

# CBRNE-TERRORISM Newsletter

Volume 38 - 2011



Japan's triple catastrophe  
CBRN security at London 2012  
UK DCBRNC  
Agroterrorism  
Forest Fires can be a **Tactic of Terrorism**  
Climate change and global **security**  
CBRN training for Photographers and TV Crews  
Innovative chem-bio sensor  
E. Coli 0104 – Terror in Germany  
Iran has secretly stocked enriched **uranium**  
for 4 nuclear bombs  
15 US nuclear reactors are located in  
an active seismic zone

Carry **spice** could be used  
to detect explosives  
How IEDs work  
What if there is a US-China  
cyber-**war** in 2020?  
Latin **America: Terrorism issues**



*Fukushima*

# CBRNE-Terrorism Newsletter

## Summer 2011

**Volume 38**  
**(Summer 2011)**

Copyright® 2011

### **Editor**

**BG (ret) Ioannis Galatas MD, MA(Terr), MC**  
Consultant in Allergy & Clinical Immunology  
Medical CBRN Planner  
Senior Terrorism/WMD Analyst  
CBRN Scientific Coordinator @ RIEAS  
VC Greek Intelligence Studies Association (GISA)  
Athens, Greece  
Contact e-mail: igalatas@yahoo.com

### **Assistant Editor**

**Panagiotis Stavrakakis**  
Hellenic Navy Captain (ret)  
MEng, MBA, MSc  
PhD student (Chemical Engineering School, NTUA)

### **Co-Editors/Text Supervisors**

**Steve Photiou, MD, MSc**  
Consultant in Internal Medicine & Emergency Medicine  
Senior staff member, Emergency Department,  
Ospedale Sant'Antonio ULSS 16, Padua, Italy  
EMDM Alumni Association Treasurer  
Chief, EuSEM Disaster Medicine Section

**Nikolaos Kokkotas, MSc**  
Civil Protection Consultant  
Emergency Manager in General Secretariat of Civil Protection  
Athens, Greece

### **Cover**

Osama bin Laden

### **DISCLAIMER**

The CBRNE-Terrorism Newsletter® is a free online publication for the fellow civilian/military First Responders worldwide. The Newsletter is a collection of papers related to the stated thematology, relevant sources are provided and all info provided herein is from open Internet sources. Opinions and comments from the Editorial group or the authors publishing in the Newsletter do not necessarily represent those of RIEAS or the Publisher.



# Contents

## Reading Public

- 9 Who is reading the Newsletter

## Editor's Corner

- 16 Mosques Flourish in America; Churches Perish in Muslim World  
18 Life in Afghanistan - 2011  
22 Building Moderate Muslim Networks  
22 Which Path to Persia?  
23 America's Peril: Islamic Extremists' War Strategy Gaining Ground  
26 Protection fabric gets Israeli patent  
27 Olympic Games 2012  
28 Unmanned medical evacuation  
29 Chest Compression—Only CPR by Lay Rescuers and Survival From Out-of-Hospital Cardiac Arrest  
30 Will Moscow's Unyielding Stance on Circassian and North Caucasian Political Issues Endanger the 2014 Sochi Olympics?  
32 Center for Disaster & Extreme Event Preparedness  
32 Brazil in shock over Rio de Janeiro school massacre  
34 Do Muslims Gather Every Friday in the Streets of New York City to Pray?  
36 Destroying One Koran vs. Destroying Many Christians – Which is worse?  
37 U.S. to Use Facebook, Twitter to Issue Terror Alerts  
38 Defence Chemical Biological Radiological and Nuclear Centre (DCBRNC)  
41 Russian Muslim leader calls for crescent as part of national emblem  
42 The CBRN Defence Market 2011-2021  
43 U.S. CBRN and HAZMAT Incidents Decontamination Technologies and Markets –2011-2016  
44 Iran 'uncovers Stars espionage virus'  
44 Iran's Oil Show  
47 The Latest Enemies of Iran  
49 Spotting incidents of agroterrorism  
50 The National Institute for Nuclear, Chemical and Biological Protection (SUJCHBO, v.v.i.)  
51 Forest Fires can be a Tactic of Terrorism  
53 A team of robots collaborate in exploration, map building  
55 Emergency Managers Warm to the Idea of Climate Change  
60 A different approach on the origins of al Qaeda  
62 Contours of conflict in the 21st century  
62 CBRN training for Photographers and TV Crews  
63 Afghan hospital assaulted amid fears of 'high-profile attacks'  
66 Do you know what this is?  
66 India's Army Could Receive WMD-Resistant Gear  
67 The Two Faces of Al-Naqba  
70 Germany to scrap nuclear power by 2022  
72 Shari'a and Violence in American Mosques  
90 Emergency responders could have jetpacks by year's end

## Original Papers

- 94 9/11 ten years on: Terrorism as a manageable risk  
107 Climate change as legitimate threat to global security



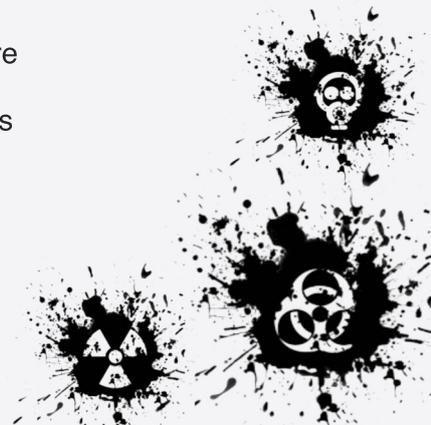
- 119 Selection of relevant articles: Climate and security 2010's world weather extremes: quakes, floods, blizzards
- 122 China may need 300 years to reverse desertification
- 123 Biting winters driven by global warming: scientists
- 125 Climate change reveals disease as national security threat
- 127 Climate change emerges as disease-related security threat
- 129 Guide for post-traumatic stress syndrome
- 133 Editor's Interview with Jane's

### Chem News

- 139 Chemical Corps tests new equipment
- 140 Universal detector made of DNA building blocks
- 142 Breakthrough In Ultra-Sensitive Sensor Technology
- 143 Rep. Rogers: 'Concern' about Libyan 'terrorist threat'
- 144 Libyan rebels sold Hizballah and Hamas chemical shells
- 145 Special operations team hit top Iranian-Hamas arms smugglers in Sudan
- 147 Chemist developing solution to nerve agent exposure
- 148 Innovative chem-bio sensor
- 149 Battery-less chemical detector developed
- 150 Northrop Grumman Launches Portable System For CBRN Incidents
- 150 Public Health Preparedness: Developing and Acquiring Medical Countermeasures Against Chemical, Biological, Radiological, and Nuclear Agents
- 152 EU Chem/Rad Emergency Management Exercise 2011
- 153 HAZAMAT Publications
- 156 Magnetic "nanobeads" detect chemical and biological agents
- 157 New Presentation Of Cyanokit(R) Approved By U.S. FDA
- 158 Military Simulation & Training Magazine
- 158 High performance CWA identifier and TIC detector
- 161 Trees as contamination detectors
- 164 Terrorists may use food poisoning as weapon

### Bio News

- 168 Anthrax human – 2001 (USA)
- 171 Pentagon Looks to Africa for Next Bio Threat
- 172 Abbott shows new pathogen detector
- 174 IQ Therapeutics Starts Phase I Clinical Trial For Antibody Against Anthrax
- 174 Plague Bacteria: The Condemned Live Longer
- 176 Blood analysis chip detects diseases in minutes
- 177 In Ricin Bioterrorist Attack, Food Prep Surfaces Could Be Decontaminated With Household Bleach
- 178 International Meeting on Emerging Diseases and Surveillance (IMED 2011)
- 178 BioSecurity N Zealand
- 179 Tools For Identification Of Biological Threats
- 180 Biosensors: A handy kit
- 181 Promising anthrax treatment study results
- 182 Anatomy of a Bioterrorist Attack
- 183 Food-Based Bioterrorism – a Growing Threat to U.S.
- 184 Virtual Biosecurity Center (VBC)
- 184 Absence of Smallpox "Take" May Not Indicate Revaccination Failure
- 185 Researchers use app to map spread of infectious diseases
- 187 New technology quickly detects bioattacks on water supply systems
- 188 Face-off Continues Over Smallpox Drug Contract
- 190 White Sleeper Brings Biological Terrorism to American Families
- 191 Secrets of plague unlocked with stunning new imaging techniques



- 193 Should Smallpox Samples In The USA And Russia Be Destroyed?
- 194 Decision on smallpox virus destruction delayed for three years
- 196 Ebola – Uganda
- 197 Illegal immigrants bring leprosy back to Greece
- 197 Do Bacteria Play Role in Weather Events?
- 198 Method used in hunting serial killers can be used against killer diseases
- 200 E. coli O104 – What do we know so far
- 204 Researchers release complete de novo E. coli O104 genome, details of their detection kit
- 205 British Intelligence: al-Qaeda May Contaminate Food After E.Coli Scare
- 206 Volunteers needed to test ricin vaccine

### Dirty News

- 210 JAPAN – Nuclear Catastrophe n Aftermath
- 212 The lessons of Fukushima
- 215 Nuclear Accident Risk Map
- 218 Nuclear terrorism is a preventable catastrophe
- 219 10 Riskiest Nuclear Power Plants in America
- 220 10 Riskiest Nuclear Power Plants in America
- 222 Second Suspected Syria Nuclear Site Is Found
- 223 North Korea Nears Completion of Electromagnetic Pulse Bomb
- 225 New technology allows detection of nuclear materials from a mile away
- 225 Fifteen U.S. nuclear reactors are located in an active seismic zone
- 227 Global nuclear bomb sensors used to track Japan's radiation
- 228 Zion's nuclear solution
- 229 Algae might help reduce nuclear waste
- 231 Chernobyl time-line
- 236 Japan: Interesting presentations from International Atomic Energy Agency
- 237 U.S. military robot to help detect radiation at Fukushima
- 238 Radiation Injury After a Nuclear Detonation: Medical Consequences and the Need for Scarce Resources Allocation
- 240 The consequence of a dirty bomb attack
- 241 New material cleans water of radioactive contamination
- 242 Portable Radionuclide Identifier
- 243 Opposition to nuclear power grows in India
- 246 China unveils first nuclear/chemical detection robot
- 247 Radiation Drug Concerns Illustrate Obstacles to Medical Countermeasures
- 248 Five men held outside Sellafield after 'taking pictures'
- 249 Smiths Detection launches new radiation detector
- 250 New Satellite Image of Construction at North Korea Nuclear Site
- 253 The Fukushima Nuclear Disaster in Perspective
- 257 I Saved My Country From Nuclear Blackmail
- 258 Pakistan's Nuclear Surge
- 261 Five steps to prevent another Fukushima
- 263 Simple Method of Dealing With Harmful Radioactive Iodine Discovered
- 263 After bin Laden: Nuclear terrorism still a top threat
- 265 Glimmer of hope for Yucca Mountain nuclear waste repository project
- 267 Cleaning Up Japan's Radioactive Mess with Blue Goo
- 270 Iran has secretly stocked enriched uranium for four nuclear bombs
- 271 Iran pushes ahead with nuke plans, despite seismic warnings
- 273 Astrium GEO-Info Services Looks Back On the Chernobyl Disaster 25 Years Later With EO Technologies
- 274 Robot reports high radiation inside crippled reactors
- 275 A Career U.S. Intelligence Officer on Al Qaeda, Nuclear Terrorism and the Nuclear Threat
- 277 Islam and the Bomb: Religious Justification For and Against Nuclear Weapons



- 281 Chernobyl radiation did not damage abundance, diversity of aquatic life
- 283 Enrichment transfer to Fordo
- 284 IRGC Website On The Day After Iran's First Nuclear Test
- 285 South Asia nuclear weapons race hots up
- 286 Nukes For Africa?
- 288 Iran's Nukes: Apocalypse Soon?
- 290 N. Korea likely can miniaturize nuclear device

### Explo News

- 293 IEDs & Suicide Bombing in Afghanistan – 2005 to Dec 2010
- 295 Wine testing technology to scan for liquids at airports
- 295 Bomb-sniffing Army dog dies of broken heart after Taliban kill his master
- 298 Vallon showcases innovative mine detector
- 299 Book-bomb attacks in Indonesia
- 300 French unveil IED jammer system
- 301 Curry spice could be used to detect explosives
- 302 Spray-on explosives detector
- 302 New device uses sniffer bees to detect explosives
- 304 Honeybees could also be trained to diagnose disease
- 304 Ultra-sensitive sensor technology detects explosives, cancer
- 310 Army seeks long distance explosive detection scanners for people
- 310 Russia to employ hi-tech bomb-sniffing dog
- 311 Spate of dry-ice bombs explosions in Long Beach, Calif.
- 313 The projected al Qaeda use of body cavity suicide bombs against high value targets
- 315 Al Qaeda used SEGA carts as explosives
- 315 Car-based IED attacks an emerging threat in Mexico
- 317 How IEDs Work
- 321 Michelin developing puncture-proof tires
- 322 Tiny Traces Of Explosives Detected By New Sensor
- 323 New 2-in-1 explosive detector and neutralizer
- 324 Princeton Laser breakthrough will enable sniffing the air at a distance
- 326 Infrared sensors could help police detect suicide vests
- 327 Implant Sciences Launches Bench-Top Explosives and Narcotics Trace Detector
- 329 Breakthrough In Ultra-Sensitive Sensor Technology
- 330 Suicide bombers: expedient tactics, not expression of Islam
- 332 Secret bomb-proofing building design posted on the Web
- 333 New detection system uses ultraviolet light to spot explosives

### Cyber News

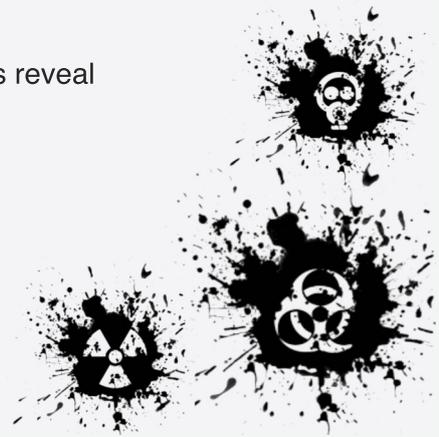
- 337 Major increase in cyber attacks on China's government
- 338 What if there is a U.S.-China cyberwar in 2020?
- 339 Remote control' computer programs pose terror risks to aeroplanes
- 339 Cybersecurity Ecosystem: The Future?
- 340 Navy calling on gamers to help with security
- 343 Digital ants protect critical infrastructure
- 344 Cyber Combat: Act of War
- 347 Hackers using cloud networks to launch powerful attacks
- 348 Joint EU and U.S. cyber security exercise to be held this year
- 349 ENISA issues final report on 'Cyber Europe 2010'
- 350 Dramatic increase in critical infrastructure cyber attacks, sabotage

### Terror News

- 360 American hostages killed by pirates
- 362 Portrait of Sheikh Dr. Yusuf Abdallah al-Qaradawi, senior Sunni Muslim cleric, affiliated with the Muslim Brotherhood



- 370 How al Qaeda Works. What the Organization's Subsidiaries Say About Its Strength
- 375 Al-Qaeda 'most wanted' plotting attacks on Britain
- 377 Gunman Shouting 'Allahu Akbar' Kills 2 US Airmen in Germany
- 379 New Book: 'Bombshell' Explodes Myths Of Female Terrorist Motivation
- 380 Financial terrorism suspected in 2008 economic crash
- 382 Oromo Liberation Front calls for "Egyptian and Tunisian-style revolution" in Ethiopia
- 384 Popular Movements in the Middle East and the Role of al-Qaeda
- 388 Terrorism from the Gaza Strip since Operation Cast Lead Data, Type and Trends
- 391 Will Libya Again Become the Arsenal of Terrorism?
- 395 Osama Bin Laden
- 397 Mini radar system offers added security
- 397 Studying counterterrorism in Israel upsets Cambridge residents
- 400 A new threat: organized crime, terrorists links
- 401 Middle East – illegal attempts to ship weapons
- 412 What Do the Uprisings in The Middle East Mean for al-Qaeda?
- 414 Muslim Brotherhood
- 416 After Mubarak: Egypt's Islamists Struggle to Adapt to the Egyptian Revolution
- 418 Piracy and Maritime Terrorism
- 418 Robot swarm to aid rescue teams
- 419 HAZAMAT Publications
- 423 New Issue of Al Qaeda's Inspire Magazine Aims For Rapid Repositioning
- 426 Radical Islam Monitor in Southeast Europe
- 426 12 Myths of 21st-Century War
- 431 Beware of the MSA in the USA
- 432 Solidarity in Resistance: Middle East Revolutions Strengthen Hezbollah
- 436 Al Qaeda acquiring weapons in Libya
- 437 How many people from terrorism-sponsoring states enter the U.S. illegally?
- 440 Picking Up Where the Red Army Faction Left Off: Tales from the German Jihad
- 442 Al-Qaeda 'trains 100 Europeans' for attack
- 443 Terror Quartet plots al-Qaida attacks
- 444 Russian terror concerns for 2014 Olympics
- 445 Movie: The Third Jihad
- 447 Darpa's Hologram Goggles Will Unleash Drone Hell
- 448 Inviting terror targets in New York City poorly guarded
- 449 Special Event Planning
- 450 Border security: Razor wire is a game changer
- 452 Missiles, Money and Migration: The Impact of the Libyan Crisis on the African Sahel
- 455 Fatalities in Terrorist Violence in Pakistan 2003-2011
- 456 The Global Threat of Terror - Ideological, Material and Political Linkages
- 457 Terrorist Trial Report Card Update – April 2011
- 458 Anti high-seas piracy coalition launches public campaign
- 459 Publications from The Jamestown Foundation
- 460 Internet Websites and Links for (Counter-)Terrorism Research
- 469 Selected Literature on Terrorism and Religion
- 476 50 Un- and Under-researched Topics in the Field of (Counter-) Terrorism Studies
- 478 Strategic Trends 2011 - Key Developments in Global Affairs
- 481 Latin America: Terrorism Issues
- 484 EUROPOL - EU Terrorism Situation
- 487 Al Qaeda Stirs Again
- 488 Radicals trained for terrorism at British mosques, Guantanamo files reveal
- 491 Terrorists Could Exploit Hurricane in U.S.
- 492 Why Pakistan Is the Most Dangerous Place On Earth
- 495 The Middle East-Latin American terrorist connection
- 499 Terrorist Group Setting Up Operations Near Border
- 501 University campuses are 'hotbeds of Islamic extremism'



- 503 Terrorists discover uses for Twitter
- 504 Conducting Field Research on Terrorism: a Brief Primer
- 505 Pass Em' Right: Assessing the Threat of WMD Terrorism from America's Christian Patriots
- 505 More Swiss train in Islamic militant camps
- 505 Al Qaeda the deadliest terror organization in history
- 506 7/7 attacks could not have been prevented
- 507 The FARC Files: Venezuela, Ecuador and the Secret Archive of 'Raúl Reyes'
- 507 Jihadis Share Methods of Bringing Down U.S. Predators over Libya
- 510 Selected Literature on Conflict Prevention, Crime Prevention, Terrorism Prevention and Violence Prevention
- 522 Definition of Terrorism
- 534 Is the terrorist threat overhyped?
- 536 Al Qaeda's Crisis of Succession
- 545 Osama Bin Laden: Chicken or Egg?
- 547 How safe are U.S. railroads?
- 549 US Government Developing Data Mining Tools To Fight Terrorism
- 550 Next Generation Defense Technologies
- 551 Scientists continue to raise doubts about safety of full body scanners
- 553 FBI: We want Unabomber's DNA in 1982 laced-Tylenol case
- 554 Ships increasingly turning to armed guards to combat piracy
- 555 Al Qaeda's Saif al-Adal masterminded Pakistani base assault
- 557 Houston ship operators adjust security to new al-Qaida information
- 558 Explaining Lone Wolf Terrorism
- 560 US adds Islamic Caucasus Emirate to list of terror groups
- 562 The Banality of Suicide Terrorism: The Naked Truth About the Psychology of Islamic Suicide Bombing
- 563 Homeland Security testing mind-reading terrorist 'pre-crime' detectors
- 566 Changing Trends in Maritime Piracy: A New & Major Threat
- 570 Protective Intelligence Lessons from an Ambush in Mexico
- 574 \$1,766 for Unabomber's tools. Sold: the bomb-making tools of Theodore Kaczynski
- 576 QinetiQ's OptaSense to protect India's major oil pipeline
- 578 Gait biometrics still walking the walk
- 578 Why did my brother become an extreme Islamist?
- 581 Best Management Practices to Deter Piracy in the Gulf of Aden and off the Coast of Somalia
- 581 Deviant Globalization: Black Market Economy in the 21st Century
- 582 Understanding crowd behavior in disasters
- 584 2002 Color-code terror alert system
- 585 Rorschach test for terrorists
- 587 White House Taking 'Seriously' Al Qaeda's Eying Of America's Gun Show Loophole
- 588 U.K. unveils new strategy to tackle extremism
- 589 U.S. Africa Embassy Bombing Suspect Killed in Somalia
- 591 Intelligence agencies get an inside look at al Qaeda Attacks
- 593 Communicating in a Crisis: Researchers Devise New Technique to Help Rescuers Communicate After Terrorist
- 594 Possible Al-Qaida Hit List Targets Specific Americans
- 595 Islamists may attack Womens' World Soccer Cup

### Special Insert

- 599 Osama bin Laden

### New Upcoming Events

- 642 Executive Seminar: Behind the Scenes Seminar of Israel's Counter-Terrorism and Security Operations 640
- 643 Need a professional speaker? CollaBoRatioN 2010
- 647 Answer to the Quiz [Terror News]. Mexico police seize 'narco-tank' used by drug gang



# CBRNE-TERRORISM Newsletter

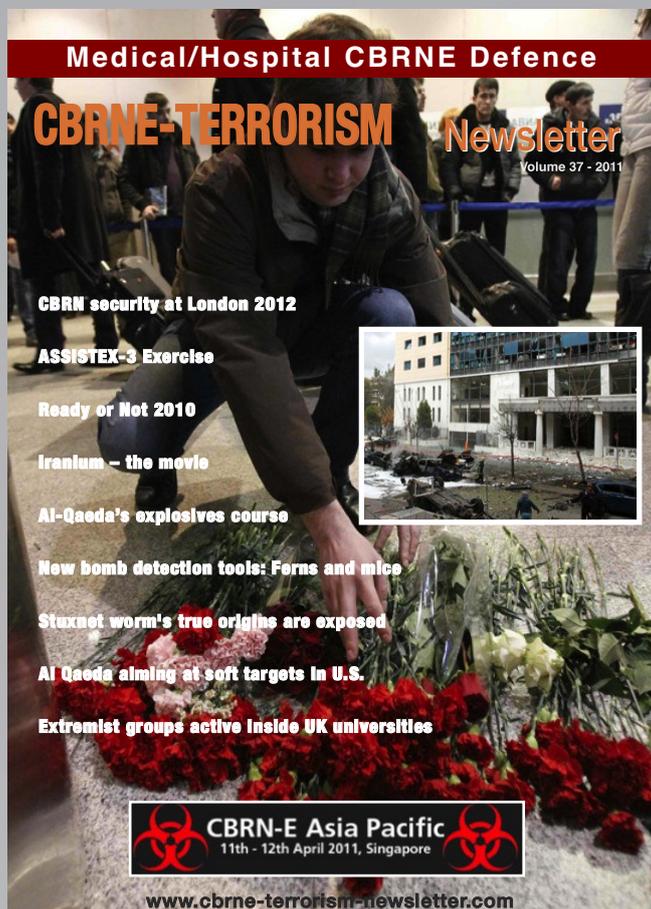
CBRNE-Terrorism Newsletter is published quarterly and distributed on-line free of charge

Starting from "Summer 2011" issue all advertisements will be charged as following:

Full page (A4)	€1.000
Half page	€ 700
Quarter page	€ 500
Inside front cover	€1.100
Inside back cover	€1.200
Outside back cover	€1.300

Free capability profile will be provided to all advertisers in the same issue (length: 200 words + one picture + logo in .jpg format)

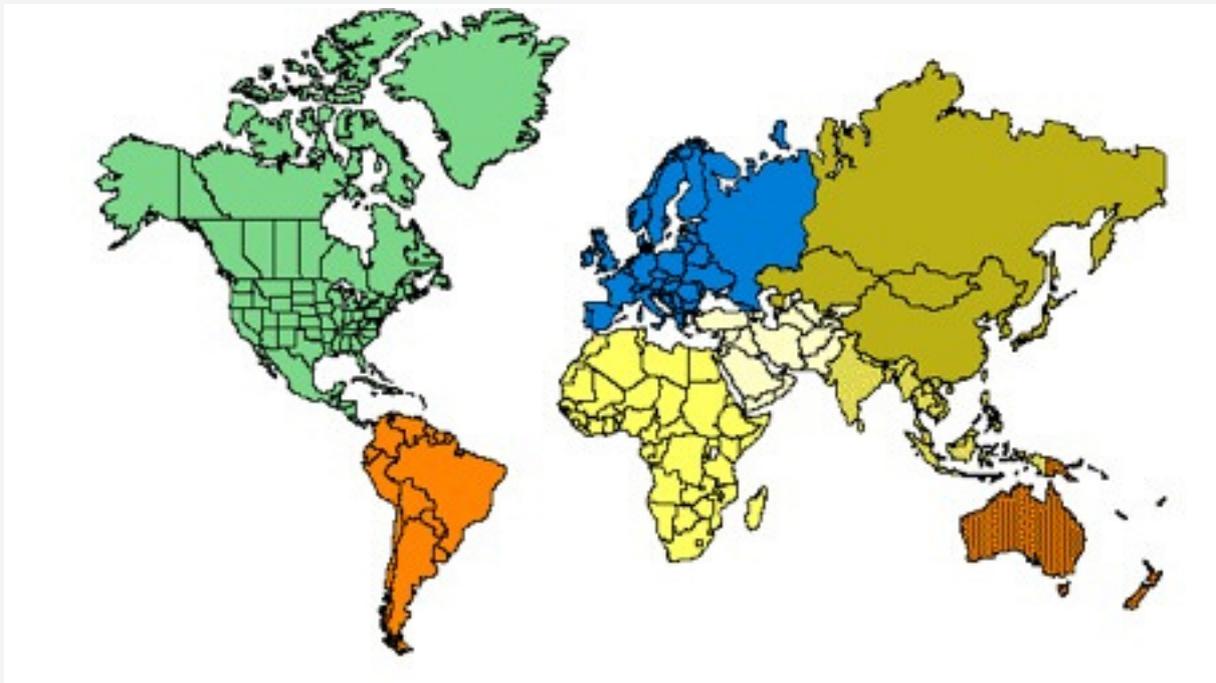
20% reduction for annual ad inclusion



New features	Original papers from around the globe & new format
Distribution	+50 countries
Recipients	Colleagues from more than 550 think tanks, organizations, companies, institutions, ministries
Free download	<a href="http://www.rieas.gr">http://www.rieas.gr</a> <a href="http://www.mendor.gr">http://www.mendor.gr</a>
Contact Editor	<a href="mailto:igalatas@yahoo.com">igalatas@yahoo.com</a>

## Reading Public

Our reading audience comes from **65 countries** all over the world and is constantly expanding. Currently colleagues and affiliates from **over 700** organizations, companies, institutions, ministries and the first responders are recipients of CBRNE-Terrorism Newsletter.



### Europe

Greece – The Netherlands – Cyprus – Serbia – Romania – Slovak Republic – Monaco – Iceland – Sweden – Finland – Norway – Croatia – Italy – Belgium – Denmark – Switzerland – Estonia – Luxemburg – Germany – Austria – France – Portugal – Bulgaria – Spain – Poland – United Kingdom

### Africa

South Africa – Kenya – Burundi – Nigeria

### Middle East

Israel – Jordan – UAE – Saudi Arabia – Qatar – Kuwait – Bahrain – Oman – Iran – Iraq

### Asia

Turkey – Russian Federation – India – Japan – China – Pakistan – Afghanistan – Azerbaijan – Singapore – Philippines – Malaysia – Indonesia – Uzbekistan – South Korea – Mongolia – Ukraine – Taiwan



### Oceania

Australia – New Zealand

### North America

United States of America – Canada

### South America

Argentina – Brazil – Peru – Colombia – Mexico – Trinidad & Tabaco

## CBRNE-Terrorism Newsletter Website's Follow-up

### CBRNE-Terrorism Newsletter's website follow-up:



top 10

1	USA	3	UK	5	Netherlands	7	Germany	9	Switzerland
2	Greece	4	Canada	6	Romania	8	Italy	10	Sweden/Italy

Our Top-10 Visitors are coming from:

1	United States	6	Romania
2	Greece	7	Germany
3	United Kingdom	8	Italy
4	Canada	9	Switzerland
5	The Netherlands	10	Sweden - Israel



# CRISTANINI CBRN DECONTAMINATION SYSTEMS



A5009

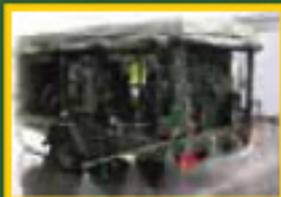
CONFORM TO THE QUALITY SYSTEM STANDARD AQAP 2110  
and ISO 9001:2008



DEPLOYABLE CBRN  
ANALYTICAL  
LABORATORY (STANAG 4632)



DEPLOYABLE BIO LABORATORY  
CLASS III BIO SECURITY LEVEL



R/CBRN TRAILER FOR CBRN  
DECONTAMINATION AND  
DETOXIFICATION



TSDM-TACTICAL STEAM  
DECON MODULE



SX34 CBRN DECONTAMINATION  
OF SENSITIVE EQUIPMENT  
AND SURFACES



DDMAS LARGE SCALE  
DECONTAMINATION SYSTEM  
HIGHLY DEPLOYABLE



DDMAS LARGE SCALE  
DECONTAMINATION SYSTEM  
DUAL OPERATORS



MOBILE SYSTEM FOR  
AIRCRAFT DECONTAMINATION



SANJET C 1126 HR CBRN DUAL  
OPERATOR DECONTAMINATION  
AND DETOXIFICATION GROUP



CBRN PRODUCTION LINE

**ONLY ONE PERSON  
ONLY ONE MACHINE  
ONLY ONE PRODUCT**



**CRISTANINI**

37010 RIVOLI - VERONA - ITALY

Tel. +39-045-6269400 - Fax +39-045-6269411

cristanini@cristanini.it - [www.cristanini.com](http://www.cristanini.com)

Osama bin Laden – the End

# CBRNE-TERRORISM Newsletter

Volume 38 - 2011



Japan's triple catastrophe  
CBRN security at London 2012  
UK DGBRNC  
Agroterrorism  
Forest Fires can be a **Tactic of Terrorism**  
Climate change and global **security**  
CBRN training for **Photographers and TV Crews**  
Innovative chem-bio sensor  
E. Coli 0104 – **Terror in Germany**  
Iran has secretly stocked **enriched uranium**  
for 4 nuclear bombs  
15 US nuclear reactors are **located in**  
an active seismic zone

Editor's Corner

Carry **spice** could be used  
to detect explosives  
How IEDs work  
What if there is a **US-China**  
cyber-**war in 2020?**  
Latin **America: Terrorism issues**



*Fukushima*

[www.cbrne-terrorism-newsletter.com](http://www.cbrne-terrorism-newsletter.com)

## Editor's Corner

### Editorial

Dear Colleagues,

Summer is already here and what better combination than reading the CBRNE-Terrorism Newsletter while relaxing at the beach!

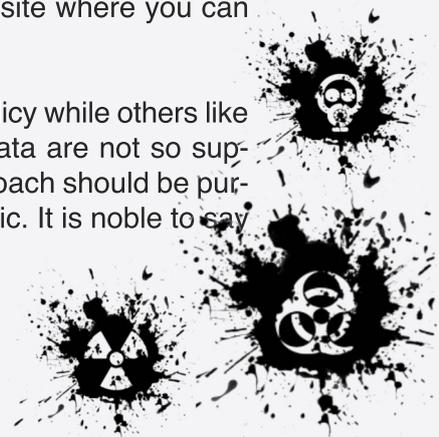
The Editorial Group would like to thank you all for your enthusiastic comments and very interesting observations on various aspects of both the edition and the website hosting the Newsletter. We will take them seriously under consideration and will try to incorporate them in our future issues.

To start with from "Summer-2011" issue you will be able to download the Newsletter either as a whole or partially. This will make it more flexible and readers can go to their articles of interest in a faster way.

Two major events happened following the "Spring 2011" issue. The first one is the elimination of Osama bin Laden by SEALs Team VI in Pakistan. Although this is a major success at strategic level, it is not expected to dramatically affect the global war against terrorism. There are many ambitious terrorists and many followers of the Osama's ideology in-line to succeed him, that very soon new leadership will be in place. In the meantime, major concern bear the "lonely wolfs" around the world that might try to revenge Osama's death. The strength of al Qaeda was the "ideology" of Jihad of Umma (society of believers) of Dar al-Islam (House of Islam) against Dar al-Harb (society of non-believers) aiming to conquer Earth. Not the physical presence of Osama bin Laden and his high rank officials. The main concern is if the new al Qaeda's leader would be ambitious to connect his name with something more spectacular than 911. A CBRNE attack might be a good alternative to sky rocket al Qaeda in the eyes of its supporters. A separate chapter dedicated to Osama bin Laden can be found at the Newsletter.

The second major event that marked 2011 was the triple catastrophe in Japan. Just a few months ago, if a security/asymmetric threats analyst mentioned in a conference/security meeting the remote scenario of a combined mega-earthquake, mega-tsunami and nuclear havoc in a single country I am sure he would be expelled from the room as ridiculous! But life often resembles Hollywood movies and this combination did happen in Japan. Hecatombs of human casualties, villages disappeared from the map, ships were anchored in the mainland and nuclear plants revealed their deficiencies and security gaps. The environmental impact is already huge but many more will be revealed in due time when the real effects of radio-contamination will be identified and recorded. A special link has been created at the website where you can follow latest news on current situation in Japan's nuclear industry.

Many countries like Germany and Italy are reconsidering their nuclear policy while others like Turkey and Iran proceed to new nuclear plants even when the seismic data are not so supporting of their decisions. I strongly believe that a more down-earthed approach should be pursued away from momentary emotional decisions or pressure from the public. It is noble to say



# CBRNE-Terrorism Newsletter

## Summer 2011

15

no to nuclear energy, but for those who support this idea they must provide viable economical solutions that will substitute the closure of nuclear plants.

The commercial attempt through advertising did not work out well so far. Perhaps our approach was not the right one or we still need to do the right connections with the right people. As already stated in "Spring-2011" issue, it is not about the money. It is about to have the financial resources to do more things about the cause and our reading audience. In that respect we can live without them and in fact we will continue support defense companies that we think have products of interest to first responders.

Enjoy the CBRNE-Terrorism Newsletter and if you really like it, please feel free to pass it over to others in your networks!

**Editor**



**BG(ret) Ioannis Galatas, MD, MA, MC**



## Mosques Flourish in America; Churches Perish in Muslim World

by Raymond Ibrahim (Pajamas Media)

March 3, 2011

Source: <http://www.meforum.org/2842/mosques-flourish-in-america-churches-perish-in>

As Muslims prepare to erect a mega-mosque near the site of the 9/11 atrocities, it is well to reflect that the sort of tolerance, or indifference, that allows them to do so, is far from reciprocated to churches in the Muslim world. I speak not of Islamist attacks against churches—such as the New Year attack in Egypt that killed 21 Christians; or when jihadists stormed a church in Iraq, butchering over 50 Christians; or Christmas Eve attacks on churches in Nigeria and the Philippines. Nor am I referring to state-sanctioned hostility by avowedly Islamist regimes, such as Iran's recent "round up" of Christians. Rather, I refer to anti-church policy by Middle East governments deemed "moderate." Consider: Kuwait just denied, without explanation, a request to build a church; so did Indonesia, forcing Christians to celebrate Christmas in a parking lot—even as a mob of 1,000 Muslims burned down two other churches. If this is the fate of churches in "moderate" Indonesia and Kuwait—the latter's sovereignty due entirely to U.S. sacrifices in the First Gulf War—what can be expected of the rest of the Islamic world?

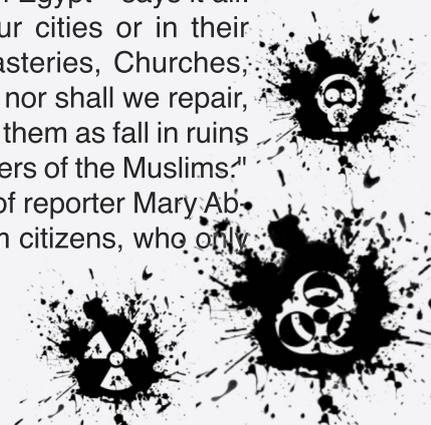
The best example of anti-church policy is Egypt, where the Middle East's largest Christian minority, the Copts, lives. During Mubarak's tenure alone "more than 1500 as-



saults on Copts have occurred, without any appropriate punishment given to criminals or compensation to the victims," says Coptic Solidarity. For starters, Egypt's state security has a curious habit of disappearing right before Coptic churches are attacked—such as in the aforementioned New Year attack. They also tend to arrive rather late after churches are attacked: it took security "hours" to appear when six Copts were murdered while exiting their church last year. Considering that weeks ago an Egyptian policeman identified and opened fire on Christians, killing a 71-year-old—while yelling Islam's medieval war-cry, "Allah Akbar!"—none of this should be surprising. Since the 7th century, when Islam invaded and subjugated formerly Christian Egypt, the plight of churches has been tenuous. The very first condition listed for Christians to obey in order not to be molested in the notorious Pact of Omar—which informs sharia law, "the principal source of legislation" in Egypt—says it all: "We shall not build, in our cities or in their neighborhood, new monasteries, Churches, convents, or monks' cells, nor shall we repair, by day or by night, such of them as fall in ruins or are situated in the quarters of the Muslims." Accordingly, in the words of reporter Mary Abdelmassih: [U]nlike Muslim citizens, who of



Egyptian State Security forces surround Talbiya church



need a municipal license to build mosques, the Copts require presidential approval for a church ... [and] the approval of the neighbouring Muslim community. Even after obtaining licenses for a church, Muslims still attack Christians and demolish or burn their churches. A rumour that Christians are meeting to pray is enough reason for Muslim neighbours to carry out acts of violence against them. On various occasions, it only takes Muslims to protest against the building of a church

for State Security to stop the works, under the pretext that it is causing "sectarian strife." In fact, citing minor building violations, Egypt's state security recently stormed a partially constructed church in the Talbiya region where over one million Christians live without a single church. In the

process, state security fired tear gas and live ammunition on protesters, claiming the lives of four Copts, including an infant (79 were severely injured, 22 blinded or semi-blinded, and 179 detained, including woman and children). One human-rights activist complained that the wounded Copts "were shackled to their hospital beds and then sent to detention camps." All this is exacerbated by well-connected Egyptian Muslims who issue fatwas comparing the building of a church to the building of "a nightclub, a gambling casino, or building a barn for rearing pigs, cats or dogs"; or who appear on Al Jazeera ludicrously accusing Copts of



stockpiling weapons in their churches and torturing Muslim women in their monasteries. Incidentally, all this was under the "secularist" Mubarak. As for Egypt's current power-holders, the military, armed forces just stormed a 5th century monastery, opening fire on monks to chants of "Allah Akbar!" Consider the fate of Copts should the Muslim Brotherhood assume power. Such, then, is the plight of Christians and their churches in the Muslim world—and such is the irony: while mosques, some of

which breed radicalization and serve as terrorist bases, start dotting America's landscape, churches are on their way to becoming extinct in the Middle East, the cradle of Christianity. More pointedly, as America allows Muslims to build a megamosque near

Ground Zero—which was annihilated by Islamists partially radicalized in mosques—America's "moderate friends" in the Muslim world blatantly persecute Christians and their churches. Such flagrant double standards are—or should be—unconscionable. Yet here we are. Is it any wonder, then, that the Western mindset has a long way to go before it understands how to deal with the scourge that is "radical Islam"?

Raymond Ibrahim is associate director of the Middle East Forum.



### Life in Afghanistan - 2011

World Security Network reporting from Mazar-e-Sharif in Afghanistan , March 04, 2011

Dr. Hubertus Hoffmann

President and Founder WSN

Source: <http://www.worldsecuritynetwork.com/>



**World Security Network Newsletter**  
NETWORKING A SAFER WORLD

Paul D. Miller wrote in his excellent essay, 'Finish the Job' in Foreign Affairs that Afghanistan in 2001 had 'Somalian anarchy, Haitian poverty, Congolese institutions, Balkan fractiousness, and a North Korean style government'. He listed many details of progress, which we add to our list below (January/February 2011, page 51–65).



Some Taliban think: "Americans own the watches, but we've got the time." This is the wrong perception. Time is running against the insurgents, as the summary of progress since 2010 will transform Afghanistan step by step from the stone age to increased security, education, jobs and new growth. The Taliban with their old stone-age concepts have shown how bad life can be when they rule. More than 90 percent do not want a return. And no country supports them. They will lose and peace will prevail at the Hindukush in some years from now."

Here are some good news about Afghanistan benchmarked to the sad reality in 2001:

#### Better Mood of the People

In 2010 47 percent of Afghans said that their country was moving in the right direction. This figure has increased since 2008 (38 percent) and 2009 (42 percent), according to the Asia

Foundation Report Survey 'Afghanistan in 2010'. Lack of security is the biggest problem for 37 percent. Unemployment and infrastructure come next (28 percent) followed by too few roads (24), too little water (22) and not enough clinics (17).

#### GDP and Growth

In 2001, Afghanistan was the seventh-poorest country in the world. In 2002 GDP per capita was only \$176. In 2002 the GDP grew by 29 percent and on average 15 percent from 2001 to 2006, 13.5 percent in 2009 and 9 percent in 2010. Now GDP per capita stands at \$1000. Afghans subsisted on only 48 cents a day. Income has now increased from \$185 in 2002 to \$500 in 2009. Still, it remains one of the poorest countries on globe.

#### Roads and Airports

Paved roads contribute significantly to security and improve the quality of life for Afghans. Roads affect commerce, access to schools, medical clinics and allow the government to provide services to the populace. There were very few paved roads in late 2002 (13 percent). Those that were paved were impassable due to rocks, potholes and complete lack of maintenance. Since 2002, more than 2,900 km of roads have been paved (33 percent in total) with 7,000 km of roads improved. The roads total 42,000 km. The improvements in roads have significantly reduced travel times to key population centers in Afghanistan. In 2002 the drive from Kabul to Jalalabad took six hours; at the end of 2010, the drive took two hours. In 2002, the drive from Kabul to Kandahar took 17 hours; at the end of 2010, the drive time was reduced to six hours. There were only eight airplanes in 2001; now there



are 46 airports, five licensed national airlines and 150,000 passengers per year.

### Electricity

Electricity is a sign of progress and allows the Afghan government to reach into homes and expand influence. The capacity to distribute electricity has more than tripled since 2003, from less than 1.5 million Afghans to greater than 4.5 million.

### Communication (Mobile Phones and Internet)

In 2001, less than one million Afghans had a mobile phone. By the end of 2010, more than 13 million had mobile devices. This represents roughly half of the population. The area of coverage with respect to population coverage is more than 21 million Afghans, or about 80 percent of the nation. One million now use the internet.

### Water

Only 13 percent of the population had clean water. Donors spent \$312 million on water projects, and the number of Afghans with access to water has doubled.

### Sanitation

Only 12 percent of Afghans had access to sanitation in 2001. Now access is at 45 percent.

### Illiteracy Rate

Only 28 percent of Afghans over 15 years of age can read and write, which shows a dramatically low education level of two third of the population. In comparison, in Iraq 74 percent of the people can read and write.



### Education

Basic education is key for progress. Access to education is restricted by the distance to schools in some rural areas, and traditional and cultural constraints on female education. Despite these difficulties, there have been impressive gains in educational development throughout Afghanistan. In 2001, only 1.1 million children were enrolled in primary and secondary education. By the end of 2010, nearly 7.5 million children were enrolled. Only about 50,000 girls were enrolled in 2001. Approximately 2.7 million girls (37 percent) were enrolled in these schools in 2010. More than 147,000 teachers have been trained. Nearly 9,000 schools have been built since 2001. The number of students at institutes of higher education and universities grew from only 4,000 students in 2001 to 75,000 in 2009, among them 35 percent are women.

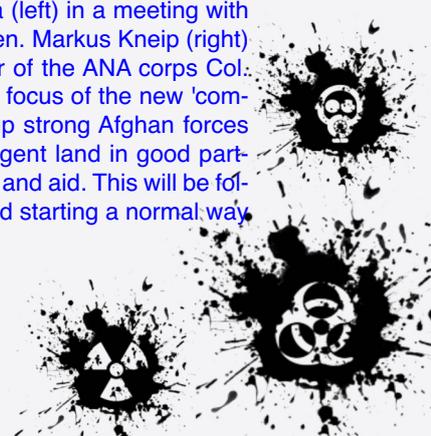
### Healthcare

The highest infant mortality in the world with 165 infants deaths per 1,000 live births. This number has fallen to 151. The shortest life expectancy with 42 years has now increased to 45 years. By 2008, 80 percent of the population had access to basic healthcare. Children have been immunized against diphtheria, whooping cough and tetanus.

### Media

Only one TV station existed in 2001. The people of Afghanistan are able to receive information due to a steady growth of television and radio outlets. There are presently more than 75 active TV channels and 175 radio stations throughout the country. The number has grown by an average of nine television channels and 20 radio stations each year since 2002. The media industry generates approxi-

Partnering between ISAF and the Afghan National Army (ANA) works well now: Here the commander of the 209th ANA Corps BrigGen. Zalmay Wesa (left) in a meeting with ISAF RC North commander MajGen. Markus Kneip (right) and in the center the ISAF mentor of the ANA corps Col. Jürgen Joachim von Sandrat. "The focus of the new 'comprehensive approach' is to build up strong Afghan forces and police to clear and hold insurgent land in good partnership with more civilian planning and aid. This will be followed by building infrastructure and starting a normal way of life."



mately \$75–\$100 million of revenue per year. 500 newspapers have been founded and represent a diverse media landscape in Afghanistan. They can report critically towards the government as well.

### **Participation of the Citizenry and Democracy**

Afghanistan has now one of the most progressive constitutions in the region. People have been able to vote freely in several elections. In October 2004, over 8 million Afghans voted in the first-ever presidential election. In September 2005, more than 6.4 million voted for the nation's legislature – the first free election since 1973. According to the Asia Foundation, 76 percent were satisfied with democracy.

### **Women's Rights**

In 2001, girls were sold at sex markets when their parents actively opposed the Taliban. Women had no rights. 18 percent of the employees in the Foreign Office are women now. They can even join the Afghan National Army and become officers. 27 percent of the members of parliament are women, which is the highest number in the region and is topped only in Asia by Singapore. One governor is a woman (Habiba Sorabi from Bamiyan province), as are many doctors or teachers.

### **Counter Narcotics**

In 2009–2010, the Afghan Counter Narcotics Criminal Justice Task Force (CJTF) dealt with 395 cases involving 502 suspects. The Primary Courts convicted 440 drug traffickers. In 2005, the court only managed to secure 36 convictions. The CJTF are also capable of securing convictions against individuals previously considered 'untouchable.' Last year 21 public officials were convicted of drug trafficking offences including commanding officers within the army and police. The arrest in 2009 of the head of a major drug trafficking network was an example of how effective the CJTF has become since it was established in 2005. This drug trafficker was sentenced to 20 years in prison. For the first time in December of last year, Ministry of Interior units, mentored by the international community, planned and executed an 'all Afghan' intelligence-led opera-

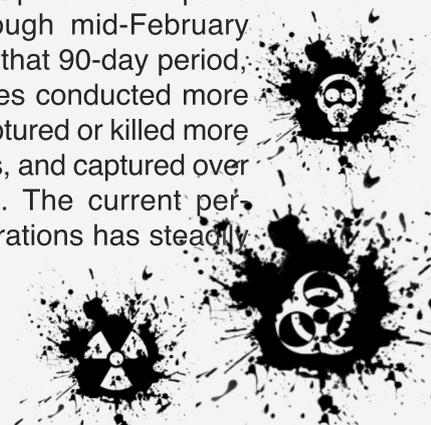
tion which resulted in the seizure and destruction of 41 tons of refined hashish. The number of chance narcotics findings during security operations has increased 250% from 2009 to 2010, thus proving the correlation between security and narco-trafficking. As security improves, narco-trafficking decreases. Total opium seizures recorded by IJC decreased slightly from 2009 to 2010 from 102,427 kg to 85,006 kg. At the same time, heroin seizures increase sharply from 1,324 kg, worth \$2.8 million to 14,795 kg, worth \$43 million. Opium poppy cultivation in Afghanistan has fallen by more than a third since 2007, down from 193,000 hectares to 123,000 hectares, and is now at the lowest level since 2005. Much of this decline has been the result of the work of Governor Mangal in Helmand, where more than two thirds of all cultivation in Afghanistan in 2008 occurred. His comprehensive approach to counter narcotics, supported by the international community, has helped reduce cultivation in the province by 37%. The increase in opium prices, as a combination of reduced supply from blight and effective law enforcement operations, led to a situation where smugglers had to pay farmers 160% more than in 2009 for their supply, yet the buyers in neighbouring countries are paying the same as in 2009. This has resulted in a 50% drop in insurgent revenue from opium.

### **Refugees**

There were 3.8 million Afghans in neighbouring countries and 1.2 million displaced within in 2001. One year later, two million have returned and 750,000 displaced persons went home. But still more than two million live in Pakistan and Iran.

### **Security**

Afghan and coalition forces have applied continuous pressure to the insurgency throughout the winter months. Operations reports from mid-December through mid-February highlight this pressure. In that 90-day period, Afghan and coalition forces conducted more than 1,800 operations, captured or killed more than 350 insurgent leaders, and captured over 2,000 insurgents in total. The current percentage of partnered operations has steadily



increased throughout the theater. As of January 2011, the percentage of partnered operations is 100% in Regional Command North, South and Capital, 80% in Regional Command West, 75% in Regional Command Southwest, and 63% in Regional Command East.

### ISAF and Civilian Support Increased

The ISAF operation started with only 5,000 soldiers focused in the capital between 2002–2005. With 140,000 men and women, now from 49 countries, this international force is stronger than ever before and can do its job throughout the country for the first time since eight months. Also the number of civilian supporters has tripled.

### The Afghan National Army and Police

The Afghan National Security Force has grown more than 40 percent since November 2009. This growth equates to nearly 80,000 additional Afghan security personnel. The

Afghan National Army (ANA) strength now stands at 152,000 and the Afghan National Police (ANP) has 119,000 militia policemen, thus a total of 270,000 men. 34,500 are in training now. At the end of 2011, Afghanistan will have 305,000 members of its own security forces. The build-up is progressing better than planned. But the quality has to be improved as many soldiers can neither read nor write, and the eight-month training is too short. After the units have come into action, know-how will increase including partnering and mentoring by ISAF officers. It is critical to hand over the security responsibility to the Afghans themselves.

### Re-Integration of Insurgents

850 former insurgents have passed the reintegration program in the last eight months according to ISAF. The Afghan Peace and Reintegration Program has changed the balance of power in several districts in favor of the government.

### Transition

In March 2011, President Hamid Karzai will announce the first districts where the full responsibility for security will be handed over step-by-step from ISAF to the Afghan National Army and Police. This process will take between 18 to 24 months for each district and will be mentored by ISAF. In a cascade, all districts and provinces will follow, so that in 2014 almost all will be secured by the Afghans themselves.

### Time Is Running Against the Taliban

Some Afghan Taliban think: “Americans own the watches, but we’ve got the time.” This is the wrong perception. Time is running against the insurgents, as the summary of progress since 2010 will transform Afghanistan step by step from the stone age to increased security, education, jobs and new growth. The Taliban with their old stone-age concepts have shown how bad life can be when they rule. More than 90 percent do not want a return. And no country supports them. They will lose and peace will prevail at the Hindukush in some years from now.



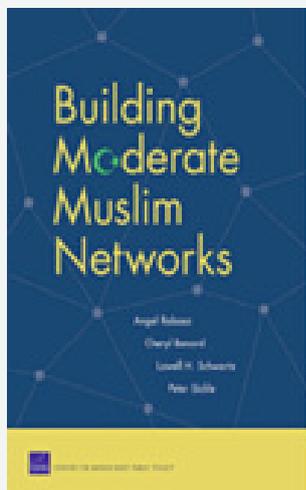
Dr. Hubertus Hoffmann, President of the World Security Network Foundation, at the Blue Mosque in Mazar-e-Sharif in Afghanistan: “In a post-conflict situation you need between 10 to 15 years to build up a functional state including good governance. One of the mistakes was that only at the London conference in January 2006 did the international community begin to build a state structure. As a result, we will need until 2016–2021 to see real stability there and will need more patience. Most in the media forget that the rebuilding of Afghanistan only began with the new Obama administration in mid-2009/2010. In 2002 the Taliban were defeated, and from 2003 to mid-2009 the US fully concentrated on the war in Iraq. The action gap between 2002 to 2009 is the reason behind the slow progress in Afghanistan until now. It explains why progress in the country remains to date insufficient.”



### Building Moderate Muslim Networks

By Angel Rabasa, Cheryl Benard, Lowell H. Schwartz, Peter Sickle

Source: <http://www.rand.org/pubs/monographs/MG574.html>



Radical and dogmatic interpretations of Islam have gained ground in recent years in many Muslim societies via extensive Islamist networks spanning the Muslim world and the Muslim diaspora communities of North America and Europe. Although a majority throughout the Muslim world, moderates have not developed similar networks to amplify their message and to provide protection from violence and intimidation. With considerable experience fostering networks of people committed to free and democratic ideas during the Cold War, the United States has a critical role to play in leveling the playing field for Muslim moderates. The authors derive lessons from the U.S. and allied Cold War network-building experience, determine their applicability to the current situation in the Muslim world, assess the effectiveness of U.S. government programs of engagement with the Muslim world, and develop a “road map” to foster the construction of moderate Muslim networks.

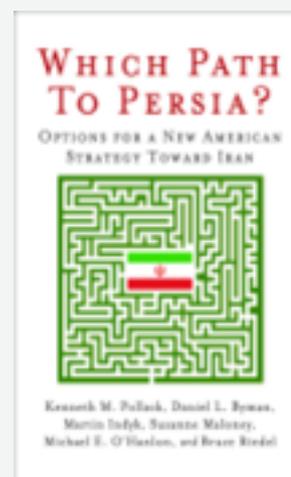
### Which Path to Persia?

Options for a New American Strategy toward Iran

By Kenneth M. Pollack, Daniel L. Byman, Martin S. Indyk, Suzanne Maloney, Michael E. O'Hanlon and Bruce Riedel (Brookings Institution Press)

Source: <http://www.brookings.edu/press/Books/2009/whichpathtopersia.aspx>

“Which Path to Persia?” objectively presents the most important policy options available to the United States in crafting a new strategy toward Iran. It considers four different types of solutions: diplomacy, military, regime change, and containment. Among the diplomatic options are one approach that would employ “bigger carrots and bigger sticks” and a strategy of pure engagement that would abandon sanctions and focus on changing Iran's strategic perceptions. The various military options include a full-scale invasion, an air campaign to destroy Iran's nuclear program, and allowing an Israeli air strike against the same. Regime change could take the form of triggering a popular revolution, supporting an insurgency, or aiding a military coup. Last, containment would involve deterring Iran from trying to wield a future nuclear arsenal while hindering its ability to cause trouble in the region. As Iran moves forward with its nuclear program, the urgency increases for the United States to implement a new policy. This distinguished group of authors, all senior fellows with the Saban Center at Brookings, points out that no one strategy is ideal and that all involve heavy costs, significant risks, and potentially painful trade-offs. With an eye to these perils, they address how the different options could be combined to produce an integrated strategy that makes the best choice from a bad lot.



**EDITOR'S NOTE:** Two inspired documents written in 2007 and 2009 respectively in close relevance to the current (and possibly future) turbulence in the Muslim world.

## America's Peril: Islamic Extremists' War Strategy Gaining Ground

By Lt. Colonel James Zumwalt, USMC (ret)

Source: [http://www.familysecuritymatters.org/publications/id.8922/pub\\_detail.asp](http://www.familysecuritymatters.org/publications/id.8922/pub_detail.asp)

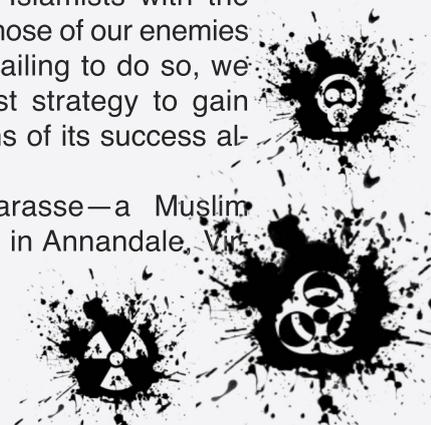


After Japan's devastating surprise attack against the US at Pearl Harbor on December 7, 1941, concerns arose over the ability of a seriously wounded American Navy to defend our country against a future attack, let alone challenge Tokyo's control of the Pacific. Over the following three and a half years, those concerns proved unwarranted as we became very effective at taking the fight to the Japanese, who—in launching their military strategy—never again achieved the tactical surprise they did at Pearl Harbor. While the resolve and courage of our fighting forces was a factor, so too was the fact we had—unknownst to the Japanese—broken their naval code. Accordingly, almost every move the Japanese made on their tactical chessboard was eventually checked by an Allied countermove, leading to one Japanese defeat after another. Meanwhile, in the European theater, the Allies achieved a similar intelligence windfall (known as “Ultra”) after breaking Germany's code. It prompted Winston Churchill

at the war's end to comment, “It was thanks to Ultra we won....”

Clearly, when an enemy secretly lays out its strategic plans as to how it intends to defeat us, and we learn of the tactics it will use before they can be employed, it provides us with an enormous opportunity to deny that enemy success by countering its strategy. In the Islamist war against the US, this has happened with the discovery seven years ago of a hidden document on how America's Constitution will be replaced by shariah law. Interestingly, the document in question was written well before 9/11. Perhaps because the strategy appeared so outlandish, we have not embraced the intentions of Islamists with the same concern we did for those of our enemies during World War II. By failing to do so, we have allowed the Islamist strategy to gain traction, with the first signs of its success already visible.

In 2004, Ismail Elbarasse—a Muslim Brotherhood leader living in Annandale, Va.



ginia—came under suspicion by the FBI when he and his wife were observed filming the Chesapeake Bay Bridge. While tourists often film the bridge for its scenic beauty, the focus of Elbarasse's film seemed to be less on that and more on weaknesses in its engineering structure. A subsequent raid of his home uncovered a secret sub-basement containing a treasure trove of documents in Arabic, representing the archives of the US branch of the fundamentalist and militant organization Muslim Brotherhood. Translation of the documents clearly indicated a conspiracy was underway to take control of America, using the introduction of sharia law as the vehicle for doing so.

The Muslim Brotherhood, founded in Egypt in 1928, today is the world's most influential Islamist movement. Its slogan "Islam is the solution" is not meant to apply to just the Arab world as it seeks to have Prophet Muhammed's sayings and influence obtain a global reach. Their ultimate goal is that all non-believers convert to Islam—or face the consequences of a global Islamic society that is intolerant of them.

There is debate over whether or not the Brotherhood embraces violence to achieve its goals. While it allegedly has renounced violence, according to teachings of the Prophet Muhammed believers can lie to or otherwise deceive non-believers about their intentions when necessary to further the cause of Islam. While giving the appearance of renouncing violence, the Brotherhood has given birth to many splinter groups that do embrace violence. Arguably, this was done with its tacit blessing.

This debate has created some confusion—although it should not at the US national security level—as evidenced by Director of National Intelligence James Clapper's recent claim the Brotherhood is "largely secular." While Clapper's Congressional testimony about the Brotherhood last month chose to downplay the organization's religious underpinnings, even the CIA's website describes it as a "religious-based" party.

In September 2010, a non-partisan panel of national security experts issued a report entitled "Sharia: The Threat to America." It quoted a 1987 document found hidden in Elbarasse's basement containing the Brotherhood's strategic plan by Brotherhood member and senior Hamas leader Mohammed Akram. Clearly stated in this document was the Brotherhood's mission:

"The process of settlement is a 'civilization-jihadist process' with all the word means. The Ikhwan (brothers of an Islamic religious militia) must understand that their work in America is a kind of grand jihad in eliminating and destroying the Western civilization from within and 'sabotaging' its miserable house by their hands and the hands of the believers so that it is eliminated and God's religion is made victorious over all other religions."



The report stated the Islamist strategy "for destroying the United States is to get us, specifically our leadership, to do the bidding of the MB for them. The Muslim Brotherhood intends to conduct Civilization Jihad by co-opting our leadership into believing a counterfactual understanding of Islam and the nature of the Muslim Brotherhood, thereby coercing these leaders to enforce the MB narrative on their subordinates."

The report urged the White House to make clear what the document states—radical Muslims are using Islamic law to subvert the US. But, six months after the report was issued, the Obama Administration has yet to do so.



of a ridiculous concern that mentioning an Islamic link will offend moderates.

According to the non-partisan report, the Islamist document calls for the Islamist's strategy plan to be slowly implemented in phases that enable shariah to "creep" into US culture. To work, it requires Muslims gain influence in various ways including: expanding Muslims' physical presence here via high birth rates, immigration and refusing to assimilate; keeping locals "in the dark" over human right infringement by ensuring they do not study shariah doctrine and its impact; controlling the language Muslims use to describe us (non-Muslims) as the enemy lest it raise our concern; forcing compliance with shariah at local levels; employing the offensive use of lawsuits and threats of lawsuits to silence critics of Islam; claiming Muslim victimization; subverting the US education system through the introduction of dominant US Middle East studies programs; demanding the right to practice shariah in segregated Muslim enclaves and demanding its recognition in non-Muslim spheres; and (ultimately) demanding that shariah replace Western law.

Every single one of these tactics has been employed to date by members of the Muslim community promoting the Brotherhood's agenda. In 2002, two US universities accepted \$20 million dollar donations from a Saudi prince in exchange for a commitment to establish programs in Islamic studies. Last year, a New Jersey criminal court judge applied shariah law to find a Muslim husband not guilty of having raped his Muslim wife as Islamic law demands a wife submit to her husband's sexual desires. In Minneapolis, home to a large community of unassimilated Somali immigrants, Muslim taxi drivers refuse to transport passengers carrying alcohol and other Mus-



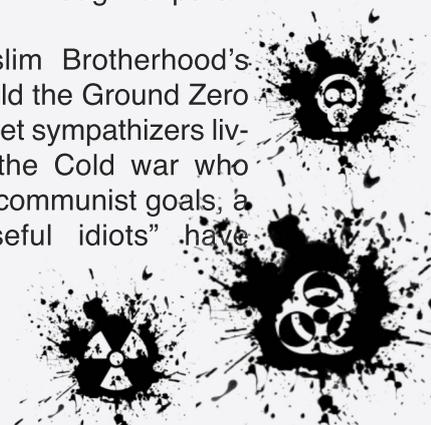
lim communities are seeking the application to them of shariah. And today, as Rep. Peter King (R-NY) seeks to hold hearings on Islamic extremism and how it radicalizes Muslims, he is being targeted by Muslim groups opposed to such hearings.

Earlier this month, British Imam Anjem Choudary, who has praised the 9/11 terrorists, was interviewed concerning his desire to come to the US to work for the implementation of shariah law here. With such implementation already partially successful in the UK (for civil cases), Choudary seeks to do the same in the US. He is the same person who, in 2006, condemned the Pope to death for simply quoting a Byzantine emperor's negative observation about Prophet Muhammad. One need not imagine the harsh reality and absence of humanity Choudary envisions for a shariah-compliant US—one need only look at what happened last week in Egypt—a country where the Muslim Brotherhood is very well organized.

In the village of Soul, just 30 kilometers from Cairo, a Christian Copt church was attacked and burned by a mob of 4000 Muslims shouting "Allahu Akbar." It was triggered due to a relationship entered into by a Copt man and Muslim woman. The Copt's house was torched to punish the man. But when the Muslim woman's father refused to kill his daughter to restore the family's honor, a cousin murdered the reluctant father. To avenge the father's death, the woman's brother then killed the cousin. Meanwhile, Muslims vow to conduct morning prayers at the site of the razed church. Under shariah law, insanity runs rampant.

Choudary claimed in an interview that the imposition of shariah is necessary to rid the US of corruption. But the hypocrisy of such a claim is evidenced by implementation of shariah in its severest form in a country—Iran—where religious leaders have become among world's wealthiest through unparalleled corruption.

Playing into the Muslim Brotherhood's strategy is the push to build the Ground Zero Mosque. Just like the Soviet sympathizers living in the West during the Cold war who naively worked to further communist goals, a new generation of "useful idiots" have



evolved, naively working to further the Brotherhood's goals.

The Ground Zero Mosque effort is dubbed the "Cordoba Initiative" by its Muslim sponsors who suggest they seek to bring back the atmosphere of "interfaith tolerance and respect that we have longed for since Muslims, Christians and Jews lived together in harmony and prosperity eight hundred years ago." This smacks of deception as no such harmony or prosperity existed in Islamic Spain for non-Muslims as they were forced to submit to Islam. And, in keeping with a practice followed by conquering Islamic armies a millennium ago, a battle's victory is to be memorialized by constructing a mosque at the site where it was won. Therefore, building a Ground Zero Mosque is very symbolic and meaningful to Islamic extremists, such as the Brotherhood.

It is interesting to further note, if one peels back the complex layers of Muslim groups

and individuals pressing for construction of the Mosque (in opposition to American sentiments about the location), links to the Brotherhood are exposed. And, as Rep. King's hearings will demonstrate, imams at such mosques play a significant role in radicalizing Muslims in the US.

During World War II, we were able to learn in advance of the enemy's war strategy. We have gained a similar intelligence upper hand today, learning about the war strategy of Islamic extremists determined to replace our Constitution with shariah law by using our system against us.

There is a big difference, however, between then and now. In World War II, we made use of that intelligence to defeat the Japanese and Germans; today, we ignore it, allowing the enemy's shariah law to chip away at our Constitution.

Sadly, we are in great peril and fail to even understand it.



Family Security Matters Contributing Editor **Lt. Colonel James G. Zumwalt, USMC (ret)** is a retired Marine infantry officer who served in the Vietnam War, the US invasion of Panama and the first Gulf war. He is the author of "Bare Feet, Iron Will--Stories from the Other Side of Vietnam's Battlefields" and frequently writes on foreign policy and defense issues.

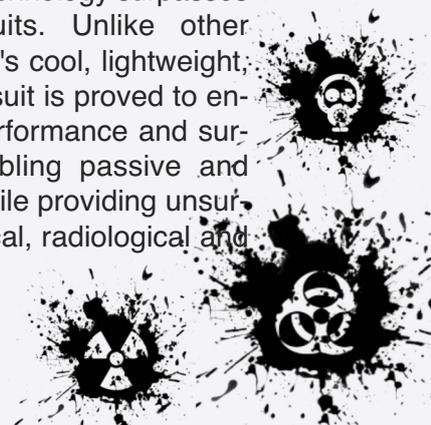
## Protection fabric gets Israeli patent

Source: [http://www.upi.com/Business\\_News/Security-Industry/2011/03/08/Protection-fabric-gets-Israeli-patent/UPI-86051299607975/print/#ixzz1GDBtuRIB](http://www.upi.com/Business_News/Security-Industry/2011/03/08/Protection-fabric-gets-Israeli-patent/UPI-86051299607975/print/#ixzz1GDBtuRIB)

U.S. company Radiation Shield Technologies has been granted an Israeli patent for Demron, its high-performance, multi-hazard protection fabric. **The company says its product is the world's first and only fabric that provides total multi-hazard protection against nuclear, biological, chemical, bomb and ballistic threats, infrared radiation and heat stress.** "RST developed Demron because we recognized that first responders need advanced personal-protection gear that helps improve athletic performance and may be used in all types of emergencies, including nuclear and radiological threats as well as traditional



ballistics and bombs, IED's, RDD's and RED's," said Dr. Ronald DeMeo, the president of Radiation Shield Technologies. "We will continue to secure patents worldwide for Demron as part of our strategy to expand its market potential." RST has 12 other national and international patents for the product. It says the nanotechnology surpasses current NBC suits. Unlike other CBRN suits, RST's cool, lightweight, flexible full-body suit is proved to enhance athletic performance and survivability by enabling passive and active heat dissipation while providing unsurpassed chemical, biological, radiological and



nuclear protection. Demron is the only impermeable CBRN fabric that permits heat exchange and enables the wearer to be cooled externally without having to penetrate the suit. In addition to the suit, RST's product line includes ballistic vests and high energy anti-nuclear ballistic blankets. RST said Demron has been shown to provide multi-hazard protec-

tion against gamma rays, chemical and biological threats and X-rays by the Lawrence Livermore National Laboratory in the United States and Pacific Northwest National Laboratory, GEOMET, and Kansas State University. RST's products are deployed throughout the Middle East, Asia, Europe and the United States.

## Olympic Games 2012

Source: <http://www.homeoffice.gov.uk/publications/>

The Olympic and Paralympic Games will begin in London on 27 July and conclude on 9 September 2012. There will be 26 Olympic sports and 20 Paralympic sports in venues in London and across the UK. About 450,000 people in total are likely to be accredited to access Olympic and Paralympic venues, including about 20,000 members of the press. An estimated 11 million tickets are likely to be sold for both Games.

In October 2010 the UK government published "A Strong Britain in an Age of Uncertainty: The National Security Strategy." The National Security Council judges that currently, and for the next five years, the four highest priority risks are those arising from:

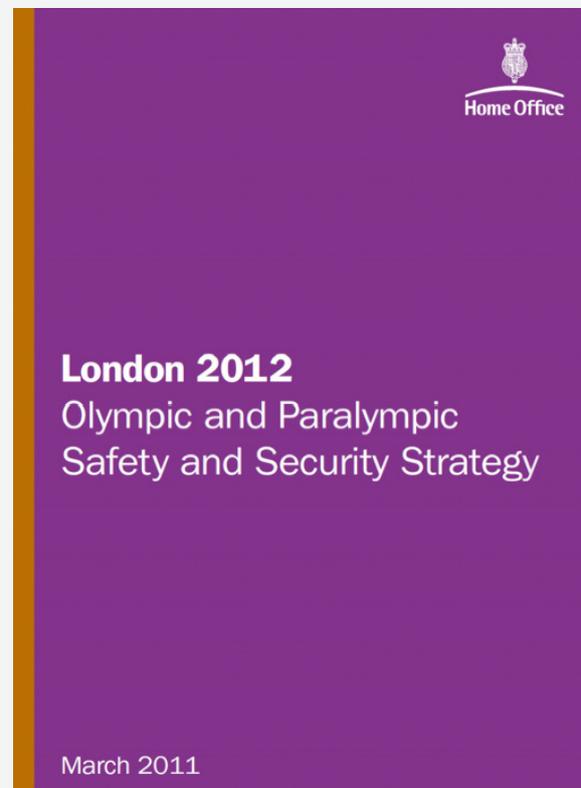
1. international terrorism, including through the use of **chemical, biological, radiological or nuclear (CBRN) materials**; and of terrorism related to Northern Ireland;
2. cyber attack, including by organised crime and terrorists;
3. international military crises; and
4. major accidents or natural hazards.

This strategy supports the National Security Strategy and considers those risks that it identifies. The Olympic and Paralympic Safety and Security Strategy objectives are:

- protect Olympic and Paralympic venues, events and supporting transport infrastructure, and those attending and using them; prepare for events that may significantly disrupt the safety and security of the

Games and ensure capabilities are in place to mitigate their impact;

- identify and disrupt threats to the safety and security of the Games;
- command, control, plan and resource (C2PR) the safety and security operation; and
- engage with international and domestic partners and communities, to enhance our security and ensure the success of the strategy.



### Unmanned medical evacuation

Source: [http://defense-update.com/wp/20101013\\_cargo-uavs.html](http://defense-update.com/wp/20101013_cargo-uavs.html)



The AirMule prototype has performed 40 test hovers and accumulated 10 hours of flight time. More recently the aircraft has been undergoing a systems upgrade including the development and installation of wheeled landing gear that will facilitate ground mobility while also enabling STOVL (Short Takeoff Vertical Landing) operations which have the potential to nearly double the aircraft's payload capacity. Urban Aeronautics plans to resume flight tests of its AirMule prototype before the end of the year. Photo: Urban Aeronautics

The U.S. Navy is expecting proposals from industry for groundbreaking operational support services, employing unmanned helicopters as 'Cargo-Unmanned Aerial Systems – C-UAS) in Afghanistan. Two companies are expected to compete for this service – Lockheed Martin-Kaman and Boeing. Boeing positions its A160T Hummingbird rotary wing UAV as an unmanned cargo lifting platform. The A160T is likely to face a larger and tough competitor, the 'Unmanned K-MAX' from Lockheed Martin and Kaman. For the long term, dedicated platforms are being developed for such roles, as well as a new category of 'transformers' flying cars, developed under a new initiative embarked by DARPA. Following are some of the highlights of these new programs.

#### Far Sighted Designs

A dedicated cargo UAV is currently in development in Israel – the AirMule, an aerial vehicle designed specifically for multi-role tactical

utility missions. The AirMule is equipped with internal lift rotors and has a small footprint, qualities that make it particularly suitable for vertical mobility in urban environments. The AirMule has an empty weight of 1400 lbs (640 kg) and maximum load of up to 1900 lbs



Urban Aeronautics is developing an unmanned vehicle powered by internal lift fans, the prototype has been flying since 2009 and will soon demonstrate hovering and flying at low altitude, controlled by the autonomous flight control and navigation system. Photo: Noam Eshel, Defense Update



(860kg). The AirMule carries fuel to support up to 8 flight hours or 600 nm (1080 km). The aircraft has multiple-mission capabilities with the current emphasis being on unmanned casualty evacuation and cargo resupply. It is measured for internal carriage inside CH-53 type helicopters, enabling rapid and efficient global deployment. The AirMule is being evaluated by the Israeli Medical Corps and Israel MOD for potential use as an unmanned airborne casualty evacuation (CasEvac) system.

So far the AirMule prototype has performed 40 test hovers and accumulated 10 hours of flight time. More recently the aircraft has been undergoing a systems upgrade including the development and installation of wheeled landing gear that will facilitate ground mobility while also enabling STOVL (Short Takeoff

Vertical Landing) operations which have the potential to nearly double the aircraft's payload capacity. Urban Aeronautics plans to resume flight tests of its AirMule prototype before the end of the year.

The U.S. Army is also looking into an unmanned aerial platform to operate as 'combat medic unmanned aircraft system' (CM-UAS), an aerial vehicle that will be able to respond to calls for evacuation or urgent resupply, by automatically navigating to the requested location, where it liaises with the party calling for the support to get landing instructions. As it touches down, the medics unload the medical supplies, load the casualties, flying back to the forward medical treatment point without putting a manned aircrew at risk.

**READ THIS: One day you might save somebody's life!**

## Chest Compression–Only CPR by Lay Rescuers and Survival From Out-of-Hospital Cardiac Arrest

Bentley J. Bobrow, MD; Daniel W. Spaite, MD; Robert A. Berg, MD; Uwe Stolz, PhD, MPH; Arthur B. Sanders, MD; Karl B. Kern, MD; Tyler F. Vadeboncoeur, MD; Lani L. Clark, BS; John V. Gallagher, MD; J. Stephan Stapczynski, MD; Frank LoVecchio, DO; Terry J. Mullins, MBA; Will O. Humble, MPH; Gordon A. Ewy, MD



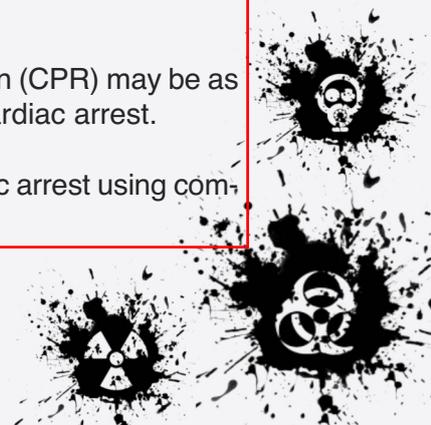
### Authors' Affiliations:

- Arizona Department of Health Services, Phoenix (Dr Bobrow and Messrs Mullins and Humble);
- Arizona Emergency Medicine Research Center, Department of Emergency Medicine (Drs Bobrow, Spaite, and Stolz),
- Sarver Heart Center (Drs Bobrow, Sanders, Kern, and Ewy and Ms Clark), University of Arizona, Tucson;
- Children's Hospital of Philadelphia, Philadelphia, Pennsylvania (Dr Berg);
- Mayo Clinic, Jacksonville, Florida (Dr Vadeboncoeur);/
- Phoenix Fire Department, Phoenix (Dr Gallagher); and
- Emergency Medicine Department, Maricopa Medical Center, Phoenix (Drs Bobrow, Stapczynski, and LoVecchio).

### Abstract

**Context:** Chest compression–only bystander cardiopulmonary resuscitation (CPR) may be as effective as conventional CPR with rescue breathing for out-of-hospital cardiac arrest.

**Objective:** To investigate the survival of patients with out-of-hospital cardiac arrest using compression-only CPR (COCP) compared with conventional CPR.



**Design, Setting, and Patients:** A 5-year prospective observational cohort study of survival in patients at least 18 years old with out-of-hospital cardiac arrest between January 1, 2005, and December 31, 2009, in Arizona. The relationship between layperson bystander CPR and survival to hospital discharge was evaluated using multivariable logistic regression.

**Main Outcome:** Measure Survival to hospital discharge.

**Results:** Among 5272 adults with out-of-hospital cardiac arrest of cardiac etiology not observed by responding emergency medical personnel, 779 were excluded because bystander CPR was provided by a health care professional or the arrest occurred in a medical facility. A total of 4415 met all inclusion criteria for analysis, including 2900 who received no bystander CPR, 666 who received conventional CPR, and 849 who received COCPR. Rates of survival to hospital discharge were 5.2% (95% confidence interval [CI], 4.4%-6.0%) for the no bystander CPR group, 7.8% (95% CI, 5.8%-9.8%) for conventional CPR, and 13.3% (95% CI, 11.0%-15.6%) for COCPR. The adjusted odds ratio (AOR) for survival for conventional CPR vs no CPR was 0.99 (95% CI, 0.69-1.43), for COCPR vs no CPR, 1.59 (95% CI, 1.18-2.13), and for COCPR vs conventional CPR, 1.60 (95% CI, 1.08-2.35). From 2005 to 2009, lay rescuer CPR increased from 28.2% (95% CI, 24.6%-31.8%) to 39.9% (95% CI, 36.8%-42.9%;  $P < .001$ ); the proportion of CPR that was COCPR increased from 19.6% (95% CI, 13.6%-25.7%) to 75.9% (95% CI, 71.7%-80.1%;  $P < .001$ ). Overall survival increased from 3.7% (95% CI, 2.2%-5.2%) to 9.8% (95% CI, 8.0%-11.6%;  $P < .001$ ).

**Conclusion:** Among patients with out-of-hospital cardiac arrest, layperson compression-only CPR was associated with **increased survival** compared with conventional CPR and no bystander CPR in this setting with public endorsement of chest compression-only CPR.

## Will Moscow's Unyielding Stance on Circassian and North Caucasian Political Issues Endanger the 2014 Sochi Olympics?

By Valery Dzutsev

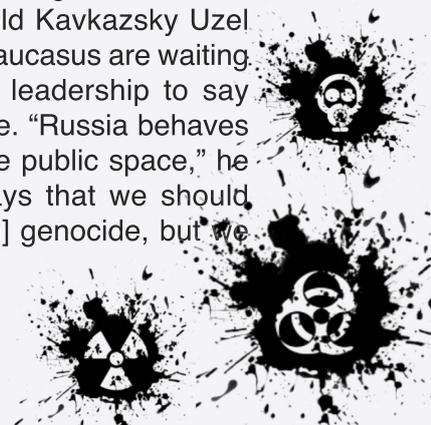
Source: [www.jamestown.org/programs/ncw/](http://www.jamestown.org/programs/ncw/)



On March 3, a conference titled "The Circassian Question and the Olympics in Sochi" was held at the Moscow center of the Carnegie Endowment for International Peace. Many of the participants expressed disappointment with the Kremlin's reluctance to discuss the issue of the Circassian "genocide" openly and engage in a dialogue with the concerned groups. The Kavkazsky Uzel (Caucasian Knot) website reported that a majority of the experts did not consider the Circassian question an obstacle to holding the Winter

Olympics in Sochi in 2014, but feared its importance may grow over the next several years in the run-up to 2014 ([www.kavkaz-uzel.ru](http://www.kavkaz-uzel.ru), March 17).

The head of the Russian regions' research center, Denis Sokolov, told Kavkazsky Uzel that people in the North Caucasus are waiting for Russia's top political leadership to say something about the issue. "Russia behaves not very adequately in the public space," he said, adding "Nobody says that we should recognize the [Circassian] genocide, but we



can publically justify our historiography. Especially as the situation in the [North] Caucasus is rather dire even without this senseless suppression of obvious facts." According to Sokolov, the real danger for the 2014 Winter Olympic Games in Sochi comes from the conflict between elites in Moscow and the North Caucasus over the distribution of budget money ([www.kavkaz-uzel.ru](http://www.kavkaz-uzel.ru), March 17).

The Russian ministry for regional development's official estimate of Moscow's expenditure on the Olympics in Sochi is \$30 billion. Unofficial estimates of the Olympics' costs are even higher - up to \$50 billion. Much of the allotted resources are to be spent on overhauling Sochi's infrastructure to prepare it for hosting the Olympics. These infrastructural costs are often hidden in other budget entries instead of being listed as part of preparations for the Olympics (<http://www.newsland.ru/news/detail/id/342936/cat/86/>).

Government money is being spent on Sochi in large quantities at the same time as the budgets of the North Caucasus republics undergo deep cuts. In 2010 all republican budgets, even in Chechnya, significantly shrank due to the ailing local economies and the rollback of financial aid from Moscow. While the North Caucasus population and elites had grown accustomed to the astonishing prosperity of Moscow in comparison to their own territories, the sudden influx of government money into the Sochi region may be viewed with resentment in the surrounding regions.

The keynote speaker at the Carnegie conference, Naima Neflyasheva, emphasized the importance of the Sochi area in the Circassian narrative. It is the native land of the Abkhaz and Circassian people, and the Russian empire expelled them from the region into exile after their final defeat in 1864. Many Circassian activists are now demanding that the Sochi Olympics be moved to another territory and that Russia should recognize and alleviate the consequences of what they regard as the "Circassian genocide." Ironically, Krasnaya Polyana [Beautiful Meadow], where a majority of the Sochi Olympics sport events are to be held, is the same place where the Russian army commemorated its victory over the Circassians exactly 150 years before the

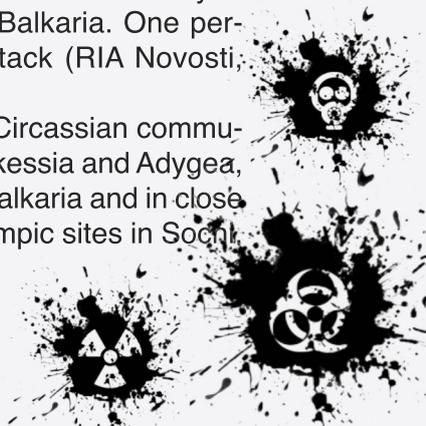
Sochi Winter Olympics are to be held.

In March and November 2010, the Jamestown Foundation held two highly acclaimed international conferences under the title "Hidden Nations, Enduring Crimes: The Circassians and the Peoples of the North Caucasus Between Past and Future." Both conferences were held in Tbilisi, Georgia and were received with great enthusiasm both in Georgia and among Circassians in the North Caucasus and elsewhere in the diasporas. The Georgian parliament has struggled since March 2010 to hold a vote on recognizing the "Circassian genocide." But Georgia has also significantly expanded its interaction with the North Caucasus, and in October 2010 lifted the visa requirement for people traveling from this troubled region.

The Carnegie Moscow Center's expert on the North Caucasus and Islam, Aleksei Malashenko, warned that the Russian government should be concerned not only about the Circassian question, but also about the general instability in the North Caucasus. As Moscow's envoy to the region, Aleksandr Khloponin, himself admitted, 2010 was "disastrous" for the Russian government in the North Caucasus ([www.kavkaz-uzel.ru](http://www.kavkaz-uzel.ru), March 17). Kabardino-Balkaria, where the majority of the Circassians live, became one of the centers of the insurgency in the North Caucasus in 2010.

On March 19, a suspected militant, Marat Zokaev, was killed in the Cherek district of Kabardino-Balkaria in a shootout with the government forces ([www.kavkaz-uzel.ru](http://www.kavkaz-uzel.ru), March 19). On March 16, the security services killed Aslan Yemkuzhev, a suspected rebel, in the center of the republican capital Nalchik. Surprisingly quickly, on the same day he was killed, the authorities announced that Yemkuzhev had received military training in Lebanon and fought in the ranks of the Fatah al-Islam radical organization ([www.kavkaz-uzel.ru](http://www.kavkaz-uzel.ru), March 16). On March 20, an explosion took place at a local market in the city of Prokhladny in Kabardino-Balkaria. One person was injured in the attack (RIA Novosti, March 20).

There are also vibrant Circassian communities in Karachaevo-Cherkessia and Adygea, to the west of Kabardino-Balkaria and in close proximity to the future Olympic sites in Sochi.



So it is hardly surprising that during the period from February 23 to March 7, large-scale military exercises were held in Adygea and the Krasnodar region, of which Sochi is a part. Six thousand servicemen, including those of the Federal Security Service (FSB) and its flagship Alfa counterterrorist unit, the Interior Ministry and the Ministry for Emergency Situations (MChS) participated in the exercises. In one of the scenarios played out during the exercises, 20 terrorists captured and held hostages at an administrative building in

the area ([www.kavkaz-uzel.ru](http://www.kavkaz-uzel.ru), March 8).

The North Caucasus insurgents claimed responsibility for the attack on the Moscow metro in March 2010 and the attack on Moscow's Domodedovo airport in January 2011. Given the proximity of the Sochi Olympics' sites to the centers of the insurgency and the poor recent record of the Russian security services, it is extremely questionable whether Moscow will be able to guarantee security for the Olympic visitors in 2014.

## Center for Disaster & Extreme Event Preparedness

Source: <http://www.umdeepcenter.org/>



The Center for Disaster & Extreme Event Preparedness (DEEP Center) conducts training, research, and service in the areas of disaster behavioral health, special populations preparedness, and disaster epidemiology. DEEP Center is a leading provider of disaster behavioral health training worldwide. Since 2003, DEEP Center has conducted more than 500 full-day, live lecture training programs to a cumulative audience of more than 20,000 participants across the United States, Canada and Latin America.

### DEEP Center Mission

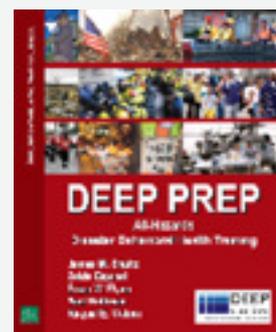
Applying disaster science and training to maximize well-being and resilience for disaster responders and survivors. DEEP Center is home to the Miami Center for Public Health Preparedness (Miami CPHP) which focuses

on special populations in disasters, with specific emphasis on disaster training for Hispanic populations.

### Miami CPHP Mission

Disaster preparedness for all cultures; cultural competence for all responders.

Shultz JM, Espinel Z,  
Flynn BW, Hoffman Y,  
Cohen RE  
DEEP PREP: All-Hazards  
Disaster Behavioral  
Health Training (2007)  
Tampa FL: Disaster Life  
Support Press.



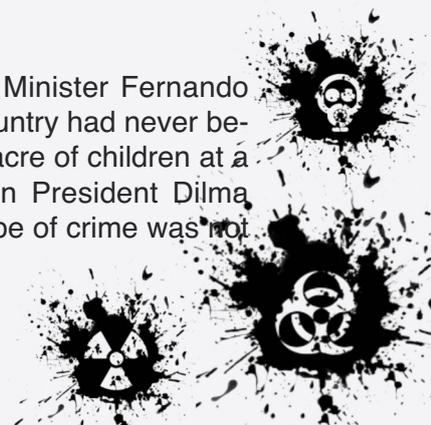
## Brazil in shock over Rio de Janeiro school massacre

Source: [http://www.monstersandcritics.com/news/americas/news/article\\_1631517.php/Brazil-in-shock-over-Rio-de-Janeiro-school-massacre](http://www.monstersandcritics.com/news/americas/news/article_1631517.php/Brazil-in-shock-over-Rio-de-Janeiro-school-massacre)

Rio de Janeiro - Brazil was in shock Thursday (April 7th), after an armed man killed at least 11 children at a school in a Rio de Janeiro suburb before committing suicide.

'It is an unprecedented tragedy in Brazil,'

said Brazilian Education Minister Fernando Hadad, noting that the country had never before experienced a massacre of children at a school. In tears, Brazilian President Dilma Rousseff said that 'this type of crime was not



characteristic of Brazil.' Rousseff cut short an appearance in Brasilia and decreed three days of official mourning nationwide, as she called for Brazilians to unite 'against this type of violence particularly against the defenceless children who lost their lives and their futures today.'

or a political motive. Police Colonel Djalma Beltrami said Menezes left behind a letter, in which he anticipated committing suicide after the attack. Beltrami described the letter as 'the words of a person who no longer believes in anything, full of sentences that made no sense and references to Islamic fundamen-



Beyond the pain caused by the deaths of the children, however, public opinion was perplexed about the motives of the killer, identified as Wellington Menezes de Oliveira, 24. He was a former student at the Tasso de Oliveira school in the poor suburb of Realengo, where some 400 students ages 7-14 were in classes Thursday.

Rio de Janeiro Governor Sergio Cabral said that, along with assisting the victims and their families, the priority for authorities was now to establish whether the massacre was the work of a psychopath or whether it had political underpinnings.

Roselane de Oliveira, a sister of the attacker, told Rio de Janeiro radio station Band News that her brother 'was very strange.' 'He had no friends, and he spent all his time on the Internet,' she said. In recent months, she said, Menezes appeared to have got closer to Islam.

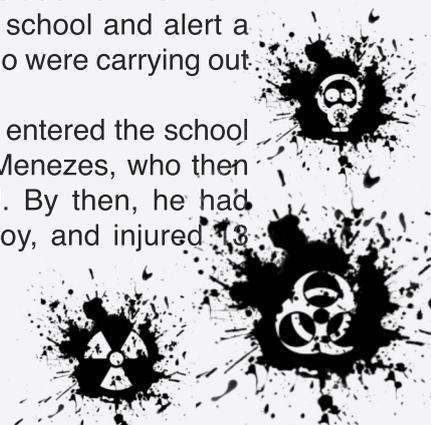
Police stressed that there was no concrete evidence that the attack had either a religious

talism.'

However, teenager Thiago Silva Motta, who witnessed Menezes' arrival, said the gunman made no political comments and only uttered three sentences before his indiscriminate killing spree. 'I am paranoid. I use my drugs. I came here to give a lecture,' Menezes said, according to Silva.

Marta Rocha, new head of Rio de Janeiro's Civilian Police, said the contents of the letter would not be immediately made public because it is part of an ongoing investigation. She said, however, that Menezes had no prior criminal record. Brazilian authorities said that the toll could have been worse, had it not been for some wounded students who managed to escape from the school and alert a group of police officers who were carrying out traffic duties nearby.

Sergeant Marcio Alves entered the school and managed to wound Menezes, who then shot himself in the head. By then, he had killed 10 girls and one boy, and injured 13



other students. 'When I found him, he was trying to go from the second to the third floor of the building, and he had a belt that was full of

ammunition,' said Alves, whom Governor Cabral hailed as a 'hero.' 'I feel happy that I did my duty and prevented more victims.'

**EDITOR'S NOTE:** Lunatic or terrorist? The answer is not of much importance (for the time being). The problem is that in a country with no anti-terrorism definition and legislation an act of terrorism happened. Being neutral or indifferent does not provide immunity against terrorism. The unexpected (?) always happen and costs lives! Actions need to be taken now before it is too late. What would happen if similar actions take place during the near-future mega-events that will take place in this big and strong country?

## Do Muslims Gather Every Friday in the Streets of New York City to Pray?

Truth or Fiction?

Source: <http://www.truthorfiction.com/rumors/m/Muslim-Day-NYC.htm>

**Summary of the eRumor:** This is a forwarded email with attached photos that says the pictures are that of Muslims in prayer on the streets of New York City. It also says that every Friday afternoon traffic is stopped so Muslims can gather at the corner of 42nd and Madison to pray.

**The Truth:** The photos were taken in New York City but this is not a weekly event. Once a year the Muslim Foundation of America organizes a Muslim Day Parade event that includes a gathering of Muslims at the corner of Madison Ave and 41st Street for Zahur prayer. This has been an annual event since 1985 and the 25th annual event is slated for September 26, 2010.

**A real example of the eRumor as it has appeared on the Internet:**



*«A Christian Nation cannot put up a Christmas scene of the baby Jesus in a public place, but the Muslims can stop normal traffic every Friday afternoon by worshipping in the streets... Something is happening in America that is reminiscent of what is happening in Europe. This is Political Correctness gone crazy...»*



This is NYC on Madison Ave



*This is an accurate picture of every Friday afternoon in several locations throughout NYC where there are mosques with a large number of Muslims that cannot fit into the mosque - They fill the surrounding streets, facing east for a couple of hours between about 2 & 4 p.m. - Besides this one at 42nd St & Madison Ave , there is another, even larger group, at 94th St & 3rd Ave , etc., etc. - Also, I presume, you are aware of the dispute over building another "high rise" Mosque a few blocks from "ground zero" - With regard to that one, the "Imam" refuses to disclose where the*

*\$110 million dollars to build it is coming from and there is a lawsuit filed to force disclosure of that information - Just some facts FYI - But then, you have your own troubles with the "immigration" problem and the new AZ law - November can't come soon enough This is in New York City on Madison Avenue, not in France or the Middle East or Yemen or Kenya . Is there a message here???? Yes, there is, and they are claiming America for Allah. If we don't wake up soon, we are going to "politically correct" ourselves right out of our own country!»*

**EDITOR'S NOTE:** Similar pictures from Paris, Athens, London and Milan – is there a message here? One have to be blind not getting the point...



The scene is taking place not in downtown Cairo, but on a busy market street in northern Paris, a short walk from the Sacre Coeur basilica. To locals, it's old news: some have been praying on the street, rain or shine, for decades.



Similar scene from Athens (Greece) downtown in Stadiou Avenue outside the National Academy. Hundreds of immigrants gathered to pray for Eid al-Adha.



The religious ceremony took place at London's City University after the institution's Islamic prayer room was closed following a racist knife attack on four students outside the building last year. But Muslim clerics said they could not worship in a room where other religions also prayed. The sight of hundreds praying in Northampton Square – which is lined with million-pound townhouses – has now become a familiar sight every Friday lunch-time to mark the Islamic holy day.



"The fact that Muslim extremists transformed the Milan's (Italy) Cathedral square into an outdoor Mosque (constitutes) an incredible provocation," ANSA news agency quoted Mario Borghezio, European deputy with the Northern League, as saying. "The prayer to Allah recited by thousands of fanatical Muslims is an act of intimidation, a slap in the face for the city of Milan which must remain Christian," he added.



## Destroying One Koran vs. Destroying Many Christians – Which is worse?

by Raymond Ibrahim

Source: <http://www.meforum.org/2872/koran-christian-persecution>

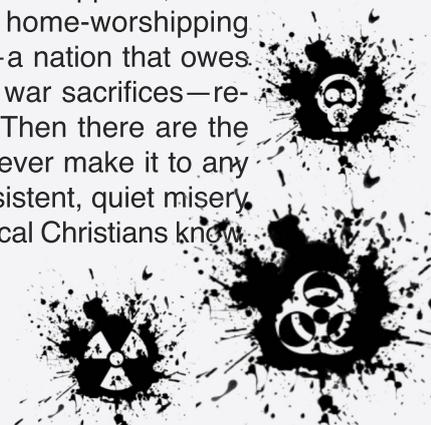
The now infamous Koran burning by Florida pastor Terry Jones has created hysteria in the Muslim world. In Afghanistan alone, some twenty people, including U.N. workers, have been killed and beheaded to screams of "Allahu Akbar!" Western leaders around the globe—including Obama and members of Congress—have unequivocally condemned Jones' actions (without bothering to point out that freedom of expression is a prized American liberty). Many are even blaming the deaths in Afghanistan directly on Jones; Bill O'Reilly says he has "blood on his hands." Yet, as Western leaders rush to profess their abhorrence at what one American did to one inanimate book, let's take a quick look at what many Muslims are doing to many living and breathing Christians around the Islamic world—to virtually no media coverage or Western condemnation:

- Afghanistan: A Muslim convert to Christianity was seized and, according to sharia's apostasy laws, awaits execution.
- Bangladesh: A Christian man was arrested for distributing Bibles near Muslims. Since Wednesday, thousands of Muslims have been rioting, injuring dozens—not because of Jones, but in protestation of women's rights.
- Egypt: A Muslim mob burned down another Coptic church and dozens of Christian homes; when Christians protested, the military opened fire on them while crying "Allahu Akbar," killing nine. Another mob cut a Christian man's ear off "according to sharia."
- Ethiopia: Muslims went on a rampage burning down nearly 70 churches, killing at least one Christian, and dislocating as many as 10,000. Christians living in Muslim majority regions are being warned to either convert to Islam, abandon their homes, or die.
- Malaysia: Authorities detained and desecrated thousands of Bibles.



- Pakistan: Two Christians were shot to death as they exited church; a Christian serving life in prison for "blasphemy" died in his cell under suspicions of murder.
- Saudi Arabia: An Eritrean Christian has been arrested for sharing his faith with Muslims and is facing the death penalty; other missionaries continue to languish in Saudi prisons.
- Somalia and Sudan: Christian girls—including a mother of four—were recently abducted, raped, and killed for embracing Christianity.

It should be borne in mind that none of these atrocities were performed in retaliation to Jones' Koran burning; they're just business as usual in the Muslim world. Moreover, the above list is but a quick and cursory sampling of the very latest in Christian suffering under Islam. Were one to include persecution from just a few months back, one could also mention the jihadist attack on a Baghdad church, killing 52 Christians; the New Year's eve Coptic church explosion, killing 21; Muslim rampages that destroyed several churches in Indonesia, Nigeria, and the Philippines; Iran's "round up" of some 70 home-worshipping Christians; and Kuwait's—a nation that owes its very existence to U.S. war sacrifices—rejection to build a church. Then there are the countless atrocities that never make it to any media—the stories of persistent, quiet misery that only the victims and local Christians know.



One would have thought that all this was at least equally deserving of media attention and Western condemnation as the burning of a Koran. This is especially so considering that, whereas only Jones is responsible for his actions, many of the aforementioned savageries—arresting and executing Christian missionaries and Muslim apostates, destroying or outlawing churches, seizing and desecrating not one but thousands of Bibles—are carried out at the hands of Muslim authorities and governments deemed U.S. "friends-and-allies."

Such is the surreal and increasingly irrational world we live in, where irate Muslims and groveling Westerners obsess over the destruction of one book while ignoring the destruction of many human lives; where a guaranteed and hard-earned American right—freedom of expression—receives a lot of condemnatory huffing and puffing from those charged with protecting it, while murderous and barbarous—in a word, evil—behavior is devoutly ignored.

Raymond Ibrahim is associate director of the Middle East Forum

## U.S. to Use Facebook, Twitter to Issue Terror Alerts

Source: <http://www.foxnews.com/politics/2011/04/07/use-facebook-twitter-issue-terror-alerts/#ixzz1IvatYwpx>

The U.S. government's new system to replace the five color-coded terror alerts will have two levels of warnings -- elevated and imminent - - that will be relayed to the public only under certain circumstances for limited periods of time, sometimes using Facebook and Twitter, according to a draft Homeland Security Department plan obtained by The Associated Press.

Some terror warnings could be withheld from the public entirely if announcing a threat would risk exposing an intelligence operation or a current investigation, according to the government's confidential plan.

Like a carton of milk, the new terror warnings will each come with a stamped expiration date.

The 19-page document, marked "for official use only" and dated April 1, describes the step-by-step process that would occur behind the scenes when the government believes terrorists might be threatening Americans. It describes the sequence of notifying members of Congress, then counterterrorism officials in

states and cities and then governors and mayors and, ultimately, the public. It specifies even details about how many minutes U.S. officials can wait before organizing urgent conference calls among themselves to discuss pending threats. It places the Homeland Security secretary, currently Janet Napolitano, in charge of the so-called National Terrorism Advisory System.

The new terror alerts would also be published online using Facebook and Twitter "when appropriate," the plan said, but only after federal, state and local government leaders have already been notified.

The new system is expected to be in place by April 27.

The government has always struggled with how much information it can share with the public about specific threats, sometimes over fears it would reveal classified intelligence or law enforcement efforts to disrupt an unfolding plot. But the color warnings that became one of the government's most visible anti-terrorism programs since the September 2001 attacks



were criticized as too vague to be useful and became fodder for television comedians.

The new advisory system is designed to be easier to understand and more specific, but it is impossible to know how often the public will receive these warnings. The message will always depend on the threat and the intelligence behind it.

For example, if there is a specific threat that terrorists were looking to hide explosives in backpacks around U.S. airports, the government might issue a public warning that

would be announced in airports telling travelers to remain vigilant and report any unattended backpacks or other suspicious activity to authorities.

If the intelligence community believes a terror threat is so serious that an alert should be issued, the warning would offer specific information for specific audiences. The Homeland Security secretary would make the final decision on whether to issue an alert and to whom -- sometimes just to law enforcement and other times to the public.

## Defence Chemical Biological Radiological and Nuclear Centre (DCBRNC)

Source:<http://www.mod.uk/DefenceInternet/AboutDefence/WhatWeDo/TrainingandExercises/DCBRNC/>

The Defence Chemical, Biological, Radiological and Nuclear Centre (DCBRNC) is a Joint unit whose mission is to deliver world class CBRN training and technical assistance in support of the UK Defence Mission.

The DCBRNC designs and conducts courses of instruction to qualify individuals of all 3 Services for operational, training and staff CBRN defence appointments. DCBRNC is located at Winterbourne Gunner, about 5 kilometres north-east of Salisbury, Wiltshire, on the southern edge of Salisbury Plain.

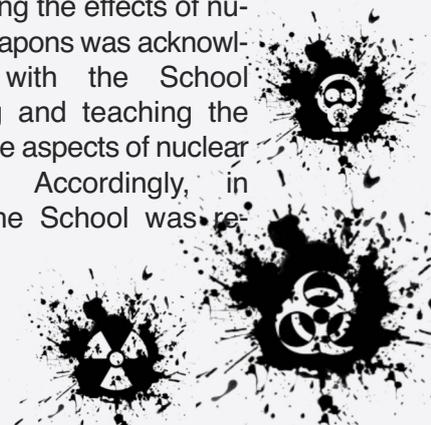
The DCBRNC site at Winterbourne Gunner was established in 1917 as a Trench Mortar Experimental Establishment under the administrative control of the War Department's Experimental Ground at Porton Down. Known as Porton South Camp, it served as troop accommodation, ammunition storage and as the trench mortar and artillery firing point.



The actual involvement of Winterbourne with chemical warfare dates from the formation of the Chemical Warfare School in 1926. The School conducted training for officers and senior non-commissioned officers (SNCOs), running courses each month and regular demonstrations for the Services' staff colleges and other dignitaries.

In 1931 the Chemical Warfare School became the Anti-Gas Wing of the Small Arms School, but in 1939 it gained independent status as the Army Gas School, later to be re-named as the Army School of Chemical Warfare.

During the years 1947/48 the School became a joint Army and Royal Air Force establishment, named the Joint School of Chemical Warfare. The importance of minimising the effects of nuclear weapons was acknowledged with the School studying and teaching the defensive aspects of nuclear warfare. Accordingly, in 1957, the School was re-



named as the Joint School of Nuclear and Chemical Ground Defence.

In January 1964 the title changed again, to the Defence Nuclear, Biological and Chemical (NBC) School in recognition of the emerging threat posed by Biological Warfare. A further change was made to the name in 1975, when it became the Defence NBC Centre. Following the 1987 Strategic Defence Review, the RAF assumed UK lead-service responsibility for NBC defence and in 1999 the Defence NBC Centre became a RAF administered unit within No 2 Group.

The replacement of the site's original World War 1 corrugated tin huts and wooden buildings was completed in 2005, with the completion of new messing facilities and state of the art student accommodation. To reflect the change in emphasis from Cold War NBC War fighting to defence against a wider asymmetric threat, the Centre changed its name to the Defence Chemical, Biological, Radiological and Nuclear Centre (DCBRNC) in 2005.

Today's DCBRNC has a purpose built training complex containing a headquarters, administrative support elements and the Defence CBRN School with lecture theatres, classrooms, and computer aided training suite. To support the CBRN training the Centre has a specialised range, scenario based training facilities, and modern troop accommodation.

### CBRN Medical

DCBRNC is the home of the Joint CBRN Medical Faculty. The Centre also provides CBRN medical training to all Medical Officers in the UK Armed Services as well as specialist medical training to UK and NATO/Allied Nations. As well as military training, DCBRNC also supports civilian ambulance frontline CBRN response provided by the Hazardous Area Response Teams (HART) and NHS London Emergency Department CBRN Training in partnership with the Health Protection Agency.



The Joint CBRN Medical Faculty supports development of the medical response to a CBRN incident and the management of CBRN casualties. It is a cross-government group with the remit

under the Surgeon General to develop CBRN clinical guidance, medical training and research.

### CBRN Clinical Training objectives are:

1. Manage any CBRN casualties including trauma
2. Manage the medical aspects of a CBRN incident
3. Treat chemical casualties
4. Treat biological casualties including sepsis
5. Treat radiological casualties including nuclear

### Principles of CBRN casualty management:

- Recognition
- Safety
- Triage
- Life Saving Intervention (LSIs)
- Casualty Hazard Management
- Supportive Management
- Definitive Management, including antidotes

### CBRN Emergency Medical Treatment (EMT) Course

The EMT course is a 3-day new entry Medical Officer course developed to provide military doctors with an awareness of the effects and management of CBRN agents and teach the competencies to provide Role 1 (pre-hospital) medical management of CBRN casualties.

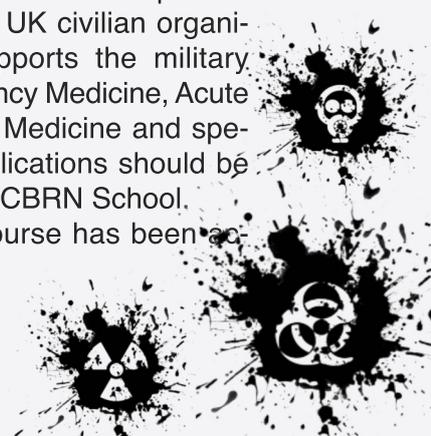
This 5-day course is designed to train Role 1 (pre-hospital), 2 (hospital) and 3 (medical, nursing and allied health) professionals in the



recognition, triage and treatment of CBRN casualties in a CBRN environment and beyond.

The CBRN Clinical Course is sponsored by the Joint Medical Command but open to NATO, allied military and UK civilian organisations. This course supports the military competencies for Emergency Medicine, Acute Medicine, Intensive Care Medicine and specialist nurse training. Applications should be submitted to the Defence CBRN School.

The CBRN Clinical Course has been a



credited by the College of Emergency Medicine for Continuing Professional Development (20 points CPD) and is compliant with NATO STANAG 2954.



DCBRNC SimMan3G during medical training

### Course dates

- 21-25 Feb 2011
- 9-13 May 2011
- 18-22 July 2011
- 24-28 Oct 2011
- 20-24 Feb 2012

### CBRN Medical Training Facilities

The medical training at DCBRNC uses blended learning including interactive presentations, table top exercises, collective training and simulation. The Centre now has a dedicated medical training area for pre-hospital training as well as high-fidelity hospital training using the SimMan3G dedicated to CBRN medical management.

**EDITOR'S NOTE:** In 2004, part of my Olympic Hospital CBRN Response Unit, trained at DNBCC. I think that we were pioneers since it was a pilot NBC medical course in preparation at that time! Excellent memories from that period! Fantastic hospitality, excellent training facilities and the most important of all, field experienced staff eager to pass the knowledge to others! **Highly recommended!**



Olympic Hospital CBRN Response Unit – medical CBRN training at DNBCC (Dr Roger Nook – left, Commandant of the unit/Editor – right)



## Russian Muslim leader calls for crescent as part of national emblem

Source: <http://en.rian.ru/russia/20110415/163540921.html>

A Muslim crescent should be part of Russia's national emblem along with Orthodox crosses, Chief Mufti of Russia Talgat Tadzhuddin said on Friday in an interview with Moskovskiye Novosti daily.



Chief Mufti of Russia Talgat Tadzhuddin

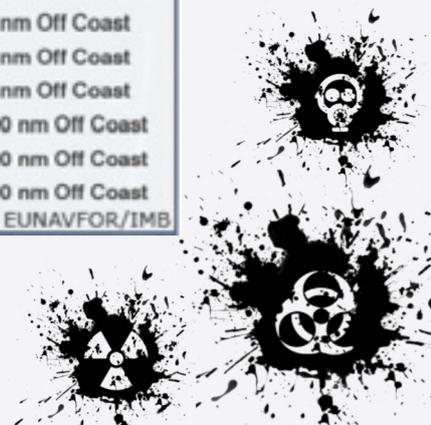
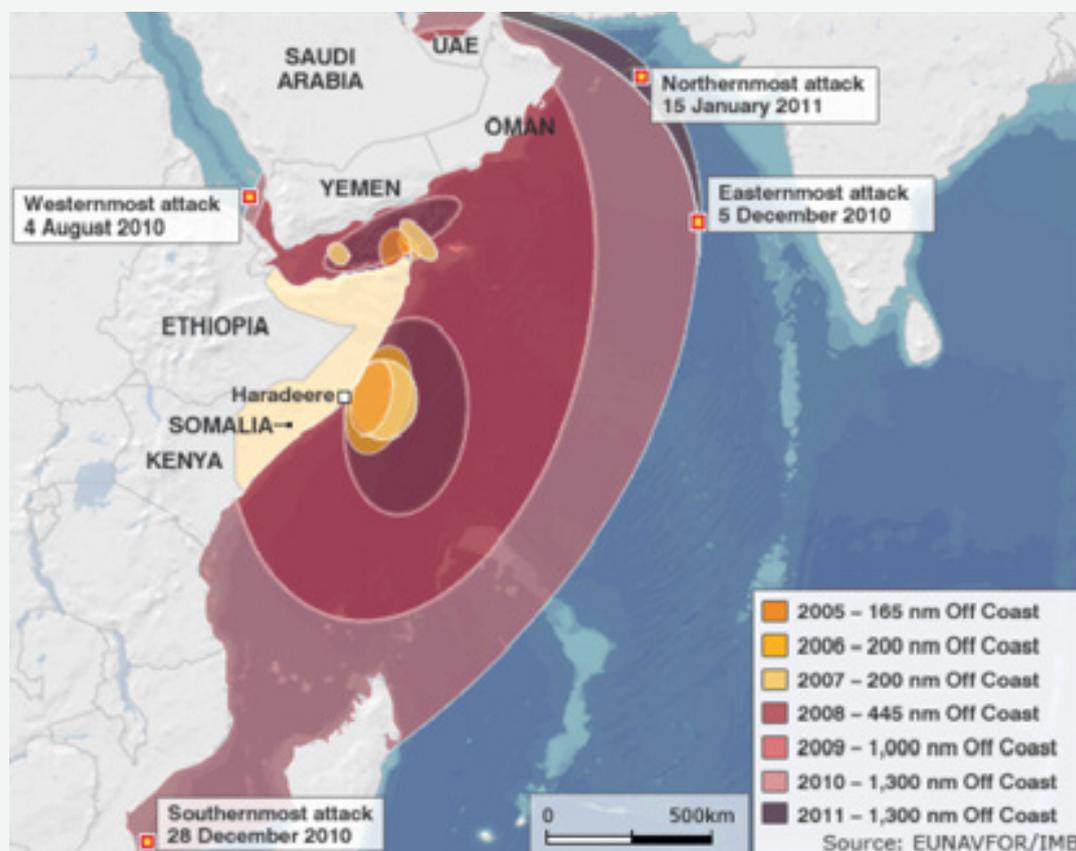
Tadzhuddin, the head of the Central Muslim Spiritual Directorate in the southwest Russian republic of Bashkiriya and

the Chief Mufti of Russia proposed adding the Muslim crescent above one of the crowns that

decorate Russia's symbol, the double-headed eagle. In February, Tadzhuddin shared his idea with President Dmitry Medvedev. The president "listened attentively," the imam said.

Since about 18% of Russia's population (20 million people) is **Muslim**, the national emblem should equally symbolize all the religious minorities living in the country, Tadzhuddin said. "Our ancestry has lived here for ages. We have united into one state by Divine will. So our neighbour is like a brother," Moskovskiye Novosti quoted Tadzhuddin as saying. In February, Tadzhuddin suggested establishing a "spirituality tax" to raise money for the construction of new mosques and cathedrals. The tax was to be collected from all residents of Bashkiriya, regardless of their faith.

**EDITOR'S NOTE:** Is the international naval force offshore Somalia and Gulf of Aden an outdated solution to confront/combat maritime terrorism?



### The CBRN Defence Market 2011-2021

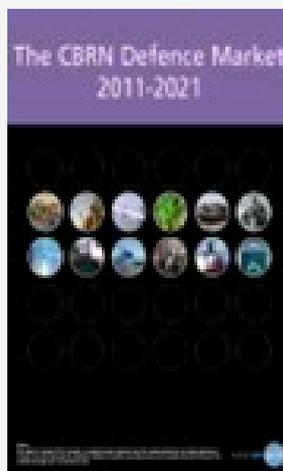
Published: January 2011

Source: <http://www.bharatbook.com/detail.asp?id=169278&rt=The-CBRN-Defence-Market-2011-2021.html>

The CBRN Defence Market 2011-2021 – assesses the continually growing business opportunities presented by one of the most significant markets in the global defence and security world. Our study examines the 12 leading national markets for chemical, biological, radiological and nuclear (CBRN) defence products and services by sales, as well as assessing the factors that are driving sales growth around the world. Our analysis has concluded that worldwide government spending on CBRN defence products and services will reach \$8.38bn in 2011.

We examine the commercial prospects for companies involved in supplying products ranging from biological and chemical agent detection devices and personal protective equipment (PPE) to decontamination systems. This analytical report defines the current state of the global CBRN defence market and discusses its potential for growth from 2011 onwards, with detailed sales forecasting carried out at global and national levels. We analyse the combination of drivers and restraints that are resulting in increasing sales. We also examine the most promising areas of technological development that are likely to affect procurement decisions over our forecast period.

Are major economies prepared to handle CBRN terrorist attacks? Which national CBRN defence marketplaces offer the most significant growth opportunities over the coming decade? What effect would a CBRN terrorist attack have on government procurement plans? How is spending on different types of CBRN defence equipment



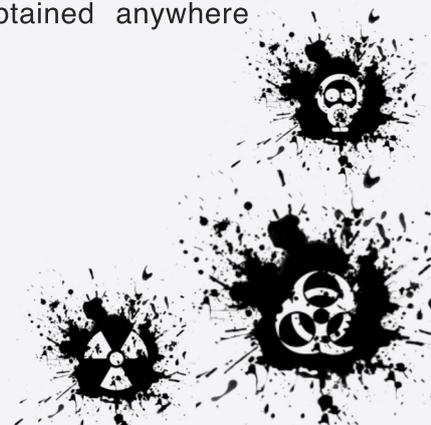
likely to be affected as government budgets continue to come under intense pressure? What are the prospects for organisations seeking to secure research funding?

We answer these critical questions and many more through the in-depth analyses presented within this market report.

#### **A comprehensive analysis of the global CBRN defence market**

The CBRN Defence Market 2011-2021 examines the global market for CBRN defence products and services from an impartial standpoint. We offer a review of significant CBRN defence contracting activity based on our close analysis of information obtained from multiple sources. The report draws on a rich combination of official corporate and governmental announcements, media reports, policy documents, industry statements and a gathering of unique expert opinion from experienced industry figures. These primary research interviews are not available elsewhere – only by ordering this report will you have access to them.

The CBRN Defence Market 2011-2021 provides detailed sales forecasts for the global market and 12 leading national markets; a strengths, weaknesses, opportunities and threats (SWOT) analysis; discussions of commercial and technological trends; and assessments of the most important market drivers and restraints. This report also includes transcripts of six interviews with leading industry experts. This package of analyses cannot be obtained anywhere else.



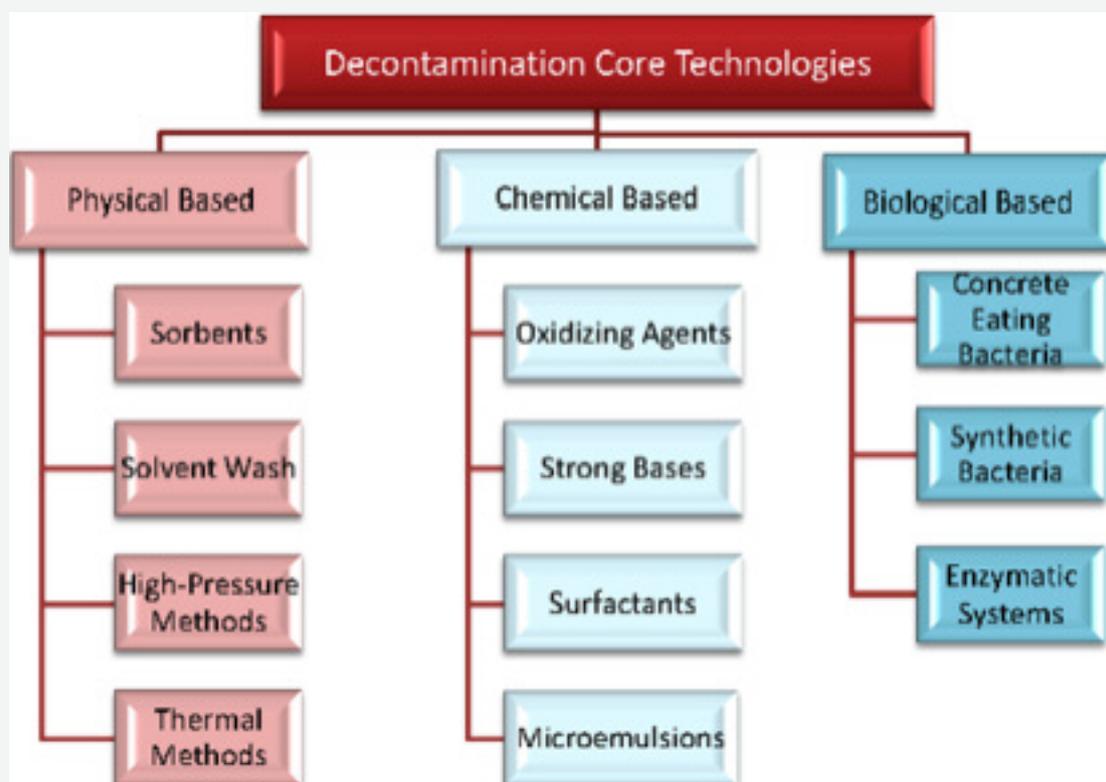
## U.S. CBRN and HAZMAT Incidents Decontamination Technologies and Markets – 2011-2016

Source: <http://www.asdreports.com/shopexd.asp?id=224>

HSRC's newest report is the most comprehensive review of the industry available today. With 171 pages, 74 tables and figures, the report covers 15 sub-markets. It offers for each sub-market: 2009-2010 data, funding and market size, as well as 2011-2014 forecasts and analysis.

grow\* from \$0.9 billion in 2010 to \$1.5 billion by 2016.

\* Excluding future "one time event" market surges following a catastrophic event like the 2010 BP oil spill



The report reveals more than twenty new business opportunities, created by, on the one hand, the increasing recognition of the threat presented by CBRN terrorism, and, on the other hand, a growing environmental consciousness that is impacting public and political attitudes. Meeting both of these challenges has sparked a host of new, pipeline technologies and opportunities that have the decontamination market poised for considerable growth. New governmental legislation following the 2010 BP Gulf of Mexico oil spill, and DHS/DOD funding post CBRN attack decontamination equipment and reagents stockpiling are only two of the many factors driving this market growth. Over the next six years: the market is forecasted to

**The report analyses and projects the 2011-2016 market and technologies from several perspectives, including:**

- Market and technology forecast by modality: (e.g., people decontamination systems, facility decontamination systems, indoor and outdoor decontamination systems, equipment decontamination systems)
- Government-sponsored R&D
- 71 vendors and their products
- Equipment & reagent sales and post warranty Service & Upgrade business

In addition, the report:

- Analyzes the market drivers and inhibitors



- Provides a competitive analysis and SWOT analysis
- Outlines the current and pipeline technologies
- Details new business opportunities and challenges

### Iran 'uncovers Stars espionage virus'

Source: <http://www.bbc.co.uk/news/technology-13188351>



Officials in Iran say they have found a computer virus designed to target the country's government institutions. The malicious software - dubbed **Stars** - was capable of inflicting minor damage, according to the head of Iran's civil defence organisation.

[Details of the Stars virus were posted on the website of Iran's civil defence organisation](#)

If the reports are accurate, it would be the second major attack in a year. The recently discovered Stuxnet worm is thought to have been created to take control of equipment used in Iran's nuclear programme. It would take some time to establish Stars' intended purpose, said Gholam Reza Jalali, military head of the Iranian Passive Defence Organisation. "The Stars virus has been presented to the laboratory but is still being investigated," he said. "No definite final conclusions have been reached." Mr Jalali revealed that the virus could have been "mistaken for executive files of governmental organisations", but gave no indication about who might be behind the attack.

### Iran's Oil Show

Source: <http://www.newsmax.com/KenTimmerman/Iran-Sanctions-OilFair/2011/04/16/id/393098>

Hundreds of foreign oil companies are taking part in a major industry exhibition that opened in Tehran on Saturday, making a mockery of U.S. and European Union efforts to impose sanctions on Iran's oil and gas industry. Organizers of the 16th annual oil and gas industry exhibition in Tehran expect to welcome more than 1 million visitors from Iran and around the region, and boast that they have attracted 460 foreign companies to attend. "In this exhibition, [the number of] participating countries and foreign companies has increased by 20 and 22 percent respectively as compared to the previous year," exhibition manager Hossein Porsan told the state-run Islamic Republic News Agency.

Companies showing their wares – either directly or through their Iranian agents – came from Austria, Spain, Australia, England, Italy, Germany, Turkey, the Czech Republic, Denmark, Russia, France, the Netherlands, Norway, India, Singapore, Japan, China, Taiwan, Thailand, Saudi Arabia, Canada, and Brazil, Porsan said. A coalition of European human rights organizations seeking a





total trade embargo on Iran said the participation of European companies undermined European Union sanctions against Iran's energy sector and blasted governments in Germany, Austria, and the UK for failing to stop them from showcasing their technology in Tehran.

The "Stop the Bomb" campaign condemned the participation of European companies, and called on the governments of Britain, Germany, Switzerland and Austria to investigate them for possible sanctions violations. "Any deals with the Iranian energy sector directly support the regime itself, and the guilty Western companies are perpetuating the regime's violations of human rights, its nuclear program and the export of terror against the will of the Iranian people and in spite of powerful popular protests against the Ahmadinejad's government," said Dan Coen, the director of Stop the Bomb-UK.

According to a recent report by Iran's Central Bank, revenues from the energy sector continue to make up 50% of Iran's state budget and 80% of its export income. Most of the Iranian energy sector is state-owned, with many of the companies directly controlled by the Revolutionary Guards. The Islamic Revolution Guards Corps (IRGC) have been designated an international terrorist organization by the U.S. Treasury Department and since July 2010 are also on the EU list of sanctioned entities, making it illegal for European companies to do business with them. Abraham Foxman, the national director of the Anti-Defamation League, noted the irony of the word "sanctionable," which is "one of the few English words to have two contradictory meanings: legally punishable and ethnically approvable."

That contradiction "appears to translate well into three European languages – Ger-

man, Italian and Spanish – at least with regard to doing business with Iran," he said. The German government of Chancellor Angela Merkel has been a vocal critic of Iran's pursuit of nuclear weapons and its human rights violations. And yet, Germany continues to do a booming business with Iran. Forty-two German governments were identified as participants in the Tehran oil and gas exhibition, according to the organizers, and Germany continues to be the most important business partner of the Iranian regime, exporting to Iran products worth 3.8 billion Euros (\$5.5 billion) last year. Earlier this year, Germany's central bank helped Iran get paid for \$12 billion of oil it sold to India despite intense pressure from Washington to stop the transfers. India paid the German Bundesbank for the oil, and the Germans then transferred the money to the Iranian-owned European-Iranian Trade Bank (EIH) in Hamburg.

The United States black-listed the EIH last September because of its involvement in weapons proliferation and banned it from using the U.S. financial system. According to the German news magazine Der Spiegel, the German government approved the \$12 billion transfer to EIH as part of a deal with Tehran to win the release of two German journalists detained in Iran. The two journalists had been arrested for interviewing the son of Sakineh Mohammadi Ashtiani, the Iranian woman who received international attention because she was sentenced to be stoned to death for adultery. German foreign minister Guido Westerwelle personally picked up the two Bild am Sonntag journalists in Tehran on Feb. 20.

"The results of the German Iran policy are disastrous. Despite EU sanctions, Germany is the most important Western business partner of Iran," said German Stop the Bomb





spokesman, Jonathan Weckerle. The Germany government has made “no serious efforts to put effective pressure on the Iranian regime.” The Italian-Iranian Chamber of Commerce and the Spanish equivalent have both been promoting participation in the Tehran oil and gas exhibition, despite the European Union sanctions that include “restrictions on trade in key equipment and technology for, and restrictions on investment in the Iranian oil and gas industry,” the ADL’s Foxman noted.

Both Italy and Spain have also hosted Iranian trade delegations recently. According to the exhibition organizers, 18 Italian and 7 Spanish companies are taking in the oil and gas trade fair that opened on Saturday. The range of products on show from British companies at the oil and gas fair included pumps, pipes, construction machines and specialized measuring instruments, according to the organizers. Some 18 British companies were present at the show. Ban the Bomb’s Austrian unit lodged a protest with the Austrian government because of the participation of the state-run oil company, OMV, in the Tehran oil and gas fair. OMV is one of the largest European oil companies, and was the only oil major to take part in this week’s exhibition.

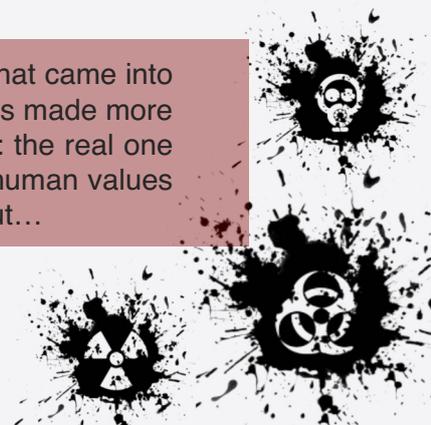
By far the largest overseas contingent came from China, which sent 129 companies to the show. China has resisted U.S. and European calls to limit its commercial involvement in Iran, and has abstained for United

Nations Security council resolutions condemning Iran for its nuclear weapons development. South Korea sent 18 to the trade fair, the Netherlands sent 8, France sent 6, Canada sent 4, and Japan sent 3. Six American companies were identified by the exhibitors as taking part. However, Newsmax



found that none of the companies named were actually American. Three were British, one was Chinese, and two were Iranian representative agents who apparently claimed to be able to import U.S. oil well logging products. German political scientist Matthias Küntzel published a directory of “Who is Who in German Trade with Iran” earlier this year. He said that Iranian government sources boasted of their ability to use German companies such as Basell, Linde and Uhde, as conduits for purchasing U.S. oil field development equipment. More than 200 German companies were actively doing business in Iran, according to a listing he discovered that had been published by the German Chamber of Industry and Commerce in Tehran. German companies also were involved in providing technologies to Iran’s nuclear program, and in helping the Revolutionary Guards Corps track Iranian dissidents with specialized security equipment, Küntzel said. “German companies and institutions are making a major contribution to sustaining the present Iranian regime,” Küntzel said.

**EDITOR’S NOTE:** I started to write a comment based on the first word that came into my mind: “hypocrisy”. Then I decided to write nothing because it was made more apparent that thinking people are balancing between two universes: the real one and the super-real one guided by profiteers who put money above human values and lives. This must be the “class of civilizations” we often hear about...



### The Latest Enemies of Iran

Source: <http://www.time.com/time/world/article/0,8599,2065873,00.html#ixzz1KpTS3rRe>

For much of the past decade, the Iranian government has tolerated what it considers a particularly depraved and un-Islamic vice: the keeping of pet dogs.

During periodic crackdowns, police have confiscated dogs from their owners right off the street; and state media has lectured Iranians on the diseases spread by canines. The cleric Gholamreza Hassani, from the city of Urmia, has been satirized for his sermons railing against "short-legged" and "holdable"



dogs. But as with the policing of many other practices (like imbibing alcoholic drinks) that are deemed impure by the mullahs but perfectly fine to many Iranians, the state has eventually relaxed and let dog lovers be.

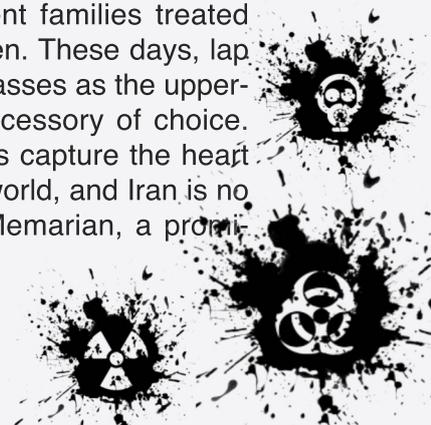
Those days of tacit acceptance may soon be over, however. Lawmakers in Tehran have recently proposed a bill in parliament that would criminalize dog ownership, formally enshrining its punishment within the country's Islamic penal code. The bill warns that that in addition to posing public health hazards, the popularity of dog ownership "also poses a cultural problem, a blind imitation of the vulgar culture of the West." The proposed legislation for the first time outlines specific punishments for "the walking and keeping" of "impure and dangerous animals," a definition that could feasibly include cats but for the time being seems targeted at dogs. The law would see the offending animal confiscated, the leveling of a \$100-to-\$500 fine on the owner, but leaves the fate of confiscated dogs uncertain.

"Considering the several thousand dogs [that are kept] in Tehran alone, the problem arises as to what is going to happen to these animals," Hooman Malekpour, a veterinarian in Tehran, said to the BBC's Persian service. If passed, the law would ultimately energize police and volunteer militias to enforce the ban systematically.

In past years, animal-rights activists in Iran have persuasively argued that sporadic campaigns against dog ownership are politically motivated and unlawful, since the prohibition surfaces in neither the country's civil laws nor its Islamic criminal codes. But if Iran's laws were silent for decades on the question of dogs, that is because the animals — in the capacity of pet — were as irrelevant to daily life as dinosaurs. Islam, by custom, considers dogs najes, or unclean, and for the past century cultural mores kept dog ownership down to minuscule numbers. In rural areas, dogs have traditionally aided shepherds and farmers, but as Iranians got urbanized in the past century, their

dogs did not come along. In cities, aristocrats kept dogs for hunting and French-speaking dowagers kept lap dogs for company, but the vast majority of traditional Iranians, following the advice of the clergy, were leery of dogs and considered them best avoided.

That has changed in the past 15 years with the rise of an urban middle class plugged into and eager to mimic Western culture. Satellite television and Western movies opened up a world where happy children frolicked with dogs in parks and affluent families treated them like adorable children. These days, lap dogs rival designer sunglasses as the upper-middle-class Iranian's accessory of choice. "Global norms and values capture the heart of people all around the world, and Iran is no exception," says Omid Memarian, a promi-



Iranian journalist specializing in human rights. "This is very frightening for Iranian officials, who find themselves in a cultural war with the West and see what they're offering as an 'Islamic lifestyle' failing measurably."



The widening acceptability of dog ownership, and its popularity among a specific slice of Iran's population — young, urban, educated and frustrated with the Islamic government — partly explains why dogs are now generating more official hostility. In 2007, two years into the tenure of hard-line President Mahmoud Ahmadinejad, security forces targeted dog owners alongside a crackdown on women's attire and men's "Westernized" hairstyles. In the regime's eyes, owning a dog had become on par with wearing capri pants or sporting a mullet — a rebellious act.

The government's tolerance for this low-level lifestyle dissidence fizzled after Ahmadinejad's contested electoral victory in 2009, which sparked massive demonstrations and the most serious challenge to Islamic rule since the 1979 revolution. In the aftermath of

that upheaval, the state has moved to tighten its control over a wide range of Iranians' private activities, from establishing NGOs to accessing the Internet, to individual lifestyle decisions, according to Hadi Ghaemi, the director for the International Campaign for Human Rights in Iran. "No doubt such attempts are motivated by a desire to squash acts of criticism and protests, even if through symbolic individual decisions that simply don't conform to officially sanctioned lifestyles," Ghaemi says.

The criminalizing of dogs, in this context, helps the government address the legal gray areas concerning lifestyle behavior. When authorities found it difficult to police what it termed Westernized hairstyles worn by young men, it solved the problem last year by releasing a poster of specifically banned styles.

For many young people, these measures are a firm reminder that the government will brook no disobedience, whether it be chanting antigovernment slogans in the streets or sporting excessively long sideburns. Dog owners in Iran, like much of the population, are mostly preoccupied these days with inflation, joblessness and the parlous state of the country's economy. But they will soon need to consider whether keeping their shih tzu or poodle is worth the added worry. Their dogs may face the same fate as the hundreds of street dogs that the government regularly sweeps from the streets of Tehran. "Many in Tehran and other big cities find the killing of street dogs offensive and cruel," says Memarian. "It's like the Iranian people and officials live in two different worlds."

**EDITOR'S NOTE:** Perhaps this article does not "fit" under CBRNE but it surely fits under "Terrorism".



My four Great Pyrenees asked me to include it as a voice of laud protest from Greece!



### Spotting incidents of agroterrorism

Source: <http://www.cattlenetwork.com/bovine-vet/industry-news/Be-aware-of-suspicious-activity-121515714.html?ref=714>



A handbook detailing the criminal investigation of cases of agroterrorism is geared for law enforcement, but information in it may be useful to food animal veterinarians whose surveillance of unusual animal activity may indicate accidental or intentional threats to the U.S. food supply.

At the 4th FBI International Symposium on Agroterrorism in late April, participants were given the Criminal Investigation Handbook for Agroterrorism. CattleNetwork reports that the handbook is mainly geared for law enforcement, but information in it may be useful to food animal veterinarians whose surveillance of unusual animal activity may indicate accidental or intentional threats to the U.S. food supply.

The handbook offers a list of indications the agriculture community should watch for as possible instances of agroterrorism.

The handbook offers a list of indications the agriculture community should watch for as possible instances of agroterrorism.

- Unusual increase in number of sick or dying animals.
- Unscheduled or unusual spraying, particularly outdoors or during periods of darkness.
- Abandoned spray devices.
- Odd delivery requests.
- Group or individual purchasing agriculture disease cultures or large amount of chemicals with cash.
- Unexplained thefts of cultures, equipment, etc.
- Increased applications for low-level jobs.
- Unsolicited phone calls asking vague questions about specific processes.
- Contractors unfamiliar with basic procedures.

- Any specimen samples submitted to animal/public health for analysis that tests positive for a potential bioterrorism or anti-agriculture organism.
- Higher than expected morbidity and mortality associated with a common disease



and/or failure to respond to traditional therapy.

- Disease with an unusual geographic or seasonal distribution (i.e. tularemia in a non-endemic area).
- Similar genetic type among agents from geographically distinct sources.
- Unusual, atypical, genetically engineered or antiquated strain of a biological agent.
- Endemic disease with unexplained increase in incidence.
- Simultaneous Foreign Animal Disease (FAD) outbreaks in non-contiguous areas of the country.
- Disease agents transmitted through aerosol, food, water or fomites.



### The National Institute for Nuclear, Chemical and Biological Protection (SUJCHBO, v.v.i.)

Source: <http://www.sujchbo.cz/>



The National Institute for Nuclear, Chemical and Biological Protection is a public research institution established by the State Office for Nuclear Safety pursuant to Act No. 341/2005 Coll. for the purpose of the development and research in the field of chemical, biological

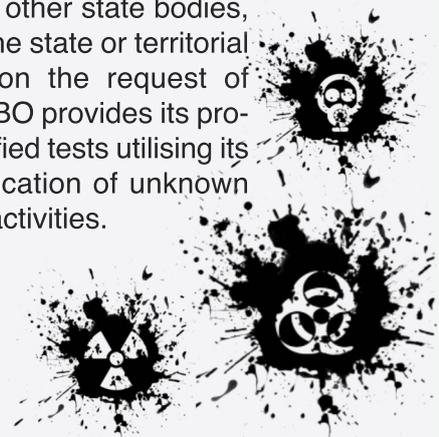
aimed at the extension of knowledge and the development of practical means utilisable in the field of radiological protection and the protection against chemical and biological agents which can be misused as weapons of mass destruction.



and radioactive agents, and the provision of technical support to the supervisory and inspection activities carried out by the aforementioned Office in radiological protection and in the verification of the prohibition of chemical and biological weapons. (The acronym "v.v.i." in the official abbreviation of the Institutes' name refers to the public research institution. Its usage in Czech is compulsory according to Act No. 341/2005 Coll.).

In its principal activity, the SUJCHBO deals with the applied research and development

Amongst secondary activities (within the meaning of Act No. 341/2005 Coll. on Public Research Institutions) belongs the professional activity in the fields of interest of the SUJCHBO carried out on the basis of the requirements of its founder, other state bodies, organisational bodies of the state or territorial self-governing units. Upon the request of those bodies, the SUJCHBO provides its professional assistance, certified tests utilising its expertise, testing, identification of unknown agents and other similar activities.



The knowledge of its researchers and the instrumentation and equipment of its laboratories are also used in the Institute's engagement in other components of the Integrated Rescue System of the Czech Republic.

Besides, the SUJCHBO offers its paid expertise and services (carried out as other activity within the meaning of Act 341/2005 Coll. for the use of currently free capacities) that are provided for both legal and physical entities in the field of the measurement of natural radioactivity, experts' opinion, testing and analyses of chemical agents, including highly dangerous ones for which toxicological chamber can be used, testing in climatic chamber making it possible to set almost any parameters of temperature, humidity and airflow, and training and educational courses. The Authorised Metrological Centre for the gauges measuring the volume activity of radon and equivalent volume activity of radon works within the SUJCHBO. It is the only laboratory in the Czech Republic calibrating and testing the gauges for the aforementioned quantities.

A close co-operation was established with the University of South Bohemia, České Budějovice - Faculty of Health and Social Studies, and Vysoká škola báňská – Technical University, Ostrava – Faculty of Safety Engineering. The SUJCHBO provides internships and research fellowships to the students of the above mentioned faculties within under-

graduate and postgraduate study, and practice period within their dissertations.

Important is also its co-operation with the Dutch laboratories TNO (Organisatie voor Toegepast Natuurwetenschappelijk Onderzoek), The Hague.

The SUJCHBO also participates in the international assistance according to Article X of the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction provided by the Czech Republic on the basis of international agreements to the Organisation for the Prohibition of Chemical Weapons with the seat of its headquarters in The Hague.

All the activities are carried out in compliance with the valid legislation of the Czech Republic, on the basis of relevant licenses of competent authorities. Constant attention is paid to the quality of the Institute's professional activity, ecology and safety. The majority of laboratories have been accredited by the Czech Accreditation Institute and their activity is subject to regular inspections performed by this Institute.

The SUJCHBO was also awarded the certification according to ISO standards ČSN EN ISO 9001, ČSN EN ISO 14001 and OHSAS 18001:1999. It was certified in 2007 by Lloyd's Register Quality Assurance.

## Forest Fires can be a Tactic of Terrorism

By Barbara Finney

Last Updated Mar 6, 2011, Published Feb 22, 2011

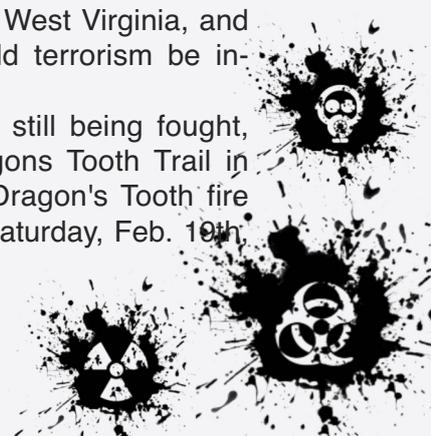
Source: <http://www.suite101.com/content/could-fires-in-virginia-and-other-states-be-due-to-terrorism-a351416#ixzz1MULlmeTh>



Halfway up the Dragons Tooth Trail which intersects the Appalachian Trail  
Photo by Barbara Finney

More than 100 forest and brush fires broke out this week in Virginia, West Virginia, and surrounding states. Could terrorism be involved?

A brush fire, which is still being fought, broke out near the Dragons Tooth Trail in Catawba, Virginia. The Dragon's Tooth fire was first discovered on Saturday, Feb. 19th.



and is burning mostly on the Craig County side of the trail in an area known as Pickle Branch. The

Roanoke county side of the trail, where the main parking lot for the trail is located, was closed off Sunday and Monday and likely is still closed as the fire is still being fought as of the last report. It is in a pretty rugged area and not an easy place to fight a fire. The dry windy conditions favored the fire. Impending rain in the area may help.

### Most Causes of Forest Fires Break Down into Percentages

However more fires than this broke out over the same weekend. Hundreds in Virginia, 26 or so in West Virginia, some in Maryland and in other states have all been reported. Most are thought to have been caused by the usual things that cause forest and brush fires. Lightning which is a often a cause, has not been around in Virginia for some time and is not likely a cause.

The Virginia Department of Forestry breaks down the cause of most forest fires in the following percentages:

- open Burning 30%
- **arson 20%**
- smokers 14%
- Misc. house, vehicle, aircraft etc. that spread to the forest) 11%
- children 9%
- equipment Use 7%
- railroads 5%
- lightning 3%
- campfires 1%

Some of the Craig County Virginia fires were thought to have been caused by some sort of power-line incident. One unidentified gentleman in the area who had heard about it at his church on Sunday, Feb, 20 was unsure of the cause of the fires in his county. No tickets have yet been issued by the Forest Service for open burning violations. There have been no incidents of lightning in weeks. No



plane crashes, no house fires, places where most of the fires have broken out are not accessible by things that cause most fires save for hikers who are smoking, and arsonists, in particular pyro-terrorists.

### The Richmond Times Dispatch Is Reporting Hundreds of Fires

The Richmond Times Dispatch is reporting that hundreds of fires have now burned over 4,000 acres in Virginia and West Virginia. Though the reports coming in now are that nearly all of the fires have been "contained" in this age of terrorism, why the media is not looking into possible acts of arson, and arson that is in fact pyro-terrorism, is somewhat disturbing.

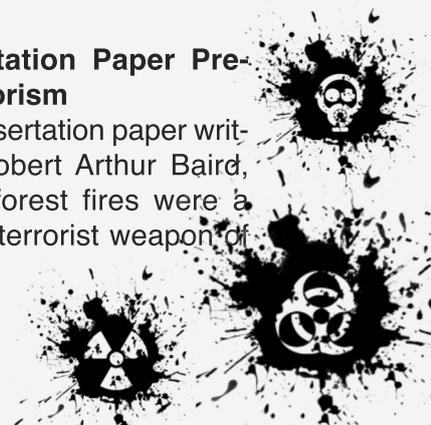


### Remote Sensing Map and Data Shows Large Cluster of Active Fires on East Coast

The United States Department of Agriculture's Forest Service's Remote Sensing Applications Center is showing a large cluster of forest fires on the East Coast, including the fires in Virginia.

### A 2005 Military Dissertation Paper Predicted Use of Pyro-Terrorism

According to a military dissertation paper written in 2005 by Major Robert Arthur Baird, USMC., Arson induced forest fires were a very real possible future terrorist weapon of



mass destruction. The title of his paper is Pyro-Terrorism--The Threat of Arson Induced Forest Fires As A Future Terrorist Weapon of Mass Destruction.

According to Major Bairds analysis "an opportunistic terrorist can unleash multiple fires creating a conflagration potentially equal to a multi-megaton nuclear weapon". Major Baird continued to state that if terrorist organizations were to use arson as a tactic, and then publicly take credit for such massively destructive fires, the public perception of the effectiveness of Homeland Security would greatly erode. Major Baird also points out that such fires could destroy critical infrastructures, weaken regional economies, affect readiness in military forces and put pressure on national leadership for policy changes.

Also according to Major Bairds 2005 paper on pyro-terrorism, from the year 1968 to 2005 when his paper was written, fifty-six terrorist groups worldwide were using arson as a tactic. According to Major Baird, the FBI has issued warnings that indicate that Al Qaeda is

seeking to use arson as a tactic in American forests.

Major Bairds paper mentions that the FBI alerted National Interagency Fire Center (NIFC) in 2004 to a possible Al Qaeda plot that involved three or four people setting wild-fires using timed devices in Colorado, Montana, Utah, and Wyoming that would detonate in forests and grasslands after operatives left the country. US Intelligence Agency specified that those 2004 attacks were intended to cause significant damage to the U. S. economy and put pressure by US citizens on the government to "change its policies".

So many fires clustered in the same region breaking out in the same time-frame should be raising red flags in the minds of all Americans; those who love woodlands and forests, freedom, and especially those involved in Intelligence and Security should be taking a larger look at these recent fires. Sure there is dryness and wind, but when would a pyro-terrorist be inclined to set fires, during the spring rains? I think not.

**EDITOR'S NOTE:** Visit the "CBRNE-CT Papers" section of the Newsletter's website for some interesting articles on pyroterrorism

## A team of robots collaborate in exploration, map building

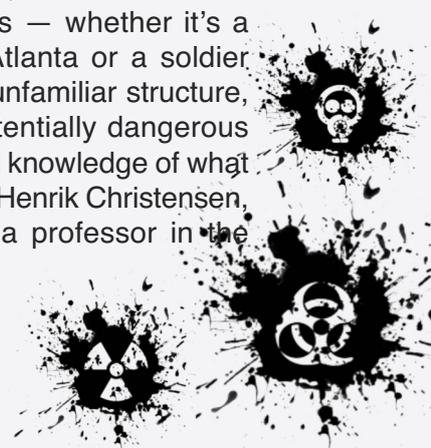
Source: <http://www.gatech.edu/newsroom/release.html?nid=66196>

Researchers have developed an advanced autonomous capability for first responders, law enforcement, and the military: a group of robots, working by themselves and communicating only with one another, divide up among themselves a variety of exploration tasks -- for example, they can go into a building and within minutes transmit a detailed floor map to humans waiting at a command center nearby

You cannot see a radio-control handset in sight as several small robots roll briskly up the hallways of an office building. Working by themselves and communicating only with one another, the vehicles divide up a variety of exploration tasks — and within minutes have transmitted a detailed floor map to humans nearby.

This is not the future, but a present-day scenario. A Georgia Tech release reports that this advanced autonomous capability has been developed by a team from the Georgia Institute of Technology, the University of Pennsylvania, and the California Institute of Technology/Jet Propulsion Laboratory (JPL). A paper describing this capability and its present level of performance was presented in April at the SPIE Defense, Security and Sensing Conference in Orlando, Florida.

"When first responders — whether it's a firefighter in downtown Atlanta or a soldier overseas — confront an unfamiliar structure, it's very stressful and potentially dangerous because they have limited knowledge of what they're dealing with," said Henrik Christensen, a team member who is a professor in the



Georgia Tech College of Computing and director of the Robotics and Intelligent Machines Center there. "If those first responders could send in robots that would quickly search the structure and send back a map, they'd have a much better sense of what to expect and they'd feel more confident."

The ability to map and explore simultaneously represents a milestone in the Micro Au-



tonomous Systems and Technology (MAST) Collaborative Technology Alliance Program, a major research initiative sponsored by the U.S. Army Research Laboratory. The five-year program is led by BAE Systems and includes numerous principal and general members comprised largely of universities.

MAST's ultimate objective is to develop technologies that will enable palm-sized autonomous robots to help humans deal with civilian and military challenges in confined spaces. The program vision is for collaborative teams of tiny devices that could roll, hop, crawl or fly just about anywhere, carrying sensors that detect and send back information critical to human operators.

The wheeled platforms used in this experiment measure about one foot square. MAST researchers, however, are working toward platforms small enough to be held in the palm of one hand. Fully autonomous and collaborative, these tiny robots could swarm by the scores into hazardous situations.

The MAST program involves four principal research teams: integration, microelectronics, microsystems mechanics, and processing for autonomous operation. Georgia Tech re-

searchers are participating in every area except microelectronics. In addition to the College of Computing, researchers from the Georgia Tech Research Institute (GTRI), the School of Aerospace Engineering, and the School of Physics are involved in MAST work.

The experiment — developed by the Georgia Tech MAST processing team — combines navigation technology developed by Georgia Tech with vision-based techniques from JPL and network technology from the University of Pennsylvania.

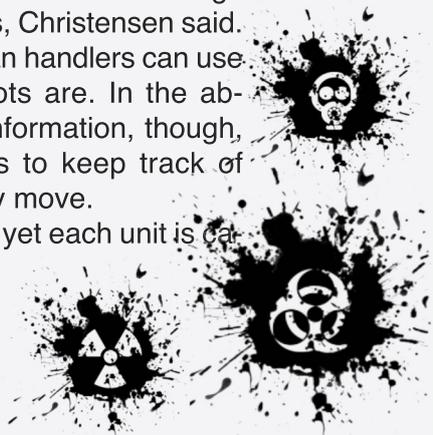
In addition to Christensen, members of the Georgia Tech processing team involved in the demonstration include Professor Frank Dellaert of the College of Computing and graduate students Alex Cunningham, Manohar Paluri and John G. Rogers III. Regents professor Ronald C. Arkin of the College of Computing and Tom Collins of GTRI are also members of the Georgia Tech processing team.

In the experiment, the robots perform their mapping work using two types of sensors — a video camera and a laser scanner. Supported by onboard computing capability, the camera locates doorways and windows, while the scanner measures walls. In addition, an inertial measurement unit helps stabilize the robot and provides information about its movement.

Data from the sensors are integrated into a local area map that is developed by each robot using a graph-based technique called simultaneous localization and mapping (SLAM). The SLAM approach allows an autonomous vehicle to develop a map of either known or unknown environments, while also monitoring and reporting on its own current location.

SLAM's flexibility is especially valuable in areas where global positioning system (GPS) service is blocked, such as inside buildings and in some combat zones, Christensen said. When GPS is active, human handlers can use it to see where their robots are. In the absence of global location information, though, SLAM enables the robots to keep track of their own locations as they move.

"There is no lead robot, yet each unit is ca-



pable of recruiting other units to make sure the entire area is explored,” Christensen explained. “When the first robot comes to an intersection, it says to a second robot, ‘I’m going to go to the left if you go to the right.’”

Christensen expects the robots’ abilities to expand beyond mapping soon. One capability under development by a MAST team involves tiny radar units that could see through walls and detect objects — or humans — behind them.

Infrared sensors could also support the search mission by locating anything giving off heat. In addition, a MAST team is developing a highly flexible “whisker” to sense the proximity of walls, even in the dark.

The processing team is designing a more complex experiment for the coming year to in-

clude small autonomous aerial platforms for locating a particular building, finding likely entry points and then calling in robotic mapping teams. Demonstrating such a capability next year would culminate progress in small-scale autonomy during MAST’s first five years, Christensen said.

In addition to the three universities, other MAST team participants are North Carolina A&T State University, the University of California Berkeley, the University of Maryland, the University of Michigan, the University of New Mexico, Harvard University, the Massachusetts Institute of Technology, and two companies: BAE Systems and Daedalus Flight Systems.

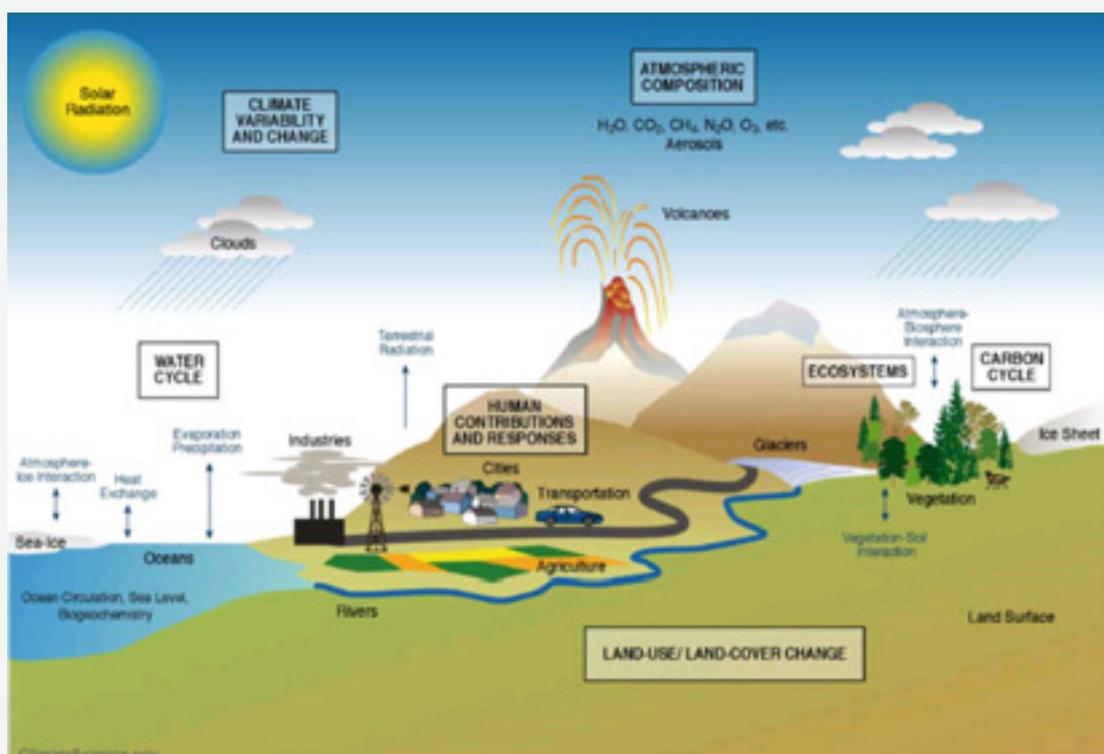
## Emergency Managers Warm to the Idea of Climate Change

By Elaine Pittman

Source: <http://www.emergencymgmt.com/disaster/Emergency-Managers-Climate-Change.html?elq=0f35939988304b52b845c4bdab1e16c7>

Whatever its moniker — climate change, global warming, climate crisis or unsubstantiated hype — many scientists and emergency managers have recognized that storms are becoming more intense, and that adapting and planning for more and possibly new weather-

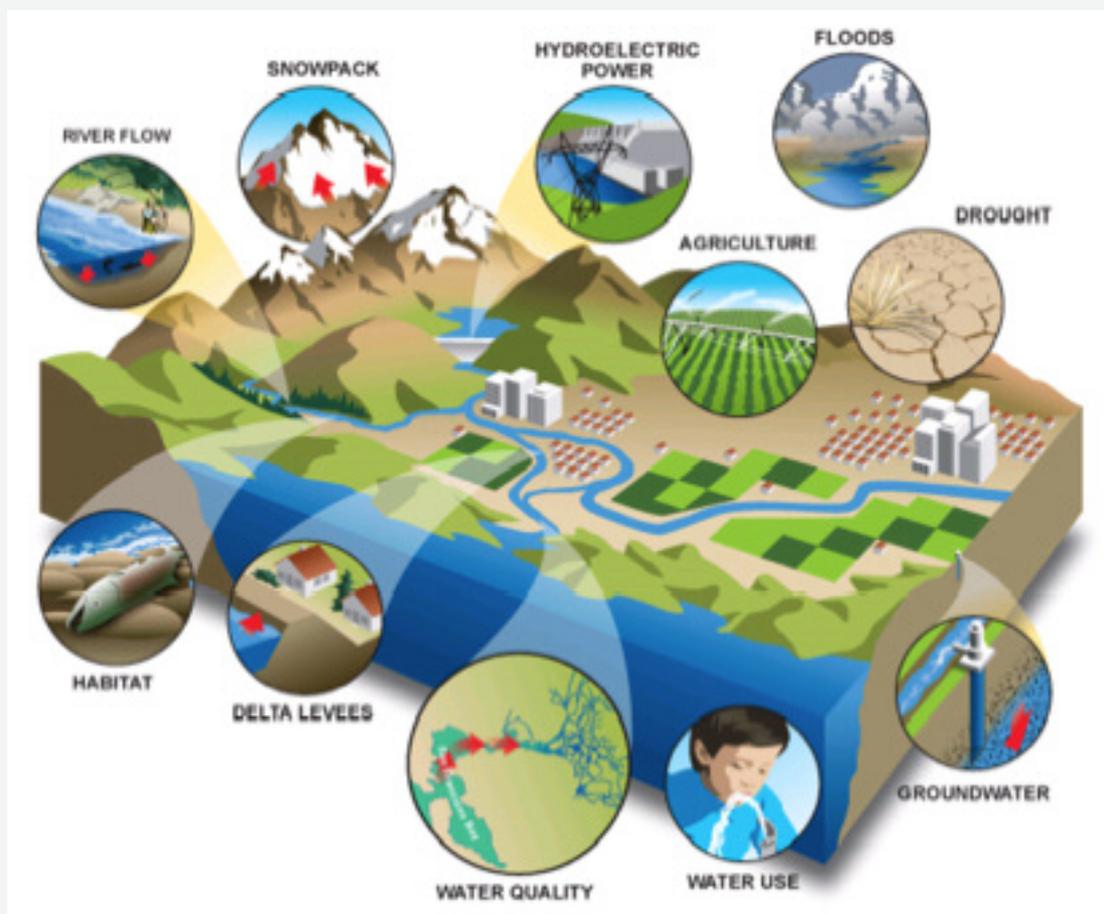
related threats needs to be incorporated into preparedness procedures. States have been developing climate action plans and some, like California, are taking it a step further by including climate change in their emergency planning and hazard mitigation plans.



Climate change's effects can include intensified wildfires, higher sea levels, extreme rainfall, windstorms, diseases spreading to new areas, heat waves and more. From the Australian bushfires in February 2009, when

more information becomes available and agencies begin developing best practices.

"Emergency managers are generally in the office of police and fire, and they work on the here-and-now and from disaster to disaster,



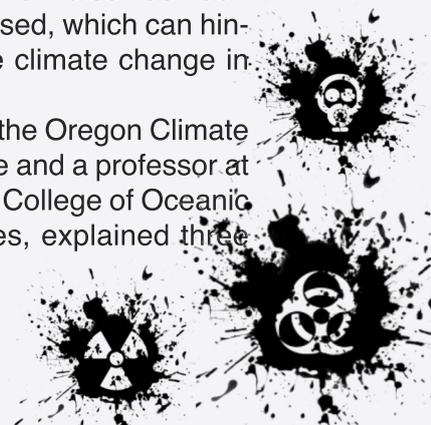
hundreds of fires broke out during record-breaking temperatures, to the May flooding in Tennessee, which was the highest since recordkeeping began there in the 1880s, climate change is appearing in news headlines as reason why the storms are stronger than in the past.

Although climate change may not specifically be identified in emergency preparedness plans, some say it's an issue that's being addressed simply because of its nature. The all-hazards emergency management community plans for just that — all types of emergencies, whether manmade or natural. Changing climate and weather patterns automatically lend themselves to increased planning and new mitigation actions. Although scientists and planners have advice for how the changing climate can be included in emergency preparedness, the field is continuing to evolve as

but they can translate these biological issues into their [planning]," said Bob Freitag, director of the Institute for Hazards Mitigation Planning and Research at the University of Washington.

Planning for climate change can mean looking at a state or jurisdiction's current natural hazards and anticipating which of them will become more extreme in the future. One of the barriers to the new planning considerations is that the future being planned for isn't likely to be next year, but many years from now. Emergency management also has traditionally been response-based, which can hinder how agencies include climate change in their planning.

Philip Mote, director of the Oregon Climate Change Research Institute and a professor at Oregon State University's College of Oceanic and Atmospheric Sciences, explained three



ways climate change is affecting or will affect the nation's communities:

1. Extreme precipitation will lead to flooding, and "there's a risk that the past will not be an adequate guide to the future," Mote said.
2. Extreme rainfall will increase in the middle and high latitudes. Although there is evidence this will happen, Mote said what jurisdictions in particular will be affected by extreme precipitation can't be accurately predicted at this time.
3. Windstorms and hurricanes will be more intense. "I think there's a general agreement that storms will get somewhat more intense, but not necessarily more frequent nor have geographic expansion," he said. "So don't, for instance, expect areas that have never experienced a land-falling hurricane to experience one."

### Shifting Paradigms

Every state and local jurisdiction faces the potential for disasters that are unique to their geography, which makes it difficult to say exactly how climate change should best be incorporated into planning. However, Adaptation Manager Missy Stults with ICLEI – Local Governments for Sustainability said although emergency planners may not be purposefully integrating climate change into their plans, they are already dealing with it by default. "What the climate is doing is manifesting itself in weather patterns that are changing," she said. "They're getting more intense, more frequent, and emergency response personnel are at the front lines of that."

Stults believes that climate change be thought about more openly and holistically, which means working with nontraditional stakeholders to "think about the full breadth of what these impacts will mean." Climate change will impact infrastructure, social situations and public health, to name a few, so all the players need to be included in the planning process, including community and religious organizations.

Including climate change in emergency plans also means changing the historical thought process. "It's very hard to determine that any single event is tied to climate change, but what we do know is that as the climate

changes we're already seeing impacts, and those impacts are going to get more frequent and potentially more intense," she said. "For emergency planners and response personnel, it becomes really important to start planning for a changing paradigm. We can't plan based on historical situations anymore because history is literally being changed."

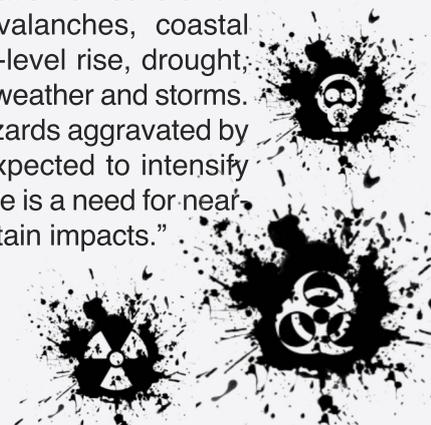
Basing plans off of current information will become a new trend in emergency planning. Stults recommends looking at the last few years of data instead of historical trends because events like 100-year floods could become a one-in-10-year storm event — and the new 100-year flood will be significantly more intense.

### Planning Heats Up

Proving to be a forward-thinking state, California added climate change to the 2007 version of its Multi-Hazard Mitigation Plan. "It was not until Hurricane Katrina drew the attention of the news media to scientific evidence on intensification of storm events that climate change was recognized as an emergency management topic," the plan said.

Various directives from Gov. Arnold Schwarzenegger such as AB 32, which calls for reducing California's greenhouse gas emissions 25 percent by 2020, makes it clear that climate change needed to be addressed in the multihazard plan, according to Ken Topping, the project lead for the California Polytechnic State University, San Luis Obispo (Cal Poly) advisory team that helped the state prepare the 2007 mitigation plan, said. Current events happening at the time also indicated the importance of including climate change in California's plan, added Mike Boswell, co-director of the project and an assistant professor of City and Regional Planning at Cal Poly.

Although Topping referred to the topic's inclusion in 2007 as a placeholder for the next version, it included information on several climate-related hazards: avalanches, coastal flooding, erosion and sea-level rise, drought, extreme heat, and severe weather and storms. It also noted that "most hazards aggravated by climate change can be expected to intensify over the long term, but there is a need for near-term action to mitigate certain impacts."



The plan is updated every three years. For the 2010 update, Boswell said climate change will have a more central focus. "One of the things that we're adding in is we've produced a whole set of reports on the forecasted effects of climate change on the state," he said. "So we have a lot more science than we did in 2007 to draw on, and we'll be incorporating that into the report."

The team studied all the climate-related hazards that were identified in the state plan and drew on science to explain what the potential impacts of climate change are on those hazards. "The state plan isn't just about Cal EMA [the California Emergency Management Agency] doing hazard mitigation," Boswell said. "It's about how do we coordinate and integrate all the efforts of the state agencies that are responsible for hazard mitigation."

health, transportation, environmental services and natural resources, which illustrates how expansive the planning can be.

### Mitigating the Risks

When it comes to emergency preparedness, planners determine actions that can be taken to make a disaster's effects less severe — create evacuation routes, have disaster supply kits on hand, conduct training drills, etc. Mitigating for climate change can be done in the same manner.

"The emergency management community is more used to dealing with the disasters that are present and at the moment," Topping said, "so the mitigation planning has the basic questions of: Are we there yet? Have we done enough? Are we gaining on the solutions? You never are quite there, and climate change

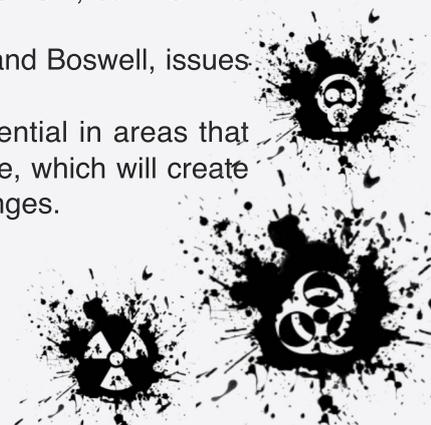


Planning for climate change's effects will require participation from all the agencies and organizations — governmental and non-governmental — in a state or jurisdiction, said ICLEI's Stults. Collaboration is critical because this planning will require a new level of connectedness. For example, the King County (Wash.) Climate Change Response team includes representatives from public

just makes that worse." He added that this may be a topic people don't think they need to address at the present moment, but the time to tackle it is now.

According to Topping and Boswell, issues California will face are:

- Increased wildfire potential in areas that are already susceptible, which will create more response challenges.



- Flooding due to more intense storms and declining snow pack in the Sierra Nevada mountain range. Earlier snowmelt will increase flooding, therefore making flood mitigation more important.
- Declining water supplies will affect fire-fighting. "Parts of the state and its communities are going to have to re-engineer their water systems," Topping said.
- Sea-level rise will cause communities to determine if they should adapt by withdrawing from areas.

And although reducing emissions of greenhouse gases into the atmosphere sounds like more of a concern for environmental protection agencies, Stults said it will create a win-win situation for everyone. If a government employs energy-efficiency efforts, not only will greenhouse gases be reduced, but the demand on the energy grid will also be lessened. "So if a storm comes through and your grid is shut down, you're not vulnerable," she said. "You just increased resilience; you just did both a climate adaptation and a climate mitigation strategy."

### Public Participation

Planning and mitigating for climate change isn't strictly an activity centered on government. The public can and should be involved,



just like it would be when preparing for other disasters. However, one barrier to public (and sometimes government) participation is that climate change is controversial. It's a contentious issue that's been debated and will continue to divide skeptics and believers.

What people think about climate change is already predetermined, according to Mote from the Oregon Climate Change Research Institute. "They tend to respond by throwing up their hands and saying either, 'It's a big problem; I can't solve it,' or 'It's a load of baloney,'" he said.

Mote said the most efficient way to approach people about climate change is to say: We are paying attention to how risks are changing and planning accordingly. "That's a fairly safe statement that tends to not raise hackles, and I think that would play well in the sense of showing responsibility without inflaming people," he said.

The Institute for Hazards Mitigation Planning and Research's Freitag said actionable change only occurs when a person hears the same information from multiple sources that are credible. With the right messaging, governments could be among those sources. Stults said people are more likely to listen to their local government representatives than scientists.

"They're much more likely to open the door if the police officer is there and listen to what the officer says than they are to a scientist who is out canvassing about climate change, or even me as maybe their neighbor," she said. "Local governments have an in; people generally understand that they're there to serve them and that's a really unique conduit to having effective change."

Although it may be 20 or more years until the major impacts of climate change are felt in the U.S., to meet the all-hazards planning approach of emergency management, it's a topic state and local government officials are addressing today.



### A different approach on the origins of al Qaeda

Al Qaeda: The Database

Source: <http://www.globalresearch.ca/index.php?context=va&aid=24738>

*Shortly before his untimely death, former British Foreign Secretary Robin Cook told the House of Commons that "Al Qaeda" is not really a terrorist group but a database of international mujaheddin and arms smugglers used by the CIA and Saudis to funnel guerrillas, arms, and money into Soviet-occupied Afghanistan. Courtesy of World Affairs, a journal based in New Delhi, WMR can bring you an important excerpt from an Apr.-Jun. 2004 article by Pierre-Henry Bunel, a former agent for French military intelligence.*

**By Wayne Madsen**

"I first heard about Al-Qaida while I was attending the Command and Staff course in Jordan. I was a French officer at that time and the French Armed Forces had close contacts and cooperation with Jordan . . .

"Two of my Jordanian colleagues were experts in computers. They were air defense officers. Using computer science slang, they introduced a series of jokes about students' punishment.

"For example, when one of us was late at the bus stop to leave the Staff College, the two officers used to tell us: 'You'll be noted in 'Q eidaat il-Maaloomaat' which meant 'You'll be logged in the information database.' Meaning 'You will receive a warning . . .' If the case was more severe, they would use to talk about 'Q eidaat i-Taaleemaat.' Meaning 'the decision database.' It meant 'you will be punished.' For the worst cases they used to speak of logging in 'Al Qaida.'

"In the early 1980s the Islamic Bank for Development, which is located in Jeddah, Saudi Arabia, like the Permanent Secretariat of the Islamic Conference Organization, bought a new computerized system to cope with its accounting and communication requirements. At the time the system was more sophisticated than necessary for their actual needs.

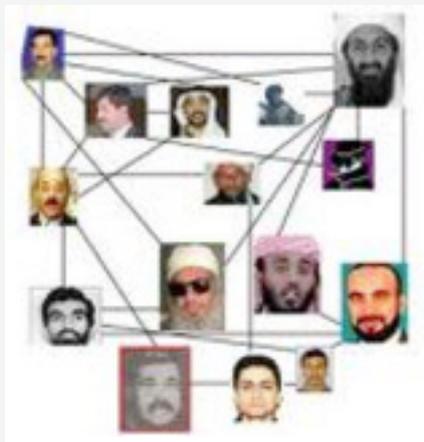
"It was decided to use a part of the system's memory to host the Islamic Conference's database. It was possible for the countries attending to access the database by

telephone: an Intranet, in modern language. The governments of the member-countries as well as some of their embassies in the world were connected to that network.

"[According to a Pakistani major] the database was divided into two parts, the information file where the participants in the meetings could pick up and send information they needed, and the decision file where the decisions made during the previous sessions were recorded and stored. In Arabic, the files were called, 'Q eidaat il-Maaloomaat' and 'Q eidaat i-Taaleemaat.' Those two files were kept

in one file called in Arabic 'Q eidaat ilmu'ti'aat' which is the exact translation of the English word database. But the Arabs commonly used the short word Al Qaida which is the Arabic word for "base." The military air base of Riyadh, Saudi Arabia is called 'q eidaat 'riyadh al 'askariya.' Q eida means "a base" and "Al Qaida" means "the base." "In the mid-1980s, Al Qaida was a data-

base located in computer and dedicated to the communications of the Islamic Conference's secretariat. "In the early 1990s, I was a military intelligence officer in the Headquarters of the French Rapid Action Force. Because of my skills in Arabic my job was also to translate a lot of faxes and letters seized or intercepted by our intelligence services . . . We often got intercepted material sent by Islamic networks operating from the UK or from Belgium. "These documents contained directions sent to Islamic armed groups in Algeria or in



France. The messages quoted the sources of statements to be exploited in the redaction of the tracts or leaflets, or to be introduced in video or tapes to be sent to the media. The most commonly quoted sources were the United Nations, the non-aligned countries, the UNHCR and . . . Al Qaida.

"Al Qaida remained the data base of the Islamic Conference. Not all member countries of the Islamic Conference are 'rogue states' and many Islamic groups could pick up information from the databases. It was but natural for Osama Bin Laden to be connected to this network. He is a member of an important family in the banking and business world.

"Because of the presence of 'rogue states,' it became easy for terrorist groups to use the email of the database. Hence, the email of Al Qaida was used, with some interface system, providing secrecy, for the families of the mujaheddin to keep links with their children undergoing training in Afghanistan, or in Libya or in the Beqaa valley, Lebanon. Or in action anywhere in the battlefields where the extremists sponsored by all the 'rogue states' used to fight. And the 'rogue states' included Saudi Arabia. When Osama bin Laden was an American agent in Afghanistan, the Al Qaida Intranet was a good communication system through coded or covert messages.

### Meet "Al Qaeda"

"Al Qaida was neither a terrorist group nor Osama bin Laden's personal property . . . The terrorist actions in Turkey in 2003 were car-

ried out by Turks and the motives were local and not international, unified, or joint. These crimes put the Turkish government in a difficult position vis-a-vis the British and the Israelis. But the attacks certainly intended to 'punish' Prime Minister Erdogan for being a 'toot tepid' Islamic politician.

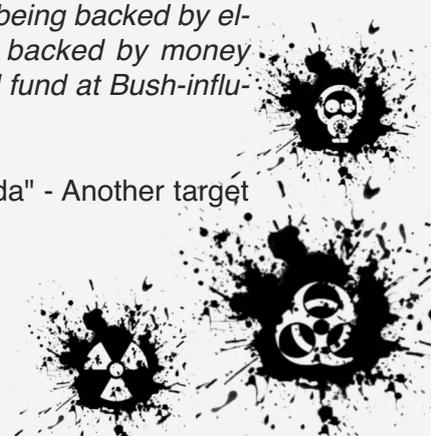
". . . In the Third World the general opinion is that the countries using weapons of mass destruction for economic purposes in the service of imperialism are in fact 'rogue states,' specially the US and other NATO countries.

"Some Islamic economic lobbies are conducting a war against the 'liberal' economic lobbies. They use local terrorist groups claiming to act on behalf of Al Qaida. On the other hand, national armies invade independent countries under the aegis of the UN Security Council and carry out pre-emptive wars. And the real sponsors of these wars are not governments but the lobbies concealed behind them.

"The truth is, there is no Islamic army or terrorist group called Al Qaida. And any informed intelligence officer knows this. But there is a propaganda campaign to make the public believe in the presence of an identified entity representing the 'devil' only in order to drive the 'TV watcher' to accept a unified international leadership for a war against terrorism. The country behind this propaganda is the US and the lobbyists for the US war on terrorism are only interested in making money."

*In yet another example of what happens to those who challenge the system, in December 2001, Maj. Pierre-Henri Bunel was convicted by a secret French military court of passing classified documents that identified potential NATO bombing targets in Serbia to a Serbian agent during the Kosovo war in 1998. Bunel's case was transferred from a civilian court to keep the details of the case classified. Bunel's character witnesses and psychologists notwithstanding, the system "got him" for telling the truth about Al Qaeda and who has actually been behind the terrorist attacks commonly blamed on that group. It is noteworthy that that Yugoslav government, the government with whom Bunel was asserted by the French government to have shared information, claimed that Albanian and Bosnian guerrillas in the Balkans were being backed by elements of "Al Qaeda." We now know that these guerrillas were being backed by money provided by the Bosnian Defense Fund, an entity established as a special fund at Bush-influenced Riggs Bank and directed by Richard Perle and Douglas Feith.*

French officer Maj. Pierre-Henri Bunel, who knew the truth about "Al Qaeda" - Another target of the neo-cons.



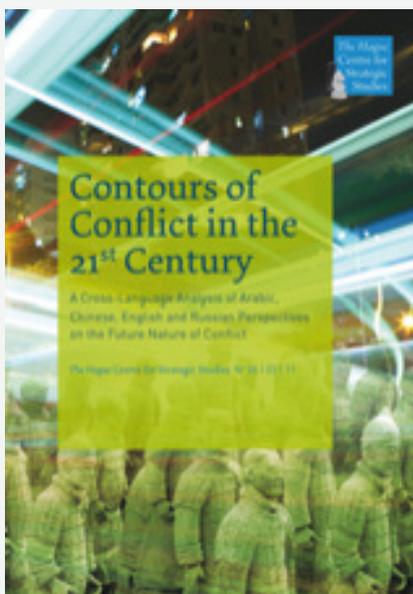
### Contours of conflict in the 21st century

By Stephan de Spiegeleire and Tim Sweijs (Editors)

Source: <http://www.hcss.nl/reports/contours-of-conflict-in-the-21st-century/17/>

Conflict remains a central element of the condition humaine. In some regions, traditional forms of conflict have virtually disappeared while in other it remains a fact of everyday life. Yet, there is a growing feeling in many parts of the world that the future nature of conflict may be changing. Much of the thinking behind this is informed by deep subject matter knowledge, firmly grounded in (military) history as well as present day experience. This being the case, the images of future conflict are inevitably a product of the respective contexts in which they are sketched.

It goes without saying that contexts differ enormously across the world. It is likely that a Russian author will paint a different picture of the future nature of conflict than his English counterpart. A Chinese expert will undoubtedly see other forms of conflict emerge than an Arab observer. Such variations not only mark differences in contemporary strategic discourses worldwide, but also shed light on the types of conflict that may be anticipated in the future as it is these images of future conflict that inform strategic planning.



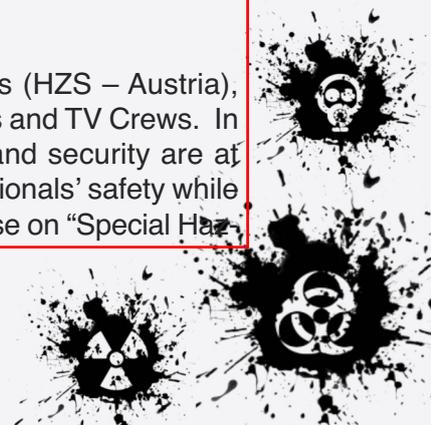
In gaining a better understanding of the future nature of conflict, it is therefore of the utmost importance to go beyond the traditional Western (English) language domain experts, and include views from regions across the world. The main purpose of the Future Nature of Conflict project is therefore to map and analyze global perspectives about the future nature of conflict published over the last two decades across four language domains – Arabic, Chinese, English and Slavic. The aim is to gain a better understanding of the bandwidth of views about the future nature of conflict. These views are analyzed along different dimensions, such as actors, aims, domains, means – who, why, where, how?; as well as salience, length, extensiveness, distinctiveness – how often, how long, how widespread, how distinct? The various definitions of conflict across the language domains were also mapped. This study seeks to better inform decision makers from government and industry in preparing for the challenges of the future conflict environment.

**EDITOR'S NOTE:** You can download this unique report from the "CBRNE-CT Papers" section of the Newsletter's website.

### CBRN training for Photographers and TV Crews

Source: <http://www.hotzonesolutions.com/en/about/news/86-hzs-launches-new-training-for-photographers-and-tv-crews.html>

In its continuous effort to meet CBRN training needs, HotZone Solutions (HZZ – Austria), proudly introduces a unique training course for professional Photographers and TV Crews. In this fast evolving and dangerous environment, where reporters' safety and security are at stake as they work to fully accomplish their mission, ensuring these professionals' safety while reporting events to the general public is a key priority at HZZ. The new course on "Special Haz-





ards: Protection Course for Photographers and TV-Crews" aims at familiarizing professional reporters with basic self-protection measures. For this training, HZS has developed a special curriculum to teach them how to work safely in potentially contaminated and hazardous areas. This unique course comprises theory and a practical training with harmless and inert chemicals, biological agents, and radioactive simulants.

## Afghan hospital assaulted amid fears of 'high-profile attacks'

Source:

<http://www.cnn.com/2011/WORLD/asiapcf/05/21/afghanistan.violence/index.html?hpt=T2>

Members of the Afghan military on Saturday stand guard on the road that leads to the military hospital that was attacked.

### STORY HIGHLIGHTS

- ISAF calls the attack "abhorrent" and the "lowest" kind of action
- A memo from Gen. David Petraeus says big attacks are likely this summer
- The Taliban says two members carried out suicide attacks at the hospital

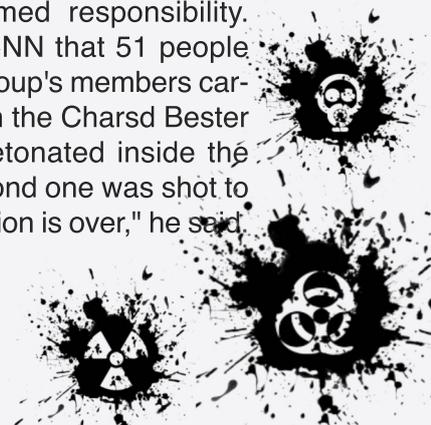
A suicide bombing ripped through a military hospital in Kabul on Saturday as a warning surfaced from the commander of coalition forces in Afghanistan of increased "high-profile attacks" over the summer.

In a memorandum to NATO's International Security Assistance Force, Gen. David Petraeus said it likely that insurgents will pursue

such operations over the coming months in an attempt to demonstrate their ability to strike.

He called on international forces to balance their tactical needs with those of the civilian population. "These attacks may increase the risk of civilian casualties and put Afghan and ISAF forces in difficult situations," Petraeus said in a memorandum made public Saturday. "In the face of such enemy actions, we must continue our efforts to reduce civilian casualties to an absolute minimum." The Kabul attack underscores Petraeus' warning.

Six people were killed and 26 others were injured in the bombing, according to Zahir Azimi, a ministry of defense spokesman. A Taliban spokesman claimed responsibility. Zabiullah Mojahed told CNN that 51 people had died and two of the group's members carried out suicide attacks on the Charsd Bester military. "One of them detonated inside the eating place, and the second one was shot to death, and now the operation is over," he said.





"As a result, 51 people (have) been killed, including foreigners."

Afghan President Hamid Karzai deplored the action, and ISAF spokesman Rear Adm. Vic Beck, called the strike "abhorrent," saying it "represents the lowest, most cowardly attack."

The Sardar Mohammad Daud Khan Hospital, a 400 bed-hospital, is the largest medical military facility in the country and provides medical services to Afghan soldiers and their families, the U.N. Assistance Mission in Afghanistan said. The strike occurred when medical students were at lunch, and the United Nations emphasized that international humanitarian law bans attacks on medical workers and hospitals.

"All medical personnel and facilities must be respected and protected in all circumstances. Further, directing an attack against a zone established to shelter wounded and sick persons, and civilians from the effects of hostilities, is also illegal and prohibited. As parties to the conflict, all anti-government elements have clear responsibilities under international humanitarian law to protect civilians and to not attack them," the U.N. Afghan mission said in a statement.

Petraeus' memorandum, posted on the ISAF website, comes as the Taliban and al

Qaeda have claimed responsibility for an increased number of attacks against security forces in Afghanistan and U.S. targets in Pakistan.

Both groups have said many of the attacks were in retaliation after U.S. commandos killed Osama bin Laden this month.

Petraeus ordered forces to review civilian casualty directives, saying troops must achieve "the proper balance between aggressiveness and patience."

Anger in Afghanistan and Pakistan over civilian casualties has mounted in recent months following NATO air strikes that have killed dozens along their shared border.

In March, Defense Secretary Robert Gates offered a personal apology to Afghan President Hamid Karzai for the killings of nine boys in a helicopter attack targeting insurgents.

The apology came after Karzai said one made earlier by Petraeus was insufficient.

Weeks later, the international force said civilians were accidentally killed during a NATO airstrike in Afghanistan's Helmand province. The target was two vehicles believed to be carrying a Taliban leader, ISAF said.

Petraeus' warning also comes as he must decide on the number of troop reductions in Afghanistan to meet President Barack



Obama's self-imposed deadline to begin withdrawing U.S. forces by July.



The president has repeatedly said he is confident the United States can meet the self-imposed deadline without compromising Afghan security, though military commanders and government officials have raised concern about the readiness of Afghan security forces.



Petraeus testified earlier this year before Congress about the plans, saying he was likely to recommend that some combat troops be among the first to return to the United States.

He has said significant progress has been made against the Taliban over the past five years. But he also has warned the progress is "fragile and reversible." "We are at a pivotal moment in our work here, and I believe it would be valuable for every leader in ISAF to reread these documents and to internalize and employ the principles in them," Petraeus said in memorandum dated May 15, 2011.

**EDITOR'S NOTE:** For the last 5yrs I strongly support the possibility that hospitals will be the next targets. It happened in Mumbai; it happened in Libya; it happened in Afghanistan. Why surprised! Don't you know that "the unexpected always happens?" Our surprise is their step ahead of us! "Plan as a terrorist and implement as a victim" was the quota in my former CBRN Response Unit. "They" have to be lucky only once...



Do you know what this is?



Look for the answer at the end of the last page of the Newsletter.

## India's Army Could Receive WMD-Resistant Gear

Source: <http://crisisboom.com/2011/05/13/indian-army-wmd-resistant-gear/>

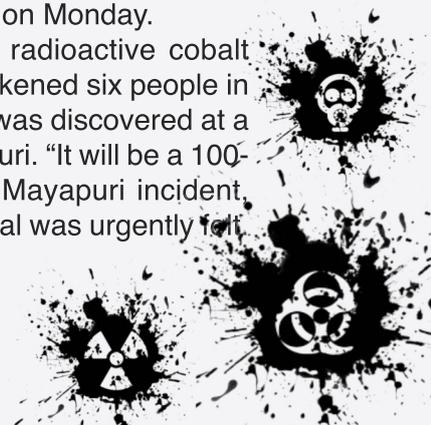
India's army could receive new gear designed to provide protection against chemical, biological or nuclear materials, the Press Trust of India reported on Wednesday. Kanpur's Defense Material and Stores Research Development

Establishment "has developed a new NBC or nuclear-biological-chemical suit that would be proved effective against any kind of dangerous weapons or chemicals and protect soldiers from any sort of attack," agency head Arvind Kumar Saxena said. "The organization [has] developed the chemical attack-resistant suit, but the suits necessary for the nuclear and biological war situation has not been prepared," the official said. "The work on the biological suit is likely to be completed by 2013, whereas the preparation for the nuclear one is in the primary level." The army requested 40,000 of the suits after examining the product. Meanwhile, India has approved plans for a medical center in New Delhi that would specialize in treating victims of a WMD attack, the Indian Express reported on Monday.



opment Establishment "has developed a new NBC or nuclear-biological-chemical suit that would be proved effective against any kind of dangerous weapons or chemicals and protect

A supply of radioactive cobalt 60 last year sickened six people in West Delhi. The material was discovered at a scrap repository in Mayapuri. "It will be a 100-bed hospital. During the Mayapuri incident, the need for such a hospital was urgently felt."





Once this hospital comes up, we can meet any chemical, biological, radiological and nuclear emergency without any inconvenience to the patients,” said N.K. Mohanty, medical

superintendent of New Delhi’s Safdarjung Hospital. The new medical center is slated for construction on a parcel of land adjacent to the Safdarjung treatment site.

## The Two Faces of Al-Naqba

By Nancy Kobrin, PhD, Joan Lachkar, PhD

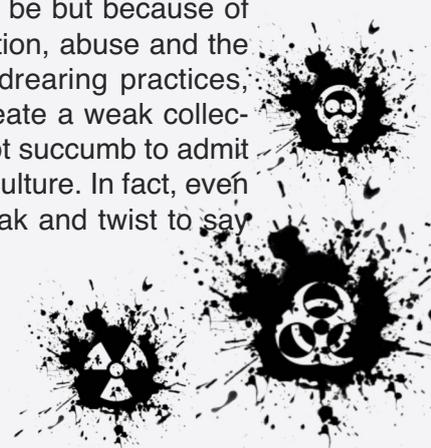
Source: [http://www.familysecuritymatters.org/publications/id.9635/pub\\_detail.asp](http://www.familysecuritymatters.org/publications/id.9635/pub_detail.asp)

The current events and uprising in the Arab world inspired us to write this article on Al Naqba, a term used to refer to the Palestinian loss of the 1948 war and the fleeing of Palestinians to surrounding Arab lands. In Arabic naqba means catastrophe or disaster, a name they attached to the occurrence of losing the war in 1948 with Is-



rael. Much to their humiliation, Israel won! Translated into psychological terms – saving face and redeeming honor to the defeated Arab world becomes a more pervasive force than life itself.

Arabs are predestined to be poor losers, not because they want to be but because of severe childhood deprivation, abuse and the lack of early healthy childrearing practices, which all contribute to create a weak collective group ego that can not succumb to admit defeat in a shame honor culture. In fact, even when they lose, they tweak and twist to say





Palestinian girls in Lebanon mark Al Naqba with Nazi salutes.

they won and reassert themselves for a comeback in order to ward off shame, or will do anything to save face even at the sacrifice of their own lives, their children or their needs. Defeat gets repackaged and recycled under the guise of a new narrative--Al Naqba.

In psychological terms the inability to deal and cope with loss is known as the paranoid schizoid position, a position described by one of the most famous pioneers in psychoanalysis, Melanie Klein, as one of the most primitive states of mind. We are not saying that Arabs are primitive. The reference is to a psychological state applicable to all human beings. It is addressed to all those individuals and groups who can not contain their rage, impulses, violent behavior and who are on a constant rampage to revenge against those who contributed to their downfall. Primitive defenses are usually a response to one's own terrorized internal world. This is known as projective identification. "We feel terrorized so now we are going to let you know how we feel by putting our terrified selves into you!!"

In the paranoid schizoid position, one can not tolerate loss instead they revert back to such defenses as splitting, projecting, retaliation and never ending revenge to ward off painful affects of shame and humiliation. It is well known that Asian and Arab Muslim cultures are shame honor cultures prone to these dynamics (Berton, Lachkar, German Japanese Attitudes toward World War II War Crimes).

Both of us have written extensively on the capacity to deal with mourning and loss, its effects in the clinical arena as well as the political world, whereby retaliation becomes the replacement for loss. "My wife wants a divorce! Just wait, she will suffer and I will ensure that she and the kids will not get a penny from me!"

In our "Bin Laden's Double Talk" article we explained this splitting mechanism or "two-side of the coin" theory for Arab Muslim behavior as Arab "double talk," as a defense mechanism inextricably linked to the incapacity to mourn loss and go on with one's lives.





Keys feature in Al Naqba posters and protests, symbols of Palestinians being “locked out” of the homes they left.

On the one hand they act like normal people ready and willing to negotiate to make peace, but on the other hand they are fired up to seek revenge.

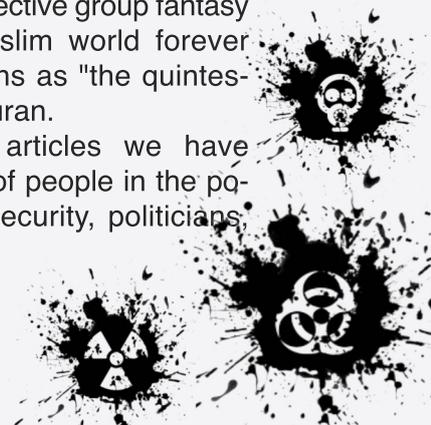
The Naqba narrative of catastrophic disaster offers a compromise to replace defeat and assuage the pain of loss. Revenge serves as a momentary quick fix relief just as what drugs or alcohol do for the addict. In the Palestinian mind Al Naqba becomes a newly regained victory, a form of redemption. Yet paradoxically, Al Naqba is their major drawback because it does not allow the ummah to process the trauma of their defeat. As with all our patients in clinical practice people, in groups and all nations must be able to mourn. The 1948 defeat is a prime example how the Palestinians will never be able to move forward without blood and violence if they can not face the normal healthy process of mourning. Israel is a constant reminder of their demise.

These defense mechanisms are an open display of this kind of grandiose omnipotence, how the Palestinians and the Arab inflate and compare Al Naqba with the Holocaust and the numbers dead with sheer delight. The socie-

tal structure of communal identity or collective group ego is so fused and fragile that they glom onto every opportunity to turn our victories and celebrations into their catastrophe. Yom Ha-Atzmaut, Israeli Independence Day, is a few good example. The second author in her latest book, *How to Talk to a Borderline* refers to this as bonding with the mother of pain (2010).

The Naqba is the Palestinian version of a soap opera – a drama they have created in order to keep themselves literally afloat. It is not ironic for us to use the word “afloat” as they continue to launch more flotillas to Gaza in order to keep the soap going. Those who don’t turn their cheek to Al Naqba soap opera are organizations like the Israeli Im Tirzu who have launched a counter narrative campaign calling it “Naqba Harta” (translates “Naqba Bullsh\*t”). This Naqba collective group fantasy keeps the Arab and Muslim world forever bonded to the Palestinians as “the quintessential orphans” of the Quran.

As in our previous articles we have stressed the importance of people in the political arena, homeland security, politicians,



historians, CIA, people working on terrorists and counterterrorism to take into account the psychological implications of Al Naqba. Without this understanding of revenge aspects, one is left to believe such Arab myths as the conflict is about territory, land, boundaries but in reality the conflicts center around betrayal, abandonment, control, domination, revenge,

getting even at the the ones who were felt to be responsible for their downfall-a shame/blame society. Most people do not realize how these dynamics get translocated on to the slippery slope of politics and the feeling evoked by the Naqba narrative is -- "Let's go get 'im!"

**Dr. Nancy Kobrin**, a psychoanalyst with a Ph.D. in romance and semitic languages, specializes in Aljamía and Old Spanish in Arabic script. She is an expert on the Minnesota Somali diaspora and a graduate of the Human Terrain System program at Leavenworth Kansas. Her new book is *The Banality of Suicide Terrorism: The Naked Truth About the Psychology of Islamic Suicide Bombing*.

**Dr. Joanie Jutta Lachkar** is a licensed Marriage and Family therapist in private practice in Brentwood and Tarzana, California, who teaches psychoanalysis and is the author of *The Narcissistic/Borderline Couple: A Psychoanalytic Perspective on Marital Treatment* (1992), *The Many Faces of Abuse: Treating the Emotional Abuse of High -Functioning Women* (1998), *The V-Spot, How to Talk to a Narcissist, How to Talk to a Borderline* and a recent paper, "The Psychopathology of Terrorism" presented at the Rand Corporation and the International Psychohistorical Association. She is also an affiliate member for the New Center for Psychoanalysis.

## Germany to scrap nuclear power by 2022

Source:[http://www.ft.com/cms/s/db203958-8a8d-11e0-b2f1-00144feab49a,Authorised=false.html?\\_i\\_location=http%3A%2F%2Fwww.ft.com%2Fcms%2Fs%2F0%2Fdb203958-8a8d-11e0-b2f1-00144feab49a.html&\\_i\\_referer=http%3A%2F%2Fwww.homelandsecuritynewswire.com%2Fgermany-scrap-nuclear-power-2022#axzz1NqW5NnTg](http://www.ft.com/cms/s/db203958-8a8d-11e0-b2f1-00144feab49a,Authorised=false.html?_i_location=http%3A%2F%2Fwww.ft.com%2Fcms%2Fs%2F0%2Fdb203958-8a8d-11e0-b2f1-00144feab49a.html&_i_referer=http%3A%2F%2Fwww.homelandsecuritynewswire.com%2Fgermany-scrap-nuclear-power-2022#axzz1NqW5NnTg)

Germany yesterday announced plans to become the first major industrialized power to shut down all its nuclear plants in the wake of the disaster in Japan; phase-out due to be wrapped up by 2022; it means that the country will have to find the 22 percent of its electricity needs currently covered by nuclear reactors from another source; Monday decision is a U-turn for Chancellor Angela Merkel, and means that the current government has adopted the timetable for a nuclear phase-out set by the previous Social Democrat-Green coalition government a decade ago; it also cancels Merkel's decision from November 2010 to extend the lifetime of Germany's seventeen reactors by an average of twelve years, which would have kept them open until the mid-2030s

Germany on Monday announced plans which would make it the first major industrialized country to shut down all its nuclear plants in the wake of the disaster in Japan, with a phase-out due to be wrapped up by 2022.



Government decision is right with the demonstrators // Source: [dagensps.se](http://dagensps.se)



Environment Minister Norbert Roettgen announced the decision by the centre-right coalition, which was prompted by the crisis at Japan's Fukushima plant, in the early hours of Monday morning, describing it as "irreversible" (Spiegel quotes him as saying: "Es wird keine Revisionsklausel geben"). "After long consultations, there is now an agreement by the coalition to end nuclear energy," he told reporters after seven hours of negotiations into the small hours at Chancellor Angela Merkel's offices. "This decision is consistent, decisive and clear."

The Financial Times reports that Germany has seventeen nuclear reactors on its territory, eight of which are currently off the electricity grid:

- Seven of the offline plants are the country's oldest nuclear reactors, which the federal government shut down for three months pending a safety probe after the Japanese atomic emergency at Fukushima that began in March.
- The eighth is the Kruemmel plant, in northern Germany, which has been mothballed for years because of technical problems.

Monday's decision made Germany the first major industrial power to announce plans to give up atomic energy entirely. It also means that the country will have to find the 22 per cent of its electricity needs currently covered by nuclear reactors from another source.

Monday decision is a U-turn for Merkel, and means that the current government has adopted the timetable for a nuclear phase-out set by the previous Social Democrat-Green coalition government a decade ago. It also cancels Merkel's decision from November 2010 to extend the lifetime of Germany's seventeen reactors by an average of twelve years, which would have kept them open until the mid-2030s.

The Bangkok Post reports that the late-night discussions among Merkel's fractious coalition partners saw the pro-business Free Democrats (FDP) arguing against a fixed end date for nuclear power, and to maintain two reserve reactors in case of energy shortages. FDP sources said there would be a contingency plan with one reactor but did not provide details.

The Christian Social Union, the Bavarian sister party of Merkel's Christian Democrats, fought for an exit within 10 years.

Some coalition members had called for a built-in review clause which could have seen the decision revisited, but this was thrown out in the final round of negotiations.

Roettgen said the government had largely followed the recommendations of an "ethics panel" appointed by Merkel after the Fukushima disaster, which called for an end to nuclear power in Germany within a decade.

**EDITOR'S NOTE:** If this decision is not an emotional/demagogic one to satisfy the adversaries of nuclear power it should be followed by an alternative power provision web that will substitute the percentage of power lost. There is no doubt that nuclear energy is a clean source of energy. The fact that man cannot yet absolutely successfully master this power does not make it an anathema. If you analyse all major nuclear plants accidents so far you will objectively notice that in the highest percentage the explanation and cause is mostly man-made – even the Fukushima incident. It seems that the "it will not happen to us" problem is much more serious and genetically integrated than we thought so far. If we do not change this attitude we will continue to blame everything else but us when the unexpected happens...



## Shari'a and Violence in American Mosques

by Mordechai Kedar and David Yerushalmi  
Middle East Quarterly

Source: <http://www.meforum.org/2931/american-mosques>

How great is the danger of extremist violence in the name of Islam in the United States? Recent congressional hearings into this question by Rep. Peter King (Republican of New York), chairman of the Committee on Homeland Security, have generated a firestorm of controversy among his colleagues, the press, and the general public. Though similar hearings



A comprehensive study of the relationship between Shari'a adherence and incitement to violence in American mosques found that mosques that segregated men from women during prayer service were more likely to contain violence-positive materials than those where men and women were not segregated.

have taken place at least fourteen times since 2001.[1] King was labeled a latter-day Joe McCarthy and the hearings called an assault on civil liberties and a contemporary witch-hunt. Yet the larger dilemmas outlined by both the congressman and some of his witnesses remain: To what extent are American Muslims, native-born as well as naturalized, being radicalized by Islamists? And what steps can those who are sworn to the protection of American citizenry take that will uncover and disrupt the plots of those willing to take up arms against others for the sake of jihad?

### Root Causes and Enabling Mechanisms

While scholarly inquiry into the root causes and factors supportive of terrorism has accelerated since the September 11, 2001 attacks on the United States, there are few empirical studies that attempt to measure the relation-

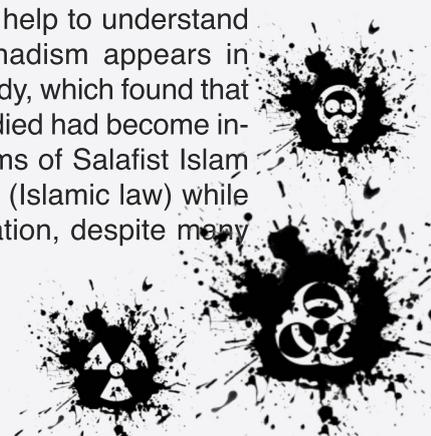
ship between specific variables and support for terrorism. To date, almost all of the professional and academic work in this field has been anecdotal surveys or case studies tracing backward through the personal profiles of terrorists and the socioeconomic and political environments from which they came.[2]

One study by Quintan Wiktorowicz, assistant professor of international studies at Rhodes College and now on the staff of the National Security Council,[3] noted that modern jihadists legitimize their violent activities by relying on the same textual works as their nonviolent Salafist counterparts. However, the approach taken to these texts by the violent jihadist may be distinguished from that of the nonviolent Salafist insofar as the jihadist uses the principles advanced by both classical and modern Islamic scholars and ideologues and adapts them to modern situations in a

way that provides a broader sanction for the permissible use of violence.[4]

Further, in 2007, Paul Gill concluded that terrorist organizations seek societal support by creating a "culture of martyrdom" and that one theme common to suicide bombers was the support they received from a community that esteemed the concept of martyrdom. Thus, a complex dynamic is at work between a terrorist organization, society, and individuals with the interplay between these three dimensions enabling radicalization and terrorist attacks.[5]

Another item that may help to understand the growth of modern jihadism appears in Marc Sageman's 2004 study, which found that 97 percent of jihadists studied had become increasingly devoted to forms of Salafist Islam highly adherent to Shari'a (Islamic law) while on their path to radicalization, despite many



coming from less rigorous devotional levels during their youths. This increase in devotion to Salafist Islam was measured by outwardly observable behaviors such as wearing traditional Arabic, Pakistani, or Afghan clothing or growing a beard.[6]

When viewed together, a picture emerges that may give researchers, as well as law enforcement officials, a way to monitor or potentially to predict where violent jihad may take root. Potential recruits who are swept up in this movement may find their inspiration and encouragement in a place with ready access to classic and modern literature that is positive toward jihad and violence, where highly Shari'a-adherent behavior is practiced, and where a society exists that in some form promotes a culture of martyrdom or at least engages in activities that are supportive of violent jihad. The mosque can be such a place.

That the mosque is a societal apparatus that might serve as a support mechanism for violent jihad may seem self-evident, but for it to be a useful means for measuring radicalization requires empirical evidence. A 2007 study by the New York city police department noted that, in the context of the mosque, high levels of Shari'a adherence, termed "Salafi ideology" by the authors of the report, may relate to support for violent jihad. Specifically, it found that highly Shari'a-adherent mosques have played a prominent role in radicalization.[7] Another study found a relationship between frequency of mosque attendance and a predilection for supporting suicide attacks but discovered no empirical evidence linking support for suicide bombings to some measure of religious devotion (defined and measured by frequency of prayer).[8]

However, the study suffers from a major methodological flaw, namely, reliance on self-reporting of prayer frequency. Muslims would be under social and psychological pressure to report greater prayer frequency because their status as good or pious believers is linked to whether they fulfill the religious obligation to pray five times a day.[9] This piety is not dependent on regular mosque attendance as Muslims are permitted to pray outside of a mosque environment whenever necessary.[10] Hence, the pressure to over-report

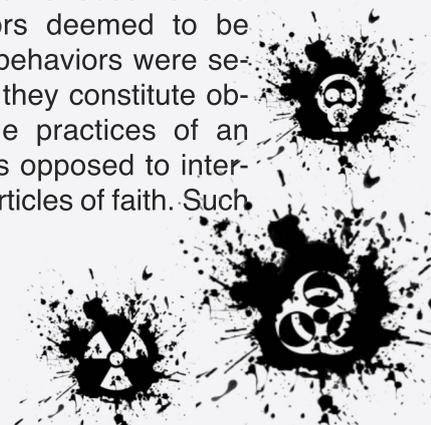
exists for self-reporting of prayer frequency but is not present in self-reporting of frequency of mosque attendance, which is a measure of both coalitional or group commitment and religious devotion.

Thus, there is a need for the study and corroboration of a relationship between high levels of Shari'a adherence as a form of religious devotion and coalitional commitment, Islamic literature that shows violence in a positive light, and institutional support for violent jihad. By way of filling this lacuna, the authors of this article undertook a survey specifically designed to determine empirically whether a correlation exists between observable measures of religious devotion linked to Shari'a adherence in American mosques and the presence of violence-positive materials at those mosques. The survey also sought to ascertain whether a correlation exists between the presence of violence-positive materials at a mosque and the promotion of jihadism by the mosque's leadership through recommending the study of these materials or other manifest behaviors.

### Identifying Shari'a-Adherent Behaviors

Shari'a is the Islamic system of law based primarily on two sources held by Muslims to be respectively direct revelation from God and divinely inspired: the Qur'an and the Sunna (sayings, actions, and traditions of Muhammad). There are other jurisprudential sources for Shari'a derived from the legal rulings of Islamic scholars. These scholars, in turn, may be adherents of differing schools of Islamic jurisprudence. Notwithstanding those differences, the divergence at the level of actual law is, given the fullness of the corpus juris, confined to relatively few marginal issues. Thus, there is general unity and agreement across the Sunni-Shiite divide and across the various Sunni madh'habs (jurisprudential schools) on core normative behaviors.[11]

Surveyors were asked to observe and record selected behaviors deemed to be Shari'a-adherent. These behaviors were selected precisely because they constitute observable and measurable practices of an orthodox form of Islam as opposed to internalized, non-observable articles of faith. Such



visible modes of conduct are considered by traditionalists to have been either exhibited or commanded by Muhammad as recorded in the Sunna and later discussed and preserved in canonical Shari'a literature. The selected behaviors are among the most broadly accepted by legal practitioners of Islam and are not those practiced only by a rigid subgroup within Islam—Salafists, for example.

Among the behaviors observed at the mosques and scored as Shari'a-adherent were: (a) women wearing the hijab (head covering) or niqab (full-length shift covering the entire female form except for the eyes); (b) gender segregation during mosque prayers; and (c) enforcement of straight prayer lines. Behaviors that were not scored as Shari'a-adherent included: (a) women wearing just a modern hijab, a scarf-like covering that does not cover all of the hair, or no covering; (b) men and women praying together in the same room; and (c) no enforcement by the imam, lay leader, or worshipers of straight prayer lines.

The normative importance of a woman's hair covering is evidenced by two central texts, discussed at length below, *Reliance of the Traveller* and *Fiqh as-Sunna* (Law of the Sunna), both of which express agreement on the obligation of a woman to wear the hijab:

There is no such dispute over what constitutes a woman's aurah [private parts/nakedness]. It is stated that her entire body is aurah and must be covered, except her hands and face ... God does not accept the prayer of an adult woman unless she is wearing a head covering (khimar, hijab).[12]

The nakedness of a woman (even if a young girl) consists of the whole body except the face and hands. The nakedness of a woman is that which invalidates the prayer if exposed. ... It is recommended for a woman to wear a covering over her head (khimar), a full length shift, and a heavy slip under it that does not cling to the body.[13]

In a similar fashion, Shari'a requires that the genders be separated during prayers. While both *Reliance of the Traveller* and *Fiqh as-Sunna* express a preference that women should pray at home rather than the mosque,[14] they agree that if women do pray

in the mosque, they should pray in lines separate from the men.[15] Additionally, authoritative Shari'a literature agrees that the men's prayer lines should be straight, that men should be close together within those lines, and that the imam should enforce prayer line alignment.[16]

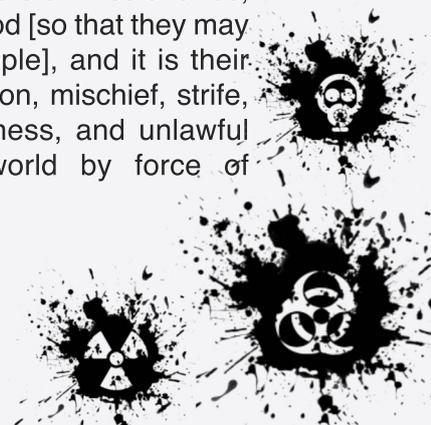
### Sanctioned Violence

The mosques surveyed contained a variety of texts, ranging from contemporary printed pamphlets and handouts to classic texts of the Islamic canon. From the perspective of promoting violent jihad, the literature types were ranked in the survey from severe to moderate to nonexistent. The texts selected were all written to serve as normative and instructive tracts and are not scriptural. This is important because a believer is free to understand scripture literally, figuratively, or merely poetically when it does not have a normative or legal gloss provided by Islamic jurisprudence.

The moderate-rated literature was authored by respected Shari'a religious and/or legal authorities; while expressing positive attitudes toward violence, it was predominantly concerned with the more mundane aspects of religious worship and ritual. The severe material, by contrast, largely consists of relatively recent texts written by ideologues, rather than Shari'a scholars, such as Abul Ala Mawdudi and Sayyid Qutb. These, as well as materials published and disseminated by the Islamist Muslim Brotherhood, are primarily, if not exclusively, aimed at using Islam to advance a violent political agenda.

Mawdudi (1903-79), for one, believed that it was legitimate to wage violent jihad against "infidel colonizers" in order to gain independence and spread Islam. His *Jihad in Islam*, found in many of the mosques surveyed, instructed followers to employ force in pursuit of a Shari'a-based order:

These [Muslim] men who propagate religion are not mere preachers or missionaries, but the functionaries of God [so that they may be witnesses for the people], and it is their duty to wipe out oppression, mischief, strife, immorality, high handedness, and unlawful exploitation from the world by force of arms.[17]



Similarly, Qutb's Milestones serves as the political and ideological backbone of the current global jihad movement. Qutb, for example, sanctions violence against those who stand in the way of Islam's expansion:

If someone does this [prevents others from accepting Islam], then it is the duty of Islam to fight him until either he is killed or until he declares his submission.[18]

These materials differ from other severe- and moderate-rated materials because they are not Islamic legal texts per se but rather are polemical works seeking to advance a politicized Islam through violence, if necessary. Nor are these authors recognized Shari'a scholars.

The same cannot be said for some classical works that are also supportive of violence in the name of Islam. Works by several respected jurists and scholars from the four major Sunni schools of jurisprudence, dating from the eighth to fourteenth centuries, are all in agreement that violent jihad against non-Muslims is a religious obligation.[19] Such behavior is normative, legally-sanctioned violence not confined to modern writers with a political axe to grind. Nor does its presence in classical Muslim works make it a relic of some medieval past. While *Umdat as-Salik* (Reliance of the Traveler) may have been compiled in the fourteenth century, al-Azhar University, perhaps the preeminent center of Sunni learning in the world, stated in its 1991 certification of the English translation that the book "conforms to the practice and faith of the orthodox Sunni community."[20] While addressing a host of theological matters and detailed instructions as to how Muslims should order their daily routine to demonstrate piety and commitment to Islam, this certified, authoritative text spends eleven pages expounding on the applicability of jihad as violence directed against non-Muslims, stating for example:

The caliph ... makes war upon Jews, Christians, and Zoroastrians ... provided he has first invited them to enter Islam in faith and practice, and if they will not, then invited them to enter the social order of Islam by paying the non-Muslim poll tax.[21]

The caliph fights all other peoples until they become Muslim ... because they are not a

people with a book, nor honored as such, and are not permitted to settle with paying the poll tax.[22]

The *Fiqh as-Sunna* and *Tafsir Ibn Kathir* are examples of works that were rated "moderate" for purposes of this survey. The former, which focuses primarily on the internal Muslim community, the family, and the individual believer and not on violent jihad, was especially moderate in its endorsement of violence. Relatively speaking, the *Fiqh as-Sunna* expresses a more restrained view of violent jihad, in that it does not explicitly call for a holy war against the West even though it understands the Western influence on Islamic governments as a force that is destructive to Islam itself.[23]

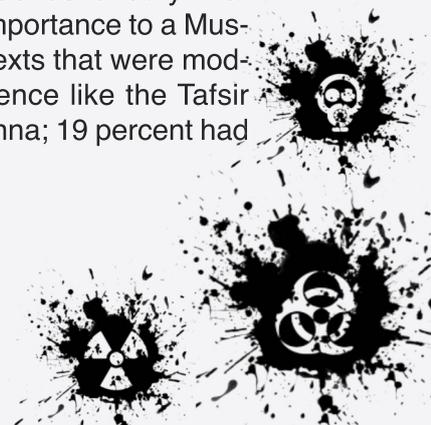
Nonetheless, such texts do express positive views toward the use of violence against "the other," as expressed in the following:

Ibn Abbas reported that the Prophet, upon whom be peace, said, "The ties of Islam and the principles of the religion are three, and whoever leaves one of them becomes an unbeliever, and his blood becomes lawful: testifying that there is no god except God, the obligatory prayers, and the fast of Ramadan." ... Another narration states, "If anyone leaves one of [the three principles], by God he becomes an unbeliever, and no voluntary deeds or recompense will be accepted from him, and his blood and wealth become lawful." This is a clear indication that such a person is to be killed.[24]

### Similarly in *Tafsir Ibn Kathir*

Perform jihad against the disbelievers with the sword, and be harsh with the hypocrites with words, and this is the jihad performed against them.[25]

The survey's findings, explored in depth below, were that 51 percent of mosques had texts that either advocated the use of violence in the pursuit of a Shari'a-based political order or advocated violent jihad as a duty that should be of paramount importance to a Muslim; 30 percent had only texts that were moderately supportive of violence like the *Tafsir Ibn Kathir* and *Fiqh as-Sunna*; 19 percent had no violent texts at all.



**Table 1: Number of Mosques Surveyed by State**

	No#	Percent
Arizona	2	2
California	26	26
District of Columbia	1	1
Florida	12	12
Georgia	1	1
Michigan	8	8
New Jersey	5	5
New York	3	3
North Carolina	12	12
Pennsylvania	1	1
South Carolina	2	2
Tennessee	2	2
Texas	9	9
Utah	3	3
Virginia	13	13
<b>Total</b>	<b>100</b>	<b>100</b>

### Survey Findings

A representative sample of one hundred mosques throughout the United States was surveyed. Table 1 presents the distribution of mosques by state. One quarter of the mosques had 10 or fewer worshipers; 50 percent had up to 28 worshipers; 75 percent had up to 70; the largest mosque had an estimated 1,700 worshipers.

The study found a statistically significant association between the severity of violence-positive texts on mosque premises and Shari'a-adherent behaviors. As indicated in Table 2, mosques that segregated men from women during prayer service were more likely to contain violence-positive materials than those mosques where men and women were not segregated. Mosques that did not segregate genders were also less likely to possess violence-positive materials (26 percent) but

**Table 2: Shari'a-adherent Mosques and Violence-positive Materials**

	No material (n=19)	Moderate [i] (n=30)	Severe (n=51) [ii]	Total	Chi-square (all df=2)
<b>Prayer service [iii]</b>					
Segregation in prayer					6.48, p=.04
No	16 (26%)	17 (27%)	29 (47%)	62	
Yes	2 (5%)	13 (35%)	22 (60%)	37	
Alignment of prayer lines					16.86, p<.001
No	16 (36%)	10 (22%)	19 (42%)	45	
Yes	2 (4%)	20 (37%)	32 (59%)	54	
<b>Description of imam or lay leader [iv]</b>					
Imam or lay leader has Sunna beard					6.62, p=.04
No [v]	13 (26%)	14 (28%)	23 (46%)	50	
Yes [vi]	3 (7%)	15 (33%)	28 (61%)	46	
Imam wore head covering					1.98, p=.37
No	9 (20%)	16 (35%)	21 (46%)	46	
Yes	7 (14%)	13 (26%)	30 (60%)	50	
Imam wore traditional (non-Western garb)					4.97, p=.08
No	11 (25%)	14 (32%)	19 (43%)	44	
Yes	5 (10%)	15 (29%)	32 (62%)	52	
Imam wore watch on right wrist [vii]					2.61, p=.27
No	15 (18%)	23 (28%)	45 (54%)	83	
Yes	1 (8%)	6 (50%)	5 (42%)	12	

[i] Has only Tafsir Ibn Kathir commentary on the Qur'an and/or Fiqh as-Sunna (n=20).

[ii] Has Riyadh as-Salaheen (n=7) or more extreme fiqh material.

[iii] In 1 mosque there was no prayer and surveyor could not determine the usual practice.

[iv] 4 mosques did not have a leader.

[v] 3 with no beard included in this category.

[vi] 3 had traditional beards with henna; and all were in the severe group. They were combined with this group for ease of reporting.

[vii] In 1 case it was not determined.



nonetheless did carry both moderate (27 percent) and severe materials (47 percent).

As was the case with gender segregation, those mosques that displayed strict alignment of men's prayer lines were more likely than their less observant counterparts to contain materials from both the moderate and severe categories. Thus, 59 percent of such mosques contained severe texts as opposed to 42 percent of mosques that did not enforce strict prayer line alignment. Conversely, only 4 percent of mosques with strict prayer line alignment possessed no violence-positive texts while 36 percent of their less observant counterparts exhibited no such literature.

Whether the mosque's imam or lay leader wore a traditional beard was also predictive of whether the mosque would contain violence-positive materials on premises. Of the mosques led by traditionally bearded imams,

61 percent contained literature in the severe category, 33 percent contained only moderate-rated materials, and 7 percent did not contain any. Forty-six percent of the mosques in which the imam did not wear a traditional beard contained severe materials, 28 percent had moderate-rated texts, and 26 percent contained none on site. Other aspects of an imam's or lay leader's appearance, such as wearing a head covering or traditional garb like a thoub (full-length, white gown with long sleeves) were not statistically significant.

Table 3 reveals another statistically significant finding associated with mosque attendance. Mosques that contained written materials in the severe category were the best attended, followed by those with only moderate-rated materials, trailed in turn by those lacking such texts. Mosques with severe materials had a mean attendance of 118 wor-

**Table 3: Violence-positive Materials, Mosque Attendance, and Shari'a-based Worshiper Characteristics**

	No material (n=19)	Moderate [i] (n=30)	Severe (n=51) [ii]	Total (n=98)	F test (unless otherwise noted)
Number of worshipers [iii]	Median 4 Mean 15	Median 25 Mean 60	Median 45 Mean 118	Median 28 Mean 81	Kruskal-Wallis, p<.002
Percentage of men with beards (SD) [iv]	14% (26.3) (n=17)	36% (25.4) (n=30)	48% (32.4) (n=51)	39% (31.7) (n=98)	F=8.61, df=2, 95P<.001
Percentage of men with hats	16% (25.8) (n=17)	34% (26.2) (n=29)	47% (32.6) (n=51)	38% (31.3) (n=97)	F=6.54, df=2, 94 p=.002
Percentage of men with Western garb	73% (39.9) (n=16)	35% (30.7) (n=30)	34% (33.1) (n=51)	41% (36.2) (n=97)	F=8.79, df=2, 94 p<.001
Percentage of women with modern hijab (vs. traditional hijab/niqab) [v]	57% (45.0) (n=7)	38% (37.5) (n=21)	42% (27.3) (n=37)	33% (32.9) (n=65)	F=0.92, df=2, 62, p=.40
Percentage of girls with hijab	29% (48.8) (n=7)	14% (32.2) (n=21)	36% (40.4) (n=37)	28% (43.8) (n=65)	F=1.87, df=2,62 p=.16
Percentage of boys with head covering [vi]	14% (37.8) (n=7)	24% (37.6) (n=20)	32% (40) (n=36)	27% (38.8) (n=63)	F=0.72, df=2, 60, p=.49

[i] Has only Tafsir Ibn Kathir commentary on the Qur'an and/or Fiqh as-Sunna (n=20).

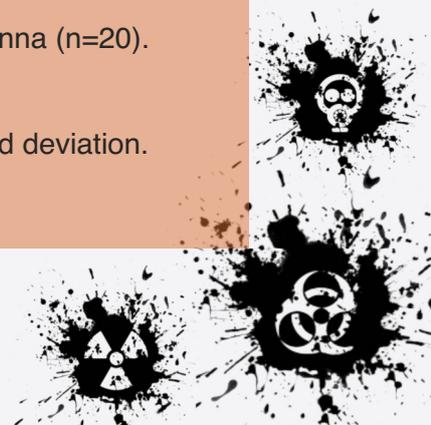
[ii] Has Riyadh as-Salaheen (n=7) or more extreme fiqh material.

[iii] In 2 mosques only the imam was present.

[iv] Data in parentheses that follow percentage figures denote the standard deviation.

[v] Women were present in 65 mosques.

[vi] Boys were present in 63 mosques.



shippers while mosques containing only moderate materials had a mean attendance of 60 worshipers; mosques that contained no violence-positive literature had a mean attendance of 15 worshipers.

The adoption or rejection of Western dress by male worshipers was yet another telling indicator of the presence of violence-positive materials. In mosques that contained no vio-

which covers all of the hair, or the niqab, which covers the whole body other than the eyes. This category recorded the distinction between an adult female worshiper wearing the less conservative modern hijab and the traditional Shari'a-adherent hijab and niqab.

Perhaps more troubling than the correlation between jihadist literature and Shari'a-adherent behaviors within a mosque was the

**Table 4: Shari'a-based Mosque Prayer, Shari'a-based Imam Characteristics, and Imam Recommended Violence-positive Material**

	Did not recommend [i] (n=15, 15%)	Recommended (n=82, 85%)	Total (n=97) [ii]	Chi-square (all df=1) p=
<b>Prayer service</b>				
Segregation in prayer				
No	12 (20%)	48 (80%)	60	3.77, p=.05
Yes	2 (6%)	34 (94%)	36	
Alignment of prayer lines				
No	12 (28%)	31 (72%)	43	11.10, p=.001
Yes	2 (4%)	51 (96%)	53	
<b>Description of imam or lay leader</b>				
Beard of imam or lay leader				
No	11 (22%)	39 (78%)	50	4.61, p=.03
Yes	3 (7%)	43 (93%)	46	
Imam wore head covering				
No	9 (20%)	37 (80%)	46	1.76, p=.18
Yes	5 (10%)	45 (90%)	50	
Imam wore traditional garb				
No	10 (23%)	34 (77%)	44	4.32, p=.04
Yes	4 (8%)	48 (92%)	52	
Imam wore watch on right wrist [iii]				
No	14 (17%)	69 (83%)	83	2.37, p=.12
Yes	0 (0%)	12 (100%)	12	

[i] Ten imams did not recommend that a worshiper study any violence-positive materials and 4 imams instructed against the study of violence-positive materials. All 14 observations were included in the "do not recommend" category.

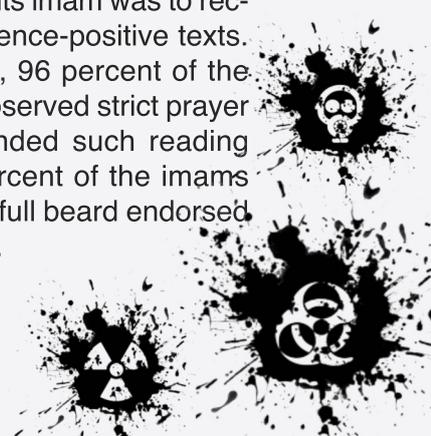
[ii] In 4 mosques, neither an imam nor a lay leader was present. However, in 1 of these 4 cases the imam had made clear recommendations on the mosque's webpage.

[iii] In 1 case it was not determined.

lence-positive materials, an average of 73 percent of the men wore Western garb. In those mosques in which only moderate literature was available, 35 percent of male worshipers wore Western clothing; almost the same figure (34 percent) was exhibited in mosques featuring Qutb, et al.

The survey was unable to find a statistically significant indicator when it came to women wearing a modern hijab as opposed to the more conservative traditional hijab,

role played by imams in recommending that worshipers study material that promote violence. The more manifestly Shari'a-adherent a mosque, the more likely its imam was to recommend the study of violence-positive texts. Thus, as seen in Table 4, 96 percent of the imams in mosques that observed strict prayer line alignment recommended such reading material. Similarly, 93 percent of the imams who sported a traditional, full beard endorsed the study of such writings.



But while the presence of certain Shari'a-adherent behaviors correlated almost one-to-one with the promotion of the violence-positive texts, the absence of these attributes should not be construed as a sign of true moderation. In mosques that did not practice strict prayer line alignment, a striking 72 percent of imams nonetheless recommended violence-positive materials. Similarly, 78 percent of imams who did not wear a traditional beard were proponents of these texts.

Moreover, mosques where the imam recommended violence-positive materials for study were marked by a higher presence of worshipers—both men and women—who took on a Shari'a-adherent appearance and a lower percentage of worshipers of a more assimilative or Western appearance (see Table 5). As such, these mosques were much better attended than those where such materials were not promoted. Imams at 82 of the 100 mosques surveyed recommended that worshipers study violence-positive materials; these mosques experienced a mean attendance of 96 worshipers and a median atten-

dance of 39. At the same time, at the 15 mosques surveyed where the imam did not recommend the study of such texts, the mean attendance was approximately 17 worshipers with a median attendance figure of 4.

The survey found a strong correlation between the presence of severe violence-promoting literature and mosques featuring written, audio, and video materials that actually promoted such acts. By promotion of jihad, the study included literature encouraging worshipers to engage in terrorist activity, to provide financial support to jihadists, and to promote the establishment of a caliphate in the United States. These materials also explicitly praised acts of terror against the West; praised symbols or role models of violent jihad; promoted the use of force, terror, war, and violence to implement the Shari'a; emphasized the inferiority of non-Muslim life; promoted hatred and intolerance toward non-Muslims or notional Muslims; and endorsed inflammatory materials with anti-U.S. views. As Table 6 demonstrates, of the 51 mosques that contained severe materials,

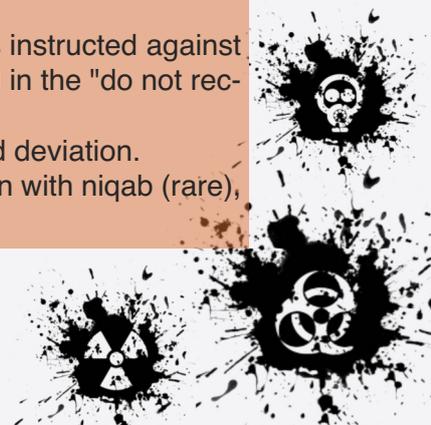
**Table 5: Mosque Attendance, Shari'a-based Worshiper Characteristics, and Imam Recommended Violence-positive Material**

	Did not recommend [i] (n=15, 15%)	Recommended (n=82, 85%)	F test for significance
Number of worshipers	Median=4 Total=250	Median=39 Total=7864	Mann-Whitney U p<.001
Percentage of men with beards (SD) [ii]	13% (27.6) (n=13)	44% (30.3) (n=82)	F=11.99, df=1, 93, p=.001
Percentage of men with hats	15% (27.2) (n=13)	42% (30.4) (n=81)	F=9.07, df=1, 92, p=.003
Percentage of men with Western garb	87% (19.1) (n=12)	34% (32.6) (n=82)	F=30.17, df=1, 91, p<.0001
Percentage of women with modern hijab (vs.traditional hijab/niqab) [iii]	70% (44.7) (n=5)	41% (30.9) (n=59)	F=3.85, df=1, 62, p<.054
Percentage of girls with hijab	20% (44.7%) (n=5)	29% (41.6) (n=60)	F=.21, df=1, 63, p=.65
Percentage of boys with head coverings	0% (n=5)	30% (39.6) (n=58)	F=2.77, df=1, 91, p<.10

[i] Ten imams did not recommend the study of any materials and 4 imams instructed against the study of violence-positive materials. All 14 observations were included in the "do not recommend" category.

[ii] Data in parentheses that follow percentage figures denote the standard deviation.

[iii] Women were present in 65 mosques. Data collected on percent women with niqab (rare), hijab, and modern hijab.



100 percent were led by imams who recommended that worshipers study texts that promote violence.

For example, mosques containing violence-positive materials were substantially

more likely to include materials promoting financial support of terror than mosques that did not contain such texts. A disturbing 98 percent of mosques with severe texts included materials promoting financial support of ter-

**Table 6: Violence-positive Materials and Promotion of Violent Jihad**

	No material (n=19)	Moderate [i] (n=30)	Severe (n=51) [ii]	Total	Chi-square (all df=2) 70.7, p<..001
Imam recommended studying texts promoting violence					
No	14 (82%)	1 (3%)	0 (0%)	15	
Yes	3 (18%) [iii]	28 (97%)	51 (100%)	82	
Promoted violent jihad					87.6, p<.001
No	18 (95%)	1 (3%)	0 (0%)	19	
Yes	1 (5%)	29 (97%)	51 (100%)	81	
Promoted joining terrorist organization					.49, p=.78
No	18 (95%)	28 (93%)	46 (90%)	92	
Yes	1 (5%)	2 (7%)	5 (10%)	8	
Promoted financial support of terror					81.9, p<.001
No	18 (95%)	1 (3%)	1 (2%)	20	
Yes	1 (5%)	29 (97%)	50 (98%)	80	
Collected money openly at mosque for known terrorist organization					.70, p=.70
No	18 (95%)	29 (97%)	47 (92%)	94	
Yes	1 (5%)	1 (3%)	4 (8%)	6	
Promotes caliphate in U.S.					81.9, p<.001
No	18 (95%)	1 (3%)	1 (2%)	20	
Yes	1 (5%)	29 (97%)	50 (98%)	80	
Praising terror against West					87.6, p<.001
No	18 (95%)	1 (3%)	0 (0%)	19	
Yes	1 (5%)	29 (97%)	51 (100%)	81	
Distributed memorabilia featuring jihadists or terrorist organizations					0.99, p=.61
No	18 (95%)	28 (93%)	45 (88%)	91	
Yes	1 (5%)	2 (7%)	6 (12%)	9	
Mosque invited imams or preachers who are known to have promoted violent jihad					28.9, p<.001
No	18 (95%)	12 (40%)	12 (24%)	42	
Yes	1 (5%)	18 (60%)	39 (76%)	58	

[i] Has only Tafsir Ibn Kathir commentary on the Qur'an and/or Fiqh as-Sunna (n=20).  
 [ii] Has Riyadh as-Salaheen (n=7) or more extreme fiqh material.  
 [iii] Denominator is 17, 2 in this column had no imam or leader.



ror. Those with only moderate-rated materials on site were not markedly different, with 97 percent providing such materials. These results stand in stark contrast to the mosques with no violence-positive materials on their premises where only 5 percent provided materials urging financial support of terror.

These results were comparable when using other indicators of jihad promotion. Thus, 98 percent of mosques that contained severe-rated literature included materials promoting establishing an Islamic caliphate in the United States as did 97 percent of mosques containing only moderate-rated materials. By contrast, only one out of the 19 mosques (5 percent) that had no violence-positive literature advocated this. Similarly, mosques with severe or moderate materials invited speakers known to have promoted violent jihad (76 percent and 60 percent respectively) versus one mosque out of 19 (5 percent) which did not contain violence-positive texts.

Finally, three patterns of behavior indicating promotion of violent jihad did not strongly correlate to the presence of violence-positive literature. Despite the presence of severe texts in such mosques, only a small number actually encouraged joining a terrorist organization, openly collected monies for such organizations, or distributed memorabilia featuring jihadists or terrorist organizations. Although very few mosques engaged openly in these activities, a correlation between these activities and the presence and severity of violence-positive literature was shown to exist.

### Broader Policy Implications

The conclusions to be drawn from this survey are dismal at best, offering empirical support for previous anecdotal studies on the connection between highly Shari'a-adherent mosques and political violence in the name of Islam. The mosques where there were greater indicators of Shari'a adherence were more likely to contain materials that conveyed a positive attitude toward employing violent jihad against the West and non-Muslims. The fact that spiritual sanctioners who help individuals become progressively more radicalized are connected to highly Shari'a-adherent mosques is another cause for deep con-

cern.[26] In almost every instance, the imams at the mosques where violence-positive materials were available recommended that worshipers study texts that promoted violence.

The survey also demonstrates that there are mosques and mosque-going Muslims who are interested in a non-Shari'a-centric Islam where tolerance of the other, at least as evidenced by the absence of jihad-promoting literature, is the norm. Mosques where violence-positive literature was not present exhibited significantly fewer indicators of orthodox, Shari'a-adherent behaviors and were also significantly less likely to promote violent jihad or invite speakers supportive of violent jihad. These non-Shari'a-centric mosques may provide a foundation from which a reformed Islam and its followers can more completely integrate into liberal, Western citizenship.

The results of this survey do not indicate the percentage of American Muslims that actually attend mosques with any regularity, nor does it reveal what relative percentage of American Muslims demonstrate Shari'a-adherent or non-adherent behaviors. Moreover, although this study shows that imams at Shari'a-adherent mosques recommend studying violence-positive materials and utilize their mosques for support of violent jihad, it does not capture the individual attendees' attitudes toward religiously sanctioned violence. However, it is at least reasonable to conclude that worshipers at such mosques are more sympathetic to the message of the literature present at those mosques and to what is being preached there. A follow-up survey of individual mosque attendees would provide insight regarding the relationship, if any, between Shari'a-adherence on the individual level and the individual's attitude toward violent jihad.

A recent study by Andrew F. March examined whether Islamic doctrine would allow Muslims to cooperate socially with non-Muslims and sincerely affirm liberal citizenship as that term is understood in its Western, democratic sense. He argued that there were grounds for an overlapping consensus but also noted that present-day Salafists cite texts holding that Muslims are either at war with non-Muslims or, at best, are in a state devoid



of any obligation to cooperate socially with them.[27] Additionally, March noted that the underpinnings of his theoretical consensus might be negated by empirical evidence showing that a large percentage of Muslims are unaware of [or reject] arguments that advocate for Western notions of liberal citizenship.[28]

Although released before March's study, an April 2007 survey conducted by WorldPublicOpinion.org presented such empirical evidence. The survey found that majorities in Morocco, Egypt, Pakistan, and Indonesia—ostensibly moderate Muslim countries—favored a strict application of Shari'a law in every Islamic country and keeping Western values out of Islamic countries.[29] However, that survey reports the attitudes of residents in non-Western countries that enforce Shari'a to varying degrees. It might be expected that Muslims in the West—who are immersed in Western culture, values, and democracy—would express different attitudes than their counterparts in the Middle East, Far East, and North Africa.

Unfortunately, the results of the current survey strongly suggest that Islam—as it is generally practiced in mosques across the United States—continues to manifest a resistance to the kind of tolerant religious and

legal framework that would allow its followers to make a sincere affirmation of liberal citizenship. This survey provides empirical support for the view that mosques across America, as institutional and social settings for mosque-going Muslims, are at least resistant to social cooperation with non-Muslims. Indeed, the overwhelming majority of mosques surveyed promoted literature supportive of violent jihad and a significant number invited speakers known to have promoted violent jihad and other behaviors that are inconsistent with a reasonable construct of liberal citizenship.

This survey suggests that, first and foremost, Muslim community leaders must take a more active role in educating their own faith community about the dangers associated with providing a safe haven for violent literature and its promotion—whether that safe haven is the mosque or the social club. These results also suggest that researchers and counterterrorist specialists should pay closer attention to the use and exploitation of classic Islamic legal doctrine and jurisprudence for recruiting and generating a commitment to violence against the perceived enemies of Islam. Finally, these findings should engender at least an interest among researchers to begin to study carefully Muslim attitudes toward citi-

### Shari'a-Adherent Behaviors:[1]

List	Description	Observation: Yes/No; or Count	Subject to Secondary Review[2]
Gender segregation during prayer service	Shari'a-adherent communal prayer occurs when men and women are segregated during prayer service. The segregation could occur by virtue of men and women praying in different buildings or different rooms. The segregation could also occur when men and women were in the same room, but were separated either with or without the use of a physical divider. Non-Shari'a-adherent communal prayer occurs when men and women are not segregated during the prayer service and the genders mix.	Yes/No	No



Shari'a-Adherent Behaviors:[1]			
List	Description	Observation: Yes/No; or Count	Subject to Secondary Review[2]
Alignment of men's prayer lines	<p>Shari'a-adherent alignment of men's prayer lines occurs when either the imam, lay leader, or the worshipers inspect and enforce the straightness of the men's prayer lines.</p> <p>Non-Shari'a-adherent alignment of men's prayer lines occurs when there is no observable attention paid to strict alignment of the men's prayer lines.</p>	Yes/No	No
Imam's or lay leader's beard [3]	<p>An imam's or lay leader's beard is a Sunna-style (i.e., full) beard, whether trimmed or not and either with or without henna dye coloring the beard.</p> <p>A non-Sunna style beard is either limited to a chin-beard or if the imam or lay leader wears no beard at all.</p>	Yes/No	No
Imam or lay leader wore head covering	<p>Shari'a-adherent behavior is that the imam or lay leader wore a religious head covering.</p> <p>Non-Shari'a adherent behavior is that the imam or lay leader did not wear a religious head covering</p>	Yes/No	No
Imam's or lay leader's clothing	<p>Shari'a-adherent garb is any of the following: (a) short thoub; (b) pants rolled up above the ankles; or (c) ankle-length thoub.</p> <p>Non-Shari'a-adherent garb is Western-style clothing such as modern-style dress or casual pants and shirt.</p>	Yes/No	No
Imam or lay leader wore watch on his right wrist[4]	<p>Certain Salafists wear the watch on the right wrist.</p> <p>Wearing the watch on the left wrist or not wearing a watch at all</p>	Yes/No	No
Percentage of men with beards	<p>Shari'a-adherent behavior is for an adult male worshiper to have a beard (full or not).</p> <p>Non-Shari'a-adherent behavior is for an adult male worshiper to have no beard.</p>	Count	No
Percentage of men with hats	<p>Shari'a-adherent behavior is for an adult male to wear a religious hat.</p> <p>Non-Shari'a-adherent behavior is for an adult male to not wear a religious hat.</p>	Count	No



Shari'a-Adherent Behaviors:[1] List	Description	Observation: Yes/No; or Count Count	Subject to Secondary Review[2] No
Adult male worshipers' clothing	Shari'a-adherent behavior is to wear either: (a) short thoub; (b) pants rolled up above the ankles; or (c) ankle-length thoub or similar Muslim attire. Non-Shari'a-adherent behavior is to wear Western-style clothing such as pants not rolled up above the ankles.		
Adult female worshipers' clothing	Shari'a-adherent behavior is to wear either the traditional hijab (covering the hair) or the niqab (covering the entire female body except the eyes). Non-Shari'a-adherent behavior is to wear the modern hijab (a scarf that does not completely cover the hair) or to not wear any hair covering.	Count	No
Girls (age 5-12) wear hijab	Shari'a-adherent behavior is to wear the traditional hijab. Non-Shari'a-adherent behavior is to not wear the hijab.	Count	No
Boys (age 5-12) wear head covering	Shari'a-adherent behavior is to wear a religious head covering. Non-Shari'a-adherent behavior is to not wear a religious head covering.	Count	No
Presence of violence-positive Shari'a legal and religious texts or presence of violence-positive Islamic political literature	If the surveyor found the Fiqh as-Sunna or Tafsir Ibn Kathir, but not more extreme materials, then the mosque was categorized as containing moderate-rated material. If the surveyor found the Riyadh as-Salaheen, works by Qutb or Mawdudi, or similar materials, then the mosque was categorized as containing severe-rated materials. If the surveyor found no violence-positive materials or if the violence-positive materials constituted less than 10% of all available materials, then the mosque was categorized as containing no materials.	Yes/No	No, unless the surveyor found materials promoting Fiqh as-Sunna, Tafsir Ibn Kathir, Riyadh as-Salaheen, or works by Qutb or Mawdudi. Other materials were subject to a secondary review.



### Shari'a-Adherent Behaviors:[1]

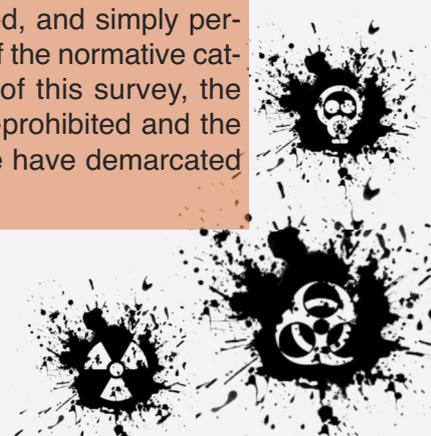
List	Description	Observation: Yes/No; or Count	Subject to Secondary Review[2]
Imam recommended studying texts promoting violence	Following the prayer service, the surveyor asked the following question: "Do you recommend the study of: (a) only the Qur'an and/or Sunna; (b) Tafsir Ibn Kathir; (c) Fiqh as-Sunna; (e) Reliance of the Traveller; or (f) the works of Qutb, such as Milestones, and Maududi, such as The Meaning of the Qur'an?" If the imam or lay leader recommended studying any of the materials mentioned above except the Qur'an and/or Sunna, then the imam or lay leader was recorded as having recommended the study of texts promoting the rated material.	Yes/No	No
Promoted joining terro- rist organiza- tion[5]	If materials available on mosque premises promoted joining a known terrorist organization, such as "mujahideen" engaged in jihad abroad, then the mosque was recorded as having promoted joining a terrorist organization.	Yes/No	Yes
Promoted financial support of terror	If materials available on mosque premises promoted the financial support of terrorism, jihadists, or terrorist organizations, then the mosque was recorded as having promoted the financial support of terror. Examples include materials that made explicit calls to support mujahideen abroad or families of Palestinian suicide bombers.	Yes/No	Yes
Openly collected money at the mosque for a known terrorist organization	If materials available on mosque premises indicated that speakers came to the mosque to raise money for specific terrorist organizations, then the mosque was recorded as having openly collected money at the mosque for a known terrorist organization.	Yes/No	Yes



### Shari'a-Adherent Behaviors:[1]

List	Description	Observation: Yes/No; or Count	Subject to Secondary Review[2]
Promoted establishment of the Islamic caliphate in the U.S.	If materials available on mosque premises promoted establishing the Islamic Caliphate in the United States, then the mosque was recorded as having promoted the establishment of the Islamic Caliphate in the U.S.	Yes/No	Yes
Praised terror against the West	If materials available on mosque premises praised engaging in acts of violence against the West or praised acts of terrorism previously committed against the West, then the mosque was recorded as having praised terror against the West.	Yes/No	Yes
Mosque invited guest imams or preachers known to have promoted violent jihad	If materials available at the mosque indicated that the mosque had invited a guest imam or other guest speaker who is known to have promoted violent jihad, then the mosque was recorded as having invited guest imams or preachers known to have promoted violent jihad.	Yes/No	Yes
Promoted violent jihad	If any of the materials featured on mosque property promoted engaging in terrorist activity; promoted the financial support of terrorism or jihadists; promoted the use of force, terror, war, and violence to implement Shari'a; promoted the idea that oppression and subversion of Islam should be changed by deed first, then by speech, then by faith; praised acts of terrorism against the West; or praised suicide bombers against Israelis, then the mosque was recorded as having promoted violent jihad.	Yes/No	Yes

[1] According to Islamic jurisprudence, Shari'a adherence can be measured across several normative axes, such as obligatory-prohibited, recommended-discouraged, and simply permissible. In theory, every act of a Shari'a-adherent Muslim falls within one of the normative categories—that is, there is no behavior outside of Shari'a. For purposes of this survey, the authors have chosen, except where indicated by notation, the obligatory-prohibited and the recommended-discouraged or recommended-permissible axes, which we have demarcated Shari'a-adherent/non-Shari'a-adherent, respectively.



[2] If a mosque, on the basis of materials observed by the surveyor, was recorded as having: (a) promoted violent jihad; (b) promoted joining a terrorist organization; (c) promoted financial support of terror; (d) collected money openly at the mosque for a known terrorist organization; (e) promoted establishing the Caliphate in the U.S.; (f) praised terror against the West; (g) distributed memorabilia featuring jihadists or terrorist organizations; or (h) invited imams or preachers who are known to have promoted violent jihad, then the materials that the surveyor relied on to record the presence of this material were subject to a secondary review by a committee of three subject-matter experts. This secondary review was collected and reviewed by the experts evaluating the materials independently of one another. A consensus view of two of the three experts was required to confirm the surveyor's observation. In 63 percent of the cases, the materials were so explicit in their promotion, praise, or support for the above behaviors that the committee's decision was unanimous. In no instance was there not a consensus and agreement with the surveyor's observation.

[3] The different legal schools vary on whether a beard is obligatory or preferable; they also differ on whether the beard for purposes of fiqh is only the chin hairs or also the lateral hairs of the sideburns and cheeks; and they differ on the minimum required length before trimming is permitted. The majority view, taking into account all schools and the Salafist opinions, is that a full beard is Sunna (following the behavior of Muhammad) and if not obligatory, preferable. For purposes of this survey, the full beard, trimmed or not, was considered Shari'a-adherent and a chin beard or no beard, was considered as non-Sunna, and in the survey's lexicon, non-adherent.

[4] While wearing a watch on the right hand is not strictly speaking a Shari'a requirement, during the preparation of the methodology of this survey, the authors identified literature at several mosques attended by Salafists advocating the wearing of a watch on the right hand for two reasons: not to wear jewelry on the left hand to follow the mode of dress of Muhammad, who, based upon certain Sunna, did not wear jewelry on his left hand; and to avoid dressing in the way of non-Muslims. The authors decided to add this observation to determine whether this behavior translated into observance by the more fundamentalist Salafists. They also observed that the 12 imams who wore the watch on the right hand were right handed.

[5] All of the materials characterized from this point to the end of the survey were dated or produced prior to September 11, 2001 but were still available or sold by the mosque in prominent fashion.

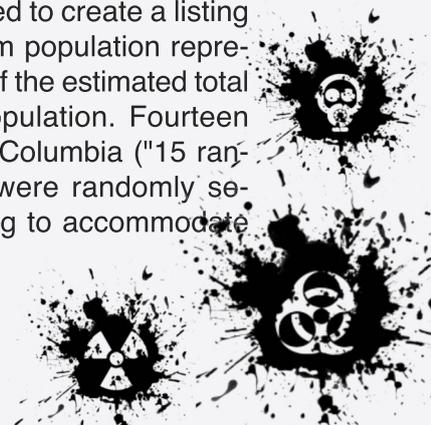
zenship and violence but one that differentiates between those who are Shari'a-adherent and those who are not. And, among Shari'a adherents, this future survey data must be sensitive to the distinction between traditionalism, orthodoxy, and Salafism, along with the more obvious sect distinctions, such as between Sunnis and Shiites.

### Methodology

**Sampling:** The survey analyzed data collected from a random sample of 100 mosques. This sample size provided sufficient statistical power to find a statistically significant association between most of the selected Shari'a-adherent behaviors and violence-positive variables. Most Shari'a adherence and vi-

olence-positive variables exhibited a strong correlation while some exhibited a weak or no correlation. A sample size of 100 mosques also allowed the survey to extrapolate to all mosques in the United States at a 95 percent confidence interval with a margin of error of +/-9.6 percent.

The survey was developed by using state-by-state estimates of the Muslim population extracted from the only extant such survey.[30] This was then used to create a listing of all states whose Muslim population represented at least 1 percent of the estimated total United States Muslim population. Fourteen states and the District of Columbia ("15 randomly selected states") were randomly selected from the final listing to accommodate



limits on physical logistics and personnel resources for the actual survey.

For each of the fourteen states and D.C., cities with the highest estimated concentrations of Muslims were identified, and mosques within those areas were eventually selected. The survey combined the data on 1,209 mosques listed in "The Mosque in America: A National Portrait"[31] with the data on the 1,659 mosques obtained online from Harvard's Pluralism Project,[32] with duplicates eliminated. Mosques were excluded from the list if there were indications that they were no longer operating, with a final site list yielding a total of 1,401 potential mosques for the survey.

The dates and prayer times for visiting mosques were also randomly selected. If a mosque was found to be closed, abandoned, or not at the address listed, then the next mosque that appeared on the randomized list for that city was visited. When the dominant language of the subject mosque was determined to be other than English, such as Arabic, Urdu, or Farsi, the surveyor who visited the mosque was fluent in that language. Each mosque was visited twice, once between May 18, 2007, and December 4, 2008 ("Survey Period"), and then again between May 10, 2009, and May 30, 2010 ("Audit Period"). The results of the Audit Period confirmed the findings in the Survey Period in all but nine mosques.

**Data Collection:** A surveyor visited a subject mosque in order: (a) to observe and record 12 Shari'a-adherent behaviors of the worshipers and the imam (or lay leader); (b) to observe whether the mosque contained the selected materials rated as moderate and severe; (c) to observe whether the mosque contained materials promoting, praising, or supporting violence or violent jihad; and (d) to observe whether the mosque contained materials indicating the mosque had invited guest speakers known to have promoted violent jihad. (See Appendix A for a more detailed presentation of the survey variables and methodology.)

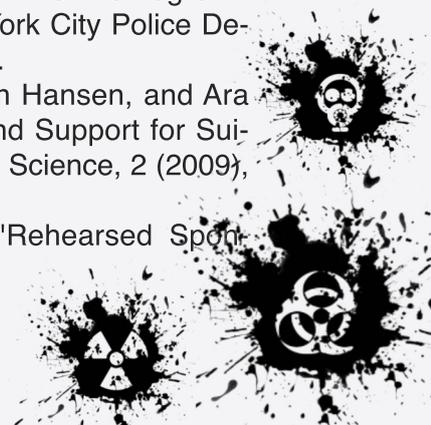
Thus, the survey only examined the presence of Shari'a-adherent behaviors, the presence of violence-positive materials in mosques, whether an imam would promote

the study of violence-positive materials, and whether a mosque was used as a forum to promote violent jihad. Since there is no central body to which all mosques belong, it was difficult to ascertain that the sampling universe list was complete. This may have introduced bias into the sampling although the authors find no evidence of any systemic distortions.

**Mordechai Kedar** is an assistant professor in the departments of Arabic and Middle East studies and a research associate with the Begin-Sadat (BESA) Center for Strategic Studies, both at Bar Ilan University, Israel. **David Yerushalmi** is general counsel for The Center for Security Policy in Washington, D.C., and director of policy studies at the Institute for Advanced Strategic and Political Studies in Potomac, Md.

### References

- [1] "Timeline of the Committee's Work on Violent Islamist Radicalization," Senate Committee on Homeland Security and Governmental Affairs, Washington, D.C., accessed Mar. 24, 2011.
- [2] James A. Piazza, "Rooted in Poverty? Terrorism, Poor Economic Development and Social Cleavages," *Terrorism and Political Violence*, Spring 2006, pp. 159-77.
- [3] Morning Edition, National Public Radio, Jan. 24, 2011.
- [4] Quintan Wiktorowicz, "A Genealogy of Radical Islam," *Studies in Conflict and Terrorism*, 28 (2005), pp. 75-97.
- [5] See Paul Gill, "A Multi-Dimensional Approach to Suicide Bombing," *International Journal of Conflict and Violence*, 2 (2007), pp. 142-59.
- [6] Marc Sageman, *Understanding Terror Networks* (Philadelphia: University of Pennsylvania Press, 2004), p. 93.
- [7] Mitchell D. Silber and Arvin Bhatt, *Radicalization in the West: The Homegrown Threat* (New York: New York City Police Department, 2007), pp. 2-90.
- [8] Jeremy Ginges, Ian Hansen, and Ara Norenzayan, "Religion and Support for Suicide Attacks," *Psychology Science*, 2 (2009), pp. 224-30.
- [9] Saba Mahmood, "Rehearsed Spontaneity"



taneity and the Conventionality of Ritual: Disciplines of Salat," *American Ethnologist*, Nov. 2004, pp. 827-53.

[10] Daniel Winchester, "Embodying the Faith: Religious Practice and the Making of Muslim Moral Habitus," *Social Forces*, June 2008, pp. 1753-80; Sayyid Sabiq, *Fiqh as-Sunna* (Indianapolis: American Trust Publications, 1991), vol. 2, pp. 67-74.

[11] Ahmad ibn Naqib al-Misri, *Reliance of the Traveller and Tools for the Worshipper*, trans. Sheikh Nuh Ha Mim Keller, p. vii, accessed Nov. 21, 2010; Wael B. Hallaq, *Shari'a: Theory, Practice, Transformations* (Cambridge: Cambridge University Press, 2009), pp. 72-8, 113-24.

[12] Sabiq, *Fiqh as-Sunna*, vol. 1, p. 113.

[13] Misri, *Reliance of the Traveller*, F5.3, F5.6.

[14] *Ibid.*, F12.4; Sabiq, *Fiqh as-Sunna*, vol. 2, pp. 50, 56.

[15] Misri, *Reliance of the Traveller*, F12.32; Sabiq, *Fiqh as-Sunna*, vol. 2, p. 64a.

[16] Misri, *Reliance of the Traveller*, F8.2; Sabiq, *Fiqh as-Sunna*, vol. 2, pp. 50, 56.

[17] Abul Ala Mawdudi, *Jihad in Islam*, Mar. 27, 2006.

[18] Sayyid Qutb, *Milestones*, in *Studies in Islam and the Middle East*, 2005, p. 34.

[19] Hallaq, *Shari'a: Theory, Practice, Transformations*, pp. 324-34; Majid Khadduri, *War and Peace in the Law of Islam* (Baltimore: Johns Hopkins University Press, 2008), pp. 42-137; Rudolph Peters, *Jihad in Classical and Modern Islam*, 2nd ed. (Princeton, N.J.: Markus Wiener Publications, 2005), pp. 1-57; David Cook, *Understanding Jihad* (Berkeley: University of California Press, 2005), pp. 13-92; Majid Khadduri, trans., *The Islamic Law of Nations: Shaybani's Siyar* (Bal-

timore: The Johns Hopkins Press, 1965), pp. 1-22; Mary Haybeck, *Knowing the Enemy: Jihadist Ideology and the War on Terror* (New Haven: Yale University Press, 2006), pp. 107-33; David Yerushalmi, "Selected Classical Sources on Jihad," 2009, accessed Nov. 6, 2010.

[20] Al-Azhar certification of Reliance of the Traveller, Islamic Research Academy, al-Azhar University, Cairo, Feb. 11, 1991.

[21] Misri, *Reliance of the Traveller*, O9.8.

[22] *Ibid.*, O9.9.

[23] Sabiq, *Fiqh as-Sunna*, vol. 3, p. 76.

[24] *Ibid.*, vol. 1, p. 77b.

[25] Hafiz Ibn Kathir, *Tafsir Ibn Kathir* (Houston: Darussalam Publishers, 2000), vol. 4, p. 475.

[26] See, for example, *The New York Daily News*, Nov. 11, 2009.

[27] Andrew F. March, *Islam and Liberal Citizenship: The Search for an Overlapping Consensus* (New York: Oxford University Press, 2009), p. 266.

[28] *Ibid.*, p. 274.

[29] "Muslim Public Opinion on U.S. Policy, Attacks on Civilians, and Al Qaeda," *The Program on International Policy Attitudes at the University of Maryland*, WorldPublicOpinion.org, Apr. 24, 2007.

[30] Barry A. Kosmin and Seymour P. Lachman, *One Nation under God: Religion in Contemporary American Society* (New York: Harmony Books, 1993), pp. 96-7.

[31] Ihsan Bagby, Paul M. Perl, and Bryan T. Froehle, "The Mosque in America: A National Portrait," *Council on American Islamic Relations*, Washington, D.C., Apr. 26, 2001.

[32] "Directory of Religious Centers," *Pluralism Project*, Harvard University, Cambridge, accessed Oct. 30, 2010.



### Emergency responders could have jetpacks by year's end

Source:

<http://www.montrealgazette.com/technology/inventor+readies+jetski+skies/4912329/story.html>

Emergency responders in New Zealand could soon be zipping around on personal jetpacks. Last month, Glenn Martin, a New Zealand inventor, successfully flew his jetpack up to a height of nearly 5,000 feet.

For the test flight, Martin controlled the device remotely and watched from a helicopter as a dummy was strapped into the device. Martin has been hard at work on the jetpack for the last thirty years and hopes to have his "jetski for the skies" commercially available within eighteen months. He said, "The first people using these in cities will be medical personnel doing emergency response." "Then you'll see people putting camera mounts on them for traffic reporting and it will eventually evolve into people just flying for fun or going to work," he explained.

The jetpack is essentially two two-liter V4 engines strapped to a carbon fiber frame. To-

gether the dual engines are capable of pumping out 200 horsepower.

The wingless device is controlled by two joysticks and can be flown with little pilot training. According to Martin, the physics behind the device are simple, "If you shoot enough air down fast enough, then you'll go up."

The jetpack weighs less than 250 pounds and carries a five gallon tank of gas that allows it to fly for about thirty minutes with a range of about thirty miles. The personal flight device can run off regular gasoline, so users can fly into a gas station to refuel their jetpack.

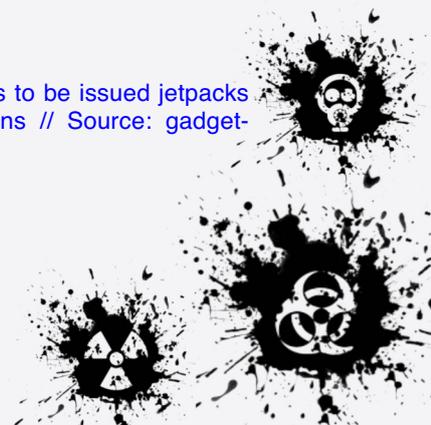
Since debuting his invention at a U.S. airshow in 2008, Martin says he has received enormous interest from governments seeking to use it for a variety of purposes that range from border security to disaster response.

"We've been approached by I think five different militaries [and] about six different governments," he said. "People are looking at using this in border patrol around a lot of the sensitive borders in the world. "We've got one large search and rescue organization that wants 500 for after earthquakes and tsunamis and those sorts of things, where the roads are beaten up and you're struggling to get helicopters down."

he pack is in its final stages of testing and Martin expects large commercial customers to be flying the jetpack by the end of the year. He hopes to make the pack publicly available in 2012 for about \$100,000, but his plan will likely run into legal trouble as current laws in the United States prohibit flights over populated areas.

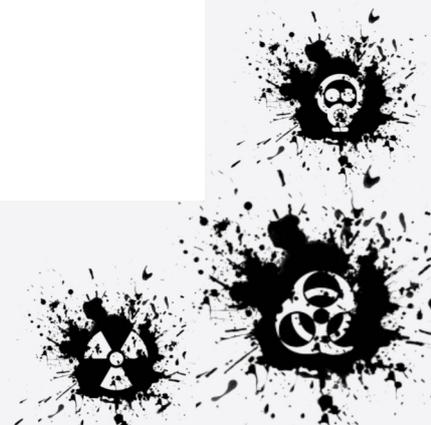


Kiwi first responders to be issued jetpacks for search operations // Source: [gadget-mug.com](http://gadget-mug.com)





Jetpack inventor Glenn Martin explains his creation in Christchurch. The jetpack, which has taken 30 years to develop, is expected to be commercially available in the next 18 months. Photograph by: Neil Sands, Getty Images



# CRISTANINI CBRN DECONTAMINATION SYSTEMS



A5009

CONFORM TO THE QUALITY SYSTEM STANDARD AQAP 2110  
and ISO 9001:2008



DEPLOYABLE CBRN  
ANALYTICAL  
LABORATORY (STANAG 4632)



DDMAS LARGE SCALE  
DECONTAMINATION SYSTEM  
HIGHLY DEPLOYABLE



DEPLOYABLE BIO LABORATORY  
CLASS III BIO SECURITY LEVEL



DDMAS LARGE SCALE  
DECONTAMINATION SYSTEM  
DUAL OPERATORS



RVCBRN TRAILER FOR CBRN  
DECONTAMINATION AND  
DETOXIFICATION



MOBILE SYSTEM FOR  
AIRCRAFT DECONTAMINATION

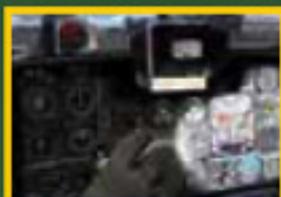


TSDM-TACTICAL STEAM  
DECON MODULE

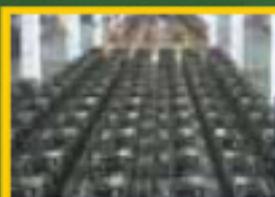
**ONLY ONE PERSON  
ONLY ONE MACHINE  
ONLY ONE PRODUCT**



SANJET C 1126 HR CBRN DUAL  
OPERATOR DECONTAMINATION  
AND DETOXIFICATION GROUP



SC34 CBRN DECONTAMINATION  
OF SENSITIVE EQUIPMENT  
AND SURFACES



CBRN PRODUCTION LINE



**CRISTANINI**

37010 RIVOLI - VERONA - ITALY

Tel. +39-045-6269400 - Fax +39-045-6269411

cristanini@cristanini.it - [www.cristanini.com](http://www.cristanini.com)

Osama bin Laden – the End

# CBRNE-TERRORISM Newsletter

Volume 38 - 2011



Japan's triple catastrophe  
CBRN security at London 2012  
UK DGBRNC  
Agroterrorism  
Forest Fires can be a **Tactic of Terrorism**  
Climate change and global **security**  
CBRN training for **Photographers and TV Crews**  
Innovative chem-bio sensor  
E. Coli 0104 – **Terror in Germany**  
Iran has secretly stocked **enriched uranium**  
for 4 nuclear bombs  
15 US nuclear reactors are **located in**  
an active seismic zone

Original Papers

Carry **spice** could be used  
to detect explosives  
How IEDs work  
What if there is a **US-China**  
cyber-**war in 2020?**  
Latin **America: Terrorism issues**



*Fukushima*

[www.cbrne-terrorism-newsletter.com](http://www.cbrne-terrorism-newsletter.com)

## Original Papers

### 9/11 ten years on: Terrorism as a manageable risk

By Daniel Möckli

The threat of jihadist terrorism has evolved in recent years. The core organisation of al-Qaida is weakened. The large majority of other Islamist extremist organisations have not followed its call for global jihad and are pursuing more local agendas. Homegrown terrorists remain a challenge for Western security, especially if they have ties to established jihadist groups. Current counterterrorism works, however, to the extent that the probability of mass-casualty attacks in the US and Europe has diminished.

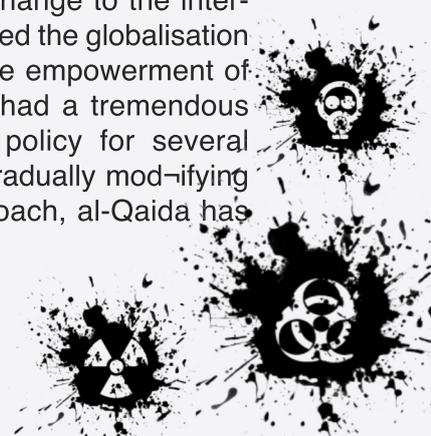
security. Recurring terrorism alerts and news about successful or foiled attacks serve as forceful reminders that this is a threat that could hit anyone anytime. Aviation security and infrastructure protection remain major public concerns. Counterterrorism capabilities in law enforcement, intelligence, and the military have all been enhanced. Geopolitically, the consequences of 9/11 are still unfolding, with the Iraq War changing the balance of power in the Middle East and the war in Afghanistan reaching new levels of intensity.



Terrorism is a real but manageable risk that Western governments should no longer overemphasise.

Ten years after al-Qaida's coordinated mass-casualty attacks on the US, many effects of 11 September 2001 are still visible. Islamist extremist violence continues to be widely perceived as a major threat to global

For all these repercussions, 9/11 has not brought about strategic change to the international system. It illustrated the globalisation of security threats and the empowerment of non-state actors. It also had a tremendous impact on US foreign policy for several years. Yet, with the US gradually modifying its counterterrorism approach, al-Qaida has



not succeeded in pro-vo-king the West into a clash of civi-lisations. This is notwithstanding growing anti-Muslim and anti-Amer-ican sentiment in certain parts of the world. Nor has al-Qaida become a mass movement. The core organisa-tion of al-Qaida has been signifi-cant-ly weakened. Al-Qaida's ideology has lost much support in Muslim coun-tries. The vast majority of Islamist extremist groups have not picked up the call for global jihad and continue to pursue more local agendas.

Seen from the perspective of West-ern security, Islamist extremist violence has not become an existential threat as was frequently predicted after 9/11. Rather, it should be perceived as an ongoing but manageable risk. Current counter-terrorism policies are effective to the extent that the likelihood of com-plex and catastrophic attacks against the homeland of Western countries has substantially decreased. The jihadist threat to Europe and the US no doubt remains real, with 'home-grown' radicals that have ties to al-Qaida-related terror organisations being a particular source of concern. However, potential terrorist attacks are likely to be limited in scale and conventional in nature over the com-ing years.

Shifting from managing to resol-ving the problem of jihadist ter-rorism may be too ambitious an objective, as strategic counterterror-ism is beset with major challenges. The fight against terrorism is set to stay and will continue to require considerable resources. Yet, terro-rism is a threat that should no longer be overemphasised at the expense of other security challenges. Issues relating to the transformation of the international system and regional developments in Europe, the Middle East, and elsewhere will likely top the strategic agenda of Western countries in the com-ing years.

### **An evolving threat**

The jihadist threat has evolved significantly in the past years. The capacity of al-Qaida Central (i.e., the core organisation around Osama Bin Laden) to launch complex and cata-strophic attacks has been dimin-ished. Al-Qaida's ideology and brand have however been taken up by some other terror organisa-

tions. These regional al-Qaida affiliates embrace the call for global jihad to some extent. But their grievances and objectives – and in most cases, also their operative range – are tied to specific local contexts.

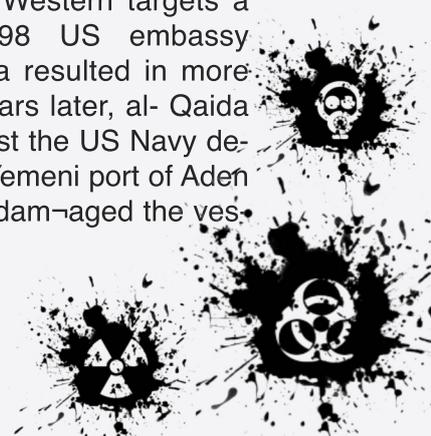
The same holds true for most other Is-lamist extremist groups. Al-Qaida's concept of global jihad is being mar-ginalised in Islamic religious and political discourse. Most of the groups that operate on the premise of jihad continue to follow the classical interpretation of a defensive struggle against oppression in Muslim coun-tries. Going after the 'near enemy', they still may hit not just national regimes and security forces, but also local Western targets. But they do not subscribe to al-Qaida's reinter-pretation of jihad in global and more offensive terms. Hitting the 'far en-emy', i.e. launching attacks against the US homeland and other Western countries, is not what they are after.

In Europe, and increasingly in the US as well, there is the additional threat of home-grown radicalisation. Evidence suggests that the damage homegrown jihadists can cause de-pends significantly on whether they are self-inspired and acting autono-mously or trained and guided by established terrorist organisations. The most likely current scenarios of homegrown terrorism concern attacks of limited scale with traditional terrorist methods such as armed assault and improvised explo-sives.

Overall, the diversification of Islam-ist extremist violence in recent years has rendered the jihadist threat more diffuse. It has also meant that the threat for Western homelands, while still real, has been reduced. Muslim-majority countries, rather than the West, are the main target of terrorist attacks.

### **Al-Qaida Central weakened**

Founded in the late 1980s, al- Qaida began to demonstrate its abil-ity to implement dev-astating attacks against Western targets a decade later. The 1998 US embassy bomb-ings in East Africa resulted in more than 300 deaths. Two years later, al- Qaida launched an attack against the US Navy destroyer USS Cole in the Yemeni port of Aden that killed 17 sailors and dam-aged the ves-



sel. In the suicide attacks of 9/11, 19 al-Qaida terrorists managed to hijack four commercial airliners simultaneously, intentionally crashing two of them into the Twin Towers of the World Trade Center in New York and a third into the Pentagon outside Washington. With nearly 3,000 victims from more than 90 countries, 9/11 catapulted al-Qaida into the limelight of world public attention and put the threat of large-scale Islamist extremist violence at the top of the international security agenda.

In the years since 9/11, the core organisation of al-Qaida has continued to be involved in the planning and conduct of terrorist attacks. Its capacity to do so has diminished, however, as it has moved into the focus of counterterrorism efforts. Some of its top leaders, including Osama Bin Laden and Ayman al-Zawahri, are still at large. Yet, they are on the run, presumably hiding in the secluded tribal belt of northwest Pakistan.

There are indications that al-Qaida Central barely functions as an effective organisation anymore. According to US government

sources, there are at most 50 to 100 members left in Afghanistan, and perhaps 300 in Pakistan. Many cadre members have been killed and are difficult to replace. Compelled to lie low, the top leadership is issuing fewer and fewer audio and video messages. Overseas funding has gone down dramatically. The facilities for training have largely been destroyed, which is why training sessions are much shorter and less sophisticated today, with trainees being asked to provide for their own funding.

Experts disagree about the extent to which the leaders of al-Qaida Central are still able to play a role in operative decisionmaking for terrorist attacks. But it seems clear that what used to be a hierarchically structured organisation has turned into a dispersed grouping that is increasingly dependent on other jihadist organisations to achieve operational effect.

### **Al-Qaida affiliates: Local insurgents with a global brand?**

In the aftermath of 9/11, a series of other jihadist organisations pledged allegiance to al-

Al Qaida and its affiliates



Qaida and in some cases have taken up its name. Al-Qaida in Iraq was founded in 2003 in response to the US invasion. Initially mainly consisting of foreign jihadists, it played a major role in the violent upheavals in post-Saddam Iraq. While it was substantially weakened once the Sunni tribes turned against it, the group has recently become more active again and today is a more indigenous organisation run by Iraqi nationals. Also in the Middle East, al-Qaida in the Arabian Peninsula (AQAP) was formed in 2009 as a merger of two al-Qaida groupings active in Saudi Arabia and Yemen. It operates mainly from Yemeni territory and is believed to consist of several hundred fighters today.

In Africa, the Salafist Group for Preaching and Combat that emerged in Algeria in the 1990s changed its name to al-Qaida in the Islamic Maghreb (AQIM) in 2006. It operates in Algeria and the Sahel region and is funding itself through kidnapping and trafficking. Finally, there is the Somali Islamist movement al-Shabaab that seeks to overthrow the Somali government and controls most of the southern parts of the country. Comprising both Somali insurgents and foreign jihadists, this grouping officially confirmed its alignment with al-Qaida in 2010.

The existence of such affiliates has prompted analysts to describe al-Qaida today as a 'movement' or 'network' whose centre of gravity is constantly shifting. Such notions can be misleading, though. Although the links of these regional affiliates to al-Qaida Central vary, all these organisations appear largely self-sustaining today. In some cases, such as AQIM, the alignment with al-Qaida has resulted in a shift of tactics, with suicide attacks becoming more prominent. However, in terms of ideological underpinnings and strategic objectives, there are differences between most of the affiliates and al-Qaida Central.

Affiliates in Iraq, the Maghreb, and Somalia are essentially local insurgent groups pursuing a domestic or regional agenda and fighting the 'near enemy'. They do share the anti-Western rhetoric of al-Qaida Central and indeed have all attacked not only governments, but also local Western targets within their reach. But there is little indication

in practice that they are eager – or indeed able – to focus on global jihad and go after the 'far enemy' in the US or in Europe.

The case of AQAP is different. This group has tried to blow up a commercial airplane over Detroit and two cargo planes flying to the US. It also issues an English-language jihadist magazine. However, although AQAP incorporates al-Qaida's global objectives to some extent, it still seems to have predominantly local aspirations and is mainly driven by local grievances. Moreover, it has yet to demonstrate its ability to implement a successful mass-casualty attack in the West.

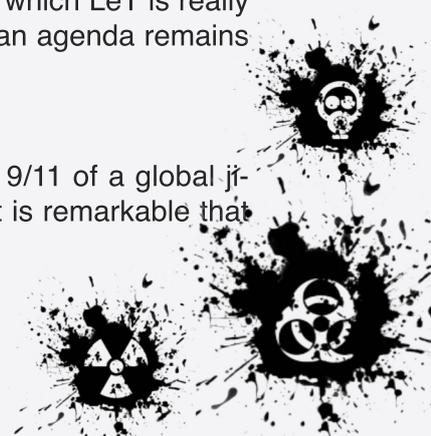
Although AQAP and AQIM, at least, can be described as transnational organisations, the overall impression is that most regional affiliates of al-Qaida are not really part of a global project in any extensive way. Some of them may have picked up the al-Qaida logo mainly to attract international attention and prestige. Others continue to be divided over what the al-Qaida brand should actually mean for them.

Beyond the official affiliates, there are other groups with ties to al-Qaida.

Although these groups have refrained from pledging allegiance to al-Qaida, they must be taken into account when assessing the global jihadist threat. In Pakistan, groups like the Pakistani Taliban or Lashkar-e-Taiba (LeT) are said to collaborate with al-Qaida. One reason why they have not formally aligned may simply be that the al-Qaida logo is certain to spur international counterterrorism efforts. Yet, again, these organisations are much more rooted in local contexts than al-Qaida Central. Some analysts predict that LeT has both the intention and the capacity to go global and become the 'next al-Qaida'. They point out that LeT went after Western and Jewish targets in the Mumbai attacks of 2008 (with 173 deaths), has listed more than 300 potential international targets, and is already running logistical and funding cells outside of South Asia. The extent to which LeT is really going beyond its anti-Indian agenda remains however to be seen.

### Decreasing appeal

Given the concerns after 9/11 of a global jihadist mass movement, it is remarkable that

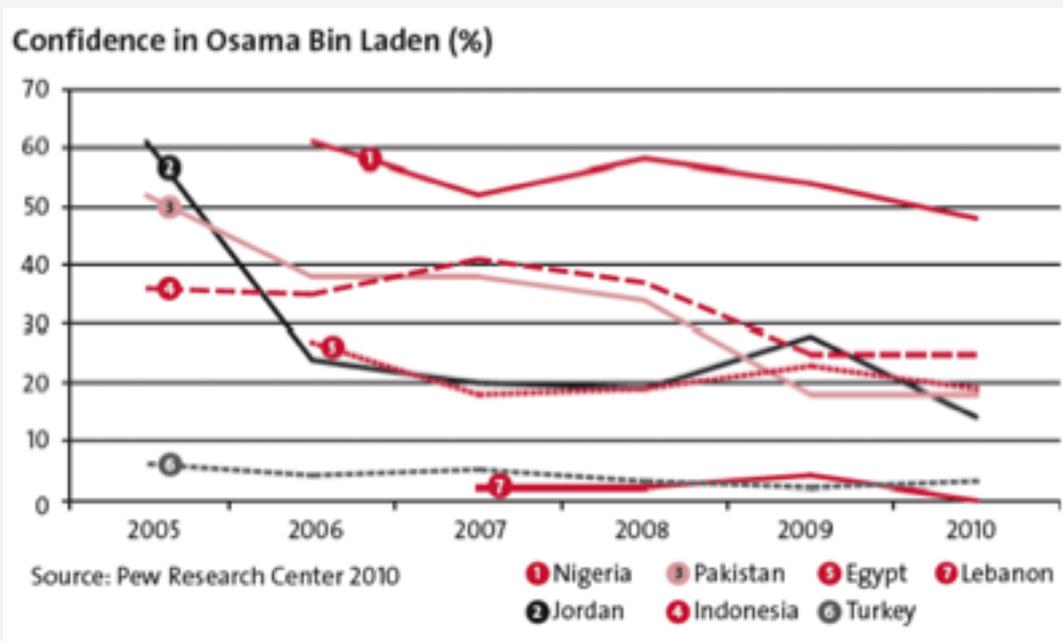


an overwhelming majority of Islamist extremist organisations have kept their distance from al-Qaida's ideology and global outlook. This holds true for terrorist organisations in East Asia like Abu Sayyaf as well as for most Islamist extremist groupings in Central Asia and the Northern Caucasus. Even the Afghan Taliban have started to disassociate themselves from al-Qaida and frame their insurgency in national terms today to enhance domestic appeal.

Two prime examples of Islamist movements with national agendas and firm anti-al-Qaida policies concern Hizbollah and Hamas. Both organisations emerged in opposition to Israeli occupation policies. While both

Caucasus Emirate, an Islamist militant group fighting Russia's presence in the Northern Caucasus, chose Moscow's international airport for its terrorist attack in January 2011 (36 deaths). Other groups refrain from attacking local Western targets, considering such attacks counterproductive for their national agenda. What unites all these groups is that they are not driven by global jihadism, which is why the probability that they attack Western homelands seems rather low.

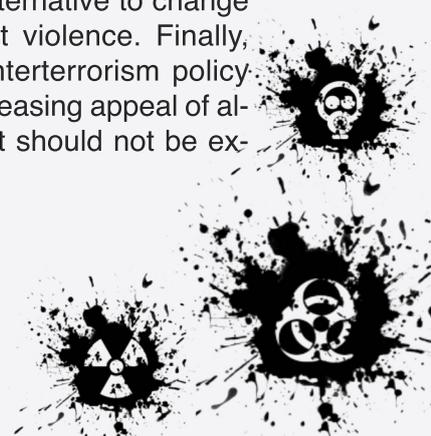
Beyond its failure to win over most other Islamist extremist organisations, al-Qaida also suffers from waning support among Muslim societies. There is much popular disaffection about al-Qaida's indiscriminate



of them have a history of terrorist tactics, they have joined the political process to advance their national objectives. Turning increasingly into state actors in Lebanon and Gaza, they reject global jihadism and may even go after such groups on their territory. Lumping Islamo-nationalist actors together with al-Qaida fails to do justice to the variety of Islamist movements and their objectives.

Similar to the al-Qaida affiliates, some of the locally-oriented Islamist extremist groups may still attack Western targets within their reach, either for ideological reasons or to draw attention to their local grievances. It was no coincidence, for example, that the

killings of Muslims. The atrocities against Muslims in Iraq and elsewhere caused tremendous damage to the al-Qaida brand. Furthermore, Bin Laden has not been able to formulate a positive vision that would appeal to the masses. The fall of the Mubarak regime in Egypt may contribute further to the loss of appeal of al-Qaida, as it has demonstrated that there is a peaceful alternative to change brought about by jihadist violence. Finally, modifications in US counterterrorism policy also contribute to the decreasing appeal of al-Qaida, though this aspect should not be exaggerated (see below).



### Two types of homegrown terrorists

Improved counterterrorism efforts have made it more difficult for members of jihadist terrorist organisations to enter Western countries and launch successful attacks. But Western security is also threatened by homegrown Islamist extremist violence. The threat of terror attacks by radicalised Muslims or converts who grew up in Western countries was first associated with Europe, following the Madrid bombings of 2004 (190 deaths) and the London bombings of 2005 (56 deaths). Since 2009, the US has also witnessed a growing number of terror plots by US citizens or legal permanent residents; the attacks in Fort Hood (Texas) and Little Rock (Arkansas) killed 14 people.

Radicalisation is a complex phenomenon. There is no single reason why young Muslims or converts in Western countries come to embrace global jihad. Identity conflicts and personal ties to other radicals have played a role in many cases. The Mohammed cartoons published by Danish newspapers are frequently listed as a reason too, as are grievances about Western policies in Iraq, Afghanistan, and other Muslim countries. Mosques, prisons, and universities have been identified as important venues of radicalisation. It has also been suggested that al-Qaida should be regarded as a 'youth movement', with recruitment factors resembling those of secular political violence groups.

There is an inconclusive debate over the extent to which homegrown terrorism consists of autonomously radicalised and independently operating jihadists and decentralised groups (bottom-up thesis) or well-trained fighters with close links to al-Qaida and its affiliates (top-down thesis). Evidence suggests that these are simply two different types of homegrown terrorists. Self-radicalised 'lone wolf' jihadists and autonomous terrorist cells are very difficult to discover. They usually lack however the expertise and logistics to launch sophisticated large-scale attacks. Building a bomb and detonating it effectively is more complex than is often assumed.

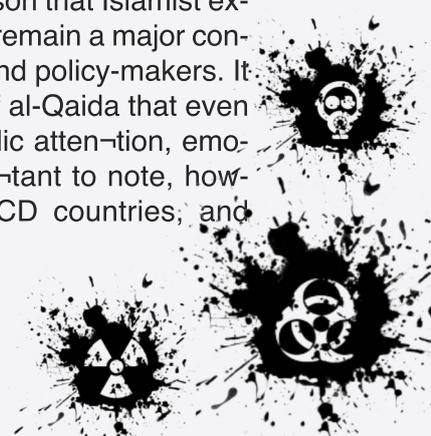
Conversely, homegrown terrorists who receive training and guidance from terrorist

groups in countries like Pakistan, Iraq, Yemen, or Somalia may have the potential to cause large-scale damage upon their return. Numerous European and US citizens have actually travelled to such conflict zones and training camps. Some of them have received lessons in bomb-making techniques, while others have even settled there and taken up operative roles within the organisations. Incidentally, the suicide bombers in the Madrid and London attacks – by far the biggest incidents of Islamist extremist violence in Europe – are now also believed to have had closer ties to al-Qaida than initially assumed. If there have not been any major successful attacks in Europe or the US since, this may partly be because the greater security risks associated with this second type of homegrown terrorists are offset to some extent by the higher probability of the perpetrators showing up on the intelligence radar. Having said that, the man trying to detonate a bomb in Times Square in May 2010 and the Stockholm suicide bomber of December 2010 are both examples of homegrown terrorists with ties to external jihadists who had remained unnoticed by intelligence agencies.

### A largely non-Western threat

The decreasing appeal of global jihad and the limited operational capacity of jihadists willing to strike European or US targets suggest a reduced scale of threat emanating from Islamist extremist violence to Western countries overall. A typical attack in the coming years will likely be of limited scale and sophistication, carried out with conventional weapons like assault rifles or improvised small explosive devices. In its methods, jihadist terrorism increasingly resembles traditional IRA- or ETA-type terrorism. It continues to differ, however, in that it is often aiming at indiscriminate mass casualties and may target any country, irrespective of secessionist conflicts.

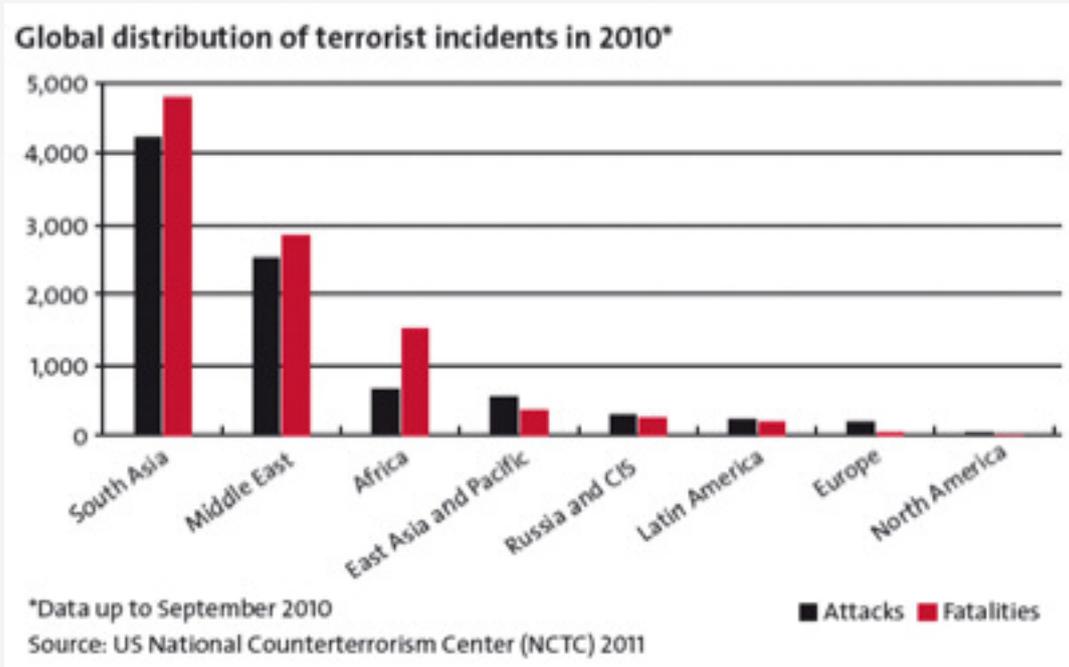
It is due to this last reason that Islamist extremist violence will likely remain a major concern to Western publics and policy-makers. It works to the advantage of al-Qaida that even failed attacks arouse public attention, emotion, and fear. It is important to note, however, that it is non-OECD countries, and



predominantly Muslim-majority countries, that suffer the bulk of terrorism attacks and casualties. In 2010, the 'top five' countries in terms of both attacks and deaths were Afghanistan, Iraq, Pakistan, India, and Somalia. Collectively, they accounted for 76 per cent of all attacks and 83 per cent of all deaths.

Europe and the US rank last on this global list of terror incidents. In Europe, there have been few attacks, and the figures for arrests

Spain and France. In the figures for 2010, the number of Islamist attacks may go up slightly, but the major trend may well be a rise in attacks by anarchist (left-wing) groups in Greece, Italy, and Spain. In the UK, there were 173 terrorism arrests in 2009/10, compared to an annual average of 216 since 2002. As for the US, few would have expected that there would 'only' be 14 homeland deaths caused by Islamist extremist violence in the decade post- 9/11 – a figure that contrasts



have been decreasing since 2006. According to Europol data covering 26 EU member states (excluding the UK), six member states reported 294 failed, foiled, or successfully perpetrated terrorist attacks in 2009. Only one of these attacks was categorised as Islamist, as opposed to 237 attacks related to ETA in

with the 168 people killed in the right-wing Oklahoma bombing of 1995.

The bottom line is that while jihadist terrorism hits hard some of the Muslim countries, it is a manageable risk in Western countries. There is of course a price tag attached to managing this risk effectively (see below). Also, new large-scale attacks on Western homelands can never be ruled out. Nevertheless, the likelihood of such an attack appears lower today than some counterterrorist bureaucracies and analysts continue to argue.

This is also why two worst-case scenarios are unlikely today: Links between anti-Western Muslim regimes and global jihadists have not materialised in any substantial way. Iran does support Hizbollah and Hamas, but has been tough on al-Qaida. Nor did Saddam Hussein cooperate with global jihadists. There are ties between the Pakistani Inter-Services

### Countries most affected by terrorism in 2010\*

	Attacks	Fatalities
1. Afghanistan	2,514	2,475
2. Iraq	2,016	2,704
3. Pakistan	1,032	1,680
4. India	616	624
5. Somalia	411	946

\*Data up to September 2010

Source: US National Counterterrorism Center (NCTC) 2011



Intelligence (ISI) and al-Qaida and LeT in Pakistan. Yet, these are tactical alliances that are not geared against the West, but must be seen in the context of the ISI's strategic calculations concerning Pakistan's relations with India.

Without state sponsorship of global jihadism, the scenario of terrorism based on weapons of mass destruction (WMD) appears unlikely too. Again, there are concerns about the safety of nuclear weapons, especially should Pakistan descend into political chaos. US President Barack Obama's characterisation of nuclear terrorism as 'the most extreme threat to global security' is certainly justified, and there is no doubt that a WMD attack could be a game-changer in international relations. But it is doubtful that Obama is also right in calling this 'the most immediate threat'. Getting the materials and the know-how to launch an effective WMD attack remains exceedingly difficult. As for the use of conventional explosives to disperse radioactive materials, such 'dirty bombs' are unlikely to cause mass casualties, though they may cause mass panic.

### More effective tactical counterterrorism

The weakening of the global jihadist threat is linked not only to strategic miscalculations on the part of al-Qaida. It is also the result of improved tactical counterterrorism. Three fundamentals have been at the heart of counterterrorism since 9/11: strengthened anti-terrorism legislation and expanded law enforcement powers, financial interdiction, and enhanced domestic coordination and international cooperation. On top of these fundamentals, there is a series of lessons learnt that in sum have rendered counterterrorism more effective in recent years. These lessons concern a modified conceptual counterterrorism framework, a shift from 'hammer' to 'scalpel' military measures, and a more comprehensive approach including non-military measures.

Changes in counterterrorism policy concern mainly the US. The Europeans reacted to 9/11 with an evolution rather than revolution in counterterrorism policies. Confronted with domestic terrorism since the 1970s, they

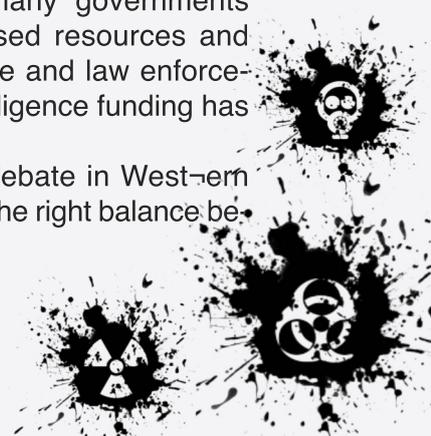
have continued to view Islamist extremist violence essentially as a law enforcement challenge. Accordingly, they focused on expanding intelligence and law enforcement powers and capabilities and made efforts to improve judicial, police, and intelligence cooperation. In the US,

Many in Europe view Islamist extremist violence above all as a law enforcement challenge by contrast, the Bush administration interpreted 9/11 as a new reality that required new approaches and provided for new opportunities, the result being a revolution in US foreign policy, a strong emphasis on military counterterrorism, and a series of legal measures that aroused much controversy. It was only towards the end of the Bush period that the US began to adapt and refine its policies, some of which had actually proven counter-productive in meeting the terrorism challenge. The Obama administration has enhanced the scale and speed of change in US counterterrorism, implementing lessons learnt since 9/11.

### Three fundamentals

Efforts to strengthen national counterterrorism legal frameworks and expand intelligence and law enforcement powers have been a fundamental component in the fight against terrorism of most Western countries since 9/11. While measures differ widely in scale, they usually include enhanced powers for the surveillance of communications, the observation of private spaces, and the secret screening of databases. Such a strengthening of preventive investigatory powers reflects a broader shift from a crime-resolving to a preventive logic in terrorism-related law enforcement, with, for instance, preparatory actions for terrorism being criminalised. In some countries, intelligence agencies have taken over law enforcement tasks traditionally performed by the police. In addition to the expansion of powers, many governments have significantly increased resources and capabilities for intelligence and law enforcement institutions. US intelligence funding has doubled since 9/11.

There is an ongoing debate in Western liberal democracies as to the right balance be-



tween security and civil rights considerations in the fight against terrorism. Legal measures to detect and go after terrorists inevitably infringe upon the privacy rights of citizens. From a counterterrorism perspective, enhanced intelligence and law enforcement powers play a vital role in keeping the rate of successful attacks in Europe and the US low. Ultimately, however, each country will mark its own delineation between national security and individual freedoms, as well as between intelligence and police competences, depending on its political culture and other domestic factors in play.

Cutting off the flow of money to terrorist organisations has been a second fundamental of counterterrorism that has proven effective. Under the leadership of the UN and the US Treasury Department's Office of Terrorism and Financial Intelligence, the vast majority of states have taken action to improve anti-money laundering and counterterrorist financing laws. Although terrorist funding emanating from countries like Saudi Arabia continues to be a major concern, the overall balance sheet of these measures is positive.

Again, issues concerning financial counterterrorism have given rise to controversies. The transparency and fairness of the terrorist designation process in the framework of the al-Qaida and Taliban Sanctions Committee under UNSCR 1267 remain disputed. The data privacy protection in the transfer to US counterterrorism authorities of information on international bank transfers through the SWIFT system has been questioned too. Yet, there is no denying that these financial counterterrorism regimes work effectively, which is why serious efforts have been made to adapt them in a way that also enhances their legitimacy.

Domestic coordination and international cooperation has been the third fundamental of counterterrorism since 9/11. Because ineffective information-sharing was a major reason why 9/11 could happen in the first place, much attention has been given to this issue in the past decade. Domestically, numerous coordinative bodies have been set up, such as the National Counterterrorism Center in the US, the Joint Terrorism Analysis Centre

in the UK, or the Gemeinsame Terrorismusabwehrzentrum in Germany. Some countries have also chosen integrative rather than coordinative models, with Switzerland for instance fusing its external and domestic intelligence agencies.

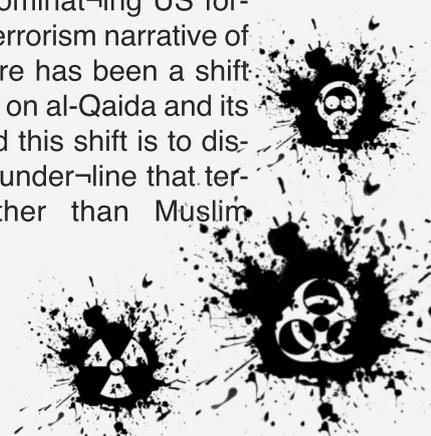
International cooperation has increased too, in line with the recognition that terrorism is a transnational threat that can only be met with a collective response. Cooperation still takes place mainly on the bilateral level, with the CIA being a clearing-house for information-sharing with both Western and Muslim countries. But there is also a growing degree of multilateral cooperation in counterterrorism, not just among the Europeans and between the EU and the US, but also in the framework of the UN and at the level of non-Western regional organisations.

Intelligence cooperation is still less developed than police cooperation, due to the sensitivity of the materials involved and the need to protect sources. Often, the material exchanged

Seen from the US, intelligence cooperation with Europe often looks like a one-way street consists of broad analyses of terrorism trends rather than operationally valuable information. Moreover, seen from the US, intelligence cooperation with Europe often looks as a one-way street, as most European agencies know much about their homegrown scene, but are struggling to track developments of the global jihadist threat. Still, had it not been for the enhanced exchanges of intelligence, far fewer attacks may have been foiled since 9/11.

### **A modified US framework**

As for the recent lessons learnt in fighting terrorism, a major change concerns the US conceptual approach to counterterrorism, which has become more focused and more nuanced. Washington has moved away from the so-called 'Global War on Terror' as an overarching framework dominating US foreign policy. In the official terrorism narrative of the US government, there has been a shift from 'war on terror' to 'war on al-Qaida and its affiliates'. The idea behind this shift is to disaggregate the threat and underline that terrorist organisations, rather than Muslim



countries or Islam per se, are the objectives of US counterterrorism. Also in this context, the US now defines the threat as 'violent extremism' rather than 'radical Islam'.

In speeches in Cairo and elsewhere, President Obama has stressed the common interests of the US and the Muslim world, in combating terrorism and beyond. Arguing that the US had gone off course in its immediate response to 9/11, he emphasised the importance of preserving the rule of law in counterterrorism and banned the use of those CIA interrogation methods widely considered torture. To be sure, the changes in the legal framework of US counterterrorism have been much more limited than many had anticipated. The Obama administration continues to apply the rule of war paradigm in its fight against global jihadism and has not abandoned practices such as indefinite detention without trial, targeted killings, rendition, and trial by military commissions. Also, Obama has failed to live up to his promise of closing the US detention facility in Guantanamo.

Still, the conceptual modifications have been substantial enough to reduce international criticism of US counterterrorism policies. Although the US image stays weak in many Muslim countries, these modifications have likely contributed to the global decline of al-Qaida's popularity.

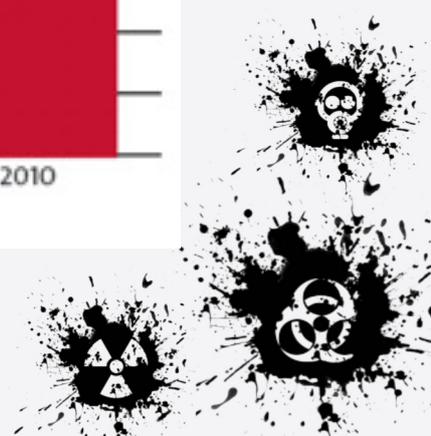
### Military scalpel

As regards the role of the military in counterterrorism, the case of Afghanistan illustrates its limits in resolving the root causes of terrorism

and stabilising fragile countries. Yet, the crisis at the Hindu Kush also demonstrates that some military measures can be quite effective in managing the terrorist threat. This has much to do with a shift from hammer to scalpel military tactics.

There are two dimensions of this shift. First, there is now a strong focus on targeted military operations and killings of al-Qaida leaders by US special operations forces and, above all, the CIA-led drone programme. The use of unmanned drones to kill militants in the border region of Pakistan and Afghanistan is increasingly perceived as a key element of counterterrorism. Reducing the need for high-risk military interventions in terrain that is difficult to access for political or topographical reasons, the covert CIA programme has proven an effective tactical tool to diminish al-Qaida's elite and disperse the organisation. There have been negative side effects in that civilian casualties of drone attacks have driven tribesmen into militancy. But such effects have decreased as attacks have become more precise due to improved cooperation with the Pakistani intelligence services, better targeting, and the use of smaller missiles. The few polls available suggest a surprising degree of local support for drone attacks in the tribal areas.

The extent to which drone-based counterterrorism is applicable elsewhere remains disputed. Much will depend on local conditions. In the case of Yemen, the US has been reluctant to rely on drone attacks so far, following warnings that actionable intelligence



and local cooperation are insufficient to avoid negative repercussions. Overall, however, drones are set to become an ever more important tool in US counterterrorism policy.

Second, the US is increasingly focusing on building local security and counterterrorism capacity by providing equipment, training, and other forms of security assistance. While the number of US special operations forces has been increased to that end, local capacity-building is also becoming a priority for the armed forces as a whole. It is now a major issue in places like Afghanistan, Iraq, Yemen, and North Africa. Local resistance to US counterterrorism activities, the fear of provoking national-oriented terrorist groups into global jihad as a result of US military action, US domestic fatigue about military intervention, and financial pressure on defence budgets are all prompting a growing reliance on local security actors for counterterrorism. This development also makes sense when considering the success of Muslim countries such as Saudi Arabia, Jordan, and Indonesia in reducing the domestic jihadist threat. Having said that, the empowerment of local security forces often does not go together with enhanced legitimacy, which raises larger questions concerning strategic counterterrorism (see below).

### **Beyond military measures**

In addition to refining military measures, there is a trend towards more non-military assistance in counterterrorism. Some analysts continue to dismiss the role of economic opportunity, arguing that terrorism is driven by politics rather than poverty. Others have long made the case for linking counterterrorism more closely with development to improve its effectiveness. The Obama administration is leaning towards this latter view. While keeping military counterterrorism funding high, it has increased complementary civilian assistance markedly.

In Pakistan, economic-related US aid has tripled since 2009. While it constituted less than one third of all US aid between 2002 and 2010, it is expected to be close to half in 2011, amounting to US\$ 1,565 bn compared to US\$ 1,665 bn in security-related funding. A

major objective is to foster development in the tribal regions to counter the rise of extremism and provide for alternative livelihood opportunities. In the case of Yemen, there has been a substantial increase of aid as well. US assistance to Yemen is expected to amount to approximately US\$ 300 mn in 2011, about half of which is earmarked for non-military purposes. Yemen's economic development is also high on the agenda of the Friends of Yemen, a group established in 2010 that brings together representatives from 20 Arab and Western states as well as international organisations.

In parallel to widening the approach of dealing with terrorist organisations in conflict regions, there are also efforts to complement intelligence and law enforcement activities with broader measures to prevent or counter homegrown radicalisation. National approaches vary and range from integration and job-finding programmes to measures specifically targeted at delegitimising al-Qaida and global jihadism. In this latter context, there is an ongoing debate about the role of radical but non-violent Islamist organisations in preventing violent radicalisation. Whereas some countries view them as a potential safety valve against the jihadist doctrine and terrorism and seek to engage with them, others argue that they nourish Islamist parallel societies and may become a conveyor belt for jihadist groups.

The specific extent to which more comprehensive approaches or indeed any of the other trends in counterterrorism discussed here have contributed to the decrease of the jihadist threat to Western security is impossible to quantify. The net effect of current counterterrorism efforts is positive, however, to the extent that it seems justified to describe the threat as a manageable risk. Managing this threat will continue to require considerable resources, although the overall costs will lower significantly once US expenditure for operations in Afghanistan decreases.

### **Challenges of strategic counterterrorism**

There are those who make the case for moving beyond containing terrorism and invest-



### Obama's budget request for fiscal year 2012

Selected items concerning major counterterrorism funding schemes and actors

	US\$ bn
<b>Overseas Contingency Operations in Afghanistan and Iraq</b>	<b>126.7</b>
<i>Department of Defense contribution</i>	118
<i>Department of State contribution</i>	8.7
<b>Homeland security</b>	<b>71.6</b>
<i>incl. Department of Homeland Security</i>	37
<i>incl. Department of Defense</i>	18
<i>incl. Department of Health</i>	4.6
<i>incl. Department of Justice</i>	4.6
<b>Department of Defense (base budget)</b>	<b>553</b>
<i>incl. security sector assistance in Iraq and Afghanistan</i>	<i>not specified</i>
<i>incl. global CT 'train and equip' assistance programmes</i>	0.5
<b>Department of State and USAID (base budget)</b>	<b>47</b>
<i>incl. partnership programmes with Iraq, Afghanistan, Pakistan</i>	5.3
<i>incl. anti-terrorism, non-proliferation, demining</i>	0.7
<i>incl. foreign military finances</i>	5.5
<i>incl. development assistance</i>	2.9
<b>CIA and other civilian intelligence agencies</b>	<b>55</b>

Source: White House 2011

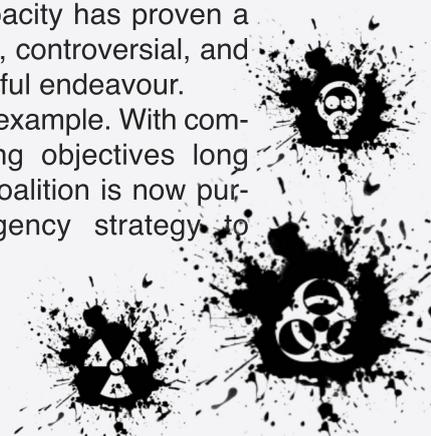
ing much more in changing the threat environment and tackling the underlying political and economic conditions that provide a fertile ground for Islamist extremist violence. There is certainly much legitimacy to this argument, and some of the lessons learnt in counterterrorism point in this direction. Yet, excessive expectations for strategic counterterrorism should be avoided, as the challenges involved are formidable. Managing the problem of jihadist terrorism seems a much more realistic scenario than resolving it.

#### Dealing with weak states

Evidence suggests that weak states provide an important home base for jihadist terrorist

organisations. Their inability or unwillingness to secure their territory provides safe havens for such groupings. How to deal with weak states is an unresolved question. Their failure to deliver essential services increases the potential for radicalisation. How to deal with weak states is an unresolved question. Western-driven state-building is in crisis. Stabilising states by creating effective local governance and security capacity has proven a complex, time-consuming, controversial, and in many cases unsuccessful endeavour.

Afghanistan is a prime example. With comprehensive nation-building objectives long abandoned, the US-led coalition is now pursuing a counter-insurgency strategy to



achieve the counterterrorism objective of defeating al-Qaida. The main pillars of the strategy are to protect the population, sufficiently weaken the Taliban to push them into political reconciliation, and strengthen local security capacity to allow for the withdrawal of the currently almost 150,000 international troops. Yet, time is on the side of the Taliban. Ten years after the military intervention in Afghanistan, it is less certain than ever that the country will be able to provide for its security post-ISAF. A long-term light-footprint counterterrorism strategy may well be inevitable to make sure that al-Qaida will not be able to operate from Afghanistan again.

In Pakistan, going beyond managing the terrorism threat will hardly be feasible either. While there are elements in the Pakistani government willing to accommodate US counterterrorism concerns to some extent today, the military is still very selective in terms of the militant groups it fights as it seeks to preserve its relations with the Afghan Taliban to counter Indian influence in post-ISAF Afghanistan. Washington has little choice but to continue the strategy of supporting and pressuring Pakistan and relying on drones to deal with the terrorist threat emanating from the tribal areas. Drones cannot provide for a long-term solution, but they are the best tactical means available for muddling through.

### **Working with authoritarian regimes**

The recent focus on 'state-building light' concepts, stressing local security capacity without larger democracy and rule of law considerations, is often criticised for producing short-term tactical counterterrorism gains but long-term strategic drawbacks. For instance, there are indications that part of the enhanced US counterterrorism assistance to Yemen has been diverted by the regime of President Saleh to intensify its policy of repression against domestic rebellions in the north and the south. The net effect of strengthening such a regime may well be growing popular dissatisfaction with the government and could play into the hands of AQAP.

Yemen illustrates a general dilemma of the West: Narrow counterterrorism concerns

have prompted the US and the Europeans to intensify cooperation with the security apparatus of many authoritarian regimes after 9/11. Putting stability over democracy, there was little pressure for political and economic reform in the past years. The reasoning was that while fully democratic societies would likely be long-term anchors of stability, the process of democratisation could be marked by increased short-term instability. Moreover, with Islamist movements being the main organised opposition group in many Arab countries, there have been concerns that elections would bring to power regimes more critical of the West.

The mass protests spreading across the Arab world in 2011 have been a forceful reminder that illegitimate government can become a source of instability itself. With bottom-up pressure for change mounting, embarrassed Western countries are gradually advocating democratic change again – at least as far as developments in North Africa are concerned. The fall of authoritarian regimes may yet become a major asset for strategic counterterrorism, removing an important source of radicalisation and anti-Western sentiment. But for all the political opportunities, Western governments remain deeply worried. It is not just growing migration and a spike in oil prices that concerns them, but also the prospect of less intensive counterterrorism cooperation with some of the new governments – as well as the scenario of new jihadist safe havens emerging as a result of domestic turmoil and growing state weakness.

### **Anti-Islam sentiments**

A third challenge of strategic counterterrorism concerns the rise of anti-Islam sentiment, especially in Europe. Anti-Muslim slogans and warnings of an 'Islamisation' of Europe by right-wing populist parties are reverberating in growing parts of society in some European countries. Immigration and integration issues are increasingly framed in anti-Islam terms. Identity crises related to globalisation, rising unemployment, and the growing number of Muslims in many Western countries have all contributed to what some call 'Islamophobia'.



Terrorism likely plays a key role, however, with the ongoing threat of jihadist attacks planting seeds of distrust.

It is ironic that anti-Muslim sentiment is rising in Europe at the same time that the US tries hard to reduce anti-Americanism in the Muslim world. Measures such as banning burqas and minarets and declaring multiculturalism dead may increase the risk of alienation and radicalisation of Muslims in Europe. They may also negatively affect relations with Muslim countries, particularly as far as intelligence and security cooperation is concerned.

### Putting terrorism and counterterrorism into perspective

All these challenges of strategic counterterrorism suggest that the war against al-Qaida is not a struggle that can be won. But the important message to convey is that global

jihadism is a risk the West can manage. Ten years after 9/11, the terrorist threat in the West remains real but limited. Counterterrorism works to the extent that the probability of mass-scale damage has decreased. Measures to prevent attacks will obviously have to continue. Equally important, however, will be efforts to strengthen the resilience capability of societies and infrastructures to mitigate the consequences of future attacks and avoid political overreaction. Fostering a culture of resilience seems the more urgent since challenges other than terrorism will likely dominate the international security agenda in the years ahead.

Daniel Mockli, Editor Strategic Trends – an annual publication of the Center for Security Studies (CSS), ETH Zurich.

## Climate change as legitimate threat to global security

By Konstantinos Karkatzounis

### Introduction

Climate change and global security: in the eyes of the inexperienced, these two entities sound like things totally independent from each other. Common people do recognize that during the last decades there are certain climatic changes that are more than obvious. In this category belong the change of seasons (going from four well-defined seasons to a “hot” and a “cold” season), the rise of the environmental temperatures all year round, the unexpected weather phenomena like snow in low altitudes, heavy rains occasionally leading to floods, wildfires and a generalized inability of soil to maintain its vegetation and life within. For city people, these changes are not of direct concern – usually they cause temporary disturbances that are quickly forgotten by them, especially if they are not the victims. For country people in Western societies, relevant changes are more prominent and worrisome because they have a direct effect on their cultivations and family income. But they manage to match losses with certain personal interventions and state support. On the other hand,

Western way of life based on personal wealth and daily over-usage of modern technology lead, slowly but in a steady uprising mode, to over-pollution over urban and megapolis areas and that has a direct effect on global environment and climate. The problem is that only a small fraction of people are aware and



adequately informed about the consequences of this type of living. Only few began to realize that it is not only big factories and state enterprises that are held responsible for the global pollution problem but isolated citizens of this world as well. The “green movement” is gaining footage but it is the governments that need to take action for the welfare of their inhabitants. Also for an additional reason: climate changes might become a threat to national/global security. Current essay will explore this possibility and try to give a persuading answer to the question: “How far and in what ways is it appropriate to identify “climate change” as legitimate “threat” to global security?”

### Key-players

Progress is a desirable multi-dimensional process that man and manhood need and pursue. But progress, if unwisely used or employed might born problems to the scale of survive that even advanced technology is unable to solve or confine. Surprisingly, it is only then that humanity realizes that the solution is the man himself.

What is the main problem accompanying progress? Emissions in the form of greenhouse gases that people produce during their work (industry, electric power generation), in

their houses (heat/cold) or for moving from one place to another (mass transportation means). Therefore, energy and emissions from combustion of petroleum, coal and natural gas generate mostly carbon dioxide that greatly contributes to global warming affecting climate change.

What is the main problem accompanying man throughout his evolution and history? Power – control – leadership – profit. Four simple words hold responsible for most of the world suffering so far. Does humanity has the will to change things, to actively change climate for the better? Or is it too late and irreversible?

### Evolution of a possible threat

Scientists (such as Svante Arrhenius from Sweden) all the way back to the 19th century theorized on the possible effect of human activities on climate change marking industry as the key player<sup>1</sup>.

In the next century, these theories materialized to the constant belief that climate change might be a source of a problem that world might confront sooner than later. But it took many years in order to put these claims in a paper that really worry societies. In 2003, a US Department of Defence paper entitled “An Abrupt Climate Change Scenario and its



<sup>1</sup> Paul R. Ehrlich (1968). The Population Bomb. p. 52.



Implications for United States National Security” address the possibility of a worst case scenario suggesting that climate change might lead to riots and finally a nuclear war. Authors of this report state at the beginning of the report: *“The purpose of this report is to imagine the unthinkable – to push the boundaries of current research on climate change so we may better understand the potential implications on United States national security. We have interviewed leading climate change scientists, conducted additional research, and reviewed several iterations of the scenario with these experts. The scientists support this project, but caution that the scenario depicted is extreme in two fundamental ways. First, they suggest the occurrences we outline would most likely happen in a few regions, rather than on globally. Second, they say the magnitude of the event may be considerably smaller. We have created a climate change scenario that although not the most likely, is plausible, and would challenge United States national security in ways that should be considered immediately.”*<sup>2</sup>

### Current status of the problem

Today, it is widely accepted that concentrations of carbon dioxide, methane and nitrous oxide in the atmosphere are high and are attributed to human activity. According to the Intergovernmental Panel on Climate Change (IPCC) “warming of the climate system is unequivocal,” and “most of the observed increase in globally averaged temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations<sup>3</sup>.”

All scientific bodies seem to be in agreement that climate change will evolve gradually. Of course it is wise to consider the fact that certain extreme conditions might exaggerate the phenomenon and accelerate its

progress and consequences. If Siberia tundra melts, then vast amounts of methane will be liberated to the atmosphere intensifying the greenhouse effect<sup>4</sup>.

### Consequences of climate change

Certain conditions are the direct or indirect effect of climate change. For example, global warming facilitates the emergence of certain pathogens and the evolution of diseases. It is of importance to note that these diseases reappear in areas that had long not existed. According to Khasnis and Nettleman “altitudes that are currently too cool to sustain vectors will become more conducive to them. Some vector populations may expand into new geographic areas, whereas others may disappear. Malaria, dengue, plague, and viruses causing encephalitic syndromes are among the many vector-borne diseases likely to be affected. Some models suggest that vector-borne diseases will become more common as the earth warms, although caution is needed in interpreting these predictions. Clearly, global warming will cause changes in the epidemiology of infectious diseases. The ability of mankind to react or adapt is dependent upon the magnitude and speed of the change. The outcome will also depend on our ability to recognize epidemics early, to contain them effectively, to provide appropriate treatment, and to commit resources to prevention and research<sup>5</sup>.”

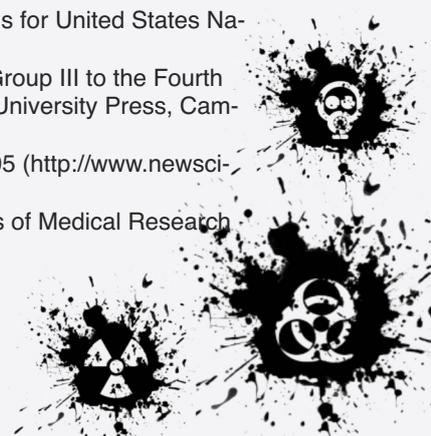
Then, it is also well-known that high environmental temperatures will drought earth and this in turn will affect agriculture. On the other hand, ice melting might cause floods in coastal areas due to the rise of sea levels. If these phenomena progress slowly, people will adapt to new situations and react accordingly. If they evolve rapidly and in extended areas, they will force people to relocate to more secure areas and even to start all over again.

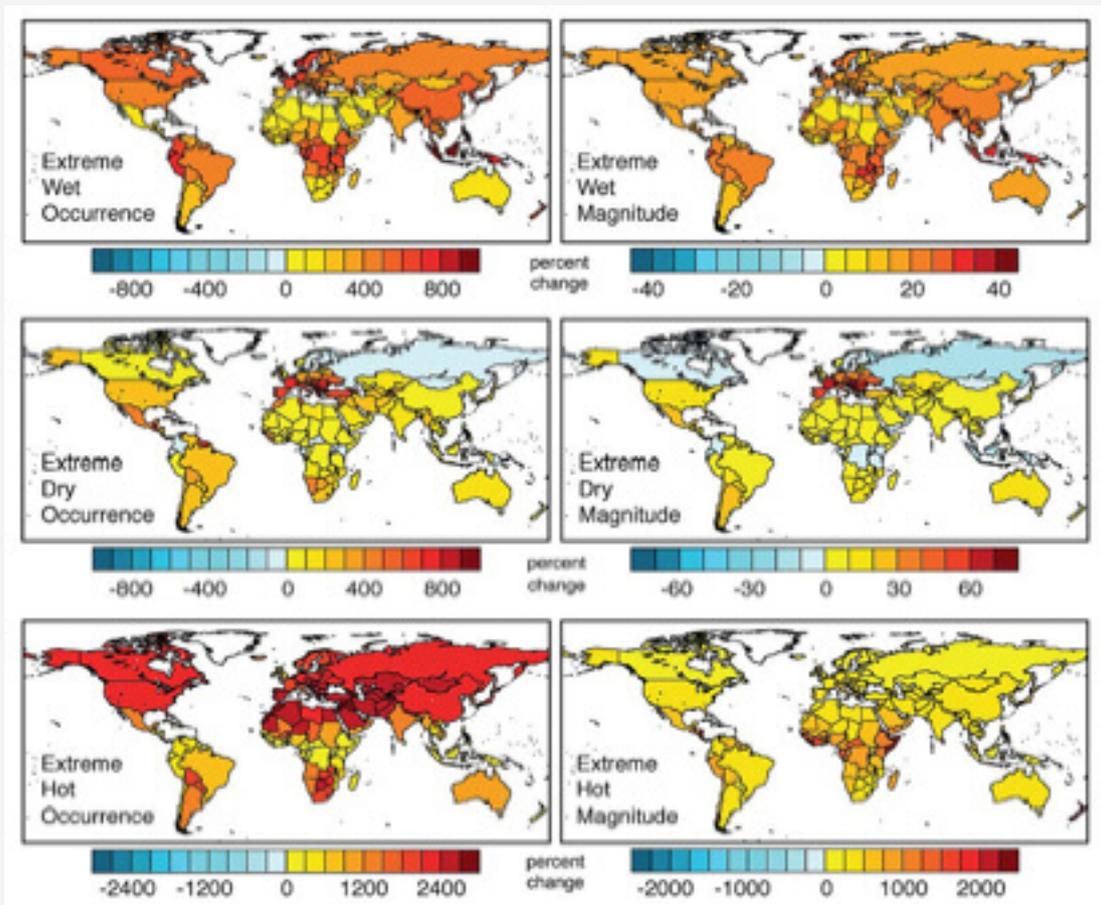
<sup>2</sup> Peter Schwartz and Doug Randall An Abrupt Climate Change Scenario and its Implications for United States National Security October 2003 [www.edf.org/documents/3566\\_AbruptClimateChange.pdf](http://www.edf.org/documents/3566_AbruptClimateChange.pdf)

<sup>3</sup> B. Metz, O.R. Davidson, P.R. Bosch, R. Dave, L.A. Meyer (eds) Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, 2007 Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

<sup>4</sup> Fred Pearce. Climate warning as Siberia melts. New Scientist, Issue 2512, 11 August 2005 (<http://www.newscientist.com/article/mg18725124.500>)

<sup>5</sup> Atul A. Khasnis and Mary D. Nettleman. Global Warming and Infectious Disease Archives of Medical Research 36 (2005) 689–696





If we try to connect climate change, effects on people's lives and security then the equation becomes more complicated and it is not certain that many people of today are aware of the right results. Relocation of populace will lead to poverty and lack of fundamental resources to survive. Urge of survival might push these populations to look for a better future and migrate in mass number to more prosperous places or near by countries not greatly affected by the new climatic conditions. Then problems might arise depending on the attitude of the host country and its ability and will to absorb all these people and the problems they bear with them.

### Climate change and global security

According to a paper published by the High Representative and the European Commission to the European Council climate change is best viewed as "a threat multiplier which exacerbates existing trends, tensions and instability"<sup>6</sup>.

bates existing trends, tensions and instability"<sup>6</sup>.

In that respect, the following conditions might be considered as evolving threats for global security.

### Resources' conflict or attritions

The key resource is water: both drinkable and water for agriculture. Drinkable water is self evident reason for survival and is in close relationship with availability of natural water tanks (rivers, lakes, rainfall). In certain parts of the world, climate change may alter rainfall by approximately 30%<sup>7</sup>. This in turn might lead to civil unrest, significant financial deficits due to reduction of arable land and finally negative impact to national economies. In countries with strong demographic pressure (vast numbers of people in relative confined geographic regions), this shortage of water might lead to national conflicts, or fuel already existing attritions. Shortage of water might also diminish

<sup>6</sup> Climate change and international security- Paper from the High Representative and the European Commission to the European Council. S113/08, 14 March 2008

<sup>7</sup> Hulme M, Jenkins GJ, Lu X, et al. (2002). Climate change scenarios for the United Kingdom: The UKCIPO2 Scientific Report. Tyndall Centre for Climate Change Research, School of Environmental Sciences, University of East Anglia, Norwich



food and fish stocks while prolonged droughts and flooding might add to the problem. Certain countries control natural waters and through history there are many instances that this control and disputes lead to armed conflicts (i.e. Turkey-Iraq over Tigris and Euphrates rivers' waters). Control of rivers might be a strategic weapon and in many countries this might cause tension and attritions (i.e. Bulgaria and Greece over Evros' river).

### Effect on coastal cities/areas

There is historical evidence that all great civilizations choose strategic coastal areas or delta-rivers in order to construct their cities and ports. Sea was and it will continue to be the contact mean between countries and civilization even during current times of speedy transition from one continent to another. Coastal areas host almost 20% of the global population<sup>6</sup> and this percentage is constantly rising. Additionally, approximately half of the world's population (~3 billion people) lives

in certain small but wealthy countries in the Arabic Peninsula) for construction of literally "sea-cities" that host big numbers of inhabitants on artificially made land (i.e. The "Palm Islands" [Palm Jumeirah, Palm Jebel Ali and Palm Deira] or "The World Islands" in the United Arab Emirates) not to mention that even international airports are now in small islands by the coast or even on artificial islands (i.e. Kansai International Airport, Chūbu Centrair International Airport, New Kitakyushu Airport, Kobe Airport, Hong Kong International Airport). Not to mention the densely populated Flevopolder in the Netherlands that is the largest artificial island in the world or Venice totally constructed on a group of islands. But despite their strategic location, it is self evident that the slightest rise in sea levels along with natural phenomena will greatly endanger all the populations living there for centuries accompanied with catastrophic effects (tourism, fishing, aquaculture) on national economies. It is estimated that China, India,



within 200 km of a coastline. By 2025 that figure is likely to double.

Big coastal cities and their critical infrastructure (ports, oil refineries) are covering large areas of land by the sea. In the last decades, we observe a tendency (especially

Central America and the Caribbean will be the most affected areas. These humanitarian crises will cause immediate pressure on the resources of mainland and huge capitals for the relocation of the populace affected. Based on economic models, the Stern Review<sup>9</sup> on

<sup>6</sup> Climate change and international security- Paper from the High Representative and the European Commission to the European Council. S113/08, 14 March 2008

<sup>7</sup> Hulme M, Jenkins GJ, Lu X, et al. (2002). Climate change scenarios for the United Kingdom: The UKCIPO2 Scientific Report. Tyndall Centre for Climate Change Research, School of Environmental Sciences, University of East Anglia, Norwich



the Economics of Climate Change estimates that “if we don’t act, the overall costs and risks of climate change will be equivalent to losing at least 5% of global GDP each year, now and forever. If a wider range of risks and impacts is taken into account, the estimates of damage could rise to 20% of GDP or more. In contrast, the costs of action – reducing greenhouse gas emissions to avoid the worst impacts of climate change – can be limited to around 1% of global GDP each year.”

### Effects on land and borders

Even when landmass is steady and fixed, there are borders’ disputes that sometimes are becoming serious enough to the point of an armed conflict. When landmass is changing due to the effects of climate change, submergence of large areas might result in loss of



territory. If this happens to a fixed inland the problem is serious but not self-existing. Imagine the same situation in certain small island states (i.e. Palau) that might disappear from world map. Another problem that might arise will be the revisiting of International Law especially when it comes to Law of the Sea that regulates the territorial relationships between coastal countries, underwater exploitation, sea trade etc. This problem is just emerging in

the areas of North Pole where many mighty countries are already in the process to justify their future rights in this unknown area of the planet. People always fought for territory expansion even when they did not really needed it for the survival of their populace. This ancient tendency is now multiplied by desertification due to lack of rainfall and natural waters and migration of vast numbers of people seeking a better future or even survival. In that respect, conflicts might emerge and it is well known that conflicts affect the political stability of the host nations or even geographical regions.

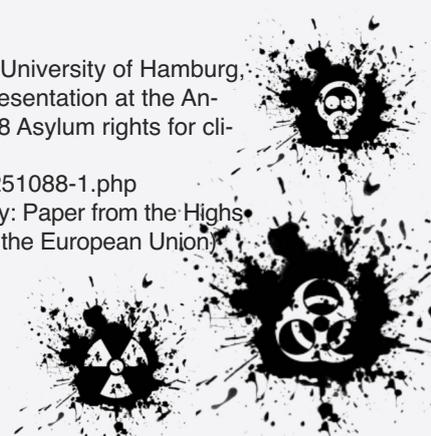
### Migration

Migration is of particular importance and is currently one of the big problems Western societies are confronting. For example, Greece already suffers from illegal immigration mainly from Asia and Africa. Moving foreign populations from conflict areas (Afghanistan, Iraq, Pakistan, Somalia etc), from areas with poor health conditions, high unemployment or social exclusion are trying to find a better place to live for their families or those left behind. But uncontrolled migration is becoming a multi-level problem within Greece threatening the social web of the country and in certain cases its relationship with certain countries (mainly Turkey) that facilitate translocation of illegal migrants. One might say that illegal immigration belongs to the asymmetric threats arsenal and it seems that certain countries are aware of this and are facilitating it effectively. According to the United Nations, in ten years from now (2020) there will be millions of environmental migrants and Europe will be the continent that will actually “feel” this pressure<sup>10,11</sup>.

<sup>10</sup> Angela Oels, Assistant Professor of International Relations, Institute of Political Science, University of Hamburg, Allende-Platz 1, D-20146 Hamburg, Germany, ## email not listed ## Paper prepared for presentation at the Annual Convention of the International Studies Association in San Francisco, 26th March 2008 Asylum rights for climate refugees?

[http://www.allacademic.com/meta/p\\_mla\\_apa\\_research\\_citation/2/5/1/0/8/pages251088/p251088-1.php](http://www.allacademic.com/meta/p_mla_apa_research_citation/2/5/1/0/8/pages251088/p251088-1.php)

<sup>11</sup> Solana, Javier and Ferrero-Waldner, Benita (2008) Climate change and international security: Paper from the High Representative and the European Commission to the European Council (Brussels: Council of the European Union)



### Governance issues

Climate change may influence internal stability in weak or failing countries since it will intensify the populace's impression that the state cannot effectively handle their problems. Governance issues have to do with two important parameters of the problem. First, climate change effects are emerging gradually and do not have a peak rise visible to people. There is no peak problem to solve; rather it is a situation that steadily deteriorates. It is the state that has to take long term preventive measures in order to avoid future complications. But weak or failing states fight for their daily survival and this keep them full time busy, As a result they prefer to hide the problem under the carpet hoping for the best. Second, ethnic and religious groups in these states often manipulate existing problems for their benefit with direct effect on political stability within the state or even in the entire region. These groups need a hot issue to be their source of objection and a good mean to manipulate followers to dangerous paths or even armed conflicts. For example, recent floods in Pakistan led thousands of citizens to abandon their residencies in order to save their lives and families. If the state has no plans to deal with catastrophes of this kind, opposing groups might use this incidence to provoke social unrest.

### Energy

Energy sources, especially in the 21st century, has been the "apple of discord" worldwide. In many areas of the world, there are tensions (SE Mediterranean, Arabic Peninsula, Central Asia) or even conflicts (N Iraq) on possible future energy sources – mainly oil and natural gas (but also valuable rare earths). The problem is that these areas (mainly Middle East) are prone for climate change effects' that in combination with the existing political situation and demographic pressure might lead even to a new world war. The alternative of wider use of nuclear power instead of solving the problem, it complicate it further (Iran case) not to mention the security problem that accompanies nuclear energy (Chernobyl case).

### International society

Although we are all responsible for the climate change, there are certain states that are leading in pollution affecting global climate. In the background of these states, there are powerful consortiums that prosper in the financial sector. International society looks like it cannot – or does not want to – realize the simple fact that you cannot make an omelette without breaking the eggs. This means that energy con-



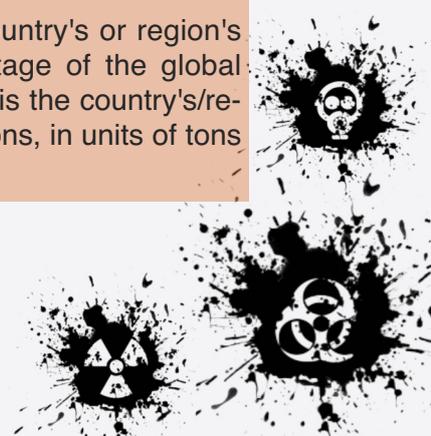
straints are mandatory in order to keep the problem under relative control. It is not only lowering the energy consumption (less profit) part of the problem. Application of modern technologies for the control of damaging emissions requires additional costs (less profit) and strategic changes in handling energy re-

Table 1

1. China – 17%, 5.8
2. United States – 16%, 24.1
3. European Union-27 – 11%, 10.6
4. Indonesia - 6%, 12.9
5. India – 5%, 2.1
6. Russia – 5%, 14.9
7. Brazil – 4%, 10.0
8. Japan – 3%, 10.6
9. Canada – 2%, 23.2
10. Mexico – 2%, 6.4

The first figure is the country's or region's emissions as a percentage of the global total. The second figure is the country's/region's per-capita emissions, in units of tons of GHG per-capita<sup>12</sup>.

<sup>12</sup> Wikipedia. The Kyoto Protocol. [http://en.wikipedia.org/wiki/Kyoto\\_Protocol](http://en.wikipedia.org/wiki/Kyoto_Protocol)



sources. Often people wonder why big powers do not proceed into action that will benefit all the citizens of this planet. People wonder why the ten countries responsible for the 87% of global total emissions (Table 1) are not considering drastic measures to diminish the catastrophe they are causing.

People wonder why the Kyoto Protocol (187 states signed and ratified the protocol – United States has no intention to ratify), is not providing the right answers to their agony for future survival. The answer is rather simple: profit and domination of today is more important from something that might happen after few decades from now. Even great nations cannot fulfil great expectations... But it is obvious that climate change will fuel political tensions between those most responsible for climate changes and those most affected by them. These tensions might be regional or international and might strengthen the existing division of North-South but also create new sub-divisions between South-South (China-India region). These divisions and sub-division will add to existing critical pressures and nobody can reassure global society that the steam will escape through the valve or will explode the cover of the cooking pot.

### **Current future...**

Taken into account the climatological phenomena that are in progress during the last two months of 2010 in Russia, USA, Portugal (wildfires), Pakistan, China, Romania, Poland, Czech Republic, Niger (floods) it would be of help to provide certain examples on the future of certain areas of the world.

### **Case study: Africa**

Tragedy for tens of thousands of citizens in at least three African countries that Niger River (the third biggest river worldwide) is running through. More than 800 people lost their house due to excessive flooding in Central African Democracy. In the neighboring Chad, local government applied for international assistance due to thousands of homeless inhabitants. In Republic of Niger, more than 5.500 people suffer from the floods in capital Niamey. Water levels of Niger River, that provides "life support" to more than

110 million people in nine African countries, reached their highest peak (1.990 cubic meters of water per second), since 1929<sup>13</sup>.

Low adaptive capacity and multi-level stresses make Africa vulnerable to climate change. Drought, water scarcity, land over-use, desertification of land and spread of vector-borne diseases represent the main threats. Areas that might be heavily affected would be the Maghreb and Sahel, Nile Delta, Darfur (conflict), Horn of Africa (conflict) and South Africa (food insecurity). These adverse living conditions are expected to lead to mass migration to the northern part of the continent and subsequently to Europe.

### **Case study: Central Europe**

Eight people lost their lives on Saturday, August 7th in the Czech Republic, Germany and Poland and thousands others abandoned their homes due to extreme rainfalls that took place in central Europe. Many people found refuge on the top of the roofs of their houses waiting to be saved by rescue helicopters. In Poland, there are fears that if the Niendorf dam near Bogatynia collapsed, the contained water might threaten the twin city of Zgorzelec- Görlitz in the borders with Germany<sup>14</sup>.

Current weather phenomena in Europe may prelude the future of the continent. Societies and states must realize that "it can happen to us as well" and do their best in national and trans-European level to adequately address the issue. EU countries must not forget that it will be them who will bear the load of uncontrolled mass migration mainly from Africa and in a lesser degree from Asia. If prevention is impossible, then preparation becomes a must.

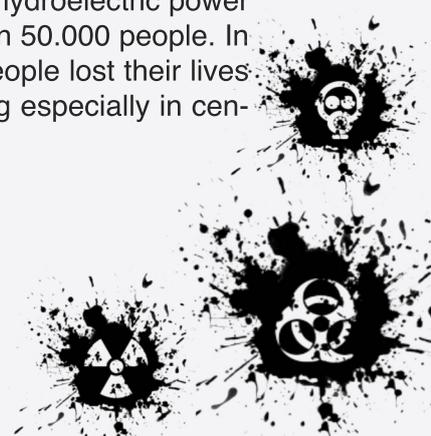
### **Case study: China**

Sliding in northwest China resulted in the death of at least 65 people mostly of Tibetan origin. Tons of mud conquered the Tibetan autonomous area of Ganan following heavy rainfalls. Sliding destroyed a hydroelectric power station affecting more than 50.000 people. In 2010, more than 2.100 people lost their lives due to flooding and sliding especially in central and northern China<sup>15</sup>.

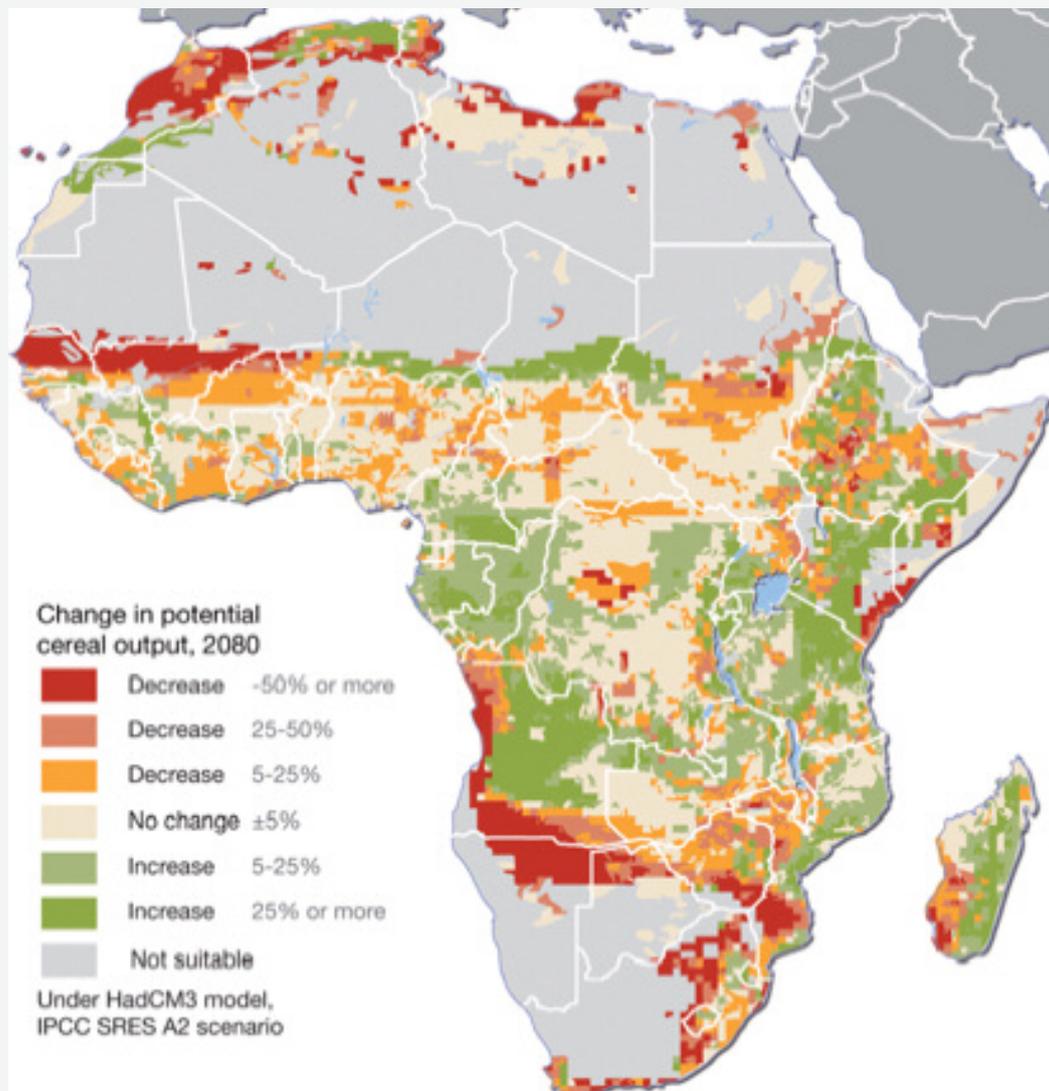
<sup>13</sup> Niger River Flooding. 08 Aug 2010 (<http://www.zougla.gr>)

<sup>14</sup> Flooding in Central Europe. 08 Aug 2010 (<http://www.zougla.gr>)

<sup>15</sup> Deadly sliding wiped northwest China. 08 Aug 2010 (<http://www.zougla.gr>)



### Africa



In South Asia the biggest consequence of climate change might be the sea-level rise that will threaten people living by the coastline and the combination of water stress and loss of agricultural productivity (taken into account the vast numbers of people living in these areas). These adverse conditions might result in uncontrolled migration and conflicts over remaining resources. In Central Asia the name of the problem is water that will affect agriculture and electricity generation (direct effects from Tajikistan's and Kyrgyzstan's glaciers losses). Also there is high potential for regional conflicts in this highly strategic, political and economic cross point of the planet.

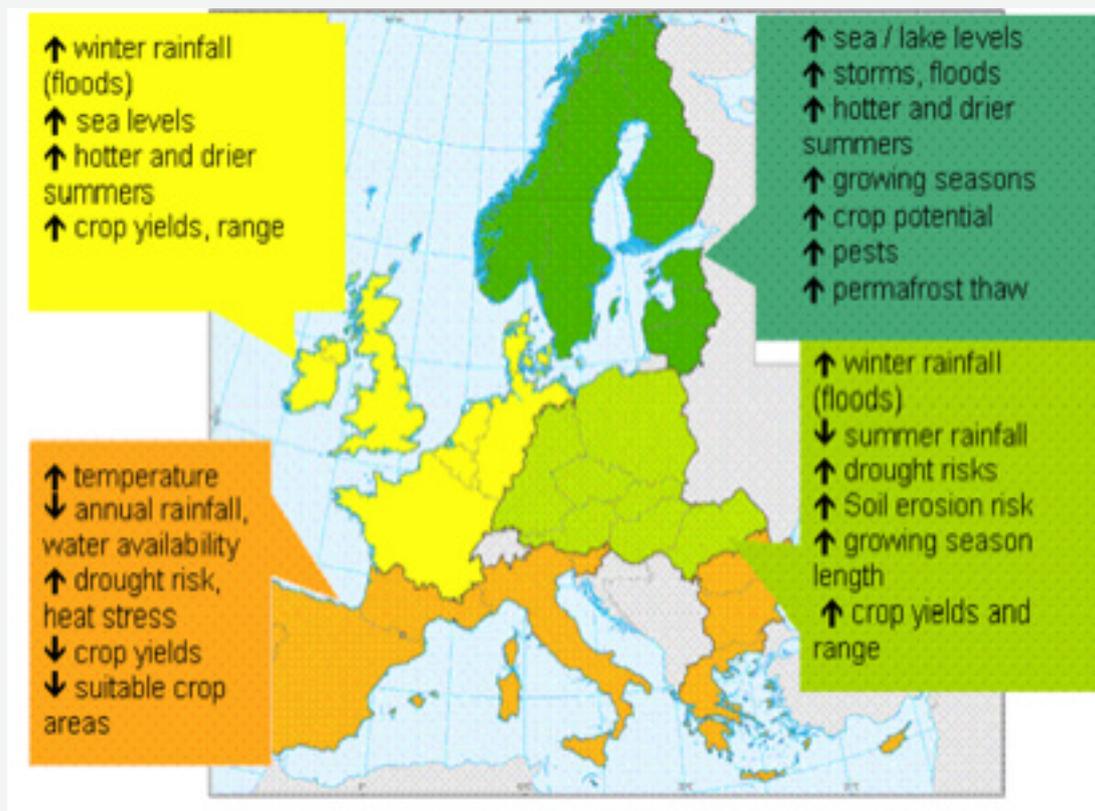
#### Case study: Russia

Hundreds of wildfires, burned military bases and camps, poisonous smog over the capital

Moscow and 1/5th of the annual wheat production destroyed – this is the picture of Russia of today. Carbon monoxide's concentrations override top permitted levels by 6.6 times while in the "red area" are the concentrations of solid particles and sodium dioxide. Wildfires in combination with ambient temperatures near 400C (normal mean for this time of the year: 230C) make life in Moscow, during the last two weeks, extremely difficult not to say dangerous. According to state sources more than 20.000 km<sup>2</sup> of land turned to ashes, 853 wildfires are still in progress with 290 of them during the last 24 hours. An Air Force Base in the suburbs of Moscow was totally burned. Up to now, 52 persons have lost their lives but officials expect a dramatic rise of wildfire victims in the coming days. Rescue and fire services are frantically trying to control



### Central Europe



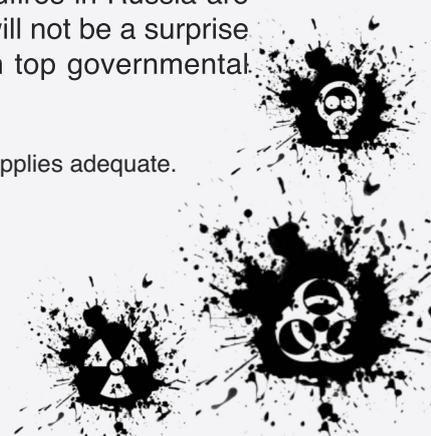
the chaotic situation and more than 161.000 people with the aid of 56 aircrafts and 26.000 specialized vehicles are involved. Italy, France, Germany, Poland and Bulgaria are assisting Russian fire services. Wildfires came to finish the destructive work of the drought that had devastated during the previous period almost 50% of the Russian breadbasket. The consequences for the Russian economy are devastated. According the Food and Agriculture Organization (FAO), the price of wheat in foreign markets rose<sup>16</sup>, since June, by 50% because Russia decided to stop exports from August 15th and until the end of 2010. Last week, wheat price gain an additional 13% rise, spreading panic to US and European markets. And the consequences do not stop in wheat destruction. The area of Briansk has been isolated with technical means and barriers in order to avoid wildfires cross the borders with Ukraine where in 1986 world experience the hazardous explosion of the Chernobyl nuclear plant. The combination of wildfires, high tem-

peratures and strong winds might give birth to a new deadly radioactive plum that will affect many countries worldwide. Also the nuclear plant in Sarov, in the suburbs of Nizhniy Novgorod (400 km east of Moscow) might be in danger if the fires proceed into this direction. President Putin is in the epicentre of the catastrophe. He is the recipient of heavy criticism for the organization and mobilization of his government and especially the civil protection services in addressing the fiery fronts. In 2007, Putin was the one who ordered the immediate dissolution of Forest Protection Corps investing in costly satellite and electronic means of surveillance and detection of natural disasters<sup>17</sup>.

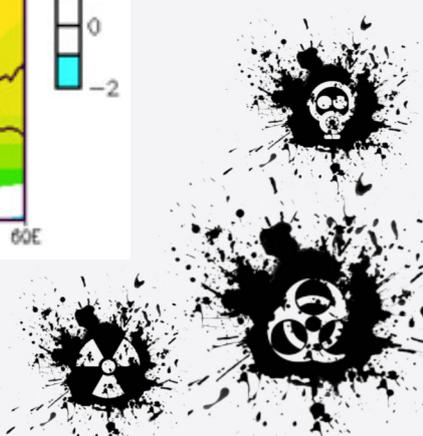
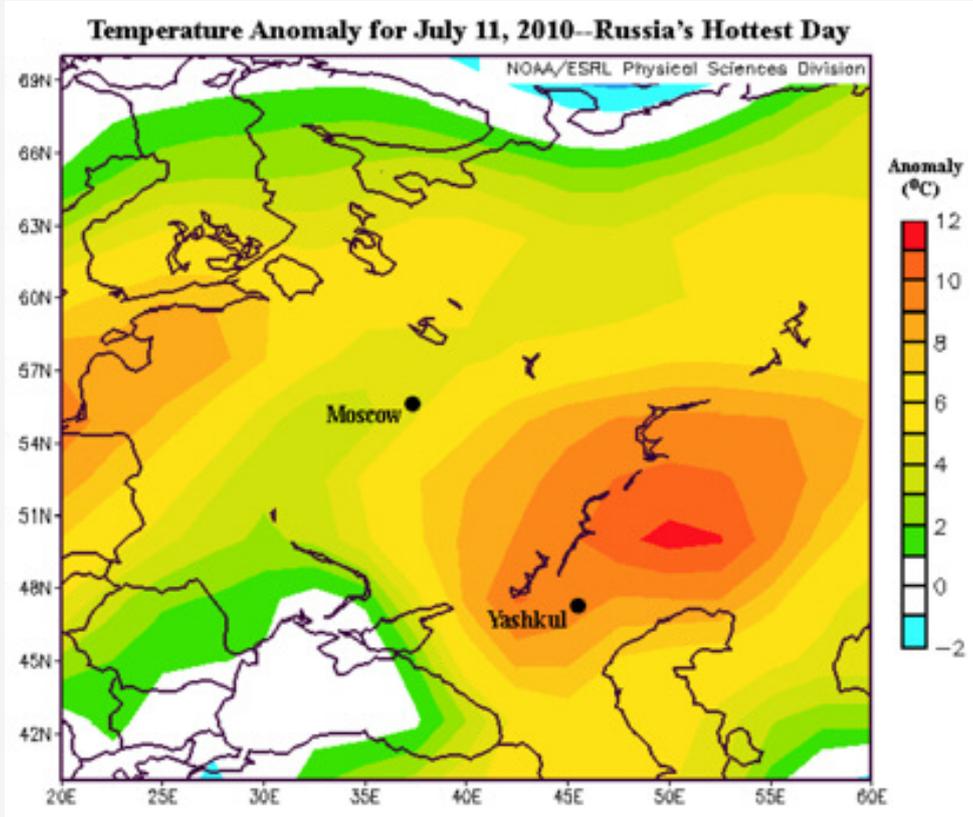
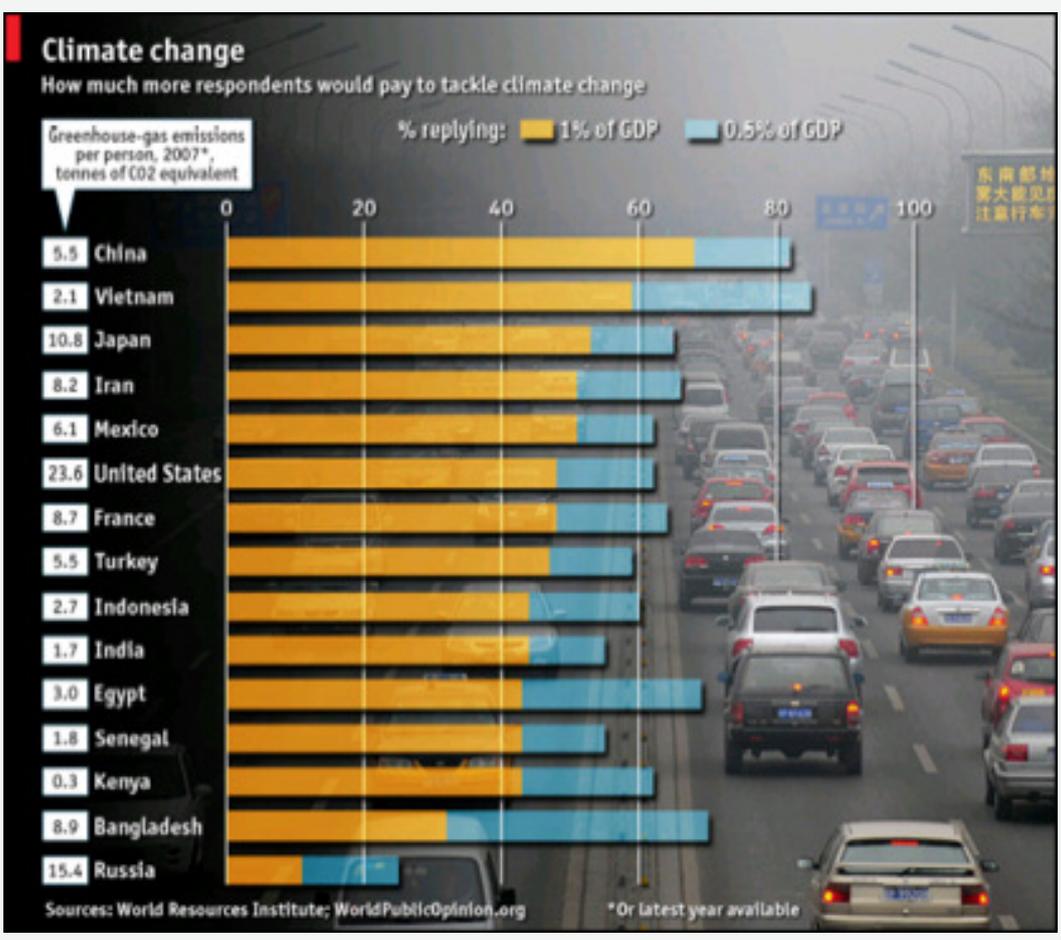
It is evident, that during top scale catastrophes, social unrest is evident and is directed against the local authorities and leadership. The consequences of wildfires in Russia are multi-dimensional and it will not be a surprise to schedule alterations in top governmental places or even policies.

<sup>16</sup> Food and Agriculture Organization FAO cuts wheat production forecast but considers supplies adequate. Wheat stocks still high in spite of the jump in prices. 04 August 2010. (<http://www.fao.org/news/story/en/item/44570/icode/>)

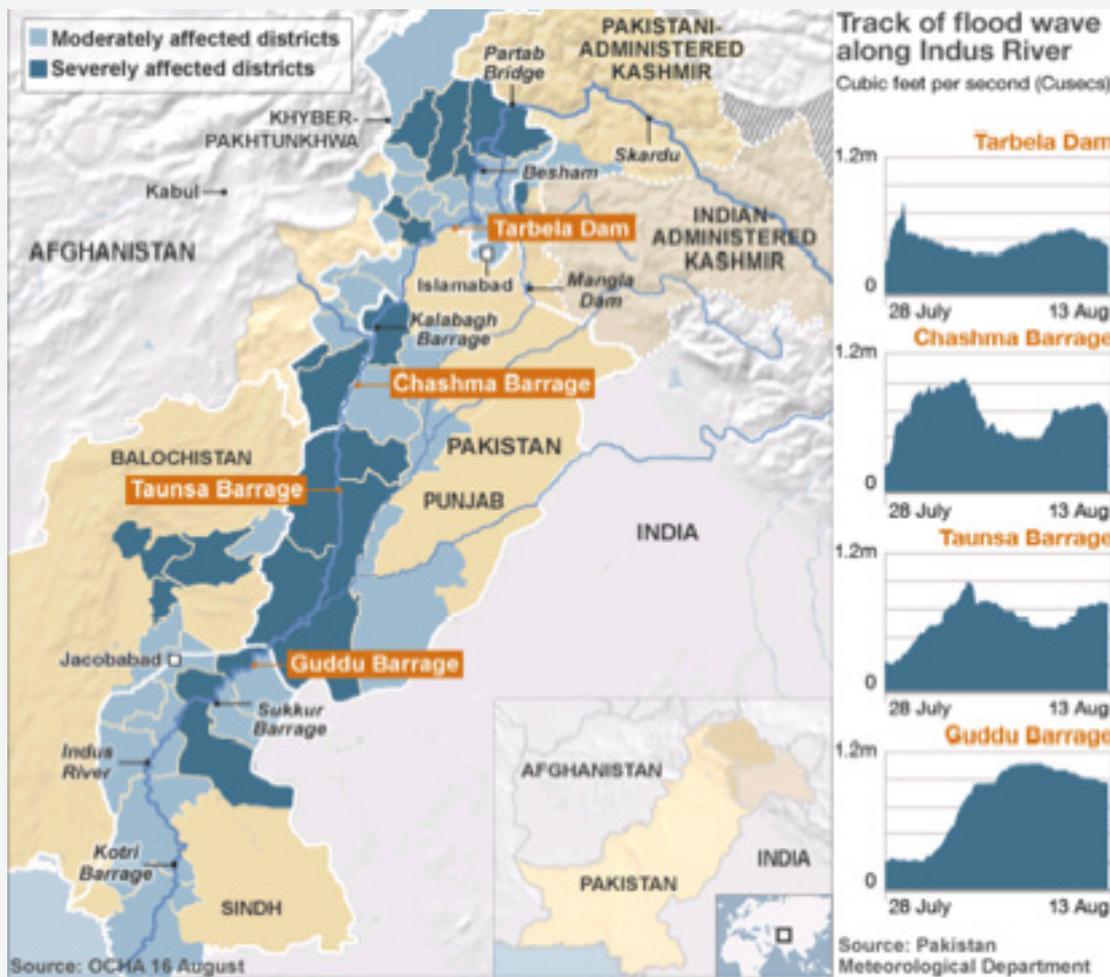
<sup>17</sup> Asphyxia in Moscow. 08 Aug 2010 (<http://www.zougla.gr>)



### China



### Pakistan



#### Case study: Pakistan

Pakistan is experiencing the worst flooding in its history. Monsoon rains swept away the houses of more than 140,000 people, caused the death of approximately 1,500 and affect the lives of more than 3 million inhabitants. The United Nations says that 1.8m is in urgent need of water, food and shelter. At the same time, President Asif Zarfā is still (at the time of writing this essay) in his tour in Europe (currently in France) most probably promoting the career of his son<sup>18</sup>.

Pakistan catastrophe is the case where relief charities, some with direct links to Islamic extremists (i.e. Jamaat-ud-Dawa), that take control in helping victims given the inadequacy of the state bodies. It is a fine example how extremists try to conquer the minds and souls of people being in a devastating status

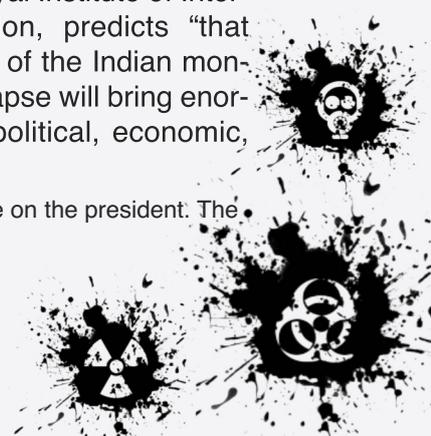
in an overall chaotic ethnic, cultural, economic and political environment.

#### Conclusion

It might be difficult for lay people or even states to envision the future but the adverse consequences of climate change are already visible – even in a small scale. It is certain, that as time passes by, as states and responsible politicians and leading authorities do not accept responsibility and do their part seriously and effectively, the final impact of climate change will lead to global security instabilities.

Cleo Paskal, at the Royal Institute of International Affairs in London, predicts “that floods, storms, the failure of the Indian monsoon and agricultural collapse will bring enormous, and specific, geopolitical, economic,

<sup>18</sup> Terrifying monsoon floods add to a sea of other woes in Pakistan—and intensify pressure on the president. The Economist. 5 August 2010. <http://www.economist.com/node/16743369>



and security consequences for all of us...the world of tomorrow looks chaotic and violent<sup>19</sup> while Jeffrey Mazo of the International Institute for Strategic Studies underlines "climate change an existential threat" and express his fears that it could usher in "state failure and internal conflict in areas like Africa<sup>20</sup>". The Intergovernmental Panel on Climate Change, in their 5th Report (2013) will include for the first time, a chapter on threats to human security<sup>21</sup>.

From the above, it is more than clear that climate change represents a major threat in

global security. Action is needed and it is needed now. Active participation of the total world populace is mandatory for the survival of planet Earth.

Konstantinos Karkatzounis is a Naval Post-graduate School (USA) graduate and a MA degree candidate ("International Terrorism, Organized Crime and Global Security"), at Coventry University (UK).

### Selection of relevant articles: Climate and security2010's world weather extremes: quakes, floods, blizzards

Source:<http://www.homelandsecuritynewswire.com/2010s-world-weather-extremes-quakes-floods-blizzards>

Earthquakes, heat waves, floods, volcanoes, super typhoons, blizzards, landslides, and droughts killed at least a quarter million people in 2010 -- the deadliest year in more than a generation; more people were killed worldwide by natural disasters in 2010 than have been killed in terrorism attacks in the past forty years combined; disasters from the Earth, such as earthquakes and volcanoes "are pretty much constant," said Andreas Schraft, vice president of catastrophic perils for the Geneva-based in-

surance giant Swiss Re. "All the change that's made is man-made."

The year which coming to an end was the year the Earth appears to have struck back. Earthquakes, heat waves, floods, volcanoes, super typhoons, blizzards, landslides, and droughts killed at least a quarter million people in 2010 — the deadliest year in more than a generation. More people were killed worldwide by natural disasters this year than have been killed in terrorism attacks in the past forty years combined. "It just seemed like it was back-to-back and it came in waves," said Craig Fugate, who heads the U.S. Federal Emergency Management Agency (FEMA). It handled a record number of disasters in 2010.

"The term '100-year event' really lost its meaning this year."

ABC News quotes scientists and disaster experts to say that we have ourselves to blame most of the time. Even though many catastrophes have the ring of random chance, the hand of

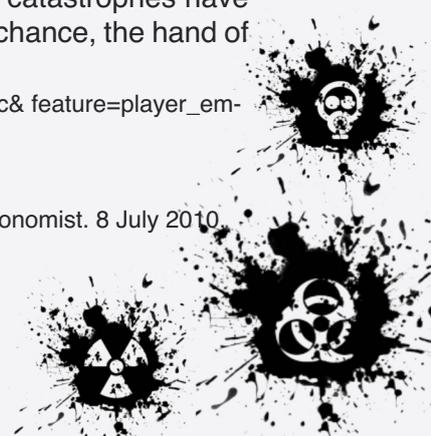


Pakistani floods an example of increased disasters // Source: [thewe.cc](http://thewe.cc)

<sup>19</sup> Global Warring – Video by Cleo Pascal. [http://www.youtube.com/watch?v=WUqUAhgpjhc&feature=player\\_embedded](http://www.youtube.com/watch?v=WUqUAhgpjhc&feature=player_embedded)

<sup>20</sup> Jeffrey Mazo. Climate Conflict. International Institute for Strategic Studies. 10 April 2010. <http://www.iiss.org/publications/adelphi-papers/adelphis-2010/climate-conflict/>

<sup>21</sup> Climate wars: Does a warming world really mean that more conflict is inevitable? The Economist. 8 July 2010. [http://www.economist.com/node/16539538?story\\_id=16539538](http://www.economist.com/node/16539538?story_id=16539538)



man made this a particularly deadly, costly, extreme, and weird year for everything from wild weather to earthquakes.

Poor construction and development practices conspire to make earthquakes more deadly than they need be. More people live in poverty in vulnerable buildings in crowded cities. This means that when the ground shakes, the river breaches, or the tropical cyclone hits, more people die.

Disasters from the Earth, such as earthquakes and volcanoes “are pretty much constant,” said Andreas Schraft, vice president of catastrophic perils for the Geneva-based insurance giant Swiss Re. “All the change that’s made is man-made.”

The January earthquake that killed well more than 220,000 people in Haiti is a perfect example. Port-au-Prince has nearly three times as many people — many of them living in poverty — and more poorly built shanties than it did twenty-five years ago. So had the same quake hit in 1985 instead of 2010, total deaths would have probably been in the 80,000 range, said Richard Olson, director of disaster risk reduction at Florida International University.

In February, an earthquake that was more than 500 times stronger than the one that struck Haiti hit an area of Chile that was less populated, better constructed, and not as poor. Chile’s bigger quake caused fewer than 1,000 deaths.

Climate scientists say Earth’s climate also is changing thanks to man-made global warming, bringing extreme weather, such as heat waves and flooding.

In the summer, one weather system caused oppressive heat in Russia, while farther south it caused flooding in Pakistan that inundated 62,000 square miles, about the size of Wisconsin. That single heat-and-storm system killed almost 17,000 people, more people than all the worldwide airplane crashes in the past fifteen years combined.

“It’s a form of suicide, isn’t it? We build houses that kill ourselves (in earthquakes). We build houses in flood zones that drown ourselves,” said Roger Bilham, a professor of geological sciences at the University of Colorado. “It’s our fault for not anticipating these

things. You know, this is the Earth doing its thing.”

ABC News reports that the excessive amount of extreme weather that dominated 2010 is a classic sign of man-made global warming that climate scientists have long warned about. They calculate that the killer Russian heat wave — setting a national record of 111 degrees — would happen once every 100,000 years without global warming. Preliminary data show that eighteen countries broke their records for the hottest day ever.

“These (weather) events would not have happened without global warming,” said Kevin Trenberth, chief of climate analysis for the National Center for Atmospheric Research in Boulder, Colorado.

This is why the people who study disasters for a living say it would be wrong to chalk 2010 up to just another bad year.

“The Earth strikes back in cahoots with bad human decision-making,” said a weary Debarati Guha Sapiir, director for the World Health Organization’s Centre for Research on the Epidemiology of Disasters. “It’s almost as if the policies, the government policies and development policies are helping the Earth strike back instead of protecting from it. We’ve created conditions where the slightest thing the Earth does is really going to have a disproportionate impact.”

ABC News offers this quick tour of an anything-but-normal 2010:

### How deadly

While the Haitian earthquake, Russian heat wave, and Pakistani flooding were the biggest killers, deadly quakes also struck Chile, Turkey, China, and Indonesia in one of the most active seismic years in decades. Through mid-December there have been twenty earthquakes of magnitude 7.0 or higher, compared to the normal sixteen. This year is tied for the most big quakes since 1970, but it is not a record. Nor is it a significantly above average year for the number of strong earthquakes, U.S. earthquake officials say.

Flooding alone this year killed more than 6,300 people in fifty-nine nations through September, according to the World Health Organization. In the United States, thirty people died



in the Nashville, Tennessee, region in flooding. Inundated countries include China, Italy, India, Colombia, and Chad. Super Typhoon Megi with winds of more than 200 mph devastated the Philippines and parts of China.

Through 30 November, nearly 260,000 people died in natural disasters in 2010, compared to 15,000 in 2009, according to Swiss Re. The World Health Organization, which has not updated its figures past 30 September, is just shy of 250,000. By comparison, deaths from terrorism from 1968 to 2009 were less than 115,000, according to reports by the U.S. State Department and the Lawrence Livermore National Laboratory.

The last year in which natural disasters were this deadly was 1983 because of an Ethiopian drought and famine, according to WHO. Swiss Re calls it the deadliest since 1976. The charity Oxfam says 21,000 of this year's disaster deaths are weather related.

### How extreme

After strong early year blizzards — nicknamed Snowmageddon — paralyzed the U.S. mid-Atlantic and record snowfalls hit Russia and China, the temperature turned to broil.

The year may go down as the hottest on record worldwide or at the very least in the top

three, according to the World Meteorological Organization.

The average global temperature through the end of October was 58.53 degrees, a shade over the previous record of 2005, according to the National Climatic Data Center.

Los Angeles had its hottest day in recorded history on 27 September: 113 degrees. In May, 129 set a record for Pakistan and may have been the hottest temperature recorded in an inhabited location.

In the U.S. Southeast, the year began with freezes in Florida that had cold-blooded iguanas becoming comatose and falling off trees. Then it became the hottest summer on record for the region. As the year ended, unusually cold weather was back in force.

Northern Australia had the wettest May-October on record, while the southwestern part of that country had its driest spell on record. Parts of the Amazon River basin struck by drought hit their lowest water levels in recorded history.

### How costly

Disasters caused \$222 billion in economic losses in 2010 — more than Hong Kong's economy — according to Swiss Re. This is more than usual, but not a record, Schraft



said. This is because this year's disasters often struck poor areas without heavy insurance, such as Haiti.

### How weird

A volcano in Iceland paralyzed air traffic for days in Europe, disrupting travel for more than seven million people. Other volcanoes in the Congo, Guatemala, Ecuador, the Philippines, and Indonesia sent people scurrying for safety. New York City had a rare tornado.

A nearly 2-pound hailstone that was eight inches in diameter fell in South Dakota in July to set a U.S. record. The storm that produced it was one of seven declared disasters for that state this year.

There was not much snow to start the Winter Olympics in a relatively balmy Vancouver, British Columbia, while the U.S. East Coast was snowbound.

In a 24-hour period in October, Indonesia got the trifecta of terra terror: a deadly magnitude 7.7 earthquake, a tsunami that killed more than 500 people, and a volcano that caused more than 390,000 people to flee. This is after flooding, landslides, and more quakes killed hundreds earlier in the year.

Even the extremes were extreme. This year started with a good sized El Nino weather oscillation that causes all sorts of extremes worldwide. Then later in the year, the world got the mirror image weather system with a strong La Nina, which causes a different set of extremes. Having a year with both a strong El Nino and La Nina is unusual.

In the United States, FEMA declared a record number of major disasters, seventy-nine as of 14 December. The average year has thirty-four.

A list of day-by-day disasters in 2010 compiled by the AP runs sixty-four printed pages long.

"The extremes are changed in an extreme fashion," said Greg Holland, director of the earth system laboratory at the National Center for Atmospheric Research.

For example, even though it sounds counterintuitive, global warming likely played a bit of a role in Snowmageddon earlier this year, Holland said. This is because with a warmer climate, there is more moisture in the air, which makes storms including blizzards, more intense, he said.

White House science adviser John Holdren said we should get used to climate disasters or do something about global warming: "The science is clear that we can expect more and more of these kinds of damaging events unless and until society's emissions of heat-trapping gases and particles are sharply reduced."

This is just the "natural disasters." It was also a year of man-made technological catastrophes. BP's busted oil well caused 172 million gallons to gush into the Gulf of Mexico. Mining disasters — men trapped deep in the Earth — caused dozens of deaths in tragic collapses in West Virginia, China, and New Zealand. The fortunate miners in Chile who survived sixty-nine days underground provided the feel good story of the year.

ABC News quotes Olson to say that in both technological and natural disasters, there is a common theme of "pushing the envelope."

Colorado's Bilham said the world's population is moving into riskier megacities on fault zones and flood-prone areas. He figures that 400 million to 500 million people in the world live in large cities prone to major earthquakes.

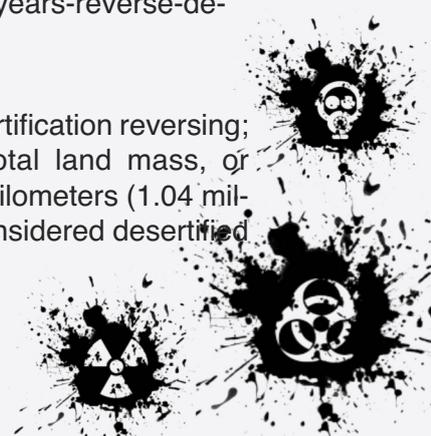
A Haitian disaster will happen again, Bilham said: "It could be Algiers. it could be Tehran. It could be any one of a dozen cities."

## China may need 300 years to reverse desertification

Source: <http://www.homelandsecuritynewswire.com/china-may-need-300-years-reverse-desertification>

Huge population pressures, scarce rainfall, and climate change have made China the world's biggest victim of desertification, a problem that could take 300 years to reverse

at the current rate of desertification reversing; 27 percent of China's total land mass, or about 2.6 million square kilometers (1.04 million square miles), are considered desertified





China's government programs have worsened the problem // Source: [sciencemag.org](http://sciencemag.org)

land, while another 18 percent of the nation's land is eroded by sand

Huge population pressures, scarce rainfall, and climate change have made China the world's biggest victim of desertification, a problem that could take 300 years to reverse, state media said Wednesday.

Overgrazing, excessive land reclamation, and inappropriate water use also make it especially difficult to halt deserts from en-

croaching on large areas of land in the nation's arid north and west, the China Daily reported.

"China is still a country with the largest area of desertified land in the world," Zhu Lieke, deputy director of the State Forestry Administration, was quoted as saying.

AFP reports that about 27 percent of China's total land mass, or about 2.6 million square kilometers (1.04 million square miles), are considered desertified land, while another 18 percent of the nation's land is eroded by sand, the report said.

Experts believe that 530,000 square kilometers of the nation's deserts can be returned to green land, but the process will take 300 years at the current rate of reversing desertification by 1,700 square kilometers annually, it said.

Some of the worst land erosion in the world occurs in the basin of the Yellow River, China's second largest river, with 62 percent of the area affected by water and soil erosion, the paper said in a separate report.

## Biting winters driven by global warming: scientists

Source: <http://www.physorg.com/news/2010-12-winters-driven-global-scientists.html>

A string of freezing European winters scattered over the last decade has been driven in large part by global warming; the culprit, according to a new study, is the Arctic's receding surface ice, which at current rates of decline could to disappear entirely during summer months by century's end; the mechanism uncovered triples the chances that future winters in Europe and north Asia will be similarly inclement, the study reports.

Counter-intuitive but true, say scientists: a string of freezing European winters scattered over the last decade has been driven in large part by global warming.

The culprit, according to a new study, is the Arctic's receding surface ice, which at current rates of decline could to disappear entirely during summer months by century's end.

The mechanism uncovered triples the

chances that future winters in Europe and north Asia will be similarly inclement, the study reports. AFP reports that biting cold weather wreaked havoc across Europe in the winter months of 2005-6, dumping snow in southern Spain and plunging eastern Europe and Russia into an unusually — and deadly — deep freeze.





Another sustained cold streak in 2009-10, gave Britain its coldest winter in fourteen years, and wreaked transportation havoc across the continent. This year seems poised to deliver a repeat performance.

At first glance, this flurry of frostiness would seem to be at odds with standard climate change scenarios in which Earth's temperature steadily rises, possibly by as much as five or six degrees Celsius (9.0 to 10.8 degrees Fahrenheit) by 2100.

Climate skeptics who question the gravity of global warming or that humans are to blame point to the deep chills as confirmation of their doubts.

Such assertions, counter scientists, mistakenly conflate the long-term patterns of climate with the short-term vagaries of weather, and ignore regional variation in climate change impacts.

New research, however, goes further, showing that global warming has actually contributed to Europe's winter blues.

Rising temperatures in the Arctic — increasing at two to three times the global average — have peeled back the region's floating ice cover by 20 percent over the last three decades.

This has allowed more of the Sun's radiative force to be absorbed by dark-blue sea rather than bounced back into space by reflective ice and snow, accelerating the warming process.

More critically for weather patterns, it has also created a massive source of heat during the winter months.

"Say the ocean is at zero degrees Celsius (32 degrees Fahrenheit)," said Stefan Rahmstorf, a climate scientist at the Potsdam Institute for Climate Impact Research in Germany. "That is a lot warmer than the overlying air in the polar area in winter, so you get a major heat flow heating up the atmosphere from below which you don't have when it is covered by ice. That's a massive change," he told AFP in an interview.

The result, according to a modelling study published earlier this month the *Journal of Geophysical Research*, is a strong high-pressure system over the newly-exposed sea which brings cold polar air, swirling counter-clockwise, into Europe.

"Recent severe winters like last year's or the one of 2005-2006 do not conflict with the global warming picture, but rather supplement it," explained Vladimir Petoukhov, lead author of the study and a physicist at the Potsdam Institute.

"These anomalies could triple the probability of cold winter extremes in Europe and north Asia," he said.

The researchers created a computer model simulating the impact on weather patterns of a gradual reduction of winter ice cover in the Barents-Kara Sea, north of Scandinavia.

Other possible explanations for uncommonly cold winters — reduced Sun activity or changes in the Gulf Stream — "tend to exaggerate their effect," Petoukhov said.



He also points out that during the freezing 2005-6 winter, when temperatures averaged 10 C below normal in Siberia, there were no unusual variations in the north Atlantic oscillation, another putative cause.

Colder European winters do not indicate a slowing of global warming trends, only an un-

even distribution, researchers say. "As I look out my window I see about 30 centimeters of snow and the thermostat reads -14.0 C," said Rahmstorf, speaking by phone from Potsdam. "At the same time, in Greenland we have above zero temperatures — in December."

## Climate change reveals disease as national security threat

Source: <http://www.mcclatchydc.com/2011/01/10/106405/climate-change-reveals-disease.html>

One of the most worrisome national security threats of climate change is the spread of disease, among both people and animals, U.S. intelligence and health officials say.

But more than a decade after such concerns were first raised by U.S. intelligence agencies, significant gaps remain in the health surveillance and response network — not just in developing nations, but in the United States as well, according to those officials and a review of federal documents and reports.

And those gaps, they say, undermine the ability of the U.S. and world health officials to respond to disease outbreaks before they become national security threats.

"We're way behind the ball on this," said Josh Michaud, who has worked at the Defense Department's National Center for Medical Intelligence and its Global Emerging Infections Surveillance and Response System. "It's a collective action problem."

Michaud said monitoring currently was done largely through publicly available medical information and mathematical modeling, but that's hardly enough to spot sudden disease trends quickly.

U.S. intelligence officials list the spread of disease as one of their top four climate change-related security concerns, along with food and water scarcity and the impact of extreme weather on transportation and communications systems. Outbreaks of disease can destabilize foreign countries, especially developing nations, overtax the U.S. military and undermine social cohesion and the economy at home.

In coming decades, more heat, humidity and rainfall could allow mosquitoes, ticks and



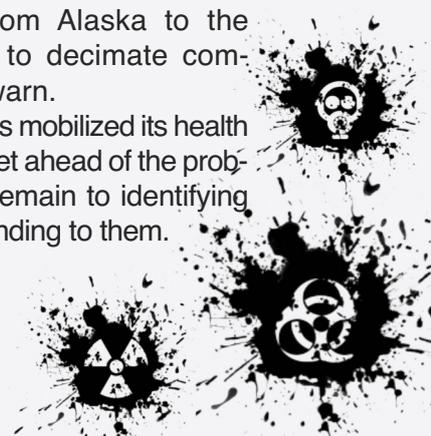
A boy who was thought to contract malaria after the 2005 Indian Ocean tsunami as disease stricken the population.

other parasites and carriers of tropical and subtropical diseases to spread to areas where they didn't exist previously, infecting populations that haven't built up resistance to them, intelligence and health officials say.

Malaria, cholera and other diseases are now being seen in parts of Asia and Africa where they weren't detected previously, something experts attribute to climate change. Dengue fever returned to the United States in 2009 after a 75-year absence — and might spread to 28 states, according to a Natural Resources Defense Council study.

Plants and animals also have been affected. Bark beetle infestations, for instance, have ravaged forests from Alaska to the Southwest and threaten to decimate commercial forestry, experts warn.

The U.S. government has mobilized its health intelligence community to get ahead of the problem, but many obstacles remain to identifying potential threats and responding to them.



Many countries lack the health infrastructure to detect diseases. Even the U.S. itself has significant holes in its public safety net due to budget cuts and inattention paid to the health risks of climate change.

"There is a gap in our surveillance to even determine whether the vectors are changing, and new diseases are being created and spread," said Dr. Joy M. Miller, the senior global health security adviser for the National Intelligence Council, the center of strategic thinking for the CIA and other agencies that fall under the supervision of the Office of the Director of National Intelligence, the agency created after the Sept. 11, 2001, terrorist attacks to coordinate intelligence gathering.

"There are key uncertainties," she noted, "including how quickly climate change will occur and the locations where the impacts will be most pronounced."

Officials at the CIA's Center on Climate Change and National Security, created in September 2009 to gather information on the threat from global warming, say countering the spread of disease is high on their agenda.

The Department of Defense also has devoted significant resources to the problem, said Kent Hughes Butts of the Army War College. One of his top concerns: that the spread of disease in developing countries is helping to create "conditions that terrorists seek to exploit."

The U.S. Global Change Research Program, which Congress created in 1990 to coordinate the work of 13 government agencies on global warming, released a report in April that identified 11 key health areas at risk from climate change. Among the concerns were diseases spread by food, water and pests such as mosquitoes and ticks; respiratory allergies; asthma and other respiratory diseases; and heat-related deaths and illnesses.

But the effort still hasn't figured out which threats are the most crucial, said Dr. George Luber, the director of the Centers for Disease Control and Prevention's climate change program at the National Center for Environmental Health.

"We really haven't gotten to the point where we can start putting even qualitative estimates on future burdens," Luber said.

The impact of disease on Africa's stability has long been a concern for U.S. intelligence and military officials, and the National Intelligence Council recognized in a National Intelligence Estimate in 2000 that "climatic shifts" were likely to allow diseases such as malaria and yellow fever to spread to new areas.

Eight years later, NIC Chairman Thomas Fingar told Congress that climate change would affect the military's new Djibouti-based Africa Command, which, Fingar said, "is likely to face extensive and novel operational requirements."

"Sub-Saharan African countries — if they are hard hit by climate impacts — will be more susceptible to worsening disease exposure," Fingar said.

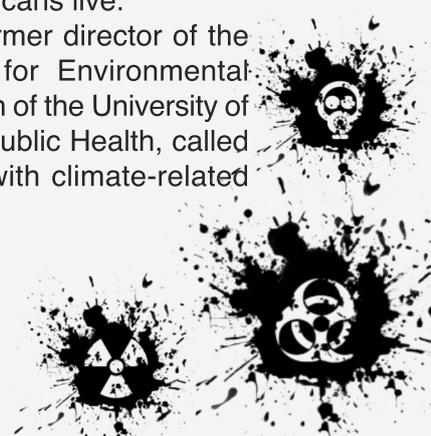
But detecting disease outbreaks remains a challenge, particularly in impoverished areas where medical care and modern communications systems are absent. A serious outbreak could soon overwhelm local governments and spur mass migration of infected victims across international borders.

"There are no international contingency plans for such an occurrence, nor are even the basic information systems in place to link (disease reporting) to potential response mechanisms like the U.N. Security Council or NATO," the National Intelligence Council concluded in a report it released two months ago.

Health officials question whether even the United States is prepared to handle the unpredictable impacts of climate change. Many local health systems lack trained health technicians who can diagnose new diseases, and the right epidemiological equipment.

They note that diseases once considered rare in the United States, such as dengue fever and West Nile virus, are no longer uncommon. West Nile virus, which was reintroduced to the United States in 1994, is now present in 44 states, while the mosquitoes that carry dengue fever are found in counties where 173.5 million Americans live.

Howard Frumkin, a former director of the CDC's National Center for Environmental Health who's now the dean of the University of Washington's School of Public Health, called the U.S. ability to cope with climate-related disease "shaky."



"It's the entire range of preparedness work, from problem identification to preparedness action to adaptation actions to testing the programs," he said. "All needs to be strengthened."

That's a message that hasn't been carried to the nation's political leaders, however. In its budget proposal for 2011, for example, the White House budget office zeroed out the CDC's vector-borne disease division. The Senate voted to restore the \$26.7 million in funds, but the funding still has not been approved by the House of Representatives.

"There wasn't a real understanding of what kind of impact this would have on American health and people worldwide," said Karen Goraleski, the executive director of the American Society of Tropical Medicine and Hygiene.

What role politics will play in the U.S.'s ability to prepare for a climate-related health catastrophe in the new Republican-led House remains to be seen. In 2007, the administration of President George W. Bush deleted six pages from the prepared congressional testimony of then-CDC director Dr. Julie Gerberding that detailed the human health impacts of climate change.

This year, for the first time, the CDC gave out \$5 million grants to 10 states and cities for climate-related health impacts. The National Institutes of Health used some money from the American Recovery and Reinvestment Act stimulus for grants that look at which populations are most vulnerable to climate change in the U.S.

But that hardly satisfies concerns.

"We're making progress, but it's a slower progress than it needs to be," Frumkin said. Climate change "is advancing far faster than has been forecast. We need to be ready not in 20 years or in 30 years, but relatively soon."

Chen is a graduate student in Northwestern University's Medill School of Journalism. This story is part of Medill's National Security Reporting Project, which is overseen by Josh Meyer, a former national security writer for the Los Angeles Times who now teaches in Medill's Washington program, and Ellen Shearer, the director of Medill's Washington program.

## Climate change emerges as disease-related security threat

Source: <http://www.washingtonpost.com/wp-dyn/content/article/2011/01/28/AR2011012807373.html>

One of the most worrisome national security threats related to climate change is the spread of disease among people and animals, U.S. intelligence and health officials say.

But more than a decade after such concerns were first raised by U.S. intelligence agencies, significant gaps remain in health surveillance and response networks - not just in developing nations, but in the United States, according to those officials and a review of federal documents and reports.

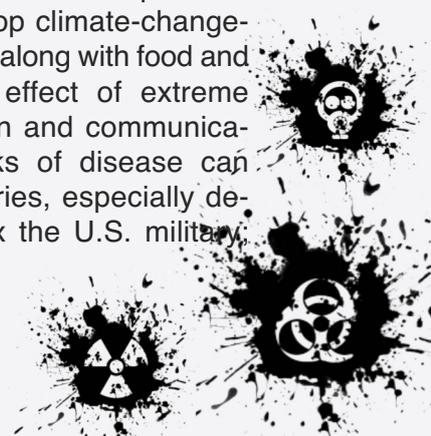
And those gaps, they say, undermine the ability of U.S. and world health officials to respond to disease outbreaks before they become national security threats.

"We're way behind the ball on this," said Josh Michaud, who has worked at the De-

fense Department's National Center for Medical Intelligence and its Global Emerging Infections Surveillance and Response System. "It's a collective action problem."

Michaud said monitoring currently is done largely through publicly available medical information and mathematical modeling, but that's hardly enough to spot sudden disease trends quickly.

U.S. intelligence officials list the spread of disease as one of their top climate-change-related security concerns, along with food and water scarcity and the effect of extreme weather on transportation and communications systems. Outbreaks of disease can destabilize foreign countries, especially developing nations; overtax the U.S. military.



and undermine social cohesion and the economy at home.

In coming decades, more heat, humidity and rainfall could allow mosquitoes, ticks and other parasites to spread tropical and sub-tropical diseases to areas where they didn't exist previously, infecting populations that haven't built up resistance to them, intelligence and health officials say.

Malaria, cholera and other diseases are now being seen in parts of Asia and Africa where they weren't detected before, something experts attribute to climate change. Dengue fever returned to the United States in 2009 after a 75-year absence - and might spread to 28 states, according to a Natural Resources Defense Council study.

Plants and animals also have been affected. Bark beetle infestations, for instance, have ravaged forests from Alaska to the Southwest and threaten to decimate commercial forestry, experts warn.

### **U.S. mobilization**

The U.S. government has mobilized its health intelligence community to get ahead of the problem, but many obstacles remain to identifying potential threats and responding to them.

Many countries lack the health infrastructure to detect diseases. Even the United States has significant holes in its public safety net due to budget cuts and inattention paid to the health risks of climate change.

"There is a gap in our surveillance to even determine whether the vectors are changing and new diseases are being created and spread," said Joy M. Miller, the senior global health security adviser for the National Intelligence Council, the center of strategic thinking for the CIA and other agencies that fall under the supervision of the Office of the Director of National Intelligence.

"There are key uncertainties," she noted, "including how quickly climate change will occur and the locations where the impacts will be most pronounced."

Officials at the CIA's Center on Climate Change and National Security - created in September 2009 to gather information on the threat from global warming - say countering

the spread of disease is high on their agenda.

The Department of Defense also has devoted significant resources to the problem, said Kent Hughes Butts of the Army War College. One of his top concerns: that the spread of disease in developing countries is helping to create "conditions that terrorists seek to exploit."

The U.S. Global Change Research Program, which Congress created in 1990 to coordinate the work of 13 government agencies on global warming, released a report in April that identified 11 key health risks related to climate change. Among the concerns were diseases spread by food, water and pests such as mosquitoes and ticks; respiratory allergies; asthma and other respiratory diseases; and heat-related deaths and illnesses. But the effort still hasn't figured out which threats are the most crucial, said George Luber, the director of the Centers for Disease Control and Prevention's climate change program at the National Center for Environmental Health.

"We really haven't gotten to the point where we can start putting even qualitative estimates on future burdens," Luber said.

### **African stability at risk**

The effect of disease on Africa's stability has long been a concern for U.S. intelligence and military officials, and the National Intelligence Council recognized in a National Intelligence Estimate in 2000 that "climatic shifts" were likely to allow diseases such as malaria and yellow fever to spread to new areas.

Eight years later, NIC Chairman Thomas Fingar told Congress that climate change would affect the military's new Djibouti-based Africa Command, which, Fingar said, "is likely to face extensive and novel operational requirements."

"Sub-Saharan African countries - if they are hard hit by climate impacts - will be more susceptible to worsening disease exposure," Fingar said.

But detecting disease outbreaks remains a challenge, particularly in impoverished areas where medical care and modern communications systems are absent. A serious outbreak could soon overwhelm local governments and spur mass migration of infected victims across international borders.



"There are no international contingency plans for such an occurrence, nor are even the basic information systems in place to link [disease reporting] to potential response mechanisms like the U.N. Security Council or NATO," the National Intelligence Council concluded in a report it released two months ago.

Health officials question whether even the United States is prepared to handle the unpredictable effects of climate change. Many local health systems lack trained health technicians who can diagnose new diseases and the right epidemiological equipment.

They note that diseases once considered rare in the United States, such as dengue fever and West Nile virus, are no longer uncommon. West Nile virus, which was reintroduced to the United States in 1994, is now present in 44 states, and the mosquitoes that carry dengue fever are found in counties where 173.5 million Americans live.

Howard Frumkin, a former director of the CDC's National Center for Environmental Health who is now the dean of the University of Washington's School of Public Health, called the U.S. ability to cope with climate-related disease "shaky."

"It's the entire range of preparedness work, from problem identification to preparedness action to adaptation actions to testing the programs," he said. "All needs to be strengthened."

### Struggle for funding

That's a message that hasn't been carried to the nation's political leaders, however. In its budget proposal for 2011, for example, the

White House budget office zeroed out the CDC's vector-borne disease division. The Senate voted to restore the \$26.7 million, but the funding still has not been approved by the House.

"There wasn't a real understanding of what kind of impact this would have on American health and people worldwide," said Karen Goraleski, the executive director of the American Society of Tropical Medicine and Hygiene.

The CDC has given out \$5 million grants to 10 states and cities for climate-related health problems. The National Institutes of Health used some stimulus money from the American Recovery and Reinvestment Act for grants that look at which populations are most vulnerable to climate change in the United States.

But that hardly satisfies concerns.

"We're making progress, but it's a slower progress than it needs to be," Frumkin said. Climate change "is advancing far faster than has been forecast. We need to be ready not in 20 years or in 30 years, but relatively soon."

Chen is a graduate student in Northwestern University's Medill School of Journalism. This story is part of Medill's National Security Reporting Project, which is overseen by Josh Meyer, a former national security writer for the Los Angeles Times who now teaches in Medill's Washington program, and Ellen Shearer, the director of Medill's Washington program.

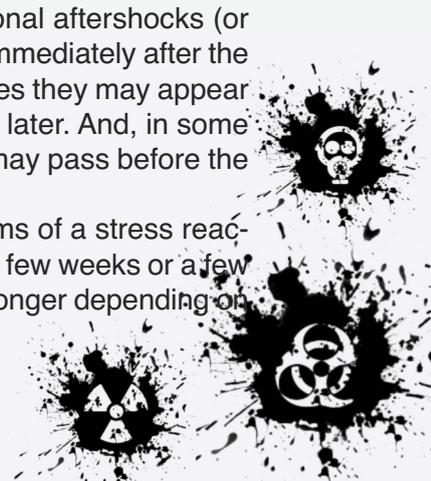
## Guide for post-traumatic stress syndrome

By Nena Wiley

YOU HAVE EXPERIENCE A TRAUMATIC EVENT. Even though the event maybe over, you may now be experiencing or may experience later some strong emotional or physical reactions. IT IS VERY COMMON, IN FACT QUITE NORMAL, FOR PEOPLE TO EXPERIENCE EMOTIONAL AFTERSHOCKS WHEN THEY HAVE PASSED THROUGH A HORRIBLE EVENT.

Sometimes the emotional aftershocks (or stress reactions) appear immediately after the traumatic event. Sometimes they may appear a few hours or a few days later. And, in some cases, weeks or months may pass before the stress reactions appear.

The signs and symptoms of a stress reaction may last a few days, a few weeks or a few months and occasionally longer depending on



the severity of the traumatic event. With the understanding and the support of loved ones, stress reactions usually pass more quickly. Occasionally, the traumatic event is so painful that professional assistance from a counselor may be necessary. This does not imply craziness or weakness. It simply indicates that the particular trauma was just too powerful to manage without help.

Here are some very common signs and signals of a stress reaction:

### PHYSICAL SIGNS

- ~ Fatigue
- ~ Nausea
- ~ Muscle tremors
- ~ Twitches
- ~ Chest pain \*
- ~ Difficulty breathing \*
- ~ Elevated BP \*
- ~ Rapid heart rate
- ~ Thirst
- ~ Visual difficulties
- ~ Vomiting \*
- ~ Grinding of teeth
- ~ Weakness
- ~ Dizziness
- ~ Profuse sweating
- ~ Chills
- ~ Shock symptoms \*
- ~ Fainting \*

\* = Definite indication of the need for medical evaluation!

### COGNITIVE SIGNS

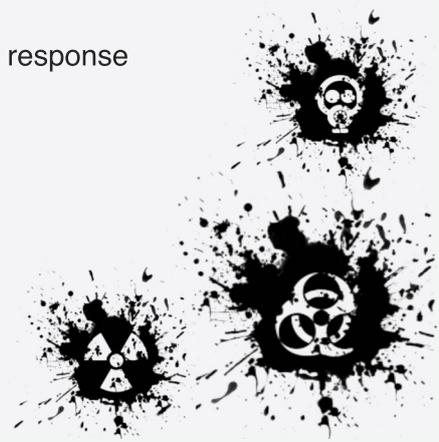
- ~ Blaming someone
- ~ Confusion
- ~ Poor attention
- ~ Poor decisions
- ~ Heightened or lowered alertness
- ~ Poor concentration
- ~ Memory problems
- ~ Hyper-vigilance
- ~ Difficulty identifying familiar objects or people
- ~ Increased or decreased awareness of surroundings
- ~ Poor problem solving



- ~ Poor abstract thinking
- ~ Loss of time, place, or person orientation
- ~ Disturbed thinking
- ~ Nightmares
- ~ Intrusive images

### EMOTIONAL SIGNS

- ~ Anxiety
- ~ Guilt
- ~ Grief
- ~ Denial
- ~ Severe panic (rare)
- ~ Emotional shock
- ~ Fear
- ~ Uncertainty
- ~ Loss of emotional control
- ~ Depression
- ~ Inappropriate emotional response
- ~ Apprehension
- ~ Feeling overwhelmed
- ~ Intense anger
- ~ Irritability
- ~ Agitation



### BEHAVIORAL SIGNS

- ~ Change in activity
- ~ Change in speech patterns
- ~ Withdrawal
- ~ Emotional outbursts
- ~ Suspiciousness
- ~ Change in usual communications
- ~ Loss or increase of appetite \*
- ~ Alcohol consumption \*
- ~ Inability to rest \*
- ~ Antisocial acts
- ~ Non-specific bodily complaints
- ~ Hyperalert to environment
- ~ Startle reflex intensified
- ~ Pacing
- ~ Erratic movements
- ~ Change in sexual functioning \*

\* = Definite indication of the need for medical evaluation!

Individuals who have experienced a traumatic event oftentimes suffer psychological stress related to the incident. IN MOST INSTANCES, THESE ARE NORMAL REACTIONS TO ABNORMAL SITUATIONS.

Individuals who feel they are unable to regain control of their lives, or who experience the following symptoms for more than a month, should consider seeking outside professional mental health assistance.

- ~ Recurring thoughts or nightmares about the event.
- ~ Having trouble sleeping or changes in appetite.
- ~ Experiencing anxiety and fear, especially when exposed to events or situations reminiscent of the trauma.
- ~ Being on edge, being easily startled or becoming overly alert.
- ~ Feeling depressed, sad and having low energy.
- ~ Experiencing memory problems including difficulty in remembering aspects of the trauma.
- ~ Feeling "scattered" and unable to focus on work or daily activities. Having difficulty making de-



isions.

- ~ Feeling irritable, easily agitated, or angry and resentful.
- ~ Feeling emotionally "numb," withdrawn, disconnected or different from others.
- ~ Spontaneously crying, feeling a sense of despair and hopelessness.
- ~ Feeling extremely protective of, or fearful for, the safety of loved ones.
- ~ Not being able to face certain aspects of the trauma, and avoiding activities, places, or even people that remind you of the event.

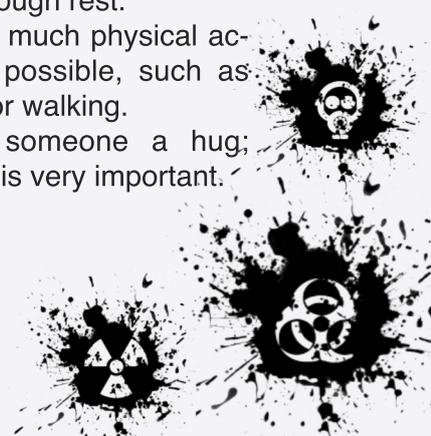
### SPECIAL EFFECTS OF TRAUMA ON YOUNG CHILDREN

- ~ Return to earlier behavior, such as thumb sucking or bed wetting
- ~ Clinging to parents
- ~ Reluctance to go to bed
- ~ Nightmares
- ~ Fantasies that the disaster never happened
- ~ Crying and screaming
- ~ Withdrawal and immobility
- ~ Refusal to attend school
- ~ Problems at school and inability to concentrate

### WHAT YOU CAN DO TO HELP AFTER THE INITIAL CRISIS

Help for You and Your Family

- ~ Recognize your own feelings.
- ~ Talk to others about your feelings; this will help relieve your stress and help you realize that your feelings are shared by other victims.
- ~ Accept help from others in the spirit in which it is given. Wouldn't you help them?
- ~ Whenever possible, take time off and do something you enjoy.
- ~ Get enough rest.
- ~ Get as much physical activity as possible, such as running or walking.
- ~ Give someone a hug; touching is very important.



### Help for Children

- ~ Talk with your child about his or her feelings and your feelings. You will find that many of your feelings are shared, regardless of your child's age. Encourage your child to draw pictures of the event. This will help you understand how he or she views what happened.
  - ~ Talk with your child about what happened, providing factual, honest information that she or he can understand.
  - ~ Reassure your child that you and he or she are safe. Repeat this assurance as often as necessary.
  - ~ Review safety procedures that are now in place, including the role your child can take.
  - ~ Hold your child. Touching provides extra reassurance that someone is there for her or him.
- ~ Spend extra time with your child, especially at bedtime.
  - ~ Relax rules, but maintain family structure and responsibility.
  - ~ Praise and recognize responsible behavior.
  - ~ Work closely with teachers, day-care personnel, baby-sitters and others who may not understand how the disaster has affected your child.

Nena Wiley is President, Pure Pursuit and Certified Traumatic Stress Specialist, Litchfield Park, AZ USA



April 14, 2011



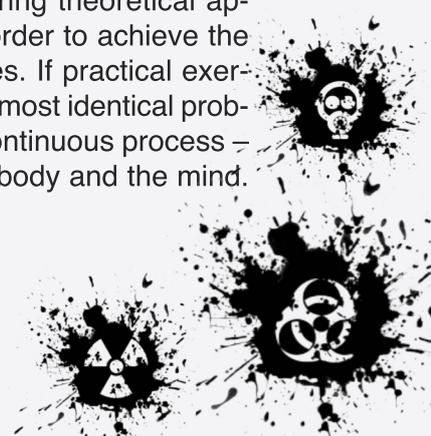
### Editor's Interview with Jane's

***A broad question; why are full-scale exercises like the upcoming EU CREMEX useful? In what ways do you think they might be more useful than tabletop exercises like Citius Torch last year in London?***

We can divide training into theoretical and practical. Same applies with exercises – tabletop and field/full-scale. Each type of training has its own place in the overall preparedness of the participating forces/first responders. Practical training follows theoretical training and aims to implement theory into praxis. If these two important elements are separated from each other then the final outcome might be even dangerous for those participating. Exercises can be regional, national or international. Each type has its own importance since it is a step-up procedure to unify response and fulfil overall planning requirements. Integration is a mandatory aspect of all response plans dealing with mega-terrorism events – conventional or asymmetric. For that purpose, the upcoming EU CREMEX exercise is very important. Same as the previous conducted ASSISTEX-3 organized by the Organization for the Prohibition of Chemical Weapons in Tunis (October 2010). International exercises are most important when comes to CBRNE threats. CBR agents release creates a critical environment that no country can handle alone. Therefore international cooperation and integration is important if such a real incident ever happens. All planners are aware of the difficulties an assisting foreign response force will face when operating in another country, with colleagues with different training and equipment and different procedures and protocols. In order to get most of international support certain elements of response forces should work together, get to know each other, apply similar standard operating procedures and have common plans for confronting new emerging threats. If this is not applicable then it is all about politics.

***You mention below that it's important to get the 'feel' of a CBRN emergency situation through practise - could you elaborate on this? Do you think this applies both to planners and first responders?***

Two equally important questions! Practice is the corner stone of all activities! Theory provides the substrate of knowledge but practice provides the proficiency of doing things the right way. An example: everybody knows that in case of nervous agents release the only protection available is to don your gas mask. They also learn in seminars that they have to put it on fast. They even learn that their time should be less than 11 seconds. For them this important piece of information is translated simply as “fast” or “immediately”. But if you try to practise on this, then you realize that it will take a LOT of time to achieve times less than 11 seconds. If one stays only in theory, he will surely die because there huge difference between “flash” and “thunder”! Practice will correct all the details not mentioned or stressed enough during theoretical approach of CBRNE operations. But practice should also be continuous in order to achieve the desired acclimatization with personal protective equipment and procedures. If practical exercising is conducted once every two years, personnel involved should face almost identical problems like the first time. It is important to realize that CBRNE defence is a continuous process – a full time job. The equipment used influences the functioning of both the body and the mind. We do not put a robe on and rush for action!



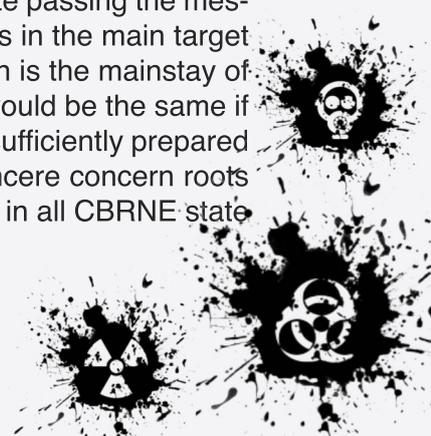
Regarding planners and first responders: Ideally planners should be first responders as well! This combination, although highly desired is not often seen in daily practice... More often planners are highly trained individuals/professionals who have never been into PPE. In that respect they are unaware of the little but important details first responders are confronted with. Lack of practical experience may compromise the entire plan by asking to perform tasks that are not easily accomplished or accomplished at all. An example: during the 2004 Olympic Games preparation we saw on television video clips with first responders in Level "A" PPE to carry stretchers with wounded casualties all the way for underground metro stations to the surface. Similar scenarios were presented in other countries conducting CBRN exercises. But all first responders know that being in Level "A" is an extremely strenuous situation by itself and to carry stretchers is almost impossible. Level "A" gear will provide a "safe window" of 20 to 40 minutes (maximum) to enter the core of the problem, see what is going on, make some measures/take samples and get out as fast as possible. But if the plan says you go in with Level "A" they have no choice but to comply. The situation resembles that of doctors and patients. Doctors very easily order uncomfortable examinations for their patients without bearing into mind the human factor. It would be very helpful for both parts to change positions from time to time in order to have a more spherical view of the situation. In my former Olympic Hospital CBRN Response Unit we had a quota saying: "When planning, think as a terrorist. When implementing, think as a victim!"

### ***What do you think are the main CBRN challenges/potential threats which face planners of the 2012 Olympic in London?***

I think that chemical and radiological threats have the biggest possibilities. If you ask to choose between them, I would surely vote for a dirty bomb. The "dark side" of the UK has the knowledge of bombing and this knowledge could be surely improved by cooperation with imported elements highly expertised in IEDs. Then the radiological source need has the advantage to be contained in a very small lead cylinder that is quite easy to be transported or imported. Are hospitals using radiological sources well guarded? Is radiological material transportation well guarded? Is personnel working in nuclear plants extensively background explored? Similar questions are applicable for the chemical agents and the threat processed. The Tokyo sarin incident can be a leading example on how such an operation can be executed and prepared. Of course in order to achieve high quality chemical warfare agents' one need to have a lot of money, laboratory to work in and specialized scientific personnel able to proceed in such an operation. Aum Shinrikyo had them all; but even then the final product was not of high quality. Perhaps if he had some more time the results would be totally different.

### ***In your opinion, is London sufficiently prepared (to the extent that is possible) for the games? If not, how do you think exercises for first responders might help mitigate the risk?***

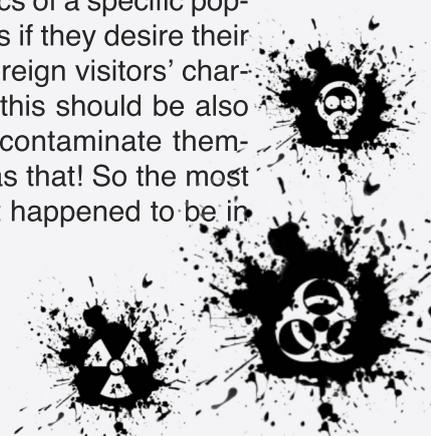
If someone says "Why are ready to handle all threats" replace him immediately! Is London sufficiently prepared? And if I may modify the question "Is the UK sufficiently prepared?" I would not think otherwise! My main focus is rather to the distribution of such preparedness. For sure London will handle the major burden of the Olympic Games. So why bother with London and not attack another Olympic City or even better a city totally irrelevant to the Olympic Games organizing complex? It would be a diversion or a single target that will facilitate passing the message "We are here! We can do it! You are next!" Sometimes planners focus in the main target and "forget" secondary targets projecting the excuse that attacking Big Ben is the mainstay of all terrorist acts. When comes to a big nation such as the UK, the impact would be the same if to happens to Canary Wharf or in a small town in the Midlands. London is sufficiently prepared to the extend that is possible. When comes to CBRNE threats my only sincere concern roots on the medical/hospital community that for me represents the weakest link in all CBRNE state



response plans. When the double-decker exploded in front of the British Medical Society's building all the good doctors rush out to assist and manage casualties. At that time, nobody thought that a chemical or radiological agent might be involved in this extreme incident. The same happened with train blasts in Madrid. The possibility of CBRN agents' usage should be incorporated to the DNA of first responders in order to achieve a reflective way of thinking before acting "What if...?" I have not convinced that this is the case regarding all front-line health professionals in all EU state-members. Supportive in this opinion of mine are the results of the EU-funded ETHREAT Project addressing exactly this specific parameter. The results are not enthusiastic at all according to the evaluation of CBRN experts from all EU countries regarding the level of knowledge and preparedness of their medical counterparts. Exercises will surely identify and improve/correct many gaps and therefore are highly recommended. In Israel, there is a person who periodically visits various major hospitals and their Emergency Departments. When the ED supervisor sees him he asks: "What kind [of exercise]?" He responds: "Chemical" From that moment on, the whole hospital is in "chemical response phase" for the next 5-6 hours. No preparation, no notification in advance, no rumours spread. Perfect surprise – like in real life! During the preparation for the Athens' Olympiad we (a few CBRN experts) were insisting on the inclusion of hospitals in the overall CBRN response web. State authorities and (theoretical) planners were reluctant to do that. Until January 2004 (the year of the games) when with the assistance (and pressure) of the International Advisory Committee, they decided that we were right! Only then they realized that following a real terrorist CBRNE attack, only 20% percent of those involved will remain in place (dead or severely wounded/contaminated) while the remaining 80% will flee to all directions and will rush to all hospital/clinics available. Not to mention the 1:5 ratio of contaminated vs. worried well that will overwhelm hospitals and collapse the national medical system in just a few hours. This is how my unit was created from scratch and finally deployed on time at the Army General Hospital of Athens. We already discussed the importance of international cooperation and integration and the reasoning behind this collaboration. Then why the NATO NBC Battalion was deployed in a city approximately 88 km away from Athens? In CBRNE incidents "time is life"... Still a question with no answer after so many years! But same question reveals all the problems that such an integration and cooperation can solve for the mutual benefit of those involved.

***You've placed an emphasis in the past upon an anthropocentric approach to CBRN management, a very interesting idea. Do you think training and practical exercises are an integral part of such an approach?***

To the term "anthropocentric" I will also add the term "cinematographic". CBRNE management should be highly anthropocentric (Greek complex word: anthropos = man, kentro = center – the man is in the center of a given situation) and cinematographic in concept. Starting from the latter, I would like to stress the inability of planners to conceive the overall picture following a CBRNE attack. If you see movies on bioterrorism or radiological terrorism then you can imagine how it will end up a situation like this. This enables you to plan "big" and not by using the usual patterns of big accident. Planners should have the "depth" of a film producer and multidimensional vision of film makers in order to plan their defences effectively. Anthropocentric approach is based on the behavioural aspects of the populace involved in a CBRNE terrorist act. Planners should be aware of how people react in stressing conditions when their lives are at stake. If this is the case nothing will work the "normal way". The characteristics of a specific population should be highly examined and incorporated in the planning process if they desire their planning to be a successful one. I also add that during mega-events the foreign visitors' characteristics will influence the overall behaviour of the local population and this should be also noted and taken into account. Western women might strip entirely to decontaminate themselves; Muslim women will not even the death threat is imminent. Simple as that! So the most important question to ask themselves, is: "What would be MY reaction if it happened to be in



the warm zone of the CBRNE incident?” This anthropocentric approach might help to solve other functional problems as heavy traffic burden and will provide ideas and innovations that will overcome the problems i.e. having first responders approaching on fully equipped 4-wheeled instead of big vehicles that can pass through jammed lines.

***You've also mentioned in the past that international co-operation is vital to counter-terror planning - how do you think planners and first responders might benefit from working together in an exercise situation?***

I am a big fan of international cooperation in all levels and forms. When you participate in an international medical congress you do not go there in order to learn basics of your medical speciality. You attend in order to hear new things, new applications of drugs and procedures, rare case studies and meet colleagues from various parts of the world. When you train with colleagues from abroad you test and/or your own tactics and procedures; you even “copy-and-paste” little details that might be the solution of a specific problem you face in your unit. Little by little, you finalize your SOPs and you are able to work with others in similar lines of work because you “know” them. You know them both personally and operationally. You know what they can do and how to do it. You know their capabilities but also their limitations. In that respect, you can plan in advance their exact future role in case of real incident where international assistance might be required. These principles apply not only on field operators but for planners as well. Different approaches, different mindsets, different priorities all lead to the same result: a better plan. Especially in planning process, an “outsider” might have a more “clear eye” to spot gaps in the overall plan. Very often those deeply involved miss obvious points because they have the whole picture in mind and this makes them to omit certain actions or procedures of small or big importance. Without aiming to be rude or impolite I would like to comment on the attitude many UK experts show met at international fora (forums) and conferences. They are not comfortable with comments regarding UK preparation issues and in most instances “long faces” accompany remarks or observations in person or from the audience. Especially, when these comments are expressed by a representative of a small country like Greece and usually when medical people were present. But the thing is that they forget that we have done the Games, have been to their shows and we know a little better the problems faced DURING the games – real problems not virtual hypotheses. When people work together for a common cause then the resulting plan is more effective and more comprehensive than each group working alone. Exchange of ideas and proposals is the easiest and most economic way to solve problems. Besides, when planners and first responders from around the globe work together around a round table they do not represent countries but only their minds that are eager to create a brainstorm for the benefit of the global community and our societies.

I would like to thank Jane's for giving me the opportunity to openly address their questions and share my experience with their audience. – JG



# CRISTANINI CBRN DECONTAMINATION SYSTEMS



A5009

CONFORM TO THE QUALITY SYSTEM STANDARD AQAP 2110  
and ISO 9001:2008



DEPLOYABLE CBRN  
ANALYTICAL  
LABORATORY (STANAG 4632)



DDMAS LARGE SCALE  
DECONTAMINATION SYSTEM  
HIGHLY DEPLOYABLE



DEPLOYABLE BIO LABORATORY  
CLASS III BIO SECURITY LEVEL



DDMAS LARGE SCALE  
DECONTAMINATION SYSTEM  
DUAL OPERATORS



RVCBRN TRAILER FOR CBRN  
DECONTAMINATION AND  
DETOXIFICATION



MOBILE SYSTEM FOR  
AIRCRAFT DECONTAMINATION



TSDM-TACTICAL STEAM  
DECON MODULE

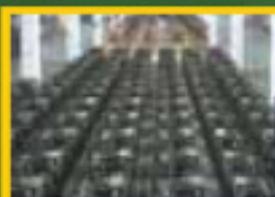
**ONLY ONE PERSON  
ONLY ONE MACHINE  
ONLY ONE PRODUCT**



SANJET C 1126 HR CBRN DUAL  
OPERATOR DECONTAMINATION  
AND DETOXIFICATION GROUP



SX34 CBRN DECONTAMINATION  
OF SENSITIVE EQUIPMENT  
AND SURFACES



CBRN PRODUCTION LINE



**CRISTANINI**

37010 RIVOLI - VERONA - ITALY

Tel. +39-045-6269400 - Fax +39-045-6269411

cristanini@cristanini.it - [www.cristanini.com](http://www.cristanini.com)

Osama bin Laden – the End

# CBRNE-TERRORISM Newsletter

Volume 38 - 2011



Japan's triple catastrophe  
CBRN security at London 2012  
UK DGBRNC  
Agroterrorism  
Forest Fires can be a **Tactic of Terrorism**  
Climate change and global **security**  
CBRN training for **Photographers and TV Crews**  
Innovative chem-bio sensor  
E. Coli 0104 – **Terror in Germany**  
Iran has secretly stocked **enriched uranium**  
for 4 nuclear bombs  
15 US nuclear reactors are **located in**  
an active seismic zone

Chem News

Carry **spice** could be used  
to detect explosives  
How IEDs work  
What if there is a **US-China**  
cyber-**war in 2020?**  
Latin **America: Terrorism issues**



*Fukushima*

[www.cbrne-terrorism-newsletter.com](http://www.cbrne-terrorism-newsletter.com)

## Chem News

### Chemical Corps tests new equipment

By Staff Sgt. Luke A. Graziani, 4th Public Affairs Detachment and Sgt. Andrea Merritt, 4th Public Affairs Detachment

Source: <http://www.army.mil>

Soldiers of the 4th Platoon, 181st CBRN Company, conduct a mounted reconnaissance mission during a field training exercise March 3 at Fort Hood, Texas, with the new M1135 Nuclear, Biological and Chemical Reconnaissance Vehicle, also known as the NBC RV Stryker.

Soldiers here field-tested the newest equipment for chemical, biological, radiological and nuclear reconnaissance during an exercise Feb. 28 - March 4. The new M1135 NBC Reconnaissance Vehicle, a Stryker-platform vehicle capable of detecting and identifying chemical, biological, radiological and nuclear, commonly referred to as CBRN, hazards, was used by Soldier of the 181st CBRN Company. They also field-tested the new Dismounted Reconnaissance Sets, Kits and Outfits, or DRSKO.



Spc. Michael Throm, a chemical, biological, radiological and nuclear specialist with 3rd Platoon, 181st CBRN Company, helps to secure the perimeter during practical field exercises March 2 at Fort Hood, Texas. He is guarding the new Dismounted Reconnaissance Sets, Kits and Outfits, or DRSKO, the white container on the truck bed.

Outwardly the modular DRSKO looks like an unmarked storage container. But equipment inside allows Soldiers to detect and identify CBRN hazards as well as toxic industrial chemicals and materials. It also contains a variety of protective suits and equipment for decontamination, sample collection, marking contaminated areas, and hazard reporting. "The equipment we have is an extreme improvement over what's been around in the past," said 1st Lt. Jaciel Guerrero, the 3rd Platoon leader, 181st CBRN Company. "Not only do we have the capabilities to detect conventional



weapons of mass destruction, normal chemical agents, biological, radiological and nuclear agents, but now we can detect a lot of the industrial chemicals and industrial materials you may find anywhere, no matter what country or what region you're in."

The NBC RV Stryker, unlike its predecessor the M93A1 Fox, provides protection from small arms fire, houses a remote weapons system which enables the platoon to provide its own security, and has equipment that allows the Soldiers inside to collect samples without ever getting out of the vehicle. "It's not just a chemical vehicle," said Sgt. Dustin Goldman, an NBC RV truck commander with 4th Platoon of the 181st CBRN Co. "It's a combat vehicle with chemical capabilities."

In the past year, the 181st CBRN Company has conducted various training on the equipment in locations such as Dugway Proving Ground, Utah, and Fort Leonard Wood, Mo. After a six-month fielding process, it was the first chemical unit to use the new equipment in a practical field exercise.

"Everyday's a learning process for us," said Spc. Eric Klopp, a surveyor with 4th Platoon, 181st CBRN Co. "We might find a mistake here and there in our training methods and we correct them on the spot. There isn't really a general set [Standard Operating Procedure] on this piece of equipment yet, so we are kind of creating our own as we go."

As Soldiers of the mounted reconnaissance platoon trained with the NBC RV, the Soldiers of the 3rd Platoon, 181st CBRN Co., the dismounted reconnaissance platoon, conducted sensitive site assessments with the DRSKO. "Not only are we a platoon that can deal with emergency situations, but we can also help civil affairs," said Guerrero. "(If) you have a village where people are maybe getting sick and showing symptoms of certain

types of chemicals or materials that may be toxic to a human, we can go out there, we can test water, we can test soil. We can test the walls inside of a building; pretty much anything the person may have come in contact with."

After training separately for a few days with their new equipment, the platoons were ready to work together on a mission, which culminated the last day of the exercise. During the training scenario, the mounted reconnaissance platoon cleared a path toward the objective then provided overwatch as the dismounted platoon conducted a sensitive site assessment on the target. "We've had the unique opportunity with mounted and dismounted systems to be able to combine those two in a more urban environment which is what we're generally seeing in combat today," said 1st Lt. Allison Brown, the executive officer for the 181st CBRN Co.

Despite hours holed up inside the NBC RV Stryker and hours covered in hot, protective gear from the DRSKO, the Soldiers were excited to work with the equipment and put 100 percent effort into the training. "It's really great to see Soldiers be excited about their job because when they are, they work their hardest," Brown said. "It's an easy job for the leadership and it's a privilege to be around Soldiers who are enthusiastic, motivated and ready to work every single day."

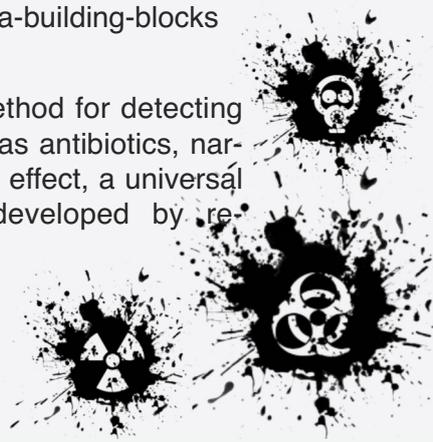
Through the training, Soldiers not only gained valuable knowledge and experience from using the new equipment, but also insight into what it's like to be on the cutting edge of CBRN reconnaissance technology. "The challenge is to field the new equipment and to make sure that all the Soldiers are constantly trained on the most cutting-edge technology that the Chemical Corps has to offer," Brown said.

## Universal detector made of DNA building blocks

Source: <http://homelandsecuritynewswire.com/universal-detector-made-dna-building-blocks>

Aptamers are composed of the building blocks of the genetic material DNA; scientists show that aptamers can be used quantitatively to detect and accurately examine multi-

faceted substances; a method for detecting such diverse substances as antibiotics, narcotics, and explosives - in effect, a universal detector -- has been developed by re-

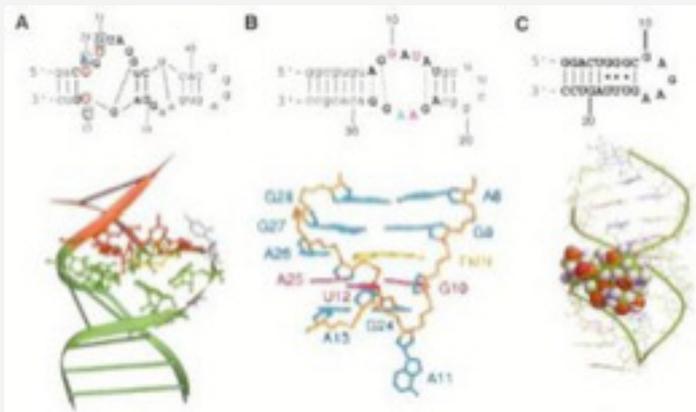


searchers at the Max Planck Institute for Polymer Research in Mainz

Aptamers are composed of the building blocks of the genetic material DNA; scientists show that aptamers can be used quantitatively to detect

and accurately examine multifaceted substances; a method for detecting such diverse substances as antibiotics, narcotics, and explosives - in effect, a universal detector — has been developed by researchers at the Max Planck Institute for Polymer Research in Mainz. The key element of this is an atomic force microscope that can be used to subject individual molecules to a tensile test. The Mainz-based researchers are therefore focusing on aptamers, which are composed of the building blocks of the genetic material DNA. If the substance researched binds to the aptamers, the force at which they tear apart changes. In this way, the substance can not only be accurately detected at small concentrations, but can also be studied more precisely. It is therefore possible for instance to investigate how the substances researched bind to aptamers, and how great their binding strength is (Journal of the American Chemical Society, 2 February 2011).

Aptamers are a practically ideal means of detecting an extremely wide variety of chemicals. Typically, they consist of the building blocks from the hereditary materials DNA and RNA, and combine universality with specificity. They form, as it were, a box of bait with which to catch another kind of fish. Their versatility results from the innumerable possibilities of varying the sequence of the four bases of which DNA is composed. Their specificity, on the other hand, results from the physical structure that a strand of DNA with a certain base sequence adopts. This produces in the aptamer individually formed pockets into which only certain molecules fit - rather like a



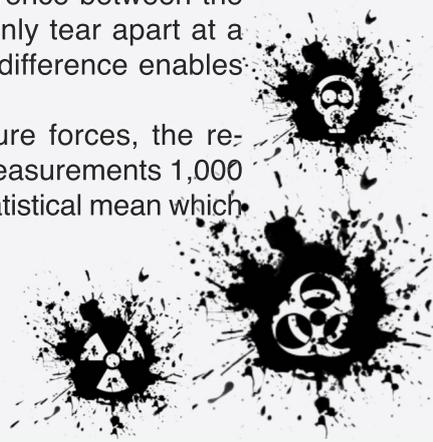
Meet the aptamers // Source: uni-marburg.de

clay figure in its mould. "Aptamers with appropriate pockets can be found for most molecules, be they antibiotics, cocaine, TNT or proteins," explains Rüdiger Berger of the Max Planck Institute for Polymer Research.

Among the appropriate aptamers, the researchers in Mainz are looking for one that can be split into two parts in such a way that the target molecule bound in the pocket forms a bridge between the two halves. An aptamer such as this could be found mostly in pre-selection, explains Mark Helm of the Institute of Pharmacy at the Johannes Gutenberg University Mainz, co-author of the study. For their first trials with the universal detector, the researchers selected adenosine monophosphate (AMP) as the target molecule and an aptamer with pockets for two AMP molecules.

They then fix one half of the split aptamer to the tip of an atomic force microscope and the other to a support. When they then lower the tip and the halves come into contact, hydrogen bridge bonds form between individual bases of the two aptamer halves. If the tip is withdrawn, the joined aptamer is stretched like a spring. The force this produces can be measured: it increases with the strain until the halves tear apart at a certain force. In a second trial, before ripping apart, the researchers added a solution of the biomolecule adenosine monophosphate (AMP) to the system. In this way, two AMP molecules are placed in the free pockets; both then form hydrogen bridge bonds with the two halves of the aptamer. As a result of this bridge function, the AMP molecules reinforce the coherence between the two parts and therefore only tear apart at a much greater force. This difference enables the AMP to be detected.

To determine the rupture forces, the researchers repeated the measurements 1,000 times and determined a statistical mean which



was around 39 piconewtons for the AMP-loaded aptamer, around 12 piconewtons higher than without the AMP. As a control, they used a mutated aptamer with a differently formed binding pocket in which the rupture force did not change. The binding strength between the AMP and the aptamer can also be readily determined by splitting the aptamer into two. To do this, the concentration of the AMP molecules in the solution was increased stepwise until approximately half of all tensile tests showed an increase in the tear force. The greater the concentration necessary for this, the smaller the binding strength is.

The new method is suitable not only for detecting certain molecules in a solution, but also for researching individual molecules, says Rüdiger Berger. "For example, with a defined force you can pull the aptamer without tearing it and examine how the properties of the molecule-aptamer bond changes", he

continues. The target molecule could also be changed so that it forms, for example, only two hydrogen bridge bonds with the pocket instead of three. "This makes it possible to understand which bonds between the target molecule and the aptamer are significant", he explains.

Knowledge of aptamers and their binding properties has great application potential. DNA fragments are already being used today for environmental analysis and in medical diagnostics; their uses as molecular tools and building blocks can be expanded even further with the new method thanks to the fresh insight, says Rüdiger Berger.

—Read more in Thi-Huong Nguyen et al., "Measuring Single Small Molecule Binding via Rupture Forces of a Split Aptamer," *Journal of the American Chemical Society* 133, no. 7 (2 February 2011): 2025-27 (DOI: 10.1021/ja1092002)

## Breakthrough In Ultra-Sensitive Sensor Technology

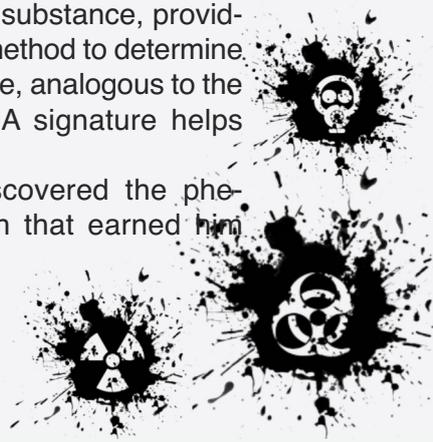
Source: <http://www.medicalnewstoday.com/articles/219799.php>

Princeton researchers have invented an extremely sensitive sensor that opens up new ways to detect a wide range of substances, from tell-tale signs of cancer to hidden explosives. The sensor, which is the most sensitive of its kind to date, relies on a completely new architecture and fabrication technique developed by the Princeton researchers. The device boosts faint signals generated by the scattering of laser light from a material placed on it, allowing the identification of various substances based on the color of light they reflect. The sample could be as small as a single molecule. The technology is a major advance in a decades-long search to identify materials using Raman scattering, a phenomena discovered in the 1920s by an Indian physicist, Chandrasekhara Raman, where light reflecting off an object carries a signature of its molecular composition and structure. "Raman scattering has enormous potential in biological and chemical sensing, and could have many applications in industry, medicine, the military and other fields," said Stephen Y. Chou, the professor of electrical engineering

who led the research team. "But current Raman sensors are so weak that their use has been very limited outside of research. We've developed a way to significantly enhance the signal over the entire sensor and that could change the landscape of how Raman scattering can be used."

Chou and his collaborators, electrical engineering graduate students, Wen-Di Li and Fei Ding, and post-doctoral fellow, Jonathan Hu, published a paper on their innovation in February in the journal *Optics Express*. The research was funded by the Defense Advanced Research Projects Agency. In Raman scattering, a beam of pure one-color light is focused on a target, but the reflected light from the object contains two extra colors of light. The frequency of these extra colors are unique to the molecular make-up of the substance, providing a potentially powerful method to determine the identity of the substance, analogous to the way a finger print or DNA signature helps identify a person.

Since Raman first discovered the phenomena - a breakthrough that earned him



Nobel Prize - engineers have dreamed of using it in everyday devices to identify the molecular composition and structures of substances, but for many materials the strength of the extra colors of reflected light was too weak to be seen even with the most sophisticated laboratory equipment. Researchers discovered in the 1970s that the Raman signals were much stronger if the substance to be identified is placed on a rough metal surface or tiny particles of gold or silver. The technique, known as surface enhanced Raman scattering (SERS), showed great promise, but even after four decades of research has proven difficult to put to practical use. The strong signals appeared only at a few random points on the sensor surface, making it difficult to predict where to measure the signal and resulting in a weak overall signal for such a sensor.

Abandoning the previous methods for designing and manufacturing the sensors, Chou and his colleagues developed a completely new SERS architecture: a chip studded with uniform rows of tiny pillars made of metals and insulators. One secret of the Chou team's design is that their pillar arrays are fundamentally different from those explored by other researchers. Their structure has two key components: a cavity formed by metal on the top and at the base of each pillar; and metal particles of about 20 nanometers in diameter, known as plasmonic nanodots, on the pillar wall, with small gaps of about 2 nanometers between the metal components. The small particles and gaps significantly boost the Raman signal. The cavities serve as antennae, trapping light from the laser so it passes

the plasmonic nanodots multiple times to generate the Raman signal rather than only once. The cavities also enhance the outgoing Raman signal. The Chou's team named their new sensor "disk-coupled dots-on-pillar antenna-array" or D2PA, for short. So far, the chip is a billion times (10<sup>9</sup>) more sensitive than was possible without SERS boosting of Raman signals and the sensor is uniformly sensitive, making it more reliable for use in sensing devices. Such sensitivity is several orders of magnitude higher than the previously reported.

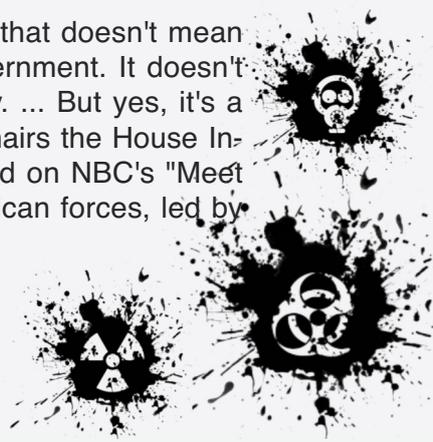
Already, researchers at the U.S. Naval Research Laboratory are experimenting with a less sensitive chip to explore whether the military could use the technology pioneered at Princeton for detecting chemicals, biological agents and explosives. In addition to being far more sensitive than its predecessors, the Princeton chip can be manufactured inexpensively at large sizes and in large quantities. This is due to the easy-to-build nature of the sensor and a new combination of two powerful nanofabrication technologies: nanoimprint, a method that allows tiny structures to be produced in cookie-cutter fashion; and self-assembly, a technique where tiny particles form on their own. Chou's team has produced these sensors on 4-inch wafers (the basis of electronic chips) and can scale the fabrication to much larger wafer size. "This is a very powerful method to identify molecules," Chou said. "The combination of a sensor that enhances signals far beyond what was previously possible, that's uniform in its sensitivity and that's easy to mass produce could change the landscape of sensor technology and what's possible with sensing."

## Rep. Rogers: 'Concern' about Libyan 'terrorist threat'

Source:<http://thehill.com/blogs/blog-briefing-room/news/153489-rep-rogers-concern-about-libyan-terrorist-threat>

Michigan Rep. Mike Rogers (R) said there's "concern" elements of al Qaeda may have infiltrated the rebel forces in Libyan, but said the possibility of Col. Moammar Gadhafi remaining in power was more worrying. "Well, in most Middle East countries there are ele-

ments of al Qaeda. Now that doesn't mean they're a part of the government. It doesn't mean they're the majority. ... But yes, it's a concern," Rogers, who chairs the House Intelligence Committee, said on NBC's "Meet the Press" Sunday. American forces, led by



NATO, are conducting a bombing campaign against Gadhafi's forces in support of a ragtag rebel army. Rogers said the Libyan leader staying on power would be dangerous on account of his past support for terrorism and the weapons he has stockpiled. I think if you have a stalemate with Moammar Gadhafi still in power when you have this split country where he still possesses stockpiles of some pretty awful stuff, I think you have to worry that he is a terrorist threat," he said. "We ought to stand with the president on making this a positive outcome for the United States. Again, the peo-

ple of Libya." Still, Rogers again expressed his reluctance to arm the Libyan rebels. "What we need to know is who they are," he said. "We know what they're against, the rebels. We know they're against Moammar Gadhafi remaining in power, but we don't know what they're for." Instead, he suggested the special forces from the Arab League's militaries could be used to assist the rebels. "If the Arab League is putting those types of forces on the ground, you know, good on 'em," he said. "The rebels could certainly use that help and support from the Arab League."

## Libyan rebels sold Hizballah and Hamas chemical shells

Source: <http://www.debka.com/article/20811/>

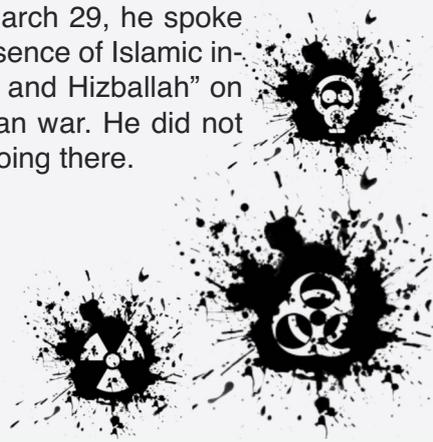
Senior Libyan rebel "officers" sold Hizballah and Hamas thousands of chemical shells from the stocks of mustard and nerve gas that fell into rebel hands when they overran Muammar Qaddafi's military facilities in and around Benghazi, debkafile's exclusive military and intelligence sources report.



US Adm. James Stavridis

Word of the capture touched off a scramble in Tehran and among the terrorist groups it sponsors to get hold of their first unconventional weapons. According to our sources, the rebels offloaded at least 2,000 artillery shells carrying mustard gas and 1,200 nerve gas shells for cash payment amounting to several million dollars. US and Israeli intelligence agencies have tracked the WMD consignments from eastern Libya as far as Sudan in convoys secured by Iranian agents and Hizballah and Hamas guards. They are not believed to have reached their destinations in Lebanon and the Gaza Strip, apparently waiting for an opportunity to get their deadly freights through without the US or Israel attacking and destroying them. It is also not clear whether the shells and gases were as-

sembled upon delivery or were travelling in separate containers. Our sources report that some of the poison gas may be intended not only for artillery use but also for drones which Hizballah recently acquired from Iran. Tehran threw its support behind the anti-Qaddafi rebels because of this unique opportunity to get hold of the Libyan ruler's stock of poison gas after it fell into opposition hands and arm Hizballah and Hamas with unconventional weapons without Iran being implicated in the transaction. Shortly after the uprising began in the third week of February, a secret Iranian delegation arrived in Benghazi. Its members met rebel chiefs, some of them deserters from the Libyan army, and clinched the deal for purchasing the entire stock of poison gas stock and the price. The rebels threw in a quantity of various types of anti-air missiles. Hizballah and Hamas purchasing missions arrived in the first week of March to finalize the deal and arrange the means of delivery. The first authoritative American source to refer to a Hizballah presence in Benghazi was the commander of US NATO forces Adm. James Stavridis. When he addressed a US Senate committee on Tuesday, March 29, he spoke of "telltale signs of the presence of Islamic insurgents led by Al-Qaeda and Hizballah" on the rebel side of the Libyan war. He did not disclose what they were doing there.



### Special operations team hit top Iranian-Hamas arms smugglers in Sudan

Source: <http://www.debka.com/article/20821/>

In accusing Israel of killing the two passengers of a Hyundai Sinai near Port Sudan Tuesday, April 5, the Sudanese Foreign Minister Ali Karti alleged a missile was fired from an aerial drone or a vessel on the Red Sea. debkafile's exclusive military and intelligence sources reveal that a special operations unit landed by sea and used a surface missile to hit the car and kill two top handlers of the Iranian-Hamas arms smuggling network in Sudan. The assailants waylaid the vehicle as it drove through the Kalaneeb region on the only blacktop road running through the Sudanese desert between Khartoum and Port Sudan.

Our sources further reveal that the passengers killed in the car did not arrive at Port Sudan airport by air, as previously reported, but by road from the northeastern Sudanese town of Atbara, which lies 344 kilometers north of Khartoum at the meeting-point of the Blue and White Niles. This town of some 120,000 inhabitants is the base of operations of one of the largest and most ruthless arms smuggling network operating out of Sudan.

This network's long and murky record goes back to the 1980s and 1990s when it served al Qaeda. Its top operatives include members of the Masoud al-Qosi clan, some of whom joined up with Osama bin Laden and quit Sudan with him when he returned to Afghanistan in 1996. One of Bin Laden's bodyguards, Ibrahim al Qosi, has spent the last seven years at the detention facility in Guantanamo Bay awaiting trial. Over the years, Iranian and Hamas agents were given a niche in the expanding Sudanese smuggling ring to oversee the execution of the deals they commissioned for smuggling arms into Gaza. Those agents recently withdrew from direct involvement and deputized network members to handle the route to Gaza.



Remains of smugglers' car near Port Sudan

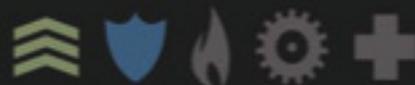
Its most recent commission was the covert transfer of mustard and nerve gas consignments which Hamas and Hizballah buyers purchased with Iranian funding and direction from Libyan rebels in Benghazi and which were bound for Lebanon and the Gaza Strip – as debkafile was first to disclose on March 31. The "merchandise" had reached Sudan from Libya in convoys under special Hizballah and Hamas guard.

On April 6, after the attack on the car, top Sudanese intelligence and military investigators arrived on the scene at around 18:00 hours to try and establish who perpetrated the attack and identify the two dead men. They found the bodies too blackened and burnt to identify and their personal documents mostly destroyed in the flames. Khartoum then turned to Cairo with an urgent request for counter-terror and missile experts to help in the inquiry. They were also stalled by lack of proper forensic investigation gear. In their initial examination, the Sudanese investigators believed they found Iranian ID belonging to one of the passengers while the second looked like a Palestinian; one of them had died in the car, the second outside. In the absence of local missing persons, the pair were presumed to be outsiders. They also deduced that the hit-team was picked up by helicopter straight after the attack and flown to a ship standing by off the Red Sea coast of Sudan. The noise it made gave rise to the theory that car had been struck by an airborne missile.

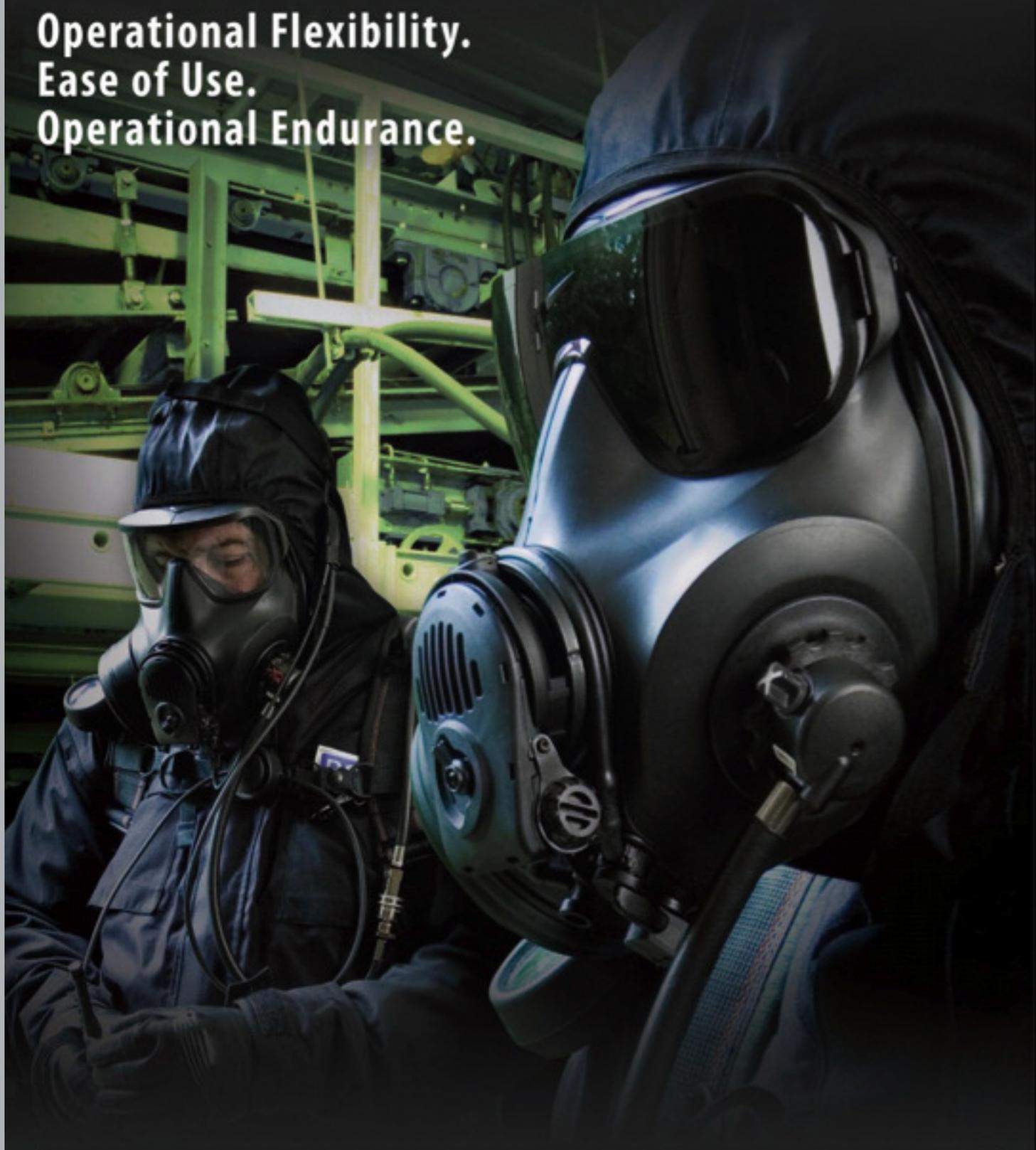
The method of attack and clean getaway pointed to a sophisticated military organization capable of unconventional operations across great distances spanning thousands of kilometers. It would have required competent military intelligence support in places as far apart as Atbara, Kalaneeb, Port Sudan and the Red Sea.



# ST53



Operational Flexibility.  
Ease of Use.  
Operational Endurance.



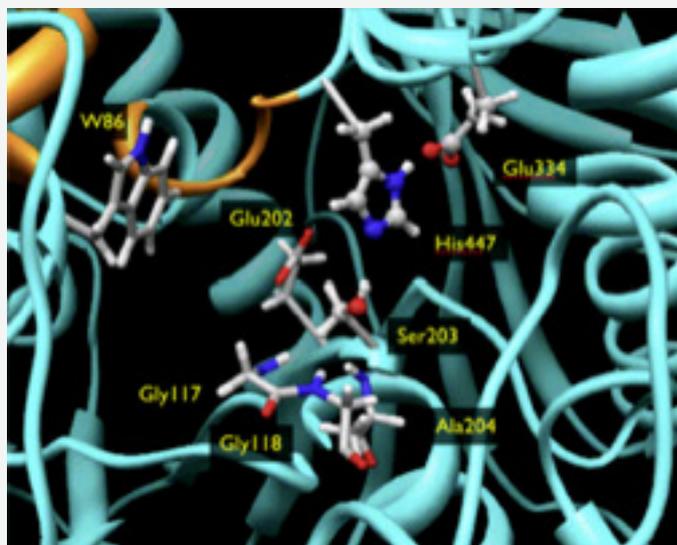
**AVON**  
PROTECTION

1 888 286 6440  
[www.avon-protection.com](http://www.avon-protection.com)

© 2011 Avon Protection Systems, Inc.

### Chemist developing solution to nerve agent exposure

Source: <http://www.osc.edu/press/releases/2011/hadad.shtml>



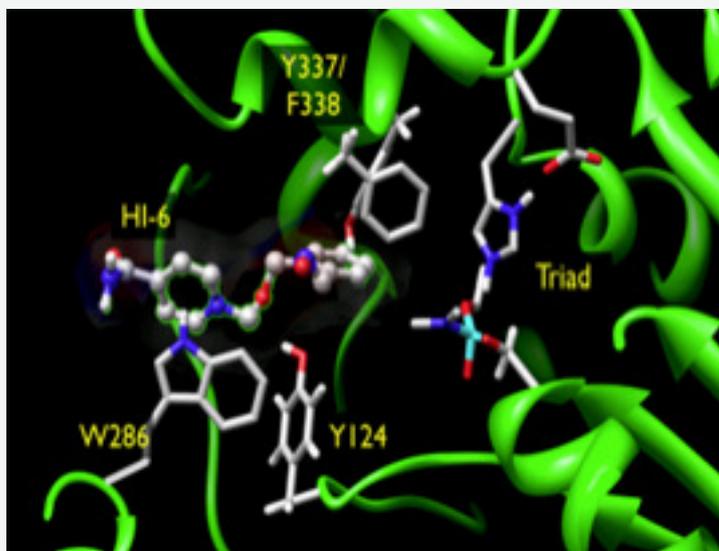
Preliminary simulations conducted by Ohio State Professor Christopher Hadad identify catalytic amino acid residues and other critical binding residues in the active site of AChE.

Scientists are working to develop a new drug that will regenerate a critical enzyme in the human body that "ages" after a person is exposed to deadly chemical warfare agents; the drug will counter the effects of Tabun, VX, VR, Sarin, Soman, Cyclosarin, and Paraoxon, all of which take on a similar molecular structure upon aging. Christopher Hadad, Ph.D., professor of chemistry at the Ohio State University (OSU), is leveraging Ohio Supercomputer Center (OSC) resources to help develop a more effective antidote to lethal chemicals called organophosphorus (OP) nerve agents. "This project is a combination of synthetic and computational organic chemistry conducted through OSC at Ohio State, and biochemical studies conducted by colleagues at the U.S. Army Medical Research Institute of Chemical Defense at Aberdeen Proving Ground in Maryland," said Hadad.

OP nerve agents inhibit the ability of an enzyme called acetylcholinesterase (AChE) to turn off the messages being delivered by

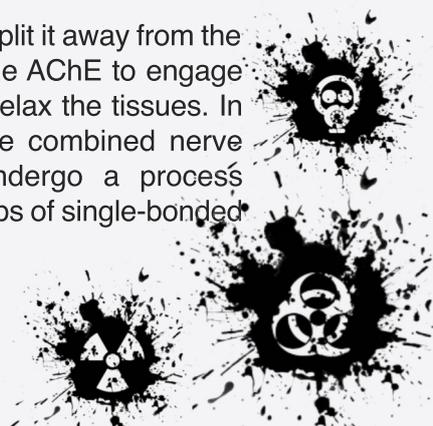
acetylcholine (ACh), a neurotransmitter, to activate various muscles, glands, and organs throughout the body. After exposure to OP agents, AChE undergoes a series of reactions, culminating in an "aging" process that inactivates AChE from performing its critical biological function. Without the application of an effective antidote, neurosynaptic communication continues unabated, resulting in uncontrolled secretions from the mouth, eyes and nose, as well as severe muscle spasms, which, if untreated, result in death.

Conventional antidotes to OP nerve agents block the activity of the nerve agent by introducing oxime compounds, which have been the focus of a number of studies. These compounds attach to the phosphorus atom of the nerve agent, after the OP is



A docking simulation constructed by Ohio State Professor Christopher Hadad illustrates binding in the active site of tabun-inhibited AChE.

bound to AChE, and then split it away from the AChE enzyme, allowing the AChE to engage with receptors and finally relax the tissues. In some cases, however, the combined nerve agent/AChE molecule undergo a process called aging, in which groups of single-bonded



carbon and hydrogen atoms called alkyl groups are removed from the molecule and a phosphonate residue is left behind in the AChE active site. Relatively unstudied in nerve agents, this process, called dealkylation, makes the nerve agent/AChE molecule unresponsive to oximes — an unfortunate situation, considering that certain nerve agents (for example, soman) can undergo aging within minutes of exposure to AChE.

Hadad's study is focused on the identification of compounds that would return an appropriate alkyl group to the aged nerve agent/AChE molecule, thus allowing treatment with oximes to provide for complete recovery. The project is investigating common OP nerve agents Tabun, VX, VR, Sarin, Soman, Cyclosarin, and Paraoxon, all of which take on a similar molecular structure upon aging. "Computational studies of the interaction of the alkylating compounds with AChE were used to provide insight for the design of selective reagents," Hadad explained.

"Ligand-receptor docking, followed by molecular dynamics simulations of the interactions of alkylating compounds with aged OP-AChE, was carried out in conjunction with experimental studies to investigate the binding of alkylating compounds to AChE. These results were then used to suggest interactions that aided in the orientation of alkylating compounds for maximal efficacy." Throughout the project, Hadad employed computational studies to guide the progress of each objective, as well as to rationalize the observed experimental results. "Dr. Hadad's work on this project has made use of a range of the tools of electronic structure theory, molecular docking, molecular dynamics and hybrid quantum mechanical/molecular mechanical methods," said Ashok Krishnamurthy, interim co-executive director of OSC. "It was by design that OSC's flagship system, the Glenn IBM 1350 Opteron cluster, was developed to meet the needs of the bioscience research investigators, such as Dr. Hadad."

### Innovative chem-bio sensor

Source: [http://www.cbrneltd.com/index.php?p=chem\\_bio\\_dual\\_sensor](http://www.cbrneltd.com/index.php?p=chem_bio_dual_sensor)



CBRNE Ltd is liaising the development and marketing of a Chemical and Biological dual sensor for use in the EU. The biosensor utilizes a biofilm based on lung cells, which is attached to a silicon plate (either oxidized or unoxidized) at a standard uniform thickness of 200 Angstroms. Commercial-off-the-shelf technology has been used to build the working biosensor prototype.

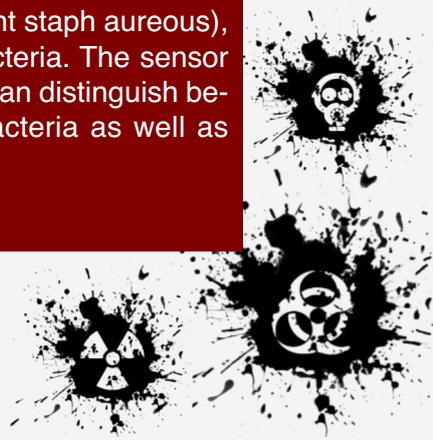
#### Test Agents

The sensor has detected over 30 different test agents. The sensor has the capability to measure gases to less than 20 ppm and explosives vapors generated from a bomb-sniffing dog training kit (1.5 grams of explosives fused in 15 grams of silica) for RDX, PETN, TNT, chlorates, and nitrates.

#### Airborne Chemicals

Additionally, the biosensor can detect airborne chemicals (jet fuel, acetone, ethanol, methanol, etc.), radioactive particles (99mTc to < 25  $\mu$ Ci), and airborne biological agents such as bacteria and viruses. Extensive tests have included MRSA (methicillin-resistant staph aureous), staph aureous, staph epidermidis, strep, and haemophilus influenzae bacteria. The sensor has been able to measure < 30 colony-forming units (CFU) of MRSA and can distinguish between MRSA and very similar staph aureous and staph epidermidis bacteria as well as haemophilus influenzae and strep bacteria.

For further information please contact CBRNE Ltd at [info@cbrneltd.com](mailto:info@cbrneltd.com)



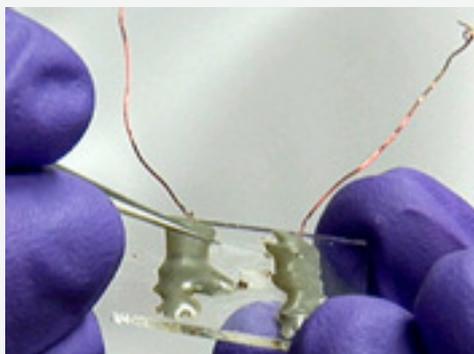
### Battery-less chemical detector developed

Source: <https://www.llnl.gov/news/newsreleases/2011/Apr/NR-11-04-02.html>

Conventional chemical detectors require an external power source, but Lawrence Livermore researchers have developed a nanosensor that relies on semiconductor nanowires rather than traditional batteries; the device overcomes the power requirement of traditional sensors and is simple, highly sensitive, and can detect various molecules quickly; its development could be the first step in making an easily deployable chemical sensor for the battlefield.

Unlike many conventional chemical detectors that require an external power source, Lawrence Livermore researchers have developed a nanosensor that relies on semiconductor nanowires, rather than traditional batteries. The device overcomes the power requirement of traditional sensors and is simple, highly sensitive, and can detect various molecules quickly. Its development could be the first step in making an easily deployable chemical sensor for the battlefield.

The Lab's Yinmin "Morris" Wang and colleagues Daniel Aberg, Paul Erhart, Nipun Misra, Aleksandr Noy, and Alex Hamza, along with collaborators from the University of Shanghai for Science and Technology, have fabricated the first-generation battery-less detectors that use one-dimensional semiconductor nanowires (see a video of Wang describing the new device).



The sensor part of the device is about 2 millimeters in size.

The nanosensors take advantage of a unique interaction between chemical species

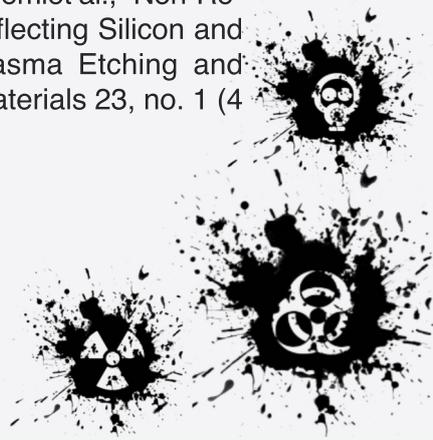
and semiconductor nanowire surfaces that stimulate an electrical charge between the two ends of nanowires or between the exposed and unexposed nanowires. The group tested the battery-less sensors with different types of platforms - zinc-oxide and silicon — using ethanol solvent as a testing agent. In the zinc-oxide sensor the team found there was a change in the electric voltage between the two ends of nanowires when a small amount of ethanol was placed on the detector. "The rise of the electric signal is almost instantaneous and decays slowly as the ethanol evaporates," Wang said.

When the team placed a small amount of a hexane solvent on the device, however, little electric voltage was seen, "indicating that the nanosensor selectively responds to different types of solvent molecules," Wang said. The team used more than fifteen different types of organic solvents and saw different voltages for each solvent. "This trait makes it possible for our nanosensors to detect different types of chemical species and their concentration levels," Wang said.

The response to different solvents was somewhat similar when the team tested the silicon nanosensors. The voltage decay as the solvent evaporated, however, was drastically different from the zinc-oxide sensors. "The results indicate that it is possible to extend the battery-less sensing platform to randomly aligned semiconductor nanowire systems," Wang said.

The team's next step is to test the sensors with more complex molecules such as those from explosives and biological systems. The research appears on the inside front cover of the Jan. 4 issue of *Advanced Materials*.

—Read more in Lauri Sainiemi et al., "Non-Reflecting Surfaces: Non-Reflecting Silicon and Polymer Surfaces by Plasma Etching and Replication," *Advanced Materials* 23, no. 1 (4 January 2011)



## Northrop Grumman Launches Portable System For CBRN Incidents

Source: [http://www.spacewar.com/reports/Northrop\\_Grumman\\_Launches\\_Portable\\_System\\_For\\_CBRN\\_Incidents\\_999.html](http://www.spacewar.com/reports/Northrop_Grumman_Launches_Portable_System_For_CBRN_Incidents_999.html)

Northrop Grumman has launched its new Integrated Tactical Rapid Assessment of CBRN Environments (I-TRACE) system, a man-portable capability for the monitoring of Chemical Biological Radiological and Nuclear (CBRN) incidents and the collection and handling of related data. I-TRACE facilitates decision support and enhances situational awareness and information sharing among emergency response organizations.



The system requires no specialist vehicle installation and can be rapidly deployed using existing "blue light" emergency services vehicles.

Access to all data and situational awareness is achieved through a web portal which is controlled using role-based authorized access.

"Command and control systems are criti-

cal to the successful management and coordination of a CBRN event. I-TRACE brings together key information assets to give users a common operational picture and provide emergency responders with an integrated analysis and response capability to help minimize the effect of CBRN attacks," said Paul Davison, vice president Defence, Northrop Grumman Information Systems Europe.

The system provides a flexible, multi-layer solution and has a versatile architecture and scalable configuration making it suitable for use in a wide range of situations and environments. I-TRACE can be integrated with third party meteorological, visual and CBRN sensors to provide situational awareness of a CBRN incident to local and remote commanders, and other interested parties at remote locations.

In addition, the raw sensor data is available to analysts for specialist analysis using existing analysis software.

Northrop Grumman has a strong presence in the U.K. with a heritage spanning 100 years. The company operates from primary locations in London, Fareham, Chester, Coventry, New Malden, Peterborough, RAF Waddington and Solihull and provides avionics, communications, electronic warfare systems, marine navigation systems, unmanned ground vehicle systems, C4ISR solutions and mission planning, national security, software development and aircraft whole life support.

## Public Health Preparedness: Developing and Acquiring Medical Countermeasures Against Chemical, Biological, Radiological, and Nuclear Agents

Source: GAO-11-567T April 13, 2011

The anthrax attacks of 2001 and a radiation leak after the recent natural disaster in Japan highlighted concerns that the United States is

vulnerable to threats from chemical, biological, radiological, and nuclear (CBRN) agents, which can cause widespread illness and



death. Medical countermeasures--such as drugs, vaccines, and diagnostic devices--can prevent or treat the health effects of exposure, but few are currently available for many of these CBRN agents. GAO was asked to testify on the Department of Health and Human Services' (HHS) CBRN medical countermeasure development and acquisition activities. This statement focuses on:

(1) How HHS determines needed CBRN medical countermeasures and priorities for development and acquisition and

(2) Selected challenges to medical countermeasure development and acquisition.

This statement of preliminary findings is based on ongoing work. To do this work, GAO examined relevant laws and presidential directives, analyzed federal agency documents and reports from advisory boards and expert groups, and interviewed officials from HHS and the Department of Homeland Security (DHS) about the processes for developing and acquiring CBRN medical countermeasures and the challenges related to those efforts. GAO shared the information in this statement with HHS. HHS provided technical comments, which GAO incorporated as appropriate.

HHS coordinates and leads federal efforts to determine CBRN medical countermeasure priorities and develop and acquire CBRN medical countermeasures, primarily through an interagency body that includes other federal agencies with related responsibilities, such as DHS and the Department of Defense. HHS's medical countermeasure acquisition strategy is based on a four-step process:

(1) Identify and assess the threat of CBRN agents,

(2) Assess medical and public health consequences of attacks with these agents,

(3) Establish medical countermeasure requirements, and

(4) Identify and prioritize near-, mid-, and long-term development and acquisition.

Through these processes, HHS determines which countermeasures to buy for specific CBRN agents, including the desired characteristics of these countermeasures--such as how many doses a vaccine requires to confer immunity--the needed quantity of

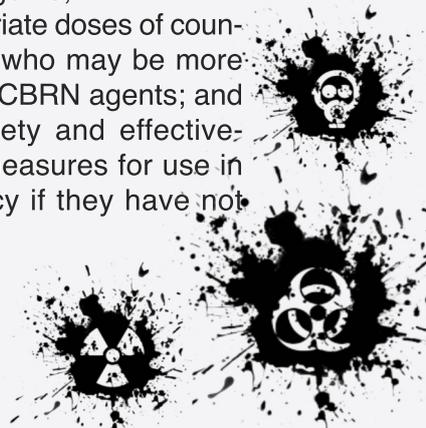
certain medical countermeasures, and the acquisition priorities. While a few CBRN countermeasures can be immediately acquired, most have not yet been developed. Therefore, HHS and the interagency body support and oversee several stages of research and development to try to obtain usable countermeasures. These include basic cellular and biological research to understand the effects of these agents on humans; applied research to validate approaches, such as testing the effectiveness of treatment in animals; early development to assess the safety of potential countermeasures; and advanced development, in which the products are more fully evaluated for safety and effectiveness, including their formulation and manufacturing processes. The federal government faces a variety of challenges in developing and acquiring medical countermeasures, such as the high failure rate in research and development and difficulties meeting regulatory requirements. For example, the failure rate for development and licensure of most drugs, vaccines, and diagnostic devices can be more than 80 percent, depending on the stage of scientific research and development. Given this risk, as well as a lack of a commercial market for most medical countermeasures, attracting large, experienced pharmaceutical firms to research and develop them is challenging. Smaller biotechnology companies are more likely to be developing medical countermeasures, but HHS must provide more guidance to these less experienced small companies than might be typical with larger companies. In addition, several challenges exist related to regulatory processes for evaluating promising medical countermeasures.

These **challenges** include:

(1) Proving a countermeasure's effectiveness using animals as proxies for humans, because humans cannot ethically be used in studies involving CBRN agents;

(2) Determining appropriate doses of countermeasures for children, who may be more vulnerable to exposure to CBRN agents; and

(3) Evaluating the safety and effectiveness of medical countermeasures for use in a public health emergency if they have not



yet been approved or licensed. Finally, HHS faces the logistical challenge of ongoing replenishment of expiring medical countermeasures in the U.S. Strategic National Stockpile, the national repository of medica-

tions, medical supplies, and equipment for public health emergencies.

**NOTE:** Read the full paper at Newsletter's "CBRNE-CT Papers" section.

## EU Chem/Rad Emergency Management Exercise 2011

15th-21st of May 2011 in Estonia

Source: <http://www.siseministerium.ee/cremex2011eng/>

Estonian Ministry of the Interior with the contribution of the Civil Protection Financial Instrument of the European Union (Grant Agreement No: 070401/2009/544190/SUB/A4) is organising a Full Scale chemical and radiological emergency management exercise including in addition to the Field Exercise also a Command Post part. The exercise name is EU CREMEX 2011 (acronym from: EU Chemical and Radiological Emergency Management Exercise 2011).



The aim of the exercise is to test the understanding, knowledge and response in the framework of the Union Civil Protection Mechanism. One of the challenges will be testing of the coordination of assistance through the MIC (EU Monitoring and Information Centre). In addition testing the new Estonian Emergency Act (in force from 2009) in action., EU CREMEX 2011 will provide a valuable exercise experience to the Civil Protection teams of the different participating EU Member State's organisations who are partners in the project. The exercise will provide materials for future learning for tactical response and inter-organisational co-operation.

In order to really test the whole crisis management system implemented in Estonia the exercise will be conducted in two different places in Estonia with a very complicated CBRN scenario - in the city of Tartu and in Tallinn Airport involving all relevant authorities who have their role in Estonia responding to Chemical and Radiological incidents.

### Most important objectives of EU CREMEX 2011:

- To verify operational and strategic procedures/plans of all actors involved for resolving a radiation, chemical and hostage emergency including mass evacuation
- To test the Union Mechanism for Civil Protection and coordination of assistance through the MIC
- To test the receiving of help from EU member states
- To verify the ability to coordinate EU member states forces in the crisis area
- To test the intervention of an EU Civil Protection team on site and the incoming EU member states' assistance
- To enhance operational cooperation between involved parties
- To provide learning opportunities for all civil protection actors involved, also providing materials for future learning for tactical response and inter-organisational co-operation

**Partners of EU CREMEX 2011:** Coordinating Beneficiary: Estonian Ministry of the Interior (EE)

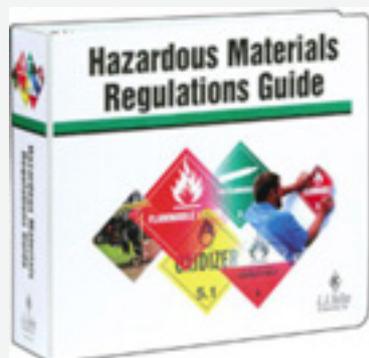
### Associated Beneficiaries

- Emergency Services College / Crisis Management Centre Finland (FI)
- Fire and Rescue Department under the Ministry of the Interior of the Republic of Lithuania (LT)
- Lithuanian Police Anti-terrorist Operations Unit "ARAS" (LT)
- The Netherland's Safety Region of North and East-Gelderland (NL)
- Swedish Civil Contingencies Agency (SE)
- Association of Chief Police Officers of England, Wales and Northern Ireland (UK)



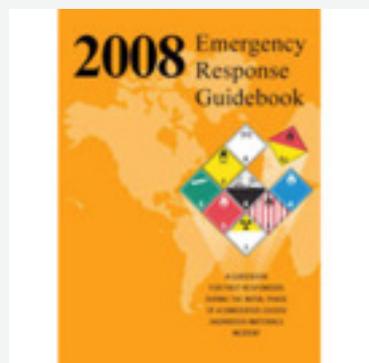
### HAZAMAT Publications

Source: <http://www.jjkeller.com/>



#### Hazardous Materials Regulations Guide

Get fast, easy access to DOT's word-for-word Hazmat regs, including the §172.101 Hazardous Materials Table.



#### Emergency Response Guidebook (ERG)

Helps satisfy DOT's requirement that hazmat shipments be accompanied by emergency response information.



#### Hazardous Materials Compliance Manual

Straight-talking, "how-to-comply" guidance gives you fast, reliable answers.



#### 49 CFR Parts 100-185 (Revised as of 10/1/10)

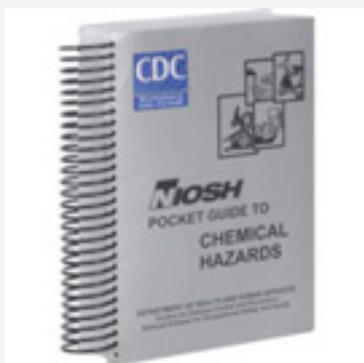
Most affordable way to get DOT's Hazardous Materials & Oil Transportation Regulations





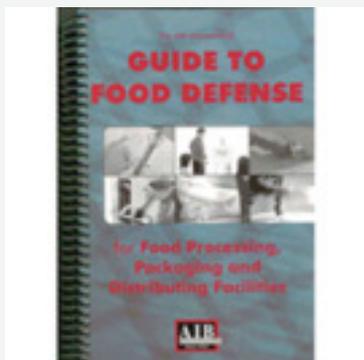
### Handling Hazardous Materials

Easy-to-understand summaries of key DOT hazmat requirements at your fingertips



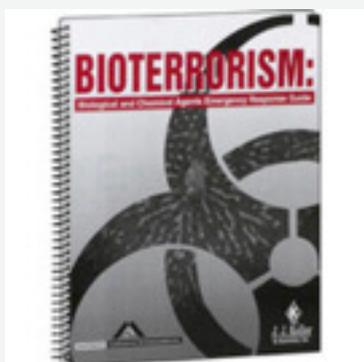
### NIOSH Pocket Guide to Chemical Hazards

Save time and money protecting your workers' health, preventing overexposure to chemicals, and responding to emergencies.



### AIB Guide to Food Defense

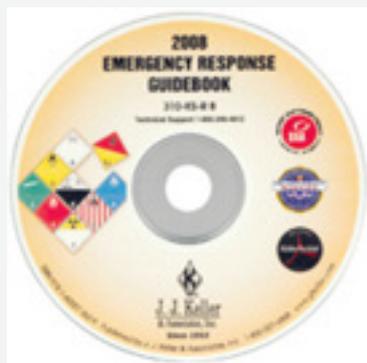
Get on the fast track to meeting regulations and securing your link in the food chain.



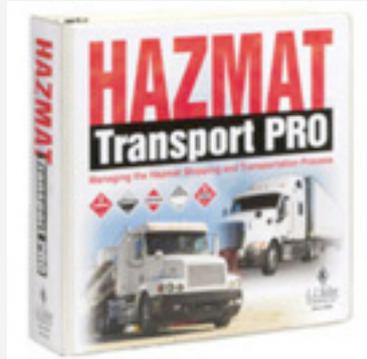
### BIOTERRORISM: Biological and Chemical Agents Emergency Response Guide

Gain a better understanding of bioterrorism

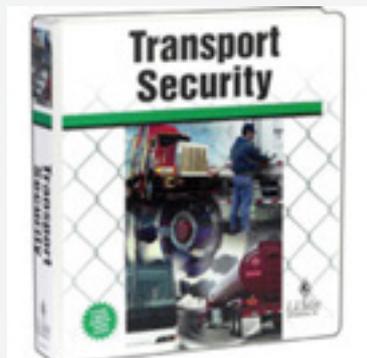




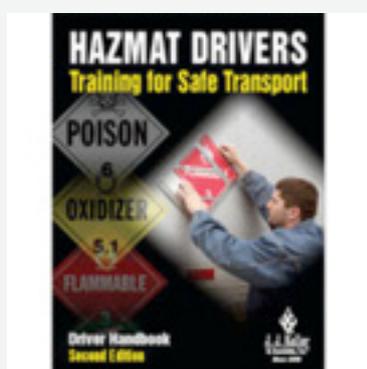
**Emergency Response Guidebook (ERG) CD-ROM**  
Get the ERGs in English, Spanish, and French on one convenient CD-ROM.



**Hazmat Transport Pro: Managing the Hazmat Shipping and Transportation Process**  
Comprehensive manual helps you manage hazmat shipping, transport, and training.

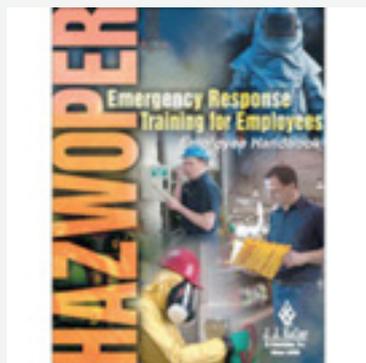


**Transport Security Manual**  
Protect your drivers, your cargo and your equipment from security threats.



**Hazmat Drivers: Training for Safe Transport, Second Edition - Driver Handbook**  
Aids in retention & provides a reference after training has been completed





### **HAZWOPER Emergency Response Training for Employees - Employee Handbook**

Aids in retention and provides a reference after training has been completed

## **Magnetic "nanobeads" detect chemical and biological agents**

Source:<http://homelandsecuritynewswire.com/magnetic-nanobeads-detect-chemical-and-biological-agents>

Researchers at Oregon State University have found a way to use magnetic "nanobeads" to help detect chemical and biological agents, with possible applications in everything from bioterrorism to medical diagnostics, environmental monitoring, or even water and food safety. When fully developed as a hand-held, portable sensor, it will provide a whole diagnostic laboratory on a single chip. The research could revolutionize the size, speed and accuracy of chemical detection systems around the world.

An Oregon State release reports that the new findings on this "microfluidic sensor" were recently reported in *Sensors and Actuators*, a professional journal, and the university is pursuing a patent on related technologies. The collaborative studies were led by Vincent Remcho, an OSU professor of chemistry, and Pallavi Dhagat, an assistant professor in the OSU School of Electrical Engineering and Computer Science.

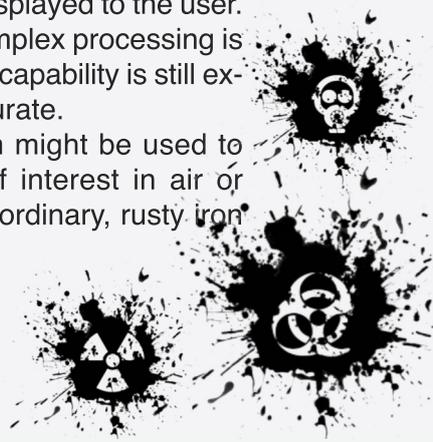
The key, scientists say, is tapping into the capability of ferromagnetic iron oxide nanoparticles — extraordinarily tiny pieces of rust. The use of such particles in the new system can not only detect chemicals with sensitivity and selectivity, but they can be incorporated into a system of integrated circuits to instantly display the findings.

"The particles we're using are 1,000 times smaller than those now being used in common diagnostic tests, allowing a device to be

portable and used in the field," said Remcho, who is also associate dean for research and graduate programs in the OSU College of Science. "Just as important, however, is that these nanoparticles are made of iron," he said. "Because of that, we can use magnetism and electronics to make them also function as a signaling device, to give us immediate access to the information available." According to Dhagat, this should result in a powerful sensing technology that is fast, accurate, inexpensive, mass-producible, and small enough to hold in your hand. "This could completely change the world of chemical assays," Dhagat said.

The OSU release notes that existing assays are often cumbersome and time consuming, using biochemical probes that require expensive equipment, expert personnel or a complex laboratory to detect or interpret. In the new approach, tiny nanoparticles could be attached to these biochemical probes, tagging along to see what they find. When a chemical of interest is detected, a "ferromagnetic resonance" is used to relay the information electronically to a tiny computer and the information immediately displayed to the user. No special thin films or complex processing is required, but the detection capability is still extremely sensitive and accurate.

Essentially, the system might be used to detect almost anything of interest in air or water. The use of what is ordinary, rusty iron



should help address issues of safety in the resulting nanotechnology product. Rapid detection of chemical toxins used in bioterrorism would be possible, including such concerns as anthrax, ricin or smallpox, where immediate, accurate and highly sensitive tests would be needed. Partly for that reason, the work has been supported by a four-year grant from the Army Research Laboratory, in collaboration with the Oregon Nanoscience and Microtechnologies Institute.

Routine and improved monitoring of commercial water treatment and supplies could

also be pursued, along with other needs in environmental monitoring, cargo inspections, biomedical applications in research or medical care, pharmaceutical drug testing, or even more common uses in food safety. Other OSU researchers working on this project include Tim Marr, a graduate student in electrical engineering, and Esha Chatterjee, a graduate chemistry student. The concept has been proven in the latest study, scientists say, and work is continuing with microfluidics research to make the technology robust and durable for extended use in the field.

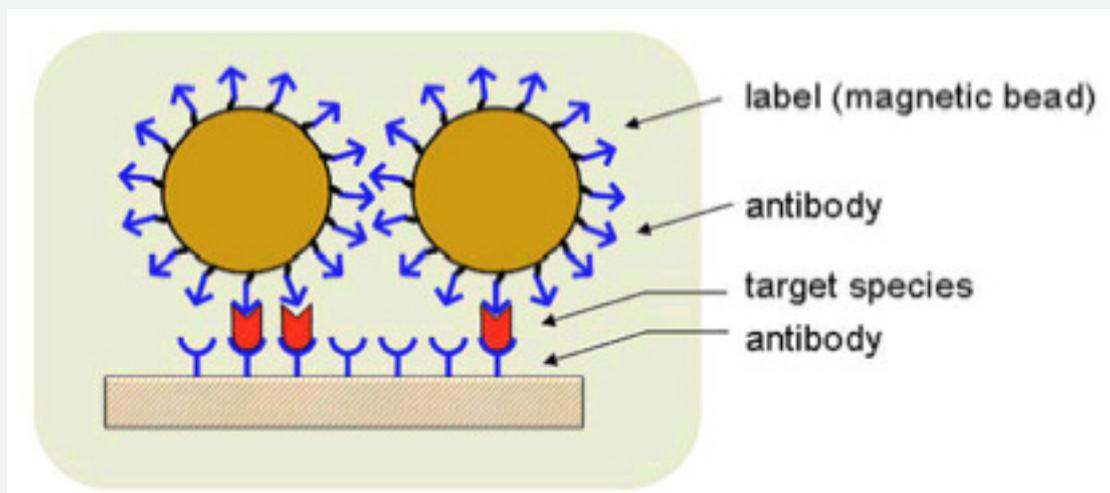
### New Presentation Of Cyanokit(R) Approved By U.S. FDA

Source: <http://www.medicalnewstoday.com/articles/223744.php>

Merck Serono, a division of Merck KGaA, Darmstadt, Germany, has announced that a new presentation of Cyanokit® 5 g (hydroxocobalamin) has been approved by the U.S. Food and Drug Administration (FDA). In the US, Cyanokit® is currently available in a kit

treat people who need immediate care, particularly when treating more than one patient."

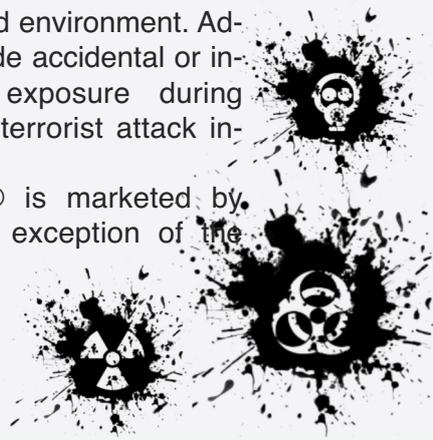
Cyanokit® is indicated for the treatment of known or suspected cyanide poisoning. The drug is typically administered by fire and rescue crews at an emergency scene or in a hos-



comprising two 2.5 g vials as the starting dose that totals 5 g hydroxocobalamin. The new presentation contains the initial antidote dose of 5 g hydroxocobalamin in a single vial. "The survival of a smoke inhalation victim with cyanide poisoning is highly related to the speed at which he/she receives the antidote", said Dr. Bernhard Kirschbaum, Executive Vice President Global Research and Development at Merck Serono. "As the initial dose required in the adult treatment is 5 g, we believe that emergency healthcare professionals will gain a significant amount of time to

pital emergency room. It must be administered in conjunction with appropriate decontamination and supportive measures. Cyanide poisoning commonly results from exposure to smoke produced from burning synthetic substances or natural materials such as cotton or paper in a closed environment. Additional causes may include accidental or intentional ingestion or exposure during industrial accidents or a terrorist attack involving cyanide.

In Europe, Cyanokit® is marketed by Merck Serono, with the exception of the





Netherlands, Ireland, the United Kingdom and the Nordic and Baltic countries where the product is marketed by its partner Swedish Orphan Biovitrum. The new Cyanokit® 5 g presentation was approved in October 2010 by the European Medicines Agency (EMA).

In the US, Cyanokit® is commercialized through Merck Serono's partner Meridian Medical Technologies, Inc. that belongs to Pfizer Inc. The launch of Cyanokit® 5 g is planned towards end of 2011.

### About Cyanokit®

The active ingredient in Cyanokit®, hydroxocobalamin, is a precursor of vitamin B12. Hydroxocobalamin works by binding directly to the cyanide ions, creating cyanocobalamin, a natural form of vitamin B12, which is excreted in the urine. Advantages of this approach are that methemoglobin is not produced and the oxygen-carrying capacity of the victim's blood is not lowered. Therefore, Cyanokit® is suitable for use in smoke inhalation victims. The most common adverse reactions seen in clinical trials of hydroxocobalamin with human subjects are transient and include: reddish discoloration of the skin, mucous membranes and urine, rash, increased blood pressure, nausea, vomiting, diarrhea, headache, and decreased white blood cell count and injection site reactions. Allergic reactions have been observed. Usage may interfere with some clinical laboratory evaluations. The starting dose of Cyanokit® for adults is 5 g, administered by intravenous infusion. Depending upon the severity of the poisoning and the clinical response, a second dose of 5 g may be administered up to a total dose of 10 g.

### Military Simulation & Training Magazine

Source: <http://halldale.com/mst>



MS&T Magazine has an unrivalled background in the defence simulation and training industry, and has been serving the military community for over 25 years. Each issue of MS&T contains a broad geographical spread

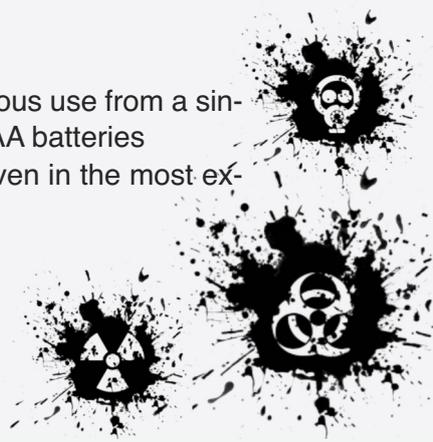
of features, including a national focus, instructional design insights, in-service reports, defence training policies and all the latest news. The editorial content of MS&T changes to keep up with operational need, training requirements, and the demands of maximizing the benefits of training technology.

### High performance CWA identifier and TIC detector

Source: [http://www.smithsdetection.com/LCD3\\_3.php](http://www.smithsdetection.com/LCD3_3.php)

#### Feature Highlights

- Detects and identifies a wide range of Chemical Warfare Agents (CWAs)
- Includes a library of detectable Toxic Industrial Chemicals (TICs)
- Small and lightweight
- Up to 75 hours continuous use from a single set of commercial AA batteries
- Designed to operate even in the most extreme environments



- Uses advanced, non radioactive IMS technology



The LCD 3.3 is a light and versatile CWA and TIC detector.

An advanced warning device that alarms to gas and vapour threats detected and identified at or below immediately dangerous to life and health (IDLH) levels, by determining the agent or type, class, concentration and dosage of chemical exposure. It can also be used as a screening and survey device.

The LCD 3.3 can be handheld or clipped to a belt or harness, to enable the user to undertake their primary role without obstruction. It features both audible and visual alarms plus a clear, easy-to-read liquid crystal display.

The device is very simple to operate and requires no calibration or complicated routine maintenance. The advanced performance of the LCD 3.3 combined with its ergonomic design and functionality provides a wide range of user capabilities while ensuring a minimal logistical burden.

The LCD 3.3 is backed by first rated service, training and support to ensure optimum product performance.

#### **Additional Features:**

**CWA:** for the detection and identification of chemical warfare agents

**TICs:** for the detection of toxic industrial chemicals

**Survey:** for the detection of residual persistent contamination

Detects, identifies, measures and warns personnel of chemical agent threats at levels below attack concentration.

Fully user configurable via the advanced menu driven display.

Supplied with a carrying pouch to allow hands-free operation. The pouch can be mounted on clothing, belt or harness. The unit can be fitted with a survey nozzle (supplied) to aid in the detection of residual persistent contamination while in survey mode. Data logging records up to 72 hours of mission data for future analysis. RS232 protocols connectivity allows post mission analysis and software updates.

#### **Specifications**

Size	10.54 x 17.93 x 4.72 cm (4.15 x 7.06 x 1.86 in)
Weight	0.65kg (1.5 lbs) including batteries
Power	9 Vdc 110/240V ac using PSU (Power Supply Unit)
Batteries	4 x AA lithium ion or 4 x AA alkaline manganese dioxide (re-chargeable AA batteries can be used)
Detection Technology	Advanced non rad Ion Mobility Spectrometry
Agents Detected	Nerve, blood, blister, choking and a selected library of TICs
Accessories	Additional accessories are available to increase the capability of the LCD 3.3



# CHEMPRO

Handheld Chemical Detector **100i**

The ChemPro100i is a handheld gas & vapor detector for the field detection and classification of Chemical Warfare Agents (CWAs) and Toxic Industrial Chemicals (TICs). The ChemPro100i can be used daily in "normal" HazMat and for the less common CWA incident.

- Designed for the rigors of military CWA detection
- Versatile enough for sniffing TICs in daily HazMat operations
- Easy to use and its non-threatening design won't alarm civilians
- No maintenance costs for 5 years



Environics USA Inc.  
1308 Continental Drive, Suite J  
Abingdon, MD 21009, USA  
tel. +1 410 612 1250  
fax. +1 410 612 1251  
[www.EnvironicsUSA.com](http://www.EnvironicsUSA.com)  
[sales@environicsusa.com](mailto:sales@environicsusa.com)

### Trees as contamination detectors

Source: <http://homelandsecuritynewswire.com/trees-contamination-detectors>

Determining the presence of groundwater or soil contaminants is an ongoing and painstaking process. Ever-present questions of whether industrial activity in an area has left behind harmful pollutants have been answerable only with extensive soil and groundwater sampling. All that may now be past.

Researchers at Missouri Univ. of Science and Technology have developed a method to detect the presence of contamination without shovels or vials of groundwater. They are using trees. Laboratoryequipment.com reports that the technique, known as phytorensics, uses the natural processes in trees to determine the presence of contaminants.

According to Dr. Joel Burken, professor of civil and environmental engineering at the university, the process is much less expensive, time-consuming and intrusive than traditional techniques. "The process of core-sampling plants has been around for a while," Burken says, "but we're taking a new approach that will improve the process on multiple levels. Sampling is easy, fast and inexpensive for quickly identifying polluted areas or contamination patterns." The sampling Burken is referring to is radically different from sampling techniques of past years. Then, the samples were vials of soil and water from the area, and core extractions from the tree trunk.

Burken's technique, however, requires no such extensive sampling. Rather, it uses a thin filament known as a solid-phase microextraction fiber, or SPME, capable of detecting even trace amounts compounds at the parts per trillion or even quadrillion level. A core hole is drilled into the trunk, and the SPME is inserted to collect the required sample. As trees grow, their root systems collect water and nutrients from the subsurface.

Collected compounds would include any



Missouri S&T researchers use a device called a solid-phase microextraction fiber, or SPME, to detect traces of chemicals at minute levels in trees.

contaminants present in the area, and the degree of presence would be an indicator of level of contamination. All these compounds are collected on the pencil-lead-thick filament, then transported to a laboratory for analysis. During the testing of the method, the Missouri S&T research team found that solvents used in a former dry-cleaning business nearby had seeped into the groundwater in a park, though not in concentrations that were a hazard to human health.

Recently, the Army's Leonard Wood Institute provided funding to a Missouri S&T team of Dr. Burken, Dr. Yinfa Ma, Curators' Teaching Professor of chemistry, and Dr. Honglan Shi, assistant research professor of chemistry to adapt the method to detect trace amounts of explosives. There are also plans to adapt the technique to detect the presence of pesticides and herbicides.





# Smartman-test

The smartman-test is a system test with chemical warfare agents for respiratory protective equipment according to various standards (e.g. NIOSH, BS).

The results of our smartman test can be used to prove that the requirements will be met. So, if you want to ensure success beforehand, have Proqares perform a (pre-) test according to your requirements.

## Proof of reliability.

### Smartman

Proqares is a world-renowned laboratory, having great experience in performing a wide range of tests. The test with chemical warfare agents (CWA) is done with the smartman according to British or American -guidelines. This test fixture consists of an anatomically shaped dummy head and torso. An inflatable rubber bladder guarantees a leak-tight seal of the respirator onto the dummy head. The dummy head is equipped with sampling ports in the oral/nasal region and in the eye region. The standard sampling point is in the oral/nasal region but, upon request, samples can also be taken in the eye region, which is important if you want to measure protection against nerve agents. Smartman is equipped with a breathing simulator, which can be set at various breathing rates.

### The test procedure

Proqares can test your complete respiratory protective device against distilled sulphur mustard (HD) and sarin (GB). The test procedure is as follows: after donning the dummy head of the smartman precisely with the respirator, the lab technician starts the generation of CWA into the test chamber. As soon as the concentration reaches the correct level, the technician initiates the breathing simulator. Special analysis equipment will take samples underneath the mask for the next eight hours. The test with sarin is a vapour challenge only while the test with HD is divided into two parts: a vapour test and a liquid test. For the liquid experiment, very accurate droplets are applied to various positions on the respirator. A complete pre-test with one CWA, during which three masks are tested, will take one week. This is

necessary to generate test results that are as accurate, reproducible and reliable as possible.



## Smartman-test

### The test result: 'pass' or 'fail'

After the test, you will receive a test report. If the respiratory protective device met the requirements, the report will state 'pass'. You can then rest assured that it will pass the official system test against CWA in the US as well, thus allowing you to enter the American market quickly.

If the results do not meet requirements, the report will indicate that necessary adaptations of your system are needed. In that case, you can count on our expertise as well. We have been performing tests on respirators and canisters for over a hundred years and, for the same period, have been consulting on product development. We would gladly provide advice for improving your product.

### Wide variation of tests

The smartman-test is the last of various tests, which must be performed on your respirator and canister. Proqares can perform all tests necessary to get your product on the market. We can test according to European and international military standards as well as NIOSH standards. Partnering with Proqares would allow you to have all necessary testing performed at a single independent research institute—an institute with the expertise, knowledge and equipment to help and advise you in all stages of the process, from development to bringing the product to market.

**proqares**  
a TNO company

Lange Kleiweg 137  
2288 GJ Rijswijk (ZH)

P.O. Box 83  
2280 AB Rijswijk (ZH)  
The Netherlands

[www.proqares.com](http://www.proqares.com)

T +31 88 7766900  
[info@proqares.com](mailto:info@proqares.com)

Many professionals worldwide trust their lives to protective equipment against chemical and biological hazards. Proqares is an internationally leading provider of testing, evaluation and certification services targeted at such personal protective equipment. Proqares has an extensive track record in testing CBRN (Chemical, Biological, Radiological and Nuclear) protection devices for military personnel and first responders; commonly tested devices include respirators, CBRN protective clothing, boots and gloves. Also, Proqares provides a range of services targeted at personal protective equipment for the Chemical, Medical en Pharmaceutical industry. Within its High-Tox facility, Proqares is capable of working with the most toxic chemicals known to man, providing the fastest and most reliable results in the industry. Any test specified in all commonly cited standards is offered - national and international standards, military and civil. Integrity, flexibility, speed and reliability are core values of Proqares and its employees.

**Proof of reliability.**

### Terrorists may use food poisoning as weapon

Source: <http://www.homelandsecuritynewswire.com/terrorist-may-use-food-poisoning-weapon>



Food and drink sold in Britain -- in stores, at restaurants -- are under an increasing threat from terrorist groups which might try to poison supplies, thus wreaking havoc and sowing fear, a government security advisers have warned

Food manufacturers, processors, and retailers have been advised that their sector is vulnerable to attacks by ideologically and politically motivated groups that may seek to cause widespread casualties and disruption by poisoning food supplies. The Telegraph reports that the warning from the Center for the Protection of National Infrastructure [CPNI], which is part of the U.K. Security Service, comes as experts warned the deadly E.coli outbreak in Germany has highlighted the vulnerability of the food chain and how quickly bacteria can spread.



# Providing clean and safe air in hostile environments

## CBRN Protection for asymmetric warfare scenarios



Beth-El Industries Ltd.



Beth-El Industries is a leading developer, designer and manufacturer of Environmental Protection Systems. We cover the whole spectrum of CBRN/TIC protection applications as well as air-conditioning systems for vehicles, containers, army tents, large bomb shelters and biological isolation systems. At this time, Beth-El's cutting edge CBRN/TIC filtration technology is being used by more than 60 armies worldwide, many of which are NATO and PfP forces.



Vehicle Filtration/AC System



Tent Filtration System



Container Filtration System



NATO-Supplier-No.  
SH785



Certified Quality Assurance Program according to AQAP-2110

# CRISTANINI CBRN DECONTAMINATION SYSTEMS



A5009

CONFORM TO THE QUALITY SYSTEM STANDARD AQAP 2110  
and ISO 9001:2008



DEPLOYABLE CBRN  
ANALYTICAL  
LABORATORY (STANAG 4632)



DDMS LARGE SCALE  
DECONTAMINATION SYSTEM  
HIGHLY DEPLOYABLE



DEPLOYABLE BIO LABORATORY  
CLASS III BIO SECURITY LEVEL



DDMS LARGE SCALE  
DECONTAMINATION SYSTEM  
DUAL OPERATORS



RVCBRN TRAILER FOR CBRN  
DECONTAMINATION AND  
DETOXIFICATION



**ONLY ONE PERSON  
ONLY ONE MACHINE  
ONLY ONE PRODUCT**



MOBILE SYSTEM FOR  
AIRCRAFT DECONTAMINATION



TSDM-TACTICAL STEAM  
DECON MODULE



SANJET C 1128 HR CBRN DUAL  
OPERATOR DECONTAMINATION  
AND DETOXIFICATION GROUP



SX34 CBRN DECONTAMINATION  
OF SENSITIVE EQUIPMENT  
AND SURFACES

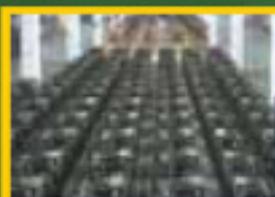


**CRISTANINI**

37010 RIVOLI - VERONA - ITALY

Tel. +39-045-6269400 - Fax +39-045-6269411

cristanini@cristanini.it - [www.cristanini.com](http://www.cristanini.com)



CBRN PRODUCTION LINE

Osama bin Laden – the End

# CBRNE-TERRORISM Newsletter

Volume 38 - 2011



Japan's triple catastrophe  
CBRN security at London 2012  
UK DGBRNC  
Agroterrorism  
Forest Fires can be a **Tactic of Terrorism**  
Climate change and global **security**  
CBRN training for Photographers and TV Crews  
Innovative chem-bio sensor  
E. Coli 0104 – Terror in Germany  
Iran has secretly stocked enriched **uranium**  
for 4 nuclear bombs  
15 US nuclear reactors are located in  
an active seismic zone

Bio News



*Fukushima*

Carry **spice** could be used  
to detect explosives  
How IEDs work  
What if there is a US-China  
cyber-**war** in 2020?  
Latin **America: Terrorism issues**

[www.cbrne-terrorism-newsletter.com](http://www.cbrne-terrorism-newsletter.com)

## Bio News

### Anthrax human – 2001 (USA)

Source: <http://www.promedmail.org>

One year ago, the Department of Justice closed its case against Fort Detrick researcher Bruce Ivins, releasing a 92-page investigative summary declaring he was the sole culprit in the 2001 anthrax attacks that killed 5 and sickened 17. The report touted "both direct evidence that anthrax spores under his sole and exclusive control were the parent material to the anthrax spores used in the attack and compelling circumstantial evidence."

Last week, a National Research Council committee released a 170-page report casting doubt on the science the FBI used in its investigation, leaving the Justice Department with circumstantial evidence that many say wouldn't hold up in court.

"I think my feelings of mistrust of the FBI's conclusions in this case have only been strengthened over the last year," Jeffrey Adamovicz, a former chief of bacteriology who supervised Ivins' work at the U.S. Army Medical Research Institute of Infectious Diseases, wrote in an e-mail. "First, the (NRC) report itself was delayed for release, and now that the report is out, I feel somewhat vindicated in my assessment that the FBI was overselling the science and its ability to prove that Bruce Ivins and only Bruce Ivins could have committed this crime."

The Justice Department report last year [2010] said its repository of anthrax samples "represents a sample from every Ames culture at every laboratory identified by the FBI as having Ames strain," and that the FBI provided a "clear and thorough protocol for the preparation of the repository submissions."

The NRC dismissed those notions, saying the repository was not ideal or complete. The instructions "were not precise enough to ensure that the laboratories would follow a con-

sistent procedure." Such problems with the repository required additional investigation and limit the strength of the conclusions that can be drawn from comparisons of these samples and the letter material."

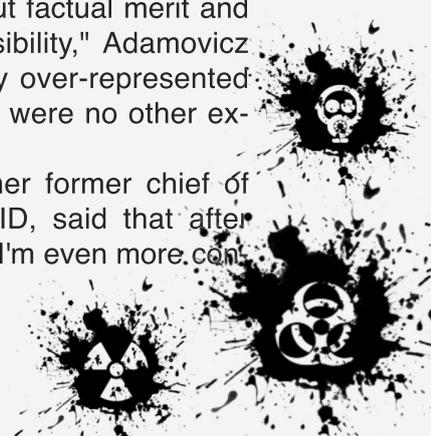
More importantly, though, Justice wrote last year [2010] that "the only complete genetic match to the evidence comes from RMR-1029 and its offspring," and the FBI, as a result, focused much of its attention on Ivins and other researchers with whom he had shared anthrax samples. Last week's NRC report, however, said that Justice misrepresented its findings.

"The scientific data generated by and on behalf of the FBI provided leads as to a possible source of the anthrax spores found in the attack letters, but these data alone did not rule out other sources," the report says. The NRC committee wrote that the mutations found in both the RMR-1029 samples and the attack anthrax could have arisen by parallel evolution instead of one being derived from the other, and the fact that the FBI did not explore this possible explanation weakens the Justice Department's interpretation of the genetic similarities between Ivins' anthrax and the attack anthrax, the report says.

"This is huge, because coupled with the lack of any other physical (forensic) evidence in this case linked to Bruce, this shows that the FBI's central tenet -- that the anthrax could have come from only

Bruce Ivins -- is without factual merit and is, therefore, just a possibility," Adamovicz wrote in an e-mail. "They over-represented this possibility as if there were no other explanations."

Gerry Andrews, another former chief of bacteriology at USAMRIID, said that after reading the NRC report: "I'm even more con-



vinced now that Dr. Ivins had nothing to do with this crime." Andrews wrote in an e-mail that he believed the case needed to be reopened or that Congress should investigate further. Andrews pointed out several items in the NRC report that he disagreed with and would like to see investigated further.

First, he said the presence of a unique strain of a 2nd bacteria, *B. subtilis*, should have been considered key forensic evidence instead of the FBI and NRC committee glossing over it. "If a cloth fiber was found in one (or more) of the anthrax envelopes, you can be darn sure that the FBI would consider this finding as 'key forensic evidence,'" Andrews wrote. "The presence of any usual/unexpected substance or material, in this case, *B. subtilis*, is VERY relevant to the case; it just doesn't support the FBI's conclusion that Dr. Ivins was the perpetrator. I believe that the FBI didn't investigate this finding thoroughly enough or was deceived."

He also said the FBI and NRC committee were too quick to gloss over the issue of the silicon content of some of the anthrax spores in the attack letters. Bacteriologists working on the investigation should have looked into several possibilities for how the silicon got onto and into the spores instead of dismissing it as an irrelevant forensic marker. "I don't believe the high silicon signature was an accident, nor do I think that the (committee's) conclusion on the silica is strong," he wrote.

The Government Accountability Office is still looking into the federal government's response to the anthrax attacks, and some lawmakers are still pushing for a congressional investigation, much like the one into the September 11th terrorist attacks [see below - Mod.MHJ].

After the deadly shooting rampage in Tucson, Sen. Patrick J. Leahy (D-Vt.) was asked to reflect on his own experience as the would-be target of an assassin. That's when he let slip something that he

rarely talks about publicly: He has never accepted the FBI's decision to close the case in the series of anthrax-laced letters mailed to public officials in fall 2001. "I still wonder who sent it and why they sent it," the Judiciary Committee chairman told a crowd gathered last month [January 2011] at the Newseum in

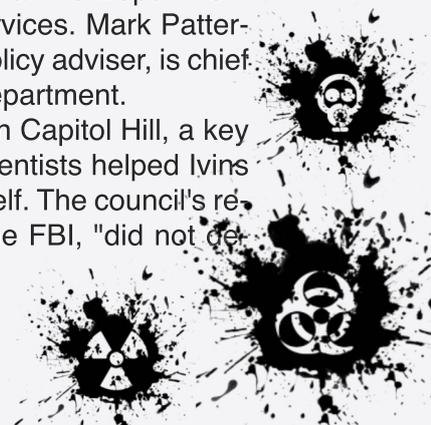
Northwest Washington to hear his 2011 legislative agenda.

On Tuesday [15 Feb 2011], the National Research Council questioned the efficacy of the genetic testing used by the FBI to allege that a Fort Detrick scientist had acted alone in mailing the deadly letters to Capitol Hill and media outlets. Leahy has generally declined to comment on the anthrax investigation, telling The Washington Post that he has tried not to discuss it much "because it affects me so..." his voice trailing off without finishing the thought. But in a brief interview Tuesday [15 Feb 2011], he said he has "extreme doubts" about the case. "I've expressed those concerns to the FBI, and this report adds to those concerns," Leahy said.

The handling of the almost 9-year investigation, dubbed "Amerithrax" by the FBI, has never sat well with Congress. On Tuesday [15 Feb 2011], Sen. Charles E. Grassley (R-Iowa), a longtime FBI critic, called for an independent review, and Rep. Rush D. Holt (D-N.J.), from whose district the letters to Leahy and others were mailed, called for Congress to create an independent commission to examine the entire case. For years, the targets of the Capitol Hill-bound letters felt shut out of the anthrax investigation, which included an official blackout of any congressional briefings ordered by the Bush administration in 2004. Now, however, there are key figures throughout the Obama administration, and Leahy and Grassley are the top senators on the Judiciary panel with FBI oversight.

A huge collection of former Daschle staff members now occupy the highest echelon of posts in the Obama administration. Pete Rouse, then the chief of staff to the majority leader, is President Obama's deputy chief of staff. Laura Petrou, the top aide in Daschle's suites in the Hart Senate Office Building, where an anthrax letter was opened 16 Oct 2001, is now chief of staff at the Department of Health and Human Services. Mark Patterson, then Daschle's top policy adviser, is chief of staff at the Treasury Department.

To Leahy and others on Capitol Hill, a key issue is whether other scientists helped Ivins or handled the anthrax itself. The council's report, commissioned by the FBI, "did not de-



finitively" demonstrate a link between the anthrax used in the deadly letters and that in a flask in Ivins's lab at the Army base in Maryland. It also questioned whether Ivins, as the FBI has alleged, was the only scientist at the base with the expertise to handle those anthrax spores. That left a sense of bewilderment among current and former officials on Capitol Hill.

"It is mystifying. Given the limited number of people who have experience with anthrax, you just wouldn't think it would be this hard," said another official who had been briefed on the Amerithrax investigation. The official requested anonymity to discuss a sensitive probe.

Last month [January 2011], Leahy said there was no question that others were involved in the anthrax attack, at least in helping Ivins hide his work from authorities. "Were there people who at the very least were accessories after the fact? I think there were," he said. Leahy also finds it strange that one person would target such an odd collection of media and political figures in the anthrax letters, a motive that has never been fully explained by the FBI or Justice Department.

"Why would he send one to Tom Brokaw, to Tom Daschle, to me, to the man at the National Enquirer in Florida?" Leahy asked. "They have to make their decisions; I have to make mine. In my mind, it's not closed," he said. "Call it an old prosecutor's instinct."

### **"NAS Report Makes Clear There Are Still Questions to be Answered and Still Lessons to be Learned"**

Rep. Rush Holt (NJ-12) today [15 Feb 2011] is reintroducing the Anthrax Attacks Investigation Act, legislation that would establish a Congressional commission to investigate the 2001 anthrax attacks and the federal government's response to and investigation of the attacks. Holt is introducing the bill on the same day that the National Academy of Sciences issued its report raising questions about the Federal Bureau of Investigation's (FBI) scientific conclusions in the "Amerithrax" case. He 1st introduced the legislation in September 2008.

"The NAS report makes clear there are still questions to be answered and still lessons to

be learned about the FBI's investigation into the attacks," Holt said. "It would take a credulous person to believe the circumstantial evidence that the FBI used to draw its conclusions with such certainty. The FBI has not proven to me that this is an open and shut case. We still badly need a 9/11-style commission to determine how the attacks happened and whether we learned the lessons to prepare for another attack."

The 11-member bipartisan commission would investigate the attacks, assess the federal government's response to and investigation of the attacks, and make recommendations to the President and Congress on how the country can best prevent or respond to a future bioterror attack.

Just as the 9/11 Commission looked not only at the attacks of that morning but also at recommended changes in the structure of government agencies, screening methods, and Congressional oversight, an anthrax commission would look not only at the attacks, but also measures for prevention, detection, and investigation of any future bio-terrorism.

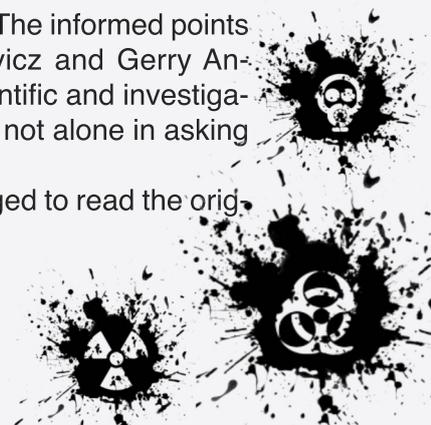
The commission would consider scientific, technical evidence as well as classified evidence the NAS did not examine.

The 2001 attacks evidently originated from a postal box in Holt's Central New Jersey congressional district, disrupting the lives and livelihoods of many of his constituents. Holt has consistently raised questions about the federal investigation into the attacks.

"Too many questions remain about the anthrax attacks and the government's bungled response to the attacks," Holt said. "A high level commission, like the 9/11 Commission, would be a start-to-finish examination of the many outstanding questions, and it would help American families know that the government is prepared to protect them and their children from future bioterrorism attacks."

It isn't over 'til it's over. The informed points made by Jeffrey Adamovicz and Gerry Andrews are of singular scientific and investigative importance. They are not alone in asking such questions.

Members are encouraged to read the original articles in full.



### Pentagon Looks to Africa for Next Bio Threat

Source: <http://www.wired.com/dangerroom/2011/02/pentagon-looks-to-africa-for-next-bio-threat/>

No, it's not a deleted scene from *Outbreak*. The Pentagon agency charged with protecting the United States from weapons of mass destruction is looking to the insecure storage of pathogens at clinics in Africa as the next flashing red light for a potential biological outbreak. Kenneth Myers, the director of the Defense Threat Reduction Agency, joined his old boss, Sen. Richard Lugar, on a trip to Burundi, Kenya and Uganda last fall to check out the security of disease samples at local clinics. What they found disturbed them: strains of

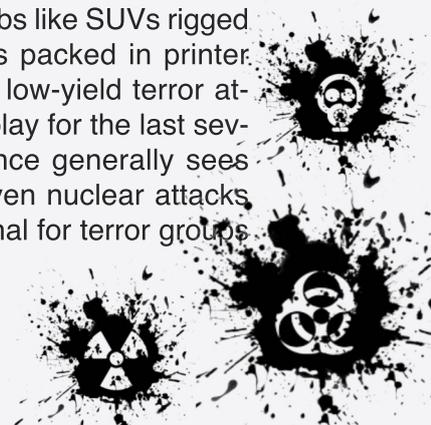
tion Agency is looking to expand a program that's grown out of Lugar's eponymous anti-nuclear proliferation effort into Africa to see if the U.S. can help partner with these countries to minimize the threat. The first goal of the Chemical Biological Engagement Program is to build those relationships Myers told a group of reporters Wednesday morning, so they can "consolidate the number of facilities with dangerous pathogens." That's not all. Myers wants to collaborate with government officials, all the way down to the clinic level, to make

sure the pathogens in residual facilities are stored safely, and offer help on "disease surveillance [and] epidemiological training." It's an early effort — "about to be able to get started," Myers put it — that's part of the \$1.5 billion worth of "layered" defenses against chemical and biological threats that the Pentagon is asking Congress to fund in the next fiscal year. Myers conceded that developing defenses against those threats is "very, very difficult." Expensive efforts to create vaccines for consequence management have stalled. But that's why he



deadly viruses like foot-and-mouth disease and anthrax, available at numerous clinics in areas in or near conflict zones, potentially ripe for the terrorist taking. "It's important to remember that these countries have no intention of being threats to the United States," Myers tells Danger Room. Indeed, the clinics have a very good reason for housing the pathogen samples: Their doctors need to be able to match patients with known diseases in the event of an outbreak. But Myers and Lugar left their trip worried about how many clinics possess the pathogens, as 20 years' worth of lessons from checking the spread of loose nukes raised fears of inadvertent bio-proliferation. So the Defense Threat Reduc-

tion Agency believes in "interdicting" WMD threats at their source to stop proliferation, having better surveillance of known and suspected sites, and responding capably if an attack should occur. Despite years of fears, it's an open question whether terrorists are actually planning chemical or biological attacks. Last month, the public threat assessment from U.S. intelligence officials warned of "smaller-scale" terrorism, involving homemade bombs like SUVs rigged to detonate or explosives packed in printer cartridges. Those cheap, low-yield terror attempts have been on display for the last several years. U.S. intelligence generally sees chemical, biological or even nuclear attacks as being mostly aspirational for terror groups



— something they'd like to pull off, sure, but aren't so realistic. Myers declined Danger Room's efforts to press him on whether the terrorist chem-bio threat was in fact receding. From his perspective, the ounce of prevention afforded by trying to lock down facilities where

pathogens reside is more than worth the effort. "Is it not in the U.S. national security interest to create more barriers between the threat and [U.S. citizens]? The answer obviously is yes," Myers says.

### Abbott shows new pathogen detector

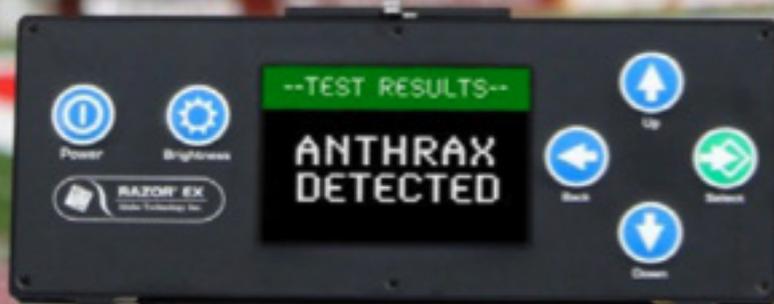
Source: <http://homelandsecuritynewswire.com/abbott-shows-new-pathogen-detector>



Illinois-based pharmaceutical company Abbott unveiled a new assay system that can accurately detect seventeen different bio-threat pathogens; among different bio-agents targeted in the new test are Bacillus anthracis, E. coli, salmonella, Ebola virus, and avian influenza viruses; the company says the new method provides results in less than eight hours. A new assay system that can accurately detect seventeen different bio-threat pathogens has been introduced by Abbott, an Illinois pharmaceutical company. "While public health officials concerned with bioterrorism and emerging infectious diseases are detecting known, conventional infectious agents, it's becoming very clear there is a need for broader detection and characterization of pathogens for bio-defence," said David Ecker, divisional vice president and general manager, of Abbott's Ibis Biosciences subsidiary. "The PLEX-ID system's new bio-threat assay will serve that need by identifying and quantifying, for non-diagnostic purposes, a broad set of pathogens including bacteria and families of viruses in humans and animals." UPI reports that Abbott unveiled its PLEX-ID system at the American Society for Microbiology Conference on Bio-defence and Emerging Diseases in Washington, D.C. The company said the PLEX-ID Biothreat Assay permits analysis of direct specimens, such as blood, water, food, and air filter samples, and provides results in less than eight hours. Among different bio-agents targeted in the new test are Bacillus anthracis, E. coli, salmonella, Ebola virus, and avian influenza viruses.



# RELIABLE



# BIODETECTION

RAZOR™ EX The Complete Field BioThreat Solution

[www.RAZOREX.info](http://www.RAZOREX.info)



390 Wakara Way, Salt Lake City, UT, 84108, USA | 1-800-735-6544 | [www.idahotech.com](http://www.idahotech.com)

## IQ Therapeutics Starts Phase I Clinical Trial For Antibody Against Anthrax

Source: <http://www.medicalnewstoday.com/articles/217507.php>

With the dosing of the first volunteers, Dutch pharmaceutical IQ Therapeutics announced the initiation of a Phase I clinical trial for IQ-DAA (a combination of two monoclonal human antibodies), a medicine directed against anthrax.

IQ-DAA has been developed by IQ Therapeutics for the treatment of inhalation anthrax. Pre-clinical experiments have indicated high efficacy of IQ-DAA, even in advanced stage of disease. Inhalation anthrax is a potentially deadly infectious disease with limited treatment options, in particular for the advanced stage of infection after the initial appearance of symptoms.

"IQ Therapeutics is pleased to initiate this clinical trial. It will provide valuable information regarding the safety and kinetics of IQ-DAA in humans, including an initial

perspective of its potential to reach efficacious levels in humans," said Dr. Roland Lageveen, Chief Executive Officer of IQ Therapeutics. "It illustrates IQ Therapeutics' commitment to and advancements in developing fully human antibodies addressing life-threatening infections and other diseases. IQ-DAA contains two unique antibodies to neutralize Anthrax lethal toxin and it has been demonstrated to be very efficacious in animal models. It has the potential to become an important addition to the arsenal of medical countermeasures."

The Phase I clinical trial, a randomized, placebo controlled, double blind, single dose-escalating study, will focus initially on the safety and tolerability of IQNL, one component of IQ-DAA. The study is being conducted by QPS Netherlands BV, and will initially involve 32 healthy volunteers.

## Plague Bacteria: The Condemned Live Longer

by Dipl.-Chem. Michael van den Heuvel

Source: [http://news.doccheck.com/com/article/203545-plague-bacteria-the-condemned-live-longer/?utm\\_source=DC-Newsletter&utm\\_medium=E-Mail&utm\\_campaign=Newsletter-COM-Englisch%20Issue-2011-03-8&mailing=36337&dc\\_user\\_id=70d115041f69101eab4f2fbdac0e859c&cide=dce103019&t1=1300626128&t2=caa8b61f2009973ca6494eedf8e38ec1a51bb523](http://news.doccheck.com/com/article/203545-plague-bacteria-the-condemned-live-longer/?utm_source=DC-Newsletter&utm_medium=E-Mail&utm_campaign=Newsletter-COM-Englisch%20Issue-2011-03-8&mailing=36337&dc_user_id=70d115041f69101eab4f2fbdac0e859c&cide=dce103019&t1=1300626128&t2=caa8b61f2009973ca6494eedf8e38ec1a51bb523)



In the 14th Century The Apocalyptic Horseman made a rich harvest: about a third of the population died of the plague. Although since then medical diagnostic

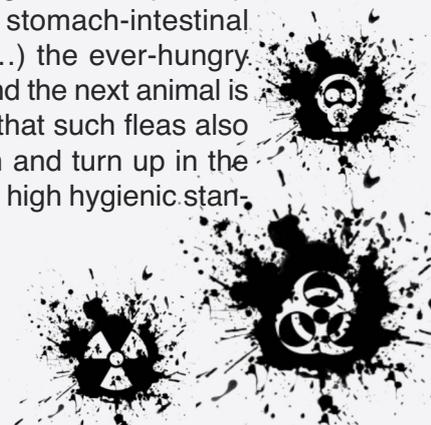
and therapeutic progress has been achieved, the bacterium *Yersinia pestis* is not yet consigned to history.

The World Health Organization presents corresponding figures regularly. Related documented reports talk about the number of cases of the plague being up to 3000 each year, mostly in Africa, Russia, China, India, South and Central America. Only isolated cases are reported from the USA, primarily

affected are the regions Arizona, New Mexico and Utah.

### Small bites, big impact

Besides the universally well-known rat, other rodents such as squirrels or prairie dogs represent a natural reservoir of the plague pathogen. Fleas then acquire their bacterial load by biting diseased, wild rodents. If the stomach-intestinal passage is clumped up with *Yersinia*, (Once the stomach-intestinal passage is clumped up ...) the ever-hungry bloodsucker bites again and the next animal is infected. A new finding is that such fleas also use pets as a way station and turn up in the vicinity of settlements with high hygienic standards.



As the climate researcher Nils Stenseth of the University of Oslo found, the living conditions of the blind passengers keep worsening. He analysed weather data from the last 56 years. Due to the increasingly early onset of snow melt in the mountains, according to Stenseth, the humidity in the cave dwellings of rodents is continually dropping. This is a bad deal for the fleas, as they need a certain minimum moisture to survive. If the water content of the air rises due to local climatic events, the number of plague cases soars, as Stenseth vividly demonstrated with Pacific neighbouring states.

### Struggle in the body

For an infection, the number of bacteria is critical. Using molecular biological techniques, David Engelthaler and Kenneth L. Gage of the U.S. Department of Health and Human Services were able to show the presence of around 100,000 *Yersinia pestis* germs in one flea. A few hours or days after a bite occurs in humans, symptoms such as headache, body aches and fever appear. Lumps arise, especially in the lymph nodes and lymph vessels. Once the pathogen has entered the bloodstream, it spreads out to all organs, and reaches the point of becoming a life-threatening sepsis via toxins.

The above-mentioned lumps and pneumonic plague are essentially caused by the same agent, the differences in the final analysis are not yet being understood. Via highly infectious sputum, the lungs of healthy people can be attacked and infected, something which is unlikely with bubonic plague. Unlike influenza viruses, *Yersinia* are, however, not very stable in the air, according to several studies. There is another macabre characteristic: Since untreated patients die very rapidly – the mortality rate being over 90 percent – large epidemics are unlikely. Considerably more benign is the abortive plague – it clears up after showing mild to moderate symptoms and gives the patient a degree of immunity.

### Probe with multiple effects

The flea world and human world are biochemically poles apart. This makes things particularly tricky, so a plague bacterium es-

entially recognises where it is currently located. Rat fleas are a rather cool type of organism, and at 24 degrees body temperature *Yersinia* plays a "wait and see" game. The RovA protein serves as a thermometer, researchers at the Helmholtz Centre for Infection Research have found in different *Yersinia* species. That isn't all it does; the protein also determines the nutrient and metabolic activity. "The function of RovA in this form is unique to bacteria," says group leader Petra Dersch. "All the more surprising then was that RovA controls various processes as a thermometer and is self-regulating." RovA facilitates penetration of the cells. After an infection, the 37 degrees Celsius brings the moment of truth for the bacterium. Since our immune system would recognise its telltale surface proteins rapidly, these are quickly disassembled by the bacteria. The intruder makes itself almost invisible to the immune system.

### Diagnostics-to-go

All the more important is an effective diagnosis. Well-equipped laboratories reveal *Yersinia* by their distinctive genetic material. Bacteriological identification is also possible. Especially in developing countries, however, there is a need for a quick and simple method. Braunschweig researchers for that reason bonded small magnetic beads onto a specific antibody that binds to surface structures of *Yersinia*. This reagent is mixed with a plasma sample of the patient on-the-spot. Professor Mahavir Singh of the Helmholtz Centre for Infection Research: "Within a diagnostic device, these complexes couple onto a specially coated surface and become exposed to a magnetic field. A detector then measures not only whether plague proteins are present in the solution, but can also determine their concentration." The new system should also be deployable in remote areas without well-functioning health infrastructure.

### Quick intervention

Because speed wins. Otherwise *Yersinia* infections are still fatal if medical staff do not recognise it in time. This



is no surprise, as the initial symptoms of fever, headache and body pain to be expected with quite a few other diseases. With early diagnosis – and this is the crux – a plague-bacteria infection can with antibiotics be treated well. In such cases tetracyclines, sulfonamides, Streptomycin or Chloramphenicol have proven successful. A protective vaccine is also now available.

### Let the dead speak

Looking back: Was *Yersinia pestis* really responsible for the great epidemics of the Middle Ages? Researchers had occasionally in the past also considered Anthrax or typhoid fever as bringers of evil. A group of anthropologists from Johannes-Gutenberg-Universität Mainz wanted to know precisely. The researchers organised skeletons from assumed plague burials in Germany, Italy, England, France and the Netherlands. Ancient DNA isolated from teeth or bones, together with immunological methods, found the guilty culprit to be *Yersinia pestis*. And not only that: "Our findings suggest that the plague was imported through at least two channels to Europe and then in each case an individual route was taken," said Dr. Barbara Bramanti, Department of Anthropology. The surprise was that on the basis of 20 markers, neither the variants "Midevalis" or "Oriental" were discovered. Instead, the researchers tracked down two previously unknown varieties, one

of which at least no longer exists. The other genetically matches a variant that was isolated from local plague outbreaks in Asia. With the data it was even possible to reconstruct some propagation paths: Already in 1347 the bacteria migrated from Asia via traditional trade routes to the French Marseille, then on through France to England. In the Netherlands another variant was exposed – which was evidence of an infection route via Norway and northern Germany.

The depicted scenario still has a blemish: The speed at which the epidemic moved through town and country can't be reconciled with the cause being rats and their blind flea passengers. Vets have calculated a spread radius of up to 20 meters per week, but historical sources have concluded that the range was from 20 to 25 kilometers per week. One possible explanation comes from scientists at the University of Marseille. Didier Raoult, head of the Department of Clinical Microbiology, considers the body louse to be the evil culprit. The organism, after infection, deposits bacteria within its excretions for about two weeks, and so the disease could be transmitted via clothing. Hence it isn't, according to Raoult, the migration of rats that was crucial to the Black Death. Instead, people themselves would have been responsible for transmission along the travel routes. This is a phenomenon which was at that time as relevant as it is today.

### Blood analysis chip detects diseases in minutes

Source: <http://www.tgdaily.com/general-sciences-features/54744-blood-analysis-chip-detects-diseases-in-minutes>

A big step forward in micro-fluidics has helped researchers develop stand-alone, self-powered chips that can diagnose diseases within minutes.

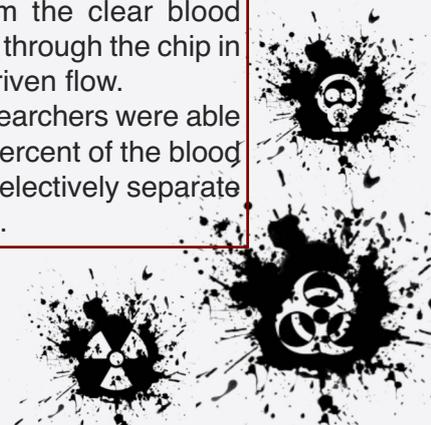
The Self-powered Integrated Micro-fluidic Blood Analysis System (SIMBAS) can process whole blood samples without the use of external tubing and extra components.

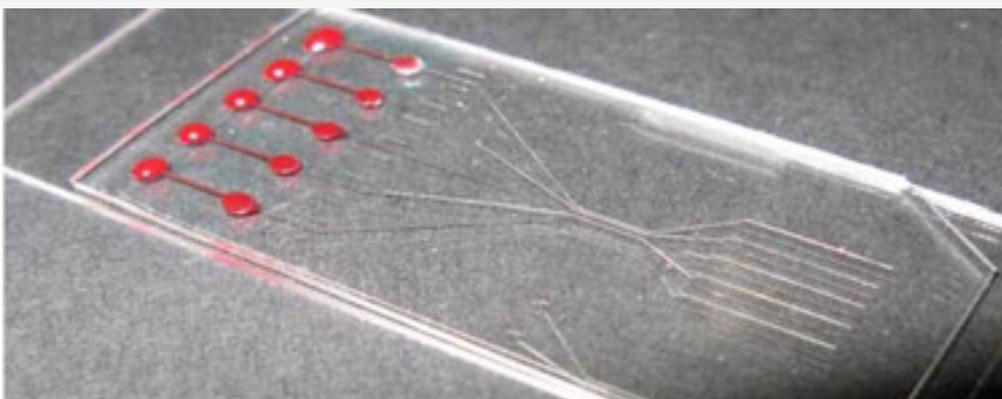
"This is a very important development for global healthcare diagnostics," says UC Berkeley professor of bioengineering Luke Lee. "Field workers would be able to use this device to detect diseases such as HIV or tu-

berculosis in a matter of minutes."

The SIMBAS biochip uses trenches patterned underneath nanoscale microfluidic channels. When whole blood is dropped onto the chip's inlets, the relatively heavy red and white blood cells settle down into the trenches, separating from the clear blood plasma. The blood moves through the chip in a process called degas-driven flow.

In experiments, the researchers were able to capture more than 99 percent of the blood cells in the trenches and selectively separate plasma using this method.





The team demonstrated the proof-of-concept of SIMBAS by testing a five-microliter sample of whole blood that contained biotin (vitamin B7) at a concentration of about 1 part per 40 billion.

The chip provided readout of the biotin levels in 10 minutes.

"This is a very important development for global healthcare diagnostics. Field workers

would be able to use this device to detect diseases such as HIV or tuberculosis in a matter of minutes. The fact that we reduced the complexity of the biochip and used plastic components makes it much easier to manufacture in high volume at low cost," says Lee.

"Our goal is to address global health care needs with diagnostic devices that are functional, cheap and truly portable."

## In Ricin Bioterrorist Attack, Food Prep Surfaces Could Be Decontaminated With Household Bleach

Source: <http://www.medicalnewstoday.com/articles/220604.php>

Help for a bioterrorist attack involving ricin, one of the most likely toxic agents, may be as close at hand as the laundry shelf, according to a report presented here at the 241st National Meeting and Exposition of the American Chemical Society (ACS). It concluded that ordinary household bleach appears to be an effective, low-cost, and widely available way to decontaminate food preparation surfaces in homes, restaurants, and processing plants that are tainted with ricin. Ricin is a poison found naturally in castor beans, which are grown and processed throughout the world to produce castor oil. Although no longer widely used as a laxative, castor oil remains a key raw material in the manufacture of soaps, paints, dyes, inks, lubricants, hydraulic and brake fluids, and other products. Ricin occurs in the waste "mash" left behind after production of castor oil. Because it is so easy to obtain and so toxic, with no antidote, experts regard ricin as one of the most likely bioterror agents. "This discovery is important because

it provides a practical, readily available way to inactivate ricin on food processing equipment in the event of an intentional contamination event," said Lauren Jackson, Ph.D., who reported on the research. "It is the first study to explore ricin decontamination in the presence of food, and it shows that household bleach is effective." Jackson and colleagues prepared solutions of bleach and two other substances routinely used at food processing plants to disinfect counters, machinery and other surfaces that may contain harmful bacteria or viruses. The other disinfectants were peroxyacetic acid (PAA) and so-called quaternary ammonium compounds. In one set of experiments, they tested the substances on discs of stainless steel smeared with milk-based infant formula, pancake mix, peanut butter and other foods that contained ricin. They also tested the three disinfectants on a "control" solution containing ricin, but without any food, to make sure it was the disinfectants that inactivated ricin and not something present in the foods.





Household bleach turned out to be the most effective anti-ricin agent. Bleach significantly reduced the toxicity of ricin within five minutes, noted Jackson, a research food technologist with the U.S. Food and Drug Administration in Summit-Argo, Ill. Bleach completely eliminated ricin in the "control" samples using just a small amount of bleach. PAA also showed effectiveness, but less so than bleach.



### International Meeting on Emerging Diseases and Surveillance (IMED 2011)

Source: <http://imed.isid.org/symposia.shtml>

Visit source for downloading interesting presentations (78) from this important conference held in Vienna, Austria (4-7 Feb 2011).

### BioSecurity N Zealand

Source: <http://www.biosecurity.govt.nz/publications/surveillance/index.htm>

'Surveillance' is published as MAF Biosecurity New Zealand's authoritative source of information on topics of relevance to New Zealand's animal disease surveillance and animal health status.

Each complete edition of 'Surveillance' can be downloaded from this website.

#### Contents

- Exotic disease focus
- Bovine ephemeral fever
- Clinical and epidemiological investigation to exclude foot and mouth disease in cattle





- Chemical residues surveillance programme 2008-2009
- Quarterly review of diagnostic cases: Gribbles Veterinary Pathology and New Zealand Veterinary Pathology
- Quarterly report of investigations of suspected exotic diseases
- The Marine Invasives Taxonomic Service
- Marine surveillance in New Zealand
- Quarterly report of investigations of suspected exotic marine and freshwater pests and diseases

## Tools For Identification Of Biological Threats

Source:

[http://www.environics.fi/index.php?option=com\\_content&view=article&id=64&Itemid=187](http://www.environics.fi/index.php?option=com_content&view=article&id=64&Itemid=187)

ENVI Assay System Gold and FL test kits are built on handy and compact immunoassay format in which BWA-specific gold- or fluorescence-labeled antibodies are utilized in capturing the BWA of interest from the sample, respectively. These rapid tests are suitable for both field and laboratory conditions with no requirement for special training, big investments or maintenance costs. In combination with a handheld ChemProÆ Reader Module, the ENVI Assay System is all what you need for early indication of a biological threat.

### A Compact Solution Designed For Field Conditions

The ENVI Assay System Gold offers disposable, separate assays for three highly poisonous agents: ricin toxin, botulinum toxin and SEB. The ENVI Assay System FL tests cover four potential BWAs - Bacillus anthracis, Variola virus, botulinum toxin and ricin toxin. Both ENVI Assay System test kits include all tools required for performing a test: test cartridges, sampling swabs, buffer solution vials, dispensers and antibody reagents and instructions for use – no separate sample collection kits are needed. The unique ENVI Assay System Gold work

bench design makes testing even easier, when wearing personal protective equipment: the water-resistant test package contains pre-determined regions into which the test tools like the test cartridges, swabs and buffer vials can be placed for performing a test.



### Supreme Multi-Threat Detection Capability

There is no need to learn multiple detection devices with different user interfaces – ChemProÆ100 Chemical detectors operated with ChemProÆ Reader Modules and ENVI Assay System tests offer unique simultaneous chemical and biological detection in portable, battery-powered format.



When you know how to use the ChemProÆ100, you know how to use the Reader Module as well: the chemical detector provides large keypad, clear display, power and user-friendly interface for this optional accessory.



- High throughput in demanding working conditions

### Key Features

- High quality and proven test method
- The most compact “lab-in-a-box” in the market
- Unique simultaneous biological and chemical detection capability
- Sensitive, specific and proven
- No special training required
- Unique workbench design

### Applications

- Law enforcement agencies
- CBRN special forces
- Mail security
- Private security services
- Customs and border control
- Airport security check
- Mobile laboratories
- EnviScreen CBRN Monitoring Systems

## Biosensors: A handy kit

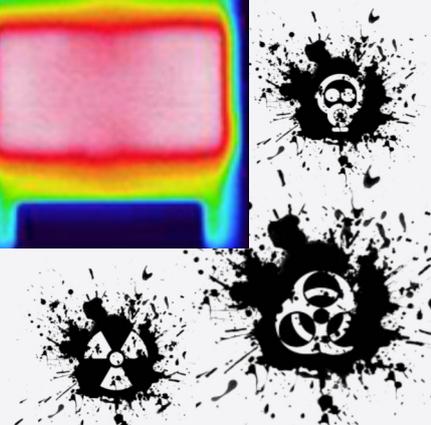
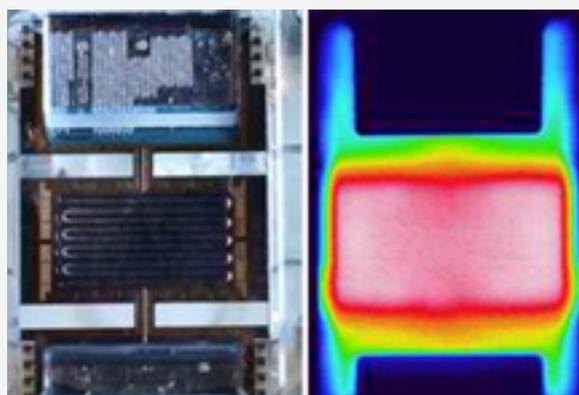
Source: <http://www.physorg.com/news/2011-04-biosensors-handy-kit.html>

The control of infectious diseases such as the 2009 H1N1 pandemic influenza hinges on handy analytical tools that can rapidly and accurately identify infected patients at the doctor’s office or at an airport. For this reason, there has been much interest in technologies that could enable replacement of the bulky instruments used at present with point-of-care testing devices. Linus Tzu-Hsiang Kao and co-workers at the A\*STAR Institute of Microelectronics and the Genome Institute of Singapore have now developed a silicon-based microfluidic system that is able to sense and differentiate the H1N1 virus from other seasonal influenza strains in ultrasmall specimens.

The detection and characterization of viral strains is now routinely performed using an assay method called real-time reverse trans-

cription polymerase chain reaction (RT-PCR), a method that typically calls for specialized laboratory instruments and skilled personnel. Kao’s team, however, was able to integrate the PCR function into a compact two-module microfluidic chip using standard semiconductor technology. “The system will be suitable for use as a portable diagnostic tool for on-the-spot screening of highly contagious viruses, such as the influenza A H1N1 strain,” says Kao.

Photograph of the PCR microfluidic chip mounted on a sample delivery and electronic measurement system (left), and an infrared image showing the uniform thermal distribution across the PCR chamber during thermal cycling (right).



Because untreated influenza samples usually contain minute amounts of viral RNA mixed with other nucleic acids and proteins, the researchers designed an 'on-chip' PCR module that amplifies target sequences for both H1N1 and seasonal viruses at the same time. The key to their compact screening technology, however, is the silicon-nanowire sensing module used for virus identification. The nanowires in the module are modified with nucleic acid-containing polymers that specifically bind the target DNA, which results in a change in electrical resistance in proportion to the concentration of target DNA present in the sample.

The team fabricated the PCR module, which includes a reaction chamber connected to small aluminum heaters and temperature sensors through tiny channels, directly into a silicon chip using an etching technique. They then constructed the silicon nano-wires by optical lithography and finally immobilized the nucleic acid-containing polymers.

Experiments revealed that the small size of the PCR chamber gave it a uniform temperature distribution (see image), providing an ideal environment for efficient RNA amplification. The PCR module also responded much faster to heating/cooling cycles than standard instruments because of the small sample volume—leading to quicker diagnoses.

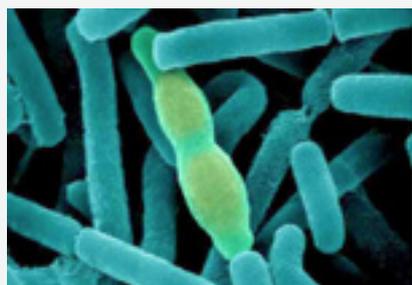
The team is currently planning to improve the sample extraction module. "We are in the process of building a fully automated and integrated prototype, which will allow us to proceed to clinical validation with our collaborators," says Kao.

More information: Kao, L. T.-H. et al. Multiplexed detection and differentiation of the DNA strains for influenza A (H1N1 2009) using a silicon-based microfluidic system. *Biosensors and Bioelectronics* 26, 2006–2011 (2011).

## Promising anthrax treatment study results

Source: <http://aac.asm.org/cgi/content/abstract/55/4/1533>

Researchers find that a multi-agent prophylaxis which is initiated within twenty-four hours



The bacterium *Bacillus anthracis*  
// Source: [ib-times.com](http://ib-times.com)

after the infection, prevented the development of fatal anthrax respiratory disease; treatment which combines antibiotics with immunization and a protective antigen-based vaccine offered long-term immunity against the disease.

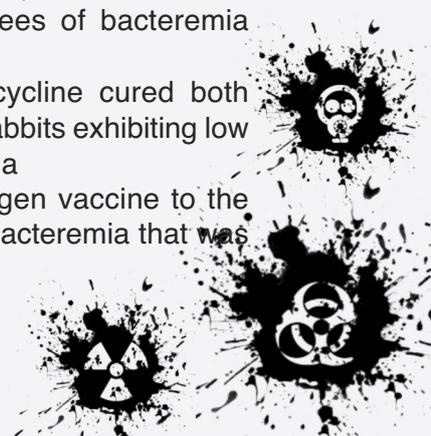
Good news on the anthrax front. According to a study in the April 2011 issue of the journal *Antimicrobial Agents and Chemotherapy*, a multi-agent prophylaxis which is initiated within twenty-four hours after the infection, prevented the development of fatal anthrax

respiratory disease. Treatment which combines antibiotics with immunization and a protective antigen-based vaccine offered long-term immunity against the disease. *Infection Control Today* reports that the research was performed by Israeli scientists at the Israel Institute for Biological research in Ness Ziona.

The researchers emphasized that combining antibiotic treatment with a protective antigen vaccine, and starting the treatment no longer than twenty-four hours after infection, left all animals fully protected even after the end of treatment. The researchers found that:

- Animals whose treatment was delayed beyond twenty-four hours post-infection developed varying degrees of bacteremia and toxemia
- Treatment with doxycycline cured both sick guinea pigs and rabbits exhibiting low to moderate bacteremia

Adding protective antigen vaccine to the mix boosted the level of bacteremia that was



curable 10-fold in the guinea pigs and 20-fold in the rabbits. Ciprofloxacin plus a monoclonal anti-protective antigen antibody, however, was still more effective.

— Read more in Shay Weiss et al., “Antibiotics Cure Anthrax in Animal Models,” *Antimicrobial Agents and Chemotherapy* 55, no. 4 (April 2011): 1533-42 (doi:10.1128/AAC.01689-10)

## Anatomy of a Bioterrorist Attack

by Lou Banks

Source:[http://www.domesticpreparedness.com/Commentary/Viewpoint/Anatomy\\_of\\_a\\_Bioterrorist\\_Attack/](http://www.domesticpreparedness.com/Commentary/Viewpoint/Anatomy_of_a_Bioterrorist_Attack/)

Few things elicit more fear than being attacked by something unseen or unknown. This is precisely why a Bioterrorist Attack is a scenario that requires some of the most advanced preparation. A bioterrorist event is not a fictional scenario; it is, rather, a reality that has been carried out in the recent past with the anthrax attacks in the United States shortly after the 9/11 terrorist attacks of 2001 and the Aum Shinrikyo-orchestrated attacks against the Japanese subway system; the group is known to have unsuccessfully attempted to use biological agents.

The probability of such an attack increased with the passage of time. U.S. intelligence agencies have issued warnings, in fact, of a pending bioterrorism attack against the U.S. homeland within the next few years. Not only can a bioterrorist attack cause mass casualties as infected carriers unknowingly transmit the pathogen throughout the population, but it can also cause a widespread public panic that would overwhelm public resources as people become anxious over the potential of being exposed or having recently been exposed.

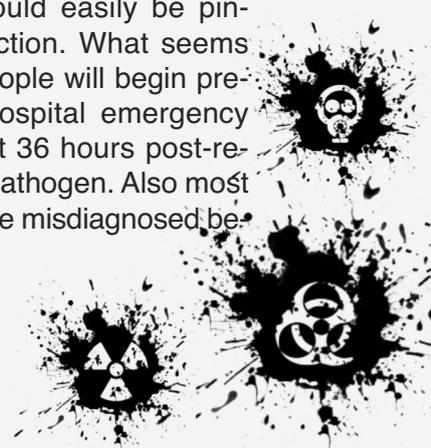
Moreover, the economic impact can be considerable from, among other things, lost productivity from employees calling in sick, the probable loss of tourism, and numerous facility closures and decontamination. One has only to look at the economic impact on Mexico (and the rest of the world) from the 2009 naturally occurring H1N1 Swine Flu Epidemic that, according to some estimates, cut the world GDP by \$2 trillion. Incidentally, the U.S. National Planning Scenario for an aerosolized anthrax attack estimates that such an attack on a U.S. metropolitan center would cost billions of dollars and could lead to

a major economic downturn caused by the loss of consumer confidence.

Unlike a chemical, nuclear, or explosive event, there usually is no immediate and/or clear indication that a nation, or community, has been attacked by terrorists using a biological weapon. Even chemical weapons leave at least some traces – caused by obnoxious odors, burning sensations, or difficulty breathing. In contrast, a biological attack, termed a “silent” attack, can be carried out by tampering with food – as was the case in the notorious 1984 Rajneeshee attacks on salad bars in The Dalles region of Oregon. Moreover, a biological attack can be perpetuated significantly by distributing pathogens in water, aerosolizing spores, or even via the U.S. mail system – all of which can be carried out without being detected. In the absence of a visual indicator, such as a powder accompanied by a credible threat, the detection of a biological attack can take days, weeks, months, or even years, and it can be very difficult if not impossible to catch the perpetrators.

### An Important Question – Followed by a Very Slow Answer

So the question arises: What would a “silent” biological attack look like? According to the National Planning Scenario for an aerosolized anthrax attack, it very probably would not be a dramatic event that could easily be pinpointed to a time of infection. What seems more likely is that sick people will begin presenting themselves to hospital emergency rooms (ERs) within about 36 hours post-release of the bioterrorism pathogen. Also most likely, the first victims will be misdiagnosed be-



cause the initial symptoms closely resemble flu symptoms. However, after a number of victims with advanced symptoms present themselves to ERs, epidemiologists will be able to declare a contagious disease emergency and activate the response network. In all likelihood, though, at least a week will have passed before detection.

Quicker detection is the key, therefore, to minimizing the impact of a bioterrorism attack and the saving of lives after such an attack occurs. Fortunately, there are a few quicker detection methods (less than two days) that can be employed. One method is to continually monitor air in strategic locations for the presence of biological particles. Once characterized biological particles have been detected, an automatic trigger initiates the collection of air samples for identification, and a determination then can be made on the burning question of whether a bioterrorism pathogen has been released.

Current air-surveillance technologies have the capability to identify an attack in 1-2 days. Other methods are utilized to identify powders. Visible powdery substances – the so-called “white powder” threats – now can be identified with a high degree of certainty within just a few hours through the use of new and highly sensitive field instruments carried by well-trained first responders such as hazmat technicians, firemen, or policemen.

Biosurveillance and field assessments are obviously among the most valuable tools available for the early detection of a biological attack, largely because first responders will almost always not only be first on the scene but also will be responsible for managing the initial stages of the event. For practical purposes, this means that, while field teams are waiting for the Laboratory Response Network (LRN – managed by CDC and the Association of Public Health Laboratories) – to complete confirmatory testing, the first responders will be, and are, responsible for quarantining and decontaminating probable victims and organizing the potential response reactions based on the initial credibility of the threat.

For that reason alone, it is imperative that these responders always have the best tools currently available to properly manage the incident and save lives. Fortunately, the U.S. government continues to fund such programs so that response agencies in communities – local, state, and federal – throughout the nation can reach an adequate preparedness level.

Lou Banks is the BioDefense Marketing Manager at Idaho Technology. Idaho Technology leads in the development of sensitive and reliable bioterrorism detection and identification instruments.

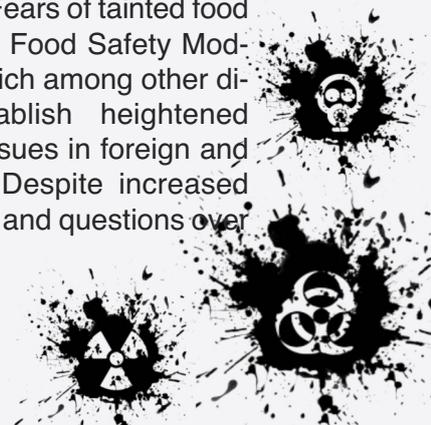
## Food-Based Bioterrorism – a Growing Threat to U.S.

Source: [http://www.globalsecuritynewswire.org/gsn/nw\\_20110427\\_6562.php](http://www.globalsecuritynewswire.org/gsn/nw_20110427_6562.php)

The United States imports much of its food from other nations, giving terrorists multiple avenues for attempting to lace goods with harmful substances for potential consumption by U.S. residents, the Kansas City Star reported on Wednesday. Experts at a conference on agroterrorism said it is growing more difficult to safeguard consumers here from food that has been accidentally or deliberately contaminated. While new U.S. regulations and enhanced monitoring by domestic food suppliers of their products have addressed the potential for such an attack, threats remain from food sources imported into the

country. Approximately one half of the U.S. food supply comes from another nation.

"There are more firms registered with the Food and Drug Administration to supply food to the U.S. from outside the country than there are inside the country," National Center for Food Protection and Defense Deputy Director Shaun Kennedy said. Fears of tainted food led Congress to pass the Food Safety Modernization Act of 2011, which among other directives seeks to establish heightened monitoring for potential issues in foreign and domestic food sources. Despite increased U.S. attention to the issue and questions over



whether hostile actors have the technical capacity to mount such an attack, Kennedy said

the likelihood of being poisoned by intentionally contaminated food is growing.

### Virtual Biosecurity Center (VBC)

Source: <http://www.virtualbiosecuritycenter.org/>

The Virtual Biosecurity Center (VBC) is a global multi-organizational initiative spear-



headed by the Federation of American Scientists (FAS) and is the 'one stop shop' for biosecurity information, education, best practices, and collaboration. The VBC was

launched in February 2011 and has received funding to support 3 high impact biosecurity related small projects. Approximately \$15,000 per project will be available for all events or projects to be held or completed by September 10, 2011. The Federation of American Scientists (FAS) pursues solutions to challenging problems in science and security policy through analysis and advocacy. FAS is committed to educating policymakers, the public, the news media, and the next generation of scientists, engineers, and global leaders about the urgent need for creating a more secure and better science-educated world.

### Absence of Smallpox "Take" May Not Indicate Revaccination Failure

Source: <http://www.upmc-cbn.org/index.html>

Successful vaccination against smallpox is generally determined by inspection of the vaccine site approximately one week after vaccination. Vesicles and pustules at the site are considered to be indicative of a successful vaccine take. These lesions are due to a localized dermal infection with the vaccinia virus.

It has long been observed that people who are revaccinated have lower rates of vaccine takes. This is believed to be due to persistent immunity from prior vaccination that blocks clinical manifestation of localized vaccinia infection. However, it is not clear if the absence of a take represents vaccine failure, ie, a fail-

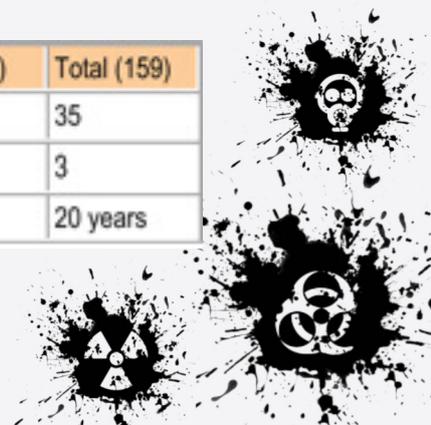
ure to induce immunity, or if it represents just a lack of visible evidence of a successful vaccination. Wisner and colleagues conducted a study of members of the Israeli Defense Forces (IDF) to assess the ability of surrogate immunological markers to assess vaccination results in those revaccinated against smallpox.

#### Surrogate Markers of Vaccine Results

This historical prospective study utilized a cohort of 159 adults, aged 24-52 years, who were vaccinated against smallpox in the winter of 2002-2003. Among the 159 subjects, 80 were included in an analysis comparing the

Table: Baseline Characteristics

Characteristic	"No-take" group (40)	"Take" group (40)	Total (159)
Mean age	33	34	35
Median # of prior vaccinations	3	3	3
Mean interval since prior vaccination	16 years	19 years	20 years



immunologic parameters of those with and without a successful vaccination take. Important baseline characteristics are summarized in the table below.

### Immunologic Evidence of Successful Vaccination

Several immunologic parameters were assessed at day 0, day 14, and month 24. At baseline, the no-take group demonstrated higher total IgG responses, IgG1 responses, and neutralization antibody titer. This was not unexpected, given that, on average, the no-take group had been vaccinated more recently than the “take group” (the inverse correlation between total IgG level and time since vaccination was statistically significant).

At day 14, levels of IgG—including IgG1-3 subclasses—and neutralization titers were found to be higher in the take group vs. the no-take group. However, most importantly, at month 24, no difference existed in total IgG, IgG subclass, or neutralizing antibody levels between the 2 groups. Moreover, cellular interferon-gamma secretion was higher in the no-take group, and antibody avidity was similar at 23 months. No difference in vaccinia-specific B-cell numbers was found at 24 months.

### Assessing Take in Re-vaccines Unnecessary?

This study demonstrates that, in the setting of re-vaccination, it is not necessary to recall those without a take (for either assessment and/or vaccination again), as a successful immunologic reaction is likely, even in the absence of evidence at the vaccination site.

This finding has major implications for mass vaccination campaigns that would occur in the event of a credible threat of smallpox release. Mass vaccination campaigns will involve the rapid mobilization of people, vaccinators, and supplies in a chaotic environment. A sizable proportion of the population has been vaccinated against smallpox in the past and may not demonstrate a vaccine take upon revaccination. Eliminating the need to assess this segment of the population for vaccine take will remove an additional task in a time of crisis and alleviate the burden on what will be already severely stressed medical resources.

### Reference

Wiser I, Orr N, Smetana Z, et al. Alternative immunological markers to document successful multiple smallpox revaccinations. *Clin Infect Dis* 2011. 52:856-861.

## Researchers use app to map spread of infectious diseases

Source: <http://www.cambridgenetwork.co.uk/news/article/default.aspx?objid=81593>

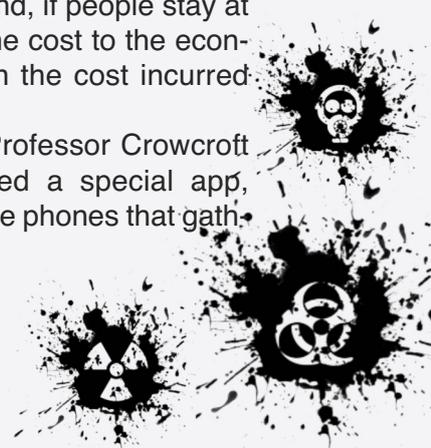
Researchers in the United Kingdom are using cell phones to map how infectious diseases are spread to help tailor public health policies during a mass outbreak; researchers developed a special app, called FluPhone, for mobile phones that gathered medical data from the user as well as information on how they interacted with other people; the app provides a scientific method for measuring the social activity of an entire population in real-time; FluPhone app can also be used to run simulations on how a disease would actually spread

Researchers in the United Kingdom are using cell phones to map how infectious diseases are spread to help tailor public health policies during a mass outbreak.

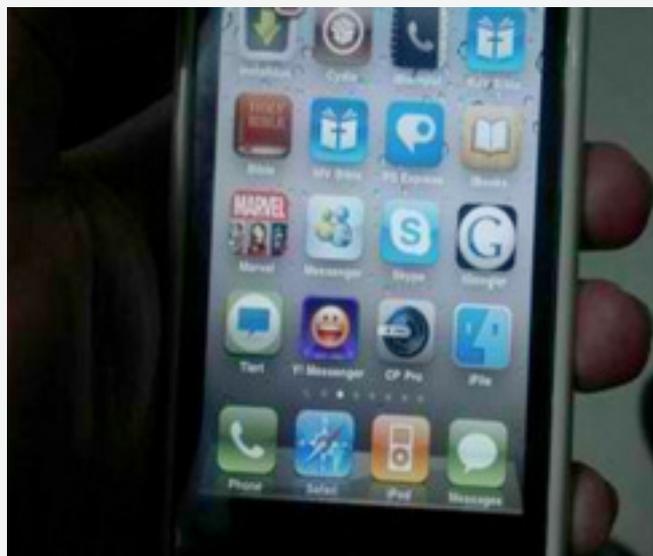
Two Cambridge scientists, Professor Jon Crowcroft and Dr. Eiko Yoneki, say that understanding how behavior changes during an epidemic or pandemic is critical to developing strategies to mitigate the spread of disease.

Professor Crowcroft explained, “How people behave could limit or exacerbate their risk of infection. Patterns of social interaction that worsen the spread of disease pose a significant risk. On the other hand, if people stay at home rather than work, the cost to the economy may be greater than the cost incurred through actual illness.”

To help gather data, Professor Crowcroft and Dr. Yoneki developed a special app, called FluPhone, for mobile phones that gath-



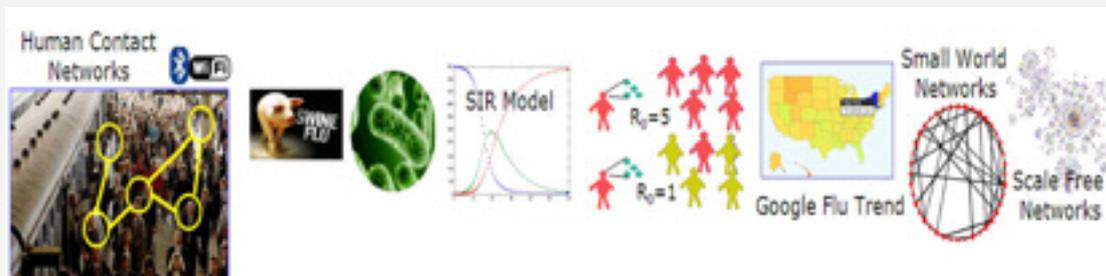
ered medical data from the user as well as information on how they interacted with other



people. "The application in the mobile phone monitors influenza-like symptoms by prompting questions for the mobile phone owner. It also captures physical proximity information between individuals by recording other de-

Yoneki said that the use of mobile phones in the study has provided a scientific method for measuring the social activity of an entire population in real-time. "A post-facto analysis of these data will yield valuable insight into how human communities are formed, how much time people spend together, and how frequently they meet. Such data show complex network-like structures, which is very useful for understanding the spread of diseases," said Dr. Yoneki.

Professor Crowcroft believes the use of mobile phones to gather data in scientific studies is a valuable addition to the arsenal of tools for researchers. "There are more cell phones than people, and, in most urban areas, network coverage is close to 100%, hence we can get very accurate measurement and sampling of the population," he said. Professor Crowcroft added that the FluPhone app can even be used to run simulations on how a disease would actually spread. "You can run a 'what-if' experiment on the live population based on



vices nearby via Bluetooth communication," Dr. Yoneki said.

The researchers were careful to take privacy into consideration and did not record any location information using GPS. During FluPhone's pilot program, researchers gathered data from volunteers, primarily University of Cambridge students and employees, over the course of several months. Adding further realism to the data, the study happened to coincide with an actual outbreak of swine flu. Dr.

their contacts, simply by randomly choosing some of the mobile phones to be infectious," he said. "We can then model the effect of behavior on disease spread." In moving forward, Professor Crowcroft and Dr. Yoneki have developed a prototype version of this virtual epidemic simulation app. "A specific disease infection model can be programmed, and the fake 'pathogens' can be transmitted via Bluetooth radio communication when two individuals are in proximity range," Dr. Yoneki said.



### New technology quickly detects bioattacks on water supply systems

Source:[http://www.youris.com/Nano/Water\\_Filtering/A\\_New\\_Detection\\_System\\_Can\\_Reveal\\_Bioterrorist\\_Attacks\\_On\\_Our\\_Water\\_Supply\\_Network.kl](http://www.youris.com/Nano/Water_Filtering/A_New_Detection_System_Can_Reveal_Bioterrorist_Attacks_On_Our_Water_Supply_Network.kl)

The risk of bioterrorist attacks or accidental contamination of a city water supply network may be low, but the consequences could be fatal. Researchers connected to DINAMICS (DIagnostic NAnotech and MICrotech Sensors), a project co-funded by the European Commission, have made a lab-on-a-chip device that can monitor drinking water and spot different pathogens even at very low concentrations.

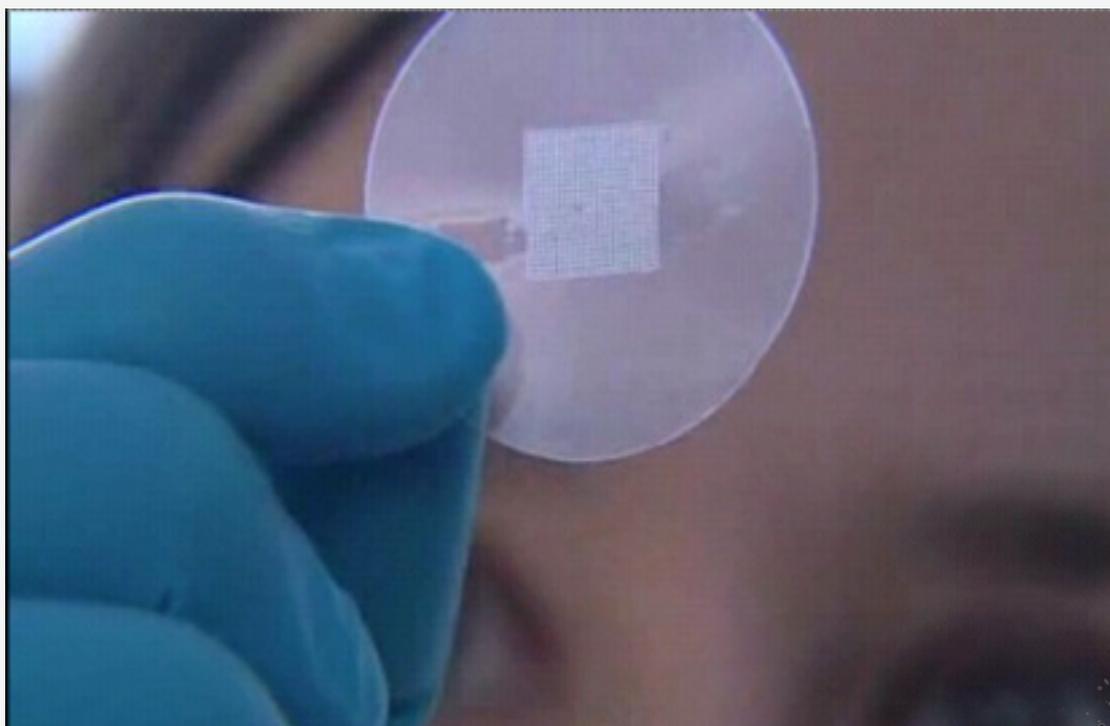
Youris.com, the European Research Media Center, reports that the device uses sensors with very small strands of different pathogenic DNA integrated onto their surfaces quickly to recognize pathogenic DNA from water samples. The DNA in the sensors will only bind to the water samples' corresponding DNA, multiplied for easier identification.

To see what different DNAs are present in the water samples, the researchers apply a reaction called chemiluminescence that will make the bound DNAs emit light. The nanoscale reactions are then interpreted by a computer. The DINAMICS project's re-

searchers have also developed another type of sensor that changes the bound DNAs into electric signals. The signal's magnitude is proportional to the quantity of pathogenic DNA from the water sample.

At present, water samples are brought to the laboratory for analysis. The researchers' goal is to make this step redundant by bringing the laboratory to the water instead, since the device is part of a portable detection system. This would speed up the process substantially. If the system detects a biological threat the authorities can be informed through email or mobile phone.

Youris.com notes that another way of spotting accidental or deliberate water contamination has been developed by the Fraunhofer Institute in Germany. By also recognizing that existing methods for water analysis are time-consuming they have set up a system called AquaBioTox, which uses living microorganisms. A sensitive camera system continuously records and analyses the microorganisms' reactions to the water. Even though the re-



searchers have documented a reliable and fast detection of contaminants, to guarantee robustness against false alarm and maximum reliability in diagnosis they recommend that the system is combined with other sensors on the market.

The release also notes that if the system becomes widely available in the water industry, this more cost-efficient way of testing could significantly improve water safety, alone or in combination with other sensors.

## Face-off Continues Over Smallpox Drug Contract

Source: <http://www.rttnews.com/Content/TopStories.aspx?id=1624527>



Two names come to mind when we think of a new smallpox drug - Oregon-based Siga Technologies Inc. and North Carolina-based privately held biotech company Chimerix Inc. These two companies continue to be in the news not only for landing a federal contract but also for the standoff between them.

Smallpox eradication efforts by the WHO began in 1967 and the world was officially declared free of this highly contagious disease in 1980. At present, there is no effective drug with which to treat or prevent smallpox infections. In September 2007, the FDA approved ACAM2000 made by Acambis plc., the first smallpox vaccine in over 75 years. Although smallpox has been eradicated from the world, it still poses potential bioterrorism threat as there is a risk of deliberate release of smallpox virus for use as a bio-warfare agent.

To address the bioterrorism threat, Siga Technologies is developing ST-246, an orally active, smallpox antiviral, to treat individuals exposed to the smallpox virus in the event of an outbreak. According to Siga, ST-246 works by blocking the ability of the virus to spread to other cells, preventing it from causing the disease. The FDA has designated ST-246 for "fast-track" status, creating a path for expedited FDA review and eventual regulatory approval.

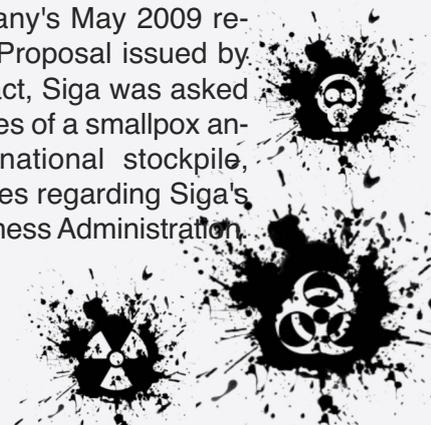
In clinical trial, ST-246 has been found to be well-tolerated in healthy human volunteers

at all tested orally administered doses. In addition, ST-246 is the first drug ever to demonstrate 100% protection against human smallpox virus in a primate trial conducted at the CDC (U.S. Centers for Disease Control and Prevention), according to Siga.

In order to supplement and re-supply health agencies with antibiotics, chemical antidotes, antitoxins or life-support medications if there is a public health emergency due to terrorist attack, flu outbreak or earthquake, the CDC maintains a national repository of life-saving pharmaceuticals known as Strategic National Stockpile or SNS.

Usually, the Department of Health and Human Services or HHS for short, through the Biomedical Advanced Research and Development Authority or BARDA issues an RFP (request for proposal) to eligible bidders to supply medicines to the nation's stockpile. Under the RFP, BARDA seeks responses from qualified small business sources only.

Last October, Siga was selected for the procurement of smallpox antiviral drug by the U.S. Department of Health and Human Services relating to the company's May 2009 response to a Request for Proposal issued by BARDA. Under the contract, Siga was asked to deliver 1.7 million courses of a smallpox antiviral for the strategic national stockpile, pending resolution of issues regarding Siga's status with the Small Business Administration.



Only those companies that qualify as a small business concern are eligible for the award.

Siga's eligibility for award of the government contract was questioned by Chimerix, an unsuccessful contender for the strategic national stockpile. Chimerix is also developing CMX001 as a medical countermeasure for the treatment of smallpox. According to Chimerix, since the SBA (Small Business Administration) had determined that Siga is not a small business concern as it is controlled by and affiliated with MacAndrews & Forbes, owned by billionaire Ron Perelman, Siga did not qualify for a small-business set-aside.

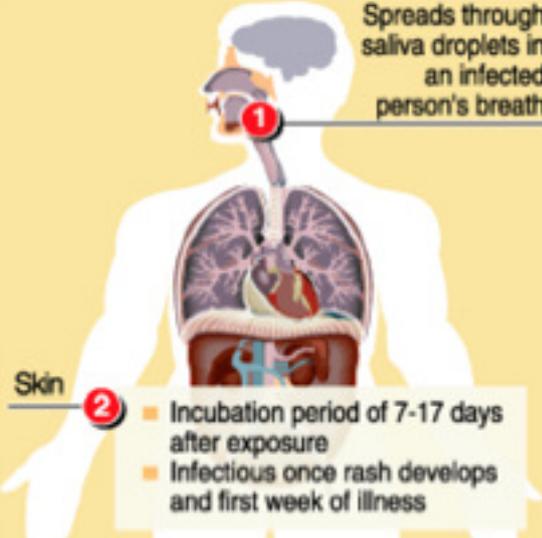
Last November, Siga appealed the adverse small business size determination of the SBA. However, in February of this year, the Small Business Administration Office of Hearings and Appeals affirmed the ruling of the SBA Area Office that Siga was other than

small at the time of its submission in response to a Request for Proposal from the BARDA.

Meanwhile on February 16, 2011 Chimerix was awarded a contract worth a total value of \$81.1 million by the BARDA for the development of its antiviral drug candidate, CMX001, as a medical countermeasure in the event of a smallpox release.

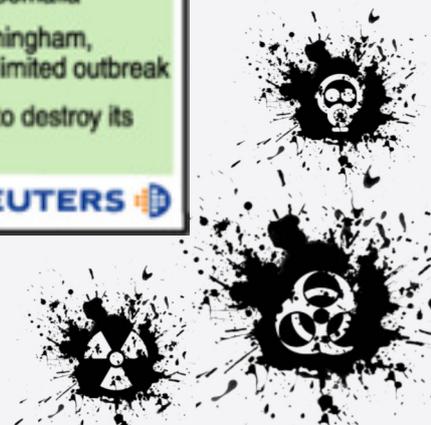
On February 18, 2011, the 2009 BARDA Smallpox RFP was canceled and a new Request for Proposal, seeking to procure 1.7 million courses of a smallpox antiviral was issued on February 21, 2011. Siga responded to the 2011 BARDA Smallpox RFP, and on May 13, secured the contract with the BARDA to deliver two million courses of its smallpox antiviral, ST-246, to the Strategic National Stockpile. The 5-year base contract award is worth \$433 million and includes options that would raise the contract's total value to about

### SMALLPOX THREAT

WHAT IS SMALLPOX?	EFFECTS ON HUMAN BODY
<ul style="list-style-type: none"><li> Airborne virus, highly contagious</li><li>Caused by variola virus</li><li>Virus related to monkeypox</li><li>Could take approximately 6 weeks to seed smallpox cases around the world</li><li>Each infected individual infects an average of 20 others</li></ul>	 <p>Spreads through saliva droplets in an infected person's breath</p> <ul style="list-style-type: none"><li>Incubation period of 7-17 days after exposure</li><li>Infectious once rash develops and first week of illness</li></ul>
<ul style="list-style-type: none"><li> <b>Early symptoms</b> High fever, fatigue and rash</li><li>Resulting spots fill with clear fluid and pus then form a crust and fall off</li><li>Fatality rate ranges from 15 to 50 percent</li></ul>	
<ul style="list-style-type: none"><li> <b>Treatment</b> Vaccination (vaccinia) to prevent infection</li><li>During the first four days after exposure</li><li>Current U.S vaccine stock-pile was produced in 1970s and contains 7.5 million doses</li><li>To be kept on shelves and used in confirmed cases only</li></ul>	<h4>HISTORY</h4> <ul style="list-style-type: none"><li>1976 WHO urges labs worldwide to destroy retained stocks of variola virus</li><li>1977 Last known natural case - Somalia</li><li>1978 Laboratory accident in Birmingham, England, kills one and causes a limited outbreak</li><li>1983 South Africa - last country to destroy its virus stock</li></ul>

Source: WHO

REUTERS



\$2.8 billion, if these options are fully exercised. Contract options include the delivery of up to 12 million additional courses of ST-246, according to the company.

Shares of Siga gained more than 12% in after-hours trading on Friday (May 13) to close at \$15.98, following the news of the contract award.

But this time too, Chimerix is back with its deliberate ploy to delay the contract as it has filed a protest with the U.S. GAO (Government Accountability Office) over Siga's contract.

On May 15, Siga announced that it has been notified by the BARDA of the post-award protest filed by Chimerix. With work under the contract to be suspended until further notice pursuant to the applicable protest rules, there

is going to be a delay in the award of the contract to Siga.

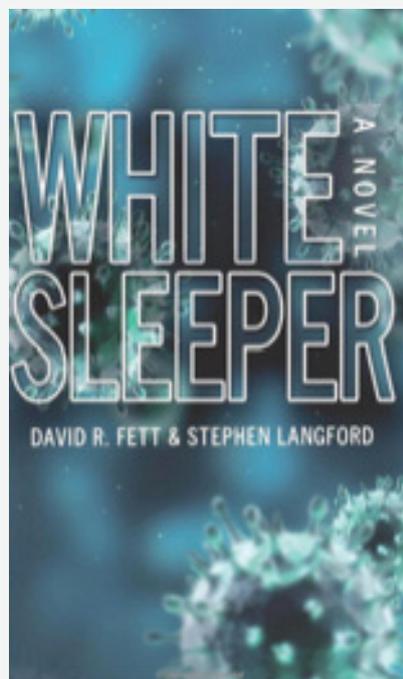
Commenting on the developments, Eric Rose, SIGA's Chairman and Chief Executive Officer, said, "We are undaunted by what we believe will be a brief delay in starting work on this important bioterrorism defense contract and will make every effort to deliver our smallpox antiviral drug to the Strategic National Stockpile as soon as possible. SIGA says it is uniquely positioned to assist the government in its efforts to protect the nation against the threat of smallpox. Will the government's decision to award the contract to Siga be upheld as entirely proper? Usually the GAO issues a decision on a protest within 100 days after it is filed. Stay tuned...

## White Sleeper Brings Biological Terrorism to American Families

Author: Bob Etier

Published: May 16, 2011

Source: <http://technorati.com/entertainment/article/white-sleeper-brings-biological-terrorism-to/>



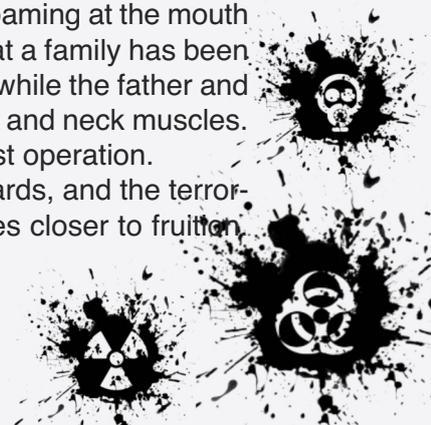
What do you get when you combine a terrorist thriller with a medical thriller? David R. Fett and Stephen Langford did just that and came up with *White Sleeper*, a story that mixes foreign and domestic terrorism, the FBI, CIA, CDC, a little sex, and a little romance. The result is a tale that could strike terror in the hearts of Americans...a plot to kill millions with the wholesale introduction of a deadly virus.

Doctors in a small town are at first puzzled when a local family comes down with botulism. Oddly, every member of the family has contracted the disease, and a sweep of the meticulously kept home provides nary a clue. If the family got the disease from a local source wouldn't there be a larger outbreak?

Soon another family comes down with an unexpected illness—plague. Again, the entire family is affected and a sweep of their home turns up no vectors. Both local doctors and Dr. Dave Richards, a disgraced CDC staffer, suspect a terrorism link. But how? Where?

When a little boy and his mother start foaming at the mouth and attacking people, the medics learn that a family has been infected with rabies. The mother and son have the "furious" form of rabies, while the father and daughter develop the "dumb" form—lethargy, weakness, paralysis of throat and neck muscles. There is no question that local residents are victims of some sort of terrorist operation.

Focusing both on the "detectives," in this case FBI agents and Dr. Richards, and the terrorists, *White Sleeper* takes the reader on a frightening ride as the plot comes closer to fruition.



Through a series of brilliant deductions and lucky coincidences, the investigators are soon on the trail of the people behind these illnesses (who have chosen a truly sinister method to infect large populations).

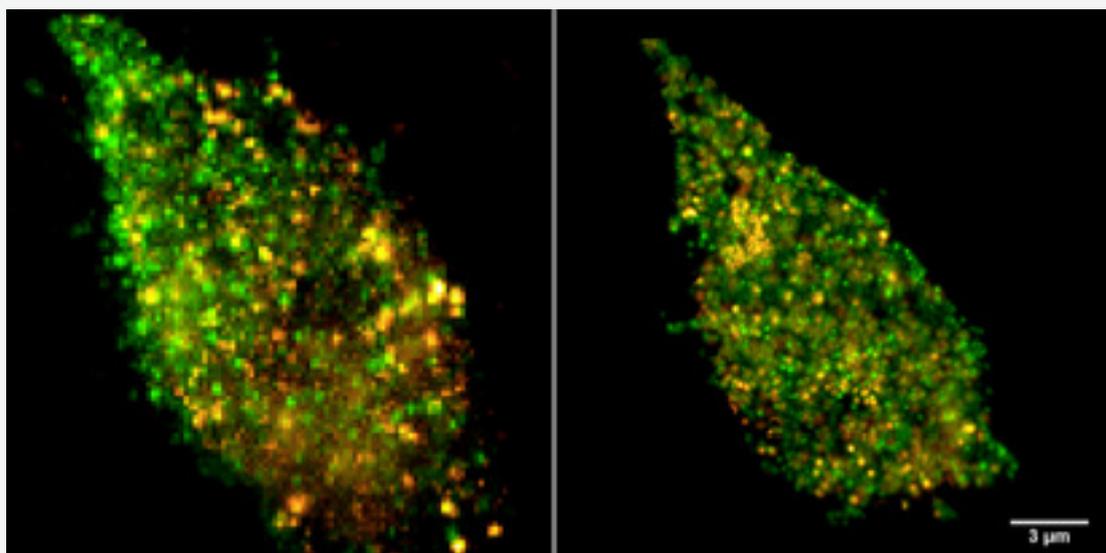
White Sleeper is a quick read and a good selection for summer reading, especially suitable for a day at the beach. Its mix of flawed protagonists and evil villains—with a sleazy bureaucrat and a mysterious CIA agent falling between—provides an entertaining treatment of a terrifying scenario.

## Secrets of plague unlocked with stunning new imaging techniques

Source:<http://homelandsecuritynewswire.com/secrets-plague-unlocked-stunning-new-imaging-techniques>

Researchers at Sandia National Laboratories have developed a super-resolution microscopy technique that is answering long-held questions about exactly how and why a cell's defenses fail against some invaders, such as plague, while successfully fending off

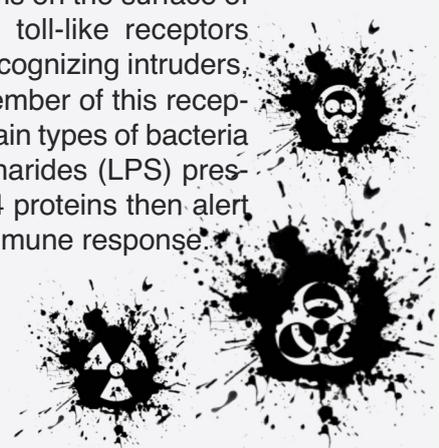
The cell membrane is a bustling hub of activity on a miniscule scale. While providing structure and housing the cell's interior, the membrane regulates movement of materials in and out of the cell, controls adhesion to other objects and coordinates the cell's com-



The difference between what was previously seen on the cell surface (left image) is dramatically different from what Jeri Timlin, Jesse Aaron, and Bryan Carson are now able to image (right). Orange areas correspond to the bacterial lipopolysaccharide (LPS), derived from *E. coli*, and the green areas correspond to the cell's TLR4 receptors. (Photo by Jeri Timlin, Jesse Aaron and Bryan Carson)

others like *E. coli*. The approach is revealing never-before-seen detail of the cell membrane, which could open doors to new diagnostic, prevention, and treatment techniques. "We're trying to do molecular biology with a microscope, but in order to do that, we must be able to look at things on a molecular scale," says Jesse Aaron, postdoctoral appointee at Sandia Labs.

munications and subsequent actions through signaling. Receptor proteins on the surface of immune cells, known as toll-like receptors (TLRs), are tasked with recognizing intruders, or antigens. The TLR4 member of this receptor family responds to certain types of bacteria by detecting lipopolysaccharides (LPS) present on their surface. TLR4 proteins then alert the cell and activate an immune response.



Sandia Labs release reports that using imaging techniques they developed, Sandia researchers Aaron, Jeri Timlin, and Bryan Carson discovered that TLR4 proteins cluster in the membrane when confronted with LPS derived from *E. coli*, which increases cell signalling and response. Interestingly, LPS derived from the bacteria that cause plague, *Yersinia pestis*, do not cause the same effects. This could explain why some pathogens are able to thwart the human immune system.

combination enables the Sandia team to get a more complete picture by simultaneously imaging LPS and TLR4 receptors on the membrane. "Current light microscopy capabilities are akin to looking out the window of an airplane and seeing the irrigation circles. You know that plants are there, but you can't tell what kinds of plants they are or what shape the leaves are," said Carson, a Sandia immunologist who was an integral part of the project. "But with this technology, it's like zooming



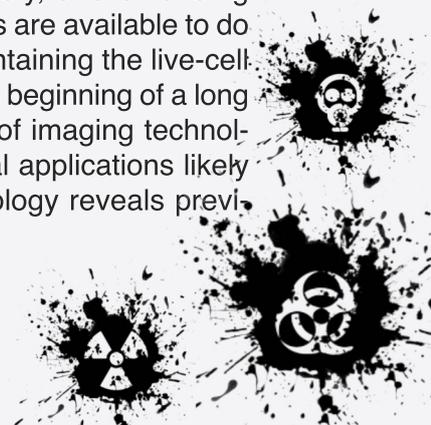
Jesse Aaron, left, Jeri Timlin, and Bryan Carson in their laboratory working with new imaging techniques to view cell-level activity with unprecedented detail. (Photo by Randy Montoya)

The plague studies marked the first time such small events have been imaged and compared, the Sandia researchers said. Previously, even the most sophisticated optical microscopes could not image the cell surface with enough spatial resolution to see the earliest binding events, due to the diffraction barrier, which limits what can be resolved using visible light.

"With more traditional visualization methods, you can't see the level of detail you need. It's important to look at not only what's present, but also when and where it's present in the cell," Timlin said. The technique used by Timlin and Aaron builds on superresolution capabilities developed in recent years, but goes another step by adding dual-color capabilities to the relatively new stochastic optical reconstruction microscopy, or STORM. The

in and seeing the leaves and the structure of the plants. That buys you a lot in terms of understanding what's happening within a cell and specifically how the proteins involved interact."

In 2009 the National Institutes of Health awarded Timlin a five-year, \$300,000-a-year innovation grant. Next on the team's agenda is developing the capability to image live cells in real time using spectral Stimulated Emission Depletion, or STED. "We're working toward using a version of superresolution that's much more live-cell friendly, and extending that in terms of what colors are available to do multiple colors, while maintaining the live-cell friendliness. I see this as a beginning of a long development in this type of imaging technology," Timlin said. Potential applications likely will expand as the technology reveals previ-



ously unattainable details of cell signaling. Eventually, the Sandia team would like to be able to visualize protein/protein interactions. "Every biological process that goes on in your body is somehow controlled by proteins forming complexes with other proteins or complexes in the membrane, so this would give you this ability to look, with high spatial resolution and multiplexed color capabilities, at four or more things in a living cell, which can't be done very easily right now. It can be done in pieces, but we want to see the whole biological process," Timlin said.

The technology has exciting potential in immunology and drug discovery. Improved imaging could show the mechanisms viruses use to invade cells, which might lead to drugs that would block entry. "We're hoping to do something like label the viral particles and watch them in real time, or as close as we can

to real time, in the internalization process," Carson said. "With the superresolution technique, we can actually watch them move through the membrane and see if there are other structures being recruited by the virus to the site of internalization."

The release notes that Sandia originally developed the technology in support of its biological national security programs, but the team wants to expand the technology into other areas such as biofuels to better understand where and when different pigments are located on the membrane of oil-producing algae. This would provide valuable insight into their photosynthesis functions, which could lead to more efficient biofuel production. "A lot of this work is in its early stages, but we're encouraged by what we're seeing and excited about its future potential," Aaron said.

## Should Smallpox Samples In The USA And Russia Be Destroyed?

By Christian Nordqvist

Source: <http://www.medicalnewstoday.com/articles/225616.php>

If smallpox laboratory stocks are destroyed, we eliminate the risk of an accident which could lead to an outbreak, get rid of them and say goodbye to any future research on a how to respond to a biological weapon one day. What should be done about a disease that used to kill nearly 30% of infected patients, was declared eradicated in 1980, and still exists in two laboratories? This week, WHO (World Health Organization) will decide on its position during the 64th World Health Assembly. This theme, which was first brought up in the Assembly in 1986, has been bouncing around debating circles ever since.

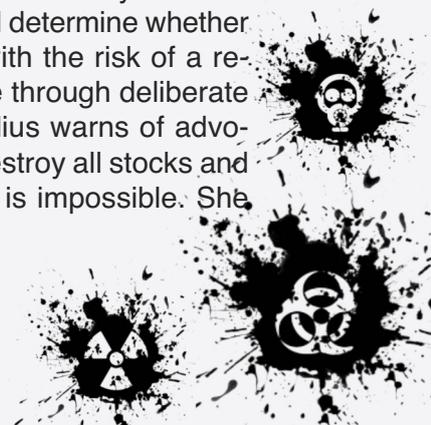
Getting rid of the smallpox stocks would address the problem of a possible accidental release one day. However, the USA and Russia are concerned that virus vials may exist elsewhere. In fact, as 50 variola virus strains have been fully sequenced, scientists could if they wanted to build one from scratch. This capability encourages the Americans and Russians to hold onto their stocks so that re-

search can lead to ways of dealing with a biological attack.

Although scientists say there have been enormous advances in smallpox research, this has not been the case with drugs and vaccines. There are no infected humans to test the new candidate vaccines and drugs on. Put simply, there is no way of carrying out clinical trials these days.

### US Government Position

Kathleen Sebelius, U.S. Secretary Of Health And Human Services, explained the US government's position in a letter to the New York Times last month. She wrote that the smallpox samples held in secure laboratories should and will eventually be destroyed. However, when this is done will determine whether humans continue living with the risk of a re-emergence of the disease through deliberate misuse of the virus. Sibelius warns of advocates who would like to destroy all stocks and believe another outbreak is impossible. She



cautions that it might be naïve to ignore the need to be properly prepared for another outbreak - this can only be done if we hang on to the current samples. Put simply, Sibelius explains that the US and Russia believe the dangers of destroying the existing smallpox samples are greater than if we hold on to them. Sibelius explained that over 300 million people worldwide were killed by smallpox in the last century alone - there were also hundreds of millions of survivors who became blind or badly scarred. Thanks to the most effective vaccination campaign this planet has ever seen, the disease was totally eradicated by 1980.

When the disease was eradicated, WHO asked nations around the world to destroy their sample or send them to two laboratories, one in the USA and the other in Russia - both WHO-sanctioned laboratories. Sibelius says that we presume, in good faith, that every nation did what WHO asked. Unfortunately, we have no proof - nobody has ever tried to verify or validate compliance. What if undisclosed or forgotten stocks are still around, Sibelius asks. Sibelius wrote: *"In other words, we've beaten smallpox once, but we must be ready and prepared to beat it again, if necessary."*

### Other Positions

Supporters for the destruction of the samples describe America's and Russia's reasons as

"obscure". They cannot see any reason for keeping them. All the productive research work that could ever be done has already been done, they add. Some scientists believe it might be a mistake to destroy the stocks and say their concerns are purely scientific. In an interview with the BBC, Professor (virology) John Oxford, of Queen Mary University London, said: *"I don't think there's a strong argument to destroy stocks, just an instinctive feeling to do it, which is misplaced. It's eradicating a whole species and you never know what the future might hold."* Whatever WHO decides, if it does manage to agree on this, is not legally binding anyway. Russia and America can choose whether to follow the recommendations or ignore them. Developing countries tend to favor destroying the samples, while the industrialized nations are slanted more towards the US and Russian concerns. Many believe WHO will decide on another date to discuss the issue again, thus avoiding the embarrassing situation of being ignored by the two nations.

*According to The Wall Street Journal in January 2011, the WHO Executive Board ". . . backed efforts by the U.S. and Russia to keep the last known stocks of the smallpox virus for research to combat terrorism, in an initial debate over the fate over what is left of one of the world's most lethal pathogens," (link)*

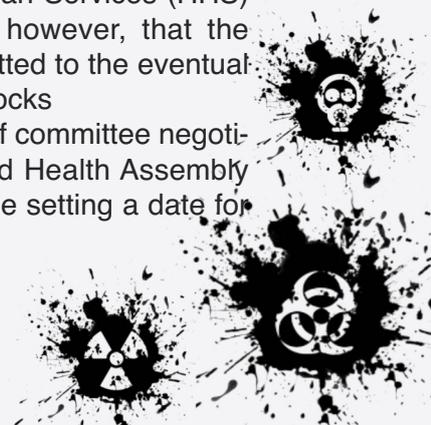
## Decision on smallpox virus destruction delayed for three years

Source:<http://www.homelandsecuritynewswire.com/decision-smallpox-virus-destruction-delayed-three-years>

After a second round of negotiations Tuesday, the World Health Assembly (WHA) agreed to postpone setting a date for destruction of the world's remaining smallpox virus stocks for another three years; the assembly simultaneously reaffirmed previous statements that the virus stocks should be destroyed after "crucial research" is completed; several countries, mainly developing ones, pushed for immediate destruction of the smallpox virus stocks, while others suggested a short delay for set-

ting a deadline; U.S. officials had introduced a resolution to retain the virus stocks for at least another five years to allow work on bioterrorism countermeasures to continue; U.S. Secretary of Health and Human Services (HHS) Kathleen Sebelius said, however, that the United States was committed to the eventual destruction of the virus stocks

After a second round of committee negotiations Tuesday, the World Health Assembly (WHA) agreed to postpone setting a date for



destruction of the world's remaining smallpox virus stocks for another three years. The assembly simultaneously reaffirmed previous statements that the virus stocks should be destroyed after "crucial research" is completed, the World Health Organization (WHO) said in a press statement. The decision came on the last day of the WHA's annual session. The WHO statement said the 67th WHA (in 2014) will review the state of variola virus research when it once again takes up the question of a destruction date.

The University of Minnesota's Center for Disease Research and Policy (CIDRAP) reports that during negotiations Monday and Tuesday, several countries, mainly developing ones, pushed for immediate destruction of the smallpox virus stocks, while others suggested a short delay for setting a deadline. Approval of the 3-year postponement came at a session of the full WHA in the afternoon. On 16 May U.S. officials had introduced a resolution to retain the virus stocks for at least another five years to allow work on bioterrorism countermeasures to continue. U.S. Secretary of Health and Human Services (HHS) Kathleen Sebelius said, however, that the United States was committed to the eventual destruction of the virus stocks. Nils Daulaire, MD, MPH, director of the HHS Office of Global Affairs, who was in Geneva as part of the U.S. delegation, told CIDRAP News that even though the timeline for revisiting the virus destruction issue is shorter than the US had proposed, the decision was a consensus one that is workable. "It's a good outcome," he said, adding that three more years of countermeasures research and development will allow experts to more precisely assess issues related to destroying the world's remaining stocks. Daulaire said one stumbling block during the discussions about the draft resolution was Iran's objection to a provision that re-

quires all countries to report if they have any variola stocks and what happened to any they previously had. He said seven other countries spoke in favor of Iran's position.

Twenty seven other countries signed on as cosponsors of the U.S. proposal, Daulaire said, adding that some were from sub-Saharan Africa, an area he says is becoming more concerned about the potential threat of a biological attack and the emergence of other related infectious diseases. In 1996 the WHA agreed that the remaining virus stocks should be destroyed, but the decision on a timeline has been postponed four other times. The United States and Russia have kept supplies of the virus for research purposes, while several developing nations have regularly pushed for the timely destruction of the remaining samples.

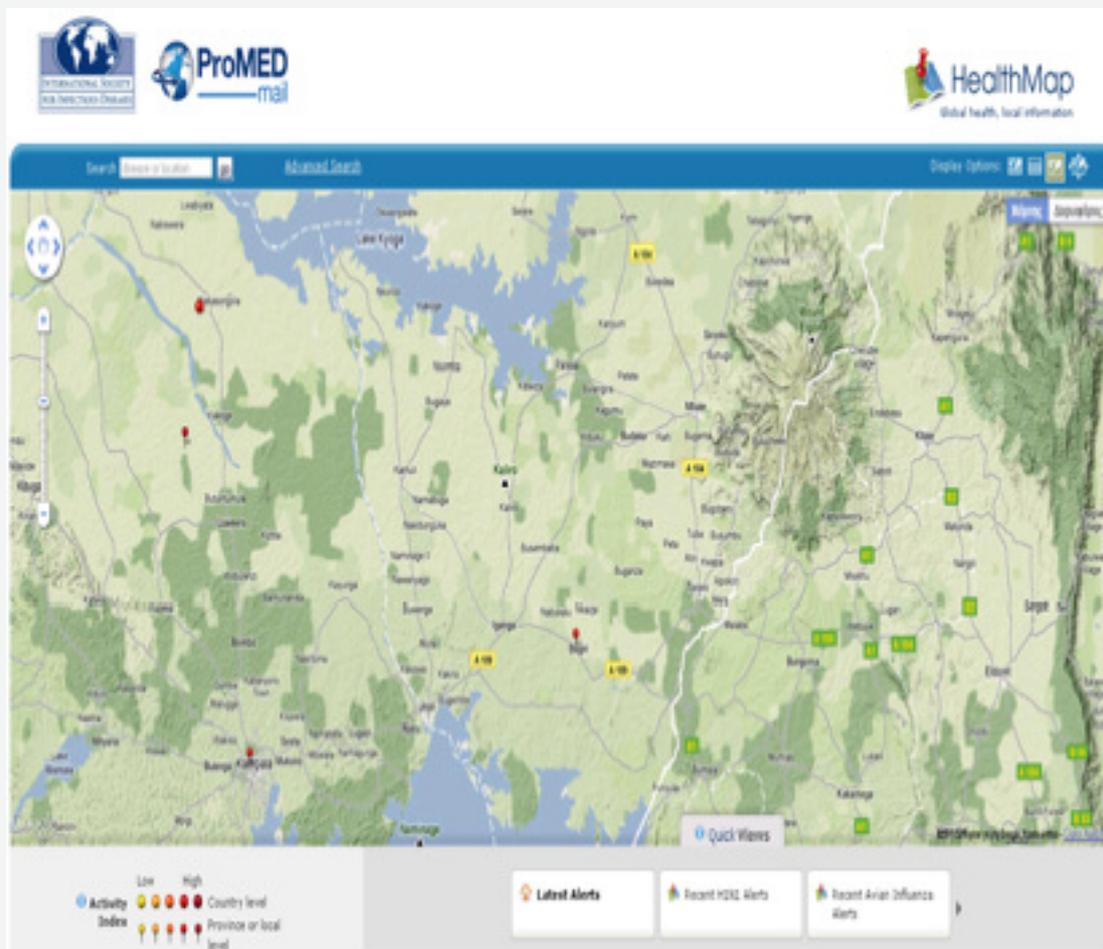
Last December an expert group convened by the WHO recommended that researchers and regulators work together to find new ways to test smallpox countermeasures to clear the way for the destruction of the remaining virus stocks. The group based its recommendations on a WHO advisory committee report that reviewed the progress of smallpox research and development. That panel concluded that continued testing of smallpox vaccines and antivirals builds confidence in their efficacy, though it's now possible to create the virus from scratch..

CIDRAP News notes that according to a detailed report on the smallpox virus deliberations from the Third World Network (TWN), a non-governmental organization that observed the proceedings, WHO Director-General Dr. Margaret Chan informally helped broker the final agreement today and said she would continue the work of the two WHO groups that released the recommendations and report, if no countries object. The TWN, based in Malaysia, does advocacy work for developing countries.



### Ebola – Uganda

Source:<http://www.ugpulse.com/articles/daily/news.asp?about=Ebola+epidemic+reaches+Busoga&ID=19564>



A new suspected case of Ebola [hemorrhagic fever] has been reported in **Busoga** village in Bugiri district, eastern Uganda. The patient who is currently admitted at Bugiri hospital is reported to have fever, measles-like rashes, and a bleeding gum. The director general of general health services, Dr Dennis Lwamafa, in a statement released this evening [19 May 2011], however, said

there haven't been any new cases confirmed so far. He says the Ministry of Health continues to monitor and observe the 25 people who were in contact with a 12-year-old girl who died of the virus [infection] in Luwero dis-

trict. Lwamafa adds that all district and hospital task forces should re-activate and liaise with the National Task Force to initiate a coordinated response to contain the outbreak. He reveals that

government and other development partners have committed funds, equipment and human resources to respond to the outbreak.

MAP:  
<http://healthmap.org/promed/index.php?name=Bugiri,%20Bugiri,%20Uganda&g=234565&v=0.571,33.742,7>



### Illegal immigrants bring leprosy back to Greece

Source: [http://www.defencenet.gr/defence/index.php?option=com\\_content&task=view&id=20162&Itemid=86](http://www.defencenet.gr/defence/index.php?option=com_content&task=view&id=20162&Itemid=86)



Leprosy is the result of *Mycobacterium leprae*, which is a bacterium

According to a recent report from the Center of Disease Control and Prevention (KEELPNO), four cases (same family – two children of school age) were recorded at the University Hospital of Rhodes in Albanian immigrants living in central-west Greece during the last 10 years.

The Hellenic Hansen Association reports that currently there

are 400 patients with history of leprosy – most of them cured. During the last 20 years only sporadic cases have been recorded in foreigners – mostly in Attica prefecture. But leprosy in Eastern Mediterranean i.e. Turkey and Egypt still represent a public health problem with a frequency of 4 cases in 100.000 of populace.



### Do Bacteria Play Role in Weather Events?

Source: <http://www.sciencedaily.com/releases/2011/05/110524111345.htm>

Researchers have discovered a high concentration of bacteria in the center of hailstones, suggesting that airborne microorganisms may be responsible for that and other weather events. They reported their findings May 24, 2011 at the 111th General Meeting of the American Society for Microbiology in New Orleans.

"Bacteria have been found within the embryo, the first part of a hailstone to develop. The embryo is a snapshot of what was involved with the event that initiated growth of the hailstone," says Alexander Michaud of

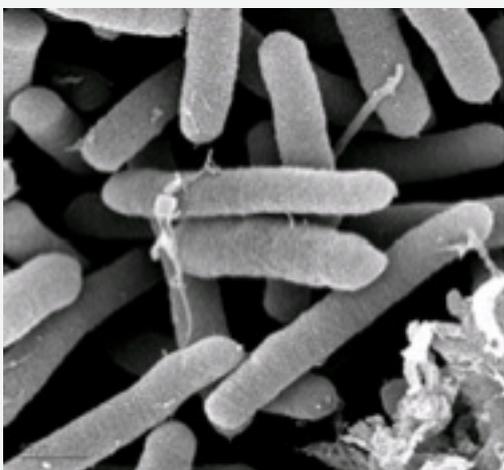
Montana State University in Bozeman, who presented the research.

Michaud and his colleagues analyzed hailstones over 5 centimeters in diameter that were collected on the University campus after



a storm in June 2010. The large hailstones were separated into 4 layers and the meltwater from each layer was analyzed. The number of culturable bacteria was found to be highest in the inner cores of the hailstone. "In order for precipitation to occur, a nucleating particle must be present to allow for aggregation of water molecules," says Michaud. "There is growing evidence that these nuclei can be bacteria or other biological particles."

Michaud's research is part of a growing field of study focusing on bio-precipitation, a concept where bacteria may initiate rainfall and other forms of precipitation including



snow and hail. The formation of ice in clouds, which is necessary for snow and most rainfall events, requires ice nuclei (IN), particles that the ice crystals can grow around. "Aerosols in

clouds play key roles in the processes leading to precipitation due to their ability to serve as sites for ice nucleation. At temperatures warmer than -40 degrees Celsius ice formation is not spontaneous and requires an IN," says Brent Christner of Louisiana State University, also presenting at the meeting.

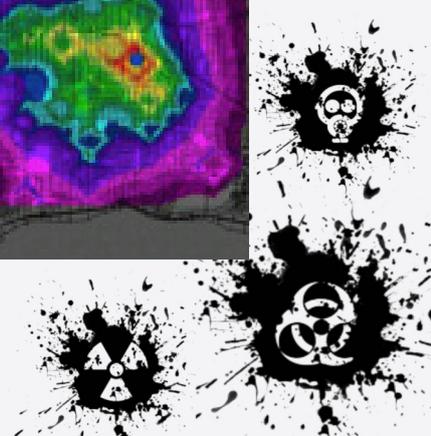
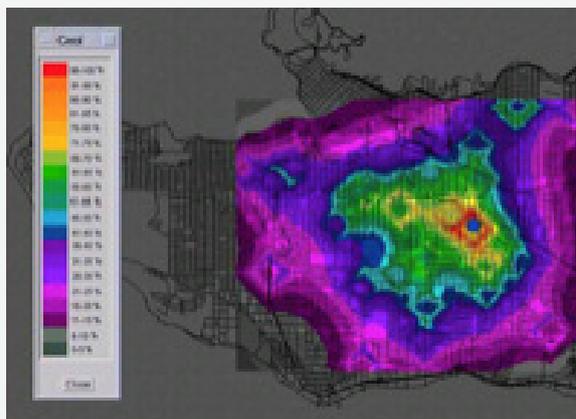
A diverse range of particles are capable of serving as IN, but the most active naturally occurring IN are biological in origin, capable of catalyzing ice formations at temperatures near -2 degrees Celsius. The most well-studied biological IN is the plant pathogen *Pseudomonas syringae* (photo in the left). "Ice nucleating strains of *P. syringae* possess a gene that encodes a protein in their outer membrane that binds water molecules in an ordered arrangement, providing a very efficient nucleating template that enhances ice crystal formation," says Christner. Aerosol-cloud simulation models imply that high concentrations of biological IN may influence the average concentration and size of ice crystals in clouds, horizontal cloud coverage in the free troposphere, precipitation levels at the ground and even insulation of Earth from solar radiation. "Evidence for the distribution of biological IN in the atmosphere coupled with the warm temperatures at which they function as IN has implied that biological IN may play a role in the Earth's hydrological cycle and radiative balance," says Christner.

## Method used in hunting serial killers can be used against killer diseases

Source: <http://www.homelandsecuritynewswire.com/method-used-hunting-serial-killers-can-be-used-against-killer-diseases>

Geographic profiling, a method used in the hunt for serial killers, can help combat infectious diseases; the statistical technique uses the locations of crimes to identify areas in which the serial criminal is most likely to live and work; it was originally developed to help police prioritize suspects, but can now be used to map the locations of diseases to try and identify the source of the disease

Geographical profiling, a statistical technique which uses the locations of crimes to identify areas in which the serial criminal is



most likely to live and work, was originally developed to help police prioritize suspects. It has been successfully used by law enforcement agencies around the world, including the Royal Canadian Mounted Police, Scotland Yard, and the Bureau of Alcohol, Tobacco, Firearms and Explosives.

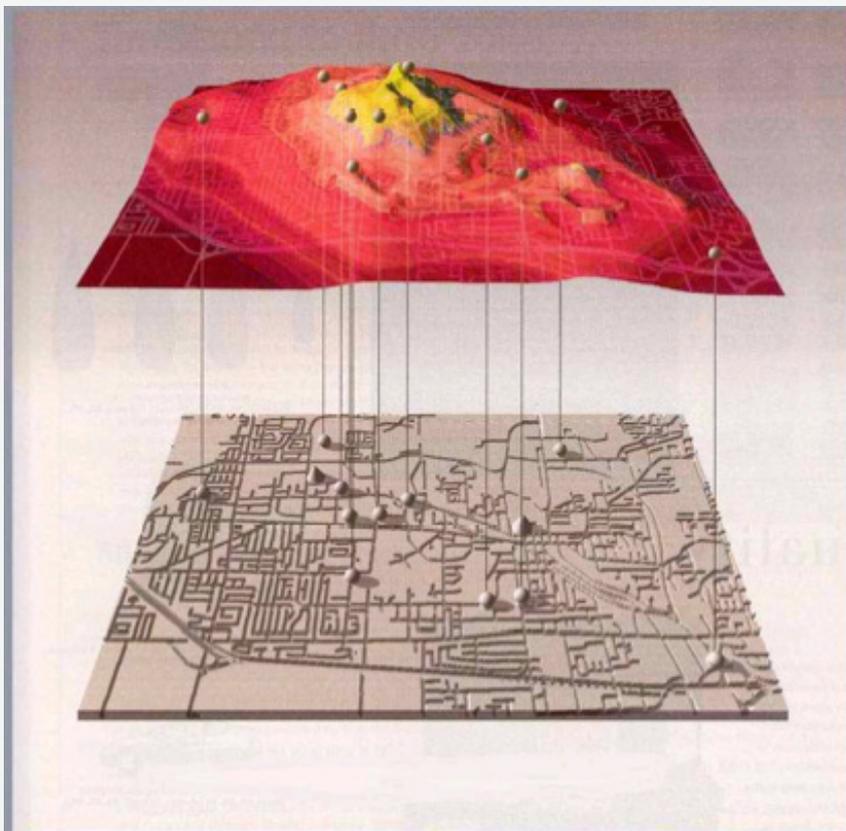
Queen Mary, University of London release reports that new research from Dr. Steven Le Comber at Queen Mary's School of Biological and Chemical Sciences has shown that this mathematical method can be used to map the locations of diseases to try and identify the source of the disease.

Le Comber, in collaboration with scientists at the University of Miami and Ain Shams University in Cairo, as well as with the inventor of geographic profiling, former detective turned Professor of Criminal Justice Kim Rossmo from Texas State University, examined the 1,854 cholera outbreak in London, and more recent cases of malaria in Cairo.

In both cases, geographic profiling successfully located the sources of the disease — the Broad Street pump in London, and the breeding habitats of the mosquito *Anopheles sergentii* in Cairo.

The findings were published in the 18 May 2011 issue of BioMed Central's International Journal of Health Geographics.

"This is a very exciting development," said Le Comber. "Correctly applied, geographic profiling shows great promise as a useful component of policy relating to the control of



a wide variety of infectious diseases. Evidence-based targeting of interventions like this is more efficient, environmentally friendly and cost effective than untargeted intervention."

— Read more in Steven C. Le Comber et al., "Geographic profiling as a novel spatial tool for targeting infectious disease control," *International Journal of Health Geographics* 10, no. 35 (18 May 2011) (doi:10.1186/1476-072X-10-35)



### **E. coli O104 – What do we know so far**

(as of beginning of June 2011)

Source: <http://www.promedmail.org>

Since early May 2011, a large outbreak of hemolytic uremic syndrome (HUS) and bloody diarrhea related to infections with Shiga toxin-producing *E. coli* (STEC) has been observed in Germany. The outbreak is focused in the north, but cases have been reported from all German states and other countries. Since our report last week [26 May 2011], the number of HUS cases has increased to 470 [in Germany] and STEC serotype O104 has been confirmed in many cases.

#### **Description of the ongoing outbreak**

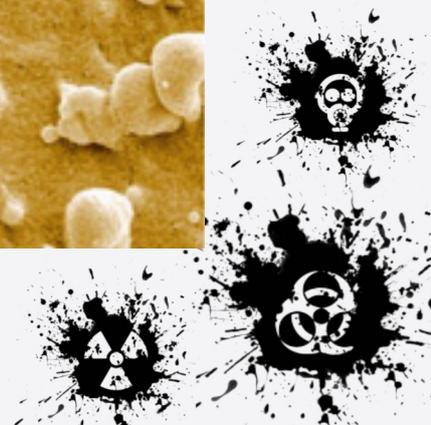
Since the beginning of May 2011, 470 cases of hemolytic uremic syndrome HUS have been notified to the Robert Koch Institute (RKI). Our initial findings have been presented (1), including background information on STEC infections and HUS. The clinical and laboratory case definitions used are available (2). Here we give an update on the epidemiological characteristics of the outbreak con-

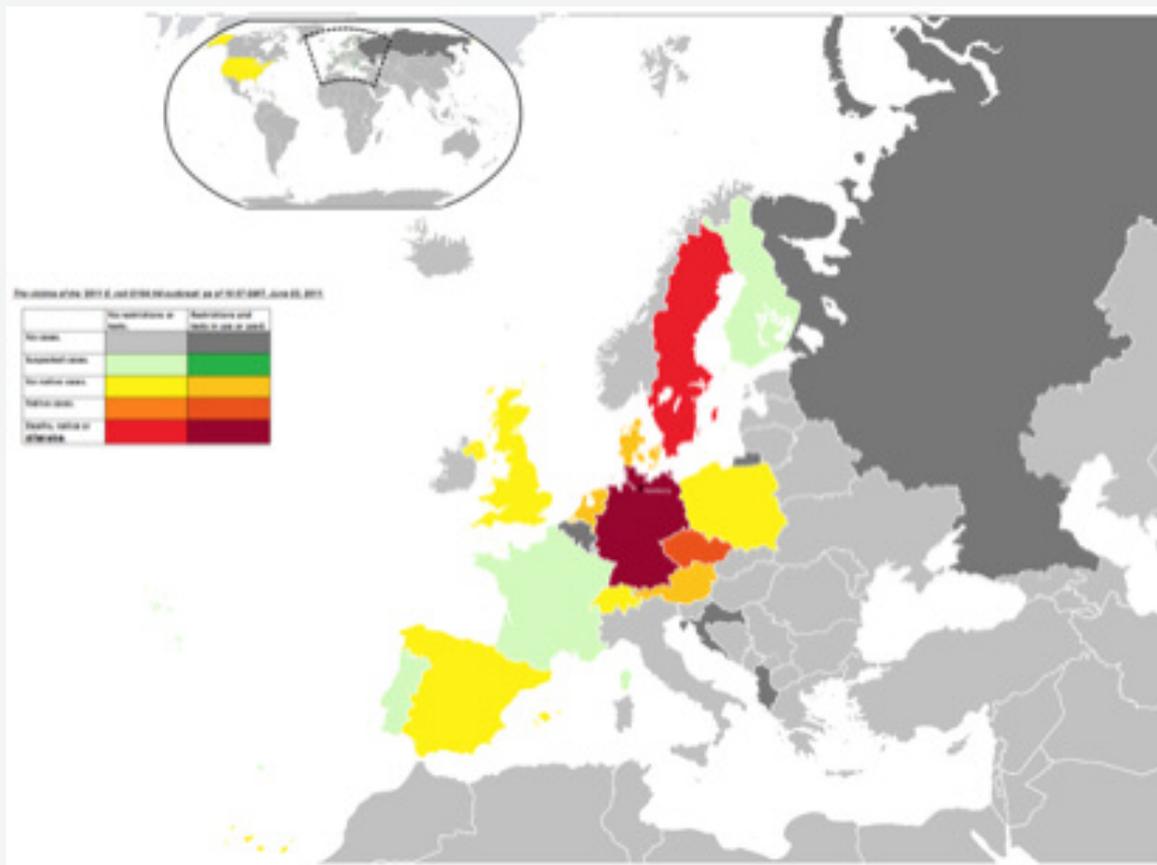
cerning cases of STEC and HUS notified to the Robert Koch Institute as of 31 May 2011.

Of 470 HUS cases, 273 (58 percent) were clinical cases with laboratory confirmation of Shiga toxin-producing *E. coli* (STEC) infection. The German National Reference Centre for *Salmonella* and other Bacterial Enteric Pathogens alone has detected STEC serotype O104, Shiga toxin 2 (stx2)-positive, intimin (eae)-negative in more than 60 samples from cases in the outbreak, indicating that this unusual serotype is the cause of the outbreak.

#### **Geographical distribution of HUS cases**

Cases of HUS have been notified from all German Federal states. The highest cumulative incidence of HUS, since 1 May 2011, continues to be observed in the 5 northern states: Hamburg, Schleswig-Holstein, Bremen, Mecklenburg-Vorpommern, and Lower Saxony [for table, see source URL above. -





Mod.LL]. A total of 66 percent of HUS cases have been notified from these states.

### Epidemiological development

From 1 to 8 May 2011, the number of new HUS cases was between 1 and 2 cases per day, based on the date of onset of diarrhea (Figure 1) [see source URL]. From 9 May 2011, we observed an initially steady increase in the number of cases. This increase gained in intensity over the following days and reached a maximum of 39 notified HUS cases on 16 May 2011.

### Age and sex distribution of HUS cases

As reported on 26 May 2011 (1), the age and sex distribution of HUS cases remain conspicuous: the majority of patients were aged 20 years or older (88 percent) and female (71 percent). Notably, between 2006 and 2010, the proportion of adults in reported STEC and HUS cases was only between 1.5 percent and 10 percent, and there were no marked differences in sex distribution [3]. Figure 2 [see source URL] shows the age- and sex-specific

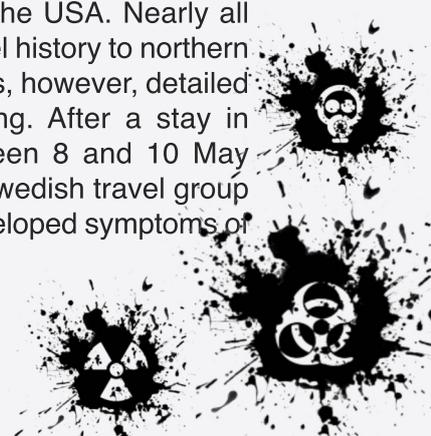
cumulative incidence of notified cases of HUS since 1 May 2011.

### Fatal cases

To date, 13 deaths have been notified [now 18 - Mod.LL]: in 9 cases, the deaths were in connection with HUS; in the remainder, the cases had had symptomatic STEC infection that was laboratory confirmed. The cases who died were between 22 and 91 years of age: 5 were aged between 22 and 40 years and 8 between 75 and 91 years of age.

### Foreign cases with connection to the present outbreak

Further HUS cases have been communicated from Denmark, UK, France, Netherlands, Norway, Austria, Spain, Sweden (including 1 death), Switzerland and the USA. Nearly all of these cases had a travel history to northern Germany. For some cases, however, detailed investigations are ongoing. After a stay in northern Germany between 8 and 10 May 2011, 15 members of a Swedish travel group (30 members in total) developed symptoms of



STEC infection and HUS was diagnosed in 5 of these cases.

Most or all victims as of 3 June 2011 were believed to have become infected in Germany, although listed according to their location when diagnosed.

The discovery, announced today [2 Jun 2011] by the food safety office of the WHO in Geneva, Switzerland, means that the infection could prove unusually difficult to bring under control.

Scientists in Germany are feverishly analysing the genome sequence of the bacterium, and have found clues as to how this strain, which has so far infected more than 1500 people and killed 18, is making so many people ill.

The bacterium is relatively unusual in that it produces extended-spectrum beta-lactamase enzymes that render the bacteria resistant to many different antibiotics. Patients with EHEC infections are not typically treated with antibiotics anyway, because the bacteria are thought to respond to the medication by increasing production of the Shiga toxin, which

Number of cases by country until 3 June 2011			
Country	Deaths	Confirmed cases	Suspected cases
Germany	17*	450	1,730
United Kingdom	0	3	-
Sweden	1	41	-
Denmark	0	14	26
Netherlands	0	2	-
France	0	0	3
Spain	0	1	-
Austria	0	2	0
Switzerland	0	2	-
Finland	0	-	1
Portugal	0	0	4
Poland	0	1	-
United States	0	3	-
Czech Republic	0	1	7

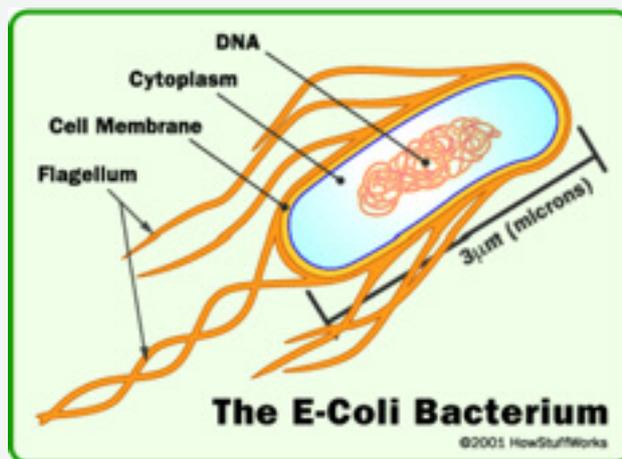
\* see latest counts at the end of this article

### Evaluation of the situation

The present situation marks one of the largest outbreaks ever described of HUS worldwide, and the largest outbreak ever reported in Germany. Because of the delay in notification and reporting of cases, the current notification data cannot be interpreted as a decrease in case numbers.

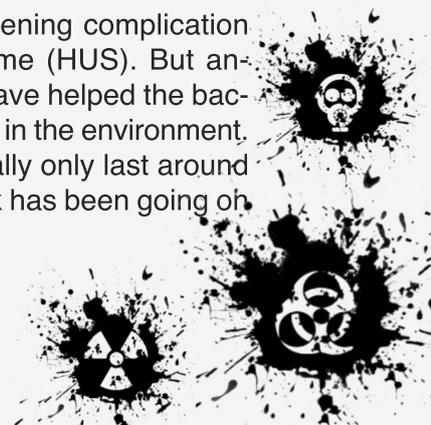
The age and sex distribution of cases in this outbreak is highly unusual, as is the identified outbreak strain: STEC O104, Shiga toxin 2 (stx2)-positive, intimin (eae)-negative. Serotype STEC O104 has caused foodborne outbreaks of diarrhea and HUS, or isolated cases of HUS before (4,5), but is not known to have caused previous outbreaks in Germany.

The bacterium responsible for the current outbreak of enterohemorrhagic *E. coli* (EHEC) infections in Germany is a strain that has never before been isolated in humans.



can lead to the life-threatening complication hemolytic-uremic syndrome (HUS). But antibiotic resistance might have helped the bacteria to survive and persist in the environment.

"EHEC outbreaks usually only last around 2 weeks, but this outbreak has been going on



since 1 May 2011 or earlier," says Angelika Fruth, a microbiologist based in Wernigerode who works for the Robert Koch Institute, the federal agency responsible for disease control. The number of new cases is still rising,

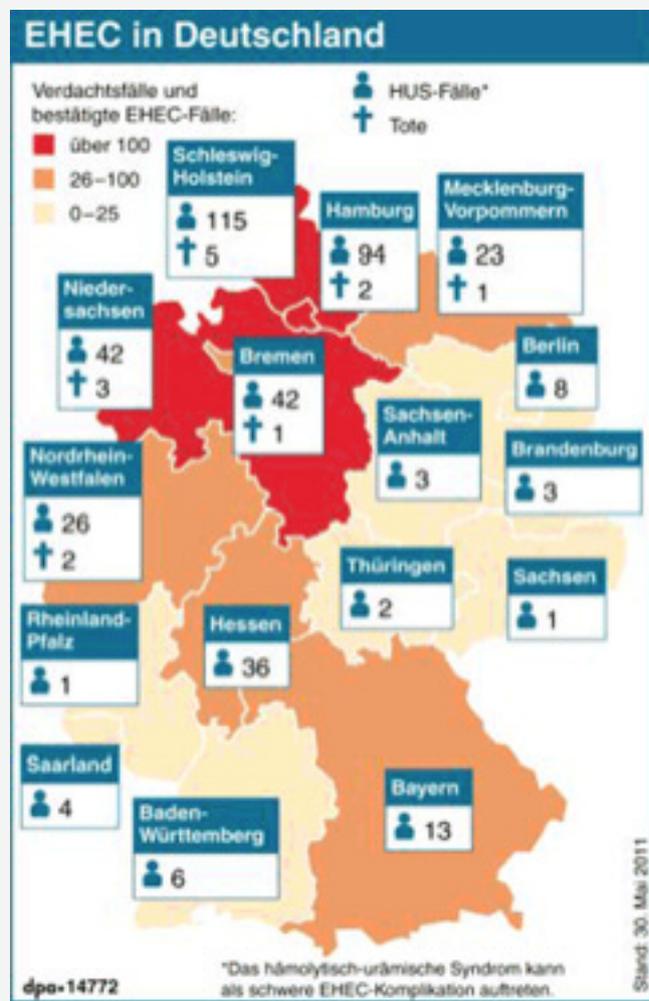
to the antibiotic-resistance genes, the bacteria contain a gene for resistance to the mineral tellurite (tellurium dioxide).

Tellurium oxides were used as antimicrobial agents against diseases such as leprosy and tuberculosis before the development of antibiotics. Some strains of bacteria may have evolved resistance to tellurium during its historical medical use, or after its use in the mining and electronics industries increased its presence in the environment. According to Wieler, the strain's resistance characteristics could point towards an environmental source, such as water or soil.

The ongoing genetic characterization of the strain might also reveal why the bacterium is mostly infecting adults, and women in particular. EHEC infections usually occur in children, and affect boys and girls equally. Initial theories suggested that young adult women are the people most likely to purchase, handle, and consume salad vegetables. "This is still our only explanation for this demographic," says Wieler. But he suspects that the strain might have biological characteristics that make adults more susceptible to the infection.

A telltale sign is that the strain does not contain the *eae* gene, which codes for a protein called intimin, an adhesion protein that allows the bacteria to attach to cells in the gut. *Eae*-negative EHEC have been specifically associated with adult infections before, although it is still unclear why this particular protein is more effective in adult guts than in those of children.

Gad Frankel, a microbiologist at Imperial College London, suspects that the genome of



suggesting that whatever their source, the bacteria are still infecting people.

Fresh vegetables are still the prime suspect, but Flemming Scheutz, head of the WHO Collaborative Centre for Reference and Research on *Escherichia* and *Klebsiella* in Copenhagen, suggests that the bacteria might not have originated in the food chain at all. "This strain has never been found in any animal, so it is possible that it could have come from straight from the environment into humans."

Lothar Wieler, a veterinary microbiologist at the Free University of Berlin, cautiously agrees with this theory. In addition



this strain will reveal more information about the adherence mechanisms of *E. coli*. "Some pathogenic bacteria don't just stick to cells in our guts, they also have active adherence mechanisms to stick to some vegetables," says Frankel.

It is possible that the strain has evolved a combination of adhesion proteins that makes

it particularly hard to remove from food, or for the human body to eliminate. "This outbreak has shown we need to be prepared to deal with emerging strains with properties that give them enhanced virulence," says Frankel.

**EDITOR'S NOTE:** In the EU/EEA, 837 HUS cases, including 26 deaths, and 2670 non-HUS cases, including 13 deaths, have been reported so far – total death toll 39.

## Researchers release complete de novo *E. coli* O104 genome, details of their detection kit

Source: <http://www.physorg.com/news/2011-06-german-de-novo-coli-o104.html>

Scientists worldwide have been working on the publicly available genomic sequences of the deadly *E. coli* O104 strain, which is causing the current health crisis in Germany and now spreading throughout Europe. To continue to speed the ongoing international efforts of researchers to assess and halt this growing epidemic, BGI and their collaborators at the University Medical Centre Hamburg-Eppendorf have now released their third version of the assembled genome, which includes new data from this *E. coli* O104.

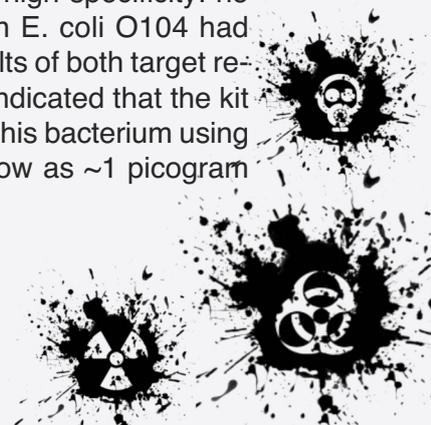
([ftp://ftp.genomics.org.cn/pub/Ecoli\\_TY-2482/Escherichia\\_coli\\_TY-2482.contig.20110606.fa.gz](ftp://ftp.genomics.org.cn/pub/Ecoli_TY-2482/Escherichia_coli_TY-2482.contig.20110606.fa.gz)). In addition, the FTP site contains a file that provides the PCR primer sequences BGI and their collaborators have used to create diagnostic kits for rapid identification of this highly infectious bacterium.

The new assembly includes more than 200x single-end reads from the Illumina High-Seq Platform, which allowed BGI to provide a more complete genome map and to correct any assembly errors from the previous version. More importantly, this version is a completely de novo assembly, whereas the previous versions by BGI and others used a reference-based assembly method to obtain a consensus sequence. The new assembly continues to support the finding that this infectious strain carries disease-causing genes from two types of pathogenic *E. coli*: en-

teroaggregative *E. coli* (EAEC) and enterohemorrhagic *E. coli* (EHEC).

Taking advantage of this genomic feature, BGI and the Beijing Institute of Microbiology and Epidemiology researchers have developed a straightforward PCR diagnostic protocol for rapid identification of the outbreak strain. The diagnostic method consists of two pairs of amplification primers that target the enteroaggregative- and hemorrhagic-associated genes (more detailed protocol is available on the BGI FTP site). Diagnostic results can be obtained within 20 hours after receiving the sample, and thus will be extremely useful for epidemic surveillance and detection of this bacterium.

BGI has assessed the specificity and sensitivity of this kit and protocol through computational analyses of 4,547 strains (from 2,183 species) using publicly available whole-genome sequences, and through experimental analyses of 323 DNA samples (from 93 species, including 55 *E. coli* strains that have different phenotypes and the current infectious strain). The findings demonstrated that the kit and protocol have high specificity: no bacterial strain other than *E. coli* O104 had positive amplification results of both target regions. Sensitivity testing indicated that the kit and protocol could detect this bacterium using a DNA concentration as low as ~1 picogram (10<sup>-12</sup> g) in the PCR.



## British Intelligence: al-Qaeda May Contaminate Food After E.Coli Scare

Source: <http://www.infowars.com/british-intelligence-al-qaeda-may-contaminate-food-after-e-coli-scare/>

Britain's MI5 is exploiting an E.coli outbreak in Germany to push the fear of terrorism as part of an effort to introduce police state measures in the country's food industry.

"Manufacturers and retailers have been told that their sector is vulnerable to attacks by ideologically and politically motivated groups that may seek to cause widespread casualties and disruption by poisoning food supplies," the Telegraph reported on Saturday.

Followers of a dead Osama bin Laden have replaced traditional criminals who have in the past deliberately contaminated food, according to the Center for the Protection of National Infrastructure (CPNI), a subset of British intelligence. British officialdom, according to the warning, "fear there is an emerging threat from extremist groups such as al-Qaeda, dissident republicans in Northern Ireland and animal rights activists."

The CPNI wants food and drinks producers, suppliers and supermarkets to tighten security at plants and depots and to identify vulnerabilities in supply chains. "The UK suffers from a low level of malicious contamination of food by the bad, the mad and the sad. Now it has to consider the possibility of food supplies being disrupted by politically motivated groups," said an official from the CPNI who addressed a conference of the Society for General Microbiology.

Politically motivated attackers could contaminate prepared food or drink with bacteria or chemicals. Or, by targeting basic ingredients used in large numbers of foods, they could cause even wider disruption, according to the Telegraph.

Britain is notorious for its pervasive electronic surveillance and oppressive terrorism laws. A 2010 study by Privacy International reveals that the British government engages in endemic surveillance.

Last year, Libertarian Alliance Director Sean Gabb said England "is now a soft totalitarian police state" that not only routinely sur-

veils the public, but also suppresses opposition political parties.

Britain is not alone in scaremongering an attack on food supplies. Officialdom and government recognized "experts" in the United States also claim terrorists may poison food. "US experts have warned that the dairy industry is particularly vulnerable, as adding just a few grams of botulinum toxin or ricin to a tanker load of milk could poison or even kill thousands of consumers," the Telegraph reports.

In 2010, officialdom in the U.S. warned that al-Qaeda would poison the local salad bar in its perpetual attempt to harm freedom lovers. "The al Qaeda group that built two toner-cartridge bombs in an unsuccessful attempt to blow up planes in October also has contemplated spreading poison on salad bars and buffets at U.S. hotels and restaurants," CNN reported on December 21, 2010.

Following non-stop coverage of the so-called toner bomb threat, the Air Cargo Director for Yemenia Airways said there were no UPS or DHL cargo flights from Yemen within a 48 hour period prior to the supposed terror attack, a detail ignored by the corporate media.

The Department of Homeland Security told CNN al-Qaeda in the Arabian Peninsula was considering the tactic of placing ricin and cyanide poisons into food supplies. CNN ran a particularly sensationistic video report on the highly speculative threat.

The MI5 terror warning after an outbreak of E.coli in Germany is particularly suspect considering that German authorities believe the outbreak was caused by poor hygiene at a farm, in transit, or at a food outlet.

On Sunday evening, the Germans said bean sprouts might have caused the Escherichia coli bacterial scare. The agricultural ministry in the German state of Lower Saxony reported a bean-sprout farm tested positive for E. Coli, and deliveries of that product had been tied to several restaurants where diners



suffered infections, according to the Wall Street Journal.

According to the British Parliamentary Office of Science and Technology, most food poisoning in the UK is the result of poor hygiene in processing and delivery, not terrorists.

MI5 has exploited the issue in order to push its anti-terror agenda, which is ironic considering the fact British intelligence has been caught on numerous occasions supporting and fostering terrorism, including the terror bombing of innocent civilians.

### Volunteers needed to test ricin vaccine

Source: [http://www.gazette.net/stories/04162011/frednew85158\\_32553.php](http://www.gazette.net/stories/04162011/frednew85158_32553.php)

Army researchers are looking for volunteers to test a vaccine for ricin, a deadly toxin derived from the castor plant. Scientists with the U.S. Army Medical Research Institute of Infectious Diseases at Fort Detrick in Frederick [photo below] are conducting the clinical study on a ricin vaccine for the Department of Defense. No vaccine or cure is available for ricin, which is poisonous if inhaled, injected or ingested.

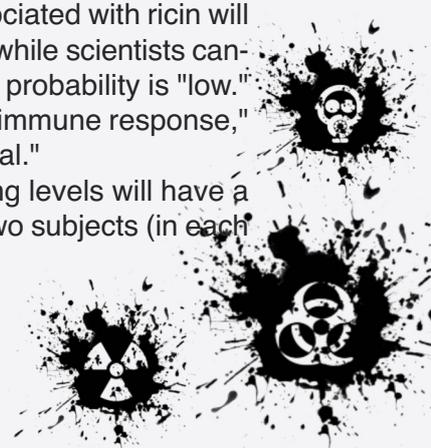
According to USAMRIID, ricin is considered a significant potential agent of biological warfare and terrorism because it is readily available and highly toxic, especially when delivered as an aerosol. When inhaled, ricin produces severe respiratory symptoms followed by respiratory failure within 72 hours. When ingested, it can cause "severe gastrointestinal symptoms followed by vascular collapse and death," according to USAMRIID.

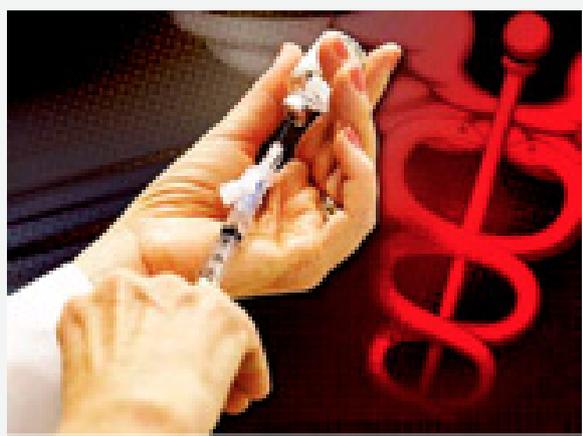


Volunteers must be 18-50 years old, have no history of respiratory disease, and weigh at least 110 pounds, among other criteria. Thirty volunteers will be vaccinated three times within two months, and give 20 blood samples over a one-year period. For each blood sample, volunteers can earn between \$25 and \$50, according to Caree Vander-Linden, a spokeswoman for USAMRIID.

Researchers expect potential reactions to include headache, fever, and redness and tenderness at the injection site, and do not believe that serious symptoms associated with ricin will occur. Dr. Ron Reisler, a clinician involved in the study, said in an email that while scientists cannot guarantee volunteers will not experience more serious side effects, the probability is "low." "The vaccine has been designed to be safe yet retain the ability to elicit an immune response," he said. "We have added an extra element of safety in the design of the trial."

The vaccine will be administered in three stages. All three vaccine dosing levels will have a staggered enrolment to assess safety. Dose one of the vaccine in the first two subjects (in each





dosing level) will be separated by at least a 48-hour observation period; the third subject will receive the first dose of vaccine at least four hours after the second subject, according to Reisler. "If the vaccine proves to be safe in our first-in-humans phase I study, the next step would be a larger phase II study," he said. "If the vaccine continues to appear to be safe and effective in a larger phase II study, then there is the potential to apply for FDA approval of the vaccine." If all goes well, scientists expect to finish the study within two years.



# CRISTANINI CBRN DECONTAMINATION SYSTEMS



A5009

CONFORM TO THE QUALITY SYSTEM STANDARD AQAP 2110  
and ISO 9001:2008



DEPLOYABLE CBRN  
ANALYTICAL  
LABORATORY (STANAG 4632)



DEPLOYABLE BIO LABORATORY  
CLASS III BIO SECURITY LEVEL



R/CBRN TRAILER FOR CBRN  
DECONTAMINATION AND  
DETOXIFICATION



TSDM-TACTICAL STEAM  
DECON MODULE



SX34 CBRN DECONTAMINATION  
OF SENSITIVE EQUIPMENT  
AND SURFACES



DDMAS LARGE SCALE  
DECONTAMINATION SYSTEM  
HIGHLY DEPLOYABLE



DDMAS LARGE SCALE  
DECONTAMINATION SYSTEM  
DUAL OPERATORS



MOBILE SYSTEM FOR  
AIRCRAFT DECONTAMINATION



SANJET C 1126 HR CBRN DUAL  
OPERATOR DECONTAMINATION  
AND DETOXIFICATION GROUP



CBRN PRODUCTION LINE

**ONLY ONE PERSON  
ONLY ONE MACHINE  
ONLY ONE PRODUCT**



**CRISTANINI**

37010 RIVOLI - VERONA - ITALY

Tel. +39-045-6269400 - Fax +39-045-6269411

cristanini@cristanini.it - [www.cristanini.com](http://www.cristanini.com)

Osama bin Laden – the End

# CBRNE-TERRORISM Newsletter

Volume 38 - 2011



Japan's triple catastrophe  
CBRN security at London 2012  
UK DGBRNC  
Agroterrorism  
Forest Fires can be a **Tactic of Terrorism**  
Climate change and global **security**  
CBRN training for **Photographers and TV Crews**  
Innovative chem-bio sensor  
E. Coli 0104 – **Terror in Germany**  
Iran has secretly stocked **enriched uranium**  
for 4 nuclear bombs  
15 US nuclear reactors are **located in**  
an active seismic zone

**Dirty News**



*Fukushima*

Carry **spice** could be used  
to detect explosives  
How IEDs work  
What if there is a US-China  
cyber-**war in 2020?**  
Latin **America: Terrorism issues**

[www.cbrne-terrorism-newsletter.com](http://www.cbrne-terrorism-newsletter.com)

## Dirty News

### JAPAN – Nuclear Catastrophe n Aftermath

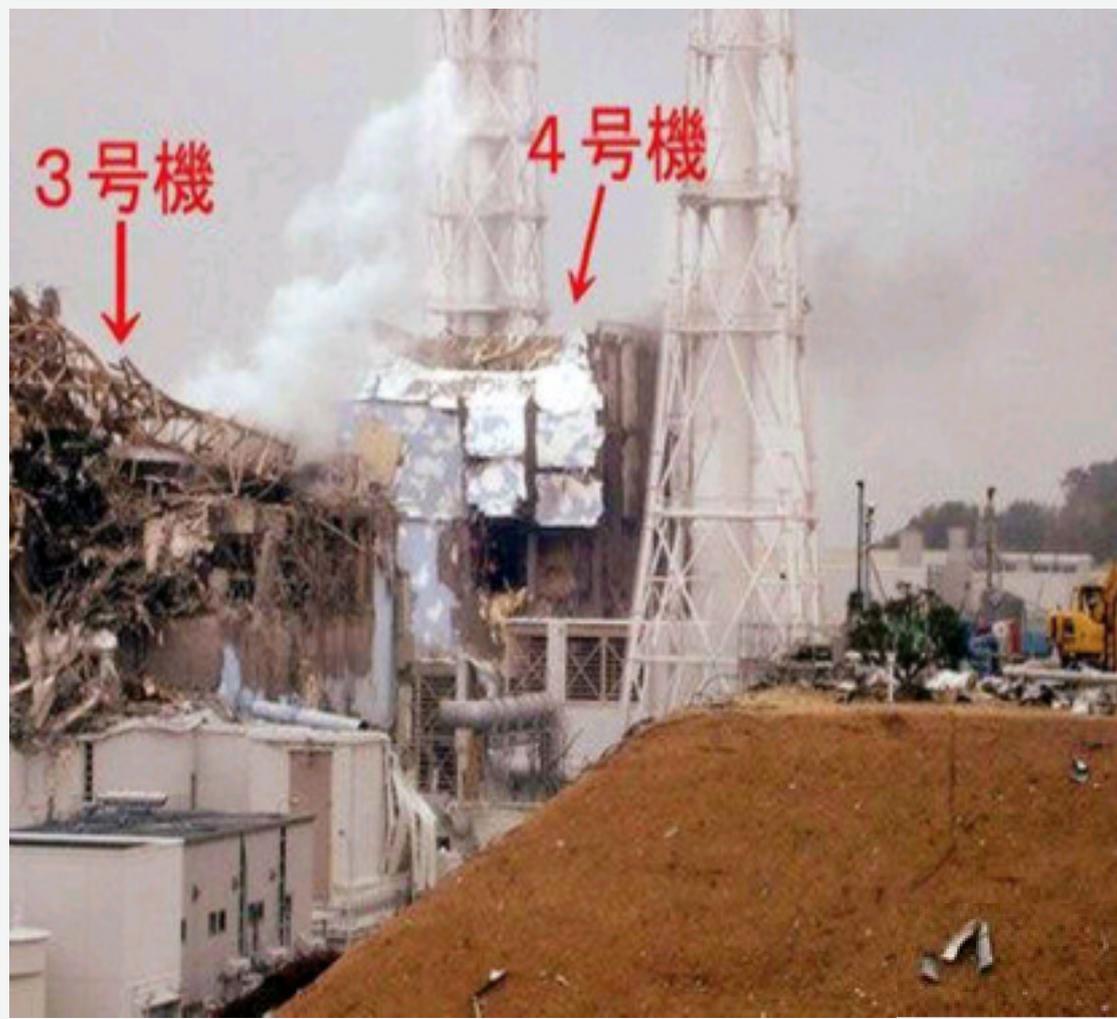
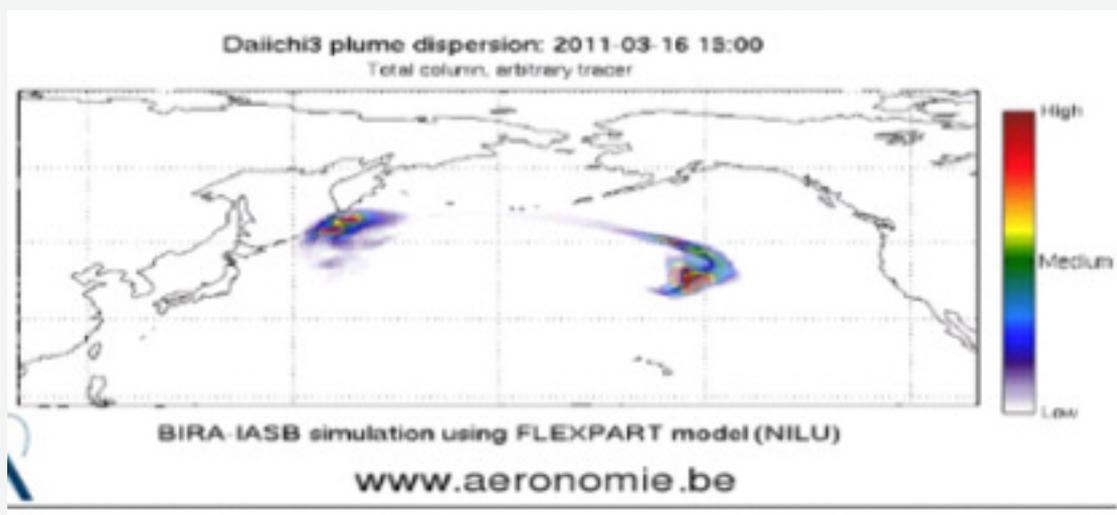


Fukushima 12 March 2011



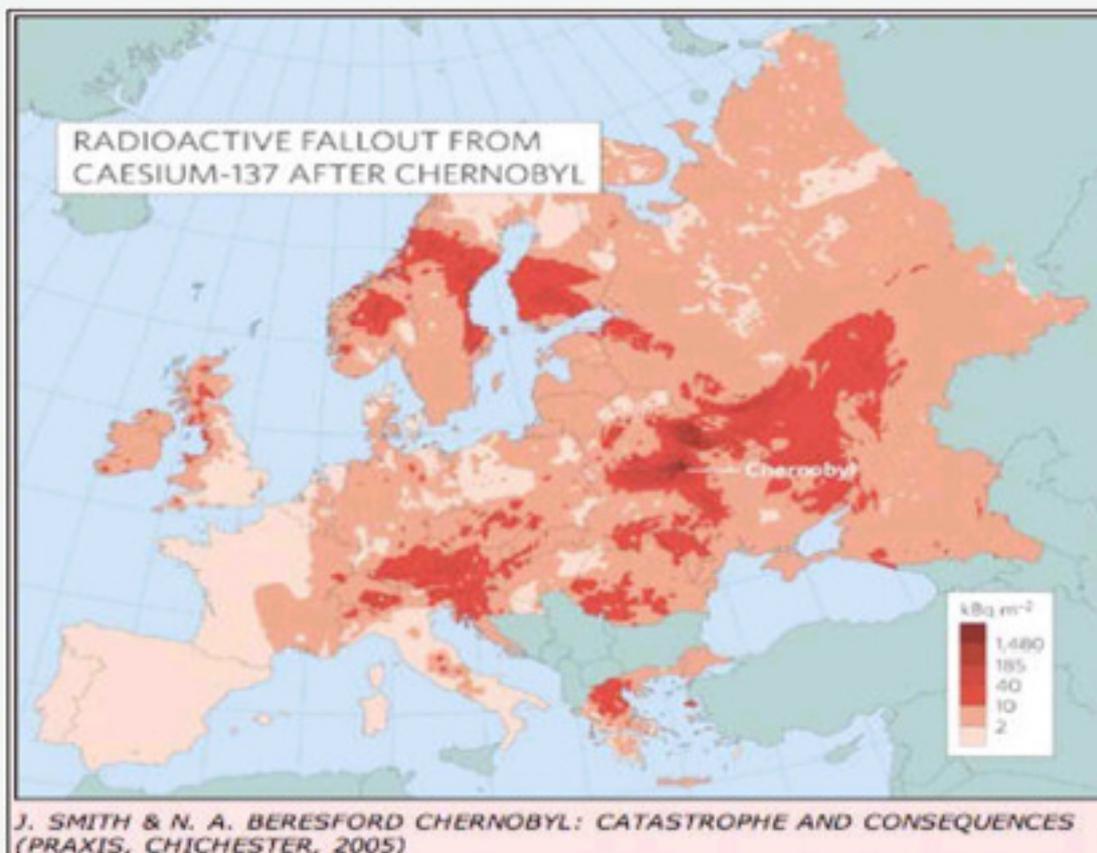
Fukushima 16 March 2011





Reactors 3 and 4





Chernobyl: April 1986 fallout

## The lessons of Fukushima

By Hugh Gusterson | 16 March 2011

Source: <http://www.thebulletin.org/web-edition/columnists/hugh-gusterson/the-lessons-of-fukushima>

**Bulletin  
of the  
Atomic  
Scientists**

IT IS 6 MINUTES TO MIDNIGHT

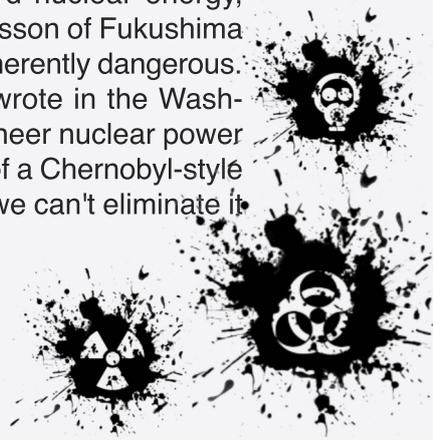


As an anthropologist, I am always interested in what humans learn from their mistakes. Can humans change their behavior, thereby improving their chances of survival, not just through natural selection, but also through cultural learning? Or are we hardwired to repeat our mistakes over and over, like humanoid lemmings?

More to the point, what lessons will we learn from the nuclear accident at Fukushima,

an accident thought to be impossible just two weeks ago?

Some people, many of them presumably already ill-disposed toward nuclear energy, have concluded that the lesson of Fukushima is that nuclear energy is inherently dangerous. Thus, Eugene Robinson wrote in the Washington Post: "We can engineer nuclear power plants so that the chance of a Chernobyl-style disaster is almost nil. But we can't eliminate it



completely -- nor can we envision every other kind of potential disaster. And where fission reactors are concerned, the worst-case scenario is so dreadful as to be unthinkable." His colleague Anne Applebaum wrote on the same op-ed page: "If the competent and technologically brilliant Japanese can't build a completely safe reactor, who can? ... I ... hope that a near-miss prompts people around the world to think twice about the true 'price' of nuclear energy, and that it stops the nuclear renaissance dead in its tracks." (The nuclear renaissance comprises plans around the world to build as many as 350 new nuclear reactors, partly as a way of inhibiting climate change.)

But others have concluded that the lesson of Fukushima is not that nuclear energy technology is inherently unsafe but that this was an event unique to the Japanese context or



that the industry just needs a little more oversight. Thus, Republican Sen. Mitch McConnell of Kentucky, in a comment that I confess to finding bizarre, said: "My thought about it is, we ought not to make American and domestic policy based upon an event that happened in Japan." (Why not? The United States has two dozen reactors of the same GE design as the dangerously damaged ones in Fukushima, it has built reactors on earthquake faults, and Japanese earthquakes behave no differently than American earthquakes.) An Indian newspaper quoted Srikumar Banerjee, head of India's Atomic En-

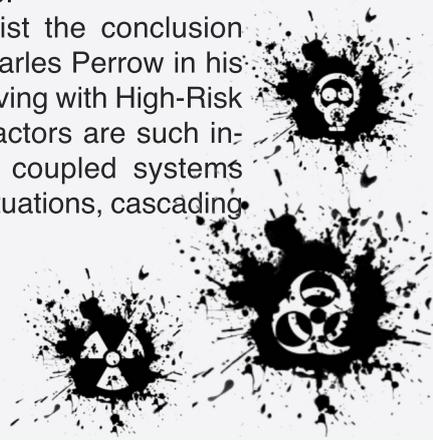
ergy Commission, downplaying the Fukushima disaster as "purely a chemical reaction and not a nuclear emergency," and saying that Indian nuclear power plants are on higher ground where tsunamis could not hurt them.

The middle ground was occupied by Democratic Rep. Ed Markey of Massachusetts, who was paraphrased in the New York Times as saying that "regulators should consider a moratorium on locating nuclear plants in seismically active areas, require stronger containment vessels in earthquake-prone regions and thoroughly review the 31 plants in the United States that use similar technology to the crippled Japanese reactors."

We have now had four grave nuclear reactor accidents: Windscale in Britain in 1957 (the one that is never mentioned), Three Mile Island in the United States in 1979, Chernobyl in the Soviet Union in 1986, and now Fukushima. Each accident was unique, and each was supposed to be impossible. Nuclear engineers have learned from each accident how to improve reactor design so as to diminish the likelihood of that particular accident repeating itself but, as Donald Rumsfeld famously reminded us, there are always "unknown unknowns," and so each accident has been succeeded by another, unwinding in a way that was not foreseen. The designers of the reactors at Fukushima did not anticipate that the tsunami generated by an earthquake would disable the backup systems that were supposed to stabilize the reactor after the earthquake.

And presumably there are other complicated technological scenarios that we have not foreseen, earthquake faults that are undetected or underestimated, and terrorists hatching plans for mayhem as yet unknown. Not to mention regulators who place too much trust in those they regulate.

Thus it is hard to resist the conclusion reached by sociologist Charles Perrow in his book *Normal Accidents: Living with High-Risk Technologies*: Nuclear reactors are such inherently complex, tightly coupled systems that, in rare, emergency situations, cascading



interactions will unfold very rapidly in such a way that human operators will be unable to predict and master them. To this anthropologist, then, the lesson of Fukushima is not that we now know what we need to know to design the perfectly safe reactor, but that the perfectly safe reactor is always just around the corner. It is technoscientific hubris to think otherwise.

This leaves us with a choice between walking back from a technology that we decide is too dangerous or normalizing the risks of nuclear energy and accepting that an occasional Fukushima is the price we have to pay for a world with less carbon dioxide. It is wishful thinking to believe there is a third choice of nuclear energy without nuclear accidents.

It is unlikely that all countries will make the same choice here. We are probably moving

announced plans to close seven reactors pending further evaluation of their safety and to reconsider plans to extend the lives of Germany's oldest reactors. In the meantime, countries with weak environmental movements and weak regulatory norms seem to be proceeding as if nothing has happened. As the Fukushima nuclear disaster unfolded, Turkey announced plans to go ahead with two reactors, and we can surely expect China, Russia, and India to do the same.

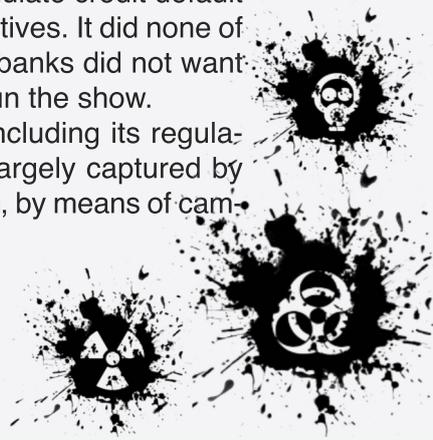
And what of the United States? Will it be like Germany and Switzerland, or like Turkey and China? A good way to think through this question is to look at how the United States responded to its last meltdown -- the meltdown of its banking system in 2008. To prevent a future recurrence of this disaster, the US government should have broken up banks



toward a post-Fukushima world in which some countries will abjure nuclear energy while others expand it. Countries with other energy options, strong democratic structures, and powerful environmental movements will probably de-emphasize, and maybe eventually renounce, nuclear energy. Switzerland has already suspended plans to build new reactors, and Germany's Angela Merkel, responding to large antinuclear protests,

that were "too big to fail," restored the Glass-Steagall Act's prohibitions on the commingling of investment and depository banks, and moved aggressively to regulate credit default swaps and financial derivatives. It did none of these things because the banks did not want it to, and the banks now run the show.

The US government, including its regulatory agencies, has been largely captured by the corporate sector, which, by means of cam-



paign donations, is able to secure compliant politicians and regulators. (In this context it is not entirely irrelevant that employees of the nuclear operator Exelon Corporation have been among Barack Obama's biggest campaign donors, and that Obama appointed Exelon's CEO to his Blue Ribbon Commission on America's Nuclear Energy Future.)

We have examples from the not-so-distant American past of the government learning important lessons from big mistakes. After the Great Crash, the government reformed the banking system. After the near disaster of the Cuban Missile Crisis, US and Soviet presidents began signing arms control agreements. After the discovery of the Love

Canal environmental contamination, Congress passed Superfund legislation.

But we now have a government captured by special interests, paralyzed by partisanship, and confused by astroturfing political groups and phony scientific experts for sale to the highest bidder. Our democracy and our regulatory agencies are husks of what they once were. It is unclear that such a system is capable of learning any lessons or indeed of doing anything much beyond generating speeches and passing the responsibility for failure back and forth like a Ping-Pong ball between our two yapping political parties. While we are distracted by the theater of Congress and the White House, our fate lies in other hands.

## Nuclear Accident Risk Map

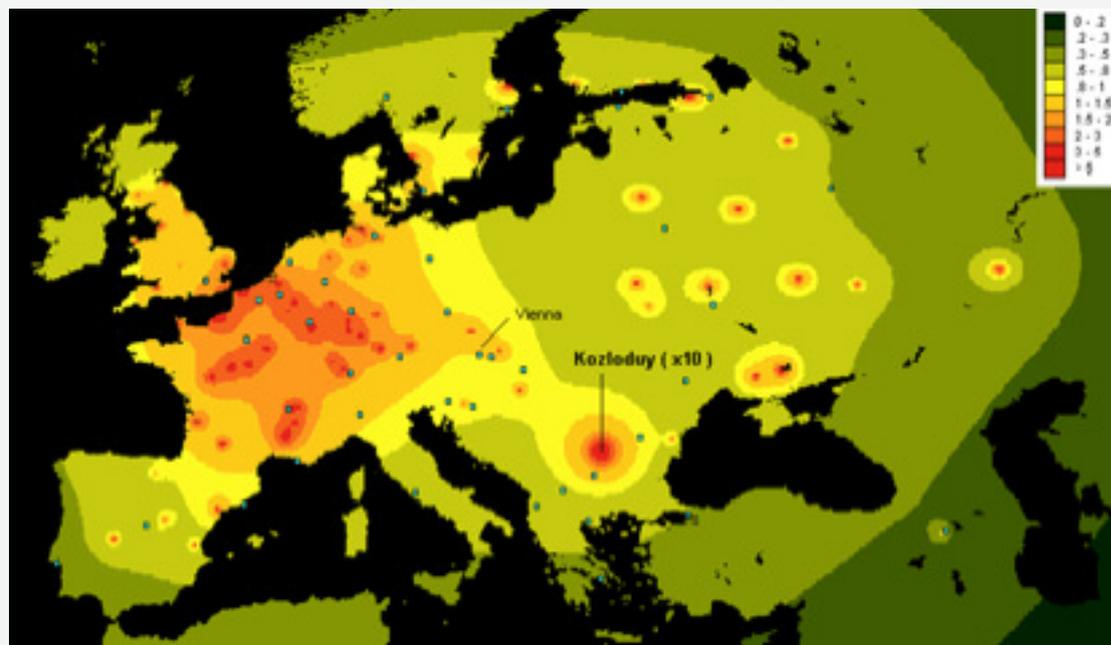
Source: [http://www.ipta.demokritos.gr/erl/nu\\_risk10.html](http://www.ipta.demokritos.gr/erl/nu_risk10.html)

This map has been produced by use of a new ERL mapping software.

The map projection is rectangular and represents correctly the actual NS/EW aspect ratio for the latitude of Central Greece.

Mapping step: 7 km NS.

dent, published recently by the EU. A trend function  $D(R)$  has been derived from the data of the Atlas, where  $D$  is the average deposition of Cs137 as a function of the distance  $R$  from Chernobyl. More details will be presented in the Panhellenic Conference of Environmental Science and Technology (Samos,



### NOTES ON THE MODEL

1. This map is based on the analysis of the data presented in the Atlas of Caesium Deposition in Europe After the Chernobyl Acci-

September 1999).

2. According to this simplified model, the risk in each point  $j$  equals

.....  $A \text{ Sumi } ( \text{Pi Wi } D(R_{ij}) )$ , where



..... A is a normalization parameter  
 ..... Pi is the probability for a Chernobyl-level accident in the reactor i  
 ..... Wi is the MWe power of the reactor i  
 ..... Rij is the distance of the reactor i from the point j

The "Chernobyl-level accident" is an accident, which results in the release of the same percentages of the core radionuclides in the environment as those from the Chernobyl 4 core during 1986.

### NOTES ON THE RESULTS

1. The risks are normalized according to the risk for Vienna, hosting the IAEA headquarters.
2. The risk in the Greek territory lays within 0.3 - 0.7. The contribution of various NPPs in the total risk in Athens and Thessaloniki is given in the following Table.

	Athens	Thessaloniki
Risk due to:		
Kozloduy 1-4 ( x10 )	0.11	0.22
Western Europe	0.22	0.26
Former Comecon	0.11	0.14
<b>Total risk</b>	<b>0.44</b>	<b>0.62</b>

3. The basic simplification of this model is the presumption of isotropic distribution of the deposition D. In fact, D(R) depends also on the coordinates of i and j , through the expectancy function of air transfer from i to j (some details follow below \*\* ). A further simplification applied in the map is the assumption of equal probabilities Pi for all the reactors, except the Kozloduy 1-4, where this probability is taken 10 times higher ( probably an over-estimation ).

3. Compare the above values with those for Sofia, Luxemburg and Brussels:

	Sofia	Luxemburg	Brussels
Risk due to:			
Kozloduy 1-4 ( x10 )	0.75	0.04	0.04
Western Europe	0.28	3.10	2.06
Former Comecon	0.22	0.10	0.09
<b>Total risk</b>	<b>1.25</b>	<b>3.24</b>	<b>2.19</b>

Therefore, the map presents simply a rough picture of the radiological risk due to severe nuclear accidents in Europe, with emphasis to the role of the Kozloduy units 1-4 in the Balkan region.

4. It is obvious that Kozloduy - even taken "by 10" - contributes less to the total risk in the Greek territory than the other European NPPs. On the other hand, the risk in certain regions of Central Europe, populated by tens of millions, is 5 - 7 times higher than this in Athens. These estimations support the recent remark of the Greek Foreign Minister Theodoros Pangalos, made in Sofia: "For Greece, the nuclear safety problem is not related to Kozloduy only, but to the safety of the nuclear power industry in general". This is an opinion supported by our Laboratory since many years.

\*\* The anisotropic distribution of D could modify considerably the picture in the simple case of one source / one target. In the case of Europe, with 88 sources ( NPPs ) and a lot of highly-populated areas, this would not change qualitatively the picture, but only the location of the most risky areas. For example, a distribution with maximum to the South direction in Central Europe would decrease the risk in Luxemburg, but increase this in Brussels.

5. The blue rectangles represent the major European towns.



# CBRN Security in the public sector

## Live Agent Training

Build stronger, more competent teams in field exercises using live chemical agents, biological materials, radiological materials and improvised explosive devices. Gain confidence, knowledge and experience not possible with the use of simulants alone.



## On Site Training

Create highly skilled employees through on-site theoretical and practical training using specially formulated simulants designed to respond to detectors.

## Equipment Testing

Conduct operational testing of CBRN equipment with live chemical agents under field conditions.



**hotzone  
SOLUTIONS**

<http://www.hotzonesolutions.com>

HEADQUARTER  
Hotzone Solutions Group  
Binckhorstlaan 36, suite C010  
2516 BE, The Hague, Netherlands  
Ph. +31 70 262 9704  
Email: [info@hotzonesolutions.com](mailto:info@hotzonesolutions.com)

AUSTRIA  
Hotzone Solutions GmbH  
P.O. Box 107  
7100 Neusiedl, Austria  
Ph. +43 699 1966 7890  
Email: [info@hotzonesolutions.com](mailto:info@hotzonesolutions.com)

### Nuclear terrorism is a preventable catastrophe

Source: <http://homelandsecuritynewswire.com/nuclear-terrorism-preventable-catastrophe>

Graham Allison, a nuclear proliferation expert, warns of the seriousness of the threat of nuclear terrorism and the ease with which rogue states or terrorists groups can obtain weapons or fissile material and the knowledge essential to developing production capability; "The number of rogue states and terrorist groups seeking to acquire nuclear weapons is increasing. There are a number of states willing to sell it to anyone, and a larger number of sites where enriched weapons grade plutonium and uranium can be found in conditions where they might be vulnerable to theft due to lack of security," he says

The ultimate result of uncontrolled nuclear proliferation is mass destruction, said an eminent Harvard scholar in a lecture at the Khalifa University of Science, Technology and Research (Kustar).

Dr. Graham Allison, director of Harvard University's Belfer Centre for Science and International Affairs, was addressing participants during the first of a series of lectures on science, technology and society launched by Kustar.

Gulf News reports that the university recently added a masters degree in nuclear engineering to its programs and invited Allison to open the lecture series by addressing the looming question of the dangers of nuclear catastrophe, focusing on the threat posed by nuclear programmes.

Tod Laursen, Kustar president, said: "In line with our vision to be a world class institution, we have started these events to educate and inform the university community and the public on various subjects, with particular emphasis on issues involving the interrelation of technology with society and the world around us."

Allison, in his lecture, warned of the seriousness of the threat of nuclear terrorism and the ease with which rogue states or terrorists groups can obtain weapons or fissile material and the knowledge essential to developing production capability.

"The number of rogue states and terrorist groups seeking to acquire nuclear weapons is increasing. There are a number of states willing to sell it to anyone, and a larger number of sites where enriched weapons grade plutonium and uranium can be found in conditions where they might be vulnerable to theft due to lack of security," Allison said.

A small 100 pound cake of enriched uranium can be made into a bomb that fits in an SUV-sized vehicle and generates a 10-kiloton explosion. If parked in Times Square on a workday, it could instantly kill 500,000 people, as everything from ground zero out to a third of a mile would disappear instantly, consumed in a ball of fire that reaches 540,000 degrees

Fahrenheit, Allison said.

He proposed a three-step strategy to prevent nuclear terrorism under a "Doctrine of Three Nos."

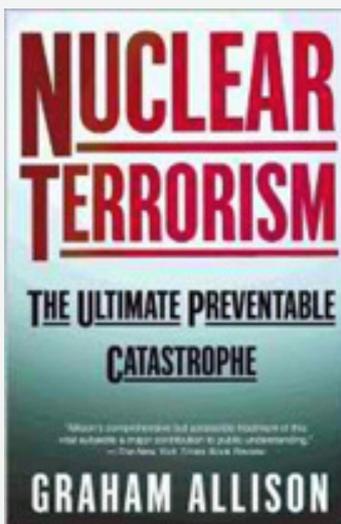
First, "No Loose Nukes," which means countries with stockpiles of nuclear weapons or materials should increase security of these sites so as to make unauthorised access impossible.

Second, "No New Nascent Nukes" — that is, no new national production of highly enriched uranium or plutonium for weapons purposes.

Third, "No New Nuclear Weapon States," requiring international cooperation to prevent new states in developing nuclear capabilities.

Any path to prevent nuclear terrorist attacks must begin with the Nuclear Non-Proliferation Treaty (NPT), and the International Atomic Energy Agency (IAEA) and the role that it plays in inspecting members and non-member states, Allison said.

Since its inception, 184 nations have renounced nuclear weapons, including more than 40 that have the technical ability to build nuclear arsenals. Four decades since the NPT was signed, there are only nine nuclear states.



Moreover, for more than sixty years, no nuclear weapon has been used in an attack.

"I think the United States cannot do it alone and can't bully everybody else to do it. Fortunately the great powers' interests converge

here. We must continue to support the institutions that we now have and to build additional institutions in order to make the process work," Dr Allison concluded.

## 10 Riskiest Nuclear Power Plants in America

Source: <http://www.care2.com/greenliving/10-riskiest-nuclear-power-plants-in-america.html#ixzz1H7 DxDp36>

As we watch the continuing catastrophe in Japan unfold with no clear expectations of the outcome, one thing is for certain: The safety of nuclear power has become a hot topic of conversation. While some countries are shutting down plants, many other are reevaluating the safety of theirs and strategizing over future plans.

In the U.S. we have 104 nuclear reactors. What are the chances that any of them could be home to an emergency like that at Fukushima Dai-ichi? The west coast would seem most at risk, given the busy San Andreas Fault. But an MSNBC analysis of data from the U.S. Nuclear Regulatory Commission (NRC) places the odds of an earthquake disabling the core of reactor elsewhere.

The NRC has calculated the odds of a quake causing catastrophic failure to a nuclear plant and has determined that for the typical nuclear reactor in the U.S., there is a 1 in 74,176 chance each year that the core could be damaged by an earthquake badly enough to leak radiation. As MSNBC puts it, that's 10 times more likely than you winning \$10,000 by buying a ticket in the Powerball multistate lottery, where the chance is 1 in 723,145. The odds take into consideration two main factors: the chance of a serious quake, and the strength of design of the plant.

In the ranking one would expect the top spot to go to the Diablo Canyon Power Plant, with its twin reactors nestled in between the Pacific coastline and the San Andreas Fault; or the San Onofre Nuclear Generating Station, amidst fault lines on land and under the ocean. But no and no. Nuclear power plants built on the California coastline have a lower risk of damage from earthquakes than those in other areas because they were designed and built with earthquakes in mind.

Meanwhile, plants in the East, South and Midwest, where earthquake risk wasn't as highly considered in the design, now find themselves at the top of the NRC's risk list. Why? Because geologists have learned a lot about the dangers of earthquakes in these areas. New faults have been found, and new computer models have changed predictions for how earthquakes may occur. According to MSNBC, the latest estimates are drawn from the 2008 maps of the U.S. Geological Survey. Of special note, the USGS said, was an allowance for waves of large earthquakes in the New Madrid fault area roughly centered on the Missouri Bootheel, as well as inclusion of offshore faults near Charleston, S.C., and new data from the mountains of East Tennessee.

The ratings, number 1 being the riskiest, are fascinating in that they also include the increase of risk (when available) based on how the USGS data changed from 1989 to 2008.

The reactor (No1: Indian Point 3, Buchanan, N.Y.) with the highest risk rating for earthquake damage in the country is a mere 24 miles north of New York City, the country's most populous metropolitan area. With a chance of a core damage from a quake estimated at 1 in 10,000 each year, under NRC guidelines, that's right on the verge of requiring "immediate concern regarding adequate protection" of the public. The two reactors at Indian Point generate up to thirty percent of the electricity for New York City. It will be interesting to see, given the new risk assessments, how the future of Indian Point and the rest of the risky bunch pans out.



### 10 Riskiest Nuclear Power Plants in America

Source: <http://www.care2.com/greenliving/10-riskiest-nuclear-power-plants-in-america.html#ixzz1H7 DxDp36>



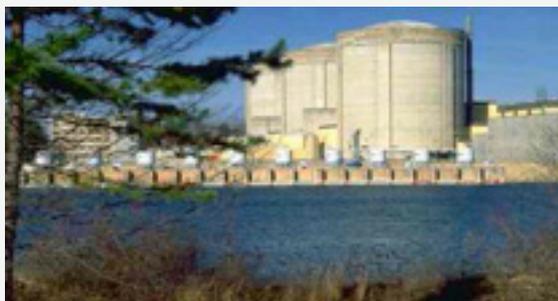
#### 10. Three Mile Island, Middletown, Pa.

Risk: 1 in 25,000  
Old estimate: 1 in 45,455  
Increase in risk: 82 percent



#### 9. Diablo Canyon 1 and 2, Avila Beach, Calif.

Risk: 1 in 23,810  
Old estimate: N/A



#### 8. Oconee 1, 2 and 3, Seneca, S.C.

Risk: 1 in 23,256  
Old estimate: 1 in 100,000  
Increase in risk: 330 percent



#### 7. North Anna 1 and 2, Louisa, Va.

Risk: 1 in 22,727  
Old estimate: 1 in 31,250  
Increase in risk: 38 percent





### 6. Saint Lucie 1 and 2, Jensen Beach, Fla

Risk: 1 in 21,739  
Old estimate: N/A



### 5. Beaver Valley 1, Shippingport, Pa.

Risk: 1 in 20,833  
Old estimate: 1 in 76,923  
Increase in risk: 269 percent



### 4. Sequoyah 1 and 2, Soddy-Daisy, Tenn.

Risk: 1 in 19,608  
Old estimate: 1 in 102,041  
Increase in risk: 420 percent



### 3. Limerick 1 and 2, Limerick, Pa.

Risk: 1 in 18,868  
Old estimate: 1 in 45,455  
Increase in risk: 141 percent





### 2. Pilgrim 1, Plymouth, Mass.

Risk: 1 in 14,493  
Old estimate: 1 in 125,000  
Increase in risk: 763 percent



### 1. Indian Point 3, Buchanan, N.Y.

Risk: 1 in 10,000 chance each year  
Old estimate: 1 in 17,241  
Increase in risk: 72 percent

## Second Suspected Syria Nuclear Site Is Found

Source:

<http://online.wsj.com/article/SB10001424052748703842004576163082774601552.html>

A second suspected nuclear installation has been identified in Syria, according to commercial satellite photos, providing new evidence that Damascus may have been pursuing atomic weapons before a 2007 Is-

raeli military strike. The publishing Wednesday (Feb 2010) of the photos by Washington's Institute for Science and International Security could increase pressure on the United Nations to demand expansive new inspections





of suspect Syrian facilities during a March board meeting of the International Atomic Energy Agency.

IAEA inspectors visited eastern Syria in 2008 and reported that they recovered traces of processed uranium from a site called Dair Alzour, which the Bush administration alleged housed a nearly operational nuclear reactor. Israeli jets destroyed the facility nearly eight months before the IAEA's visit. Syrian President Bashar al-Assad's government has rebuffed repeated IAEA requests to conduct additional inspections of the site as well as three other facilities the U.N. agency believes could be related to a covert Syrian nuclear program. Damascus's rejection of IAEA inspections could result in Syria being declared noncompliant with its U.N. commitments and referred to the Security Council for formal censuring. Mr. Assad denied in an interview with The Wall Street Journal last month that his

government has pursued a nuclear program. He also said he wouldn't allow the IAEA expansive powers to inspect his country. The photos published by the ISIS think tank identifies what it says are one of the three additional sites the IAEA believes could be connected to the Dair Alzour facility. In a series of photos, ISIS displays what it alleges were apparent Syrian attempts to disguise the activities of site after the Israeli attack. "Laying down a new foundation could be an attempt to defeat the environmental sampling the IAEA inspectors would like to carry out to see if uranium was present," the ISIS report reads. ISIS says the location and contours of the building suggests it housed uranium-conversion equipment that is used to produce nuclear fuel. The facility, in a town called Marj as Sultan, is on the outskirts of Syria's capital, Damascus. ISIS said it located the site using commercial satellite images based on information provided by sources at the IAEA as well as by a report in the German newspaper, Sueddeutsche Zeitung. IAEA Director General Yukiya Amano has said in recent months that he'd consider calling for a so-called special inspection of Syrian sites if Damascus continues to deny U.N. staff entry. Syria could then be referred to the Security Council, if it again refused the IAEA's request. Diplomats at the IAEA said Mr. Amano is also considering releasing a report at the March meeting that would detail what the agency says is evidence that Syria was secretly developing a nuclear reactor. Such a move is viewed as less of a political risk than a call for a special inspection, but still could result in Security Council action at a later date.

## North Korea Nears Completion of Electromagnetic Pulse Bomb

N. Korea Disrupts Current Military Maneuvers With Russian Device To Jam GPS

Source:<http://abcnews.go.com/International/electronic-warfare-north-korea-nears-completion-electromagnetic-pulse/story?id=13081667>

North Korea appears to be protesting the joint U.S. and South Korean military maneuvers by jamming Global Positioning Devices in the south, which is a nuisance for cell phone and computers users -- but is a hint of the looming menace for the military.

Since March 4, Pyongyang has been trying to disrupt GPS receivers critical to South Korean military communications apparently in protest of the ongoing joint military training exercises between South Korean and U.S. forces. Strong jamming signals were sent in



termittently every five to 10 minutes.

The scope of the damage has been minimal, putting some mobile phones and certain military equipment that use GPS signals on the fritz.

Large metropolitan areas including parts of Seoul, Incheon and Paju have been affected by the jamming, but "the situation is getting wrapped up, no severe damage has been reported for the last two days," Ky-oungwoo Lee, deputy director of Korea Communications Commission, said.

The jamming, however, has raised questions about whether the Korean peninsula is bracing for new electronic warfare.

The North is believed to be nearing completion of an electromagnetic pulse bomb that, if exploded

25 miles above ground would cause irreversible damage to electrical and electronic devices such as mobile phones, computers, radio and radar, experts say.

"We assume they are at a considerably substantial level of development," Park Chang-kyu of the Agency for Defense Development said at a briefing to the parliament Monday.

Park confirmed that South Korea has also developed an advanced electronic device that can be deployed in times of war.

The current attempts to interfere with GPS transmissions are coming from atop a modified truck-mounted Russian device. Pyongyang reportedly imported the GPS jamming system from Russia in early 2000 and has since developed two kinds of a modified version. It has also in recent years handed out sales catalogs of them to nations in the Middle East, according to South Korea's Chosun Ilbo.

North Korea Jams GPS Signals in Ominous Threat of More to Come

Major Korean newspaper editorials today called the recent jamming a "wake-up call," pointing out that consequences could be severe if North Korea succeeds in discharging full-fledged electromagnetic waves.

On top of disrupting major communication tools used by both civilians and the military, the waves would affect financial transactions and civilian airplanes dependent on radio signals.

"The problem could be further exacerbated by the fact that our military equipment increasingly relies on commercial GPS standards," wrote JoongAng Daily, one of South Korea's largest newspapers.

This is the second time North Korea has sought to interfere with military communications. Pyongyang

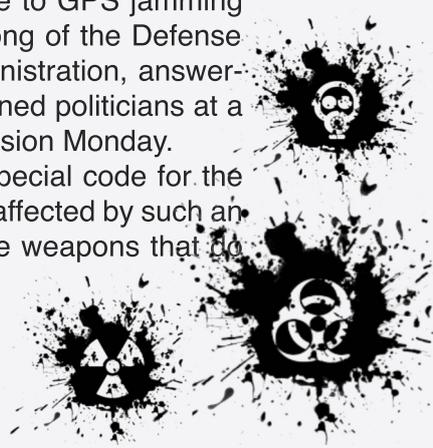
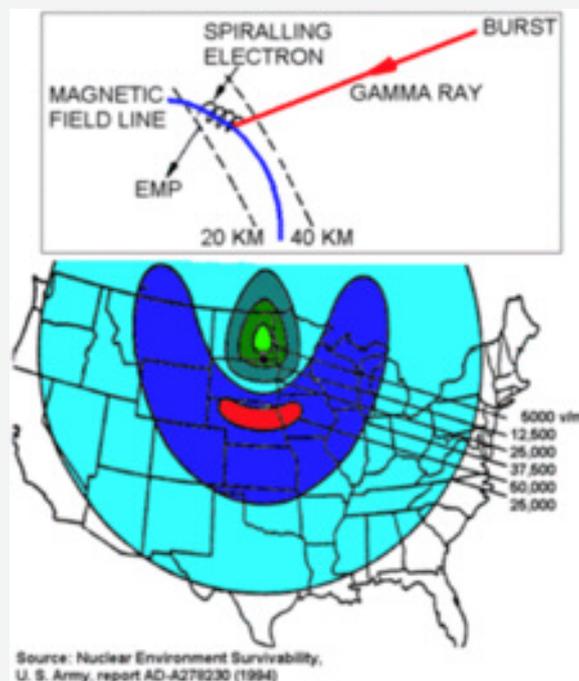
is thought to have been behind a failure of GPS receivers on some naval and civilian aircraft during another joint military exercise in August.

South Korea's minister of defense at that time had reported to the Congress, warning that the North poses "a fresh security threat" capable of disrupting guided bombs and missiles by sending signals over a distance of up to 60 miles.

Some modern weapons are equipped with an alternative guided system in addition to GPS, which means the bomb would find its way to the target even if it loses contact with the satellite.

But the Korean military weaponry still largely remains vulnerable to GPS jamming signals, said Kwon Oh-Bong of the Defense Acquisition Program Administration, answering questions from concerned politicians at a parliamentary working session Monday.

"Because we have a special code for the military, it is unlikely to be affected by such an attack, but there are some weapons that do



not require a special code, so we are researching preventive measures," he said.

U.S. Forces Korea spokesman David Oten declined to assess the effects, saying it is a matter of intelligence but added in an e-mail response that they are conducting extensive

analysis of potential threats and ensured that "United States forces operate using multiple, redundant navigational systems and train extensively to operate in a contested electronic environment."

## New technology allows detection of nuclear materials from a mile away

Source: <http://homelandsecuritynewswire.com/new-technology-allows-detection-nuclear-materials-mile-away>

New detection technology would allow illicit nuclear material to be detected from up to a mile away; the technology, developed by the Idaho National Laboratory, will help protect the United States against the smuggling of nuclear materials into the country; field tests will begin this summer. The Idaho National Laboratory in eastern Idaho has been cleared to begin testing air- and ground-operated devices intended eventually to detect nuclear materials and explosives being smuggled into the country. The U.S. Department of Energy earlier last week gave INL scientists and engineers the OK to begin experimenting after issuing a finding that the testing would cause no significant environmental impact. Department spokesman Tim Jackson told the Post Register that preparation of the testing site at the 890-square-mile nuclear reservation will likely start as soon as the snow melts, and

that testing will begin this summer. Officials said the technology could allow illicit nuclear material to be detected from up to a mile away. The Columbus (Indiana) Republic reports that experts said the testing involves high-energy linear accelerator-based systems. Such systems are used by many hospitals to produce medical X-rays. Scientists at the INL hope to adapt the technology to cause nuclear material to emit a "signature" that can be detected at a distance. The tests involve placing radioactive materials at the site and then using sensing tools to detect them, Jackson said. He said safeguards have been built into the testing to prevent accidental exposure to workers involved in the testing, as well as employees at nearby labs. "For more than 20 years, INL has been at the forefront of threat materials and detection research," Jackson said.

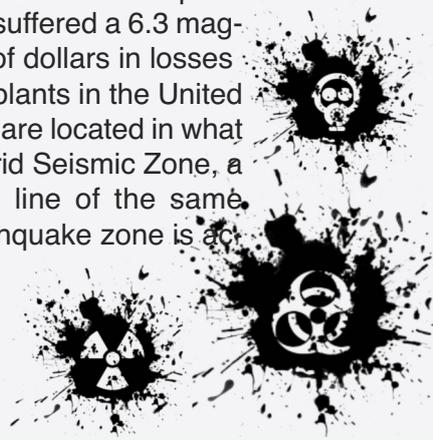
## Fifteen U.S. nuclear reactors are located in an active seismic zone

Source: <http://homelandsecuritynewswire.com/fifteen-us-nuclear-reactors-are-located-active-seismic-zone>

There are 104 nuclear plants in the United States, and fifteen of them are located in what is known as the New Madrid Seismic Zone, a region defined by a fault line of the same name; the New Madrid Seismic Zone involves eight states, and it is an active earthquake area in the central United States that follows the Mississippi River between Missouri, Kentucky, Arkansas, and Tennessee; while the U.S. earthquake zone is active, scientists say the ingredients do not exist there for a Japan-

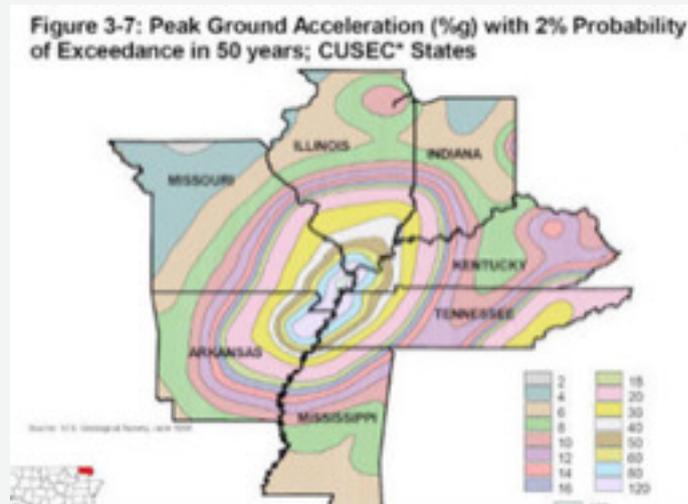
style nuclear disaster; should a large seismic event strike this part of the country, seismologists offer Christchurch, New Zealand, rather than Japan as an example of what to expect. In February, Christchurch suffered a 6.3 magnitude quake and billions of dollars in losses.

There are 104 nuclear plants in the United States, and fifteen of them are located in what is known as the New Madrid Seismic Zone, a region defined by a fault line of the same name. While the U.S. earthquake zone is ac-



tive, scientists say the ingredients do not exist there for a Japan-style nuclear disaster.

“There is that uncertainty when you hear that something has happened because you don’t understand,” said Jeff King, interim director of the Nuclear Science and Engineering Program at the Colorado School of Mines. “I



The New Madrid Seismic Zone // Source: [showme.net](http://showme.net)

would say Americans should actually be very comfortable (about) those plants.”

King, a former Department of Energy nuclear facility on-site inspector, is not working directly with officials on the Japan disaster, and he noted that it will be some time before a final report is completed.

He told Fox News that the early diagnosis for the nuclear accident in Japan had more to do with the tsunami that followed the 11 March earthquake and the power loss to the Fukushima Daiichi nuclear facility than the 8.9 magnitude temblor. “The distinction, the earthquake and the tsunami is kind of an important one,” he said. “The plant survived the earthquake with minimal problems, there’s some questions about the spent fuel pools, but minimal problems, and then it was an hour later when the tsunami hit and they lost all of the their backup power.”

Fox News reports that DHS is scheduled to conduct a large-scale, interagency disaster

response exercise in the New Madrid Seismic Zone this spring. It is an annual exercise held by the federal government, and Homeland Security Secretary Janet Napolitano’s office said the location of this year’s drill is not connected to events in Japan. “With respect to the United States, we are constantly practicing” disaster response, Napolitano recently told an audience in Denver.

Robert Williams, a scientist with the U.S. Geological Survey’s Hazards Team, said the New Madrid Seismic Zone involves eight states, and it is an active earthquake area in the central United States that follows the Mississippi River between Missouri, Kentucky, Arkansas, and Tennessee. “It’s an area that is currently experiencing earthquakes and has a history of magnitude 7 to 8 earthquakes,” Williams said. “But the shaking from a New Madrid quake would involve a much larger area. So it runs along that border and it’s of concern to those communities in the Mississippi River valley as well as Memphis and St. Louis.”

Should a large seismic event strike this part of the country, seismologists offer Christchurch, New Zealand, rather than Japan as an example of what to expect. In February, Christchurch suffered a 6.3 magnitude quake and billions of dollars in losses. “Christchurch has a building infrastructure that’s a lot like what you find in the central U.S. main street, 100-year-old brick buildings, no reinforcement, no consideration of earthquake shaking,” Williams said.

King, who used to live in the New Madrid region, agreed that infrastructure outside the nuclear plants is the bigger concern. “If I still lived in that area, my biggest worry would be the loss of my utilities, the loss of my power and water,” he said. “The real tragedy in the case of a natural disaster is going to be the natural disaster, not the nuclear power plant.”



## Global nuclear bomb sensors used to track Japan's radiation

Source:<http://homelandsecuritynewswire.com/global-nuclear-bomb-sensors-used-track-japans-radiation>

A worldwide network of radiation sensors originally built to detect nuclear weapon tests is now being used by scientists to track radiation leaked from Japan's Fukushima Daiichi nuclear power plant; over 280 sensors were installed to detect radiation from nuclear weapons testing; the sensors have detected several radioactive elements that are the byproducts of nuclear fission like iodine-131 and cesium-137 from Japan; experts studying the data disagree on the effect and size of the release, but assure the public that the effects are minimal as much of the radiation is being scattered across the Pacific. A worldwide network of radiation sensors originally built to detect nuclear weapon tests is now being used by scientists to track radiation leaked from Japan's Fukushima Daiichi nuclear power plant. As part of the Comprehensive Test Ban Treaty (CTBT), radiation sensors were built across the world about ten years ago to enforce a ban on nuclear weapon testing. "We have currently over 280 sensors worldwide, monitoring underground, the atmosphere, the oceans for any sign of a nuclear explosion, and we're also sniffing the air for any sign of radioactivity," says Comprehensive Test Ban Treaty Organization spokeswoman Annika Thunborg.

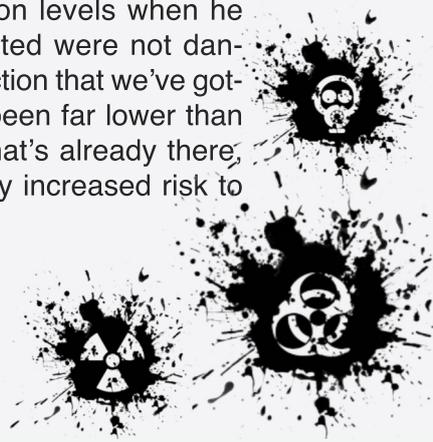
After the damaged nuclear reactors at Japan's beleaguered power plant suffered from several explosions and began releasing radiation into the atmosphere, the organization began tracking the radiation. According to Gerhard Wotawa, of the Austrian meteorological institute who has been studying data from the monitoring stations, the increases in radiation that the sensors are detecting are from Japan. "Data like that I have never seen in my career, so it is pretty much clear where it comes from," Wotawa said.

The sensors have detected several radioactive elements that are the by-products of nuclear fission inside reactors like iodine-131 and cesium-137. Experts studying the

data picked up by the sensors disagree on the effect and size of the release. Based on computer models on where the radiation will go, Wotawa says that the accident is releasing about as much radiation as the Chernobyl disaster in 1986. While "the daily release is comparable to what was released in Chernobyl," he said, "the effect of the power plant accident in Japan is not comparable to the effect of Chernobyl on the former Soviet Union."

The radiation released during the Chernobyl accident contaminated land in all directions because the reactor was located inland. In contrast Japan's Fukushima Daiichi reactor is located on the coast and winds are scattering radiation over the Pacific. Harry Miley, a nuclear physicist at the Pacific Northwest National Laboratory in Washington State, has also been studying the data and disagrees with Wotawa's findings. "If I had to guess, I would say the release levels or more like Three Mile Island and less like Chernobyl, but we'll see as time goes forward," Miley said.

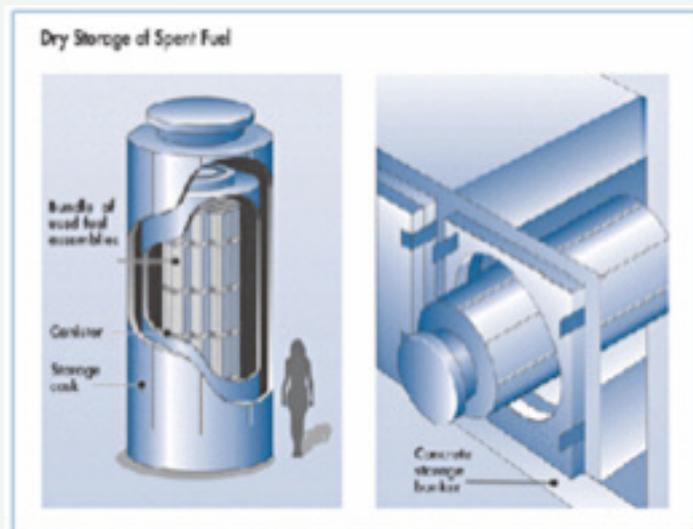
Miley also said that studying the data from the sensor network can tell researchers what occurred inside the Fukushima reactors. He explains, "We might determine things like what was the temperature of the material when the radioactivity was emitted, which material it was. There are three reactors, and there are spent fuel pools and so forth — they're all potential sources, and we should be able to nail down which source is which." The CTBT sensors are currently the only glimpse that scientists have on what occurred at the reactors as radiation levels on site are still far too high to measure directly. Miley also allayed fears on the west coast of the United States about contamination levels when he said that the levels detected were not dangerous. "The highest detection that we've gotten here in the U.S. has been far lower than the natural radioactivity that's already there, so I don't think there's any increased risk to the U.S. public," he says.



### Zion's nuclear solution

Source: <http://homelandsecuritynewswire.com/zions-nuclear-dry-cask-storage-solution>

In Illinois, 28,588 fuel assemblies, each containing a bundle of 200 rods and weighing about 600 pounds, are cooling in pools on the ground or above reactors -- as in Japan; experts say they are "very inviting targets for terrorists"; moreover, "No one has come up with a solution to safely store this waste for 10,000 years into the future"



could happen and whether they would be protected. In Illinois, 28,588 fuel assemblies, each containing a bundle of 200 rods and weighing about 600 pounds, are cooling in pools on the ground or above reactors as in Japan. Positioned, up high, they are "very inviting targets for terrorists," said David Lochbaum, director of the Nuclear Safety Project of the Union of Concerned Scientists, and critics note that the buildings that house the pools are flimsy. "No one has come up with a solution to safely store this waste for 10,000 years into the future," said Lochbaum.

The Energy Department says it is committed to ensuring it meets its long-term disposal obligations, but a plan hasn't been disclosed. For safety reasons, law requires spent rods to cool in pools for five years before they can be moved into dry casks — stainless-steel

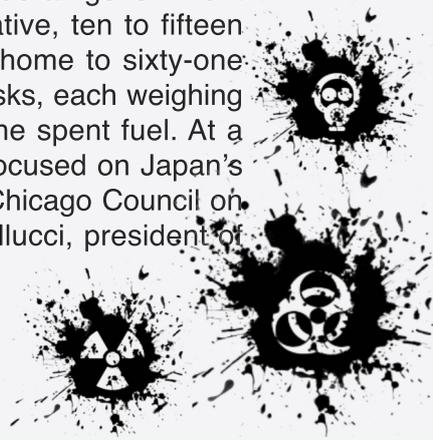
Schematic of the dry-cask solution // Source: [nrc.gov](http://nrc.gov)

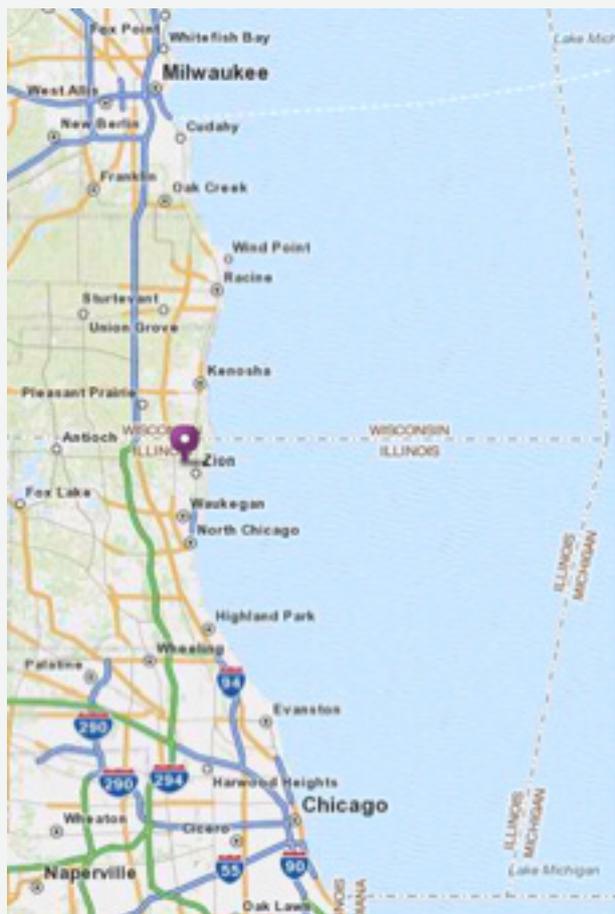
Fourteen years ago, Zion nuclear power plant's last red-hot fuel rod was lifted from its reactor core and submerged into a pool of water, joining the rest of the plant's 2.2 million pounds of spent fuel. Despite plans to entomb the nuclear waste within Nevada's Yucca Mountain, the U.S. Energy Department left Zion operators with the responsibility of storing the dangerous materials on site. Chicago-based Exelon Corp. shuttered Zion in 1998 and another company is dismantling the complex piece by piece. The plan calls for Zion's waste to be encased in concrete-and-steel bunkers not far from Lake Michigan, possibly in perpetuity. In the wake of Japan's disaster, the safety calculation involved in storing such waste has changed, experts say. More than 80 percent of the spent nuclear fuel in Illinois remains in pools.

In Zion, a town of 25,000 about fifty miles north of Chicago, and at other towns where nuclear waste is stored, Japan's crisis has some questioning if the most unlikely events

canisters, encased in 3-inch-thick carbon-steel liners and covered in two feet of reinforced concrete. Installing dry-cask storage infrastructure at a plant with two reactors would cost between \$20 million and \$30 million, and annual costs for buying casks, loading them and running a dry-cask storage facility are \$7 million to \$10 million, according to Exelon. Unlike in Japan, Zion's fuel rods have been cooling for as long as forty years. "You can't have a meltdown," said Patrick Daly, general manager of EnergySolutions, which is dismantling Zion.

By 2020, EnergySolutions expects to turn the 240-acre site into an uncontaminated field of grass. Unless the federal government comes up with an alternative, ten to fifteen acres of the land will be home to sixty-one concrete and steel dry casks, each weighing 125 tons, used to store the spent fuel. At a panel discussion Friday focused on Japan's crisis and hosted by the Chicago Council on Global Affairs, Robert Gallucci, president of





the John D. and Catherine T. MacArthur Foundation, said the concrete monoliths were “a good interim solution” to the storage problem. He said he was a “very enthusiastic supporter of long-term dry storage.” Gallucci previously served with the U.S. State Department as a special envoy focused on the threat posed by the proliferation of weapons of mass destruction. Even Lochbaum calls dry-cask storage “the cheapest insurance we can possibly pay.” So far, none of Zion’s waste has been moved into dry casks. This summer a pad is to be built about 2,000 feet from Lake Michigan that would protect the casks from earthquakes. Daly said spent fuel will be moved into dry casks by 2014. Meanwhile, cooling occurs through natural convection.

## Algae might help reduce nuclear waste

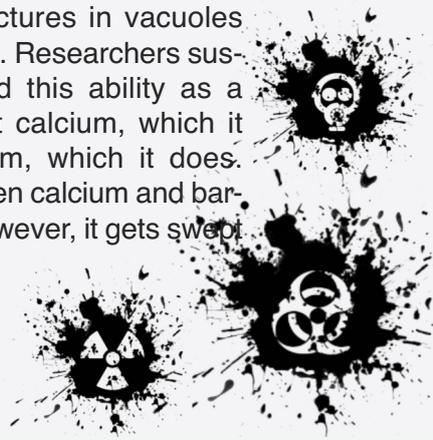
Source: <http://homelandsecuritynewswire.com/algae-might-help-reduce-nuclear-waste>

The humble algae -- *Closterium moniliferum* -- might one day soon be used to help separate strontium from calcium in nuclear waste; if successful, the process could lead to a reduction in the amount of nuclear waste that is left over from nuclear power facilities, and might even help in cleanup when accidents occur such as the one in Chernobyl, Ukraine, that spewed great quantities of strontium into the surrounding environment

New research conducted by Minna Krejci and her colleagues at Northwestern University in Chicago, and published in *ChemSusChem*—Chemistry and Sustainability, suggests that the algae, *Closterium moniliferum*, might one day soon be used to help separate strontium from calcium in nuclear waste. If successful, the process could lead to a reduction in the amount of nuclear waste that is left over from nuclear power facilities,

and might even help in cleanup when accidents occur such as the one in Chernobyl, Ukraine, that spewed great quantities of strontium into the surrounding environment (but not like the current situation in Fukushima, because there the problem is xenon and iodine). This is important because the amount of waste is piling up; currently around hundred million gallons of toxic sludge exist in just the United States.

Nature reports that the distinctive crescent shaped freshwater algae have been observed removing strontium from water and then depositing it as crystal structures in vacuoles (thin membrane organelle). Researchers suspect the algae developed this ability as a means for separating out calcium, which it doesn’t want, from barium, which it does. Since strontium sits between calcium and barium in atomic structure, however, it gets swept





up with the barium, while the calcium gets left behind. The end result, is vacuoles full of crystals that can be collected and stored as nuclear waste, while the relatively harmless calcium can be processed or stored in other less secure ways.

Strontium, or more precisely, strontium-90, a radioactive isotope, (which has a half-life of thirty years) is particularly dangerous to human beings because it so strongly resembles calcium, which means the body treats it the same way; because of that it can easily get into milk, bones, bone marrow, blood and other tissues, causing hard to treat cancers.

It is not yet known what effect exposing the algae to strontium90 will have over time, but

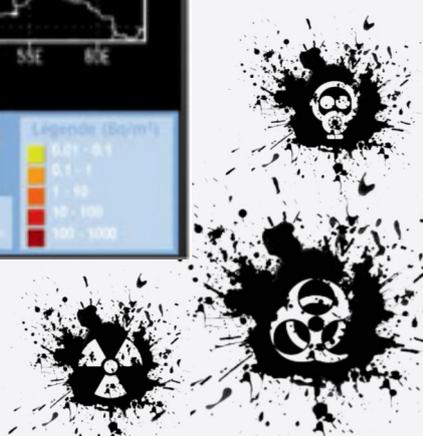
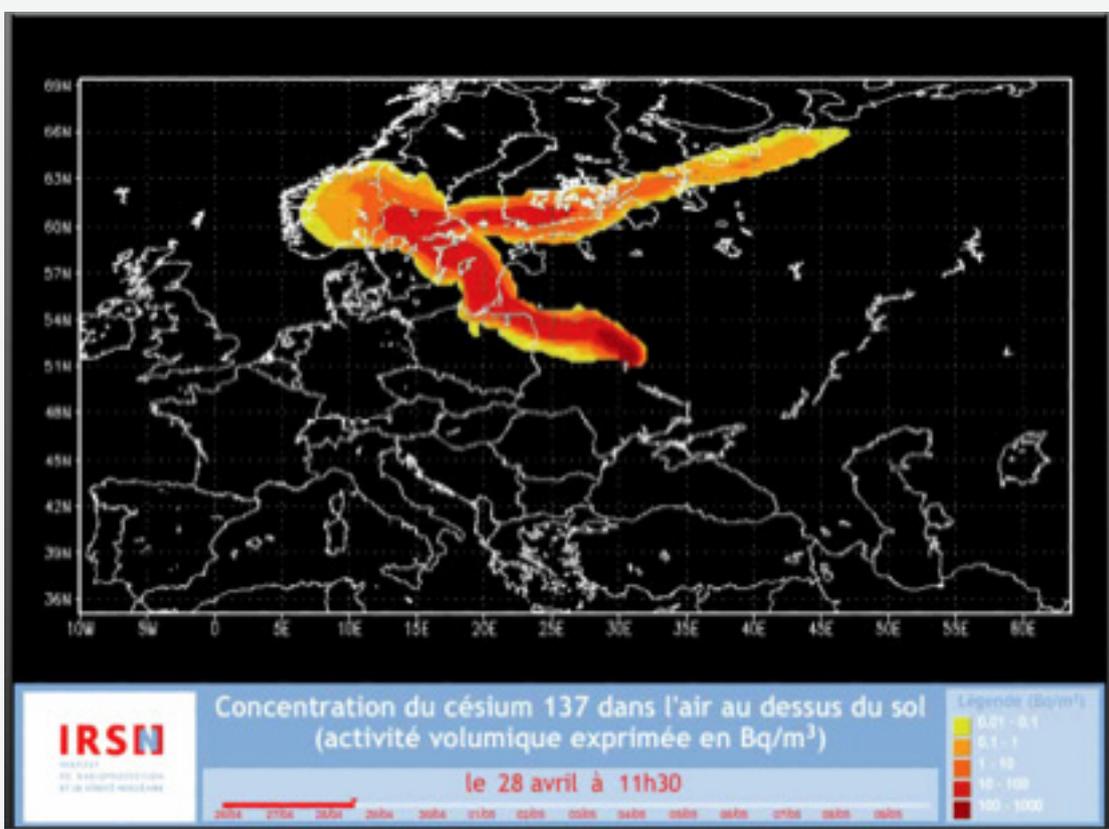
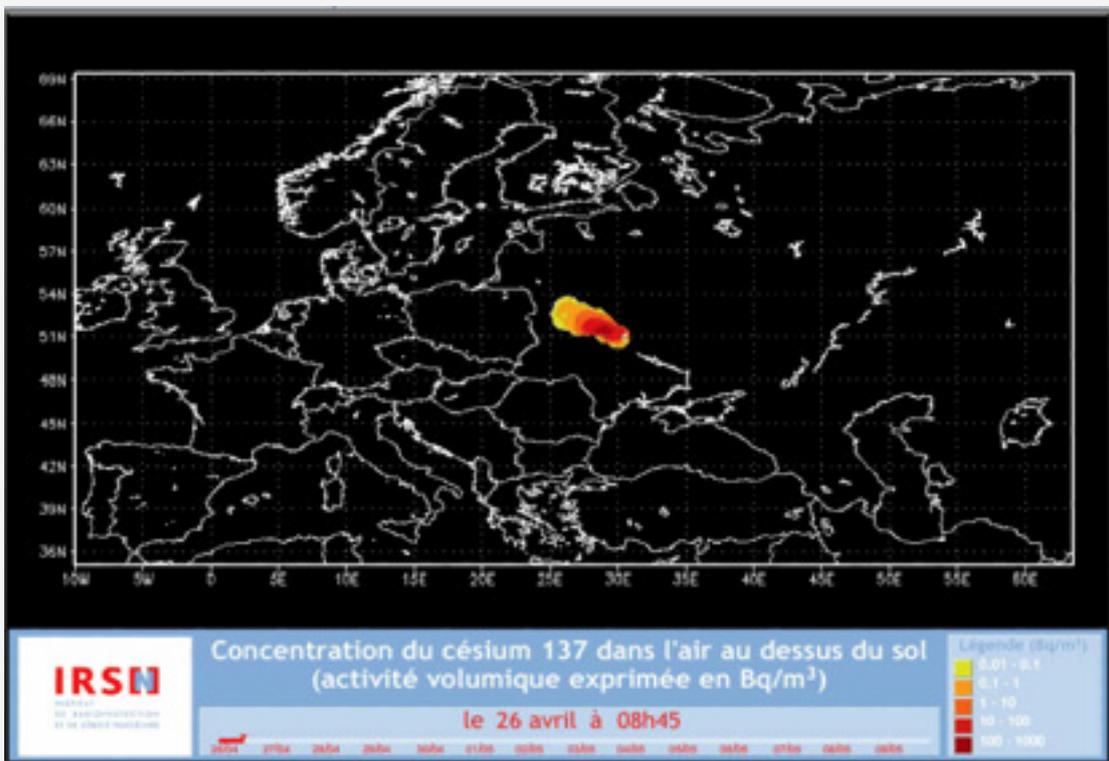
Krejci notes in her paper, even if the algae are killed in short order, she suspects they will be able to live long enough to produce some crystals which can be separated from the general sludge created by nuclear plants, which is enough, because *Closterium moniliferum* can be easily cultured, thus providing a constant stream of new algae to continue the process.

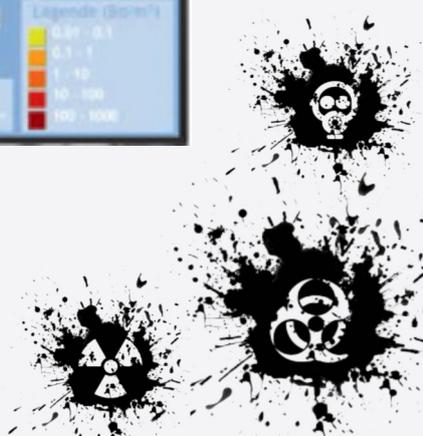
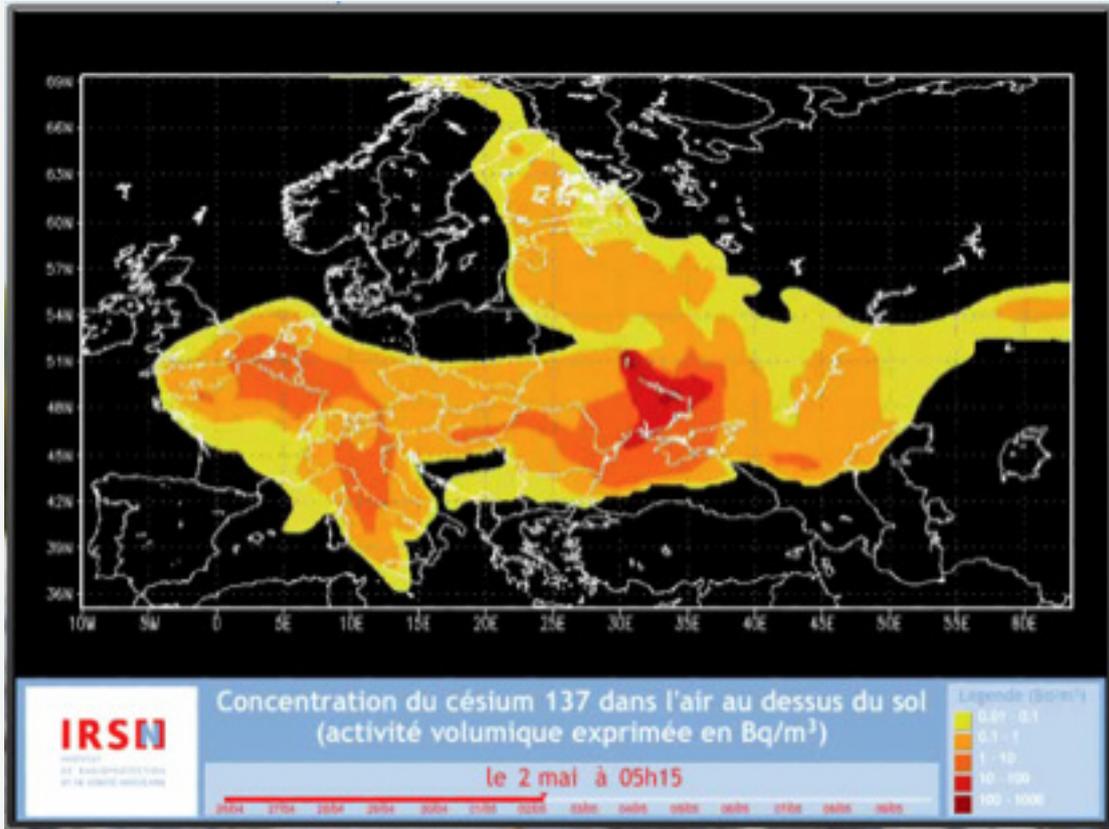
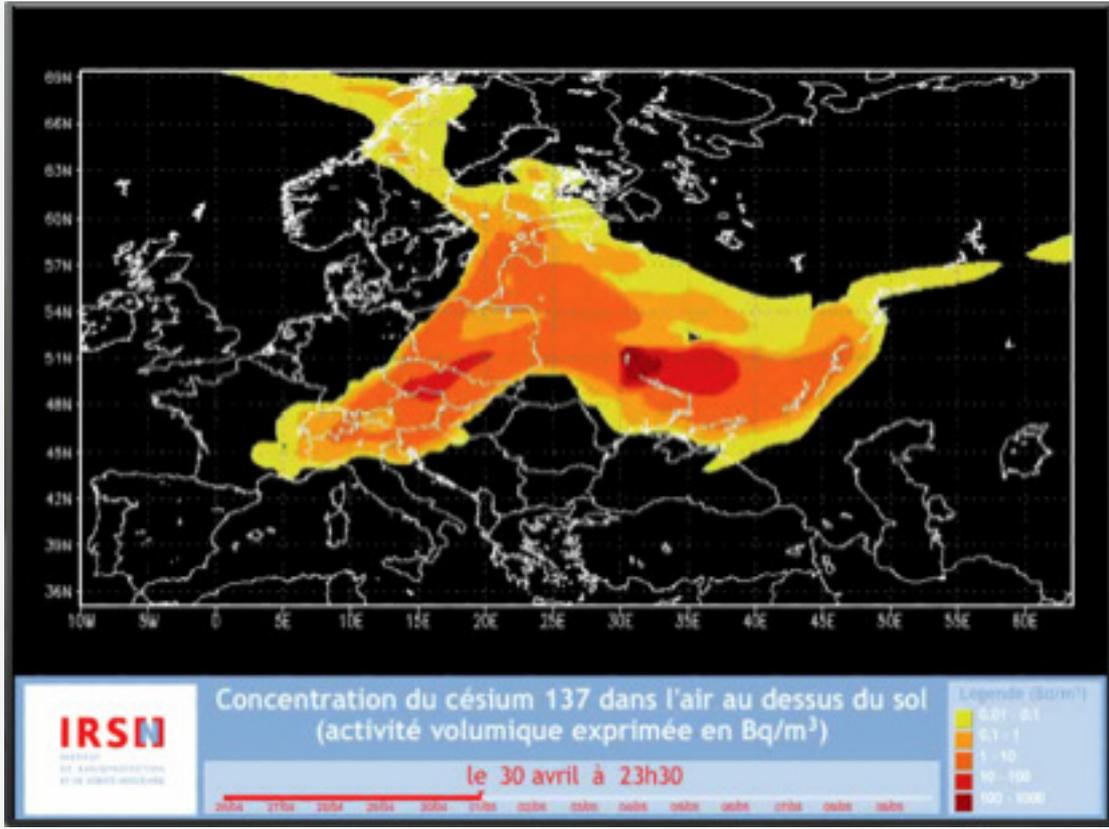
—Read more in Minna R. Krejci et al., “Selective Sequestration of Strontium in Desmid Green Algae by Biogenic Co-precipitation with Barite,” *ChemSusChem—Chemistry and Sustainability* (29 March 2011) (DOI: 10.1002/cssc.201000448)

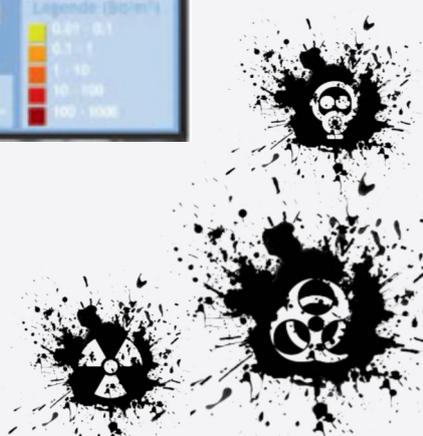
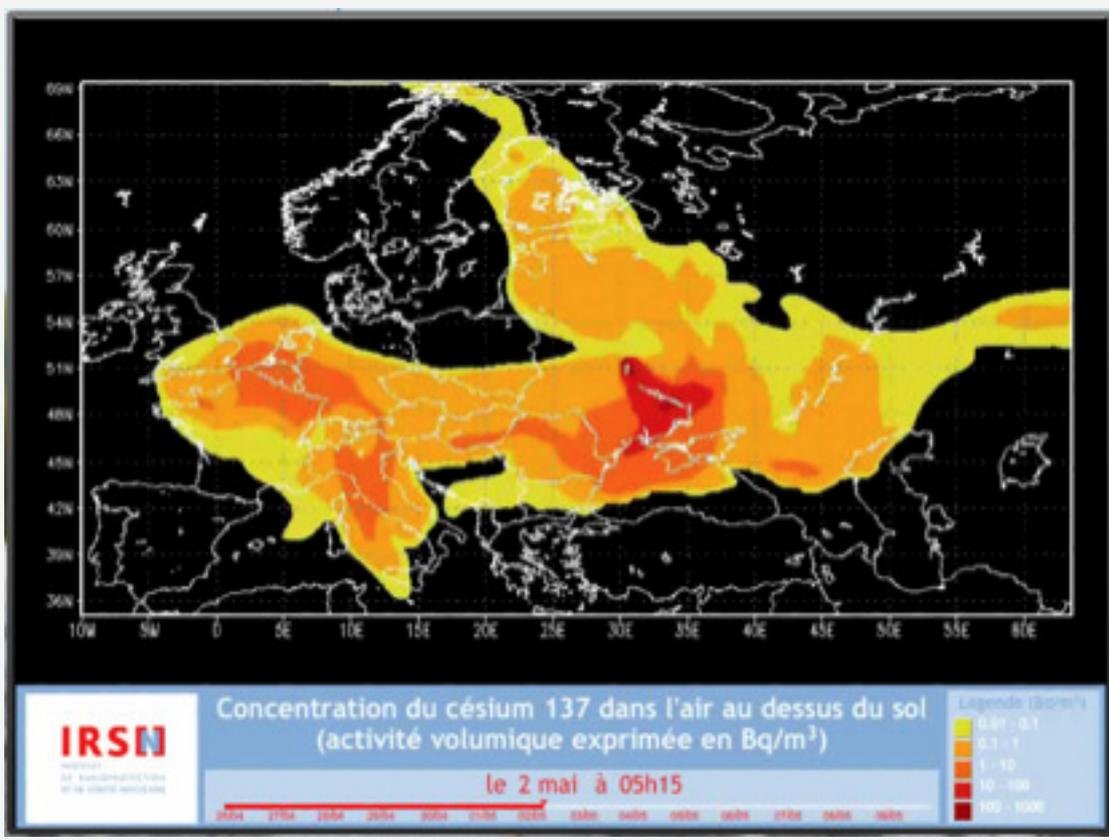
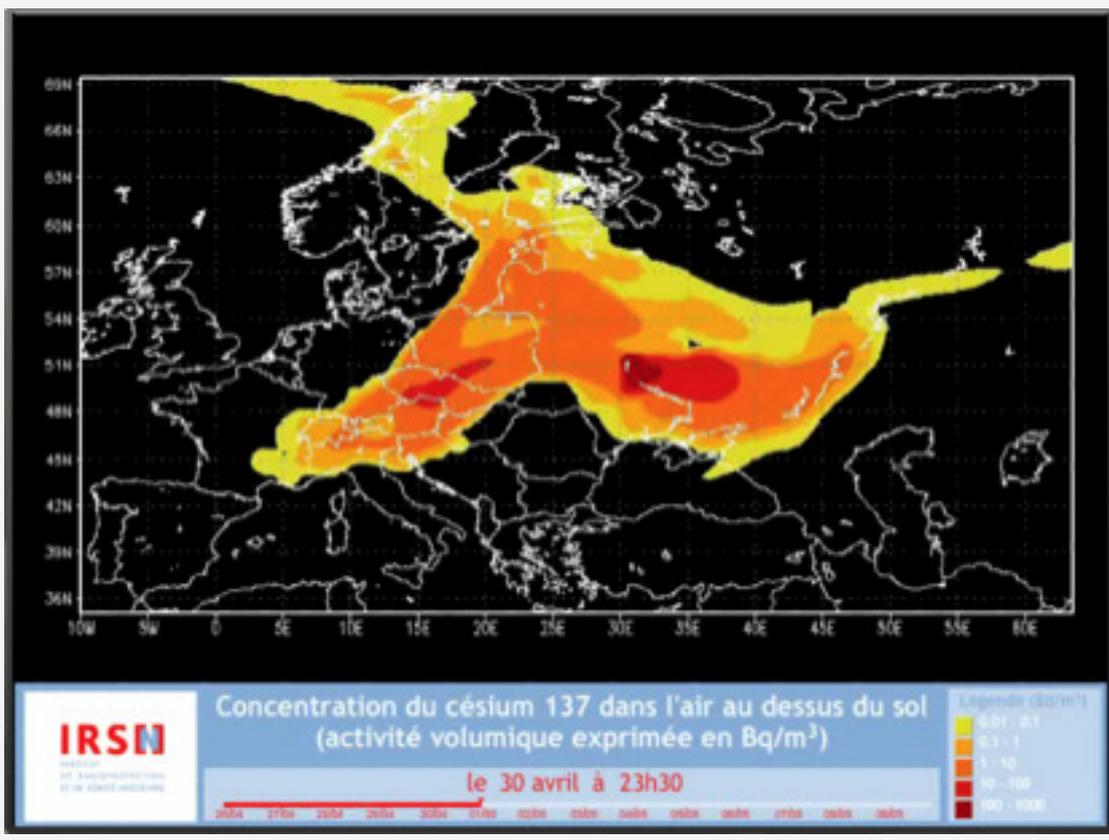


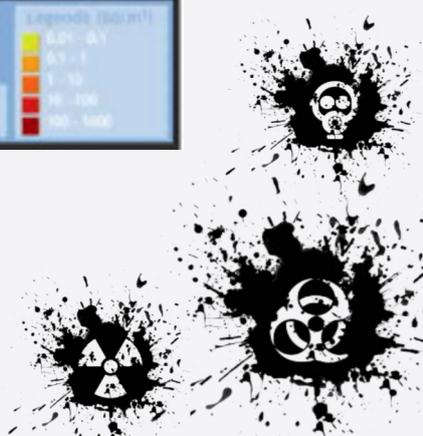
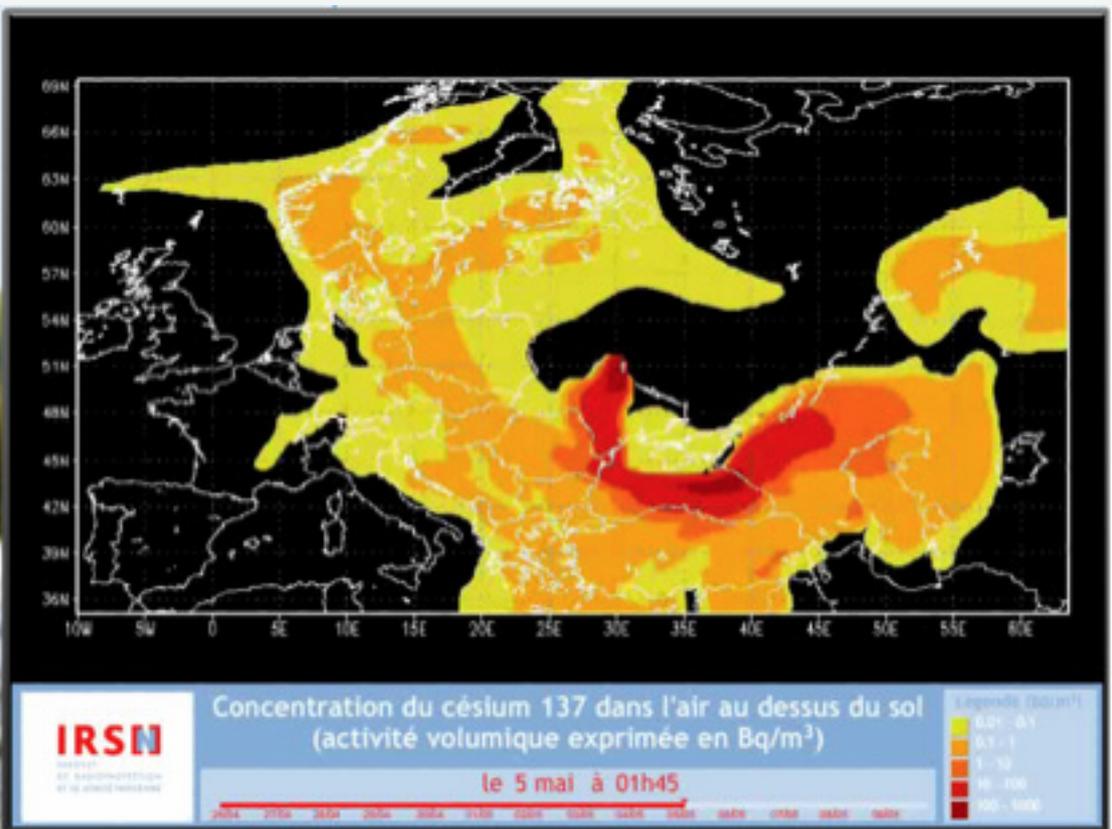
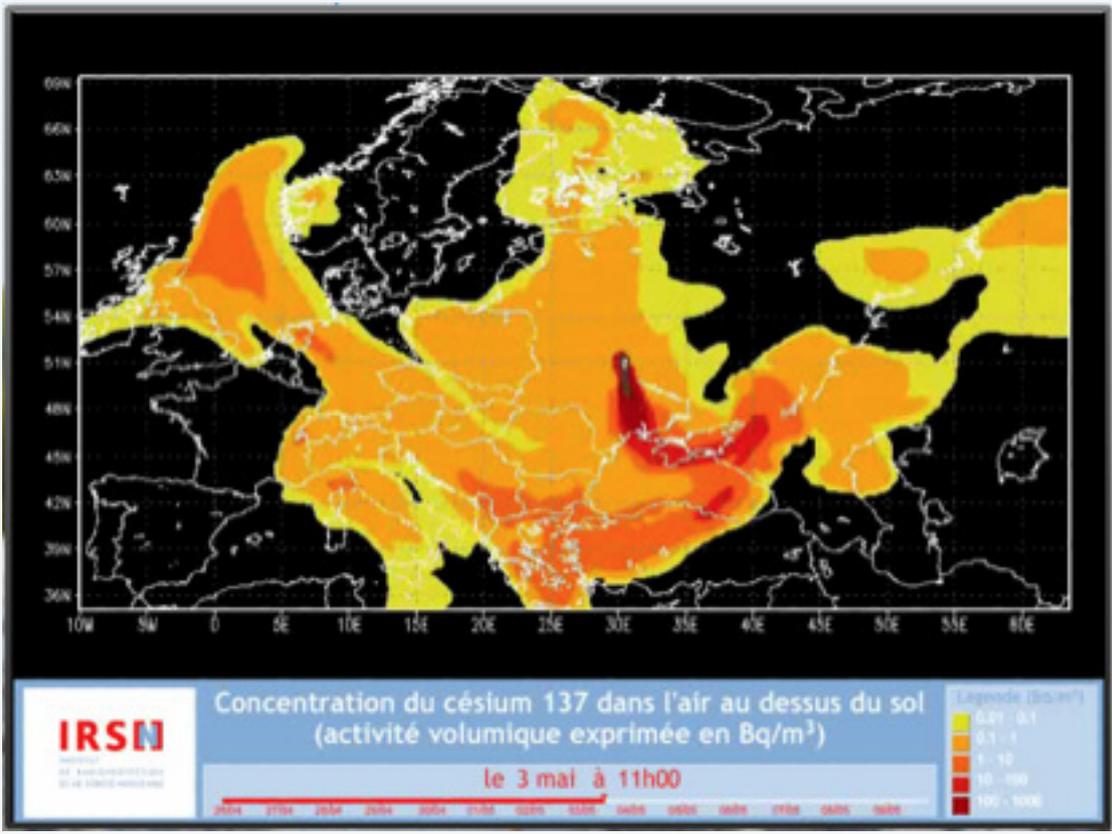
### Chernobyl time-line

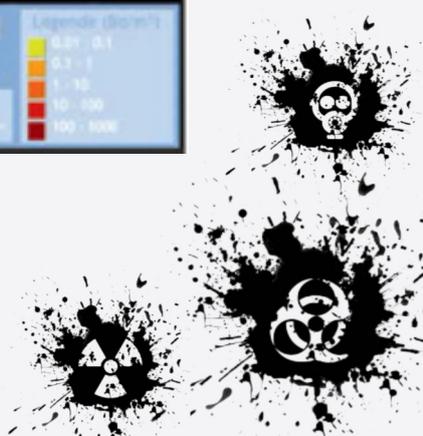
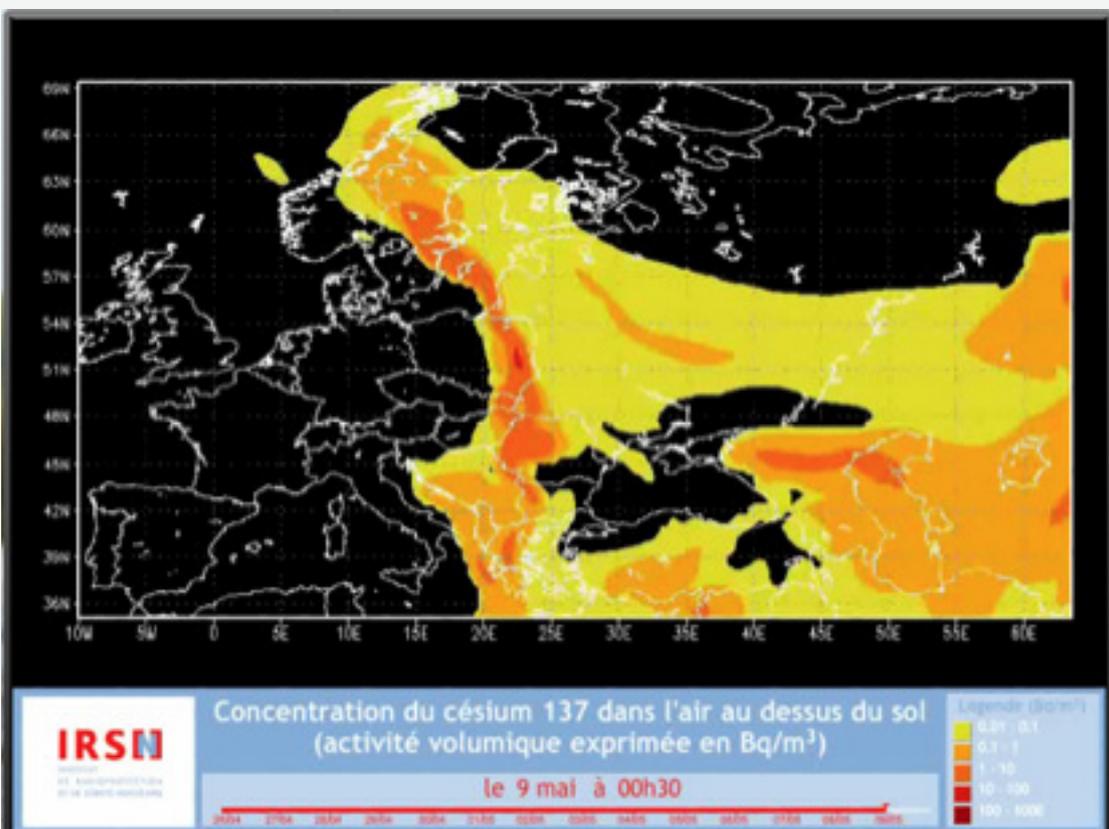
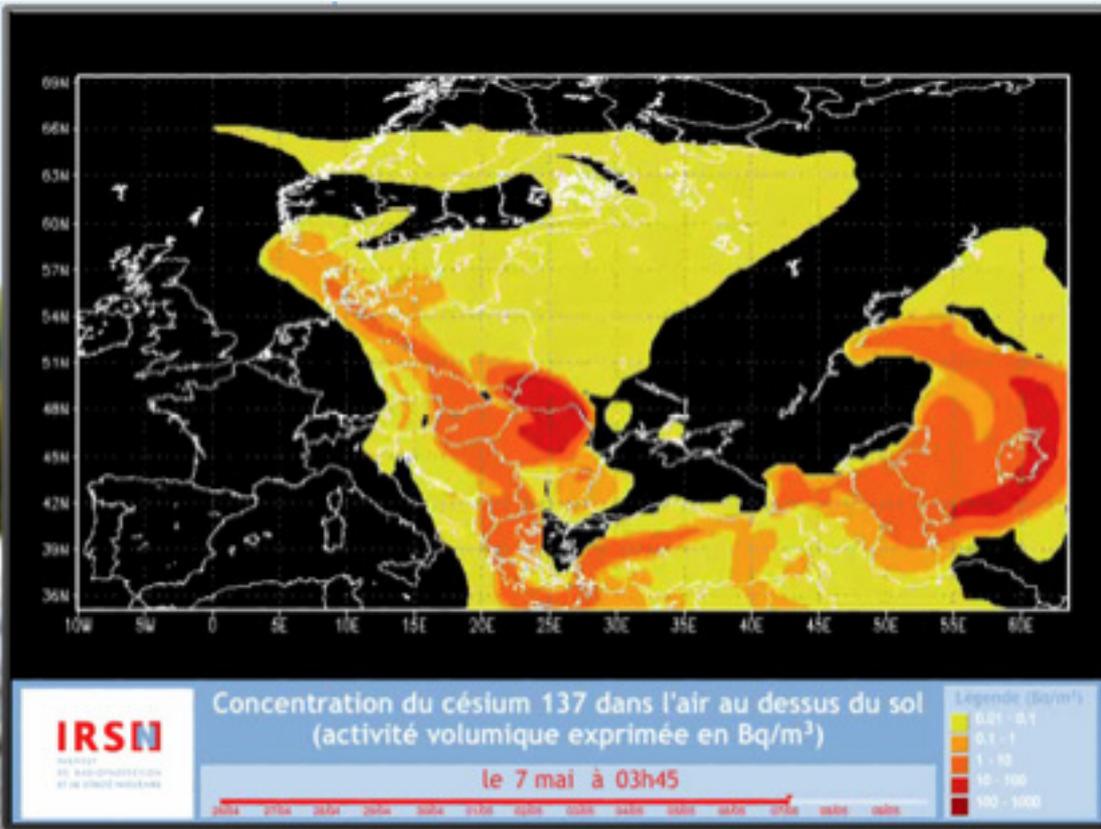
Source: [http://www.irsn.fr/FR/popup/Pages/tchernobyl\\_video\\_nuage.aspx](http://www.irsn.fr/FR/popup/Pages/tchernobyl_video_nuage.aspx) [animated map]

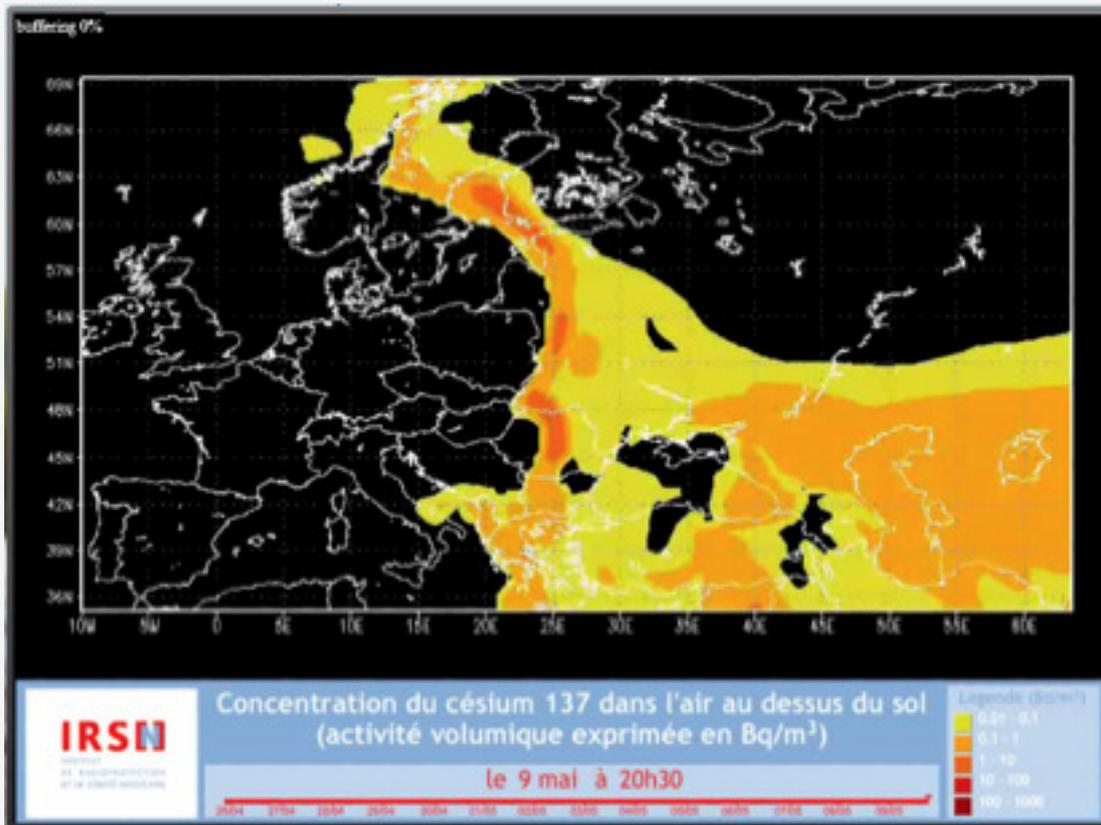












## Japan: Interesting presentations from International Atomic Energy Agency

Source: <http://www.slideshare.net/iaea/presentations>

Visit source to download interesting presentations relevant to Japan's nuclear emergency.

Presentations

Latest Most viewed

- Summary of Reactor Unit ...  
16 hours ago, 11 views
- Summary of Reactor Unit ...  
16 hours ago, 4139 views
- Summary of reactor status...  
1 day ago, 6589 views
- Fukushima - Background I...  
2 days ago, 6288 views



### U.S. military robot to help detect radiation at Fukushima

Source: <http://homelandsecuritynewswire.com/us-military-robot-help-detect-radiation-fukushima>

The modified military robot to navigate around Fukushima plant and produce a color-coded map of radiation levels; the robot includes a chemical, biological, radiological, nuclear, and explosive detection kit that can identify more than 7,500 environmental hazards, including toxic industrial chemicals and volatile gases; it also has temperature and air quality indicators and night vision, and it can sense sounds up to 1,000 meters away; the robot joins other pieces of specialized equipment, donated by QinetiQ to help Japan deal with the crisis

A modified military robot, equipped with radiation-hardened cameras, GPS, and sensors, arrived in Japan on Thursday to help out at the stricken nuclear power plant.

The Talon robot, built by QinetiQ North America and modified by the Department of

Energy's Idaho National Lab, has done field work before, including supporting military operations in Iraq and Afghanistan and assisting at the site of the World Trade Center in New York after the 2001 terrorist attacks.

Discover News reports that the Fukushima nuclear power plant in Japan will be Talon's first tour of duty in a highly radioactive environment.

The Talon robot reaches the plant, it will help the Japanese visualize radiation in the environment, Nicole Stricker, spokeswoman with the DOE's Idaho National Laboratory, told Discovery News.

The robot can take radiation readings and stamp them geospatially with a GPS device. "From the radiation and GPS data, a Google Earth map is generated and the radiation levels are superimposed on the map and color-



coded according to intensity. As the robot navigates in the environment, a breadcrumb-like trail is generated and displayed on the operator control unit. The system is self-contained and has the ability to work with a variety of radiation sensors,” Stricker said

The robot includes a chemical, biological, radiological, nuclear, and explosive detection kit that can identify more than 7,500 environmental hazards, including toxic industrial chemicals and volatile gases. It also has tem-

perature and air quality indicators and night vision, and it can sense sounds up to 1,000 meters away.

The Department of Energy robot joins two other Talons, two smaller Dragon Runner robots, and equipment that turns Bobcat loaders into unmanned vehicles that can shovel, grapple, and perform other tasks without an operator. The equipment, worth about \$1 million, was donated by QinetiQ, said company spokeswoman Jennifer Pickett.



QinetiQ North America offers modular CBRNE (chemical, biological, radiological, nuclear, explosive) kits as an addition to new or existing models of the TALON robot.

### Tray-Mounted Detection Capabilities

- JCAD (joint chemical agent detector) for CWAs (chemical warfare agents) and TICs (toxic industrial chemicals)
- RAE MultiRAE Plus for volatile gases
- Canberra AN/UDR-14 for gamma and neutron radiation
- Raytek temperature probe for temperature sensing

### Gripper-Mounted Detection Capabilities

- ICX Fido® XT for TNT-based explosives

## Radiation Injury After a Nuclear Detonation: Medical Consequences and the Need for Scarce Resources Allocation

Source: Disaster Med Public Health Preparedness. 2011;5:S32-S44

### ABSTRACT

A 10-kiloton (kT) nuclear detonation within a US city could expose hundreds of thousands of people to radiation. The Scarce Resources for a Nuclear Detonation Project was undertaken to guide community planning and response in the aftermath of a nuclear detonation, when demand will greatly exceed available resources. This article reviews the pertinent literature on radiation injuries from human exposures and animal models to provide a foundation for the triage and management approaches outlined in this special issue. Whole-body doses >2 Gy can produce clinically significant acute radiation syndrome

(ARS), which classically involves the hematologic, gastrointestinal, cutaneous, and cardiovascular/central nervous systems. The severity and presentation of ARS are affected by several factors, including radiation dose and dose rate, interindividual variability in radiation response, type of radiation (eg, gamma alone, gamma plus neutrons), partial-body shielding, and possibly age, sex, and certain preexisting medical conditions. The combination of radiation with trauma, burns, or both (ie, combined injury) confers a worse prognosis than the same dose of radiation alone. Supportive care measures, including fluid support, antibiotics, and possibly myeloid

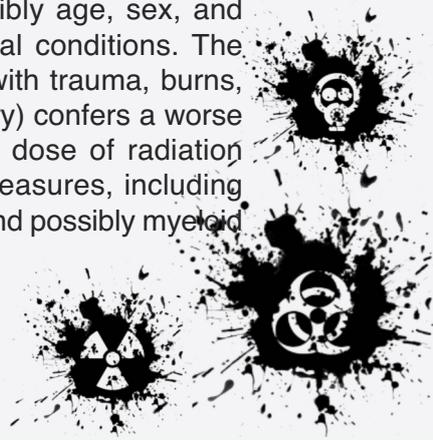


Table 1. Resource Demand and Availability after a Nuclear Detonation in Washington, DC

	Symptomatic Injured People or Incident Demand	Single Hospital	City	Nation
	Minimum/Median/Maximum			
People injured (next column) or population of designated area (city, nation)	930 000/930 000/1.6 million	N/A	592 000	300 million
Hospital beds (unoccupied)	70 000/100 000/300 000	165 (40)	3670 (920)	947 000 (295 000)
Intensive care unit beds (unoccupied)	24 000/51 000/110 000	20.5 (1.6)	N/A	118 000 (9400)
Operating rooms	N/A	6	N/A	30 000
Burn beds (unoccupied)	0/0/1100	N/A	32 (5)	1760 (590)
Ambulances	N/A	N/A	38	48 400

Availability is indicated for a single medical center, within the city, and across the United States. The single-hospital figures are based on an average for medical centers within Washington, DC. Minimum, median, and maximum numbers of people injured and incident demands (second column) are for a variety of 10-kT detonation scenarios in Washington, DC, modeled by the Modeling Division of the Biomedical Advanced Research and Development Authority, Office of the Assistant Secretary for Preparedness and Response, in association with the Public Health Emergency Medical Countermeasures Enterprise Blood and Tissue Requirements Working Group.

Table 1. Resource Demand and Availability after a Nuclear Detonation in Washington, DC

cytokines (eg, granulocyte colony-stimulating factor), can improve the prognosis for some irradiated casualties. Finally, expert guidance and surge capacity for casualties with ARS are available from the Radiation Emergency Medical Management Web site and the Radiation Injury Treatment Network.

The Scarce Resources for a Nuclear Detonation Project, presented in this issue of Disaster Medicine and Public Health Preparedness, was undertaken to guide community planning for the first 4 days after a nuclear detonation incident. During this period, the demand for resources will vastly outstrip available supplies. The article by Knebel et al in this issue includes basic descriptions of nuclear detonation scenarios and a response framework. A nuclear detonation differs from other mass casualty incidents in 2 ways: the very high number of affected individuals and the release of ionizing radiation. Thus, plans for responding to a nuclear detonation must consider the many consequences of radiation (environmental, clinical, and psychological) across a wide population.

The present article briefly reviews pertinent aspects of clinical radiation injury gleaned from reports of human exposure and research in animal models. Specifically, we describe the features of acute radiation syndrome (ARS), outline data supporting a synergistic effect on mortality from radiation in combination with either traumatic injury or cutaneous thermal and/or radiation burns, and discuss evidence for clinical benefit from some facets of supportive care, including antibiotics and myeloid cytokines (eg, granulocyte colony-stimulating factor [G-CSF]). To provide context specific to nuclear detonation response, the article includes model-based projections of the number of irradiated casualties, their resource needs, and the anticipated resources available. Subsequent articles in this issue address key aspects of radiation injury management within the context of medical response to a mass casualty event. Because the Scarce Resources for a Nuclear Detonation Project focuses on the initial response after the detonation, the long-term effects of radiation (eg, cancer, teratogenesis, and heritable genetic effects) are not discussed.

**EDITOR'S NOTE:** The full paper of this report can be downloaded from the Newsletter's website



### The consequence of a dirty bomb attack

By Carl Robichaud

Source: <http://thehill.com/blogs/congress-blog/homeland-security/155493-the-consequence-of-a-dirty-bomb-attack>

This past week (April 2011) New York conducted a major emergency preparedness exercise to practice its emergency ability to detect and response to a radiological dispersion device (or “dirty bomb”). We cannot know the likelihood that Al Qaeda or related groups might acquire such a weapon, but the evidence that they possess both the desire and the capacity is compelling enough that authorities have chosen to invest scarce resources to prepare.



We can only speculate about the consequences of a radiological attack, but the ongoing Japanese reactor crisis in Fukushima offers some insights into how an incident might unfold. After all, a “dirty bomb” is designed to release damaging radioactive materials—precisely what has happened at Fukushima.

The first lesson we might draw is that when radiation is involved, uncertainty reigns. Expert assessments of the risks from the reactors and spent fuel ponds at Fukushima vary widely, but the fact is that it is extraordinarily difficult to pinpoint the short-term and long-term consequences. Twenty five years after Chernobyl, the effects of that disaster remain hotly contested.

As with Fukushima, we can expect the first hours of a radiological attack to be filled with incomplete and misleading information. There will be conflicting recommendations from experts, the media and public figures—as when the 20 kilometer evacuation zone set by Japanese authorities was immediately contradicted by the U.S. Nuclear Regulatory Commission.

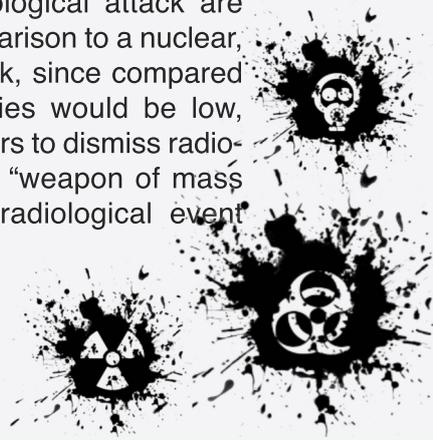
The second lesson of Fukushima is that we have a great deal to fear from fear itself. Measurements of elevated radioactivity in the vicinity of the reactors led to panic hundreds

of miles away, triggering a run on sodium iodine in California and table salt in China. First responders will need to prepare for these sorts of unexpected consequences, and hospitals will need to prepare for wave after wave of the “worried well.” The complexities of responding to a ra-

dioactive incident in New York become clear when you notice that the roster for this last week’s exercise: personnel from 150 agencies spanning three states and several federal authorities.

In other words, a radiological attack against the United States would generate unpredictable and cascading consequences for which it is difficult to prepare. An evacuation of the affected area, immediate or delayed, would be likely. The aftermath of Katrina showed that such relocations have a massive human and financial cost. We saw this again in Fukushima, where ten towns were emptied of some 200,000 people, adding to the stricken region’s refugee crisis. These refugees, already staggering with loss of home and family, experienced ostracism by host communities who feared contamination.

The effects of a radiological attack are often downplayed in comparison to a nuclear, biological or nuclear attack, since compared to these devices casualties would be low, leading some commentators to dismiss radiological weapons as mere “weapon of mass disruption.” However, a radiological event



would strike a massive blow to America's sense of safety, security and well being—and could have massive economic implications.

Consider an attack on New York with a relatively long-lived isotope such as Cesium-137, which could persist for hundreds of years. After the initial shock and trauma, the city would start to recover—but with lingering anxiety. It is hard to imagine what it would mean to see the Chrysler building, Wall Street, or the Statue of Liberty become a “no go zone” overnight. Clean up could extend for years and cost hundreds of billions of dollars.

An attack would have massive implications for the real estate market. Those with the ability to move would do so, creating an overnight plunge in property values near the affected area. There could be ripple effects as citizens in San Francisco and Chicago, fearing a similar attack, take another look at the suburbs. This is not just a concern of the affluent—as the last few years have shown, the nation's economic health rests to a distressing degree upon the well being of the real estate market.

We can hope that this week's exercise will help establish a clear response and communication plan that can mitigate consequences. For example, a “shelter in place” strategy could effectively protect civilians until the most damaging radiation dissipated. On the other hand, a poorly managed response could lead to a chaotic evacuation, increasing the number of people exposed and spreading contaminants. This risk is especially acute in a

city with memories of the twin falling towers.

Given the likely costs of such an attack, and the difficulty of crafting an effective response, it is worth investing heavily in prevention. Effective intelligence and counterterrorism operations have foiled past “dirty bomb” plots, and are essential. However, a comprehensive approach requires securing weapons-usable material at its source.

This week marks the one year anniversary of the president's Nuclear Security Summit, an unprecedented meeting of 47 national leaders that focused on locking down nuclear weapons-usable material. In its first meeting, the Summit focused on securing material that could be used to build a nuclear bomb. The next meeting of the Nuclear Security Summit will expand the agenda to focus on additional materials that could be used in a radiological device. With a variety of industrial uses—from medical isotopes to mining—and are often poorly monitored, making them a prime target for terrorists. The United States must lead the way in building cooperative approaches for securing and accounting for these dangerous materials.

**Carl Robichaud** is a specialist in nuclear policy at the Carnegie Corporation of New York and editor of *Breaking the Nuclear Impasse: New Prospects for Security against Weapons Threats*.

## New material cleans water of radioactive contamination

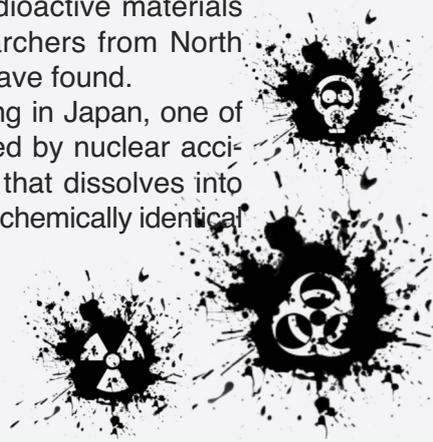
Source: <http://homelandsecuritynewswire.com/new-material-cleans-water-radioactive-contamination>

NC State researchers develop material to remove radioactive contaminants from drinking water; the material is a combination of forest by-products and crustacean shells; the new material not only absorbs water, but can actually extract contaminants, such as radioactive iodide, from the water itself; this material, which forms a solid foam, has applications beyond radioactive materials

The 11 March Japan disaster, and the contamination of both fresh and sea water with ra-

dioactive material seeping from the damaged nuclear reactors at Fukushima, will make this story timely and important. A combination of forest by-products and crustacean shells may be the key to removing radioactive materials from drinking water, researchers from North Carolina State University have found.

“As we're currently seeing in Japan, one of the major health risks posed by nuclear accidents is radioactive iodide that dissolves into drinking water. Because it is chemically identical



to non-radioactive iodide, the human body cannot distinguish it — which is what allows it to accumulate in the thyroid and eventually lead to cancer,” says Dr. Joel Pawlak, associate professor of forest biomaterials. “The material that we’ve developed binds iodide in water and traps it, which can then be properly disposed of without risk to humans or the environment.”

The new material — a combination of hemicellulose, a byproduct of forest materials, and chitosan, crustacean shells that have been crushed into a powder — not only absorbs water, but can actually extract contaminants, such as radioactive iodide, from the water itself. This material, which forms a solid foam, has applications beyond radioactive materials. Pawlak and fellow researchers

found that it has the ability to remove heavy metals — such as arsenic — from water or salt from sea water to make clean drinking water. “In disaster situations with limited-to-no power source, desalinating drinking water is difficult, if not impossible. This foam could be brought along in such situations to clean the water without the need for electricity,” Pawlak says. “This material could completely change the way we safeguard the world’s drinking water supply.”

The foam, which is coated on wood fibers, is used like a sponge that is immersed in water. For smaller-scale applications, the foam could be used in something like a tea bag. On a larger scale, water could be poured through it like a filter.

## Portable Radionuclide Identifier

Source:[http://www.environics.fi/index.php?option=com\\_content&view=article&id=91&Itemid=188](http://www.environics.fi/index.php?option=com_content&view=article&id=91&Itemid=188)

RanidPro200 provides the user a simple-to-use tool packed with high quality features. It detects and identifies even the minutest trace of radiation and gives the user a clear reading of the results, all in real-time. The software also features a comprehensive radionuclide database for result comparisons. The entire solution has been designed to be used by anyone. It requires only minimal training and enables anyone to conduct measurements and provide valid data everytime.

### Reliable Data - Extremely Low False Alarm Rate

The RanidPro200 implements unique automatic energy stabilization routines, meaning that the detector is able to conduct continuous spectroscopic measurements and analysis. The neutron detector has been designed to reject cross-sensitivity to gamma radiation meaning that it is not affected by high dose rates. This makes the RanidPro200 significantly more sensitive than similar R/N detectors and helps reduce the false alarms to absolute minimum.

### Simple Operation

Using the RanidPro200 is simple. Just turn

the device on and it checks itself. There is no need for any calibration or configuration as everything is automated. The device has an intuitive and self-explanatory user interface and the information is displayed to the user in a clear format containing dose rate, alarms and identification.

### Comprehensive Full Spectrum Database

RanidPro200 has an integrated a GPS system, which enables logging the measurements in conjunction to the time and place. The device offers a comprehensive radionu-



clide database for reference. All measured data can be compared to the known spectrums for very specific analysis.

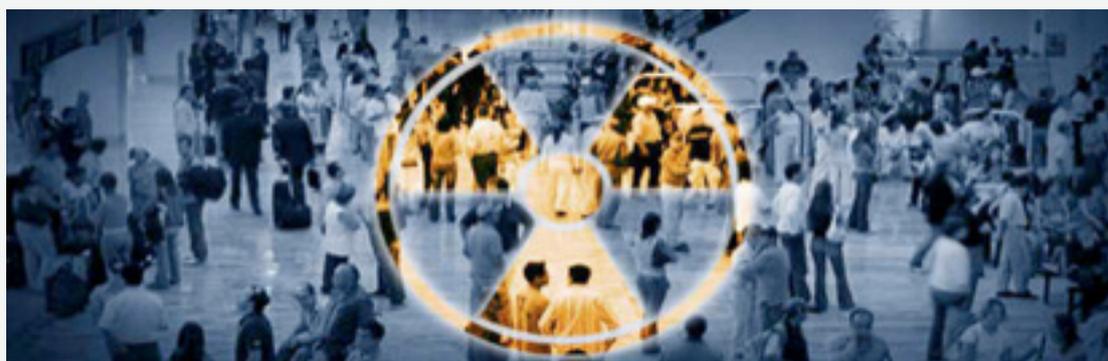
### Full Reachback Capability

The RavidPro200 supports all commonly used wireless data transfer methods, and are able to be in constant contact with the control centers where the experts can process the measurements for more in-depth analysis.

- Automatic energy stabilization – valid data every time
- Remote control through a smartphone interface
- Full reach back capability
- Inconspicuous design

### Applications

- Locating suspicious containers
- Locating orphan sources



This helps verify the threat rapidly and provide immediate instructions for action.

### Key Features

- High performance tools for radionuclide search & identification
- Simple to operate - intuitive user interface
- Sophisticated professional tools made available for every user
- Highly sophisticated detection algorithms
- Very low false alarm rate

- Portal applications (e.g. entry control)
- Radiological safety of industrial sites (e.g. steel mill industry)
- Radiological safety of harbors and railways
- Customs, border control and law enforcement
- Monitoring of mass events and high security meetings

## Opposition to nuclear power grows in India

Source: <http://www.nytimes.com/2011/04/15/business/global/15nuke.html?pagewanted=1&src=busln>

Opponents of nuclear power in India have received a major boost following the continuing nuclear crisis in Japan; the Indian government has planned an aggressive push to develop thirty-nine new nuclear power plants; by 2050, the government hopes to generate 25 percent of the country's electricity with nuclear power; as a result of the events at Japan's Fukushima Daiichi nuclear plant, Indian scientists, politicians, and residents have become increasingly opposed to the construction of new nuclear plants; critics cite

safety concerns and cleaner alternatives as reasons for their opposition; India faces a real need for power, approximately 40 percent of the country is not connected to the electrical grid and most major cities do not have reliable power twenty-four hours a day.

To fuel its need for energy, the Indian government has planned an aggressive push to develop thirty-nine new nuclear power plants in addition to the five that it is already building. By 2050, the government hopes to generate 25 percent of the country's electricity





Protest against nuclear power in India // Source: trust.org

with nuclear power. Currently, India has twenty nuclear reactors that produce about 3 percent of the nation's electricity. But, as a result of the events at Japan's Fukushima Dai-

opposition to the planned construction of six nuclear reactors in Madban, India has gained more momentum. Local farmers have been joined by engineers, scientists, academics and former government officials in their efforts to halt construction.

The opposition is quick to point out that Madban has been hit by nearly 100 earthquakes from 1985 to 2005, but state officials counter that the quakes were mostly minor and that the plant would be situated high atop the cliffs protecting it against tsunamis. If completed, the facility in Madban would be the world's largest nuclear power plant. While many may oppose nuclear



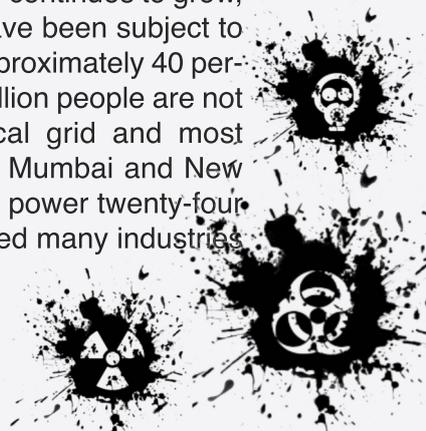
Kainaz Amaria for The New York Times - India's Konkan coastline, near the site of a proposed nuclear power plant, has been hit by earthquakes in recent years.

ichi nuclear plant, Indian scientists, politicians, and residents have become increasingly opposed to the construction of new nuclear plants.

In an open letter, a group of 50 Indian scientists, academics, and activists urged the government to impose a moratorium on all new nuclear projects.

The letter said, "The Japanese nuclear crisis is a wake-up call for India." In particular,

power, government officials say that India cannot meet its energy needs without nuclear power. As India's economy continues to grow, business and residents have been subject to routine power outages. Approximately 40 percent of the country's 1.2 billion people are not connected to the electrical grid and most major cities, not including Mumbai and New Delhi, do not have reliable power twenty-four hours a day. This has forced many industries



to rely on diesel generators to keep their businesses running.

In addition, India currently obtains 70 percent of its oil from overseas and in recent years has begun to import increasing amounts of coal. Proponents of nuclear dismiss security concerns, stating that the Fukushima Daiichi reactors are forty years old and safety measures have improved significantly since then. Anil Kakodkar, the former chairman of India's Atomic Energy Commission, said, "[Clearly Reuters – A billboard in Madhban, India, not far from the site of a planned nuclear power plant, makes an argument against construction.](#)"

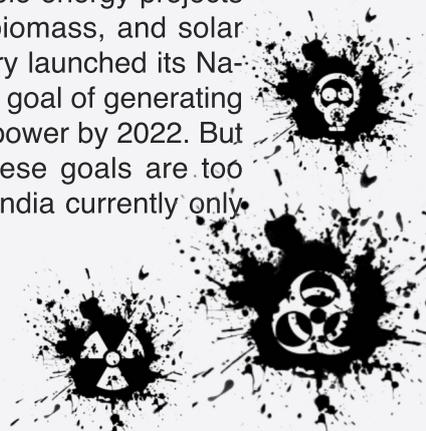
The new model is a pressurized water reactor, which the company says is a highly advanced model. But, so far, the company's first installations in France and Finland were stalled due to safety problems. Gopalakrishnan said, "In view of the vast nuclear devastation we are observing in Japan, I would strongly urge the government not to proceed with the Jaitapur project with purchase of EPRs from France or any other import of nuclear reactors." Some believe that India's energy needs can be met from a variety of sources and reforms.

Currently more than 30 percent of India's electricity is lost during the transmission and



Fukushima was an unprecedented natural event, but the facilities, particularly nuclear facilities, have to be designed to meet such extreme situations. Ultimately, this will settle down, but we can't ignore nuclear power in terms of meeting the power needs of the world." But Adinarayan Gopalakrishnan, the former chairman of India's Atomic Energy Regulatory Board, is not convinced. Gopalakrishnan is particularly concerned about the reactor models chosen to be installed at the Madhban site. He believes that the new Areva designed reactors, dubbed EPR, are unproven.

distribution process. Much of it is lost due to the inefficient transmission systems, but the vast majority is believed to be siphoned off by corrupt officials. Minimizing the theft of electricity and upgrading the electrical grid alone would offer a large boost without having to build any new power facilities. Other efforts include investing in renewable energy projects like hydroelectric, wind, biomass, and solar power. In 2009, the country launched its National Solar Mission with a goal of generating twenty gigawatts of solar power by 2022. But observers believe that these goals are too ambitious to be realistic. India currently only



generates 6 gigawatts of power from solar energy.

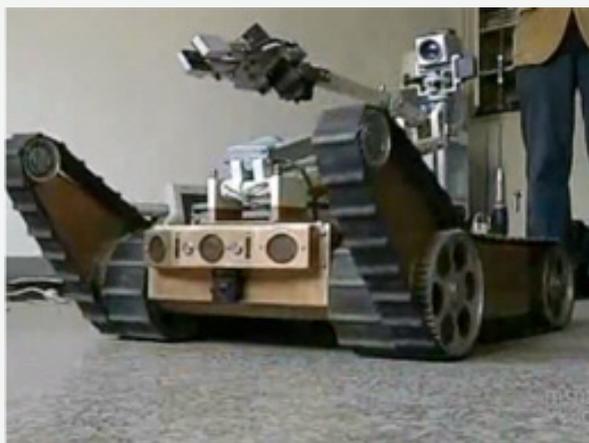
No clear answers have emerged and no policy decisions have been made, so in the meantime, the battle to shape India's energy future will continue to rage on. Much to the dismay of those opposed to nuclear power, atomic energy is likely to play some role in India's future given how prominently it is featured in the current government's agenda.

Prime Minister Manmohan Singh has been deeply committed to nuclear energy given that in 2008 he staked his government's survival on a hotly debated civil nuclear deal with the United States. As a result of the agreement, India is now allowed to purchase nuclear technology and import uranium fuel from Western nations, even though the country has refused to sign the Nuclear Nonproliferation Treaty.

## China unveils first nuclear/chemical detection robot

Source: <http://english.peopledaily.com.cn/90001/98649/7338953.html>

Earlier this month (April 2011), China unveiled its first unmanned remotely operated robot that can help emergency responders operate in areas that have been contaminated with radiation, poisonous gases, or other dangerous chemical substances; the robot is outfitted with a slew of sensors that allow it to take samples, measure radiation levels, and analyze chemical and biological substances; the robot is particularly suited to operating in highly radioactive environments as it is equipped with a camera that is resistant to radiation and a nuclear detector that measures the amount of radiation in an area and draws a graph to help workers find the source of radiation



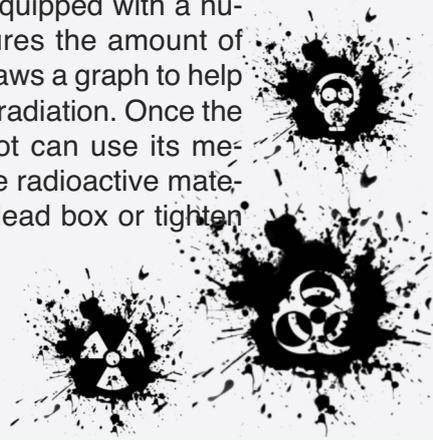
Earlier this month, China unveiled its first unmanned remotely operated robot that can help emergency responders operate in areas that have been contaminated with radiation, poisonous gases, or other dangerous chemical substances. The robot is compact weigh-

ing in at a little over sixty pounds and stands a little less than three feet tall. To help emer-



gency workers, the robot is outfitted with an array of sensors that allow it to take samples, measure radiation levels, and analyze chemical and biological substances. The robot is particularly suited to operating in highly radioactive environments as it is equipped with a camera that is resistant to radiation and sturdy armor.

According to Song Ai'guo, the robot's lead developer, the robot normally has a range of five kilometers, or 3 miles, "but in areas with high interference that may limit the robot's functions, you can keep control within a range of 1 kilometer." It is also equipped with a nuclear detector that measures the amount of radiation in an area and draws a graph to help workers find the source of radiation. Once the leak is identified, the robot can use its mechanical arm to pick up the radioactive material and store it in a thick lead box or tighten



any loose valves that it finds. The remote controlled detection device was designed by Song and his team of researchers at Southeast University's School of Instrument Science and Engineering.

Song, the president of the Instrument Science and Engineering School, first began work on remote controlled robots in 2004 and the latest robot is their fifth generation model.

## Radiation Drug Concerns Illustrate Obstacles to Medical Countermeasures

Source:<http://www.hstoday.us/briefings/today-s-news-analysis/single-article/radiation-drug-concerns-illustrate-obstacles-to-medical-countermeasures/cd2f3bb3edf9de8b0e418441cde6c37a.html>

The nuclear disaster in Japan stoked fears of radioactive fallout in California, where demand for potassium iodide spiked in recent weeks, prompting concerns that the United States has not planned for an adequate supply of the drug. Rep. Laura Richardson (D-Calif.) questioned the Department of Health and Human Services Wednesday as to whether it has included enough potassium iodide in the Strategic National Stockpile for distribution to states that demand it. But the situation is more complicated than HHS simply stockpiling the drug, explained Dr. Richard Hatchett, chief medical officer of HHS Strategic Sciences and Management.

While the National Strategic Stockpile has obtained potassium iodide, the drug is not a major focus of Project BioShield, which received \$5.6 billion to procure medical countermeasures to chemical, biological, radiological and nuclear (CBRN) threats through 2016, Hatchett said. Rather, that responsibility lies with an initiative known as ThyroShield, jointly run by the Nuclear Regulatory Commission (NRC) and the Federal Emergency Management Agency (FEMA). NRC and FEMA supply potassium iodide to states that have nuclear reactors or states adjacent to them.

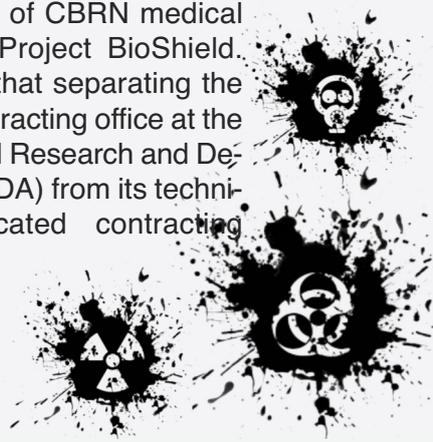
As those responsibilities lie with NRC and FEMA, Hatchett could not confirm that states had received an adequate supply. After a March 11 earthquake damaged Japan's Fukushima Daiichi power plant, some California residents feared its radiation could travel to the US West coast and sicken people. While those fears have proven unfounded, Richardson voiced concerns that the US gov-

ernment's strategy to distribute potassium iodide only to people living within 10 miles of a nuclear reactor was not sufficient. Radioactive particles have traveled as far as 100 miles in some documented instances, Richardson noted.

Hatchett acknowledged US policy to focus on emergency protection zones around nuclear power plants. Potassium iodide, meanwhile, remains an over-the-counter medication available for purchase by the general public. Hatchett warned against taking potassium iodide needlessly, however, as it could prove toxic if ingested without radiation sickness. HHS would examine the 10-mile rule within the context of an interagency review to gauge the adequacy of US radiological defenses, Hatchett assured Richardson and the rest of the House Subcommittee on Emergency Preparedness, Response, and Communications. The department also continues to talk to biomedical companies to understand current demand for potassium iodide and to examine the production capacity for the drug in the event that an emergency increases demand, Hatchett said.

### Public-private challenges

Rep. Gus Bilirakis (R-Fla.), chair of the subcommittee, expressed concern that HHS was not working well enough with the private sector to spur the production of CBRN medical countermeasures under Project BioShield. Rumors have suggested that separating the reporting chain for the contracting office at the HHS Biomedical Advanced Research and Development Authority (BARDA) from its technical group has complicated contracting



procedures. Instead of reporting to the BARDA director, the BARDA contracting office now reports to the HHS assistant secretary for Preparedness and Response, creating worries that the contracting staff and the technical staff do not coordinate their deliberations.

But Hatchett assured Bilirakis that is not the case, despite the change in management structure. The contracting office still received input from the technical group, Hatchett said, and the two remain physically co-located in the BARDA offices. For the development of medical countermeasures, HHS has adopted a process similar to the departments of Defense and Energy, where subject matter experts review program milestones and weigh in on their effectiveness, Hatchett described.

The Medical Countermeasure Enterprise Review, completed by HHS Secretary Kathleen Sebelius in August 2010, would streamline and focus the department's role in CBRN drug development and production, Hatchett emphasized. Cynthia Bascetta, managing director of Health Care at the Government Accountability Office (GAO) observed that HHS must still struggle with challenges in producing CBRN medical countermeasures. Top challenges include a high failure rate for the development of CBRN drugs, which exceeds

80 percent in the early stages, and the lack of financial incentives for large corporations to enter the market for medical countermeasures.

To overcome the high failure rate, HHS attempts to fund a large set of small companies in order to increase the chances that one countermeasure for a specific threat will succeed, Bascetta reported. HHS also attempts to leverage its Project BioShield funding to overcome corporate reluctance to enter a market where no commercial market may exist. Dr. Gerald Parker, deputy assistant at the Department of Defense (DoD) Chemical and Biological Defense Division, noted that DoD has long struggled with the same problems despite its leading role in the development of medical countermeasures. DoD has been refining its approaches to form more effective public-private partnerships and to improve real-time communication with its contractors, Parker said. Federal agencies must adjust their tactics to encourage innovation from small biotechnology companies as well as attract experience from large pharmaceutical companies with high production capacities. "Biodefense is a hard area," Parker stated. "It does demand a multidisciplinary approach and an interagency approach."

### Five men held outside Sellafield after 'taking pictures'

By Duncan Gardham and Nigel Bunyan 10:09PM BST 03 May 2011

Source: <http://www.telegraph.co.uk/news/uknews/terrorism-in-the-uk/8491193/Five-men-held-outside-Sellafield-after-taking-pictures.html>

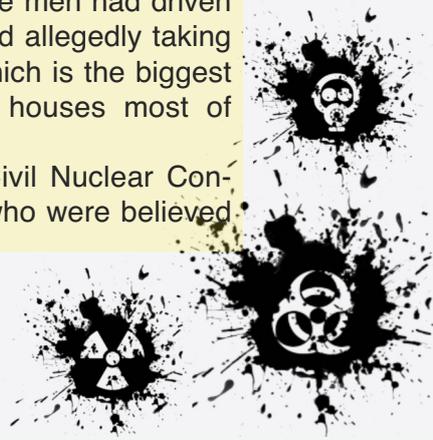
Five men were being questioned by anti-terrorism officers last night after being arrested for allegedly taking pictures outside the Sellafield nuclear reprocessing plant in the wake of Osama bin Laden's death. The men, all aged in their twenties and from London, were stopped close to the Cumbria plant on Monday afternoon, hours after the death of the al-Qaeda leader was announced.



The arrests follow reports in The Daily Telegraph last week that al-Qaeda had threatened a nuclear attack in the event of bin Laden's death.

It is understood that the five men had driven from London and were spotted allegedly taking photographs of the facility, which is the biggest nuclear site in Europe and houses most of Britain's supply of plutonium.

Armed officers from the Civil Nuclear Constabulary arrested the men, who were believed



to be Muslims, and handed them over to Cumbria police. They were taken to the North West Counter-Terrorism unit in Manchester for questioning. Later, officers from Scotland Yard's Counter-Terrorism Command raided four homes in east London. The operation in Cumbria was not "intelligence-led", according to sources, and the men were only detained because of their suspicious behaviour, but Britain's security services remain on high alert for revenge attacks.

One contributor to a jihadi internet forum monitored by the International Centre for the Study of Radicalisation and Political Violence warned "a million new bin Ladens will be born! And the flag of jihad will be raised! Inshallah".

According to secret documents obtained by Wikileaks and seen by The Daily Telegraph, Abu Faraj al-Libi, one of al-Qaeda's most senior figures, was said to know the location of a nuclear bomb, hidden in Europe, that would be detonated if bin Laden was killed or captured. Khalid Sheikh Mohammed, the alleged mastermind of the September 11 attacks, admitted to a range of plans, according to the same documents, including a "nuclear hellstorm" plot in the United States.

The suspects were seized at 4.32pm on Monday after police became suspicious about their vehicle. Police immediately sealed off a road to other traffic.

Cumbria Police said in a statement: "Officers from the Civil Nuclear Constabulary conducted a stop check on a vehicle close to the Sellafield site. "As a result, police officers from Cumbria Constabulary arrested five men from London, all aged in their twenties, under Section 41 of the Terrorism Act." Greater Manchester Police said: "At this stage we are not aware of any connections to recent events in Pakistan."

Britain remains on a "severe" terrorism alert and David Cameron convened a meeting of the National Security Council yesterday following bin Laden's death. Officials at HM Inspectorate of Constabulary conducted an urgent assessment of the security at nuclear installations last year after concerns arose following an exercise in which special forces posed as terrorists to test security. The 800-strong Civil Nuclear Constabulary is the most heavily armed police force in Britain. Most officers are trained marksmen responsible for guarding nuclear facilities and the force has recently upgraded the quality and type of weapons and ammunition it uses.

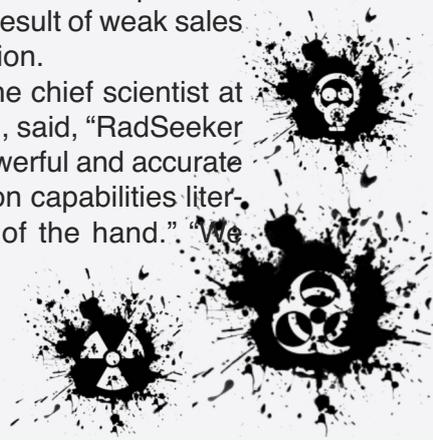
## Smiths Detection launches new radiation detector

Source: [http://www.smithsdetection.com/1025\\_5850.php](http://www.smithsdetection.com/1025_5850.php)

Last week (May 2011) Smiths Detection unveiled its new hand-held radiation detection device that is capable of more accurately

identifying radiological and nuclear threats; the "RadSeeker" is designed to have a wide-range of applications to enable security officials and first responders to detect nuclear threats in addition to scanning cargo for nuclear material; the president of Smiths Group, Smiths Detection's parent company, announced that he would step down; his decision is a result of weak sales at Smiths Detection.

Brian Boso, the chief scientist at Smiths Detection, said, "RadSeeker puts the most powerful and accurate radiation detection capabilities literally in the palm of the hand." "We



believe it will greatly increase accuracy, efficiency and versatility in finding and identifying rad-nuc threats," he added.

According to Boso, with the launch of RadSeeker, "Smiths Detection is now able to provide technology that can detect threats in all major areas of concern to national and homeland security, including: chemical, biological, radiological, nuclear and explosive."

The device is capable of operating in extreme temperatures and weather conditions and can even detect nuclear materials that have been masked or shielded.

RadSeeker's launch comes after Stephen Phipson, the president of Smiths Group, Smiths Detection's parent company, announced that he would step down. His decision is a result of weak sales at Smiths Detection. The company announced that in March sales at Smiths Detection had fallen 9 percent, or more than \$400 million, compared to a 7 percent increase in total company sales for the first half of the year. Smiths Detection accounts for 18 percent of the company's total sales.

Last Tuesday, the company stated, "Looking to the full year for Smiths Detection, the sales trends seen in the first half are likely to continue through the balance of the year, while full year margins may be affected by the associated operational gearing."

### Feature Highlights

- Advanced spectrum processing and identification algorithms utilizing Symetrica's Discovery technology for superior identification accuracy
- Continuous automatic stabilization, no field calibration required
- Fully ruggedized to survive 3ft drop, extreme operating temperatures and water spray while weighing less than 5lbs

### Additional Highlights

- Simplified user interface takes the guesswork out of spectral interpretation
- Designed to meet/exceed all ANSI N42.34 (2006) requirements
- Commercial Sodium Iodide (CS) and Commercial Lanthanum Bromide (CL) configurations available

### Specifications

Radiation detection High sensitivity detection alarms/alerts indicate gamma or neutron radiation above background; user-adjustable thresholds. Capable of detecting 14uCi Ba-133 or 5uCi Co-57 when passing at 2 ft/sec at a distance of 2 ft (60.96 cm)

### Dimensions

17.8 x 30.5 x 11.4cm (7" x 12" x 4.5") – small bumpers

### Weight

CS 2.4 kg (5.2 lbs), CL 2.2 kg (4.8 lbs)

## New Satellite Image of Construction at North Korea Nuclear Site

Source:<http://isis-online.org/isis-reports/detail/new-satellite-image-of-construction-at-north-korea-nuclear-site/>

ISIS has obtained commercial satellite imagery taken on March 8, 2011 of the Yongbyon nuclear center in North Korea showing progress in the construction of what North Korea has stated will be a light water reactor (see figure 1). A cylinder can be seen in the image and it measures approximately 21 meters across. At this diameter, the cylinder would be too large for a light water reactor containment vessel. It could, however, be part of the containment structure for a light water reactor. There is new excavation next to the cylinder as well (see figure 1). There is also a new clearing with a crane and what could be construction materials in an ad-



acent area northwest of the cylinder (see figures 1 and 2). It is unclear if this is a construction support or staging area or if a structure will be built there. Several South Korean news agencies reported in early April that satellite imagery from March 24, 2011 showed what could be a new nuclear facility next to the cylinder. Korea Broadcasting Service released an image and highlighted another structure next to the cylinder. The

Chosun Ilbo described it as a “dome-shaped structure”. The March 8th image does not yet show this structure. ISIS will continue to acquire new commercial satellite imagery of the construction progress. The new gas centrifuge plant at the Yongbyon fuel fabrication facility can also be seen in the imagery (see figure 3). There do not appear to be any major changes to this building.



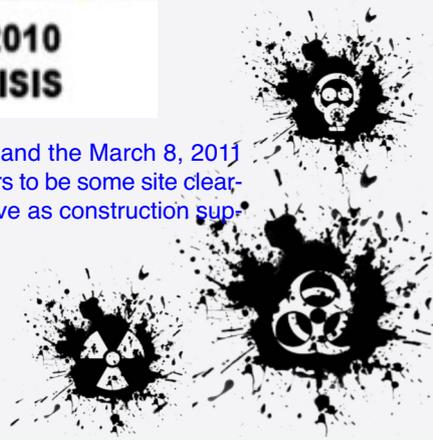
**Figure 1.**

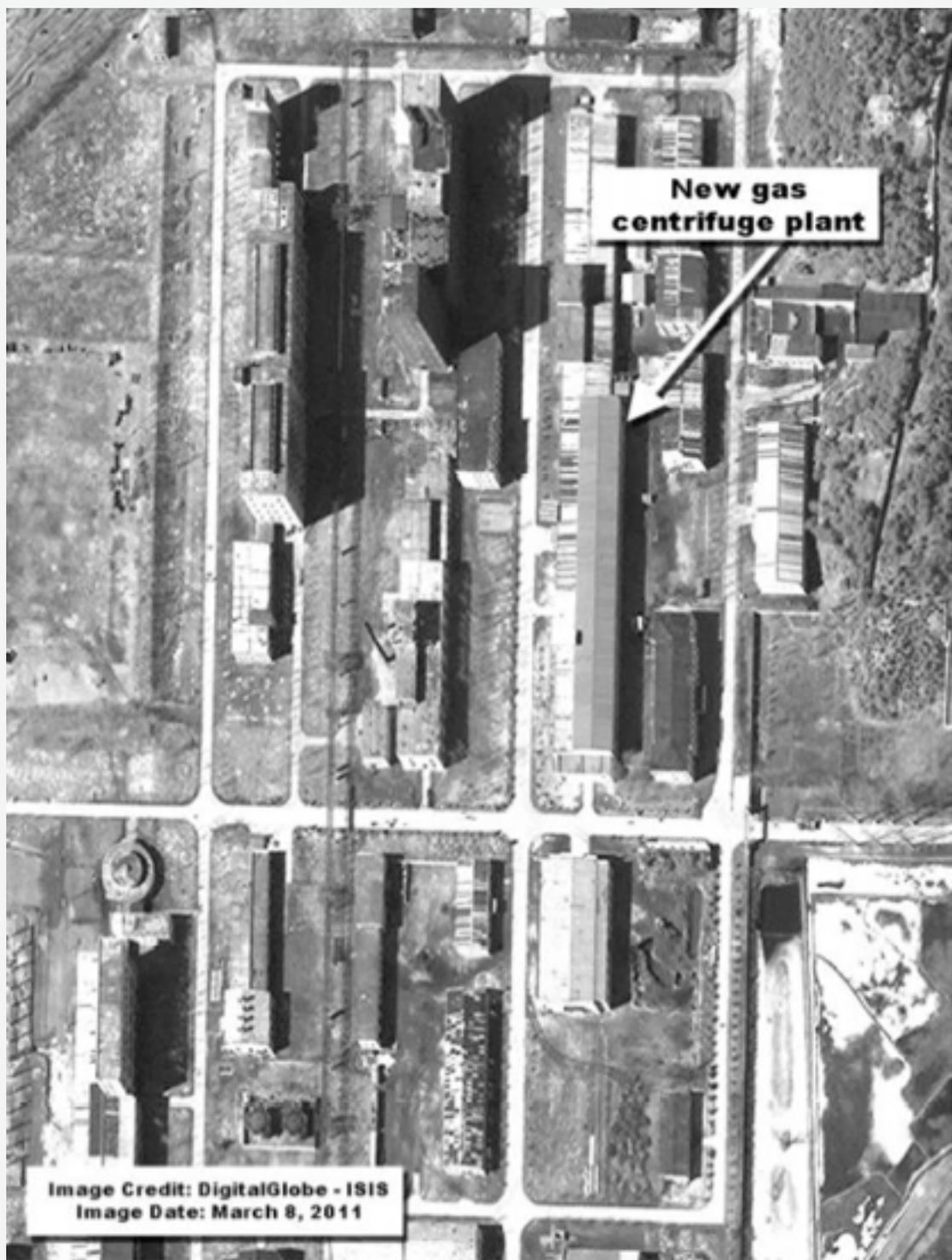
Commercial satellite image from March 8, 2011 of the new construction near the site of the destroyed cooling tower for the 5 megawatt reactor at the Yongbyon nuclear center. North Korea has stated this is a construction site for a new light water reactor. The cylinder seen in the image measures approximately 21 meters across. There is also a new clearing with a crane and possibly construction materials in an area near the 5 MW reactor. The cylinder may appear to be oval-shaped, however, this is an optical illusion caused largely by the shadows cast and partly by the angle of the image. The diameter of the cylinder remains relatively constant around the circle—accounting for the angle.



**Figure 2.**

A comparison of an area adjacent to the new construction as seen in a November 3, 2010 and the March 8, 2011 image. This area is mostly empty in the earlier image. In the March 2011 image, there appears to be some site clearing, a crane, and what could be construction materials. It is unclear if this area is or will serve as construction support or staging, of if a structure will be built there.





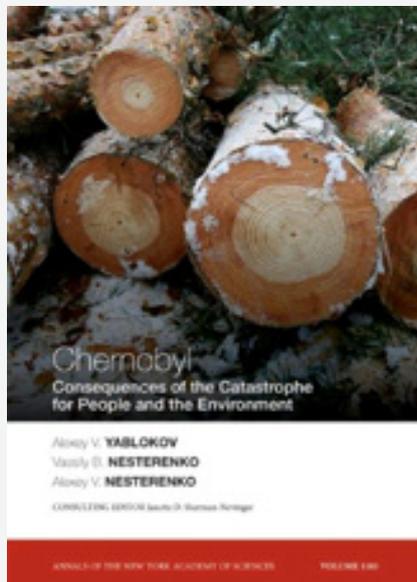
**Figure 3.** Commercial satellite image from March 8, 2011 showing the new gas centrifuge plant at the fuel fabrication complex at the Yongbyon nuclear center.



## The Fukushima Nuclear Disaster in Perspective

By Dr. Helen Caldicott

Source: <http://www.globalresearch.ca/index.php?context=va&aid=24730>



Dr. Helen Caldicott's March 18th press conference in Montreal, sponsored by the Centre for Research non Globalization (CRG). This press conference organized by Global Research was held in the context of Helen Caldicott's public lecture to Montreal on March 18, 2011.

First I want to present this report, produced by the New York Academy of Sciences, a report on Chernobyl. It can be

the roofs of the reactors, not within the containment vessel, are cooling pools. Every year they remove about thirty tons of the most radioactive rods that you can possibly imagine.(8) Each one is twelve feet long and half an inch thick. It gives out so much radiation, that if you stand next to it for a couple of minutes, you'll die. Not drop dead. Remember Litvinenko, the Russian, who got poisoned by polonium?(9) You'll die like that, with your hair falling out, and bleeding with massive infection, like AIDS patients die.

downloaded.(2) They translated 5,000 articles from Russian for the first time into English. It seems that nearly a million people have already died as a result of Chernobyl, despite what the WHO(3) says and the IAEA.(4) This is one of the most monstrous cover-ups in the history of medicine. Because everybody should know about this.

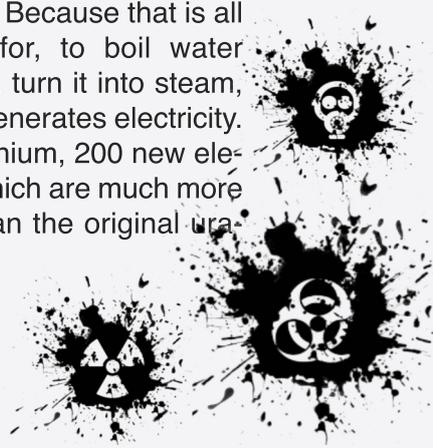
And [the spent fuel rods] are thermally hot, so they have to be put in a big pool, and continually cooled. The pool has really no roof. There have been three hydrogen explosions, blowing off the roof of the building, not the containment vessel of the core, but the roof. And exposing the cooling pool.(10) Two of the cooling pools are dry. They have no water in them. Meaning that the nuclear fuel rods are covered with a material called zirconium. When zirconium is exposed to air, it burns, it ignites. Two of the cooling pools at this moment are burning. In the cooling pools are many times, like 10 to 20 times more radiation than in each reactor core. In each reactor core is as much long-lived radiation as would be produced by a thousand Hiroshima-sized bombs. We are dealing with diabolical energy.

Then we extrapolate through to Japan. Japan is by orders of magnitude many times worse than Chernobyl. Never in my life did I think that six nuclear reactors would be at risk.(5) I knew that three GE engineers who helped design these Mark I GE reactors, resigned because they knew they were dangerous.(6)

So Japan built them on an earthquake fault. The reactors partially withstood the earthquake, but the external electricity supply was cut off, and the electricity supplies the cooling water, a million gallons a minute, to each of those six reactors. Without the cooling water, the water [level] falls, and the rods are so hot they melt, like at Three Mile Island, and at Chernobyl.

$E=MC^2$  is the energy that blows up nuclear bombs. Einstein said nuclear power is a hell of a way to boil water.(11) Because that is all nuclear power is used for, to boil water through the massive heat, turn it into steam, and turn a turbine which generates electricity. Now when you fission uranium, 200 new elements are formed, all of which are much more poisonous to the body than the original ura-

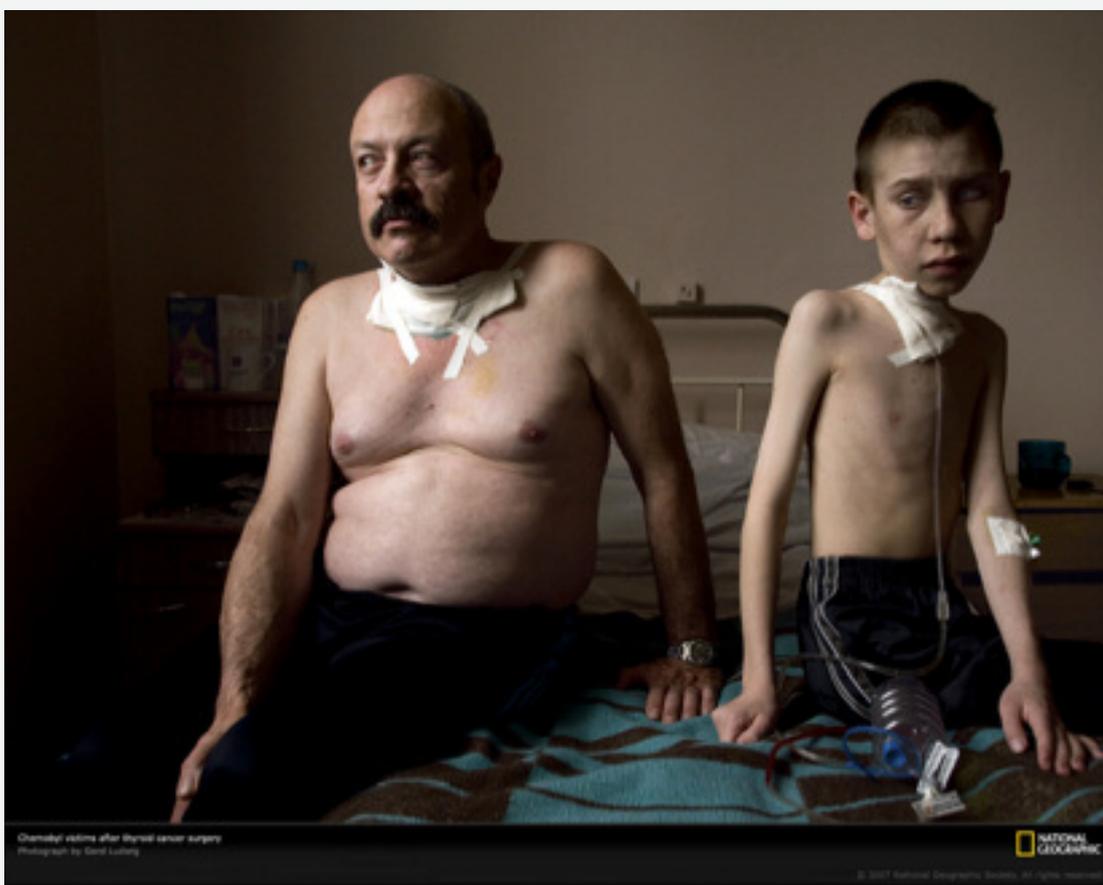
So the emergency diesel generators, which are as large as a house, got destroyed by the tsunami, so there is no way to keep the water circulating in the reactors.(7) Also, on



nium.(12) Although uranium is pretty poisonous. America used it in Fallujah, and in Baghdad. And in Fallujah, 80 per cent of the babies being born are grossly deformed.(13) They're being born without brains, single eyes, no arms... The doctors have told the women to stop having babies. The incidence of childhood cancer has gone up about twelve times.

This is genocide -- it's a nuclear war being conducted in Iraq. The uranium that they're using lasts more than 4.5 billion years. So we're contaminating the cradle of civilization. "The coalition of the willing!"

thyroids out, and they will die unless they take thyroid replacement every day, like a diabetic has to take insulin. Strontium-90 will get out, it lasts for 600 years. It goes to the bone, where it causes bone cancer or leukemia. Cesium lasts for 600 years -- it's all over Europe. 40 per cent of Europe is still radioactive. Turkish food is extremely radioactive. Do not buy Turkish dried apricots, or Turkish hazelnuts. The Turks were so cross with the Russians, they sent all their radioactive tea over to Russia after Chernobyl.(15). Forty per cent of Europe is still radioactive. Farms in

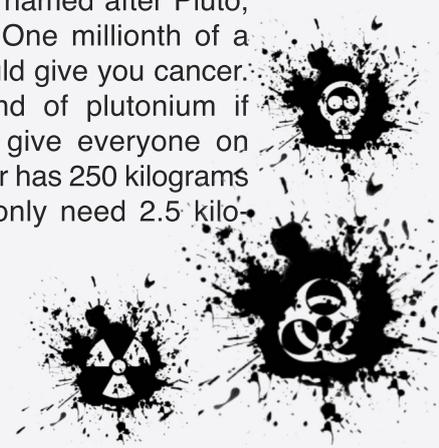


In the nuclear power plants, however, there is a huge amount of radiation: two hundred elements. Some last seconds, some last millions of years. Radioactive iodine lasts six weeks, causes thyroid cancer. That's why people are saying, "Better take potassium iodide," because that blocks the thyroid uptake of radioactive iodine, which later can cause thyroid cancer.

In Chernobyl, over 20,000 people have developed thyroid cancer.(14) They have their

Britain, their lambs are so full of cesium they can't sell them. Don't eat European food.

But that's nothing compared to what's happening now. One of the most deadly [nuclear byproducts] is plutonium, named after Pluto, god of the underworld. One millionth of a gram, if you inhale it, would give you cancer. Hypothetically, one pound of plutonium if evenly distributed could give everyone on earth cancer. Each reactor has 250 kilograms of plutonium in it. You only need 2.5 kilo-

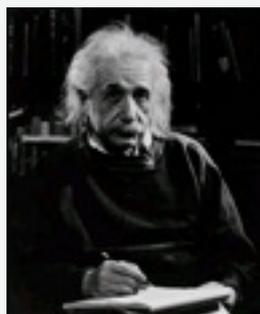


grams to make an atomic bomb, because plutonium is what they make bombs with. So any country that has a reactor, works with your uranium. You [Canada] are the biggest exporter of uranium in the world.(16) Canada sells two things: it sells wheat for life, and uranium for death. Plutonium is going to get out and spread all over the northern hemisphere. It's already heading towards North America now.

Radioactive iodine, plus strontium, plus cesium, plus tritium, and I could go on and on and on. When it rains, downs come fallout, and it concentrates in food. If it gets into the sea, the algae concentrate it, hundreds of times. And the crustaceans concentrate it, hundreds of times. And then the little fish, then the big fish, then us.(17) Because we stand on the apex of the food chain. You can't taste these radioactive food elements, you can't see them, you can't smell them. They're silent. When you get them inside your body, you don't suddenly drop dead of cancer, it takes five to sixty years to get your cancer, and when you feel a lump in your breast, it doesn't say, "I was made by some strontium-90 in a piece of fish you ate twenty years ago."

All radiation is damaging. It's cumulative - each dose you get adds to your risk of getting cancer. The americium is more dangerous than plutonium -- I could go on and on. Depends if it rains if you're going to get it or not. If it rains and the radiation comes down, don't grow food, and don't eat the food, and I mean don't eat it for 600 years. Radioactive waste from nuclear power is going to be buried, I hear, next to Lake Ontario. It's going to leak, last for millions of years, it's going to get into the water, and into the food chains. Radioactive waste will induce epidemics of cancer, leukemia, and genetic disease for the rest of time. This is the greatest public health hazard the world has ever witnessed, apart from the threat every day of nuclear war.

**Einstein** said "the splitting of the atom changed everything, save man's mode of thinking" -- very profound -- "and thus we drift toward unparalleled catastrophe." We are arrogant, we have a lot of hubris, and



I think the reptilian mid-brain of some men's brains is pathological.(18) We are in a situation where we have harnessed the energy of the sun. It is totally out of control. And there's simply nothing we can do about it.

### NOTES

1) Helen Caldicott is the founder of Physicians for Social Responsibility, and is the author of "The New Nuclear Danger" (The New Press, 2002).

2) "Chernobyl: Consequences of the Catastrophe For the People and the Environment," Annals of the New York Academy of Sciences <http://www.nyas.org/publications/annals/Detail.aspx?cid=f3f3bd16-51ba-4d7b-a086-753f44b3bfc1>

3) "Health Effects of the Chernobyl Accident," World Health Organization. <http://www-ns.iaea.org/appraisals/chernobyl.asp>

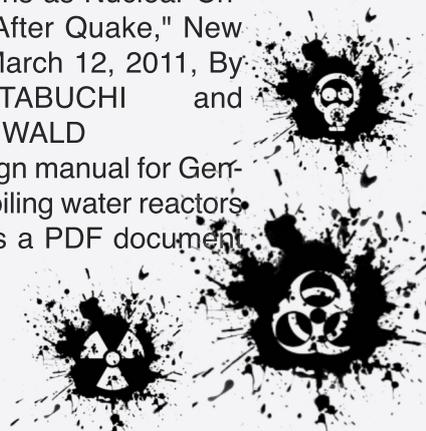
4) "Consequences of the Chernobyl Nuclear Accident," International Atomic Energy Agency. <http://www-ns.iaea.org/appraisals/chernobyl.asp>

5) For a general description of the complex, including cross-sections of the six reactors, see [http://en.wikipedia.org/wiki/Fukushima\\_I\\_nuclear\\_accidents](http://en.wikipedia.org/wiki/Fukushima_I_nuclear_accidents)

6) [http://en.wikipedia.org/wiki/GE\\_Three](http://en.wikipedia.org/wiki/GE_Three) Excerpt: On February 2, 1976, Gregory C. Minor, Richard B. Hubbard, and Dale G. Bridenbaugh "blew the whistle" on safety problems at nuclear power plants. The three engineers gained the attention of journalists and their disclosures about the threats of nuclear power had a significant impact. They timed their statements to coincide with their resignations from responsible positions in General Electric's nuclear energy division, and later established themselves as consultants on the nuclear power industry for state governments, federal agencies, and overseas governments.

7) "Japanese Scramble to Avert Meltdowns as Nuclear Crisis Deepens After Quake," New York Times, March 12, 2011, By HIROKO TABUCHI and MATTHEW L. WALD

8) The design manual for General Electric boiling water reactors was posted as a PDF document



on the "What Really Happened" website, and can be downloaded at: <http://whatreallyhappened.com/content/ge-manual-bwr6-reactor-design-and-operation>

9) [http://en.wikipedia.org/wiki/Poisoning\\_of\\_Alexander\\_Litvinenko](http://en.wikipedia.org/wiki/Poisoning_of_Alexander_Litvinenko) Excerpt: Alexander Litvinenko was a former officer of the Russian Federal Security Service, FSB and KGB, who escaped prosecution in Russia and received political asylum in the United Kingdom. He wrote two books, "Blowing up Russia: Terror from within" and "Lubyanka Criminal Group", where he accused the Russian secret services of staging Russian apartment bombings and other terrorism acts to bring Vladimir Putin to power. On 1 November 2006, Litvinenko suddenly fell ill and was hospitalized. He died three weeks later, becoming the first confirmed victim of lethal polonium-210-induced acute radiation syndrome. According to doctors, "Litvinenko's murder represents an ominous landmark: the beginning of an era of nuclear terrorism". Litvinenko's allegations about the misdeeds of the FSB and his public deathbed accusations that Russian president Vladimir Putin were behind his unusual malady resulted in worldwide media coverage.

10) "Greater Danger Lies in Spent Fuel Than in Reactors," Keith Bradsher & Hiroko Tabuchi, NY Times, March 17, 2011 [www.nytimes.com/2011/03/18/world/asia/18spent.html](http://www.nytimes.com/2011/03/18/world/asia/18spent.html)

"Radiation Spread Seen; Frantic Repairs Go On," David Sanger & William J. Broad, NY Times, March 17, 2011 [www.nytimes.com/2011/03/18/world/asia/18intel.html](http://www.nytimes.com/2011/03/18/world/asia/18intel.html)

"U.S. Sees Array of New Threats at Japan's Nuclear Plant," James Glanz & William J. Broad, NY Times, April 6, 2011 [www.nytimes.com/2011/04/06/world/asia/06nuclear.html](http://www.nytimes.com/2011/04/06/world/asia/06nuclear.html)

"Focus on preventing explosions at Japan nuke plant," Mari Yamaguchi, Associated Press, April 6, 2011 [http://news.yahoo.com/s/ap/20110406/ap\\_on\\_bi\\_ge/as\\_japan\\_earthquake\\_654](http://news.yahoo.com/s/ap/20110406/ap_on_bi_ge/as_japan_earthquake_654)

11) <http://wisequotes.org/nuclear-power-is-one-hell-of-a-way-to-boil-water>

12) [http://en.wikipedia.org/wiki/Decay\\_product](http://en.wikipedia.org/wiki/Decay_product)

13) "US Accused of Using Poison Gases in Fallujah," Democracy Now, Monday, November 29th, 2004

[http://www.democracynow.org/2004/11/29/u\\_s\\_accused\\_of\\_using\\_poison](http://www.democracynow.org/2004/11/29/u_s_accused_of_using_poison)

"Evidence of Extensive War Crimes, Unprecedented in the annals of legal history," Niloufer Bhagwat,

Global Research, December 11, 2004 <http://globalresearch.ca/articles/BHA412A.html>

"Depleted Uranium Weapons: Dead Babies in Iraq and Afghanistan Are No Joke," by Dave Lindorff, Global Research, October 20, 2009 <http://www.globalresearch.ca/index.php?context=va&aid=15744>

"The consequences of a US war crime: Cancer rate in Fallujah worse than Hiroshima,"

Tom Eley, World Socialist, July 23, 2010 <http://www.wsws.org/articles/2010/jul2010/fall-j23.shtml>

"Research Links Rise in Fallujah Birth Defects and Cancers to US Assault," Martin Chulov, The Guardian/UK, December 31, 2010 <http://www.commondreams.org/headline/2010/12/31>

14) "Chernobyl's Continuing Thyroid Impact," By Mary Shomon, December 15, 2003 <http://thyroid.about.com/cs/nuclearexposure/a/chernob.htm>

15) "Authorities lied on impact of Chernobyl in Turkey," Greenpeace Report <http://www.blackraiser.com/chno.htm>

16) WISE Report on the Worldwide Uranium Market <http://www.wise-uranium.org/umkt.html>

"Why is Uranium Important to Canada?" Canadian Nuclear Association, <http://www.cna.ca/english/pdf/nuclear-facts/04-NuclearFacts-uranium.pdf>

17) <http://en.wikipedia.org/wiki/Bioaccumulation>

18) <http://www.crystalinks.com/reptilian-brain.html>



### I Saved My Country From Nuclear Blackmail

Source: <http://www.pakistankakhudahafiz.com/2011/05/17/i-saved-my-country-from-nuclear-blackmail-aq-khan/>



Pakistan's nuclear program has always been a target for Western propaganda and false accusations. I would like to make it clear that it was an Indian nuclear

Dr Abdul Qadeer Khan

explosion in May 1974 that prompted our nuclear program, motivating me to return to Pakistan to help create a credible nuclear deterrent and save my country from Indian nuclear blackmail.

After 15 years in Europe with invaluable experience in enrichment technology, I came to Pakistan in December 1975 and was given the task of producing nuclear weapons by then-prime minister Zulfikar Ali Bhutto. On Dec. 10, 1984, I informed Gen. Zia-ul-Haq that we could explode a device at a week's notice, whenever he so desired. We achieved credible nuclear capacity by the second half of the '80s, and the delivery system was perfected in the early '90s. For a country that couldn't produce bicycle chains to have become a nuclear and missile power within a short span—and in the teeth of Western opposition—was quite a feat.

The question of how many weapons are required for credible deterrence against India is purely academic. India is engaged in a massive program to cope with the nonexistent threat posed by China and in order to become a superpower. India doesn't need more than five weapons to hurt us badly, and we wouldn't need more than 10 to return the favor. That is why there has been no war between us for the past 40 years.

I have little knowledge of the present status of our program, as I left Kahuta, Pakistan's main nuclear facility, 10 years ago. As the pioneer of the program, my guess is that our ef-

forts have been to perfect the design, reduce the size of the weapons to fit on the warheads of our missile systems, and ensure a fail-safe system for their storage. A country needs sufficient weapons to be stored at different places in order to have a second-strike capability. But there is a limit to these requirements.

Don't overlook the fact that no nuclear-capable country has been subjected to aggression or occupied, or had its borders redrawn. Had Iraq and Libya been nuclear powers, they wouldn't have been destroyed in the way we have seen recently. If we had had nuclear capability before 1971, we would not have lost half of our country—present-day Bangladesh—after disgraceful defeat.

There is a total misconception about the money spent on our nuclear program.

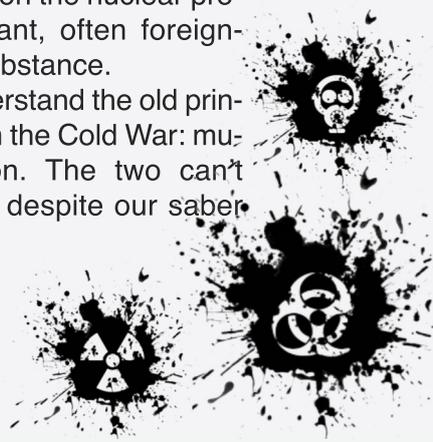
When we started, our budget was just \$10 million per year, increasing to \$20 million per year when at full capacity, including all salaries, transport, medical care, housing, util-



At his brother's funeral (2011)

ities, and purchases of technical equipment and materials. This is but half the cost of a modern fighter aircraft. The propaganda about spending exorbitant sums on the nuclear program circulated by ignorant, often foreign-paid, Pakistanis has no substance.

India and Pakistan understand the old principle that ensured peace in the Cold War: mutually assured destruction. The two can't afford a nuclear war, and despite our saber-



rattling, there is no chance of a nuclear war that would send us both back to the Stone Age. What pains me is that we gave Pakistan nuclear capability for its self-esteem and deterrence against adversaries. With our sovereignty thus secure, I urged various governments to concentrate on development to raise the people's standard of living.

Unfortunately, successive incompetent and ignorant rulers never bothered to work on the greater national interest. We are far worse off

now than we were 20, or even 40, years ago when we were subjected to embargoes.

Our nuclear-weapons program has given us an impregnable defense, and we are forced to maintain this deterrence until our differences with India are resolved. That would lead to a new era of peace for both countries. I hope I live to see Pakistan and India living harmoniously in the same way as the once bitter enemies Germany and France live today.

## Pakistan's Nuclear Surge

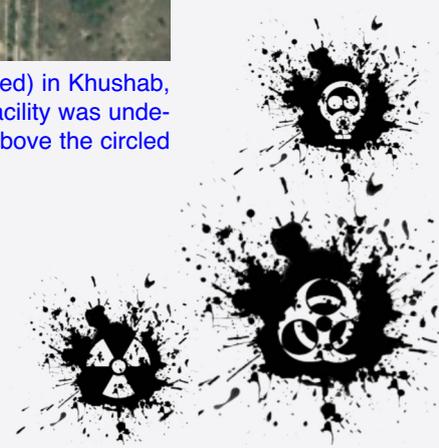
Source: <http://www.newsweek.com/2011/05/15/fourth-nuclear-reactor-at-pakistan-s-khushab-site.html>

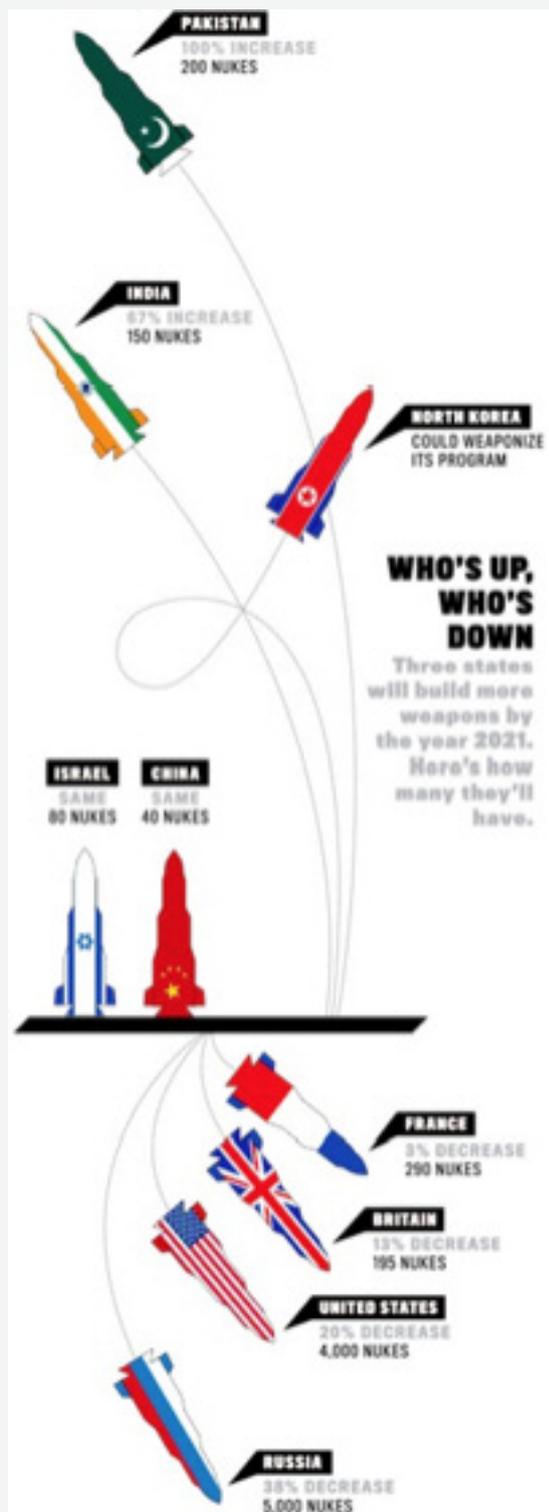
Even in the best of times, Pakistan's nuclear-weapons program warrants alarm. But these are perilous days. At a moment of unprecedented misgiving between Washington and Islamabad, new evidence suggests that Pakistan's nuclear program is barreling ahead at a furious clip.

According to new commercial-satellite imagery obtained exclusively by NEWSWEEK, Pakistan is aggressively accelerating construction at the Khushab nuclear site, about 140 miles south of Islamabad. The images, analysts say, prove Pakistan will soon have a fourth operational reactor, greatly expanding



Exclusive satellite imagery taken in April 2011 exposes a new nuclear facility (circled) in Khushab, Pakistan—which now has the fastest-growing nuclear program in the world. The facility was undetectable in satellite images take as recently as December 2009. Pictured directly above the circled area are two white boxes which are also nuclear reactors. Image by © GeoEye





plutonium production for its nuclear-weapons program.

"The buildup is remarkable," says Paul Brannan of the Institute for Science and International Security. "And that nobody in the U.S. or in the Pakistani government says any-

thing about this—especially in this day and age—is perplexing."

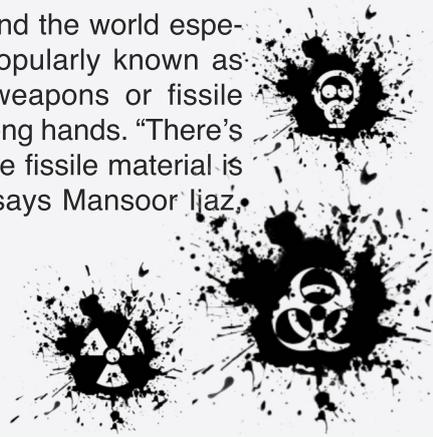
Unlike Iran, which has yet to produce highly enriched uranium, or North Korea, which has produced plutonium but still lacks any real weapons capability, Pakistan is significantly ramping up its nuclear-weapons program. Eric Edelman, undersecretary of defense in the George W. Bush administration, puts it bluntly: "You're talking about Pakistan even potentially passing France at some point. That's extraordinary."

Pakistani officials say the buildup is a response to the threat from India, which is spending \$50 billion over the next five years on its military. "But to say it's just an issue between just India and Pakistan is divorced from reality," says former senator Sam Nunn, who co-chairs the Nuclear Threat Initiative. "The U.S. and Soviet Union went through 40 years of the Cold War and came out every time from dangerous situations with lessons learned. Pakistan and India have gone through some dangerous times, and they have learned some lessons. But not all of them. Today, deterrence has fundamentally changed. The whole globe has a stake in this. It's extremely dangerous."

It's dangerous because Pakistan is also stockpiling fissile material, or bomb fuel. Since Islamabad can mine uranium on its own territory and has decades of enrichment know-how—beginning with the work of nuclear scientist A. Q. Khan—the potential for production is significant.

Although the White House declined to comment, a senior U.S. congressional official who works on nuclear issues told NEWSWEEK that intelligence estimates suggest Pakistan has already developed enough fissile material to produce more than 100 warheads and manufacture between eight and 20 weapons a year. "There's no question," the official says, "it's the fastest-growing program in the world."

What has leaders around the world especially worried is what's popularly known as "loose nukes"—nuclear weapons or fissile material falling into the wrong hands. "There's no transparency in how the fissile material is handled or transported," says Mansoor Ijaz,



who has played an active role in back-channel diplomacy between Islamabad and New Delhi. “And the amount—they have significant quantities—is what’s so alarming.”

That Osama bin Laden was found in a Pakistani military community, and that the country is home to such jihadi groups as Lashkar-e-Taiba, only heightens concerns. “We’ve looked the other way from Pakistan’s growing program for 30 years,” says Sharon Squassoni, a director at the Center for Strategic and International Studies. What we’re facing, she says, is “a disaster waiting to happen.”

A Defense Department official told NEWSWEEK that the U.S. government is “confident that Pakistan has taken appropriate steps toward securing its nuclear arsenal.” But beyond palliatives, few in Washington want to openly discuss the nightmare scenario of terrorists getting hold of nuclear material or weapons. “The less that is said publicly, the better,” says Stephen Hadley, national-security adviser to President George W. Bush. “But don’t confuse the lack of public discussion for a lack of concern.”

Compiled with Hans Kristensen of the Federation of American Scientists

The bomb lends the Pakistanis a certain diplomatic insouciance. Nukes, after all, are a valuable political tool, ensuring continued economic aid from the United States and Europe. “Pakistan knows it can outstare” the West, says Pakistani nuclear physicist Pervez Hoodbhoy. “It’s confident the West knows that Pakistan’s collapse is too big a price to pay, so the bailout is there in perpetuity. It’s the one thing we’ve been successful at.”

Pakistani leaders defend their weapons program as a strategic necessity: since they can’t match India’s military spending, they have to bridge the gap with nukes. “Regretfully, there are several destabilizing developments that have taken place in recent years,” Khalid Banuri of Pakistan’s Strategic Plans Division, the nuclear arsenal’s guardian, wrote in response to NEWSWEEK questions. Among his country’s concerns, Banuri pointed to India’s military buildup and the U.S.’s -civilian nuclear deal with India.

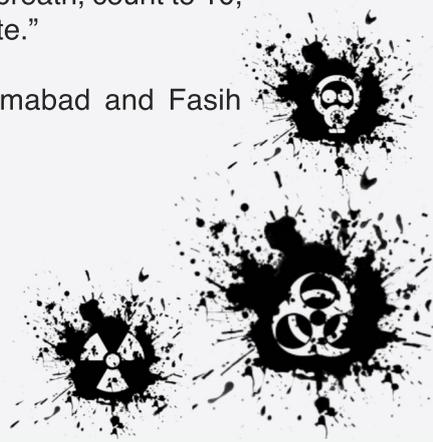
“Most Pakistanis believe the jihadist scenario is something that the West has created as a bogey,” says Hoodbhoy, “an excuse, so they can screw us, defang, and denuclearize us.”

“Our program is an issue of extreme sensitivity for every man, woman, and child in Pakistan,” says former Pakistani president Pervez Musharraf, adding that the nukes are “well dispersed and protected in secure locations.” When asked whether the U.S. has a role to play in securing the arsenal, Musharraf said: “A U.S. role to play? A U.S. role in helping? Zero role. No, sir. It is our own production? . . . We have not and cannot now have any intrusion by any element in the U.S.” To guard its “strategic assets,” Pakistan employs two Army divisions—about 18,000 troops—and, as Musharraf drily puts it, “If you want to get into a firefight with the forces guarding our strategic assets, it will be a very sad day.”

For now, the White House appears to have made a tacit tradeoff with Islamabad: for your cooperation in Afghanistan, we’ll leave you to your own nuclear devices. “People bristle at the suggestion, but it follows, doesn’t it?” says Rolf Mowatt-Larsen, formerly the CIA’s chief officer handling terrorism and weapons of mass destruction. “The irony is that the U.S. presence in Afghanistan and Pakistan, and the money we’re giving them to fight terrorism, could inadvertently aggravate the very problem we’re trying to stop. After all, terrorism and nukes is the worst-case scenario.”

With this fourth nuclear facility at Khushab coming online as early as 2013, and the prospect of an accelerated nuclear-weapons program, the U.S. is facing a diplomatic dilemma. “The Pakistanis have gone through a humiliation with the killing of Osama bin Laden,” says Nunn. “That’s never a time to corner somebody. But with both recent and preexisting problems, we are in a race between cooperation and catastrophe. Both sides need to take a deep breath, count to 10, and find a way to cooperate.”

With Ron Moreau in Islamabad and Fasih Ahmed in Lahore



### Five steps to prevent another Fukushima

Source: <http://www.thebulletin.org/web-edition/features/five-steps-to-prevent-another-fukushima>

The situation at the Fukushima Daiichi nuclear plant has been an ongoing disaster since the March 11 earthquake and tsunami. According to an estimate by the Federation of Electric Power Companies of Japan, by April

actors. The water inside the reactors boiled away, exposing the fuel, which then overheated and reacted with steam to produce combustible hydrogen gas. Hydrogen explosions tore through the reactor containment buildings and released radioactive gases -- including cesium 137, the principal radioactive isotope released by the Chernobyl accident -- from the damaged fuel. To prevent such a power loss in the future, plant operators should install multiple connections to the offsite power grid; station emergency diesel generators on high ground; and deploy plenty of mobile emergency diesel generators.

#### Article Highlights

- The Fukushima accident has made it clear that additional safety and security measures are needed to protect nuclear facilities.
- Improvements to power supply systems, fuel storage systems, and ventilation systems can make nuclear plants safer.
- A multinational agreement prohibiting military attacks on nuclear facilities should be on the agenda for next year's Nuclear Security Summit.

27 approximately 55 percent of the fuel in reactor unit 1 had melted, along with 35 percent of the fuel in unit 2, and 30 percent of the fuel in unit 3; and overheated spent fuels in the storage pools of units 3 and 4 probably were also damaged. The accident has already surpassed the 1979 Three Mile Island accident in seriousness, and is comparable to the 1986 Chernobyl accident.

To prevent this kind of nuclear disaster from happening again, both the nuclear industry and government officials worldwide must seriously consider making at least five major changes to the safety systems at nuclear power plants, as well as to security measures and international agreements.

#### Stabilize the electricity supply system.

The Fukushima nuclear accident is said to have been caused by an unprecedented natural disaster: a tremendous earthquake followed by a tsunami. What really caused the accident, however, was that the power plant simply ran out of electricity. Offsite power was cut off by the earthquake and tsunami; onsite emergency diesel generators malfunctioned; and batteries were empty within hours. With no electricity, there was no way to operate the emergency core-cooling systems for the re-

#### Store spent fuel in dry casks.

The Fukushima accident was a vivid reminder that fuel storage pools are vulnerable when cooling systems fail. Like the fuel inside the reactor cores, some of the fuel stored in pools at Fukushima probably melted as water levels dropped, releasing radioactive gases into the atmosphere. To minimize the risks of a similar situation happening again, plant operators should remove spent fuel from pools after five years. By that time, the fuel is cool enough to be stored in dry casks, which are sealed metal cylinders surrounded by concrete or other materials. These casks provide robust protection against physical damage, and are expected to maintain their integrity for 100 years or more. More than 400 fuel assemblies -- about three percent of the total amount of spent fuel -- are already stored in dry casks at Fukushima Daiichi, and they apparently survived the earthquake and tsunami without any significant damage. Dry-cask storage also helps to alleviate shortages of storage-pool capacity, which some countries are facing.

**Install filtered vent systems.** In an accident like the one at Fukushima, a filtered vent system could reduce the possibility of containment-building explosions, by releasing ra-



diocative gases to the atmosphere through a large filter system. This system traps the most dangerous radioactive species, including cesium 137, and prevents them from spreading beyond the containment building. A group of nuclear engineers at the University of California originally suggested this idea in 1977, and Frank von Hippel and Jan Beyea reintroduced the idea in the Bulletin of the Atomic Scientists in 1982. Some countries -- including France, Sweden, and Germany -- have installed filtered vent system at their reactors. But Japan, the United States, and many other countries with nuclear power plants have not adopted them.

### **Prevent sabotage at nuclear facilities.**

Even without a natural disaster such as an earthquake followed by a tsunami, a Fukushima-like nuclear accident can occur at any nuclear power plant that relies on water for cooling. A terrorist attack on a plant's emergency core cooling system, for example, could have catastrophic results. The Fukushima accident implicitly shows the overlap between nuclear safety and nuclear security concerns, and these concerns should be addressed at the 2012 Seoul Nuclear Security Summit. After the terrorist attack of September 11, 2001, the Nuclear Regulatory Commission (NRC) reviewed security standards for nuclear power plants, and approved new regulations in December 2008. These regulations include specific guidelines about what should be done to: ensure that necessary security measures do not compromise plant safety; prevent theft or diversion of plutonium-bearing mixed-oxide (MOX) fuel; prevent cyber attacks; respond to an aircraft attack; mitigate the effects of large explosions and fires; implement more rigorous programs for authorizing personnel access; strengthen security personnel training and qualification;

and enhance physical security. Regulations like those developed by the NRC should be implemented at nuclear power plants worldwide.

**Ratify a treaty to prohibit military attacks.** At Fukushima, water continues to leak from spent-fuel pools that were damaged by hydrogen explosions in mid-March. This poses a threat of radioactive gas releases from damaged fuel in the pools. A military attack on a nuclear facility could also cause this kind of damage -- and radioactive releases. The consequences could be grave and could spread beyond national boundaries. Therefore, it is urgent that global communities ratify a treaty prohibiting the use of military forces against civilian nuclear facilities in IAEA member states. India and Pakistan already have a bilateral agreement not to attack each other's nuclear facilities, entered into force in 1991. The agreement defines nuclear facilities as "nuclear power and research reactors, fuel fabrication, uranium enrichment, isotopes separation and reprocessing facilities as well as any other installations with fresh or irradiated nuclear fuel and materials in any form and establishments storing significant quantities of radioactive materials." A multilateral non-attack treaty should be on the agenda for the Seoul Nuclear Security Summit.

Making these five changes will take time, so the work should begin as soon as possible. Cost is the primary impediment to installing alternative power sources, fuel-storage casks, and filtered vent systems -- but these safety improvements are far less expensive than a major accident would be. As for new regulations and treaties, the challenge is finding the political willpower to make these changes. Here, too, the price of inaction could be unimaginably steep.



## Simple Method of Dealing With Harmful Radioactive Iodine Discovered

Source: <http://www.sciencedaily.com/releases/2011/05/110524104657.htm>

A novel way to immobilise radioactive forms of iodine using a microwave, has been discovered by an expert at the University of Sheffield. Iodine radioisotopes are produced by fission of uranium fuel in a nuclear reactor. Radioactive iodine is of concern because it is highly mobile in the environment and selective uptake by the thyroid gland can pose a significant cancer risk following long term exposure. Furthermore, iodine-129, which is a type of radioactive iodine, has an extremely long half life of 15.7 million years, so is one of the most significant long term hazards faced by the population due to its emission during the geological disposal of nuclear waste.

Professor Neil Hyatt, from the University's Department of Materials Science and Engineering, has now found a way of locking up iodine radioisotopes in a durable, solid material suitable for ultimate disposal, like lead iodovanadinite ( $Pb_5(VO_4)_3I$ ). The research, which was published in the *Journal of Nuclear Materials*, demonstrates how his simple, inexpensive and rapid method can be done at atmospheric pressure. Professor Hyatt and his team created a solid material for immobilisation of iodine with the formula  $Pb_5(VO_4)_3I$ , by heating a mixture of lead iodide, lead oxide and vanadium oxide. Previously, this has only been achieved using high pressure and a sealed container, because iodine is volatilised at high temperature. However, using the knowledge that vanadium is a good absorber of microwaves at 2.45 GHz -- the frequency used in domestic microwave ovens -- the

team were able to heat the mixture of chemicals in a microwave oven to produce  $Pb_5(VO_4)_3I$  in about three minutes.

The key to the method's success is that  $Pb_5(VO_4)_3I$  is a poor absorber of 2.45 GHz microwaves, so once this is formed, the sample cannot absorb microwaves, so the temperature does not get high enough for the iodine to volatilise. Iodine-131 was the harmful gas emitted from the Fukushima power plant in Japan following the earthquake and tsunami last month, and was a significant contributor to the health effects from open-air atomic bomb testing in the 1950s, and was also emitted during the Chernobyl disaster. It is hoped the new research will reduce the public health impact associated with the release of radioactive iodine to the environment by providing a simple and inexpensive method of immobilisation in a solid material, which could be rapidly deployed in an accident scenario.

Professor Neil Hyatt, said: "In spent nuclear fuel, the iodine is not immobilised, so once the containment is breached it simply gets dispersed. At present, iodine-129 released by nuclear fuel reprocessing is discharged direct to the Irish Sea off the coast of Sellafield. Substantial quantities of this radioisotope were also released into the sea off the coast of Japan in the Fukushima incident. Our new method offers a way of safely and rapidly containing this radionuclide, reducing the potential long term impact on human health from discharge to the environment."

## After bin Laden: Nuclear terrorism still a top threat

By Fissile Materials Working Group

Source: <http://thebulletin.org/web-edition/columnists/fissile-materials-working-group/after-bin-laden-nuclear-terrorism-still-top-t>

Osama bin Laden's death may represent a significant turning point in the US effort to defeat Al Qaeda, but the threat of nuclear ter-

rorism will not lessen in the wake of his demise. Such threats, however, are preventable, and the United States must now take care to



sustain the nonproliferation and threat reduction programs that will help stop terrorists from obtaining nuclear materials.

More than a decade ago, Osama bin Laden professed that "acquiring [chemical or nuclear] weapons is a religious duty." Since then, Al Qaeda operatives and leaders have restated their intention to acquire a nuclear capability. Experts broadly agree that Al Qaeda does not possess a nuclear device; however, it is generally accepted that it and other terrorist organizations continue to seek the materials necessary to build one. Two years ago in his landmark speech in Prague, President Barack Obama made securing "all vulnerable nuclear material around the world within four years" a top priority. Earlier this year, Director of National Intelligence James Clapper reiterated the importance of the administration's commitment to the four-year goal in his testimony before the Senate Committee on Armed Services, noting that "poorly secured stocks of CBRN [chemical, biological, radiological, and nuclear materials] provide potential source material for terror attacks." Significant progress has been made in US efforts to secure nuclear material around the globe, but much remains to be done.

The evolving threat. While Al Qaeda's anti-American ideology is unlikely to change after bin Laden's death, the loss of the group's founder and figurehead could affect Al Qaeda's structure. According to the Atlantic Council's J. Peter Pham, regional "branches" and "franchises" of the terrorist organization gained power during the decade that bin Laden was in hiding, and while united by their loyalty to Al Qaeda's mission, they are not necessarily subject to orders from a central leadership.

The growing influence, strength, and operational capacity of these regional organizations (Al Qaeda in the Arabian Peninsula and Al Qaeda in the Islamic Maghreb, for example) are of particular concern with respect to the threat of nuclear terrorism. The best way to prevent Al Qaeda subgroups -- ideologically aligned, geographically disparate, and operating under regional leadership -- from gaining access to nuclear material is to secure existing sites and eliminate superfluous storage

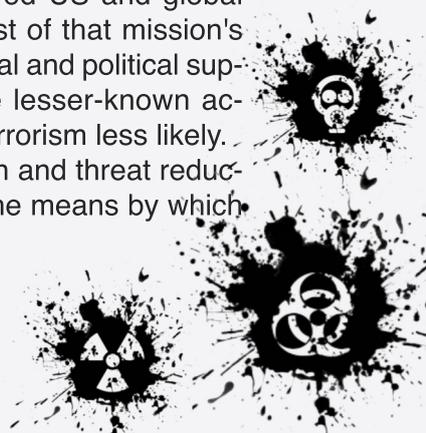
sites. Enough nuclear material to make tens of thousands of nuclear devices exists in dozens of locations worldwide. Without being able to predict how bin Laden's death might alter the operational capacity of Al Qaeda, a US priority must be securing this potential source material.

Support proven programs. Efforts to eliminate and secure nuclear material are the best way to minimize the threat of nuclear terrorism: Prevent terrorist groups from acquiring the materials necessary for a nuclear device, and nuclear terrorism is prevented. In the post-bin Laden era, existing programs that seek to lock down vulnerable nuclear material must remain a key part of US national security strategy.

Effective nonproliferation programs that aim to keep nuclear material out of terrorists' hands must be continued and their role in the four-year effort to secure vulnerable material supported. These programs are successful, but they require continued financial support from Congress to keep pace with recent accomplishments. The National Nuclear Security Administration (NNSA) secured 800 bombs' worth of nuclear material in 2010 alone. Since April 2009, the NNSA's Global Threat Reduction Initiative (GTRI) has eliminated highly enriched uranium (HEU) from six countries, and the initiative is on track to secure or remove all of the vulnerable weapons-usable nuclear material that has been identified at civilian sites around the globe by 2016 -- more than 4,800 kilograms.

One of GTRI's more remarkable achievements to date was the removal of HEU from Chile in the aftermath of an 8.8-magnitude earthquake in April 2010. The material may not have been a likely terrorist target, but the coordinated US effort to remove it during a crisis situation was an achievement that strengthened both US and global security. The coordinated US raid on a compound in Pakistan rid the world of a terrorist mastermind and likewise improved US and global security. To make the most of that mission's success, continued financial and political support must be given to the lesser-known actions that make nuclear terrorism less likely.

Nuclear nonproliferation and threat reduction programs represent the means by which



Washington can prevent fissile materials from becoming the tools of terrorists and are crucial to post-bin Laden counterterrorism strategy. An accomplishment on one front of the fight against Al Qaeda must not give way to complacency on another.

**Sarah Williams**, coordinator of the Fissile Materials Working Group, wrote this column. Williams is also a Herbert Scoville Jr. Peace Fellow at the Center for Science, Technology, and Security Policy (CSTSP) at the American Association for the Advancement of Science (AAAS). Her comments do not reflect the opinions or position of the CSTSP or AAAS.

## Glimmer of hope for Yucca Mountain nuclear waste repository project

Source: <http://www.homelandsecuritynewswire.com/glimmer-hope-yucca-mountain-nuclear-waste-repository-project>

The Yucca Mountain Nuclear Waste Repository was supposed solve the U.S. nuclear waste problem( see “Background” below). After studies which began in 1978, the Carter administration said that Yucca Mountain would be the site for a deep geological repository storage facility for spent nuclear reactor fuel and other high level radioactive waste. The site is on federal land adjacent to the Nevada Test Site in Nye County, Nevada, about eighty miles northwest of the Las Vegas. So far, around \$15 billion have been spend on the project so far.

Opposition from environmentalists and Nevada residents notwithstanding, Congress approved the project in 2002. The Obama administration defunded the project, though, and funding for work on the site was terminated effective with the 2011 federal budget

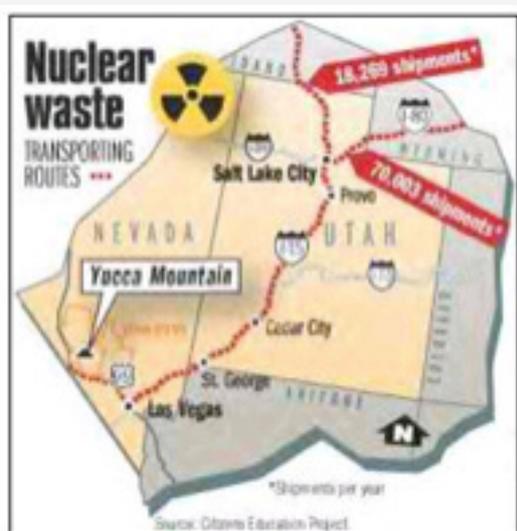
passed by Congress on 14 April 2011. Project supporters charged that President Obama made a deal with Senator Harry Reid of Nevada to kill the project in order to ensure Nevada’s increasingly Democratic leaning.

Some members of Congress, though, have not given up on Yucca Mountain, and the House Appropriations Committee has added \$35 million for the project in the 2012 energy spending bill. This is far cry from past appropriations for the project – typically around \$400 million a year – and even one of the supporters, Representative Mark Simpson (R-Idaho) described it as symbolic gesture.

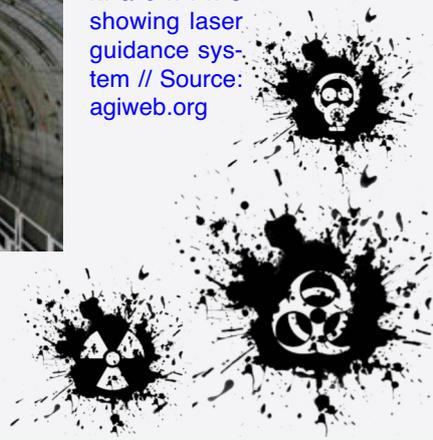
The bill also contains instruction to the Nuclear Regulatory Commission (NRC) to halt the shutdown of work at the site.

The Las Vegas Review-Journal notes that the committee’s measure came as House lawmakers were told by federal auditors at a hearing Wednesday that the U.S. policy for managing nuclear waste is up in the air and is becoming “more pressing day by day” after the discontinuation of the Yucca project.

There is also a case now being heard in federal court, in which the administration is



Rear of boring machine showing laser guidance system // Source: [agiweb.org](http://agiweb.org)



charged with overstepping its bounds by cancelling the project without congressional permission.

Representative G. K Butterfield (D-North Carolina) said that ending the program "is the cherry on top of a mismanaged federal exercise."

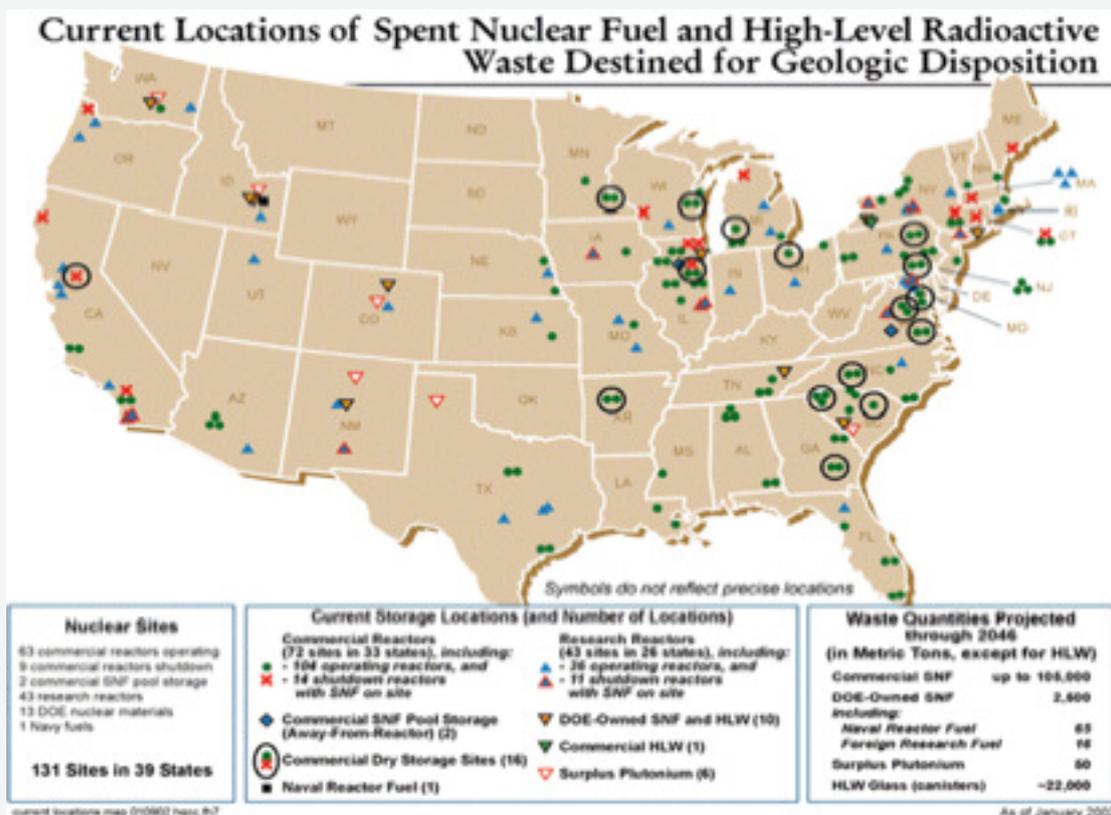
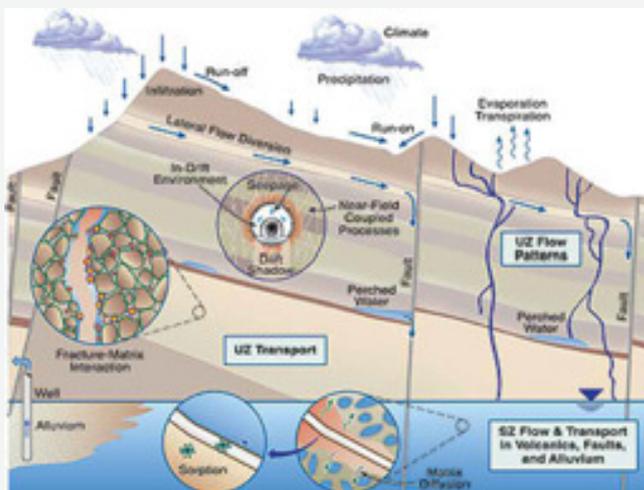
### Background

The volatility of oil prices and environmental concerns led many to consider – or, rather, reconsider – nuclear energy. The last five years so more and more references to a Nuclear Renaissance. Then came the March 2011

the government set a 2022 deadline for closing the country's seventeen nuclear reactors (eight aging reactors were shut down in the immediate aftermath of Fukushima, and will not be restarted).

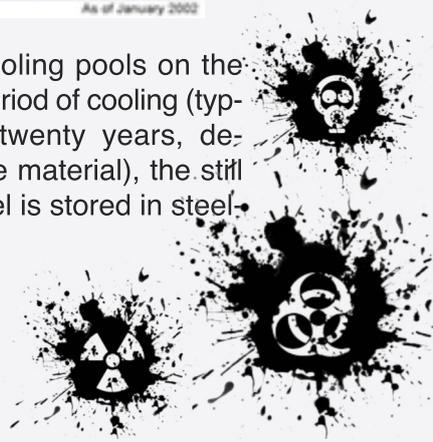
Even without the Fukushima shock, though, there has been one persistent problem for which the nuclear industry is yet to offer a satisfying solution: what to do with nuclear waste.

Nuclear plants generates large amount of waste which remain highly toxic for hundreds of years. Nuclear waste in the United States is



Fukushima nuclear scare, and talk about a nuclear rebirth cooled. One example: On Monday Germany became the first large industrial country to announce it was abandoning nuclear power generation altogether, and

currently being kept in cooling pools on the site of the plants. After a period of cooling (typically between five and twenty years, depending on the radioactive material), the still highly radioactive, cool fuel is stored in steel-



reinforced concrete casks which sit out in the open on concrete slabs. There are about 15,000 tons of it currently sitting at nuclear power plants across the United States.

There are two problems with this combined pool-dry casks solution:

First, nuclear waste continues to accumulate, and if more nuclear reactors are built, even more waste will be generated. The Nuclear Regulatory Commission (NRC) estimates that many of the nuclear power plants in the United States will be out of room in their spent fuel pools by 2015, thus requiring the use of temporary storage of some kind.

Keeping dangerous waste on the grounds of more than a 100 nuclear plants is a security nightmare:

- Different plants are located in different parts of the country and are thus exposed to different natural dangers (earthquakes in California, tornadoes in the Midwest, etc.). The NRC stipulates that cooling pools should be able to withstand earthquakes which occur within a 200-mile radius of the plant, but some security experts point to a combination earthquake-tsunami which

wrecked the Fukushima plants as an example of how nature may surprise us. Moreover, some plants sit near powerful fault lines – for example, the Diablo Canyon facility near San Luis Obispo in California, and the San Onofre plant about halfway between Los Angeles and San Diego – and may thus be exposed to powerful tremors which exceed design specifications.

- Terrorist may find these exposed cooling pools an inviting target. Nuclear reactors are surrounded by sturdy, 4-ft thick concrete containment vessels which, the industry argues, may be able to withstand a 9/11-like attack by terrorists (some security experts dispute this assertion). The pools, though, are housed in more conventional buildings which are conceivably more susceptible to aircraft strikes or explosives, according to Time Magazine's Mark Benjamin.

Benjamin quotes a 1997 study by the Brookhaven National Laboratory on Long Island, New York, which estimated that a massive calamity at one spent-fuel pool could ultimately lead to 138,000 deaths and contaminate 2,000 sq. mi. (5,200 sq. km) of land.

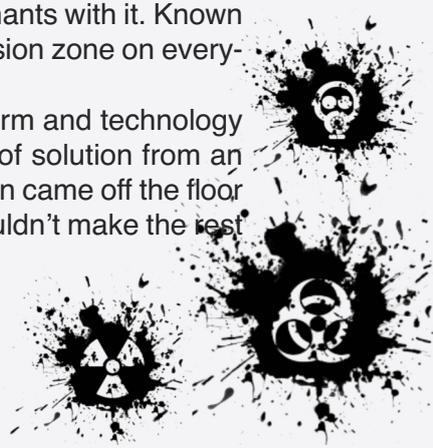


## Cleaning Up Japan's Radioactive Mess with Blue Goo

Source: <http://www.searchthenetnow.com/tag/fukushima-daiichi/>

A clever technology is helping hazmat crews in Japan contain and clean up the contamination caused by the ongoing nuclear disaster there: a blue liquid that hardens into a gel that peels off of surfaces, taking microscopic particles like radiation and other contaminants with it. Known as DeconGel, Japanese authorities are using it inside and outside the exclusion zone on everything from pavement to buildings.

DeconGel was stumbled upon by accident at Hawaiian venture capital firm and technology incubator Skai Ventures. A researcher conducting an experiment got a bit of solution from an experiment on the floor; when it was cleaned up the next morning, the solution came off the floor taking everything foreign with it. Underneath, the floor was so clean they couldn't make the rest





of the surface look the same with any amount of scrubbing.

Now commercialized, the blue goo hasn't seen much publicity. But after donating 100 five-gallon buckets of the stuff to Japanese cleanup efforts, the orders are rolling in.

When DeconGel goes onto a surface, it encapsulates absolutely everything that isn't native to the material itself—including microscopic bits of contamination, like radiation or other pollutants. That in itself is a huge innovation. Conventionally, radiation is literally scrubbed from surfaces, essentially with soap and water. In doing so cleanup crews essentially mobilize the dangerous waste, increasing the chances that it might escape into water supplies or into the soil, while also increasing the hazard to workers themselves. The byproduct is contaminated water that is heavy and difficult to contain.

DeconGel captures contaminants first, then hardens around them, neutralizing the threats. Workers can then remove the contaminants safely, without worrying about pollutants escaping into the air or seeping into surrounding soil.

It sounds like, a pretty remarkable improvement in the way environments are remediated, and one that is likely to keep hazmat workers safer while they do their jobs. Those who do that unenviable work seem to think so. DeconGel's maker has doubled its business every year since 2008, and with the Fukushima disaster elevating nuclear awareness around the globe, the company's CEO told CNN Money he predicts 20 times more business over the next few years.



### Types of DeconGel:



**DeconGel® 1101** is a brush-on gel for heavy nuclear and toxic industrial chemical decontamination.

**DeconGel® 1102** is a brush-on gel optimized for oil and grease decontamination (crude oils, diesel, PCB's, etc.). DecDeconGel® 1102 is currently brush on only, but a sprayable version is currently under development.

**DeconGel® 1120** is a spray-on version of 1101 formulated and optimized for hand-held light duty sprayers and hard, smooth surfaces such as glass, steel, polished stone and other smooth hard substrates and is used for nuclear and chemical decontamination.

**DeconGel® 1121** is a spray-on version of 1101 formulated for heavy duty industrial sprayers for horizontal and vertical hard porous and non-porous surfaces such as concrete, pavement, wood, glass, steel, stone, and other hard substrates, and is used for heavy nuclear and chemical decontamination.





## Iran has secretly stocked enriched uranium for four nuclear bombs

Source: <http://www.debka.com/article/20995/>

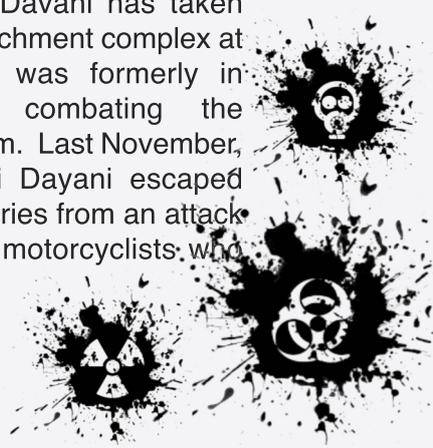
The Wisconsin Project on Nuclear Arms Control, American's scientific watchdog on world nuclear weapons production, estimates that by Dec. 2008, Iran had accumulated enough U-235 to fuel one nuclear bomb; by 2009, enough for a second, by August 2010 material for a third bomb and by April 2011, enough enriched uranium for a fourth bomb. These estimates presuppose an Iranian decision to further process low-enriched material to weapons grade - a process taking no more than a couple of months.

Iran, says the Wisconsin Project, is consolidating its status as a "virtual" nuclear weapon state – meaning it can set about building a bomb whenever its rulers so decide.

In its twice-annual report published Thursday, June 2, Wisconsin revealed three further developments in Iran's nuclear drive:

1. Since November 2010, when Iran stopped enriching uranium in all cascades at the Natanz plant for about a week (the report does not give the reason for the stoppage

– possibly a Stuxnet virus invasion of its computer control system), the enrichment rate has increased. The 5,000 centrifuges spinning in February 2011 increased to nearly 6,000 in May 2011. debkafile's Iranian sources add: Prof. Ferei-doon Abbasi Davani has taken over as director of the enrichment complex at Natanz. He was formerly in charge of combating the Stuxflex worm. Last November, Prof. Abbasi Dayani escaped with light injuries from an attack by a pair of motorcyclists who



attached a sticky bomb to his car. It occurred near the Imam Hossein University in Tehran where most of Iran's secret nuclear labs are located.

2. Wisconsin quotes the International Atomic Energy Agency's May 2011 report that one of its seals as broken in the "feed and withdrawal area" of the Natanz enrichment plant. This means that Iran took action to conceal the real amount of is enriched uranium stockpile from the nuclear watchdog and the fact, as Wisconsin reports, that it has accumulated enough material for building four nuclear bombs. Its steady progress will go undetected until the next IAEA inventory in October or November. debkafile's intelligence sources point out that Tehran has won a period of six to seven months for keeping its nuclear activities hidden from oversight with no one in the West or in Israel able to find out what is going on at the Natanz enrichment plant.

3. Wisconsin goes on to state: "Uncertainties about the number of centrifuges operated by Iran make it difficult to draw a conclusion about the performance of individual machines." More machines may be switched on when IAEA inspectors are not present while less, more advanced centrifuges, may take over after the inspection is over.

Our sources stress that these revelations



are highly pertinent to the controversy taking place in Israel over the surpris-

ing comments by ex-Mossad Director Meir Dagan. Dubbed "Mister Stop the Bomb" for reputedly directing covert operations that held off Iran's nuclear threat for five or six years – though this may an exaggeration - Dagan suddenly began speaking out strongly against any Israeli attack on Iran's nuclear program. Wednesday, June 1, he implicitly warned that such an attack would precipitate a regional war in which Israel would fare badly.

Israel's political and defense establishments have always had their doves but Dagan is sounding one like for the first time. The controversy around his comments reflects a similar argument afoot in US political and defense circles over whether the time has come to smash Iran's nuclear capability or stand by and let the Islamic Republic becomes a "virtual nuclear weapon state." In the last three years, the two schools of thought for and against military action against Iran have been joined by a third, which affirms that the US and Israel can live with an Iran armed with one or two nuclear bombs because this number would be dwarfed even by Israel's reputed stock let alone the American arsenal. Therefore, until Iran stockpiles a serous arsenal of weapons, it does not constitute an existential threat to Israel.

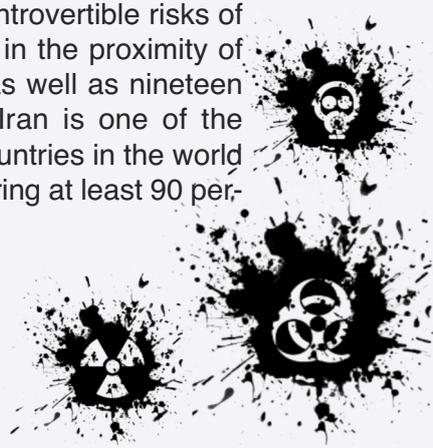
The Wisconsin Project's latest report explodes this argument because it exposes the steady accumulation of materials for four bombs in two-and-a-half years and Iran's dogged advance toward a serious arsenal unless it is stopped. That is the reason why the military option is back on the table in Jerusalem.

## Iran pushes ahead with nuke plans, despite seismic warnings

Source:<http://www.homelandsecuritynewswire.com/iran-pushes-ahead-nuke-plans-despite-seismic-warnings>

Iranian officials have chosen to ignore the warnings of top scientists and continue with the construction of nuclear facilities near earthquake prone regions; according to an official with the International Atomic Energy Agency, in a top level meeting Iran's leaders recently decided to move ahead with plans to construct nuclear facilities, despite Iranian sci-

entists' warnings that "data collected since the year 2000 shows the incontrovertible risks of establishing nuclear sites in the proximity of fault lines' in Khuzestan as well as nineteen other Iranian provinces; Iran is one of the most seismically active countries in the world with major fault lines covering at least 90 percent of it



Iranian officials have chosen to ignore the warnings of top scientists and continue with the construction of nuclear facilities near earthquake prone regions.

According to Fox News, an official from the International Atomic Energy Agency, said Iran's decision came in the days following the 11 March earthquake and tsunami that severely damaged Japan's Fukushima Daiichi nuclear power plant and sparked the worst nuclear accident since Chernobyl.

Speaking anonymously, the official said President Mahmoud Ahmadinejad, Fereidoun Abbasi, Iran's nuclear chief, Abbasi, Saeed Jalili, secretary of the Supreme National Security Council, and General Mohammad Ali Jafari, head of the Revolutionary Guard, ordered a review of a 2005 study on the Khuzestan province, where the government plans to build a nuclear plant near the town of Darkhovin.

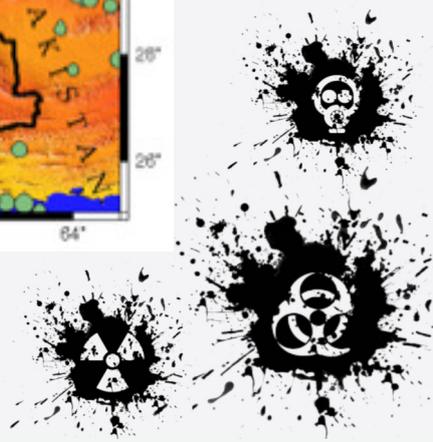
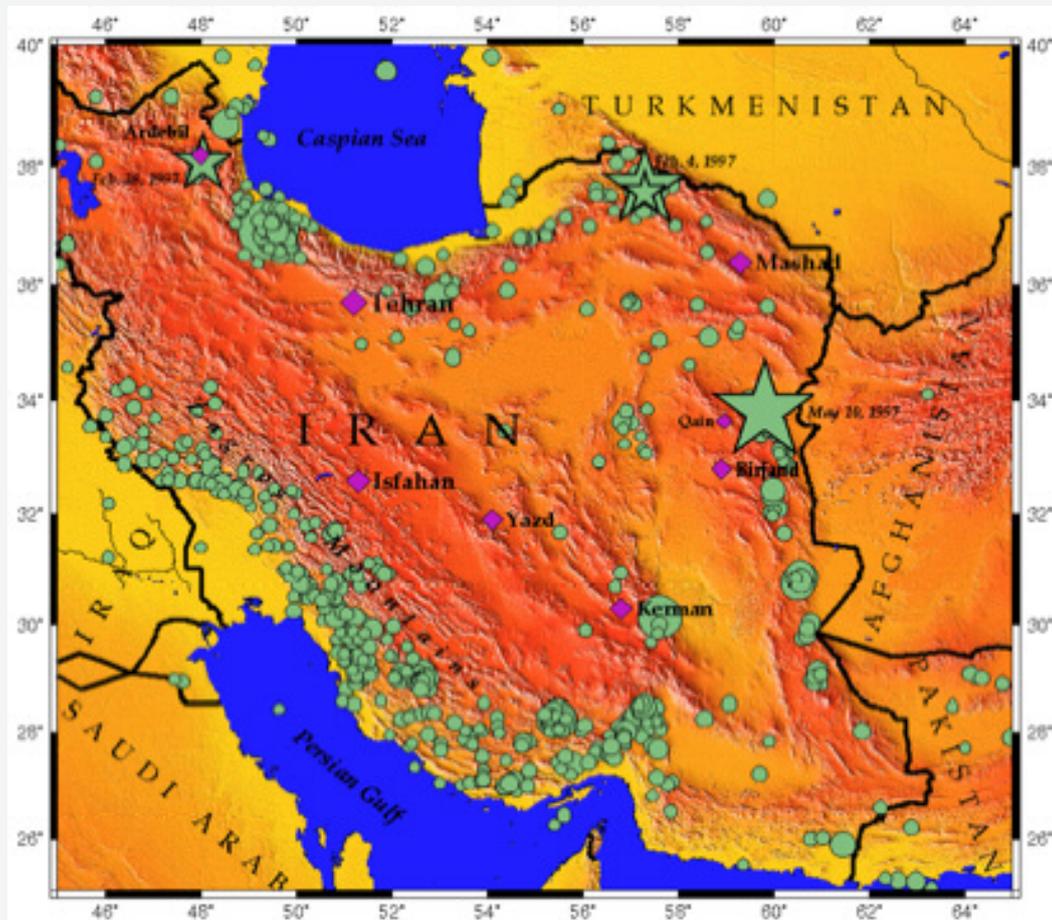


Khuzestan, Iran

According to the official, in a top level meeting Iran's leaders recently dismissed the updated report's findings and decided to move ahead with plans to construct nuclear facilities, despite Iranian scientists' warnings that "data collected since the year 2000 shows the incontrovertible risks of establishing nuclear sites in the proximity of fault lines" in Khuzestan as well as nineteen other Iranian provinces.

The meeting concluded with Ayatollah Ali Khamenei, Iran's supreme leader, approving continued work on reactor designs and that access to the report should be restricted. The study, titled "Geological Analysis and Seismic Activity in Khuzestan: Safety and Environment" has been deleted from computers at Tehran University's Geographic Institute.

In the last decade, the Khuzestan region has been hit by several earthquakes including one on 20 December 2010 in Hossein-



abad, located just 100 miles north of Darkhovin, which had a magnitude of 6.5, and a 6.1 magnitude earthquake on 31 March 2006 in Borujerd, roughly 200 miles to the north.

Iran is one of the most seismically active countries in the world with major fault lines covering at least 90 percent of it. The country is located in a zone of tectonic compression where the Arabian plate is slowly colliding with the Eurasian plate.

Andrew Freed, an associate professor with Purdue University's Department of Earth and Atmospheric Sciences, said, "Not only [does Iran] have active faults, but many, many unmapped active faults." "[Iran] not a good place to build a nuclear plant," he concluded.

Last month, Iranian officials reaffirmed their

staunch support of their nuclear reactor program. Ramin Mehmanparast, a spokesman for the Foreign Ministry, said, "We have long-term programs for peaceful use of the nuclear knowledge; we continue various activities and this will develop the country.

Ismail Kowsari, the deputy chairman of Iran's parliamentary committee of national interest and foreign policy, echoed these thoughts stating, "We are pursuing a program to have more reactors."

Iran's moves are contrary to the majority of existing nuclear powers which have placed their nuclear programs under increasing scrutiny following events in Japan. Germany has even gone so far as to initiate plans to phase out nuclear power all together.

## Astrium GEO-Info Services Looks Back On the Chernobyl Disaster 25 Years Later With EO Technologies

Source: <http://satellitereconnaissanceobserver.blogspot.com/2011/04/astrium-geo-info-services-looks-back-on.html>

The first satellite image of the Ukrainian site was acquired by SPOT1 only ten days after the explosion, demonstrating the value of Earth-imaging satellites in responding to natural and man-made disasters. Technology has evolved in the 25 years since the Chernobyl explosion, and Astrium GEO-Information's satellites continue to keep a watchful eye on the zone. Astrium GEO-Information Services (formerly Spot Image) has released satellite imagery of the Chernobyl nuclear site covering the 25 years since the disaster in 1986. From the first satellite image acquired by SPOT1 on April 26th 1986 to the high performance radar imagery taken only days ago of the affected area, Astrium GEO-Information Services has effectively monitored Chernobyl for a quarter of a century using the vast data archive containing more than 100 billion square kilometres of imagery. Since 1986, satellite imagery has played a crucial role in managing disaster zones by providing teams on the ground with comprehensive information for decontamination efforts as well as mapping the resulting reforestation of the area. Astrium GEO-Information Services has published an online flipbook presenting the

multi-source, multi-resolution imagery of the Ukrainian site acquired over the past 25 years. The flipbook illustrates the changes to the area and demonstrates how satellite technology has brought new insights to site monitoring, management and mitigation of disasters since the 1980s. Taking full advantage of the fully-integrated combined resources and skills of its Spot Image and Infoterra subsidiaries, the GEO-Information division of Astrium Services has become a recognised world leader in the geo-information market by offering decision-makers sus-



tainable one-stop-shop solutions to increase security, protect the environment, and better manage natural resources. It has exclusive access to SPOT and TerraSAR-X satellite data, while also calling on a full gamut of space data sources and airborne acquisition capabilities, enabling it to offer an unrivalled combination of Earth observation products

and services. Its portfolio spans the entire geo-information value chain.

To view the [Astrium GEO-Info Services Chernobyl flipbook of images from the last 25 years](http://www.spotimage.com/Flip-Book/Tchernobyl/ENG/index.html) please go to: <http://www.spotimage.com/Flip-Book/Tchernobyl/ENG/index.html>

## Robot reports high radiation inside crippled reactors

Source: <http://homelandsecuritynewswire.com/robot-reports-high-radiation-inside-crippled-reactors>

A U.S.-made robot traveled inside Unit 1 and Unit 3 of the crippled Fukushima plant, and came back with radioactivity readings of up to 49 millisieverts per hour inside Unit 1 and up to 57 millisieverts per hour inside Unit 3; the legal limit for nuclear workers was more than doubled since the crisis began to 250 millisieverts; the U.S. Environmental Protection Agency recommends an evacuation after an incident releases 10 millisieverts of radiation, and workers in the U.S. nuclear industry are allowed an upper limit of 50 millisieverts per year. A robot that entered two crippled buildings housing nuclear reactors which were damaged during the 11 March earthquake and tsunami, sent back readings which

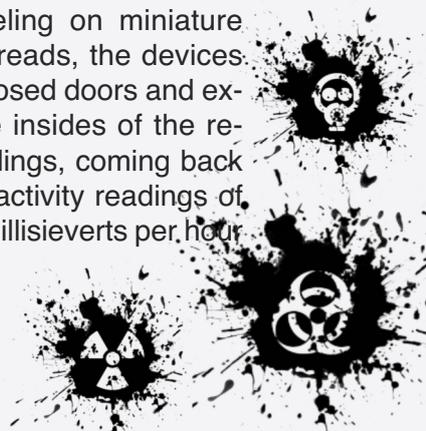
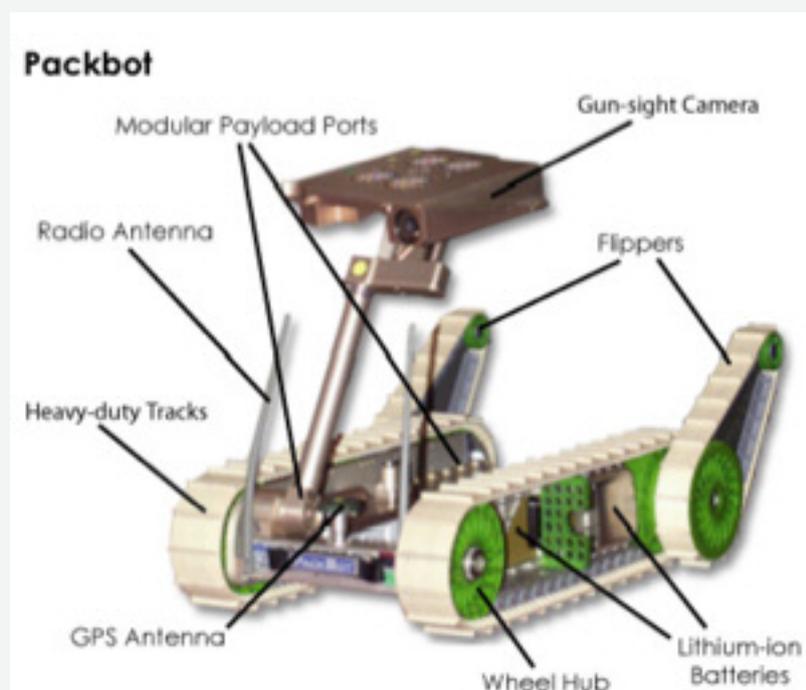
showed a harsh, radioactive environment too dangerous for workers to operate in.

The operator of the reactors said, however, that the harsh readings from Unit 1 and Unit 3 at the Fukushima plant do not change the timetable for bringing the complex under control by the end of the year. The robot was set to investigate Unit 2 on Monday.

Fox News reports that workers have not gone inside the two reactor buildings since the first days after the plant's cooling systems were wrecked by a catastrophic earthquake and tsunami. Hydrogen explosions in both buildings in the first few days destroyed their roofs and littered them with radioactive debris.

The U.S.-made robot entered the two buildings Sunday and took readings for temperature, pressure and radioactivity. More data must be collected and radioactivity must be further reduced before workers are allowed inside, said Hidehiko Nishiyama of Japan's Nuclear and Industrial Safety Agency.

The robots being used inside the plant, called Packbots, are made by Bedford, Massachusetts-based iRobot. Traveling on miniature tank-like treads, the devices opened closed doors and explored the insides of the reactor buildings, coming back with radioactivity readings of up to 49 millisieverts per hour.



inside Unit 1 and up to 57 millisieverts per hour inside Unit 3.

The legal limit for nuclear workers was more than doubled since the crisis began to 250 millisieverts. The U.S. Environmental Protection Agency recommends an evacuation

after an incident releases 10 millisieverts of radiation, and workers in the U.S. nuclear industry are allowed an upper limit of 50 millisieverts per year. Doctors say radiation sickness sets in at 1,000 millisieverts and includes nausea and vomiting.

## A Career U.S. Intelligence Officer on Al Qaeda, Nuclear Terrorism and the Nuclear Threat

By Rahim Kanani (Editor-in-chief, World Affairs Commentary)

Source: [http://www.huffingtonpost.com/rahim-kanani/a-career-us-intelligence-\\_b\\_850627.html](http://www.huffingtonpost.com/rahim-kanani/a-career-us-intelligence-_b_850627.html)

In a recent discussion with Rolf Mowatt-Larssen, Senior Fellow at Harvard Kennedy School's Belfer Center for Science and International Affairs, and former Director of Intelligence and Counterintelligence at the U.S. Department of Energy, we discussed al Qaeda's quest for nuclear weapons, the scale and scope of the nuclear terrorism threat, and ways in which we can avert a nuclear terrorist attack.

Prior to his appointment as a senior fellow at the Belfer Center, Mr. Rolf Mowatt-Larssen served over three years as the Director of Intelligence and Counterintelligence at the U.S. Department of Energy. Prior to this, he served for 23 years as a CIA intelligence officer in various domestic and international posts, to include Chief of the Europe Division in the Directorate of Operations, Chief of the Weapons of Mass Destruction Department, Counterterrorist Center, and Deputy Associate Director of Central Intelligence for Military Support.

**Rahim Kanani:** In assessing and analyzing the nuclear terrorist threat, whether against the United States or another part of the world, how should the public understand the situation in the context of other current and potential international crises?

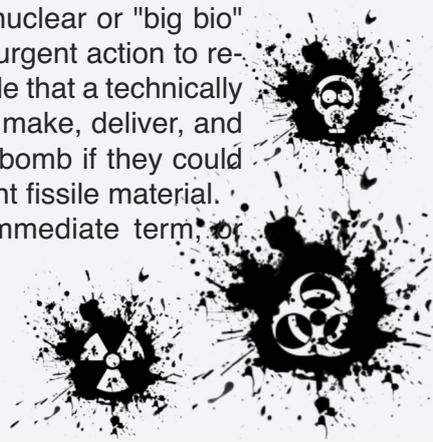
**Rolf Mowatt-Larssen:** Nuclear terrorism is inextricably linked to the broader phenomenon of terrorism. As the cycle of violence escalates, the use of weapons of mass destruction has become more attractive to terrorist groups like al Qaeda. There are chilling similarities between the cycle of al Qaeda warnings in the run-up to the 9/11 attack, and

a new cycle of warnings associated with an attack on a much larger scale than 9/11. In 1998, Osama bin Laden issued a religious ruling (fatwa) that declared war on America; the 9/11 attack followed three years later. In 2008, Al Qaeda deputy chief Ayman Zawahiri published an exhaustive religious justification for using weapons of mass destruction that could kill ten million Americans. This treatise ("Exoneration") built on the first-ever WMD fatwa issued by Saudi cleric Nasir al-Fahd in 2003. Al Qaeda's WMD warnings are not part of some theological exercise, of that we can be certain; they are laying the groundwork in providing the required justification and serial warnings in advance of a future attack. If the 9/11 cycle holds true, al Qaeda is in the middle of planning another major attack against the US in the near future.

**Rahim Kanani:** And in the same vein, how should policymakers contextualize this threat as it competes against a range of domestic and international concerns?

**Rolf Mowatt-Larssen:** Policymakers are swamped with a daunting array of "number one priorities," it is true. However, some threats deserve more attention than others. Given the potentially catastrophic consequences, even a small probability of terrorists getting and detonating a nuclear or "big bio" bomb is enough to justify urgent action to reduce the risks. It is plausible that a technically sophisticated group could make, deliver, and detonate a crude nuclear bomb if they could get their hands on sufficient fissile material.

**Rahim Kanani:** In the immediate term, or



over the next 2 to 4 years, what are some concrete steps we can take, both from the perspective of an engaged citizen, and also from the perspective of the international community as a whole, to prevent, in the words of Harvard's Belfer Center Director Graham Allison, the ultimate preventable catastrophe?

**Rolf Mowatt-Larssen:** Nuclear terrorism is a preventable catastrophe. It is very difficult for terrorists to buy, steal or build a bomb. Although we are unlikely to convince terrorists that it would be a disaster if they use WMD, I cannot fathom how they can hope to advance their cause by using weapons that indiscriminately kill millions of men, women and children of all faiths. But our destiny lies in our own hands. The first order of business is to deny terrorists the capability they seek. The most critical task is to fulfill the historic nuclear security summit's goal of locking up all weapons-usable nuclear materials as soon as possible, preferably in the next four years. In addition, governments must strengthen international intelligence and law enforcement cooperation to find and eliminate terrorist nuclear plots before they reach fruition. The nuclear black market in trafficking of nuclear materials needs to be shut down. Severe punishment must be meted out for anyone dealing with the stuff of mass destruction.

**Rahim Kanani:** Similarly, if we broadened the timeline of this discussion to long-term action, or over the next 15 to 20 years, what does the United States and the international community need to either decide, understand, or act upon, to ensure nuclear terrorism and the threat of nuclear terrorism ultimately decreases to an almost-zero percent chance of being realized?

**Rolf Mowatt-Larssen:** Down the road, we must ensure that the global expansion of technologies and materials connected with nuclear energy does not raise the proliferation risks, especially concerning the fuel cycle, transportation, waste and storage. As global citizens, we must press our leaders to take courageous measures to reduce nuclear arsenals, and ultimately lock the nuclear genie back in his bottle by eliminating all nuclear weapons worldwide. This is not a utopian

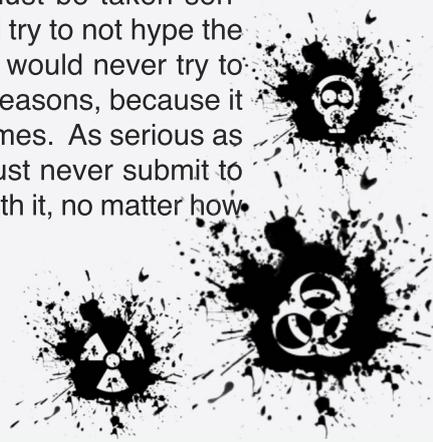
ideal for dreamers; the concept of global zero has won the brave support of many of the world's most visionary leaders and practitioners, such as Presidents John F. Kennedy and Ronald Reagan, Soviet leader Mikhail Gorbachev, Henry Kissinger, George Schultz, Sam Nunn and William Perry, to name a few. One thing is clear: If the world does not act in concert to rid us of this menace, we are more likely to experience the catastrophe of a mushroom cloud in this century, than in the last century.

**Rahim Kanani:** What are the biggest impediments to implementing the range of short-term and long-term solutions you propose?

**Rolf Mowatt-Larssen:** In order to be successful, we must insist on uncommon leadership; vision; moral courage. Given the right mindset, there are no practical impediments to ridding ourselves of nuclear weapons. But if we stand still and accept the status quo, we will fail, because today, we are not doing enough to eliminate the threat. Only strong leadership can overcome the widespread tendency to dismiss events that have never happened. It is easier for bureaucracies, absent forceful direction from the top, to deal with their overflowing in-boxes, than to sit back and proactively head off the bigger threats of tomorrow.

**Rahim Kanani:** At a recent Harvard Kennedy School forum on the future of nuclear weapons, you asserted that we have to live with the prospect of this kind of attack, in order for us to survive it maturely. Is such an attack inevitable? And how would you characterize a surviving civilization as one that survives maturely?

**Rolf Mowatt-Larssen:** As someone who has been working on WMD terrorism for a decade, I still struggle to get the balance right: on the one hand, nuclear and bio terrorism are real and urgent threats that must be taken seriously. On the other hand, I try to not hype the threat to make my point. I would never try to sell the threat for political reasons, because it is too important to play games. As serious as I think the threat is, we must never submit to fear in our efforts to deal with it, no matter how



tempting that may be. If we allow ourselves to live in fear, the terrorists win. If we sacrifice our values that we are fighting for in our desire to feel safe, the terrorists win. I agree with terrorists on one crucial point: this is a moral conflict. It is about our values versus theirs. And I am secure in my own belief that our cause is just, and that no good can ever be justified through terrorist violence. The mere fact that the al Qaeda leaders are so hateful that they would unleash the scourge of WMD on humanity ultimately discredits them.

**Rahim Kanani:** And lastly, with such an intensely complicated and world-changing potentiality at stake, of which you were tasked for several years to lead the U.S. government's efforts in preventing exactly this realization, is there light at the end of the tunnel? And how do you balance pragmatism with optimism, as you continue your efforts in this regard?

## Islam and the Bomb: Religious Justification For and Against Nuclear Weapons

Source: <http://www.rahimkanani.com/2011/02/27/islam-and-the-bomb-religious-justification-for-and-against-nuclear-weapons/>

In a report issued last week through Harvard Kennedy School's Belfer Center for Science and International Affairs, Rolf Mowatt-Larssen, former director of the Office of Intelligence and Counterintelligence at the U.S. Department of Energy and former head of the Central Intelligence Agency's WMD and terrorism efforts, explores the Islamic justification for and against the acquisition, possession and use of nuclear weapons. Rahim Kanani, editor-in-chief of World Affairs Commentary and graduate student at Harvard Divinity School focusing on Islamic studies, human rights, and international security policy, contributed to the research and writing that went into this report.

### AUTHOR'S NOTE

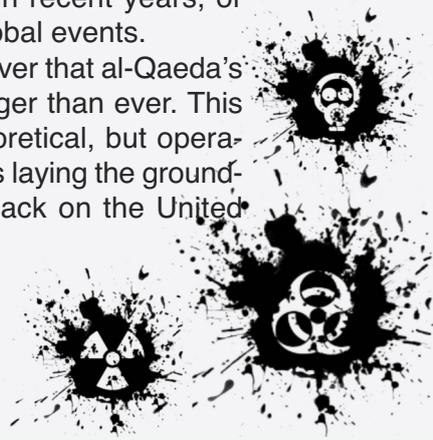
Threats cannot be fully appreciated without an understanding of the circumstances that give rise to them. Identifying and eliminating threats starts with an insider's understanding

**Rolf Mowatt-Larssen:** The world has a tricky way of confronting mankind with challenges that reveal who we really are. I will always be an idealist, because cynicism is all-consuming, if one allows oneself to succumb to it. Striving to do the right thing has its own rewards. I worry about the argument that it is fine to torture people if it works; it is never right, even when it works. I worry about the impact of inaction for the future of our children. So, let us act! I'll never concede that our problems are too big and that we cannot solve them. I'm excited over the prospects of living in a world where a growing number of people are forcing change, even if it creates great uncertainties and carries new risks. We need to seize this historical opportunity to address problems that have been festering for decades, for the sake of all mankind, and not for the narrower definitions of "self-interest."

of the enemy's plans and intentions. Chinese military philosopher Sun Tzu said it best: "Know your enemy, and know yourself, and you will fight a hundred battles without catastrophe."

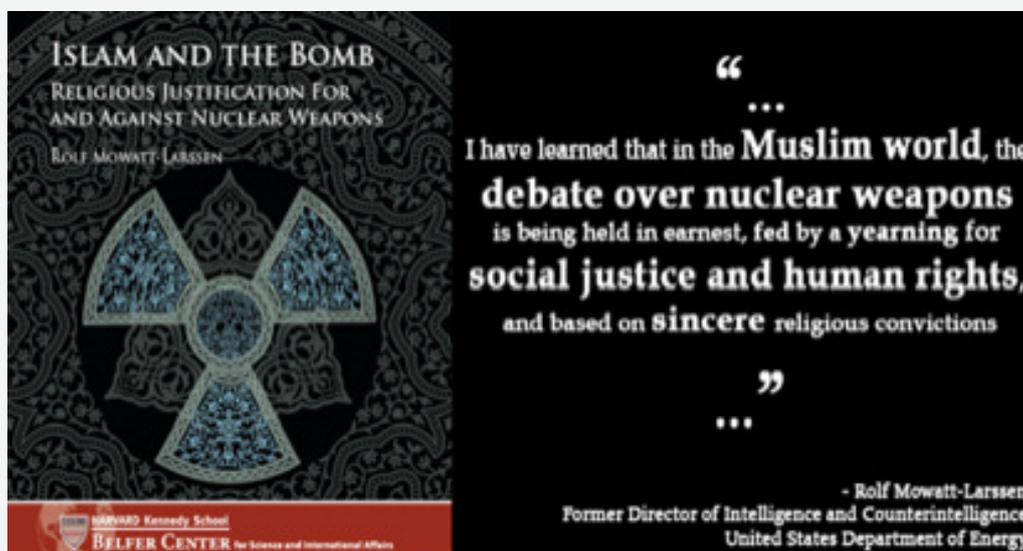
When I began this project, my goal was to develop insight into the deeper thought process behind al-Qaeda's nuclear intent. I expected to find evidence that their interest is strong, perhaps unshakable, but hinges on capability, i.e., they will use weapons of mass destruction if they are able to acquire them. Specifically, I set out to examine the impact al-Qaeda's apparent frustration in acquiring WMD has had on the group's intent; perhaps their interest has waned in recent years, or has been overtaken by global events.

I was surprised to discover that al-Qaeda's WMD ambitions are stronger than ever. This intent no longer feels theoretical, but operational. I believe al-Qaeda is laying the groundwork for a large scale attack on the United



States, possibly in the next year or two. The attack may or may not involve the use of WMD, but there are signs that al-Qaeda is

derestimate him. Conventional wisdom holds that al-Qaeda is spent—that they are incapable of carrying out another 9/11. Leaving



working on an event on a larger scale than the 9/11 attack.

When al-Qaeda number two Ayman Zawahiri published his book “Exoneration” in 2008, I dismissed it as the ranting of a leadership that is increasingly detached from reality. Reading various book reviews confirmed my impressions; terrorism experts dismissed “Exoneration” as a rather desperate, defensive reaction to a harsh critique of al-Qaeda by an imprisoned former associate.

So, I didn’t bother to read the book. I only picked it up again this summer because I was searching for clues on the current status of the aborted WMD religious ruling (fatwa) that al-Qaeda issued in May 2003; I was informed that the author of that fatwa, radical Saudi cleric Nasir al Fahd, was cited in “Exoneration.”

As I read the text closely, in the broader context of al-Qaeda’s past, my concerns grew that Zawahiri has written this treatise to play a part in the ritualistic process of preparing for an impending attack. As Osama bin Laden’s fatwa in 1998 foreshadowed the 9/11 attack, Ayman Zawahiri’s fatwa in 2008 may have started the clock ticking for al-Qaeda’s next large scale strike on America. If the pattern of al-Qaeda’s modus operandi holds true, we are in the middle of an attack cycle.

Even if this theory proves to be wrong, it is better to overestimate the enemy than to un-

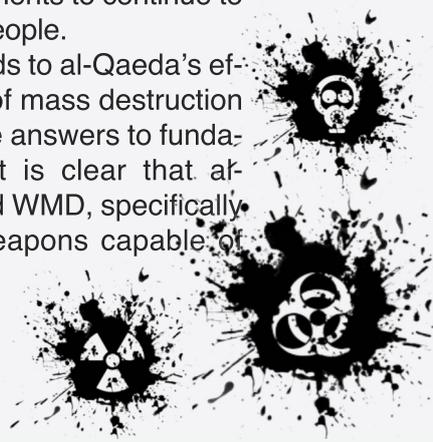
aside whether this view is correct, for which I harbor grave doubts, we will surely miss the signs of the next attack if we continue to overestimate our own successes, and dismiss what terrorists remain capable of accomplishing when they put their minds to it.

**Rolf Mowatt-Larsen**  
January 12, 2011

### FOREWORD

It has been almost ten years since I was first charged with assessing the threat posed by terrorist use of weapons of mass destruction (WMD). I vividly recall the day, not long after 9/11, when the CIA received unequivocal intelligence that al-Qaeda was seeking the bomb. At the time, I took solace in the assumption that it was probably too difficult for them to get their hands on a nuclear weapon. I was wrong. We can not exclude the possibility of nuclear terrorism. It is not tomorrow’s threat; it is with us here today. The game changing impact of a single mushroom cloud could destabilize the world order and raise fundamental doubts about the ability of governments to continue to provide security for their people.

For years, I chased leads to al-Qaeda’s efforts to acquire weapons of mass destruction (WMD), without finding the answers to fundamental questions. Yes, it is clear that al-Qaeda is seeking high-end WMD, specifically nuclear and biological weapons capable of



causing mass casualties. But why has al-Qaeda set their sights so high? Isn't a "dirty bomb" or a chemical device a more probable threat, since such weapons are much easier to obtain? What is al-Qaeda's justification for using WMD — how much of a factor is religion in their thinking? What can terrorists hope to achieve by indiscriminately killing people on a mass scale?

In the absence of hard data, there are few facts and too many assumptions being made about terrorist WMD plans and intentions. As an intelligence officer at heart, I try to keep an open mind when analyzing a problem, but I must confess I find it hard to shake the intuitive logic of the troubling observation of Harvard's Graham Allison in the movie, *Countdown to Zero*: "You can't kill four million Americans by flying airplanes into buildings."

Sub-state actors are the latest players on the nuclear scene, but the aspirations of states remain of high concern as well. Over many years of tracking Iran's nuclear program, I remain uncertain about the Iranian leadership's real intentions — is their quest for nuclear energy merely a cunning cover for developing nuclear weapons? Has a decision already been made to build a bomb? If so, who has made this decision, and on what basis? How important is the religious case, for or against nuclear weapons, in an Islamic theocracy? Are conflicting statements concerning the status of nuclear weapons issued by clerics and scholars signs of dissension between religious and secular authorities in Iran?

Understanding Iran's nuclear intentions assumes the added dimension of if and when Iran gets the bomb. A nuclear-armed Iran will pose new proliferation risks surrounding the possible transfer of nuclear capability and know-how from state to sub-state actors, such as Hezbollah and Hamas. Scant attention has been paid to the nuclear intent of surrogate groups and their collusion with Iranian insiders with access to nuclear facilities.

Considering the daunting challenge of divining what lies in someone's mind, my modest objective is to present a framework for analyzing key factors that impact on the religious justification under Islam for and against nuclear weapons. Al-Qaeda (Sunni extremism) and Iran (Shia theocracy) are offered as

two case studies in this regard, because their potential acquisition of nuclear weapons is of greatest contemporary concern. Presenting them side by side will invite a comparison of the respective arguments of a state and sub-state actor, in both houses of Islam. However, their inclusion together in this project should not be construed as an effort to compare or equate al-Qaeda and Iran with one another, either their motivations, or in moral terms.

The sections of this report represent a compilation of the various arguments that are being made in the Islamic community today. I have endeavored to faithfully represent the views of key voices in the Muslim world, scholars, and extremists, whether they are for or against nuclear weapons — and to put their testimony on the record. For this reason, the paper contains a large number of quotes and excerpts of key lines of reasoning for and against the bomb.

I was surprised to learn that there is a lack of basic research on the issues that sit at the cross-roads of nuclear proliferation, terrorism and religion. Perhaps this is due to the fact there are many experts in each of these domains, but very few experts in all three. Moreover, a nuclear attack has not happened in over half a century, perhaps reinforcing an unfortunate misperception that the dangerous interplay between states and sub-state actors in the nuclear arena is still a theoretical problem.

This report is written for expert and layperson alike. It is meant to stimulate thought, provoke questions, and most importantly, broaden public awareness concerning the threat posed by nuclear weapons. After years of working on the problem, I have come to believe that eliminating the appeal of possessing nuclear weapons must come from people of all backgrounds and beliefs who are willing to speak out against the corrosive moral effects of these weapons of mass destruction. There is a growing global consciousness that the use of nuclear weapons can never be justified for any reason. We must nurture this feeling; rogue states and terrorists can ignore that reality, but they are not going to change it.

Despite the intrinsically depressing nature of nuclear catastrophe, I remain an inveterate optimist. We can prevent WMD terrorism and



eliminate the threat. From this project, I have learned that in the Muslim world, the debate over nuclear weapons is being held in earnest, fed by a yearning for social justice and human rights, and based on sincere religious convictions. The West must fearlessly join the discourse by showcasing its values and beliefs, because we are all in this together. Truth, itself, is at stake, and in the end, it will prevail.

“There can be no peace among nations without peace among religions” — Hans Kung

### SHIA VOICES: IRAN AND THE BOMB (Excerpt)

Following the Iranian revolution of 1979, Supreme Leader Ayatollah Khomeini is said to have issued a fatwa against nuclear weapons—some now claim he never uttered such words, while others claim his statement mysteriously disappeared. Iran’s current Supreme Leader, Ayatollah Khomeini, issued an anti-nuclear fatwa in September 2004. While sourced by a variety of Iranian authorities, the fatwa itself has yet to be officially released or found. But in light of the many references, it would seem that Khomeini’s fatwa is legitimate and absolute. Is the issue then not clear, from a religious point of view? It is not so simple, as the testimony of the following voices from within Iran will attest.

The range of opinion on this matter is far-reaching, with the overwhelming majority of religious voices taking a stand against nuclear weapons. Individuals in opposition include current and former Supreme Leaders of Iran, the former Deputy Supreme Leader, the former Secretary of the Supreme National Security Council, the Chairman of Parliament of Iran, Iran’s Ambassador to Pakistan, and the Grand Marja of Shia Islam, among others. Those in favor of possession, including on a conditional basis as a deterrent and in the context of equal retaliation, include a member of the Iranian Parliaments’ Judicial Commission, a member of Iran’s Assembly of Experts, and two middle-ranking clerics. It is also important to note that Hezbollah’s Secretary-General, Sayyed Nasrallah, recently announced the right to possess any weapon, and as such, the Iran-Hezbollah nexus can-

not be ignored if in fact Iran were to realize nuclear weapons capabilities.

As one will recognize from the analysis below, there is a serious internal debate on this issue within the religious community regarding: acquiring such a weapon that cannot distinguish between combatants and non-combatants; the use of WMD as a retaliatory measure if attacked by the same weapon; possessing such a weapon as a deterrent measure; among other issues. Surprisingly, justifying the acquisition of WMD either for equalizing or defensive purposes has rarely if ever been mentioned in the context of any regional threat, including that of Israel.

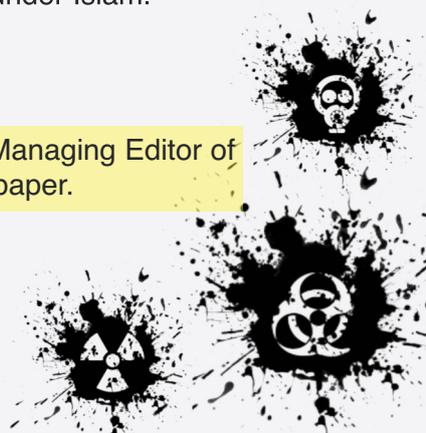
In producing this survey of Shi’a voices in Iran, no assumptions have been made as to whether or not Iran is indeed pursuing nuclear weapons. By compiling numerous comments made by a range of religious clerics, scholars and authorities over the last several years, the goal is to assess the substance and significance of the religious discourse concerning Shi’a Islam and the permissibility or impermissibility of WMD acquisition, possession and use.

### Shia Clerics Against Nuclear Weapons

“The Islamic Republic of Iran, based on its fundamental religious and legal beliefs, would never resort to the use of weapons of mass destruction... In contrast to the propaganda of our enemies, fundamentally we are against any production of weapons of mass destruction in any form.” Ayatollah Khomeini Supreme Leader of Iran “There is complete consensus on this issue. It is self-evident in Islam that it is prohibited to have nuclear bombs. It is eternal law, because the basic function of these weapons is to kill innocent people. This cannot be reversed.”

Grand Ayatollah Yusef Saanei Grand Marja of Shia Islam, Iranian Scholar “Those in Iran who clandestinely believed they could develop nuclear weapons have now been forced to admit that is forbidden under Islam.”

Hussein Shariamadari Managing Editor of Kayhan, an Iranian newspaper.



## Chernobyl radiation did not damage abundance, diversity of aquatic life

Source: <http://www.port.ac.uk/aboutus/newsandevents/frontpagenews/title,131629,en.html>

A new study of the lakes in and around Chernobyl's fallout zone reveals that radiation from the nuclear accident appears to have had no long term effect on the abundance or diversity of aquatic animal life; no evidence was found that the abundance or diversity of the animal

had no long term effect on the abundance or diversity of aquatic animal life.

The study, which coincides with the twenty fifth anniversary of the Chernobyl disaster, examined invertebrate animals, such as insects, snails, and crustaceans, living along the

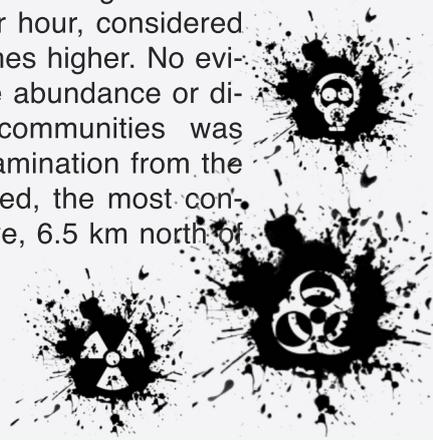


Fig. 1. Study area with sampled lakes indicated by stars and italicised labels.

communities was influenced by direct contamination from the Chernobyl accident; indeed, the most contaminated lake, Glubokoye, 6.5 km north of the nuclear power plant, supported the most animal diversity of those lakes studied

A new study of the lakes in and around Chernobyl's fallout zone reveals that radiation from the nuclear accident appears to have

shores of eight lakes. Levels of radiocaesium in the lakes ranged from near-background levels at 0.1 microGrays per hour, considered normal, to around 300 times higher. No evidence was found that the abundance or diversity of the animal communities was influenced by direct contamination from the Chernobyl accident. Indeed, the most contaminated lake, Glubokoye, 6.5 km north of



the nuclear power plant, supported the most animal diversity of those lakes studied.

The findings are published in the Journal of Environmental Radioactivity by Dr. Jim Smith from the University of Portsmouth, Dr. John Murphy from Queen Mary, University London, and Dr. Liubov Nagorskaya of the National Academy of Sciences of Belarus. The results of the lake-based research are significant because they contrast with previous studies of the region's land-based and flying insects which reported a significant negative impact associated with radiation from Chernobyl.

A University of Portsmouth release quotes Murphy to say that: Our study found no evidence that radioactive contamination from the Chernobyl accident has had a direct influence on the lakes' aquatic invertebrates. We discovered over 230 species some of which are rare and endangered and even species that are thought to be particularly susceptible to high levels of radioactive contamination, such as freshwater snails, showed no response.

This indicates that, twenty five years on, the radiation has not had a perceptible affect on the diversity and abundance of the region's lake invertebrates.

The study may have significant implications for the long-term effects of the recent nuclear accident at the Fukushima power plant in Japan, where scientists are already monitoring levels of radiocaesium in a lake in the village of Iitate 40 km to the northwest. Smith suggests that long-term radiation dose rates to organisms there could be similar to those seen in some of the contaminated Chernobyl lakes.

Smith, from the School of Earth & Environmental Science, added: "Whilst recent estimates by the Japanese authorities show that the radioactive releases to the air at Fukushima were about ten times less than Chernobyl, there are high levels of radiocaesium fallout to land in some areas to the northwest of the power plant."

The University of Portsmouth release notes that the scientists examined samples

from the lakes, situated in Belarus and the Ukraine, over a two year period and found that they contained a range of diversity typical for the region.

They documented 230 different species including water mites, beetles, freshwater shrimp, seed shrimps, true flies, mayflies, caddis flies, water bugs, leeches, snails, dragonflies, damselflies, and flatworms and even found three species new to Belarus and a number of threatened species.

Murphy said: "Studying aquatic invertebrates is a valuable and well-established method of measuring effects of pollution on freshwater environments because they generally complete their entire life cycle in or close to water and thus reflect conditions in the water body over the preceding months."

He added that "Estimating the radiation dose to organisms inevitably involves a degree of uncertainty since their exact habitat is imprecise and varies with their life cycle. However even taking this into consideration, the results suggest that natural environmental factors, such as lake size, and hydrochemical factors are the main drivers of biodiversity in the lakes."

The study did not examine possible genetic or physiological responses of organisms at the individual level, but the scientists said such effects could not be ruled out.

"Regular monitoring of the freshwater habitats in the affected regions around Chernobyl and Fukushima would greatly help our understanding of how nature responds to such radioactive contamination events," Smith said.

The study was carried out while both Drs. Smith and Murphy were based at the Natural Environment Research Council Centre for Ecology and Hydrology.

— Read more in T. W. Bowyer et al., "Elevated Radioxenon Detected Remotely Following the Fukushima Nuclear Accident," Journal of Environmental Radioactivity (in press) (doi:10.1016/j.jenvrad.2011.04.009)



### Enrichment transfer to Fordo

Iran's slap in the face for Obama, IAEA and Israel

Source: <http://www.debka.com/article/21006/>

Iran has struck another blow in its nuclear offensive against the world. Tuesday, June 7, President Mahmoud Ahmadinejad termed Iran's nuclear program "a train with no brakes or reverse gear" after Tehran announced the deployment of submarines in the Red Sea. Wednesday, Iran's vice president and atomic chief Fereydoon Abbasi Davani said Iran's 20-percent uranium enrichment work would be transferred from Natanz to Fordo this summer. Purification capacity would be tripled, he said, by improved centrifuges. debkafile's military sources report that this move further shortens Iran's road to weapons grade uranium of 90 percent. Last November, Abbasi Davani escaped an attempt of his life in northern Tehran, for which Iran held Israel responsible.

Fordo is a well-guarded underground facility situated near the military installations surrounding the holy city of Qom and protected by air defense missile batteries. It was bur-

rowed deep into the side of a mountain. These features make the facility all but invulnerable to an American or Israel air strike.

The very name Fordo is a red flag for US President Barack Obama. In Pittsburgh on Sept. 25, 2009, Obama appeared before the world media, flanked by the British prime minister of the day, George Brown, and French President Nicolas Sarkozy, to reveal the existence of the surreptitious Iranian enrichment facility at Fordo. He gave Tehran two weeks to open up the facility to full International Atomic Energy Agency inspection and disclose the plans for the site, failing which Washington, London and Paris would pursue joint action against the Islamic Republic. The answer Iran gave was that the US president's allegations were baseless and the nuclear watchdog inspectors were welcome.

The UN inspectors arrived at the Fordo subterranean facility a month later and returned to Vienna to report they found nothing



– neither centrifuges for enrichment nor nuclear materials. Two more UN inspections produced the same result.

Iran's announcement Wednesday demonstrates that in 2009, it made a fool of Western leaders, especially President Obama, and tricked the international atomic agency inspectors. Enrichment uranium to 20 percent meanwhile takes Iran another big step towards attaining the fuel for a nuclear weapon.

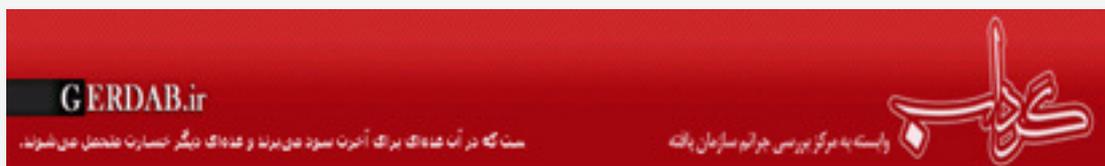
Three years ago, Obama accused Tehran of concealment and deceit. Today, the Irani-

ans no longer bother to conceal the true function of the Fordo facility - or even that 3,000 advanced centrifuges will be working there when the plant reaches full capacity. Iran's rulers feel they can be afford to be barefaced about their activities because they are certain that neither the US nor Israel will take military action against the Fordo plant. They do not find the condemnation of world powers or the nuclear watchdog too burdensome to live with.

## IRGC Website On The Day After Iran's First Nuclear Test

Source: [http://www.memri.org/report/en/0/0/0/0/0/5355.htm#\\_edn1](http://www.memri.org/report/en/0/0/0/0/0/5355.htm#_edn1)

An article posted April 24, 2011 on Gerdab, the website of the Iranian Revolutionary Guards Corps (IRGC), envisions the day after Iran's first nuclear test. The article states that Iran's first controlled nuclear explosion will not disrupt the daily lives of Iranians, but will only boost their national pride. However, it says, in the Arab world, in the West and in Israel, it will sow a sense of fear mingled with respect for Iran's achievement. The article makes satirical comments on Iran's charged relations with the Arabs and with the West.



The following are excerpts from the article [1]:

*"The day after Iran's first nuclear test will be an ordinary day for us Iranians. But many of us will have a new gleam in our eyes.*

*"It's a fine day. The hour is 7:00 AM. The sun is not yet fully up, but everything is already clear. Many countries in the northern hemisphere are starting their day. It's the first dawn after Iran's nuclear test. It's an ordinary day.*

*"Yesterday, an underground nuclear explosion took place, probably [somewhere] in the deserts of central Iran, where the Americans and some of the [other] Western countries once wanted to bury their nuclear waste. The blast was not so powerful as to cause much damage to the region, but not so weak as to cause the Iranian nuclear scientists any problem in their experiment.*

*"It's an ordinary day, and just like on any [other] day when there is news from Iran – which is 90% of year – we see reports on the foreign news websites, and they read as follows:*

*"Reuters: 'Iran Detonates Its Nuclear Bomb.'*

*"CNN: 'Iran Detonates Nuclear Bomb.'*

*"Al-Jazeera: 'Iran Has Tested Its Second Nuclear Bomb.'*

*"Al-'Arabia: 'A Shi'ite Nuclear Bomb Has Gone Off.'*

*"Yahoo News: "Nuclear Explosion in Iran."*

*"The Jerusalem Post: 'The Mullahs Have Obtained Nuclear Weapons.'*

*"The Washington Post: 'Nuclear Explosion in Iran; Shock and Anxiety in Tel Aviv.'*

*"The local [Iranian press] will also shower this achievement by the Hidden Imam and the Leader [Khamenei] with words of praise, as follows:*



*"Kayhan: 'Iran Has Tested Its First Nuclear Bomb.'*

*"Jomhuri-ye Eslami: 'Iran Carries Out Successful Nuclear Test.'*

*"Iran [a popular pro-Ahmadinejad daily]: 'On President's Orders, Iran Tests All-Iranian Nuclear Bomb.'*

*"Ettelaat: 'Iran Detonates Long-Awaited Nuclear Bomb'...*

*"It will be a news storm, but it will not disrupt normal [daily] life in Iran. Employees will come to work and punch the clock on time, or [at most] a little late. Bakers will not bake unsubsidized bread. Broadband Internet will function as usual, and even this storm will not make it any cheaper, nor will it cause [Iranian] TV to rethink its policy on the airing of foreign programs.*

*"The day after Iran's first nuclear test will be an ordinary day for us Iranians, but many of us will have a new gleam in our eyes – a gleam of national pride and might.*

*"[Koran 8:60:] 'And prepare against them what force you can and horses tied at the frontier, to frighten thereby the enemy of Allah and your enemy'"*

### Endnote:

[1] Gerdab (Iran), April 24, 2011.

## South Asia nuclear weapons race heats up

Source:<http://www.theaustralian.com.au/news/world/south-asia-nuclear-weapons-race-heats-up/story-e6frg6so-1226071220752>

THE nuclear arms race between India and Pakistan has accelerated sharply in the past year, with both countries increasing their weapons stockpile, a new report warns.

The Stockholm International Peace Research Institute estimates both countries have increased their nuclear arsenals by up to a third, and that the tense neighbours were "expanding their capacity to produce fissile material for military purposes", the report issued by the institute yesterday reveals.

SIPRI director Daniel Nord said south Asia was the only region of the world "where you still have a nuclear weapons arms race".

He identified Pakistan losing control of part of its nuclear arsenal to a terrorist group as a particular concern.

The institute estimates India's nuclear warheads armoury has increased from between 60 to 80 last year up to 110 now, while Pakistan may have lifted its stockpile from between 70-90 warheads to as many 110.

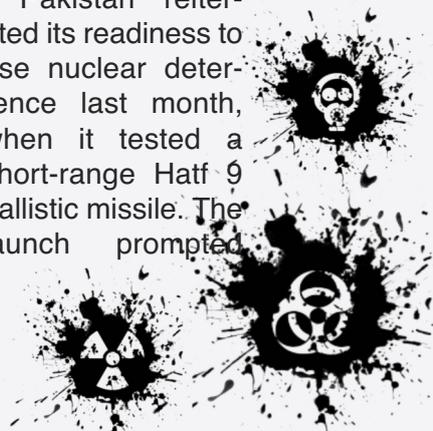
While both countries keep their nuclear inventories secret, the institute said its numbers were based on calculations of their stocks of weapons-grade plutonium, as well as the number of operational nuclear-capable delivery systems.

"India and Pakistan continue to develop new ballistic and cruise missile systems capable of delivering nuclear weapons," it says in its 2011 year book, released yesterday.

"Currently, neither country is believed to keep its nuclear weapons mounted on missiles and ready for launch. However, recurring crises and the growing familiarity of the military in both countries with nuclear weapons is likely to generate pressures for deployment of

nuclear weapons with a launch-on-warning posture - with the attendant grave risk of accidental nuclear war."

Pakistan reiterated its readiness to use nuclear deterrence last month, when it tested a short-range Hatf 9 ballistic missile. The launch prompted



the Federation of American Scientists Nuclear Information Project to warn that the nuclear-capable missile appeared designed to attack an invading force of Indian soldiers.

The south Asian neighbours, who have fought three wars since Pakistan was hived off from the subcontinent in 1947, both stunned the world with nuclear tests in 1998.

Ten years later, the US lifted a three-decade moratorium on nuclear trade with India, agreeing to provide assistance to India's civilian nuclear energy program and

transferring nuclear technology to states such as Libya and North Korea, and fears for the stability of the country's nuclear arsenal.

Recent militant attacks on supposedly highly secured military facilities, including a 17-hour siege last month of a Karachi naval air base, have heightened concerns that the insurgents could gain access to Pakistan's nuclear weapons.

Pakistani Interior Minister Rehman Malik insisted this week the country's nuclear arsenal was "200 per cent safe" against an attack.

"The assets are well-protected and tightly monitored," he said. "The (International Atomic Energy Agency) agrees with us." The SIPRI report found that the world's nuclear-armed nations - the US, Russia, China, Britain, France, Israel, India and Pakistan - possessed more than 20,500 warheads, and that all eight countries were committed to improving or



expand bilateral co-operation in energy and satellite technology.

Since then, Islamabad has pressured the US for a similar deal, but Washington holds serious concerns over Pakistan's record in

maintaining their nuclear weapons programs.

**"More than 5000 nuclear weapons are deployed and ready for use, including nearly 2000 that are kept in a high state of alert," it warned.**

## Nukes For Africa?

Source: <http://www.care2.com/causes/environment/blog/nukes-for-africa/>

The world is at a crucial energy policy cross-road. Do we continue to use nuclear power to produce electricity or even increase our nuclear generation capacity -- or do we abandon the technology altogether?

Although the issue was brought into sharp focus by the recent earthquake- and tsunami-induced nuclear disaster in Japan, arguments between supporters and opponents of atomic energy were coming to a head regardless. In the aftermath of the accident at the Fukushima Daiichi nuclear power plant, national responses have been varied.

Some countries like the UK, France and the USA have vowed to continue to follow a nuclear development path, albeit stepping up

safety measures, while others have decided to scale back on their dependence on nukes. The Swiss have recently announced a gradually phase-out and Germany is planning to close all of its 17 nuclear reactors by 2022.

### ... and what about Africa?

The nuclear power situation in Africa doesn't generally attract much attention. Currently the only commercial atomic power plant on the continent is situated near Cape Town in South Africa. Built by the French in the 1980s it was the pride of the Apartheid government. While illegal and exiled, the African National Congress appeared to be a staunch opponent of nuclear energy, but since coming to power, after the dawn of democracy, the party has





Situated near Cape Town, Koeberg is the only nuclear power station on the African continent

executed an about-turn and now considers nukes as part of a mix of energy options.

Earlier this year, the South African government approved a 20-year electricity master plan that commits the country to increased reliance on atomic energy. Six new nuclear reactors with a combined capacity of 9600 megawatts (MW) are to be built at three coastal sites. In May, energy minister Dipuo Peters announced that negotiations with nuclear suppliers had to start by early 2012 to allow the first 1600 MW plant to come online by 2023.

But South Africa's nuclear ambitions appear to be more than just domestic. Several government officials have spoken of plans to foster a home-grown nuclear industry that would involve not only the mining of uranium, but also its beneficiation, enrichment and export. Peters recently talked of Africa being "rich in uranium" and "slowly becoming nuclear energised". Senegal, Nigeria, Uganda,

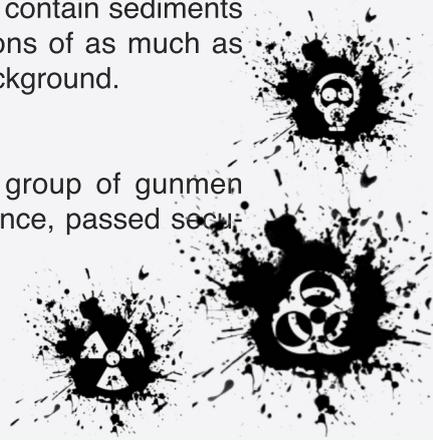
Kenya, Algeria, Tunisia, Morocco, Niger, Ghana and Egypt have all expressed their intention of building nuclear power plants.

### Radioactive legacy

In South Africa uranium is a ubiquitous by-product of the gold mining industry and an estimated 600 000 tons of it have found their way onto some of the 270-odd tailings dams that dot the gold-rich regions of the Gauteng and Free State provinces. From there it's carried into the surrounding countryside – tens of tons of it every year – as windblown particles or leached into streams and ground water. One stream, the radioactive Wonderfontein-spruit, has been shown to contain sediments with uranium concentrations of as much as 1000 times the natural background.

### Security lapse

On 7 November 2007 a group of gunmen breached a 10,000 volt fence, passed secu-





rity cameras and walked a distance of about a kilometre before entering the emergency response room of the Pelindaba nuclear research facility near Pretoria – the site of Apartheid South Africa’s nuclear weapons

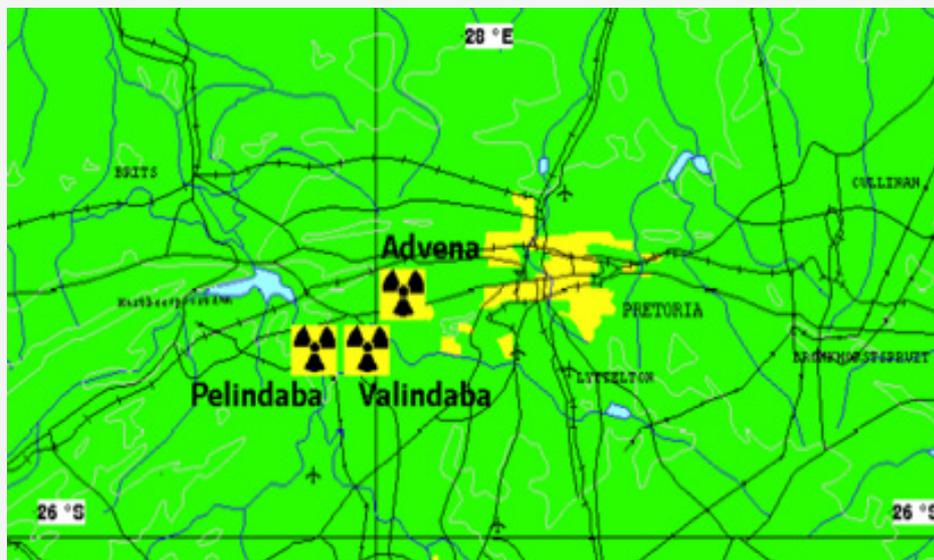
glary seems implausible and at the very least the episode exposes the difficulties involved in keeping sensitive nuclear installations and materials secure.

### The wrong option

South African anti-nuclear campaigners point to these and other issues when they oppose the expansion of the country’s nuclear programme and the growth of the nuclear industry elsewhere on the continent. They argue that nuclear energy is expensive, dangerous and continues to be vulnerable to the threat of nuclear weapons proliferation, while the perennial problem of how and where to safely store high-level nuclear waste remains unanswered.

But perhaps the most convincing argument

against nuclear energy in South Africa and Africa as a whole is simply that it’s not needed. The continent has spectacular, yet almost unexploited, resources of much more sustainable and environmentally-friendly renewable energy, especially solar, wind and ocean power. This is surely where the focus of Africa’s energy fu-



programme. On the same night, a second gang breached a perimeter security fence, disabling an alarm system. None of the intruders have been arrested and many questions remain. The official claim that the incident was simply a case of attempted bur-

ture should lie, not with some dubiously dangerous and dirty technological relic of the 20th Century.

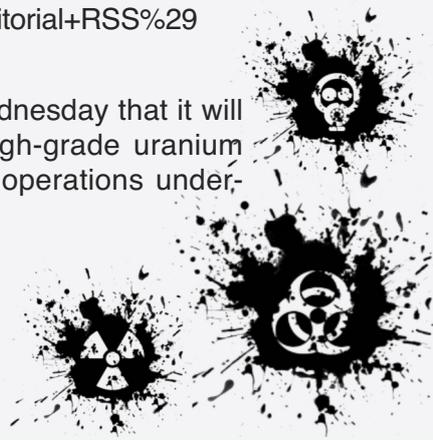
[Andreas is a book shop manager and freelance writer in Cape Town, South Africa.](#)

## Iran's Nukes: Apocalypse Soon?

Source:[http://www.investors.com/NewsAndAnalysis/Article.aspx?id=574746&utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+EditorialRss+%28Editorial+RSS%29](http://www.investors.com/NewsAndAnalysis/Article.aspx?id=574746&utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+EditorialRss+%28Editorial+RSS%29)

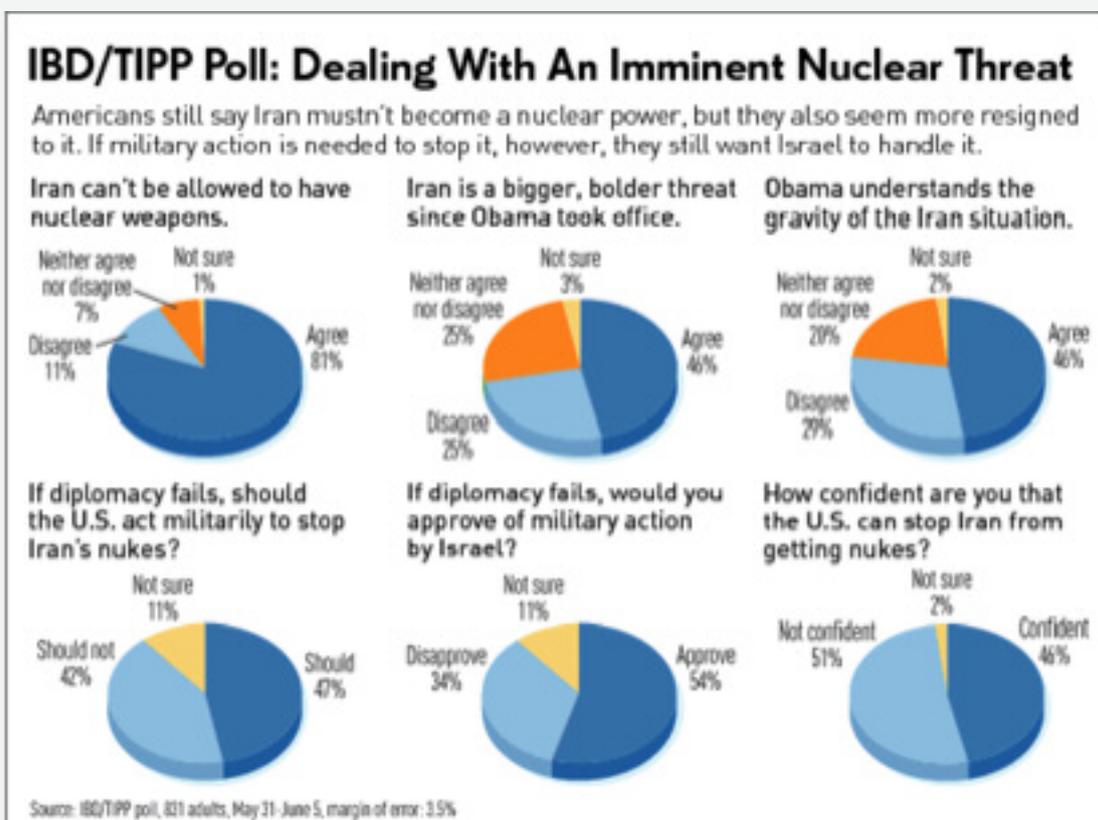
Terror: Iran is speeding up its nuclear materials production and moving it underground amid reports that the regime is eight weeks from atomic bomb capability. Doomsday, anyone?

Tehran announced Wednesday that it will triple its production of high-grade uranium and relocate enrichment operations underground.



This comes just days after the Rand Corp. determined that the Islamofascist government

nuclear "hot potato," expecting someone else — usually Israel — to stop Tehran. But Israel



is less than two months from being able to build a nuclear explosive, and that only an occupation force — not just airstrikes — can stop it.

On Friday, Iranian President Mahmoud Ahmadinejad repeated his demand that Israel go away. "As long as the Zionist regime exists, if only on a small piece of land in Palestine, the region will not see tranquility," he declared at the grave of the Ayatollah Khomeini.

Year after year, the American people have made it clear they view a nuclear Iran as an unacceptable risk, and the most recent results of the IBD/TIPP Poll, shown below, found that those sentiments remain strong.

Yet the poll also shows a loss of confidence in our government's ability to prevent this terrorist-sponsoring state from joining the nuclear family.

In the years during which Iran has moved toward weapons of mass destruction, the free nations have irresponsibly played a kind of

itself is not immune to the trigger shyness: Last month, ex-Mossad chief Meir Dagan said an Israeli attack on Iran would be a "stupid thing."

The fact remains that in eight weeks, thanks to all the dithering, a fanatical Islamist state may have nukes, along with missiles to carry them — and terrorist friends willing to smuggle them across borders.

How does the free world respond to this latest series of seemingly never-ending disturbing events in Iran? "This announcement is a provocation," deduced the French foreign ministry regarding the tripling of uranium production. No kidding, Inspector Clouseau.

And the leader of the free world? At a press conference with German Chancellor Angela Merkel, President Obama said Tuesday:

"We agreed that if the International Atomic Energy Agency this week determines again that Iran is continuing to ignore its international obligations, then we will have no choice



but to consider additional steps, including potentially additional sanctions, to intensify the pressure on the Iranian regime."

He'll think about more of the sanctions that for years have served to apply no pressure at all on the fanatics ruling Iran.

This is a Hitler moment for the world — except that Hitler couldn't incinerate a city. And as in the 1930s, the free world is in a dangerous daze.

## N. Korea likely can miniaturize nuclear device

Source: <http://ca.news.yahoo.com/n-korea-likely-miniaturize-nuclear-device-seoul-094309294.html>

North Korea has probably succeeded in miniaturizing a nuclear device, South Korea's defense minister said on Monday, an advance that would in theory allow the hermit state to place an atomic warhead on a rocket. Regional powers have for years tried -- with a mix of aid offers and punitive sanctions -- in vain to stop Pyongyang pressing ahead with a nuclear weapons program it argues is a necessary defense against a hostile United States and South Korea with which it still has no peace treaty to formally end the 1950-53 Korean War.

Kim Kwan-jin offered no evidence to back his assertion but said the North had had enough time for such a development. "It has been quite a while, enough time for them to have succeeded in miniaturization," he told a parliamentary defense committee.

If true, it would mark a key advance in the North's drive to develop a functioning nuclear weapon though that threat appears to be potential rather than actual. It detonated nuclear devices in 2006 and 2009 but neither was considered by weapons experts to have been successful,

though they say the impoverished state has enough fissile material for up to 10 nuclear weapons. It is believed to be preparing a third test at a test site on its east coast. The North has also been working, so far with little success, to build a missile capable of delivering a nuclear weapon across the Pacific, as far as the United States.

Talks with major powers on its nuclear weapons program have been on ice for more than two years though the North has signalled it wants them to resume. However, both the United States and key allies South Korea and Japan have been reluctant to head back into negotiations which in the past have rewarded the North for little if anything in return.



# CRISTANINI CBRN DECONTAMINATION SYSTEMS



A5009

CONFORM TO THE QUALITY SYSTEM STANDARD AQAP 2110  
and ISO 9001:2008



DEPLOYABLE CBRN  
ANALYTICAL  
LABORATORY (STANAG 4632)



DDMAS LARGE SCALE  
DECONTAMINATION SYSTEM  
HIGHLY DEPLOYABLE



DEPLOYABLE BIO LABORATORY  
CLASS III BIO SECURITY LEVEL



DDMAS LARGE SCALE  
DECONTAMINATION SYSTEM  
DUAL OPERATORS



RVCBRN TRAILER FOR CBRN  
DECONTAMINATION AND  
DETOXIFICATION



MOBILE SYSTEM FOR  
AIRCRAFT DECONTAMINATION



TSDM-TACTICAL STEAM  
DECON MODULE

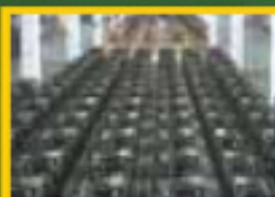
**ONLY ONE PERSON  
ONLY ONE MACHINE  
ONLY ONE PRODUCT**



SANJET C 1126 HR CBRN DUAL  
OPERATOR DECONTAMINATION  
AND DETOXIFICATION GROUP



SX34 CBRN DECONTAMINATION  
OF SENSITIVE EQUIPMENT  
AND SURFACES



CBRN PRODUCTION LINE



**CRISTANINI**

37010 RIVOLI - VERONA - ITALY

Tel. +39-045-6269400 - Fax +39-045-6269411

cristanini@cristanini.it - [www.cristanini.com](http://www.cristanini.com)

Osama bin Laden – the End

# CBRNE-TERRORISM Newsletter

Volume 38 - 2011



Japan's triple catastrophe  
CBRN security at London 2012  
UK DGBRNC  
Agroterrorism  
Forest Fires can be a **Tactic of Terrorism**  
Climate change and global **security**  
CBRN training for **Photographers and TV Crews**  
Innovative chem-bio sensor  
E. Coli 0104 – **Terror in Germany**  
Iran has secretly stocked **enriched uranium**  
for 4 nuclear bombs  
15 US nuclear reactors are **located in**  
an active seismic zone

Explo News



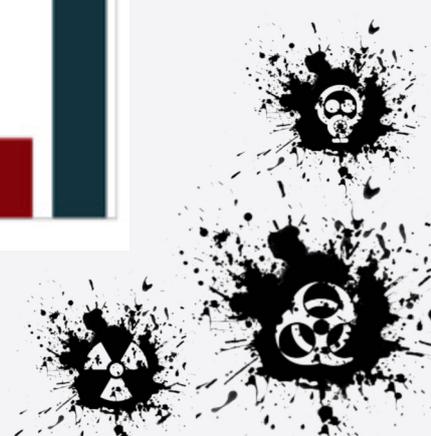
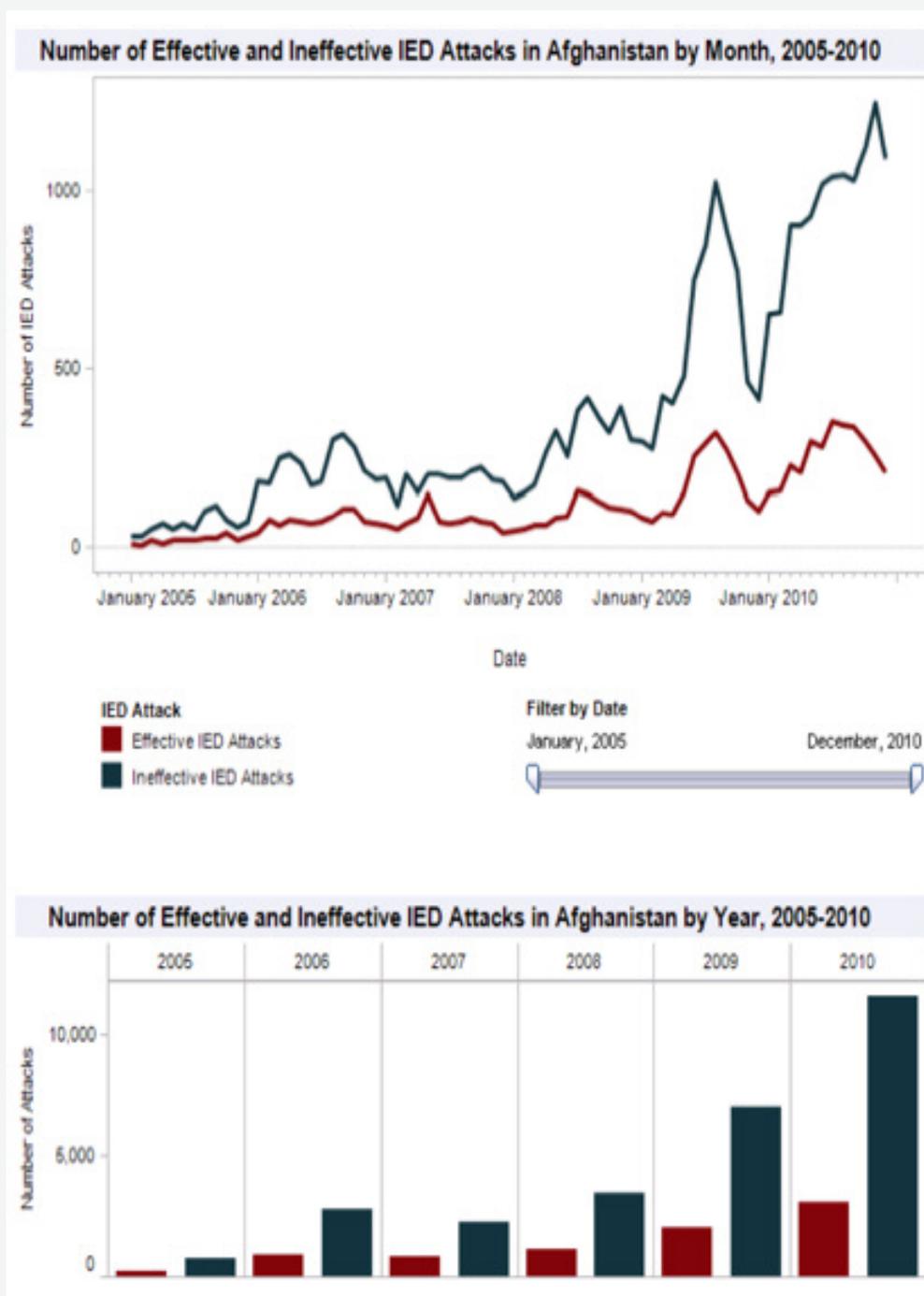
Carry **spice** could be used  
to detect explosives  
How IEDs work  
What if there is a US-China  
cyber-**war in 2020?**  
Latin **America: Terrorism issues**

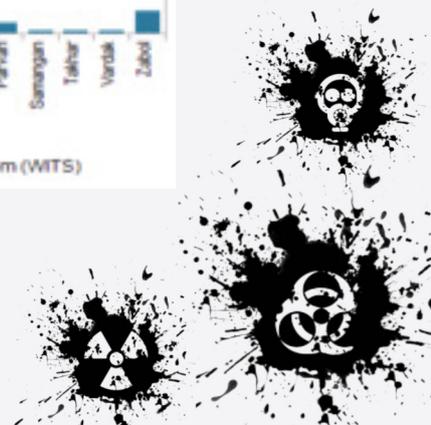
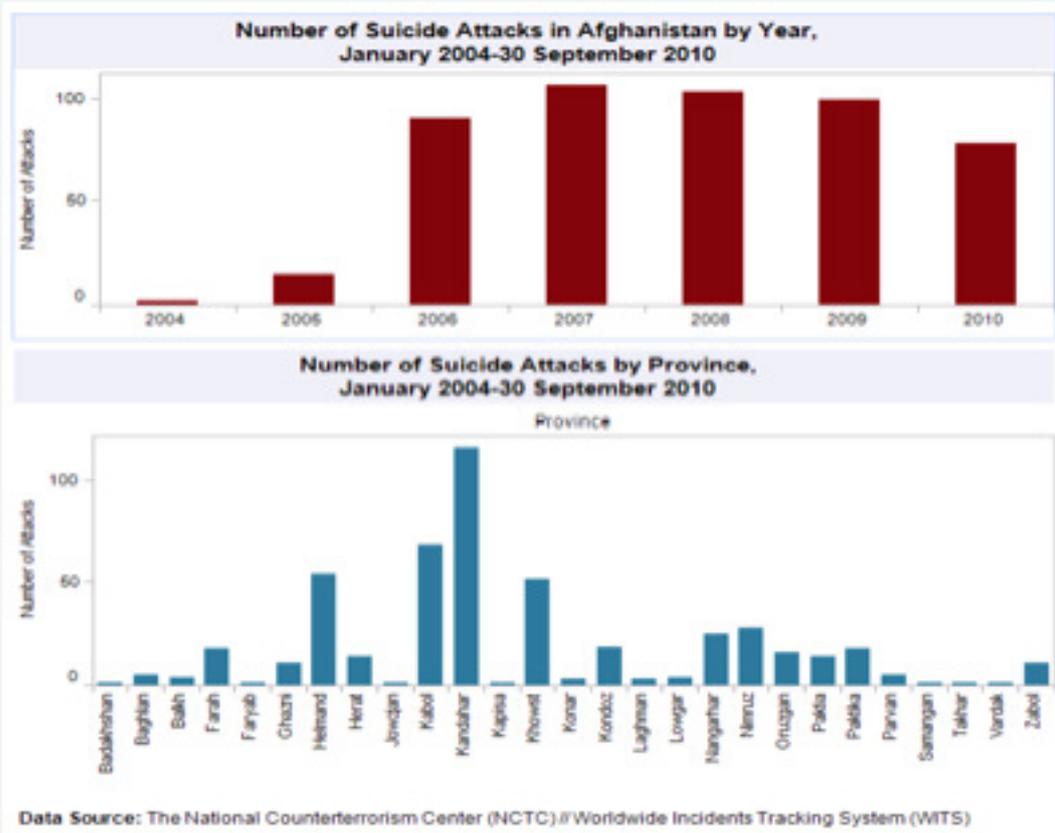
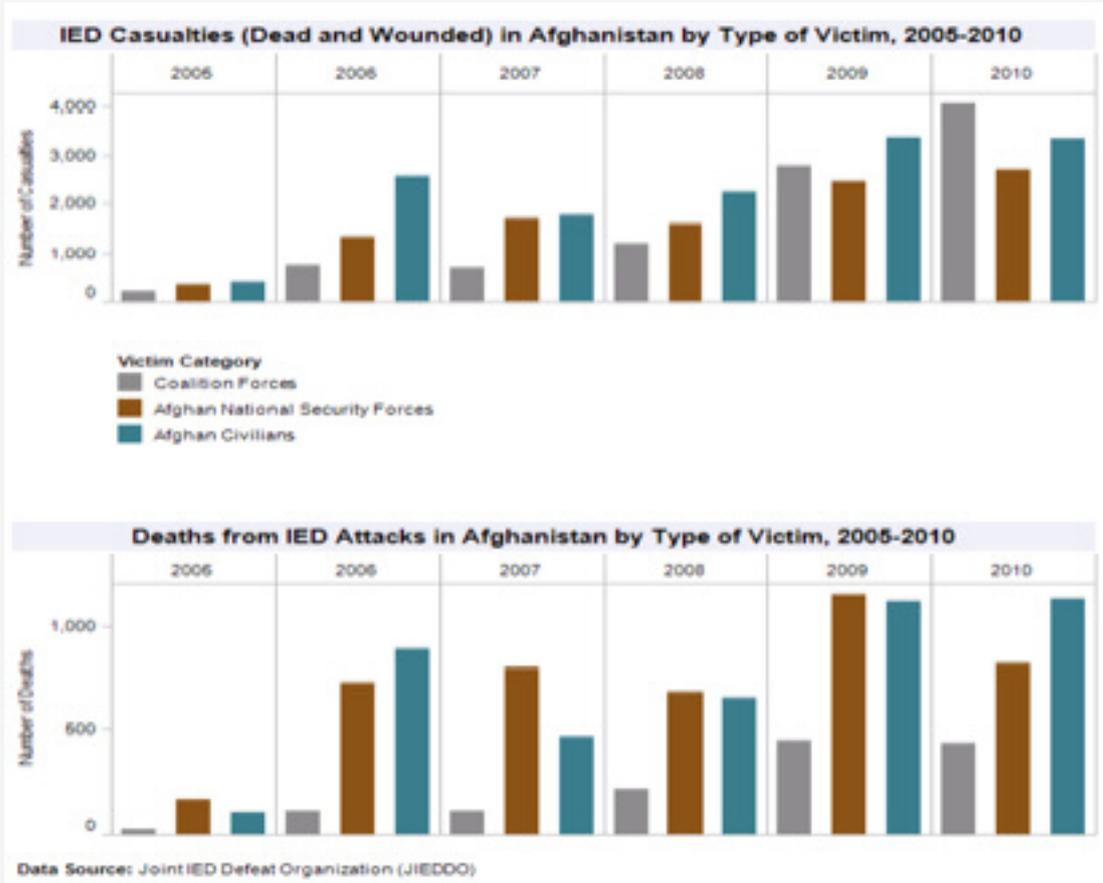
[www.cbrne-terrorism-newsletter.com](http://www.cbrne-terrorism-newsletter.com)

# Explo News

## IEDs & Suicide Bombing in Afghanistan – 2005 to Dec 2010

Source: <http://www.conflictmonitors.org/countries/afghanistan/facts-and-figures/violent-incidents/ied-attacks>





### Wine testing technology to scan for liquids at airports

Source: <http://homelandsecuritynewswire.com/wine-testing-technology-scan-liquids-airports>

Scanner technology originally developed at the University of California, Davis, to test wine in the bottle is being re-engineered to tell shampoo from explosives at airports. This means travellers could be able to carry soda cans or full-size tubes of toothpaste through security and onto jetliners in the not-too-distant future. DHS has taken a keen interest in the project, bankrolling it and putting it on a fast track, scientists say. "They'd like to get it, the sooner, the better," said Professor Matt Augustine, lead researcher on the project at UC Davis. "For them, success is they hand you your water bottle back instantaneously and say, 'Get out of here.'"

The Seattle Times reports about Augustine demonstrating a working model: a blocky device of battleship gray attached to a computer. A cylinder inserted between magnets holds water bottles, juice boxes and cans of Red Bull. As he explained it, the events that led to the development of the airport scanner started about 10 years ago when a graduate student got interested in wine. Researchers then took an old magnetic resonance imaging device — a smaller version of a hospital MRI — and modified it to examine contents of wine bottles to see if the wine had turned to vinegar. In 2006 terrorists carried liquid explosives on board trans-Atlantic airliners.

The news led Augustine's colleague Joe Broz, a scientist with White House experience, to ask if the wine-scanning technique

could be used to determine whether airline passengers were carrying flammable liquids. Augustine and Broz bought cases of wine at Trader Joe's, emptied the bottles and filled them with various substances, from shampoo to gasoline. They then put them in the wine scanner, bombarding the bottles with radio waves to determine the chemicals in each bottle. "It worked," Augustine said.

The scientists wrote a proposal to DHS, which responded "very enthusiastically" and eventually funded the project with an initial grant of \$800,000. What the anti-terrorist experts wanted, however, was harder than looking through wine bottles. "They wanted to be able to look inside a Coke can," Augustine said.

The problem: High-frequency radio waves produce a more precise picture of molecular structure, but only low-frequency radio waves can penetrate metal. The challenge for Augustine and Broz has been to find a middle ground in which a device can "see" inside aluminium can but also tell with a high degree of accuracy what's inside.

Scientists at the Los Alamos National Laboratory in New Mexico and elsewhere also are trying to solve the problem in what has become a friendly competition, Broz said. Researchers have been working to have a prototype ready by year's end, he said. They hope to mass produce the scanners and put them into airports within a few years.

### Bomb-sniffing Army dog dies of broken heart after Taliban kill his master

Source: <http://www.dailymail.co.uk/news/article-1362275/Bomb-sniffing-Army-dog-dies-broken-heart-Taliban-kill-master.html#ixzz1FoUr1BaC>

#### L/Cpl Tasker was the 358th serviceman killed in the conflict while his dog Theo was the sixth British military hound to die in action in Iraq and Afghanistan

In life, they were united in their tireless work saving countless British soldiers in Afghanistan. In death, they were united in tragedy. Shortly after Lance Corporal Liam

Tasker was killed in a firefight with the Taliban, his devoted Army search dog Theo suffered a seizure and passed away too.





Tragic loss: Liam Tasker was on patrol with his dog Theo at the time of the attack in Nahr-e-Saraj, Afghanistan

The pair had uncovered 14 home-made bombs and hoards of weapons in just five months – a record for a dog and his handler in the conflict.

L/Cpl Tasker, 26, this week became the 358th British serviceman to die in the ten-year conflict.

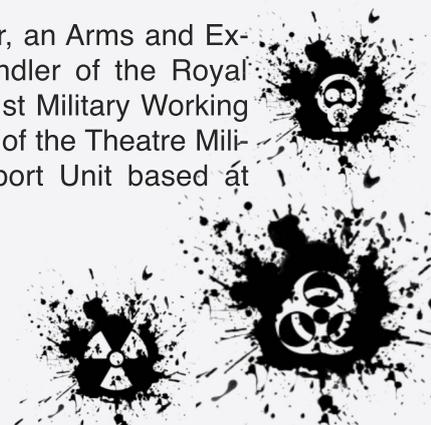
Only last month he described his joy at the close bond he had developed with Theo, a 22-month-old springer spaniel cross.

‘I love my job and working together with

Theo. He has a great character and never tires,’ he said in an interview on the Ministry of Defence website.

‘He can’t wait to get out and do his job and will stop at nothing.’

Theo and L/Cpl Tasker, an Arms and Explosives Search dog handler of the Royal Army Veterinary Corps, 1st Military Working Dog Regiment, were part of the Theatre Military Working Dogs Support Unit based at Camp Bastion.



On Tuesday they took part in a mission in the Nahr-e Saraj district in Helmand, a hotbed of the insurgency.

Theo's task was to be the 'front man', sniffing out any hidden IEDs, weapons and bomb-making equipment. But a firefight broke out with the Taliban and L/Cpl Tasker was shot

dead. After his body was flown back to Camp Bastion, his beloved Theo is thought to have died of a broken heart. The soldier, from Kirkcaldy, Fife, leaves behind mother Jane Duffy, father Ian Tasker, brother Ian, sisters Laura and Nicola and girlfriend Leah Walters.



Dog handler: Liam was a member of the Royal Army Veterinary Corps.

Theo also died after the attack. In a statement, his family said: 'There are three words that best describe Liam: larger than life. He lit up every room he walked into with his cheeky smile. 'He died a hero doing a job he was immensely passionate about. We are so proud of him and everything he's achieved. Words can't describe how sorely he will be missed.'

Miss Walters added: 'LT never met anyone without touching their lives in some way. I am the proudest girlfriend there could ever be and there will be an LT-sized hole in my life forever. Sleep well, my darling, my soulmate, my best friend.'

Lieutenant Colonel David Thorpe, commanding officer 1st Military Working Dog Regiment, also paid tribute to L/Cpl Tasker, saying: 'He genuinely loved the dogs he worked with and was always able to get the best out of them.'

'Epitomising the hard-working, determined and ambitious nature of our very best soldiers,

he wanted to go to Afghanistan. He wanted to ply his trade in the harshest of environments, to be outside of his comfort zone and he wanted to be successful. He was.

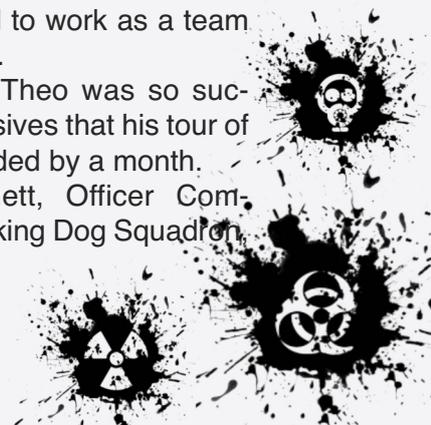
'The work he did in his five months in Afghanistan saved countless lives, of that I have no doubt.'

L/Cpl Tasker joined the Army in 2001 as a vehicle mechanic in the Royal Electrical and Mechanical Engineers. But his passion for animals led to a transfer to the Royal Army Veterinary Corps in 2007.

He only learned about the dog unit when a friend showed him videos of them in action. He spent 15 weeks on a handlers' course with Theo, where they learned to work as a team and developed their bond.

Once in Afghanistan, Theo was so successful at detecting explosives that his tour of duty was due to be extended by a month.

Major Caroline Emmett, Officer Commanding 104 Military Working Dog Squadron,



said: 'L/Cpl Tasker was one of the best people I have ever known. Kind, with a good heart, he always put others before himself. He and his dog Theo were made for each other.'

Defence Secretary Liam Fox said he was 'deeply saddened' by the news.

'It is clear that L/Cpl Tasker was a dedicated and highly capable soldier whose skills in handling dogs were second to none,' he said.

'He and his dog Theo had saved many lives and we will be eternally grateful for this.'

## Vallon showcases innovative mine detector

Source: <http://homelandsecuritynewswire.com/vallon-showcases-innovative-mine-detector>

German company Vallon unveiled its latest mine detection system; one of its advantages is that it can detect mines made with no metal parts (the device can detect metal-free particles at a depth of 40 cm, and metal objects at greater depths); the UN is already deploying the device in mine-clearance operations in thirty countries



Technician operating a Minehound VMR2 // Source: [cobham.com](http://cobham.com)

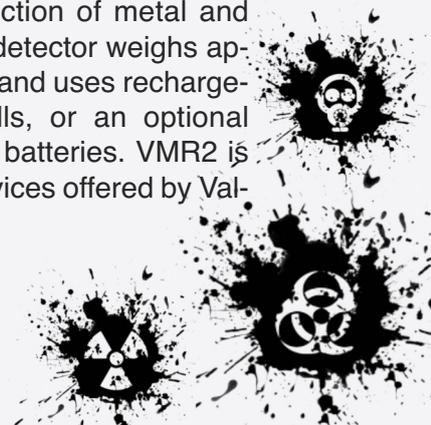
Founded in 1965, Germany-based Vallon, a global operator and producer of mine sensors and ferrous locators (UXO bomb locators), will be showcasing its MINEHOUND VMR2 dual mine detector to partners in Azerbaijan.



The device was exhibited at the IDEX 2011, International Defense Exhibition, held in Abu Dhabi. The 5-day event had over 60,000 visitors, 1,060 exhibitors from 52 countries, 49 participants in the First-Time Exhibitor Zone, and attendance from over 100 official delegations. Four naval ships from the UAE, United Kingdom, and France took part while military bands from New Zealand, Australia, and the UAE performed in the daily opening ceremonies rerun.

According to Michael Wieder, sales manager at Vallon, the device has multiple features. The company provided the device to various global mine-clearing companies using mine sensors, including its Azerbaijani partner. The U.S. Navy has also shown an interest in procuring the device.

The device's electromagnetic induction device (EMI) and ground penetrating radar (GPR) allow for the detection of metal and metal-free objects. Each detector weighs approximately eight pounds and uses rechargeable lithium polymer cells, or an optional power supply of 4 D-size batteries. VMR2 is one of many detection devices offered by Vallon.



According to Alex Donnison, sales manager, Cobham Technical Services, the device was offered along with the Cobham ground penetrating radar. It has dual transmitters and can detect metal-free particles at a depth of 40 cm, and metal objects at greater depths. The

Azerbaijan National Agency for Mine Actions, an assembly of fourteen UN department, agencies, and programs that provides demining and mine-risk education to thirty countries and three territories, is currently deploying the sensors in mine-clearance operations.

## Book-bomb attacks in Indonesia

Source: <http://www.bbc.co.uk/news/world-asia-pacific-12770697>

A mail bomb has been sent (March 17) to a well-known Indonesian singer - the fourth such



incident in less than a week. Like the previous packages, it contained an explosive device hidden in a hollowed-out book. The bomb was defused without anyone getting injured. There is, however, mounting concern over the number of these attacks, which have all targeted people known to espouse religious tolerance. Indonesia has the largest population of Muslims in the world, but it is a secular country and there is an increasing divide between hardline Islamic groups and those with more moderate views.

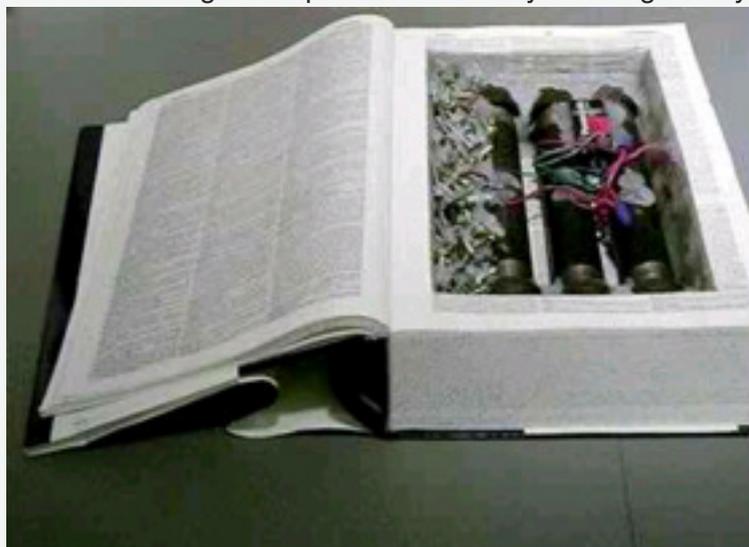
### 'Old forces'

The first book bomb was addressed to Uilil Abshar Abdalla, a prominent politician known for his liberal opinions. Later that day, a former counter-terrorism chief received a similar package. So did the chairman of a youth organisation seen as a rival to Islamic fundamentalist groups.

The latest recipient, Ahmad Dhani, is a musician who has been openly critical of hardline Muslims in the lyrics of his songs.

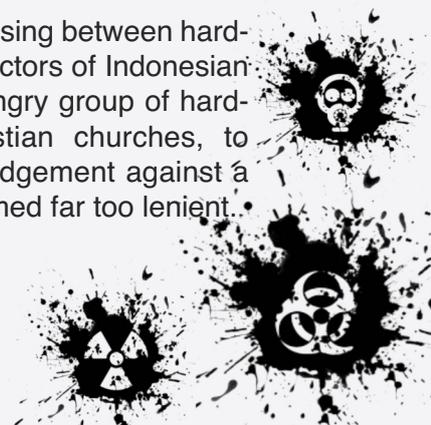
No one has admitted sending the packages, but the head of Indonesia's anti-terrorism agency, Ansyad Mbai, said the mail bombs were probably sent by one of several militant groups that have been active in the country in recent years. "Old forces are behind this," he told the BBC.

The country has been notably targeted by the South East Asian group Jemaah Islamiyah, which has links to Al-Qaeda. It has been accused of a string of attacks, the largest being the Bali bombings of 2002, which killed more than 200 people, many of whom were foreign tourists. In a televised address, President Susilo Bambang Yudhoyono urged the police and military to not "give any-



one the opportunity to rip apart the security situation".

But tensions are increasing between hardline Muslims and other sectors of Indonesian society. Last month an angry group of hardliners burned two Christian churches, to protest against a court judgement against a Christian which they deemed far too lenient.



Another mob attacked members of a small Islamic sect called the Ahmadiyah, killing three people.

Hardliners are putting pressure on the government to ban the Ahmadiyah completely, saying that because the Ahmadis' faith deviates from the tenets of Islam, they are violating the country's laws against blasphemy.

The national government has so far not granted this request, but several local authorities have issued decrees limiting the Ahmadis' activities and encouraging them to convert to mainstream Islam. Indonesia is known for its religious tolerance and pluralism, but increasingly this reputation is under threat.



When you need answers in 60 seconds or less

### HAZMATID™ 360

Chemical Identifier

smiths detection

Smiths Detection leads the global military and emergency response marketplace with specialized chemical, biological, radiological, nuclear, and explosive (CBRNE) detection and protection solutions. Our advanced, accurate, and trusted solutions enable armed forces and responders to mitigate incidents with confidence as they seek to reduce risks and minimize potential losses associated with growing CBRNE threats.

## French unveil IED jammer system

Source: [http://www.upi.com/Business\\_News/Security-Industry/2011/03/18/French-unveil-IED-jammer-system/UPI-39551300448855/print/#ixzz1HLP4H4JC](http://www.upi.com/Business_News/Security-Industry/2011/03/18/French-unveil-IED-jammer-system/UPI-39551300448855/print/#ixzz1HLP4H4JC)

French company Bull, and its Amesys subsidiary, have launched an "intelligent" signal jammer to thwart remote-controlled IEDs. The system is called Shadow and Bull says it refines a new generation of jammers able to deal with all forms of systems relating to remote-controlled explosives, including improvised explosive devices. "Bull's innovation strategy is focused on computing power and security, two areas where our added value and technical expertise are very strong," said Philippe Vannier, Bull's chairman and chief executive officer. "Following the launch of DLP (designed to protect enterprises' confidential data), Shadow once again clearly illustrates our know-how and our capacity for growth in these sectors." Shadow is designed for armed forces but is equally well-suited to meet homeland security requirements. It not only protects passengers, vehicles and critical areas against remote-controlled explosive devices but

can be used to identify enemy communications and monitor radio signals.

The jamming technology at the heart of Shadow optimizes the jammer's capacity for action. Effectively, Shadow adapts its power



as a function of the interference waveforms, as well as of the threats it identifies, from its ability to detect and classify them. The system only transmits in the presence of a threat and automatically reconfigures itself depending on its location. Compared with traditional systems, this adaptability considerably reduces operators' and vehicle passengers' exposure to radiation; which makes the system especially well suited to intensive use. Bull said

Shadow technology processes signals from all the systems used with remote-controlled explosive devices, while also making the most efficient use of the radio spectrum and associated RF power. Shadow can instantaneously detect more than 2,000 threats and is geared up to respond extremely effectively to GSM and DECT "bursts" from mobile and cordless telephones.

## Curry spice could be used to detect explosives

Source: <http://homelandsecuritynewswire.com/curry-spice-could-be-used-detect-explosives>

The main chemical in the curry spice turmeric [photo] could be the basis for cheap explosives detectors, say researchers. The curcumin molecule is already well-known in medicine for its anti-cancer and anti-oxidant properties. Now, research presented at the American Physiological Society meeting suggests it could replace more complex solutions to spot explosives like TNT.



As it gathers molecules of explosive material in air, changes in its light-emitting properties can be measured. This "fluorescence spectroscopy" is already employed in a wide array of sensing and analysis techniques.

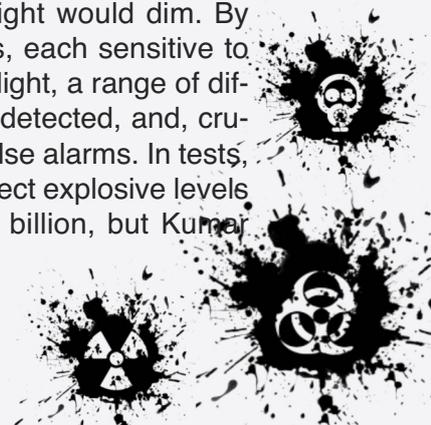
Illuminating some chemicals causes them to re-emit light of a different color, sometimes for extended periods, an effect exploited in, for example, glow-in-the-dark materials. The intensity of this re-emitted light can change if different molecules bind to the fluorescent ones, and that is how sensing techniques exploit the effect.

Abhishek Kumar of the University of Massachusetts, Lowell, and his colleagues have happened across a means of co-opting the curry ingredient's fluorescence properties for explosive detection. "If you have a gram of TNT... and you sample a billion air molecules from anywhere in the room, you'll find four or five molecules of TNT - that's the reason they're so hard to detect," he told the conference. "And, the US State Department estimates there are about 60 to 70 million land

mines throughout the world; we need a very portable, field-deployable sensing device which is cheap, very sensitive, and easy to handle." Kumar's team was investigating the

use of curcumin for biological applications, trying to make it easily dissolve in water, when they hit on the idea of making use of its optical properties. "People have mainly looked at its biological applications, treating cancer and Alzheimer's and so on, but nobody has looked at making optical devices out of them," he told BBC News. The team's first trick was to use a

chemical reaction to attach "side groups" to the curcumin that preferentially bind to explosive molecules. Curcumin's helpful optical properties, however, only worked when it was dissolved in a liquid; when evaporated to a solid, it clumped together and the fluorescence stopped. They then hit on the idea of using a polymer called polydimethylsiloxane, which is thick and viscous at room temperature, spinning the mixture on glass plates to make extremely thin films. The idea would be to use an inexpensive light source (the team uses LEDs) shone on to the thin films, detecting the light they then put off. In the presence of explosives, the light would dim. By using an array of sensors, each sensitive to slightly different colors of light, a range of different materials could be detected, and, crucially, reduce the risk of false alarms. In tests, the films can currently detect explosive levels down to eighty parts per billion, but Kumar



said that for high-sensitivity applications like mine detection, they needed to increase the sensitivity further, by adjusting the chemical groups attached to curcumin. The team,

which is funded in part by the U.S. government, is already in discussions with a company to develop the technique into a portable detector device.

## Spray-on explosives detector

Source: <http://homelandsecuritynewswire.com/spray-explosives-detector>

A chemist at Oklahoma State University has developed a spray-on material that detects explosives made from peroxides and renders them harmless. The material is a type of ink that contains nano-particles of a compound of

wear the sensors as badges on their uniforms or use them as paper-based test strips. Airports, subways and other facilities could also use the sensors as part of stationary monitoring devices. The same color-changing material can also neutralize explosives. In laboratory studies, the scientists showed that they could add the material to TATP or HMTD explosives and render them ineffective. As such, bomb-squad technicians could spray the ink onto bombs or suspicious packages until the color change indicated that the devices were no longer a threat. Explosives could also be dumped into vats containing the ink to neutralize them. Since the ink also changes from a metallic conductor to a non-conducting material, it could be used in an electronic sensor where it could detect TATP vapors at levels as low as a fifty parts per million within thirty seconds. The material can also improve safety at laboratories that use explosive chemicals. Recently, Apblett developed pellets containing the ink that can be added to laboratory solvents to prevent the build-up of levels of dangerous peroxides, which can cause accidental explosions. The color-changing feature helps the users of the solvents to know that they are safe. Apblett and his colleagues have now founded a company called XploSafe to develop and market the material. They hope to see the explosive-detecting ink used in airports in as little as a year.



molybdenum. The ink changes color, from dark blue to pale yellow or clear, in the presence of explosives. The Engineer reports that according to associate professor of chemistry Allen Apblett from Oklahoma State University, this color-change feature allows the material to work as a sensor for quickly detecting the presence of vapors produced by explosives. Apblett said that soldiers or fire-fighters could

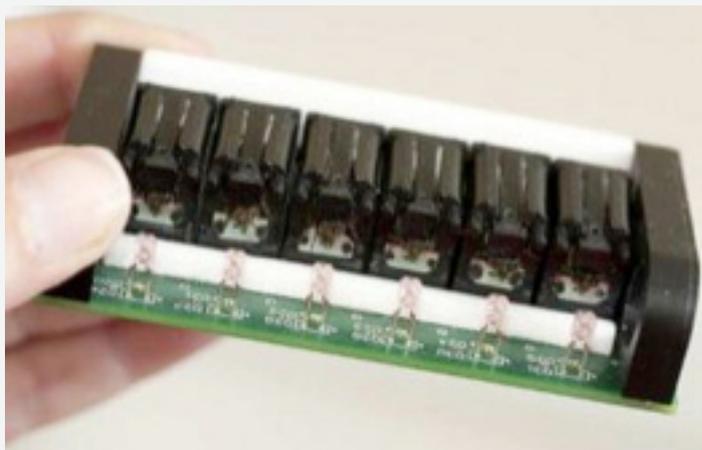
## New device uses sniffer bees to detect explosives

Source: <http://www.theengineer.co.uk/sectors/military-and-defence/in-depth/uk-engineers-develop-bee-based-security-device/1008007.article>

The unassuming honeybees have a hidden talent -- an even keener sense of smell than anyone first expected -- which could make them one of the U.K.'s most ruthless and

worst-feared weapons against terrorism; researchers developed a portable handheld sensor that holds thirty-six trained bees gently restrained in six cassettes inside the de-





Cassette containing six trained sniffer bees // Source: word-press.com

vice; each is taught to recognize a particular odor and associate that smell with a food reward; the researchers have already trained their honeybees to detect a wide variety of explosive compounds and mixtures, including Semtex, C4, PE4, TNT, DMNB, gunpowder, and hydrogen peroxide

Honeybees appear to be simple creatures, buzzing from flower to flower and occasionally startling an innocent passerby. These unassuming insects also have a hidden talent that could make them one of the U.K.'s most ruthless and worst-feared weapons against terrorism. Two years ago, the government funded a project to harness the olfactory ability of bees in detecting trace vapor to catch terrorists and drug smugglers. The Engineer reports that a group of researchers in Hertfordshire quietly went to work on a sensor that could do just that. In the course of their research, they discovered that honeybees have an even keener sense of smell than anyone first expected. The device they finally came up with astonished security experts, both for its radical approach and for its levels of accuracy. "Our sensor integrated live honeybees as the main component," said lead researcher Mathilde Briens. "For a long time people really wouldn't believe that this was serious work and, even now, many people are amazed by what we're doing - we usually get a few smiles and often some raised eye-

brows." Under the government contract, Inscentinel, a spin-out of Rothamsted Research, developed a portable handheld sensor known as the VASOR136 (volatile analysis by specific olfactory recognition). The system can hold thirty-six trained bees gently restrained in six cassettes inside the device. Each is taught to recognize a particular odor and associate that smell with a food reward. During operation, a fan draws in air from whatever is being examined and passes it over the bees. If the sample contains the substance the bees are

trained to detect, it elicits a proboscis extension reflex response (PER) and the bee sticks out its tongue in expectation of food. When detected, an integrated display provides an immediate read-out of the bee's reaction. If enough bees respond, an alarm is triggered to warn of dangerous substances in the air. "We see the bee more like a tool in the machine rather than an insect," said Briens. "Combining biology and engineering together



like this makes the system far more reliable. For instance, we know there are a lot of issues with sniffer dogs because of their relationship with the dog handler. If you use some engineering instead, it makes the human factor disappear.” The Engineer quotes the researchers to say that honeybees are ideal detectors because they are inexpensive, widely available, and can be trained within minutes. They also have extremely low limits of detection, with trace vapors being picked up in parts per trillion levels, comparable to the accuracy of a sniffer dog. The researchers have already trained their honeybees to detect a wide variety of explosive compounds

and mixtures, including Semtex, C4, PE4, TNT, DMNB, and gunpowder. They have also been successful in training their bees to detect hydrogen peroxide, which is one of the compounds known to be used in home-made explosives. In a test for the U.K. Office for Security and Counter Terrorism, the VASOR136 compared favorably with existing detection technology. The design of the trial was adapted from an aviation check-point protocol used in tests for trace detection equipment. Control measurements were conducted using gas chromatography-mass spectrometry (GC-MS) analysis of the explosive samples to establish the concentration detected.

### Honeybees could also be trained to diagnose disease

Source: <http://www.theengineer.co.uk/sectors/military-and-defence/in-depth/uk-engineers-develop-bee-based-security-device/1008007.article#ixzz1lIW1rMy>

The olfactory ability of honeybees isn't limited to security applications. In a collaborative study with the London School of Hygiene and Tropical Medicine, researchers at Inscentinel proved that bees could also be used to diagnose disease. During a trial, honeybees were trained to recognise volatile compounds from Mycobacterium bovis BCG - a micobacteria very close to Tuberculosis but safer to handle. The trained bees were found to differentiate vapours from Mycobacterium bovis BCG from those of the environmental mycobacteria. According to the research group, implications of the research could be wide-reaching, particularly for developing countries that have very little access to expensive medical equipment.

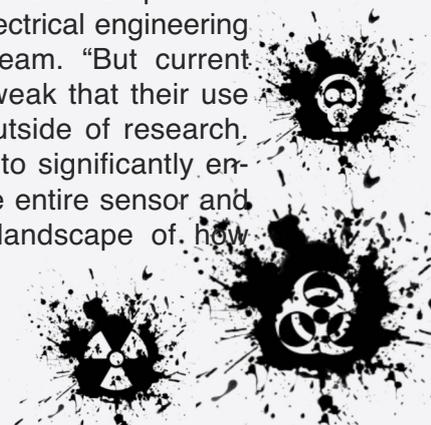
### Ultra-sensitive sensor technology detects explosives, cancer

Source: <http://homelandsecuritynewswire.com/ultra-sensitive-sensor-technology-detects-explosives-cancer>

Princeton researchers have invented an extremely sensitive sensor that opens up new ways to detect a wide range of substances, from tell-tale signs of cancer to hidden explosives. The sensor, which is the most sensitive of its kind to date, relies on a completely new architecture and fabrication technique developed by the Princeton researchers. The device boosts faint signals generated by the scattering of laser light from a material placed on it, allowing the identification of various substances based on the color of light they reflect. The sample could be as small as a single molecule.

The technology is a major advance in a decades-long search to identify materials

using Raman scattering, a phenomena discovered in the 1920s by an Indian physicist, Chandrasekhara Raman, where light reflecting off an object carries a signature of its molecular composition and structure. “Raman scattering has enormous potential in biological and chemical sensing, and could have many applications in industry, medicine, the military and other fields,” said Stephen Y. Chou, the professor of electrical engineering who led the research team. “But current Raman sensors are so weak that their use has been very limited outside of research. We’ve developed a way to significantly enhance the signal over the entire sensor and that could change the landscape of how



Raman scattering can be used.”

Chou and his collaborators, electrical engineering graduate students, Wen-Di Li and Fei Ding, and post-doctoral fellow, Jonathan Hu, published a paper on their innovation in February in the journal *Optics Express*. The research was funded by the Defense Advance Research Projects Agency (DARPA).

In Raman scattering, a beam of pure one-color light is focused on a target, but the reflected light from the object contains two extra colors of light. The frequency of these extra colors are unique to the molecular make-up of the substance, providing a potentially powerful method to determine the identity of the substance, analogous to the way a finger print or DNA signature helps identify a person.

Since Raman first discovered the phenomena — a breakthrough that earned him Nobel Prize — engineers have dreamed of using it in everyday devices to identify the molecular composition and structures of substances, but for many materials the strength of the extra colors of reflected light was too weak to be seen even with the most sophisticated laboratory equipment. Researchers discovered in the 1970s that the Raman signals were much stronger if the substance to be identified is placed on a rough metal surface or tiny particles of gold or silver. The technique, known as surface enhanced Raman scattering (SERS), showed great promise, but even after four decades of research has proven difficult to put to practical use. The strong signals appeared only at a few random points on the sensor surface, making it difficult to predict where to measure the signal and resulting in a weak overall signal for such a sensor. Abandoning the previous methods for designing and manufacturing the sensors, Chou and his colleagues developed a completely new SERS architecture: a chip studded with uniform rows of tiny pillars made of metals and insulators.

One secret of the Chou team’s design is that their pillar arrays are fundamentally different from those explored by other researchers. Their structure has two key

components: a cavity formed by metal on the top and at the base of each pillar; and metal particles of about 20 nanometers in diameter, known as plasmonic nanodots, on the pillar wall, with small gaps of about 2 nanometers between the metal components. The small particles and gaps significantly boost the Raman signal. The cavities serve as antennae, trapping light from the laser so it passes the plasmonic nanodots multiple times to generate the Raman signal rather than only once. The cavities also enhance the outgoing Raman signal. The Chou’s team named their new sensor “disk-coupled dots-on-pillar antenna-array” or D2PA, for short. So far, the chip is a billion times more sensitive than was possible without SERS boosting of Raman signals and the sensor is uniformly sensitive, making it more reliable for use in sensing devices. Such sensitivity is several orders of magnitude higher than the previously reported. Already, researchers at the U.S. Naval Research Laboratory are experimenting with a less sensitive chip to explore whether the military could use the technology pioneered at Princeton for detecting chemicals, biological agents and explosives.

In addition to being far more sensitive than its predecessors, the Princeton chip can be manufactured inexpensively at large sizes and in large quantities. This is due to the easy-to-build nature of the sensor and a new combination of two powerful nanofabrication technologies: nanoimprint, a method that allows tiny structures to be produced in cookie-cutter fashion; and self-assembly, a technique where tiny particles form on their own. Chou’s team has produced these sensors on 4-inch wafers (the basis of electronic chips) and can scale the fabrication to much larger wafer size. “This is a very powerful method to identify molecules,” Chou said. “The combination of a sensor that enhances signals far beyond what was previously possible, that’s uniform in its sensitivity and that’s easy to mass produce could change the landscape of sensor technology and what’s possible with sensing.”



# MINEHOUND VMR2

## DUAL SENSOR MINE DETECTOR

- Comprising a metal detector and a ground penetrating radar (GPR)
- Metalfree mines and IED can also be detected
- Ultra high sensitivity
- Easy operation
- Alarm:
  - visual bargraph
  - audio signal
- Simultaneous operation of metal detector and GPR possible
- Lightweight



## MINEHOUND VMR2 DUAL SENSOR MINE DETECTOR

MINEHOUND VMR2 is an advanced technology, combining leading-edge ground penetrating radar (GPR) and high-performance metal detector (MD). The unit has been designed specifically for use in the most challenging military and humanitarian demining operations.

The GPR responds to even the smallest flush buried mine (diam. > 5 cm), but not to small metal fragments. This means that metallic clutter, which commonly cause false alarms such as bullet casings, small arms rounds and shrapnel, is rejected by the system. The GPR also detects mines with minimum or zero metal contents which are normally difficult to locate using metal detection techniques alone. MINEHOUND VMR2 uses a MD produced by Vallon GmbH (VMH3) and a custom designed 1 GHz GPR designed by Cobham Technical Services (the new trading name of ERA Technology Ltd). The GPR is a time-domain radar transmitting short pulses. A dedicated state of the art DSP processor is used to provide all control and signal processing functions.

MINEHOUND VMR2 is a new technology which requires special training of the operator team before working in a 'live' minefield situation.



Position for standing

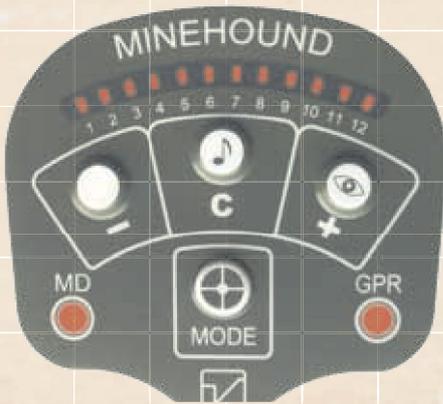
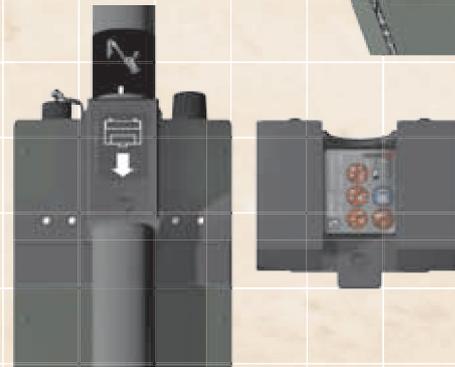
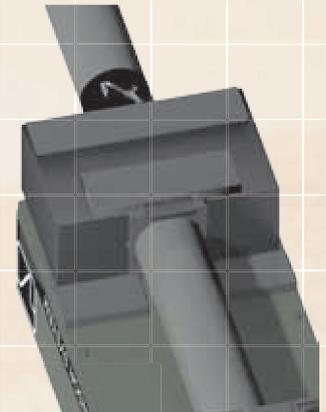
Position for kneeling

MINEHOUND VMR2 is simple to use, providing the operator with clear audio signals to alert the presence of a potential mine threat. When a threat is located, the MD audio provides accurate position information and mass of metal indication. The GPR audio provides additional position and depth information, and gauges the radar cross-section of the target. Both detectors can be used separately or together.

MINEHOUND VMR2 is switched on by a rotary control, which also has switch positions for the metal detector programmes N (normal soil) and M (conductive soil) as well as setups for MD and GPR. A headset and an internal loudspeaker, which can be muted, are provided.



The highly effective Li-polymer battery is fixed to the bottom of the electronics unit.



A push button in the handle allows the operator to select the operation mode MD or GPR or both.

LED's indicate which function is operative.

The MD function is the prime search capability and offers a highly sensitive technology to locate even minimum metal mines (such as PMA3 and M14). The operator can set the MD sensitivity. The setting is observed by means of a LED bar graph display.

The GPR is self-calibrating in use by the operator. The GPR mode will give an audio confidence tick every 7.5 sec. to indicate correct operation.

If a serious error condition occurs in the GPR, the LED bar display flashes.

The battery charger can be connected to the mains or to a car battery.



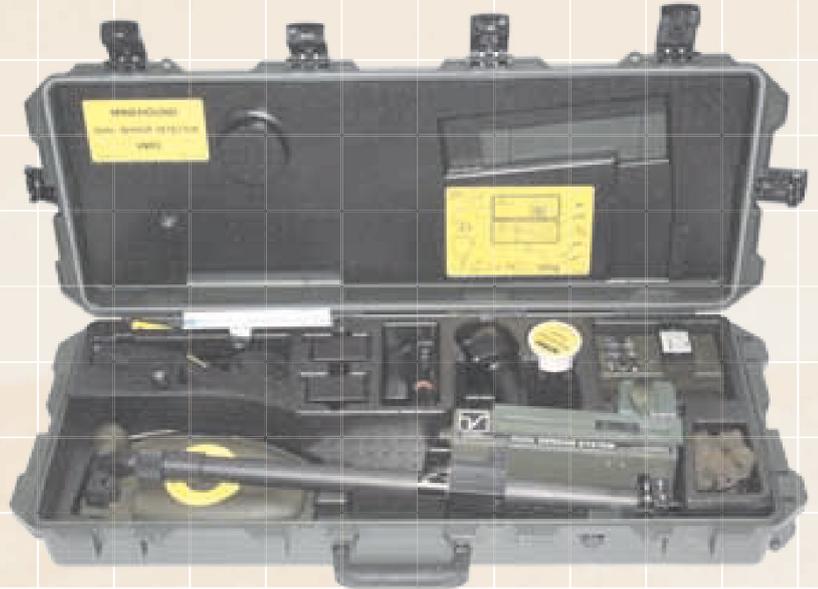
Two batteries can be charged at the same time (front and rear side of the charger). LED-indicators show the actual charging condition of the batteries.



## Transportation

The MINEHOUND VMR2 comes ready-to-use in a transportation case, with all accessories:

- Four test pieces (mine surrogate)
- Two rechargeable Li-polymer batteries
- Charger
- Belt for arm-rest
- Mains cable
- Headset
- Field manual
- Operation manual



## Technical Data

Measuring principle:	Dual sensor MD + GPR
Weight (ready for operation):	approx. 4 kg
Telescopic bar length: (handgrip - search head)	24-102 cm
Dimensions of search head:	21 x 33.5 cm
Dimensions of electronics: (without battery compartment)	29 x 13.5 x 7 cm
Power Supply:	Lithium Polymer cells, rechargeable, optional: battery compartment for 4 x 1.5 V, D-cells
Power consumption:	< 5 W
Operation Temperature:	-31 °C to +63 °C
Storage Temperature:	-51 °C to +71 °C
Soil programmes (MD):	normal soil mineral soil
Waterproof:	0.2 m
Alarm signal:	audio and visual (volume adjustable)
Transport case:	102 x 43 x 17 cm
Transport weight:	approx. 14 kg

### Control functions

Select switch:	OFF N = normal soil M = mineral soil SETUP
Handle controls:	MD only GPR only MD and GPR Sensitivity: +/- MD +/- GPR GPR range
Sweep speed:	< 1.5 m/sec
Input/Output:	Headset Firmware upgrade

### Metal detector performance

Power line suppression:	Yes
Demining environmental conditions:	All world

### GPR Performance

The GPR detects AP and AT mines in almost all soil conditions, but not in heavy clay (like used for pottery) or salt water.

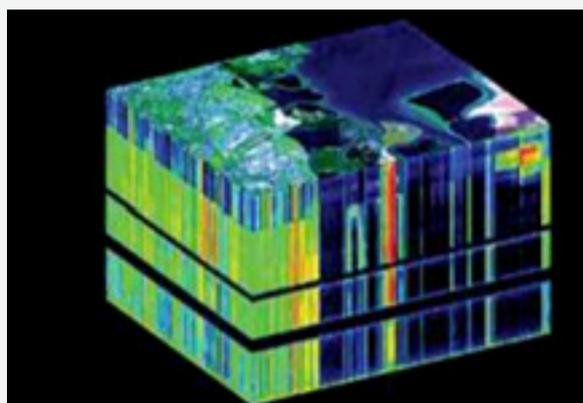
**NATO-STOCK-Number 6665-12-371-0357**

All technical data are subject to change without prior notice.  
Issue 07/2010

### Army seeks long distance explosive detection scanners for people

Source: <http://homelandsecuritynewswire.com/army-seeks-long-distance-explosive-detection-scanners-people>

The U.S. Army is seeking to rapidly deploy long distance chemical detection devices that are capable of detecting explosives hidden on people; ideally, the devices will be able to sense the presence of explosives and chemicals on people standing, walking, or running from as far away as 100 yards; the Army wants to be able to field these capabilities within a year, so it is only considering mature technologies that are ready to be implemented; the request for proposals will close on 6 May



The U.S. Army is seeking to rapidly deploy long distance chemical detection devices that are capable of detecting explosives hidden on people. Ideally, the devices will be able to sense the presence of explosives on people standing, walking, or running from as far away as 100 yards.

The Army wants to be able to field these capabilities within a year, so it is only considering mature technologies that are ready to be implemented.

On Wednesday, the Army Night Vision and Electronic Sensors Directorate at Fort Belvoir, Virginia issued a sources-sought notice specifically for hyper-spectral imaging technology designed for long distance explosives and chemical detection. Devices should be capable of being mobile as the Army intends to mount them on extendable masts on vehicles. In addition, the sensors must be able to detect explosives with an accuracy of two centimeters on people approaching at twelve miles per hour at a range of 330 feet during daytime, night time, and poor weather situations. The detection system should process data at a mobile workstation in a vehicle. That data would then be streamed via RF data link to a central processing and analysis station.

The Army has chosen to pursue hyper-spectral sensor solutions over multi-spectral sensors due to their increased sensitivity and ability to detect more subtle variations. Multi-spectral imagery relies on sensors that measure the amount of reflected energy within a specific set of bands within the electromagnetic spectrum, like visible greens and reds. In contrast, hyper-spectral sensors have the ability to measure reflected energy along a broader number of electromagnetic bands and more sensitive to fluctuations in reflected energy.

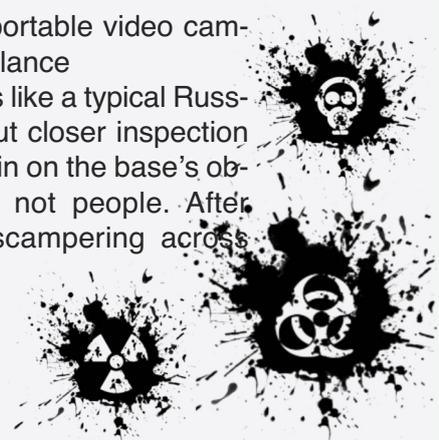
### Russia to employ hi-tech bomb-sniffing dog

Source: <http://homelandsecuritynewswire.com/russia-employ-hi-tech-bomb-sniffing-dog>

In response to a series of terrorist attacks, Russia's president Dmitry Medvedev has called on Russian military and security services to train more dogs as bomb sniffers; the dogs are trained not only in identifying explosives, but are also trained in carrying walkie-talkies so they can be given instructions from

a distance, and to carry portable video cameras for in-building surveillance

From a distance it looks like a typical Russian army training base, but closer inspection reveals that those who train on the base's obstacle course are dogs, not people. After clambering over walls, scampering across



narrow beams, and squeezing through tunnels, the dogs are given a lesson in how to sniff out explosives which have been hidden in boxes, in cars, and in people's pockets.

The BBC reports that this particular group of dogs is training to be sniffer dogs – but what makes them different from other sniffer canines is that, as well as having an acute



sense of smell, these dogs also have a nose for technology.

The BBC reporter watched as a 7-year-old Labrador called Heinz had a walkie-talkie strapped to his collar. Communicating with the dog by radio only, a soldier directs Heinz down the road toward a suspicious looking suitcase.

For the purposes of this training exercise, the bag has been packed with explosives. A few minutes later Heinz reaches the bag and lies down beside it, to indicate he has found a bomb. Responding to another radioed command, Heinz then returns to base and the offending suitcase is destroyed. Next the soldier attaches a video camera to Heinz. It sticks up from his collar like a pooch periscope. This time the dog is sent into a building across the field where he uncovers another bomb. The dog's handler monitors the whole scene in safety on a video screen strapped to his wrist.

The Russian army believes that remote-controlled sniffer dogs will help keep the army and the public safe. "Dogs can detect the kind of deadly material and explosives that a human being, a robot or a mine detector often struggle to find," Colonel Vasily Kondratyuk, head of the 66th Military Engineers Corp, where the army's sniffer dog centre is based, told the BBC. "With their help we can prevent terrorist attacks. Dogs really are man's best friend. Because they save lives." The push toward training more dogs in explosives detection is the initiative of Russian president Dmitry Medvedev, who, following several terrorist attacks in Moscow, called for more sniffer dogs in Russia.

## Spate of dry-ice bombs explosions in Long Beach, Calif.

Source: <http://homelandsecuritynewswire.com/spate-dry-ice-bombs-explosions-long-beach-calif>

A Long Beach officer is injured after an investigation of a dry-ice bomb left in an alley; a dry ice bomb is a homemade device that uses water, a bottle and dry ice, or frozen carbon dioxide; it can take anywhere from thirty seconds to an hour for a dry-ice bomb to rupture, depending on temperatures outside of the bottle.

The unidentified officer was one of several who responded to reports of what neighbors thought were fireworks shortly after noon, said Long Beach police Sgt. Rico Fernandez. The Contra Costa Times reports that as they searched an alley near Bort Street and Butler Avenue, a dry-ice bomb hidden inside a plastic bag exploded, sending the officer reeling.

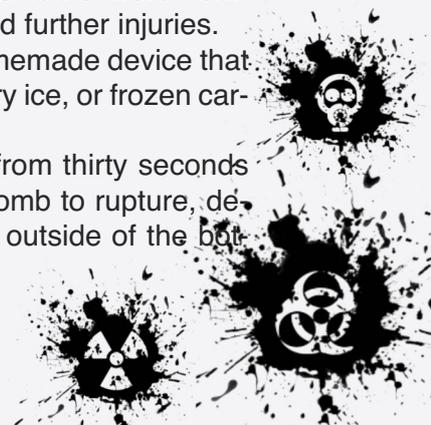
Fernandez described the officer's injuries as minor.

A third, similar explosive was discovered at the other end of the alley, which runs behind homes and apartments in a neighborhood just south of the 91 Freeway, Fernandez said.

The Los Angeles County Sheriff's Department Bomb Squad was called in to detonate the third device, and residents were temporarily evacuated to avoid further injuries.

A dry ice bomb is a homemade device that uses water, a bottle and dry ice, or frozen carbon dioxide.

It can take anywhere from thirty seconds to an hour for a dry-ice bomb to rupture, depending on temperatures outside of the bot-



tle, according to California criminal codes banning the devices.

Officers are investigating who planted the bombs and why. No arrests had been announced as of Sunday afternoon.

The Times notes that the latest incident is not the first time Long Beach or surrounding

cities have seen multiple dry-ice bomb explosions in a single day. In the 1990s, a spate of similar explosions in Norwalk forced authorities to issue public warnings about the dangers linked to these explosives, which often cause serious injuries to both unsuspecting victims and bomb-makers.



## The projected al Qaeda use of body cavity suicide bombs against high value targets

GroupInter Occasional Paper

Source:<http://www.groupintel.com/2011/04/11/the-projected-al-qaeda-use-of-body-cavity-suicide-bombs-against-high-value-targets/#>

### Preface

By **John P. Sullivan**

Senior Research Fellow,  
Center for Advanced Studies  
on Terrorism, Los Angeles, CA  
March 2011



### Body Cavity Bombs and the Barbarization of Terrorism

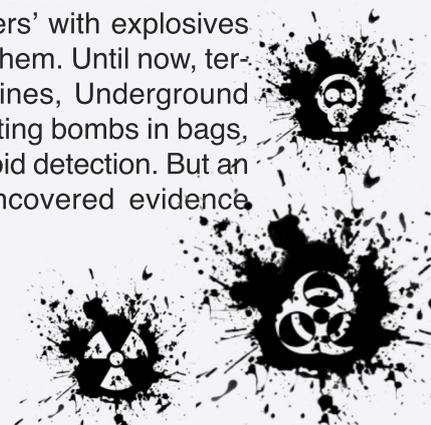
Terrorism, or the instrumental use of violence by sub-national or non-state actors for political ends, has been a constant for many years. Terrorism persists because it offers tactical and sometimes strategic advantage to those who employ it. As part of this dynamic, countermeasures by security services, new technologies, and political considerations bring tactical innovations (new weapons), shifts in targeting (new targets), and new tactics, techniques or procedures (TTPs) such as car bombs, suicide bombings, and swarming attacks.

As terrorist campaigns (or insurgent campaigns employing the use of terrorist tactics) persist in duration, the level of violence often increases. That is, the longer the campaign, frequently the more brutal or barbaric the nature of attacks. Suicide bombings (human- and vehicle-borne) have been a staple of terrorist strategy and tactics. They provide a

means of low-cost precision targeting that amplifies casualties and ensures the attacks are noticed. As countermeasures (weapons screening, searches, etc.) become more effective, a shift in targeting and/or TTPs is a likely terrorist adaptation.

Dr. Robert J. Bunker has been working for the last few years on assessing the potential use of body cavity bombs (BCB) or body cavity suicide bombs (BCSB) as a variation of suicide bombing tactics, techniques, and procedures (TTPs). Sadly or on the indications and warning (I&W) side fortunately, it seems by careful analysis of transactions and signatures, trends and potentials, and capabilities and intentions (i.e., the Transaction Analysis Cycle)<sup>2</sup> Dr. Bunker has forecast a terrorist innovation...

Awareness of this barbaric potential has been increasing among the security services. For example, the French intelligence service has warned of a new terrorism threat from suicide bombers carrying in-body explosives that can't be detected by standard airport screening. The method is suspected in a failed attempt to kill the Saudi anti-terrorism chief in August 2009. According to Der Spiegel, "French anti-terrorism experts have warned that suicide bombers carrying explosives inside their bodies pose a new threat to air traffic, French newspaper Le Figaro reported." Standard metal detectors at airports can't detect in-body explosives and full X-ray screening would be needed to spot them. Awareness of this security gap is increasing; for example, the Daily Mail (UK) reported: "Britain is facing a new Al Qaeda terror threat from suicide 'body bombers' with explosives surgically inserted inside them. Until now, terrorists have attacked airlines, Underground trains and buses by secreting bombs in bags, shoes or underwear to avoid detection. But an operation by MI5 has uncovered evidence



that Al Qaeda is planning a new stage in its terror campaign by inserting 'surgical bombs' inside people for the first time."



By 2010, the European Police Agency (Europol) had issued an assessment of BCBs. According to the Europol assessment: On 27 August 2009, at about 2330 hours (local time), in Jeddah (Saudi Arabia) a suicide bomber tried to assassinate the Assistant Interior Minister of Saudi Arabia, Prince Muhammad bin Nayef. Muhammad, who is also the son of the country's Interior Minister, was lightly injured in the attack. According to several media worldwide, the suicide bomber (Abdullah Al-Asiri) had hidden the improvised explosive device (IED) in his rectum and activated it once close to the Prince.

Europol assessed the possible use of a new modus operandi (M.O.) for suicide bombings despite the fact that it was not possible to officially confirm the hypothesis about the place of the IED's concealment and the means used for its activation. The research supporting the Europol report found that:

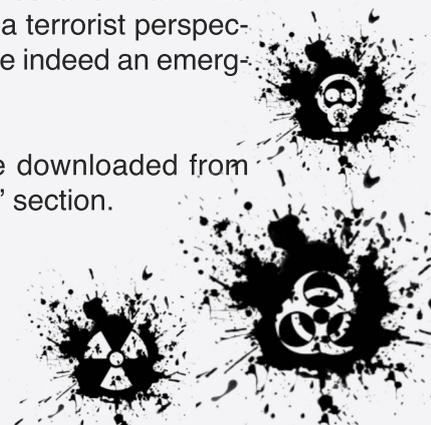
- 1) It would be possible to explode a device concealed in the rectum;
- 2) Activation by radiofrequency seems to be the M.O. for this terrorist attack; and
- 3) Concealing an IED in the rectum would limit the amount of explosive available.

Finally, Europol assessed that "Should

there be conclusive proof that the attack took place with an IED concealed inside the perpetrator's body, it would definitely have an impact in aviation safety and the current standard operational procedures in place should be reviewed. Passengers are screened through metal detectors, in some airports even through explosive detectors, but the sensitivity and power of these machines would need to be increased or reviewed, in order to overcome shielding of the device by the human body."

BCB potentials are not limited to human-borne improvised explosive devices (IEDs). As recent open source reports have highlighted, the use of canine-borne BCBs is also a stark potential. Al-Qaeda operatives in Iraq allegedly tried to unleash terror in the skies by deploying a pair of kamikaze canines on a US-bound plane according to French newspaper reports. The plot failed because the bombs were so badly stitched inside the dogs that they died, reported the Paris daily *Le Figaro*. Dr. Bunker's analysis in this GroupIntel Occasional Paper captures the patterns of threat evolution from potential to actualization. After looking at suicide bombings in general, he evaluates the indicators of BCB threat evolution (including an in-depth discussion of TTPs). After looking at precursor incidents, he assesses the Abdullah Al-Asiri incident in detail. He provides extensive endnotes, and an addendum with endnotes making this a comprehensive assessment. This is an important contribution to the literature in several regards. First, it relies exclusively on open source materials (illustrating the value of OSINT as an intelligence discipline). Next, it demonstrates the value of early warning efforts to anticipate and detect evolving and emerging threat vectors and novel or evolving TTPs. Finally, it sounds an alarm. As the barbarization of terrorism continues, we can expect new TTPs to be employed in order to overcome countermeasures and maximize operational success from a terrorist perspective. Body cavity bombs are indeed an emerging threat.

**NOTE:** Full paper can be downloaded from Newsletter's "CBRNE-CT" section.



### Al Qaeda used SEGA carts as explosives

Source: <http://www.eurogamer.net/articles/2011-04-25-al-qaeda-used-sega-carts-as-explosives>

Al Qaeda extremists plotted terrorist attacks in 2002 using explosives and detonators hidden in SEGA cartridges, according to a new Wikileaks report. Guantánamo Bay inmate

videogame cassette cartridges". "Detainee discussed remote-controlled firing devices (RCFDS) which were found during raids in Karachi in September 2002," read the record, spotted by Game Set Watch. "These RCFDS were built inside black Sega videogame cassette cartridges to protect the RCFDS and to make them appear innocuous."

Another Guantánamo inmate Hassan Mohammed Ali Bin Attash was apparently shown how to make remote detonators out of the game cartridges. "The detainee stated he traveled from Karachi, Pakistan to Quetta with three to five Sega cartridges made into remote detonators," reads his assessment. "The detainee stated he delivered the cartridges to two Afghan males."

There's no indication in the reports as to whether devices such as those mentioned were ever used in an Al Qaeda attack or what any possible targets may have been.



assessment documents dug up by the infamous whistle-blowing website and published by the New York Times explain how alleged 9/11 mastermind Khalid Shaikh Mohammed had stockpiled bombs hidden in "black SEGA

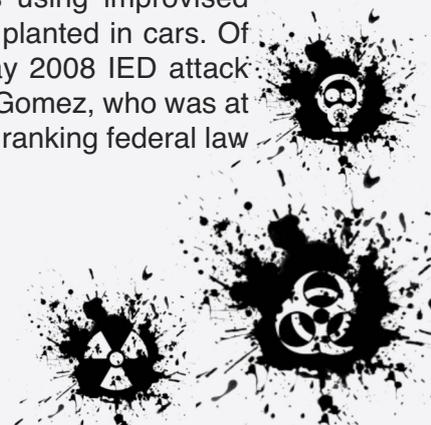
### Car-based IED attacks an emerging threat in Mexico

Source: <http://homelandsecuritynewswire.com/car-based-ied-attacks-emerging-threat-mexico>

Intelligence analysts worry that Mexican drug cartels will increasingly turn to deadly car bombs in the escalating drug wars; drug cartels have already assassinated several government officials using improvised explosive devices (IEDs) planted in cars; in Mexico IEDs are easy to construct due to easy access to powerful commercial explosives that are widely used in the country's mining and petroleum industry; due to strict gun laws, it is actually cheaper and easier to obtain explosives than guns; to defend against this emerging threat the U.S. consulate in Monterrey

erected concrete barriers. The cartels have already demonstrated their ability to successfully plan and carryout such attacks on multiple occasions.

The cartels began deploying such techniques in 2008 and have assassinated several government officials using improvised explosive devices (IEDs) planted in cars. Of particular note was a May 2008 IED attack which killed Edgar Millan Gomez, who was at the time Mexico's highest ranking federal law enforcement official.





Vehicle-borne IED detonated in Ciudad Victoria // Source: stratfor.com

In Mexico IEDs are easy to construct thanks to easy access to powerful commercial explosives that are widely used in the country's mining and petroleum industry. Due to strict gun laws, it is actually cheaper and easier to obtain explosives than guns.

Mexican law enforcement officials often find large quantities of explosives when raiding cartel weapon caches. On 1 April Mexican military forces unearthed a large cartel arms depot in Matamoros and discovered 412 plastic sleeves of hydrogel commercial explosives, thirty-six electric detonators, and nearly forty feet of detonation chord. Despite easy access to explosives, cartels did not frequently turn cars into dangerous weapons with remotely detonated IEDs until July 2010.

On 15 July 2010, in Juarez, Chihuahua, the Juarez cartel killed four law enforcement agents and injured nine other first responders after it remotely detonated an IED inside a car. The cartel had lured the agents to the vehicle by reporting it contained a dead body. Other cartels took notice and also began employing the technique. Following the car bomb in Juarez, the Gulf cartel launched six IED attacks from August to December 2010.

More recently on 22 January an IED was detonated in a car in Tula, Hidalgo as police

officers responded to a tip that the vehicle had a body inside it. When agents opened the car door, the bomb exploded injuring four officers.

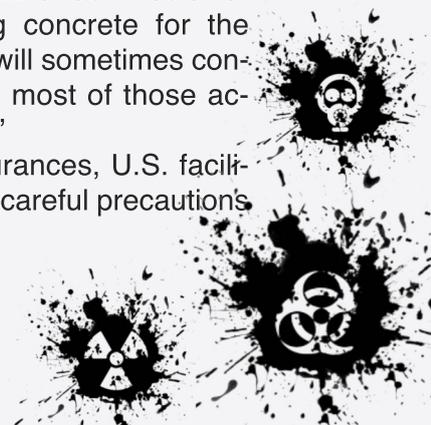
Despite the dangers that car based IEDs pose, Scott Stewart, an intelligence analyst with Stratfor, does not believe that civilians and government facilities should worry too much.

In a recent article in Right Side News, Scott argued that the cartels have primarily used IEDs to send warning messages and it is not in their best interest to conduct larger attacks that kill civilians or target government facilities as it would anger civilians and cause an even tougher government crackdown. Scott writes, "It is one thing to target members of opposing cartels, or even law enforcement and military



personnel, and it is quite another to begin to indiscriminately target civilians or to level entire city blocks with large VBIEDs [vehicle based IED]. While the drug war...has affected many ordinary Mexicans and turned sentiment against the cartels, public sentiment would be dramatically altered by the adoption of true terrorist tactics. So far, the Mexican cartels have been very careful not to cross that line." He adds, "There is also considerable doubt that a larger IED attack would really accomplish anything concrete for the cartels. While the cartels will sometimes conduct very violent actions, most of those actions are quite pragmatic."

Despite Scott's reassurances, U.S. facilities in Mexico have taken careful precautions





to defend against this emerging threat. On 5 April the U.S. consulate in Monterrey, Mexico erected concrete barriers outside to minimize traffic approaching government buildings and to prevent cars from parking too close.

## How IEDs Work

By Craig Freudenrich, Ph.D.

Source: <http://science.howstuffworks.com/ied.htm/printable>

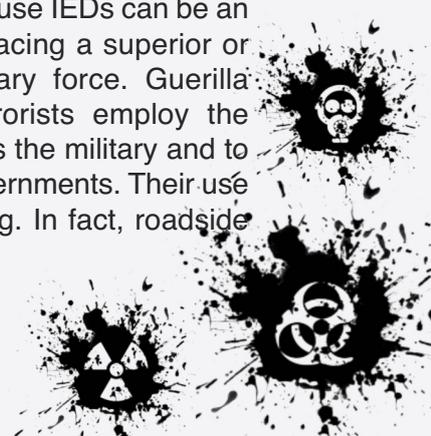
A neighbourhood in Iraq reverberates with a deafening explosion. A military convoy has been hit by a roadside bomb. The explosion has left a crater in its wake, ripped apart vehicles and injured the soldiers riding within them. In a nearby marketplace, a suicide bomber blows himself up, maiming and killing scores of nearby civilians. These violent scenes have played out repeatedly in Iraq and Afghanistan since combat operations began there in the early 21st century. It wasn't always this way. In the beginning of the Iraq war, U.S. soldiers were injured mainly from gunfire, mortars and grenades. The injuries are wrought now by a different source. The preferred weapon of insurgents and terrorists has become an improvised explosive device, or IED. You might call it a homemade bomb or a booby trap. Whatever you call it, an IED is relatively simple to make, easily hidden and very destructive. –Soldiers, civilians, as well as paramilitary and terrorist groups, have



Marwan Ibrahim/AFP/~Getty Images – An Iraqi police commando walks past the aftermath of a vehicle-borne IED attack in Kirkuk, Iraq. The war in Iraq has seen a massive uptick in the number of deadly IED bombings occurring.

been building and detonating homemade bombs for years. During the Vietnam War, the Viet Cong hid IEDs in soda cans because they observed that U.S. soldiers liked to kick empty cans while marching along the roads [source: GlobalSecurity.org]. The Irish Republican Army used them in the 1960s and 1970s during its struggles with the British in Northern Ireland.

In 1996, Eric Rudolph made a pipe bomb (IED) and set it off in Atlanta's Centennial Olympic Park during the Summer Olympics. One person died and more than 100 people were injured in the attack. –You could fill volumes with all the IED attacks that have occurred within the last decade. That's because IEDs can be an effective strategy when facing a superior or more technological military force. Guerilla fighters, rebels and terrorists employ the weapons mainly to harass the military and to terrorize civilians and governments. Their use shows no signs of abating. In fact, roadside



bombs, which are typically IEDs, have reigned as the No. 1 killer of U.S. troops in Iraq, although the number of IED casualties dropped substantially in August 2008. In Afghanistan, however, IED attacks are up 50 percent in 2008. No wonder the U.S. military is actively researching countermeasures.

This article will explore the destructive world of IEDs -- how they're made and detonated, why they're so prevalent, how they injure people and how to protect people from them.

### Anatomy of an IED

Before we pick apart an IED, a refresher on more conventional bombs might be handy. Landmines are planted within a designated area (a minefield) and are intended to bring down entering soldiers or vehicles. Soldiers



Ed Darack/-Getty Images – A cordless phone is a popular remote trigger for an IED since it may allow a signal to be transmitted up to a mile.

throw hand grenades over a short range to clear an area of enemy personnel. Rocket-propelled grenades, or just RPGs, are launched over a larger range and can rid a target area of enemy personnel or destroy enemy vehicles. Bombs are dropped from planes, are self-contained and controlled to devastate anything within a specific area. Such bombs are commercially made. Armies purchase these weapons from defense contractors for military and training operations, although other individuals can obtain them through the thriving black market for weapons.

Such bombs are commercially made. Armies purchase these weapons from defense contractors for military and training operations, although other individuals can obtain them through the thriving black market for weapons.

In contrast, IEDs are homemade with five basic parts:

- (1) A power supply, often provided by car batteries or alkaline flashlight batteries
- (2) A trigger, switch or some other direct or in-

direct means of setting the device off, such as a radio signal, trip wire, timer or firing button that someone presses. A common form of remote trigger is a cell phone, cordless phone, radio or garage door opener activated by someone who is watching [source: GlobalSecurity.org].

- (3) A detonator, a small explosive charge that sets off the main charge. Detonators are usually electrical, like those used for explosions in construction.
- (4) A main charge, the primary explosive that's the big guns behind the blast. Unexploded landmines fit the bill.
- (5) A container to hold everything together. The container may be designed to force the blast in a specific direction.

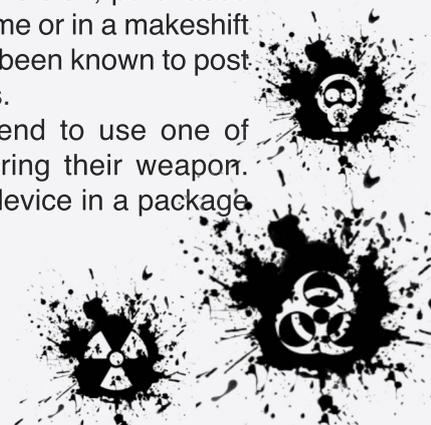
Additional components packed in the device may include projectiles for shrapnel, such as ball bearings, nails and stones, as well as hazardous, toxic or fire-starting chemicals. IEDs may also be used as the explosive part of a biological or radioactive dirty bomb.

Let's look at how these parts work together:

- (1) The power source supplies electricity to the trigger or switch and to the detonator.
- (2) The trigger activates the detonator and initiates the explosion sequence. The trigger may sense the target, be activated by the target, be a timed trigger or be operated remotely.
- (3) The detonator explodes, thereby providing energy for the main explosive.
- (4) The main charge explodes, producing a high-pressure shock wave or blast wave, and may propel shrapnel, toxic chemicals or fire-starting chemicals.

**Here's the distressing part:** IEDs are relatively simple to make with a little research, time and training. After all, how hard is it to get batteries, cell phones and radios? Detonators and explosives such as C-4, Semtex and dynamite can be found at construction sites and oil rigs. They also may be stolen, purchased legally or cooked up at home or in a makeshift lab. Terrorist groups have been known to post recipes on their Web sites.

Once made, people tend to use one of three methods for delivering their weapon. Often they'll conceal the device in a package



that may be in plain sight, hidden or buried. Insurgents have even hidden IEDs in animal carcasses alongside military convoy routes. They may also place the IED in a vehicle's trunk (vehicle-borne IED or VBIED). A driver may park the vehicle alongside a convoy route. A remote watcher can then detonate the VBIED from a safe distance. The last delivery method relies on a suicide bomber. The suicide bomber may drive a VBIED into the target area and explode it or strap the device on his or her body, walk into the intended target area and explode it.

### What happens when an IED explodes?

#### IED Impacts

Aside from how it's made, an IED is like any other bomb -- it explodes. Before you can understand the impact of an IED, it helps to know what's happening during that fateful moment.

- (1) When the primary charge explodes, gases heat up and expand rapidly outward under pressure.
- (2) The expansion creates shock waves or blast waves. The waves travel outward at about 1,600 feet per second (488 meters per second) over hundreds of yards or more depending upon the amount of explosive.
- (3) The explosion fragments the container and sends pieces of shrapnel at high speeds outward. If the IED also contained other fragments such as ball bearings,

nuts, bolts and pellets, then they also would be thrown outward.

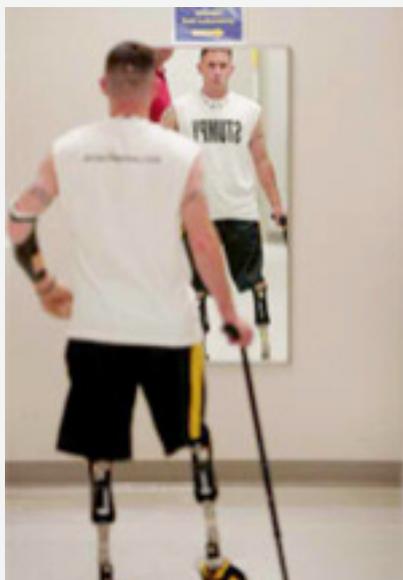
- (4) The heat from the explosion causes fire.
- (5) The heat and fires from the explosion can cause secondary fires.
- (6) The blast wave leaves a partial vacuum, which causes air to rush back in under high pressure. The intruding air also pulls in debris and shrapnel.

So, an IED explosion causes damage to vehicles and property primarily through the blast wave, heat and fires.

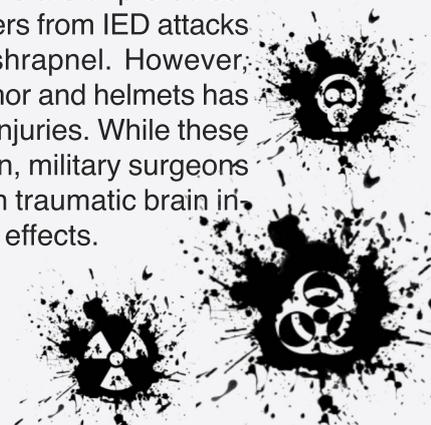
In contrast, casualties within the blast radius can stem from many causes. The explosion can release shrapnel or create debris from secondary impacts such as flying glass from broken windows. This debris can penetrate the body in many places, leading to lacerations, bleeding, broken bones and loss of limbs. Second, the heat from the blast causes fires; both the heat and the fires themselves can cause severe burns. Finally, the pressure in a blast wave can be on the order of 1,000 times atmospheric pressure. This intense pressure can rupture your eardrums and slam your brain against the inside of your skull, which leads to concussion, blindness, deafness and swelling of the brain. In addition, many air-filled tissues and organs such as the lungs and bowels can be perforated by the pressure changes.

The type and extent of the injury depends on the person's location relative to the IED. A person in the primary blast radius can be hit by pressure changes, heat and shrapnel. Most likely, this person will die. Outside the primary blast radius, a person is most likely to be injured by shrapnel. The person may survive depending on how many injuries the shrapnel causes and where they're located. If shrapnel tears a hole in a major artery, then that person can bleed to death.

Civilian casualties are often high in IED attacks because these people are unprotected. Initial injuries to U.S. soldiers from IED attacks were caused mainly by shrapnel. However, the use of Kevlar body armor and helmets has greatly reduced shrapnel injuries. While these types of injuries have fallen, military surgeons have reported increases in traumatic brain injuries caused by the blast effects.



Scott Olson/Getty Images – Bryan Anderson, a U.S. Army military policeman, lost three limbs after an IED exploded near his Humvee in Iraq in October 2005.



### Defeating and Detecting IEDs

Insurgents and terrorists don't just go make a bomb and use it. IED attacks are the result of coordinated enemy activities such as financing, obtaining supplies, making IEDs, and planting and detonating them. So defeating these devices must involve a combined strat-



John Moore/-Getty Images - U.S. Army bomb team members watch the controlled detonation of an improvised explosive device (IED) to clear it from the streets in Baghdad, Iraq.

egy of understanding and observing the enemy. Soldiers and personnel have to be trained to be aware of the enemy's behaviors, to look for indicators of IEDs in their patrol areas and to use technology to dispose or disable them.

The U.S. Army's IED defeat strategy includes the following measures:

1. Collecting data about enemy activities that might indicate upcoming IED attacks. This could be anything from observing suspicious activities of people within the combat area to tracing or disrupting the movements of supplies and money.
2. Detecting the IEDs themselves
3. Disposing of or disabling the detected IED
4. Protecting military personnel and civilians from a detected IED

Training soldiers to be keen observers in combat operations is important. For example, a U.S. Marine spotter near Habbaniyah, Iraq, noticed a man who was videotaping a nearby

patrol of assault vehicles. The man had a high-powered rifle in his car next to him. After a sniper shot the man, soldiers discovered a cache of IED materials and munitions in the car.

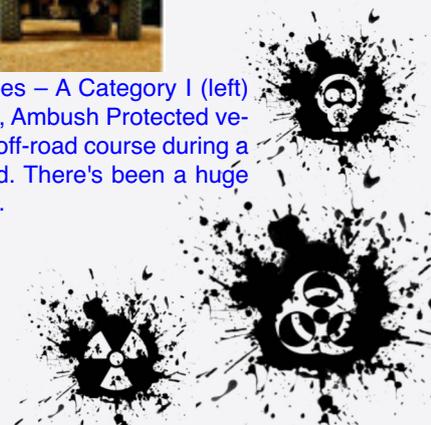
Likewise, soldiers or other personnel should be trained to be suspicious of unattended packages along a road, fence, building or even a trash pile. IEDs are easy to hide. Simulating more IED attacks during military training will help soldiers to detect and deal with these attacks before encountering them in combat.

Besides training soldiers, some new technologies are capable of detecting, disrupting or disabling IEDs. These technologies are designed to place a "bubble" of protection around troops operating in combat situations. For example, many combat vehicles are now equipped with **radio frequency jamming devices**, which disrupt the cell phone signals often used to trigger IEDs.

Another device called a **NIRF**, which stands for neutralizing improvised explosive devices with radio frequency, emits a high frequency radio pulse that deactivates IED electronics within a short area. Microwave-pulsing devices also can be used to "fry" the electronics of IEDs. Another device called LIBS (laser-induced breakdown spectroscopy) uses lasers to detect IED explosives within a 100-foot (30-meter) radius.



Chip Somodevilla/-Getty Images - A Category I (left) and Category II Mine Resistant, Ambush Protected vehicle (MRAP) drive through an off-road course during a demonstration in Aberdeen, Md. There's been a huge demand for the vehicles in Iraq.



Alternatively, you might not need a soldier to deal with a suspected IED at all. The military is exploring using robots and drones to protect people from IEDs. Aerial drones may be able to detect IEDs or suspicious activities without exposing troops, while robots can search areas for the suspected devices or handle shady looking packages without involving soldiers.

What about protecting soldiers during an attack if the detection methods fail? Kevlar body armor has shielded soldiers from the shrapnel released in an IED explosion. In ad-

dition, armored vehicles have been re-designed with the blast impacts of an IED in mind. These vehicles are called **Mine Resistant Ambush Protected (MRAP) vehicles**. Essentially, the usual flat undercarriage of a vehicle is changed to a V-shaped undercarriage, which diverts the blast waves from an explosion underneath around the vehicle rather than into it. Because IED attacks are a favored strategy in modern war, the U.S. Department of Defense continues research aimed at IED countermeasures.

## Michelin developing puncture-proof tires

Source: <http://www.policeone.com/patrol-issues/articles/3592707-Just-hope-the-car-youre-chasing-doesnt-have-Tweels/>

Michelin, the French tire manufacturer, has invented the "Tweel" which could make vehicles impervious to punctures or even explosions. The Tweel is a combination tire and wheel that infuses the best elements of both designs.

Unlike a traditional tire, the Tweel has no pneumatic rubber shell leaving nothing to deflate or puncture. Instead the Tweel resembles a wagon wheel with polyurethane spokes and rubber for the treads. But, unlike a wagon wheel, the Tweel

is not entirely rigid as the polyurethane spokes are flexible softening the ride.

The new design is also more environmentally friendly as existing tires as less material is required to manufacture them and it could be possible to even re-tread the rubber.

Despite these improvements in design, law enforcement officers will not have to worry about cars equipped with Tweels bypassing spike strips or other tire flattening tools any time soon.

Tweels have several flaws that have kept them from being widely implemented. In particular, at high speeds there is a significant amount of vibration which in turn generates noise that can be irritating to drivers and heat that results in premature tire wear.

The new design is currently installed on low-speed vehicles like construction equipment and Segways. Tweels could also be used in military applications as they are more resistant to mines and improvised explosive devices than conventional tires and deflect shock waves away from vehicle.



### Tiny Traces Of Explosives Detected By New Sensor

Source: <http://www.theengineer.co.uk/sectors/electronics/news/bee-venom-makes-explosives-detector-extra-sensitive/1008575.article>

MIT researchers have created a new detector so sensitive it can pick up a single molecule of an explosive such as TNT. To create the sensors, chemical engineers led by Michael Strano coated carbon nanotubes - hollow, one-atom-thick cylinders made of pure carbon - with protein fragments normally found in bee venom. This is the first time those proteins have

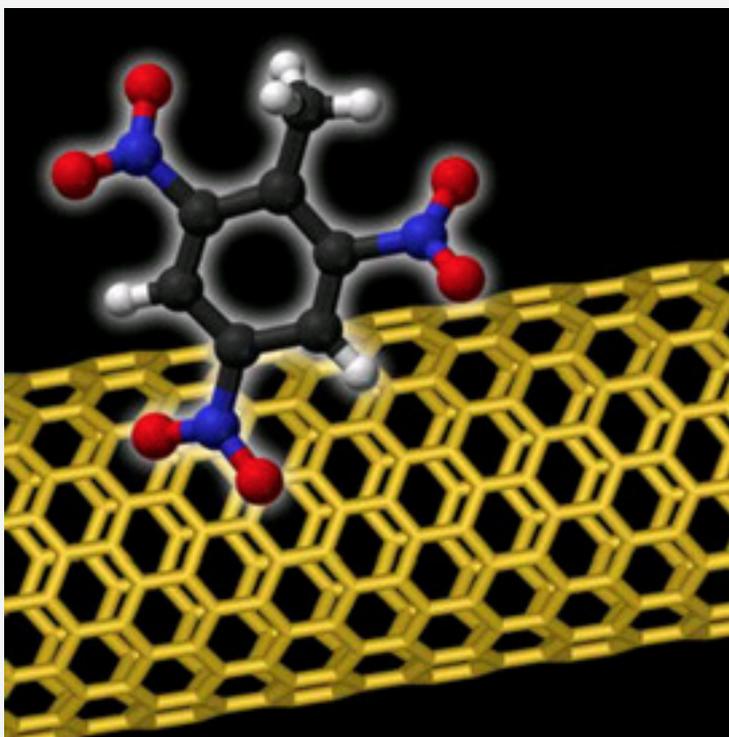
been shown to react to explosives, specifically a class known as nitro-aromatic compounds that includes TNT. If developed into commercial devices, such sensors would be far more sensitive than existing explosives detectors - commonly used at airports, for example - which use spectrometry to analyze charged particles as they move through the air. "Ion mobility spectrometers are widely deployed because they are inexpensive and very reliable. However, this next generation of nanosensors can improve upon this by having the ultimate detection limit, [detecting] single molecules of explosives at room temperature and atmospheric pressure," says Strano, the Charles (1951) and Hilda Roddey Career Development Associate Professor of Chemical Engineering.

A former graduate student in Strano's lab, Daniel Heller (now a Damon Runyon Fellow at MIT's David H. Koch Institute for Integra-

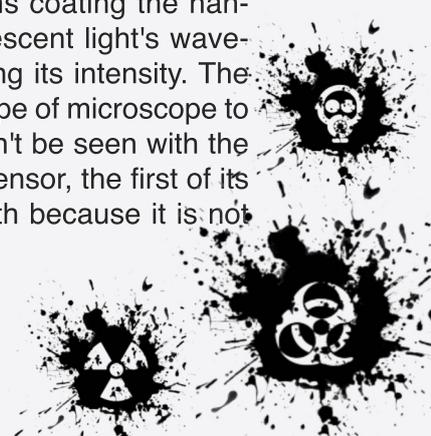
tive Cancer Research), is lead author of a paper describing the technology in the Proceedings of the National Academy of Sciences. The paper appears online this week. Strano has filed for a patent on the technology, which makes use of protein fragments called bombolitins. "Scientists have studied these peptides, but as far as we know, they've never been shown to have an affinity for and recognize explosive molecules in any way," he says. In recent years, Strano's lab has developed carbon-nanotube sensors for a variety of molecules, including nitric oxide, hydrogen peroxide and toxic agents such as the nerve gas sarin. Such sensors take advantage of carbon nanotubes' natural fluorescence, by coupling them to a molecule that

binds to a specific target. When the target is bound, the tubes' fluorescence brightens or dims.

The new explosives sensor works in a slightly different way. When the target binds to the bee-venom proteins coating the nanotubes, it shifts the fluorescent light's wavelength, instead of changing its intensity. The researchers built a new type of microscope to read the signal, which can't be seen with the naked eye. This type of sensor, the first of its kind, is easier to work with because it is not



The MIT researchers' sensor uses carbon nanotubes covered in protein fragments. It can detect even a single molecule of an explosive, such as a TNT molecule



influenced by ambient light. "For a fluorescent sensor, using the intensity of the fluorescent light to read the signal is more error-prone and noisier than measuring a wavelength," Strano says. Each nanotube-peptide combination reacts differently to different nitro-aromatic compounds. By using several different nanotubes coated in different bombolittins, the researchers can identify a unique "fingerprint" for each explosive they might want to detect. The nanotubes can also sense the breakdown products of such explosives. "Compounds such as TNT decompose in the environment, creating other molecule types, and those derivatives could also be identified with this type of sensor," Strano says. "Because molecules in the environment are constantly changing into other chemicals, we need sensor platforms that can detect the entire network and classes of chemicals, instead of just one type."

The researchers also showed that the nanotubes can detect two pesticides that are nitro-aromatic compounds as well, making them potentially useful as environmental sen-

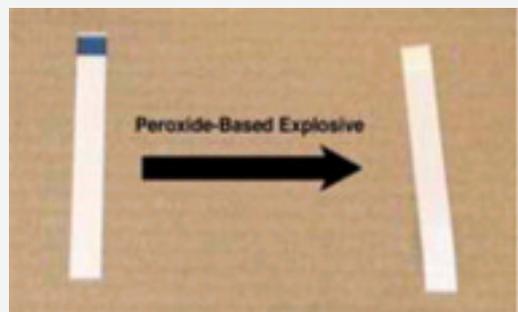
sors. The research was funded by the Institute for Soldier Nanotechnologies at MIT. Philip Collins, a professor of physics at the University of California at Irvine, says the new approach is a novel extension of Strano's previous work on carbon-nanotube sensors. "It's nice what they've done - combined a couple of different things that are not sensitive to explosives, and shown that the combination is sensitive," says Collins, who was not involved in this research.

The technology has already drawn commercial and military interest, Strano says. For the sensor to become practical for widespread use, it would have to be coupled with a commercially available concentrator that would bring any molecules floating in the air in contact with the carbon nanotubes. "It doesn't mean that we are ready to put these onto a subway and detect explosives immediately. But it does mean that now the sensor itself is no longer the bottleneck," Strano says. "If there's one molecule in a sample, and if you can get it to the sensor, you can now detect and quantify it."

## New 2-in-1 explosive detector and neutralizer

Source:[http://portal.acs.org/portal/acs/corg/content?\\_nfpb=true&\\_pageLabel=PP\\_ARTICLEMAIN&node\\_id=222&content\\_id=CNBP\\_027246&use\\_sec=true&sec\\_url\\_var=region1&\\_uuid=2806ad3e-db7c-4280-9fb0-5ce297f5b435](http://portal.acs.org/portal/acs/corg/content?_nfpb=true&_pageLabel=PP_ARTICLEMAIN&node_id=222&content_id=CNBP_027246&use_sec=true&sec_url_var=region1&_uuid=2806ad3e-db7c-4280-9fb0-5ce297f5b435)

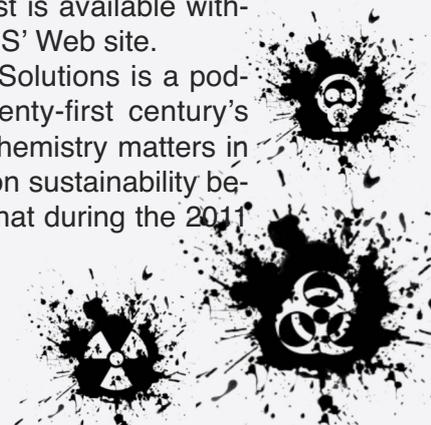
A two-in-one material that can both detect and neutralize explosives of the type favored by terrorists is the topic of the latest episode in the American Chemical Society's (ACS) Global Challenges/Chemistry Solutions podcast. An ACS release reports that the detector/neutralizer is a material made of metal oxide nanoparticles so small that 50,000 could fit across the width of a



A test strip changes from blue to pale yellow or colorless in the presence of peroxide-based explosives like those favored by terrorists.

single human hair. It changes color in the presence of certain explosives, alerting emergency responders to the threat. The material also can be sprayed onto bombs or suspicious packages to inactivate certain explosives, according to Allen Applett, Ph.D., study leader. "This stuff is going to be used anywhere terrorist explosives are, says Applett, who reported at the ACS' 241st National Meeting & Exposition in Anaheim, California. The new podcast is available without charge at iTunes and from ACS' Web site.

Global Challenges/Chemistry Solutions is a podcast describing some of the twenty-first century's problems, and how research in chemistry matters in the search solutions. Global Challenges is the centerpiece in an alliance on sustainability between ACS and the Royal Society of Chemistry. The ACS release notes that during the 2011



global celebration of the International Year of Chemistry (IYC), Global Challenges/Chemistry Solutions also is focusing on the main themes of IYC — health, environment, energy, and materials. The American Chemical

Society is a nonprofit organization chartered by the U.S. Congress. It has more than 163,000 members, making it the world's largest scientific society.

## Princeton Laser breakthrough will enable sniffing the air at a distance

Source: <http://www.gizmag.com/princeton-laser-breakthrough-will-enable-sniffing-the-air-at-a-distance/17728/>

Researchers at Princeton University developed a technique for generating a laser beam out of nothing but air. Princeton University engineers have developed a new laser sensing technology that is expected to enable the remote distant detection of explosives, airborne pollutants and greenhouse gasses. The technique differs from previous remote laser-sensing methods in that the returning beam is not just a reflection or scattering of the outgoing beam but an entirely new laser beam generated by oxygen atoms whose electrons have been "excited" to high energy levels. This "air laser" is a much more powerful tool than previously existed for remote measurements of trace

amounts of chemicals in the air. "We are able to send a laser pulse out and get another pulse back from the air itself," said Richard Miles, a professor of mechanical and aerospace engineering at Princeton, the research group leader and co-author on the paper. "The returning beam interacts with the molecules in the air and carries their fingerprints."

The researchers, whose work is funded by the Office of Naval Research's basic research

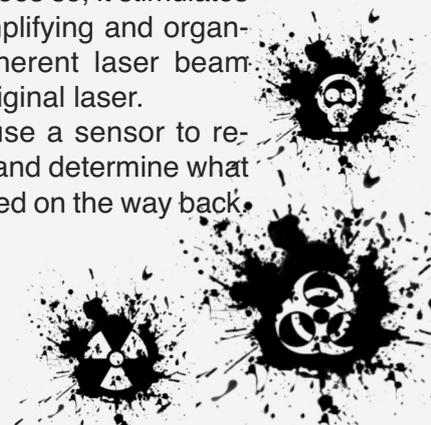
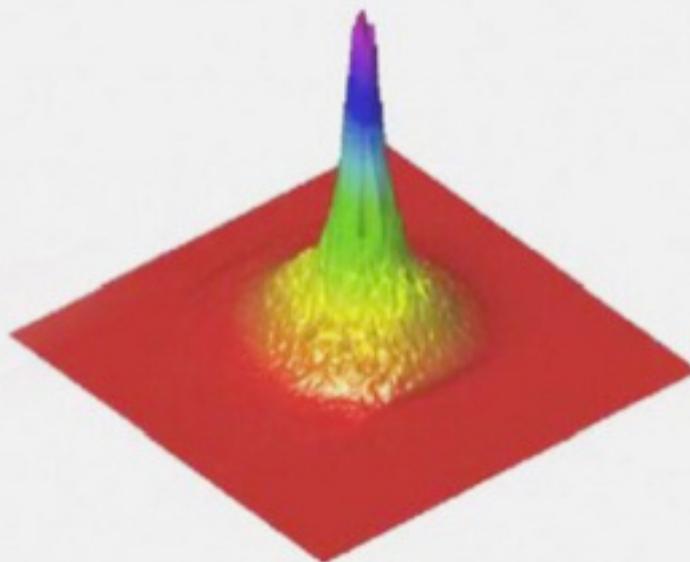
program on Sciences Addressing Asymmetric Explosive Threats, published their new method Jan. 28 in the journal *Science*.

Miles collaborated with three other researchers: Arthur Dogariu, the lead author on the paper, and James Michael of Princeton, and Marlan Scully, a professor with joint appointments at Princeton and Texas A&M University. The new laser sensing method uses an ultraviolet laser pulse that is focused on a

tiny patch of air, similar to the way a magnifying glass focuses sunlight into a hot spot. Within this hot spot — a cylinder-shaped region just 1 millimeter long — oxygen atoms become "excited" as their electrons get pumped up to high energy levels.

When the pulse ends, the electrons fall back down and emit infrared light. Some of this light travels along the length of the excited cylinder region and, as it does so, it stimulates more electrons to fall, amplifying and organizing the light into a coherent laser beam aimed right back at the original laser.

Researchers plan to use a sensor to receive the returning beam and determine what contaminants it encountered on the way back.



"In general, when you want to determine if there are contaminants in the air you need to collect a sample of that air and test it," Miles said. "But with remote sensing you don't need to do that. If there's a bomb buried on the road ahead of you, you'd like to detect it by sampling the surrounding air, much like bomb-

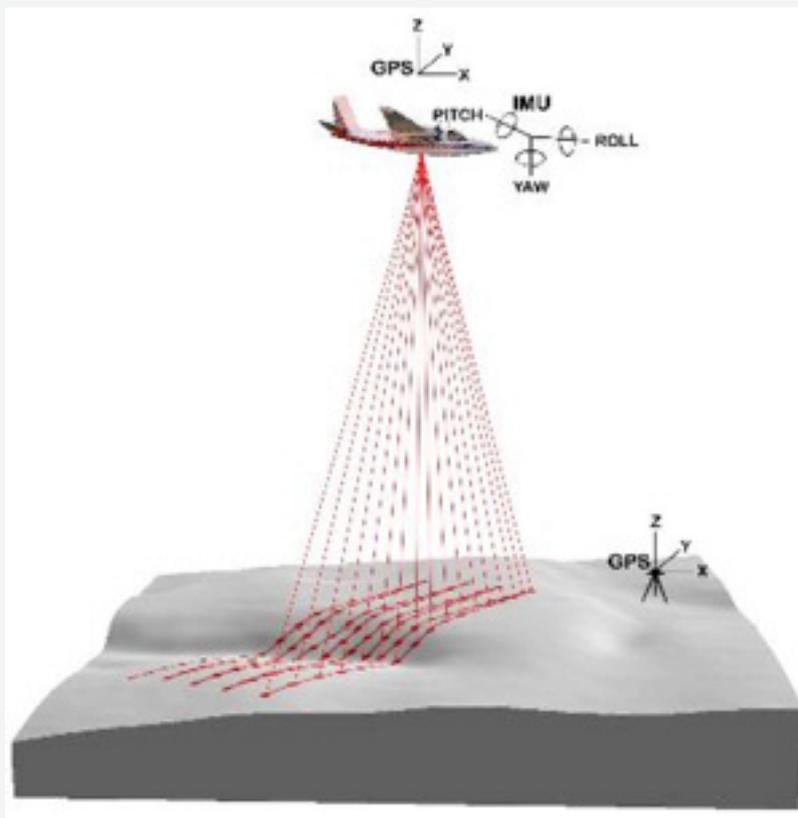
detect trace amounts and cannot determine the location of the gases with much accuracy.

The returning beam is thousands of times stronger in the method developed by the Princeton researchers, which should allow them to determine not just how many contaminants are in the air but also the identity and location of those contaminants.

The stronger signal should also allow for detection of much smaller concentrations of airborne contaminants, a particular concern when trying to detect trace amounts of explosive vapors. Any chemical explosive emits various gases depending on its ingredients, but for many explosives the amount of gas is miniscule.

While the researchers are developing the underlying methods rather than deployable detectors, they envision a device that is small enough to be mounted on, for example, a tank and used to scan a roadway for bombs.

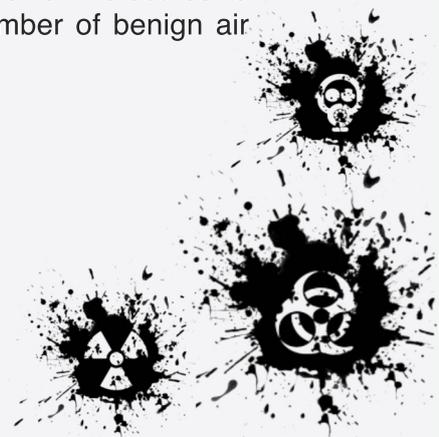
So far, the researchers have demonstrated the process in the laboratory over a distance of about a foot and



sniffing dogs can do, except from far away. That way you're out of the blast zone if it explodes. It's the same thing with hazardous gases – you don't want to be there yourself. Greenhouse gases and pollutants are up in the atmosphere, so sampling is difficult."

The most commonly used remote laser-sensing method, LIDAR -- short for light detection and ranging -- measures the scattering of a beam of light as it reflects off a distant object and returns back to a sensor. It is commonly used for measuring the density of clouds and pollution in the air, but can't determine the actual identity of the particles or gases. Variants of this approach can identify contaminants, but are not sensitive enough to

a half. In the future they plan to increase the distance over which the beams travel, which they note is a straightforward matter of focusing the beam farther away. They also plan to fine-tune the sensitivity of the technique to identify small amounts of airborne contaminants. In addition, the research group is developing other approaches to remote detection involving a combination of lasers and radar. "We'd like to be able to detect contaminants that are below a few parts per billion of the air molecules," Miles said. "That's an incredibly small number of molecules to find among the huge number of benign air molecules."



### Infrared sensors could help police detect suicide vests

Source: <http://www.nationaldefensemagazine.org/archive/2011/June/Pages/MilitaryInfraredSensorThatFerretsOutSuicideVestsOfferedtoLocalLawEnforcement.aspx>

Sophisticated infrared sensors originally designed for the U.S. military could soon be used by local police departments to detect suicide bombers. Thermal Matrix USA initially designed its Access Counter IED Technology system to assist military personnel in Iraq and Afghanistan identify potential suicide bombers, but hopes to create a model that local law enforcement agencies can deploy.

Using a series of complicated sensors including millimeter wave, long-waves, infrared, and ultraviolet light, the suite of sensors offered the military a comprehensive view of what an individual could be hiding beneath their clothes. After it was initially developed in 2005, DHS officials tested the devices for domestic use but determined that they were too costly, took too long to set up, and were not portable.

Bill Reinpoldt, the company's director of technology, said, "It took a few guys and truck or two to move the system around. It was big and unwieldy."

But now the company has modified its product to significantly reduce its size, weight, and deployment time to be more practical for local law enforcement officials.

While the comprehensive range of sensors offered a detailed picture of what an individual could be concealing, researchers realized that the device's infrared scanners were performing the majority of the detection capabilities. Therefore to reduce size and complexity, the company abandoned the other sensors opting to focus solely on the infrared scanner.

Unlike other body scanning technologies, infrared does not project any radiation and limits privacy concerns as it does not generate images of an individual's sensitive areas.

Instead the infrared scanners display a detailed "shadow" over an individual when it de-

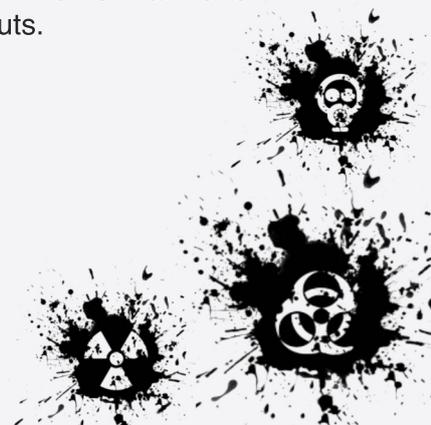
fects a concealed object. The devices are capable of detecting any hidden objects including knives, guns, plastics, and even liquids. "You can not only see a gun, but which way the gun is pointed, the trigger, the trigger guards, the hammer, and whether it is cocked or not," Reinpoldt said.

In addition the device casts a wide-spectrum and can scan as many as five people walking side by side.

According to Reinpoldt, the modified infrared scanners are also portable and easy to set up.



The devices can fit in a backpack and can be set up in "seven minutes instead of hours." Because of the devices are military-grade and its specifications are classified, Reinpoldt could not specify its range, but did say that it could scan individuals as far as 100 yards away. Thermal Matrix currently sells the devices to the U.S. Army and several federal agencies, but is working to market them to local police departments, but cost remains an issue. The devices are less expensive than airport body scanners, which cost about \$130,000, making them prohibitively expensive for local police departments that have been hit hard by budget cuts.



### Implant Sciences Launches Bench-Top Explosives and Narcotics Trace Detector

Source: <http://phx.corporate-ir.net/phoenix.zhtml?c=88760&p=irol-newsArticle&ID=1563822&highlight=>

In a move to further accelerate revenue growth and market penetration, Implant Sciences Corporation, a high technology supplier of systems and sensors for homeland security markets, today announced the launch of

automatic calibration system requires no user intervention or expensive disposables. And the QS-B220's rapid clear-down design increases operational availability and improves checkpoint throughput.



Building upon the field-tested core technology of the Quantum Sniffer QS-H150, the QS-B220 has been engineered to meet the needs of a wide range of security applications, including the requirements of the U.S. Transportation Security Administration (TSA). The system features one of the smallest footprints in the industry, making it ideal for crowded security checkpoints at airports and air cargo screening facilities. Able to detect a very wide variety of trace substances, including both narcotics and explosives, it opens new market opportunities for Implant Sciences such as prisons and border crossings.

its new bench-top explosives and narcotics trace detector, the Quantum Sniffer(TM) QS-B220. Implant Sciences has already gained significant market traction with its portable explosives trace detector (ETD), the Quantum Sniffer QS-H150, which has sold over 1,300 units worldwide, totaling over \$30 million in sales.

The QS-B220 is a user-friendly, low maintenance system that offers compelling economics for purchasers. It contains no radioactive materials, eliminating licensing, annual testing, and end-of-life disposal issues. A built-in au-

The QS-B220 will be launched at FPED VIII, the Force Protection Equipment Demonstration, being held in Stafford Virginia, from May 17th -19th. The event, sponsored by the Department of Defense and Department of Energy, will provide Implant Sciences a venue for presenting its products and technology to



the key federal, state and local decision makers in the purchase of security equipment.

Implant Sciences will sell the QS-B220 through its growing global network of 32 distributors on 6 continents.

"The QS-B220 is poised to fill a market need for a bench-top ETD that offers the same advantages as our portable QS-H150, as well as some new innovations. We anticipate that the QS-B220 will help drive increasing revenues through our expanding sales channels," stated Implant Sciences CEO, Glenn Bolduc.

Todd Silvestri, Vice President of Product Development concluded, "Implant Sciences is one of today's true innovators in trace detection. We are continuously developing new products and technologies that will help our customers increase security in a variety of applications."

About the Quantum Sniffer QS-H150 The QS-H150 Quantum Sniffer [below] is a handheld explosives trace detector that uses Ion Mobility Spectrometry (IMS) to rapidly detect and identify trace amounts of a wide variety of military, commercial, improvised, and homemade explosives. The QS-H150 features a low-maintenance design that is self-calibrating and self-clearing, providing very high levels of operational availability and extremely low total cost of ownership.

About the Quantum Sniffer QS-B220 The Quantum Sniffer QS-B220 is a bench-top explosives and narcotics trace detector that uses Ion Mobility Spectrometry (IMS) to rapidly detect and identify trace amounts of a wide variety of military, commercial, improvised, or homemade explosives and narcotic substances. The QS-B220 continues the Implant Sciences tradition of freedom from radioactive materials, low total cost of ownership, and high operational availability.

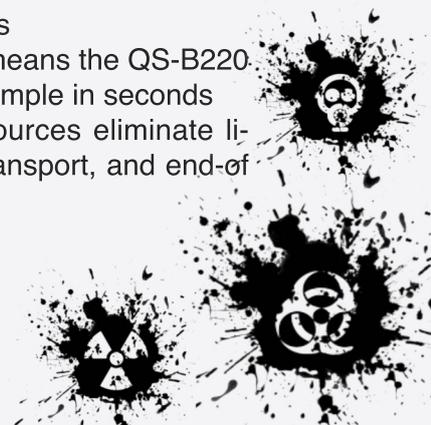
About Implant Sciences Implant Sciences develops, manufactures and sells sophisticated sensors and systems for Security, Safety, and Defense (SS&D) markets. The Company has developed proprietary technologies used in its commercial explosive trace detection systems which ship to a growing number of locations domestically and internationally. Implant Sciences' QS-H150 Portable

Explosives Detector has been designated as Qualified Anti-Terrorism Technology by the U.S. Department of Homeland Security under the Support Anti-terrorism by Fostering Effective Technology Act of 2002 (the SAFETY Act). For further details on the Company and its products, please visit the Company's website at [www.implantsciences.com](http://www.implantsciences.com).

**Safe Harbor Statement** This press release may contain certain "forward-looking statements," as that term is defined in the Private Securities Litigation Reform Act of 1995. Such statements are based on management's current expectations and are subject to risks and uncertainties that could cause the Company's actual results to differ materially from the forward-looking statements. Such risks and uncertainties include, but are not limited to, the risks that our explosives detection products and technologies (including any new products we may develop) may not be accepted by governments or by other law enforcement agencies or commercial consumers of security products; economic, political and other risks associated with international sales and operations could adversely affect our sales; our business is subject to intense competition and rapid technological change; liability claims related to our products or our handling of hazardous materials could damage our reputation and have a material adverse effect on our financial results; and other risks and uncertainties described in our filings with the Securities and Exchange Commission, including our most recent Forms 10-K, 10-Q and 8-K. Such statements are based on management's current expectations and assumptions which could differ materially from the forward-looking statements.

#### Features and Benefits:

- Automatic, continuous self-calibration:
  - Adjusts automatically to environmental changes
  - No calibration traps
  - No verification traps
- Ultra-fast clear-down means the QS-B220 is ready for the next sample in seconds
- Non-radioactive ion sources eliminate licensing, inspection, transport, and end-of-life issues

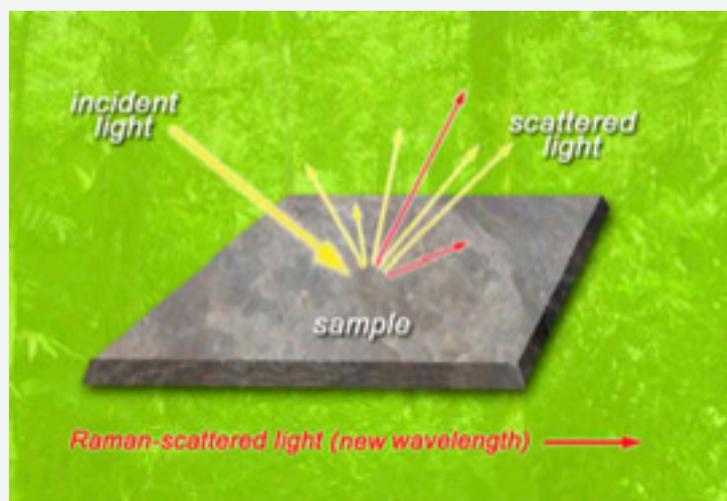


- Low maintenance design delivers low total cost of ownership
- Very low false positive rate
- Full range of detectable substances
- User-expandable threat library
- Capable of rapidly detecting and identifying both explosives and narcotics

## Breakthrough In Ultra-Sensitive Sensor Technology

Source: <http://www.medicalnewstoday.com/articles/219799.php>

Princeton researchers have invented an extremely sensitive sensor that opens up new ways to detect a wide range of substances, from tell-tale signs of cancer to hidden explosives. The sensor, which is the most sensitive of its kind to date, relies on a completely new architecture and fabrication technique developed by the Princeton researchers. The device boosts faint signals generated by the scattering of laser light from a material placed on it, allowing the identification of various substances based on the color of light they reflect. The sample could be as small as a single molecule.

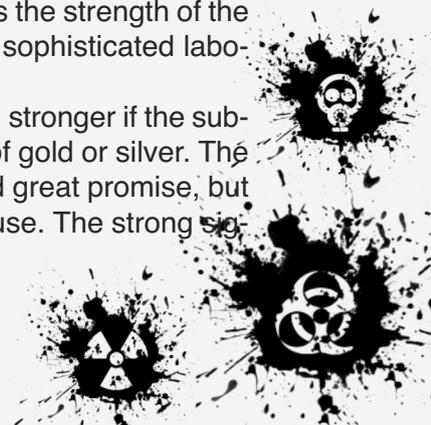


The technology is a major advance in a decades-long search to identify materials using Raman scattering, a phenomena discovered in the 1920s by an Indian physicist, Chandrasekhara Raman, where light reflecting off an object carries a signature of its molecular composition and structure. "Raman scattering has enormous potential in biological and chemical sensing, and could have many applications in industry, medicine, the military and other fields," said Stephen Y. Chou, the professor of electrical engineering

who led the research team. "But current Raman sensors are so weak that their use has been very limited outside of research. We've developed a way to significantly enhance the signal over the entire sensor and that could change the landscape of how Raman scattering can be used." Chou and his collaborators, electrical engineering graduate students, Wen-Di Li and Fei Ding, and post-doctoral fellow, Jonathan Hu, published a paper on their innovation in February in the journal *Optics Express*. The research was funded by the Defense Advance Research Projects Agency.

In Raman scattering, a beam of pure one-color light is focused on a target, but the reflected light from the object contains two extra colors of light. The frequency of these extra colors are unique to the molecular make-up of the substance, providing a potentially powerful method to determine the identity of the substance, analogous to the way a finger print or DNA signature helps identify a person. Since Raman first discovered the phenomena - a breakthrough that earned him Nobel Prize - engineers have dreamed of using it in everyday devices to identify the molecular composition and structures of substances, but for many materials the strength of the extra colors of reflected light was too weak to be seen even with the most sophisticated laboratory equipment.

Researchers discovered in the 1970s that the Raman signals were much stronger if the substance to be identified is placed on a rough metal surface or tiny particles of gold or silver. The technique, known as surface enhanced Raman scattering (SERS), showed great promise, but even after four decades of research has proven difficult to put to practical use. The strong sig-



nals appeared only at a few random points on the sensor surface, making it difficult to predict where to measure the signal and resulting in a weak overall signal for such a sensor. Abandoning the previous methods for designing and manufacturing the sensors, Chou and his colleagues developed a completely new SERS architecture: a chip studded with uniform rows of tiny pillars made of metals and insulators. One secret of the Chou team's design is that their pillar arrays are fundamentally different from those explored by other researchers. Their structure has two key components: a cavity formed by metal on the top and at the base of each pillar; and metal particles of about 20 nanometers in diameter, known as plasmonic nanodots, on the pillar wall, with small gaps of about 2 nanometers between the metal components.

The small particles and gaps significantly boost the Raman signal. The cavities serve as antennae, trapping light from the laser so it passes the plasmonic nanodots multiple times to generate the Raman signal rather than only once. The cavities also enhance the outgoing Raman signal. The Chou's team named their new sensor "disk-coupled dots-on-pillar antenna-array" or D2PA, for short. So far, the chip is a billion times (10<sup>9</sup>) more sensitive than was possible without SERS boosting of Raman signals and the sensor is uniformly

sensitive, making it more reliable for use in sensing devices. Such sensitivity is several orders of magnitude higher than the previously reported.

Already, researchers at the U.S. Naval Research Laboratory are experimenting with a less sensitive chip to explore whether the military could use the technology pioneered at Princeton for detecting chemicals, biological agents and explosives. In addition to being far more sensitive than its predecessors, the Princeton chip can be manufactured inexpensively at large sizes and in large quantities. This is due to the easy-to-build nature of the sensor and a new combination of two powerful nanofabrication technologies: nanoimprint, a method that allows tiny structures to be produced in cookie-cutter fashion; and self-assembly, a technique where tiny particles form on their own. Chou's team has produced these sensors on 4-inch wafers (the basis of electronic chips) and can scale the fabrication to much larger wafer size. "This is a very powerful method to identify molecules," Chou said. "The combination of a sensor that enhances signals far beyond what was previously possible, that's uniform in its sensitivity and that's easy to mass produce could change the landscape of sensor technology and what's possible with sensing."

## Suicide bombers: expedient tactics, not expression of Islam

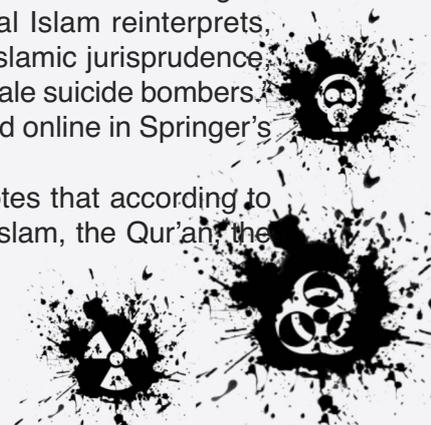
Source: <http://www.homelandsecuritynewswire.com/suicide-bombers-expedient-tactics-not-expression-islam>

New study argues that female suicide bombing is a political and military tactic, not a religious act; according to mainstream scholars of Islam, the Qur'an, the Hadith (traditions and practices of the Prophet Muhammad), and other principles of Shari'a (Islamic law) clearly condemn terrorist acts and oppose suicide operations; in order to justify suicide bombings, leaders of Hamas, Palestinian Islamic Jihad (PIJ), and al Qaeda have formulated their own interpretations of Islam, which are based more on military strategy than theology.

Terrorist groups bend the rules of "true" Islam to justify the use of female suicide

bombers, according to Margaret Gonzalez-Perez from Southeastern Louisiana University. Her paper traces the development of radical Islamic doctrine over time, highlights how it deviates from mainstream Islam, and identifies the building blocks that have culminated in Jihadi female suicide bombers. According to Gonzalez-Perez, "Radical Islam reinterprets, and even misinterprets Islamic jurisprudence as a tool to legitimize female suicide bombers." Her findings are published online in Springer's journal, *Gender Issues*.

A Springer release notes that according to mainstream scholars of Islam, the Qur'an, the





Moscow suicide bomber with her husband // Source: [worstsinners.com](http://worstsinners.com)

Hadith (traditions and practices of the Prophet Muhammad), and other principles of Shari'a (Islamic law) clearly condemn terrorist acts and oppose suicide operations. In order to justify suicide bombings, leaders of Hamas, Palestinian Islamic Jihad (PIJ), and al Qaeda have formulated their own interpretations of Islam, which are based more on military strategy than theology. This is particularly apparent in their attempts to portray female suicide bombing as consistent with Islamic doctrine, according to Gonzalez-Perez. She identifies a two-stage radicalization process, the origins of which she traces back to the thirteenth century.

The gradual radicalization of Islam began in the Middle Ages with some individuals claiming the right to interpret religious law and decide for themselves when war was justified. These ideas led to the justification of suicide bombers as a form of Islamic martyrdom under the interpretation of Iran's Ayatollah Khomeini (1902-89). Further radicalization enabled the justification of female suicide bombing. The Qur'an, however, does not include women as soldiers and explicitly categorizes women and children as non-combatants. According to Gonzalez-Perez's analysis of the

emergence in 2000, and rise since, of female suicide bombers, they are merely a military tactic, rather than a religious act.

In the author's view, terrorist groups recruit women by exploiting vulnerable females, including some with mental health issues and girls as young as fourteen. The common profile of female suicide bombers is that of a woman trying to survive in the aftermath of a war with no political, economic, or social security. Understanding female suicide bombers, their motivations, and their uses can be helpful in developing counter-terrorism strategies.

Gonzalez-Perez concludes: "The decidedly un-Islamic introduction of female suicide bombers is hardly surprising in current terrorist groups, for they simply reinterpret and manipulate religious doctrine to legitimize acts that are strategically and militarily utilitarian. Female suicide bombers are not Islamic martyrs nor any other manifestation of orthodox religious faith."

### Reference

— Read more in Margaret Gonzalez-Perez, "The False Islamization of Female Suicide Bombers," *Gender Issues* 28, nos. 1-2, 50-65 (20 April 2011) (DOI: 10.1007/s12147-011-9097-0)



### Secret bomb-proofing building design posted on the Web

Source: <http://homelandsecuritynewswire.com/secret-bomb-proofing-building-design-posted-web>

The Pentagon is building two towers in Alexandria, Virginia, to house 6,400 personnel; the Army Corps of Engineers inadvertently posted the bomb-proofing specifications for the new buildings on the Web; experts say

to house some 6,400 DoD personnel in it. The Pentagon also wanted to make the building bomb-proof. The facility consists of two towers, one of fifteen stories the other of seven-teen stories, joined up to the tenth floor.



Trouble is, the bomb-proofing design – a 30-page document accompanied by nearly 400 pages of technical details – was inadvertently posted to the publically accessible Web site of the U.S. Army Corps of Engineers. There is a another problem: Reuters reports that the level of bomb-proofing is astonishingly low: the secret-document stipulates that the building should be designed to resist threats posed by vehicle bombs detonated outside the building's security perimeter carrying

Damage done by the equivalent of 4,000 pounds of TNT // Source: [wordpress.com](http://wordpress.com)

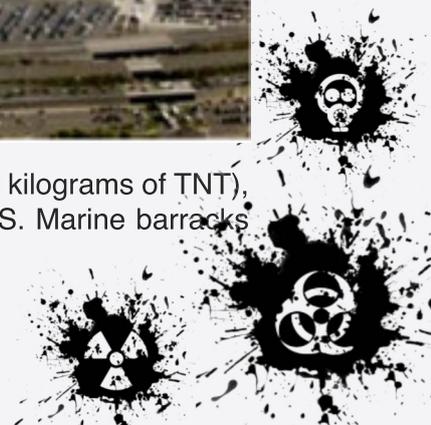
this will allow terrorist to learn how to circumvent the building defenses; there is another problem; the documents reveal that the specifications call for the building to be designed to resist threats posed by vehicle bombs detonated outside the building's security perimeter carrying the equivalent of 220 pounds of TNT; experts say this is not enough; Timothy McVeigh used 4,000 pounds of TNT in Oklahoma City in 1995; the 1993 attempt on the World Trade Center involved 900 pounds; the attack on the Marine barracks in Lebanon in 1983 involved 12,000 pounds of TNT

the equivalent of 220 pounds (100 kilograms) of TNT. This is far less than the amount of explosives used in Oklahoma City in 1995 (4,000 pounds, or 1,818 kilograms of TNT), the first attempt on the World Trade Center in



The Department of Defense is building a new building in Alexandria, Virginia, planning

1993 (900 pounds, or 409 kilograms of TNT), or in the attack on the U.S. Marine barracks



in Lebanon in 1983 (12,000 pounds, or 5,454 kilograms of TNT).

Reuters also reports that the document remained on the site more than twenty-four hours after the news agency advised the Corps of the security breach. Even after the document was removed from the Web, it

could be accessed through a Google cache.

Joanne Hensley, the Army Corps' deputy project manager for the building, told Reuters that the decision to base the building's bomb-proofing design elements on the threat posed by a 220-pound bomb was a "judgment call by our experts."

## New detection system uses ultraviolet light to spot explosives

Source: <http://news.ufl.edu/2011/06/09/explosives-detector/>

More than 625 million travelers will take to the air before 2011 is over; the passengers' carry-on luggage and checked baggage are screened for explosives -- but University of Florida researchers say there is a better way to do so; the UF scientists say they have developed the first explosive detection system in the world that utilizes ultraviolet light to zero in on specks of dangerous explosives found in and on luggage; the explosives detection market is estimated to exceed \$3 billion in the U.S. alone.

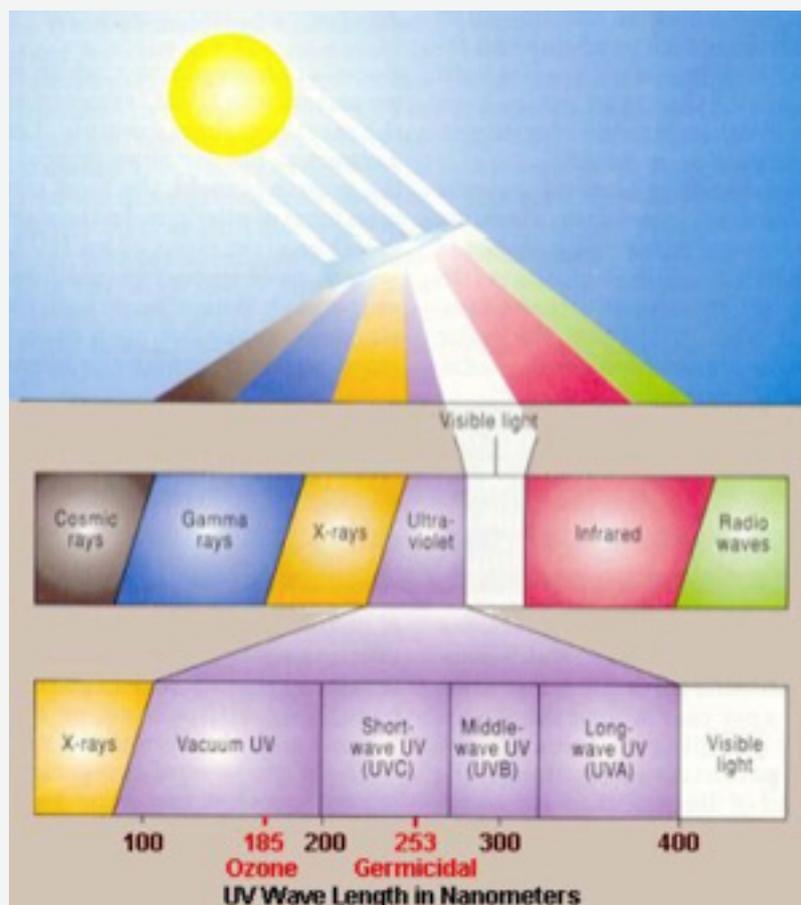
Airport security workers this year will employ an array of pre-boarding detection measures to scan for deadly materials smuggled into the luggage of the 625 million passengers expected to take the air before the year is over.

These security workers, however, are yet to use what researchers at the University of Florida believe is the world's first explosive detection system that utilizes ultraviolet light to zero in on specks of dangerous explosives found on these items.

"We are absolutely the only one using differential reflectometry," said one of the system's inventors, Rolf Hummel, a professor emeritus in UF's department of materials science and engineering.

University of Florida release reports that Hummel also thinks that had his team's detection system been in place last Oc-

tober, it would have detected an explosive package disguised as a printing toner before it slipped past airport inspectors in Yemen and ended aboard a jet in Dubai preparing to fly to the United States. A tip from intelligence



agents, not technology, eventually averted a tragedy.

The detection system also may have provided an extra layer of protection to airport workers. "Our goal," said Hummel, "for our technology is for it to make speedy decisions at security check points and minimize the involvement of human beings to keep them safe."

The release notes that the fully automated device is based on patented technology pioneered at UF five years ago by Hummel and fellow UF researcher Paul Holloway, which utilizes the science of differential reflectometry.

The scanning process begins when UV light shines on pieces of luggage moving on a conveyor belt commonly used in airport security systems. Any residual amounts of TNT or any other explosive powder on the surface of these objects absorb the incoming light at specific varying wavelengths, depending on the chemical makeup of the material. The system instantly provides a spectrographic analysis of the absorption spectrum of the light after it has been reflected back into the device.

The computer compares this "fingerprint" with those of known explosives stored in its memory. If a match occurs, the device beeps to alert security officers.

Programmers also have equipped the system's computer with algorithms designed to allow the detection device to consider all the possibilities that are sent to it, including fingerprints of new or unknown explosive materials that may emerge in the future, explained Thierry Dubroca, a UF postdoctoral research associate, working on the project.

"Fingerprints of explosive materials," he said, "are unique and very recognizable."

Dubroca also is the CEO of Delta R. Detection, a Gainesville-based startup now gearing up to license the UF-patented technology to tap the growing worldwide explosives detection market, estimated to exceed \$3 billion in the U.S. market alone.

So far, the research team has received about \$1.4 million in federal, state, and private money for product development.

Said Hummel: "I've been a scientist for 50 years and I've always wanted to do something that really helps mankind. I now feel satisfaction."



# CRISTANINI CBRN DECONTAMINATION SYSTEMS



A5009

CONFORM TO THE QUALITY SYSTEM STANDARD AQAP 2110  
and ISO 9001:2008



DEPLOYABLE CBRN  
ANALYTICAL  
LABORATORY (STANAG 4632)



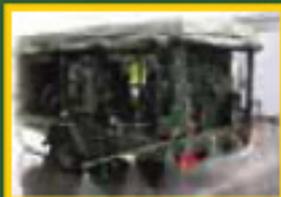
DDMAS LARGE SCALE  
DECONTAMINATION SYSTEM  
HIGHLY DEPLOYABLE



DEPLOYABLE BIO LABORATORY  
CLASS III BIO SECURITY LEVEL



DDMAS LARGE SCALE  
DECONTAMINATION SYSTEM  
DUAL OPERATORS



RVCBRN TRAILER FOR CBRN  
DECONTAMINATION AND  
DETOXIFICATION



MOBILE SYSTEM FOR  
AIRCRAFT DECONTAMINATION



TSDM-TACTICAL STEAM  
DECON MODULE

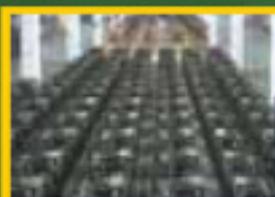
**ONLY ONE PERSON  
ONLY ONE MACHINE  
ONLY ONE PRODUCT**



SANJET C 1126 HR CBRN DUAL  
OPERATOR DECONTAMINATION  
AND DETOXIFICATION GROUP



SC34 CBRN DECONTAMINATION  
OF SENSITIVE EQUIPMENT  
AND SURFACES



CBRN PRODUCTION LINE



**CRISTANINI**

37010 RIVOLI - VERONA - ITALY

Tel. +39-045-6269400 - Fax +39-045-6269411

cristanini@cristanini.it - [www.cristanini.com](http://www.cristanini.com)

Osama bin Laden – the End

# CBRNE-TERRORISM Newsletter

Volume 38 - 2011



Japan's triple catastrophe  
CBRN security at London 2012  
UK DGBRNC  
Agroterrorism  
Forest Fires can be a **Tactic of Terrorism**  
Climate change and global **security**  
CBRN training for **Photographers and TV Crews**  
Innovative chem-bio sensor  
E. Coli 0104 – **Terror in Germany**  
Iran has secretly stocked **enriched uranium**  
for 4 nuclear bombs  
15 US nuclear reactors are **located in**  
an active seismic zone

Cyber News



*Fukushima*

Carry **spice** could be used  
to detect explosives  
How IEDs work  
What if there is a US-China  
cyber-**war in 2020?**  
Latin **America: Terrorism issues**

[www.cbrne-terrorism-newsletter.com](http://www.cbrne-terrorism-newsletter.com)

## Cyber News

### Major increase in cyber attacks on China's government

Source: <http://homelandsecuritynewswire.com/major-increase-cyber-attacks-chinas-government>

China recently reported that last year its government websites experienced a 68 percent increase in cyber attacks; a total of 35,000 Chinese websites, including 4,635 government sites, were hit by hackers in 2010; attacks on non-government websites decreased 22 percent in 2010, while attacks on government websites had increased; in response to the increased number of cyber at-

tial security risks.

Zhou Yonglin, head of the Operation Department at CNCERT/CC, explains, "Hackers use two main means to attack government websites. One means is to turn the homepage of government websites into that of hacker organizations in order to show off their skills and the other is to hide hackers' own pages on government Web sites before telling potential



tacks, the report urged local regulators to step up efforts to police the Internet and deter these hackers by imposing stricter penalties; five million Chinese IP addresses had been infected with a trojan horse or corpse virus

In a twist of events, China recently reported that last year its government websites experienced a 68 percent increase in cyber attacks.

The Chinese government has been accused of sponsoring cyber attacks against major companies like Google and Yahoo as well as governments around the world.

A report released by the National Computer Network Emergency Response Technical Team/Coordination Center of China (CNCERT/CC) found that a total of 35,000 Chinese websites, including 4,635 government sites, were hit by hackers in 2010.

Attacks on non-government websites actually decreased 22 percent in 2010, while attacks on government websites had increased nearly 70 percent.

The report also found that roughly 60 percent of ministerial-level websites have poten-

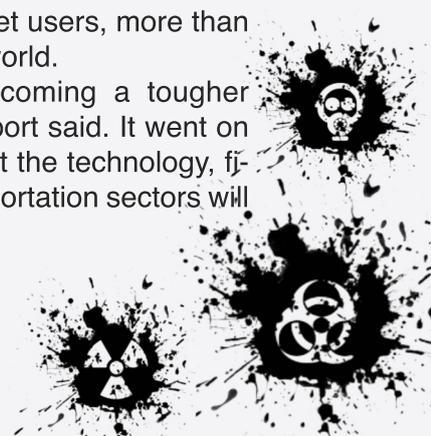
buyers that the servers and bandwidth of the government Web sites have been under their control and can be leased and transferred to criminals."

In response to the increased number of cyber attacks, the report urged local regulators to step up efforts to police the Internet and deter hackers by imposing stricter penalties. The report suggested enacting similar rules as those currently in place in the United States regarding Web safety.

After cyber attacks against China's largest search engine Baidu, the report said that Chinese Internet companies and users should increase monitoring of malicious cyber activity.

The report also found that five million Chinese IP addresses had been infected with a trojan horse or corpse virus. China has roughly 457 million Internet users, more than any other country in the world.

"Internet safety is becoming a tougher issue day by day," the report said. It went on to say that attacks against the technology, finance, energy, and transportation sectors will increase.



CNCERT/CC is affiliated with the China's Ministry of Industry and Information Technology.

The Chinese government maintains that it is the victim of cyber attacks and does not encourage them.

The French government recently confirmed that sensitive files were stolen in highly sophisticated and targeted attacks against its Budget Ministry's computers.

An anonymous French official was quoted saying, "We noted that a certain amount of the

information was redirected to Chinese sites. But that [in itself] does not say very much."

McAfee analysts also recently determined that a series of highly targeted cyber attacks stole sensitive financial data worth millions of dollars from five major multinational oil and gas companies.

Evidence suggests that the attacks may have originated from China, but according to Dmitri Alperovitch, vice president for threat research at McAfee, it remains unclear if the attacks were "government sponsored in any way."

## What if there is a U.S.-China cyberwar in 2020?

Source: <http://homelandsecuritynewswire.com/what-if-there-us-china-cyberwar-2020>

With an increasing number of countries around the globe developing military cybercapabilities, many in the information-security community have been saying either, 'We're in a cyber-war with China' or 'It's time to prepare for a cyber-war with China'; a Rice University fellow says that that cyber-war is not a substitute for real warfare but instead may be a component of conventional or unconventional military action, and that there is a great deal of very conventional thinking on this very unconventional topic

As Iran's nuclear plant attack and Chinese-based hackers attacking Morgan Stanley demonstrate how the Internet can wreak havoc on business and governments, a new paper by a Rice University's Baker Institute for Public Policy fellow hypothesizes what an all-out cyberwar between the United States and China might look like.

To date, the cyberattacks in East Asia have been relatively benign, said Christopher Bronk, author of "Blown to Bits: China's War in Cyberspace, August-September 2020," published this month in the U.S. Air Force journal Strategic Studies Quarterly. Bronk is a fellow in information technology policy at the Baker Institute and a former U.S. State Department diplomat.

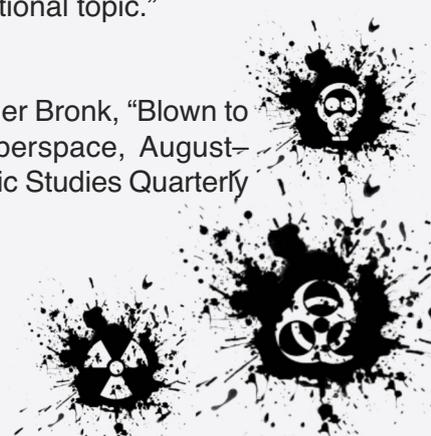
"Web pages are defaced, allegations of espionage are leveled and, generally, a status quo of sorts is maintained. The threat politics of the cyber-domain, however, do not stand

still," Bronk said. "China has been deeply impressed by U.S. information dominance since the 1991 Gulf War. China has produced a considerable literature of strategic studies for cyberoperations while developing a national firewall system that shields the country from a considerable portion of Web content.

"The United States, too, has made strategic moves in cyberspace and is in the process of building a Department of Defense cybercommand that will manage the efforts of thousands of civilian and military 'cyberwarriors,'" Bronk said.

With an increasing number of countries around the globe developing military cybercapabilities, Bronk chose to consider how a conflict with major cybercomponents might appear. "Basically, many in the information-security community have been saying either, 'We're in a cyberwar with China' or 'It's time to prepare for a cyberwar with China.' The points I'm trying to make are, first, that cyberwar is not a substitute for real warfare but instead may be a component of conventional or unconventional military action, and second, that there's a great deal of very conventional thinking on this very unconventional topic."

—Read more in Christopher Bronk, "Blown to Bits: China's War in Cyberspace, August-September 2020," Strategic Studies Quarterly (Spring 2011): 1-20



### 'Remote control' computer programs pose terror risks to aeroplanes

Source: <http://www.couriermail.com.au/news/national/remote-control-computer-programs-pose-terror-risks-to-aeroplanes/story-e6freooo-1226032870380>

AEROPLANES could be taken over by remote control and forced to crash with the use of newly invented computer software. Cyber attacks are now viewed by experts as the second-biggest risk to aviation behind natural disasters. Representatives from Qantas and Virgin Airlines were warned of the threat at the Asia-Pacific Aviation Security Conference in Hong Kong. Australian cyber-security expert Ty Miller, from Pure Hacking, told the conference whole fleets of planes could be affected. "The stereotypical Die Hard 2 airport attack, where aircraft controls can be taken over, is no longer just a movie script. It's an actual reality," Mr Miller said. "Depending on what information was accessed . . . the control of the aircraft themselves could be compromised. "You could deal with planes so that when they're in the air they all of a sudden start dumping all of their fuel, or force the planes to take a nose-dive. And it's not necessarily one plane it could be a whole fleet of planes." Mr Miller's firm engages in "ethical hacking", which involves testing the security of a network by trying to crack its systems. Posing as a rogue employee with general access to an

airline's systems, Mr Miller was recently able to take over the airline's entire network within a day. "That would give us full administrator access to the whole computer system and access to potentially sensitive documents and data," he said. He cited the Stuxnet worm incident, where an unknown attacker last year used the software to sabotage one of Iran's uranium enrichment plants. The Stuxnet attack overwhelmed the nuclear facility's internal network, causing it to go offline. "The analysis of the Stuxnet attack (on Iran) showed that it would have required a team of five or ten people working for at least six months," Mr Miller said. "It would have been extremely well funded, and the culprits would have had access to intelligence to conduct several multi-staged attacks on a number of different companies to perform industrial espionage. "To compromise the avionics of an aircraft, hackers would have to have the same level of information and potentially need to hack into Boeing, the specific airline and the airport systems." A rogue employee was in fact more of a threat than terrorists, Mr Miller said.

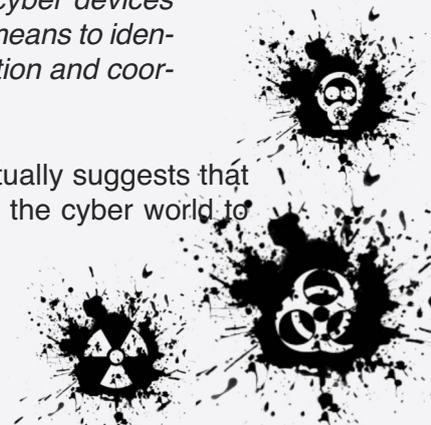
### Cybersecurity Ecosystem: The Future?

Source: [http://cybersecurityreport.nextgov.com/2011/03/cybersecurity\\_ecosystem\\_the\\_future.php?zone=itsecurity](http://cybersecurityreport.nextgov.com/2011/03/cybersecurity_ecosystem_the_future.php?zone=itsecurity)

The Department of Homeland Security on Wednesday rolled out its much-anticipated white paper on the ecosystem of cyber-security. The document, according to DHS:

*"...explores technical options for creating a safer, more secure and resilient network of networks. Specifically, the paper looks at how prevention and defense can be enhanced through three security building blocks: automation, interoperability, and authentication. If these building blocks were incorporated into cyber devices and processes, cyber stakeholders would have significantly stronger means to identify and respond to threats--creating and exchanging trusted information and coordinating courses of action in near real time."*

While "ecosystem" suggests an environmental approach, the paper actually suggests that cybersecurity should mirror the body's immune system. DHS says that in the cyber world to



come, cyber devices, much like bodies, will defend themselves against attacks to keep the system "healthy."

Instead of the ad hoc approach we currently have, the cyber ecosystem will use automation, interoperability, and authentication. DHS likens "automation" to the body's ability to defend, destroy, and clean itself. In the cyber ecosystem, Automated Courses of Action (ACOAs) will allow a system to automatically develop a defense strategy, while fighting through attacks.

Just as the body rejects things that are bad for it, the cyber ecosystem will employ strategies that reject what is not good for it; when possible "bad things" or a disruption are detected, the system will diagnose the problem and figure out how to automatically protect itself in the future.

The paper is thought-provoking and the start of a conversation. While the health analogy is not new (computer "viruses" have long been "infecting" computers), this paper additionally maps out where the government may go in creating cyber equivalents to the Centers for Disease Control.

At the end of the document, DHS asks for feedback, including thoughts on a proposed action plan relating to game-changing initiatives. Among the initiatives listed are:

- Piloting, demonstration, and rapid promulgation of community and inter-community ACOAs for collective defense
- Piloting, demonstration, and rapid promulgation of security content automation standards for functions described in the second and third waves of Figure 5
- Building upon the draft NSTIC to achieve standards-based device authentication, including small and often wireless devices composing massively scalable grids.
- These ideas suggest that the government is serious about moving beyond strategies and plans and actually is looking for technical and tactical solutions to the cybersecurity problem.

## Navy calling on gamers to help with security

Source:[http://www.washingtonpost.com/local/navy-calling-on-gamers-to-help-with-security/2011/05/13/AFRYiP4G\\_story.html](http://www.washingtonpost.com/local/navy-calling-on-gamers-to-help-with-security/2011/05/13/AFRYiP4G_story.html)

To combat Somali pirates, the U.S. Navy has relied on warships, snipers and SEAL teams. Now, it is turning to the heavy artillery: Internet gamers. This month, the Office of Naval Research will



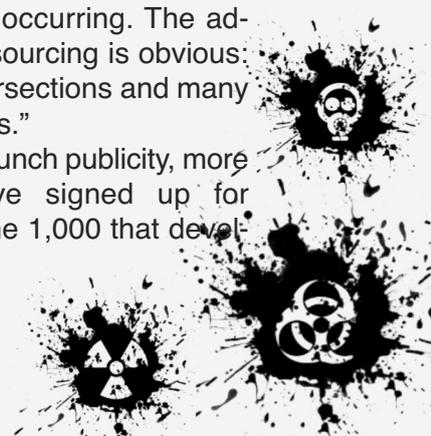
roll out the military's first-ever online war game open to the public, crowd-

sourcing the challenges of maritime security to thousands of "players" sitting in front of their computers.

The project — named MMOWGLI (the acronym for Massively Multiplayer Online Wargame Leveraging the Internet) — is a video game for policy wonks. It aims to replicate a traditional military strategy session on an exponentially larger scale, bringing to-

gether a diverse mix of government and outside experts that would be impossible even in the largest Pentagon conference room. Through virtual simulation and social media tools made popular on Twitter and Facebook, players will work together to respond to a series of make-believe geopolitical scenarios set off when private ships are hijacked off Somalia's coast. "We live in an echo chamber," Lawrence Schuette, the naval research office's innovation chief, said of the military. "The challenge is you always want to have an audience that's diverse in background, diverse in thinking. It's those intersections where you see creativity occurring. The advantage of online crowd-sourcing is obvious: You have many more intersections and many more diverse backgrounds."

Thanks in part to pre-launch publicity, more than 7,000 people have signed up for MMOWGLI, far beyond the 1,000 that devel-





opers had anticipated for the \$450,000 pilot project. Programmers from the Institute for the Future, a nonprofit based in Palo Alto, Calif., that is making the software, have postponed the launch date to be sure the game has enough capacity. Schuette stressed that his office is more interested in building technology that can be used for research across military platforms than it is in generating groundbreaking anti-piracy policy. But piracy experts welcomed the exercise as a much-needed thought experiment. “It is such a complex issue that has to do with local dynamics on the ground, governance, financial flows,” said Jennifer Cooke, director of the Africa Program at the Center for Strategic and International Studies. “There is no single way to approach piracy in that area. “Naval experts do not know the tools that Treasury can bring to bear,” she said. “Likewise, a Somali expert might not have knowledge of what possible mari-time strategies commercial shippers are able to employ.”

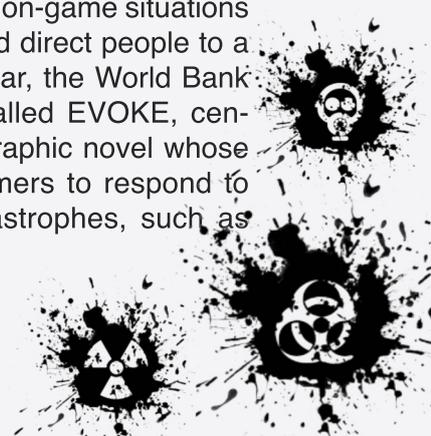
### **Innovate and Defend**

MMOWGLI lacks the high-tech, shoot 'em up graphics of commercial video games. Video clips and storyboards will prompt players to envision scenarios. For example: “Three pi-

rate ships are holding the world hostage. Chinese-U.S. relations are strained to the limit and both countries have naval ships in the area. Humanitarian aid for rig workers is blocked. The world is blaming the U.S. for plundering African resources.” Players are then confronted with two boxes — Innovate and Defend — asking what new resources could “turn the tide” and what risks might result.

In the first round, players are limited to proposing Twitter-length, 140-character solutions, and the crowd votes on their favorite ideas, similar to “liking” something on Facebook, said Jason Tester, a game designer from the Institute for the Future. In ensuing rounds of the three-week game, teams will form around the most popular ideas and develop in-depth action plans.

It is all part of the Navy’s attempt to exploit the benefits of online “gamification,” the increasingly popular strategy of employing game-play mechanics in non-game situations to influence behaviors and direct people to a desired outcome. Last year, the World Bank hosted a virtual game called EVOKE, centered around an online graphic novel whose characters prompted gamers to respond to imagined worldwide catastrophes, such as





famine in Japan. Aimed initially at college students in South Africa, the game went viral: 19,324 people from more than 150 countries registered to play, submitting 23,500 blog entries, 4,700 photos and 1,500 videos, said Robert Hawkins, a senior education specialist at the World Bank who helped develop the game. "If you look at user-generated innovation, it's already happening in the private sector," Hawkins said. The theory is that "those closest to the ground and action have the best ideas as to what will work best."

### Practical vs. trendy

But as anyone who has spent time in an online chat room knows, moderating the debate against online bullies and sifting through thousands of comments to find quality ideas can be nearly impossible. During the EVOKE project, players coalesced around proposals that were unsustainable, such as floating greenhouses that would produce food 25 times too expensive to afford, said Rex Brynen, a professor of political science at McGill University in Montreal who blogs on strategic gaming. "There was not enough quality control," Brynen said of EVOKE. "Trendy development

ideas that appeal to the 15- to 30-year-old age demographic catch on because they're trendy, not because there is proof they would work." Hawkins dismissed the criticism, noting that the World Bank was using "nascent technology" to envision the world 10 years in the future. "By no means were we proposing that the solutions outlined in a fictional story in 2020 are things the World Bank advocates," he said. "What we wanted to do was inspire people and get them thinking about the possible."

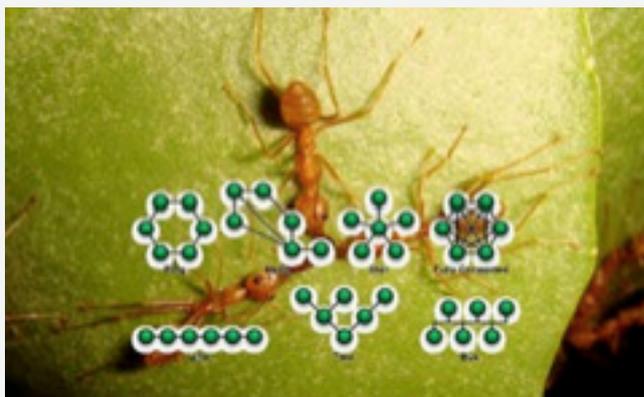
Schuette, of the naval research office, said his team is aware of the potential pitfalls of throwing out policy development to a nameless, faceless crowd. A dozen members of the Naval Postgraduate School, which is hosting the MMOWGLI Web site, will monitor the game around the clock, Schuette said. Developers hope that MMOWGLI can help break down rigid military hierarchies by allowing players to remain anonymous. "That's old hat online, but it's radically new to the military," Tester said. "Everyone is looking forward to seeing if the winning team could be a four-star admiral, a Naval Academy cadet and someone from a nonprofit collaborating with each other."



### Digital ants protect critical infrastructure

Source: <http://www.homelandsecuritynewswire.com/digital-ants-protect-critical-infrastructure>

As the U.S. electrical power grid becomes more interconnected through the Internet, the chances of cyber attacks increase as well; a Wake Forest University security expert developed "digital ants" to protect critical networks; unlike traditional security approaches, which



are static, digital ants wander through computer networks looking for threats such as computer worms, self-replicating programs designed to steal information or facilitate unauthorized use of computers; when a digital ant detects a threat, it summons an army of ants to converge at that location, drawing the attention of human operators to investigate

As the U.S. electrical power grid becomes more interconnected through the Internet — from the nuclear power plant in California to transmission lines in Texas to the microwave in your kitchen — the chances of cyber attacks increase as well.

Wake Forest University's professor of computer science Errin Fulp is training an army of "digital ants" to turn loose into the power grid to seek out computer viruses trying to wreak havoc on the system.

If the approach proves successful in safeguarding the power grid, it could have wide-ranging applications on protecting anything connected to SCADA (Supervisory Control and Data Acquisition) networks, computer systems that control everything from water and sewer management systems to mass transit systems to manufacturing systems.

A Wake Forest University release reports

that Fulp is working this summer with scientists at Pacific Northwest National Laboratory (PNNL) in Richland, Washington, on the next steps in the digital ants technology, developed by PNNL and Wake Forest over the last several years. The approach is so promising that it was named one of the "ten technologies that have the power to change our lives," by Scientific American magazine last year.

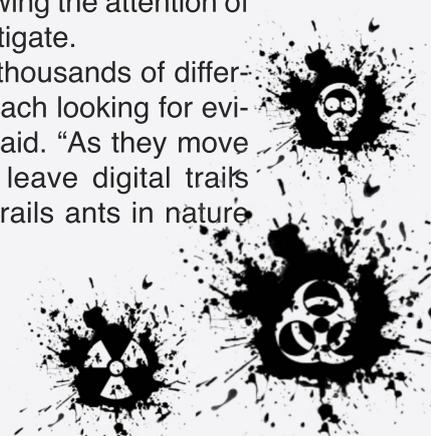
The power grid is probably more vulnerable to cyber attacks than security experts would like to admit, said Fulp, an expert in security and computer networks. As the grid becomes more and more interconnected, it offers hackers more points to enter the system; for instance, inserting a virus or computer worm into a low security site, such as in your home's smart grid, to gain access to more secure systems up the line.

"When that network connects to a power source, which connects to the smart grid, you have a jumping off point" for computer viruses, he said. "A cyber attack can have a real physical result of shutting off power to a city or a nuclear power plant."

The digital ants technology could transform cyber security because it adapts rapidly to changing threats, said Fulp, who has received nearly \$250,000 in grants from PNNL/Battelle Memorial Institute for his ongoing research.

The release notes that unlike traditional security approaches, which are static, digital ants wander through computer networks looking for threats such as computer worms, self-replicating programs designed to steal information or facilitate unauthorized use of computers. When a digital ant detects a threat, it summons an army of ants to converge at that location, drawing the attention of human operators to investigate.

"The idea is to deploy thousands of different types of digital ants, each looking for evidence of a threat," Fulp said. "As they move about the network, they leave digital trails modeled after the scent trails ants in nature



use to guide other ants. Each time a digital ant identifies some evidence, it is programmed to leave behind a stronger scent. Stronger scent trails attract more ants, producing the swarm that marks a potential computer infection.”

The concept has proven successful in testing on a small scale, but will it still work when it's scaled up to protect something as large and complex as the nation's power grid? Fulp and two of his students — computer science graduate students Michael Crouse and Jacob White — are working this summer with scientists at PNNL and from the University of California at Davis to answer that question. Even using PNNL's vast computer platforms, they can only rely on computer simulations to predict the ants' "behavior" up to a point.

This is where Associate Professor of Mathematics Ken Berenhaut, an expert in mathematical modeling and simulation, comes in. Berenhaut, along with graduate student Ross Hilton, will use modeling to help determine what will happen as the ants move about the smart grid from the hot water heater in your house to the electrical substation to the power plant.

Among the questions to be answered: How do the ants migrate across different computer platforms and systems operating at different

speeds? How many ants should you have patrolling a system? How long do they live? How do the ants scale up to identify a threat and then ramp back down?

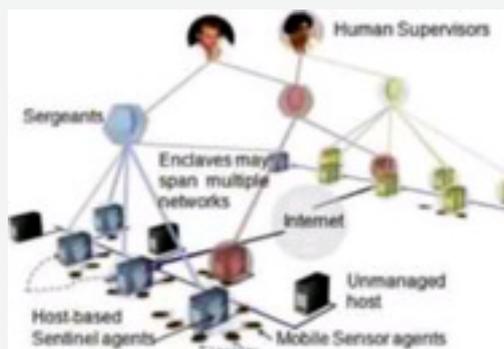
“In nature, we know that ants defend against threats very successfully,” Fulp said. “They can ramp up their defense rapidly, and then resume routine behavior quickly after an intruder has been stopped. We're trying to achieve that same framework in a computer system.”

PNNL, a Department of Energy laboratory, conducts cutting-edge research in cyber security. Glenn Fink, a senior research scientist at PNNL, first came up with the idea of copying ant behavior for computer security. He was familiar with Fulp's work developing faster computer scans using parallel processing — dividing computer

data into batches like lines of shoppers going through grocery store checkouts, where each lane is focused on certain threats — and invited him to join the project several years ago.

Fulp and two of his students, Wes Featherstun and Brian Williams, then graduate students in com-

puter science, worked at PNNL during the summer of 2009. Fulp and Crouse worked there again last summer.



## Cyber Combat: Act of War

Source: <http://online.wsj.com/article/SB10001424052702304563104576355623135782718.html>

The Pentagon has concluded that computer sabotage coming from another country can

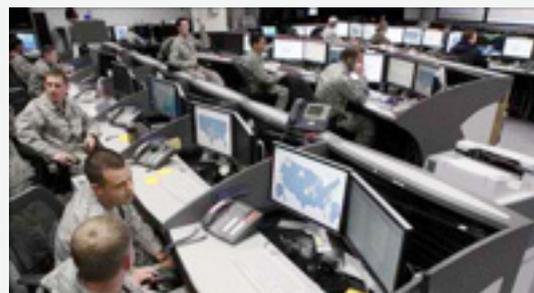
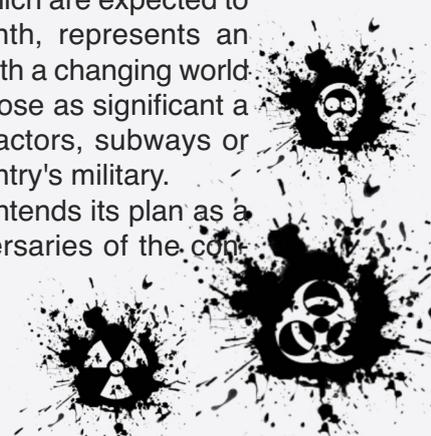


Photo: THOMAS KIENZLE/AFP/Getty Images

constitute an act of war, a finding that for the first time opens the door for the U.S. to respond using traditional military force.

The Pentagon's first formal cyber strategy, unclassified portions of which are expected to become public next month, represents an early attempt to grapple with a changing world in which a hacker could pose as significant a threat to U.S. nuclear reactors, subways or pipelines as a hostile country's military.

In part, the Pentagon intends its plan as a warning to potential adversaries of the con-



sequences of attacking the U.S. in this way. "If you shut down our power grid, maybe we will put a missile down one of your smokestacks," said a military official.

Recent attacks on the Pentagon's own systems—as well as the sabotaging of Iran's nuclear program via the Stuxnet computer

addressed, including whether the U.S. can ever be certain about an attack's origin, and how to define when computer sabotage is serious enough to constitute an act of war. These questions have already been a topic of dispute within the military.

One idea gaining momentum at the Pentagon is the notion of "equivalence." If a cyber attack produces the death, damage, destruction or high-level disruption that a traditional military attack would cause, then it would be a candidate for a "use of force" consideration, which could merit retaliation.

The Pentagon's document runs about 30 pages in its classified version and 12 pages in the unclassified one. It concludes that the Laws of Armed Conflict—derived from various treaties and customs that, over the years, have come to guide the conduct of war and proportionality of response—apply in cyberspace as in traditional warfare, according to three defense officials who have read the document. The

### The War on Cyber Attacks

Attacks of varying severity have rattled nations in recent years.

- June 2009: First version of Stuxnet virus starts spreading, eventually sabotaging Iran's nuclear program. Some experts suspect it was an Israeli attempt, possibly with American help.
- November 2008: A computer virus believed to have originated in Russia succeeds in penetrating at least one classified U.S. military computer network.
- August 2008: Online attack on websites of Georgian government agencies and financial institutions at start of brief war between Russia and Georgia.
- May 2007: Attack on Estonian banking and government websites occurs that is similar to the later one in Georgia but has greater impact because Estonia is more dependent on online banking

worm—have given new urgency to U.S. efforts to develop a more formalized approach to cyber attacks. A key moment occurred in 2008, when at least one U.S. military computer system was penetrated. This weekend Lockheed Martin, a major military contractor, acknowledged that it had been the victim of an infiltration, while playing down its impact.

The report will also spark a debate over a range of sensitive issues the Pentagon left un-

document goes on to describe the Defense Department's dependence on information technology and why it must forge partnerships



with other nations and private industry to protect infrastructure.

The strategy will also state the importance of synchronizing U.S. cyber-war doctrine with that of its allies, and will set out principles for new security policies. The North Atlantic Treaty Organization took an initial step last year when it decided that, in the event of a cyber attack on an ally, it would convene a group to "consult together" on the attacks, but they wouldn't be required to help each other respond. The group hasn't yet met to confer on a cyber incident.

Pentagon officials believe the most-sophisticated computer attacks require the resources of a government. For instance, the weapons used in a major technological assault, such as taking down a power grid, would likely have been developed with state support, Pentagon officials say.

The move to formalize the Pentagon's thinking was borne of the military's realization the U.S. has been slow to build up defenses against these kinds of attacks, even as civilian and military infrastructure has grown more dependent on the Internet. The military established a new command last year, headed by the director of the National Security Agency, to consolidate military network security and attack efforts.

The Pentagon itself was rattled by the 2008 attack, a breach significant enough that the Chairman of the Joint Chiefs briefed then-President George W. Bush. At the time, Pentagon officials said they believed the attack originated in Russia, although didn't say whether they believed the attacks were connected to the government. Russia has denied involvement.

The Rules of Armed Conflict that guide traditional wars are derived from a series of international treaties, such as the Geneva Conventions, as well as practices that the U.S. and other nations consider customary international law. But cyber warfare isn't covered by existing treaties. So military officials say they want to seek a consensus among allies about how to proceed.

"Act of war" is a political phrase, not a legal term, said Charles Dunlap, a retired Air Force Major General and professor at Duke Univer-

sity law school. Gen. Dunlap argues cyber attacks that have a violent effect are the legal equivalent of armed attacks, or what the military calls a "use of force."

"A cyber attack is governed by basically the same rules as any other kind of attack if the effects of it are essentially the same," Gen. Dunlap said Monday. The U.S. would need to show that the cyber weapon used had an effect that was the equivalent of a conventional attack.

James Lewis, a computer-security specialist at the Center for Strategic and International Studies who has advised the Obama administration, said Pentagon officials are currently figuring out what kind of cyber attack would constitute a use of force. Many military planners believe the trigger for retaliation should be the amount of damage—actual or attempted—caused by the attack.

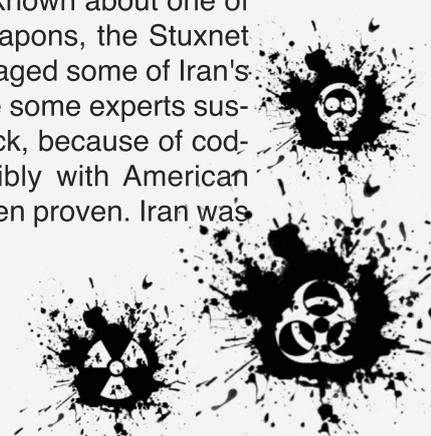
For instance, if computer sabotage shut down as much commerce as would a naval blockade, it could be considered an act of war that justifies retaliation, Mr. Lewis said. Gauges would include "death, damage, destruction or a high level of disruption" he said.

Culpability, military planners argue in internal Pentagon debates, depends on the degree to which the attack, or the weapons themselves, can be linked to a foreign government. That's a tricky prospect at the best of times.

The brief 2008 war between Russia and Georgia included a cyber attack that disrupted the websites of Georgian government agencies and financial institutions. The damage wasn't permanent but did disrupt communication early in the war.

A subsequent NATO study said it was too hard to apply the laws of armed conflict to that cyber attack because both the perpetrator and impact were unclear. At the time, Georgia blamed its neighbor, Russia, which denied any involvement.

Much also remains unknown about one of the best-known cyber weapons, the Stuxnet computer virus that sabotaged some of Iran's nuclear centrifuges. While some experts suspect it was an Israeli attack, because of coding characteristics, possibly with American assistance, that hasn't been proven. Iran was



the location of only 60% of the infections, according to a study by the computer security firm Symantec. Other locations included Indonesia, India, Pakistan and the U.S.

Officials from Israel and the U.S. have declined to comment on the allegations.

Defense officials refuse to discuss potential cyber adversaries, although military and intelligence officials say they have identified previous attacks originating in Russia and China. A 2009 government-sponsored report from the U.S.-China Economic and Security Review Commission said that China's Peo-

ple's Liberation Army has its own computer warriors, the equivalent of the American National Security Agency.

That's why military planners believe the best way to deter major attacks is to hold countries that build cyber weapons responsible for their use. A parallel, outside experts say, is the George W. Bush administration's policy of holding foreign governments accountable for harboring terrorist organizations, a policy that led to the U.S. military campaign to oust the Taliban from power in Afghanistan.

## Hackers using cloud networks to launch powerful attacks

Source: <http://www.homelandsecuritynewswire.com/hackers-using-cloud-networks-launch-powerful-attacks>

In a disturbing new trend, hackers have begun harnessing the vast computing power of cloud based servers to carry out powerful cyber attacks; cloud computing services piece together large strings of online servers and storage systems to provide users with enormous processing power and terabytes of storage space; earlier this year, a German researcher, demonstrated that a cloud server could fire 400,000 passwords a second at a secured Wi-Fi network; in the recent attacks that shut down Sony's online customer networks in April, hackers used cloud based attacks to disrupt service to roughly 100 million users worldwide

In a disturbing new trend, hackers have begun harnessing the vast computing power of cloud based servers to carry out powerful cyber attacks.

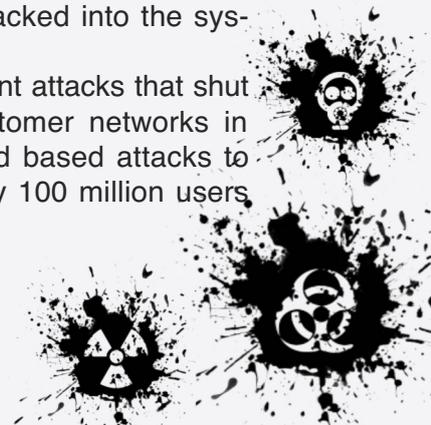
Cloud computing services piece together large strings of online servers and storage systems to provide users with enormous processing power and terabytes of storage space. These companies offer their services on an as needed basis to allow companies

like Netflix or Foursquare accommodate additional traffic.

But the increasing ubiquity of cloud computing services and the decreasing costs have enabled hackers to rent their services on an hourly basis. Using the computing power of cloud networks, cyber attackers can wage digital assaults like "brute force attacks" which send a constant stream of passwords at a computer system until it finds the correct code to enter.

For instance, earlier this year, Thomas Roth, a German researcher, demonstrated how Amazon's cloud computing service Elastic Computer Cloud (EC2) could be used to hack into other systems. Using EC2, Roth launched a brute force attack that fired 400,000 passwords a second at a secured Wi-Fi network. Within about twenty minutes, Roth had successfully hacked into the system.

In addition, in the recent attacks that shut down Sony's online customer networks in April, hackers used cloud based attacks to disrupt service to roughly 100 million users worldwide.



Scott Chasin, the chief technology officer of McAfee's Security-as-a-Service, said,

Siamak Farah, the founder and CEO of InfoStreet, a cloud service provider, said that



“That’s the real key now. There’s a lot of available computing out there with instant-on and instant provisioning.”

In the past, to conduct cyber attacks with vast computing power, hackers would painstakingly create botnets by infecting thousands of individual computers to operate as one. This process could take months, but with cloud computing networks, hackers can set up a powerful attack in a few minutes.

According to Chasin, these types of “lily pad” attacks, where hackers use one compromised server to attack another, are not new, but the ease with which hackers can gain access to cloud servers is.

Hackers can purchase time on Amazon’s EC2 network for as little as a few pennies per hour.

companies using cloud-computing networks should not worry too much about attacks that might affect their accounts because service providers have more sophisticated cyber security defenses than most companies do. “It’s natural for any customer to be concerned, but most people want their money in the bank and not under their mattress,” he said.

Farah added that individual companies generally cannot afford the technology or expertise that cloud service providers can. In addition he said companies can purchase insurance as well as disaster recovery and backup services from third party providers. “You cannot stop crime, but you can reduce it from happening,” he said.

## Joint EU and U.S. cyber security exercise to be held this year

Source: [http://www.theregister.co.uk/2011/04/15/global\\_cyberwar\\_exercise/](http://www.theregister.co.uk/2011/04/15/global_cyberwar_exercise/)

The United States and the European Union (EU) recently announced that they will hold joint cyber war exercises by the end of 2011; the exercise comes as part of a broader agreement to expand efforts to jointly defend against cyber security threats; the two sides agreed to share best practices, engage the private sector, and increase global cyber incident response capabilities; in particular, the agreement will focus on fighting botnets, securing industrial control systems, and enhancing the resilience and stability of the internet

The United States and the European Union (EU) recently announced that they will hold joint cyber war exercises by the end of 2011. The exercise comes as part of a broader agreement to expand efforts to jointly defend against cyber security threats.

The joint exercises were announced after last week’s meeting between DHS Secretary Janet Napolitano and the EU home affairs commissioner Cecilia Malmstrom in Budapest, Hungary where the two security chiefs discussed increasing preparedness against cyber threats.



The United States has regularly held cyber security exercises for several years, while the European Union recently held its first exercise, dubbed Cyber Europe, last year.

The two sides agreed to share best practices, engage the private sector, and increase global cyber incident response capabilities.

After the meeting, Secretary Napolitano said, in a statement, "The United States is fully committed to working with our European partners to combat threats to our mutual security and economic stability. Together, we will enhance information sharing, strengthen cyber security and ensure the security and resilience of our global supply chain systems against terrorism and transnational crime."

In particular, the agreement will focus on fighting botnets, securing industrial control systems, and enhancing the resilience and stability of the internet.

Officials also agreed to work closely to remove child pornography from the Internet by

teaming up with domain-name registrars and registries.

These joint efforts are aimed at formalizing ad hoc cooperative agreements and streamline coordination. The agreement will be overseen by the EU-U.S. Working Group on Cyber Security and Cyber Crime that was established at the EU-U.S. summit in November 2010.

The United States and the European Union are also hoping to expand the Council of Europe Convention on Cyber Crime treaty. Currently thirty countries have signed the treaty, which is considered as the global standard for cyber security and cyber crime investigation.

U.S. and EU officials seek to push the treaty beyond Europe and are actively encouraging other countries ratify it.

At the end of the year, officials from both sides of the Atlantic will meet once more to evaluate the progress of their efforts.

## ENISA issues final report on 'Cyber Europe 2010'

Source: <http://www.stefanomele.it/news/dettaglio.asp?id=211>

The ENISA (European Network and Information Security Agency) - Europe's cyber security agency - released its final report on the first Pan-European cyber security exercise, "Cyber Europe 2010". The exercise was conducted back in



November 2010 as a way to trigger communication and collaboration

between countries and as a step for strengthening Europe's cyber defenses in the event of large-scale cyber-attacks.

According to the report's **key findings**:

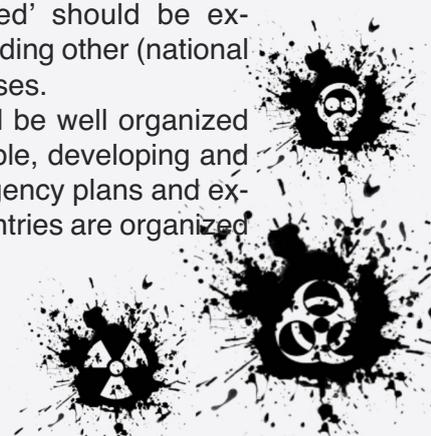
- Member States' Information Technology bodies communicate in a wide variety of ways. Harmonization of standard operating procedures would lead to more secure and efficient communications between them.
- The ability of participants to find the relevant points of contact within organizations varied. In the event of a real crisis, some

55 % of countries were not confident they would be able to quickly identify the right contact, even with the available directories.

- Participants were evenly divided about if a 'Single Point of Contact' (SPOC) or 'Multiple Points of Contact' (MPOC) would be better. A SPOC would be easier; however, realistically today there are multiple points of contact. Having MPOC also avoids there being a single point of failure.

The report's **main recommendations** include that:

- Europe should continue to hold exercises in Critical Information Infrastructure Protection (CIIP): 86% of the participants found the 'dry run' either 'very' or 'extremely' useful.
- The 'Lessons Identified' should be exchanged with those holding other (national or international) exercises.
- Member States should be well organized internally by, for example, developing and testing national contingency plans and exercises. European countries are organized



nationally in a variety of ways. Given the differences in structures and process, it is vital to know whom to contact. The dialogue on the necessity of a SPOC or MPOC at the EU level should continue, and ENISA can be the facilitator of this.

- A roadmap for pan-EU exercises should be

created. This would include a definition of standard procedures and structures for large scale events.

**NOTE:** Full report can be downloaded from Newsletter's website – CBRNE-T Papers section

## Dramatic increase in critical infrastructure cyber attacks, sabotage

Source: <http://www.csis.org>

A new study by McAfee and CSIS reveals a dramatic increase in cyber attacks on critical infrastructure such as power grids, oil, gas, and water; the study also shows that many of the world's critical infrastructures lacked protection of their computer networks, and revealed the staggering cost and impact of cyberattacks on these networks

McAfee and the Center for Strategic and International Studies (CSIS) earlier this week revealed the findings from a report that reflects the cost and impact of cyberattacks on critical infrastructure such as power grids, oil, gas, and water. The survey of 200 IT security executives from critical electricity infrastructure enterprises in fourteen countries found that 40 percent of executives believed that their industry's vulnerability had increased. Nearly 30 percent believed their company was not prepared for a cyberattack, and more than 40 percent expect a major cyberattack within the next year.

The report, "In the Dark: Crucial Industries Confront Cyberattacks," was commissioned by McAfee and produced by CSIS. "We found that the adoption of security measures in important civilian industries badly trailed the increase in threats over the last year," said Stewart Baker, who led the study for CSIS. Industry executives made modest progress over the past year in securing their networks, as the energy sector increased its adoption of security technologies by only a single percentage point (51 percent), and oil and gas industries increased only by three percentage points (48 percent).

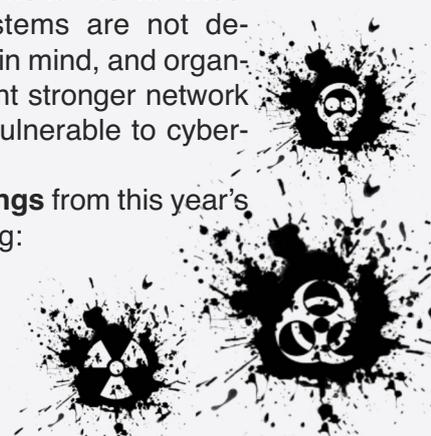
"Ninety to 95 percent of the people working on the smart grid are not concerned about

security and only see it as a last box they have to check," said Jim Woolsey, former U.S. director of Central Intelligence.

A McAfee release says that the report is a follow-up to a report released in 2010 called "In the Crossfire: Critical Infrastructure in the Age of Cyberwar," that found that many of the world's critical infrastructures lacked protection of their computer networks, and revealed the staggering cost and impact of cyberattacks on these networks. The new study reveals that while the threat level to these infrastructures has accelerated, the response level has not, even after the majority of respondents frequently found malware designed to sabotage their systems (nearly 70 percent), and nearly half of respondents in the electric industry sector reported that they found Stuxnet on their systems. This threat to infrastructures also includes electrical smart grids, which are growing in adoption and expected to have exceeded \$45 billion in global spending in 2015.

"What we are learning is the smart grid is not so smart," said Dr. Phyllis Schneck, vice president and chief technology officer for public sector at McAfee. "In the past year, we've seen arguably one of the most sophisticated forms of malware in Stuxnet, which was specifically designed to sabotage IT systems of critical infrastructures. The fact is that most critical infrastructure systems are not designed with cybersecurity in mind, and organizations need to implement stronger network controls, to avoid being vulnerable to cyberattacks."

Other **key report findings** from this year's report include the following:

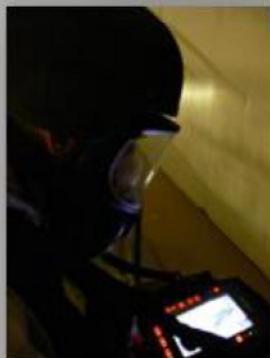


- Cyberattacks still prevalent: 80 percent of respondents have faced a large-scale denial of service attack (DDoS), and a quarter reported daily or weekly DDoS attacks and/or were victims of extortion through network attacks.
- Extortion attempts were more frequent in the CIP sectors: One in four survey respondents have been victims of extortion through cyberattacks or threatened cyberattacks. The number of companies subject to extortion increased by 25 percent in the past year, and extortion cases were equally distributed among the different sectors of critical infrastructure. The countries of India and Mexico have a high rate of extortion attempts; 60 to 80 percent of executives surveyed in these countries reported extortion attempts.
- Organizations failing to adopt effective security: Sophisticated security measures placed upon offsite users are in the minority, with only a quarter of those surveyed implementing tools to monitor network activity, and only about 36 percent use tools to detect role anomalies.
- Security conscious countries: Brazil, France, and Mexico are lagging in their security measures, adopting only half as many security measures as leading countries China, Italy, and Japan. Concurrently, China and Japan were also among the countries with the highest confidence levels in the ability of current laws to prevent or deter attacks in their countries.
- U.S. and Europe falling behind Asia in government involvement: Respondents in China and Japan reported high levels of both formal and informal interaction with their government on security topics, while the United States, Spain, and the United Kingdom indicated little to no contact.
- Organizations fear government attacks: More than half of respondents say that they have already suffered from government attacks.





# CBRNE Training Facilities



JOOC  
JOINT OPERATIONS CENTER



# Advanced CBRNE Training

The JOC is a former nuclear fuels reprocessing plant that has been converted into an all hazards training site. With much of the structures remaining complete, including control room, tanks, miles of pipes, etc.. The JOC can offer a real world training experience.

9 Story UF6 Bldg



Separations Bldg

GTI in conjunction with Savannah River National Labs (SRNL) have the facilities and additional assets to offer the most advanced CBRNE training solutions available.





# CBRNE Sensitive Site Exploitation and Training at the JOC

Exploit various possible hazardous chemical, biological, radiological or explosive incidents for the purpose of being able to plan and execute a proper response

## Scenario Based Training Facilitations for:

- Chemistry and Chemical Agents
- Biological Agents
- Radiological Detection
- Chemical Detection
- Biological Detection



## Full Site Access for:

- Sensitive Site Assessment
- Site Exploitation and Characterization





# CBRNE Agent Operations

Real World Training Facilities to mimic small or large scale CBRNE production and operations.



- Chemical agent production
- Biological agent production
- Radiological agent production
- Nuclear agent production
- Explosive production to include IED rigged buildings and lanes





# Advanced Defeat of Production Facilities

Disablement and characterizations of production scale facilities.

Scenarios can be designed to fit SOP, SOW or TTP of an individual team or unit. Utilization of hardware and processes that make up biological, chemical and radiological production plants.



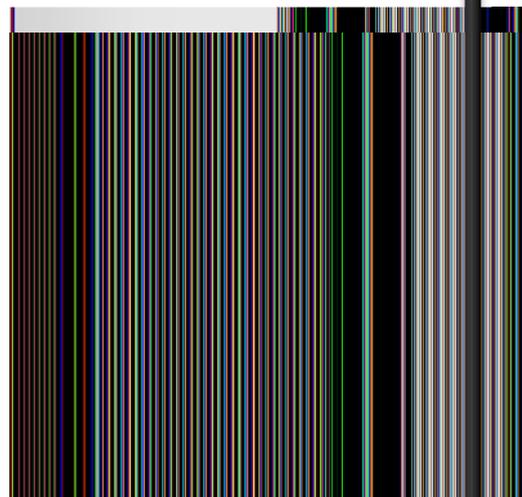
## Unit Designed Scenarios:

- Chemical and Biological WMD-Warfare
- Radiological WMD
- Industrial Agents WMD
- Asymmetrical Weapons
- Decontamination





# Training & Facility Coordination



## Contact:

Government Training Institute

Idaho Office: (866) 938-5510

South Carolina Office: (803) 793-0057

Email: [info@gtitraining.org](mailto:info@gtitraining.org)

Or Visit

Web: [www.gtitraining.org](http://www.gtitraining.org)

**JOCC**  
JOINT OPERATIONS CENTER

# CRISTANINI CBRN DECONTAMINATION SYSTEMS



A5009

CONFORM TO THE QUALITY SYSTEM STANDARD AQAP 2110  
and ISO 9001:2008



DEPLOYABLE CBRN  
ANALYTICAL  
LABORATORY (STANAG 4632)



DDMAS LARGE SCALE  
DECONTAMINATION SYSTEM  
HIGHLY DEPLOYABLE



DEPLOYABLE BIO LABORATORY  
CLASS III BIO SECURITY LEVEL



DDMAS LARGE SCALE  
DECONTAMINATION SYSTEM  
DUAL OPERATORS



RVCBRN TRAILER FOR CBRN  
DECONTAMINATION AND  
DETOXIFICATION



MOBILE SYSTEM FOR  
AIRCRAFT DECONTAMINATION



TSDM-TACTICAL STEAM  
DECON MODULE

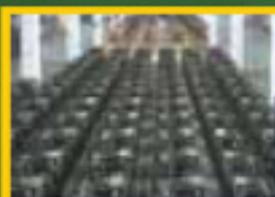
**ONLY ONE PERSON  
ONLY ONE MACHINE  
ONLY ONE PRODUCT**



SANJET C 1126 HR CBRN DUAL  
OPERATOR DECONTAMINATION  
AND DETOXIFICATION GROUP



SC34 CBRN DECONTAMINATION  
OF SENSITIVE EQUIPMENT  
AND SURFACES



CBRN PRODUCTION LINE



**CRISTANINI**

37010 RIVOLI - VERONA - ITALY

Tel. +39-045-6269400 - Fax +39-045-6269411

cristanini@cristanini.it - [www.cristanini.com](http://www.cristanini.com)

Osama bin Laden – the End

# CBRNE-TERRORISM Newsletter

Volume 38 - 2011



Japan's triple catastrophe  
CBRN security at London 2012  
UK DGBRNC  
Agroterrorism  
Forest Fires can be a **Tactic of Terrorism**  
Climate change and global **security**  
CBRN training for Photographers and TV Crews  
Innovative chem-bio sensor  
E. Coli 0104 – Terror in Germany  
Iran has secretly stocked enriched **uranium**  
for 4 nuclear bombs  
15 US nuclear reactors are located **in**  
an active seismic zone

## Terror News

Carry **spice** could be used  
to detect explosives  
How IEDs work  
What if there is a US-China  
cyber-**war** in 2020?  
Latin **America: Terrorism issues**



*Fukushima*

## Terror News

### American hostages killed by pirates

Source: [http://www.usatoday.com/news/world/2011-02-22-pirates-kill-hostages\\_N.htm](http://www.usatoday.com/news/world/2011-02-22-pirates-kill-hostages_N.htm)

A pirate fired a rocket-propelled grenade at a U.S. Navy destroyer shadowing a hijacked yacht with four Americans aboard Tuesday. Then gunfire erupted, the military said. U.S. special forces rushed to the yacht only to find the four Americans fatally wounded.



Phyllis Macay and Bob Riggle on a yacht in Bodega Bay, Calif., in 2005. The U.S. military said that pirates killed four American hostages they were holding on the yacht Quest off Somalia's coast. The duo was among those killed.

Phyllis Macay and Bob Riggle on a yacht in Bodega Bay, Calif., in 2005. The U.S. military said that pirates killed four American hostages they were holding on the yacht Quest off Somalia's coast. The duo was among those killed. The experienced yacht enthusiasts from California and Washington are the first Americans killed by Somali pirates since the start of attacks off East Africa several years ago. One of the American couples on board had been sailing around the world since 2004 handing out Bibles. Their deaths

appeared to underscore an increasingly brutal and aggressive shift by pirates in their treatment of hostages. Killing hostages "has now become part of our rules," said a pirate who identified himself as Muse Abdi and referred to last week's sentencing of a pirate to 33 years in prison for the 2009 attack on the U.S. cargo vessel the Maersk Alabama. "From now on, anyone who tries to rescue the hostages in our hands will only collect dead bodies," he said. "It will never ever happen that hostages are rescued and we are hauled to prison." Secretary of State Hillary Rodham Clinton strongly condemned the killings, saying in a statement that the slayings were "deplorable" and underscored the need for international cooperation in fighting the scourge of piracy in waters off the Horn of Africa. Pirates had hijacked the 58-foot yacht Quest south of Oman on Friday. Since then, four U.S. warships and sky-high drones shadowed the vessel's movement as pirates tried to sail it to the Somali shore. U.S. officials negotiated with the captors via radio. But at 8 a.m. East Africa time Tuesday, a rocket-propelled grenade





was fired from the Quest at the USS Sterett, a guided-missile destroyer 600 yards (meters) away. The RPG missed and almost immediately afterward small arms fire was heard coming from the yacht, said Vice

Adm. Mark Fox, commander of the U.S. 5th Fleet in Bahrain. Several pirates then appeared on deck with their hands up. U.S. naval forces boarded the vessel and tried to provide lifesaving care to the Americans, but they died, Fox said. No U.S. forces were injured or killed. Thirteen pirates were captured and detained Tuesday, and two other pirates had boarded the USS Sterett on Monday to negotiate, Fox said. A member of a U.S. special operations force killed one of the pirates with a knife, Fox said. A second pirate was also killed, and the bodies of two other pirates were discovered on board, bringing to 19 the total number of pirates involved. The U.S. military didn't say how those two died and it

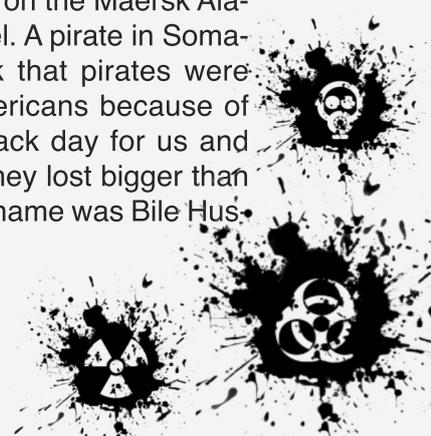
was not known if the pirates had fought among themselves. Pirates have increased attacks off the coast of East Africa in recent years despite an international flotilla of warships dedicated to protecting vessels and stopping the pirate assaults. But the conventional wisdom in the shipping industry had been that Somali pirates are businessmen looking for a multimillion-dollar ransom pay-

day, not insurgents looking to terrorize people. "We have heard threats against the lives of Americans before but it strikes me as being very, very unusual why they would kill hostages outright," said Graeme Gibbon-Brooks, the head of Dryad Maritime Intelligence, adding that the pirates must realize that killing Americans would invite a military response. Motivated by million-dollar ransoms, pirates have become increasingly bold in their attacks despite a flotilla of international warships patrolling the waters off East Africa. The last time pirates kidnapped a U.S. citizen — during the 2009 hijacking of the Maersk Alabama — Navy sharpshooters killed two pirates and rescued the ship's captain. But Tuesday's bloody events are apt to leave U.S. military planners in a quandary: Do they go after the pirates harder? Do they attack their bases on Somalia's ungoverned shores? One maritime expert said it's too early to tell. "This is a first," said Gibbon-Brooks, the analyst. "We don't know if the situation is related to a



straight execution. We don't know if it was related to an attempt to break free. We don't know if it was related to an accident." Gibbon-Brooks said the killings were "extremely unwise" by the Somalis, and that the deaths threaten what has been a successful and lucrative business

model. Two days before the hijacking, a New York court sentenced a pirate to 33 years in prison for the 2009 attack on the Maersk Alabama, a U.S. cargo vessel. A pirate in Somalia told the AP last week that pirates were more likely to attack Americans because of the sentencing. "It's a black day for us and also the Americans, but they lost bigger than us," a pirate who said his name was Bile Hus-



sein said. "If they still want a solution and safety for their citizens in the oceans, let them release our men they arrested." Only minutes before the military announced that the four Americans had died, a Somali pirate told AP by phone that if the yacht were attacked, "the hostages will be the first to go." "Some pirates have even suggested rigging the yacht with land mines and explosives so as the whole yacht explodes with the first gunshot," said the pirate, who gave his name as Abdullahi Mohamed, who claimed to be a friend of the pirates holding the four Americans. Pirates — who currently hold 30 ships and more than 660 hostages — typically win a multimillion ransom for releasing their captives, a huge sum that is shared among investors and pirates. The money is often spent on alcohol, drugs and prostitutes. One ransom paid last year was reported as \$9.5 million. Most ransoms are worth several million dollars. Given that typical financial motivation, Tuesday's killings left several unanswered questions, such as whether the pirates, being trailed by the Americans, believed there was no way to avoid spending years in a U.S. prison, or if the American forces spooked the pirates by approaching the yacht, or even if the hostages

had tried to retake the yacht from the pirates. The military said U.S. forces have been monitoring the Quest for about three days, since shortly after the Friday attack. Four Navy warships were involved, including the aircraft carrier USS Enterprise. Mohamed, the pirate in Somalia, told AP that pirate leaders had been expecting the yacht to make landfall soon. Five cars full of pirates were headed toward the pirate dens of Eyl and Gara'ad in anticipation of the Quest reaching land Monday, he said. Had the four reached land, they may have faced a long hostage ordeal like the 388 days that the British sailing couple Paul and Rachel Chandler spent in the hands of pirates. The two were released in November. "This incident is a clear message and alarm that it's time the world community quickly steps up to stop these pirate criminal activities. They should be treated mercilessly," said Gen. Yusuf Ahmed Khayr, the security minister in the northern Somalia region of Puntland, a pirate haven. The Adams ran a Bible ministry and had been distributing Bibles to schools and churches in remote villages in areas including the Fiji Islands, Alaska, New Zealand, Central America and French Polynesia.

## Portrait of Sheikh Dr. Yusuf Abdallah al-Qaradawi, senior Sunni Muslim cleric, affiliated with the Muslim Brotherhood

Source: The Meir Amit Intelligence and Terrorism Information Center Newsletter (<http://www.terrorism-info.org.il>)

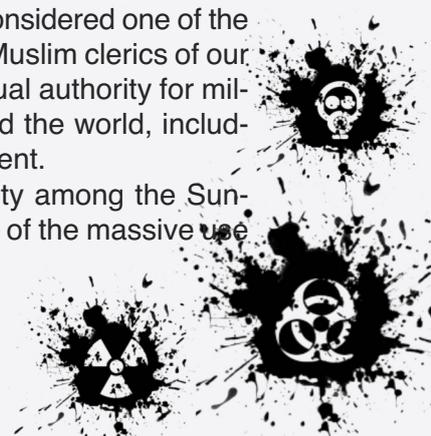
### Overview

1. Sheikh Dr. Yusuf Abdallah al-Qaradawi is a central figure affiliated with the Muslim Brotherhood. He was expelled from Egypt and found refuge in Qatar, and operates from there throughout the Muslim world.



Sheikh Yusuf al-Qaradawi ( Hamas' Palestine-info website, August 15, 2010)

2. After President Hosni Mubarak was ousted al-Qaradawi returned to Egypt and delivered the Friday sermon at a mass rally held in Al-Tahrir Square in Cairo. Many consider him the supreme religious and ideological authority for the Muslim Brotherhood, although he is not officially its leader (in the past refused to accept the title of the Muslim Brotherhood's General Guide). He is influential in Egypt and considered one of the most important Sunni Muslim clerics of our generation and a spiritual authority for millions of Muslims around the world, including the Hamas movement.
3. Al-Qaradawi's popularity among the Sunnis has grown because of the massive use



he makes of electronic media, mainly television and the Internet. One of his most important tools is the Al-Jazeera TV channel, which broadcasts his popular program "Life and Islamic Law," viewed by tens of millions of Muslims.

4. Al-Qaradawi has often exploited the program for blatant anti-Semitic propaganda and incitement (see below). He was also one of the founders of the IslamOnline website in 1997, which often quotes him.



Sheikh Dr. Yusuf al-Qaradawi on Al-Jazeera TV's popular "Life and Islamic Law" program (Al-Jazeera TV, March 15, 2009).

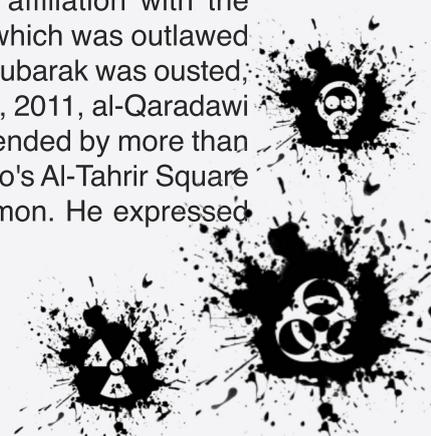
5. Al-Qaradawi refers to his religious views as "moderate Islam," which seeks to balance intellect and emotion. He has positive attitudes toward reforms in Islam, which he calls "correcting perceptions which were corrupted." He is considered one of the foremost propounders of the doctrine of the "the law of the Muslim minorities," which provides the Muslim minorities around the globe with space in which to maneuver and compromise between their daily lives and Islamic law. The aim of implementing his doctrine is to unite and unify Muslim minorities to make it possible for them to live under non-Muslim regimes, until the final stage of spreading Islam to the entire world.
6. At the same time, building a bridge between the exigencies of Muslim emigrants' daily lives and Islamic religious law also includes regarding taking over Europe as Islam's next target. In 2003 al-Qaradawi issued a fatwa declaring that "Islam will return to Europe as a victorious conqueror after having been expelled twice. This time it will not be

conquest by the sword, but by preaching and spreading [Islamic] ideology...The future belongs to Islam...The spread of Islam until it conquers the entire world and includes the both East and West marks the beginning of the return of the Islamic Caliphate..."

7. Although al-Qaradawi opposes Al-Qaeda and its methods, he enthusiastically supports Palestinian terrorism, including suicide bombing attacks targeting the civilian Israeli population. In the past he also supported "resistance" (i.e., terrorism) to the occupation of Iraq, including, by implication – although he denied it – abducting and murdering American civilians in Iraq. He issued fatwas calling for jihad against Israel and the Jews, and authorizing suicide bombing attacks even if the victims were women and children. He regards all of "Palestine" as Muslim territory (according to Muslim Brotherhood and Hamas ideology), strongly opposes the existence of the State of Israel and rejects the peace treaties signed with it, and opposes the Palestinian Authority (and in the past called for the stoning of Mahmoud Abbas).

### Al-Qaradawi and the recent events in Egypt

8. In response to the dramatic events in Egypt, al-Qaradawi (whose statements are widely reported in Egypt) expressed his support for the demonstrators. He called on the Egyptian people to fight the despots and forbade the security forces to shoot civilians. The IslamOnline website has recently posted a chapter of his book [Islamic] Law and Jihad, according to which jihad against corruption and a tyrannical regime is the most exalted form of jihad, even more important than jihad against external enemies.
9. Al-Qaradawi was expelled from Egypt in 1997 because of his affiliation with the Muslim Brotherhood, which was outlawed in Egypt. After Hosni Mubarak was ousted, on Friday, February 18, 2011, al-Qaradawi appeared at a rally attended by more than a million people in Cairo's Al-Tahrir Square and delivered the sermon. He expressed



his esteem for the young people of Egypt who had revolted against the "despotic Pharaoh" Mubarak. He sent a message of interfaith unity between Muslims and Christians, who had stood and demonstrated side by side. He praised the Egyptian army which had "adhered to freedom and democracy" and called for the immediate release of all political prisoners and for the rapid formation of a civilian government. He ended the sermon with a call for the liberation of Al-Aqsa mosque and asked the Egyptian army to open the Rafah crossing and allow aid convoys to enter the Gaza Strip (Al-Jazeera TV, February 18, 2011). A few days later, apparently on February 21, he returned to Qatar.

10. The Muslim Brotherhood, which until al-Qaradawi's arrival was careful to keep a low profile, was quick to declare that it was not behind the invitation that brought him to Egypt, apparently to prevent tensions with the other protest movements. Dr. Muhammad Sa'ad al-Katatni, Muslim Brotherhood spokesman, said that the Muslim Brotherhood had not invited Dr. Al-Qaradawi to Egypt, but rather that the invitation had come from "the youth in [Al-Tahrir] Square" (Al-Sharq al-Awsat, February 19, 2011). Spokesmen for other protest movements tried to diminish the importance of al-Qaradawi's appearance (ibid).



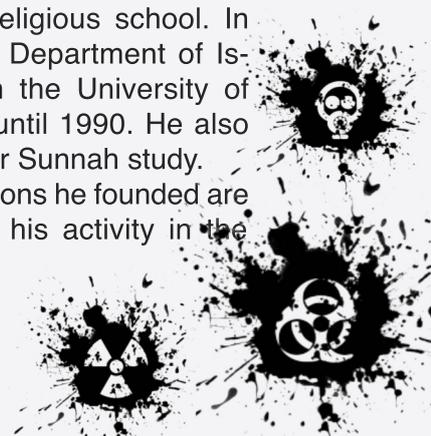
Sheikh al-Qaradawi speaks at a mass rally in Cairo's Al-Tahrir square (Al-Jazeera TV, February 18, 2011).

11. Al-Qaradawi's appearance at the rally in Cairo was a tribute to the great popularity he enjoys in Egypt and reflects a new stage in the Muslim Brotherhood's public involvement in the events in Egypt. However, the statement made by the Muslim

Brotherhood spokesman may indicate a potential rivalry and/or dissention between the Muslim Brotherhood leadership in Egypt and al-Qaradawi, who entered the leadership vacuum which has plagued the Muslim Brotherhood in recent years.

### Al-Qaradawi's biography

12. Al-Qaradawi was born in a small Nile delta village in 1926. His father died when he was two and he grew up in his uncle's house, in a religious environment. When he was four he was sent to a religious school. According to stories, when he was nine he knew the Qur'an by heart. As a youth he studied at a religious school in Tanta where he delved into the writings of Hassan al-Banna, the founder of the Muslim Brotherhood, whom al-Qaradawi said shaped his political and religious thinking.
13. When he was 18 he became a student in the religion department of Al-Azhar University in Cairo. He graduated in 1953. The following year he passed the exam to receive a teaching license. In 1958 he received a Master's degree in Arab language and literature and in 1973 received a Doctorate. So far he has written more than 50 books about various aspects of Islamic jurisprudence. During his studies at Al-Azhar he was exposed to the Muslim Brotherhood ideology and devoted himself to political Islamic activity and to preaching against the British presence in Egypt. His preaching against Nasser's regime led to his being arrested several times.
14. His Islamic political activity and sharp tongue caused him to be dismissed from Al-Azhar University in 1961 and assigned to head its branch in Qatar. However, sent to Qatar and released from the pressures of the Egyptian regime, enabled him to become prominent as an independent cleric. He has lived in Qatar since 1961, where he headed an high religious school. In 1977 he founded the Department of Islamic Law Studies in the University of Qatar and headed it until 1990. He also founded an institute for Sunnah study.
15. To this day, the institutions he founded are important centers for his activity in the



Arab-Muslim world and among Muslim communities in the West. He was granted Qatari citizenship in honor of the services he performed for the country. He has received a number of awards and decorations, among them the King Feisal of Saudi Arabia Award, the Islamic University of Malaysia Award and the Sultan of Brunei Award.

16. After the Muslim Brotherhood was outlawed, al-Qaradawi was a wanted man and could not return to Egypt. Until now he has lived in Qatar, where he has held a number of posts, both in and outside the country. They included head of the Qatar University's institute for the study of the history of the prophet Muhammad; chairman of the association of Muslim scholars; head of the European Council for Fatwa and Research (ECFR – an Islamic-European umbrella organization for the rapprochement between Muslim communities throughout Europe and for building bridges between the various Islamic schools so that they can integrate life in democratic Christian Europe with Muslim law). In July 2007 he launched a forum for moderate Islam named after himself and funded by the Shari'a' department of the University of Qatar and the moderate Islamic Center in Kuwait.
17. Although al-Qaradawi began as a Muslim Brotherhood activist he later denied membership in it and several times even refused to head the movement in Egypt (i.e., to accept the title of General Guide). However, he has a special status among members of the Muslim Brotherhood and Hamas, its Palestinian branch, and the Islamic movement in Israel, for all of whom he is the supreme authority on Islamic law.

### **Ideology, political activity and publications**

18. Al-Qaradawi refers to his religious views as "moderate Islam," which seeks to balance intellect and emotion. He has positive attitudes toward reforms in Islam, which he calls "correcting perceptions which were corrupted." He is considered one of the foremost propounders of the doctrine of the "the law of the Muslim mi-

norities," which provides the Muslim minorities around the globe with space in which to maneuver and compromise between their daily lives and Islamic law. The aim of implementing his doctrine is to unite and unify Muslim minorities to make it possible for them to live under non-Muslim regimes, until the final stage of spreading Islam to the entire world.

19. At the same time, building a bridge between the exigencies of Muslim emigrants' daily lives and Islamic religious law also includes regarding Europe as Islam's next target. In 2003 al-Qaradawi issued a fatwa declaring that "Islam will return to Europe as a victorious conqueror after having been expelled twice. This time it will not be conquest by the sword, but by preaching and spreading [Islamic] ideology...The future belongs to Islam...The spread of Islam until it conquers the entire world and includes the both East and West marks the beginning of the return of the Islamic Caliphate..."
20. Conservative Muslims object to what they consider al-Qaradawi's excessive flexibility and have occasionally attacked his fatwas as "too permissive." However, despite the criticism he is greatly respected and esteemed in the Muslim world and most Muslim clerics respect his fatwas. Many people today consider him the heir of Sayyid Qutb (Muslim Brotherhood theoretician and senior activist in Egypt) and as the movement's highest religious and ideological authority, even if he did reject offers to officially head it.
21. Al-Qaradawi has issued a great many fatwas and written a large number of books, the most important of which is *The Lawful and Prohibited in Islam*. It was translated into many languages and has sold millions of copies. Today it is considered the best selling Muslim book after the Qur'an.

### **Al-Qaradawi's attitude towards suicide bombing attacks and support for Hamas**

22. All of al-Qaradawi's opinions regarding Israel are extreme and he is a source of supreme religious authority for Hamas. He is an enthusiastic supporter of Palestinian





Dr. Yusuf al-Qaradawi answers viewers' questions (Al-Jazeera TV, March 15, 2009).

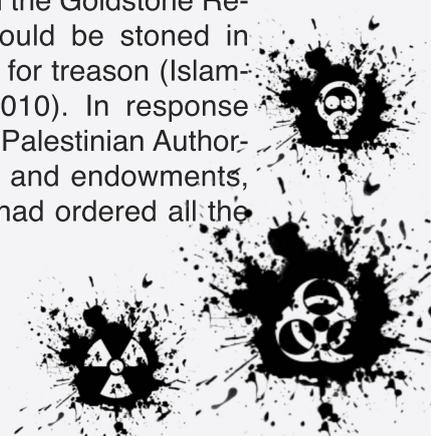
terrorism, including when it is directed against civilians, claiming that it is a legitimate expression of the so-called "resistance" and that Israel is a militaristic society where every civilian is a potential soldier. He issued fatwas calling for jihad against Israel and the Jews and authorizing suicide bombing attacks, even when they entailed killing women and children. He also issued fatwas authorizing attacks on Jews around the world because in his view there is no essential difference between Judaism and Zionism, and therefore every Jewish target equals an Israeli target.

23. His status as a leading Sunni Muslim cleric gives added importance to his fatwas supporting Palestinian terrorism and make him particularly influential in shaping anti-Israeli sentiments in the Arab-Muslim world.
24. In July 2003, during the height of the suicide bombing terrorism (the second intifada), he addressed the issue of suicide bombing attack at an ECFR conference. He said that istishhad (death as a martyr for the sake of Allah),<sup>1</sup> carried out by the Palestinian organizations to opposed the so-called "Zionist occupation" were by no means to be defined as terrorism (Al-Sharq al-Awsat, July 19, 2003). On other occasions he also supported suicide bombing attacks, including on the BBC (February 8, 2010) and Al-Jazeera TV (January 28, 2009).<sup>2</sup>
25. Senior Hamas figures relied on al-Qaradawi's fatwas which authorize suicide bombing attacks against Israel to justify that sort of (debatable) attack. For example:

1) Sheikh Hamid al-Bitawi, senior Hamas activist in Judea and Samaria, relying on an al-Qaradawi fatwa, said that according to Islamic jurisprudence, "jihad is a collective duty..." and that if infidels occupy any bit of Muslim land – such as the occupation of Palestine by the Jews, jihad becomes the duty of every individual, thus making it permissible to carry out suicide bombing attacks.<sup>3</sup>

2) Dr. Abd al-Aziz al-Rantisi, a senior Hamas leader who died in a targeted killing, relying on a fatwa issued by al-Qaradawi, said that "suicide depends on intention. If the person intends to kill himself because he is fed up with life, that is suicide (which is prohibited). However, if he wants to die to strike at the enemy and to receive a reward from Allah, he is considered as delivering up his soul [and not as committing suicide]."<sup>4</sup>

26. To help fund Hamas' civilian infrastructure (the da'wah) al-Qaradawi established the Union of Good, which he heads today. It is an umbrella organization which raises money for Hamas and other Islamist activities around the globe. The Union of Good was declared a terrorism-sponsoring organization and outlawed by Israel in February 2002. In December 2002 it was designated as a terrorist organization by the United States and outlawed.
27. Al-Qaradawi is hostile to the Palestinian Authority. At the beginning of 2010 he criticized Mahmoud Abbas for his vote regarding the Goldstone Report, and issued a fatwa calling for Mahmoud Abbas to be stoned in Mecca. Mahmoud Abbas demanded a retraction from al-Qaradawi, who denied having issued the fatwa. However, he did admit that during a sermon he said that if accusations against any person in the Palestinian Authority were proved true [i.e., that he had supported the cancellation of the vote on the Goldstone Report], that person should be stoned in Mecca as punishment for treason (Islam-Online, January 7, 2010). In response Mahmoud al-Habash, Palestinian Authority minister of religion and endowments, said that his ministry had ordered all the



preachers in the mosques in the Palestinian Authority to attack al-Qaradawi personally (Al-Quds Al-Arabi, January 18, 2010)

### Anti-Semitic remarks

28. Al-Qaradawi has often made anti-Semitic remarks. For example, his "Life and Islamic Law" program broadcast on March 15, 2009, discussed the topic of righteous Muslims in Islam. One of the viewers called in and asked about the role of the righteous (al-salkhoun) in the Qur'an in the liberation of the [Islamic] holy places and the victory of the [Muslim] nation.

29. Al-Qaradawi used the opportunity to attack the Jews, basing his answer on a known hadith [oral tradition] calling for the murder of Jews. On the program he said that righteous Muslims were "the salt of the earth" who were always instrumental in liberating lands. He called them a source of hope and that he hoped that through them Jerusalem would be "liberated," as would "Palestine," the Gaza Strip, and all the lands ruled by the enemies of the Muslims. He said that the war against the Jews was not only the war of the Palestinians but of all Muslims. Al-Qaradawi based his answer on a well-known hadith about the war on Judgment Day between Muslims and Jews. He said that the prophet Muhammad said that "...therefore you will continue to fight the Jews and they will fight you until the Muslims kill them. The Jew hides behind rock and tree. The rock and the tree say, oh, slave of Allah, oh, Muslim, here is the Jew behind me, come and kill him."<sup>5</sup> He interpreted that to mean that those who fight to "liberate" the holy places are the Muslim slaves of Allah, and not Jordanians or Palestinians or Iraqis.

### Al-Qaradawi's position on Al-Qaeda and the global jihad

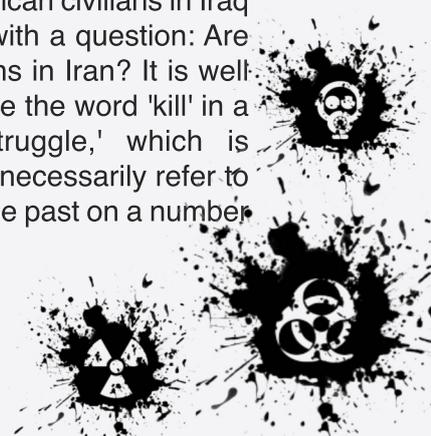
30. Al-Qaradawi denounced the September 11, 2001 attacks on the World Trade Center in New York and said it was the duty of every Muslim to help bring the perpetrators to trial. As opposed to his opposition

to Al-Qaeda, he called for attacks on Americans fighting in Iraq.

31. In August 2004 the "Pluralism in Islam" conference was held by the Egypt's journalists' union in Cairo. At the conference al-Qaradawi issued a fatwa allowing the abduction and murder of American civilians in Iraq to exert pressure on the American army to remove its forces. He emphasized that "all the Americans in Iraq are fighters, there is no difference between civilians and soldiers, and they have to be fought against because the American civilians come to Iraq to serve the occupation. Abducting and killing them is a [religious] duty to make [the Americans] leave [Iraq] immediately. [On the other hand] abusing their corpses is forbidden by Islam" (Al-Sharq al-Awsat, London, September 2, 2004).

32. Al-Qaradawi issued the fatwa a week after public figures from various Muslim countries published an open letter calling for support for the forces fighting the coalition in Iraq. It was signed by 93 Islamic clerics and public figures, including al-Qaradawi and figures from the Muslim Brotherhood, Hamas, the Palestinian Islamic Jihad and Hezbollah (Al-Quds Al-Arabi, London, August 23, 2004).

33. In view of the storm caused by the fatwa permitting the abduction and murder of American civilians in Iraq, ten days later al-Qaradawi sent a fax to the London-based daily Arabic newspaper Al-Hayat denying "what the media said he said." He said that "some of the media claimed I issued a fatwa saying it was a duty to kill American civilians in Iraq. That has no basis. I never issued a fatwa on the issue. A few days ago I was asked by Egypt's journalists' union about permission to struggle against the occupation in Iraq and I answered in the affirmative. After that I was asked about American civilians in Iraq and I answered only with a question: Are there American civilians in Iran? It is well known that I do not use the word 'kill' in a fatwa but rather 'struggle,' which is broader and does not necessarily refer to killing. In addition, in the past on a number



of times I denounced abducting hostages and demanded they be released without threatening to kill them" (Al-Hayat, London, September 9, 2004).

34. Before the denial was issued, Azzam Halima, al-Qaradawi's office manager, confirmed that al-Qaradawi had issued a fatwa stating that it was a duty to fight the American civilians in Iraq because they were invaders (Al-Quds Al-Arabi, London, September 23, 2004).

### Al-Qaradawi and Iran

35. Al-Qaradawi strenuously opposes the attempts to disseminate Shi'ite Islam and is critical of Iran's attempts to spread it to Sunni countries. He has also criticized Hezbollah leader Hassan Nasrallah on a number of occasions.

The call for Muslims to acquire nuclear weapons

36. In the past al-Qaradawi has said that Muslims should acquire nuclear weapons "to terrify their enemies." However, he has said that nuclear weapons should not be used.<sup>6</sup>

Al-Qaradawi's position on the recent events in Tunisia and Libya

37. Regarding the recent events in Tunisia, al-Qaradawi said that the struggle should be continued until all the members of Ben Ali's party be removed from their positions, with the exception of the interim president, who should, he said, remain in power to prevent the creation of a constitutional vacuum. He called on Tunisia to release its political prisoners, bring back political exiles and restore the Islamic customs which were forbidden by the secular regime of the ousted president, such as

wearing the veil (hijab) on university campuses.

38. Regarding the recent events in Libya, al-Qaradawi called on Muammar Gaddafi to relinquish power and to learn the lessons of Egypt and Tunisia. He said that a revolt against Gaddafi was an Islamic religious duty, called on the members of the tribes in Libya to rise up against Gaddafi and join the ranks of the demonstrators. He called on the Libya army "to behave like their brothers in Egypt, to stand alongside the people to restore to Libya its Arab Islamic character." He said that those who had died during the violent events in Libya were shaheeds in paradise and supported the jihad fighters rising up against the Libyan regime (Egyptian TV, telephone conversation with al-Qaradawi broadcast in a special program, February 20, 2011).

1 The suicide bomber is called istishhadi, the one who deliberately sacrifices himself for the sake of Allah.

2 According to MEMRI, February 8, 2010.

3 Al-Hayat, February 25, 2001.

4 Al-Hayat, February 25, 2001.

5 According to the original hadith, every tree and rock will give up the hiding places of the Jews except the nitraria, (a thorny bush which grows in desert regions). In other versions, such as that quoted by al-Qaradawi, the words of Muhammad are not related to Judgment Day but used rather in their current political contexts and as a general commandment to Muslims to kill Jews, with no mention of the bush that protects them

6 Qatari TV, October 18, 2002, according to MEMRI.





# ZASTITA

TRADE JOURNAL FOR SECURITY AND PROTECTION

- police
- military
- security guards
- fire departments
- rescue services
- antiterrorism
- technology&new products
- national, regional and global security



## www.zastita.info

**ZASTITA** is a proud co-organizer of **CBMTS Industry VII**

"World Congress on the CBRN Threat and Terrorism"

*(Dubrovnik/Cavtat, Croatia, 9-15 April 2011)*

under the high patronage of the Government of the Republic of Croatia

[http://zastita.info/en/congress\\_cbmts/](http://zastita.info/en/congress_cbmts/)

and

a proud media partner of

**ASDA 2011** – First Adriatic Sea&Defence Exhibition&Conference

*(Split, Croatia, 29-31 March 2011)*

<http://www.adriaticseadefense.com/>

## How al Qaeda Works What the Organization's Subsidiaries Say About Its Strength

Source: <http://www.foreignaffairs.com/articles/67467/leah-farrall/how-al-qaeda-works>

Despite nearly a decade of war, al Qaeda is stronger today than when it carried out the 9/11 attacks. Before 2001, its history was checkered with mostly failed attempts to fulfill its most enduring goal: the unification of other militant Islamist groups under its strategic leadership. However, since fleeing Afghanistan to Pakistan's tribal areas in late 2001, al Qaeda has founded a regional branch in the Arabian Peninsula and acquired franchises in Iraq and the Maghreb. Today, it has more members, greater geographic reach, and a level of ideological sophistication and influence it lacked ten years ago.

Still, most accounts of the progress of the war against al Qaeda contend that the organization is on the decline, pointing to its degraded capacity to carry out terrorist operations and depleted senior leadership as evidence that the group is at its weakest since 9/11. But such accounts treat the central al Qaeda organization separately from its subsidiaries and overlook its success in expanding its power and influence through them. These groups should not be ignored. All have attacked Western interests in their regions of operation. Al Qaeda in the Arabian Peninsula (AQAP) has also long targeted the United States, but its efforts have moved beyond the execution stage only in the last two years, most recently with the foiled plot to bomb cargo planes in October 2010. And although al Qaeda in the Islamic Maghreb

(AQIM) has not yet attacked outside its region, al Qaeda in Iraq (AQI) was reportedly involved in the June 2007 London and Glasgow bomb plots.

It is time for an updated conception of al Qaeda's organization that takes into account its relationships with its subsidiaries. A broader conceptual framework will allow for a greater understanding of how and to what degree it exercises command and control over its expanded structure, the goals driving its expansion strategy, and its tactics.

### Al Qaeda's lost decade

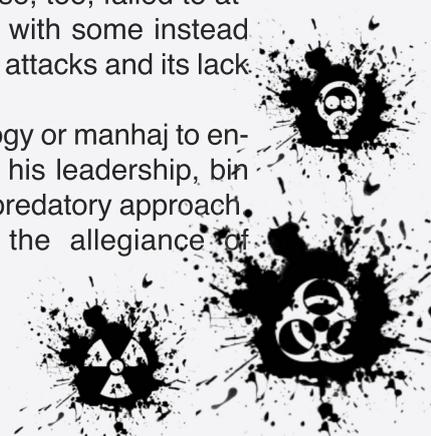
Although al Qaeda had tried to use other groups to further its agenda in the 1980s and early 1990s, Osama bin Laden's first serious attempts at unification began in the mid-1990s, when the organization was based in Sudan. Bin Laden sought to build an "Islamic Army" but failed. Al Qaeda had no ideology or manhaj (program) around which to build lasting unity, no open front of its own to attract new fighters, and many of its members, dissatisfied with "civilian work," had left to join the jihad elsewhere.

Faced with such circumstances, bin Laden instead relied on doling out financial support to encourage militant groups to join his army. But the international community put pressure on Sudan to stop his activities, and so the Sudanese government expelled al Qaeda from the country in 1996. As a result, the group fled to Afghanistan.

By mid-1996, al Qaeda was a shell of an organization, reduced to some 30 members. Facing irrelevance and fearing that a movement of Islamist militants was rising outside of his control, bin Laden decided a "blessed jihad" was necessary. He declared war on the United States, hoping this would attract others to follow al Qaeda. It did not. A second effort followed in 1998, when bin Laden unsuccessfully used his newly created World Islamic Front for Jihad Against Jews and Crusaders to lobby other groups to join him. Later that year, al Qaeda launched its first large-scale attacks:

the bombings of the U.S. embassies in Kenya and Tanzania, which it hoped would boost its fortunes. But these, too, failed to attract other groups to join, with some instead criticizing al Qaeda for the attacks and its lack of a legitimate manhaj.

With no coherent ideology or manhaj to encourage unification under his leadership, bin Laden instead pursued a predatory approach. He endeavored to buy the allegiance of



weaker groups or bully them into aligning with al Qaeda, and he attempted to divide and conquer the stronger groups. In the late 1990s, he tried and failed to gain control over the Khalden training camp, led by the militants Ibn al-Shaykh al-Libi and Abu Zubaydah, and over the activities of Abu Musab al-Suri and Abu Khabab al-Masri, senior militant figures who ran their own training programs. Bin Laden's attempts in 1997-98 to convince Ibn al-Khattab, a Saudi militant who led an international brigade in Chechnya, to come under al Qaeda's banner also failed. His efforts in 2000-2001 to gain control over a brigade of foreign fighters in Afghanistan met a similar fate: the Taliban leader Mullah Omar, who had supreme authority over the brigade, instead handed the leadership of it to the Islamic Movement of Uzbekistan, another group bin Laden was attempting to convince to align with al Qaeda. Around the same time, bin Laden also unsuccessfully lobbied the Egyptian Islamic Group and the Libyan Islamic Fighting Group to join al Qaeda's efforts. And although al Qaeda supported the militant Abu Musab al-Zarqawi in his establishment of an independent training camp in Afghanistan, bin Laden was unable to convince him to formally join the organization.

The only real success during this period was al Qaeda's mid-2001 merger with Egyptian Islamic Jihad, led by Ayman al-Zawahiri, now al Qaeda's second-in-command. The merger was possible thanks to Egyptian Islamic Jihad's weakened position and its reliance on bin Laden for money. The decision was nevertheless contentious within Egyptian Islamic Jihad, and several of its members left rather than join with al Qaeda. In the end, al Qaeda's only successful merger during its Afghanistan years added just five people to its core membership. Compared to this dismal record, the past decade has been highly successful.

By 2001, al Qaeda still had no formal branches or franchises. Its membership included a core of just under 200 people, a 122-person martyrdom brigade, and several dozen foot soldiers recruited from the 700 or so graduates of its training camps. These numbers made al Qaeda among the strongest of the

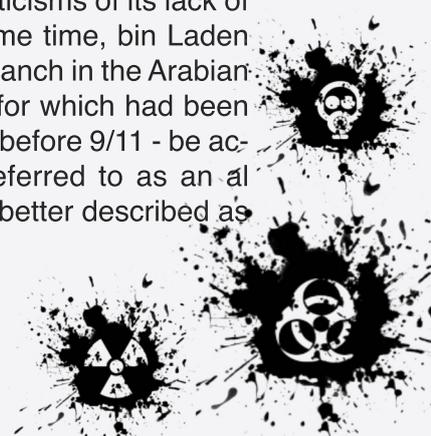
14 foreign militant groups operating in Afghanistan, yet there was little unity among them. Relations were characterized by doctrinal debate on issues such as the legitimacy of fighting alongside the Taliban or recognizing Mullah Omar as "commander of the faithful." The lack of unity further hampered bin Laden's efforts to gain influence and control.

### Mergers and acquisitions

His predatory approach to unification having failed, bin Laden sowed the seeds of a new strategy. He concluded that al Qaeda could force unity among foreign militants and draw in new followers by carrying out "mass impact" attacks against the United States. The 9/11 attacks were designed to incite an armed retaliation that would get U.S. boots on Afghan soil, opening up a new front for jihad and - because the retaliation would confirm al Qaeda's status as the "strong horse" among Islamist militants - causing smaller groups to come under al Qaeda's leadership to fight against the invading Americans.

The strategy worked at first. The U.S. invasion began in October 2001, and in November, the leaders of the foreign militant groups remaining in Kandahar agreed to come under al Qaeda's command in an effort to defend the city. But the organization's control did not last long: in early December 2001, those foreign militants began to withdraw from Kandahar. Al Qaeda still lacked a cogent ideology and manhaj, which meant that bin Laden had nothing to convince these groups to fully commit to its cause.

After al Qaeda's flight from Afghanistan in December 2001, the group's Iran-based leadership and its members in the Arabian Peninsula sought to reverse the organization's fortunes by building a solid ideological foundation and a clear manhaj. This effort was intended to support those already undertaking jihad in al Qaeda's name and end senior Saudi religious figures' criticisms of its lack of a manhaj. Around the same time, bin Laden also ordered that a new branch in the Arabian Peninsula - preparations for which had been undertaken in Kandahar before 9/11 - be activated. AQAP is often referred to as an al Qaeda franchise, but it is better described as



a branch. It was created by, and continues to operate under, the leadership of core al Qaeda members. Unlike those of al Qaeda's franchises, the leaders of AQAP did not swear an oath of allegiance to bin Laden in order to bring their organization under al Qaeda's umbrella. They were already al Qaeda members and established the branch on bin Laden's direct orders. Although AQAP commanders answer directly to al Qaeda's leadership, they have regional autonomy. But the relationship has not been without issues. Senior figures responsible for establishing the branch and some members in Iran had lobbied bin Laden to delay its opening and instead focus on developing an ideology and a manhaj. Bin Laden refused; nevertheless, between 2002 and 2004, AQAP's and al Qaeda's leaders intensified their efforts to consolidate the organization's ideological and tactical foundations to support the new branch and bolster al Qaeda's legitimacy.

They drew from takfiri thought, which justifies attacking corrupt regimes in Muslim lands, and on materials that outline the Muslim requirement to target the global enemy: in this case, the United States and the West. (This was framed in the context of defensive jihad, the need for which was reinforced by the 2003 U.S. invasion of Iraq.) The hybrid ideology and manhaj that emerged make little distinction between targeting local enemies and targeting global ones and have a one-size-fits-all solution - jihad.

Partnering with al Qaeda does not, therefore, require a local group to abandon its own agenda, just broaden its focus. This helped assuage other groups' fears that merging with al Qaeda would mean a loss of autonomy to pursue their own local goals.

The inclusion of takfiri materials gave al Qaeda another advantage, because this literature stresses the need for militant groups to unify. There are two main streams of guidance on how this should be done. One focuses on seniority and holds that newer groups should merge with the oldest group, regardless of the capabilities of each. The other emphasizes capability. Al Qaeda seems to have favored the seniority argument, and after its merger with Egyptian Islamic Jihad, it could - rather

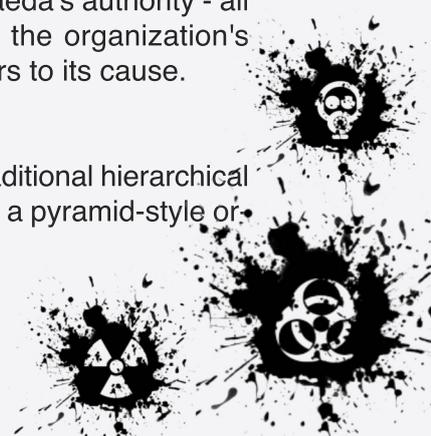
dubiously - present itself as the senior militant group.

Newer groups were apparently willing to go along, even if they had greater capacity than al Qaeda. By late 2004, for example, Zarqawi's group in Iraq, Jamaat al-Tawhid wal-Jihad, had eclipsed al Qaeda in terms of both resources and brand power. Even so, Zarqawi willingly merged his group with the weaker al Qaeda and swore an oath to bin Laden, creating AQI. Zarqawi's ties to al Qaeda's senior leadership, which had been consolidated during time he had spent in Afghanistan and Iran and had been further strengthened when al Qaeda members arrived in Iraq after the U.S. invasion, also played a role in his decision. Zarqawi was also instrumental in convincing the Salafist Group for Preaching and Combat (GSPC) to join, even though it had more members than al Qaeda. Significantly, the GSPC did not merge with Zarqawi's group, which was then the strongest Islamist militant group worldwide. Instead, in late 2006, after a lengthy negotiation process, the GSPC merged with the central al Qaeda organization, the most senior group, becoming its second branch, AQIM.

Although the development of a coherent ideology and manhaj helped al Qaeda acquire franchises, negotiations with most groups were nevertheless drawn out because it proved difficult to agree on the parameters of operational autonomy. Al Qaeda's focus was on integration, unity, growth, and gaining strategic leadership in the militant milieu. The group viewed external operations against the West; keeping the jihad going, no matter how incrementally; and strategic messaging as the way to achieve these objectives. So even as they pursued local agendas, the franchises were required to undertake some attacks against Western interests, and leaders of groups joining al Qaeda had to be willing to present a united front, stay on message, and be seen to fall under al Qaeda's authority - all crucial for demonstrating the organization's power and attracting others to its cause.

### Who's the boss?

Al Qaeda today is not a traditional hierarchical terrorist organization, with a pyramid-style or-



ganizational structure, and it does not exercise full command and control over its branch and franchises. But nor is its role limited to broad ideological influence. Due to its dispersed structure, al Qaeda operates as a devolved network hierarchy, in which levels of command authority are not always clear; personal ties between militants carry weight and, at times, transcend the command structure between core, branch, and franchises. For their part, al Qaeda's core members focus on exercising strategic command and control to ensure the centralization of the organization's actions and message, rather than directly managing its branch and franchises. Such an approach reduces the command-and-control burden, because al Qaeda need only manage centralization on a broad level, which, with a solid manhaj already in place, can be achieved through strategic leadership rather than day-to-day oversight.

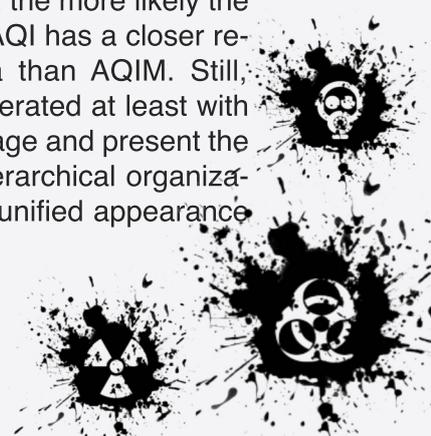
Al Qaeda exercises command and control mostly in relation to external operations. It requires its subsidiaries to seek approval before conducting attacks outside their assigned regions and specifies that its branch and franchises seek approval before assisting other militant groups with external operations. For the most part, they appear to follow these stipulations. While Zarqawi was at AQI's helm, he reportedly sought permission to expand his area of operation to include Jordan, but it is not known whether permission was granted.

In times of sustained pressure, al Qaeda has delegated significant responsibility for external operations against the United States to its branch, AQAP. The first such action came in late 2002, when al Qaeda had exhausted its existing supply of operatives for external operations and was in the process of rebuilding its capacity from its sanctuary in Pakistan. Al Qaeda asked AQAP to carry out an attack on U.S. interests; AQAP devised a plot against U.S. subways and got permission to use a chemical device. (In 2003, just before putting the plan into action, AQAP asked al Qaeda for final signoff but was denied.) When the pressure on al Qaeda eased between 2003 and 2006, because the United States was focusing less on Afghanistan, the group was able to regenerate its capacity and inten-

sify its planning for global operations. But the U.S. drone campaign against al Qaeda in Pakistan's tribal areas has again put pressure on it, and the group has again tapped AQAP to undertake external operations. It has also made similar requests of its franchises, particularly AQI. In 2008, for example, it asked AQI to carry out attacks against Danish interests in retaliation for a Danish newspaper's publication of cartoons depicting the Prophet Muhammad.

When subsidiaries do carry out attacks outside their territories, al Qaeda requires that they be conducted within set parameters. For example, al Qaeda heavily encourages suicide attacks and repeated strikes on preapproved classes of targets, such as public transportation, government buildings, and vital infrastructure. Once a location has been authorized, the branch and the franchises are free to pursue plots against it. But al Qaeda still emphasizes the need to consult the central leadership before undertaking large-scale plots, plots directed against a new location or a new class of targets, and plots utilizing a tactic that has not been previously sanctioned, such as the use of chemical, biological, or radiological devices.

Al Qaeda has put these requirements in place to ensure that attacks complement, not undermine, its strategic objectives. Whereas AQAP appears to honor al Qaeda's authority, at times the franchises have acted on their own; AQI's unapproved bombings of three hotels in Amman, Jordan, in 2005, for example, earned it a strong rebuke from headquarters. And a range of factors influence whether a franchise will attack an external target when al Qaeda asks it to. Chief among them is the franchise's capacity and whether the franchise is willing to dedicate resources to external operations instead of local activities. Another factor is the closeness of the ties between the subsidiary and the central organization; the tighter the ties, the more likely the request will be honored. AQI has a closer relationship with al Qaeda than AQIM. Still, AQIM has generally cooperated at least with requests to stay on message and present the image of a united and hierarchical organization. This emphasis on a unified appearance



was clear when, in November 2010, AQIM's leader, Abu Musab Abdel Wadoud, announced that France would have to negotiate directly with bin Laden for the release of hostages held by AQIM. Although in recent times, the capacity of both franchises has been weakened by intensified counterterrorism efforts against them, neither has shown any signs of abandoning al Qaeda's global agenda in favor of purely local goals.

Communication and coordination among al Qaeda's core, branch, and franchises occur mostly through their respective information committees, which have access to senior leaders, distribution networks to assist in passing information, and close ties to the operations section of each group, which is responsible for planning attacks (since attacks must be publicized).

Messages from the branch and the franchises to the core then generally go through al Qaeda's second-tier leadership, which briefs Zawahiri, bin Laden, or both if the issue is urgent - that is, involves gaining permission for external operations or resolving a conflict between or within the subsidiaries.

Because al Qaeda's second-tier leadership manages most of the group's interaction with its subsidiaries, the removal of either Zawahiri or bin Laden would not overly affect the unity among the organization's core, branch, and franchises, nor would it impede communication among them. So long as al Qaeda can continue to demonstrate its ability to lead and provide strategic direction, its organizational dynamics will likely remain unchanged. The emphasis on unity in al Qaeda's ideology and manhaj and a desire to maintain the status quo will likely allow the organization to hold together, even as it comes under more pressure from the West.

### Future outlook

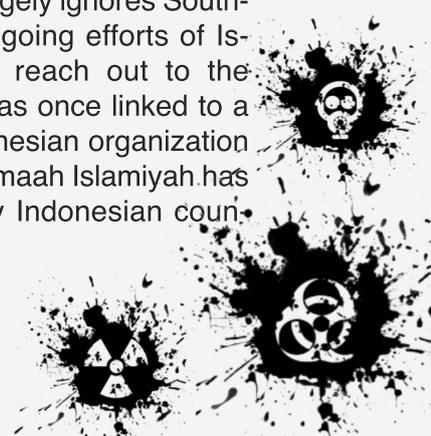
Although opening a regional branch and acquiring franchises has reinforced the position of al Qaeda and its ability to present itself as both the senior and the most capable Islamist militant group, it approaches new mergers warily. Al Qaeda learned a lesson about overreach in 2006, when it attempted to bring splinter groups from the Egyptian Islamic

Group and the Libyan Islamic Fighting Group under its umbrella. In an ill-calculated move, it portrayed the joining of the splinter factions as formal mergers with al Qaeda, which elicited heavy criticism from both groups' leaders, who opposed unification with al Qaeda. This criticism has, however, minimally impacted al Qaeda's appeal with its target audience - those already radicalized to its cause but not yet part of the organization - and other groups still seek to join under al Qaeda's banner. Al Qaeda is nonetheless wary of attracting criticism from other militants, so it is reticent to accept groups that have not demonstrated unified leadership within their areas of operation.

Al Shabab, a Somali militant group, has openly declared its allegiance to bin Laden in an effort to join al Qaeda as a franchise. But infighting between al Shabab and another group with historical ties to al Qaeda, Hizbul Islam, has thus far kept al Qaeda from accepting al Shabab. Recent reports that Hizbul Islam and al Shabab have unified may see a change in al Qaeda's position. Due to the significant ties between AQAP and al Shabab, any future merger would likely be negotiated with AQAP's assistance.

Should al Shabab's popularity with foreign fighters continue to rise, and the group become more active in external operations planning, al Qaeda's hand may be forced. In 2009, a small group of Australian extremists (mostly of Somali descent) sought the permission of al Shabab leaders to carry out an attack in Australia. Although the plot was foiled, al Qaeda views this type of extraregional activity as potential brand competition. If al Shabab carries out a successful attack somewhere in the West, al Qaeda might more quickly move to bring the group under its umbrella, in order to control al Shabab's projection of power.

With the exception of al Shabab, al Qaeda is unlikely to acquire any new subsidiaries in the immediate future. It largely ignores Southeast Asia, despite the ongoing efforts of Islamist militants there to reach out to the organization. Al Qaeda was once linked to a splinter group of the Indonesian organization Jemaah Islamiyah, but Jemaah Islamiyah has since been decimated by Indonesian coun-



terrorism efforts. Should ties again be strengthened between al Qaeda and Indonesian militants - many of whom are now coalescing around a relatively new group, Jamaah Ansharut Tauhid - the relationship would likely be limited to material support. A training group dubbed "al Qaeda in Aceh," which was linked to Jamaah Ansharut Tauhid, adopted the al Qaeda name without formal permission and probably as a means of attracting material support. Jamaah Ansharut Tauhid has its own robust and regionally focused manhaj, making a formal merger unlikely.

In Lebanon, meanwhile, after several failed attempts to gain influence over groups there and in the broader region, al Qaeda seems to have settled for working with a group active in the area. The Abdullah Azzam Brigades, which are led by Saleh al-Qarawi, a senior figure with links to AQAP, AQI, and al Qaeda's core, are reportedly based in Lebanon but have a wide operational ambit in the broader region. The group has regional autonomy but ultimately answers to the central al Qaeda organization for strategic direction. Given the inability of the group to gain dominance in the region, it is unlikely to become an official franchise.

In the near term, aside from any efforts to bring al Shabab on board, al Qaeda is likely to focus on its existing subsidiaries. As it comes under continued pressure in Pakistan, al Qaeda will primarily focus on making sure that

the centralization of the organization's actions is maintained through the external operations carried out by its subsidiaries and that the subsidiaries stay on message. Doing so will ensure that in the event the central leadership suffers greater losses, al Qaeda will have alternative means to project power and maintain influence.

Because al Qaeda will continue to encourage its branch and franchises to carry out attacks and will continue to use the reactions they provoke to pursue its goals, it is important that the strategic picture of al Qaeda accurately reflect the organization's broad operating dynamics instead of wishful thinking about the central organization's degraded capacity. A large attack tomorrow orchestrated by the central leadership would prove wrong any assessments of diminished capabilities. Meanwhile, the enduring goals that drive al Qaeda's strategies and tactics, which have allowed the group to expand during the past decade of war, continue to be overlooked. Until al Qaeda's interaction with its branch and franchises is better comprehended and taken into consideration, assessments of its capacity and organizational health will continue to fall short.

**Leah Farrall** is a former Senior Counterterrorism Intelligence Analyst with the Australian Federal Police and the author of the blog All Things Counter Terrorism.

## Al-Qaeda 'most wanted' plotting attacks on Britain

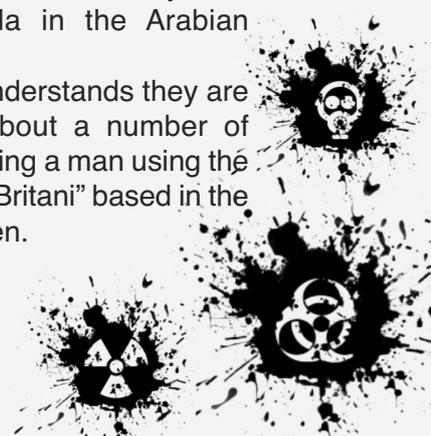
Source: <http://www.telegraph.co.uk/news/uknews/terrorism-in-the-uk/8353395/Al-Qaeda-most-wanted-plotting-attacks-on-Britain.html>

Rajib Karim, who worked for British Airways, tried to use a cabin crew strike to get a job on a plane in order to launch a terrorist attack on a flight to the US.

MI5 discovered his plans after investigating the British links of Anwar al-Awlaki, the al-Qaeda leader behind the "underpants bomb" attack on a trans-Atlantic flight 14 months ago, sources said.

The security services believe there could be up to 20 Britons in Yemen who have joined Awlaki's group, al-Qaeda in the Arabian Peninsula.

The Daily Telegraph understands they are particularly concerned about a number of Karim's associates, including a man using the pseudonym "Muhammed Britani" based in the city Taiz in southern Yemen.





One message from Awlaki asked: "What procedures would a person on the watch list have to go through. Can they prevent a national from a certain country from travelling to his country, like a Brit going back to Britain?"

Karim's brother signed up for the same language school in Sanaa as Umar Farouq Abdulmutallab, the underpants bomber, and many others are thought to have followed the same route.

Theresa May, the Home Secretary, thanked Scotland Yard and MI5 and added: "We know that we face a serious threat from terrorism and national security remains this government's top priority. The fact that Karim has been found guilty of such a heinous plot shows why we will never be complacent."

Karim's arrest has led police to place renewed emphasis on the importance of vetting staff in sensitive positions, but sources say it would not have guaranteed they would have caught Karim.

Awlaki, one of the key figures in al-Qaeda in the Arabian Peninsula, questioned Karim about security procedures during a series of internet exchanges in January and February last year.

The terrorist leader asked him about x-ray machines and said: "Is it possible to get a package or a person with a package on board a flight heading to the US?"

Karim replied that he would try and get a job as cabin crew during last year's strike and would also recruit some airport workers at Heathrow and "find out the possibilities of shipping a package to a US bound plane."

He flew to London to meet a baggage handler called Shahzada Khan at Heathrow who was later arrested but not charged and was

sacked by British Airways.

Karim used the nickname "flyer" while Awlaki was called "the professor" in messages to Yemen, where the terrorist leader was hiding out.

He was said to be in a "race" for martyrdom with his younger brother Tehzeeb and was "determined to seek martyrdom, to die and to sacrifice himself for his cause," according to prosecutor Jonathan Laidlaw QC.

Mr Laidlaw said Karim was giving assistance to a "major terrorist planner who wanted to bring down an airplane over the Atlantic or US airspace killing hundreds of innocent people, men, women, children and staff on the plane."

Karim, who had come to Britain to seek medical treatment for his son on the NHS, had already told his brother he was ready to launch "another 7/7."

"You don't appear to hold the way this country is governed or the way our people live their life with any sense of approval but you still find yourself here and happy to accept medical treatment for you son?" Mr Laidlaw asked him.

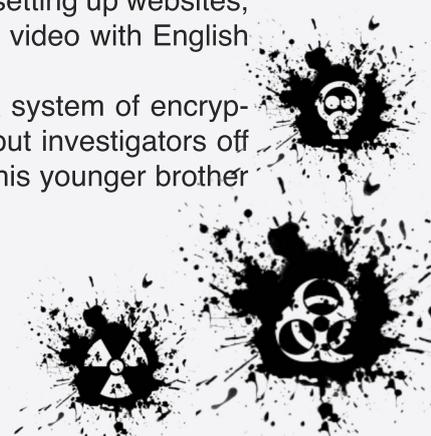
"I don't see this as a contradiction. This country has freedom of views," Karim told Woolwich Crown Court.

But he was leading a double life and within weeks of arriving in Britain, had set up secretive online communication with Tehzeeb back in Bangladesh.

One senior police officer at the Metropolitan Police Counter-Terrorism Command said it was the "most sophisticated encryption ever seen in international terrorism."

On the surface he appeared a quiet family man, but he was actually carrying out work for the Jamaat-ul Mujahideen Bangladesh (JMB), distributing jihadist texts, setting up websites, and producing a four-part video with English subtitles.

Karim used a complex system of encryption and code to try and put investigators off the trail when contacting his younger brother Tehzeeb, abroad.



They communicated as if involved in business but Mr Laidlaw said there was "no legitimate activity at all. Their trade was terrorism."

In his first message on January 25 last year, Awlaki told Karim: "Today we need men who are willing to go all the way and not hold back anything from Allah...This is not a weekend religion. The contract is to sell our souls to Allah. The compensation is the jannah [paradise]."

In his second message on February 12 last year, Awlaki told him: "In your case you are not asked to stay behind but in fact you are asked to stay at the front line."

He also agreed that Karim should make the most of the approaching British Airways strike to retrain as cabin crew, adding: "You should definitely take this opportunity."

Awlaki added: "The question is: with the people you have, is it possible to get a package or a person with a package on board a flight heading to the US...did any of the bros [brothers] you mentioned get training on x-ray machines or understand their limitations?"

Karim wrote back on February 15 saying he had applied for cabin crew training and added: "I can work with the bros to find out the possibilities of shipping a package to a US bound plane."

Karim was arrested at his desk at the IT centre in Newcastle shortly after lunch on February 25.

Besides the messages, Karim had a collection of extremist videos and literature on a hard drive at his home which included a document about preparing for jihad in Yemen that listed targets: "One: the Americans. Two: the English."

Also on the external hard drive was a book called "Chemistry of Explosives" which included instructions on producing detonators, fuses, gunpowder and petrol bombs.

One senior officer described Karim as "very intelligent and self-assured, and potentially very dangerous."

"When he was arrested he seemed quite confident, self-assured and relaxed. I don't think he thought for one minute we would be able to get through his encryption and he answered all our questions until he realised we had cracked his codes."

Karim pleaded guilty to producing and distributing a video on behalf of JMB, raising funds for terrorism and offering himself and encouraging others to volunteer for terrorist operations abroad.

He was found guilty of four charges of preparing to commit acts of terrorism himself or assisting others to do so.

## Gunman Shouting 'Allahu Akbar' Kills 2 US Airmen in Germany

Source:<http://abcnews.go.com/Politics/gunman-shouting-allah-akbar-kills-us-airmen-germany/story?id=13037467>

A gunman shouting "Allahu Akbar" opened fire on a bus carrying U.S. airmen in Frankfurt, Germany, killing two and wounding two others before his gun jammed and he was subdued, officials said.

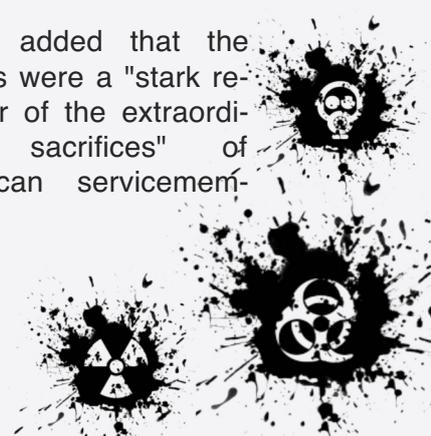
An ethnic Albanian from Kosovo was taken into custody and the FBI was heading an investigation because U.S. citizens were killed and to determine whether the shooting was an act of terrorism.



President Obama made an unscheduled appearance to say, "I am saddened and I am outraged by this attack" and U.S. investigators would work with German authorities and

"spare no effort" to ensure that "all of the perpetrators are brought to justice."

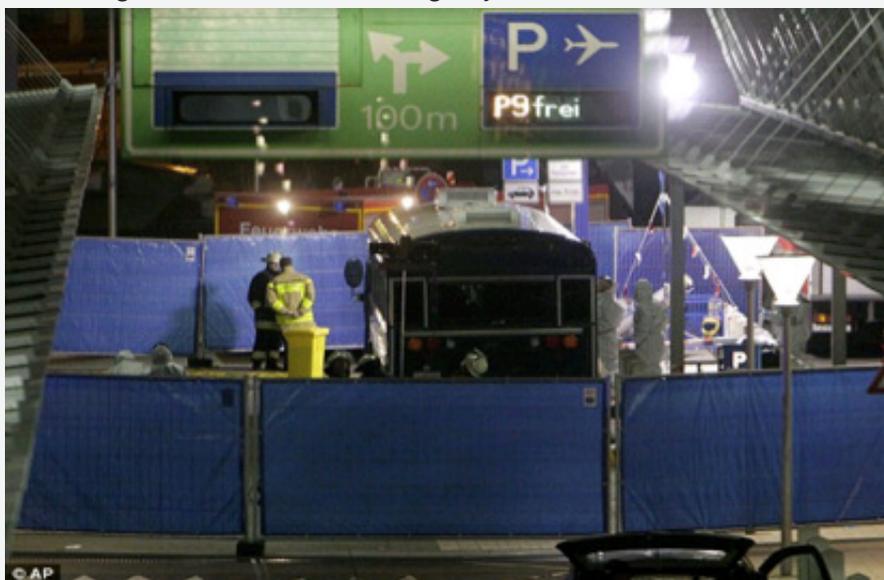
He added that the killings were a "stark reminder of the extraordinary sacrifices" of American servicemembers.





Sources told ABC News that the victims were on a bus at Frankfurt airport. The bus was marked United States Air Force and was carrying 13 or 14 people, plus the driver. U.S. intelligence is trying to determine whether the shooting occurred while the gunman was on the bus or while he was trying to board the bus.

When he opened fire, the gunman, identified as a long-term resident of Germany, shouted "Allahu Akbar," according to sources. He fired nine times, killing two and critically wounding two others before the gun jammed



and he was subdued by other passengers. While being wrestled into submission, the suspect shouted either "Jihad Jihad" or "Allahu Akbar," sources said.

One of the dead was the bus driver, military officials said.

The servicemembers who were attacked were members of a Security Forces team assigned to RAF Lakenheath in Great Britain.

They were being transported to Ramstein Airbase and were en route to support Overseas Contingency Operations, although their exact destination was not stated.

Rep. Patrick Meehan, R-Pa., said at a House Homeland Security Committee hearing today that the shooting looks like it could be a terrorist attack. Meehan said he was briefed by his staff, who are continuing to collect information.



The gunman was identified by sources to ABC News as Arid Uka, although other spellings give his name as Arif Uka. Although he has lived in Germany for years, he is a citizen of Kosovo and his family is from the northern town of Mitrovica.

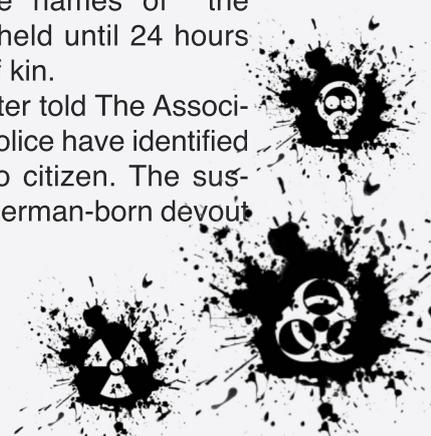
U.S. intelligence officials are running Uka's name through its terrorism data bases to see if he has come to their attention before.

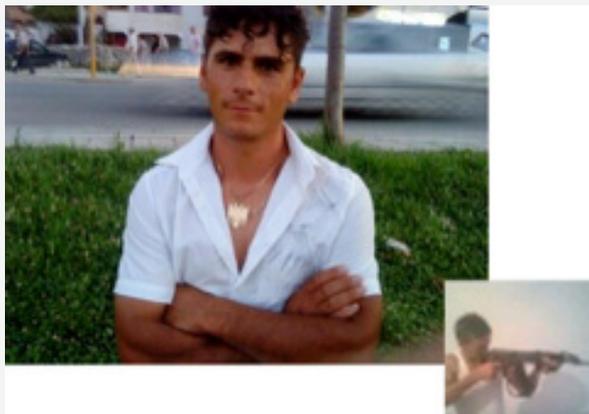
### Who Was Gunman at Frankfurt Airport?

"This is a devastating and a tragic event," Kosovo Interior Minister Bajram Rexhepi

said. "We are trying to find out was this something that was organized or what was the nature of the attack." The names of the deceased are being withheld until 24 hours after notification of next of kin.

Kosovo's interior minister told The Associated Press that German police have identified the gunman as a Kosovo citizen. The suspect's uncle said he is a German-born devout





Muslim who works at the airport. In an interview with The Associated Press in Kosovo, 70-year-old Rexhep Uka said the suspected gunman -- Arid Uka, 21 -- was born and raised in Germany after his parents moved there from Kosovo about 40 years ago. The uncle says Arid is a pious Muslim whose grandfather was a religious leader at a mosque in the village of Zhabar, near Mitrovica, Kosovo. Murat Uka, who identified himself as the alleged shooter's father, says the only thing he knew about his son was that he hadn't turned up at work on Wednesday.

## New Book: 'Bombshell' Explodes Myths Of Female Terrorist Motivation

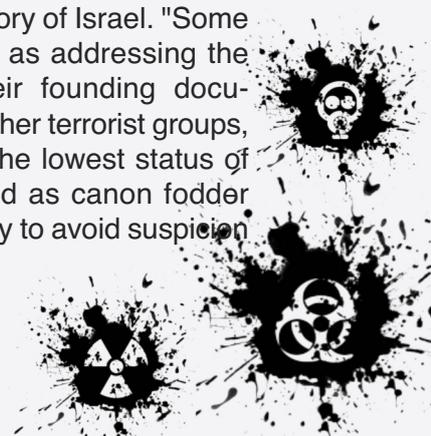
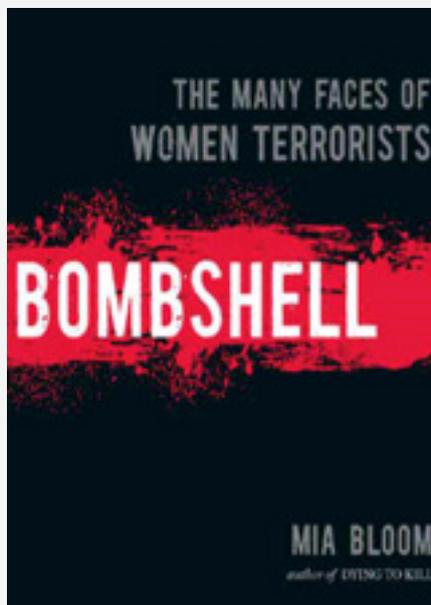
Source: <http://www.medicalnewstoday.com/articles/217172.php>

Often portrayed as pawns of male-dominated terrorist organizations, female terrorists are actually motivated by more complicated and diverse reasons, according to a Penn State researcher. "It's true that some women are coerced, but the truth is that motivations vary from terrorist group to terrorist group," said Mia Bloom, fellow, International Center for the Study of Terrorism. "For example, of the women in the provincial Irish Republican Army group that I talked to, not one was coerced; they were enthusiastic about their roles."

Bloom, who examined female participation in the world's most recognized terrorist groups in her book, "Bombshell: The Many Faces of Female Terrorists" (Viking Canada 2011), said there are five main reasons why females resort to acts of terrorism and suicide bombings--revenge, redemption, relationship, respect and rape. "Relationship, the third R, is particularly crucial in understanding how women are mobilized," Bloom writes. "The best single predictor that a woman will engage in terrorist violence is her relationship with a known insurgent or jihadi." According

to Bloom, leaders of terrorist groups encourage female participation in their organizations for several reasons. Women are more effective at attracting media attention. They are also held up as an example to goad males into joining with or increasing their participation in terrorist movements. "Groups have found it very effective to use women as propaganda tools, especially to appeal to men," Bloom said. "The message is if you don't step up, you're not a man."

Bloom also said the level of participation in a terrorist group changes from culture to culture and from group to group. In some terrorist organizations, women assume leadership positions and take part in all aspects of operations. For example, Ah-lam al-Tamimi, a member of Hamas, planned one of the deadliest terrorist attacks in the history of Israel. "Some terrorist groups go as far as addressing the roles for females in their founding documents," said Bloom. For other terrorist groups, women are relegated to the lowest status of the organization and used as cannon fodder and, because of their ability to avoid suspicion



in civilian areas, as suicide bombers on city streets. "The truly deplorable thing about female suicide bombing is that in many cases women are usually selected to attack civilian targets, or 'soft targets,' " said Bloom. "So women are being used to kill other women and children."

Bloom recommends blunting the lure of terrorism for females by exposing the true nature of the groups in a process she refers to as "deglamorizing, demobilizing and delegitimizing terrorism." "This part of the book has to do with the work we do here at the center," said Bloom. "We look for ways to get people

to leave terrorism." She began writing the book about three years ago after writing a chapter on female suicide bombers in her previous book, "Dying to Kill: The Allure of Suicide Terror." As she further researched female terrorists, Bloom realized that her source's conclusion that most female terrorists were coerced was simplistic. "I actually wrote the book as a corrective," Bloom said. "I started to realize that I mischaracterized women as merely pawns in these organizations."

The University of Pennsylvania Press plans to publish the book in the U.S. in fall, 2011.

## Financial terrorism suspected in 2008 economic crash

### Pentagon study sees element

Source:<http://investmentwatchblog.com/financial-terrorism-suspected-in-2008-economic-crash-pentagon-study-sees-element/>

Evidence outlined in a Pentagon contractor report suggests that financial subversion carried out by unknown parties, such as terrorists or hostile nations, contributed to the 2008 economic crash by covertly using vulnerabilities in the U.S. financial system. The unclassified 2009 report "Economic Warfare: Risks and Responses" by financial analyst Kevin D. Freeman, a copy of which was obtained by The Washington Times, states that "a three-phased attack was planned and is in the process against the United States economy."

While economic analysts and a final report from the federal government's Financial Crisis Inquiry Commission blame the crash on such economic factors as high-risk mortgage lending practices and poor federal regulation and supervision, the Pentagon contractor adds a new element: "outside forces," a factor the commission did not examine. "There is sufficient justification to question whether outside forces triggered, capitalized upon or magnified the economic difficulties of 2008," the report says, explaining that those domestic economic factors would have caused a "normal downturn" but not the "near collapse" of the global economic system that took place. Suspects include financial enemies in Middle Eastern states, Islamic terrorists, hostile

members of the Chinese military, or government and organized crime groups in Russia, Venezuela or Iran. Chinese military officials publicly have suggested using economic warfare against the U.S.

In an interview with The Times, Mr. Freeman said his report provided enough theoretical evidence for an economic warfare attack that further forensic study was warranted. "The new battle space is the economy," he said. "We spend hundreds of billions of dollars on weapons systems each year. But a relatively small amount of money focused against our financial markets through leveraged derivatives or cyber efforts can result in trillions of dollars in losses. And, the perpetrators can remain undiscovered.

"This is the equivalent of box cutters on an airplane," Mr. Freeman said.

Paul Bracken, a Yale University professor who has studied economic warfare, said he saw "no convincing evidence that 'outside forces' colluded to bring about the 2008 crisis." "There were outside players in the market" for unregulated credit default swaps, Mr. Bracken said in an e-mail. "Foreign banks and hedge funds play the shorts all the time too. But suggestions of an organized targeted attack for strategic reasons don't seem to me to be plausible."



Regardless of the report's findings, U.S. officials and outside analysts said the Pentagon, the Treasury Department and U.S. intelligence agencies are not aggressively studying the threats to the United States posed by economic warfare and financial terrorism. "Nobody wants to go there," one official said.

A copy of the report also was provided to the recently concluded Financial Crisis Inquiry Commission, but the commission also declined to address the possibility of economic warfare in its final report. Officials, who spoke on the condition of anonymity, said senior Pentagon policymakers, including Michael Vickers, an assistant defense secretary in charge of special operations, blocked further study, saying the Pentagon was not the appropriate agency to assess economic warfare and financial terrorism risks.

Mr. Vickers declined to be interviewed but, through a spokesman, said he did not say economic warfare was not an area for the Pentagon to study, and that he did not block further study. Mr. Vickers is awaiting Senate confirmation on his promotion to be undersecretary of defense for intelligence. Despite his skepticism of the report, Mr. Bracken agreed that financial warfare needs to be studied, and he noted that the U.S. government is only starting to address the issue. "We are in an era like the 1950s where technological innovation is transforming the tools of coercion and war," he said. "We tend not to see this, and look at information warfare, financial warfare, precision strike, [weapons of mass destruction], etc. as separate silos. It's their parallel co-evolution that leads to interesting options, like counter-elite targeting. And no one is really looking at this in an overall 'systems' way. Diplomacy is way behind here."

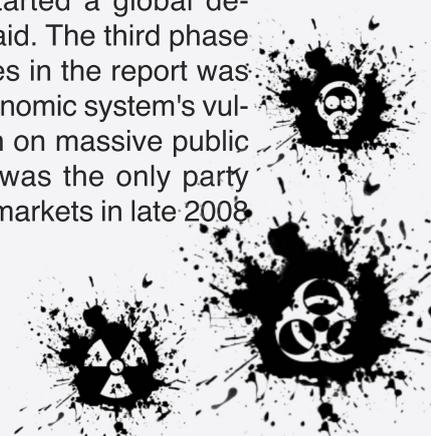
Mr. Freeman wrote the report for the Pentagon's Irregular Warfare Support Program, part of the Combating Terrorism Technical Support Office, which examines unconventional warfare scenarios.

"The preponderance of evidence that cannot be easily dismissed demands a thorough and immediate study be commenced," the report says. "Ignoring the likelihood of this very real threat ensures a catastrophic event." The

report concluded that the evidence of an attack is strong enough that "financial terrorism may have cost the global economy as much as \$50 trillion." Because of secrecy surrounding global banking and finance, finding the exact identities of the attackers will be difficult. But U.S. opponents in Russia who could wage economic warfare include elements of the former KGB intelligence and political police who regard the economy as a "logical extension of the Cold War," the report says.

Asked by The Times who he thought to be the most likely behind the financial attacks, Mr. Freeman said: "Unfortunately, the two major strategic threats, radical jihadists and the Chinese, are among the best positioned in the economic battle space." Also, the report lists as suspects advocates of Islamic law, who have publicly called for opposition to capitalism as a way to promote what they regard as the superiority of Islam.

Further Pentagon Low Intensity Conflict office research into possible economic warfare or financial terrorism being behind the economic collapse by the Pentagon's Special Operations and was blocked, Mr. Freeman said. The Pentagon report states that the evidence of financial subversion revealed that the first two phases of an attack on the U.S. economy took place from 2007 to 2009 and "based on recent global market activity, it appears that the predicted Phase III may be underway right now." The report states that federal authorities must further investigate two significant events in the months leading up to the financial crisis. The first phase of the economic attack, the report said, was the escalation of oil prices by speculators from 2007 to mid-2008 that coincided with the housing finance crisis. In the second phase, the stock market collapsed by what the report called a "bear raid" from unidentified sources on Bear Stearns, Lehman Brothers and other Wall Street firms. "This produced a complete collapse in credit availability and almost started a global depression," Mr. Freeman said. The third phase is what Mr. Freeman states in the report was the main source of the economic system's vulnerability. "We have taken on massive public debt as the government was the only party who could access capital markets in late 2008



and early 2009," he said, placing the U.S. dollar's global reserve currency status at grave risk. "This is the 'end game' if the goal is to destroy America," Mr. Freeman said, noting that in his view China's military "has been advocating the potential for an economic attack on the U.S. for 12 years or longer as evidenced by the publication of the book *Unrestricted Warfare* in 1999."

Additional evidence provided by Mr. Freeman includes the statement in 2008 by Treasury Secretary Henry M. Paulson Jr. that the Russians had approached the Chinese with a plan to dump its holdings of bonds by the federally backed mortgage companies Fannie Mae and Freddie Mac. Among the financial instruments that may have been used in the economic warfare scenario are credit default swaps, unregulated and untraceable contracts by which a buyer pays the seller a fee and in exchange is paid off in a bond or a loan. The report said credit default swaps are "ideal bear-raid tools" and "have the power to determine the financial viability of companies."

Another economic warfare tool that was linked in the report to the 2008 crash is what is called "naked short-selling" of stock, defined as short-selling financial shares without borrowing them. The report said that 30 per-

cent to 70 percent of the decline in stock share values for two companies that were attacked, Bear Stearns and Lehman Brothers, were results of failed trades from naked short-selling. The collapse in September 2008 of Lehman Brothers, the fourth-largest U.S. investment bank, was the most significant event in the crash, causing an immediate credit freeze and stock market crash, the report says. In a section of who was behind the collapse, the report says determining the actors is difficult because of banking and financial trading secrecy. "The reality of the situation today is that foreign-based hedge funds perpetrating bear raid strategies could do so virtually unmonitored and unregulated on behalf of enemies of the United States," the report says. "Only recently have defense and intelligence agencies begun to consider this very real possibility of what amounts to financial terrorism and-or economic warfare."

As for Chinese involvement in economic sabotage, the decline in the world economy may have hurt Beijing through a decline in purchases of Chinese goods. Treasury spokeswoman Marti Adams had no immediate comment on the report but said her department's views on the causes of the economic crash were well known.

## Oromo Liberation Front calls for "Egyptian and Tunisian-style revolution" in Ethiopia

Source: <http://www.jamestown.org>

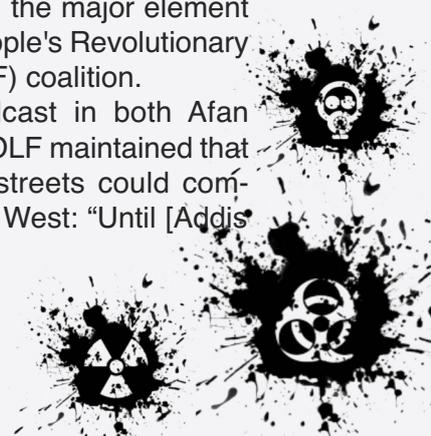
### TERRORISM MONITOR

*In-depth Analysis of al-Qaeda and the War on Terror*

Political reverberations from the revolutions in Tunisia and Egypt continue to sweep through the Horn of Africa, which has already witnessed demonstrations against the Transitional Federal Government and its Islamist opponents in Somalia (see *Terrorism Monitor Briefs*, February 17). Now militants belonging to Ethiopia's Oromo Liberation Front (OLF) have called for all of Ethiopia's ethnic and religious groups to emulate the Tunisian and

Egyptian revolts and unite in deposing the Tigrayan-dominated government of Prime Minister Meles Zenawi, leader of the Tigrayan People's Liberation Front, the major element of the ruling Ethiopian People's Revolutionary Democratic Front (EPRDF) coalition.

In a statement broadcast in both Afan Oromo and Amharic, the OLF maintained that only a revolution in the streets could command the attention of the West: "Until [Addis



Ababa] becomes the next Tunis or Cairo, their ears will not listen," though "most of the superpower countries, the hitherto supporters



and handlers of the tyrannical regimes, were forced to quickly abandon their darlings and side with the people in revolt." Most importantly, the Oromo must unite with Ethiopia's Amharic speakers to provide a long-term solution to the country's ills (Jimma Times, February 27).

The Oromo are the largest single ethnic group in Ethiopia and dwell principally in central and southern Ethiopia, though there is a high degree of social integration with Ethiopia's Amharic-speaking peoples, the traditional rulers of the nation until 1991. The Oromo are religiously diverse, with members of the ethnic group following Islam, Christianity and traditional religions, but not all Oromo opposition leaders and parties agree on the necessity of a revolution.

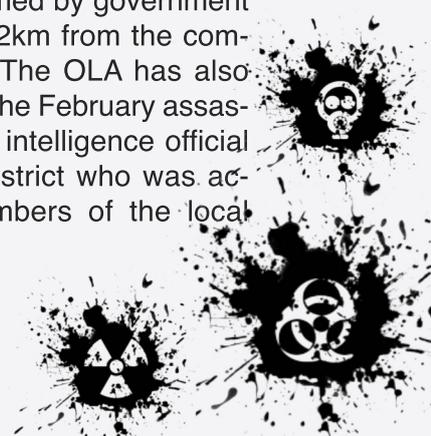
In recent days, a joint operation along the border by Ethiopian and Kenyan military forces that began last November is reported to have resulted in the arrest of at least 120 OLF fighters and the seizure of a quantity of arms, grenades and missiles. The existence of a cross-border Oromo community is reported to have complicated efforts to identify OLF members; according to a local Kenyan

provincial commissioner, "These people speak the local dialect and it may be hard to distinguish them from the locals but the locals themselves are volunteering information that will lead to their arrest." The operation will continue to search for other OLF members (Sudan Tribune, February 26).

The OLF began an armed struggle for Oromo self-determination and local autonomy from the Amhara monarchy in 1973. After dropping out of the coalition government formed after the conclusion of the Ethiopian civil war and the fall of the communist Derg regime of Mengistu Haile Mariam in 1991, the OLF then took up arms against the new Tigrayan-dominated government. Addis Ababa classifies the OLF as a terrorist organization and has accused it of being responsible for a series of bombings in

Addis Ababa in 2008, a claim denied by the OLF (see the OLF statement published in the Sudan Tribune, May 29, 2008).

Despite assertions by Ethiopian authorities that the military capabilities of the OLF and its armed wing, the Oromo Liberation Army (OLA), have been much diminished by constant pressure from government security services, the movement recently claimed that a special unit of the OLA operating in the OLF's so-called "Eastern Zone" raided and destroyed a government military base in Kombolcha, killing 19 soldiers and injuring 25 others (Voice of Oromo Liberation Radio, February 25; OLF News, February 26; for OLF military capabilities, see Militant Leadership Monitor Briefs, January 29, 2010). The attack and the alleged casualties have not been confirmed by government sources. Kombolcha is 12km from the commercial center of Harar. The OLA has also claimed responsibility for the February assassination of a government intelligence official in the Eastern Oromia district who was accused of harassing members of the local



Oromo community. An OLA statement warned: "Those who continue to be part of the TPLF killing machine will face the same death

penalty unless they refrain from such evil acts" (OLF News, February 6; Jimma Times, February 9).

## Popular Movements in the Middle East and the Role of al-Qaeda

By Murad Batal al-Shishani

Source: <http://www.jamestown.org>

In light of recent developments in the Arab political scene, Salafi-jihadists have been notably absent from the major uprisings taking place namely the "Jasmine Revolution" in Tunisia, the "Lotus Revolution" in Egypt, and even the ongoing Libyan uprising. After scrutinizing jihadist web forums, most discussions regarding Egypt and Tunisia seem to react to events without taking credit for them, a common practice for jihadists who usually place al-Qaeda and Salafi-jihadists trademarks on them. Furthermore the "official" reaction from al-Qaeda leaders has been late in coming. The organization's second-in-command Ayman al-Zawahiri spoke, although a bit late, about the turmoil in Egypt. Al-Qaeda rhetoric promoting violent jihad, seems to have had very little affect among young Arabs and Muslims in Cairo and other Arab streets. Peaceful political activism proved, so far, to be more effective than al-Qaeda-style actions.

### Al-Zawahiri and the Trust of the New Arab Street

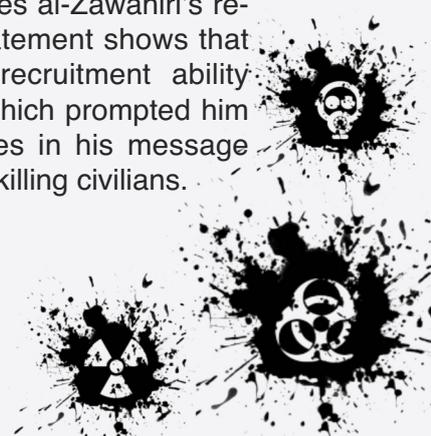
The Salafi-jihadist movement has in fact delivered messages in several forms regarding the developments in the Arab world. Most significantly was a message from al-Zawahiri who has released, so far, three parts of his message to the Egyptian people entitled "Part Three: Message of Hope and Good Tidings to Our People in Egypt". Al-Zawahiri reflected in his message, particularly in the second part, al-Qaeda's opinion concerning the new inclination among Arab youth towards peaceful political activism instead of the al-Qaeda-style way of change i.e. violent jihad.

Al-Zawahiri, aiming to present the "soft and political" face of al-Qaeda, warned against expansion by using the "al-Tatarrus" concept (literally shielding) meaning that being Muslims among kaffer enemies should not keep jihadists from attacking them, despite possible "collateral" Muslims casualties. Many al-Qaeda attacks were in fact justified using this concept, including the September 11 attacks. Al-Zawahiri

followed by stating that:

"[...] there are some operations that are truly or falsely attributed to the mujahidin targeting Muslims in mosques, markets other gathering spots. Regardless of the truth or falsity of these operations being attributed to the mujahidin, I and my brothers in al-Qaeda strongly condemn these attacks whether committed by the mujahidin or by others [...] Sheikh Osama [Bin Laden] -may Allah protect him- delegated me to emphasize the [importance] of this matter. Hence I advise every mujahid to plan his operation very keenly to avoid injuring anyone who should not be hurt, [according to Islam] whether he is a Muslim or a non Muslim [...] and to use all caution in [using] al-Tatarrus".

Most studies pointed to the "killing of civilians" as a major issue that prompted al-Qaeda to lose ground and standing in the Muslim world, which makes al-Zawahiri's remarks significant. His statement shows that al-Qaeda is losing its recruitment ability among the Arab youth, which prompted him to focus on certain issues in his message such as the legitimacy of killing civilians.



Attempts to promote this strategy were also stated in a booklet entitled "The Popular Revolution and the Fall of the Corrupt Arab System" written by Aṭīyah Abū 'Abd ar-Rahman (nom de guerre), a jihadist whose writings have been recommended by al-Zawahiri. Abd ar-Rahman has asked jihadists in Egypt to deal softly with the public, to avoid "intellectual confrontations", and to focus on treating people politely. In doing so, al-Qaeda is seeking to gain the trust of the new Arab street. However, al-Qaeda literature remains in the "pre-Arab-revolutions" era, focused on the importance and priority of jihad against the West, and the United States in particular, while portraying them as occupiers and looters of Muslims world. This ideology reflects typical jihadist thought, it also shows how al-Qaeda is banking on the failure of the West in supporting the popular movements in Arab world.

### Jihad Against the West

Abu Munther Shanqiti, whose name suggests that he is Mauritanian, has recently emerged as an influential jihadist ideologue. Apart from describing him as "a member of the Sharia'a Committee" of the Minbar al-Tawhid w al-Jihad website belonging to well-known jihadist scholar Abu Muhammad al-Maqdisi, there is not much information about al-Shanqiti. However his writings, letters, and fatwas suggest that he is an ideologue who is gaining influence. He issued a fatwa calling for the killing of Christian pastors in Egypt, after a series of bombings last December against Copts in Alexandria, Egypt. He has also authored a long letter, entitled "al-Intsar Il-Sujana'a al-Abrar fi Fitnat al-Hiwar" (Advocating the righteous prisoners in affliction of dialogue), which was addressed to the Mauritanian authorities as "a dialogue between the government and the armed groups in the prisons" (<http://www.tawhed.ws/a?a=shanqeet>).

Furthermore, most of al-Shanqiti's writings focus on Egypt. He has recently written several letters tackling the Egyptian protests in addition to Tunisia's revolution. However in one of his letters entitled "the revolution against Mubarak," he rejected the calls against taking part in the demonstrations against the Egyptian regime. This letter was

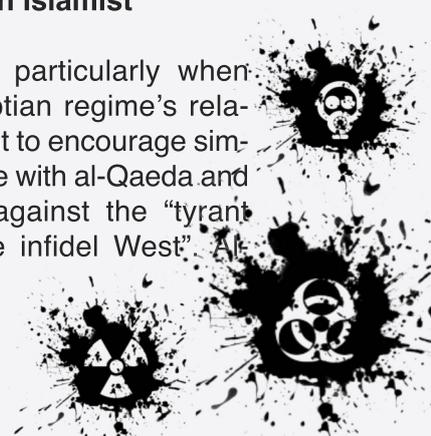
expanded by al-Shanqiti, in response to a question about developments in Egypt and re-published under the title "What is the rule of participation in the revolution in Egypt now?" ([http://www.tawhed.ws/FAQ/display\\_question?qid=4195](http://www.tawhed.ws/FAQ/display_question?qid=4195)) Al-Shanqiti's letter on Egypt explains how jihadists should react to the developments in Egypt and shows which opportunities could emerge for al-Qaeda and other affiliated jihadists in light of Hosni Mubarak's fall from power.

Al-Shanqiti concedes from the beginning the failure of jihadists to bring down the Egyptian regime: "We must acknowledge that removing the ruling regime in Egypt is a matter that could not be done [even] by the largest jihadist organizations, so if these demonstrators succeed in toppling it, it will be a great victory for Islam and Muslims (Brynjar Lia, Jihadis Debate Egypt (1) + (2), <http://www.jihadica.com>, February 4). He deemed it a victory because the West, and the United States in particular, relied on the Egyptian regime to implement their policies in the Middle East. "If the Egyptian regime fell, Allah willing, the West will lose one of its most important agents in the region [... while] the Americans will have to deal in different ways with the peoples of the region...and if the Egyptian regime fell, Allah willing, perhaps several other Arab regimes will follow".

While al-Shanqiti predicted that "the fall of Egypt" would be similar to the September 11 attacks in terms of scale, he also pointed out the necessity of a revolution in Egypt for jihadists and his disdain for the Mubarak regime: "if ten or even a hundred of the best Mujahedeen conducted martyrdom operations in order to destroy Mubarak and his regime I would not see anything wrong in that, because of [these operations] would be in the interest of Islam and Muslims and would mean a defeat to the enemies of religion".

### The "Myth" of Fearing an Islamist Takeover

Al-Shanqiti in his letter, particularly when speaking about the Egyptian regime's relations with the West, sought to encourage similar violent behaviour in line with al-Qaeda and other affiliated groups, against the "tyrant regime supported by the infidel West". Al-



though al-Qaeda is out of the current political scene in Arab world, they do represent at the same time, a political alternative if the revolutionary movements fail in Arab world.

As the demonstrations break out demanding change and political reform in Tunisia, Egypt, Libya, and throughout the greater Middle East the fear of a "fundamentalist" power grab, has made headlines in the West. This fear might have already been implemented into Western foreign policy given that several governments including the United States have mistakenly been prioritizing "stability" rather than "democracy". Former French Foreign minister Michèle Alliot-Marie, who recently resigned, even suggested sending French police units to help Tunisian police forces suppress demonstrators, before her government refused to receive ousted president Zine El Abidine Ben Ali on its territory. If the French had intervened, the protesting youngsters would have seen Salafi-jihadist ideology as the only alternative. The youth which organized and led the demonstrations in Tunisia, and Egypt, as well as other neighboring countries, are for the most part politically unaffiliated; they are middle class, educated, believe in civil liberties, human rights, and are able to communicate through new social media networks like "Twitter" and "Facebook". It was obvious that Islamists were not dominating these protests, which makes any policy aimed to hinder reform, out of fear of Islamists rule, unjustified, and against Western interests.

For instance, when Egyptian authorities cut off the Internet and launched a violent campaign to quell the demonstrations, many protestors called on the U.S. State Department, and President Obama, to pressure the Egyptian government against censorship. If U.S. policy in Egypt had sought to maintain stability at the expense of political reform, the vast majority of Egypt's otherwise apolitical youth might have felt "betrayed", and could then have viewed the Salafi-jihadists's argument that the West supports only tyrant regimes as being justified.

Several studies do reject the correlation between political reform and the rise of Islamist militant groups, but only a few studies reject the correlation between frustration and political violence, thus making democracy the only guarantee against radicalization in the Arab world.

Murad Batal al-Shishani is an Islamic groups and terrorism issues analyst based in London. He is a specialist on Islamic Movements in Chechnya and in the Middle East. He is a regular contributor to several publications in both Arabic and English. He is also author of the book "The Islamic Movement in Chechnya and the Chechen-Russian Conflict 1990-2000", Amman, 2001 (in Arabic), and "Iraqi Resistance: National Liberation vs. Terrorism: A Quantitative Study," November 2005 Iraqi Studies Series, Issue 5, Gulf Research Center-Dubai.



## Novel Mini-Radar for Advanced Security Applications

### Background

The world is standing in front of a new era where small, affordable radar sensors will be used for many civil applications, such as gaming, tracking of customer behavior in retail stores, counting and car safety, as well as in the security industry. A wide range of technologies and products are available for perimeter security and Safe City — CCD cameras, IR cameras, radars and others — yet the market continues to look for more integrated, accurate, real-time solutions with minimal false alarms at low costs. Systems that enhance security in terms of performance, ease of deployment, and maintenance are needed. In the near future both the security and civilian markets will look for integrated cameras that incorporate radar sensors.

### Technology/Products

Mantissa's mini radar sensor is a highly innovative integration of cutting-edge RF technologies with patented new software and hardware developments. Mantissa's MSHRS-300X sensor provides security that successfully overcomes the major drawbacks of existing solutions. Mantissa's highly reliable smart sensors provide unparalleled performance for surveillance and for triggering events during the day or night, in any weather or visibility conditions, and at a cost that is magnitudes lower than that of comparable technologies. By reducing unit costs, Mantissa opens the potential for using high-level radar performance with minimal human intervention in a wide spectrum of situations and applications.

The small MSHRS-300X measures precise range and range rate for every pixel on the scene along with coarse angle. For every detected target, fully reliable parameters of range, velocity, angle, and course of movement are calculated for transfer to the command and control center. A unique Micro-Doppler processor further analyzes suspicious targets and determines whether the target is human or nonhuman.

Mantissa's MSHRS-100SC product is a modified version for in-city installations. It is easily incorporated into urban video cameras for triggering online recording of an event and then for post-event analysis offline.

**Mantissa is the first to bring small, reliable and low cost radar technology into the security market.**

### Mantissa's Competitive Advantage

Mantissa's new radar sensor offers numerous advantages that place it ahead of existing solutions in the market.

**Significantly lower cost** — Enables a network of multiple units for wide coverage; opens use of technology for a multitude new applications

**Native Network Deployment** — 100% detection coverage

**Small, lightweight** — 490g, easy installation *anywhere*

**No moving parts** — Greater reliability and even lower costs

**Reduced false alarms** — Classified alerts minimize false alarms and need for human inspection (ongoing monitoring of activity and guard response)

**Performance design** — Can be tailored for different customers, applications, and security needs

### Market Size

Mantissa is first targeting the over \$600 million perimeter security market (Blue River Stone Report), a key part of the layered security framework for critical infrastructure and Safe City.

### Mantissa Ltd.

**Danny Seker, CEO**

Phone: +972.72.260.7043

Mobile: +972.52.733.4127

E-mail: [danny@mantissa-ltd.com](mailto:danny@mantissa-ltd.com)

### Key Personnel

**Dr. Ehud Fishler, Founder & CTO.**

Expert in the field of nonlinear, optimal filtering; managerial and hands-on experience in radar development for more than 15 years; Ph.D. in electrical engineering, Tel Aviv University

**Danny Seker, CEO.** Former CEO of Gita Technologies (information security); former helicopter pilot. B.A., economics and computer sciences, Bar-Ilan University; M.Sc., business management, Ben Gurion University of the Negev

**Shimon Erlichman, Active Chairman of the Board.** Expert in security technologies; former CTO of an Israeli government security organization. Director at FTK Technologies, the Trendlines Group

### Advisory Board

**Efraim Halevi, Chairman of the Advisory Board.** World renowned figure in the security and public arena; currently Head of Shasha Center for Strategic Studies, Hebrew University of Jerusalem; served as National Security Advisor, Head of Mossad, Israel Ambassador to the European Union; served in many other official/ public positions

**Prof. Anthony J. Weiss, Advisory Board member,** Head of School of Electrical Engineering, Tel-Aviv University; Fellow of the IEEE and a world recognized expert in the fields of signal processing and location systems

### Company Status

**Founded:** 2009

**Investor:** The Trendlines Group

### Milestones

**Q4 2010** Completed prototype sensor

**Q3 2011** Complete first field testing

**Q3 2012** Commercial model

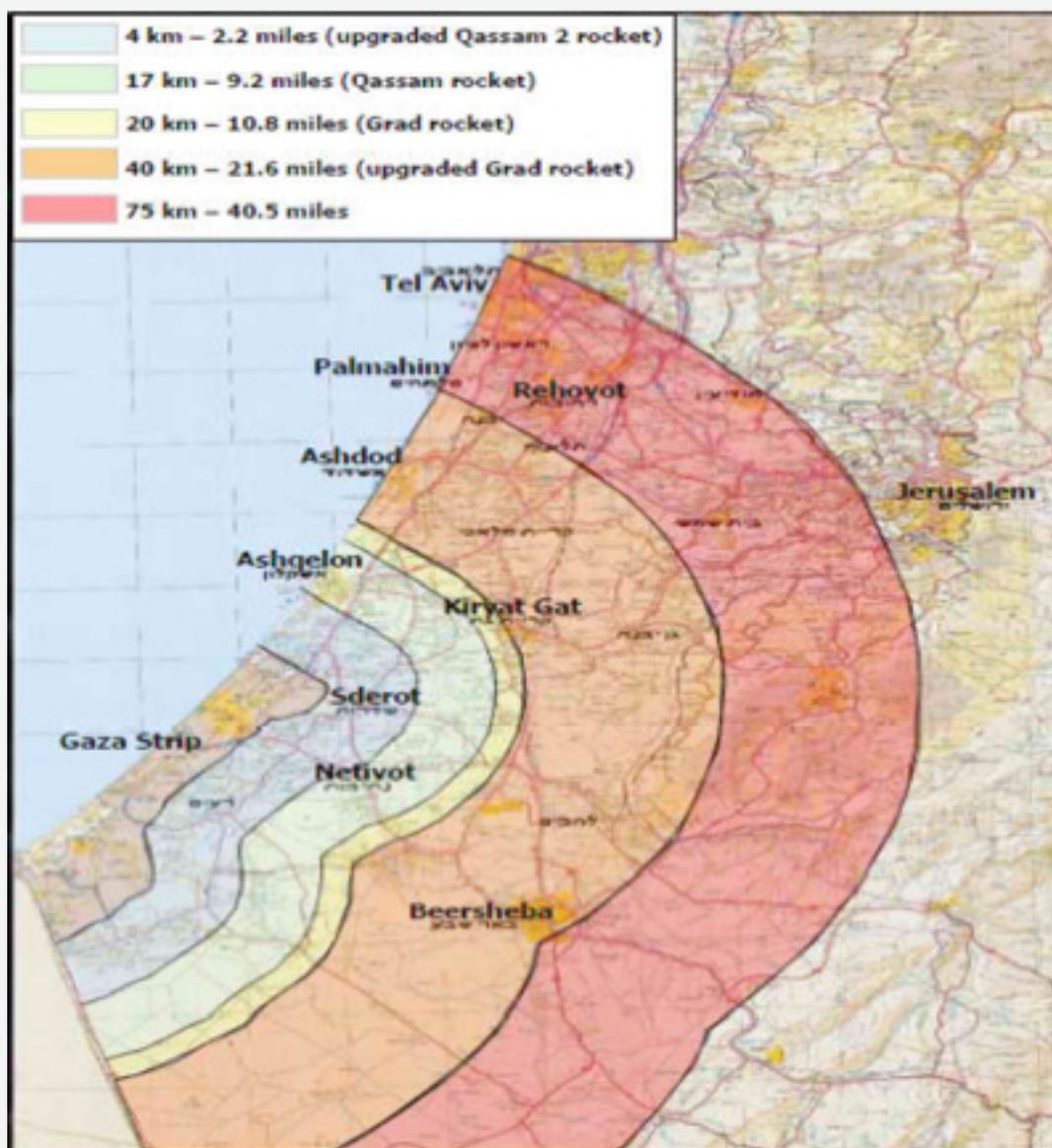
### Funding

**Mantissa is seeking to raise \$750,000 to -**

- **develop a commercial model**
- **begin testing**
- **continue business development**

### Terrorism from the Gaza Strip since Operation Cast Lead Data, Type and Trends

This document is an overview of a study which is currently being translated and will shortly appear on the source: <http://www.terrorism-info.org.il>



Map of the rocket threat to the Israeli home front from the Gaza Strip

#### Overview

1. In the two years since Operation Cast Lead there has been a significant reduction in the extent and severity of terrorist attacks carried out by Hamas, the Palestinian Islamic Jihad and the other Palestinian terrorist organizations operating in the Gaza Strip. That created a new security situation, and improvement on that before Operation Cast

Lead. The decrease in terrorism reflects Israel's power, restored by Operation Cast Lead, to deter the terrorist organizations. However, even the current level of rocket and mortar shell fire and the frequent attacks on IDF forces along the border fence disrupt the daily lives of the western Negev residents.

2. The relative quiet has been exploited by Hamas and the other terrorist organizations



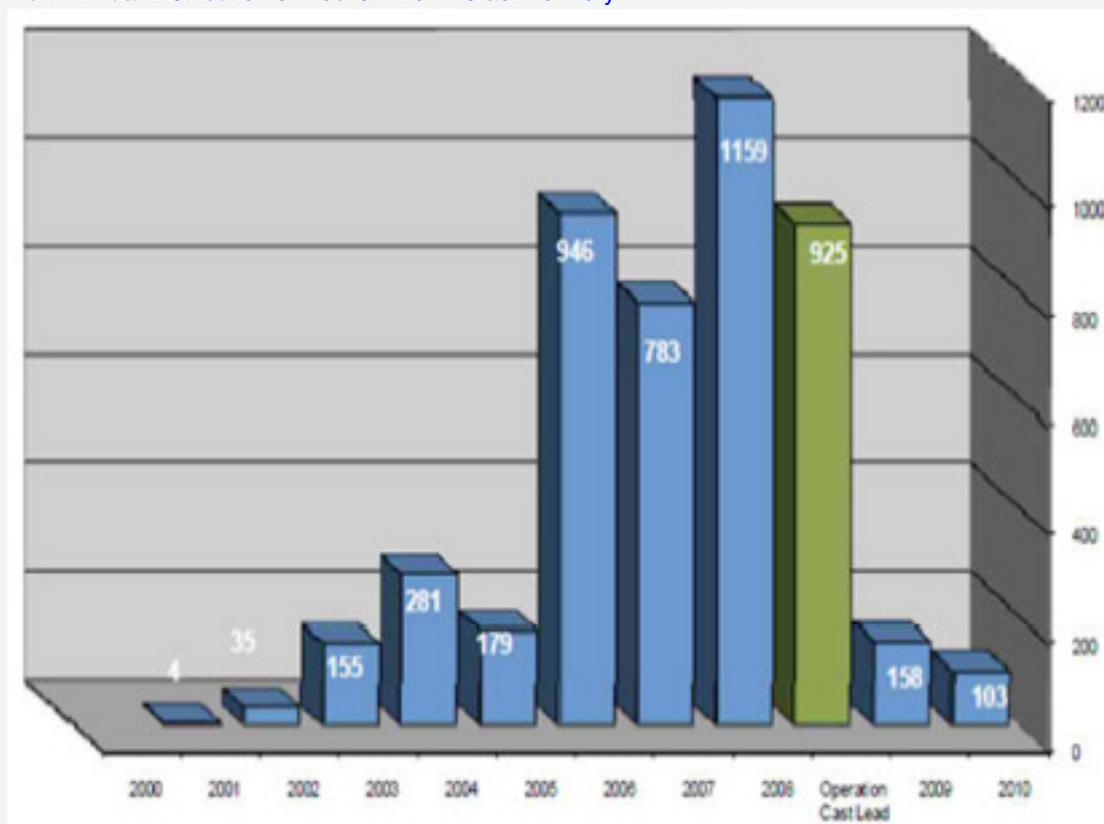
for the as yet incomplete process of rehabilitating and upgrading their military capabilities. The process is implemented by the vast support provided by Iran and Syria. In any case, Hamas continues to make it possible, sometimes with its own involvement or through its proxies, for low-signature shooting attacks and other terrorist activities to be carried out, and tries to keep a balance between preventing escalation and waging a campaign of attrition against Israeli civilians.

3. Hamas, to enforce its strategic policy of restraint on the other terrorist organizations operating in the Gaza Strip, some of which occasionally try to challenge it, uses its security

and determination. Judging by the results, it can be said that Hamas has generally succeeded in enforcing its policy of restraint on the other organizations, including its rivals. However, at the end of 2010 and the beginning of 2011 there was been an erosion in the willingness of the various organizations to obey Hamas' policy, and there was a certain increase in shooting and other terrorist attacks against Israel.

5. On the ground, in 2009 and 2010 Hamas' restraint policy was effective both quantitatively and qualitatively. The number of showcase attacks decreased and there was significantly less rocket and mortar shell fire

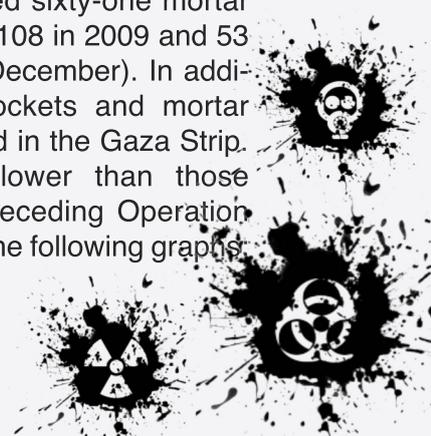
Multi-Annual Distribution of Rocket Fire in Israeli Territory



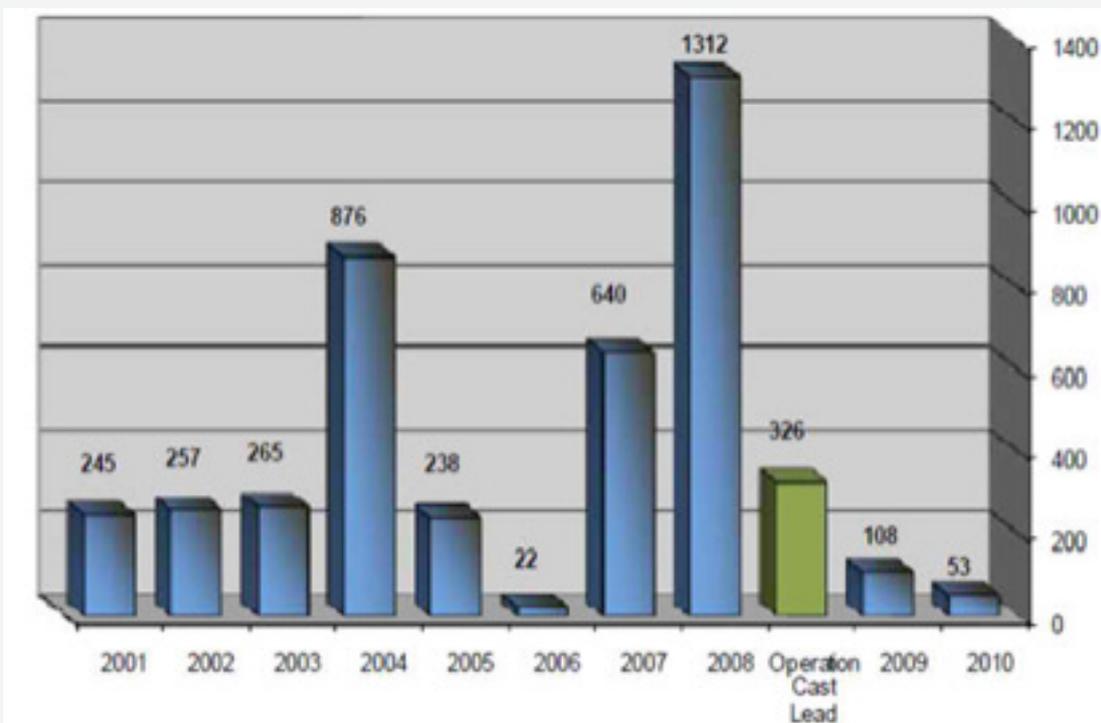
(and sometimes military) enforcement apparatuses. Hamas also coerced other terrorist organizations into accepting its policies through agreements meant to preserve the lull. Its enforcement apparatuses reduced rocket fire and showcase attacks from the Gaza Strip and at the same time tried to channel the rogue organizations into accepting the ground rules deemed suitable by Hamas.

4. Those Hamas policies have been carried out with varying levels of effectiveness

from the Gaza Strip. In the two years since Operation Cast Lead, 261 rocket hits were identified in Israeli territory, 158 in 2009 and 103 in 2010. One hundred sixty-one mortar shell hits were identified, 108 in 2009 and 53 in 2010 (half of them in December). In addition, several hundred rockets and mortar shells misfired and landed in the Gaza Strip. The numbers are far lower than those recorded in the years preceding Operation Cast Lead, illustrated by the following graphs:



Multi-Annual Distribution of Mortar Shell Fire in Israeli Territory



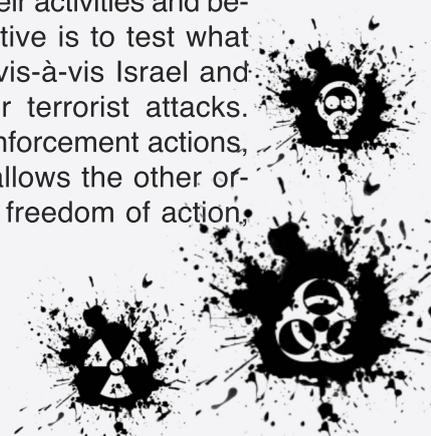
6. To "compensate" for the need to restrain attacks along the Gaza-Israeli border, Hamas and the other terrorist organizations looked for indirect routes into Israel through the Sinai Peninsula and naval routes from the sea. Efforts were made to hide them and on occasion to deny their existence, especially to avoid complicating relations (complex in any case) with Egypt, which regards the exploitation of the Sinai Peninsula for terrorist attacks as detrimental to its national security and economy.

7. The use of indirect routes in 2010 was manifested by two instances of launching of 122mm Grad rockets from the Sinai Peninsula at Eilat, Israel's southernmost city. Responsible for both attacks were operatives from Hamas' Izz al-Din al-Qassam Brigades in the Gaza Strip. Hamas, however, did not admit responsibility for the attacks and in one instance even denied the attack had been carried out. In other instances Hamas and the other terrorist organizations operating in the Gaza Strip sent terrorist squads into Israel through the Sinai Peninsula to carry out various types of attacks. Those plans included the abduction and murder of an IDF soldier, his body to be used as a bargaining chip, and

mass-casualty attacks in crowded population centers.

8. The relative quiet was disrupted at the end of 2010 by increasing mortar shell fire aimed at military and civilian targets and by increasing rocket fire. In February 2011 a 122mm Grad rocket attack was carried out against Beersheba, 42 kilometers (26 miles) from the Gaza Strip (for the first time since Operation Cast Lead). There was also an increase in the number of attempted attacks (IEDs, anti-tank fire, sniper attacks) on IDF forces conducting counterterrorism activities near the border fence, both within Israeli territory and inside the Gaza Strip (several hundred meters from the fence).

9. In our assessment, Israel's deterrent power still exists and Hamas clearly wants to continue its policy of restraint to keep the situation from deteriorating. However, Hamas, its military wing and the other terrorist organizations have increased their activities and become bolder. Their objective is to test what they can and cannot do vis-à-vis Israel and extend the limits of their terrorist attacks. Hamas still enforces its enforcement actions, although on occasion it allows the other organizations slightly more freedom of action.



and infrequently even participates in attacks near the border fence.

10. Hamas and the other terrorist organizations are exploiting the relative quiet on the ground for a rapid process of rehabilitating and upgrading their military capabilities. Hamas gives the process priority over rehabilitating the civilian infrastructure, which demands greater resources. Hamas and the Palestinian Islamic Jihad particularly emphasize improving their rocket and mortar shell capabilities, considered Israel's home front to be its Achilles heel, and want to be able to strike Israeli civilians while using Palestinian civilians as human shields.

11. In the two years since Operation Cast Lead, Hamas (with aid from Iran) has doubled and upgraded its rocket arsenal. It now has thousands of rockets of various ranges, both standard and homemade, including Fajr 5 rockets which can reach the center of Israel. The Palestinian Islamic Jihad has also upgraded its rocket capabilities.

12. Hamas also particularly emphasizes rehabilitating and upgrading its anti-tank system, which it regards as a response to the IDF's armored advantage. In the past two years the terrorist organizations operating in the Gaza Strip have equipped themselves

with advanced anti-tank guided missile systems with deeper penetration capabilities, such as Kornet missiles (the first of which was fired from the Gaza Strip on December 6, 2010).

13. The process of rehabilitating the terrorist military infrastructure is based on weapons and knowhow supplied by external sources. It entails exploiting Sudanese territory and using border-crossing networks of smugglers and merchants, passing through routes, most of which originate in Iran. As in the past, Iran plays a principle role, regarding the growing military capabilities being constructed in the Gaza Strip as a tool for advancing its own strategic objectives.

14. Iranian and Syrian support is manifested in supplying Hamas and the Palestinian Islamic Jihad with highly advanced weapons, logistical aid in smuggling them into the Gaza Strip, instruction and training, transferring funds to the organizations in the Gaza Strip and giving the de facto Hamas administration in the Gaza Strip political and propaganda support. In addition, Iran fosters special relations with the Palestinian Islamic Jihad, an Iranian proxy which is not subject to some of the governmental considerations restraining Hamas.

## Will Libya Again Become the Arsenal of Terrorism?

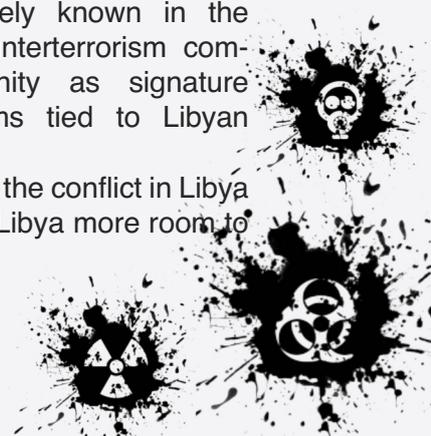
By Scott Stewart

Source: [http://www.stratfor.com/weekly/20110309-will-libya-again-become-arsenal-terrorism?utm\\_source=SWeekly&utm\\_medium=email&utm\\_campaign=110310&utm\\_content=readmore&elq=c33a30fdeae94dfe8e7a0cc5691d607a#ixzz0MSdkch5v](http://www.stratfor.com/weekly/20110309-will-libya-again-become-arsenal-terrorism?utm_source=SWeekly&utm_medium=email&utm_campaign=110310&utm_content=readmore&elq=c33a30fdeae94dfe8e7a0cc5691d607a#ixzz0MSdkch5v)

During the 1970s and 1980s, Libya served as the arsenal of terrorism. While this role may have received the most publicity when large shipments of weapons were intercepted that Libya was trying to send to the Provisional Irish Republican Army, Libyan involvement in arming terrorist groups was far more widespread. Traces conducted on the weapons used in terrorist attacks by groups such as the

Abu Nidal Organization frequently showed that the weapons had come from Libya. In fact, there were specific lot numbers of Soviet-manufactured F1 hand grenades that became widely known in the counterterrorism community as signature items tied to Libyan support of terrorist groups.

As we have discussed, the conflict in Libya could provide jihadists in Libya more room to





operate than they have enjoyed for many years. This operational freedom for the jihadists might have an impact not only in Libya but also in the broader region, and one significant way this impact could manifest itself is in the supply of arms. The looting of the arms depots in Libya is reminiscent of the looting in Iraq following the U.S. invasion in 2003. There are also reports that foreign governments are discussing providing arms to the Libyan rebels in the eastern part of the country. While it is far from clear if any of those discussions are serious or whether any potential patron would ever follow through, past operations to arm rebels have had long-lasting repercussions in places like Afghanistan and Central America.

In light of these developments, a tactical discussion of the various classes of weapons contained in Libyan supply depots and how they could be utilized by insurgents and terrorists is in order.

### **The Nature of Weapons**

First of all, it is important to realize that weapons are durable and fungible goods that are easily converted to cash. By durable, we mean that while certain types of weapons and weapon components have a limited shelf life — such as battery-coolant units for the FIM-92A Stinger missile — many other weapons remain functional for many decades. It is not unusual to find a militant or a soldier carrying an AK-47 that was manufactured before he was born — and in many cases even before his father was born. Weapons provided to the anti-Soviet fighters in Afghanistan in the 1980s are still being used against coalition troops in Afghanistan and weapons provided by the United States and the Soviet Union to rebels and governments during Central Amer-

ica's civil wars are still making their way into the arsenals of the Mexican drug cartels. Weapons are fungible in the sense that an AK-47-style rifle manufactured in Russia is essentially the same as one manufactured in China or Egypt, and an M16 manufactured in Israel can easily replace an M16 manufactured in the United States.

One good illustration of the durable and fungible nature of weapons is the fact that some of the weapons seized by the North Vietnamese following the withdrawal of U.S. forces from South Vietnam were traded to Cuba in the 1970s and 1980s in exchange for sugar. The Cubans then provided these weapons to Marxist militant groups in Central and South America. These weapons originally shipped to U.S. forces in Vietnam were then used by insurgents in Latin American civil wars and some of them were even used in terrorist attacks in the 1980s in places such as Chile, El Salvador and Guatemala. More recently, some of these Vietnam-era weapons have made their way from South and Central America to Mexico, where they have been used by the drug cartels. Another example are the Lee-Enfield rifles manufactured in the early 1900s that can still be found in arms markets in places like Yemen and Pakistan. These antiques are still being used by militants in many parts of the world, including Afghanistan, where they have proved to be more effective in longer-range engagements typical of the theater than the newer and more common AK-47s.

The arms depots in Libya have been looted by a number of different actors ranging in motivation from anti-Gadhafi freedom fighters to jihadists to outright thieves and thugs. While the weapons are now being used mostly to fight Col. Moammar Gadhafi's re-



maining forces, they could later be diverted to other uses. Arms, ammunition and explosives looted from Libyan arms depots today will likely be serviceable for decades, and the thriving transnational black arms market will provide a mechanism for groups and individuals to sell looted weapons or those received from foreign governments. The bottom line is that weapons from Libya will be available on the black arms market for many years to come.

### Types of Weapons

So far, the media discussion of Libyan weapons has focused on two classes of weapons: Libya's chemical weapons stockpiles and its "man-portable air defense systems," or MANPADS. These are important to consider in evaluating the threats posed by an uncontrolled military arsenal in Libya, but be-

Militants in many parts of the world have learned to manufacture improvised explosive mixtures, but such compounds are simply not as compact, stable, reliable or potent as military-grade explosives. Because of this, military-grade explosives have an obvious application for terrorist attacks and are highly sought after on the black arms market.

Still another class is heavier, crew-served weapons, such as heavy machine guns, automatic grenade launchers, recoilless rifles and mortars. Such weapons systems are powerful on the battlefield and can be very useful for insurgents if properly employed, although they are difficult to conceal and transport. Crew-served weapons also use heavier ammunition than small arms and in some cases rapidly consume ammunition, so employing them can also present a significant logistical strain. Because of these factors, they



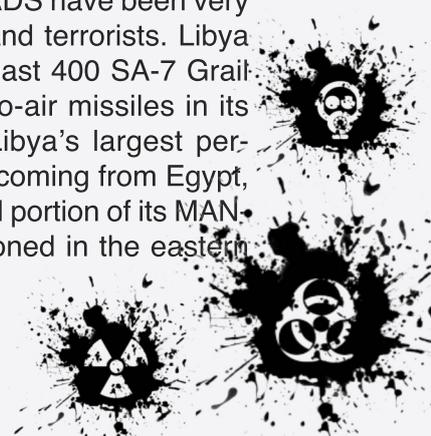
fore discussing these weapons it is worthwhile to look at many other types of weapons that could prove useful to insurgents and terrorists.

One category is small arms, which includes rifles, hand grenades and rocket-propelled grenades (RPGs). A large number of weapons in this class have been looted from arms depots in Libya and widely distributed to rebel fighters. As noted above, such weapons tend to be highly durable and can remain functional for decades. From a militant perspective, such weapons are useful not only in irregular warfare operations but also in armed robberies and kidnappings that are conducted to raise funds for the group. From a terrorism perspective, small arms are useful for assassinations and armed assaults.

Yet another category of munitions of interest to militants is military-grade explosives.

are somewhat difficult to use for terrorist applications. Mortars have been heavily used by insurgents in Iraq, and to a lesser extent by al Qaeda in the Arabian Peninsula in Yemen, but these groups have not demonstrated the ability to adjust their mortar fire to effectively engage targets.

Perhaps the biggest worry right now in terms of Libya's uncontrolled military arsenal is the looting of MANPADS, which is quite possibly the biggest blow to worldwide MANPADS counterproliferation efforts since Iraq in 2003. Historically, MANPADS have been very appealing to insurgents and terrorists. Libya is estimated to have at least 400 SA-7 Grail (9K32 Strela-2) surface-to-air missiles in its military inventory. With Libya's largest perceived regional air threat coming from Egypt, it is likely that a substantial portion of its MANPADS stocks were positioned in the eastern



part of the country when the current civil war started. We have seen open-source photos of Libyan rebels carrying SA-7 missiles (not al-

of the small arms and smaller crew-served weapons have been taken and what is left behind are large stockpiles of artillery ammuni-



ways with gripstocks), and one photo even depicted a rebel launching an SA-7 at a pro-Gadhafi warplane. While the airstrikes by pro-Gadhafi aircraft have been largely ineffective, the attention these attacks have been receiving in the press could lead some countries to supply additional, and perhaps even more advanced, MANPADS to the Libyan rebels.

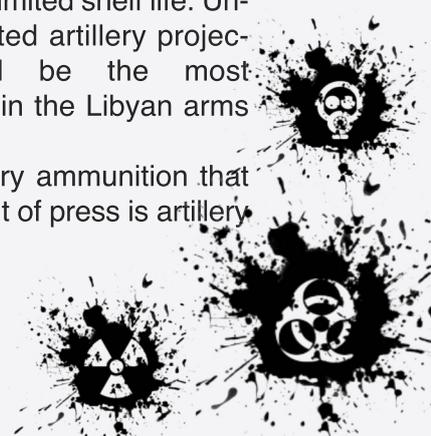
As noted in STRATFOR's previous coverage of MANPADS, at least 30 civilian aircraft have been brought down and approximately 920 civilians killed by MANPADS attacks since 1973. These attacks brought about the concerted international effort to remove these weapons from the black and gray arms markets. While MANPADS attacks against civilian aircraft have declined in the last decade, sting operations and seizures of illicit arms shipments clearly demonstrate that militant groups continue to work hard to get their hands on the weapons. This means that any MANPADS not used against pro-Gadhafi aircraft in the current conflict will be sought out by militant groups in the region and by arms dealers, who will seek to sell them elsewhere for a profit.

The next class of military ordnance to consider — and this is where the chemical threat comes in — is artillery ammunition. A recent video of Libyan arms depots shows that most

In Iraq and Afghanistan, insurgents have been able to use artillery rockets to attack large targets like military bases or the Green Zone in Baghdad. This fire does not amount to much more than harassment, since the insurgents do not have the skill to deliver the accurate, massed fire required to use such weapons in a militarily effective manner.

That said, artillery ammunition is filled with military-grade high explosives, and militants in places like Iraq, Afghanistan and Algeria have been able to remove the explosive filler from artillery shells, artillery rockets and mortar rounds in order to use it in improvised explosive devices (IEDs). Militants in Iraq also became quite proficient in using artillery rounds (sometimes several of them chained together) as the main charges in roadside IEDs and vehicle-borne IEDs. A 152 mm howitzer shell contains approximately 13 pounds of a high explosive such as TNT or composition B. The explosive fillers used in these rounds are very hardy and include stabilizers that give them virtually unlimited shelf life. Untold thousands of neglected artillery projectiles could very well be the most under-appreciated threat in the Libyan arms depots.

And one type of artillery ammunition that has been getting quite a bit of press is artillery



ammunition capable of delivering chemical agents. Libya has admitted to producing tons of mustard gas, and the Organization for the Prohibition of Chemical Weapons is currently in the process of overseeing the destruction of Libya's mustard-gas stockpile (a process no doubt disrupted by the current civil war). There is concern that if Gadhafi gets desperate, he could use mustard gas or some other chemical munitions he had not declared. However, while mustard gas can be deadly if used in high concentrations, it is very difficult to use in a militarily effective manner, which requires a heavy concentration of chemical munitions fire. In World War I, fewer than 5 percent of the troops exposed to mustard gas died. As far as terrorist application, as evidenced by the many chemical attacks conducted by Aum Shinrikyo in Tokyo and the few chemical shells employed in IED attacks against U.S. troops in Iraq, it is also very difficult to effectively employ chemical weapons in a terrorist attack.

In Libya, as a result of the current strife, literally tons of weapons have recently entered

into free circulation where there is little or no government control over them. If foreign powers decide to arm the Libyan rebels, more large shipments of arms may soon follow. Given the durable and fungible nature of arms, these weapons could have an impact on the region for many years to come, and Libya could once again become the arsenal of terrorism.

In the past, this role was an intentional policy of the Gadhafi regime, and it was possible to direct international policy against the regime to curtail such activity. In the near future there may not be a stable government with control over all of Libya. The weapons that have been looted from Libyan arms depots have been taken by a number of different actors, and the weapons will almost certainly proceed from Libya via a number of divergent channels. Because of this, controlling these arms may pose an even more difficult challenge than the arms intentionally proliferated by the Gadhafi regime.

## Osama Bin Laden

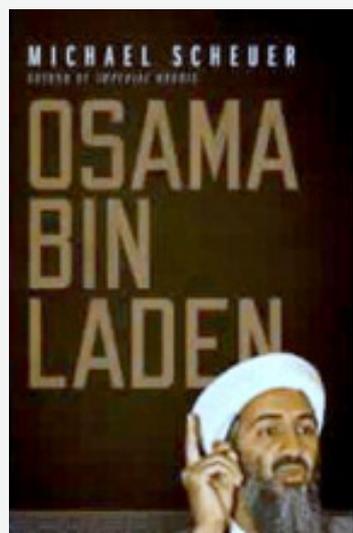
By Michael Scheuer (Author)

Oxford: Oxford University Press, 2011.

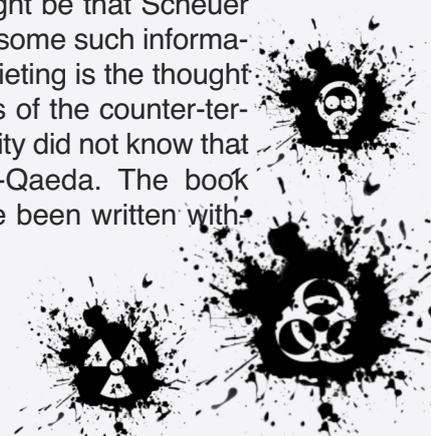
288 pp. ISBN: 13:9780199738663; US \$ 19.95

Source: <http://www.terrorismanalysts.com/pt/index.php/pot/article/view/137/html>

Books and articles about Al-Qaeda and its figurehead Osama Bin Laden are published in great quantities. Yet the qualifications for the task of analysis among the authors are often meager. This is not the case for Michael Scheuer who previously published, while still working for the Bush administration, as "Anonymous" *Imperial Hybris: Why the West is Losing the War on Terrorism*. Be-



tween 1996 and 1999 Scheuer was the chief of the CIA's bin Laden unit; he continued to work for the American government as counterterrorism analyst until 2004. Few people are more qualified to write on Osama Bin Laden than he is. This raises high expectations to which the book, however, does not always live up to. Spoiled by recent Wikileaks, one expects revelations, e.g. from the period when transcripts of Bin Laden's intercepted satellite phone conversations ended on Scheuer's desk. The reader who looks for such materials will be disappointed. It might be that Scheuer did not or could not share some such information. However, more disquieting is the thought that he and his colleagues of the counter-terrorist intelligence community did not know that much about him and Al-Qaeda. The book Scheuer wrote could have been written with-



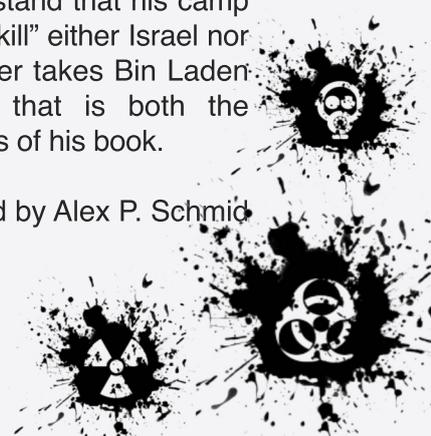
out access to classified materials. It is based largely on Osama Bin Laden's own writings and speeches (159 documents totaling 791 pages (p.10)) and the commentaries and reminiscences of those closest to him (p.249). Scheuer has documented his sources well: there are no fewer than 688 notes and almost 15 pages of small-print bibliography.

The analysis of these documents forms the bulk of the book and is illuminating. Based on these materials, he constructs a portrait of the leader of Al-Qaeda that is at odds with much that others have tried to tell us. Before his construction of Bin Laden, Scheuer first de-constructs the dominant portrait of OBL as pushed by the Saudi propaganda machine - "good Saudi-boy-led-astray-by-evil-Egyptians" (p.91) - and propagated more or less unwittingly by those in the West who, in Scheuer's view, fell for it (e.g. Lawrence Wright and Steve Coll - p. 13). The Bin Laden Scheuer reconstructs is not, as often portrayed a person "swaggering, boastful, threatening, disrespectful toward both scholars and princes" (p.83) but a "kind, humble man who lived a modest life"(p.87), "courageous", consistent"(p. 25), a "workaholic"(p. 35), "Spartan"(p.37), "tolerant for religious diversity"(p.41), "like a businessman"(p.69), a Salafi, not a Wahhabi (p.174)"comfortable with command, able to make hard decisions, hold an organization together"(p.87), a "modern Saladin"(p.181), "fearless on the battlefield"(p.212), "a master of media"(p.238) a man who "makes brilliant use of the intimacy of Muslims with Islamic history"(p.214). Scheuer's Bin Laden is "a pious, generous, and personally brave man, who behaves with integrity and speaks with an eloquence that can alternately comfort and inspire his listeners"(p. 167). Scheuer admits that "my view of bin Laden is far out of the mainstream" (pp. 185-6). His claim that "Bin Laden and al-Qaeda demonstrably attract the Muslim world's most devout, who also are often its best and brightest"(p.195) can be questioned as can many other of Scheuer's assessments. Those who fight Bin Laden on the American side, the US soldiers in Afghanistan, are, in Scheuer's view, "lions led by jackasses"(p.187). He has a special grudge against John Brennan, "the very former CIA officer who stopped plans to cap-

ture bin Laden in 1998-1999 [who] is now President Obama's senior adviser on 'extremism', a word whose substitution for more accurate Islamic terms is emblematic of both ignorance and an eagerness to deceive". (p.186). Clearly, the author has some axes to grind but he also comes up with some uncomfortable (though debatable) insights such as that Bin Laden rhetoric and actions do not put him outside Islam (p.247) and that he is "seen as, a legitimate and good Muslims by his coreligionists"(p.176).

While this book will be the standard biography for some time to come, one is left behind with an uncomfortable feeling that its author has been too close to his subject, writing almost a hagiography rather than a biography. Some of Scheuer's judgments are, in this reviewer's view, amazingly far off the mark: are we living, as he claims, in the "bin Laden era"(p.163)? Is it fair to say, as Scheuer does, "that he has had a greater impact on how Americans view their society, government, and security than any other individual in the past fifty years"? (p. 163). Are we really, as Scheuer believes, "fighting a war for survival"(p. 182) with Al-Qaeda? Is the Bin Laden who claimed, in 2000, that "there would be a holy war in every street of the United States" (p.227) not devoid of any sense of reality and, with his claim that he has religious authorization to kill up to ten million Americans (p. 215), out of his mind?."Scheuer reprints a dialogue between OBL and his son Omar: "America and Israel are one bicycle with two wheels. The wooden wheel represents the United States. The steel wheel represents Israel. Omar, Israel is the stronger power of the two.(...)The Americans are weak. It is best to attack the weakest point first. Once we take out the weak wooden wheel, the steel wheel will automatically fail"(pp. 111-112). If Bin Laden is, as Scheuer claims "a man who has grasped the timeless truth that wars are only won by killing"(p.ix), he obviously does not understand that his camp will never be able to "overkill" either Israel nor the United States. Scheuer takes Bin Laden seriously. Paradoxically, that is both the strength and the weakness of his book.

Reviewed by Alex P. Schmid



### Mini radar system offers added security

Source: <http://homelandsecuritynewswire.com/mini-radar-system-offers-added-security>

An Israeli company developed a small -- camera size, 490 grams -- radar to be used for securing strategic facilities, critical infrastructures, and borders; the radar provides full information of target range, velocity, azimuth, and heading; its staring antenna enables vehicle recognition from a distance of up to 600 meters and can distinguish people from animals at 300 meters

Israeli company Mantissa has developed a miniature radar/surveillance system the size of a personal camera. The company has completed the demo stage of the new radar. It says the new development is a technological and application breakthrough that will change the rules of the game for surveillance and security.

Israel21 quotes the company to say that the miniature MSHRS-300X sensor demonstrates the capabilities required for securing strategic facilities, critical infrastructures, and borders. It works day and night, in all weather conditions, and weighs just 490 grams. "Mantissa's radars provide a solution to many of the drawbacks associated with security devices currently on the market, most of which are based on cameras," said

Mantissa founder Ehud Fishler. "Camera usage involves costly personnel watching multiple screens. They have to work around the clock and are hard pressed to capture images at a great distance, track multiple objects and work in bad weather or poor visibility conditions.

The radar provides full information of target range, velocity, azimuth, and heading. Its staring antenna enables vehicle recognition from a distance of up to 600 meters and can distinguish people from animals at 300 meters. "Our radars outperform traditional VMD systems," said Fishler.

The company is currently seeking an investment of \$3 million in order to complete the product's development and launch it in the market. "The capabilities, size, weight, and price of this radar make it feasible for use by every army unit, and military or civilian facilities. Our radar system supports a broad range of innovative functionalities

and will usher in a new era for surveillance, security and urban safety," said Danny Seker, CEO of Mantissa. "I have no doubt that within five to seven years radar-integrated cameras will be commonplace."

**Significantly lower cost** — Enables a network of multiple units for wide coverage; opens use of technology for a multitude new applications.

**Native Network Deployment** — 100% detection coverage.

**Small, lightweight** — 490g, easy installation anywhere.

**No moving parts** — Greater reliability and even lower costs.

**Reduced false alarms** — Classified alerts minimize need for human intervention (ongoing monitoring of activity and guard response).

**Performance design** — Can be tailored design for different customers, applications, and security needs.

### Studying counterterrorism in Israel upsets Cambridge residents

Source: <http://homelandsecuritynewswire.com/studying-counterterrorism-israel-upsets-cambridge-residents>

Some residents of Cambridge, Massachusetts are upset that sixteen law enforcement and emergency services officials from the city went to Israel in an Anti Defamation League-

sponsored trip to observe Israeli counterterrorism methods; the trip was funded by a local businessman; in a city hall meeting residents expressed discomfort with a privately organ-



ized trip for public officials -- and with the fact that these officials chose Israel as the place to study counterterrorism tactics; one local resident said that what Israel calls "counterterrorism" is "a mechanism of oppression suited to employment in a police state, a status I do not regard our city as having obtained. At least not yet"



Israel provides counterterror training to many nations // Source: [militaryphotos.net](http://militaryphotos.net)

Residents from Cambridge, Massachusetts are criticizing an Anti-Defamation League-sponsored trip for public safety officials to study counterterrorism strategies in Israel. The league was founded in 1913 "to stop the defamation of the Jewish people and to secure justice and fair treatment to all."

Late last year, a delegation of sixteen senior law enforcement officials including Deputy Fire Chief Gerard E. Mahoney and Police Deputy Superintendent Paul Ames went to Israel with the Anti-Defamation League to observe the country's counterterrorism strategies and tactics.

According to a letter sent to councilors by local businessman Carl Barron, he had paid for the Cambridge officials to take the trip. Barron, 94, is a fixture in the Central Square business community. In the past year, he has given campaign money to city councilors, including Denise Simmons, Tim Toomey, Leland Cheung, and David Maher.

Of the thirty-four Cambridge residents who came to speak at a Cambridge City Council meeting, twenty-five expressed disapproval of Cambridge public safety officials taking the

trip. Councillor Marjorie Decker was alarmed when she found out that such a trip could have happened without the knowledge of the council, especially since a similar one took place December 2008.

"It is not the practice of the city of Cambridge to ask private organizations or individuals to pay for professional development. It's not, and it's inappropriate," she said. "We have not contracted out to any organization asking them for help with counter terrorism tactics."

Upon completion of the program in 2008, participant Weyssun Dun of the FBI stated: "[The seminar] was simultaneously an eye-opening and enlightening experience [...] The itinerary and seminar agenda provided the opportunity to interact with a variety of government, military, business, and civic leaders, which provided me with insight into the complexities of the conflict between Israel and the Palestinians, and to show the human side of the political and religious situation in the region."

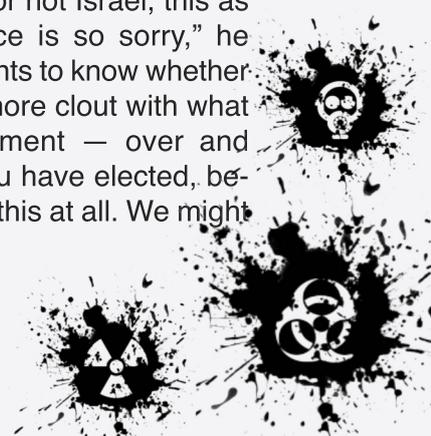
When asked about the first trip to Israel at a Civic Unity Committee hearing on 22 January 2009, Police Commissioner Haas said that the trip "...was interesting, but in the end, not particularly useful. The Israel government does a number of things that he would never do in this country."

Decker noted that the public safety officials had briefed members of the business community about their most recent trip, and still the council had not received information.

"When did the business community stop becoming a partner and usurp the power that the City Council should hold around understanding public safety?" she asked.

Councilor Ken Reeves agreed, saying that that he was saddened by what had happened.

"This is quite incredible. No matter what your position is on Israel or not Israel, this as a municipal happenstance is so sorry," he said. "To anybody who wants to know whether certain individuals have more clout with what happens in your government — over and above the people who you have elected, because nobody here knew this at all. We might



have multiple governments that we didn't know."

Decker stressed that Barron himself had done nothing wrong by offering to pay for the trips. She said that city staff should not have approved the trips without informing the council.

"You don't get to buy the democratic process," she said. "You don't get to give millions and then decide what's best for the community."

Even after questions and public comments about the trip and its purpose took up almost a majority of the council's 28 February meeting — and after Reeves met with City Manager Bob Healy to discuss the trip — the council did not learn that Barron had paid for the trip until they received Barron's letter on Monday.

"If this was the deal in the first place, why hasn't (Healy) told us this by now?" Reeves said. "This city manager has to understand that he cannot do this. This is beyond the pale of anybody's expectations. Since we began discussing this last week, nobody in the first floor of this building has taken it upon themself to say 'Oh by the way.'"

Twice since bringing the original order, Decker has amended it to temper criticism that it is critical of Israel. The original order contained a clause that described Israel's counterterrorism as using "tactics which are associated with indefinite detention, illegal occupation, torture, lacking any constructional guidance." Decker deleted that clause 28 February.

At the 7 March meeting she further amended the order to get rid of all of the listed reasons for her request for information — those clauses that began with "whereas." She said they were becoming a "distraction" from the request for information.

"I want to delete all of the distraction around this and get straight to: I want information," she said.

The request for an overall policy on training and travel came from Councilor Craig Kelley.

"To pick out the Police Department and Fire Department for what apparently some people thought was useful training, I think

misses what else we might be sending people to," he said. "It might be great stuff. It might not be. If we're concerned about it we should be concerned about it all."

For the agenda of the city's council meeting, Councilor Marjorie Decker had submitted an order noting that Police Commissioner Robert Haas had described a similar 2009 trip as "not particularly useful." The order asked City Manager Bob Healy to investigate the rationale for and the substance of both trips.

Resident Alan Meyers said he was "deeply disturbed" by the trip.

"What Israel euphemistically calls counterterrorism is for the most part an assault on a defenseless, unarmed civilian population," he said. "It is a mechanism of oppression suited to employment in a police state, a status I do not regard our city as having obtained. At least not yet."

Resident Gerald Bergman told councilors to "wake yourself out of your stupor and put a stop to it."

Resident David Slaney had his own theory as to the reason for the trip: "All I could figure out is: Is it true that Cambridge is planning to invade and occupy, annex and sell parts of Somerville — possibly the line through Union Square and Davis Square?" he asked the council. "Because if we were going to do that then it would make perfect sense to learn how the Israeli police work. If we were going to do that we would have to expropriate people, expel people, we'd have to knock down their houses."

ADL spokesman Sean Martin provided the Cambridge Chronicle with a written, bullet pointed, response to the allegations. It noted that the council had not reached out to the ADL for information and called the organization, "one of our nation's most important organizations fighting hate, promoting inclusion, and keeping our communities safe."

The ADL noted the training in Israel was especially valuable for Cambridge, which has a bomb squad.

"Like their American counterparts, Israel's police must balance preventing terrorism and crime, and respecting the law and values of a democratic nation," it said.



**EDITOR'S NOTE:** Freedom of speech is mandatory in all democracies – old and new. Perhaps too much freedom is not good when it motivates people to express humanitarian concerns about situations and countries that are unable to identify in a map. Since the unexpected always happen – when it will happen in Cambridge then it will be too late to change the liberal minds of the opposition's counsellors anticipating police reaction. It seems that 911 taught nothing to many people in this big nation! As for the training itself – since I have personal opinion on this – we do not copy and paste everything we learn to our daily routine. We choose elements and adapt what is useful while forgetting anything that is not “useful/relevant/able” to us. In that way we improve our techniques and skills. Finally, no comment on Commissioner's “not particularly useful” – even the worst training has something to offer! Especially when conducted in a country with war/terrorism field experience – just the opposite of his background.

## A new threat: organized crime, terrorists links

Source: <http://homelandsecuritynewswire.com/new-threat-organized-crime-terrorists-links>

Lawmakers and security analysts around the world are growing increasingly worried about links between terrorists and organized crime; terrorists and organized crime gangs have increasingly worked together around the world to finance operations; in 2000, it was estimated that FARC, Colombia's largest terrorist organization, received as much as \$400 million annually from its role in the drug trade; intelligence reports found that al Qaeda was looking to work with Mexican cartels to sneak into the United States; Islamic extremists have also become organized criminal networks themselves

engaging in kidnapping, human trafficking, counterfeiting money, fraud, and armed robbery to raise money for their causes

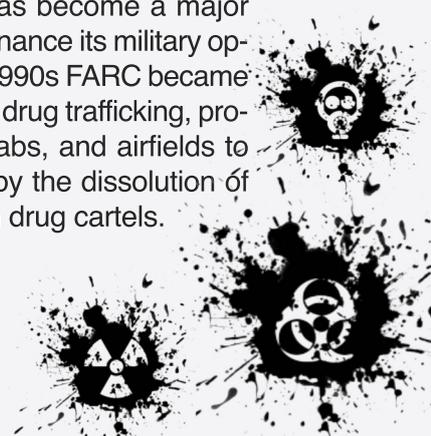
Lawmakers and security analysts around the world are growing increasingly worried about links between terrorists and organized criminal gangs. Before Australia's Parliament last month, the Australian Crime Commission testified that the government should no longer treat terrorism and organized crime separately and that the two have become closely linked.

Karen Harfield, the spokeswoman for the commission, said, “Disruption of crime within the aviation and maritime sectors and the prevention of terrorism need not be considered mutually exclusive objectives.”

“Both terrorist groups and criminal groups have consistently been noted as primary threats to Australia's transport sector,” she said. “Criminal activity can expose aviation security vulnerabilities that might be exploited by terrorists.”

In other parts of the world, the line distinguishing terrorists and organized crime has blurred even further, with terrorist organizations engaging heavily in the drug trade.

In particular FARC (Revolutionary Armed Forces of Colombia), the largest terrorist organization in Colombia, has become a major player in the drug trade to finance its military operations. Beginning in the 1990s FARC became increasingly involved in the drug trafficking, providing security for crops, labs, and airfields to fill the power vacuum left by the dissolution of the large Cali and Medellin drug cartels.



By 2000, it was estimated that FARC received as much as \$400 million annually from its role in the drug trade. According to Bruce Bagley, an expert on the Latin American Drug Trade at Miami University, "The money they are making from the drug trade has given them the degree of autonomy they need to pursue their agenda." Drug cartels in Columbia and Mexico are also directly collaborating with Islamic extremists in the Middle East. A report released last year by the Center for a New American Security (CNAS), a defense think tank in Washington, D.C., found that Hezbollah and al Qaeda have been working with FARC to fund their operations.

A two year investigation, dubbed "Operation Titan," led by U.S and Colombian authorities seized \$23 million and 360 kilos of cocaine. Among the 130 arrested was a Lebanese man operating under the alias "Taliban" who was in charge of a money-laundering ring that funded Hezbollah. While a separate investigation found that FARC had been working with al Qaeda in the Maghreb in Africa, and closer to the United States, in 2003 intelligence reports emerged warning that al Qaeda may be working with Mexican drug cartels to sneak into the United States. Islamic extremists have also begun to function more like organized crime networks engaging in kidnapping, human trafficking, counterfeiting money, fraud, and armed robbery to raise money for their causes. In 2002, a credit card fraud and smuggling ring was broken up in Charlotte, North Carolina after it was discovered that they were helping to finance Hezbollah.

Meanwhile extremists in countries like Iraq,

Somali, and Afghanistan have continued to kidnap foreign nationals as a tactic to raise money. A recent report released by the Canadian Security Intelligence Service finds that, "Although kidnappings have long been seen as a useful tactic by criminals and armies, the last few decades have seen a large increase in the number of people taken by individuals and groups associated with Islamist extremism." The report says that these terrorist organizations will likely continue to use kidnapping as it is a "lucrative tactic" and in "many cases require very little planning or materiel."

These growing linkages between terrorist organizations and organized crime complicate efforts to crack down on drug cartels and add a new wrinkle to attempts to combat violent extremism. "Criminal networks linking cartels and gangs are no longer simply a crime problem, but a threat that is metastasizing into a new form of widespread, networked criminal insurgency. The scale and violence of these networks threaten civil governments and civil societies in the Western Hemisphere and, increasingly, the United States as well," warns the CNAS report. In order to address these transnational issues, the report suggests taking a multi-faceted approach that includes military, political, and economic tactics.

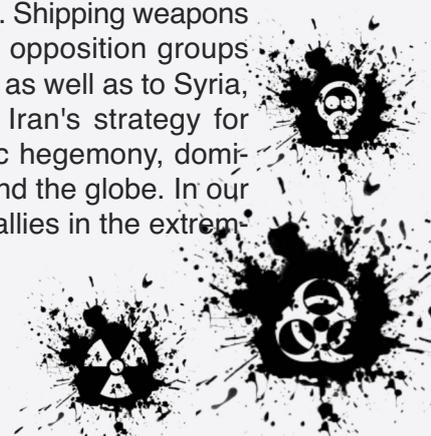
The United States must "discretely" provide "the training, equipment and support for developing law enforcement capabilities for governments fighting cartels," in addition to conducting kinetic operations on these groups, cutting off access financially, and assisting allied countries develop more robust civil institutions and stimulate their economies.

## Middle East – illegal attempts to ship weapons

Source: [http://www.terrorism-info.org.il/malam\\_multimedia/English/eng\\_n/html/iran\\_e106.htm](http://www.terrorism-info.org.il/malam_multimedia/English/eng_n/html/iran_e106.htm)

In recent months two more Iranian attempts to ship weapons were exposed. Their destinations were Hezbollah (August 2010) and Gambia, West Africa (July 2010). The shipments, camouflaged as "innocent" cargos, were sent by sea using civilian shipping companies, in gross violation of the international

sanctions imposed on Iran. Shipping weapons to terrorist organizations, opposition groups and subversive elements, as well as to Syria, is an important factor in Iran's strategy for achieving regional Islamic hegemony, dominance and influence around the globe. In our assessment, Iran and its allies in the extrem-



ist camp intend to continue the shipments by employing fraud and concealment.

### Overview

1. In recent months Iran made two attempts to ship weapons by sea, one to a terrorist organization (Hezbollah in Lebanon in August 2010) and the other to a West African country (Gambia in July 2010).



Nigerian security forces display 120mm mortars found aboard the M/V Everest (July, 2010).

2. Both attempts manifested Iran's strategy of shipping weapons by sea, air and land routes to terrorist organizations, opposition groups and subversive elements, as well as to countries which fall under Iranian sphere of influence. The shipments were directed by the Iranian leadership, implemented by the covert mechanism of the Revolutionary Guards' Quds Force. The Quds Force is used as its main apparatus for the practical export the Iranian revolution beyond the borders of Iran itself.

3. Shipping the weapons to terrorist organizations, opposition groups and subversive elements, as well as to foreign countries, is an important factor in Iranian strategy, which strives for regional hegemony, Islamic dominance in various focal points in the Middle East (Lebanon, the Gaza Strip, Iraq, the moderate Arab countries) and beyond (East and West Africa, Latin America, Central Asia, etc.). Its objectives are to strengthen the Islamic regime in Tehran, to ensure its existence and survival, to deter and challenge those Iran perceives as its enemies, espe-

cially the United States and Israel, and to change the global strategic balance.

4. Regionally, Iran provides massive quantities of weapons to Hezbollah in Lebanon (primarily through Syria), and Hamas and the Palestinian Islamic Jihad in the Gaza Strip (primarily through Sudan). That enables the terrorist organizations to bolster military capabilities which threaten the northern and southern population centers of the State of Israel, as well as the pro-Western forces in Lebanon. Most of the weapons go to Shi'ite forces, and some even to Sunnis, who provoke confrontations and undertake subversive activities in Lebanon, Iraq, Yemen, Bahrain and Afghanistan.

5. For Iran, the African continent is an important center of operations, where it combines subversion and diplomacy. Iran seeks to establish its power in countries like Sudan (regarded as a conduit for support for the terrorist organizations in the Gaza Strip) and Eritrea (which lies along the Red Sea), at the same time increasing its involvement in countries in both East and West Africa.

6. Acting in accordance with its African policy, Iran tries to exploit what it regards as the weakness of the local regimes and their readiness to receive aid.<sup>1</sup> Shipping weapons to various clients, such as terrorist organizations, subversive elements and various countries, is sometimes part of an extensive Iranian package deal which also includes money, training, logistic support and ideological direction. Politically, that policy is implemented within a framework of alliances and agreements for military cooperation, as well as in technological, agricultural, financial, economic and political areas.

7. By shipping weapons, Iran violates a series of UN Security Council resolutions, including Resolution 1747, which forbids Iran to export arms. Iran's use of international shipping companies and European ports to export arms is a methodical and gross violation of international shipping laws and a genuine danger to both the ships themselves and the ports involved.



8. This study examines the methods used by Iran to ship arms and analyzes two specific examples of arms shipped by sea and intercepted during the second half of 2010, one to Hezbollah via Italy (in August) and the other to Gambia via Nigeria (in July). The Appendix provides examples from the past decade of Iran's use of sea and air lanes and overland routes. In our assessment Iran and its allies in the extremist camp intend to continue their arms shipments.

### Methods for Shipping Weapons

9. Shipping weapons to distant locations entails considerable logistic and political difficulties. To that end, over the years Iran has established a covert mechanism headed by the Revolutionary Guards' Quds Force.<sup>2</sup> The Quds Force uses existing commercial transportation air, sea and land routes. Iran frequently uses sea routes to ship weapons. Recently, following sanctions imposed on the large Iranian shipping companies (HDS, IRISL), Iran also uses European and international shipping companies for their arms shipments. They do that without informing them

of the nature of the cargos. To that end Iran extensively uses shell corporations and false documentation, claiming cargos contain innocent materials (such as milk powder and polyethylene pellets).

10. The weapons are generally stowed behind the innocent cargos, although an X-ray can sometimes reveal their true nature. The shipments are also provided with bills of lading which indicate innocent contents. For example, the bill of lading of the Francop, which carried a large shipment of arms from Iran to Hezbollah in November 2009, stated that the cargo consisted of polyethylene pellets. The weapons were stowed behind the sacks of polyethylene.

11. Iran uses various methods to make the arms shipments look innocent, using different types of transportation via commercial sea, air and land routes to many destinations in the Middle East and around the globe. That is done using the merchant fleet, cargo planes, trains and trucks.

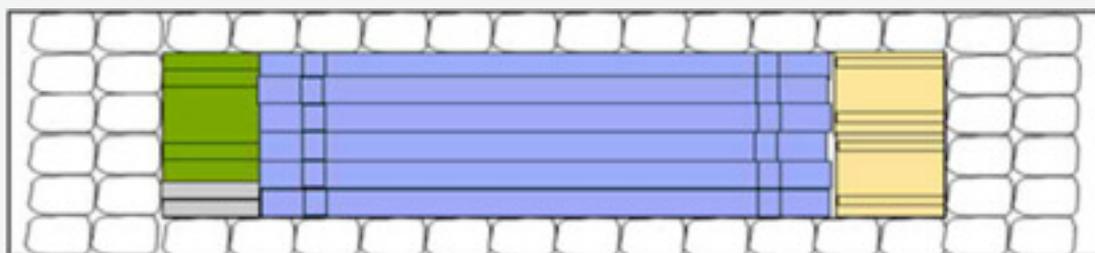
12. In August 2010 a shipment of arms from Iran was sent by sea to Syria, apparently meant for Hezbollah in Lebanon. It departed

### Hiding Weapons Aboard the Francop

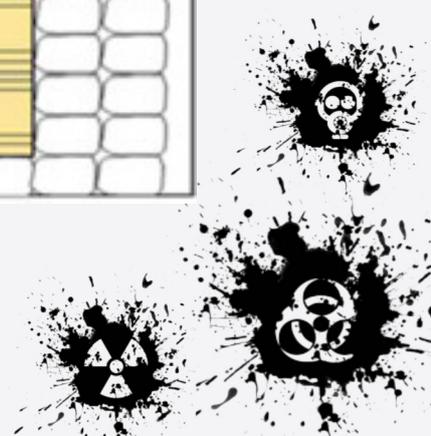


Left: Sacks of "innocent" polyethylene pellets aboard the Francop. | Right: Crates of weapons for Hezbollah stowed behind the polyethylene.

### Shipping Weapons from Iran to Hezbollah by Sea through Italy



Sketch showing the disposition of the Francop's cargo.





Route taken by the M/V MSC Finland



M/V MSC Finland

from the Iranian port of Bandar Abbas on August 6, apparently with the involvement of the Revolutionary Guards' Quds Force. According to its documentation, the shipment con-

sisted of milk powder, packed into a container and loaded aboard a ship belonging to the Italian company MSC, which docked in the port of Gioia Tauro, Italy, on August 27. The container was to be transferred to a different ship and sent to the Syrian port of Latakia.<sup>3</sup>

13. The ship used for transporting the weapons was the M/V MSC Finland, owned by a Greek company called Hinter Marin SA. It was operated by the Swiss-Italian MCS and flew the Liberian flag.

14. The container aroused suspicion in the Italian port. It was examined by the Italian police, who discovered that it held seven tons of



Left: The container arrives in Italy. Right: The explosives found in the container.



an explosive called RDX, packed in sacks labeled "milk powder," which is similar in appearance to RDX (marketed as a white powder). This type of explosive is used in the warheads of Hezbollah's missiles and rockets.

15. That was the first time a cargo of weapons was discovered in an Italian port, and it is not known whether it or other European ports have been used for the same purpose. The discovery of the weapons exposed one of the naval smuggling methods Iran uses by camouflaging its arms shipments, and exploiting European ports and shipping companies.

### Exposing the Arms Shipment in Nigeria on Its Way to Gambia

16. On October 26, 2010, the Nigerian security forces announced that an examination of the M/V Everest, which had arrived from Iran and docked in the Nigerian port of Apapa in July, had revealed 13 containers which held tons of weapons. The shipment was listed as containing building materials (stones and as-

with ties to the Gambian president. The media reported that Nigerian intelligence deployed to intercept the shipment after receiving advance notice (Israel Channel 2 TV, November 12, 2010).

17. Among the weapons were 107mm rockets, 120mm mortar shells and light arms. While the Iranians attempted to represent the shipment as a private business deal,<sup>4</sup> shipments of arms to Gambia is apparently part of a joint Iranian-Gambian cooperative security agreement. It is also possible that the arms were meant for subversive elements whose identity is unknown.

18. The containers were found aboard the M/V Everest. It belongs to an Iranian company called Behineh Trading, apparently connected to a Quds Force operative (who was later detained). It is operated by a French company called CMA-CGM, and flies the flag of the Marshall Islands.

19. CMA-CGM is a private company owned by Jacques Saadé, a French businessman of Syrian-Lebanese extraction. It is



Nigerian security forces discover the weapons stowed aboard the ship

bestos, behind which the weapons were hidden). Its port of destination was Banjul in Gambia, and it was addressed to a company

the third largest shipping company in the world, owns 300 ships and operates in 400 ports around the globe. At the beginning of 2010, apparently following Iran's difficulties in



Weapons found aboard the M/V Everest. Left: 120mm mortar shells. Right: 107mm rockets.





M/V Everest

using its own ships due to international sanctions, CMA-CGM announced its intention to increase significantly its activity in Iran.

20. CMA-CGM said it was not aware that the shipment included arms and that the bill of lading indicated building materials (Ynet, November 15, 2010).

because they feared internal clashes related to national elections.

22. An investigation conducted by the Nigerian security services revealed two Iranian "businessmen" who sought refuge in the Iranian embassy in the Abuja, the capital of Nigeria, when the affair was exposed. The Gambian media later reported that the two, Tamsabahi5 and Azim Aghajani, were senior Quds Force operatives. They also reported that Tamsabahi was the senior operative responsible for the Quds Force in Africa.

24. Following the discovery of the arms shipment, the Iranian foreign minister, Manuchehr Mottaki (since replaced) arrived in Nigeria for a meeting with his Nigerian counterpart. They agreed that the Iranians would cooperate with the interrogation and the affair would end relatively quietly. They also agreed

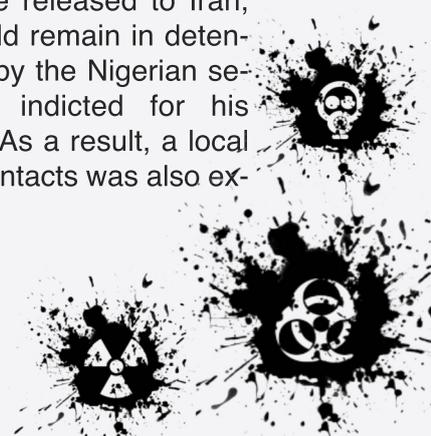


Route of the M/V Everest from Jebel Ali to Apapa

### Aftermath of the Exposure of the Nigerian Arms Shipment

21. The exposure of the Iranian arms shipment led to a serious diplomatic crisis between Iran and a number of African countries. The Nigerians found the shipment particularly serious, both the public and the government,

that Tamsabahi would be released to Iran, while Azim Aghajani would remain in detention and be interrogated by the Nigerian security forces. He was indicted for his involvement in the affair. As a result, a local Quds Force network of contacts was also exposed.







Ahmadinejad visits Gambia, November 2009 (Mehr News Agency, Iran, November 2009).

website). In response the Iranian foreign minister claimed that the Senegalese decision could not be justified (IRNA News Agency, February 24, 2011).

### Appendix

#### Iranian Arms Shipments Seized in Recent Years

1. The two shipments exposed last year are part of a long series of arms shipments originating in Iran destined for various countries and sent by sea, air and over land. There were many such shipments which reached the terrorist organizations and various subversive groups without being discovered. In every instance Iran denied its involvement in the arms shipments. The recent shipments, in fact, were not the only ones intercepted on

their way from Iran to various organizations.

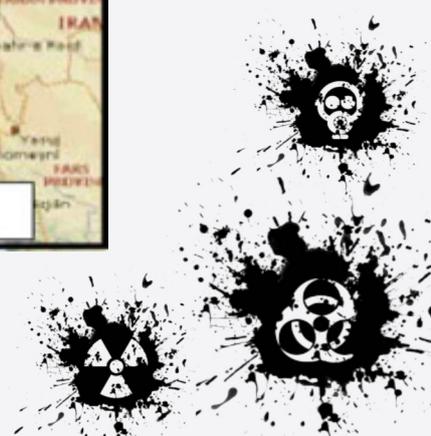
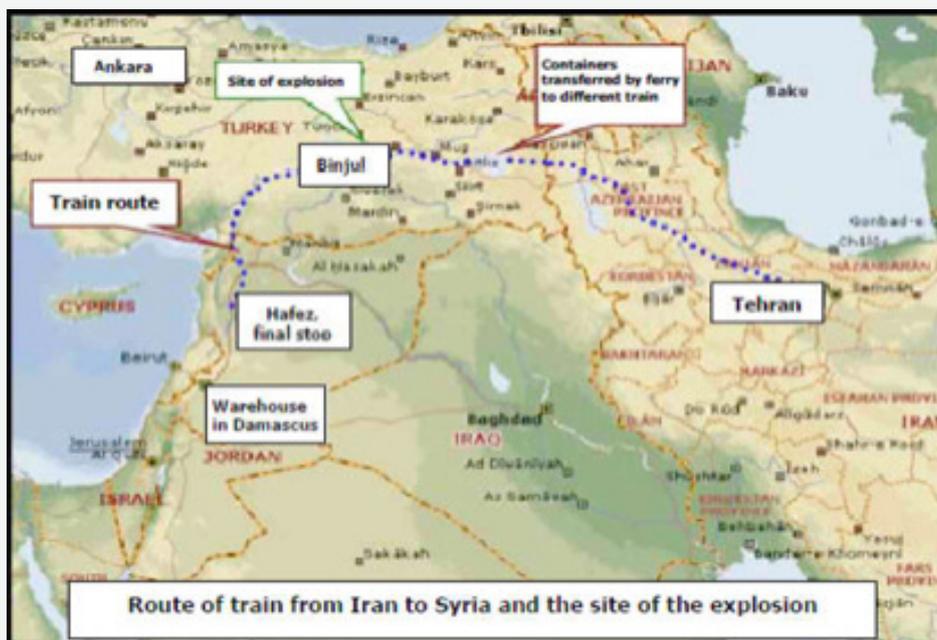
2. Some examples are:

1) December 2001: The Karin A was purchased by the Palestinian Authority, loaded with an enormous quantity of arms for the Gaza Strip in the Iranian port of Kish. It sailed via the port of Hodeidah in Yemen, and from there it was bound for Egypt, where it planned to unload its cargo. The weapons were supposed to be collected by fishing boats which would turn them over to the terrorist organizations in the Gaza Strip. The ship was intercepted on January 3, 2002 by the Israeli navy. It was found to be carrying 50 tons of weapons, among them rockets, mortars, anti-tank missiles, RPGs and light arms. Some of them were meant to upgrade the terrorist or-



Weapons found aboard the Karin A (IDF Spokesman)

ganizations' operational-terrorist capabilities during the first year of the Palestinian terrorist campaign (the second intifada).



2) Between December 2003 and January 2004 the Iranian Revolutionary Guards conducted an air lift of weapons and equipment to Syria for Hezbollah. The flights were disguised as bringing humanitarian assistance to victims of the earthquake in the southeastern Iranian city of Bam. It was a clear exploitation of the open skies policy of the time, during which planes from all over the globe brought humanitarian assistance to Iran.

3) May 2007 – A shipment of weapons was sent by train from Iran to Syria through Turkey, apparently destined for Hezbollah. According to reports from the media, an explosion caused by the Turkish PKK revealed that one of the containers held weapons (81mm mortar shells, 122mm [rockets], ammunition, explosives and RPGs). Iran denied it was behind the shipment. According to a Wikileaks document, trains from Iran are examined inside

Turkish territory approximately one and a half kilometers from the border. The Wikileaks documents describe the great ease with which the Turkish-Iranian border can be crossed, where the means for examination are extremely flimsy (date of relevant documentation, July 28, 2009).

4) March 2008 – An Iranian commercial ship, the Iran Bagheri, owned by the Iranian shipping company IRISL, departed from Iran for the Syrian port of Latakia with hundreds of tons of arms for Syria. A NATO force which was in the region interrogated the ship's captain as the ship left the Suez Canal and requested permission to examine the ship itself. After employing evasion, fraud and concealment, the ship reached its destination in Syria without examination.

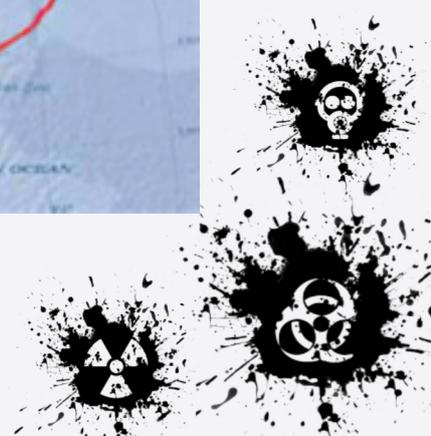
5) End of 2008 – The Egyptian security forces exposed a Hezbollah network which dealt with smuggling weapons and infiltrating terrorist operatives into the Gaza Strip. The Egyptians claimed that the network was directed by Iran, and they considered its exposure as serious Iranian involvement in their internal and national security affairs. Hezbollah leader Hassan Nasrallah admitted the involvement of his organization in smuggling weapons and infiltrating operatives in to the Gaza Strip from Egypt, but denied the Egyptian accusations of the network's involvement



Cypriot merchant vessel Monchegorsk



Cypriot merchant vessel Monchegorsk



in subversion and terrorist attacks. The leader of the network, a Hezbollah operative nicknamed Sami Shihab, escaped from prison in Egypt during the events which led to the ousting of Egyptian President Hosni Mubarak, and on February 16, 2011, participated in a Hezbollah rally in Beirut.<sup>7</sup>

6) January 2009 – The Cypriot merchant vessel Monchegorsk, which was leased by the Iranian shipping company IRISL, was seized carrying more 1,300 tons of military equipment sent from Iran to Syria. On January 19 it was delayed in the Red Sea by American forces and examined on January 19 and 20. It was found to be carrying a variety of raw

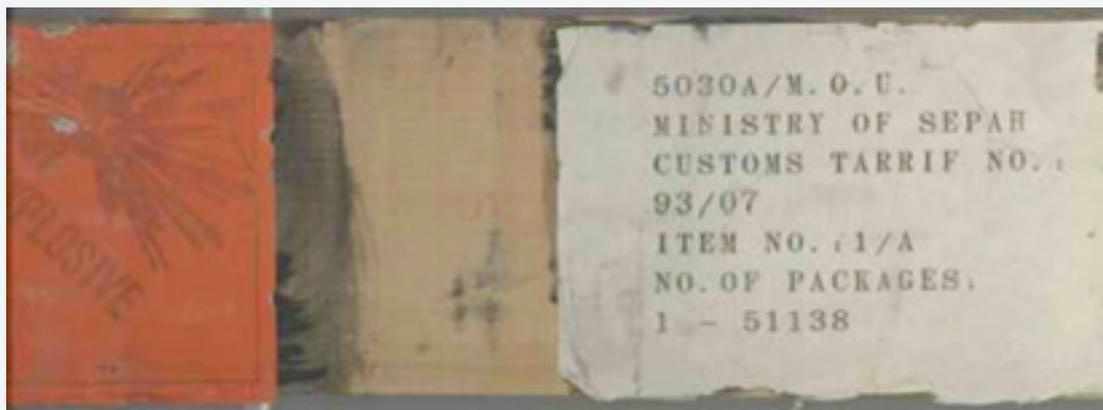
shells and raw materials for manufacturing artillery barrels.

7) October 2009 – A shipment sent by sea containing weapons and industrial military equipment for the manufacture of weapons, apparently for Syria (and possibly Hezbollah) was sent from Iran to the port of Latakia. The ship, which flew the German flag, was reloaded in Egypt and again in Malta, where an examination revealed the weapons.

8) November 2009 – Thirty-six containers of arms were sent from Iran to Hezbollah, disguised as polyethylene pellets. They were confiscated aboard the Cypriot ship Francop, and were found to contain more than 500 tons

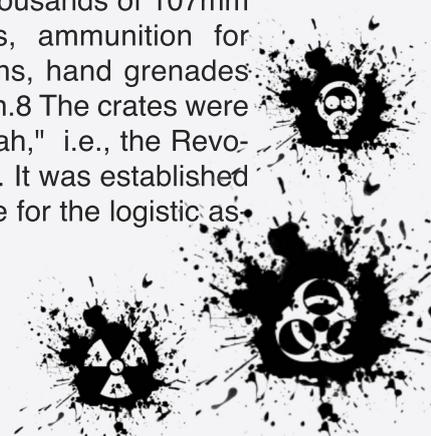


The Francop and its cargo. Some of the containers bear the stamp of the Islamic Republic of Iran Shipping Lines (IRISL).



materials and components for the manufacture and assembly of weapons. Sailing through the Mediterranean Sea on its way to Latakia, it was recalled to Cyprus by the authorities and examined at the port of Limassol on January 27. Its cargo was found to contain large quantities of explosives used in mortar

of arms. They included thousands of 107mm rockets, 122mm rockets, ammunition for 106mm recoilless cannons, hand grenades and light arms ammunition.<sup>8</sup> The crates were stamped "Ministry of Sepah," i.e., the Revolutionary Guards Ministry. It was established 1980 and was responsible for the logistic as-



pects of the Revolutionary Guards' activity. It was closed in 1989 following changes in the Iranian constitution.

9) In 2009 Iran apparently used cargo flights of the Sudanese airline to ship arms to the Palestinian terrorist organizations in the Gaza Strip. The cargos were shipped from Iran to Sudan via Oman and Saudi Arabia, and from Sudan to Syria through Egypt and Jordan (relevant Wikileaks documentation, March 29, 2009). In our assessment the arms were smuggled from Sudan to the Gaza Strip by local smugglers via Egypt (the Sinai Peninsula). According to Wikileaks, the United States warned Sudan, Oman, Saudi Arabia and Yemen that transporting Iranian arms through Sudan for the Palestinian terrorist organizations was a serious breach of the UN resolution forbidding Iran to ship arms of any type.

10) In March 2009 the American and Arab media reported that Israel had attacked a convoy in Sudan. The convoy carried a shipment of arms and was on its way to the Gaza Strip:

i) On March 25 CBS reported that in January 2009 Israeli aircraft had attacked a convoy in Sudan. The convoy consisted of 20 trucks loaded with weapons which were on their way to the Gaza Strip. According to the report, the attack was carried out in a desert region south west of the Sudanese port city of Port Sudan, and 39 men were killed.

ii) On March 29 Time Magazine reported that a shipment of weapons had been attacked. According to the magazine, the shipment, which left from Iran, contained long-range Fajr missiles, which if fired from the Gaza Strip could reach Tel Aviv.

iii) On March 30 Time Magazine reported that dozens of fighter planes and unmanned aerial vehicles had attacked the 23-truck

F-16s returned and struck them from the air again.

11) In August 2010 a shipment of arms from Iran was discovered. Transported by sea, it was destined for Syria, its final recipient apparently Hezbollah in Lebanon. The ship departed from the Iranian port of Bandar Abbas on August 6, apparently with the involvement of the Quds Force. According to its bill of lading, the ship was carrying powdered milk, packed in a container on board a ship which sailed to the Italian port of Gioia Tauro on August 27. The container was supposed to have been shipped from there to the Syrian port of Latakia aboard a different ship.

12) On October 26, 2010, the Nigerian security forces announced that an examination of the M/V Everest, which had arrived from Iran in the Nigerian port of Apapa in July 2010, was found to be carrying 13 containers of tons of weapons disguised as building materials (stone and asbestos). Their final destination was the Gambian port of Binjul, and the shipment was addressed to a company with ties to the Gambian president. The media reported that Nigerian intelligence had received advance warning of the shipment's arrival (Israel Channel 2 news, November 12, 2010).

1 For further information about Iran's connections in Africa, see the July 29, 2009 ITIC bulletin, "Iran's activity in East Africa, the gateway to the Middle East and the African continent" at, [http://www.terrorism-info.org.il/malam\\_multimedia/English/eng\\_n/pdf/iran\\_e011.pdf](http://www.terrorism-info.org.il/malam_multimedia/English/eng_n/pdf/iran_e011.pdf).

2 For further information see the April 2, 2007 ITIC bulletin, "sing the Quds Force of the Revolutionary Guards as the main tool to export the revolution beyond the borders of Iran"



Photographs taken, according to Al-Jazeera TV, at the site of the attack in Sudan (Al-Jazeera TV, March 26, 2010).

convoy. Pictures taken by the UAVs revealed that the convoy was partially hit and

at [http://www.terrorism-info.org.il/malam\\_multimedia/English/eng\\_n/pdf/iran\\_e0307.pdf](http://www.terrorism-info.org.il/malam_multimedia/English/eng_n/pdf/iran_e0307.pdf)



3 According to the bill of lading, the weapons aboard the Francop were also supposed to be shipped to the Syrian port of Latakia.

4 Alaa al-Din Boroujerdi, head of the Iranian Majlis' foreign affairs committee, said that the weapons were supposed to reach Gambia and were part of a legal business deal between a private Iranian company and the Gambian government (Haaretz, November 24, 2010).

5 The reference may possibly be to Ali Akbar Tabatabaei, whose name was mentioned by the media in connection with the affair along with Azim Aghajani.

6 The Movement of Democratic Forces in the Casamance

7 For further information see the April 28, 2009 ITIC bulletin, "Exposure of a Hezbollah network in Egypt: state of affairs, implications, and reactions in Egypt and in the Arab and

Muslim world " at [http://www.terrorism-info.org.il/malam\\_multimedia/English/eng\\_n/pdf/hezbollah\\_e011.pdf](http://www.terrorism-info.org.il/malam_multimedia/English/eng_n/pdf/hezbollah_e011.pdf) and the April 13, 2009 ITIC bulletin, Egypt exposes a Hezbollah network on its soil claiming it not only smuggled weapons into the Gaza Strip and but also planned to carry out terrorist attacks and subversion activities. Hassan Nasrallah admitted a detained Hezbollah operative was involved in smuggling but denied other accusations" at [http://www.terrorism-info.org.il/malam\\_multimedia/English/eng\\_n/pdf/hezbollah\\_e010.pdf](http://www.terrorism-info.org.il/malam_multimedia/English/eng_n/pdf/hezbollah_e010.pdf)

8 For further information see the November 5, 2009 ITIC bulletin, "The Israeli Navy captures a ship carrying a large shipment of weapons (including rockets, mortar shells and anti-tank weapons) from Iran. The shipment was apparently on its way to Hezbollah in Lebanon "at [http://www.terrorism-info.org.il/malam\\_multimedia/English/eng\\_n/pdf/iran\\_e035.pdf](http://www.terrorism-info.org.il/malam_multimedia/English/eng_n/pdf/iran_e035.pdf)

## What Do the Uprisings in The Middle East Mean for al-Qaeda?

By Michael Ryan

Source: <http://www.jamestown.org>

### TERRORISM MONITOR

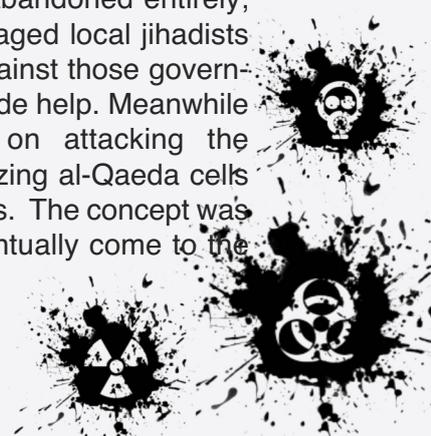
*In-depth Analysis of al-Qaeda and the War on Terror*

There are currently two arguments about what the recent uprisings across the Middle East mean for al-Qaeda. The optimists argue that non-violent revolutions in Tunisia and Egypt have stripped al-Qaeda's narrative of its power. The pessimists counter that al-Qaeda is far from finished and will wait for the dust to settle, disappointment to set in, and the revolutionary spirit to turn bitter before it takes advantage of countries weakened by revolution. Perhaps, a better approach to this question is to be found in al-Qaeda's strategic literature and its traditional relationship to each country in question.

Al-Qaeda represents a revolution within Islam. Its strategic literature recounts that Bin Laden commissioned a series of detailed regional studies to inform him about the best approach to jihadist revolution based on the

facts of each case. Several years before 9/11, these studies were distributed among Bin Laden's top advisers. [1] From this knowledge base, al-Qaeda's leadership framed a flexible and opportunistic regional strategy that assigned operational priorities to countries based on the likelihood of success and the extent to which "global jihad" against the United States could be advanced by al-Qaeda's involvement.

Those countries considered too hard to tackle directly were not abandoned entirely; instead al-Qaeda encouraged local jihadists to engage in terrorism against those governments without much outside help. Meanwhile al-Qaeda concentrated on attacking the United States and organizing al-Qaeda cells within top priority countries. The concept was that al-Qaeda would eventually come to the



assistance of local jihadists in low-priority countries after success in high priority countries.

According to al-Qaeda strategist Abu Bakr Naji, the idea behind the movement's prioritization was to avoid expending resources, even in important countries, without a clear return. [2] For example, Egypt, with almost 25% of the population of all the Arab League countries combined, has always been extremely important for al-Qaeda. Nevertheless, Mubarak's Egypt is the prime example of a country in which al-Qaeda operations were considered too difficult. So Egypt was featured prominently in al-Qaeda's propaganda and was the subject of multiple videos and three books written by Ayman al-Zawahiri, the latest of which appeared just 59 days before the first demonstrations in Tahrir Square. [3] However, al-Qaeda's propaganda, which encouraged insurrection and terrorism, did not appeal to the Egyptian population. Internally, al-Qaeda used Egypt for lessons learned during the disastrous jihadist campaigns during the 1990s when other jihadist groups were virtually destroyed by Egyptian security forces.

Tunisia has been like a smaller version of Egypt for al-Qaeda. It was ruled by a strong central government, aided by powerful security forces. Tunisia experienced incidents of jihadist terrorism over the years, but al-Qaeda considered it an appropriate area for agitation and propaganda, rather than a target for its own operations. It was not considered a priority target for al-Qaeda.

After 9/11, Yemen, Saudi Arabia, and Pakistan were top priority countries in which al-Qaeda's leadership arranged for jihadist networks to be funded and manned for guerrilla warfare. Al-Qaeda currently has well-established networks in Yemen and Pakistan. Non-Arab Pakistan marches to its own beat; its grave problems after the Arab uprisings are no different from before. Yemen has been influenced by the uprisings, but al-Qaeda's local impact is negligible in comparison to powerful tribal and sectarian forces. Saudi Arabia has witnessed Shiite demonstrations and there are serious concerns that these could spread, but al-Qaeda exerts no influence on Shiite communities.

Libya was never a priority country for al-Qaeda. Its indigenous Libyan Islamic Fighting Group (LIFG) did ally itself to al-Qaeda in 2007, but was defeated by Gaddafi's forces and by 2009 was essentially out of combat (for the LIFG, see *Terrorism Monitor*, May 5, 2005; November 3, 2005; June 18, 2009). Therefore, it was not in a position to support the recent uprisings and did not inspire the current Libyan opposition, whose public posture is incompatible with al-Qaeda's doctrine.

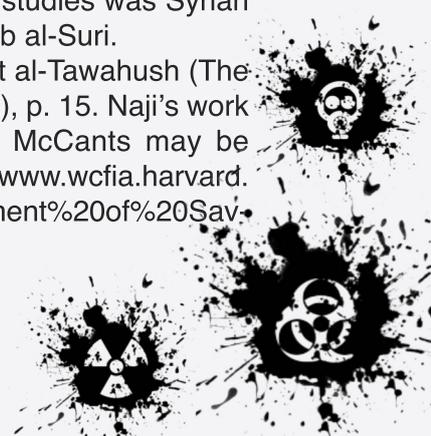
The West supports the opposition and appears to be trying to calibrate its response to avoid doing too much or too little, either of which could help al-Qaeda's narrative. The ultimate outcome in Libya is difficult to gauge at this time, but so far, events there have not played to al-Qaeda's advantage.

Even if one factors in Jordan, Iraq, and Algeria, it appears that al-Qaeda is in approximately the same position now as it was before the uprisings, with its regional appeal declining and its networks under severe pressure everywhere. This conclusion does not diminish the importance of uprisings across the Arab world. The significance of these uprisings, however, should not be judged using al-Qaeda as a metric; each has its own internal logic and history. In the end, if only the Egyptian and Tunisian revolutions prove successful, a major part of the Arab world will have unfurled the banner of modernization and democracy in a culturally acceptable model, which could become a new beacon for a large part of the Arab Middle East. In the meantime, local forces in places that experienced uprisings will continue to trump al-Qaeda's transnational narrative. In the longer term, if none of these uprisings improve the lot of their people, al-Qaeda, an organization still capable of doing great damage, will be looking for new opportunities.

#### Notes:

1. The author of these studies was Syrian jihad strategist Abu Mus'ab al-Suri.

2. Abu Bakr Naji, *Idarat al-Tawahush (The Management of Savagery)*, p. 15. Naji's work as translated by William McCants may be downloaded from: [http://www.wcfia.harvard.edu/olin/images/Management%20of%20Sav-](http://www.wcfia.harvard.edu/olin/images/Management%20of%20Sav)



agery%20-%2005-23-2006.pdf. The Arabic version is available at: <http://www.tawhed.ws/a?a=chr3ofzr>. For commentary on his work, see *Terrorism Focus*, March 17, 2005; *Terrorism Monitor*, September 10, 2009.

3. Ayman al-Zawahiri, *Knights Under the Prophet's Banner* (in Arabic) 2nd edition,

Sahab Media, November 27, 2010.

Dr. Michael W.S. Ryan is an independent consultant and researcher on Middle Eastern security issues. He is a Senior Research Associate at The Jamestown Foundation.

## Muslim Brotherhood

Source: <http://www.terrorism-info.org.il>

The Muslim Brotherhood is an Islamic mass movement whose worldview is based on the belief that "Islam is the solution" and on the stated aim of establishing a world order based on Islamic religious law (a caliphate) on the ruins of Western liberalism. With extensive support networks in Arab countries and, to a lesser extent, in the West, the movement views the recent events in Egypt as a historic opportunity. It strives to take advantage of the

political process for gradual, non-violent progress towards the establishment of political dominance and the eventual assumption of power in Egypt and other Middle Eastern countries.

### Overview

1. The Muslim Brotherhood (Jama'at al-Ikhwan al-Muslimin) was established in Egypt by Hassan al-Banna in the early 20th century.



Generations of Muslim Brotherhood leaders (clockwise from top left): Hassan al-Banna, the founder; Sayyid Qutb, the philosopher of militant Islam; Muhammad al-Badi'a, the current general guide; Ibrahim al-Hudaybi, of the movement's younger generation, a blogger and grandson of the sixth general guide



Later in that century, it became one of the major movements of political Islam.

2. Its worldview, based on the belief that “Islam is the solution” to all individual, social, and political problems, and that Islam is “both a religion and a state”, has turned it into a major challenge for the Arab regimes. The movement has also spread to Muslim communities in Europe, often becoming a major source of political and social power in the communities.

3. The Muslim Brotherhood’s success lies in a combination of political and social factors that peaked by the mid-twentieth century: its ideology was perceived as an authentic response to the hegemony of the “Western occupation”, winning over a public that had grown tired of other failed ideologies; it managed to take root among the urban educated middle class which was undergoing a process of Islamization; above all, it developed an extensive socio-economic system (da’wah) to be used as a tool in the battle for hearts and minds.

4. The Muslim Brotherhood’s emphasis in this activity is on addressing the problems of ordinary citizens through extensive social assistance systems, education and health infrastructure, and a network of mosques and preaching. These have often been a substitute for dysfunctional state institutions and an effective social network for the spread of the Muslim Brotherhood’s religious-political message.

5. At its core, the ideology of the Muslim Brotherhood aims to achieve an Islamic revival and establish a global regime based on Islamic religious law (i.e., a caliphate), starting with the removal of Arab regimes in the current “land of Islam” (dar al-islam) and ending with the emergence of a caliphate on the wider world scene (dar al-harb), on the ruins of the Western liberal word order.

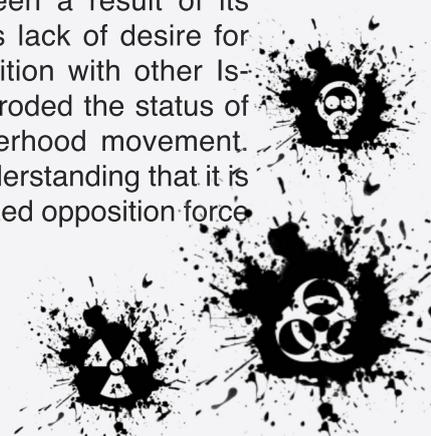
6. The movement considers the land of Palestine an Islamic endowment (waqf), denies Israel’s right to exist, and opposes the peace treaties and any compromise with it. It consistently pursues an anti-Semitic line and spreads anti-Semitic ideas, including The Protocols of the Elders of Zion. At the same time, the movement opposes terrorism, except when it’s aimed against “Zionism” and the “occupation” in Iraq, Afghanistan, etc., and strives for a gradual realization of its objectives while taking advantage of opportunities as they arise.

7. Unlike the militant factions of other Islamist movements, which completely rule out democracy on the basis of it being a Western, pagan, and ignorant idea, the Muslim Brotherhood does use the term “democracy”. In its view, however, it has two main connotations: a tactical, instrumental means of taking over countries through the use of the democratic process; and an “Islamic democracy” based on Shari’ah law (i.e., Islamic religious law) and a model of internal consultation with the leadership (shura). These views have nothing in common with the ideas of liberal democracy (including minority rights, personal freedoms, rule of law, pluralism).

8. The Muslim Brotherhood is not a uniform movement, consisting also of more moderate, pragmatic factions, some of which have a real desire to integrate Islam with true democratic parliamentarism and political tolerance. In our understanding, however, these factions taken together exert relatively minor influence compared to the more dogmatic elements in the movement—at least for the time being.

9. Since the time of Gamal Abdel Nasser, the Muslim Brotherhood has been persecuted and suppressed throughout the Arab world (by some regimes more than others), and outlawed as well. Mubarak’s regime considered it its sworn enemy and, in a long struggle, was able to neutralize its power and influence in Egyptian internal politics. This was clearly demonstrated in the latest elections, when the regime was able to practically eliminate the Muslim Brotherhood presence in the People’s Assembly (which, in retrospect, appears to be a Pyrrhic victory, as it undermined the legitimacy of Egypt’s political game).

10. In recent years, the Muslim Brotherhood in Egypt has been plagued by internal ideological and political dissension; faced fundamental questions over its identity; and had difficulties retaining its status as an ideologically attractive option for the younger generation. This has mostly been a result of its conservative leadership’s lack of desire for change, and the competition with other Islamist factions that has eroded the status of the global Muslim Brotherhood movement. Nevertheless, it is our understanding that it is currently the most organized opposition force in Egypt.



11. While the movement played no dominant part in the latest Egyptian revolution, it considers it a historical opportunity to increase its political power and put itself in a better position to assume power and turn Egypt into an Islamic state. However, at this point, the Muslim Brotherhood proceeds slowly, cooperating with other opposition parties and movements intending to run for the parliament elections, presenting an ostensibly moderate political line to reduce concerns among the public, the regime, and in the West. To the extent that circumstances permit, it will attempt to gather momentum and make similar achievements in other Middle Eastern countries.

### Contents

1. Part 1: The historical evolution of the Muslim Brotherhood in Egypt
2. Part 2: The ideology of the Muslim Brotherhood
3. Part 3: The Muslim Brotherhood's education, preaching, and social activity
4. Part 4: The structure and funding sources of the Muslim Brotherhood

5. Part 5: The Muslim Brotherhood's struggle against the government and other challenges facing it

6. Part 6: The Muslim Brotherhood's stance on the Palestinian-Israeli conflict

7. Part 7: The development of political discourse in the Muslim Brotherhood and the 2007 election platform

8. Part 8: Profiles of prominent Muslim Brotherhood figures in Egypt

9. Part 9: The Egyptian Muslim Brotherhood's ties to its branches in Middle Eastern and Western countries

10. Part 10: The Muslim Brotherhood in Arab countries and in Europe

11. Part 11: A profile of Sheikh Dr. Yusuf al-Qaradawi

12. Part 12: Islamic jihadist organizations in Egypt ideologically affiliated with the Muslim Brotherhood

**Note:** This is the Overview of a study which appears in its entirety on the ITIC website in Hebrew. The English translation will be posted in the near future.

## After Mubarak: Egypt's Islamists Struggle to Adapt to the Egyptian Revolution

By Hani Nasira

Source: <http://www.jamestown.org>

### TERRORISM MONITOR

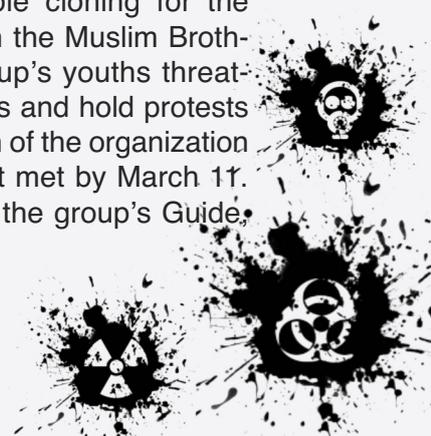
*In-depth Analysis of al-Qaeda and the War on Terror*

Following the departure of Egyptian president Hosni Mubarak on February 11 and the collapse of his regime, new faces and conflicts have appeared within the ranks of Egypt's Islamist movement, including the Muslim Brotherhood.

As with the larger Egyptian revolution, internal dissent first appeared on Facebook pages under the slogan "Brotherhood, Development, Revolution." Postings from the Brotherhood youth called for the dissolution of the various group structures, including the post of the General Guide, the Guidance Office and the Consultative Council, as well as demanding the involvement of the younger members

and the "Sisters division" in the Brotherhood's decision. In addition, the Facebook pages demanded the assignment of a committee of five members (with relevant qualifications and who are not members of the current Guidance Office) to manage the Group's affairs during the transition phase in the run-up to elections in six months.

This reveals a possible cloning for the Egyptian revolution within the Muslim Brotherhood, whereby the group's youths threatened to take to the streets and hold protests demanding the dissolution of the organization if their demands were not met by March 11. These threats compelled the group's Guide,



along with a number of its leaders, to meet with the youth's leadership (comprised of 200 members) in Cairo for four full hours in order to ease their anger and pledge to respond to their demands (IslamTimes.org, March 3).

The situation looks more difficult for the Egyptian Islamic Group (EIG), which appears to have joined the revolution only after it had achieved its objective. The EIG leadership adopted a stance contrary to the revolution at its onset and took little part in it. While the EIG prepares to establish an Islamic Party, as announced by one of its leaders, heated discussions are going on within its youth wing over the movement's role in the revolution. Many of the group's youth resent their leaders' attitudes toward the revolution as well as their hesitant and indecisive reaction to the momentous developments.

This dispute reveals a severe generational conflict within the group that threatens to divide it and disperse its members. Historically, the EIG leaders have been the sole decision makers within the movement. It is possible that some of its youth members might choose to join new Islamic parties that include senior jihadists and independent Islamists.

In Alexandria the Salafists were not enthusiastic about the revolution from the start. Their members did not join it in practice and confronted it in theory. The Salafists repeatedly claimed that involvement in the uprisings and political conflicts would divert attention away from preaching activities and would further exhaust the Islamic movement.

After the success of the revolution many Facebook invitations were sent to the Salafists to work in politics and help unify the Islamic movement. However, the Salafists insisted on adhering to their commitment to preaching activities and refusing to take part in political work. Despite their opposition to political participation, the Salafists have issued a number of announcements in which they confirmed the necessity of fully activating the second article of the Egyptian constitution (providing that Shari'a will be the main source of legislation) by implementing Islamic law

In an interview with the Egyptian newspaper Al Shorouq, Salafist advocate Ahmad Farid

confirmed that members of the Salafist movement did not take part in the revolution or its protests, which required forbidden things like mixing between men and women and the raising of the Cross. Despite their view of democracy as blasphemy, Farid did not dismiss the idea of the Salafists being active within a political party: "The Salafists must be present in the political arena in the coming phase and it's not unlikely that the movement would endorse specific individuals to take part in general elections, either parliamentary or presidential, especially after the collapse of the fear barrier which preyed on the previous era [i.e. Mubarak's regime]... The Street seeks the Salafists who would hold the Islamic rituals and would provide more public services than the brotherhood" (Shorouk News, March 5).

The Salafists were invited to join in on political work by other streams as well, including the Salafist "Hafs" movement headed by Shaykh Rida Ahmad al-Samady. [1] Some recent leaks point to the possibility of the Salafists approving of their youth joining one of the Islamic parties that are being formed after the revolution and will call for the full implementation of Islamic law in accordance with a Salafist process. This is a major change from pre-revolution days when the leadership rejected a similar invitation from al-Samady.

The Salafists have observed that their persistent calls for the full activation of the second article of the Egyptian constitution prompted both the head of Cairo's al-Azhar University and Coptic Pope Shenouda III to request that it remain unchanged in its current application. Other requests for the establishment of a civil democratic state are considered completely taboo by the Salafists, as this threatens their Islamic vision of the Egyptian state (Shorouk News, March 5).

Hani Nasira is an Egyptian writer who specializes in ideological movements.

Notes:

1. <http://alharakahalsalafiah.blogspot.com/>, March 14, 2011.



## Piracy and Maritime Terrorism

Source: [http://www.swp-](http://www.swp-berlin.org/fileadmin/contents/products/research_papers/2011_RP03_mrs_ks.pdf)

[berlin.org/fileadmin/contents/products/research\\_papers/2011\\_RP03\\_mrs\\_ks.pdf](http://www.swp-berlin.org/fileadmin/contents/products/research_papers/2011_RP03_mrs_ks.pdf)



- Synopsis (by Stefan Mair)
- Piracy as a problem of international politics
- Piracy and world trade: the economic costs
- West Africa
- Somalia and the Gulf of Aden
- Straits of Malacca
- Maritime Security in Latin America
- Combating acts of piracy under international law
- Multinational military engagement
- The role of the German Navy and Federal Police
- Prosecuting pirates
- Appendix
- Abbreviations
- Authors

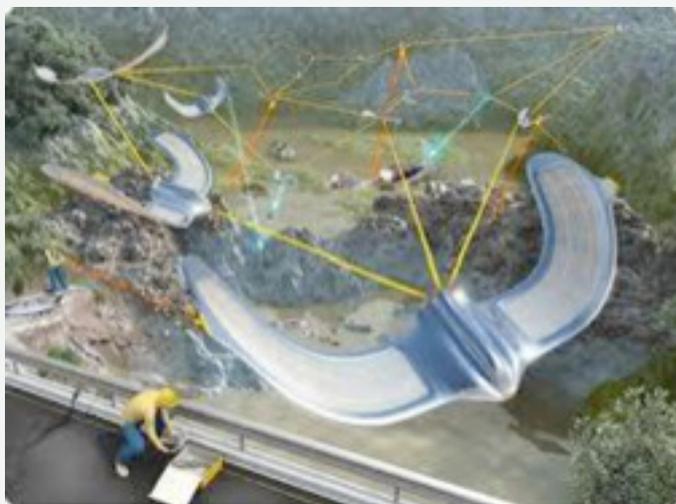
## Robot swarm to aid rescue teams

Source: <http://homelandsecuritynewswire.com/robot-swarm-aid-rescue-teams>

A new system of autonomous flying robots being developed at the Federal Institute of Technology in Lausanne (EPFL) could establish wireless communication networks to aid

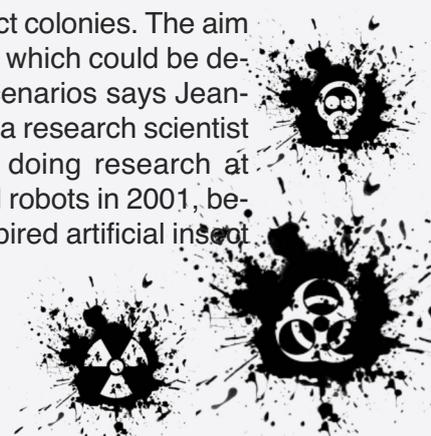
rescue teams in the event of a disaster

A new system of autonomous flying robots being developed at the Federal Institute of Technology in Lausanne (EPFL) could establish wireless communication networks to aid rescue teams in the event of a disaster.



SMAVNET drones deployed // Source: [singularityhub.com](http://singularityhub.com)

The Swarming Micro Air Vehicle Network (SMAVNET) research project at EPFL's Laboratory of Intelligent Systems (LIS) was set up to study swarm intelligence, the science of artificially mimicking the efficient collective behaviors of animal or insect colonies. The aim is to create a system which could be deployed in disaster scenarios says Jean-Christophe Zufferey, a research scientist at LIS. "We started doing research at EPFL on bio-inspired robots in 2001, beginning with a fly-inspired artificial insect



that could avoid hitting the walls and ground. From that success we moved on to test these outdoors," Zufferey said. This led to the creation of a "flying wing," one of 10 devices which have flown together as part of the SMAVNET project.

Made from lightweight plastic foam with a lithium battery-powered electric motor at the rear, these Micro Air Vehicles (MAVs) are launched a bit like you would a Frisbee. Once airborne, an autopilot controls altitude, air speed, and turn rate, while the MAVs avoid mid-air collisions by communicating with one another via optical flow sensors. These sensors are mounted at the front of each MAV, enabling it to detect the distance between objects and change direction if they get too close to each other. "The sensors are similar to the ones found in a computer mouse — they are really good optical detectors," Zufferey said.

LIS says the inspiration for the establishment and maintenance of the MAVs' communication pathways between themselves and a base controller comes from army ants, which lay pheromone paths from their nests to food sources. Final data for the SMAVNET project is currently being gathered before LIS researchers start on a follow-up project called "Swarmix" which will explore how these robot swarms can be applied to assist relief work in

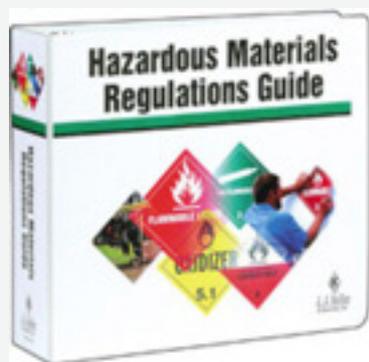
disaster zones. The LIS team says the idea is for all MAVs in a swarm to be equipped with a small wireless module to form an ad-hoc network which rescue teams can use to communicate.

Small flying robots have obvious advantages over temporary land-based network devices, negating problems with difficult terrain and line-of-sight communication, and they do not rely on expensive sensors or radar equipment. But there are important modifications that will need to be made to turn this research project into a product, Zufferey says. The most obvious problem is endurance. Small MAVs are currently only capable of staying in the air for 30 to 60 minutes, he says, but solar technology could solve this in the near future.

And while the 420-gram drones, probably the lightest of their kind in the world, according to Zufferey, will not cause any damage should they crash into anything or anyone, their weight precludes flying in anything but moderate winds (15-20 mph) and weather. But this has not stopped utilizing the current capabilities of a single MAV to set up a spin-off company, senseFly, which can be deployed for aerial photography, atmospheric sampling, surveillance, or 2D and 3D mapping. As for robot swarms, Zufferey says that they could be on the market in two to four years.

## HAZAMAT Publications

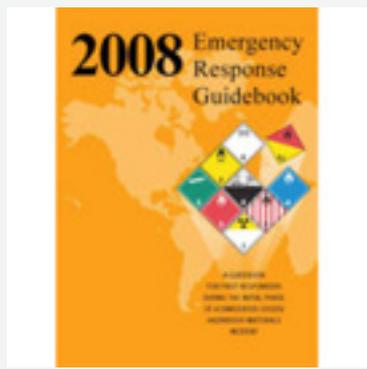
Source: <http://www.jjkeller.com/>



### Hazardous Materials Regulations Guide

Get fast, easy access to DOT's word-for-word Hazmat regs, including the §172.101 Hazardous Materials Table.





### Emergency Response Guidebook (ERG)

Helps satisfy DOT's requirement that hazmat shipments be accompanied by emergency response information.



### Hazardous Materials Compliance Manual

Straight-talking, "how-to-comply" guidance gives you fast, reliable answers.



### 49 CFR Parts 100-185 (Revised as of 10/1/10)

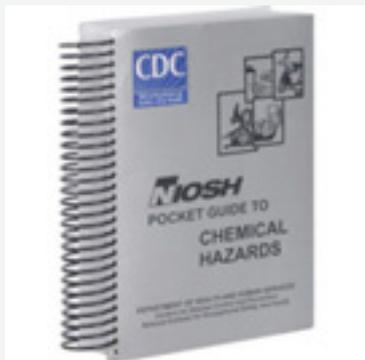
Most affordable way to get DOT's Hazardous Materials & Oil Transportation Regulations



### Handling Hazardous Materials

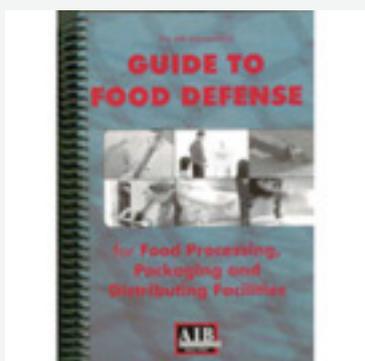
Easy-to-understand summaries of key DOT hazmat requirements at your fingertips





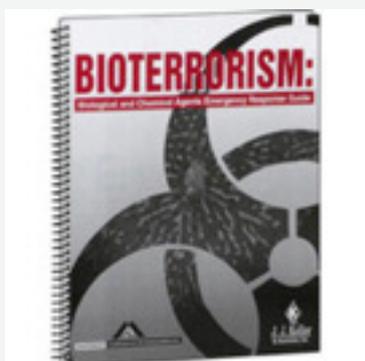
### **NIOSH Pocket Guide to Chemical Hazards**

Save time and money protecting your workers' health, preventing overexposure to chemicals, and responding to emergencies.



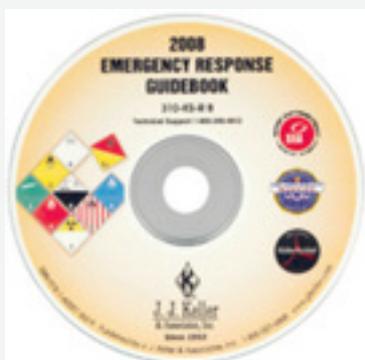
### **AIB Guide to Food Defense**

Get on the fast track to meeting regulations and securing your link in the food chain.



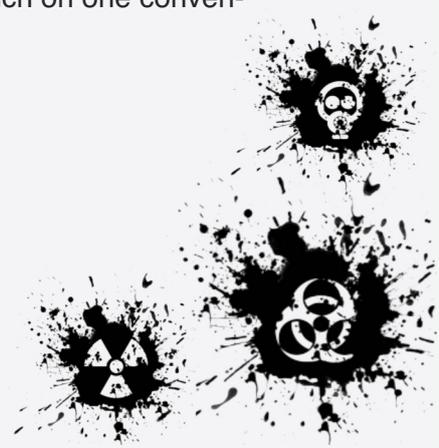
### **BIOTERRORISM: Biological and Chemical Agents Emergency Response Guide**

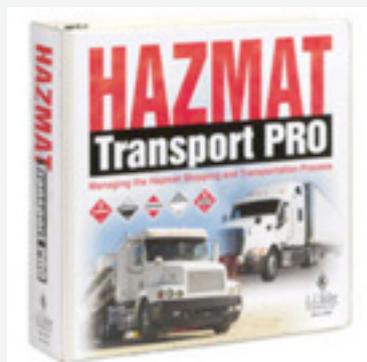
Gain a better understanding of bioterrorism



### **Emergency Response Guidebook (ERG) CD-ROM**

Get the ERGs in English, Spanish, and French on one convenient CD-ROM.





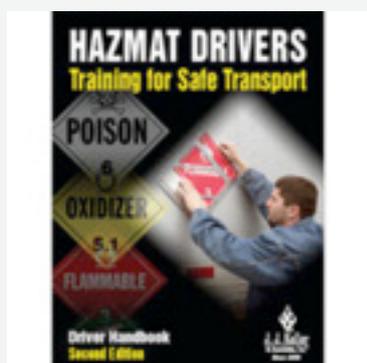
### **Hazmat Transport Pro: Managing the Hazmat Shipping and Transportation Process**

Comprehensive manual helps you manage hazmat shipping, transport, and training.



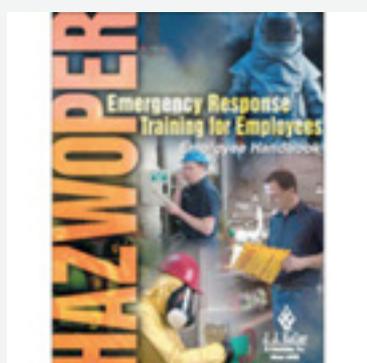
### **Transport Security Manual**

Protect your drivers, your cargo and your equipment from security threats.



### **Hazmat Drivers: Training for Safe Transport, Second Edition - Driver Handbook**

Aids in retention & provides a reference after training has been completed



### **HAZWOPER Emergency Response Training for Employees - Employee Handbook**

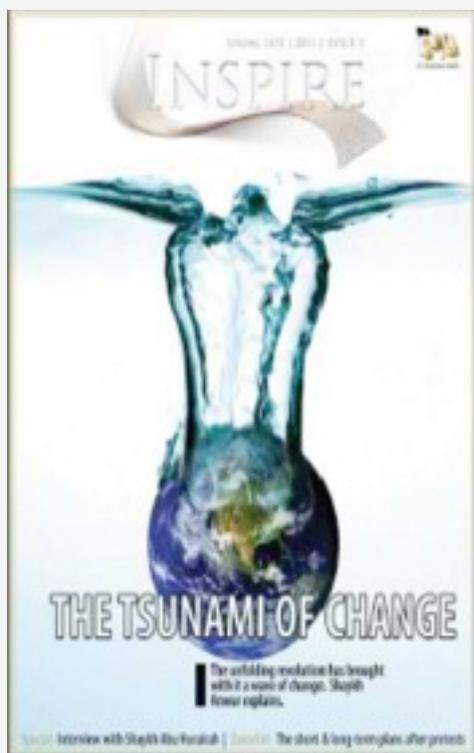
Aids in retention and provides a reference after training has been completed



## New Issue of Al Qaeda's Inspire Magazine Aims For Rapid Repositioning

Source: <http://news.intelwire.com/2011/03/new-issue-of-al-qaedas-inspire-magazine.html>

Al Qaeda in the Arabian Peninsula has released the latest issue of Inspire, and it's a 70-page behemoth devoted to the Middle East uprisings. There are two important dimensions to this issue's theme. First, it seeks to refute a wave of media coverage that deemed Al Qaeda irrelevant to the Middle Eastern protests. Second, it seeks to fundamentally reinterpret Al Qaeda's core principles in order to give the global AQ movement a foothold in the evolving political process.



### Please don't call us irrelevant

Inspire's writers take strong exception to the idea that secular, nonviolent revolutions have made Al Qaeda obsolete and irrelevant. In a prominent opening position, we get an introductory piece by Yahya Ibrahim, whose previous claim to fame was the invention of the Ultimate Mowing Machine. Ibrahim argues that the uprisings are opening the door to globalized jihad in Palestine by removing the U.S. allies who previously protected Israel. The key to making this argument stick is, of

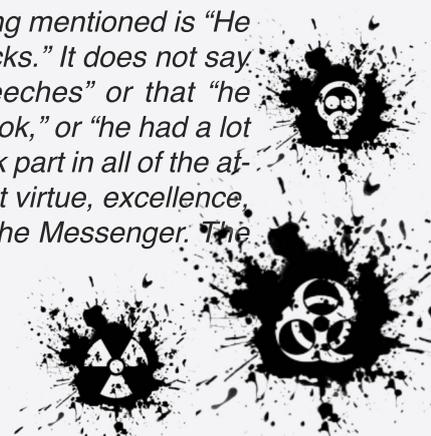
course, combining words with action. There is no shortage of AQ rhetoric on Palestine, but neither the network nor the movement have managed to breach Israel's borders in a very effective manner. Ibrahim's piece makes two more very important points related to the uprisings, which represent a significant shift in AQ rhetoric and even its philosophy. First, he argues that Al Qaeda is entirely in favor of "freedom" in the Middle East, because that gives people the freedom to learn about and understand AQ's goals. In a pointed jab against the West, he writes:

Why would the freedoms being granted to the people be bad for al Qaeda? If freedom is so bad for al Qaeda, how come the West has been practicing a restriction on the freedoms of expression when it comes to the message of the mujahidin? Why does the West ban the spread of books and talks of the al Qaeda leadership and in some countries consider it to be a crime to be in possession of such material? Why did the U.S. request from a site such as YouTube to take off lectures by Shaykh Anwar al-Awlaki?

Even more significantly, Ibrahim writes that Al Qaeda is not opposed to regime change through peaceful means. While Ibrahim's status as an Islamic authority figure in the movement is unclear at best, this represents a pretty significant shift away from a long argument that military jihad is the only acceptable means to achieve Al Qaeda's long term political goals.

One of Inspire's predecessors, an English-language newsletter published in Boston during the 1990s, summed up nonviolent political action in the following terms:

*[Y]ou find that the first thing mentioned is "He took part in all of the attacks." It does not say "He gave a hundred speeches" or that "he wrote such and such a book," or "he had a lot of money." It says "He took part in all of the attacks." This is the greatest virtue, excellence, or merit of the friends of the Messenger. The*



*value of someone in Islam is measured by the "number of battles he took part in."*

Today when they write about our dead, what do they say? Do they mention how many attacks they took part in? No. If they are truthful they will write "This famous scientist, this matchless preacher did not shoot one bullet for Allah's cause in all of his life."

This echoes a line of thought going all the way back to Abdullah Azzam, the emir of the Arab-Afghan jihad, who famously said, during a lecture in Brooklyn in the 1980s:

Whenever jihad is mentioned in the [Quran], it means the obligation to fight. It does not mean to fight with the pen or to write books or articles in the press, or to fight by holding lectures.

In contrast, Ibrahim makes a very important qualification which, if truly adopted by the broad Al Qaeda movement, could be a game-changer (emphasis below added by me):

Another line that is being pushed by Western leaders is that because the protests in Egypt and Tunisia were peaceful, they proved al Qaeda – which calls for armed struggle – to be wrong. That is another fallacy. Al Qaeda is not against regime changes through protests but it is against the idea that the change should be only through peaceful means to the exclusion of the use of force.

The accuracy of this view is proven by the turn of events in Libya. If the protesters in Libya did not have the flexibility to use force when needed, the uprising would have been crushed.

There is a galaxy of distance between arguing that Al Qaeda believes military jihad is a mandatory sixth pillar of Islam and arguing that Al Qaeda believes that peaceful regime change is appropriate as long as the use of force is permitted under the right circumstances. Yet Ibrahim is planting that seed squarely in the soil of what is arguably Al Qaeda's most important messaging platform.

It will be very interesting indeed to see whether this thread is taken up by other Al Qaeda figures. Although Ibrahim correctly points out that this principle is implied in recent statements by Al Qaeda leadership on the protests, most notably Zawahiri, I don't recall seeing it stated so starkly.

This could be seen a bold effort to fundamentally redefine Al Qaeda as a political movement that sometimes uses violence rather than as a violent movement whose goals are political. But it is certainly possible that this will be read simply as an effort to jump on somebody else's bandwagon. We'll see how that develops.

### Awalaki's take

The cover story in Inspire No. 5 is an article on the protests by Anwar Awlaki. Over the last year, Awlaki's messages in print and in A/V communiques have become increasingly concerned with local events in Yemen and Islamic rulings. Here, he returns to his best form with a piece that is political and accessible.

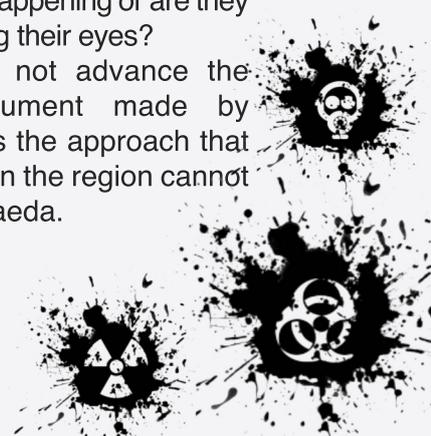
Awlaki far exceeds Ayman Zawahiri's recent messages about the protests by keeping his comments short and to the point. Awlaki argues that the uprisings have fundamentally changed the outlook of the Muslim Ummah by proving that the totalitarian regimes of the Middle East can be defied.

He then launches into an extended attack on CNN's Peter Bergen, who argued that the uprisings were bad news for Al Qaeda, with an amusingly discordant jab at Fareed Zakaria, whom Awlaki inexplicably characterizes as a "neoconservative."

Awlaki argues that Bergen is thinking too much in the short-term and that the uprisings will benefit Al Qaeda over time. Mubarak, he says, did not defeat the jihad movement in Egypt. Rather, by driving it out of Egypt, he spread it all over the world, where it is now thriving and from whence it will return.

Peter Bergen believes that al Qaeda is viewing the events with glee and despair. Glee yes, but not despair. The mujahidin around the world are going through a moment of elation and I wonder whether the West is aware of the upsurge of mujahidin activity in Egypt, Tunisia, Libya, Yemen, Arabia, Algeria, and Morocco? Is the West aware of what is happening or are they asleep with drapes covering their eyes?

Notably, Awlaki does not advance the "peaceful change" argument made by Ibrahim, but instead takes the approach that the fall of American allies in the region cannot help but be good for Al Qaeda.



America, since 9-11, has been focused on the fight with the mujahidin in Afghanistan, Pakistan, Iraq and now Yemen. It has devoted its resources and intelligence for the "fight on terror". But with what is happening now in the Arab world, America would no doubt have to divert some of its attention to the unexpected avalanche that is burying its dear friends. America has depended on these men for the dirty work of protecting the American imperial interests. They acted as point men that saved America the effort of doing it themselves but now with their fall, America would have to divert huge amounts of effort and money to cultivate a new breed of collaborators. This would force America, which is already an exhausted empire, to spread itself thin, which in turn would be a great benefit for the mujahidin. Even without this wave of change in the Muslim world, the jihad movement was on the rise. With the new developments in the area, one can only expect that the great doors of opportunity would open up for the mujahidin all over the world.

Although Awlaki did not seem to embrace the kinder, gentler Al Qaeda in the main piece of the protests, there are some interesting comments in the "Inspire Responses" section where readers can write in with questions. The column is not attributed to Awlaki but it ends with an invitation for readers to send Awlaki questions, and the style of the writing matches the Yemeni-American's voice.

The main letter to Awlaki challenges is a multi-part question challenging the methods and beliefs of Al Qaeda generally and Inspire specifically. The early parts of the question challenge a number of points in AQ propaganda before getting to the red meat:

*In terms of your personal ideology, how do you account for the fact that your legitimacy within the Islamic community is not only called into question but nearly non-existent. Most Muslims condemn the actions that you commit, Alhamdulillah. I understand your takfiri ideology but what gives you the right to judge the rest, even Muslims? It seems to me that you enjoy the power of playing God and determining who is good and evil. Nowhere in the Koran does it give authority to man to judge and determine the life of a man.*

I cannot overstate how awesomely great this question is in this context. Back before 9/11, Awlaki gave a khutba at his mosque in San Diego on this exact subject and the questioner has almost certainly listened to at least part of that lecture.

Takfir means excommunication, and in this context it refers to the Al Qaeda practice of declaring that its Muslim enemies are not Muslims, have become apostates and are therefore legitimate targets for murder.

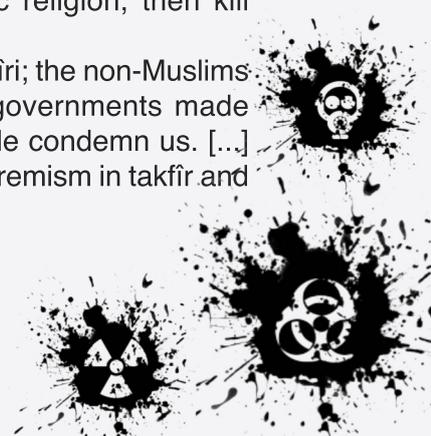
In San Diego, Awlaki argued against the practice of takfir, saying:

*[If] you tell your brother that he is [an apostate], if he is not, it will come back on you. [ . . . ] We do not know what is in the hearts of people. [If we think] this man is saying with his tongue what he doesn't mean in his heart, [the hadith] tells us we are not ordered to open up and seek what is in the hearts of people. He is not ordered clearly [ . . . ] I am not told by Allah to seek what's in the hearts of people. Meaning that we call people to Islam, but we are not judges over them. We do not judge the people. We leave the judgment to Allah, [glory to him].*

The questioner is clearly trying to catch Awlaki in a contradiction, and to some extent, he is successful. The Awlaki of 2011 squirms in his response, first suggesting that his correspondent google takfir for more guidance, then writing:

We don't just assume someone is an apostate without clear evidence. The other thing is who can implement the ruling once one is determined to be an apostate. In today's world, there is no Caliph nor Islamic Caliphate to properly pass the judgment. So within that we find a whole other topic in fiqh concerning the implementation of [mandatory Islamic capital punishment] without a state. In brief, if the individual has apostatized publicly, and his apostasy is clear, then this person's blood and wealth is not protected from the Muslims due to the hadith narrated by al-Bukhari, "Whoever changed his Islamic religion, then kill him."

Our ideology is not takfiri; the non-Muslims as well as their puppet governments made that up to make the people condemn us. [...] We are openly against extremism in takfir and seek a balance.



Awlaki is sensitive to his dilemma here. His choice is either to renounce his previous statements and risk being called a hypocrite (a serious slam in his world) or to alienate some of his core supporters in the jihadist

movement. So his response is an artful dodge, but it's still a dodge, and no one who is familiar with his earlier arguments on takfir is likely to see it otherwise.

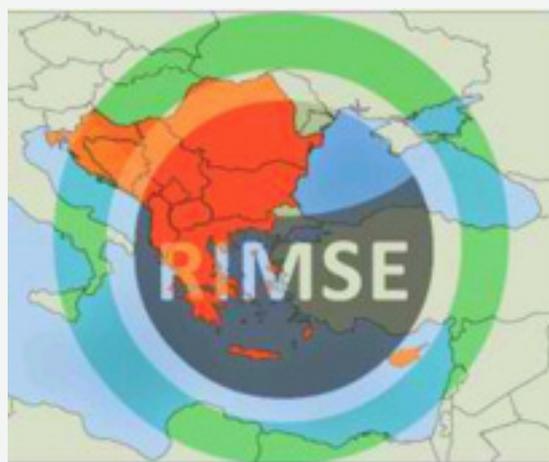
## Radical Islam Monitor in Southeast Europe

Source: <http://www.rimse.gr>

Launched in February 2011, Radical Islam Monitor in Southeast Europe (RIMSE) seeks to expose Islamist activities (both violent and non violent) in the region of Southeast Europe. Special attention will be given to Islamist activities taking place in Greece.

Islamism is a totalitarian political ideology which adheres to the belief that Islam is not just a religion, but a holistic socio-political system.

Islamism advocates the implementation of Shariah law (Islamic law) and the establishment of a global Islamic state-the Caliphate- that will unite the trans-national Muslim community, known as the Ummah. RIMSE argues that the threat posed to the West in general and to Southeast Europe in particular is not by Islam as a faith but by Islamism as a totalitarian political ideology.



Islamists are pursuing their totalitarian goals through both violent and non violent methods. Terrorism is a method used by violent Islamists in their effort to achieve world domination. The global Salafi-Jihadi movement

for example is trying to impose Shariah law and establish the Caliphate mainly through terrorist activity.

At the same time non-violent Islamist movements such as the Muslim Brotherhood, Hizb-ut-Tahrir, Jamaat e- Islami and their affiliates are seeking to advance the same agenda by subverting Western liberal democracies.

RIMSE engages in a two-fold effort of research and activism in order to educate and alert the public in the liberal democracies of Southeast Europe on the threat posed by the totalitarian political ideology of Islamism.

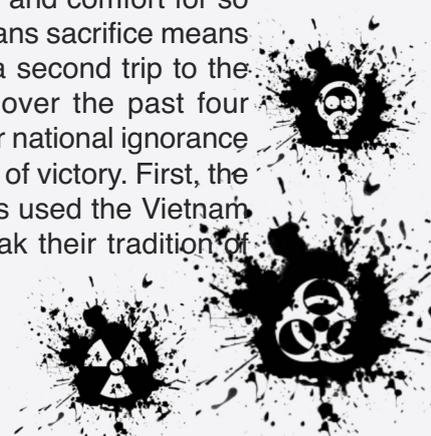
## 12 Myths of 21st-Century War

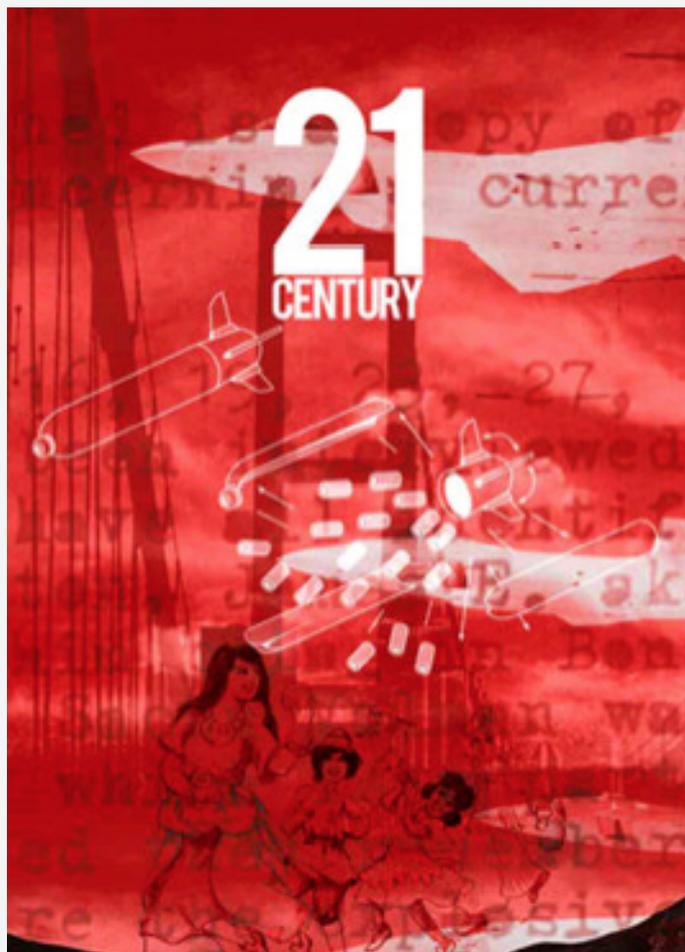
By Ralph Peters

Source: <http://www.mytroops.com/ralph-peters-12-myths-21st-century-war-american-legion/>

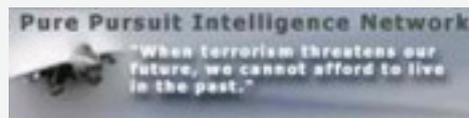
Unaware of the cost of freedom and served by leaders without military expertise, Americans have started to believe whatever's comfortable. We're in trouble. We're in danger of losing more wars. Our troops haven't forgotten how to fight. We've never had better men and women in uniform. But our leaders and many of our fellow Americans no longer grasp what war means or what it takes to win.

Thanks to those who have served in uniform, we've lived in such safety and comfort for so long that for many Americans sacrifice means little more than skipping a second trip to the buffet table. Two trends over the past four decades contributed to our national ignorance of the cost, and necessity, of victory. First, the most privileged Americans used the Vietnam War as an excuse to break their tradition of





uniformed service. Ivy League universities once produced heroes. Now they resist Reserve Officer Training Corps representation on their campuses. Yet, our leading universities still produce a disproportionate number of U.S. political leaders. The men and women destined to lead us in wartime dismiss military service as a waste of their time and talents. Delighted to pose for campaign photos with our troops, elected officials in private disdain the military. Only one serious presidential aspirant in either party is a veteran, while another presidential hopeful pays as much for a single haircut as I took home in a month as an Army private. Second, we've stripped in-depth U.S. history classes out of our schools. Since the 1960s, one history course after another has been cut, while the content of those remaining focuses on social issues and our alleged misdeeds. Dumbed-down textbooks minimize the wars that kept us free. As a result, ignorance of the terrible price our troops had to pay for freedom in the past creates absurd expectations about our present conflicts.



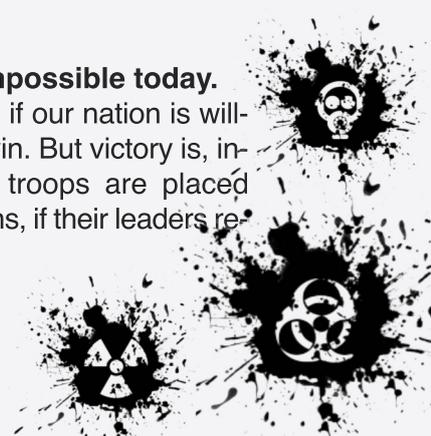
When the media offer flawed or biased analyses, the public lacks the knowledge to make informed judgments. This combination of national leadership with no military expertise and a population that hasn't been taught the cost of freedom leaves us with a government that does whatever seems expedient and a citizenry that believes whatever's comfortable. Thus, myths about war thrive.

### **Myth No. 1: War doesn't change anything**

This campus slogan contradicts all of human history. Over thousands of years, war has been the last resort - and all too frequently the first resort - of tribes, religions, dynasties, empires, states and demagogues driven by grievance, greed or a heartless quest for glory. No one believes that war is a good thing, but it is sometimes necessary. We need not agree in our politics or on the manner in which a given war is prosecuted, but we can't pretend that if only we laid down our arms all others would do the same. Wars, in fact, often change everything. Who would argue that the American Revolution, our Civil War or World War II changed nothing? Would the world be better today if we had been pacifists in the face of Nazi Germany and imperial Japan? Certainly, not all of the changes warfare has wrought through the centuries have been positive. Even a just war may generate undesirable results, such as Soviet tyranny over half of Europe after 1945. But of one thing we may be certain: a U.S. defeat in any war is a defeat not only for freedom, but for civilization. Our enemies believe that war can change the world. And they won't be deterred by bumper stickers.

### **Myth No. 2: Victory is impossible today.**

Victory is always possible, if our nation is willing to do what it takes to win. But victory is, indeed, impossible if U.S. troops are placed under impossible restrictions, if their leaders re-



fuse to act boldly, if every target must be approved by lawyers, and if the American people are disheartened by a constant barrage of negativity from the media. We don't need generals who pop up behind microphones to apologize for every mistake our soldiers make. We need generals who win. And you can't win if you won't fight. We're at the start of a violent struggle that will ebb and flow for decades, yet our current generation of leaders, in and out of uniform, worries about hurting the enemy's feelings. One of the tragedies of our involvement in Iraq is that while we did a great thing by removing Saddam Hussein, we tried to do it on the cheap. It's an iron law of warfare that those unwilling to pay the butcher's bill up front will pay it with compound interest in the end. We not only didn't want to pay that bill, but our leaders imagined that we could make friends with our enemies even before they were fully defeated. Killing a few hundred violent actors like Moqtada al-Sadr in 2003 would have prevented thousands of subsequent American deaths and tens of thousands of Iraqi deaths. We started something our national leadership lacked the guts to finish. Despite our missteps, victory looked a great deal less likely in the early months of 1942 than it does against our enemies today. Should we have surrendered after the fall of the Philippines? Today's opinionmakers and elected officials have lost their grip on what it takes to win. In the timeless words of Nathan Bedford Forrest, "War means fighting, and fighting means killing."

And in the words of Gen. Douglas MacArthur, "It is fatal to enter any war without the will to win it."

### **Myth No. 3: Insurgencies can never be defeated.**

Historically, fewer than one in 20 major insurgencies succeeded. Virtually no minor ones survived. In the mid-20th century, insurgencies scored more wins than previously had been the case, but that was because the European colonial powers against which they rebelled had already decided to rid themselves of their imperial possessions. Even so, more insurgencies were defeated than not, from the Philippines to Kenya to Greece. In the entire 18th century, our war of independence was the only insurgency that defeated a major for-

ign power and drove it out for good. The insurgencies we face today are, in fact, more lethal than the insurrections of the past century. We now face an international terrorist insurgency as well as local rebellions, all motivated by religious passion or ethnicity or a fatal compound of both. The good news is that in over 3,000 years of recorded history, insurgencies motivated by faith and blood overwhelmingly failed. The bad news is that they had to be put down with remorseless bloodshed.

### **Myth No. 4: There's no military solution; only negotiations can solve our problems.**

In most cases, the reverse is true. Negotiations solve nothing until a military decision has been reached and one side recognizes a peace agreement as its only hope of survival. It would be a welcome development if negotiations fixed the problems we face in Iraq, but we're the only side interested in a negotiated solution. Every other faction - the terrorists, Sunni insurgents, Shia militias, Iran and Syria - is convinced it can win. The only negotiations that produce lasting results are those conducted from positions of indisputable strength.

### **Myth No. 5: When we fight back, we only provoke our enemies.**

When dealing with bullies, either in the schoolyard or in a global war, the opposite is true: if you don't fight back, you encourage your enemy to behave more viciously. Passive resistance only works when directed against rule-of-law states, such as the core English-speaking nations. It doesn't work where silent protest is answered with a bayonet in the belly or a one-way trip to a political prison. We've allowed far too many myths about the "innate goodness of humanity" to creep up on us. Certainly, many humans would rather be good than bad. But if we're unwilling to fight the fraction of humanity that's evil, armed and determined to subjugate the rest, we'll face even grimmer conflicts.

### **Myth No. 6: Killing terrorists only turns them into martyrs.**

It's an anomaly of today's Western world that privileged individuals feel more sympathy



for dictators, mass murderers and terrorists - consider the irrational protests against Guantanamo - than they do for their victims. We were told, over and over, that killing Osama bin Laden or Abu Musab al-Zarqawi, hanging Saddam Hussein or targeting the Taliban's Mullah Omar would only unite their followers. Well, we haven't yet gotten Osama or Omar, but Zarqawi's dead and forgotten by his own movement, whose members never invoke that butcher's memory. And no one is fighting to avenge Saddam. The harsh truth is that when faced with true fanatics, killing them is the only way to end their influence. Imprisoned, they galvanize protests, kidnappings, bombings and attacks that seek to free them. Want to make a terrorist a martyr? Just lock him up. Attempts to try such monsters in a court of law turn into mockeries that only provide public platforms for their hate speech, which the global media is delighted to broadcast. Dead, they're dead. And killing them is the ultimate proof that they lack divine protection. Dead terrorists don't kill.

### **Myth No. 7: If we fight as fiercely as our enemies, we're no better than them.**

Did the bombing campaign against Germany turn us into Nazis? Did dropping atomic bombs on Japan to end the war and save hundreds of thousands of American lives, as well as millions of Japanese lives, turn us into the beasts who conducted the Bataan Death March? The greatest immorality is for the United States to lose a war. While we seek to be as humane as the path to victory permits, we cannot shrink from doing what it takes to win. At present, the media and influential elements of our society are obsessed with the small immoralities that are inevitable in wartime. Soldiers are human, and no matter how rigorous their training, a miniscule fraction of our troops will do vicious things and must be punished as a consequence. Not everyone in uniform will turn out to be a saint, and not every chain of command will do its job with equal effectiveness. But obsessing on tragic incidents - of which there have been remarkably few in Iraq or Afghanistan - obscures the greater moral issue: the need to defeat enemies who revel in butchering the in-

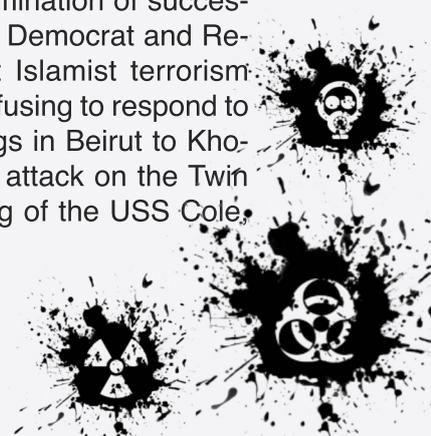
nocent, who celebrate atrocities, and who claim their god wants blood.

### **Myth No. 8: The United States is more hated today than ever before.**

Those who served in Europe during the Cold War remember enormous, often-violent protests against U.S. policy that dwarfed today's let's-have-fun-on-a-Sunday-afternoon rallies. Older readers recall the huge ban-the-bomb, pro-communist demonstrations of the 1950s and the vast seas of demonstrators filling the streets of Paris, Rome and Berlin to protest our commitment to Vietnam. Imagine if we'd had 24/7 news coverage of those rallies. I well remember serving in Germany in the wake of our withdrawal from Saigon, when U.S. soldiers were despised by the locals - who nonetheless were willing to take our money - and terrorists tried to assassinate U.S. generals. The fashionable anti-Americanism of the chattering classes hasn't stopped the world from seeking one big green card. As I've travelled around the globe since 9/11, I've found that below the government-spokesman/professional-radical level, the United States remains the great dream for university graduates from Berlin to Bangalore to Bogota. On the domestic front, we hear ludicrous claims that our country has never been so divided. Well, that leaves out our Civil War. Our historical amnesia also erases the violent protests of the late 1960s and early 1970s, the mass confrontations, rioting and deaths. Is today's America really more fractured than it was in 1968?

### **Myth No. 9: Our invasion of Iraq created our terrorist problems.**

This claim rearranges the order of events, as if the attacks of 9/11 happened after Baghdad fell. Our terrorist problems have been created by the catastrophic failure of Middle Eastern civilization to compete on any front and were exacerbated by the determination of successive U.S. administrations, Democrat and Republican, to pretend that Islamist terrorism was a brief aberration. Refusing to respond to attacks, from the bombings in Beirut to Khobar Towers, from the first attack on the Twin Towers to the near-sinking of the USS Cole,



we allowed our enemies to believe that we were weak and cowardly. Their unchallenged successes served as a powerful recruiting tool. Did our mistakes on the ground in Iraq radicalize some new recruits for terror? Yes. But imagine how many more recruits there might have been and the damage they might have inflicted on our homeland had we not responded militarily in Afghanistan and then carried the fight to Iraq. Now Iraq is al-Qaeda's Vietnam, not ours.

**Myth No. 10: If we just leave, the Iraqis will patch up their differences on their own.**

The point may come at which we have to accept that Iraqis are so determined to destroy their own future that there's nothing more we can do. But we're not there yet, and leaving immediately would guarantee not just one massacre but a series of slaughters and the delivery of a massive victory to the forces of terrorism. We must be open-minded about practical measures, from changes in strategy to troop reductions, if that's what the developing situation warrants. But it's grossly irresponsible to claim that our presence is the primary cause of the violence in Iraq - an allegation that ignores history.

**Myth No. 11: It's all Israel's fault. Or the popular Washington corollary: "The Saudis are our friends."**

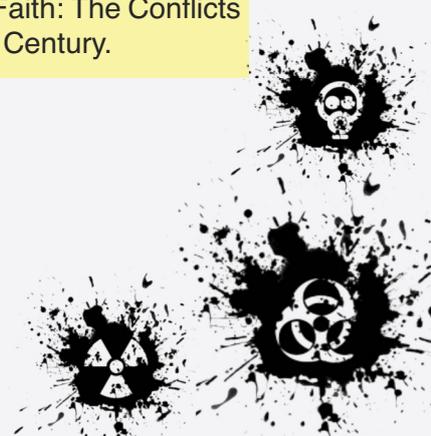
Israel is the Muslim world's excuse for failure, not a reason for it. Even if we didn't support Israel, Islamist extremists would blame us for countless other imagined wrongs, since they fear our freedoms and our culture even more than they do our military. All men and women of conscience must recognize the core difference between Israel and its neighbours: Israel genuinely wants to live in peace, while its genocidal neighbours want Israel erased from the map. As for the mad belief that the Saudis are our friends, it endures only because the Saudis have spent so much money on both sides of the aisle in Washington. Saudi money continues to subsidize anti-Western extrem-

ism, to divide fragile societies, and encourage hatred between Muslims and all others. Saudi extremism has done far more damage to the Middle East than Israel ever did. The Saudis are our enemies.

**Myth No. 12: The Middle East's problems are all America's fault.**

Muslim extremists would like everyone to believe this, but it just isn't true. The collapse of once great Middle Eastern civilizations has been under way for more than five centuries, and the region became a backwater before the United States became a country. For the first century and a half of our national existence, our relations with the people of the Middle East were largely beneficent and protective, notwithstanding our conflict with the Barbary Pirates in North Africa. But Islamic civilization was on a downward trajectory that could not be arrested. Its social and economic structures, its values, its neglect of education, its lack of scientific curiosity, the indolence of its ruling classes and its inability to produce a single modern state that served its people all guaranteed that, as the West's progress accelerated, the Middle East would fall ever farther behind. The Middle East has itself to blame for its problems. None of us knows what our strategic future holds, but we have no excuse for not knowing our own past. We need to challenge inaccurate assertions about our policies, about our past and about war itself. And we need to work within our community and state education systems to return balanced, comprehensive history programs to our schools. The unprecedented wealth and power of the United States allows us to afford many things denied to human beings throughout history. But we, the people, cannot afford ignorance.

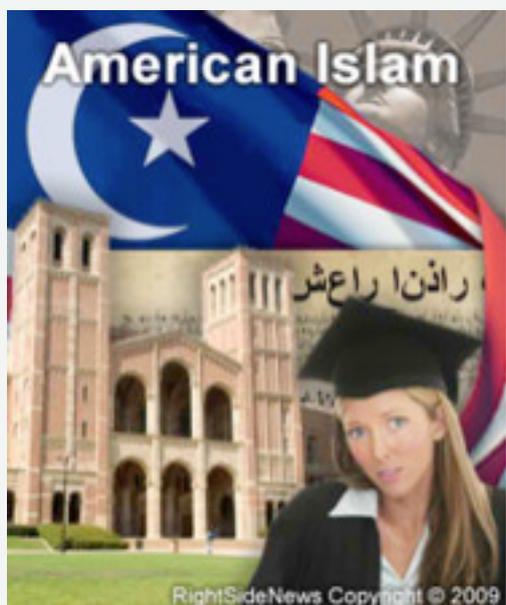
Ralph Peters is a retired Army officer, strategist and author of 22 books, including the recent "Wars of Blood and Faith: The Conflicts That Will Shape the 21st Century."



### Beware of the MSA in the USA

Source: [http://www.rightsidenews.com/2011032613132/us/islam-in-america/beware-of-the-msa-in-the-usa.html?utm\\_source=Right+Side+News&utm\\_campaign=94ab7ebafb-daily-rss-newsletter&utm\\_medium=email](http://www.rightsidenews.com/2011032613132/us/islam-in-america/beware-of-the-msa-in-the-usa.html?utm_source=Right+Side+News&utm_campaign=94ab7ebafb-daily-rss-newsletter&utm_medium=email)

The MSA (Muslim Students of America) is the largest and most powerful organization of Islamic college students in North America. They were formed under, financed by, and controlled by the Muslim Brotherhood, one of many Islamic organizations in the U.S. whose purpose is the overthrow of American freedom



and democracy as we know it, to be replaced with Sharia law.

Do not fall for the premise that they are a peaceful, down-trodden, moderate group for kids who are only seeking love and acceptance. Far from it. They are infesting campuses in order to establish power and disrupt anything that is perceived contrary to the goals of Islam. They are nearly every major university in all four corners of this country, with plenty of MB (Muslim Brotherhood) money at their disposal with which to finance any project.

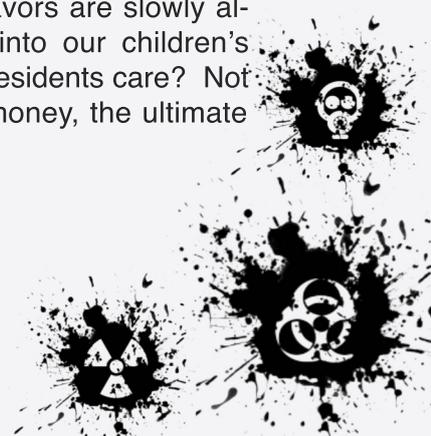
Not long ago, the Israeli ambassador to the U.S. came to speak at the University of California, Irvine campus, but was systematically shouted down by one MSA student after another, in order to disrupt the talk. The students are so effective, that many colleges and uni-

versities fear inviting any scholars and public figures that might piss them off. Thus, its censorship by default.

Brigitte Gabriel is a Lebanese-born journalist, now an American, who heads ACT for America, a group dedicated toward fighting the incursion of Sharia and Islamic intolerance. A dynamic speaker, she is often invited to civic organizations and college campuses. In her book, "Because They Hate," she writes about her invitations to schools: "Speakers who aren't friendly to Islam (such as myself) require a full security staff, including body guards and K-9 units, to ensure our lives will be protected when giving a lecture on a university campus. When I spoke at the University of Detroit in 2006, I was accompanied by security details fit for a president. This was the result of a Palestinian group in California sending an e-mail to their Detroit friends urging that 'Muslims, Arabs, their friends and allies to show up and give Brigitte Gabriel a proper welcome.'"

The Saudis have been flowing millions (maybe billions) of their petro dollars into the U.S., targeting universities and colleges, (and prisons). For example, Harvard and Georgetown Universities have accepted as much as \$20 million in donations from a Saudi prince. Nice folks, those Islamists, they really want us to get good educations. Of course, that kind of money guarantees foot baths for Muslims throughout the campuses, special hours for female Muslims-only in the gym, Halal meals in the eatery, lots of Islamic professors and support for on and off campus organizations.

More definitively, it is bribe money. Quid pro quo. Big bucks translates to big favors. But in this case, those favors are slowly allowing Sharia to creep into our children's lives. Do the university presidents care? Not really. They care about money, the ultimate Achilles heel of America.



## Solidarity in Resistance: Middle East Revolutions Strengthen Hezbollah

By Chris Zambelis

Source: <http://www.jamestown.org>

### TERRORISM MONITOR

*In-depth Analysis of al-Qaeda and the War on Terror*

As the surge of revolutionary fervor that has taken the greater Middle East by storm continues to spread, many observers are grappling with the political uncertainties that the tumult has produced from Morocco to the Persian Gulf and beyond. The popular uprisings that prompted the ouster of the dictatorships in Tunisia and Egypt and threaten the panoply of authoritarian despots that cling to power in other countries have already had a profound effect on regional politics. Despite the highly dynamic and fluid nature of events in the region, it is not too early to assess the impact of these events on the position of prominent actors such as Lebanon's Hezbollah. The movement's place amid the unfolding unrest bears special relevance, considering the open hostility that has characterized its relations with the recently toppled Mubarak regime and other governments threatened by the wave of unrest. The popularity Hezbollah enjoys among a large segment of the very same people that have taken to the streets to demand political freedoms, rule of law, representative government and economic opportunities adds another dynamic worth closer examination.

### Solidarity in Resistance

Having weathered the massive Israeli assault during the July 2006 War and deftly outmaneuvering attempts by its political opponents to undermine its position and blame it for the February 2005 assassination of Lebanese prime minister Rafiq Hariri, Hezbollah's stock as a political party, social movement, and paramilitary force in Lebanese and regional affairs continues to rise.

In characteristic fashion, Hezbollah has not been coy about articulating its positions on the uprisings that have shaken the foundations of

power in the Middle East in various media outlets, particularly its own Beirut-based al-Manar satellite television network. [1] Initially, however, Hezbollah adopted a cautious approach to the opposition activism that engulfed Tunisia and Egypt. Hezbollah was concerned that a show of support for the protests early on would tarnish their legitimacy and lend credence to allegations repeated by the embattled regimes that the protestors were acting at the behest of hostile foreign elements aiming to destabilize the region. Hezbollah essentially opted to refrain from issuing an endorsement of the protests until the popular grassroots character of the rebellions entered into the discourse of global media coverage and analysis. Hezbollah's Secretary General Hassan Nasrallah encapsulated this point in a statement broadcast during a February 7 event in Beirut organized to support the opposition in Egypt: "In case we announced solidarity earlier, they would have said that the revolution was motivated by Hezbollah or Hamas cells or even by the Iranian Revolutionary Guards. Then, this real, original and patriotic movement would be accused of serving a foreign agenda" (al-Manar [Beirut], February 8).



Hezbollah has since expressed solidarity with what it sees as the assertion of the true will of the Arab and Muslim masses who strive for social, political, and economic justice in the face of illegitimate and corrupt autocracies that it claims are beholden to the United States and Israel. In this regard, Hezbollah has framed the political activism taking place in the region through a larger resistance narrative analogous to the one it applies to its own circumstances, a theme echoed by Nasrallah in remarks directed at the Egyptian opposition: "Our belief says that what you're doing is very great and one of the very important turning points in the history of this nation and region. Your move and victory will change the whole face of our region to the interest of its peoples in general and especially Palestine (al-Manar, February 8).

The fall of the Mubarak regime, a longtime enemy of the group, has had special resonance for Hezbollah. In spite of its Shi'a character, Hezbollah is very popular in predominantly Sunni Egypt for its resistance against Israel and support for the Palestinian cause, as demonstrated by the protests in Egypt and the Sunni-led Arab world in support of Hezbollah during the July 2006 War and the heroic status Nasrallah has enjoyed since (see *Terrorism Focus*, August 8, 2006). Amid the chaos that accompanied Mubarak's ouster, Hezbollah managed under murky circumstances to free Muhammad Yusuf Mansour (a.k.a. Sami Shehab), a member of the group serving time in an Egyptian prison (al-Jazeera, February 7). Egyptian authorities convicted Mansour along with a host of others on espionage, weapons, and terrorism-related charges in 2010. Egyptian authorities claimed, among other things, that Mansour was planning attacks on Egyptian soil (see *Terrorism Monitor*, June 12, 2009). While Nasrallah acknowledged Mansour's membership in Hezbollah, he denied that his activities threatened Egypt; instead, Mansour was leading an effort to support the Palestinians in Gaza (see *Terrorism Monitor*, May 28, 2010). In a masterstroke of political theater that has become a signature of Hezbollah, Mansour appeared in person during the group's annual February 16 commemoration of its deceased leaders in the

Dahiyeh, the southern suburbs of Beirut where Hezbollah enjoys tremendous support. Speaking to jubilant crowds through a video feed broadcast on a large screen television, Nasrallah thanked Egyptians for freeing Mansour and highlighted the fact that the Mubarak's decision to step down on February 11 coincided with the anniversary of the 1979 victory of the Iranian Revolution (Islamic Republic of Iran Broadcasting [IRIB], February 17).

Expanding on his observations of the events in Tunisia and Egypt, Nasrallah's televised March 19 speech addressed the wider unrest experienced in Libya, Bahrain, and Yemen: "Our gathering today is to voice our support for our Arab people and their revolutions and sacrifices, especially in Tunisia, Egypt, Bahrain, Libya and Yemen. The value of this solidarity is moral, political, and ethical.... A great victory was achieved in Egypt and Tunisia. Libya entered civil war, and in Bahrain and Yemen the regimes put their own peoples on the brink of civil war (al-Manar, March 20).

Nasrallah singled out Libyan leader Muammar Qaddafi over the disappearance of Imam Musa Sadr, the Iranian-born founder of the *Afwaj al-Muqawama al-Lubnaniya* (AMAL - Lebanese Resistance Detachments) movement and a major figure among Shi'a in Lebanon and other parts of the Middle East. Sadr is credited with helping galvanize Lebanon's Shi'a community to assert themselves in Lebanese politics and society. Sadr went missing under mysterious circumstances along with two others during a visit to Tripoli in 1978 and is widely believed to have been executed by Libya. However, some claim that he is still being held in captivity, a view repeated by Nasrallah amid the current conflict in Libya: "We are looking forward to the day when Sadr can be liberated from this dictatorial tyrant" (al-Manar, March 20).

Events in Bahrain, which hosts the U.S. Navy's Fifth Fleet, have also not been lost on Hezbollah, especially the sectarian dynamics underlying the unrest, where a U.S. and Saudi-backed Sunni monarchy led by King Hamad Ibn Issa al-Khalifa rules over a majority Shi'a population that is largely underserved and faces widespread discrimination in daily



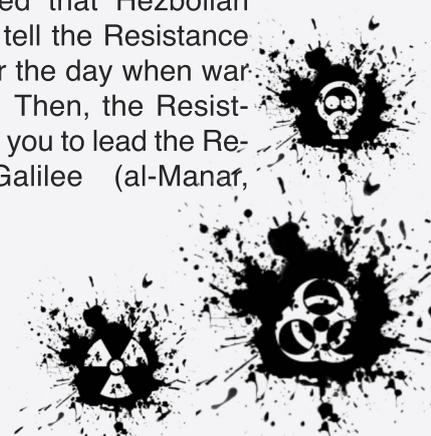
life. Commenting on the regime's decision to crack down violently on the peaceful demonstrators and Saudi Arabia's decision to send troops to back its ally, Nasrallah declared: "The regime in Bahrain was not threatened and the resistance was peaceful, yet the army was used against it. This is a first. We heard that some arrested opposition leaders had their houses demolished. This is Israeli style... I ask some in the Arab and Islamic world who are remaining silent about the injustice that our brothers in Bahrain are facing: Why stay silent about these peaceful protests or condemn their movements? Is it because they are Shi'a? If someone in a country belonged to a certain sect, should he be relieved of his human rights? ... No one asked about the religion or sect of the Palestinian, Egyptian, Tunisian or Libyan people (al-Manar, March 20). The push to topple President Ali Abdullah Saleh of Yemen also drew a response from Nasrallah: "In Yemen there are many complications, but no doubt that we absolutely cannot be silent about the murder and crimes that are occurring. We salute the resistance of the Yemeni people and their commitment to the peacefulness of their movement (al-Manar, March 20).

### Geopolitical Considerations

Rhetoric aside, Hezbollah's support for the rush of opposition movements stems from calculated pragmatism; the course of events that is redefining the Middle East, upending the regional status quo, is shaping up in Hezbollah's favor. As a member of the so-called "Resistance Axis," a bloc composed of Iran, Syria and Hamas that stands in opposition to the U.S.-led order made up of Israel and friendly Arab autocracies such as Saudi Arabia, it is easy to see why Hezbollah (and its allies) gained by the current unrest, a point not lost on Nasrallah: "Israel today is wailing over the loss of its last strategic ally in the region [i.e. Egypt] after it lost the Shah in Iran in 1979 and after it lost to a great degree Turkey due to its aggression on Lebanon and Gaza, its murderous policies and its crimes against the Freedom Fleet [i.e. the Gaza Freedom Flotilla] (al-Manar, February 8; see also Terrorism Monitor, May 28, 2010).

Hezbollah is frequently cited as a threat by the sitting autocrats in the region, a threat that is often portrayed in sectarian terms: Hezbollah's Shi'a character and alliance with Iran, in essence, represents a force for instability and radicalism. In reality, however, the threat posed by Hezbollah to the ruling regimes stems from its penchant for criticizing sitting governments and inspiring domestic opposition among those who tend to identify with Hezbollah over their own leaders, many of who are viewed as agents of the United States and Israel. From its doctrinaire origins as an outpost of the Iranian Revolution in the Levant, Hezbollah now boasts multiple, overlapping identities that speak to numerous audiences in Lebanon and beyond. As a political party, organic Lebanese organization and transnational Shi'a Islamist movement, Hezbollah is at once a defender of all Lebanese – regardless of sect – and Lebanese sovereignty against Israel, an advocate for pan-Arab and Palestinian nationalist causes, and a force for social justice and resistance. This reality frightens the ruling regimes and is likely to be cause for continued concern.

In spite of Israel's overwhelming military power, it is widely acknowledged that Hezbollah's impressive showing during the July 2006 War helped it achieve an effective deterrence capacity in relation to Israel. With a reputation for living up to its promises and exceeding expectations on the battlefield, it is also worth considering how the changing regional landscape will impact Hezbollah's strategies in a future war with Israel. In this context, Nasrallah's suggestion that Hezbollah engage Israel on its own soil, specifically, in the northern Galilee region, warrants a closer look. During his February 16 speech, Nasrallah declared: "The major achievement of the Resistance is that it complicated the possibility of Israel occupying Lebanon. Even more, today, Israel is concerned that Hezbollah might liberate Galilee... I tell the Resistance fighters to be prepared for the day when war is imposed on Lebanon. Then, the Resistance leadership might ask you to lead the Resistance to liberate Galilee (al-Manar, February 18).



Nasrallah's bold statement follows a series of threats that hint at the group's intention to dramatically escalate hostilities in any future conflict with Israel, such as its pledge to target Israel's Ben Gurion International Airport and major urban centers in central and southern Israel in retaliation for Israeli strikes on similar targets in Lebanon: "I say to the Israelis: if you attack Beirut's Rafiq Hariri airport we will attack Ben Gurion airport in Tel Aviv (Al-Arabiya [Dubai], February 10, 2010). Hezbollah has also demonstrated its ability over the years to infiltrate the Israeli security establishment through the successful recruitment of ranking Israeli military and intelligence officers (see *Terrorism Monitor*, June 25, 2009). Given this track record, it is not out of the realm of possibility that Hezbollah will attempt to fight in some capacity in northern Israel in the next confrontation with its archenemy. The symbolism behind such a move would be profound.

While it is unlikely that Egypt will abrogate its commitment to the Camp David Accords in the near future, a major shift in Egyptian foreign policy down the line is not out of the question. Because popular opinion in Egypt and across the Middle East remains strongly opposed to Israel for its continued occupation of Palestinian land and the complicity of Arab regimes in this policy, such as the role played by the Mubarak regime and Palestinian Authority during Israel's 2008 invasion of Gaza, the possibility that Egypt will adopt a foreign policy posture that is more reflective of public opinion should not be ruled out. While it is too early to count Egypt as a member of the "Resistance Axis," even a modest shift in Egyptian foreign policy away from its traditional pro-U.S. and pro-Israel position would bolster Hezbollah in relation to Israel and its other opponents in the region. The weakening of the U.S.-led alliance due to the ongoing protests in friendly autocracies and the simultaneous

rise of more representative governments that will cater to public opinion will also continue to play to Hezbollah's advantage.

### Conclusion

As the groundswell of domestic pressure continues to spread across the Middle East, Hezbollah's position is poised to improve. At the same time, the latest rumblings of dissent in Syria – a crucial Hezbollah ally – against the ruling Ba'ath regime demonstrates how the contagion of revolution sweeping the Middle East can also come back to haunt the group. Some reports out of Syria indicate that protesters in Dera'a, a conservative and largely Sunni town located along Syria's southern border with Jordan, chanted anti-Hezbollah and anti-Iran slogans alongside calls for political reform. Following in the footsteps of other regimes in the region, Syria has implicated outside agitators in the unrest (*al-Jazeera*, March 26; *Reuters*, March 24). Until this point, Hezbollah has – not surprisingly – avoided addressing the developments in its longtime ally. However events play out in Syria, the broad trajectory of political change witnessed in the region to date has so far strengthened Hezbollah's hand.

### Note:

1. Footage of Al-Manar satellite television programming, as well as transcripts and official statements issued by Hezbollah, is available at the station's official website <http://www.al-manar.com.lb/>.

Chris Zambelis is an author and researcher with Helios Global, Inc., a risk management group based in the Washington, DC area. The opinions expressed here are the author's alone and do not necessarily reflect the position of Helios Global, Inc.



## Al Qaeda acquiring weapons in Libya

By Lamine Chikhi

Source: <http://af.reuters.com/article/topNews/idAFJOE7330LB20110404>

Al Qaeda is exploiting the conflict in Libya to acquire weapons, including surface-to-air missiles, and smuggle them to a stronghold in northern Mali, a security official from neighbouring Algeria told Reuters.

The official said a convoy of eight Toyota pick-up trucks left eastern Libya, crossed into Chad and then Niger, and from there into northern Mali where in the past few days it delivered a cargo of weapons. He said the weapons included Russian-made RPG-7 anti-tank rocket-propelled grenades, Kalashnikov heavy machine guns, Kalashnikov rifles, explosives and ammunition. He also said he had information that al Qaeda's north African wing, known as al Qaeda in the Islamic Maghreb (AQIM), had acquired from Libya Russian-made shoulder-fired Strela surface-to-air missiles known by the NATO designation SAM-7. "A convoy of eight Toyotas full of weapons travelled a few days ago through Chad and Niger and reached northern Mali," said the official, speaking on condition of anonymity. "The weapons included RPG-7s, FMPK (Kalashnikov heavy machine guns), Kalashnikovs, explosives and ammunition ... and we know that this is not the first convoy and that it is still ongoing," the official told Reuters. "Several military barracks have been pillaged in this region (eastern Libya) with their arsenals and weapons stores and the elements of AQIM who were present could not have failed to profit from this opportunity." "AQIM, which has

maintained excellent relations with smugglers who used to cross Libya from all directions without the slightest difficulty, will probably give them the task of bringing it the weapons," said the official. The official said that al Qaeda was exploiting disarray among forces loyal to Libyan leader Muammar Gaddafi, and had also infiltrated the anti-Gaddafi rebels in eastern Libya.

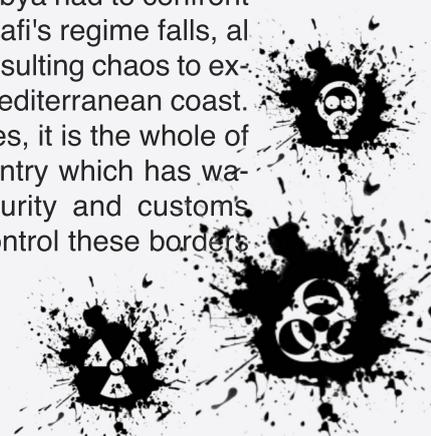
The rebels deny any ties to al Qaeda. U.S. Admiral James Stavridis, NATO's supreme allied commander for Europe, said last week intelligence showed only "flickers" of an al Qaeda presence in Libya, with no significant role in the Libyan uprising. "AQIM ... is taking advantage by acquiring the most sophisticated weapons such as SAM-7s (surface-to-air missiles), which are equivalent to Stingers," he said, referring to a missile system used by the U.S. military.

Algeria has been fighting a nearly two-decade insurgency by

Islamist militants who in the past few years have been operating under the banner of al Qaeda. Algeria's security forces also monitor al Qaeda's activities outside its borders. The security official said the Western coalition which has intervened in Libya had to confront the possibility that if Gaddafi's regime falls, al Qaeda could exploit the resulting chaos to extend its influence to the Mediterranean coast. "If the Gaddafi regime goes, it is the whole of Libya -- in terms of a country which has watertight borders and security and customs services which used to control these borders



SAM-7s



-- which will disappear, at least for a good time, long enough for AQIM to re-deploy as far as the Libyan Mediterranean." "In the case of Libya, the coalition forces must make an urgent choice. To allow chaos to settle in, which will necessitate ... a ground intervention with

the aim of limiting the unavoidable advance of AQIM towards the southern coast of the Mediterranean, or to preserve the Libyan regime, with or without Gaddafi, to restore the pre-uprising security situation," the official told Reuters.

## How many people from terrorism-sponsoring states enter the U.S. illegally?

Source: <http://homelandsecuritynewswire.com/how-many-people-terrorism-sponsoring-states-enter-us-illegally>

Senator John Cornyn (R-Texas) says the United States arrested people from nations designated as terrorism sponsors on the border with Mexico in the first nineteen months of Obama administration; an Austin newspaper investigated this claim and reached these conclusions: Cornyn is right that there were arrests of people from the four states designated by the United States as sponsoring terrorism (Cuba, Iran, Sudan, and Syria) -- but: the number of people from these states arrested on the Mexican border is miniscule (0.02 percent of the 540,865 total arrests on the southwestern border in fiscal 2009); 87 percent of the people from these countries arrested while trying to enter the United States illegally do so through the Canadian border; and the numbers are dropping: there were 3,309 apprehensions of people from terrorism-sponsoring countries in 2005 (when Libya and North Korea were also on the list), 935 apprehensions in 2009, and 736 in fiscal 2010

U.S. Sen. John Cornyn (R-Texas), came to a committee hearing on homeland security armed with statistics about the nation's southwestern border. Confronting DHS secretary Janet Napolitano on 9 March, Cornyn cited information that he said was from the Border Patrol about people from countries other than Mexico who have been detained near the southwestern border for illegally entering the United States. Cornyn said there were about 45,000 arrests of people from 140 different countries, excluding Mexico, in the nineteen months between the start of the 2009 fiscal year -- 1 October 2008 -- and 30 April 2010.

At least four of those nations "have been designated by the U.S. Department of State

as state sponsors of terrorism," Cornyn said. "How can you possibly claim that the approach of the administration is working when it comes to border security, in light of these statistics?"

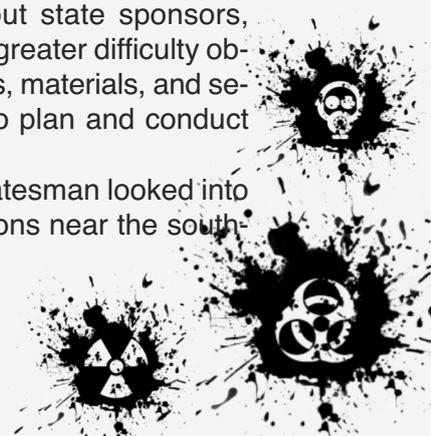
The senator made a similar point the next day while questioning National Intelligence director James Clapper at another hearing. "Would you agree with me, Director Clapper, that an individual with enough money and enough determination can penetrate our southwestern border and make their way into the United States ... and that that does represent a potential terrorist threat to the United States?" Cornyn asked.

Clapper's response: "Yes, sir. I don't -- I don't pretend, nor would, I don't think, Secretary Napolitano pretend that, you know, we've got an iron-clad perfect system."

The Austin American-Statesman decided to look into the facts cited by Cornyn to see whether Cornyn was right. Did the U.S. Border Patrol arrest people on the Mexico border who were from nations that the United States labels state sponsors of terrorism?

On the State Department's Web site there are only four nations currently designated as state sponsors of terrorism: Cuba, Iran, Sudan, and Syria. "State sponsors of terrorism provide critical support to many non-state terrorist groups," says a 2009 department report on terrorism. "Without state sponsors, these groups would have greater difficulty obtaining the funds, weapons, materials, and secure areas they require to plan and conduct operations."

Next, the American-Statesman looked into Border Patrol apprehensions near the south-



western border. The paper's reporters found that nearly all are of Mexican nationals, according to information the agency publishes on its Web site. In fiscal 2009, their 495,582 arrests accounted for 92 percent of the total.

The rest of the apprehensions on the Mexican border are of people from countries other than Mexico. The Border Patrol, which is part of the U.S. Customs and Border Protection division of the Homeland Security Department, publishes data on how many of those occur — but not by individual country. According to that information, there were 45,283 arrests of individuals from nations other than Mexico in fiscal 2009 and 50,912 in fiscal 2010 (it appears that Cornyn quoted only the fiscal 2009 number during the hearing.)

In DHS lingo, an "apprehension" is an arrest for being in the United States illegally. The number of people actually detained, however, is smaller because some individuals are arrested more than once, according to a June 2009 fact sheet published by the department's Office of Immigration Statistics.

As support for the senator's statement during the 9 March hearing, Cornyn spokesman Drew Brandewie sent the American-Statesman a chart that he said his office had received from Customs and Border Protection. Unlike the Border Patrol's published data, this chart lists a country-by-country breakdown of arrests "by citizenship" for illegal entry on the southwestern border during fiscal 2009 and the first seven months of fiscal 2010. This is the same time period that Cornyn noted at the 9 March hearing.

The southwestern border data from Cornyn's chart show that there were 105 apprehensions of Cubans, 10 of Iranians, six of Sudanese, and none of Syrians in fiscal 2009. In the first seven months of 2010, there were 48 apprehensions of Cubans, seven of Iranians, one of Sudanese, and two of Syrians.

All together, the apprehensions from those four countries represent 0.25 percent of the total arrests of non-Mexicans on the southwestern border over the 19-month period, according to Cornyn's chart (El Salvador, Guatemala, and Honduras alone accounted for 84 percent.)

Add Mexican nationals to the equation,

and the percentage shrinks more: According to the numbers in Cornyn's chart, apprehensions of people from the "state sponsor of terrorism" nations amounted to 0.02 percent of the 540,865 total arrests on the southwestern border in fiscal 2009.

What about the other U.S. border areas? The Border Patrol also apprehends people for illegal entry at the northern border with Canada and in the coastal areas of Puerto Rico, Florida, Louisiana, and other Gulf states. According to 2009 nationwide statistics that newspaper received from the Border Patrol, there were 935 arrests of people from the four "terrorism" nations: 910 of Cubans, 15 of Iranians, six of Sudanese, and four of Syrians. Subtract the 121 apprehensions that took place on the southwestern border that year, according to Cornyn's chart, and that leaves 814 arrests, mostly of Cubans.

It thus appears that 87 percent of the apprehensions of citizens from terrorism-sponsoring countries occurred away from the southwestern border.

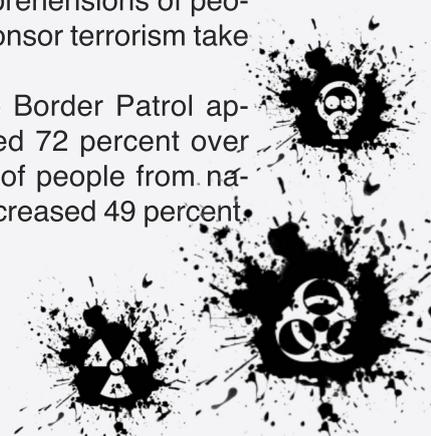
The American-Statesman asked the Border Patrol to confirm the information in Cornyn's chart, but the agency declined. "For operational integrity and intelligence-based targeting, the Border Patrol does not specifically list country of birth to the location of apprehension," Border Patrol spokesman Mark Qualia said.

To try to verify that the data were authentic, the paper asked Cornyn's office to show it the accompanying e-mail from the agency; Brandewie declined.

Border Patrol statistics that the agency either publishes online or confirmed for the paper, however, lend statistical support to Cornyn's claim.

For instance: The vast majority of apprehensions of people from countries other than Mexico occur on the southwestern border, 86 percent in fiscal 2009. So it is statistically likely that some of the apprehensions of people from countries that sponsor terrorism take place there, too.

While total nationwide Border Patrol apprehensions have dropped 72 percent over the past decade, arrests of people from nations other than Mexico increased 49 percent.



Have arrests of people from the “state sponsor of terrorism” nations also gone up?

Not as far as it is possible to tell. The paper asked the Border Patrol for a country-by-country breakdown for fiscal 2005, midway through the Bush administration and one of the peak years for total apprehensions in the past decade, as well as other years. All it received was the data for 2005, when six nations had the “terrorism” label: Cuba, Iran, Libya, North Korea, Sudan, and Syria. Nationwide in 2005, there were 3,309 apprehensions of people from terrorism-sponsoring countries out of a total of 1,189,000. That compares to the 935 apprehensions in 2009 out of a total of 556,041.

In fiscal 2010, the nationwide apprehensions of people from the four terrorism-sponsoring countries dropped again, to 736.

What of Cornyn’s larger argument: that the arrests of people from Cuba, Iran, Sudan, and Syria show that the federal government’s approach to security on the southwestern border is not working and that the border is vulnerable to penetration by terrorists crossing illegally?

“We’re not going to tackle the first point, which is a political bone of contention,” the American-Statesman writes. “We’re also mindful of the logic that any arrests are evidence that border security efforts are working. But we

wanted to find out whether there is evidence of would-be terrorists entering the U.S. illegally through Mexico.”

Matthew Chandler, press secretary for DHS, told the paper that “at this time, DHS does not have any credible information on terrorist groups operating along the southwest border.”

Eric Olson, a senior associate at the Mexico Institute of the Woodrow Wilson International Center for Scholars in Washington, D.C. echoed that thought in a 17 March Texas Tribune news article, saying that the State Department’s most recent report on terrorism gave no indication that Mexico has become a launch pad for terrorists crossing the border illegally.

“I suppose anyone that hates the U.S. would find a way to get in,” he told the Trib-

une. “But so far, most of the cases (of those visitors who have sought to harm the U.S.) have been overstayed visas. They come in through the front door, not the back door.”

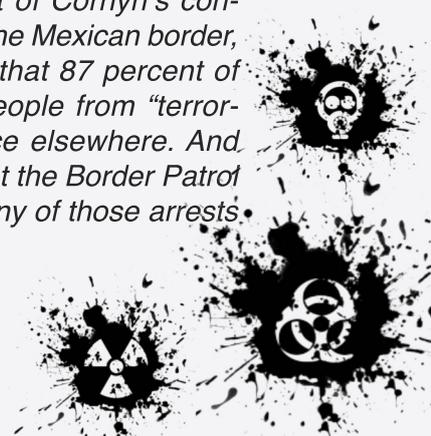
David Shirk, director of the University of San Diego’s Trans-Border Institute, which studies border-related topics such as the cooperation between the United States and Mexico on security initiatives, told the American-Statesman that although the United States has been arresting people at the border from countries associated with terrorism, that does not necessarily indicate that those individuals were would-be terrorists.

Fred Burton, vice president of intelligence for Stratfor, an Austin-based global intelligence company, told the papers that Cornyn’s comments are “spot-on” and that there is reason to be concerned about potential terrorists coming across the southwestern border. As an example, he pointed to a 3 June Stratfor assessment noting that in late May, DHS “issued a lookout to authorities in Texas, warning that ... (a) Somali purportedly linked to al Shabaab was believed to be in Mexico and was allegedly planning to attempt to cross the border into the United States.”

Al Shabaab, an Islamist militant group based in Somalia that has fought the nation’s transitional government for years, has been on the U.S. list of foreign terrorist organizations since early 2008.

Where does that leave us? Here is the American-Statesman’s conclusions:

*Cornyn’s claim — that people from countries designated as state sponsors of terrorism have been arrested on the Mexican border for illegally entering the U.S. — relies on Border Patrol statistics that the agency won’t confirm or deny. However, they appear to be consistent with broader data the agency has made public. And we have no reason to question the authenticity of the information we received from Cornyn’s office. But in the larger context of Cornyn’s concerns about security on the Mexican border, his own numbers show that 87 percent of the apprehensions of people from “terrorism” countries took place elsewhere. And our spot-check found that the Border Patrol made three times as many of those arrests.*



*in 2005, during the Bush administration, than in 2009.*

Because Cornyn's statement leaves out key details, we rate it Half True.

## Picking Up Where the Red Army Faction Left Off: Tales from the German Jihad

By Raffaello Pantucci

Source: <http://www.jamestown.org>

### TERRORISM MONITOR

*In-depth Analysis of al-Qaeda and the War on Terror*

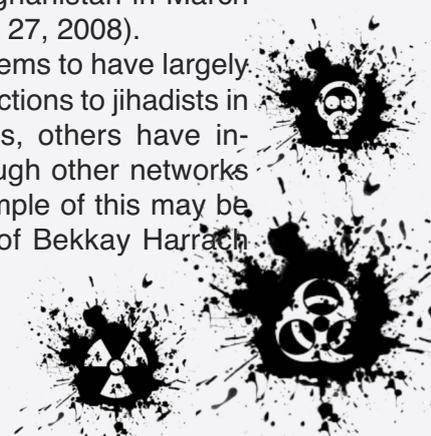
The shooting deaths in early March of two American servicemen at Frankfurt airport as they awaited a plane taking them to Afghanistan was an event that seemed to harken back to the 1970s, when left-wing groups like the Red Army Faction (RAF) targeted American soldiers stationed in Germany. More in tune with the times, however, Arid Uka, the 21-year-old Kosovar responsible for the killings, appears to have been an individual living on the fringes of Germany's growing Salafist scene (Der Spiegel, March 3). While abnormal in its success, Uka's shooting was part of a jihadist scene in Germany that has been growing apace for some time.

Just over a week after Uka's action in Frankfurt, a court in Berlin convicted Filiz Gelowicz of "supporting foreign terrorist groups" (AFP, March 9). Filiz is the wife of one of the German jihad's more notorious members, Fritz Gelowicz, who was sentenced to 12 years in prison as part of Germany's largest terrorism trial since the days of the RAF (Der Spiegel, March 4, 2010). Gelowicz was incarcerated for his role in a plot directed by the largely Uzbek Islamic Jihad Union (IJU) to carry out a bombing on a U.S. military target in Germany. His wife Filiz confessed to sending money to German terrorist networks in Waziristan, and was accused of being a key online supporter of German jihadists fighting in Waziristan (AP, November 5, 2010; Der Spiegel, February 22, 2010).

The group is part of a larger community of German jihadists who have developed a close relationship with the IJU and the Islamic Movement of Uzbekistan (IMU) and who were

eventually allowed to establish their own organization called the Deutsche Taliban Mujahideen (DTM). According to German terrorism specialist Guido Steinberg (formerly of the German Chancellery and now at the German Institute for International and Security Affairs), the DTM is largely a propaganda vehicle founded by the IJU in 2009 in response to the growing number of German jihadists who had been arriving in Waziristan seeking to fight alongside the group. This view was seemingly confirmed by the published memoirs of late DTM member Eric Breininger (a.k.a. Abdul Ghafar al-Alamani), a German convert to Islam who had been fighting alongside the IJU when his leader came and asked him if he wanted to join a group of Germans who had recently completed their training and were going to join the Taliban as a sub-group called the DTM. [1] Breininger was killed on April 30, 2010, in a firefight in Waziristan with Pakistani soldiers (Der Spiegel, May 3, 2010; see Terrorism Focus, January 28, 2009). He was not the first from the group to have fallen in the region; a number of German jihadists had already been killed in battle and Turkish-German Cüneyt Ciftci (a resident of Bavaria) became Germany's first known Islamist suicide bomber when he carried out an attack against U.S. forces in Afghanistan in March 2008 (Der Spiegel, March 27, 2008).

But while this group seems to have largely managed to find its connections to jihadists in Waziristan by themselves, others have instead been directed through other networks tied to al-Qaeda. An example of this may be found in the experience of Bekkay Harrach



(a.k.a. Abu Talha al-Alamani), a Moroccan-German whose death was announced by fellow extremists on Islamist forums in January (BBC, January 20, 2011). Harrach was a long-time extremist who had supposedly pursued jihad in the West Bank, Iraq and finally Waziristan. He was directed to the training camps in Waziristan by long-time German Lashkar-e-Taiba and al-Qaeda supporter Aleem Nasir. Harrach was featured in videos released under the banner of As-Sahab, Al Qaeda's media wing, as well as ones linked to the IJU. His death, however, appears to have occurred fighting alongside the IMU (for more on Harrach, see Terrorism Monitor, October 1, 2009).

Others who ended up with the group were drawn to Waziristan only after first connecting with American Islamist Anwar al-Awlaki in Yemen. Mounir and Yassin Chouka, Moroccan-born brothers who grew up in Bonn, were initially drawn to Yemen for jihad and claim to have met with al-Awlaki and an individual claiming to be a former bodyguard of Osama bin Laden.

According to their account, after spending some time there with the cleric and his network, the brothers were told the region was very dangerous for foreigners and were instead directed to Waziristan, where they were warmly welcomed. Jihadist groups in Waziristan were at that time actively seeking to recruit entire families. Enthused by this, the brothers set off, arriving in 2008 in Waziristan to join the IMU – a group they claimed not to have heard of before. [2]

Other German jihadis drawn to Yemen have instead chosen to stay there rather than go to Waziristan. In March a court in Yemen convicted Yemeni-German Hans Harmel of being involved in forming an armed group to conduct terrorist acts (Yemen Post, March 5). The details of his case are unclear, but there are other reports of some German nationals showing up at Yemeni schools and training camps. The growing German Salafist scene is likely feeding both the Yemen and Waziristan networks. According to Steinberg, there are some 4000-5000 Salafists in Germany at the moment and "this is particularly worrying because all the German individuals who went

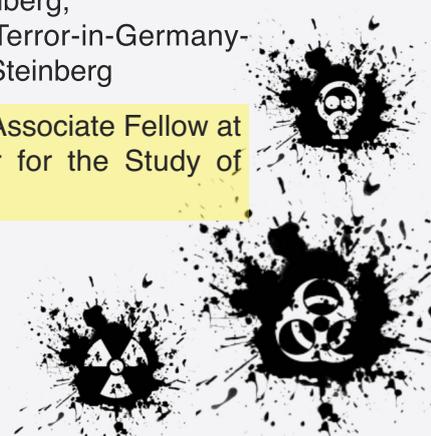
to join al-Qaeda, IMU and IJU in Pakistan first attended Salafist mosques." [3]

It is in many ways the threat as expressed by gunman Arid Uka that is of greatest concern to German authorities. While it is unclear whether he was linked to existing networks – according to neighbors he knew another recently repatriated German in his building who had been caught fighting in Waziristan and his Facebook page showed evidence of contact with German Salafists – his attack does not appear to have been directed by others and he appears currently to be a "lone wolf" extremist (AP, March 3). There have already been other cases of "lone-wolf" extremists lurking on the periphery of the German radical scene, including Cameroonian convert Kevin S., who had met one of Fritz Gelowicz's co-conspirators and threatened to carry out an attack through an amateurish YouTube video when he was arrested, and Turkish-German Adnan V. who was convicted in February of trying to build a bomb, telling others about it online and posting extremist videos online (Deutsche Presse Agentur, February 8). While officials suggest there are about 220 citizens who have trained or are training in jihadist camps, only ten of the 120 who have returned to Germany are in jail. Faced with both al-Qaeda/IMU trained militants and self-radicalized German nationals operating outside the normal networks, German authorities remain uncertain as to the exact extent of a clearly growing threat.

### Notes:

1. Translation summary can be found at: <http://www.jihadica.com/guest-post-the-story-of-eric-breininger/>
2. An English summary of their account can be found at: <http://ojihad.wordpress.com/2011/02/13/german-jihadi-brothers-met-anwar-al-awlaki/>.
3. Raffaello Pantucci: "Terror in Germany: An interview with Guido Steinberg," <http://www.icsr.info/blog/Terror-in-Germany-An-interview-with-Guido-Steinberg>

Raffaello Pantucci is an Associate Fellow at the International Center for the Study of Radicalisation (ICSR).



### Al-Qaeda 'trains 100 Europeans' for attack

Source: [http://www.spacewar.com/reports/Al-Qaida\\_trains\\_100\\_Europeans\\_for\\_attack\\_999.html](http://www.spacewar.com/reports/Al-Qaida_trains_100_Europeans_for_attack_999.html)

European security authorities are concerned about reports that al-Qaeda and its North African affiliate, determined to strike the United States and its allies, are recruiting European operatives able to blend into Western societies and evade capture. France's Le Figaro newspaper recently cited French intelligence sources as saying that 100 such recruits are undergoing training in camps along the Afghanistan-Pakistan border. The newspaper said French authorities were on alert for attacks and noted that 14 French citizens were among Europeans undergoing training by al-Qaeda in late 2010.

French President Nicolas Sarkozy declared war on the jihadist group in North Africa, al-Qaeda in the Islamic Maghreb, in July 2010 after it beheaded a 78-year-old French captive, Michel Germaneau. He was killed after an abortive attempt by French Special Forces to rescue him in the Sahara Desert in Mali. Six AQIM fighters were shot dead in the attack.

AQIM has stepped up its attacks on French nationals in northwest African, kidnapping at least eight and killing three. In January, Osama bin Laden threatened attacks on France, "on different fronts, inside and outside of France." The last major successful terrorist attack in France was in 1995, when Algeria's Armed Islamic Group, or GIA, from which AQIM emerged two years ago, carried out a bombing campaign against the transportation system and tourist sites.

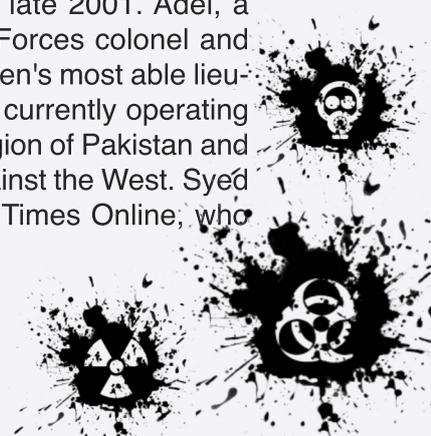
The jihadists' most innovative, and potentially most lethal, operation in France was on Dec. 24, 1994, during the Algerian civil war. Four GIA members in Algerian police uniforms hijacked a Paris-bound Air France Airbus 300 at Houari Boumediene Airport in Algiers, killed three passengers and forced the pilot to fly the jetliner to Marseille. There they ordered the aircraft loaded with fuel and planned to crash it into the Eiffel Tower in Paris -- a forerunner of al-Qaeda's Sept. 11, 2001, attacks on the United States.

The plot failed when French counter-terrorism police stormed the aircraft and killed all four hijackers.

In December 2010, police forces across Western Europe arrested dozens of suspects amid warnings of continent-wide terrorist attacks hatched in Pakistan. No major attack took place and there was speculation that authorities had been spooked by faulty intelligence.

But Western intelligence sources insist that al-Qaeda is planning attacks in the West that go beyond the amateurish lone-wolf type of attacks that have occurred in recent months in the United States. The report also supported the belief among Western intelligence services that the focal point of this threat is Pakistan, now the major battleground in the war against al-Qaeda. The increase in such activity observed in recent months has occurred at a time when al-Qaeda has been re-energized by the gathering of a new field leadership comprising veteran commanders drawn from other regions, many with their eyes on hitting the West hard. These include such notorious figures as Mohammed Ilyas Kashmiri, a 45-year-old Pakistani who fought India in Kashmir for years and now heads bin Laden's Lashkar-e Zil, or Shadow Army. Kashmiri, who joined al-Qaeda in 2005, is also closely connected to bin Laden's notorious Brigade 313, one of the key components of the Lashkar-e Zil. According to the CIA, "the footprints of Brigade 313 are now in Europe."

Al-Qaeda's leadership cadre has also been reinforced by the return of veteran commanders such as Saif al-Adel, an Egyptian, and other seasoned jihadists from Iran, where they were reportedly held under varying degrees of restriction since late 2001. Adel, a former Egyptian Special Forces colonel and considered one of bin Laden's most able lieutenants, is reported to be currently operating in the North Waziristan region of Pakistan and planning major strikes against the West. Syed Saleem Shahzad of Asia Times Online, who



has access to jihadist circles in Pakistan and Afghanistan, reported in January that al-Qaida was planning to infiltrate white Westerners, all converts to Islam, into their home countries "to spread the flames of the South Asian war theater to the West." The Westerners include a group of 12 Canadians said to

be undergoing terrorist training in jihadist camps in North Waziristan. Others reportedly include Americans, Britons and Germans. Taliban sources said the Canadian group is led by a 30-year-old known by his nom de guerre of Abu Shahid. He converted to Islam in 2007.

## Terror Quartet plots al-Qaida attacks

Source: [http://www.spacewar.com/reports/Terror\\_Quartet\\_plots\\_al-Qaida\\_attacks\\_999.html](http://www.spacewar.com/reports/Terror_Quartet_plots_al-Qaida_attacks_999.html)

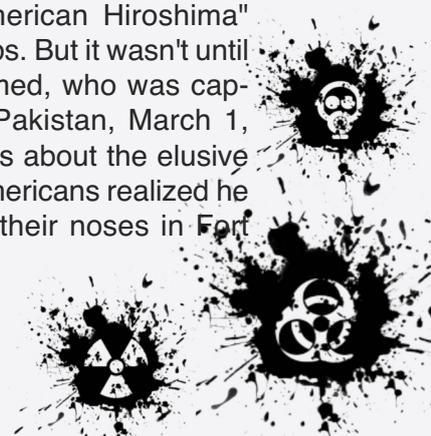
Al-Qaida has been unable to mount a major terrorist attack in the United States since 9/11 despite several attempts but recent reports indicate that the network's top commanders are determined to hit the Americans hard. Four of these leaders -- Saif al-Adel, Mahfouz Ould Walid, Ilyas Kashmiri and Adnan al-Shukrijuma -- are reported to be in the North Waziristan region of Pakistan, plotting new attacks and recruiting operatives for special operations.

- **Saif al-Adel**, a veteran al-Qaida chieftain and former colonel in the Egyptian army's Special Forces, moved to Waziristan in 2010 from Iran, where he had been apparently restricted since 2002. A close associate of Khalid Sheik Mohammed, alleged mastermind of 9/11, Adel, a 50-year-old Egyptian, is one of al-Qaida's senior strategists who sat on its military committee. He has been linked to the Oct. 12, 2000, bombing of the USS Cole in Aden harbor that killed 17 sailors, and to the U.S. embassy bombings in East Africa Aug. 7, 1998, that killed more than 200 people. Adel -- real name Muhammad Ibrahim Makkawi -- has a \$5 million U.S. bounty on his head and is wanted in the United States for allegedly training the 9/11 suicide attackers.
- **Ould Walid**, aka Abu Hafs the Mauritanian, is a veteran jihadist who fought the Soviets in Afghanistan in 1979-89. Aged 36, he was a close adviser to Osama bin Laden before they became separated during the U.S. invasion of Afghanistan fol-



lowing 9/11. He accompanied al-Adel from Iran. Arab intelligence sources say that the hard-line clerics and senior Revolutionary Guards officers who oversaw Abu Hafs and al-Adel during their sojourn in Iran allowed them to operate with considerable freedom and have access to sophisticated electronic communications systems. The Americans mistakenly reported in January 2002 that Abu Hafs, a key military planner in the al-Qaida hierarchy, had been killed in Afghanistan.

- Saudi-born **Adnan Shukrijuma**, 35, is one of the few al-Qaida leadership cadre who has actually lived in the United States. That makes him a key figure in the reported efforts to plan attacks inside the United States. He is a naturalized U.S. citizen. His family moved to Florida in 1985 where he studied computer engineering and started moving in Islamist circles before going underground following 9/11. He has a \$5 million U.S. bounty on his head but has eluded a global manhunt for a decade. Al-Qaida leader Abu Zubaydah, captured in Pakistan March 28, 2002, told CIA interrogators of several al-Qaida plots. One involved "Jaafar the pilot" -- Shukrijuma in one of his many disguises -- who he said would deliver an "American Hiroshima" using radioactive bombs. But it wasn't until Khalid Sheik Mohammed, who was captured in Rawalpindi, Pakistan, March 1, 2003, spilled the beans about the elusive Shukrijuma that the Americans realized he had lived right under their noses in Fort



Lauderdale for years. U.S. authorities say he was the mastermind behind a failed attack on the New York subway. The Long War Journal Web site, which monitors global terrorism, calls him al-Qaida's "chief of operations for North America."

- **Ilyas Kashmiri**, a 45-year-old Pakistani, heads al-Qaida's Lashkar al Zil, or Shadow Army, an elite jihadist unit of seasoned fighters made up of Arabs, Central Asians and Pakistanis. He was linked to David Coleman Headley, an American arrested for involvement in the November 2008 carnage in the Indian city of Mumbai in which 160 people were killed. Headley also has been charged with conspiring to attack Jyllands-Posten, a Danish newspaper that incensed jihadists by publishing cartoons of the Prophet Mohammed in 2005. Kashmiri's operational signature is

attacks by groups of highly trained gunmen as in Mumbai. He has threatened similar attacks in the West. In a 2009 interview, Kashmiri said Mumbai "was nothing compared to what has been planned for the future." According to Islamist sources, he joined the Pakistani-directed insurgency against India over divided Kashmir in his teens. By 1991, he was a key figure in Harkat-ul Jihad-i-Islami, one of the most ferocious of the Pakistani groups active in Kashmir. He joined bin Laden in 2005 and is considered one of his most effective commanders and planners. Kashmiri, who sports a red henna-dyed beard, is virtually unknown outside the intelligence community. But he's rated as a most dangerous adversary, deadly, highly innovative, bold and hard to track.

## Russian terror concerns for 2014 Olympics

Source:

[http://www.spacewar.com/reports/Russian\\_terror\\_concerns\\_for\\_2014\\_Olympics\\_999.html](http://www.spacewar.com/reports/Russian_terror_concerns_for_2014_Olympics_999.html)

Russia is preparing for possible terrorist threats to the 2014 Winter Olympics. At a recent session of the Russian Security Council in Sochi, the site of the 2014 Winter Games, Russian President Dmitry Medvedev stated that Russia intends to spend \$2 billion on security for the 2014 Olympics, twice what was spent on security by the organizers of the 2010 Games in Vancouver and more than the

outlays on security by the organizers in Athens, Greece, in 2004 for the Summer Games, which are larger than Winter Olympics.

In Athens in 2004 the Games organizers faced three major threats -- Kosovar Albanians, who had gained independence and were promising to focus attention upon themselves with a terrorist act; radical Turks who were reportedly preparing to seize Olympian athletic hostages; and dissident Kurdish elements, Nasha Versiia reported Sunday.

A recent Security Council session said possible threats to the Games included North Caucasian separatists in Chechnya, Ingushetia, Dagestan and Karachay-Cherkessia and Georgian irredentists.

Of the various possible disruptive elements in Sochi, Russian authorities are said to be concerned that potential Georgian attackers might have significant foreign backing, as Georgian governmental irredentists have the support of the West-



ern democracies, led by the United States.

Since the 2008 conflict, relations between Russia and Georgia have remained extremely strained, as the administration of Georgian President Mikheil Saakashvili has never accepted the loss of Abkhazia and South Ossetia, whose subsequent independence Russia recognized.

Adding to the uncertainties surrounding the games, on Feb. 25 Saakashvili spoke live on PIK television. Reading his televised address in Russian, Saakashvili stated that "Georgia poses zero threat to Sochi physically."

In contrast, at a recent meeting of the Security Council in Krasnaia Poliana, Medvedev noted that Russian intelligence services have information on possible provocations during

the 2014 Olympics being prepared by Georgia. "There are also certain problems involving our neighbor Georgia, everything that requires increased attention along the lines of the Foreign Ministry, law enforcement authorities and the uniformed agencies has to be done, therefore, and a secure barrier has to be placed in the way of any provocations," Medvedev said.

As part of the blueprint for security drawn up by the FSB, successor to the KGB and providing for the creation of the Ministry of Internal Affairs 2014 Olympics center, it is planned to increase the ranks of the Sochi police to 25,000 to deal with any unexpected events.



### Movie: The Third Jihad

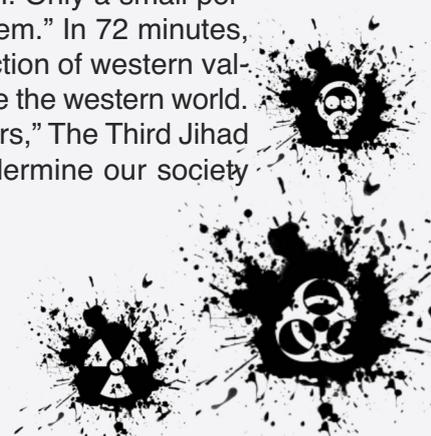
Source: <http://www.thethirdjihad.com/>

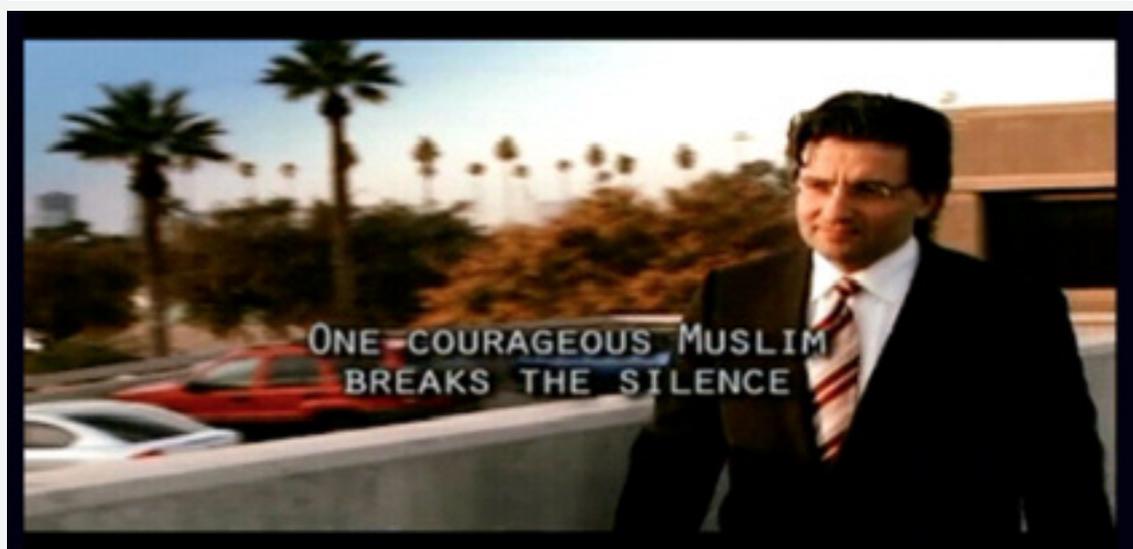
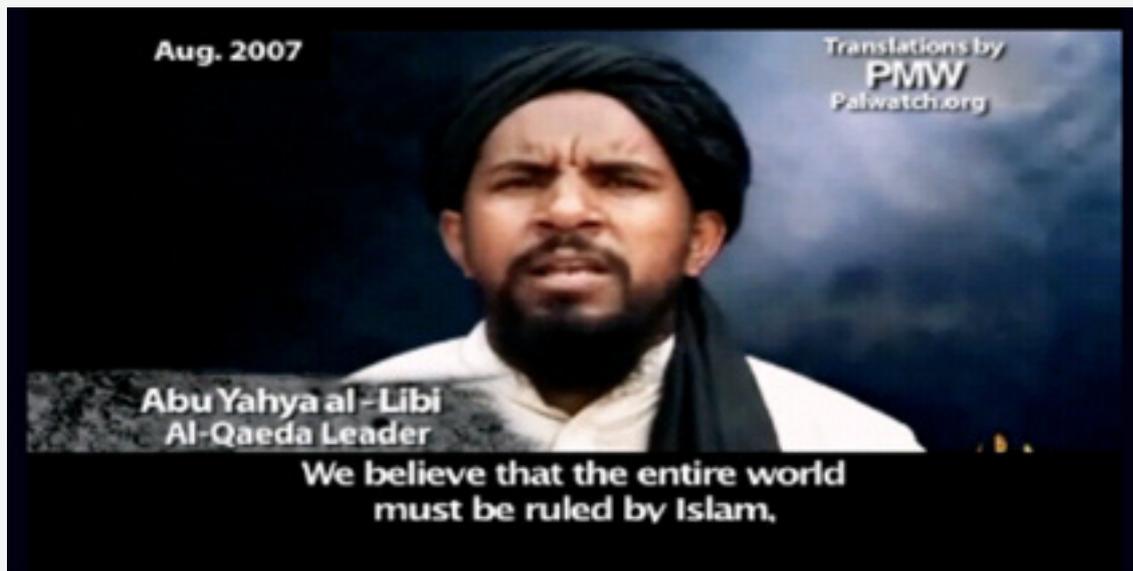
The Third Jihad, the newest offering from the producers of the captivating documentary film, *Obsession*, explores the existence of radical Islam in America and the emerging risk that this



“homegrown jihad” poses to national security, western liberties and the “American way of life.” The film, which is narrated by devout Muslim American Dr. M. Zuhi Jasser, opens with the following statement: “This is not a film about Islam. It is about the threat of radical Islam. Only a small per-

centage of the world's 1.3 billion Muslims are radical. This film is about them.” In 72 minutes, the film reveals that radical Islamists driven by a religiously motivated rejection of western values cultures and religion are engaging in a multifaceted strategy to overcome the western world. In contrast to the use of “violent jihad” and terror to instil fear in “non-believers,” The Third Jihad introduces the concept of “cultural jihad” as a means to infiltrate and undermine our society from within.





### Darpa's Hologram Goggles Will Unleash Drone Hell

Source: <http://www.wired.com/dangerroom/2011/04/holograms-bring-hell/>

The Pentagon's mad-science arm wants robotic death-from-above, on demand. And the key to getting it done just might be holograms.

Let me explain. Right now, authorizing and targeting air strikes is a process that's sometimes bureaucratic, and sometimes dangerous as hell. Bureaucratic as in the Stanley McChrystal phase of the Afghanistan war, when it took a gaggle of lawyers, intelligence

The program to make this all happen is called Persistent Close Air Support, or PCAS. And the goal is to give that controller the ability to "request and control near-instantaneous airborne fire support."

Darpa and the Air Force Research Lab recently handed out big contracts to the usual suspects — Northrop Grumman and Raytheon — for the next phase of the PCAS project.

But the military also gave a million bucks to the relatively tiny Vuzix Corp. of Rochester, New York. Which is a little odd, at first blush, because Vuzix is an eye-wear company, specializing in augmented reality specs.

But a little augmented reality may be just what a JTAC needs, in order to call in those airstrikes on his own. Rather than staring down at a bunch of maps and computer screens — and calling up intelligence analysts at headquarters for more info — it'd be better (and faster, and less prone to error) if he could get all of that data right on his augmented reality goggles. Oh, and if there was an integrated head-tracker, so the attached computer could basically see what the JTAC sees.

"It is all about speeding up the CAS [close air support] mission and eliminating friendly fire issues that can occur if the user on the ground may not have the whole picture of what is around them," Vuzix executive Stephen Glaser tells Danger Room.

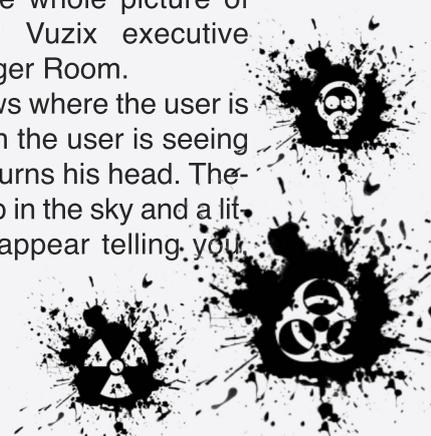
"The head tracker knows where the user is looking, so the information the user is seeing changes as he moves or turns his head. Theoretically you could look up in the sky and a little green triangle would appear telling you

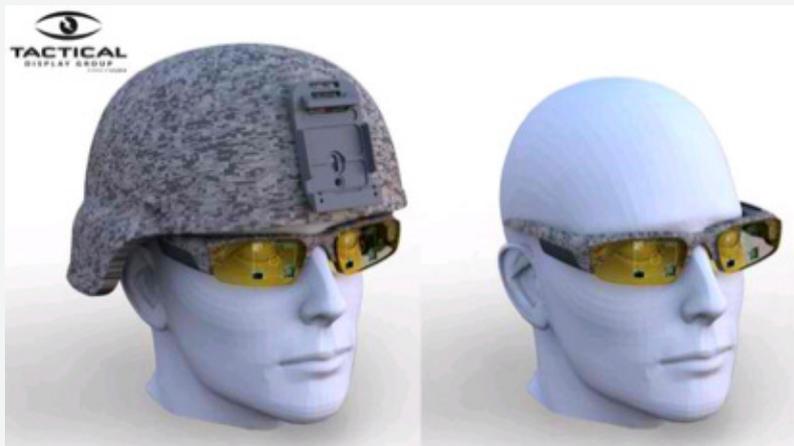


analysts, air controllers, and commanders at multiple layers to put steel on target.

The result was fewer civilian casualties — but more U.S. troops, locked in firefights without air support. Dangerous as hell as in the Libya war, where NATO jets are accidentally offing Libyan rebels with such alarming regularity that the opposition forces are now painting their vehicles' roofs pink, to distinguish them from Gadhafi's rides.

Darpa believes there might be a single technological fix to both problems: Give a single guy on the ground a direct data link to the drone (or manned plane) circling above. That would eliminate the multilayered, bureaucratic approach, in which information is often passed through IM windows and static-ridden radio connections. That same lone "Joint Terminal Attack Controller," or JTAC, might be low-profile enough to slip into a situation like Libya without causing too much of an international ruckus.





you have an F-16 30 miles out at 21,000 feet. It could also tell you what type of ordnance the plane was carrying, so you could make a quick decision if that plane would be appropriate for the mission.”

Some of this can be done today with pilots' heads-up displays. But those require so much power and light, a JTAC would need to lug around an extra 8 pounds of batteries to make

it work. (And it still wouldn't work in direct sunlight.) That's where the holograms come in.

Vuzix's setup uses a more-or-less traditional microdisplay, then mates that up to a flat piece of glass called an optical waveguide. The light from the display travels down the glass and bounces around inside the glass parallel flats. Those beams are directed to holographic film, which bounces the image to the eye.

If the plan works, the system will be tiny — just 3 mm thick. And when the display is off, it'll be totally see-through. Glaser notes: “This will ultimately allow us to design the display right into a pair of sunglasses, so no one will know you are even wearing a display.” Which could make the goggles good for civilians, as well as troops ordering in a robotic, lethal hail.

## Inviting terror targets in New York City poorly guarded

Source: <http://homelandsecuritynewswire.com/inviting-terror-targets-new-york-city-poorly-guarded>

A list of Port Authority facilities especially vulnerable to terrorist attacks inadvertently released; the list contains some of the most heavily trafficked bridges, tunnels, and transit hubs in the world

Late last week, the New York-New Jersey Port Authority police union, the Police Benevolent Association, revealed what should be described as the terrorist's guide to New York City. The list of targets was supposed to be confidential. The New York Post, which obtained the list, notes that some of the most heavily trafficked bridges, tunnels, and transit hubs in the world are on a list of Port Authority facilities vulnerable to terrorist attacks. The Hudson River crossings to Manhattan — the Lincoln and Holland tunnels and the George Washington Bridge — along with the Bayonne Bridge, the roadway under the Port Authority Bus

Terminal and the AirTrain to Kennedy Airport, all get inadequate policing, the documents show.

The Port Authority's most vulnerable sites, according to its police union:

- Lincoln & Holland tunnels, GW Bridge: An incident at one site would leave the other two without police coverage.
- JFK AirTrain. There are no cops patrolling the rails 97 percent of the time.



The vulnerable George Washington Bridge  
Source: [manhattanstyle.com](http://manhattanstyle.com)



- Port Authority Bus Terminal. A roadway that runs below it is totally unmanned.
- Bayonne Bridge. It is left with no police coverage several times during the day.

In a statement, the PA said it had spent more than \$6 billion since 9/11 on a “multilayered security protocol [that] includes technological elements as well as private security.”

## Special Event Planning

Source: [http://www.domesticpreparedness.com/Commentary/DP40/FINAL\\_REPORT:\\_Special\\_Event\\_Planning/](http://www.domesticpreparedness.com/Commentary/DP40/FINAL_REPORT:_Special_Event_Planning/)

Each year, thousands of entities – including government agencies, private volunteer organizations, and commercial enterprises at all levels – collaborate to plan and oversee a wide array of special events across the country. These events vary greatly in terms of size, scope, and complexity. They include high-visibility National Special Security Events (NSSEs) like the State of the Union Address and Presidential nominating conventions; major sports events like the Super Bowl and Indy 500; more common events such as major league and college baseball/basketball/football games and concerts; and local events such as urban-area fireworks displays and small-town holiday parades.

In many cases, these special event activities involve broad multi-jurisdictional, multi-agency, public/private-sector planning and coordination. The degree of detail necessary depends on the nature of the event, crowd size, presence of dignitaries, proximity to critical infrastructures, threat level, and other factors. In support of these activities, many government, not-for-profit, and commercial entities have developed extensive venue-focused security and emergency response protocols, best practices, and partnership networks. It is important to note that these protocols and practices are generally intended to cover a “snapshot in time” – i.e., the immediate period before, during, and after the event takes place. They typically are not designed to support a more generalized “steady-state” emergency preparedness or response posture.

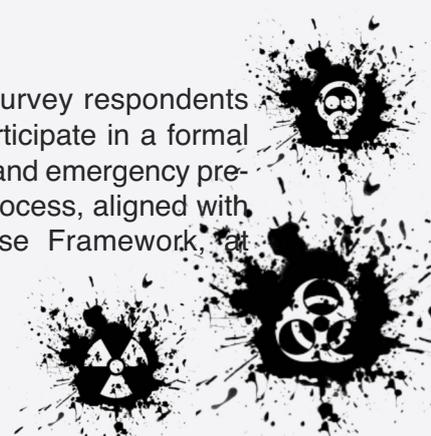
Nonetheless, it is interesting to consider

the potential application of the protocols, systems, information-sharing networks, relationships, and best practices developed and used to support special event venue-driven planning in a much broader context. In fact, it makes sense to postulate that government agencies, commercial enterprises, and communities that actively engage in public/private-sector planning for special events should be better prepared to deal with all-hazard emergencies in a much broader context. Putting it simply, if a major urban area plays host to the World Series or even less complex special events on a frequent basis, that area should be better postured, in some sense, to deal more effectively with a broader range of potential contingencies.

The following analysis reflects the opinions of DomPrep40 members and DomPrep readers compiled through the most recent DomPrep survey on the application of special events-focused best practices, planning structures, and information-sharing mechanisms in a more generalized preparedness context. The survey results offer some useful information for discussing various preparedness challenges at the national, regional, and local levels from a “Whole-of-Community” perspective.

### Key Findings

- The vast majority of survey respondents indicated that they participate in a formal special event security and emergency preparedness planning process, aligned with the National Response Framework.



least once a year. Surprisingly, less than half of the respondents maintain formal special events planning checklists or best practices inventories.

- The vast majority of respondents believe that there is a strong correlation between special events planning and oversight, and community preparedness in a much broader context, including terrorism prevention and all-hazard consequence mitigation.
- More than half of respondents' jurisdictions/organizations actively participate in public/private-sector information sharing

associated with special events security and emergency preparedness planning, and believe that private sector participation in such activities is important.

- The majority of the respondents participate in special events security and emergency preparedness training and exercise activities on a frequent basis, and believe that these activities bolster community preparedness in a broader all-hazards context.

NOTE: Download the full report from Newsletter's "CBRNE-CT Papers" section

## Border security: Razor wire is a game changer

Source: <http://homelandsecuritynewswire.com/border-security-razor-wire-game-changer>

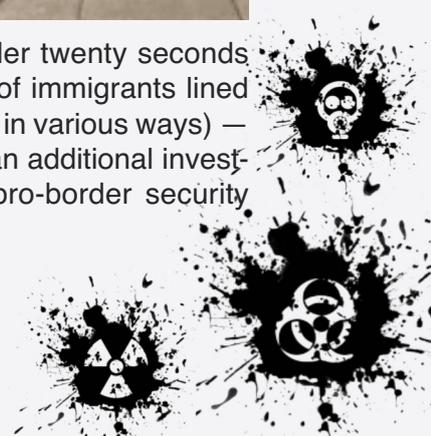
There is one solution to securing the U.S. borders that should receive more attention: razor wire; it creates a significantly more serious obstacle to every class of fence climber; the one stretch of border fence that does have razor wire (San Ysidro, five miles of it) saw significant drops in all three areas studied -- attacks on border agents, illegal crossings, and injuries to illegal immigrants; razor-wire fencing can only be crossed at either end, or at any point that an investment has been made in making a breach (path through the razor wire, hole through the fence, or tunnel under the fence); this means that a stretch of razor-wire fence is reduced to known breaches -- making those breaches an enforcement funnel.

I read with interest the Ben Frankel border protection article. I would suggest an additional way to look at the spending on physical (and virtual) fencing along the border — as a way to communicate the level of government competence (currently, not high) regarding border security, and tangentially, immigration reform. There will be no immigration reform until there is significantly improved border security — or some perception of significantly improved border security. Even formerly pro-reform Republicans like Senator John McCain (R-Arizona) and Representative Jeff Flake (R-Arizona) have hardened their stance on security first. DHS must realize that all border spending is PR spending — either good or bad.

The SBInet virtual fence can be counted as bad PR spending — \$3.7 billion to trumpet governmental incompetence. And anyone who attended Boeing's dog-and-pony show at the beginning of SBInet (I attended in Long Beach) could see it coming from the beginning. The physical infrastructure however, most of which does improve security to some degree, also has an element of bad PR — the 12-foot ladder argument ("For every 10-foot fence there's a 12-foot ladder") and girls



climbing the fence in under twenty seconds (PLUS countless photos of immigrants lined up and crossing the fence in various ways) — make every dollar spent an additional investment in bad PR to the pro-border security lobby.



There is a fencing component that has seen almost zero deployment on the border, which would be less-Swiftian than land mines, yet incredibly cost effective both for security and PR. The component is razor wire. As we like to say, a fence without razor wire is just a climbing wall — or something to prop your ladder against.



Razor wire is a game changer. While not indestructible, it does create a significantly more serious obstacle to every class of fence climber (see photo). The one stretch of border fence that does have razor wire (San Ysidro, five miles of it) saw significant drops in all three areas studied pre- and post-installation — attacks on border agents, crossings, and most-interesting, injuries to illegal immigrants. The drops were over 50 percent in each category. Apparently, a lot of people who climb the tallest fences get hurt jumping down the other side. With razor wire they just don't climb it.

The DHS representative from the Information and Communication Division who relayed these results to us, said the report is private, and not likely to be published externally. We wonder, why? Our company sup-

plied the razor wire for this section of fencing, and when inquiring about a border tour to see how it was holding up, we asked regarding how many areas had been vandalized in the two years since its installation. We were told that DHS was unaware of any area of vandalism to the razor wire.

While I find that hard to believe (and have not yet toured it personally to confirm this) — the word was that people do not attempt to climb over. They will attempt to cut through in various places (the lower portion of the fence), or move to another area, but apparently the self-preservation instinct keeps people from getting tangled up in the multiple rows, high on the top of the fence.

Of course, my company has a motivating self-interest in seeing razor wire installed along some or all of the border fence — we manufacture razor wire (Razor Wire International of Phoenix, Arizona). But we also have a unique perspective into the effectiveness of this fencing component, and why it is used extensively for corrections, military, international borders and other critical infrastructure security. It is highly effective, and significantly improves every other dollar invested in infrastructure. Plus, it is PR money well spent. Razor wire both looks serious and is serious.

Some people are worried about injuries to illegal crossers that razor wire might cause



(the study shows a drop in injuries). Others worry about the message it sends to our southern neighbor. But these are not concerns of the pro-border security lobby. Take ten miles of fencing without razor wire, and it can typically be crossed at any point along the ten miles — requiring constant enforcement of the entire perimeter. Take ten miles of fencing with razor wire, and it can only be crossed at either end, or at any point that an investment has been made in creating a breach (path through the razor wire, hole through the fence, or tunnel under the fence). Suddenly, ten miles is reduced to known breaches — making these breaches an enforcement funnel. This is strategic porosity. Scheduled surveillance and drones can be used to identify

and catalog breaches, with enforcement efforts deployed accordingly.

Razor wire will add real security — and positive PR — at a fraction of the cost of virtual fencing. And for the anti-fence advocates, we can call it temporary fencing — until something better comes along. DHS secretary Janet Napolitano must have a PR budget for DHS. She should start spending some of it on strategically deployed razor wire. It might actually convince someone the government is serious about doing more than just spending money.

Kent Olmstead is CFO of Razor Wire International

## Missiles, Money and Migration: The Impact of the Libyan Crisis on the African Sahel

By Dario Cristiani

Source: <http://www.jamestown.org>

### TERRORISM MONITOR

*In-depth Analysis of al-Qaeda and the War on Terror*

Unlike many other parts of the world, Libyan leader Mu'ammur Qaddafi enjoys widespread support in Africa as a result of years of Libyan diplomatic and economic engagement in the continent. Libyan money and arms have boosted the stability of many African regimes.

Clearly, Qaddafi's moves in Africa were connected to the advancement of specific geopolitical and diplomatic interests. With its proximity to Libya, the African Sahel region has always been an important target of Qaddafi's ambitious foreign policy.

Libyan support has been strong in the Sahelian nation of Mali. In the Malian capital of Bamako, the Front for Rejection of the Colonial War in Libya organized a march to the Libyan Embassy on March 19. A second rally was held on March 25, organized by the Malian Coalition to Support the Great Libyan Jamahiriya. Both protests were characterized by harsh anti-French and anti-American slogans (Journal du Mali, March 25; Mali Web,

March, 29). These marches are only two examples of a more general feeling spreading throughout Africa after NATO's attacks on Libya began. Mu'ammur Qaddafi enjoys strong popularity among the peoples of the continent and also among many of its governments. Paradoxically — given the peculiar history of Libyan foreign policy under Qaddafi — the "Brother Leader" has represented an element of stability for many African governments due to his money and his political and diplomatic support, and the possibility that his regime in Libya will come to an end is perceived as a major threat by many African actors.

Libya is one of the largest financial contributors to the African Union and it also pays many bills for small and poor countries, which explains the very cool reaction of the African Union to international efforts against Qaddafi.

Through the Libya Arab Africa Investment Company (LAAICO), Qaddafi has invested in



a wide range of African economic activities, including hotels, banks, telecommunications, media, agriculture and many other sectors. [1] Qaddafi's active economic foreign policy in Africa, linked to his anti-imperialist stance and his more recent Pan-African narrative, has given him not only the support of the elites of



these countries, but also the support of many intellectuals and other sectors of the population (La Depeche, March 18). This peculiar Libyan "soft power" approach to Africa has helped Qaddafi become very popular in many parts of the continent.

### **The Roots of Libyan Involvement in Africa and Its "Near Abroad"**

Africa emerged as a priority in Gaddafi's foreign policy once his attempts to play a major role in the Arab world failed. The African states were more receptive than the Arabs toward Qaddafi's tools of foreign policy, specifically its enormous economic resources. The "king of kings," as he wanted to be defined by Africans, has since the late 1990s pursued a very active political agenda in Africa. As he had already tried in the Arab world, Qaddafi was an energetic supporter of "unity" among Africans. Neighboring Chad, especially, has always represented a geopolitical priority for Libya in general and Qaddafi in particular for a variety of reasons: the territorial dispute over the Aouzou strip and the anti-Qaddafi plot – the so-called "Black Prince" conspiracy organized from Chad in 1970 – are likely the most notable.

Libya occupied northern Chad in the early 1980s and a few years later it suffered a military humiliation from the regime of President Hissène Habré (1982-1990). The relationship

with Chad improved only when Déby overthrew Habré. Since then, Libya has become one of Chad's most important economic and diplomatic supporters. Qaddafi also played a very important role in Mali and Niger; their economies have been largely supported by Libyan money and Qaddafi has played a fundamental role in brokering the peace agreements between the Malian and Nigerien governments and the Tuareg rebels signed in the Libyan oasis city of Sabha in October 2009 (Reuters Africa, Oct 7, 2009; The Tripoli Post, Oct 10, 2009). This wide net of relations in the Libyan "near abroad" explains why these governments were very reluctant to condemn domestic repression in Libya earlier or to support the international intervention later.

### **The War in Libya and Its Possible Impact on Sahelian Security**

As mentioned before, the economic and political role of Qaddafi's Libya role in Africa has paradoxically represented an element of stability for many governments of the region. In many capitals of the continent there is now a major fear that a prolonged conflict in Libya, as well as a weakening of Qaddafi or his complete fall, could strongly jeopardize their security. There are major concerns related to terrorism, the role of Tuareg rebels and the economic impact of this war.

The first major concern is represented by weapons that could be acquired now on the Libyan market in the absence of any consistent and effective control on its territory and its deposits. Chadian President Idriss Déby has affirmed that al-Qaeda in the Islamic Maghreb (AQIM) acquired several types of weapons from the rebels' strongholds and warned of the risks of destabilizing Libya, suggesting, with some hyperbole, that the group is "turning into the most powerful army of the region" (Jeune Afrique, March 25). A few days later an Algerian security official told Reuters that AQIM had smuggled a huge amount of weapons acquired in Libya to Mali. The loads allegedly included Kalashnikov heavy machine guns, Kalashnikov rifles, Russian-made RPG-7 anti-tank rocket-propelled grenades and, most importantly, Russian-made shoul-



der-fired Strela surface-to-air missiles, known by the NATO designation SAM-7 (Reuters Africa, April 4). The day after, Algerian political officials also expressed their concerns for the situation in Libya. Abdelkader Messahel, the Algerian deputy foreign minister, told Reuters that he was worried by “the increasingly noticeable presence of AQIM in Libya” (without elaborating) and the increasing circulation of weapons which can be used by terrorists (Reuters Africa, April 5).

The main concern related to the acquisition of these weapons is that they could be used to replicate in the Mediterranean region an attack similar to that which occurred in Kenya in November 2002, when two SAM-7 missiles were fired at an Israeli passenger jet taking off from Mombasa International Airport. However, even if these allegations were all true, the potential impact of these weapons must be carefully addressed. Most worrisome are the mobile (truck-mounted or man-portable) optically-guided or infrared-guided missiles believed to be in Libyan hands. Russia’s Kolomna Machine-Building Design Bureau (KBM) has admitted selling truck-mounted SA-24 “Grinch” missiles after they were spotted in press photos by Aviation Week [2] This modern and highly effective weapon would be in great demand for terrorist operations if it could be made man-portable, but KBM insists this cannot be done without a separate trigger mechanism, one that was not supplied to Libya (Aviation Week, March 29).

It is more likely that these allegedly stolen missiles are the earlier and more basic Soviet-made man-portable SA-7 “Grail” missiles, which were purchased in large quantities by Libya. [3] Though these weapons pose a potential threat to passenger planes in the hands of AQIM, they are more likely to be used for defensive rather than offensive purposes, firing at military helicopters or surveillance planes. However, Africa has a rich and dynamic black market for weapons, which means AQIM could have access to rockets and missiles not only in Libya, but also in other parts of the continent. It is likely, therefore, that both Chad and Algeria want to emphasize this threat in order to advance specific foreign policy interests related to the

on-going conflict in Libya. Using the name of al-Qaeda is always a powerful tool to get the attention of Western powers, above all the United States, in trying to make them more receptive to some specific interests of the countries of the area.

Another threat for the stability of the countries of the Sahel could be posed by Tuareg rebels from Mali and Niger who have been employed as mercenaries among Qaddafi's supporters in the past few weeks. In this case, the risk could be presented by the return of these fighters to their own countries, armed with weapons grabbed in Libya (Ennahar, March 28). As mentioned earlier, Qaddafi has played a major role in settling many of these domestic conflicts. An end to Qaddafi's regime in Libya also means the end of the presence of a powerful protector for the Tuareg in these countries. The mix of armed Tuareg and the absence of the most powerful diplomatic broker in the region could represent a serious threat for countries in which Tuareg rebels are present in significant numbers.

A further crucial point for the security of the entire area is the linkage between economy and security. Qaddafi's Libya represents one of the backbones of the Sahelian economy. The countries of this region are very poor and the money that Qaddafi pours into these economies every year is fundamental to their existence. The end of Qaddafi's regime will likely mean the end of the financial flows from Libya to these countries. Given the highly personalized foreign policy of the Jamahiriya and the level of domestic political tension within Libya nowadays, it is likely that a new power elite in Libya will pursue a foreign policy agenda completely opposed to that of Qaddafi. The African option is one among others and not the only one that a new Libyan government could pursue. Even with Qaddafi, the African option became a top priority in Libyan foreign policy agenda only after the failure of attempts to win a major role in the Arab world. The end of Qaddafi's Libya could also mean the return of many Sahelian workers to their own countries; Chadian immigrants alone in Libya number 800,000 (al-Wihda, April 4). The collapse of Qaddafi's regime would ensure enormous economic



and demographic pressures on governments whose resources are very limited. This potential crisis should also be analyzed in the wider context of other on-going African crises; the violent clashes in Ivory Coast are only the latest reminders of the potential for instability in Africa. In the next few months, other major African countries, such as Nigeria, will have elections whose outcomes could be contested, sparking other internal conflicts. That could mean a further increase of migration pressures on other countries, economic troubles, the eruption of violence and the risk of spill-over conflicts in other parts of the continent where ethnic and confessional balances are very fragile.

### Conclusion

Mu'ammarr Qaddafi's African largesse and popular regional sympathy for the Colonel explain why the governments of the Sahel nations have been reluctant in supporting the international intervention against him. This behavior is not only linked to a sort of "political benevolence": it is also linked to an analysis based strictly on interests, recognizing that Qaddafi in power better serves the security, political and economic interests of these countries than the unpredictable course of

revolution.

Geographically, Libya will always have an interest in the Sahel, but politically the emphasis could be different and far less effective and consistent under a new regime than in the past. These governments fear the loss of funds that are needed to support their weak economies and give these regimes resources to share in order to boost their own power. They also fear the presence of AQIM and armed Tuareg rebels returning from Libya. The collapse of Libya would have an immediate impact on the structurally weak Sahel region with long-term implications for security and development.

### Notes:

1. A complete map of Libyan economic involvement in Africa is available at: <http://www.laaico.com/invest.htm>.
2. The Russian name for this weapon is Iglas 9K338.
3. The Russian name for this weapon is 9K32M Strela-2.

Dario Cristiani is a PhD Candidate in Middle East and Mediterranean Studies at King's College London.

## Fatalities in Terrorist Violence in Pakistan 2003-2011

Source: <http://www.satp.org/satporgtp/countries/pakistan/database/casualties.htm>



### Annual Fatalities in Terrorist Violence in Pakistan, 2003-2011

	Civilians	Security Force Personnel	Terrorists/Insurgents	Total
2003	140	24	25	189
2004	435	184	244	863
2005	430	81	137	648
2006	608	325	538	1471
2007	1522	597	1479	3598
2008	2155	654	3906	6715
<b>2009</b>	2324	991	8389	11704
2010	1796	469	5170	7435
2011	710	171	702	1583
<b>Total</b>	<b>10120</b>	<b>3496</b>	<b>20590</b>	<b>34206</b>

\* Data till April 17, 2011

Source: Figures are compiled from news reports and are provisional.

## The Global Threat of Terror - Ideological, Material and Political Linkages

The Institute for Conflict Management

Source: <http://www.satp.org/satporgtp/publication/books/index.html>



The Global Threat of Terror probes the ideological nuances, the diverse motivations, the complex interrelations, and the patterns of proliferation among terrorist movements - and particularly those that secure their justification in millennial or religious ideologies. The book brings together international research and the experience of those who have actually handled counter-terrorism campaigns against terrorist movements in different parts of the world in order to generate an accurate threat assessment, and to explore coherent alternatives of response within the context of the evolving security environment in the post-9/11 global order.

- Introduction, K. P. S. Gill, President, Institute for Conflict Management, New Delhi
- The Global Fight Against Terrorism: Where to Begin and How to End, George Fernandes, Honourable Minister for Defence, Government of India
- Responding to Terrorism, Arun Shourie, Honourable Minister for Disinvestment and Development of the Northeastern Region
- Global Terror: The Challenge of Ideologies, Dr. L M Singhvi, Member of Parliament and Jurist
- Messianism and Political Action: Some Contextual Characteristics, Dr. William Maley, School of Politics, University College, Australia
- The Brotherhood of Global Jihad, Dr. Reuven Paz, The Interdisciplinary Center, Herzliya. Israel
- Terrorism & Politics: Relations of Time & Place, Mahmoud Mourad, Deputy Editor



in-Chief, Al-Ahram, Cairo, Egypt

- The Taliban: Pakistan's Geopolitical Instrument, America's Problem, Prof. Amin Saikal, Australian National University, Canberra
- Asia Pacific: Organised Crime & International Terrorist Networks, Dr. Rohan Gunaratna, University of St. Andrews, Scotland, UK
- Problem of Terrorism in the Post-Soviet Era, Dr. Evgueny Kozhokin, Russia's Institute for Strategic Studies, Moscow
- The Abu Sayyaf Group A Growing Menace to Civil Society, Gen. Alfredo Filler, Former

Vice Chief of Armed Forces, Philippines

- Secessionist War and Terrorism in Sri Lanka: Transnational Impulses, Prof. G H Peiris, University of Peradeniya, Sri Lanka
- South Asia: Extremist Islamist Terror & Subversion, Dr. Ajai Sahni, Executive Director, Institute for Conflict Management, New Delhi

For inquiries: Institute for Conflict Management, 11, Talkatora Road, New Delhi - 110 001, INDIA; Tel: 91-11- 23715455, 23710374, 23710375; Fax: 91-11- 23715455; e-mail: icm@del3.vsnl.net.in



## Terrorist Trial Report Card Update – April 2011

Source: <http://www.lawandsecurity.org/Portals/0/Documents/Federal%20Terrorism%20Crimes%20Prosecuted%20Since%209-11%20%20%28Updated%20April%202011%29.pdf>

### Federal Terrorism-Related Prosecutions Since 9/11

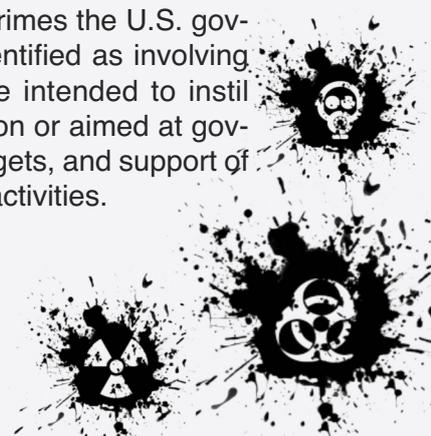
#### Terrorism<sup>1</sup> or National Security Crimes<sup>2</sup>

- Defendants charged with terrorism or national security crimes: 450
- Cases resolved: 279
- Convictions: 230 (82%)
- Guilty by Trial: 84
- Guilty by Plea: 146
- Acquittal on All Counts: 7
- Innocent by Reason of Insanity: 1
- Mistrial: 1
- Charges Dropped by Prosecution: 26
- Charges Dismissed by Judge: 8
- Charges Dismissed by Plea: 1
- Guilty Verdicts Vacated: 5
- Average Sentence: 15.3 years

#### Terrorism/National Security: Jihadi-related Crimes<sup>3</sup>

- Defendants charged: 308
- Resolved cases: 200
- Convictions: 174 (87%) Acquittals: 7
- Mistrial: 1
- Charges Dropped: 13
- Guilty Verdicts Vacated: 5
- Avg. Sentence: 14 years

<sup>1</sup> This category includes crimes the U.S. government has explicitly identified as involving terrorist tactics, i.e. those intended to instill fear in the larger population or aimed at governmental or symbolic targets, and support of groups engaged in such activities.



<sup>2</sup> This category includes crimes that the U.S. government has determined threaten the nation's security interests, excluding crimes the government has explicitly identified as involving terrorist tactics, acts or organizations. National security crimes include, but are not limited to, hostage-taking, espionage, or sub-

versive foreign relations activities.

<sup>3</sup> The category of jihadi crimes includes defendants whom the government identified as affiliated with an officially designated terrorist organization or who self-identified with such an organization.

## Anti high-seas piracy coalition launches public campaign

Source: <http://www.itfglobal.org/news-online/index.cfm/newsdetail/5743>

"2,000 Somali pirates are hijacking the world's economy" -- this is the motto of a new coalition of maritime transportation organization which has launched a public campaign to encourage governments to take more active measures to tackle high-seas piracy; the Save Our Seafarers campaign has a Web site and will take out ads in leading world newspapers.

All sides of the shipping industry have joined in launching a hard-hitting campaign to harness "people power" to tackle high-seas piracy. A release from the International Transport Workers' Federation (ITF) says that the "SOS — save our seafarers" campaign was launched on 1 March by the ITF, the Baltic and International Maritime Council, the International Chamber of Shipping, the International Shipping Federation, Intercargo, and Intertanko.

The campaign, which is backed by a comprehensive Web site and advertisements in the world's top newspapers, aims to encourage millions of people to put pressure on their governments to crack down on piracy. The move follows last year's worldwide petition calling on governments to tackle piracy, which attracted almost a million signatures.

The ITF release notes that the campaign highlights the fact that governments around the world do not realize the severity of the piracy crisis that is hitting seafarers and shipping. Somali pirates are currently holding nearly 800 seafarers hostage and are becoming increasingly brutal in their treatment of captives.

The anti-piracy coalition says that because governments hold the key to resolving the crisis, the campaign is making six specific re-

quests on them to take action to eradicate piracy. They include:

- Provide greater protection and support for seafarers
- Authorize naval forces to detain pirates and deliver them for prosecution and punishment
- Criminalize all acts of piracy and intent to



Commandos from the French frigate Le Floreal make arrest // Source: [boston.com](http://boston.com)

commit piracy under national laws in accordance with international conventions

- Trace and criminalize the organizers and financiers behind the criminal networks



## Publications from The Jamestown Foundation

Source: <http://www.jamestown.org>

The JAMESTOWN FOUNDATION INFORMATION WITHOUT POLITICAL AGENDA, FROM EURASIA, CHINA AND THE WORLD OF TERRORISM

### Publications

- The Al-Qaida Organization in the Islamic Maghreb: Expansion to the Sahel and Challenges from Within** (Introduction by Bruce Riedel)
- The BATTLE FOR YEMEN: Al-Qaida and the Struggle for Stability** (Introduction by Bruce Riedel)
- UNMASKING TERROR: A Global Review of Terrorist Activities** (Volume 20)
- Osama bin Laden's Last Days: Requiem, Power, or Betrayal?** (By John H. Garvey)
- The Crimea: Europe's Next Flashpoint?** (By Tara Kono)
- ISLAMIST MOVEMENTS IN THE HORN OF AFRICA: SELECTED ESSAYS FROM THE JOURNAL OF ISLAMIC STUDIES** (Edited by Dr. Steven M. Scalet)
- Towards a Curriculum for the Teaching of Jihadist Ideology** (Part I: Introduction - Prof. Dr. Perle)
- VOLATILE LANDSCAPE: IRAQ AND ITS INSURGENT MOVEMENTS** (Introduction by Reider Visser)
- PAKISTAN'S TROUBLED FRONTIER** (Introduction by Bruce Riedel)
- Saudi Arabia: Oil Facilitating the Achilles Heel of the Western Economy** (Michael Scheuer, Stephen Stein, John C. Kelly)
- TERRORISTS ON THE RISE IN ASIA AND THE MIDDLE EAST** (Introduction by Bruce Riedel)
- CHINA'S SIXTH GENERATION: BEIJING'S GRAND SIXTH GENERATION GAMES FOR 2020** (By John H. Garvey)



## Internet Websites and Links for (Counter-)Terrorism Research

By Albert Jongman

Source: <http://www.terrorismanalysts.com/pt/index.php/pot/article/view/134/html>

### PERSPECTIVES ON TERRORISM

a journal of the Terrorism Research Initiative

#### Abstract

*Since 9/11 the field of (Counter-) Terrorism Studies has expanded exponentially. With the simultaneous expansion of Internet-based resources, it has become almost impossible to maintain an overview of the field – the more so as a variety of sub-fields have emerged, dealing with specific aspects of the phenomenon of terrorism. Any researcher dealing with (counter-) terrorism issues on a regular basis would be aided by a guide of web links directing him or her to areas relevant for particular research needs. However, since the knowledge requirements of researchers differ, there can be no universal list that satisfies all.[1] The following short list is admittedly subjective, serving my individual research needs. They are all from Open Sources. I have grouped them in 15 fairly general categories; much more specialised categories could be selected. By visiting these sites and exploring what is available on each of them, the reader might get further ideas as to where to look to satisfy his or her specific needs. Most of these websites have their own list of additional web resources which can also be very useful. In the following, I will introduce each category with some explanatory notes.*

#### General Sites

If you do not know yet where to look for, you should start with general search engines and general sites. I list only half a dozen here. AboutCom provides general information about the history and causes of terrorism, types of terrorism, groups & tactics, US counter-terrorism policy, the global war on terrorism (GWOT - now replaced with the less

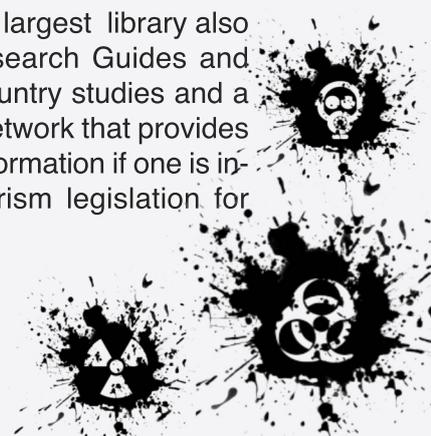
pretentious term fight against violent extremism], homeland security, human and civil rights and emergency preparedness. There is also a section on books, TV and movies, plus sections called 'must reads' and 'most popular'.

<http://terrorism.about.com/>

Anti-terrorisme is a Dutch site that brings together web resources in different categories, including terrorism in the Netherlands, foreign intelligence services, Europe and counterterrorism, NATO, weapons of mass destruction, maritime security, cyber terrorism and narco-terrorism. One can expand searches to more general topics like criminology, prisons, newspapers, foreign media, police and private security. There are many similar sites in other languages that categorise resources in such a way.

<http://anti-terrorisme.beginthier.nl>

A good way to start are also major libraries which sometimes offer customer-tailored services. The US Library of Congress maintains so-called Portals to the World, which are electronic resources selected by subject experts. At the time of this writing the terrorism portal is temporarily taken down for a review of its content. The world's largest library also has a section called Research Guides and Databases. It includes country studies and a global legal information network that provides contextual background information if one is interested in counter-terrorism legislation for specific countries.



<http://www.loc.gov/rr/international/hispanic/terrorism/terrorism.html>

The Terrorism Starting Page brings together web resources related to the topic of aggression. Resources are categorised in groups like research institutes (domestic/foreign), specialists (domestic/foreign), electronic books, special files, an online encyclopaedia on terrorism and scientific journals (domestic/foreign).

<http://agressie-infobronnen.startpagina.nl/>

### News Portals

For those concentrating on current developments, news portals can be very useful. I selected just seven but there are many more sites that bring together selections of newspapers, magazines and journal articles. On the World News page one can select a topic or a country and will find related newspaper articles. For terrorism-related issues one generally has to search under "military and"/or "politics". The Global Security site is a very useful site on security issues broadly defined, including terrorism. One can find there many official documents related to on-going armed conflicts. The focus is on situation reports, military issues, weapons of mass destruction, intelligence and homeland security. For each topic, there is a selection of web resources in the categories: NGOs, news, US government sites, other government sites. Most of the terrorism-related links can be found under Homeland Security; these are grouped in the following categories: policy shops, counterterrorism, transportation security, immigration and borders, bioterrorism, emerging response, civil liberties, extremist groups. Under the topic 'Intelligence' there is a whole section on private intelligence.

For current developments on terrorism, I find the British News Now site very helpful. One can narrow the news selection down to current affairs and terrorism. Under the heading "terrorism" one can select topics like AQ [Al-Qaeda], Bin Laden, counter-terrorism, Guantanamo, renditions, suicide bombers and terrorism trials. By clicking on one of these topics, the reader will find a variety of

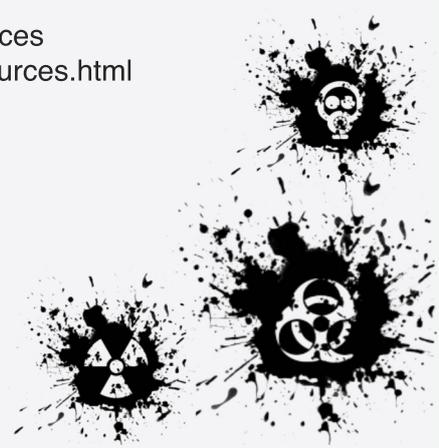
news items from sources in different world regions that have been published in the last 24 hours. One can also select news items on a specific date. The war & terrorism section includes topics like military news (US/UK), British forces, intelligence, terrorism, wars, war crimes, arms trade, cluster bomb ban, private security contractors, torture, world conflicts. This site is very useful to get a quick overview of terrorism-related incidents.

The Silobreaker site features news on global issues (including politics, conflicts & crime, environment and health), technology, science, business, energy and countries. A subscription permits researchers to use software that allows one to scan the content volume on specific topics, to use automatic network analysis on persons and entities as well as to identify hot spots. It also includes a Tweet section, a section on blogs, an audio/video section and a press release section.

Many websites are country-specific. Two examples: if you want Dutch news sources you should access the Villa Media site which contains links to most media sources (newspapers, magazines, journals, radio, TV) in the Netherlands. The Where-to-do-research site has a focus on the United States; it has links to the top 100 US daily newspapers. One can choose specific topics, some of which are terrorism related, e.g. terrorism and counter-terrorism, think tanks, reference & research, politics and history. Each topic has a selection of web resources. More media sources can be found on Arno Reuser's Repertorium for Open Source Intelligence (OSINT) and the Toddington website with search tools and research resources for on line investigators. The US diplomatic cables published by Wikileaks are currently very much in the news. Cablesearch is an attempt to construct and maintain a user-friendly search engine of already published documents from Wikileaks.

-Alternative News Resources  
<http://rinf.com/pages/resources.html>

-Cablesearch  
<http://cablesearch.org>



-European Union

<http://emm.newsbrief.eu/sitemap//en/sitemap.html>

-Global security.org

<http://www.globalsecurity.org/security/?co=C005905>

-[ British] News Now-terrorism

<http://www.newsnow.co.uk/h/Current+Affairs/War+&+Terrorism/Terrorism>

-Arno Reuser's Open Source Intelligence Resource Discovery Toolkit

<http://rr.reuser.biz/ShortVersion.html>

-Silobreaker: global issues

[www.silobreaker.com](http://www.silobreaker.com)

-Toddington's Search Tools and Research Resources for Online Investigators

<http://www.Toddington.com/wp/>

-Villa Media: Dagbladen

<http://www.villamedia.nl/villamedia-portal/dagbladen-portal/>

-Wheretodoresearch.com

[http://www.wheretodoresearch.com/News/US\\_Newspapers.htm](http://www.wheretodoresearch.com/News/US_Newspapers.htm)

-World Newspapers

<http://www.world-newspapers.com/>

### Terrorism Databases

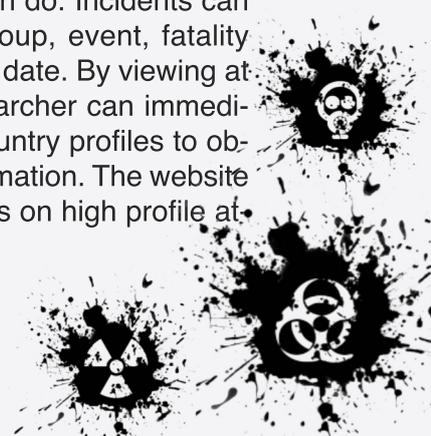
Terrorist databases can be very useful if one is interested in a specific group, a country or a specific terrorist tactic or target category.[2] There are several sites that plot news items on a world map. An example is the Global Incident Map. It lists incidents related to hazmat [hazardous materials] situations, forest fires, H1N1 pandemic, gang activity, border security issues, presidential threats, terrorism events predictions, drug interdictions, non-terrorist aviation incidents, earth quakes and the Iranian conflict. By clicking on a symbol on the map, one is directed to the original news item. In the free version there is, however, a 24-48 hour time delay while paying subscribers receive breaking news about inci-

dents. There are features to filter the news by incident type, country, city and date.

The Worldwide Incidents Tracking Systems (WITS) of the National Counterterrorism Center (NCTC) is the US government's authoritative database on terrorist attacks. Users of the WITS database can filter and sort attack data by a broad range of characteristics, browse attack records, and derive statistics on terrorism by country, region or global. The website offers also information on foreign terrorist organisations, terrorism definitions, terrorist exclusion list designees and bomb threat call procedures. It further offers profiles of terrorist organisations and information on terrorists captured and killed. In addition, it presents several indicator lists (radiological incidents, suspicious financial activities, terrorist documents and chemical incidents).

The website of the International Association of Counterterrorism and Security Professionals (IACSP) keeps track of news in the following categories: global security, aviation security, corporate security, cyber security, homeland security, maritime security, law enforcement & intelligence. For each section, news sources are listed. Incidents can also be plotted on a counterterrorism news map. The IACSP website also has a Counterterrorism Solutions Center with a few useful features and produces the magazine CounterTerrorism.

The RAND Corporation has maintained a database on terrorist incidents since 1972. Its Worldwide Terrorism Incidents (RDWTI) database contains information on over 36,000 incidents. Since the MIPT –RAND database was discontinued in March 2008, it has been revised and updated but is not yet fully available to the public. The subscription-based database of the Jane's Terrorism and Insurgency Center (JTIC) is probably the only one that is up-to-date and not lagging behind months or even years as some other databases in the public domain do. Incidents can be filtered by country, group, event, fatality number, target, tactic and date. By viewing at current news item a researcher can immediately click on group and country profiles to obtain more contextual information. The website also provides case studies on high profile at-



tacks and offers country briefings. Jane's website has an extensive section on web resources on countries (e.g. Australia, UK, US, New Zealand and Canada) and organisations (e.g. ASEAN, EU, NATO, UN, INTERPOL, OAS and OSCE). It also offers links on groups' designations as terrorist organisations, government reports and anti-terrorism legislation. Jane's produces a number of products that are very useful for professional researchers, including the Terrorism & Security Monitor, Terrorism Watch report, World Insurgency and Terrorism, Airport review, Country Risk Daily Report, Intelligence Review and the Islamic Affairs Analyst. However, this information comes at a price that goes beyond the budget of most academic researchers.

The South Asia Terrorism Portal is maintained by K.P.S. Gill in New Delhi and collects and analyses information on Bangladesh, Bhutan, India, Nepal, Pakistan and Sri Lanka. For each country one can find assessment, bibliographies, data sheets, documents, timelines and information on terrorist groups. The datasheets are based on local news sources and are much more detailed and specific than international news sources. India and Pakistan are countries in the top 10 of international terrorism. This website provides very rich and detailed research materials, also offering statistics on fatalities among civilians, security forces and terrorists.

One of the largest databases on terrorism is the Global Terrorism Database (GTD) maintained by START of the University of Maryland. It has data on incidents that go back to 1970, now covering over 87,000 discrete incidents, both domestic and international. This publicly available website allows researchers to filter and search the data with the help of several analytical tools. The GTD Data Rivers tool, for instance, allows users to visualize trends in terrorism spanning almost four decades. START plans to continue to expand and enhance GTD in the coming years to ensure that these data remain relevant for trend analyses.

As suicide terrorism has become a characteristic tactic of jihadi terrorism since the early 1980s researchers of the University of

Chicago around Robert Pape have developed a publicly available database on suicide attacks for the 1980-2009 period. The Chicago Project on Security and Terrorism (CPOST) database allows researchers to filter information on suicide attacks by year, location, group, campaign, target type, weapon and gender.

The most-widely used profiles on terrorist organisations are the ones produced by the US State Department. These are published annually in the Country Reports on Terrorism. Many links on the internet lead to these profiles. These government data are freely available but not as extensive and current as those produced for its subscribers by Jane's Terrorism and Insurgency Center.

-Global Incident Map  
<http://globalincidentmap.com>

-Jane's Terrorism and Insurgency Centre  
<http://jtic.janes.com/JDIC/JTIC/home.do>

-The Long War Journal  
<http://www.longwarjournal.org>

-National Counter Terrorism Center: World Wide Incidents Tracking System (WITS)  
<http://www.nctc.gov/site/other/wits.html>

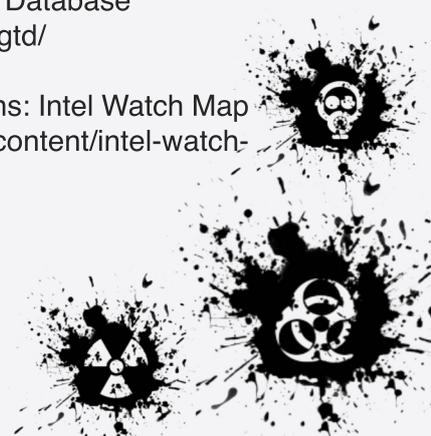
-Planet Data: The security news network: news map  
<http://www.planetdata.net/newsmaps/intelligence.php>

-RAND Database of Worldwide Terrorism Incidents  
<http://www.rand.org/nsrd/projects/terrorism-incidents/index.html>

-South Asia Terrorism Portal (SATP)  
<http://www.satp.org>

-START: Global Terrorism Database  
<http://www.start.umd.edu/gtd/>

-Total Intelligence Solutions: Intel Watch Map  
<http://www.totalintel.com/content/intel-watch-map>



-University of Chicago Project on Security and Terrorism (CPOST): Suicide Terrorism Database

<http://cpost.uchicago.edu/search.php>

### Terrorism Archives

As the materials on specific terrorist incidents, campaigns, groups and tactics accumulate, archives, both private and public are created to house all the information. I mention only two here:

-National Security Archive, September 11th-George Washington University

<http://www.gwu.edu/~archive/NSAEBB/#911>

-The Avalon project of Yale's Law School

[http://avalon.law.yale.edu/subject\\_menus/21st.asp](http://avalon.law.yale.edu/subject_menus/21st.asp)

### Terrorist Group Profiles

The monitoring of terrorist groups is a time-consuming and demanding activity. What is available in the public domain is usually incomplete, already dated and often unreliable. While there are several thousands of terrorist groups [3], only a few hundred are well-described. Three websites in this area are:

-Dudley Knox Naval Postgraduate School Library-Terrorist Group Profiles

<http://web.nps.navy.mil~library/tgp/tgpmain.htm>

-IACPC: group profiles

<http://www.planetdata.net/ct/terrorgroups.php>

-US Department of State: Counterterrorism

<http://www.state.gov/s/ct/index.htm>

### Terrorism Journals/Magazines

In this section I listed only two quality digital magazines that are available for free. They cover current topics and articles and are written by very knowledgeable experts. There are many more journals and magazines. Researchers may consult the websites of academic publishers like Sage, Wiley, Taylor & Francis or Elseviers – they all provide searchable lists of journals/magazines. The down-

side is that very often substantial costs (e.g. \$ 25.- per article) are involved for downloading single articles from scholarly journals.

-Combating Terrorism Center at West Point: Sentinel

<http://ctc.usma.edu/>

-Jamestown Foundation: Terrorism Monitor

<http://www.jamestown.org>

### Terrorism Research Institutes/Centres

In the section on research institutes I have limited myself as a recent issue of Perspectives on Terrorism (Vol. IV, No. 5) published a list of one hundred institutes/centres and programs. In addition to more academic institutes, there are many more policy-oriented think tanks, governmental in-house research centres, commercial security firms and NGOs with a research arm; these all engage in terrorism and counter-terrorism research of one sort or another. By visiting just a few institutes and consulting their web links to other sites and resources one can, however, easily feel overwhelmed. It very much depends on one's research question which institute in which country can help you further. Here I list only two dozens of them.

-Brookings Institution-Project on Terrorism and American Foreign Policy

<http://www.brookings.org/terrorism/>

-Center for Biodefense, Law and Public Policy

[www.ttu.edu/biodefense](http://www.ttu.edu/biodefense)  
<http://www.ttu.edu/biodefense>

-Center for Defense and International Security Studies (UK)-Terrorism program

<http://www.cdiss.org/terror.htm>

-Center for Terrorism and Counterterrorism, Leiden University - Campus The Hague

<http://www.campusdenhaag.leiden.edu/research/>

-Center for the Study of Terrorism and Political Violence, University of St. Andrews (UK)

<http://www.st-and.ac.uk/academic/intel/research/cstp>



-Center on Terrorism and Irregular Warfare  
<http://www.nps.navy.mil/ctiw/index.html>

-Center for Terrorism Preparedness  
<http://seem.findlay.edu/PubInfoPages/default.asp>

-Council on Foreign Relations  
<http://www.cfr.org/issue/135/>

-Federation of American Scientists (FAS)  
<http://www.fas.org/terrorism/index.html>  
Forsvarets forskningsinstitutt (FFI)  
[Norwegian Defence Research Establishment]  
<http://www.ffi.no>

-Foundation for Defense of Democracies  
<http://www.defenddemocracy.org/>

-The International Association for Counterterrorism & Security Professionals  
<http://www.iacsp.com>

-The International Center for Terrorism Studies (ICTS)  
<http://www.potomac institute.org/academic/icts.cfm>

-International Humanitarian Law Research Initiative  
<http://ihl.ihlresearch.org/>

-The International Institute for Counter-Terrorism, ICD, Herzliya  
<http://www.ict.org.il>

- International Peace Institute (IPI), New York (UN-focused)  
<http://www.ipinst.org/terrorism>

-International Relations and Security Network, Zurich  
<http://www.isn.ethz.ch/isn/Current-Affairs/ISN-Insights>

-International Strategy & Assessment Center  
<http://www.strategycenter.net/>

-The Meir Amit Intelligence and Terrorism Information Center

[www.terrorism-info.org.il](http://www.terrorism-info.org.il)

-Public Agenda Special report: Terrorism  
<http://www.publicagenda.org/specials/terrorism/terror.htm>

-RAND Corporation  
[http://www.RAND.org/research\\_areas/terrorism/](http://www.RAND.org/research_areas/terrorism/)

-Southern Poverty Law Center-Hatewatch  
<http://www.splcenter.org/intel/hatewatch.jsp>

-Terrorism Research Center  
<http://www.terrorism.com>

-University of Michigan Libraries - America's war against terror  
<http://www.lib.umich.edu/govdocs/usterror.html>

### Global Jihad

Developments related to the Salafist jihadist campaign with its global aspirations to conduct a holy war against alleged infidels and heretics are covered by many websites. I list here only a handful. The Hudson Institute specializes in detailed research on specific aspects of global jihad. The Jihadi Websites Monitoring Group of the ICT and SITE monitor jihadi websites; they are just two well-known organisations that re-publish selections of jihadist propaganda and ideological statements in English translations, accompanied by comments to put these into perspective. There are several good blogs that bring together Islam experts who offer religiously informed comments and perspectives. AIVD, the Dutch domestic intelligence agency and the Netherlands' National Coordinator on Counterterrorism (NCTb) (see CT-section) produce, on a regular basis, assessments on developments regarding the global jihad. Most of these reports are translated into English and available for free on the respective websites.

-Global Terror Alert  
<http://www.globalterroralert.com/?co=C005905>



-Hudson Institute  
[http://www.hudson.org/index.cfm?fuseaction=research\\_publications\\_list&resType=IntSec](http://www.hudson.org/index.cfm?fuseaction=research_publications_list&resType=IntSec)

-ICT-Jihadi Websites Monitoring Group  
<http://www.ict.org.il/ResearchPublications/JihadiWebsitesMonitoring/JWMGInsights/tabid/320/Default.aspx>

-Jihadica  
[www.jihadica.com](http://www.jihadica.com)

-Jihadology net: a clearing house for jihadi primary source material  
<http://jihadology.net>

-SITE Intelligence Group  
<https://www.siteintelgroup.com/Pages/Default.aspx>

-Umma News  
<http://www.ummanews.com>

-Virtually Islamic  
<http://www.virtuallyislamic.com>

### Terrorist Financing

The idea that following the money trail will lead from the recipients of donations to the sources that finance terrorism has led to institutions that focus on hawala and other forms of terrorist financing. Two sites can serve as starters:

-Financial Action Task Force  
[http://www.fatf-gafi.org/pages/0,2987,en\\_32250379\\_32235720\\_1\\_1\\_1\\_1\\_1,00.html](http://www.fatf-gafi.org/pages/0,2987,en_32250379_32235720_1_1_1_1_1,00.html)

-Financial Crimes Enforcement Network  
<http://www.fincen.gov/>

### Terrorism Experts

This section on terrorism experts contains a handful of sites that bring together terrorism experts. The Counterterrorismblog is a good site of up-to-date information; its archives are very useful. The NEFA Foundation, linked to the events of Nine Eleven 2001, specialises in current developments and produces research reports on jihadi organisations and terrorist plots in the US and Western Europe.

The website has links to legal files on terrorist suspects which makes it a very valuable resource for researchers. Websites of networks of experts often contain useful information on on-going research and conferences. However, often they are not in the public domain. Publicly available are, inter alia:

-Counterterrorism Blog  
<http://counterterrorismblog.org/>

-NEFA Foundation  
<http://www.nefafoundation.org>

-Network of European Experts on Terrorism  
<http://reet-neet.eu>

-Network of Terrorism Research [in German]  
[www.netzwerk-terrorismusforschung.de](http://www.netzwerk-terrorismusforschung.de)

-World Security Network  
[www.worldsecuritynetwork.com](http://www.worldsecuritynetwork.com)

### Early Warning

While forecasting in the field of terrorism is, due to the small size of terrorist groups and their clandestine modus operandi, notoriously difficult without specific human intelligence, general trends in the field of terrorism often reflect those of armed conflicts or political crisis situations. Helpful in this regard are the reports of the International Crisis Group which provide early warnings on likely conflict escalations. Nightwatch provides a nightly newsletter that tracks current news and assesses international security developments. An academic project at Kansas University tracks developments in several dozen countries where there is, in their estimate, a likelihood of civil unrest in the coming five years. The model successfully predicted civil unrest in Peru, Ireland, Ecuador, Italy and most recently Tunisia.

### Domestic Political Violence Forecasting Model

<http://radicalism.milcord.com.blog>

International Crisis Group

<http://www.crisisgroup.org/>

Nightwatch

<http://www.kforcegov.com/Services/IS/Nightwatch.aspx>



### Armed Conflict & Conflict Resolution

Terrorism is often linked to wider armed conflicts at home or abroad. Here are a few websites which offer information on armed conflicts and conflict resolution. The CIRI Human Rights Data Project monitors 15 separate human rights, including the life integrity rights (extra-judicial killings, torture and political imprisonment). The annual indexes for 195 countries produced by CIRI covering the period since 1981 can be used in correlation analysis.

-Center for Systemic Peace  
<http://www.systemicpeace.org>

**CIRI Human Rights Data Project**  
<http://ciri.binghamton.edu>

-Human Security Institute  
<http://www.humansecuritygateway.com>

-Institute for War & Peace Reporting  
[http://iwpr.net/caucasus\\_index1.html](http://iwpr.net/caucasus_index1.html)  
NATO  
<http://www.nato.int/cps/en/natolive/index.htm>  
<http://natolibguides.info>  
<http://www.nato.int/libraries>

-SIPRI  
<http://www.sipri.org/>

-Threats Watch  
<http://threatswatch.org/>

-United States Institute of Peace  
<http://www.usip.org/>

### CBRN Terrorism

Despite the fact that most terrorist groups are, in their modus operandi, quite conservative, using time-tested tactics, there is apprehension that some of them might, with or without the support of rogue regimes, be able to access chemical, biological, radiological or nuclear agents and materials. There are many websites on CBRN issues, including these:

-Arms Control Association  
<http://www.armscontrol.org>

-Biosecurity & bioterrorism: biodefense strategy, practice and science  
<http://www.libertonline.com>

-Bulletin of Atomic Scientists  
<http://www.thebulletin.org/>

-International Atomic Energy Agency  
<http://www.iaea.org/>

-Nuclear Threat Initiative  
<http://www.nti.org/index.php>

-Terrorism and Weapons of Mass Destruction

### Resources

<http://www.internationalsecurityresources.com/Terrorism%20and%20Weapons%20of%20Mass%20Destruction.html>

-Weapon of Mass Destruction Commission  
<http://www.wmdcommission.org/>

### Cyber Terrorism

While there is plenty of cyber crime, cyber hacking, cyber espionage and cyber fraud, cyber terrorism in the narrow sense of the word has so far been almost non-existent. However, the term 'cyber-terrorism' is often used very loosely and attention to this field, partly because terrorist propaganda and recruitment make use of computer networks, has been rapidly growing.

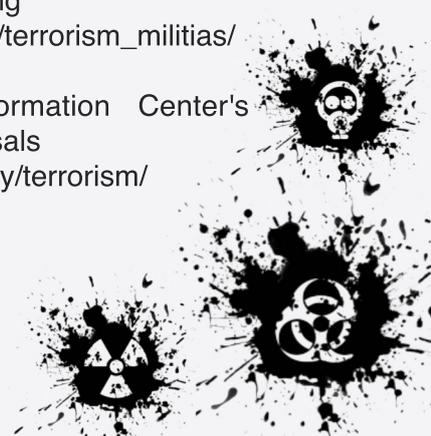
-Berkman Center for Internet and Society  
<http://cyber.law.harvard.edu>

-The Center for Democracy and Technology (CDT) Counter-Terrorism issues page  
<http://www.cdt.org/policy/terrorism>

-C4I.org  
<http://www.c4i.org/>

-EFF " Censorship & Privacy-Terrorism Hysteria & Militia Fingerprinting  
[http://www.eff.org/Privacy/terrorism\\_militias/](http://www.eff.org/Privacy/terrorism_militias/)

-Electronic Privacy Information Center's Counter-Terrorism Proposals  
<http://www.epic.org/privacy/terrorism/>



-Institute for Security, Technology & Society  
<http://www.ists.dartmouth.edu/>

-The Surveillance Studies Network (SNN)  
<http://www.surveillance-studies.net/>

### Counter-Terrorism

There are hundreds of websites focusing on countering terrorism. The following is but a brief selection. Most of these have features that refer researchers to more specialized sites.

-International Association for Counter Terrorism and Security Professionals (IACSP)  
<http://www.antiterrorism.org/main.html>

-Counter-Terrorism-Terrorism and Security Information  
<http://www.disastercenter.com/terror.htm>

-Counterterrorism: Training & Resources for Law Enforcement  
<http://www.counterterrorismtraining.gov/>

-Dutch Coordinator for Counterterrorism  
<http://english.nctb.nl/>

-Dutch Ministry of Interior: Counterterrorism  
<http://www.rijksoverheid.nl/onderwerpen/terrorismebestrijding>

-European Union: fight against organised crime  
[http://europa.eu/legislation\\_summaries/justice\\_freedom\\_security/fight\\_against\\_organised\\_crime/index\\_en.htm](http://europa.eu/legislation_summaries/justice_freedom_security/fight_against_organised_crime/index_en.htm)

-FEMA-Responder Knowledge Base  
<https://www.rkb.us/>

-Homeland Security  
<http://www.dhs.gov/files/counterterrorism.shtm>

### International Security Resources

<http://www.internationalsecurityresources.com/>

-International Society of Explosives Engineers  
<http://www.isee.org/>

-International Summit on Democracy, Terrorism and Security  
<http://english.safe-democracy.org/keynotes/>

-Military Education Research Library Network  
<http://merln.ndu.edu/>

-National Counterterrorism Center  
<http://www.nctc.gov/>

-National Intelligence Council  
<http://www.dni.gov>

-US Office of the Coordinator for Counterterrorism  
<http://www.state.gov/s/ct/>

-Security, Intelligence and Political Risk Resources  
<http://www.internationalsecurityresources.com/Security%20and%20Intelligence.htm>

-Security Management  
<http://www.securitymanagement.com/>

-Security Solutions International  
<http://www.homelandsecurityssi.com/ssi/content/view/98/111/>

-Strategic Insights  
<http://strategicinsights.eu>

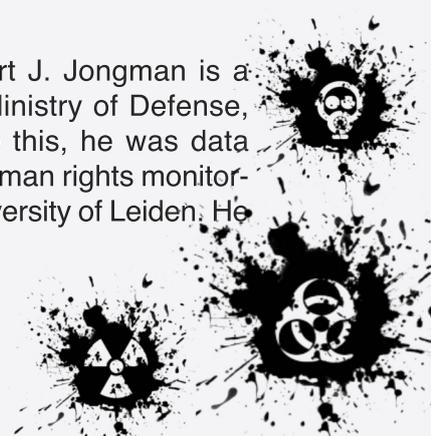
-Terrorism-Awareness and Prevention  
[http://www.pa-aware.org/portal/server.pt/community/terrorism\\_awareness/9270](http://www.pa-aware.org/portal/server.pt/community/terrorism_awareness/9270)

-United Nations Action to Counter Terrorism  
<http://www.un.org/terrorism/>

-United States Department of Defense  
<http://www.defense.gov/>

-United States Special Operations Command  
<http://www.socom.mil/SOCOMHome/Pages/default.aspx>

**About the Author:** Albert J. Jongman is a senior analyst with the Ministry of Defense, the Netherlands. Prior to this, he was data manager for PIOOM, a human rights monitoring programme at the University of Leiden. He



has been responsible for various data collections, including several World Directories of Terrorist Groups and the PIOOM's World Conflict and Human Rights Maps for which he received the Golden Candle Award from OSS.NET. He has published on armed conflict and political violence, incl. the edited volume *Contemporary Genocides* (1996).

### Notes

[1] For a useful general list, see: Eric Price. *Library and Internet Resources for Research on Terrorism*. In: Alex P. Schmid (Ed.). *The Routledge Handbook of Terrorism Research*. London & New York: Routledge, 2011, pp. 443- 456.

[2] For a detailed overview of twenty databases on terrorism, see: Neil G. Bowie and Alex P. Schmid. *Databases on Terrorism*. In: A.P. Schmid (Ed.), op. cit., pp. 294-340.

[3] For the most comprehensive list in both the open and non-public literature, see: Albert J. Jongman. *World Directory of Extremist, Terrorist and other Organizations Associated with Guerrilla Warfare, Political Violence, Protest, Organized Crime and Cyber-Crime*. In: A. P. Schmid (Ed.). op. cit., pp. 341-442; for a short-list of 120 major blacklisted terrorist groups, see Benjamin J.E. Freedman. *Officially Blacklisted Extremist or Terrorist (Support) Organizations*. In: Idem, pp. 350-354.

## Selected Literature on Terrorism and Religion

By Eric Price (Professional Information Specialist; Editorial Assistant PT)

NB: some of the items listed below are clickable and allow access to the full text; those with an asterisk [\*] only have a clickable table of contents.

Aboul-Enein, Y.H. (2010) *Militant Islamist ideology: understanding the global threat* Annapolis, Md.: Naval Institute Press.

Achcar, G. (2002) *The clash of barbarisms: September 11 and the making of the new world disorder* New York, NY.: Monthly Review Press

[\*<http://www.loc.gov/catdir/enhancements/fy0730/2002013335-d.html> ].

Al-Khattar, Aref M., (2003) *Religion and terrorism: an interfaith perspective* Westport, Conn.: Praeger.

Allen, D. (ed.) (2006) *Comparative philosophy and religion in times of terror* Lanham, MD.: Lexington Books [\*<http://www.loc.gov/catdir/toc/ecip0611/2006010214.html> ].

Al-Rasheed, M. & Shterin, M. (eds.) (2009) *Dying for faith: religiously motivated violence in the contemporary world* London: I.B. Tauris; New York: Palgrave Macmillan

Anonymous (2002)[Michael Scheuer] *Through our enemies' eyes: Osama bin Laden, radical Islam, and the future of America* Washington, D.C.: Brassey's

[\*<http://www.loc.gov/catdir/toc/fy0711/2002004848.html> ].

Apata, C.T., Seriki, I. & Arazi, H.A. (eds.)

(2003) *Religion and terrorism*. Ogun State, Nigeria: National Association for the Study of Religions and Education (NASRED).

Barlas, A. (2004) *Islam, Muslims, and the US: essays on religion and politics*. New Delhi: Global Media Publ..

Barton, P.A. (2002) *A history of racism and terrorism, rebellion and overcoming: the faith, power, and struggle of a people* Philadelphia: Xlibris.

Barrett, P. (2007) *American Islam: the struggle for the soul of a religion* New York:

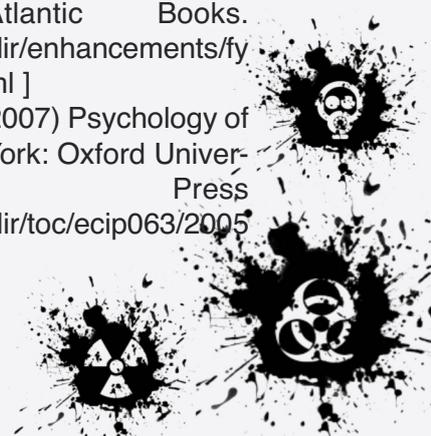
Farrar, Straus and Giroux [\*<http://www.loc.gov/catdir/toc/ecip0611/2006011404.html> ].

Bauder, J. (ed.) (2007) *Censorship Detroit: Greenhaven Press* [\*<http://catdir.loc.gov/catdir/toc/ecip075/2006038688.html> ].

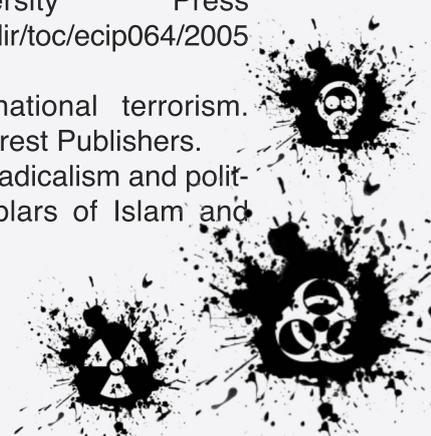
Bayman, H. (2003) *The secret of Islam: love and law in the religion of ethics* Berkeley, Calif.: North Atlantic Books. [\*<http://www.loc.gov/catdir/enhancements/fy0731/2002154400-b.html> ]

Bongar, B. (et al. ) (eds) (2007) *Psychology of terrorism* Oxford; New York: Oxford University Press

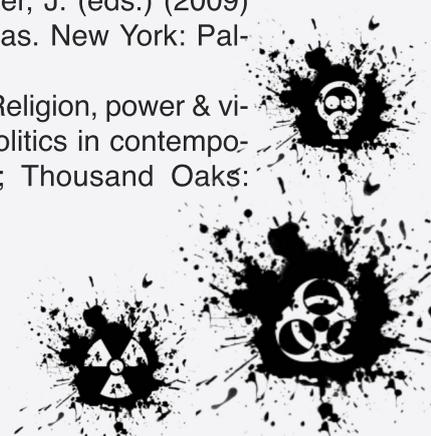
[\*<http://www.loc.gov/catdir/toc/ecip063/2005>



- 034001.html ]
- Bonney, R. (2004) *Jihad: from Quran to Bin Laden* New York: Palgrave Macmillan [[\\*http://catdir.loc.gov/catdir/toc/hol052/2004051152.html](http://catdir.loc.gov/catdir/toc/hol052/2004051152.html) ].
- Cohen-Almagor R. (ed.) (2005) *Israeli democracy at the crossroads*. London; New York: Routledge.
- Cooper, B. (2002) *Unholy terror: the origin and significance of contemporary, religion-based terrorism* Vancouver: Fraser Institute.
- Crist, A.J. (2007) *My search for truth: all people die in peace*. Milan, Mich.: JCarp Publications.
- Deegan, H. (2009) *Africa today: culture, economics, religion, security* London; New York: Routledge [[\\*http://www.loc.gov/catdir/toc/ecip0819/2008023511.html](http://www.loc.gov/catdir/toc/ecip0819/2008023511.html) ].
- Einfeld, J. (ed.) (2005) *Is Islam a religion of war or peace?* San Diego: Greenhaven Press.
- Euben, R. L. & Zaman, M. Q. (eds.) (2009) *Princeton readings in Islamist thought: texts and contexts from al-Banna to Bin Laden* Princeton: Princeton University Press.
- Farr, T. F. (2008) *World of faith and freedom: why international religious liberty is vital to American national security*. New York: Oxford University Press [[\\*http://www.loc.gov/catdir/toc/ecip0822/2008026671.html](http://www.loc.gov/catdir/toc/ecip0822/2008026671.html) ].
- Fisher, D. & Wicker, B. (eds.) (2010) *Just war on terror? A Christian and Muslim response*. Farnham, Surrey, England; Burlington, VT.: Ashgate.
- Foran, J., Lane, D. & Zivkovic, A. (eds.) (2008) *Revolution in the making of the modern world: social identities, globalization, and modernity*. Milton Park, Abingdon, Oxon; New York: Routledge [[\\*http://www.loc.gov/catdir/toc/ecip0718/2007018405.html](http://www.loc.gov/catdir/toc/ecip0718/2007018405.html) ].
- Franco, G.H. & Cervantes, S.L. (eds.) *Islam in the 21st century* Hauppauge, N.Y.: Nova Science Publishers.
- Fuller, G. E. (2010) *A world without Islam*. New York: Little, Brown and Co.
- Gabriel, B. (2008) *They must be stopped: why we must defeat radical Islam and how we can do it* New York: St. Martin's Press [[\\*http://www.loc.gov/catdir/enhancements/fy0835/2008018642-b.html](http://www.loc.gov/catdir/enhancements/fy0835/2008018642-b.html) ].
- Garrard-Burnett, V. (2010) *Terror in the land of the Holy Spirit* Oxford; New York: Oxford University Press.
- Glass, J. D. (2003) *Soldiers of God: primal emotions and religious terrorists*. Corona Del Mar, Calif.: Donington Press Ltd. [[\\*http://www.loc.gov/catdir/toc/ecip046/2003015753.html](http://www.loc.gov/catdir/toc/ecip046/2003015753.html) ].
- Glucklich, A. (2009) *Dying for heaven: holy pleasure and suicide bombers—why the best qualities of religion are also its most dangerous*. New York: HarperOne [[\\*http://www.loc.gov/catdir/enhancements/fy1009/2009005174-d.html](http://www.loc.gov/catdir/enhancements/fy1009/2009005174-d.html) ].
- Hafez, K. (2010) *Radicalism and political reform in the Islamic and Western worlds*. New York: Cambridge University Press.
- Harris, S. (2005) *The end of faith: religion, terror, and the future of reason* New York: W.W. Norton & Co. [[\\*http://www.loc.gov/catdir/toc/ecip0417/2004007874.html](http://www.loc.gov/catdir/toc/ecip0417/2004007874.html) ].
- Hauerwas, S. & Lentricchia, F. (eds.) (2003) *Dissent from the homeland: essays after September 11*. Durham: Duke University Press [[\\*http://www.loc.gov/catdir/toc/ecip041/200306486.html](http://www.loc.gov/catdir/toc/ecip041/200306486.html) ].
- Hehir, J. B. (et al.) (2004) *Liberty and power: a dialogue on religion and U.S. foreign policy in an unjust world*. Washington, D.C.: Brookings Institution Press [[\\*http://www.loc.gov/catdir/toc/ecip0421/2004019511.html](http://www.loc.gov/catdir/toc/ecip0421/2004019511.html) ].
- Hider, J. (2009) *The spiders of Allah: travels of an unbeliever on the frontline of holy war* New York: St. Martin's Griffin.
- Hodges, T. (2006) *Religion and world conflict*. Farmington Hills, MI.: Lucent Books [[\\*http://www.loc.gov/catdir/toc/ecip0615/2006019391.html](http://www.loc.gov/catdir/toc/ecip0615/2006019391.html) ].
- Hoffman, B. (2006) *Inside terrorism* New York: Columbia University Press [[\\*http://www.loc.gov/catdir/toc/ecip064/2005033841.html](http://www.loc.gov/catdir/toc/ecip064/2005033841.html) ].
- Innes, B. (2003) *International terrorism*. Broomall, PA.: Mason Crest Publishers.
- Israeli, R. (2008) *Islamic radicalism and political violence: the Templars of Islam and*



- Sheikh Ra'id Salah Portland: VallentinPublished.
- Jacobs, M. D. & Hanrahan, N. W. (eds.) (2005) *The Blackwell companion to the sociology of culture*. Malden, MA : Blackwell Pub.
- Jefferis, J.L. (2010) *Religion and political violence: sacred protest in the modern world* New York: Routledge.
- Jewett, R. (2008) *Mission and menace: four centuries of American religious zeal* Minneapolis, MN.: Fortress Press [[\\*http://www.loc.gov/catdir/toc/ecip083/2007044769.html](http://www.loc.gov/catdir/toc/ecip083/2007044769.html) ].
- Jewett, R. (2003) *Captain America and the crusade against evil: the dilemma of zealous Nationalism*. Grand Rapids, Mich.: W.B. Eerdmans
- Kaur, R. (ed.) (2005) *Religion, violence, and political mobilisation in South Asia*. New Delhi; Thousand Oaks, Calif.: Sage Publications [[\\*http://www.loc.gov/catdir/toc/ecip0518/2005024703.html](http://www.loc.gov/catdir/toc/ecip0518/2005024703.html) ].
- Koenig, H.G. (2006) *In the wake of disaster: religious responses to terrorism & catastrophe*. Philadelphia: Templeton Foundation Press [[\\*http://www.loc.gov/catdir/toc/ecip063/2005031364.html](http://www.loc.gov/catdir/toc/ecip063/2005031364.html) ].
- Kolig, E. (2010) *New Zealand's Muslims and multiculturalism*.
- Kuriakose, K. K. (ed.) (2006) *Religion, terrorism and globalization: nonviolence: a new Agenda*. New York: Nova Science Publishers [[\\*http://www.loc.gov/catdir/toc/ecip0516/2005020872.html](http://www.loc.gov/catdir/toc/ecip0516/2005020872.html) ].
- Laurence, J. (2006) *Integrating Islam: political and religious challenges in contemporary France*. Washington, D.C.: Brookings Institution Press [[\\*http://www.loc.gov/catdir/toc/ecip0614/2006018347.html](http://www.loc.gov/catdir/toc/ecip0614/2006018347.html) ].
- Levitt, P. (2007) *God needs no passport: immigrants and the changing American religious landscape*. New York : New Press; distributed by W.W. Norton & Company [[\\*http://www.loc.gov/catdir/toc/ecip071/2006030951.html](http://www.loc.gov/catdir/toc/ecip071/2006030951.html) ].
- Lieb, M & Labriola, A.C. (eds.) (2006) *Milton in the age of Fish: essays on authorship, text, and terrorism* Pittsburgh, Pa.: Duquesne University Press [[\\*http://www.loc.gov/catdir/toc/ecip0618/2006024411.html](http://www.loc.gov/catdir/toc/ecip0618/2006024411.html) ].
- Lincoln, B. (2006) *Holy terrors: thinking about religion after September 11*. Chicago: University of Chicago Press [[\\*http://www.loc.gov/catdir/toc/ecip067/2006001528.html](http://www.loc.gov/catdir/toc/ecip067/2006001528.html) ].
- Madiwale, A. (ed.) (2007) *Rise of fascism in India: voices beneath the ashes, victims of communal violence speak* [report of the Independent People's Tribunal on the Rise of Fascist Forces and the Attack on the Secular State, March 20-22, 2007] New Delhi: Human Rights Law Network.
- Mango, A. (2005) *Turkey and the war on terror: for forty years we fought alone*. London; New York: Routledge [[\\*http://www.loc.gov/catdir/toc/ecip057/2005002949.html](http://www.loc.gov/catdir/toc/ecip057/2005002949.html) ].
- Marshall, P., Gilbert, L. & Ahmanson, R.G. (eds.) (2009) *Blind spot: when journalists don't get religion*. Oxford; New York: Oxford University Press.
- Martyn T. (ed.) (2006) *Copts in Egypt: a Christian minority under siege*. [papers presented at the First International Coptic Symposium, Zurich, September 23-25, 2004; International Coptic Symposium] G2W-Verlag; Vandenhoeck & Ruprecht.
- Moggach, D. (ed.) (2006) *The new Hegelians: politics and philosophy in the Hegelian School*. New York: Cambridge University Press [[\\*http://www.loc.gov/catdir/enhancements/fy0633/2005008110-t.html](http://www.loc.gov/catdir/enhancements/fy0633/2005008110-t.html) ].
- Morgan, M. J. (ed.) (2009) *The impact of 9/11 on religion and philosophy*. New York: Palgrave Macmillan.
- Nathan, C.N. (ed.) (2010) *Current issues in human rights and international relations: papers from the Clemens Nathan Research Centre*. Leiden; Boston: M. Nijhoff Publishers.
- Patterson, E.D & Gallagher, J. (eds.) (2009) *Debating the war of ideas*. New York: Palgrave Macmillan.
- Puniyani, R. (ed.) (2005) *Religion, power & violence: expression of politics in contemporary times*. New Delhi; Thousand Oaks: Sage



- [\*<http://www.loc.gov/catdir/toc/ecip058/200505282.html> ].
- Rennie, B & Tite, P.L. (eds.) (2008) Religion, terror and violence: religious studies perspectives. New York: Routledge
- [\*<http://www.loc.gov/catdir/toc/ecip0727/2007037960.html> ].
- Richardson, L. (ed.) (2006) The roots of terrorism. New York: Routledge
- [\*<http://www.loc.gov/catdir/toc/ecip0610/2006009341.html> ].
- Rinehart, J. F. (2006) Apocalyptic faith and political violence: prophets of terror. New York: Palgrave Macmillan
- [\*<http://www.loc.gov/catdir/enhancements/fy0642/2006041584-b.html> ].
- Ross, Jeffrey (ed.). Religion and Violence. An Encyclopedia of Faith and Conflict from Antiquity to the Present. Armonk, N.Y., M.E. Sharpe, 2011. 3 vols.
- Ryan, K. J. (2007) Radical eye for the infidel guy: inside the strange world of militant Islam. Amherst, N.Y.: Prometheus Books
- [\*<http://www.loc.gov/catdir/toc/ecip077/200700021.html> ].
- Sagarin, R.D. & Taylor, T. (eds.) (2008) Natural security: a Darwinian approach to a dangerous world. Berkeley: University of California Press.
- Sammon, B. (2007) The evangelical president: George Bush's struggle to spread a moral democracy throughout the world. Washington, DC: Regnery Pub.
- [\*<http://www.loc.gov/catdir/toc/ecip0723/2007030824.html> ].
- Scruton, R. (2002) The West and the rest: globalization and the terrorist threat Wilmington, Del.: ISI Books.
- Seidler, V. J. (2007) Urban fears and global terrors: citizenship, multicultures and belongings after 7/7. London ; New York: Routledge
- [\*<http://www.loc.gov/catdir/toc/ecip0710/2007005571.html> ].
- Shukla, I. K. (2005) Hindutva, treason and terrorism New Delhi: Pharos Media & Publishers.
- Shusta, R.M. (et al.) (2011) Multicultural law enforcement: strategies for peacekeeping in a diverse society. Upper Saddle River, N.J.: Pearson Education/Prentice Hall.
- Sidel, J. T. ( 2006) Riots, pogroms, jihad: religious violence in Indonesia. Ithaca, N.Y.: Cornell University Press
- [\*<http://www.loc.gov/catdir/toc/ecip0614/2006014486.html> ].
- Skorupski, J. (ed.) (2010) The Routledge companion to ethics. London; New York: Routledge.
- Skya, W. (2009) Japan's holy war: the ideology of radical Shintō ultranationalism. Durham: Duke University Press
- [\*<http://www.loc.gov/catdir/toc/ecip0810/2008003796.html> ].
- Stone, R. H. (2008) Moral reflections on foreign policy in a religious war. Lanham: Lexington Books.
- Tapp, R.B. (ed.) (2006) The fate of democracy. Amherst, N.Y.: Prometheus Books [ \*<http://catdir.loc.gov/catdir/toc/fy0612/2006276275.html> ].
- Thomas, B. (2009) The dark side of Zionism: Israel's quest for security through dominance Lanham, MD.: Lexington Books
- [\*<http://www.loc.gov/catdir/toc/ecip0827/2008038166.html> ].
- Triandis, H. C. (2009) Fooling ourselves: self-deception in politics, religion, and terrorism. Westport, Conn.: Praeger Publishers
- [\*<http://www.loc.gov/catdir/toc/ecip0825/2008033679.html> ].
- Weigel, G. (2009) Faith, reason, and the war against jihadism: a call to action. New York: Image Books/Doubleday Religion.
- Weinberg, L & Pedahzur, A. (eds.) (2004) Religious fundamentalism and political extremism. London; Portland, OR.: Frank Cass
- [\*<http://www.loc.gov/catdir/toc/ecip047/2003016967.html> ].
- Williams, P. L. (2006) The dunces of doomsday: 10 blunders that gave rise to radical Islam, terrorist regimes, and the threat of an American Hiroshima. Nashville, Tenn.: WND Books
- [\*<http://www.loc.gov/catdir/toc/ecip068/2006004336.html> ].
- Wilson, M. (ed.) (2006) Democracy: opposing viewpoints. Farmington Hills, MI.: Greenhaven Press/Thomson Gale.
- Winfield, R. D. (2007) Modernity, religion, and the War on Terror. Aldershot, Hampshire, England; Burlington, VT.: Ashgate



[\*<http://www.loc.gov/catdir/toc/ecip0710/2007004391.html> ].

Zacharias, R. K. (2002) Light in the shadow of Jihad Sisters Or.: Multnomah Publishers [\*<http://www.loc.gov/catdir/enhancements/fy0729/2001008632-b.htm> ].

### Non-conventional Literature

Adkins, M.J. (2007) Suicidal Terrorism, A Dying Strategy. [Thesis] Marshall University; Huntington, W. Virginia

[<http://www.marshall.edu/etd/masters/adkins-michael-2007-ma.pdf> ].

Ahluwalia, J.S. (2007) God - In the Mind of the Terrorist? The Sikh Review [<http://www.sikhreview.org/pdf/april2007/pdf-files/psychoanalysis.pdf> ].

Ahmad, I. (2009) Conceptualizing Terrorism: Perspective from the Periphery. Quaid-i-Azam University, Islamabad [[http://www.ish-tiaqahmad.com/downloads/IR\\_April\\_09.pdf](http://www.ish-tiaqahmad.com/downloads/IR_April_09.pdf) ].

Armstrong, K. (2006) The Role of Religion in Today's Conflict. UNAOC [[http://www.unaoc.org/repository/Armstrong\\_Religion\\_Conflict.pdf](http://www.unaoc.org/repository/Armstrong_Religion_Conflict.pdf) ].

Berman, E. (2008) Religion, terrorism and public goods. Cambridge, MA.: National Bureau of Economic Research [<http://papers.nber.org/papers/w13725> ].

Cilluffo, F J., Carpenter, S. & Levitt, M. (2011) What's the Big Idea? Confronting the Ideology of Islamist Extremism. Homeland Security Policy Institute Issue Brief, February 4 [[http://www.gwumc.edu/hspi/policy/issue-brief\\_confrontingideology.pdf](http://www.gwumc.edu/hspi/policy/issue-brief_confrontingideology.pdf) ].

Dobrot, L.A. (2007) The global war on terrorism: a religious war? Strategic Studies Institute [<http://www.strategicstudiesinstitute.army.mil/pdf/files/pub822.pdf> ].

Durham, Jr., W. C. & Liggett, B. D. (2006) The Reaction to Islamic Terrorism and the Implications for Religious Freedom After September 11: A United States Perspective. Brigham Young University [<http://bradliggett.com/files/911.pdf> ].

Farr, T. (2008) World of Faith and Freedom. Oxford Scholarship Online Monographs [\*<http://www.oxfordscholarship.com/oso/public/content/religion/9780195179958/toc.html?q=WorldIFaithIFreedom> ].

Hashmi, A.S. (September 2009) Terrorism, Religious Radicalism and Violence. Ian-Pakistan Dialog on Conflict and Solution and Peace Keeping

[[http://www.ipcs.org/pdf\\_file/issue/IB121-Ploughshares-Arshi.pdf](http://www.ipcs.org/pdf_file/issue/IB121-Ploughshares-Arshi.pdf) ].

Horst, R. (2009) Suicidal Terrorism and Alternatives: A Model of Economics and Religion. University of Maryland [[http://www.religionomics.com/asrec/ASREC09\\_Papers/Horst\\_Suicide%20Terrorism%20-%20ASREC\\_7b.pdf](http://www.religionomics.com/asrec/ASREC09_Papers/Horst_Suicide%20Terrorism%20-%20ASREC_7b.pdf) ]

Jones, J. (2008) Blood That Cries Out From the Earth. Oxford Scholarship Online Monographs [\*<http://www.oxfordscholarship.com/oso/public/content/religion/9780195335972/toc.html> ].

Jones, S. & Libicki, M. (2008) How Terrorist Groups End: Lessons for Encountering al-Qa'ida RAND Corp.

[[http://www.rand.org/content/dam/rand/pubs/monographs/2008/RAND\\_MG741-1.pdf](http://www.rand.org/content/dam/rand/pubs/monographs/2008/RAND_MG741-1.pdf) ].

Lynch, A., MacDonald, E. & Williams, G. (2007) Law and Liberty in the War on Terror. [[http://www.law.utoronto.ca/documents/Roach/The\\_Case\\_for\\_Defining\\_Terrorism.pdf](http://www.law.utoronto.ca/documents/Roach/The_Case_for_Defining_Terrorism.pdf) ].

Mendus, S. (2008) Religious Toleration in an Age of Terrorism. White Rose [[http://eprints.whiterose.ac.uk/7789/6/Lecture\\_2.pdf](http://eprints.whiterose.ac.uk/7789/6/Lecture_2.pdf) ].

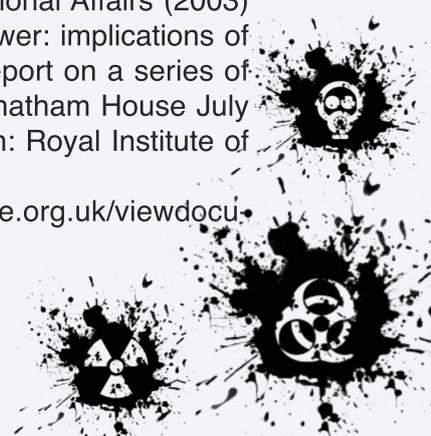
Moeckli, D. (2008) Human Rights and Non-discrimination in the War on Terror Oxford Scholarship Online Monographs [[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1161103](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1161103) ].

Perkins, J.L. (2010) The Cost of Religious Delusion: Islam and Terrorism. [paper; 2010 Global Atheist Convention] [<http://home.alphalink.com.au/~jperkins/DelusionIslamAndTerrorism.pdf> ].

Praja, J. S. (2007) UNAFEI [paper] Islam, Globalization and Counter Terrorisms. [[http://www.unafei.or.jp/english/pdf/RS\\_No71/No71\\_09VE\\_Praja1.pdf](http://www.unafei.or.jp/english/pdf/RS_No71/No71_09VE_Praja1.pdf) ].

Royal Institute of International Affairs (2003) Living with the megapower: implications of the war on terrorism.[report on a series of consultations held at Chatham House July 2002-July 2003] London: Royal Institute of International Affairs

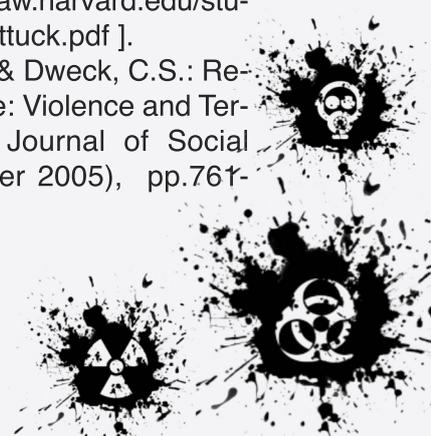
[<http://www.chathamhouse.org.uk/viewdocu>



- ment.php?documentid=3958 ].
- Sosis, R. & Alcorta, C.S. (2008) Militants and Martyrs: Evolutionary Perspectives on Religion and Terrorism. Department of Sociology and Anthropology Hebrew University of Jerusalem [http://www.webster.edu/religion-violence/Readings/Militants\_and\_Martyrs.pdf ].
- Treverton, G.F. (et al.) (2005) Exploring Religious Conflict. RAND Corp. [http://www.rand.org/content/dam/rand/pubs/conf\_proceedings/2005/RAND\_CF211.pdf ].
- Weissbrodt, D. (2008) The Human Rights of Non-citizens. Oxford Scholarship Online Monographs [\*http://www.oxfordscholarship.com/oso/public/content/law/9780199547821/toc.html ]
- Prime Journal Articles**
- Ateş, H.: Towards a Distinctive Model? Reconciling the Views of Contemporary Muslim Thinkers on an Ideal State for Muslim Societies Religion, State and Society. (4, December 2003) pp.347-366.
- Atran, S.: Mishandling suicide terrorism. The Washington Quarterly 27 (3, Summer 2004) pp.67-90 [http://www.twq.com/04summer/docs/04summer\_atran.pdf ].
- Barnes, L. P.: Was the Northern Ireland Conflict Religious? Journal of Contemporary Religion 20 (1, January 2005) pp.5-69.
- Barnidge, R.P.: War and peace: negotiating meaning in Islam. Critical Studies on Terrorism 1 (2, 2008) pp.263-278.
- Beit-Hallahmi, B.: Ten Comments on Watching Closely the Gaps Between Beliefs and Actions. Terrorism and Political Violence 14 (1, Spring 2002) pp.123-144.
- Benn, D. W.: Should we allow terrorists to terrify us? International Affairs 83 (5, September 2007) pp. 969-974.
- Bhatia, A.: Discursive illusions in the American National Strategy for Combating Terrorism. Journal of Language and Politics 7 (2, June 2008), pp.201-227.
- Bird, G., (et al.) International Terrorism: Causes, Consequences and Cures. The World Economy 31 (2, February 2008), pp.255-274.
- Blair, T.: Faith in an Interdependent World. New Perspectives Quarterly 25, (4, Fall 2008) pp.30-32.
- Brents, B.G. & Mshigeni, D.S.: Terrorism in Context: Race, Religion, Party, and Violent Conflict in Zanzibar. The American Sociologist 35 (2, Summer 2004), pp.60-74 [http://faculty.unlv.edu/brents/research/terrorZanzibar.pdf ].
- Buijs, F.: Muslims in the Netherlands: Social and Political Developments after 9/11. Journal of Ethnic and Migration Studies; 85, (3 March 2009), pp.421-438.
- Burack, C.: God, gays and good-enough enemies. Psychoanalysis, Culture Society 14 (1, April 2009), pp.41-48
- Debray, R.: God and the Political Planet. New Perspectives Quarterly, 25 (4, Fall 2008) pp.33-35.
- De la Corte, L. & Gimenez-Salinas, A.: Motivos y procesos psicosociales que promueven la violencia y el terrorismo suicidas. [Motives and social psychological processes promoting suicide violence and terrorism]. Revista de Psicología Social, 24, (2, May 2009), pp. 217-240.
- Dingley, J. & Kirk-Smith, M.: Symbolism and Sacrifice in Terrorism. Small Wars & Insurgencies, 13, (1, Spring 2002), pp. 102-128.
- Dingley, J. & Mollica, M.: The Human Body as a Terrorist Weapon: Hunger Strikes and Suicide Bombers. Studies in Conflict and Terrorism, 30, (6, June 2007), pp.459-492.
- Habermas, J.: Notes on Post-Secular Society. New Perspectives Quarterly. 25,4, Fall 2008), pp.17-29.
- Hamm, M. S.: Prison Islam in the Age of Sacred Terror. British Journal of Criminology 49 (5, September 2009), pp.667-785.
- Hosking, G.: Terrorism and Trust. Critical Studies on Terrorism, 2 ,3, (2009), pp.482-496.
- Iannaccone, L. & Berman, E.: Religious extremism: The good, the bad, and the deadly. Public Choice, 128, 1-2, July (2006), pp. 109-129.
- Jackson, P. I.: Measuring Muslim Integration in Europe. Democracy and Security, 5 ,3, (2009), pp.223-248.
- Kadir S. Mapping Muslim politics in Southeast Asia after September 11. The Pacific Review, 17, 2, June (2004), pp. 199-222.



- Kamran, T. Contextualizing Sectarian Militancy in Pakistan: A Case Study of Jhang. *Journal of Islamic Studies*, 20, 1, (6 January 2009), pp.55-85.
- Kippenberg, H. G.: Searching for the Link between Religion and Violence by Means of the Thomas-Theorem. *Method Theory in the Study of Religion*, 22, (2-3 October 2010), pp.97-115.
- Kruglanski, A. W. (et al.) Fully Committed: Suicide Bombers' Motivation and the Quest for Personal Significance. *Political Psychology*, 30, 3 (June 2009), pp.331-357.
- Lapshina, E.: The vulnerability of democracies. *Foresight - The journal of future studies, strategic thinking and policy*, 6, 4 (1 April 2004), pp. 218-222.
- Larry, W.: How Religion Shapes Economics. *Marketplace of the Gods*, 1, 9 (7 April 2010), pp.161-183.
- Lerner, N.: Do Religion and Human Rights Interact? *International Journal on Minority and Group Rights*, 15 ,2-3 ( September 2008), pp.408-411.
- Liddle, J. R., Bush, L.S. & Shackelford, T.K. An introduction to evolutionary psychology and its application to suicide terrorism. *Behavioral Sciences of Terrorism and Political Aggression*, (September 2010) [<http://www.toddkshackelford.com/downloads/Liddle-Bush-Shackelford-BSTPA.pdf>].
- Mackerras, C.: Some Issues of Ethnic and Religious Identity among China's Islamic Peoples. *Asian Ethnicity*, 6 ,1 (February 2005), pp. 3-18.
- Marshall, P. Religion and Terrorism: Misreading al Qaeda. *Blind Spot*, 1 ,9 (1 February 2009), pp. 31-47.
- Meer, N. & Modood, T.: Refutations of racism in the 'Muslim question'. *Patterns of Prejudice*, 43, 3-4 ( July 2009), pp. 335-354.
- Miles, J.: Religion and American Foreign Policy. *Survival*, 46, 1 (2004), pp. 23 -37.
- Miller, G.: Confronting Terrorisms: Group Motivation and Successful State Policies. *Terrorism and Political Violence*, 19 ,3 (September 2007), pp. 331-350.
- Morgan, M.J.. The Origins of New Terrorism. *Parameters*, 34, (Spring 2004), pp. 29-43. [<http://www.carlisle.army.mil/usawc/parameters/Articles/04spring/morgan.pdf>]
- Nabers, D. & Patman, R.: September 11 and the rise of political fundamentalism in the Bush administration: domestic legitimization versus international estrangement? *Global Change, Peace Security*, 20 ,2 ( June 2008), pp.169-183.
- Nader, K. & Danieli, Y.: Cultural Issues in Terrorism and in Response to Terrorism *Journal of Aggression, Maltreatment & Trauma*, 9, 3 ( 2005), pp. 399-410.
- Piazza, J.A. & Walsh, J. I.: Transnational Terror and Human Rights. *International Studies Quarterly*, 53, 1 (March 2009), pp.125-148.
- Rhoades, G. K. (et al.): Forgiving the September 11th terrorists: Associations with coping, psychological distress, and religiosity. *Anxiety, Stress and Coping*, 20, 2 (June 2007), pp. 109-128.
- Robbins, T. & Hall, J. R.: New Religious Movements and Violence. *Teaching New Religious Movements*, 1 9 (1 June 2007), pp. 245-271.
- Rowley, C.: Terrorist Attacks on Western Civilization. *Public Choice*, 128, 1-2 (July 2006), pp. 1- 6.
- Sato N.: On the horns of the terrorist dilemma: Syrian Christians response to Israeli "Terrorism". *History and Anthropology* ,14,2 ( June 2003), pp. 141-155.
- Schmid, A. P.: Frameworks for Conceptualising Terrorism. *Terrorism and Political Violence* ,16, 2 (April-June 2004), pp.197-221.
- Schonteich, M.: The Emerging Threat? South Africa's Extreme Right. *Terrorism and Political Violence*, 16, 4 (October-December 2004), pp. 757-776.
- Sedgwick, M.: Al-Qaeda and the Nature of Religious Terrorism. *Terrorism and Political Violence*, 16 ,4 (Winter 2004), pp.795-814[[http://ipac.kacst.edu.sa/eDoc/2006/158222\\_1.pdf](http://ipac.kacst.edu.sa/eDoc/2006/158222_1.pdf)].
- Shattuck, J.: Religion, Rights, and Terrorism. *Harvard Human Rights Journal*, 16 (2003), pp.183-188 [<http://www.law.harvard.edu/students/orgs/hrj/iss16/shattuck.pdf>].
- Silberman, I., Higgins, E. & Dweck, C.S.: Religion and World Change: Violence and Terrorism versus Peace. *Journal of Social Issues*, 61,4 (December 2005), pp.761-784.



- Spector, S.: The Arab and Muslim Enemy. *Evangelicals and Israel*, 1, 9 (1 April 2009), pp.50-76 [<http://www.oxfordscholarship.com/oso/public/content/religion/9780195368024/acprof-9780195368024-chapter-4.html>].
- Spencer, A.: Questioning the Concept of 'New Terrorism'. *Peace Conflict and Development*, 8 (January 2006), pp. 1-33. [<http://www.peacestudiesjournal.org.uk/dl/Feb%2006%20SPENCER%20version%202.pdf>].
- Tan, E. K. B.: Norming "Moderation" in an "Iconic Target": Public Policy and the Regulation of Religious Anxieties in Singapore. *Terrorism and Political Violence*, 19 ,4 (2007), pp. 443-462.
- Tibi, B.: The Totalitarianism of Jihadist Islamism and its Challenge to Europe and to Islam. *Totalitarian Movements and Political Religions*, 8 ,1 (March 2007), pp. 35-54.
- Tohidi, N.: Women's Rights in the Muslim World: the Universal-Particular Interplay *Hawwa*, 1 ,2 (17 July 2003), pp. 152-188.
- Tucker, D.: What is New about the New Terrorism and How Dangerous is It? *Terrorism and Political Violence*, 13 ,3 (Fall 2001), pp.1-14.
- Venkatraman, A.: Religious Basis for Islamic Terrorism: The Quran and Its Interpretations. *Studies in Conflict and Terrorism*, 30, 3 ( March 2007), pp. 229-248.
- Weisbrod, B.: Fundamentalist violence: political violence and political religion in modern conflict. *International Social Science Journal*, 54 ,174 (December 2002), pp. 499-508.
- Woods, J.: The 9/11 effect: toward a social science of the terrorist threat. *The Social Science Journal*, (12 February 2011).
- Yusuf, I.: The Southern Thailand Conflict and the Muslim World. *Journal of Muslim Minority Affairs*, 27, 2 (August 2007), pp.219-339.
- Zanca R.: Explaining Islam in Central Asia: an anthropological approach for Uzbekistan. *Journal of Muslim Minority Affairs*, 24 ,1 (April 2004), pp.99-107.

## 50 Un- and Under-researched Topics in the Field of (Counter-) Terrorism Studies

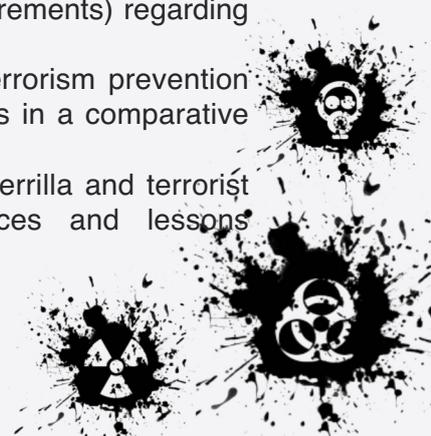
By Alex P. Schmid

### Introduction

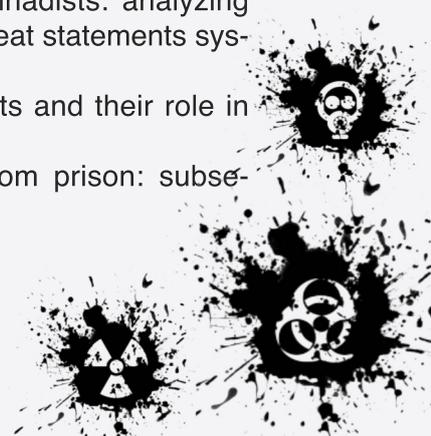
The Terrorism Research Initiative seeks to stimulate individual and collaborative research on terrorism and other forms of political violence that threatening human security. While some topics are "fashionable" and obtain an extraordinary amount of attention (e.g. CBRN threats, radicalization, suicide terrorism, jihadist terrorism) other (sub-) topics are un- or under-researched.

In order to stimulate research, TRI presents this list of 50 un- and under-researched topics. Any individual or research group wishing to tackle one or another of these topics, is encouraged to register that with the research data bank of the Center for Terrorism and Counterterrorism of Leiden University's The Hague Campus where an online inventory of ongoing and completed research is maintained. Check the website: <http://www.terrorismdata.leiden.edu/>

1. Terrorist audiences and their responses: cross-national and longitudinal comparisons of public opinion surveys regarding support of, and opposition to, terrorism;
2. Measuring and evaluating counter-terrorism policies: methodologies and techniques;
3. Unwanted and unexpected side- and boomerang (blowback) effects of counter-terrorism: ways to recognize and minimize them;
4. Is there a disconnect between academic research on terrorism and the counter-terrorist intelligence community's knowledge (and knowledge requirements) regarding terrorism?;
5. Review of national terrorism prevention programs and policies in a comparative perspective;
6. De-mobilisation of guerrilla and terrorist groups: best practices and lessons



- learned;
7. Non-violent popular revolt and Salafist Jihadism: competing paradigms for political change in the Islamic world;
  8. Conspiracy theories related to (counter-) terrorism: is there a need for countering them?
  9. Warning the public: responsible crisis communications prior, during and after terrorist attacks - lessons learned and best practices;
  10. Strengthening public resilience against terrorism: policies of individual states (e.g. Israel, Colombia, USA);
  11. New strategies for identifying and countering extremist ideologies on the Internet;
  12. Countering terrorism: is it possible to limit the role of government and strengthen the role of civil society?;
  13. Civil society and (counter-) terrorism: the role of NGOs in terrorism and counter-terrorism;
  14. Immigration, diasporas and terrorism: misperceptions, alleged and proven links;
  15. The responses of human rights organizations to human rights violations by terrorist groups.
  16. Counter-terrorism within the frameworks of human rights and humanitarian law requirements: upholding or updating international law standards?
  17. The UN CT strategy [GA Res. 60/288 (2006)]: where does the international community stand with its implementation?
  18. Terrorism and the Media, Terrorism and the Internet: cross-impacts and what can be done about them while upholding freedom of speech and expression?
  19. Freedom of speech vs. incitement to terrorism: the response of the courts;
  20. Prevention of terrorism by intelligence and security services vs. prosecution and punishment of terrorists by law enforcement: dilemmas and solutions;
  21. The prosecution of terrorists in international comparison: national arrest, trial and conviction records compared;
  22. The grievances of terrorists: should they be taken seriously or are they just pretexts and justifications for violence?
  23. The terrorism - organized crime nexus: new insights and developments;
  24. The delayed impact of the 2008 economic crisis on terrorism, political violence, armed conflict and non-violent protests;
  25. The rehabilitation of terrorists vs. the rehabilitation of common criminals in prison: recidivism records compared;
  26. Prisons: new ways of preventing and countering radicalization of prisoners and advancing rehabilitation of convicted offenders;
  27. Countering radicalisation and violent extremism in schools and religious institutions: evaluating existing programs;
  28. The shrinking space of citizen privacy: thinking about safeguards to prevent the development of surveillance societies in the name of counter-terrorism;
  29. Islamophobia and Antisemitism compared: between rhetorical weapons and legitimate grievances;
  30. Muslims, Christians, Hindus, Jews, and Buddhists under attack for their faith: a quantitative comparison in the post-Cold War period – claims vs. facts;
  31. Differentiating between terrorism, other forms of political violence and human rights violations: towards a more balanced approach to assessing armed conflict and repression;
  32. Analyzing terrorist statements and internal writings: looking for cues regarding the expected utility of terrorism in terrorist thinking;
  33. Measuring the actual effectiveness of terrorism: findings from empirical research on the tactical and strategic outcomes of uses of terrorism;
  34. State human rights violations in response to terrorism – how widespread, how serious?;
  35. Kidnapping for ransom: the consequences of paying ransom and of refusals to pay.
  36. The messaging policies of Al-Qaeda, its affiliates and media jihadists: analyzing communiques and threat statements systematically;
  37. Careers of ex-terrorists and their role in countering terrorism;
  38. Terrorists released from prison: subsequent careers;



39. The targeting logic of terrorist attacks;
40. The trajectory of terrorist campaigns in comparative perspective;
41. The role of victim associations in court cases against terrorists;
42. Websites associated with terrorist groups: an overview;
43. Failed, foiled and completed attacks by Al-Qaeda, AQ affiliates and individual (would-be) associates: a consolidated overview;
44. New legislation on terrorism: inventory, comparison and impact;
45. The lethality of terrorism in comparison with criminal homicides, victimization by natural disasters, specific diseases, etc.:
46. Pakistan: regional and global implications of potential state failure/collapse;
47. Afghanistan: endgame scenarios and their regional and global implications;
48. The Arab Awakening and its possible implications for terrorism and international counter-terrorism cooperation;
49. Terrorist groups and political parties - same goals, different tactics: between cooperation and rivalry;
50. The future of terrorism: regional trends, new developments, likely scenarios and worst (CBRN) cases.

## Strategic Trends 2011 - Key Developments in Global Affairs

Center for Security Studies - ETH

**Authors:** Matthew Hulbert, Prem Mahadevan, Daniel Möckli, Roland Popp

Source: [www.css.ethz.ch/box\\_feeder/Strategic-Trends-2011.pdf](http://www.css.ethz.ch/box_feeder/Strategic-Trends-2011.pdf)



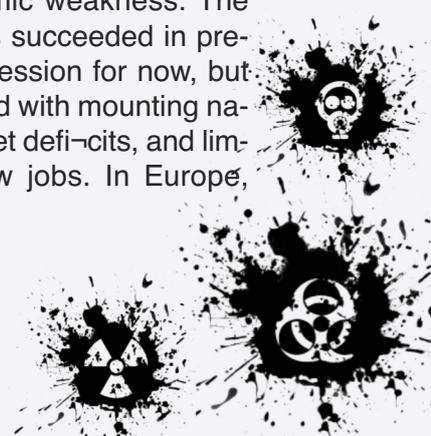
Divergence is a key theme in our strategic assessment of the world in 2011. With profound global and regional power shifts underway, a new multipolar international order is gradually emerging that is marked by diversity, a lack of leadership, and potentially growing instability. Managing change and finding solutions to common problems will not become any easier under such conditions.

The accelerated redistribution of global power towards Asia and changing regional dynamics in Europe and, in particular, the Middle East are defining features of 2011. Weak states and transnational threats such as jihadist terrorism and the increase in drug-related violence continue to require attention. But 'asymmetric challenges' are only one part of the jigsaw. As a growing number of non-Western states are gaining relative geo-economic weight, geopolitics takes centre stage again – in an international system that is increasingly complex and fragmented.

### A new world emerging

The most obvious divergence concerns the economic performance of emerging and Western countries. Emerging markets have suffered less and recovered faster from the global financial and economic crisis. China is now pivotal to the global economy; whether it should still be called 'emerging' is a point of contention. Beijing's commodity and trade links to non-OECD economies not only have a geo-economic impact, but political bite. Emerging markets are no longer fully dependent on Western demand: They now have a range of options for increasing their economic and political stakes between East and West.

In contrast, the US and the EU are struggling with severe economic weakness. The US stimulus package has succeeded in preventing a long-lasting recession for now, but Washington is confronted with mounting national debt, massive budget deficits, and limited growth with few new jobs. In Europe,



several countries face grave sovereign debt crises. Public-sector austerity measures are now a hallmark across the continent, with debt restructuring still a likely scenario for some countries.

As divergent economic fortunes are gradually translating into a geopolitically fragmented world, finding common ground on global challenges and the resolution of regional conflicts will become ever more difficult. The US increasingly lacks the resources and political will to unilaterally provide global stability, yet China and other rising powers are reluctant to step in. Domestic development remains their priority, which partly explains why currency and trade disputes are heating up and why collective action through the G2 (US and China), or indeed the broader G20, is not really taking off. Little progress can be expected on non-proliferation, climate change, energy, or indeed regional disputes.

### Europe in crisis

Divergence is also visible at the regional level. In Europe, it manifests itself as an economic gap between a solvent core and the heavily indebted periphery. But it also applies to different political preferences as to how to resolve the debt crisis – the root problem being undercapitalised banks as much as a lack of political tenacity. Due to its economic strength, Germany's power within the EU has increased. Berlin is in the driver's seat as to how monetary union will play out, and although the euro is unlikely to be dropped, the terms and conditions attached to financial guarantees have met with criticism from many.

Whereas EU member states have displayed solidarity as far as short-term help for highly-indebted countries is concerned, political tensions are rising in Brussels now that strategic decisions need to be taken. The outcome remains unclear. Neither regional fragmentation nor a deepening of the integration process towards a fiscal union nor, indeed, a broader multi-speed Europe can entirely be ruled out. But one thing is obvious: Europe's preoccupation with internal crisis management will hinder it from playing a major global role in the years to come. De-

spite the institutional improvements of the Lisbon Treaty, Europe's political efficacy will mean little in the greater scheme of things.

### Changing dynamics in the Middle East

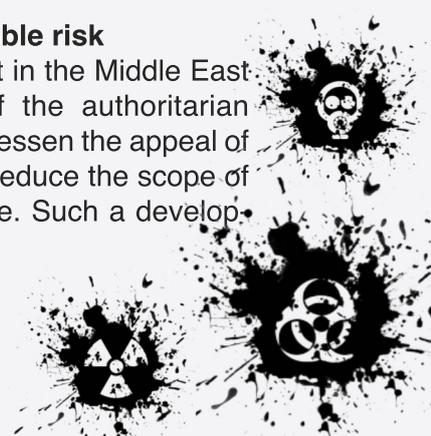
In the Middle East, the popular upheavals that surprised the world in early 2011 mirror a major divergence between rulers and ruled across large parts of the region. These domestically-driven secular revolts also underline the declining influence of the US as the regional hegemon of past decades. With US leadership waning and the Arab core long weakened, major power shifts are underway in the Middle East. As Iran and, above all, Turkey are playing increasingly important roles, there is a rise of the non-Arab periphery, which also includes Israel as the dominant regional military power.

The future of the Arab states is ever more uncertain in light of the mass protests. The most vulnerable authoritarian Arab regimes may well be the old Arab Nationalist republics, mostly situated in North Africa, while the majority of the Gulf monarchies will likely be able to weather this storm. The geo-political divergence between the Gulf and the western parts of the Middle East may grow as the oil-rich monarchies look increasingly to the energy-hungry rising powers in Asia, while fledgling pluralist regimes in the Levant and North Africa can be expected to intensify cooperation with Europe.

The US is bound to stay involved in the Middle East to safeguard its energy interests, protect Israel, and manage non-proliferation, terrorism, and other security challenges. However, with both its dependence on Middle Eastern oil and the threat of jihadist terrorism decreasing, Washington may eventually shift its strategic focus beyond Afghanistan and Pakistan towards the Far East, where Sino-American competition for influence is becoming ever more apparent.

### Terrorism as a manageable risk

A diminishing US footprint in the Middle East and the fall of some of the authoritarian regimes there might also lessen the appeal of the jihadist ideology and reduce the scope of Islamist extremist violence. Such a develop-



ment would reinforce the view put forward in this issue of Strategic Trends that jihadist terrorism should be perceived as a manageable risk rather than an existential threat to Western security. The core organisation of al-Qaida is severely weakened. Most of its affiliates in the Middle East and Africa as well as the large majority of other Islamist extremist organisations pursue predominantly local agendas. Al-Qaida's ideology of global jihad is being marginalised in Islamist discourse today. Largely as a result of al-Qaida's indiscriminate killings of fellow Muslims, Osama Bin Laden and his followers have lost much support.

Jihadist terrorism will not go away, and homegrown jihadists with ties to established terrorist organisations remain a particular concern for both Europe and the US. However, with some lessons learnt, counterterrorism works to the extent that the probability of mass-casualty attacks on Western homelands has significantly lowered. Although fighting terrorism will continue to be a cost-intensive struggle, it should no longer be overemphasised at the expense of other challenges.

### **Weak states and international security: Narcotics as a case in point**

How to deal with weak states remains an

open question, given the current crisis of many international state-building missions. Threats relating to under-governed spaces continue to affect Western security negatively and need to be addressed. Whereas terrorism has received much attention as a threat linked to weak states ever since 9/11, narcotics are now rapidly becoming an international security concern too.

The global narcotics trade ought to be taken into account as an increasingly important source of political violence. The drug-financed Taliban insurgency in Afghanistan and the rise of drug-related violence in Mexico are examples. Efforts to combat the problem aggressively in either source or transit countries for drugs have only worsened the problem. Meanwhile, terrorists are showing signs of cooperation with drug traffickers due to a convergence of interests and methods.

Unless the narcotics-insecurity cycle is met with greater counternarcotics coordination, it may spread ever further. The US as the leading counternarcotics actor has, however, not succeeded in forging an effective multilateral approach, with other states either disapproving of US policy or being complacent about the problem. As with many other issues, a joint response will not become any easier as more powers with divergent interests and views now have a seat at the global table.



### ISDS International Security & Defence Systems Ltd.

P.O. Box 173, Nir Zvi, Israel 72905. Tel: 972-8-9227699, Fax: 972-8-9235104

*Dear Distinguished Colleagues,*

On behalf of ISDS Ltd. it gives me great pleasure to announce the launching of our first Diploma Program in Security Management together with the well-known University of Tel Aviv. ISDS offers a package jointly coordinated with the university that includes classes and workshops with world-renowned professors, attendance to seminars, trips, and visits to strategic security sites in Israel.

Additionally, participants to the **Diploma Program in Security Management** will be invited to celebrate the **30th Anniversary of ISDS!** ISDS has planned extraordinary activities to mark this event. The grand celebration will take place on **September** and will begin with an "Asado Event" and tourism program. This special celebration will symbolize 30 years of ISDS' experiences worldwide and will bring together friends and colleagues from around the world.

ISDS Ltd. and university of Tel Aviv are integrating efforts to present each participant with the most comprehensive, intensive, and useful program in Security Management. As a participant, you will experience the knowledge and experience of the university's professors. Then, you will have the opportunity to take part in several seminars, simulation exercises, and trips, among others.

Participants to the Diploma Program in Security Management will receive **three (3) certifications**: a Diploma in Security Management from the University, A Diploma in Security Management from ISDS Ltd., and a Diploma from the Israel Export Institute (IEI).

I am very proud to be able to put together these two special occasions: ISDS 30th Anniversary and the first Diploma Program in Security Management and hope you can join us. Please contact us for further information and to register,

*Warm regards,*

**Leo Gleser**  
President and Founder

**Edith Tsouri**  
Program Coordinator  
**ISDS Ltd.**  
E-mail: [edith@isds.co.il](mailto:edith@isds.co.il)  
Web: [www.isds.co.il](http://www.isds.co.il)  
Tel: 972 54 960 8913  
Skype: editha1022



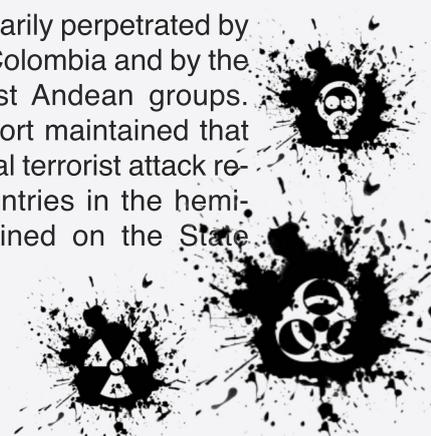
## Latin America: Terrorism Issues

By Mark P. Sullivan (Specialist in Latin American Affairs)

Source: [www.fas.org/sgp/crs/terror/RS21049.pdf](http://www.fas.org/sgp/crs/terror/RS21049.pdf)

U.S. attention to terrorism in Latin America intensified in the aftermath of the September 2001 terrorist attacks on New York and Washington, with an increase in bilateral and regional cooperation. In its 2009 Country Reports on Terrorism (issued in August 2010), the State Department maintained that terror-

ism in the region was primarily perpetrated by terrorist organizations in Colombia and by the remnants of radical leftist Andean groups. Overall, however, the report maintained that the threat of a transnational terrorist attack remained low for most countries in the hemisphere. Cuba has remained on the State





Department's list of state sponsors of terrorism since 1982 pursuant to Section 6(j) of the Export Administration Act, which triggers a number of economic sanctions. Both Cuba

and Venezuela are on the State Department's annual list of countries determined to be not cooperating fully with U.S. antiterrorism efforts pursuant to Section 40A of the Arms Export Control Act. U.S. officials have expressed concerns over the past several years about Venezuela's lack of cooperation on antiterrorism efforts, its relations with Iran, and potential support for Colombian terrorist groups.

Concerns about Iran's increasing activities in Latin America center on Iran's attempts to circumvent U.N. and U.S. sanctions, as well as on its ties to the radical Lebanon-based Islamic group Hezbollah. Allegations have linked Hezbollah to two bombings in Argentina: the 1992 bombing of the Israeli Embassy in Buenos Aires that killed 30 people and the 1994 bombing of the Argentine-Israeli Mutual Association (AMIA) in Buenos Aires that killed 85 people. The State Department terrorism report maintains that the United States remains concerned that sympathizers of Hezbollah and the Sunni Muslim Palestinian group Hamas are raising funds among the sizable Middle Eastern communities in the tri-border area of Argentina, Brazil, and Paraguay, but stated that there was no corroborated information that these or other Islamic extremist groups had an operational presence in the TBA or elsewhere in the hemisphere.

In the 111th Congress, President Obama signed into law the Comprehensive Iran Sanc-

tions, Accountability, and Disinvestment Act of 2010 (P.L. 111-195) on July 1, 2010, which includes a provision making gasoline sales to Iran subject to U.S. sanctions. (In 2009, Venezuela promised to supply gasoline to Iran in the case of U.S. sanctions. U.S. officials are examining whether Venezuela is in violation of the sanctions legislation.) In other legislative action in the 111th Congress, the House approved H.Con.Res. 156 (Ros-Lehtinen) in July 2009, which condemned the 1994 AMIA bombing in Buenos Aires and urged Western Hemisphere governments to take actions to curb the activities that support Hezbollah and other such extremist groups.

Several other measures were either considered or introduced in the 111th Congress with provisions related to Latin America and terrorism issues. In June 2010, the Senate Committee on Armed Services reported S. 3454, the National Defense Authorization Act for FY2011, with a provision that would have required a report on Venezuela related to terrorism issues. In June 2009, the House approved H.R. 2410, the Foreign Relations Authorization Act for FY2010 and FY2011, with a provision that would have required a report on Iran's and Hezbollah's actions in the Western Hemisphere. Other introduced measures included H.R. 375 (Ros-Lehtinen) and H.R. 2475 (Ros-Lehtinen), which would have placed restrictions on nuclear cooperation with countries assisting the nuclear programs of Venezuela or Cuba; H.R. 2272 (Rush), which would have removed Cuba from the state sponsors of terrorism list; and H.Res. 872 (Mack), which would have called for Venezuela to be designated a state sponsor of terrorism.

**NOTE:** Full paper is available to download at "CBRNE-CT Papers" section of the Newsletter.



Findings following arrest of a notorious drug lord in Mexico:



### EUROPOL - EU Terrorism Situation

Source: [http://www.europol.europa.eu/publications/EU\\_Terrorism\\_Situation\\_and\\_Trend\\_Report\\_TE-SAT/TE-SAT2011.pdf](http://www.europol.europa.eu/publications/EU_Terrorism_Situation_and_Trend_Report_TE-SAT/TE-SAT2011.pdf)

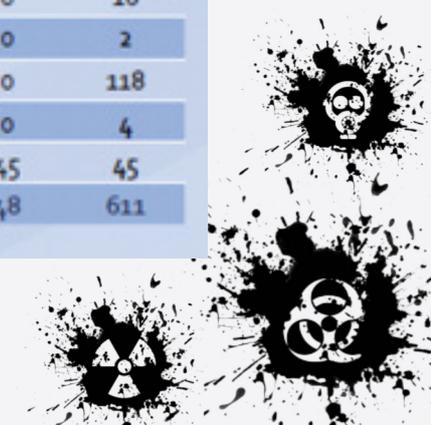
#### Failed, foiled and completed attacks in 2010, per member state and per affiliation

Member State	Islamist	Separatist	Left-wing	Right-wing	Single-issue	Not specified	Total 2010
Austria	0	1	1	0	0	0	2
Czech Republic	0	0	1	0	0	0	1
Denmark	2	0	0	0	0	0	2
France	0	84	0	0	0	0	84
Greece	0	0	20	0	1	0	21
Italy	0	1	7	0	0	0	8
Spain	0	74	16	0	0	0	90
Sweden	1	0	0	0	0	0	1
United Kingdom	-	-	-	-	-	40	40
<b>Total</b>	<b>3</b>	<b>160</b>	<b>45</b>	<b>0</b>	<b>1</b>	<b>40</b>	<b>249</b>

#### Arrests in 2010 per member state and per Affiliation

(For the UK, the figures represent the number of charges for 2009 and 2010, to provide a more accurate comparison with the number of judicial arrests in other Member States. However, at this stage in the criminal justice process it is not possible to assign an affiliation to individual cases)

Member State	Islamist	Separatist	Left-wing	Right-wing	Single-issue	Not specified	Total 2010
Austria	1	1	3	0	0	0	5
Belgium	11	9	0	0	0	0	20
Denmark	6	0	0	0	0	0	6
France	94	123	0	0	0	2	219
Germany	9	14	2	0	0	0	25
Greece	0	0	18	0	0	0	18
Ireland (Republic of)	5	57	0	0	0	0	62
Italy	4	16	8	1	0	0	29
The Netherlands	19	19	0	0	0	1	39
Portugal	0	3	0	0	0	0	3
Romania	14	2	0	0	0	0	16
Slovenia	2	0	0	0	0	0	2
Spain	11	104	3	0	0	0	118
Sweden	3	1	0	0	0	0	4
United Kingdom	-	-	-	-	-	45	45
<b>Total</b>	<b>179</b>	<b>349</b>	<b>34</b>	<b>1</b>	<b>0</b>	<b>48</b>	<b>611</b>



### Data convictions and penalties (Eurojust)

Member State	2008	2009	2010
Austria	0	2	0
Belgium	12	7 <sup>13</sup>	10
Denmark	16	10	1
France	75	76	40
Germany	10	7	12
Ireland (Republic of)	9	15	18
Italy	25	24	22
The Netherlands	12	2	8
Spain	141	217	173
Sweden	1	1	4
United Kingdom	59	37	19
Total	360	398	307

1. Number of individuals tried in 2010 for terrorism charges, by Member State<sup>14</sup>

Member State	Islamist	Left-wing	Right-wing	Separatist	Not specified	Total
Belgium	9				1	10
Denmark					1	1
France	14			26		40
Germany	10	2				12
Ireland (republic of)				18		18
Italy	5	17				22
The Netherlands	8					8
Spain	24	18		155	1	198
Sweden	2				2	4
UK	12		4	2	1	19
Total	84	37	4	201	6	332

2. Number of convictions/acquittals for terrorism charges in 2010, per Member State and group type<sup>15</sup>

<sup>13</sup> Verdicts received by the drafting team after the deadline for collecting information for TE-SAT 2011 could not be included.

<sup>14</sup> According to the information provided by national authorities, in 2010 one person appeared in five different court proceedings, three other persons were tried three times for terrorist offences, whilst another fifteen individuals each appeared in two different proceedings. These cases all originated from Spain.

<sup>15</sup> Figure 2 connects the reported verdicts in the Member States to the group type. It should be noted that ten individuals (the majority of them separatists) received more than one verdict and they have therefore been counted more than once in the calculation.



Member State	Convicted	Acquitted	Total verdicts	Acquitted %
Belgium	9	1	10	10%
Denmark	1		1	0%
France	40		40	0%
Germany	12		12	0%
Ireland (Republic of)	15	3	18	17%
Italy	16	6	22	27%
The Netherlands	8		8	0%
Spain	122	76	198	38%
Sweden	4		4	0%
United Kingdom	14	5	19	26%
Total	241	91	332	27%

3. Number of verdicts, convictions and acquittals per Member State in 2010

Member State	Final	Pending judicial remedy	Total verdicts
Belgium	9	1	10
Denmark	1		1
France	29	11	40
Germany	8	4	12
Ireland (Republic of)	17	1	18
Italy	1	21	22
The Netherlands	8		8
Spain	87	111	198
Sweden	2	2	4
United Kingdom	13	6	19
Total	175	157	332

4. Number of final and not final verdicts per Member State in 2010<sup>16</sup>

<sup>16</sup> Some verdicts are pending appeal or recourse. In those cases, where no confirmation was received on the finality of the decision, they have been considered as not final.

NOTE: Full paper can be downloaded for the “CBRNE-CT Papers” Section of the Newsletter.



### Al Qaeda Stirs Again

By Juan C. Zarate

Source: <http://www.nytimes.com/2011/04/18/opinion/18Zarate.html>

MANY in the West had taken comfort in Al Qaeda's silence in the wake of the uprisings in the Muslim world this year, as secular, non-violent protests, led by educated youth focused on redressing longstanding local grievances, showcased democracy's promise and seemed to leave Al Qaeda behind.

flooded the streets of Tunis and Cairo, it had been fighting in the mountains against the same enemies. Anwar al-Awlaki, a Yemeni-American cleric affiliated with Al Qaeda in the Arabian Peninsula, declared that in the wake of the revolutions, "our mujahedeen brothers ... will get a chance to breathe again after



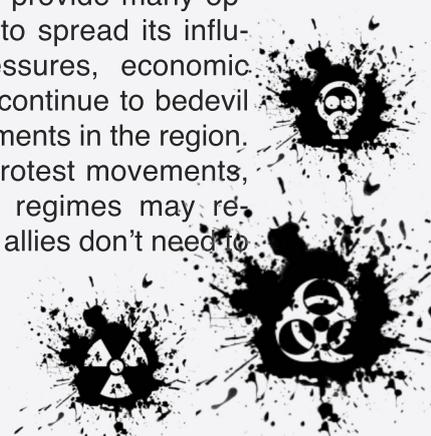
Indeed, the pristine spirit of the Arab Spring does represent an existential threat to Al Qaeda's extremist ideology. But Al Qaeda's leaders also know that this is a strategic moment. They are banking on the disillusionment that inevitably follows revolutions to reassert their prominence in the region. And now Al Qaeda is silent no more — and is taking the rhetorical offensive.

In recent statements, Ayman al-Zawahri, Osama bin Laden's second-in-command, and Qaeda surrogates have aligned themselves with the protesters in Libya, Egypt and elsewhere, while painting the West as an enemy of the Arab people.

In North Africa, Al Qaeda in the Islamic Maghreb claimed that while protesters

three decades of suffocation" and that "the great doors of opportunity would open up for the mujahedeen all over the world." Mr. Zawahri has denounced democracy, arguing that toppling dictators is insufficient and that "justice, freedom, and independence" can be achieved only through "jihad and resistance until the Islamic regime rises."

The chaos and disappointment that follow revolutions will inevitably provide many opportunities for Al Qaeda to spread its influence. Demographic pressures, economic woes and corruption will continue to bedevil even the best-run governments in the region. Divisions will beset the protest movements, and vestiges of the old regimes may re-emerge. Al Qaeda and its allies don't need to



win the allegiance of every protester to exert their influence; they have a patient view of history.

Although Washington must avoid tainting organic movements or being perceived as a central protagonist, the United States and its Western allies should not be shy about working with reformers and democrats to shape the region's trajectory — and ensuring Al Qaeda's irrelevance in the Sunni Arab world, the heart of its supposed constituency.

In countries where autocrats have been toppled (as in Egypt and Tunisia), we must help shape the new political and social environment; in nondemocratic, allied states (like the region's monarchies), we need to accelerate internal reform; and in repressive states (like Iran, Libya and Syria), we should challenge the legitimacy of autocratic regimes and openly assist dissidents and democrats. This is not about military intervention or the imposition of American-style democracy. It is about using American power and influence to support organic reform movements.

The United States Agency for International Development and advocacy organizations can help civil society groups grow; human rights groups can organize and assist networks of dissidents; and Western women's groups and trade unions could support their counterparts throughout the Middle East. Wealthy philanthropists and entrepreneurs

who are part of the Middle Eastern diaspora could make investments and provide economic opportunities for the region's youth, while technology companies interested in new markets could partner with anticorruption groups to aid political mobilization and increase government accountability and transparency. Hollywood and Bollywood writers and producers should lionize the democratic heroes who took to the streets to challenge the orthodoxy of fear.

A focused campaign to shape the course of reform would align our values and interests with the aspirations of the protesters. More important, it would answer the challenge from Al Qaeda to define what happens next and reframe the tired narratives of the past.

In 2005, Mr. Zawahri anticipated this battle for reform and noted that "demonstrations and speaking out in the streets" would not be sufficient to achieve freedom in the Muslim world. If we help the protesters succeed, it will not only serve long-term national security interests but also mark the beginning of the end of Al Qaeda.

Juan C. Zarate, a senior adviser at the Center for Strategic and International Studies, was the deputy national security adviser for combating terrorism from 2005 to 2009.

## Radicals trained for terrorism at British mosques, Guantanamo files reveal

Source: <http://www.dailymail.co.uk/news/article-1380564/35-radicals-trained-terrorism-British-mosques-Guantanamo-files-reveal.html#ixzz1KmvLtaTo>

Britain's mosques became an international haven for extremists who enjoyed state benefits while being trained for terrorism, leaked documents show. The WikiLeaks files, written by U.S. military chiefs, reveal that at least 35 Guantanamo terrorists were radicalised in London mosques before being sent to fight against the West. This is believed to be more than any other Western country.

Of these, just 17 were British nationals or had been granted asylum, while 18 had travelled from abroad — cementing Britain's repu-



Implicated: The files point to the crucial role of London-based preachers such as Abu Hamza, above, in indoctrinating extremists



tation as a global training camp for terrorists. U.S. intelligence officers describe Finsbury Park mosque, in North London, as a 'haven for Islamic extremists from Morocco and Algeria' and 'an attack planning and propaganda production base'. After their UK trip they were then flown to Pakistan and Afghanistan where they were taught to fight and make bombs. The leaked documents also show that an Al Qaeda 'assassin' accused of bombing two churches and a luxury

allied personnel in Afghanistan and Pakistan'. He has been returned to Algeria but it is not clear whether he will stand trial there.

The WikiLeaks documents, published by the Daily Telegraph, also reveal that 16 detainees sent back to Britain were regarded as 'high risk' by the U.S. authorities and capable of plotting acts of terror. Yet each has been paid £1million of public money by the Government to compensate them for their unlawful detention. The documents point to the



'Haven for extremists': US intelligence experts describe Finsbury Park Mosque, in north London, above, as an 'attack planning and propaganda production base'

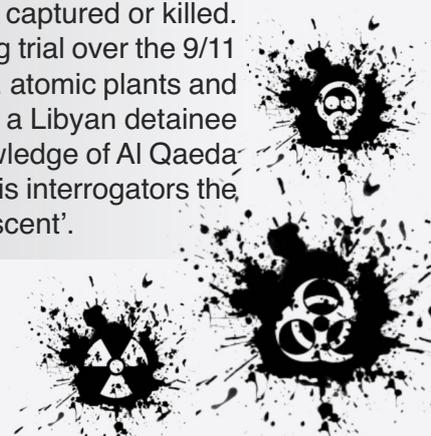
hotel in Pakistan was at the same time working for MI6.

Adil Hadi al Jazairi Bin Hamlili was captured in 2003 and sent to Guantanamo Bay where interrogators were convinced that he was an informer for British intelligence. U.S. intelligence reports describe the 35-year-old Algerian citizen as a 'facilitator, courier, kidnapper, and assassin for Al Qaeda'. CIA interrogators found him 'to have withheld important information from ...British Secret Intelligence Service ... and to be a threat to U.S. and

crucial role played by London-based preachers such as Abu Qatada and Abu Hamza in the suspected indoctrination of extremists, before they were dispatched around the world to plot terror attacks. They describe Qatada as 'the most successful recruiter in Europe' and

### REVENGE PLOT TO NUKE BRITAIN

Interrogators at Guantanamo Bay uncovered serious plots to unleash chemical and nuclear weapons on the West, the WikiLeaks documents show. According to detainees' confessions, Al Qaeda mastermind Kalid Sheikh Mohammed claimed they had hidden a nuclear bomb in Britain which would be detonated if Osama Bin Laden was captured or killed. Detainees admitted that Mohammed, currently facing trial over the 9/11 terrorist attacks, was involved in a plot to attack U.S. atomic plants and unleash a 'nuclear hellstorm'. According to the files, a Libyan detainee and close friend of Bin Laden, Abu Al-Libi, 'has knowledge of Al Qaeda possibly possessing a nuclear bomb'. Another told his interrogators the bombers would be 'Europeans of Arab or Asian descent'.



‘a focal point for extremist fundraising [and] recruitment’.

while his wife and eight children are claiming £680 a week in benefits and living in a coun-



Held: At least 35 extremists indoctrinated in Britain were held in Guantanamo Bay

Despite this, the London cleric and Al Qaeda’s chief European agent was paid £2,500 for being ‘unlawfully detained’ by the British Government, after being held indefinitely without trial following 9/11. A ruling found that keeping him in Belmarsh prison, while he refused to return to his native Jordan, breached his human right to a fair trial. The Government is trying to deport him to Jordan, where he has been sentenced to jail in his absence on terror charges.

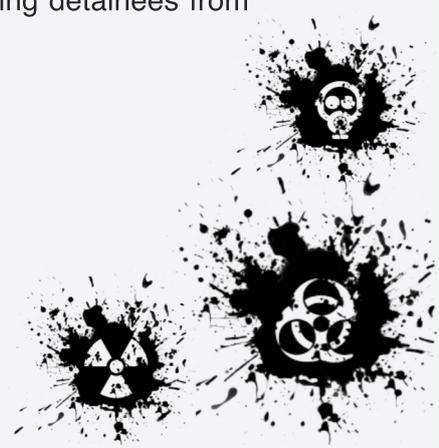
Meanwhile, Hamza is named as encouraging ‘his followers to murder non-Muslims’, in the documents, and yet continues to fight deportation to the U.S. because of Europe’s liberal human rights laws.

Extradition proceedings began six years ago, but he appealed to Strasbourg on the grounds that this would breach his human right to a fair trial because he would be given an ‘excessive’ sentence. The taxpayer continues to fund his stay in Belmarsh prison

cil home in West London. Three other mosques and an Islamic centre are also highlighted by senior commanders as places where young Muslim men were turned into potential terrorists.

Many obtained EU passports from other European countries such as France, but then travelled on to Britain to take advantage of the generous asylum system. The leaks help explain why U.S. intelligence services regard extremists in Britain as the greatest threat to American security. The CIA is still so concerned about militant recruitment in the UK that it operates its own intelligence network and recruits its own agents among the Muslim population in Britain.

In a statement, the Pentagon said: ‘The previous and current administrations have made every effort to act with the utmost care and diligence in transferring detainees from Guantanamo.’



### Terrorists Could Exploit Hurricane in U.S.

Source: [http://www.globalsecuritynewswire.org/gsn/nw\\_20110425\\_5307.php](http://www.globalsecuritynewswire.org/gsn/nw_20110425_5307.php)

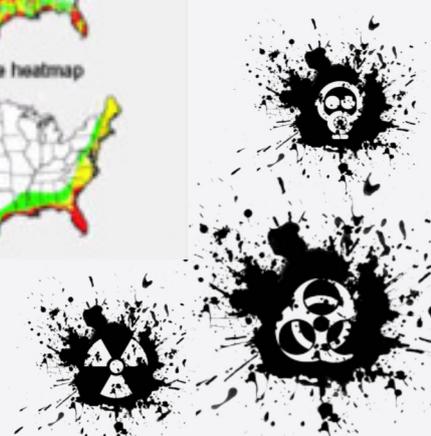
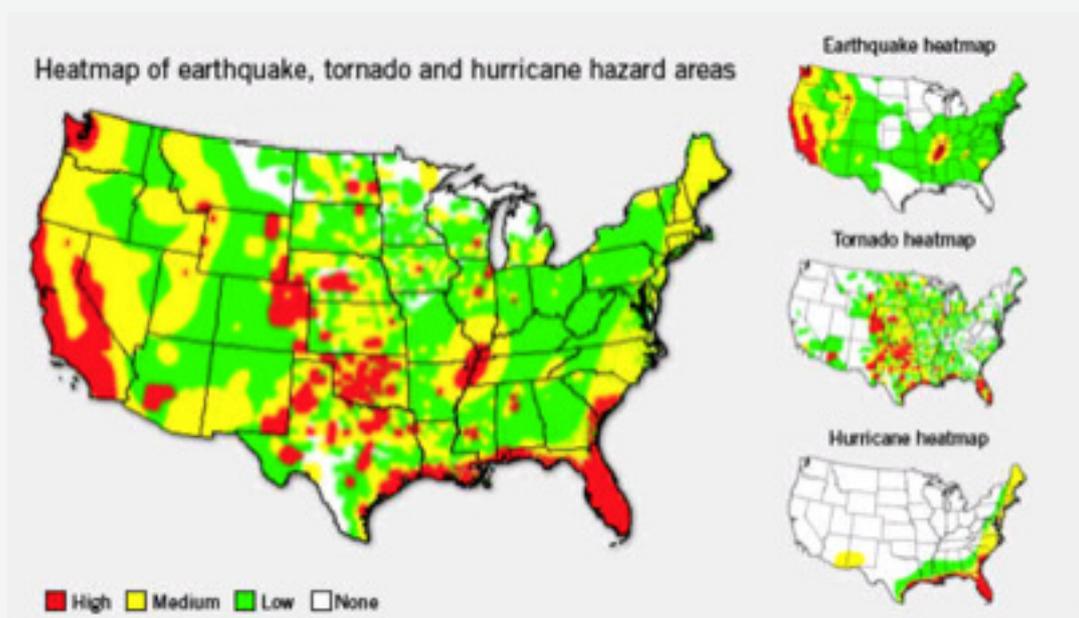
An extremist entity might take advantage of the disorder produced by a hurricane in the United States, through actions such as striking emergency exit routes, launching computer attacks, or noting emergency response measures for planning a later assault on an atomic plant or other site, experts warned in a U.S. Homeland Security Department "red cell" report made public. The document, posted on the Public Intelligence website, looks at threats that could arise before, during and after a hurricane. A hurricane has the highest probability of being tapped by a single terrorist or an independent team, says the assessment by a group of 35 intelligence, armed forces, academic and industry specialists convened in 2003. "A lone actor or small group would be seeking attention rather than pursuing a political agenda, and would retain the capability to act without extensive planning," the document states.

More widely dispersed entities including al-Qaeda, Hamas and Hezbollah undertake involved preparations unsuited for leveraging a hurricane, though they might execute an existing plan when U.S. emergency capabilities are burdened by an unforeseen natural event, according to the assessment. However, "members considered this a low probability,

because of the unpredictable nature of hurricanes, the inability to determine location and the varying intensity," the report says.

"Physical threats during [a hurricane] were considered highly unlikely, due to the logistical complexities involved in preparing and mobilizing assets in extreme weather," it states. "However, participants noted that a natural disaster could be used as a diversion or a way to capitalize on the concentration of federal resources in one area of the country while an attack is staged." "Hard targets such as critical infrastructures may be more difficult to attack during the storm since they will have initiated emergency operations. In addition emergency responders will have a greater presence in areas due to emergency shift schedule operations," the report adds.

After a hurricane, though, a threatened bomb detonation or biological material release could heighten public anxiety, further strain medical resources and heighten the issuer's public profile, according to the document. "Experts felt that cyber terrorism may be the most likely and potentially dangerous attack that could be mounted easily -- locally or internationally -- during all phases of the storm," the report states. "A cyber attack could produce erroneous information on the storm





to confuse the population, hamper critical infrastructures during the storm thereby increasing instability and response efforts. Denial of service attacks on infrastructures such as the 911 system could be widespread

and impact communication between first responders and the public.

"In addition, attacks on soft targets or disaster areas by persons or groups disguised as first responders or infrastructure repair personnel were considered a potential vulnerability, especially considering the mobilization agreements in place. Such an attack would likely cause panic and frustrate efforts by emergency management personnel to respond to the effects of the hurricane. Natural disaster sites have less security than terrorism disaster sites and it may be easy to manipulate the confusion and chaos to access high value targets," the report warns. Such "red cell" analyses are designed to draw attention to potential vulnerabilities, but they do not necessarily mean exploitation of discussed weaknesses is probable, according to Wired magazine.

**NOTE:** Read the full 2003 report at the "CBRNE-CT Papers" section of the Newsletter's website.

## Why Pakistan Is the Most Dangerous Place On Earth

By Richard North Patterson

Source: <http://www.foxnews.com/opinion/2011/04/27/richard-north-patterson-pakistan-dangerous-place-earth/#ixzz1KvQ7qDxj>

In recent years, American and Israeli fears of nuclear proliferation have focused on Iran. The consequences of an Iranian bomb could be grave indeed: a chain reaction of nuclear armament among Arab countries, some of whom are threatened by, or may collaborate with, jihadists.

It is unlikely, however, that Iran would start a nuclear war: its regime has a return address, and Israel could annihilate them. That is why nuclear terrorism by non-state actors like Al Qaeda is the West's ultimate nightmare and why Pakistan, not Iran, is the most dangerous place on earth.

Imagine this: Three jihadist groups in Pakistan — Al Qaeda, the Taliban and Lashkar-e-Taiba ("LET") — forge an operational alliance to steal a nuclear bomb from the Pakistani arsenal in order to destroy a major Western city. Pursuant to the plan, LET—which carried out

the Mumbai attacks—destroys the Taj Mahal and attacks the Indian Parliament, precipitating a state of nuclear alert between India and Pakistan, whose intelligence agency is the chief sponsor of LET.

When a Pakistani convoy moves a bomb from its secret storage facility to an Air Force base near the border, a group of Pakistani Taliban—directed by Al Qaeda and tipped off by a military insider—attacks the convoy and





steals the bomb. From there, Al Qaeda has several routes for smuggling the bomb to America, Europe, or Israel.

This is not a Bondian fantasy. What is so frightening about this scenario is its realism: every detail is of grave concern to the national defense and intelligence communities. But almost as disturbing is how little most Americans know about this threat.

There is no country with more active terrorists than Pakistan, and few with more nuclear weapons. The spur for nuclear armament is Pakistan's bitter rivalry with India, focused on the violent sixty-year-old dispute over Kashmir. The unintended consequences could be lethal: a jihadist capture of nuclear weapons or materials for use against the West.

This could happen in several different ways: the clandestine acquisition of nuclear materials; seizure of a nuclear facility by a rogue military officer; a jihadist takeover of the Pakistan government; and the theft of a nuclear weapon.

Underlying these fears are serious questions about the security of the Pakistani arsenal. We don't know where all the weapons are stored. The people who do—the military and the Pakistani intelligence service, the ISI—include highly-placed jihadist sympathizers, typified by a former head of the ISI who has said, "The same nuclear capacity that can destroy Madras, India, can destroy Tel Aviv." The weapons themselves may lack American-style security systems—which operate like a sophisticated ATM—to prevent accidental or unauthorized use. The tension between Pakistan and India poses the constant threat of a

nuclear alert. And nuclear weapons are never less secure than when they are moved from one site to another.

Al Qaeda has long been obsessed with nuclear weapons, and Pakistan has always been its focus. Just before 9/11, Bin Laden met in Afghanistan with a Pakistani nuclear scientist and an engineer, drawing up specifications for an Al Qaeda bomb. And after 9/11, Bin Laden announced Al Qaeda's intention to kill four million Americans to "balance" the Muslim deaths he attributes to the United States and Israel and issued a fatwa calling for the use of nuclear arms against the West.

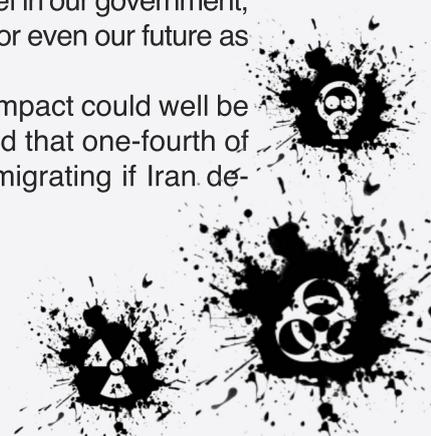
We are certainly vulnerable to this. A Pakistani bomb carries enough HEU to destroy New York, but can travel in a container the size of a coffin. Its total weight is between 200 to 300 pounds, which means that a few men could put it in a van, truck, boat, cargo container, or private plane.

Such a weapon could easily be smuggled through the ports in Long Beach or New York, where we inspect roughly 2% of all cargo containers. From there, a small aircraft could deliver a nuclear weapon to any city in America.

For example, let's take Washington, D.C. In theory, we've got a fifteen mile no-fly zone around the capital, enforced by surface-to-air missiles and jets at Andrews Air Force Base on a five-minute alert. But thousands of aircraft fly within fifteen miles of the White House—if one crosses the line going 300 miles an hour, five minutes won't be enough. Though the government won't say so, multiple planes fly over the capital every year, and we don't spot half of them until it's over.

There's a more than fair chance that Al Qaeda could turn the White House into the epicenter of a nuclear blast. A strike against Washington, D.C. or New York could be economically, politically, and psychologically shattering. Terrified of Al Qaeda, Americans would be thrown into a panic while they wait for the next city to disappear. This would threaten our own belief in our government, our system of civil liberties, or even our future as a democracy.

As for Israel itself, the impact could well be fatal. A recent poll revealed that one-fourth of Israelis would consider emigrating if Iran develops a bomb.



Imagine, then, the impact of a strike on Tel Aviv that annihilates hundreds of thousands of Israelis, destroying the heart of their infrastructure, their economy, and, most fundamental, the belief that they can survive as a nation. One likelihood is that Israel would become a Masada state, populated by a cadre of religious fanatics prepared to watch their families die rather than yield an inch of their atomic wasteland. The result would be unspeakably sad—the end of Israel as we know it.

So how realistic is a scenario in which Al Qaeda links with other jihadists to steal a nuclear weapon from Pakistan? Very. But to grasp this, one must understand the links between jihadist groups, and the ties between these groups and the most powerful forces within Pakistan—the military who controls the nuclear arsenal and, in particular, the ISI.

The ISI is at the heart of Pakistani jihadism. It helped create the Taliban to fight the Russians in Afghanistan, and introduced its leaders to bin Laden. It created LET to fight a guerilla war against India in Kashmir. The military, the ISI and LET all recruit among the Punjabi, Pakistan's dominant ethnic group, creating familial ties between all three. With the ISI's protection, LET—despite Mumbai—trains hundreds of jihadists every year. And the ISI is so marbled with jihadist sympathizers that joint operations with the CIA are often next to impossible—witness its current demand that we withdraw hundreds of intelligence and Special Operations personnel, a fresh expression of antipathy that weakens our intelligence, strengthens the militants and exacerbates Pakistan's nuclear danger.

As for the Taliban and LET, according to leading experts they are now allied with Al Qaeda against the West and planning further

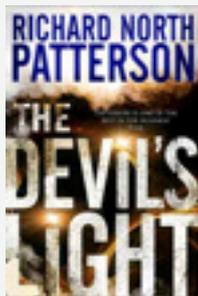
attacks on America and its allies at home and abroad. Al Qaeda and the Taliban have safe havens in Pakistan—including, most believe, Bin Laden—and Benazir Bhutto's murder was most likely their joint operation.

As for LET, Al Qaeda helped to fund it, and after 9/11 some of its leaders took refuge in LET safe houses.

U.S. intelligence officials believe that LET's targets now include America, Israel, and Europe. And all three groups are Sunni and, increasingly, share Al Qaeda's goal of jihad against the West.

So what do we do about Pakistan itself? Cutting off aid would only destabilize the country further. Instead, we must pursue the undramatic but essential work that any hard situation requires: engagement, patience, consistency, prudent intelligence work under hard circumstances, and smart diplomacy. We must engage civilian leaders, encourage the development of civil institutions, fund greater aid earmarked for universal education, increase military-to-military contact; and quietly work for a rapprochement with Indian and Pakistani acquiescence in the international regime governing nuclear proliferation.

Obviously, there are no simple answers. But protecting ourselves against disaster requires the willingness to look ahead for decades, not weeks or months or even years. The foreign policy of a great nation in a nuclear age does not shy from complex challenges—it embraces them.



Richard North Patterson is the author of eighteen bestselling and critically acclaimed novels. His latest book "The Devil's Light" (Scribner) will be published in May.



## The Middle East-Latin American terrorist connection

By Vanessa Neumann

Source: <http://www.fpri.org/enotes/201105.neumann.latinamericanterrorist.html>

In a global triangulation that would excite any conspiracy buff, the globalization of terrorism now links Colombian FARC with Hezbollah, Iran with Russia, elected governments with violent insurgencies, uranium with AK-103s, and cocaine with oil. At the center of it all, is Latin America—especially the countries under the influence of Venezuelan President Hugo Chávez.

The most publicized (and publicly contested) connection between Hugo Chávez and the Colombian narcoterrorist organization Revolutionary Armed Forces of Colombia (FARC) was revealed after the March 2008 Colombian raid on the FARC camp in Devía, inside Ecuador, where a laptop was discovered that apparently belonged to Luis Edgar Devía Silva (aka, “Raúl Reyes”), head of FARC’s International Committee (COMINTER). The Colombian government under then-President Álvaro Uribe announced that Interpol had certified the authenticity of the contents of the computer disks, whose files traced over US\$ 200 million funneled to the FARC through the Venezuelan state-owned, and completely Chávez-dominated, Petróleos de Venezuela (PDVSA). On May 10th, 2011, the International Institute of Strategic Studies (IISS) will publish one of its strategic dossiers based on a study of the computer disks entitled *The FARC Files: Venezuela, Ecuador and the Secret Archives of ‘Raúl Reyes’* that purports to elucidate the organization’s development and internationalization.

According to some already leaked documents, Venezuelan General Hugo Carvajal and other members of the armed forces were in direct contact with and lending financial support to the late FARC leader Antonio Marín, aka “Tirofijo” (“Sure Shot”) and “Manuel Marulanda.” Of the fact that the

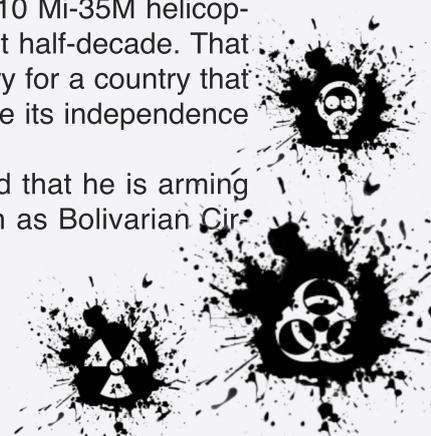
FARC enjoys at least ideological support from the governments of Ecuador and Venezuela, there can be no doubt: Venezuelan President Hugo Chávez and Ecuadorean President Rafael Correa have both argued that the FARC should not be considered a terrorist organization.

While support of the insurgents next door is certainly nothing new, Venezuelan military and terror alliances are spanning the globe and expanding at a worrying rate for all, especially US interests in the region.

As I wrote in *The Weekly Standard* last October[1], Venezuelan President Hugo Chávez and Russian President Dmitry Medvedev jointly announced that they had reached an agreement for Russia to build two 1200-megawatt nuclear reactors in Venezuela. Also part of the deal was the latest installment of \$6.6 billion of conventional weapons purchases since

2005: ninety-two T-72 and T-90 tanks that will replace the aging French MX-30s, ten Ilyushin Il-76MD-90 planes, two Il-78MK refueling aircraft, as well as five S-300 missile systems. Iran had also sought the S-300 but Medvedev banned the sale for fear of violating U.N. Security Council Resolution 1929, concerning sanctions on Iran. The S-300 missiles and their attendant Smerch multiple rocket launchers are considered far more powerful than the Tor M-1 missile systems that both Venezuela and Iran have previously purchased in the past five years. Caracas has also confirmed plans to purchase up to 10 Mi-28NE attack helicopters on top of the 10 Mi-35M helicopters purchased in the past half-decade. That is an awful lot of weaponry for a country that has not fought a war since its independence from Spain in 1821.

While Chávez has said that he is arming his citizen militias, known as Bolivarian Cir-



cles, rumor has it that the weapons may also be going to agents and fighters from the Colombian FARC, the Iranian-backed terrorist group Hezbollah and Cuban security and intelligence services, whose numbers, according to many think tanks and U.S. security sources, have swelled in Venezuela. Interpol has confirmed evidence that Venezuela has funneled well over \$300 million to the FARC and has built an ammunition plant to supply AK-103s, the FARC weapon of choice.

That is only one piece of the puzzle; the other is Iran, where Venezuelan money has also been flowing.

Venezuelan President Hugo Chávez and Iranian President Mahmoud Ahmadinejad publicly call each other “brothers” and last year signed 11 memoranda of understanding for, among other initiatives, joint oil and gas exploration, as well as the construction of tanker ships and petrochemical plants. Chávez’s assistance to the Islamic Republic in circumventing U.N. sanctions has got the attention of the new Republican leadership of the House Foreign Affairs Committee. Ileana Ros-Lehtinen and Connie Mack (both R-FL) have said they intend to launch a money-laundering investigation into the Venezuelan state oil company *Petróleos de Venezuela, S.A. (PDVSA)*. In July 2010, the EU ordered the seizure of all the assets of the Venezuelan International Development Bank, an affiliate of the Export Development Bank of Iran (EDBI), one of 34 Iranian entities implicated in the development of nuclear or ballistic technology and sanctioned by the Treasury Department. In the meantime, Tehran and Caracas have announced that PDVSA will be investing \$780 million in the South Pars gas field in southern Iran.

Uranium, sought by both Iran and Russia, is a key aspect of the two countries’ strategic relationship: Iran is reportedly helping Venezuela find and refine its estimated 50,000 tons of uranium reserves.

So, on one side Venezuela is funding and arming the FARC; on the other it is purchasing nuclear reactors and weapons from the Russians; on yet another, it is sending money to Iran and helping it find and enrich uranium. And then there is Hezbollah, Iran’s Lebanon-based asset.

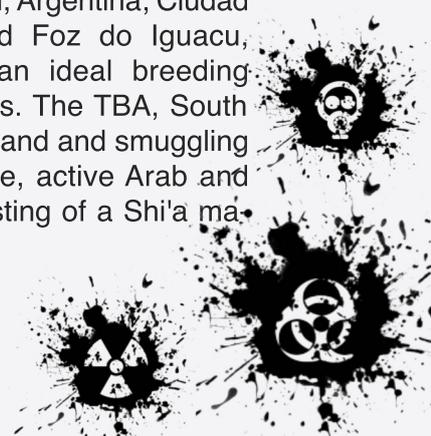
Reports that Venezuela has provided Hezbollah operatives with Venezuelan national identity cards are so rife, they were raised in the July 27, 2010, Senate hearing for the recently nominated U.S. ambassador to Venezuela, Larry Palmer. When Palmer answered that he believed the reports, Chávez refused to accept him as ambassador in Venezuela. Meanwhile, Iran Air, the self-proclaimed “airline of the Islamic Republic of Iran,” operates a Tehran-Caracas flight commonly referred to as “Aeroterror” by intelligence officials for allegedly facilitating the access of terrorist suspects to South America. The Venezuelan government shields passenger lists from Interpol on that flight.

Iran, meanwhile, has developed significant relationships elsewhere in Latin America – most prominently with Chávez’s allies and fellow Bolivarian Revolutionaries: Bolivian President Evo Morales, Ecuadorean President Rafael Correa and Nicaraguan President Daniel Ortega.

In December 2008 the EDBI offered to deposit \$120 million in the Ecuadorean Central Bank to fund bilateral trade, and Iran and Ecuador have signed a \$30 million deal to conduct joint mining projects in Ecuador through the Chemical-Geotechnical-Metallurgical Research Center in Ecuador. Even as that deal carefully avoids mentioning uranium, the IAEA’s March 2009 plans to help Ecuador explore its vast uranium reserves were largely intended to highlight and preclude Iranian involvement. In February 2010 the Paris-based Financial Action Task Force, a multilateral organization that combats money laundering and terrorist financing, placed Ecuador on a list of countries that failed to comply with its regulations.

Middle Eastern terrorism, however, is not new to Latin America and has been on the US Army’s radar for many years. [2]

Latin America’s Tri-Border Area (TBA), bounded by Puerto Iguazu, Argentina; Ciudad del Este, Paraguay; and Foz do Iguacu, Brazil, has long been an ideal breeding ground for terrorist groups. The TBA, South America’s busiest contraband and smuggling center, is home to a large, active Arab and Muslim community consisting of a Shi’a ma-





jority, a Sunni minority, and a small population of Christians who emigrated from Lebanon, Syria, Egypt, and the Palestinian territories about 50 years ago. Most of these Arab immigrants are involved in commerce in Ciudad del Este but live in Foz do Iguacu on the Brazilian side of the Iguacu River.

In 2005, six million Muslims were estimated to inhabit Latin American cities. However, ungoverned areas, primarily in the Amazon regions of Suriname, Guyana, Venezuela, Colombia, Ecuador, Peru, Bolivia, and Brazil, present easily exploitable terrain over which to move people and material. The Free Trade Zones of Iquique, Chile; Maicao, Colombia; and Colón, Panama, can generate undetected financial and logistical support for terrorist groups. Colombia, Bolivia, and Peru offer cocaine as a lucrative source of income. In addition, Cuba and Venezuela have cooperative agreements with Syria, Libya, and Iran.

Argentine officials believe Hezbollah is still active in the TBA. They attribute the detonation of a car bomb outside Israel's embassy in Buenos Aires on 17 March 1992 to Hezbollah extremists. Officials also maintain that with Iran's assistance, Hezbollah carried out a car-bomb attack on the main building of the Jewish Community Center (AMIA) in Buenos Aires on 18 July 1994 in protest of the Israeli-Jordanian peace agreement that year.

Today, one of the masterminds of those attacks, the Iranian citizen and Shia Muslim teacher, Mohsen Rabbani, remains not only at large, but extremely active in recruiting young Brazilians, according to reports in

Brazilian magazine *Veja*. [3] "Now based in Iran, he continues to play a significant role in the spread of extremism in Latin America," prosecutor Alberto Nisman, head of the special unit of the Argentine prosecutors charged with investigating the attacks, said to *VEJA*. The enticement of Brazilians for courses abroad has been monitored for four years by the Federal Police and the ABIN, the government's secret service.

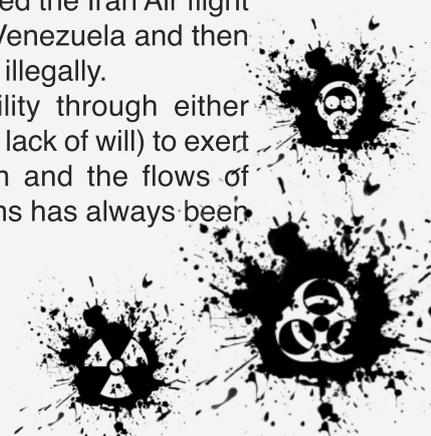
One hundred eighty kilometers away from Recife, in rural Pernambuco, the city of Belo Jardim remains the most active center for the recruitment of extremists in Latin America. [4] Along with the recruits in Belo Jardim, youth from Argentina, Chile, Colombia, Costa Rica, and Mexico also travel to Iran for religious instruction under Rabbani.

The Federal Police has information that Rabbani has been to Brazil several times in



recent years. In one of those visits, almost three years ago, he boarded the Iran Air flight from Tehran to Caracas, Venezuela and then from there, entered Brazil illegally.

So while ungovernability through either government weakness (or lack of will) to exert controls over immigration and the flows of money, drugs and weapons has always been



an issue, it is the new government complicity that makes it all the more dangerous.

Even ahead of the IISS dossier's publication, the most shocking revelations into the global interconnectedness of Latin American governments and Middle Eastern terrorist groups have come from Walid Makled, Venezuela's latter-day Pablo Escobar, who was arrested on August 19, 2010 in Cúcuta, a town on the Venezuelan-Colombian border. A

eral-in-Chief of the Armed Forces Unified Command, General Henry Rangel Silva, and the Director of Military Intelligence, General Hugo Carvajal.

Although the US had issued an arrest warrant and subjected him to sanctions under the Kingpin Act, Makled is being extradited to Venezuela, not the US. While the US dithered on Colombia's offer of extradition to the US, Venezuelan President Hugo Chávez re-



Venezuelan of Syrian descent known variously as "El Turco" ("The Turk") or "El Arabe" ("The Arab"), he is allegedly responsible for smuggling 10 tons of cocaine a month into the US and Europe – a full 10% of the world's supply and 60% of Europe's supply. His massive infrastructure and distribution network make this entirely plausible, as well as entirely implausible the Venezuelan government did not know. Makled owned Venezuela's biggest airline, Aeropostal, huge warehouses in Venezuela's biggest port, Puerto Cabello, and bought enormous quantities of urea (used in cocaine processing) from a government-owned chemical company.

Indeed since his arrest and incarceration in the Colombian prison La Picota, Makled has given numerous interviews to various media outlets, in which he has claimed that he paid more than a million dollars a month to various high-ranking Venezuelan government officials who were his partners in trafficking FARC cocaine – amongst the named: Venezuelan Minister of the Interior and also Minister of Justice, Tarek El Aissami, the Gen-

eral-in-Chief of the Armed Forces Unified Command, General Henry Rangel Silva, and the Director of Military Intelligence, General Hugo Carvajal.

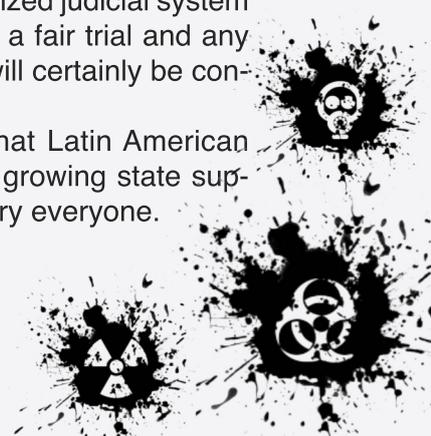
Although the US had issued an arrest warrant and subjected him to sanctions under the Kingpin Act, Makled is being extradited to Venezuela, not the US. While the US dithered on Colombia's offer of extradition to the US, Venezuelan President Hugo Chávez re-

quested Makled's extradition to Venezuela, where he is (in the ultimate ironic twist) wanted for cocaine trafficking and at least two murders.

When asked on camera by a Univisión television reporter whether he had any relation to the FARC, he answered: "That is what I would say to the American prosecutor." Asked directly whether he knew of Hezbollah operations in Venezuela, he answered: "In Venezuela? Of course! That which I understand is that they work in Venezuela. [Hezbollah] make money and all of that money they send to the Middle East." [5]

Makled's extradition to Venezuela rather than the US is thus a terrible loss for both the United States's Global War on Terror (GWOT) and the world's intelligence communities: in Venezuela's heavily politicized judicial system Makled will never receive a fair trial and any testimony he might give will certainly be concealed.

The problem now is that Latin American support for terrorism has growing state support—and this should worry everyone.



### Notes

[1] [http://www.weeklystandard.com/blogs/hugo-ch-vezs-military-buildup-and-iranian-ties\\_511234.html](http://www.weeklystandard.com/blogs/hugo-ch-vezs-military-buildup-and-iranian-ties_511234.html)

[2] [http://www.army.mil/professionalWriting/volumes/volume3/january\\_2005/1\\_05\\_4.htm](http://www.army.mil/professionalWriting/volumes/volume3/january_2005/1_05_4.htm)

[3] <http://veja.abril.com.br/blog/reinaldo/geral/brasil-vigia-suspeitos-de-elo-com-extremistas-no-ira/>  
<http://veja.abril.com.br/blog/reinaldo/geral/quantos-sao-os-aneis-que-separam-o-pt-dos-terroristas-islamicos-que-atuam-no-brasil/>  
<http://veja.abril.com.br/blog/reinaldo/geral/acordem-senhores-congressistas-ja-o-governo-nao-da-bola-terrorista-alicia-homens-pobres-do-interior-do-brasil-para-fazer-%E2%80%9Ccurso-de-religio%E2%80%9D-no-ira/>

[4] <http://interamericansecuritywatch.com/2011/04/20/the-terrorist-%E2%80%9Cprofessor%E2%80%9D/>

[5] <http://colombiareports.com/colombia-news/news/15355-venezue>

Vanessa Neumann is an Associate of the University Seminar on Latin America at the School of International and Public Affairs (SIPA) at Columbia University. A native Venezuelan, Dr. Neumann has worked as a journalist in Caracas, London and the United States. She is Editor-at-Large of Diplomat, a London-based magazine to the diplomatic community and a regular contributor to The Weekly Standard on Latin American politics.

## Terrorist Group Setting Up Operations Near Border

Hezbollah Considered To Be More Advanced Than Al-Qaida

Source: <http://www.10news.com/news/27780427/detail.html>

A terrorist organization whose home base is in the Middle East has established another home base across the border in Mexico. "They are recognized by many experts as the

"A" team of Muslim terrorist organizations," a former U.S. intelligence agent told 10News. The former agent, referring to Shi'a Muslim terrorist group Hezbollah, added, "They cer-

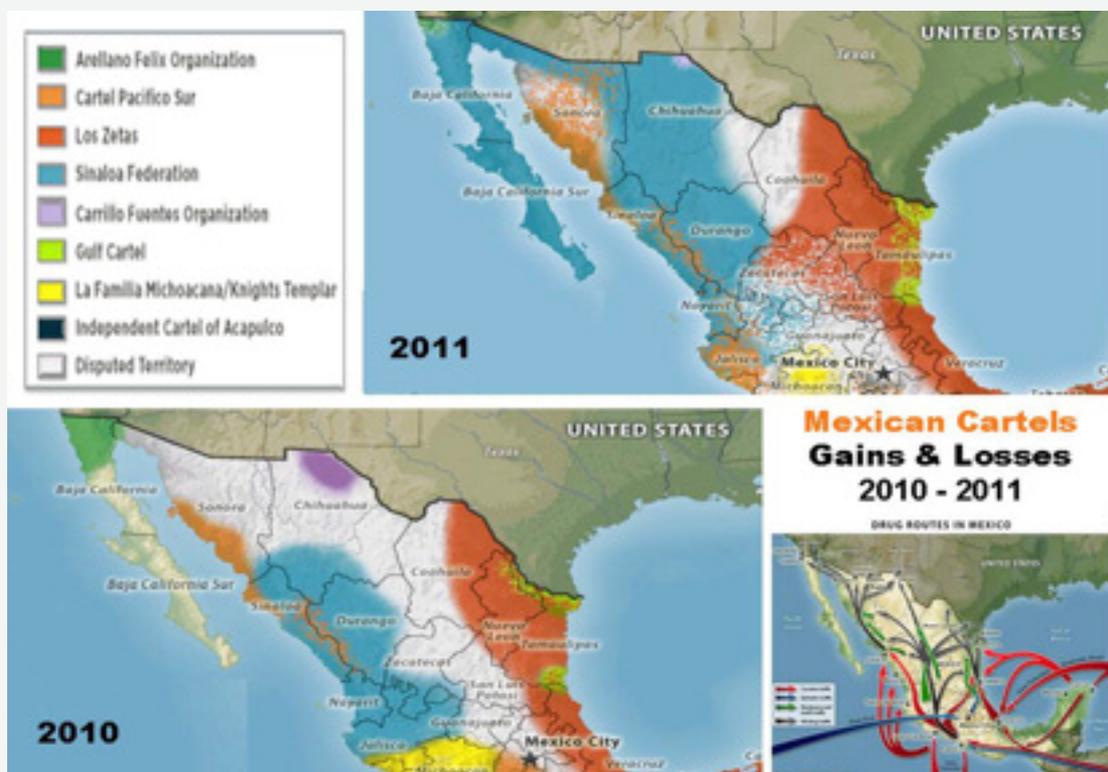




tainly have had successes in big-ticket bombings." Some of the group's bombings include the U.S. embassy in Beirut and Israeli embassy in Argentina. However, the group is now active much closer to San Diego.

"Their operators are far more skilled ... they are the equals of Russians, Chinese or Cubans," he said. "I consider Hezbollah much more dangerous in that sense because of strategic thinking; they think more long-term."

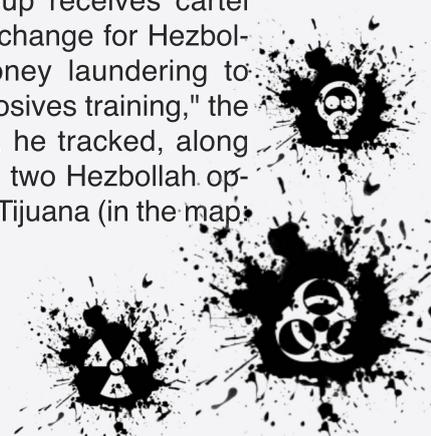
Hezbollah has operated in South America for decades and then Central America, along with their sometime rival, sometime ally Hamas. Now, the group is blending into Shi'a Muslim communities in Mexico, including Tijuana. Other pockets along the U.S.-Mexico border region remain largely unidentified as U.S. intelligence agencies are focused on the drug trade. "They have had clandestine training in how to live in foreign hostile territories," the agent said. The agent, who has spent years deep undercover in Mexico, said



Source: Stratfor 2011

"We are looking at 15 or 20 years that Hezbollah has been setting up shop in Mexico," the agent told 10News. Since the Sept. 11, 2001, terrorist attacks, U.S. policy has focused on al-Qaida and its offshoots. "They are more shooters than thinkers ... it's a lot of muscles, courage, desire but not a lot of training," the agent said, referring to al-Qaida. Hezbollah, he said, is far more advanced.

Hezbollah is partnering with drug organizations, but which ones is not clear at this time. He told 10News the group receives cartel cash and protection in exchange for Hezbollah expertise. "From money laundering to firearms training and explosives training," the agent said. For example, he tracked, along with Mexican intelligence, two Hezbollah operatives in safe houses in Tijuana (in the map).



opposite to San Diego) and Durango (in the map: central Mexico – same level as Mazatlan by the sea). "I confirmed the participation of cartel members as well as other Hezbollah individuals living and operating out of there," he said.

Tunnels the cartels have built that cross from Mexico into the U.S. have grown increasingly sophisticated. It is a learned skill, the agent said points to Hezbollah's involvement. "Where are the knowledgeable tunnel builders? Certainly in the Middle East," he said. Why have Americans not heard more about Hezbollah's activities happening so

close to the border? "If they really wanted to start blowing stuff up, they could do it," the agent said. According to the agent, the organization sees the U.S. as their "cash cow," with illegal drug and immigration operations. Many senior Hezbollah leaders are wealthy businessmen, the agent said. "The money they are sending back to Lebanon is too important right now to jeopardize those operations," he said. The agent said the real concern is the group's long-term goal of radicalizing Muslim communities. "They're focusing on developing ... infiltrating communities within North America," the agent told 10News.

## University campuses are 'hotbeds of Islamic extremism'

By Duncan Gardham

Source:<http://www.telegraph.co.uk/news/religion/8478975/University-campuses-are-hotbeds-of-Islamic-extremism.html>

Islamic fundamentalism is being allowed to flourish at universities, endangering national security, MPs and peers said yesterday. Academics are turning a blind eye to radicals be-



group, which includes the former home secretary Lord Reid. Secret files obtained by The Daily Telegraph and WikiLeaks disclosed this week that at least 35 terrorists held at Guantánamo Bay were indoctrinated by extremists in Britain. The leaked documents, written by senior US military commanders, illustrated how Britain effectively became a crucible of terrorism over the course of two decades.

The parliamentary group was set up two years ago to carry out research into homeland security issues.

Its inaugural report comes after a separate inquiry by the umbrella organisation for universities earlier this year said ani-

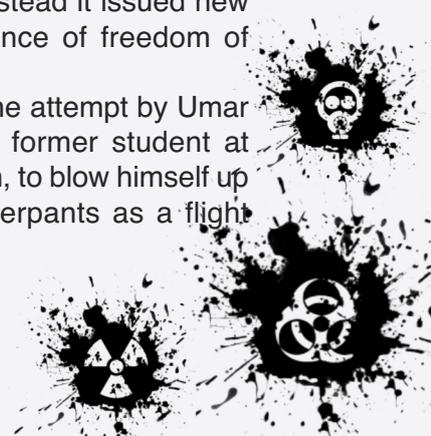
Umar Farouk Abdulmutallab was a former student at University College London Photo: PA

cause they do not want to spy on students, a report claimed. Despite "damning evidence" of a serious problem, little progress had been made in tackling the unsustainable situation, the All-Party Parliamentary Group on Homeland Security said. They urged the Government to tackle the issue on campuses with "utmost urgency". Such extremism "endangers our security at home and has international implications that are serious enough to threaten our alliance relationships", said the

mal rights extremists posed a greater problem than Islamist radicals.

Universities UK, which represents vice-chancellors, said it could do very little about extremism on campus. Instead it issued new guidance on the importance of freedom of speech.

Their report followed the attempt by Umar Farouk Abdulmutallab, a former student at University College London, to blow himself up using a bomb in his underpants as a flight



came in to land at Detroit on Christmas Day, 2009. Abdulmutallab, an engineering student, was the Islamic Society president from 2006 to 2007.

The parliamentarians' report said Britain's homeland security strategy failed to address in sufficient detail how to tackle the threat of extremism at universities, how to strengthen businesses' ability to deal with a terrorist attack and how to ensure security over the internet. The report said some universities and colleges had become sites where extremist religion and radicalism could flourish "beyond the sight of academics". They also noted that there was a "reluctance to co-operate with the police on the part of some universities that did not want to be seen to be 'spying' on their students". The MPs and peers said universities presented a "unique challenge". However, "in some cases [they] evidently struggle to establish the correct balance between academic freedoms and university authorities' responsibilities as part of ensuring homeland security." In the report, entitled Keeping Britain Safe, the MPs and peers said the problem of universities as places of radicalisation required "urgent and sustained attention by the new Government". Several witnesses had flagged up "serious problems" evident in universities and the issue was of "grave concern." The problems they cited included examples of extremist preachers being invited on to campuses. Abdulmutallab was only one in a long line of university students to become involved in terrorism.

A recent survey found that 31 per cent of those convicted of terrorist-related offences had attended university and 10 per cent were still students when they were arrested. Two of the July 7 bombers had been students. Think tanks have highlighted a succession of extremist speakers invited to deliver lectures unopposed at university Islamic societies, including UCL. Westminster University recently elected students with links to the extremist group Hizb ut-Tahrir as president and

vice-president of the student union. The report also raised "significant concerns" over unregulated foreign funding of universities. It said that, in many cases, the funding had a political purpose and could have direct effects upon the institutional structure, curriculum, appointments and the schedule of events. The London School of Economics was among the controversial recipients of foreign aid, accepting a donation of £1.5 million from a trust controlled by Col Muammar Gaddafi's son, Saif.

The report quoted one witness, Prof Anthony Glee, of Buckingham University, who said Arab and other foreign governments had ploughed £240 million into Islamic studies courses at universities over the past 10 years. The report said the role of businesses in preparing for emergencies such as terrorist attacks was "highly problematic". The Government's new counter-terrorism strategy will aim to "prevent the import and dissemination of extremist written material and speech which promotes hatred" on campus, the report said. "These are welcome initiatives which must be implemented forcefully," the MPs added. "This complex subject requires further attention. It has been an obvious and neglected problem for too long and must be tackled as a matter of utmost urgency." The report also found that the processes behind the National Security Strategy (NSS) and the Strategic Defence and Security Review (SDSR) were "deeply unsatisfactory". "Too much was done in too little time, consultations were not extensive enough and it presents a lost opportunity for a sophisticated debate about internal and external defence," it said. Bernard Jenkin, the group's chairman, said: "The NSS and SDSR are not a satisfactory basis for the UK's homeland security strategy for the next five years."

**NOTE:** You can download the full study from the "CBRNE-CT Papers" section of the Newsletter's website.



### Terrorists discover uses for Twitter

Source: <http://www.washingtontimes.com/news/2011/apr/28/terrorists-discover-uses-for-twitter/?page=1>

Banned from Facebook and censored on YouTube, al Qaeda and Taliban jihadists are turning to Twitter to spread their propaganda in a new social media front in the terrorists' war against America.



Extremist groups long have used the Internet to distribute videos, audio recordings and other messages. But this is the first time they have tried to establish a presence on the

microblogging site Twitter, which has proved a valuable organizing tool to the young activists behind the revolutions in the Arab world.

"Up until now, we haven't seen the [extremist] groups themselves active in this space," said William McCants, an analyst with the Center for Naval Analyses and founder of the blog Jihadica.com, which reports on extremist messaging.

"The question is: Is this the start of a trend, or is it an anomaly?" he said, adding that individual supporters of extremist groups appear to be using Twitter.

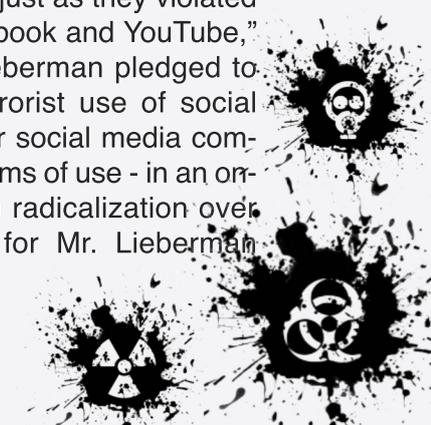
The Twitter feed @alemarahweb posts links to the official website of the Islamic Emirate of Afghanistan, as the Taliban calls itself. The feed, in Pashto - the language spoken in the Taliban heartland of southern Afghanistan and the tribal regions of Pakistan - has been active since December and has posted more than 670 tweets, as the 140-character Twitter messages are called.

Another Twitter account, @al\_nukhba, was set up last month. It posts links to an Arabic-language website called Nukhba al-Ilam al-Jihadi, or Jihadi Media Elite (JME). The website features Arabic transcripts of audio and video messages from al Qaeda and its affiliates in Yemen, North Africa and Iraq, said Christopher Anzalone, who identified the feeds. Mr.

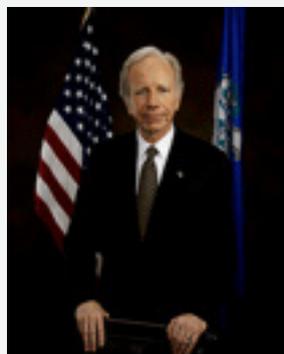
Anzalone, a doctorate student at the Institute of Islamic Studies at McGill University in Montreal who studies Muslim political movements' use of multimedia, said the phenomenon is new. "There are a small number of [extremist media] outfits with Twitter accounts," he said, calling the groups' use of the service "very nascent." Whether the groups continue to tweet, in part, "depends on how Twitter responds," he said. "It's hard to tell who exactly is posting [the tweets]," Mr. Anzalone said, noting that the Taliban feeds only posted links to the group's official site.

U.S. law prohibits the provision of services to designated terrorist groups, including al Qaeda and the Taliban. But establishing a link between an individual's social media account and a designated terrorist group is often impossible to do. Moreover, the First Amendment protects freedom of speech. Yet the major social media sites all have terms of service that limit what can be posted by users, and Facebook and YouTube regularly remove material or close pages that promote or show terrorist violence. Twitter did not respond to multiple requests for comment over two days.

Sen. Joe Lieberman, Connecticut independent and a leading advocate for censoring extremists' use of social media, told The Washington Times that the company should take action. "I would think [terrorist sympathizers using Twitter] would be violating the company's terms of use, just as they violated the terms of use of Facebook and YouTube," the senator said. Mr. Lieberman pledged to "continue to monitor terrorist use of social media - and advocate for social media companies to enforce their terms of use - in an ongoing effort to help stem radicalization over the Internet." A staffer for Mr. Lieberman



added that the senator's concern is driven by the increasingly important role that social media played in helping terrorist groups find and radicalize recruits online.



In the past few years, observers say, the propaganda machine employed by al Qaeda and other extremist groups has become much flatter and more diverse. It has grown from 10 or so password-protected Internet chat forums to a wide range of websites - many of them publicly accessible and maintained by supporters with no off-line links to the real groups. Mr. McCants noted that extremist groups traditionally had been "much more comfortable with the password-protected fo-

ums" that al Qaeda and associated groups pioneered several years ago. "We'll see how long this lasts," he said of the Twitter feeds.

A spokeswoman for YouTube, who asked not to be named, told The Times that the website has community guidelines "that prohibit dangerous or illegal activities such as bomb-making, hate speech and incitement to commit violent acts." Facebook spokesman Simon Axton said: "There is no place on Facebook for people who promote violence, and we devote significant resources" to stopping misuse by terrorist sympathizers and others. "We actively search the site for content that promotes violence, using sophisticated tools and lists from various sources," he said. In the past, Facebook executives have told The Times that those sources include U.S. government agencies such as the State and Treasury departments.

## Conducting Field Research on Terrorism: a Brief Primer

By Adam Dolnik

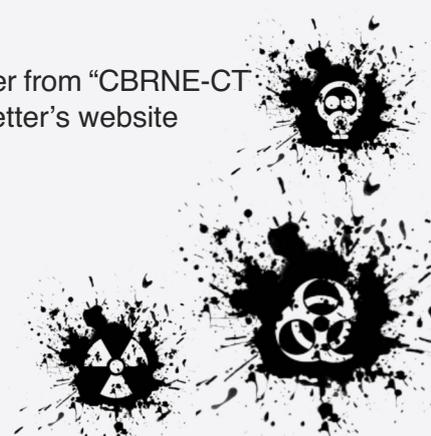
Source: <http://www.terrorismanalysts.com/pt/index.php/pot/article/view/dolnik-conducting-field-research/html>

### Abstract

This article focuses on the practical aspects of field research on terrorism. Firstly, it outlines some issues involved in the process of attaining a human research ethics/institutional review board clearance in order to be able to even begin the field research. It suggests some ways in which researchers can positively influence this review process in their favor. Secondly, the article focuses on the real and perceived dangers of field research, identifying practical steps and preparatory activities that can help researchers manage and reduce the risks involved. The article also covers the formalities and dilemmas involved in gaining access to the field. It then provides some insights into the topic of operating in conflict zones, followed by a section covering the ways of gaining access to sources, effective communication skills and influence tech-

niques and addresses key issues involved in interviewing sources in the field. The final section focuses on identifying biases and interfering factors which researchers need to take into account when interpreting the data acquired through interviews. This article is a modest attempt to fill a gap in the literature on terrorism research by outlining some of the key issues involved in the process of doing field research. It incorporates insights from diverse disciplines as well as the author's personal experiences of conducting field research on terrorism in places like Afghanistan, Pakistan, Chechnya, Ingushetia, Colombia, Mindanao, Uganda, Indonesia, Democratic Republic of Congo, Sudan, and India.

**NOTE:** Download full paper from "CBRNE-CT Papers" section of Newsletter's website



## Pass Em' Right: Assessing the Threat of WMD Terrorism from America's Christian Patriots

By Paul D. Brister and Nina A. Kollars

Source: <http://www.terrorismanalysts.com/pt/index.php/pot/article/view/brister-pass-em-right>

### Abstract

Within the field of terrorism studies, great effort has been devoted to the topic of weapons of mass destruction (WMD) and their potential usage in the hands of terrorist organizations. This article deepens the discussion of WMD terrorism by focusing upon an oft-overlooked movement that resides within American borders. The Christian Patriot Movement – which rightfully claims the likes of Timothy McVeigh – is a phenomenon that has gone largely unnoticed as American counterterrorism efforts focus largely upon Islamist terrorist organizations. Here we aim to bring the

Patriots back into discussions of terrorist threats by assessing their potential to use WMD. We conclude that, although the Patriots have demonstrated intent to employ such weapons, they lack the overall capability to design, acquire, or employ a WMD of significant lethality. We end by looking at the pathways which the Patriots are currently exploring to narrow the divide between intent and capability.

**NOTE:** Download full paper from “CBRNE-CT Papers” section of Newsletter’s website

## More Swiss train in Islamic militant camps

Source: [http://www.swissinfo.ch/eng/politics/More\\_Swiss\\_train\\_in\\_Islamic\\_militant\\_camps.html?cid=30181170](http://www.swissinfo.ch/eng/politics/More_Swiss_train_in_Islamic_militant_camps.html?cid=30181170)

Defence Minister Ueli Maurer says there has been an increase in the recruitment of Muslims for militant training camps. In an interview with the *SonntagsZeitung* newspaper, Maurer said the government was aware of Swiss who



went to these training camps and others who visited Koran schools. He said the federal intelligence service had a good overview of Switzerland’s “Jihad fighters”, but refused to give any figures. According to the intelligence service, a militant Islamic network was set up last year in Switzerland in order to find recruits who are sent to countries like Somalia and Yemen. Maurer told the newspaper that under current Swiss laws it is difficult to prevent Islamists from raising funds. “The intelligence service can only observe and provide analyses,” he said. “We have at our disposal very little means [to fight Islamic militant activities] since parliament has up to now rejected them.”

## Al Qaeda the deadliest terror organization in history

Source: <http://homelandsecuritynewswire.com/al-qaeda-deadliest-terror-organization-history>

A new report finds al Qaeda to be the deadliest terrorist organization in history; since its founding in 1998, the organization has conducted eighty-four terrorist attacks, resulting

at least 4,299 deaths and 6,300 people injured; in comparison: ETA, the Basque separatist organization in Spain, killed 820 people between 1972 and 2008; IRA attacks have



killed about 1,829 people dating back to 1970; the only group that comes close in terms of deadly attacks is the Revolutionary Armed Forces of Colombia (FARC), killing 4,835 people during the course of its existence.

“Al Qaeda, the terrorist organization Usama bin Laden founded, was responsible for fomenting more mass casualty attacks than any other group in recent history,” said START director Gary LaFree, a University of Maryland professor who has assembled the world’s most comprehensive unclassified terrorism database.



Fox News notes that the report compares al Qaeda to other terrorist groups in terms of lethality. ETA, the Basque separatist organization in Spain, killed 820 people between 1972 and 2008. IRA attacks have killed about 1,829 people dating back to 1970. The only group that comes close in terms of deadly attacks is the Revolutionary Armed Forces of Colombia (FARC), killing 4,835 people during the course of its existence.

**NOTE:** Full report can be downloaded from “CBRNE-CT Papers” section of the Newsletter’s website.

## 7/7 attacks could not have been prevented

Source: <http://homelandsecuritynewswire.com/77-attacks-could-not-have-been-prevented-report>

An inquest into the 7 July 2005 attack on London transportation concluded that any suggestion MI5 could have stopped the attacks was “based to a considerable extent on hindsight”; there were failures in the response by emergency workers -- confusion, a shortage of first aid supplies, and radios that did not work underground, but the report concludes that government errors had not increased the death toll.

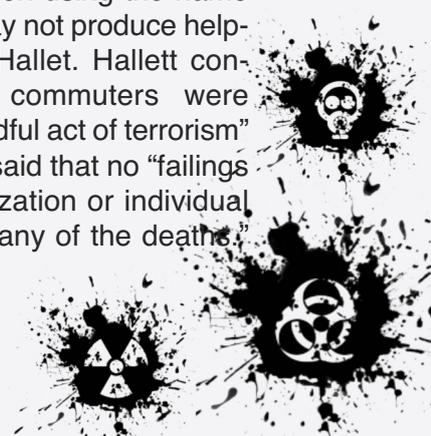


A new report released last week into the 7/7 attacks on London transportation – “Coroner’s Inquest into the London Bombing of 7 July 2005” – says that software problems

made it difficult for MI5 to investigate the 7 July 2005 attacks.

AP reports that Heather Hallett, the coroner in charge of the inquest, raised questions with MI5 about the computer systems used to monitor Mohammad Siddique Khan and his associates. Khan appeared in footage taken at a terrorist training camp in 2001 and was monitored on four separate occasions in 2004, but this only came to light after the bombings.

“Witness G,” the chief of staff to Jonathan Evans, MI5’s director general, told the inquest “‘it can be very difficult’ to ‘dig into’ the files and computer systems at the Security Service to try to find out if a particular person has previously come to their attention,” adding that the difficulty was the result of the large number of people with the surname Khan. Even using the name Siddique Khan “may not produce helpful results,” says Hallett. Hallett concluded that the commuters were “unlawfully killed in a dreadful act of terrorism” by the four bombers and said that no “failings on the part of any organization or individual caused or contributed to any of the deaths.”



Hallett said any suggestion MI5 could have stopped the attacks was “based to a considerable extent on hindsight.”

There were also failures in the response by emergency workers — confusion, a shortage of first aid supplies, and radios that did not work underground. Hallett said, however, that government errors had not increased the

death toll. “I am satisfied on the balance of probabilities that each of them would have died whatever time the emergency services had reached and rescued them,” she said.

**NOTE:** Full report can be downloaded from “CBRNE-CT Papers” section of the Newsletter’s website.

## The FARC Files: Venezuela, Ecuador and the Secret Archive of 'Raúl Reyes'

Source: <http://www.iiss.org/publications/strategic-dossiers/the-farc-files-venezuela-ecuador-and-the-secret-archive-of-ral-reyes/>



This Strategic Dossier provides unique insights into the thinking and evolution of the Revolutionary Armed Forces of Colombia (FARC). It is based on a study of the computer disks belonging to Luis Edgar Devía Silva (aka Raúl Reyes), head of FARC’s International Committee (COMINTER), that were seized by Colombian armed forces in a raid in March 2008 on Devía’s camp inside Ecuador. Several months afterwards, senior officials from the Colombian Ministry of Defence invited the IISS to conduct an independent analysis of the material.

The dossier shows how FARC evolved from a small, austere and strategically irrelevant group into an insurgent movement which, fuelled by revenues from narcotics production, came close to jeopardising the survival of the Colombian state. A key part of FARC’s evolution was the development of an international strategy aimed at acquiring financial support, arms and political legitimacy. The dossier looks in detail at FARC’s relations with Venezuela and Ecuador.

The dossier is accompanied by a CD-ROM containing all relevant e-mails unedited and in the original Spanish in a searchable, chronological format. The dossier was launched on 10 May 2011.

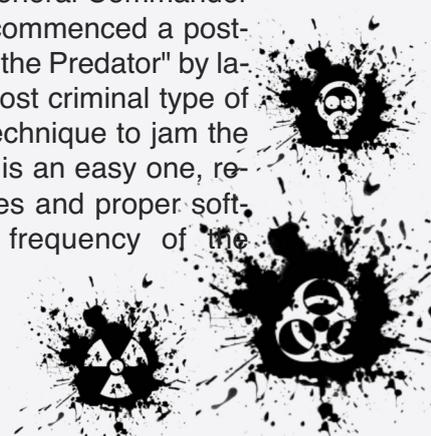
## Jihadis Share Methods of Bringing Down U.S. Predators over Libya

By Abdul Hameed Bakier

Source: <http://www.jamestown.org>

Most jihadi internet forums have sections on training manuals and special postings for their members. When a jihadi operational priority arises, certain training tactics are typically discussed at length. Since the American deployment of the unmanned Predator drone in a military effort to protect Libyan civilians, jihadi forum members have begun discussing ways of downing the aircraft (al-jahafal.com, April 2).

A forum member nicknamed Nosra, regarding himself as the “General Commander of al-Zarqawi Battalion,” commenced a posting entitled “How to Down the Predator” by labeling the Predator the most criminal type of aircraft. Nosra claims a technique to jam the Predator’s satellite signal is an easy one, requiring only simple devices and proper software. By jamming the frequency of the



satellite, an inaccurate signal would be transmitted to the Predator falsely indicating no satellite GPS signal, consequently causing the collapse of the Predator's systems. Nosra's long explanation of the technique focuses on jammers that work within a fixed range radius. The jammers' capability to intercept the Predator's signal and the simplicity of building such jammers from material readily available in the market is a great op-

portunity for jihadis to take down the number one killer of mujahideen, says Nosra. portunity for jihadis to take down the number one killer of mujahideen, says Nosra.

portunity for jihadis to take down the number one killer of mujahideen, says Nosra. as the Predator, the Reaper and another small UAV made by Jordan and approved by the United States for use in Iraq (possibly a reference to the "Jordan Falcon," a tactical UAV intended for surveillance tasks). The Falcon is a joint venture between Jordan Aerospace Industries (JAI) and the King Abdullah II Design and Development Bureau (KADDB).



Another method discussed in the lesson is producing a focused microwave beam with a commercial microwave and using a parabolic dish to direct the beam on a single source. According to Nosra, this is capable of disrupting circuitry in the Predator's camera motor. There are also a few GPS jammers available in the market; the mujahideen could procure and develop these for use against UAV's.

Nosra reports that Iraqi mujahideen hackers have used software available in the market to intercept data transmitted by American drones. The software used is the "SkyGrabber," developed and marketed on the internet by Russian company SkySoftware. [1] Nosra refers here to the 2009 discovery that insurgents belonging to the Iraqi Shiite Kata'ib Hezbollah were using the SkyGrabber software to intercept the drones' video transmissions, though they were unable to control the

Other forum members considered acquiring the methods outlined in Nosra's posting a high priority. Developing such abilities would help protect the mujahideen in Palestine, Yemen, Pakistan, Afghanistan and all other Muslim countries. Forum member Abu Fahad

as the Predator, the Reaper and another small UAV made by Jordan and approved by the United States for use in Iraq (possibly a reference to the "Jordan Falcon," a tactical UAV intended for surveillance tasks). The Falcon is a joint venture between Jordan Aerospace Industries (JAI) and the King Abdullah II Design and Development Bureau (KADDB).





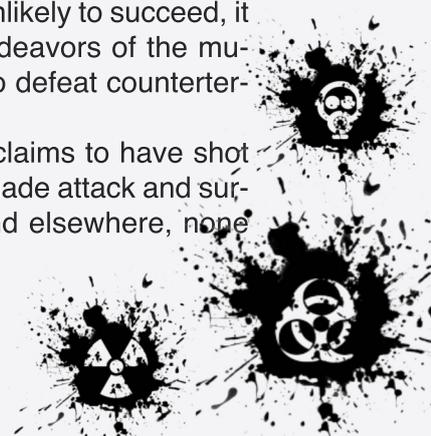
al-Misri deemed the techniques very timely and very much needed to counter U.S. attacks in Libya and Egypt in the near future (al-Jahafal, April 2).

Another jihadi forum conducted a month-long online workshop entitled “How Do We Shoot Down the Enemy’s Aircraft?” (albo-raq.info, April 15). Many forum chatters contributed to the workshop with ideas and techniques, posting pictures and drawings of different UAVs. Bu Omar al-Ghanim, who started the workshop, concluded the findings and knowledge share by recommending, firstly, the use of homemade smoke bombs to cover mujahideen firing on attacking gunships. Secondly, the mujahideen are encouraged to try to manufacture magnetic cannons capable of sending electromagnetic vibrations. Al-Ghanim does not mention how these cannons would be manufactured, but he may be referring to an adaption of the High Power Electromagnetic System (HPEMS) being developed by California-based Eureka Aerospace with funding from the U.S. Marine Corps and the U.S. Department of Defense. [2] The device is intended to use a beam of microwave energy to stop moving vehicles or

boats by disabling or destroying their computerized control systems, but is only in the prototype stage.

Al-Ghanim quotes from a message by the Amir of the Islamic Army in Iraq in which he encourages the mujahideen in Gaza to shoot down Israeli aircraft: “Our hero brothers: You are in the heart of the nation. You are the symbol of its dignity and pride, hold your ground, attack the enemy and prepare intensive crossfire arcs to destroy enemy aircraft.” [3] The workshop also discussed the ability to interrupt the electronic systems of enemy aircraft by using 700mW Chinese-made laser pointers. According to al-Ghanim, the laser can jam and burn a fighter aircraft’s electrical equipment at a 28 kilometer distance. Al-Ghanim posts links to some Chinese websites that sell the laser pointers. Although many of the tactics recommended by the workshop are unconventional and unlikely to succeed, it shows the continuous endeavors of the mujahideen to invent ways to defeat counterterrorist air superiority.

Despite Salafi-Jihadi claims to have shot down U.S. or Jordanian-made attack and surveillance UAVs in Iraq and elsewhere, none



of the videos released by the mujahideen's media outlets, especially al-Furqan, show any advanced air defense techniques being used to down UAVs. The existing videos only show downed UAVs that could have crashed because of technical malfunctions.

### Notes:

1. <http://www.skygrabber.com/en/index.php>.
2. <http://eurekaerospace.com/content/high-power-electromagnetic-system-stopping-vehicles> Video of the device prototype can be

seen at: [http://www.youtube.com/watch?v=oT5EJYY\\_6HQ&feature=player\\_embedded](http://www.youtube.com/watch?v=oT5EJYY_6HQ&feature=player_embedded).

3. Al-Ghanim doesn't provide a source for this statement.

Abdul Hameed Bakier is an intelligence expert on counter-terrorism, crisis management and terrorist-hostage negotiations. He is based in Jordan.

## Selected Literature on Conflict Prevention, Crime Prevention, Terrorism Prevention and Violence Prevention

By Eric Price (Professional Information Specialist)

Source: <http://www.terrorismanalysts.com/pt/index.php/pot/article/view/price-conflict-crime-prevention/html>

## PERSPECTIVES ON TERRORISM

a journal of the Terrorism Research Initiative

Abbass, H.A. & Essam, D. (eds.) (2006) Applications of information systems to homeland security and defense Hershey, PA: Idea Group Pub. [[\\*http://www.loc.gov/catdir/toc/ecip0512/2005013549.html](http://www.loc.gov/catdir/toc/ecip0512/2005013549.html)]

Albrecht, J. F & Das, D.K. (eds.) (2010) Effective crime reduction strategies: international perspectives Boca Raton: CRC Press

Aldis, A. & Herd, G.P. (eds.) (2006) The ideological war on terror: world-wide strategies for counter-terrorism London; New York: Routledge [[\\*http://www.loc.gov/catdir/toc/ecip0613/2006014025.html](http://www.loc.gov/catdir/toc/ecip0613/2006014025.html)]

Alexander, Y. (ed.) (2006) Counterterrorism strategies: successes and failures of six nations Washington, D.C.: Potomac Books

Aydinli, E. (ed.) (2010) Emerging transnational (in) security governance: a statist-transnationalist approach London ; New York: Routledge

Alexander, Y & Kraft, M.B. (2007) Evolution of U.S. counterterrorism policy Westport, Conn.: Praeger Security International

[[\\*http://www.loc.gov/catdir/toc/ecip0722/2007028388.html](http://www.loc.gov/catdir/toc/ecip0722/2007028388.html)]

Al-Khattar, A.M. (2003) Religion and terrorism: an interfaith perspective Westport, Conn.: Praeger

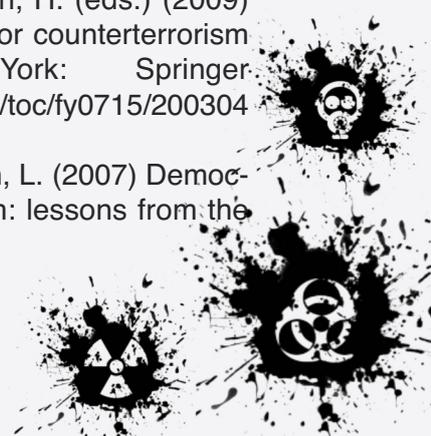
Anon. (2010) Issues in terrorism and homeland security: selections from CQ researcher Los Angeles: SAGE

Alvarez, A. (2008) Violence: the enduring problem Los Angeles: Sage Publications [[\\*http://www.loc.gov/catdir/toc/ecip0718/2007020489.html](http://www.loc.gov/catdir/toc/ecip0718/2007020489.html)]

Archick, K & Gallis, P. (2003) Europe and counterterrorism New York: Nova Science Publishers [[\\*http://www.loc.gov/catdir/toc/ecip042/2003007409.html](http://www.loc.gov/catdir/toc/ecip042/2003007409.html)]

Argamon, S & Newton, H. (eds.) (2009) Computational methods for counterterrorism Dordrecht; New York: Springer [[\\*http://www.loc.gov/catdir/toc/fy0715/2003041602.html](http://www.loc.gov/catdir/toc/fy0715/2003041602.html)]

Art, R. J. & Richardson, L. (2007) Democracy and counterterrorism: lessons from the



past Washington, D.C.: United States Institute of Peace Press

Baarda, T.A. van & Verweij, D.E.M (eds.) (2009) *The moral dimension of asymmetrical warfare: counter-terrorism, democratic values and military ethics* Leiden; Boston: Martinus Nijhoff

Barton, L. (2008) *Crisis leadership now: a real-world guide to preparing for threats, disaster, sabotage, and scandal* New York: McGraw-Hill [[\\*http://www.loc.gov/catdir/toc/ecip081/2007040363.html](http://www.loc.gov/catdir/toc/ecip081/2007040363.html)]

Bayley, D.H. & Perito, R.M (2010) *The police in war: fighting insurgency, terrorism, and violent crime* Boulder: Lynne Rienner Publishers

Beach, M. (2010) *Disaster preparedness and management* Philadelphia, PA.: F.A.Davis Co.

Bellamy, A. J. (2008) *Fighting terror: ethical dilemmas* London; New York: Zed Books [[\\*http://www.loc.gov/catdir/toc/ecip0812/2008008329.html](http://www.loc.gov/catdir/toc/ecip0812/2008008329.html)]

Benedek, W. & Yotopoulos-Marangopoulos; A. J. (eds.) (2004) *Anti-terrorist measures and human rights* Leiden ; Boston: M. Nijhoff [[\\*http://www.loc.gov/catdir/toc/fy052/2004304610.html](http://www.loc.gov/catdir/toc/fy052/2004304610.html)]

Benedek, W. (et al.) (eds.) (2010) *Transnational terrorism, organized crime and peacebuilding: human security in the Western Balkans* New York: Palgrave Macmillan

Beyer, C. & Bauer, M. (eds.) (2009) *Effectively countering terrorism: the challenges of prevention, preparedness and response* Brighton; Portland: Sussex Academic Press

Biersteker, T.J & Eckert, S.E. (eds.) (2008) *Countering the financing of terrorism* London & New York: Routledge [[\\*http://www.loc.gov/catdir/toc/fy0903/2007006063.html](http://www.loc.gov/catdir/toc/fy0903/2007006063.html)]

Bjorgo, T & Horgan, J (eds.) (2009) *Leaving terrorism behind: individual and collective disengagement* Milton Park, Abingdon, Oxon.; New York: Routledge [[\\*http://www.loc.gov/catdir/toc/ecip0822/2008027289.html](http://www.loc.gov/catdir/toc/ecip0822/2008027289.html)]

Brown, M.E. (et al.) (eds.) (2010) *Contending with terrorism: roots, strategies, and responses* Cambridge, Mass.: MIT Press

Brück, T. (ed.) (2007) *The economic analysis of terrorism* London; New York: Routledge [[\\*http://www.loc.gov/catdir/toc/ecip0614/2006018083.html](http://www.loc.gov/catdir/toc/ecip0614/2006018083.html)]

Buesa, M. (et al.) (eds.) (2010) *The economic repercussions of terrorism* Oxford; New York: Oxford University Press [[\\*http://www.loc.gov/catdir/enhancements/fy1008/2009039600-b.html](http://www.loc.gov/catdir/enhancements/fy1008/2009039600-b.html)]

Byrnes, J. (ed.) (2006) *Advances in sensing with security applications* : Dordrecht; UK: Springer [[\\*http://www.loc.gov/catdir/toc/fy0611/2006296958.html](http://www.loc.gov/catdir/toc/fy0611/2006296958.html)]

Canter, D. (ed.) (2009) *The faces of terrorism: multidisciplinary perspectives* Chichester, UK; Malden, MA: Wiley-Blackwell

Carment, David and Albrecht Schnabel (eds.). *Conflict Prevention. Path to Peace or Grand Illusion?* Tokyo: United Nations University Press, 2003.

Carrington, K.L & Griffin, S. (eds.) (2011) *Transforming terror: remembering the soul of the world* Berkeley, Calif.: University of California Press

Central Intelligence Agency – CIA (2002) *DCI Counterterrorist Center: preempt, disrupt, defeat* Langley, Va.: Central Intelligence Agency

Chandler, M & Gunaratna, R. (2007) *Countering terrorism: can we meet the threat of global violence?* London: Reaktion [[\\*http://www.loc.gov/catdir/enhancements/fy0732/2007310428-b.html](http://www.loc.gov/catdir/enhancements/fy0732/2007310428-b.html)]

Clancy, V.M. (ed.) (2010) *United States border issues* Hauppauge, N.Y.: Nova Science Publisher's

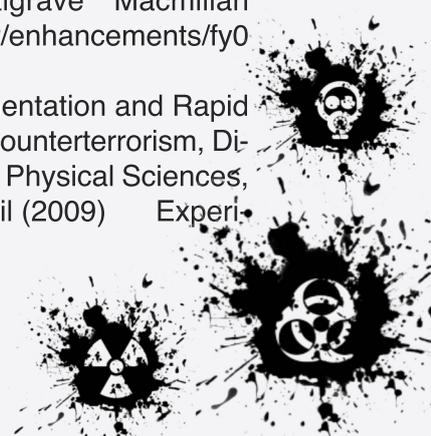
Clarke, R.A. & Aga, G.P. (eds.) (et al.) (2004) *Defeating the jihadists: a blueprint for action: the report of a task force* New York: Century Foundation Press [[\\*http://www.loc.gov/catdir/toc/ecip052/2004025180.html](http://www.loc.gov/catdir/toc/ecip052/2004025180.html)]

Cogwell, M.T. (ed.) (2003) *Critical infrastructures* New York: Nova Science Publishers [[\\*http://www.loc.gov/catdir/toc/fy0711/2003273334.html](http://www.loc.gov/catdir/toc/fy0711/2003273334.html)]

Cohen, S. (ed.) (2008) *Democracies at war against terrorism: a comparative perspective* New York, NY: Palgrave Macmillan

[[\\*http://www.loc.gov/catdir/enhancements/fy0835/2008004027-b.html](http://www.loc.gov/catdir/enhancements/fy0835/2008004027-b.html)]

Committee on Experimentation and Rapid Prototyping in Support of Counterterrorism, Division on Engineering and Physical Sciences, National Research Council (2009) *Experi-*



mentation and rapid prototyping in support of counterterrorism Washington, D.C.: National Academies Press

Coolsaet, R. (ed.) (2008) *Jihadi terrorism and the radicalisation challenge in Europe*: Aldershot, England; Burlington, VT.: Ashgate [[\\*http://www.loc.gov/catdir/toc/ecip0720/2007025290.html](http://www.loc.gov/catdir/toc/ecip0720/2007025290.html)]

Council of Europe (2005) *The fight against terrorism: Council of Europe standards* Strasbourg: Council of Europe Pub. [[\\*http://www.loc.gov/catdir/toc/fy0712/2007397147.html](http://www.loc.gov/catdir/toc/fy0712/2007397147.html)]

Crocker, C.A., Hampson, F. O. & Aall, P. (eds.) (2007) *Leashing the dogs of war: conflict management in a divided world* Washington, D.C.: United States Institute of Peace Press [[\\*http://www.loc.gov/catdir/toc/ecip0620/2006027680.html](http://www.loc.gov/catdir/toc/ecip0620/2006027680.html)]

Cronin, A.K. & Ludes, J.M (eds.) (2004) *Attacking terrorism: elements of a grand strategy* Washington, D.C.: Georgetown University Press [[\\*http://www.loc.gov/catdir/toc/ecip048/2003019462.html](http://www.loc.gov/catdir/toc/ecip048/2003019462.html)]

Dershowitz, A.M. (2006) *Preemption: a knife that cuts both ways* New York: W.W. Norton [[\\*http://www.loc.gov/catdir/toc/ecip061/2005027728.html](http://www.loc.gov/catdir/toc/ecip061/2005027728.html)]

Davis, John L. and Ted R. Gurr (Eds.). *Preventive Measures. Building Risk Assessment and Crisis Early Warning Systems*. Lanham: Rowman & Littlefield, 1998.

Eder, F. & Senn, M. (eds.) (2009) *Europe and transnational terrorism: assessing threats and countermeasures* Baden-Baden: Nomos [[\\*http://d-nb.info/991006011/04](http://d-nb.info/991006011/04)]

Egidi, P. (ed.) (2010) *Detection of nuclear weapons and materials* New York: Nova Science Publishers

Fluri, P.H., Gustenau, G.E & Pantev, P.I. (eds.) (2005) *The evolution of civil-military relations in South East Europe: continuing democratic reform and adapting to the needs of fighting terrorism* Heidelberg ;New York, NY: Physica-Verlag [[\\*http://www.loc.gov/catdir/enhancements/fy0663/2005927953-d.html](http://www.loc.gov/catdir/enhancements/fy0663/2005927953-d.html)]

Forest, J.J. (2007) (ed.) *Countering terrorism and insurgency in the 21st century: international perspectives* [3 vols.] Westport, Conn.: Praeger Security International [[\\*http://www.loc.gov/catdir/toc/ecip0712/2007007938.html](http://www.loc.gov/catdir/toc/ecip0712/2007007938.html)]

Forst, B., Greene, J.R. & Lynch, J.P. (eds.) (2011) *Criminologists on terrorism and homeland security* Cambridge; New York: Cambridge University Press

Freilich, J. D. & Guerette, R. T. (eds.) (2006) *Migration, culture conflict, crime, and terrorism* Aldershot, Hants, England; Burlington, VT.: Ashgate [[\\*http://www.loc.gov/catdir/toc/ecip069/2006005842.html](http://www.loc.gov/catdir/toc/ecip069/2006005842.html)]

Friedman, L.S. (ed.) (2005) *Are efforts to reduce terrorism successful?* San Diego: Greenhaven Press [[\\*http://www.loc.gov/catdir/toc/fy0711/2004042421.html](http://www.loc.gov/catdir/toc/fy0711/2004042421.html)]

Gallis, P. (2004) *European counterterrorist efforts: political will and diverse responses* New York: Nova Science Pub. [[\\*http://www.loc.gov/catdir/toc/fy0712/2004298180.html](http://www.loc.gov/catdir/toc/fy0712/2004298180.html)]

Ginbar, Y. (2008) *Why Not Torture Terrorists?* Oxford Scholarship Online Monographs [[\\*http://www.oxfordscholarship.com/oso/public/content/law/9780199540914/toc.html](http://www.oxfordscholarship.com/oso/public/content/law/9780199540914/toc.html)]

Goodin, R. E. (2006) *What's wrong with terrorism?* Cambridge, UK; Malden, MA.: Polity [[\\*http://www.loc.gov/catdir/enhancements/fy0902/2006278658-b.html](http://www.loc.gov/catdir/enhancements/fy0902/2006278658-b.html)]

Gottlieb, S. (ed.) (2010) *Debating terrorism and counterterrorism: conflicting perspectives on causes, contexts, and responses* Washington, DC: CQ Press

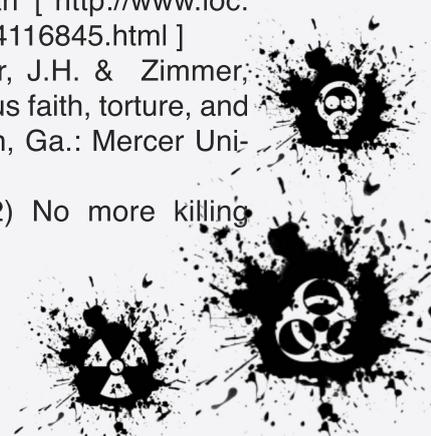
Green, D.L. & Roberts, A.R. (2008) *Helping victims of violent crime: assessment, treatment, and evidence-based practice* New York: Springer Pub. Co.

Greenberg, L.J & Dratel, J. (eds.) (2008) *The enemy combatant papers: American justice, the courts, and the War on Terror* Cambridge, UK; New York: Cambridge University Press [[\\*http://www.loc.gov/catdir/enhancements/fy0827/2008013105-t.html](http://www.loc.gov/catdir/enhancements/fy0827/2008013105-t.html)]

Gupta, D.K (ed.) (2006) *Current perspectives: readings from InfoTrac college edition. Terrorism and homeland security* Belmont, CA: Thomson Wadsworth [[\\*http://www.loc.gov/catdir/toc/fy0711/2004116845.html](http://www.loc.gov/catdir/toc/fy0711/2004116845.html)]

Gushee, D.P., Zimmer, J.H. & Zimmer, J.D. (eds.) (2010) *Religious faith, torture, and our national soul* Macon, Ga.: Mercer University Press

Hamburg, D.A. (2002) *No more killing*



fields: preventing deadly conflict Lanham, Md.: Rowman & Littlefield [[\\*http://www.loc.gov/catdir/toc/fy022/2002001811.html](http://www.loc.gov/catdir/toc/fy022/2002001811.html)]

Harmon, C.C. (2008) *Terrorism today* London; New York: Routledge [[\\*http://www.loc.gov/catdir/toc/ecip0718/2007020110.html](http://www.loc.gov/catdir/toc/ecip0718/2007020110.html)]

Harrison, J. (2009) *International aviation and terrorism: evolving threat, evolving security* London; New York: Routledge

Haugen, D. (ed.) (2007) *National security* Detroit: Greenhaven Press [[\\*http://www.loc.gov/catdir/toc/ecip0720/2007024926.html](http://www.loc.gov/catdir/toc/ecip0720/2007024926.html)]

Hippel, K. v. (ed.) (2005) *Europe confronts terrorism* Houndmills, Basingstoke, Hampshire; New York: Palgrave Macmillan [[\\*http://www.loc.gov/catdir/toc/fy0602/2005042831.html](http://www.loc.gov/catdir/toc/fy0602/2005042831.html)]

Hocking, J. & Lewis, C. (eds.) (2007) *Counter-terrorism and the post-democratic state* Cheltenham, UK; Northampton, MA: Edward Elgar [[\\*http://www.loc.gov/catdir/toc/ecip0716/2007017061.html](http://www.loc.gov/catdir/toc/ecip0716/2007017061.html)]

Howard, R.D. & Sawyer, R.L. (eds.) (2004) *Defeating terrorism: shaping the new security environment* Guilford, Conn.: McGraw-Hill Companies [[\\*http://www.loc.gov/catdir/toc/mh041/2003106504.html](http://www.loc.gov/catdir/toc/mh041/2003106504.html)]

Howells, K. (2009) *Could 7/7 have been prevented? Review of the Intelligence on the London terrorist attacks on 7 July 2005* Surrey, England: Stationery Office

Howitt, A.M. & Pangi, R.L. (eds.) (2003) *Countering terrorism: dimensions of preparedness* Cambridge, Mass.: MIT Press [[\\*http://www.loc.gov/catdir/toc/fy0711/2003109413.html](http://www.loc.gov/catdir/toc/fy0711/2003109413.html)]

International Atomic Energy Agency (2007) *Engineering safety aspects of the protection of nuclear power plants against sabotage* IAEA: Vienna, Austria [[\\*http://www.loc.gov/catdir/toc/fy0804/2007387577.html](http://www.loc.gov/catdir/toc/fy0804/2007387577.html)]

Iseby, J. (ed.) (2008) *9/11 Commission recommendations* New York: Nova Science Publishers [[\\*http://www.loc.gov/catdir/toc/fy0805/2008011208.html](http://www.loc.gov/catdir/toc/fy0805/2008011208.html)]

Johnson, J.A. (et al.) (eds.) (2005) [in 3 vols.] *Community preparedness and response to terrorism* Westport, Conn.: Praeger [[\\*http://www.loc.gov/catdir/toc/fy0602/2004042290.html](http://www.loc.gov/catdir/toc/fy0602/2004042290.html)]

Johnson, M.P. (2008) *A typology of do-*

*mestic violence: intimate terrorism, violent resistance, and situational couple violence* Boston: Northeastern University Press; Hanover, NH.: University Press of New England [[\\*http://www.loc.gov/catdir/toc/ecip087/2007052379.html](http://www.loc.gov/catdir/toc/ecip087/2007052379.html)]

Jonas, G. (2005) *Vengeance: the true story of an Israeli counter-terrorist team* New York: Simon & Schuster Paperbacks team [[\\*http://www.loc.gov/catdir/enhancements/fy0631/2006355140-d.html](http://www.loc.gov/catdir/enhancements/fy0631/2006355140-d.html)]

Jebb, C.R. (et al.) (2006) *The fight for legitimacy: democracy vs. terrorism* Westport, Conn.: Praeger Security International [[\\*http://www.loc.gov/catdir/toc/ecip0613/2006015197.html](http://www.loc.gov/catdir/toc/ecip0613/2006015197.html)]

Jones, B.D. & Forman, S. (eds.) (2010) *Cooperating for peace and security: evolving institutions and arrangements in a context of changing U.S. security policy* Cambridge UK.; New York: Cambridge University Press

June, D.L. (ed.) (2011) *Terrorism and homeland security: perspectives, thoughts, and opinions* Boca Raton, Fla.: Taylor & Francis

Kahn, P. W. (2008) *Sacred violence: torture, terror, and sovereignty* Ann Arbor: University of Michigan Press [[\\*http://www.loc.gov/catdir/toc/ecip0813/2008011488.html](http://www.loc.gov/catdir/toc/ecip0813/2008011488.html)]

Katona, P. (et al.) (eds.) (2006) *Countering terrorism and WMD: creating a global counter-terrorism network* London; New York: Routledge [[\\*http://www.loc.gov/catdir/toc/ecip069/2006006879.html](http://www.loc.gov/catdir/toc/ecip069/2006006879.html)]

Katz, S. M. (2005) *Global counterstrike: international counterterrorism* Minneapolis: Lerner Publications Co. [[\\*http://www.loc.gov/catdir/toc/ecip046/2003015415.html](http://www.loc.gov/catdir/toc/ecip046/2003015415.html)]

Kauffmann, M. (ed.) (2008) *Building and using datasets on armed conflicts* [meeting: NATO Advanced Research Workshop on Indicators and Databases for Risk Prevention; 2007: Grenoble, France] Amsterdam, Netherlands; Washington, DC: IOS Press

Kayyem, J.N. & Pangi, R.L. (2003) *First to arrive: state and local responses to terrorism* Cambridge, Mass.: MIT Press [[\\*http://www.loc.gov/catdir/toc/fy0711/2003109630.html](http://www.loc.gov/catdir/toc/fy0711/2003109630.html)]

Kendall, R. (et al.) (2008) *Advances in biological and chemical terrorism countermea-*



sures [[\\*http://www.loc.gov/catdir/toc/ecip085/2007047129.html](http://www.loc.gov/catdir/toc/ecip085/2007047129.html)]

Kennedy, C.H & Williams T. J. (eds.) (2011) Ethical practice in operational psychology: military and national intelligence applications Washington, DC: American Psychological Assoc.

Kennedy, L.W. & McGarrell, E.F. (eds.) (2011) Crime and terrorism risk: studies in criminology and criminal justice New York, NY: Routledge

Kimmel, P.R. & Stout, C.E. (eds.) (2006) Collateral damage: the psychological consequences of America's war on terrorism Westport, Conn.: Praeger [[\\*http://www.loc.gov/catdir/toc/ecip0612/2006012111.html](http://www.loc.gov/catdir/toc/ecip0612/2006012111.html)]

Klein, A. J. (2005) Striking back: the 1972 Munich Olympics Massacre and Israel's deadly response New York: Random House [[\\*http://www.loc.gov/catdir/toc/fy0712/2005057401.html](http://www.loc.gov/catdir/toc/fy0712/2005057401.html)]

Knop, K. v., Neisser, H. & Creveld, M. v. (eds.) (2005) Countering modern terrorism : history, current issues, and future threats [proceedings: second International Security Conference, Berlin, 15-17 December 2004] Bielefeld: W. Bertelsmann Verlag

Krueger, E.J. (ed.) (2010) Accident prevention manual for business & industry: security management Itasca, Ill.: National Safety Council

Larche, R.A. (2008) Global terrorism issues and developments New York: Nova Science Publishers [[\\*http://www.loc.gov/catdir/toc/fy0804/2007030869.html](http://www.loc.gov/catdir/toc/fy0804/2007030869.html)]

Last, M & Kandel, A. (eds) (2005) Fighting terror in cyberspace N.J.: World Scientific

Leeuwen, M. van (ed.) (2003) Confronting terrorism: European experiences, threat perceptions, and policies The Hague; New York: Kluwer Law International [[\\*http://www.loc.gov/catdir/toc/fy0715/2003041602.html](http://www.loc.gov/catdir/toc/fy0715/2003041602.html)]

Lennon, A.T.J. (ed.) (2003) The battle for hearts and minds: using soft power to undermine terrorist networks Cambridge, Mass.: MIT Press

Liddy, G. G (et al.) (2006) Fight back: tackling terrorism, Liddy style New York: St. Martin's Press [[\\*http://www.loc.gov/catdir/toc/fy0711/2005044608.html](http://www.loc.gov/catdir/toc/fy0711/2005044608.html)]

Linnan, D.K. (ed.) (2008) Enemy combat-

ants, terrorism, and armed conflict law: a guide to the issues Westport, Conn.: Praeger Security International [[\\*http://www.loc.gov/catdir/toc/ecip081/2007040815.html](http://www.loc.gov/catdir/toc/ecip081/2007040815.html)]

Lund, Michael S. Preventing Violent Conflicts. A Strategy for Preventive Diplomacy. Washington, D.C.: United States Institute of Peace Press, 1996

Malik, A.A. (ed.) (2008) The state we are in: identity, terror & the law of Jihad Bristol: Amal Press

Maniscalco, P. M. (2002) Terrorism response: field guide for law enforcement Upper Saddle River, N.J.: Prentice Hall; Boston, Mass.: Pearson Custom Pub. [[\\*http://www.loc.gov/catdir/toc/fy0711/2002514449.html](http://www.loc.gov/catdir/toc/fy0711/2002514449.html)]

Maniscalco, P.M. & Christen, H.T. (2003) Terrorism response: field guide for fire and EMS organizations Upper Saddle River, N.J.: Prentice Hall [[\\*http://www.loc.gov/catdir/toc/fy0711/2003275909.html](http://www.loc.gov/catdir/toc/fy0711/2003275909.html)]

McCorb, K.H. (ed.) (2011) Critical infrastructure Hauppauge, N.Y.: Nova Science Publishers

McGarrity, N., Lynch, A. & Williams, G. (2010) Counter-terrorism and beyond: the culture of law and justice after 9/11 Abingdon, Oxon; New York, N.Y.: Routledge

Meggle, G. (ed.) (2005) Ethics of terrorism & counter-terrorism Frankfurt: Ontos [[\\*http://www.loc.gov/catdir/toc/fy0701/2006482328.html](http://www.loc.gov/catdir/toc/fy0701/2006482328.html)]

Merkidze, A.W. (ed.) (2007) Terrorism issues: threat assessment, consequences and prevention New York: Nova Science Publishers [[\\*http://www.loc.gov/catdir/toc/ecip0722/2007028247.html](http://www.loc.gov/catdir/toc/ecip0722/2007028247.html)]

Miller, D.A. (ed.) (2007) Espionage and intelligence Farmington Hills, MI: Greenhaven Press

Nacos, B. L. (2010) Terrorism and counterterrorism: understanding threats and responses in the post-9/11 world Boston: Longman

Natarajan, M. (ed.) (2011) International crime and justice Cambridge; New York: Cambridge University Press [[\\*http://www.loc.gov/catdir/enhancements/fy1106/2010033856-t.html](http://www.loc.gov/catdir/enhancements/fy1106/2010033856-t.html)]

Nathan, C.N. (ed.) (2010) Current issues



in human rights and international relations: papers from the Clemens Nathan Research Centre Leiden; Boston: M. Nijhoff Publishers National Crime Prevention Institute (NCPI). Understanding Crime Prevention. Woburn, MA.: Butterworth-Heinemann, 2001.

Norwitz, J.H. (ed.) (2008) Armed groups: studies in national security, counterterrorism, and insurgency Newport, R.I.: U.S. Naval War College [[\\*http://www.loc.gov/catdir/toc/ecip0816/2008016007.html](http://www.loc.gov/catdir/toc/ecip0816/2008016007.html)]

Nusbacher, A.S. (2003) War and conflict Chicago, Ill.: Raintree

Ochs, J. (2010) Security and suspicion: an ethnography of everyday life in Israel Philadelphia: University of Pennsylvania Press

O'Hair, H. D. (ed.) (2008) Terrorism: communication and rhetorical perspectives Cresskill, NJ: Hampton Press [[\\*http://www.loc.gov/catdir/toc/ecip087/2007051380.html](http://www.loc.gov/catdir/toc/ecip087/2007051380.html)]

Ortmeier, P. J. (2009) Introduction to security: operations and management Upper Saddle River, N.J.: Pearson/Prentice Hall [[\\*http://www.loc.gov/catdir/toc/ecip085/2007048004.html](http://www.loc.gov/catdir/toc/ecip085/2007048004.html)]

O'Sullivan, T.M. (ed.) (2010) Department of Homeland Security Intelligence Enterprise: overview and issues Hauppauge, N.Y.: Nova Science Publisher's, Inc.

Peleg, S. & Kempf, W. (2006) Fighting terrorism in the liberal state: an integrated model of research, intelligence and international law [Meeting: NATO Advanced Research Workshop on Fighting Terrorism in the Liberal State: An Integrated Model of Research, Intelligence and International Law; 2005: Konstanz, Germany] Amsterdam; Washington, DC: IOS Press

Peykar, E.V. (ed.) (2005) The FBI: past, present, and future New York: Nova Publications, Inc. [[\\*http://www.loc.gov/catdir/toc/ecip051/2004022328.html](http://www.loc.gov/catdir/toc/ecip051/2004022328.html)]

Poland, J. M. (2011) Understanding terrorism : groups, strategies, and responses Boston: Prentice Hall

Popp, R.L. & Yen, J. (eds.) (2006) Emergent information technologies and enabling policies for counter-terrorism Hoboken, N.J.:

Wiley-Interscience; Chichester: John Wiley [[\\*http://www.loc.gov/catdir/toc/fy0704/2006299648.html](http://www.loc.gov/catdir/toc/fy0704/2006299648.html)]

Price, R.M. & Zacher, M.W. (eds.) (2004) The United Nations and global security New York: Palgrave Macmillan [[\\*http://www.loc.gov/catdir/toc/fy0904/2003060876.html](http://www.loc.gov/catdir/toc/fy0904/2003060876.html)]

Rapley, R. (2007) Witch hunts: from Salem to Guantanamo Bay Montreal: McGill-Queen's University Press [[\\*http://www.loc.gov/catdir/enhancements/fy1002/2007281631-b.html](http://www.loc.gov/catdir/enhancements/fy1002/2007281631-b.html)]

Reuveny, R & Thompson, W.R. (eds.) (2010) Coping with terrorism: origins, escalation,

counterstrategies, and responses Albany, N.Y.: State University of New York Press

Richardson, H.E., Gordon, P. & Moore II, J.R. (eds.) (2007) The economic impacts of terrorist attacks Cheltenham, UK; Northampton, MA, USA: Edward Elgar [[\\*http://www.loc.gov/catdir/toc/fy0804/2007281888.html](http://www.loc.gov/catdir/toc/fy0804/2007281888.html)]

Riedel, M. (2011) Criminal violence: patterns, causes, and prevention New York: Oxford University Press

Rollings-Magnusson, S. (ed.) (2009) Anti-terrorism: security and insecurity after 9/11 Halifax: Fernwood Pub. [[\\*http://www.loc.gov/catdir/enhancements/fy0912/2009396826-b.html](http://www.loc.gov/catdir/enhancements/fy0912/2009396826-b.html)]

Rosenthal, U. & Muller, E.R. (2007) The evil of terrorism: diagnosis and countermeasures Springfield, Il.: Charles C. Thomas [[\\*http://www.loc.gov/catdir/toc/ecip0723/2007030357.html](http://www.loc.gov/catdir/toc/ecip0723/2007030357.html)]

Sadat, L.N. (ed.) (2011) Forging a convention for crimes against humanity Cambridge; New York: Cambridge University Press

Schubert, H & Kuznetsov, A. (eds.) (2004) Detection of bulk explosives: advanced techniques against terrorism Dordrecht; Boston: Kluwer Academic Publishers [[\\*http://www.loc.gov/catdir/toc/fy046/2004042403.html](http://www.loc.gov/catdir/toc/fy046/2004042403.html)]

Schweitzer, G. E. (ed.) (2009) [workshop: Committee on Counterterrorism Challenges for Russia and the United States; Office for Central Europe and Eurasia; Development, Security, and Cooperation, Policy and Global Affairs] Countering terrorism : biological agents, transportation networks, and energy



systems Washington, D.C.: National Academies Press

Sen, A. (et al.) (2007) Civil paths to peace: report of the Commonwealth Commission on Respect and Understanding London, U.K.: Commonwealth Secretariat

Shemella, P. (ed.) (2011) Fighting back: what governments can do about terrorism Stanford, California: Stanford University Press

Sidhu, D.S & Gohil, N.S. (2009) Civil rights in wartime: the post-9/11 Sikh experience Farnham, Surrey, UK; Burlington, Vt.: Ashgate

Simi, P. & Futrell, R. (2010) American swastika: inside the white power movement's hidden spaces of hate Lanham, Md.: Rowman & Littlefield Publishers

Smith, J. & Sanderson, T. (eds.) (2006) Five years after 9/11: an assessment of America's war on terror Washington, D.C.: CSIS Press, Center for Strategic and International Studies [[\\*http://www.loc.gov/catdir/toc/ecip0620/2006028224.html](http://www.loc.gov/catdir/toc/ecip0620/2006028224.html)]

Smith, P. J. (2008) The terrorism ahead: confronting transnational violence in the twenty-first century Armonk, N.Y.: M.E. Sharpe [[\\*http://www.loc.gov/catdir/toc/ecip0710/2007003968.html](http://www.loc.gov/catdir/toc/ecip0710/2007003968.html)]

Snowden, L. L. (2002) Preventing terrorism North Chelmsford, MA: Erudition Books, Courier Custom Pub. [[\\*http://www.loc.gov/catdir/toc/fy0711/2003272093.html](http://www.loc.gov/catdir/toc/fy0711/2003272093.html)]

Sorial, S. (2011) Sedition and violence against the state: free speech and counter-terrorism Abingdon, Oxon; New York, NY: Routledge

Staub, E. (2010) Overcoming evil: genocide, violent conflict, and terrorism Oxford; New York: Oxford University Press, USA

Stout, C. E. (ed.) (2004) Psychology of terrorism: coping with the continuing threat Westport, Conn.: Praeger Publishers

[[\\*http://www.loc.gov/catdir/toc/ecip0415/2004004633.html](http://www.loc.gov/catdir/toc/ecip0415/2004004633.html)]

Taylor, R.W. (et al.) (2011) Digital crime and digital terrorism Boston: Prentice Hall [[\\*http://www.loc.gov/catdir/toc/ecip054/2004028224.html](http://www.loc.gov/catdir/toc/ecip054/2004028224.html)]

Thaler, W.M. (ed.) (2005) Emerging issues in homeland security New York: Nova Science Publishers [[\\*http://www.loc.gov/catdir/toc/fy055/2005297959.html](http://www.loc.gov/catdir/toc/fy055/2005297959.html)]

Thomas, T.S. & Casebeer, W.D. (2005) Turbulent arena: global effects against non-state adversaries Colorado Springs, CO: USAF Institute for National Security Studies, USAF Academy

Thomas, T.S. & Casebeer, W.D. (2004) Violent systems: defeating terrorists, insurgents, and other non-state adversaries Colorado Springs, Colo.: USAF Institute for National Security Studies, USAF Academy [[\\*http://www.loc.gov/catdir/toc/fy0711/2004556204.html](http://www.loc.gov/catdir/toc/fy0711/2004556204.html)]

Tsang, S. (ed.) (2009) Combating transnational terrorism: searching for a new paradigm Santa Barbara, Calif.: Praeger Security International/ABC-CLIO

Turk, J.L. & Manson, A. (eds.) (2007) Free speech in fearful times: after 9/11 in Canada, the U.S., Australia & Europe Toronto: Lorimer [[\\*http://www.loc.gov/catdir/toc/fy0802/2007408333.html](http://www.loc.gov/catdir/toc/fy0802/2007408333.html)]

UK. Commonwealth Secretariat (2006) Combating money laundering and terrorist financing: a model of best practice for the financial sector, the professions and other designated businesses London: Commonwealth Secretariat

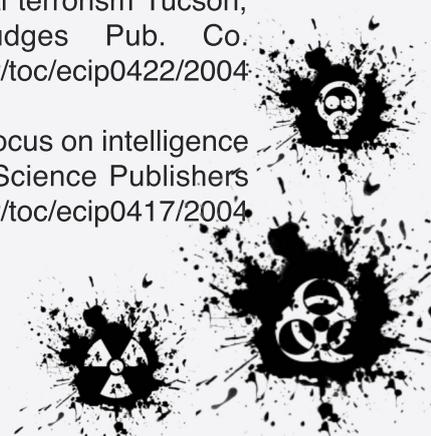
Ulusoy, M.D. (ed.) (2008) Political violence, organized crimes, terrorism, and youth [meeting: NATO Advanced Research Workshop on Political Violence, Organized Crimes, Terrorism and Youth; 2007; Ankara, Turkey] Amsterdam; Washington, DC: IOS Press

US. Directorate of Legal Research, Law Library of Congress (2002) European legal cooperation against terrorism: reports on 24 jurisdictions Washington, DC: Law Library of Congress

Wang, C. (et al.) (eds.) (2007) Department of Defense sponsored information security research: new methods for protecting against cyber threats Indianapolis, Ind.; Chichester: Wiley

Wecht, C.H. (ed.) (2004) Forensic aspects of chemical and biological terrorism Tucson, Ariz.: Lawyers & Judges Pub. Co. [[\\*http://www.loc.gov/catdir/toc/ecip0422/2004019767.html](http://www.loc.gov/catdir/toc/ecip0422/2004019767.html)]

Wheatley, C.N. (ed.) Focus on intelligence issues New York: Nova Science Publishers [[\\*http://www.loc.gov/catdir/toc/ecip0417/2004](http://www.loc.gov/catdir/toc/ecip0417/2004)]



008200.html ]

Wilkinson, P. (2006) *Terrorism versus democracy: the liberal state response* London; New York: Routledge [\*<http://www.loc.gov/catdir/toc/ecip068/200604407.html>] Williams, C. (2004) *Terrorism explained: the facts about terrorism and terrorist groups* Sydney: New Holland [\*<http://www.loc.gov/catdir/toc/fy0711/2005440659.html>]

Williams, C. & Taylor, B. (eds.) (2003) *Countering terror: new directions post '911'* Canberra: Strategic & Defence Studies Centre, Australian National University

Wilmot, R. & Ness, R. (eds.) (2005) *Domestic and international terrorism* Boston, MA: Pearson Custom Pub.

Wood, J. & Dupont, B. (eds.) (2006) *Democracy, society, and the governance of security* Cambridge, UK; New York: Cambridge University Press [\*<http://www.loc.gov/catdir/enhancements/fy0702/2006284089-t.html>]

Yinon, J. (ed.) (2007) *Counterterrorist detection techniques of explosives* Amsterdam; Boston: Elsevier

Younger, S. M. (2007) *Endangered species: mass violence and the future of humanity* New York: Ecco [\*<http://www.loc.gov/catdir/toc/fy0713/2006048163.html>]

Yount, (ed.) (2004) *Fighting bioterrorism* San Diego, Calif.: Greenhaven Press [\*<http://www.loc.gov/catdir/toc/fy0711/2003047236.html>]

### Non-conventional Literature

Advisory Council on International Affairs (2006) *Counterterrorism from an international and European perspective* The Hague: Advisory Council on International Affairs [[http://www.trefpunteuropa.nl/9353000/1/j4nvg5k5kjg27kof\\_j9vvhswlo9bh5xe/vi0r984nzwg1/f=blg18225.pdf](http://www.trefpunteuropa.nl/9353000/1/j4nvg5k5kjg27kof_j9vvhswlo9bh5xe/vi0r984nzwg1/f=blg18225.pdf)]

Bowman, M.E. (2007) *Counterterrorism activities of the FBI: at home and abroad* Center for Technology and National Security Policy [<http://www.ndu.edu/CTNSP/doc/Uploaded/Case%208%20The%20FBI%20at%20War.pdf>]

Chalk, P & Ungerer, C. (2008) *Neighbourhood watch: the evolving terrorist threat*

Southeast Asia Barton, A.C.T.: Australian Strategic Policy Institute [<http://www.aspi.org.au>]

Council of Europe Convention on the Prevention of Terrorism (2005) Council of Europe Convention on the Prevention of Terrorism: CETS no. 196 opened for signature in Warsaw on 16 May 2005 and explanatory report Strasbourg: Council of Europe Pub. [<http://www.statewatch.org/news/2005/may/coe-conv-terrorism-expl-memo.pdf>]

Cragin, K. & Gerwehr, S. (2005) *Dissuading terror: strategic influence and the struggle against terrorism* Santa Monica, Calif.: RAND Corp [[http://www.rand.org/content/dam/rand/pubs/monographs/2005/RAND\\_MG184.pdf](http://www.rand.org/content/dam/rand/pubs/monographs/2005/RAND_MG184.pdf)]

Davis, L.E. (et al.) (2006) *Combating terrorism: how prepared are state and local response organizations?* Santa Monica, CA: RAND National Defense Research Institute [[http://www.rand.org/pubs/monographs/2006/RAND\\_MG309.pdf](http://www.rand.org/pubs/monographs/2006/RAND_MG309.pdf)]

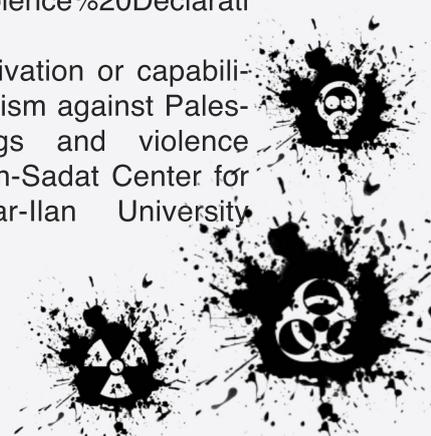
Davis, L.E. (et al.) (2004) *Coordinating the war on terrorism* Santa Monica, Calif.: Rand [[http://www.rand.org/pubs/occasional\\_papers/2005/RAND\\_OP110.pdf](http://www.rand.org/pubs/occasional_papers/2005/RAND_OP110.pdf)]

Dial, D.E. (2006) *Enterprising police for the September 12 era* [thesis]; Monterey, California: Naval Postgraduate School [[http://www.semp.us/\\_images/biots/Biot423.pdf](http://www.semp.us/_images/biots/Biot423.pdf)]

European Conference of Ministers of Transport (2003) *ECMT Round Tables Vandalism, Terrorism and Security in Urban Public Passenger Transport* N 123 OECD - Organisation for Economic Co-operation and Development [<http://www.internationaltransportforum.org/IntOrg/ecmt/pubpdf/03RT123e.pdf>]

European Confederation of Police Officers – EUROCOPE Violence against police officers is violence against society Luxembourg, EuroCOP [<http://www.eurocop-police.org/policies/safer%20policing/Violence%20Declaration.pdf>]

Frisch, H. (2006) *Motivation or capabilities? Israeli counterterrorism against Palestinian suicide bombings and violence* Ramat-Gan, Israel: Begin-Sadat Center for Strategic Studies, Bar-Ilan University



[<http://www.biu.ac.il/Besa/MSPS70.pdf> ]

Germany, Federal Government (2004) Action Plan 'Civilian Crisis Prevention, Conflict Resolutions, and Post-Conflict Peace-Keeping Berlin, Die Bundesregierung [[https://www.civcap.info/fileadmin/user\\_upload/Germany/Aktionsplan-En.pdf](https://www.civcap.info/fileadmin/user_upload/Germany/Aktionsplan-En.pdf) ]

Jackson, B.A. (eds.) (2009) Considering the creation of a domestic intelligence agency in the United States: lessons from the experiences of Australia, Canada, France, Germany, and the United Kingdom Santa Monica, CA: RAND [[http://www.rand.org/pubs/monographs/2009/RAND\\_MG805.pdf](http://www.rand.org/pubs/monographs/2009/RAND_MG805.pdf) ]

Jackson, B.A. (et al.) (eds.) (2008) Evaluating novel threats to the homeland: unmanned aerial vehicles and cruise missiles Santa Monica, CA: RAND National Defense Research Institute [[http://www.rand.org/pubs/monographs/2008/RAND\\_MG626.pdf](http://www.rand.org/pubs/monographs/2008/RAND_MG626.pdf) ]

Kettl, D.F. (ed.) (2004) The Department of Homeland Security's first year: a report card New York: Century Foundation [<http://www.fas.org/sgp/crs/RL31751.pdf> ]

Lopez, C. M. (et al.) (2011) Religious Bias Crimes 2000-2009: Muslim, Jewish and Christian Victims- Debunking the Myth of a Growing Trend in Muslim Victimization Washington, D.C.: Center for Security Policy [[http://www.centerforsecuritypolicy.org/upload/wysiwyg/center%20publication%20pdfs/Center\\_for\\_Security\\_Policy\\_Religious\\_Bias\\_Crimes\\_0329.pdf](http://www.centerforsecuritypolicy.org/upload/wysiwyg/center%20publication%20pdfs/Center_for_Security_Policy_Religious_Bias_Crimes_0329.pdf) ]

Martin, J. (ed.) (2002) Defeating terrorism: strategic issue analyses Carlisle, PA: Strategic Studies Institute, U.S. Army War College [<http://www.strategicstudiesinstitute.army.mil/pdffiles/pub273.pdf> ]

Niang, S.R. (2001) Terrorizing ages Purdue University [<http://web.ics.purdue.edu/~sniang/work/Niang%20-%20Terrorizing%20Ages.pdf> ]

Rabasa, A. (et al.) (2006) (in 2 vols.) Beyond al-Qaeda Santa Monica, CA: Rand Corporation [[http://www.rand.org/pubs/monographs/2006/RAND\\_MG429.pdf](http://www.rand.org/pubs/monographs/2006/RAND_MG429.pdf) ] and [[http://www.rand.org/pubs/monographs/2006/RAND\\_MG430.pdf](http://www.rand.org/pubs/monographs/2006/RAND_MG430.pdf) ]

Rabasa, A. (et al.) (eds.) (2011) Deradicalizing Islamist extremists Santa Monica, CA:

RAND [[http://www.rand.org/pubs/monographs/2010/RAND\\_MG1053.pdf](http://www.rand.org/pubs/monographs/2010/RAND_MG1053.pdf) ]

Singapore. National Security Strategy (2004) The fight against terror: Singapore's national security strategy Singapore National Security Coordination Centre [<http://merln.ndu.edu/whitepapers/Singapore-2004.pdf> ]

Regeringskansliet (UD). Preventing Violent Conflict – A Swedish Action Plan. Stockholm: Ministry of Foreign Affairs, 1999.

Soldatov, A. & Borogan, I. (2005) Terrorism prevention in Russia Agentura ru. Studies and Research Centre – ARSC [<http://www.agentura.ru/english/dosie/terrorismprevention/preventssystem.pdf> ]

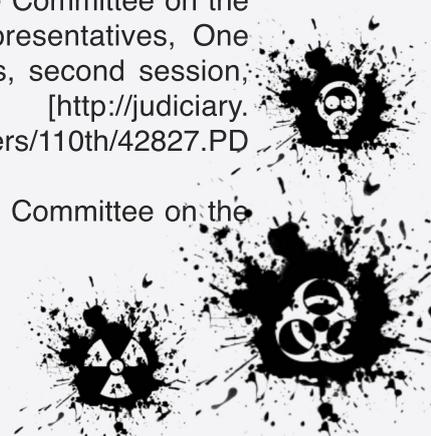
Smith, B. (2008) Demographic and ideological variations of behavior amongst American terrorists Terrorism Research Center in Fulbright College [[http://www.orau.gov/DHSsummit/presentations/March17/Panel7/Smith\\_Mar17.pdf](http://www.orau.gov/DHSsummit/presentations/March17/Panel7/Smith_Mar17.pdf) ]

United Nations Office on Drugs and Crime – UNODC (2010) [meeting: Salvador, Brazil; 12-19 April 2010] Twelfth United Nations Congress on Crime Prevention and Justice Vienna: UNODC [[http://www.un.org/en/conf/crimecongress2010/pdf/pamphlet\\_ebook.pdf](http://www.un.org/en/conf/crimecongress2010/pdf/pamphlet_ebook.pdf) ]

US. Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism (2009) The clock is ticking: a progress report on America's preparedness to prevent weapons of mass destruction proliferation and terrorism Washington, D.C.: Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism [<http://www.pharmathene.com/pdf/CPWMD%20Interim%20Report.pdf> ]

US . Congress. House. Committee on the Judiciary. Subcommittee on Crime, Terrorism, and Homeland Security. Addressing gangs : what's effective? what's not?[ hearing before the Subcommittee on Crime, Terrorism, and Homeland Security of the Committee on the Judiciary, House of Representatives, One Hundred Tenth Congress, second session, June 10, 2008] [<http://judiciary.house.gov/hearings/printers/110th/42827.PDF> ]

US. Congress. House. Committee on the



Judiciary. Subcommittee on Crime, Terrorism, and Homeland Security. Court Security Improvement Act of 2007 [hearing before the Subcommittee on Crime, Terrorism, and Homeland Security of the Committee on the Judiciary, House of Representatives, One Hundred Tenth Congress, first session, on H.R. 660, May 3, 2007] [<http://purl.access.gpo.gov/GPO/LPS102908>]

US. GAO. (2005) Aviation security: measures for testing the impact of using commercial data for the Secure Flight program Washington, D.C.: U.S. Government Accountability Office [<http://www.gao.gov/new.items/d05324.pdf>]

US. GAO. (2007) Combating terrorism: law enforcement agencies lack directives to assist foreign nations to identify, disrupt, and prosecute terrorists Washington, D.C.: United States Government Accountability Office [<http://www.gao.gov/new.items/d08144t.pdf>]

US. GAO. (2006) Foreign assistance: recent improvements made, but USAID should do more to help ensure aid is not provided for terrorist activities in West Bank and Gaza Washington, D.C.: United States Government Accountability Office [<http://www.gao.gov/new.items/d061062r.pdf>]

US. Committee on Assessment of Security Technologies for Transportation, National Materials Advisory Board, Division on Engineering and Physical Sciences, National Research Council (2006) Defending the U.S. air transportation system against chemical and biological threats Washington, D.C.: National Academies Press

US. House of Representatives (2004) 9/11 Commission recommendations on public diplomacy: defending ideals and defining the message Washington, D.C.: GPO [<http://house.resource.org/108/org.c-span.183196-1.pdf>]

US. Joint Chiefs of Staff (2002) Antiterrorism personal protection guide: a self-help guide to antiterrorism Washington, D.C.: Joint Chiefs of Staff [<http://www.marines.mil/news/publications/Documents/JS%20Guide%205260.pdf>]

Willis, H.H. (et al.) (2005) Estimating terrorism risk Santa Monica, CA: RAND

[[http://www.rand.org/pubs/monographs/2005/RAND\\_MG388.pdf](http://www.rand.org/pubs/monographs/2005/RAND_MG388.pdf)]

Winkler, T.H., Ebnöther, A.H. & Hansson, M.B. (eds.) (2005) Combating terrorism and its implications for the security sector Stockholm: Swedish National Defence College; Geneva: Geneva Centre for the Democratic Control of Armed Forces [[http://se2.dcaf.ch/serviceengine/Files/DCAF/21593/ipublicationdocument\\_singledocument/d80c58c9-db8b-4e33-af2f-f8c82c9cfa49/en/Combat\\_Terrorism\\_webb.pdf](http://se2.dcaf.ch/serviceengine/Files/DCAF/21593/ipublicationdocument_singledocument/d80c58c9-db8b-4e33-af2f-f8c82c9cfa49/en/Combat_Terrorism_webb.pdf)]

World Bank (2009) Combating money laundering and the financing of terrorism: a comprehensive training guide Washington, D.C.: World Bank [<http://cdi.mecon.gov.ar/doc/bm/CMLFT/6.pdf>]

Zuhur, S. (2007) Egypt: security, political, and Islamist challenges Carlisle, PA: Strategic Studies Institute, U.S. Army War College [<http://www.strategicstudiesinstitute.army.mil/pdffiles/PUB787.pdf>]

### Prime Journal Articles

Anon.: International Relations Political Studies Review 3 (2, April 2005) pp.284-303

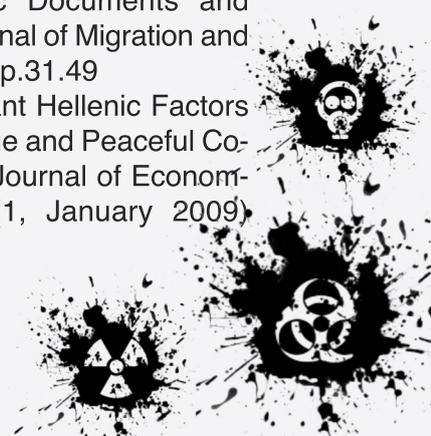
Asada, M.: Security Council Resolution 1540 to Combat WMD Terrorism: Effectiveness and Legitimacy in International Legislation Journal of Conflict and Security Law 13 (3, 2008) pp.303-332

Asada, M.: Security Council Resolution 1540 to Combat WMD Terrorism: Effectiveness and Legitimacy in International Legislation Journal of Conflict and Security Law 13 (3, 2008) pp.303-332

Bachmann, J. & Hnke, J.: Peace and Security as Counterterrorism? The Political Effects of Liberal Interventions in Kenya African Affairs 109 (434, January 2010) pp.97-114

Baldaccini, A.: Counter-Terrorism and the EU Strategy for Border Security: Framing Suspects with Biometric Documents and Databases European Journal of Migration and Law 10 (1, March 2008) pp.31-49

Bargeliotes, L.: Relevant Hellenic Factors Favoring Effective Dialogue and Peaceful Coexistence The American Journal of Economics and Sociology 68 (1, January 2009)



pp.205-229

Barnutz, S.: The EU's logic of security: politics through institutionalised discourses *European Security* 19 (3, September 2010) pp.377-394

Bates, E.: Anti-terrorism control orders: liberty and security still in the balance *Legal Studies* 29 (1, March 2009) pp.99-126

Beauchamp, J.L.: Countering Terrorism: the Role of Science and Technology *Science & Technology* (4, 2002) pp.26-35 [<http://calteches.library.caltech.edu/685/2/Terrorism.pdf>]

Bredel R.: The UNs Long-term Conflict Prevention Strategies and the Impact of Counter-terrorism *International Peacekeeping* 10 (2, Summer 2003) pp.51-70

Breen, G-M.: Examining Existing Counter-Terrorism Tactics and Applying Social Network Theory to Fight Cyberterrorism: An Interpersonal Communication Perspective

*Journal of Applied Security Research* 3 (2, 2008) pp.191-204

Cesari, J.: Religion, Conflict, and Military Intervention *Religion, State and Society* 39 (1, March 2011) pp.130-131

Choo, K-K. R.: Politically exposed persons (PEPs): risks and mitigation *Journal of Money Laundering Control* 11 (4, 17 October 2008) pp.371-387

Crocker, C.A.: Thoughts on the Conflict Management Field after 30 Years *International Negotiation* 16 (1, 2011) pp.1-10

Daniel, M.: Anti-terrorism Regimes: Rationales and Scope *Human Rights and Non-discrimination in the War on Terror* 1 (9, 24 January 2008) pp.23-57

Daniel, M.: Selective Use of Police Powers *Human Rights and Non-discrimination in the War on Terror* 1 (9, 24 January 2008) pp.193-223

Davis, M. H.: 'A new world rising': Albert Camus and the absurdity of neo-liberalism *Social Identities* 17 (2, March 2011) pp.225-228

Deshpande, N.: Pyro-Terrorism: Recent Cases and the Potential for Proliferation *Studies in Conflict and Terrorism* 32 (1, January 2009) pp.36-44

Ellingsen, S. A.: Strengthening the Second Line of Defense *The Nonproliferation Review* 15 (2, 2008) pp.399-402

Foster, M. W. & Butler, J.W.: Cancer, HIV, and terrorism: translating public health models for prevention and control to counter-terrorism *Critical Studies on Terrorism* 1 (1, 2008) pp.81-94

Freilich, J. D. (et al.) Critical events in the life trajectories of domestic extremist white supremacist groups: A case study analysis of four violent organizations *Criminology Public Policy* 8 (3, August 2009) pp.497-530

Glaessner, G-J.: Internal security and the new anti-terrorism act *German Politics* 12 (1, April 2003) pp.43-58

Henry, V.E. & King D.H.: Improving Emergency Preparedness and Public-Safety Responses to Terrorism and Weapons of Mass Destruction *Brief Treatment and Crisis Intervention* 4 (1, 2004) pp.11-35

Jaspal, R. & Maya, Y.: Social representations of the Holocaust and Jewish Israeli identity construction: insights from identity process theory *Social Identities* 17 (2, March 2011) pp.201-224

Jones Parry, E.: International Conflict Prevention and Intervention *The RUSI Journal* 149 (6, December 2004) pp.56-61

Klausen, J.: British Counter-Terrorism After 7/7: Adapting Community Policing to the Fight Against Domestic Terrorism *Journal of Ethnic and Migration Studies* 35 (3, March 2009) pp.403-420

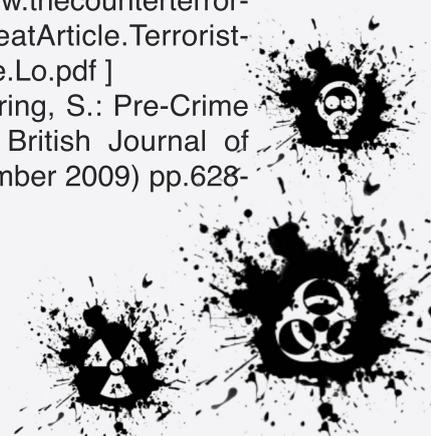
Kruglanski, A. W. (et al.) Fully Committed: Suicide Bombers' Motivation and the Quest for Personal Significance *Political Psychology* 30 (3, June 2009) pp.331-357

Lusthaus, J.: Religion and state violence: legitimation in Israel, the USA and Iran *Contemporary Politics* 17 (1, March 2011) pp.1-17

Lopes, P. N.: Emotion Regulation and the Quality of Social Interaction: Does the Ability to Evaluate Emotional Situations and Identify Effective Responses Matter? *Journal of Personality* 79 (2, April 2011) pp.429-467

Marquise, R.: Terrorism Threat Indicators *The Counter Terrorist* 1 (September/October 2008) pp.24-34 [<http://www.thecounterterroristmag.com/pdf/Issue3.FeatArticle.Terrorist-ThreatIndicators.Marquise.Lo.pdf>]

McCulloch, J. & Pickering, S.: Pre-Crime and Counter-Terrorism *British Journal of Criminology* 49 (5, September 2009) pp.628-645



Merlonghi, G.: Fighting financial crime in the age of electronic money: opportunities and limitations *Journal of Money Laundering Control* 13 (3, 1 January 2010) pp.202-214

Nacos, B. L. (et al.) Prevention of Terrorism in Post-9/11 America: News Coverage, Public Perceptions, and the Politics of Homeland Security *Terrorism and Political Violence* 20 (1, 2008) pp.1-25

Nersessian, D.: The Way Forward: Rethinking the Crime of Crimes Genocide and Political Groups 1 (9, 29 July 2010) pp.205-219

O'Connell, M. E.: Unilateral Armed Measures The Power and Purpose of International Law 1 (9, 28 August 2008) pp.153-193

Organisation for Economic Co-operation and Development – OECD: Programmes and Tools to Enhance Risk Awareness and Education on Insurance Issues. Source: OECD Education Skills 2008 (5, July 2008) pp.51-57

Orme-Johnson, D. W. (et al.) Preventing Terrorism and International Conflict *Journal of Offender Rehabilitation* 36 (1, 2003) pp.283-302

Pelfrey, W. V.: Parallels between Community Oriented Policing and the War on Terrorism: Lessons Learned *Criminal Justice Studies: A Critical Journal of Crime, Law and Society* 18 (4, 2005) pp.335-346

Reinares, F.: After the Madrid Bombings: Internal Security Reforms and Prevention of Global Terrorism in Spain *Studies in Conflict and Terrorism* 32 (5, May 2009) pp.367-388

Rock, S.: Religion, Violence, Memory, and Place *Religion, State and Society* 19 (1, March 2011) pp.127-129

Rothacher, A.: Clashes and dialogues of civilizations revisited the case of contemporary East Asia and Europe *Asia Europe Journal* 6 (1, April 2008) pp.129-143

Sabsay, L.: The Limits of Democracy *Cultural Studies* 25 (2, March 2011) pp.213-229

Scanlan, G.: The war on terror - future trends *Journal of Financial Crime* 12 (2, 1 April 2005) pp.104-111

Schmid, A.: Terrorism and Human Rights: A Perspective from the United Nations Terror-

ism and Political Violence 17 (1-2, Winter 2005) pp.25-35

Staub, E.: Preventing Violence and Terrorism and Promoting Positive Relations between Dutch and Muslim Communities in Amsterdam *Peace and Conflict: Journal of Peace Psychology* 13 (3, 2007) pp.1-28 [[http://people.umass.edu/estaub/HPCN\\_A\\_247018staub.pdf](http://people.umass.edu/estaub/HPCN_A_247018staub.pdf)]

Stock, J. & Herz, A.: The Threat Environment Created by International Terrorism from the German Police Perspective *European Journal on Criminal Policy and Research* 13 (1-2, April 2007) pp.85-108

Ventura, H.E., Miller, M. & Deflem, M.: Governmentality and the war on terror: FBI Project Carnivore and the diffusion of disciplinary power *Criminal Criminology* 13 (Spring 2005) pp.55-70 [<http://www.cas.sc.edu/socy/faculty/deflem/zgovernterror.pdf>]

Walker, C.: Clamping Down on Terrorism in the United Kingdom *Journal of International Criminal Justice* 4 (5, 1 November 2006) pp.1137-1151

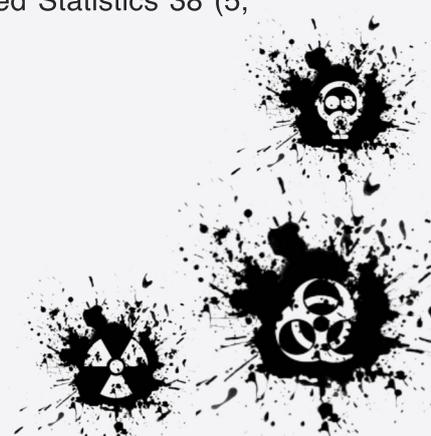
Watney, M.: State surveillance of the internet: human rights infringement or e-security mechanism *International Journal of Electronic Security and Digital Forensics* 1 (1, 9 May 2007) pp.52-54

Weaver, A. (et al.) Liking Violence and Action: An Examination of Gender Differences in Children's Processing of Animated Content *Media Psychology* 14 (1, January 2011) pp.49-70

Weisburd, D. (et al.) Terrorist Threats and Police Performance *British Journal of Criminology* 50 (4, June 2010) pp.725-747

Wurmser, L.: Metaphor as Conflict, Conflict as Metaphor *Psychoanalytic Inquiry* 31 (2, March 2011) pp.107-125

Yusuf, B. (et al.) Identifying predictors of violent behaviour among students using the conventional logistic and multilevel logistic models *Journal of Applied Statistics* 38 (5, May 2011) pp.1055-1061



### Definition of Terrorism

An Internet group of experts exchange opinions on how people from different countries define "terrorism":

#### How do you define "terrorism" ?

As many of you know, there is a huge debate in this field about what separates terrorism from other tactics used by groups and organizations in order to further their agendas. I personally use Jeffrey Bale's definition, "terrorism is violence that is consciously carried out by the perpetrator(s) primarily in order to influence the attitudes and behavior of a wider target audience, or multiple target audiences."-

([http://www.miis.edu/academics/researchcenters/terrorism/about/Terrorism\\_Definition](http://www.miis.edu/academics/researchcenters/terrorism/about/Terrorism_Definition))

However, I also add that it is not just violence but the treat of violence. I am interested to find out how those of you who have been working in the fields much longer then I have define the term and how you separate it specifically from other forms of violence.

UKRAINE-1 • In my country we consider terrorism as the activity which main aim is not the act itself, but the psychological influence of the act on as wide audience as possible.

USA • Jaime, let me lead off with I am no expert. If the local, state and federal law enforcement entities, the UN, different governmental agencies, EMS or FD can't agree on

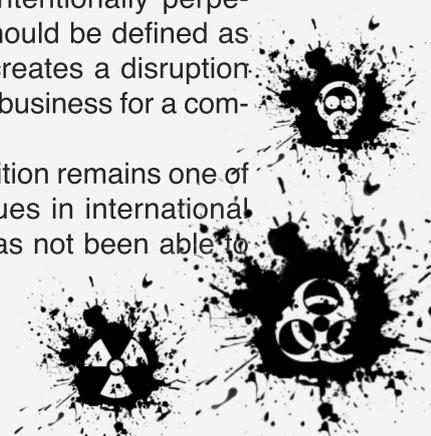
were held at bay for hours in fear of further actions. Could these not be considered "Lone Wolf" terrorist acts? Any singular event that can stop mass transit, close down airspace, halt airport operations, close governmental offices and local businesses, lock down medical facilities and schools, freeze the population of the said community from continuing in their



one answer what makes me think I can do better? I feel that it is better to define what are acts of terrorism by the response generate. The man who flew a plane into a governmental building in Texas earlier this year or the gentleman who shot up a federal courthouse in Las Vegas earlier this year aren't deemed terrorists because they acted upon a self motivated cause. However, these communities

daily life all at the same time should be deemed as terrorism if intentionally perpetrated. To me terrorism should be defined as any threat or event that creates a disruption in the normalcy of life and business for a community.

INDIA • Terrorism definition remains one of the most contentious issues in international relations today, the UN has not been able to

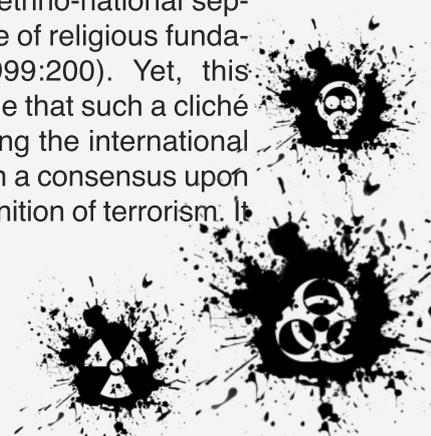


work out a definition for terrorism so far and is not likely to do so in the years ahead, there are so many different versions of what countries and people may consider as terrorism and what others may see as freedom fighters or other similar paradigms. I think terrorism is a violent act or threat of violence with a political purpose with the aim of influencing a target group, which may or may not be the victim of that act. Anything which lacks a political purpose would have to be categorised differently. Cheers!

THAILAND-1 • Defining terrorism is one of those tasks that can lead quickly to semantic irrelevance. However the need to understand what we face is necessary in order to counter it. The problem is that there are no easy ways to do this. For what it may be worth what follows is a piece that I wrote a while ago for a course on Global Terrorism I took at AMU. Let's start with the definition of the word. Merriam Webster defines "terrorist" as "the deliberate creation and exploitation of fear for bringing about political change." Too vague to be of any use unfortunately. Such generic definitions lead to a facile approach to the problem, one that is unfortunately supported (wrongly in my opinion) by many in the military. For example Gen. Ralph Peters, writing in his Book *When Devils walk the Earth*, recommends extreme responses to terrorism that may not solve the problem in the long run. The saying "one man's terrorist is another man's freedom fighter" may be appropriate here. Gen. Peters recommends responding to force with much greater force, even though it may cause serious collateral damage, and have the opposite effect of creating an even bigger pool of dissatisfied people with nothing to lose, who then become the easy targets of terrorist recruiters. I am British and I still remember the domestic war that we fought in Northern Ireland against the IRA terrorists. Mistakes were certainly made in the management of the "Troubles" (as they were called) but over time the British Army had to learn how to conduct interdictions against terrorists as they hid among civilian population, without inflicting massive collateral damage. I would use the word "terrorist" with caution. The acceptance of vague definitions leads to woolly

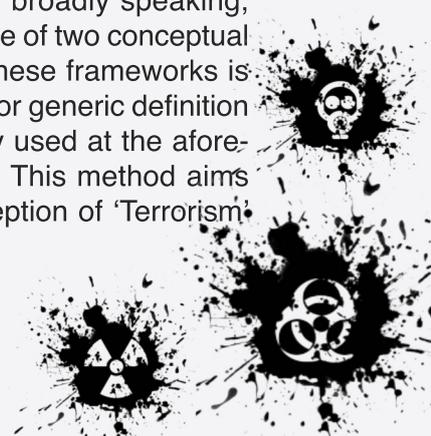
concepts such as "the War on Terror". The result of accepting such indefinable concepts leads to acceptance of a weakening of civil liberties that Governments can impose through rush legislation, while people are still in shock over an attack. I am not singling out the United States here: "War on Terror" legislation has been rushed in many countries such as China, most of the –stans in Central Asia, all over South East Asia (where I live) as well as in the UK. Which brings me back to the initial definition of Terrorism: "the deliberate creation and exploitation of fear for bringing about political change." Isn't political change what is happening? There have been huge changes to our perception of what is acceptable to give up in pursuit of woolly goals since the 9/11 attacks. If UBL's aims were to bring change to the Western concepts of Democracy, he must be laughing his head off in Pakistan right now. Better to view terrorism as a simple tool and to search for a wider solution to be used to counter the situations that give birth to the perceived need to use this tool. Investing the same money in the building of professional development schools in impoverished areas on Central Asia as what Saudi Arabia does in Madrassas may be one way of doing this.

UNKNOWN • Hi, its nice to see a group of non-policy makers discussing such an important topics. I have a few thoughts upon the definition of terrorism that are contrary to most of what I've read in this discussion so far. I recently wrote a paper upon this topic and have copied and pasted it below as it would be interesting to get some feedback upon my ideas. If anyone represents or works with any journals that would be interested in publishing the paper please contact me! Its in bits as its too long for a single post... The old cliché that 'one man's terrorist is another man's freedom fighter' is often dismissed as not being applicable to the post September 11th world due to the believed decline in ethno-national separation groups and the rise of religious fundamentalism (Hoffman, 1999:200). Yet, this essay will hope to conclude that such a cliché is responsible for paralysing the international community's efforts to gain a consensus upon a legal and diplomatic definition of terrorism. It



will also argue that this impasse will remain as long as the word 'terrorism' is present, and, in doing so, it will suggest that the only significance of there not being a globally agreed definition of terrorism, is to show that such a definition is surplus to requirements. In doing so, this essay will first briefly outline where the term 'Terrorism' came from, before moving on to present the two different conceptual frameworks that are used in legal attempts to define terrorism. This study will then give examples of legislative definitions from both sides of the methodological divide, which will then be assessed and the problems that they pose and/or create, at both the State and inter-State level, will be considered. Violence for political ends is not new and in fact it can be traced right through human history. In ancient times there were the Jewish Zealots who fought an insurgent style campaign against the Roman occupation of Israel in the 1st century. By violently stabbing a long list of targets to death in public, and meeting all Roman concessions with more violence, they were able to create a general revolt against Roman rule (Richardson 2006:22). Moving in to the medieval period, we find the Islamic Assassins, who were a highly organized group of 'terrorists' with their own State consisting of mountain fortresses in the Middle East. From here they pioneered the use of what is often considered a central feature of modern terrorism; the suicide attack. By believing it to be shameful to escape after their attack, they were often beaten to death by witnesses or later hanged. This was an act deliberately calculated to repulse and fascinate their contemporaries so as to enhance the propaganda value of the attack committed (Richardson 2006:26). Even at the birth of the modern liberal-democratic State – the French Revolution- we find the regime de la terreur. This was a method of governance whereby The Committee of General Security, headed by Robespierre, created fear and terror that ensured the complicity of the masses by systematically guillotining those deemed to be traitors to the Revolution (Hoffman 1999:15). British contemporaries of the French Revolution and the regime de la terreur that followed thought it was such a horrific occurrence that

they coined the word 'Terrorism' in order to refer to it in English (Hoffman 1999:17). Despite Robespierre's Committee of General Security having lasted only a year – September 1793 till July 1794 - the word 'Terrorism' never left the English vocabulary. Even though 'Terrorism' lacked a formal definition, its revolutionary connotations would mean that the term would come to be used to describe various individuals, events and groups across Europe, and the World, in both the 19th and 20th centuries. This trend of the media, labelling a wide variety of acts as 'terrorist', with little or no explanation as to why (Hoffman 1999:18), meant that the term became a pervasive theme in society, both then and now. It has also caused the term to remain vague and ill defined as every new ascription of a group, individual or event to the term further dilutes its meaning. To elucidate this point further, it is only necessary to look at changes in the term's use over the 20th century. At the start of last century 'Terrorism' was generally held to refer to individual anarchist bombers before being adopted in common usage, in the 1940s and 1950s, as meaning the 'Red Terror' of the Communist Russian Regime. Then in the 1960s the usage of the word 'Terrorism' changed again as it became synonymous with the 'urban guerrilla' movements, such as the Red Army Faction in Europe and the Revolutionary Armed Forces of Columbia in Latin America. The meaning of the word 'Terrorism' then mutated again in the 1990s and started to be used to describe religious fundamentalist groups (Schmid 2004:399). With this history in mind, it seems hard to imagine a definition that could accurately encompass all of the term's meanings. However, attempts have been made to clarify what is meant by the word 'Terrorism'. Starting in the 1920's with the 'International Conferences for the Unification of Penal Law', there have been hundreds of attempts (Golder and Williams 2004: 270) and, broadly speaking, these attempts fall in to one of two conceptual frameworks. The first of these frameworks is referred to as the general or generic definition and was the methodology used at the aforementioned Conferences. This method aims to create a general conception of 'Terrorism'

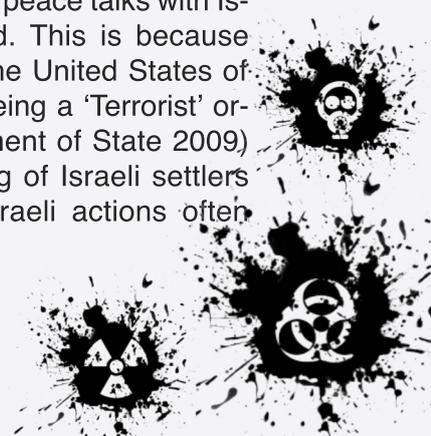


by referencing certain overarching criteria, such as intention, motivation and so forth (Golder et al 2004: 286).

On a basic level, there is generally much agreement that 'Terrorism' is held to refer to political, religious or ideologically motivated violence that causes harm to people and property and that is intended to engender fear in order to coerce a population or government or any part thereof (Golder et al 2004: 289). Whilst it is easy to gain such an informal agreement on what 'Terrorism' is held to refer to, trying to solidify this accepted meaning into a definition throws up many problems. If the United Kingdom's Terrorism Act 2000 (see appendix I) is considered as evidence, one of the problems of trying to create a general definition becomes visible. The British legal definition of 'Terrorism', contained within this document, is expressed at a high level of abstraction so as to ensure a sufficient coverage of all possible 'terrorist' tactics. But, by being so abstract, this type of generic definition also infringes upon the civil liberties of citizens within the United Kingdom. This infringement stems from the fact that, in order to distinguish 'Terrorism' from ordinary violent crime, generic definitions have to qualify the acts that they cover in terms of motivation. Now, in the Terrorism Act 2000, there are several motivational qualifiers that must be satisfied before an act, group or individual can be considered 'terrorist', some of which are problematic. The first such qualifier, that "the use or threat is designed to influence the government or an international governmental organisation or to intimidate the public or a section of the public" (Home Office 2000) is clear evidence for the difficulty that arises in selecting appropriate language for use in a general definition. As the government's own independent reviewer of terror legislation noted, problems arise from this section of the definition because "the 'bar' is set rather low by the use of the word influence in the definition" (Lord Carlile 2007:34). The 'bar' referred to here is the level at which action against a government should be considered as being inappropriate and undemocratic. However, industrial action, protest and civil disobedience are inalienable rights of citizens, designed to give people a voice and

ensure that government remains answerable to the people it is supposed to represent (Home Office 1998: Article 11). All three of these actions are carried out explicitly to 'influence' government decisions, are generally peaceful and are often aimed at getting specific situational grievances redressed. Yet, if one consults the above legislation, it would appear that this intent to influence the government would be sufficient to make these acts classifiable as 'Terrorism' (Golder et al 2004: 290), despite the actual motivation to carry out any of the three often being aimed at highlighting governmental wrong doings or unfair practices. However, it has been argued by Charles Clarke, amongst others, that industrial action, protest and civil disobedience are "...not a political, religious or ideological cause" (Golder et al 2004: 290) and therefore not liable to being considered as 'Terrorism'. Despite this reassurance, until a clause is added specifically stating that industrial action, protest and civil disobedience are excluded from categorisation as 'Terrorism', the Terrorism Act 2000 effectively gives the British government a powerful legal tool, should they wish to use it, for crushing democratic dissent. In Great Britain our civil liberties are well protected and so this point seems irrelevant, but the above does highlight how 'Terrorism' is a pejorative label that delegitimizes those labelled 'terrorist' and gives power to those conducting the labelling. This is one of the most significant factors of not having a globally agreed legal definition of 'Terrorism', as until a definition is agreed upon, the term 'Terrorism' will remain a powerful political tool for those wishing to tarnish their opposition.

For example, Palestine is a legitimate state that democratically elected the radical Islamic group Hamas as its government in 2006 (Wilson 2006). Despite Hamas having won a majority in an externally monitored and validated election (Wilson 2006), their involvement in international diplomacy and peace talks with Israel are highly contested. This is because they are recognised by the United States of America and others as being a 'Terrorist' organisation (U.S. Department of State 2009) because of their targeting of Israeli settlers and civilians. Despite Israeli actions often

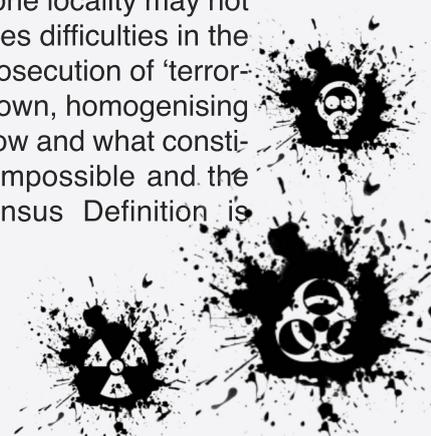


being illegal, the U.S. Government is able to delegitimize Hamas's political status and stigmatise them within the International Community by affixing the 'terrorist' label to Hamas. In labelling Hamas in this way, the U.S has made it increasingly hard for Hamas to engage in global diplomacy which, in turn, isolates the vulnerable Palestinian state that they represent. This makes it more likely that extremists will gain popular support within Palestine, as their violent message must often seem like the only way of being heard. Also, the labelling of Hamas as 'terrorists' has enabled Israel to conduct military operations against the Palestinians in a counterterrorism role. Not only do these operations open up the possibility of a new generation of Palestinians and Israelis becoming radicalised they also add further difficulty to defining 'Terrorism'. This is because the Palestinians argue that Israel is illegally occupying its country and therefore claim that they are fighting a legitimate war of liberation against a foreign aggressor. What the claim does is to raise an interesting conundrum; can the tactics of 'Terrorism' be used by a weaker force fighting a legitimate defence?

It is arguable that 'terrorism' is a valid military response to occupation as it is an efficient means of demoralizing the enemy that requires little resources. However, the targeting of unarmed civilians makes many unable to accept such tactics even if they are used in furtherance of a valid cause. This confusion over whether or not 'Terrorism' can be used by freedom fighters makes it impossible to create a generic definition of 'Terrorism'. This is because if one defines and outlaws 'Terrorism' one may also outlaw the only method of resistance available to oppressed groups. So, how do you create a globally acceptable definition of 'Terrorism', whilst avoiding the above? One approach within the generic framework is to try and isolate exactly what 'Terrorism' is through a consensus. The 1988 United Nations Academic Consensus Definition of Terrorism (see appendix I) is one such attempt and is also evidence that a generic definition of 'Terrorism' may be unattainable. This definition of 'Terrorism' was compiled by analysing 109 existing definitions of 'Terror-

ism' for parts that were most prevalent amongst the majority. These parts were then synthesised together to create a definition that was then scrutinised by experts to ensure its neutrality and validity (Schmid 2004: 381). By constructing a definition in this way, consensus was guaranteed as was a certain amount of neutrality. But, in trying to gain such a consensus, the definition was always going to include certain aspects that would be unpalatable to many in the international arena. In this instance the problem arises not with the meaning attributed to the words used in the definition, which is the case with the inclusion of the word 'influence' in the Terrorism Act 2000, but instead, it stems from the inclusion of certain phrases. This effectively makes this definition both legally and diplomatically unworkable.

For example, by defining 'Terrorism' as a violent act that is used by "... (semi-) [3] clandestine individual, group, or state actors, for [4] idiosyncratic, criminal, or political reasons..." (Schmid 2004: 382), all possible instances of 'terror' are covered. But, by including States and individuals within the list of possible 'terrorist' actors, this definition creates two problems. Firstly, the inclusion of States in the list of those who may employ terror as a tactic would make most Western governments liable to be labelled as 'terrorist', a fact that would guarantee a refusal to sign this definition into law. The second problem created is that, by including individuals, the definition, if it became law, would require signatory countries to categorise many current criminal threats as 'terrorist'. These two problems clearly show that one significant aspect of not having a globally agreed definition of 'Terrorism' is that our understanding of the term becomes dependent upon the local interpretation. This reliance upon local definitions makes inter-State co-operation and law enforcement more difficult, as what may be considered 'Terrorism' in one locality may not be in another, which creates difficulties in the pursuit, extradition and prosecution of 'terrorists'. As this essay has shown, homogenising such variations as who, how and what constitutes 'Terrorism' can be impossible and the above Academic Consensus Definition is

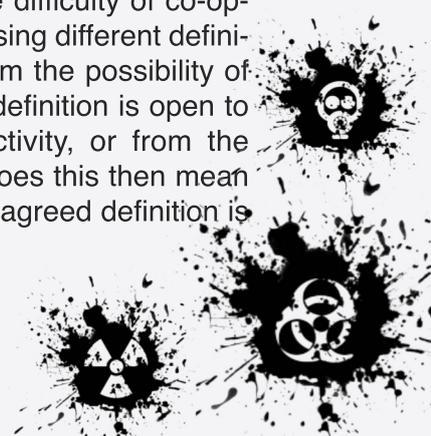


clear evidence that, no matter how carefully a generic definition of terrorism is created, it will always contain some elements that are unsatisfactory. Let us consider the second methodology used in attempts to define 'Terrorism'. In complete opposition to the generic method is the specific approach where certain activities are directly identified as constituting 'terrorism' (Golder et al 2004: 286). By isolating the actions that constitute 'terrorism', this method removes the subjective ability of policy makers to define who is and who is not committing 'terrorist' acts and removes any arguments over basic definitional principles (Golder et al 2004: 287). Evidence of this approach can be found in the New Zealand Terrorism Suppression Act 2002 (see appendix I), as the definition contained within this legislature juxtaposes a general definition with a specific definition. This juxtaposition is carried out by reference to acts being 'Terrorism' if they are in breach of specific international 'Terrorism' conventions (Ministry of Foreign Affairs 2002). By referencing these treaties, the New Zealand attempt at defining Terrorism removes the problem of subjectivity, as outlined above, and also removes the problem of gaining consensus. This is because it is much easier to convince others of the wrongness of an action like aircraft hijacking, as the harm done during such an act is clearly in violation of the rights of others, irrespective of the motives that are behind it (Levitt 1986: 111). This clarity of what is right and wrong is an appealing aspect of the specific approach, but does such a method hold the answer to the question of definition surrounding 'Terrorism'? Unfortunately it would seem not.

Whilst the specific method does remove many of the problems discussed elsewhere in this essay, it also creates problems. By requiring those who subscribe to the specific methodology to proscribe individual actions as 'Terrorism', a danger is created where the countries using a specific approach may be unable to proscribe acts fast enough to keep pace with technological advance. To combat this would require a constant updating of legislation, which is a process renowned for its slowness in parliamentary countries. Also, individually proscribing acts means that some

'terrorist' acts would inevitably fall outside the scope of the legislation and come under ordinary criminal law (Golder et al 2004: 287). In such a situation, those acts that fall under the criminal law may not be liable to the severe punishments that they would be under the 'Terrorism' legislation. This, then, raises the interesting question of why this method of defining any acts as 'Terrorism' should be used at all? Why not just increase the punishment for certain crimes that already exist? Legislating against disparate criminal offences individually is what current criminal law does, and, in doing so, it creates a list of proscribed activities that citizens are forbidden from carrying out. The specific method tries to capture this approach for 'Terrorism' but fails to do so. This is because, by forbidding individual actions, the specific approach becomes uninterested in motivations and so it is unable to explain what differentiates 'terrorist' actions from ordinary criminal ones (Levitt 1986: 112). The specific approach in this context also shows how significant the lack of an agreed definition of 'Terrorism' can be in relation to jurisdiction. By referencing international conventions, New Zealand's legal definition is trying to label 'Terrorism' as being *hostis humanis generis*, in the same way that piracy was in the past, in order to make acts of 'Terrorism' a breach of international law and therefore punishable wherever they occur. In fact, referencing the conventions divides jurisdiction between those States which have ratified and recognise the conventions as law and those States that have not.

The evidence presented so far shows that both of the current methods for defining 'Terrorism' fall short of providing a working definition. In showing the weaknesses of both the methodologies, the evidence has also revealed some of the reasons why the lack of a globally agreed definition is significant. However, the points raised so far are negligible and mostly stem from the difficulty of co-operation between parties using different definitions of 'Terrorism', or from the possibility of rights' violations when a definition is open to interpretation and subjectivity, or from the question of jurisdiction. Does this then mean that the lack of a globally agreed definition is

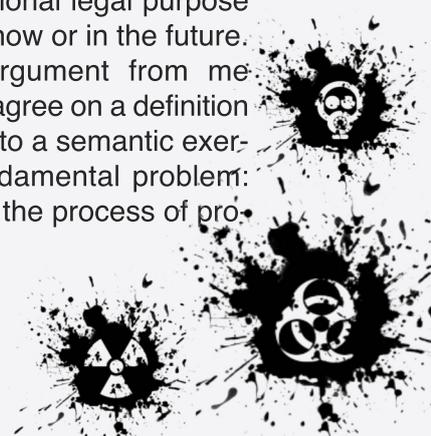


insignificant? There is plentiful evidence to support such a view. As this essay has shown, it is often argued that an agreement upon the definition of 'Terrorism' is needed to ensure inter-State co-operation in combating 'Terrorism'. Yet, if all that is required is a framework from which to combat political violence on a global scale, then the definition of 'Terrorism' is insignificant. This is because there are several routes that could be currently taken to make the legal and diplomatic pursuit of 'terrorists' easier without needing to define the word 'Terrorism'. The first such route would be to apply the law of war (*jus in bello*) as set out by the Geneva Conventions, the Hague Regulations and the Nuremberg principles to acts of 'Terrorism' (Baxter 1974: 381). By doing this, the word 'Terrorism' would become defunct, as the law of war would criminalise attacks against unarmed civilians, regardless of the motivation, as war crimes. This would also remove the freedom fighter problem by allowing for the legitimate targeting of uniformed combatants like police officers, soldiers and so forth by those who are involved in legitimate wars of liberation. Like all of the legal aspects of this essay there is a problem with this, as the law of war would only be applicable to those groups that could be proven to be working for a State. However, this need not rule out the possibility that a legal definition of 'Terrorism' is defunct. If violent attacks against civilians could not be criminalised as war crimes, then such attacks must come under a municipal law. As Baxter pointed out, acts such as murder, pillage, assault and so on are universally condemned under law and so it is odd that 'Terrorism', which partakes of these crimes, is not regarded as a serious breach of international law and universally condemned (Baxter 1974: 381). This, then, would be the second route to removing the need to define 'Terrorism'. As the above examination of the specific method of definition has shown, it is possible to gain multinational support in condemning actions that are in violation of others' inalienable rights. Logically then, 'Terrorism' and the need to define it, could be removed by seeking to extend the illegality of acts such as murder to an international level and require the universal punishment of such crimes

through the implementation of a convention similar to those mentioned elsewhere. However, as stated by Levitt, the effectiveness and likelihood of such a development happening is negligible, as, even if it was implemented, governments would continue to "ignore or violate them with impunity" (Levitt 1986:110) in much the same way that they do with current international conventions. To conclude, this essay has argued that the lack of a globally agreed definition of 'Terrorism' is significant in several areas. These areas include international cooperation in fighting 'Terrorism', as it seems impossible to fight something without first defining it; jurisdiction over 'terrorist' suspects, as it is legally difficult to justify the arrest and extradition of a person for an act that is not recognised as illegal in their country of residence; human rights violations, as, without a globally agreed definition, States are able to qualify what is 'Terrorism' in line with their own agendas, meaning that it is possible to use antiterrorism laws to punish legal political dissent, and finally, the lack of a definition is significant in global diplomacy, as, until it is concretely defined, it offers the perfect tool for moral justification and de-legitimization of the 'other' as shown in the Hamas example elsewhere.

After considering all of the areas where the lack of a definition is significant, it became apparent that it is often the definition itself that is the biggest cause of inactivity within the international arena. As the essay has tried to show, this is because the arguments over who and what should be classified as 'Terrorism' and how this classification should be done often distracts from the job of branding those who commit these crimes as international outlaws. This then suggests that, after sixty years of trying to define 'Terrorism', maybe it is finally time to admit that the legal definition of 'Terrorism' has become insignificant, and will therefore remain imprecise, ambiguous and therefore serve no operational legal purpose (Baxter 1986:380) either now or in the future.

THAILAND-2 • No argument from me John, as I stated trying to agree on a definition will always degenerate in to a semantic exercise that ignores the fundamental problem: terrorism is a tool used in the process of pro-



moting a point of view. You need to understand the point of view, not the tool in order to understand how to counter it. Then you can blunt the tool by finding ways of making it ineffective. For instance violent videos that portray how Al Qaeda carries out executions of kaffirs may have a recruiting appeal among those who are so predisposed to see the world in terms of black and white. However AQ violence has caused far more deaths among Muslims than it has among kaffirs. This side of their violent activity is obviously not used as a propaganda tool by them. But it could be used by us against them.

I think the whole exercise of trying to find a definition of the tool is actually detracting from the fight against those who use it, and sometimes deliberately so. There is no way you can avoid politicising the definition. So we will always get sidetracked from the real problem that is understanding how to remove the reasons and the opportunity for the tool to be used in the first place.

UKRAINE-2 • Guys, I want to add my vision about the terrorists and freedom fighters.

My country was a part of Soviet Union for a long time. And the USSR supported many terrorist movements, calling them freedom-fighters, like HAMAS, Sendero Luminoso, etc. But as for me terrorism is a weapon which is used for different purposes. Terrorism is terrorism, in spite of the goals people try to achieve. If freedom fighters use terrorism - they are simple terrorists. And I think that none of the aims can justify using of terror.

GREECE (Editor, "CBRNE-Terrorism Newsletter") • There are MANY definitions of terrorism and this means that defining terrorism is purely subjective - depending on which side of the coin you belong. If we want to be strictly objective we have to approach it through the etymology of terrorism - that is "terror" production. Terror effect on humans does not discriminate sides, races, people involved or number of casualties. We must also have in mind that "terrorism is not about killing. It is about notifying all of us that we are next!"

UNITED KINGDOM • There are so many inherent problems with defining the term "terrorism" for the primary reason that the word

itself means so many different things to so many different people. Instead I strongly suggest that so much time is wasted in terrorism studies debating what exactly terrorism is and whether there is "new terrorism" or not (only two of a great number of debates). Instead I strongly advocate that more time should be spent on teaching students more useful and pragmatic ways of dealing with terrorism and its associated problems. Otherwise many students find themselves emerging out of a course none the wiser in how to deal with terrorism and instead only slightly more aware of the sheer volume of ways there are to define such an enigmatic term.

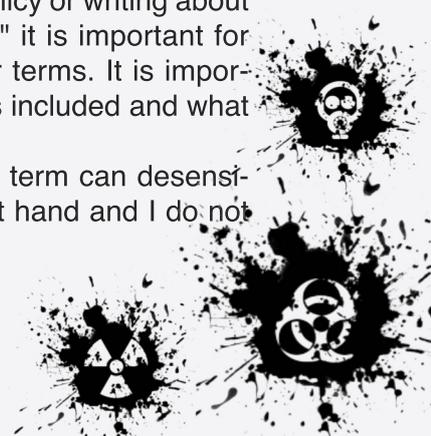
USA (different) • Trying to define terrorism in my opinion is an exercise in futility. I don't think that a definition that can fully encompass terrorism is achievable because of the politics involved both domestically and internationally. With that said, I define terrorism as an acts or attempted acts committed by entity with the aim of changing policy or the values of a society through physical and/or psychological violence mainly perpetrated against innocent civilians.

USA (different) • I know that there are a multitude of different definitions and that, chances are, there will never be an agreed upon definition of terrorism. The varying international views are why I posed the question in the first place. To those who think that it's a waste of time to try to define it, I have to disagree. I think that it is very important for those who develop policy or responses, especially governments, to have a clear definition that they are working off of. This is important for four reasons:

1. Responses to what is deemed as terrorism and what is deemed as general criminal activity is different in legal terms. Therefore, in order to avoid having inconsistent application of law it is important to have a solid working definition.

2. When developing policy or writing about the problem of "terrorism" it is important for academics to define their terms. It is important to understand what is included and what is not.

3. The over use of the term can desensitize people to the issue at hand and I do not



believe that this is a topic that people should become desensitized to.

4. The term "terrorism" has been tagged onto the end of a number of other words such as narco-terrorism, political terrorism, government sponsored terrorism, etc. These are terms that are thrown around the diplomatic and political arena frequently without a full understanding of the terms or the potential consequences of using those terms. These should be used carefully due to the responses from governments and general populations that they might invoke.

So, while we may never agree on a universal definition of terrorism, it is important to define what we mean by it when using it. This question was simply meant to be an exercise to share points of view and gain an understanding of how different people view this trans-national problem.

USA (different) • With the sub-categorization of "terrorism" the term itself has become watered down, in my opinion. Ultimately, the root of the problem is an attempt to sway public opinion and policy to the point of near or total cessation of "normal" life and critical infrastructure. As policy makers banter over the "legally" correct definition of terrorism that will fit their needs we who are planning, mitigating, training and responding are continuously and relentlessly preparing ourselves, personnel and our communities for "after event" operations. Regardless of the form (cyber-, narco-, etc.) or source (domestic or foreign) the severity of the event is determined by the coordinated response that comes after. Just as MCIs are defined by the number injured (Level I, II or III for example) so should the determination of a terrorist event.

USA (different) • Was Joseph Stack a terrorist? <http://www.foxnews.com/us/2010/02/18/pilot-crashes-texas-building-apparent-anti-irs-suicide/> This always leads to some good answers on this question

ISRAEL • In my opinion, Joseph Stack was indeed a terrorist. I support the Boaz Ganor definition of terrorism as "politically-motivated violence [including threats] carried out by sub-state entities [including individuals] against civilian targets". (Note that according to Ganor, similar acts carried out by govern-

ments are already included in the existing legal definitions of "war crimes" and "crimes against humanity", so "terrorism" is left as a description only of non-governmental actions. Some people prefer to lump governmental attacks against civilians in with non-governmental terrorism, perhaps labelled as "state terror".)

There are (at least) three important points to remember about this definition:

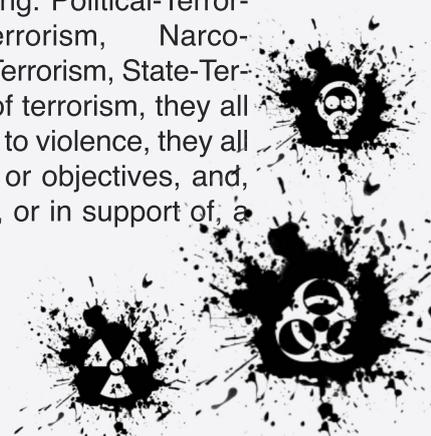
\* Attacks on military targets, including non-combatant soldiers, are \*not\* terrorism. By limiting "terrorism" to civilian targets, we preserve the value of the term as something we can (hopefully) agree is both morally and legally wrong.

\* There is no "organization test": a "lone wolf" attacker is just as much a terrorist as a member of al Qaeda or any other established terror group. In today's climate of on-line radicalization, more and more terror attacks (albeit not, in general, "high quality" attacks) are being carried out by "amateurs".

\* There is no "sanity test": as long as someone is sufficiently sane to articulate a political motive, it doesn't matter if that person is "crazy" by most standards. As pointed out at <http://tinyurl.com/6d9hawp>, a climate of radicalization and delegitimization typically manifests first in acts carried out by "madmen", but later leads to acts of political violence carried out by progressively less "crazy" people. It is important to identify even "crazy lone wolf" attackers as terrorists in order to identify climates and ideologies conducive to political violence before they are strong enough to make terrorism "sane".

AUSTRALIA • I am aware that I may be repeating a few previously mentioned ideas here, but I wanted to join in this discussion so, without further ado.

Terrorism, like many adjectival nouns, is a subjective term which is dependent upon the context within which it is used, to give it substantial or relevant meaning. Political-Terrorism, Environmental-Terrorism, Narco-Terrorism, Revolutionary-Terrorism, State-Terrorism are all categories of terrorism, they all involve violence or threats to violence, they all have political undertones or objectives, and, they are all committed by, or in support of, a



group. The things that separate them are their intended goals and their ideological backgrounds. Yet none of these categories bring us closer to a definition. The term terrorism is so hard to define because, the term itself, is used to describe an act as well as an apparent ideological challenger to current or standing political regimes and ideologies. Some argue that it cannot be both and yet we consider democracy to be both an ideological practice and an act dependent upon the context in which we use it. The term is used within political rhetoric in much the same way. It is used to describe an act or attack, yet it is also used as an 'evil other'. Please, allow me to explain;

Jaime, you argued "... that it is very important for those who develop policy or responses, especially governments, to have a clear definition that they are working off", which automatically sets up a pre-positioning of the context in which you wish to define and use the term. You are presupposing that governments do not partake in terrorism. However, this is only true, so long as the definition of terrorism is left to governments. States, and their governments, will always define a term in ways that reflect, or can be manipulated to justify or to legitimise, their use of force in defence of their ideological positioning.

In the four points you have listed, you seem to be looking less to define terrorism, and more attempting to compartmentalise acts of violence, as those that can be labelled as being terroristic as opposed to those that are purely criminal. The problem here does not lie in the definition of terrorism; it lies in the fact that the acts committed are criminal as well as being terroristic. They effect perceptions of security and inflict feelings of fear, regardless of their intended outcomes. However, it is these intentions or the intended goals that determines if an act should be considered simply criminal, or, given the more serious label of terrorism.

I have always found it funny that when used by the state, 'coercion', is referred to as force but when used by sub-state or non-state actors it is referred to as violence or terrorism. This disparity in terms is due to the states need to preserve legitimacy in the eyes of the

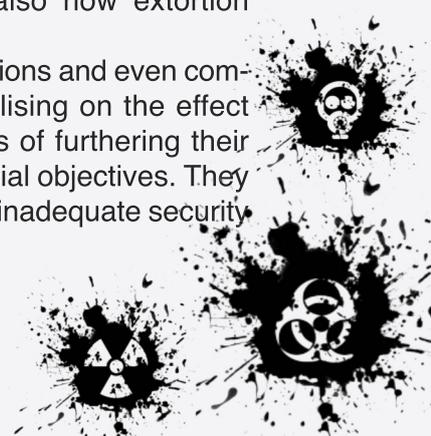
people, and the monopoly on the exercise of power. The state will, regardless of ideological vision, always categorise those who oppose it with violence, as being terrorists who use terrorism.

Previous to the use of the term terrorism, as a tool for unification and solidarity behind an ideological position, it was Communism, prior to that it was Fascism. Like these other terms, terrorism, is used in political rhetoric simply because of the fearful connotations associated with it and the images of death, destruction and senselessness it brings with it.

The lack of any other 'ism' that can be claimed to pose a significant threat to societal security and endurance of its way of life, has meant that there has been a reliance on the term 'terrorism' to secure ongoing support for many varied goals (e.g. enviro, narco etc.). Just like the images from the holocaust were used in the fight against the spread of Fascism, and how the threat of nuclear war and loss of liberty, and in turn capital freedom, were used rhetorically against the spread of Communism, 9/11 still looms large. Images both visual and mental are utilised and perpetuated via political rhetoric and continuous media reminders. Images of planes crashing into the twin towers and their consequential collapse have, and will continue to, ensure the terms overuse in modern rhetoric for the next generation. In this way terrorism contains an inherently ideological component.

States, religion and even parents, have always utilised the concept of an 'evil other' in order to maintain control, compliance and legitimacy, and, to reinforce their position as sole protector and provider of security. Tell a person that someone, or something, is out to get them; instil them with a level of fear and a sense of insecurity, whilst offering them protection and an increased level of security, and the majority will fall under your wing and subject themselves to your will and guidance. Funnily enough this is also how extortion works.

Governments, corporations and even community groups are capitalising on the effect the term has, as a means of furthering their own political and/or financial objectives. They are reinforcing a sense of inadequate security



in order to perpetuate feelings of fear, so that people will consume their products. The only reason this is not deemed to be terrorism is because it does not involve the direct use of violence or destruction. This is not to say that terrorism is not real, and it is certainly not saying that I do not believe that terrorism exists, I just think that if a true definition is to ever come about, it needs to disregard ideology, politics and religion. These three things are not only used as justifying rhetoric by terrorists and freedom fighters alike, they are also used by states for the same purposes within their rhetoric.

We need to move away from the contextually subjective definition model and move more to the objective and possibly even dispassionate model which disregards reliance on the participant's specific ideological, political or religious identification before determining or defining an act as being terroristic.

We need to move away from this idea that acts such as bombings, assassinations and/or hijackings (to name but three) can be both criminal and terrorist. We need to conclude that acts previously associated with both, are either one or the other. Until we do there will always be legislative loopholes which will allow for pleas to lesser charges and reduced sentencing. And, there will always be ambiguity as to what is deemed to be terroristic which only truly serves to make it impossible to clearly define the term terrorism.

When looking at acts of violence committed by groups I use the following as a guide to deciding whether or not it is of a terrorist nature:

Any violent act, or threat thereof, made, or carried out, with the intention of causing death, destruction, harm or fear in an audience by, or in support of, persons or peoples, with a polarised conceptual standpoint, who believe that achievement of their goals through the use of violence or forceful coercion, justifiably overrides any sense of, or demonstrates a callous disregard for, personal liberty, morality, or the humanity, of the audience, regardless of whether that act is aimed at, or sanctioned by, the state.

In this "an audience" refers to any person or persons, directly or indirectly affected by, or

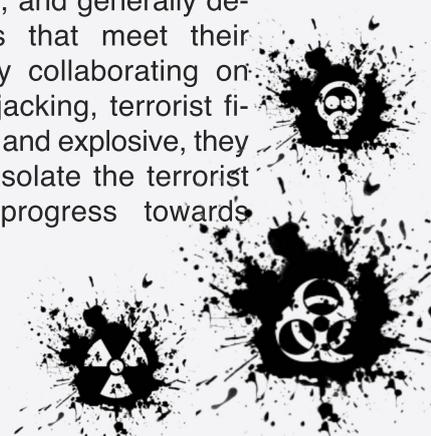
witness to, or victim of, the act. Of course this is just my opinion.

USA (different) • Hello everyone! As a means of introduction to this group, permit me to enter the fray with my two-cents. I toyed with this very question and incorporated the following into my book Integrated Technical Warfare:

"While there will always be debates regarding the inclusion of political terms and beliefs, I believe that a consensus can be found that would categorize terrorists as private or state-sponsored groups operating largely outside the control of the national military whose fundamental goal is to intimidate people and their governments into recognizing the group's ideologies and/or religious beliefs through the coordinated use of indiscriminate murder, torture, and the destruction of private and public properties, especially that which will achieve a great deal of attention by local and international media organizations. Therefore, this is how I generally define terrorists and anybody who aids them in any manner whatsoever is a terrorist supporter."

UNITED KINGDOM (different) • Despite the inability of world states and the UN to deliver a universal world definition governments, viewers and listeners of a news broadcast detailing the latest terrorist outrage will have few doubts as to their understanding of the meaning of the word 'terrorism' in the context of the programme, although their view as to whether the act was, or was not, terrorism will come from their nationality, politics and religion, not from having consumed Hoffman, Richardson, Rappoport etc. While an exact definition can be important as part of a precise legal process, we should not get bogged down by our inability to define the act precisely. If it looks like a duck, quacks like a duck .....

Notwithstanding our global inability to deliver a universal definition, individual states, severally and separately recognise the constructs that create the act, and generally deliver national definitions that meet their individual needs, and by collaborating on areas such as aircraft hijacking, terrorist finance, the control of arms and explosive, they have been able to both isolate the terrorist and make significant progress towards



achieving an effective trans-national counter-terrorism network.

We may not be able to agree on the definition of terrorism, but the common bond that we all have as prospective victims of it ensures that the collaboration continues.

AUSTRALIA (different) • Hi all ...My spin on the conundrum put forward by Jaime is not so much an answer probably more food for thought. How do 'you' define terrorism? I believe it is identified through mission driven and organizationally defined roles to ensure the mission can be met and accomplished organizationally; whoever that mission role may belong to and all are very different. For example the FBI, the CIA, DOD, Federal Departments, the UN or Global States and their departments etc all have different definitions on what terrorism is or what they perceived it to be and are therefore mission driven to achieve their organisational goal or outcome, albeit for a war fighting problem, WOT law issues (Gitmo) or Bodies of the UN. A single definition of an adjective such as terrorism creates a further dilemma; describing a describer, interesting. And this is where it goes in the circle of those using the word (Terrorism) to describe their problem or Organizational Mission statement and their stand regarding the 'war on terror'; everyone's interpretation is different because their role or mission is defined by design.

UNITED KINGDOM (different) • Politically motivated violence aimed at civilians. The odd thing about terrorism is that no one can agree on a definition, but, everyone knows what it is when they witness it.

SRI LANKA • Suggest to list out all the passive/active terrorists related incidents/situations /scenarios/campaigns are studied and analysed in detail from country to country, region to region and understand the trends, patterns, relationships leading to the cause before arriving at definitions. Definitions will be subjective for some and objective for most. Terrorism is part of further civilisation with Have's and Not's, Big and Small, Happy and Unhappy at play. Very survival of the fittest with less trouble is the challenge faced. Unfortunate to be born in this era to experience the same. Debate goes on ....

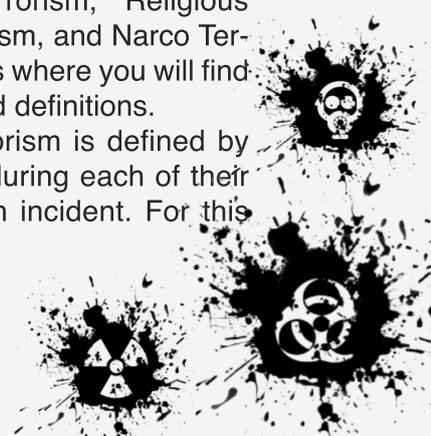
USA (different) • I agree with John Galatas on his perception of terrorism. (Great perspective John). Terrorism is about one thing and one thing only. FEAR! Whether its trying to scare the public, governments or businesses as well as many other facets of our society, it all boils down to fear. As for a definition, one can only hope that we can come out with one that would not confuse the revolutionaries with the terrorists. (Yes according to the current FBI and UN definition of terrorism, we would have been considered terrorists back in the revolutionary time periods). The only way to truly define terrorism is to break it down into sections or types of terrorism. You really cannot label it unless you talk about fear. And yes in that context governments could also be considered terrorists. (Thats my perspective).

USA (different) • The Department of Defense Dictionary of Military Terms defines terrorism as: "The calculated use of unlawful violence or threat of unlawful violence to inculcate fear; intended to coerce or to intimidate governments or societies in the pursuit of goals that are generally political, religious, or ideological."

Overall, the term Terrorism is intentionally left broad across most parts with multiple definitions on purpose. The reason being is so governments, or organizations can use it to their advantage. Governments make new terrorism laws; what defines terrorism? Whatever they want, so they can make the law work how they want. In some cases they are able to label a single individual as a lone wolf terrorist, while others they can label him just a criminal. With an open definition this allows them to work it how they want.

It's not so much the definition of terrorism itself thats important, but they various forms of terrorism. State Sponsored Terrorism, Biological Terrorism, Cyber Terrorism, Eco Terrorism, Lone Wolf Terrorism, Religious Terrorism, Nuclear Terrorism, and Narco Terrorism for example. This is where you will find more specific and detailed definitions.

USA (different) • Terrorism is defined by each of the individuals, during each of their experiences, during each incident. For this



reason, we see the media (and government) struggle to use the word "terrorism" when describing an incident.

Take the Nidal Hassan incident for an example. The description of the event changed over the days and weeks following, playing the definition roller-coaster between "criminal" and "terrorism". On the contrary, an incident such as the attempted bombing in Times Square was easily labeled as "terrorism". In a strange example, many of the VBIED/IED attacks against military forces in Iraq and Afghanistan are labeled as "terrorism".

So, the labeling of "terrorism" comes from a place that is personal. This personal definition is anything that is recognized as being a means of deliberately instilling terror or fear. This can be directed at people, places, or things. But, because I believe terrorism to be a personal definition, each "incident" will have various perspectives.

The example of VBIED/IED attacks against military forces in Iraq and Afghanistan being labeled as "terrorism" I used before may need more analysis. Where a VBIED/IED attack on a marketplace in Afghanistan could easily be labeled as "terrorism", can an attack against military forces in the same country be labeled "terrorism" too? Many veterans and current servicemembers may argue this one....anybody?

ISRAEL-2 (reply on the above comment) • I strongly disagree that terrorism is - or should be - defined by individuals based on their personal experience of incidents. If "terrorism" is defined in this way, it basically loses all its meaning; and if everything is terrorism, nothing is terrorism.

The whole point of defining terrorism is distinguish it from other, more legitimate forms of violence. The illegitimacy of terrorism is fundamental to the fight against terrorism, and in turn relies on defining "terrorism" properly. This is why it is important to label attacks on military targets as guerilla warfare rather than as terrorism: once we use "terrorism" to describe attacks on soldiers, the term has lost all its power to convey the illegitimacy of attacks directed at civilians.

Once more for the record, I'll repeat the definition I favor: Terrorism is politically-motivated violence directed at civilian targets. This definition is short, simple, (relatively) objective, and generally easy to apply, and has appropriate policy implications.

SRI LANKA • Simply " act of inducing threat in minds to secure time, space and resources through a process of systematic, or unorthodox but violent elimination and destruction of identified objects, situations, events, patterns, trends, relationships, beliefs, faiths, ideals to facilitate end state realisation "

## Is the terrorist threat overhyped?

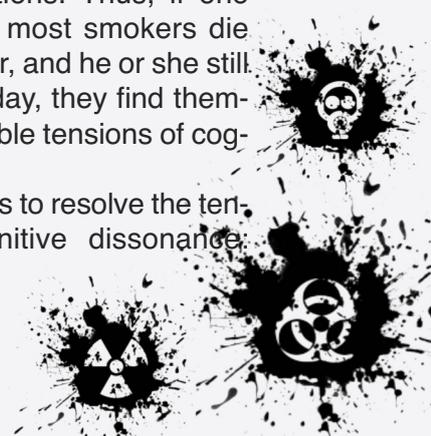
Source: <http://www.homelandsecuritynewswire.com/terrorist-threat-overhyped>

There are serious people who raise thoughtful questions about the nature and scope of the terrorist threat to Western societies, and because they do not accept the assumptions of both the Bush and Obama administrations about the nature of the threat, they criticize these administrations' policies; this group of critics of current policies are joined by others who belong to a second group of critics: in this second group we find people who do not share the assessment of members of the first group about the nature of the threat, but who join them in criticizing government anti-terror policies as too expensive, too intrusive, and ineffective; a new, thought-provoking article on the subject performs a useful

service in that it should keep advocates of expensive and intrusive government anti-terrorism policies honest

Psychologists tell us that the people cannot cope with what they term "cognitive dissonance." One suffers from cognitive dissonance when one's knowledge and beliefs contradict one's actions. Thus, if one knows and believes that most smokers die prematurely of lung cancer, and he or she still smokes a pack or two a day, they find themselves facing the unbearable tensions of cognitive dissonance.

There are only two ways to resolve the tensions attendant to cognitive dissonance:



change one's beliefs so they agree with one's actions, or change one's actions so they accord with one's beliefs. When the change is made, harmony replaces dissonance.

In the example above: smokers, acting on their knowledge and beliefs, may quit smoking so their actions are in agreement with their beliefs – or they may continue to smoke but convince themselves that they belong to the small group of smokers who do not get cancer, thus making their actions (continuing to smoke) congruent with their beliefs (they belong to the minority that will not get cancer).

We see a similar pattern with the attitudes of people toward homeland security – especially toward two aspects of government's reaction to the problems of homeland security: large government outlays to secure the nation, and intrusive measures – from full-body scanning to warrantless wiretapping to searching digital storage media at border crossings – the government has undertaken to bolster public safety.

The problem is especially vexing to believers in the need to reduce the role of government in our lives – reduction which would be achieved if we made the government smaller, shrank government budgets, enacted fewer regulations, and decentralized and devolved government responsibilities.

The approach of the two U.S. administrations in power since 9/11 – one Republican, one Democrat – has been to move in the opposite direction of what small-government advocates would prefer. The Bush administration created a huge new government department in DHS, expanded dramatically the reach and scope of domestic spying, enlisted the National Security Agency (NSA) to keep tabs on American citizens, pushed for the enactment of the Patriot Act, launched two costly wars, and more. On the issue of fighting terrorism, there is hardly a difference between the Obama and the Bush administrations. If anything, the Obama administration has intensified the covert war against terrorism, preferring to send drones, CIA agents, and special forces to places like Pakistan, Yemen, Somalia, and more.

Those who believe in small, inexpensive, and unintrusive government have not given

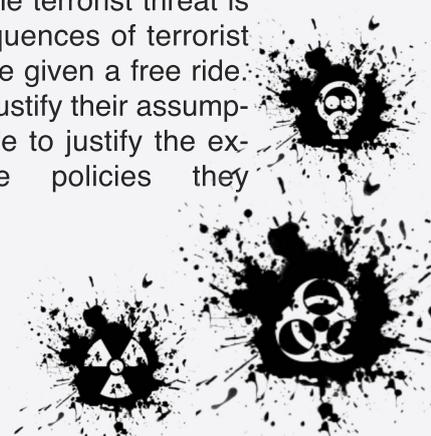
up the fight, though (and the support Representative Ron Paul received in the Republican primaries in 2008, and his decision to run again, are but one indication).

This brings us to the issue of cognitive dissonance. How do small-government advocates square their beliefs in smaller, inexpensive, and less intrusive government with the need to take a range of actions to thwart the terrorist threat?

They do what psychologists said they would do: they define the problem away. Rather than support a broad, expensive, and demanding government action to counter the threat of terrorism – such support would create a cognitive dissonance with their beliefs about the role of government – these small-government advocates argue that the threat does not exist, or that it is greatly exaggerated. Since the threat does not exist or is over-hyped, there is no need for the government to undertake expensive and intrusive actions, and there is no need for small-government advocates to change their beliefs. In this way they maintain cognitive harmony rather than grapple with the tensions of cognitive dissonance.

What we said above about small-government advocates is unfair to them, and is a bit of a caricature we drew to illustrate the point. In reality, there are serious people who raise thoughtful questions about the nature and scope of the terrorist threat to Western societies. This first group of critics of current policies is joined by others who belong to a second group: in this second group we find people who do not share the assessment of members of the first group about the nature of the threat, but who join them in criticizing government anti-terror policies as too expensive, too intrusive, and ineffective.

The analysts, scholars, and writers who belong in these two groups perform a valuable service: they keep government honest. Those who believe that the terrorist threat is real, and that the consequences of terrorist actions dire, should not be given a free ride. They should be made to justify their assumptions – and then be made to justify the expensive and intrusive policies they recommend.



Such service is offered by Benjamin Friedman in his article "Managing Fear: The Politics of Homeland Security" (Political Science Quarterly 126, no. 1 [spring 2011]: 77-106).

Friedman, a doctoral candidate in political science at MIT and a Research Fellow in Defense and Homeland Security at the libertarian Cato Institute, makes four arguments in his cogent and well-written article: first, the terrorist threat is exaggerated; second, the American society is not as susceptible to disruption by terrorist actions because it is robust and sturdy; third, there are psychological reasons why people exaggerate the threat of terrorism; fourth, there are political reasons why political leaders both fan and over-hype the threat of terrorism rather than use their power to calm an edgy and nervous population by telling people the truth.

On Monday, I'll deal in more detail with Friedman's arguments about the threat terrorism pose. Here I will just summarize the arguments he makes about the sturdiness of the American society and why terrorist acts, even if they do take place, will not cause the massive, debilitating damage supporters of large homeland security budget say they will:

First, the United States has mature, strong liberal institutions which do not offer incentives for U.S. citizens to embrace terrorism and violence (unlike the situation in oppres-



sive societies, in which violence is almost the only way available to citizenry to oppose the regime). Homegrown terrorism has been, and remains, a marginal issue in the United States.

Second, the U.S. economy and governmental capacity limit the consequences of any terrorist action. The U.S. economy and government are not weak or brittle, but rather robust and sturdy. Most natural disasters in the United States do not cause even a fraction of the death and damage similar events cause in other countries. Even 9/11 or Hurricane Katrina have not had a meaningful affect on the national economy.

Third, economic trends – the move from a manufacturing economy to a service economy – make attacks on the American economy less effective, and damage more localized and easy to recover from.

"These U.S. attributes limit the risk that terrorism pose here," Friedman says.

I do not agree with everything Friedman says, and on Monday I will discuss what I take to be his too-benign a depiction of the nature of the threat the United States is facing. Still, Friedman's article is engaging and thought-provoking. I would make it a required reading at DHS – and in Congress.

Ben Frankel is editor of the Homeland Security NewsWire

## Al Qaeda's Crisis of Succession

By Laura Mansfield

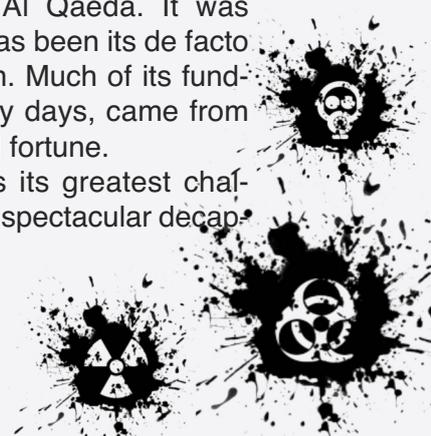
Source: <http://www.lauramansfield.com/>

Al Qaeda Inc. is not just a buzzword; the term is very descriptive of the form the global terror organization has taken as it has evolved over the years into a global franchise with activities throughout much of the world. Its projects have ranged from spectacular events like the September 11 attacks to epic fails and no-shows. Its recruiting grounds range from mosques of all sizes in many countries to the internet, where a wide range of forums in mul-

tiple languages tries to find a way to hook in new followers.

Until now, the name Osama Bin Laden has been synonymous with Al Qaeda. It was founded by him, and he has been its de facto CEO for its entire lifespan. Much of its funding, especially in the early days, came from Bin Laden's vast personal fortune.

Today Al Qaeda faces its greatest challenge ever after Sunday's spectacular decap-



itation strike on Bin Laden. Thanks to a combination of good intelligence, strategic planning, and courageous and accurate military action, Osama Bin Laden is no more.

Where does that leave Al Qaeda?

That's the big question today. There is no well-defined line of succession, at least not one that has been exposed to public view. It appears that Bin Laden never appointed a successor, an oversight that may have fatal consequences for Al Qaeda.

So who then is poised to take over the reins of the organization, and preside over its reorg?



There are several members of Al Qaeda leadership who have taken a visible role, either in middle management, on the battlefield, or in its trademark As Sahab videos.

Some analysts have speculated that the fact that Al Qaeda has not crowned its new "Emir" is an indication of a power struggle for control of the organization.

That is certainly plausible; it is equally possible that the remaining leadership core is facing significant communications challenges. It isn't likely that they can call a "cabinet" meeting of sorts with the US following hot on the trail of leads from the Bin Laden raid intelligence, and they are likely exercising extreme care in the use of telephones and the internet.

There is no doubt that Osama Bin Laden's death has dealt a harsh blow to the organization. It remains to be seen whether or not it is a mortal blow. Bin Laden earned much of his mettle out in the field battling the Soviets in Afghanistan. Much of his legitimacy came from his work in what is seen by the jihadists

as their great victory over one of the infidel superpowers, the Soviet Union.

Since 2001, Bin Laden has largely been a leader in absentia, disappearing for months and years at a time. During those absences, many speculated that the terror leader might be dead. In the absence of an announcement confirming his death, the rank and file of Al Qaeda carried on business as usual, with confidence that their leader still lived.

Regardless of whether Bin Laden was alive or dead, the prevailing view among analysts was that he was likely isolated and no longer in direct control of the organization. His infrequent messages showed that he was following current events, yet there was delay between the events and his messages referencing those events. This appeared to indicate that Bin Laden was in a remote location where communications were limited. For years, it has been assumed that information flowed to and from Bin Laden via a series of couriers.

We know now that since 2005, Bin Laden has been living in a compound in Abbottabad. The evidence recovered from Bin Laden's compound in Abbottabad by SEAL Team Six indicated that Bin Laden may not have been as out of touch with the day to day operations of the organization as many thought.

This makes the death of Bin Laden a much more critical issue that it would be otherwise.

For years, it was widely believed that Al Qaeda second-in-command Ayman al Zawahiri was in day to day control of the terror group. Many believed Bin Laden has been reduced to simply a figurehead who released a message from time to time to maintain morale.

In the last few years, drone strikes in Pakistan and Afghanistan have continued to pick off key Al Qaeda commanders. The death of Mustafa abu al-Yazid, Al Qaeda's paymaster, and explosives expert Abu Khabbab al Masri were major strikes. Other major Al Qaeda players have been captured, including Khalid



Sheikh Muhammad and Abu Faraj al Libi.

These blows have considerably attrited the pool of potential leaders.

Names currently being thrown around as possible leaders include Ayman al Zawahiri and Abu Yahya al Libi, yet those are not likely to be able to lead the Al Qaeda we know today.

Bin Laden's successor is going to face significant challenges. One of the most significant challenges is going to be funding for the group. In many ways, Al Qaeda functions as a business. It has payroll to meet, operating expenses, and it must continually restock its military equipment and supplies. In addition, it has historically paid for travel expenses for its followers; at one point, Al Qaeda actually had an employee handbook listing benefits such as travel. Funding for new terror attacks also must be addressed.

Bin Laden had many admirers and contacts dating back to the Afghan jihad against the Soviet Union. After his personal fortune was seized by Saudi Arabia, Bin Laden was able to leverage these contacts to provide a continuous source of funds. This became even more critical after the September 11, 2001 attacks, when the money trail to Bin Laden faced continuous scrutiny.

The new Al Qaeda leader is going to need to be an effective fundraiser.

Al Qaeda's new "Emir" is also going to need to have a strong personality; the Al Qaeda organization has deep fractures within, and each of those factions has a leader of his own.

The new leader will have to find a way to consolidate the factions, and reunify the organization.

In the last two decades Al Qaeda has become a global clearinghouse of sorts, a command and control organization for smaller radical groups such as those in Yemen and Saudi Arabia, North Africa, Somalia, and Gaza. Without a strong central leader, these fragments will become more autonomous, and any funds that they might raise would no longer flow upwards to Al Qaeda central.

In addition, Bin Laden's successor must deal with rivalry in the regions. Groups like the

Taliban, the TTP (Taliban Pakistan), and their offshoots pose competition for power in the regional arena. Without a strong, unifying leader, these groups may pursue their own separate agendas.

Let's take a look at each of these potential Al Qaeda successors, and assess the likelihood of each of these men taking control of the Al Qaeda as leader of the Global jihad.

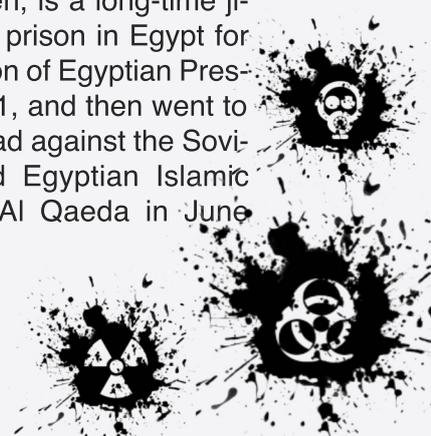
### **Ayman al Zawahiri: Heir Apparent?**

Many analysts believe that Bin Laden's second-in-command Dr. Ayman al Zawahiri will assume control of Al Qaeda Central. Zawahiri certainly is the most visible among the candidates for the leadership role. He releases video and audiotapes quite frequently. During one time period, there were so many messages from Zawahiri that the host of a TV news show quipped on air to then-Vice President Dick Cheney that Zawahiri was on TV more than he was.



Many believe that Zawahiri has acted as the de facto leader of Al Qaeda over the years, although that interpretation is now open to question with intelligence recovered from the Bin Laden raid.

Zawahiri, like Bin Laden, is a long-time jihadist. He served time in prison in Egypt for his role in the assassination of Egyptian President Anwar Sadat in 1981, and then went to Afghanistan to join the jihad against the Soviets. He formally merged Egyptian Islamic Jihad with Bin Laden's Al Qaeda in June



2001, solidifying years of cooperation between the two groups.

But Zawahiri is not well liked and is seen by many as a divisive element in Al Qaeda. His ideology of jihad is even more extreme than Bin Laden and may have been a role in the evolution of Bin Laden's strategies.

Let's face it, Zawahiri may be the brains of Al Qaeda and may have wielded considerable influence over Bin Laden, but he just doesn't have the charisma of Osama. Nor does he have the charismatic appeal of a Zarqawi or even a Moqrin, all of whom had strong followers before their deaths.

Although Zawahiri's messages are key elements in the Al Qaeda "marketing communications" program, they just aren't doing the job of rallying the troops. He does not reach the new generation of jihadists, and that is going to be essential for Al Qaeda's survival as a global entity, especially in the face of increasing competition from rival and splinter groups in the absence of Bin Laden.

Zawahiri may have the advantage of experience, and the respect of the older generations of jihadists, even if they don't particularly like him.

Can Ayman Zawahiri reach the new generation? He has certainly tried, releasing video tapes on a continuous basis over the years, and even taking questions over the internet and answering them in a two-part video. But quite frankly there is little excitement among the internet jihadists when a Zawahiri message is released. He may be able to take over operational control, but given his age and his lack of charisma, it's unlikely that he can inspire a new generation to take on jihad.

There is little doubt that there was competition between Bin Laden and Zawahiri; some reports speculate that Zawahiri may somehow have knowingly violated OPSEC and given up Bin Laden's location. Regardless, for over a decade Zawahiri has been content to be known as the number two man. There may be a very good reason for that. Zawahiri simply doesn't have the leadership or people skills, or the fundraising ability to take over the top role.

He would be more effective either as the second-in-command or perhaps as a member of a coalition leadership with someone like Al Libi.

If Zawahiri takes over as leader of Al Qaeda, then there is one key thing Al Qaeda must do to survive short term or long term. It needs to borrow the words of Donald Trump, and address them to Zawahiri: "You're fired!"

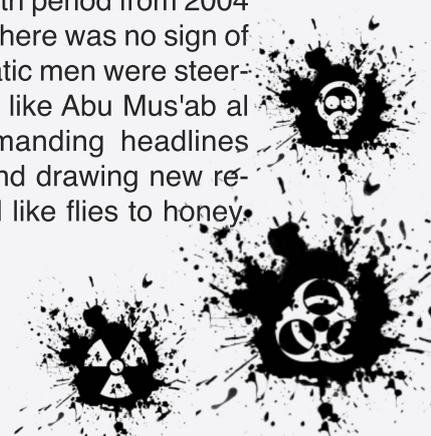
### Abu Yahya al Libi: Rising Star?

In 2007, Abu Yahya al Libi was Al Qaeda's rising star. Al Qaeda sympathizers on jihadist messages boards were stressing out about the absence of Bin Laden. There was consid-



erable angst beginning to appear among the jihadists; there had been no message from Bin Laden in nine months. Yet Bin Laden had gone much longer without a message, without causing any discernible discomfort among his supporters. At the time, it appeared that the reason was the leadership vacuum Al Qaeda has experienced since that period, and which is now exacerbated by the death of Bin Laden. Al Libi appeared poised to try to fill this role.

During the sixteen-month period from 2004 through early 2006 when there was no sign of Bin Laden, other charismatic men were steering the global jihad - men like Abu Mus'ab al Zarqawi, who was commanding headlines with his exploits in Iraq and drawing new recruits into the global jihad like flies to honey.



For much of this period, issues of Sawt al Jihad and Moaskar al Battar were being published regularly on the internet by Al Qaeda of the Arabian Peninsula. The Al Qaeda propaganda machine had no problems finding adequate material to keep the troops focused.

After Zarqawi was killed, no one had really stepped up to the plate to motivate the masses. Attempts by Ayman al Zawahiri were met with a lukewarm response at best. For many months, it has looked like that Abu Yahya al Libi was attempting to step in to this leadership vacuum.

Abu Yahya Al Libi is considered by many jihadists to be a true mujahid imam, an Islamist preacher who has also earned his stripes on the battlefield.

Al Libi's big claim to fame is his escape from American custody in Afghanistan in 2005. He was being held at a prison in Bagram, Afghanistan, when he and three other jihadist detainees broke out of the facility. His three fellow escapees have either been killed or recaptured, yet al Libi continues to elude US forces.

This escape has earned him a considerable amount of respect among his fellow jihadists, who view his escape as a victory over the Americans.

Al Libi has appeared in numerous videos through As Sahab since his escape. His rhetoric has become more and more inciting; in July 2006, he called on his followers to attack the White House. He has also called for the group to acquire and use weapons of mass destruction. Al Libi has written letters to Zarqawi, issued fatwas against the regimes of Denmark and Afghanistan, and delivered Eid messages to the Islamic Ummah.

His physical appearance in these videos has changed too; now he is shown with AK47 at his side, much like Bin Laden and Zawahiri. In many cases, As Sahab translates the videos into English and provides English subtitles and transcripts for the messages, a feature normally found in videos of Bin Laden or Zawahiri.

Using the tapes featuring Al Libi that were produced by As Sahab as an indicator, it becomes apparent that Al Libi has moved up in the leadership chain in the Al Qaeda organi-

zational charts.

Bin Laden's followers need a leader; Abu Yahya al Libi seems to be willing and able to take his place. He seems to have some sort of official sanction from Al Qaeda, otherwise As Sahab would not be releasing his tapes in the manner that they are.

Can Al Libi fill this role?

Al Libi does not have well established connections to the Al Qaeda's global funding network.

His speeches bog down in Islamic rhetoric. Although this may appeal to some, the new generation of jihadists belongs to the MTV generation. Like youth worldwide, they tend to respond best to short sound bites, not hour long sermons.

Most importantly, Al Libi does not have the charisma of a Bin Laden. It takes a strong constituent base to consolidate power, and Al Libi most likely does not have that kind of following. It is possible for Al Libi to forge a coalition of sorts with someone like Zawahiri, and perhaps be part of a leadership team, but it's unlikely that he will emerge as CEO of Al Qaeda.

An Al Qaeda under Al Libi's leadership is likely to lose much of its global reach. Although Al Libi does have ambitious aspirations (his calls for attacks on the White House and for the acquisition and use of nuclear weapons for example) he does not have the leadership skills to carry out these ambitions.

### Adam Gadahn aka Azzam al Amriki: Really?

Occasionally someone floats the name of Adam Gadahn (Azzam al Amriki), the Orange County, California-born convert who embraced the jihad. That's extremely unlikely.



Although he's been around Al Qaeda since the pre-9/11 days, he's not widely trusted among jihadists. He has played a key role in the video production efforts of Al Qaeda, and he does release messages of his own from time to time.

He has little or no following among jihadists, and is seen more as a novelty to them. He cannot compete for leadership of new recruits from the west; he does not have the charisma of someone like Anwar Awlaki. Most in the west consider Adam Gadahn to be somewhat of a pompous buffoon, and don't take him seriously.

If this were *Celebrity Apprentice*, Gadahn would be fired in round one.

### **Anwar Awlaki: Crown Prince or Pretender?**

The name Anwar Awlaki is being thrown around by many as a possible successor to



Bin Laden. On one level, it looks like Al Qaeda's days as the controller of the Global Jihadist movement may be ending. There appears to be a new light on the horizon in the form of American-born imam Anwar Awlaki. He is American-born but of Yemeni descent, and nicely bridges the gap between the two cultures. He is currently the rising star in the jihadist world, with enough charisma to motivate and inspire the rising generation of jihadists. He appeals to would-be followers in Europe and the US as well as in traditionally Muslim countries.

Awlaki has gained a fair amount of "street cred" with a string of attacks that he has reportedly inspired or directed, including the failed toner cartridge attempt, and the failed attempt by Nigerian underwear bomber AbdulMutallab.

Awlaki also has the ability to address another concern that Global Jihad must face - money. Although Bin Laden lost access to his personal fortune that helped bankroll the organization in its early days, in recent years his contacts and his messages have kept Al Qaeda funded. Its unlikely Zawahiri or Al Libi would be effective at fundraising. There is little doubt that Awlaki can effectively raise funds for the group through various methods.

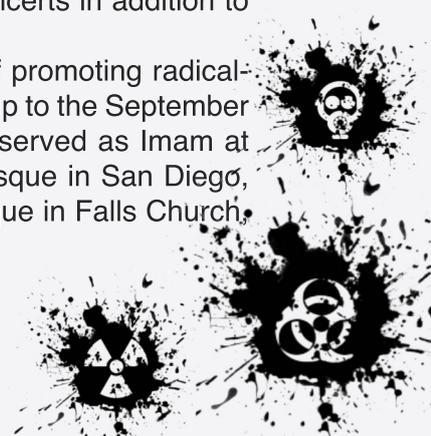
He has a large following especially on the internet, and his followers are loud and vocal. If Awlaki wants to take control of the Global Jihad, he will need to move quickly to leverage his position, and his primary way to do it is through the internet.

Youth and converts who formerly were drawn to Bin Laden will instead become Awlaki supporters, especially in the West, again, through the internet.

But in many ways, the internet is the only place that Awlaki exists anymore for all intents and purposes. He is the world's first cyber-created terrorist leader. And he's created enough of a splash that he has become the first US citizen targeted for assassination in the War on Terror.

In many ways, Awlaki's rise to fame reminds of me the 2004 movie *Pixel Perfect*, where a computer generated hologram becomes a world famous singer, or of the more recent (and real) Japanese hologram singer, who has actually held concerts in addition to her YouTube videos.

Awlaki has a history of promoting radicalism. In the years leading up to the September 11, 2001 attacks, Awlaki served as Imam at the Ar-Ribat al-Islami Mosque in San Diego, and at Dar al Hijrah Mosque in Falls Church,



VA, serving as a spiritual advisor to 9/11 hijackers Hani Hanjour, Nawaf al-Hazmi and Khalid al-Mihdhar. Ramzi Bin al-Shibh (the "20th hijacker") had Awlaki's phone number when his apartment was raided after the 9/11 attacks.

Awlaki also has the dubious distinction of being the only terrorist leader with a history of vice arrests. This man who followed an ideology so strict that he refused to shake hands with women was arrested twice in San Diego on charges of Soliciting for Prostitution. Between the two cases, he was sentenced to completing an AIDS education program, and paying \$464, and three years' probation.

It's not clear where Awlaki obtained his credentials. His undergraduate degree is in Engineering, and he never completed his PhD in Human Resources Management. According to his own website, the sum total of his Islamic training is made up of several months of erratic study with several Muslim scholars, and self-training through reading the writings of other Muslim scholars. This shows in his sermons, articles, and fatawa. He mixes his scholars and schools of Islamic jurisprudence much in the same way that someone not truly familiar with US history would combine the writings of Ronald Reagan and Jimmy Carter, lumping them together as like-minded. It is puzzling that this has received as little attention as it has.

His lack of formal education hasn't held him back on the internet. He has developed a strong cyber-following among young men and women in the West. At least it looks that way.

He apparently has his own promoter/marketing specialist, or at least someone who wants to maintain Awlaki's high level of visibility. Every morning, dozens of copies of old Awlaki video and audio sermons are posted on YouTube, and on blogs around the internet. No new material is posted - just the same material day in and day out. It's unclear as to whether these are the efforts of one person, a handful of people, or a larger following.

What's interesting is that all of these sermons are old - many dating back before 2001. Very little in the way of writings containing Islamic guidance has come out of Awlaki since he went to Yemen in 2004.

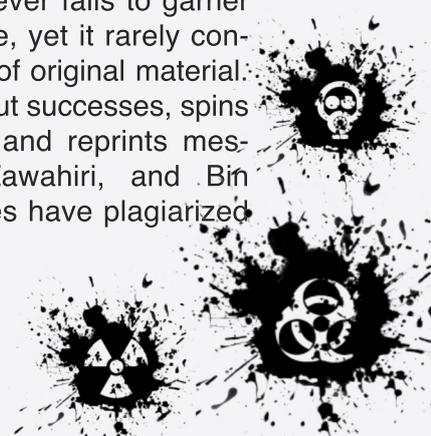
In the past two years, Awlaki apparently decided to start writing again. His new focus is on jihad and his specialization is inspiring the murder of western "kuffars". He's been successful at just that - inspiring murder.

Fortunately his devotees have not turned out to be particularly competent. In many ways, they were misfit souls looking for a light in their darkness. Cult leaders have always capitalized on this kind of psychological weakness; these Awlaki-"inspired" murderers would simply have found another leader if Awlaki wasn't around.

Despite this, Awlaki has managed to spin failure into success over and over again. The underwear bomber who tried to blow up a Northwest Airlines flight in an epic fail of a terror attempt on Christmas Day 2009 was supposedly trained by Awlaki. The toner cartridge bomb scheme, where laser printer cartridges were turned into bombs designed to bring down airliners, was Awlaki's most recent claim to fame. This too was a failure. So was the British passenger plane plot, the threats against the cartoonist, and the attempted Times Square bombing by Faisal Shahzad.

In fact the only two Awlaki-inspired terror acts have actually harmed anyone: the 2010 stabbing of a British cabinet minister in 2010, and the murder of 12 servicemen and women at Fort Hood, Texas. He also threatened numerous cartoonists, and his threats about her cartoons drove a Seattle woman into changing her name and going into hiding at the request of the FBI after Awlaki issued a Fatwa calling for her death.

The "Anwar Awlaki Internet Fan Club", ostensibly run by an American from Charlotte, NC named Samir Khan, puts out Inspire. Despite the fact the Khan has no graphics art or publishing experience or training, every other month he manages to produce a 50-plus page internet equivalent of a high-gloss magazine complete with fancy graphics and flashy page design. The magazine never fails to garner extensive press coverage, yet it rarely consists of much in the way of original material. The magazine gloats about successes, spins failures into successes, and reprints messages by Gaddahn, Zawahiri, and Bin Laden. The last few issues have plagiarized



the book "Architect of Global Jihad" by Brynjar Lia, copying Lia's translation of the writings of Abu Musab al Suri.

What's particularly interesting about this publication is that Awlaki has neither acknowledged the existence of Inspire, despite the fact that it bears the Al Malahem logo. In fact, his most recent Inspire article justifies criminal activities in the west to fund jihad - something we've never seen Awlaki support in any of his previous messages and sermons. Awlaki has remained silent on this article too.

There's no question that Awlaki has an internet following. But what kind of following does he have in real life? Several news agencies have interviewed people on the streets of Yemen after Friday prayers, asking them their opinion of Awlaki. Most had never heard of him.

Despite the daily uploading of the same Awlaki videos over and over again, there seems to be little or no new material coming from Awlaki, other than his occasional cheer-leading videos calling for kuffars, especially Americans, to be killed.

What is truly missing from Awlaki is the kind of interactivity other radical imams have. They deliver sermons, answer questions on forums, and even participate in Question and Answer sessions on Paltalk. Even Zawahiri, with a \$25 million bounty on his head, managed to do an internet "town hall" meeting with his supporters, who posted their questions on a specific jihadist forum. Shortly afterwards, Zawahiri answered questions in a two part video.

What are the chances Awlaki's Western internet following will follow him onto the battlefield long-term? How long will a generation of fighters who have been raised on video games remain willing to go into battle where instead of losing a virtual life, the follower stands to either be killed or face a lengthy prison term? It's likely that once his followers realize that jihad is not a video game that they can just do-

over with new lives by simply restarting the game that the jihad may lose some of its appeal.

Awlaki has been successful raising funds in the past, and that is an important strength. Whether he can do so in today's climate is nothing more than speculation.

Although he does have internet promoters, they lack depth. In many cases, it appears that many of these followers are simply intelligence services trying to "buy into" Awlaki's group by winning his favor.

He also lacks follow-through. His fan magazine and its articles attributed to him remain unacknowledged and some question whether it is even produced by Al Qaeda of the Arabian Peninsula.

Is it possible that Awlaki and his terror spin-off, Al Qaeda of the Arabian Peninsula, could assume a more prominent role in leading the Global Jihad, eclipsing the legacy Al Qaeda group in Afghanistan and Pakistan.

That remains to be seen. But I can't shake the feeling that like in the Wizard of Oz, someone is going to pull back the curtain on Awlaki, and like the Great and Powerful Oz, will not be what he appears to be.

### The Future

Family businesses often face serious crises after the patriarch dies; his heirs often cannot sustain the same sense of excitement that the original owner did. This is true for most types of businesses, and is true also for Al Qaeda, at least the Afghanistan-Pakistan branch. As the generation of jihadists who followed Bin



Laden to Afghanistan pre-9/11 dies off, martyrs themselves, retires, or simply gets tired of the demands of jihad, the focal point for Global Jihad is likely to shift to Yemen.

Not every reorg is successful in maintaining the core business; that's likely the case with Al Qaeda.

Throughout the last two decades, Al Qaeda under the leadership of Osama Bin Laden has been able to act as an umbrella group, pulling together small regional extremists groups in Egypt, Libya, Somalia, Algeria, Yemen, Saudi Arabia, and other countries into a coalition of terror. Those days may very well be over. The real problem is there are no effective candidates to replace Osama Bin Laden.

The most likely successor to Bin Laden remains Zawahiri. Despite his limitation, there remains a high probability that he will be appointed. If that happens, Zawahiri's deficiencies are likely to lead over the relatively short term to a decline in Al Qaeda's role as leading the Global Jihad,

Unless a real leader emerges quickly, Al Qaeda as we know it is on its way to obsolesce, leaving in its wake fragmented regional, national, and even ethnic jihadist organizations fighting each other more than they fight the "kuffars".

The violence will continue, but in a more anarchic fashion. The world will not be a safer place without Al Qaeda; instead, it may become a more dangerous place as individual groups all pursue their own individual agendas. There will be no Global Jihad Central Command to coordinate activities. It will be every group for itself, and each man for himself.

### How will Al Qaeda choose its new leader?

Who's going to be the next Al Qaeda leader? That seems to be the question everyone is asking these days in the wake of the death of Osama Bin Laden.

But who chooses the leader? What individual or group of individuals is authorized to make such a choice? Who announces their selection?

It is likely that Al Qaeda's Majlis al Shura (Shura Council) will be the group that makes

this selection. The Shura Council acts as an advisory council for Al Qaeda's leaders, in much the same way that a board of directors does for a CEO. It was the Shura Council, or representatives of that council, who issued the announcement, signed by the Al Qaeda General Command confirming bin Laden's death.

Open source documents confirm that the Al Qaeda Majlis al Shura was formed in 1989 in the early days of the organization. Several members of the Shura Council have either died or been detained; at least one is thought to have "retired" and is no longer active with the organization.

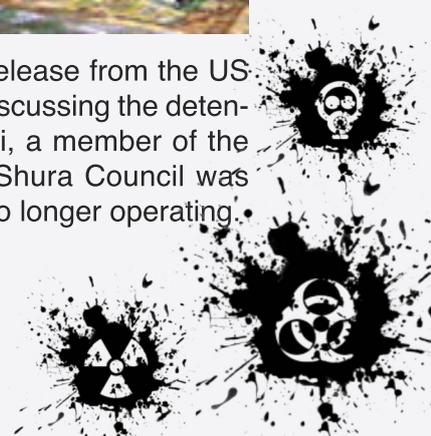
The members of this advisory board would have been Osama bin Laden's most trusted advisors. In fact, after the September 11, 2001 attacks, open source documents indicate that bin Laden actually turned operational control of Al Qaeda over to the Shura Council.

Although several members of the Majlis al Shura are in US custody, very little information about the council is available through open source media. It is likely that what is known about the Shura Council will change dramatically as intelligence community examines the information recovered from Bin Laden's hideout in Abbottabad.

US Government officials have indicated that bin Laden remained in day-to-day operational control of Al Qaeda right up until his death. This would indicate that at some point after 2001, bin Laden retook the reins of control from the Majlis al Shura.



According to a press release from the US Department of Defense discussing the detention of Abdel Hadi al-Iraqi, a member of the Council, as of 2007 the Shura Council was considered defunct and no longer operating.



However, a recent As-Sahab video featuring Abu Yahya al Libi identifies al Libi as a member of the Majlis al Shura, indicating that it was functioning as of a few months ago.

Al Libi has joined a group of Al Qaeda's elite core who share responsibility for advising the Al Qaeda leader. Other documented members of the Shura Council who have not been detained and who remain alive include Ayman al Zawahiri, Saif al Adel, and Abdullah Ahmed Abdullah.

It is likely that the all four of these men remain members of the Majlis al Shura.

These four men, with several other Al Qaeda senior leaders, will be the ones to designate a replacement for Osama bin Laden. In fact, each of these four men is a potential candidate for the job as Al Qaeda's Emir.

Under normal circumstances, the Majlis al Shura would meet and after discussion appoint a new leader. Operational security issues may hamper this process. A "board meeting" is unlikely; bringing the Al Qaeda

core leadership together in one place would be extremely risky, although not impossible.

Once the Majlis al Shura has reached a decision, it would most likely announce it using their standard operating procedure: an announcement or a video message from the new Emir posted on internet jihadist forums.

It is unclear when such a decision would be made. If the Shura Council is unable to agree on a new leader, or is unable to convene, an announcement may be delayed considerably.

But given that the core members of the Council have a long history together, dating back to the Afghan Jihad, before Al Qaeda was formed, it is likely that even before bin Laden died the members of the Shura Council had a successor in mind. Today, Al Qaeda is almost certainly operating under the direction of the Al Qaeda Shura Council. In the absence of a declared leader, the Majlis al Shura would remain in charge of Al Qaeda operations.

## Osama Bin Laden: Chicken or Egg?

by Raymond Ibrahim

Source: <http://www.meforum.org/2903/osama-bin-laden-chicken-or-egg>

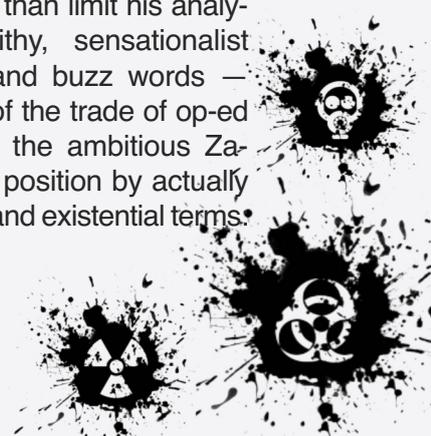
To posit the significance of Osama bin Laden's demise, we must first decide which came first — the chicken or the egg? Quaint as it is, this question is fundamentally an inquiry into the nature of cause and effect. In our context, did Osama bin Laden "create" the idea of jihad, or did the centuries-old doctrine of jihad — supplemented by Koranic verses to "strike terror into the heart of infidels" (8:12) — create him?

It is clear what the mainstream media would have us think. Take CNN alone; its national security analyst Peter Bergen maintains: "Killing bin Laden is the end of the war on terror. We can just sort of announce that right

now." Insisting that the "iconic nature of bin Laden's persona" cannot be replaced, Bergen suggests: "It's time to move on."

Another CNN analyst, Fareed Zakaria, assures us that even if politicians including President Obama aren't saying it yet (you know, "to be cautious"), "the truth is this is a huge, devastating blow to al-Qaeda, which had already been crippled by the Arab Spring. It is not an exaggeration to say that this is the end of al-Qaeda in any meaningful sense of the word."

Rather than limit his analysis to pithy, sensationalist phrases and buzz words — the tools of the trade of op-ed writing — the ambitious Zakaria undermines his own position by actually trying to argue in historical and existential terms.



Al-Qaeda was an idea and an ideology, symbolized by an extremely charismatic figure in Osama bin Laden. ... History teaches us that the loss of the charismatic leader — of the symbol — is extraordinarily damaging for the organization. ... With the death of bin Laden, the central organizing ideology that presented an existential seduction to the Muslim world and an existential threat to the Western world is damaged beyond repair. ... That existential threat is gone.

Indeed, nothing could be further from the truth. How many Muslim "charismatic leaders" and ideologues have come and gone only for the jihad to rage on?

Consider the Islamist leaders of this century alone: Hassan Bana and Sayyid Qutb, founder and chief ideologue of the Muslim Brotherhood, respectively; both were killed, yet over fifty years later, the Brotherhood — the parent organization of many jihadist organizations, including al-Qaeda — is today more dominant than ever, and may well take over Egypt.

Then there is the immensely "charismatic" Ayatollah Khomeini — the original poster-boy of radical Islam, who transformed once secular Iran into a fundamentalist theocracy. Over twenty years after his death, Iran is more radical than ever, and on its way to becoming a nuclear power with eschatological visions of glorious "martyrdom."

One can go on and on. For example, after Hamas' spiritual leader and founder, Sheikh Yassin, was assassinated, far from fizzling, Hamas grew in strength to the point that it now runs the Palestinian Authority.

Bana, Qutb, Khomeini, and Yassin are a meager sampling of Islamist leaders that have come and gone in this century alone. Were one to go further back in time, the continuum of history would unequivocally prove the existentialist nature of the threat: "Charismatic ideologues" — like Ibn Abdul Wahhab (18th century), Ibn Taymiyya (14th century), and Ibn Hanbal (9th century) — have preached the jihad throughout the centuries; and any of these Muslim leaders would make bin Laden look like a sissy.

Indeed, if one doesn't mind being labeled an "Islamophobe," one could trace jihad back to the origins of Islam in the 7th century, to the prophet Muhammad, who proclaimed: "I have been commanded to fight against people so long as they do not declare that there is no god but Allah."

Yet all of them — including the revered prophet of Allah — came and went. And still the jihad rages on.

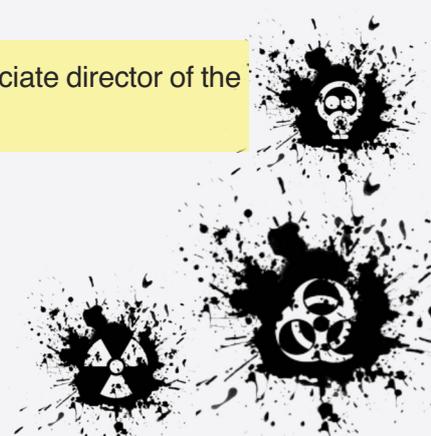
Ayman al-Zawahiri, now al-Qaeda's de facto leader, once summarized this phenomenon well. Asked in an interview about the status of bin Laden and the Taliban's Mullah Omar, he confidently replied:

Jihad in the path of Allah is greater than any individual or organization. It is a struggle between Truth and Falsehood, until Allah Almighty inherits the earth and those who live in it. Mullah Muhammad Omar and Sheikh Osama bin Laden — may Allah protect them from all evil — are merely two soldiers of Islam in the journey of jihad, while the struggle between Truth [Islam] and Falsehood [non-Islam] transcends time (The Al Qaeda Reader, p.182).

How terribly myopic of mainstream analysts to conclude that the death of bin Laden — of one man — can in any way, shape, or form eliminate the threat of jihad, which has a fourteen-hundred year lineage. It is a sign of the times that the media's most celebrated "experts" cannot — or will not — distinguish between cause and effect.

For our purposes, then, clearly the "chicken" (the cause, the idea) came first, producing many "eggs" (the effects, the believers). Even as we crack and fry up another jihadi-egg — an admittedly large one, bin Laden — the jihad-chicken runs wild, producing batches of eggs around the globe, while the establishment refuses to acknowledge its existence.

Raymond Ibrahim is associate director of the Middle East Forum



### How safe are U.S. railroads?

Source: <http://inthearena.blogs.cnn.com/2011/05/11/with-160000-miles-of-track-how-safe-are-americas-railroads-from-terrorist-attack/>

Following the revelation that al Qaeda had aspired to attack U.S. railways, security experts, the media, and lawmakers have turned their attention to improving security for American trains.

Most recently Senator Chuck Schumer (D–New York) has proposed allocating addi-

ing all passengers and cargo like with air travel, Jenkins said that the system would simply be too expensive and logistically impossible. “Passenger and freight screening would not affect terrorist attempts to sabotage the rails,” he said bluntly. He added that “applying an aviation security model to public sur-



tional funding to railway security as well as the creation of a “no ride list” that would function similarly to the airline’s “no fly list,” that is aimed at keeping suspected terrorists from boarding airplanes.

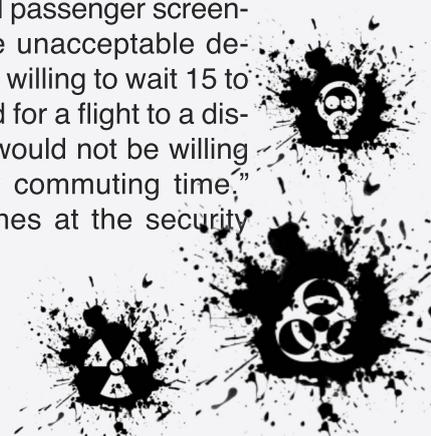
In a recent interview with CNN, Brian Michael Jenkins, the director of the Mineta Transportation Institute’s (MTI) National Transportation Security Center of Excellence, discussed the current state of railway security, how realistic creating an airline style screening system for railroads would be, and what measures need to be taken to secure railroads.

Jenkins said that the U.S. railroad operators have been keenly aware for some time about the growing threat to trains following the 2004 train bombing in Madrid, the 2005 attack on the London Subway, and the 2006 commuter train attack in Mumbai.

When asked about the feasibility of screen-

ing all passengers and cargo like with air travel, Jenkins said that the system would simply be too expensive and logistically impossible. “Passenger and freight screening would not affect terrorist attempts to sabotage the rails,” he said bluntly. He added that “applying an aviation security model to public sur-

face transportation will not work” because there are far too many train passengers each day. While roughly two million people travel by air each day in the United States, “four or five times that many get on trains or subways every day” and “we would need a quarter million screeners.” In addition, the costs to implement such a system would be prohibitively expensive. “It costs us somewhere around \$7 or \$8 dollars per passenger for airline security. Imagine adding that cost to a subway or commuter train fare. It would destroy public surface transportation,” Jenkins said. Finally, Jenkins said that a railroad passenger screening program would cause unacceptable delays. “Passengers may be willing to wait 15 to 20 minutes to be screened for a flight to a distant city,” he said. “They would not be willing to add that to their daily commuting time.” “Moreover, the waiting lines at the security





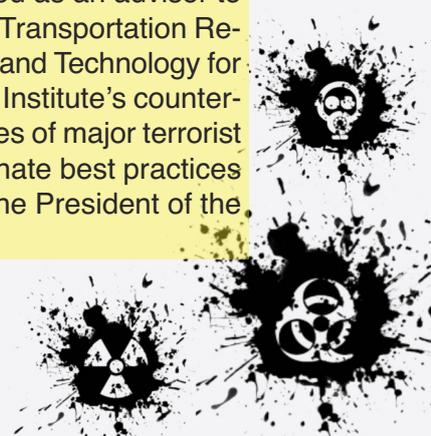
checkpoints themselves would make tempting terrorist targets.”

In order to realistically improve rail security in a cost effective manner, Jenkins urged passengers to begin taking a more active role.

Jenkins also urged the United States “to be more realistic about risk.”

He said, “Americans have come to expect a risk-free society—100 percent security, which is unrealistic.”

Brian Michael Jenkins is one of the world’s foremost authorities on terrorism and sophisticated crime. He works with government agencies, international organizations and multinational corporations as an analyst, investigator, and crisis management consultant. Commissioned in the infantry at the age of 19, Mr. Jenkins became a paratrooper and ultimately, a Captain in the Green Berets. He is a decorated combat veteran, having served in the Seventh Special Forces Group in the Dominican Republic during the American intervention and later as a member of the Fifth Special Forces Group in Vietnam (1966-1967). He returned to Vietnam on special assignments in 1968 and in 1971. Mr. Jenkins is the author of *International Terrorism: A New Mode of Conflict*, the editor and coauthor of *Terrorism and Personal Protection*, co-editor and co-author of *Aviation Terrorism and Security*, and co-author of *The Fall of South Vietnam*. In 1996, President Clinton appointed Mr. Jenkins to be a member of the White House Commission on Aviation Safety and Security. From 1999 to 2000, he served as an advisor to the National Commission on Terrorism. Jenkins was also a member of the Transportation Research Board/National Research Council Panel on Transportation: Science and Technology for Countering Terrorism, 2002. Mr. Jenkins has led the Mineta Transportation Institute’s counterterrorism research team since 1997, producing three volumes of case studies of major terrorist attacks on surface transportation and participating in symposia to disseminate best practices distilled from lessons learned in the attacks. He is also Senior Advisor to the President of the RAND Corporation.



## US Government Developing Data Mining Tools To Fight Terrorism

Source: <http://www.informationweek.com/news/government/enterprise-apps/229500130>

Federal intelligence agencies are developing new software that can analyze the communications networks and travel activities of terrorists to help discover relationships between them.

The software being developed by the National Counterterrorism Center (NCTC), called DataSphere, is just one of several projects intelligence agencies developed in 2010 to aid in retrieval and analysis of intelligence information, according to the Office of the Director of National Intelligence's (ODNI's) 2010 Data Mining Report.

The report covers a range of programs currently in development by the ODNI that are aimed at helping the intelligence community more efficiently use data, although the ODNI itself admits that they don't all adhere strictly to the data-mining definition.

For example, rather than mining data, DataSphere uses network analysis tools on existing data about known and suspected terrorists and their associates. It detects patterns in the data that links individuals with events and actions--including identifying a set of individuals that fit the parameters designated in a threat-intelligence communication, according to the report.

Intelligence authorities can then use the information in their investigations of potential terrorist attacks in development.

NCTC is working with the proper authorities--including ODNI's civil liberties and privacy and general counsel offices--to ensure its development of DataSphere is aligned with privacy and civil liberties protections, according to the report.

The Intelligence Advanced Research Projects Activity (IARPA) is another agency exploring innovations in data mining to collect and analyze intelligence information, according to the report. Last year IARPA continued to advance development of two programs it created in 2009.

The Knowledge Discovery and Dissemination (KDD) program is aimed at quickly disseminating information from large, complex, and varied data sets so they can be integrated with other data sets already in use. The project also will create analysis tools that can work across the data sets once they're properly aligned, according to the report. IARPA awarded research contracts for the KDD program last September.

IARPA's Automated Low-level Analysis and Description of Diverse Intelligence, or AL-ADDIN, meanwhile, is a video-query program aimed at replacing a manual process already in use, according to the report. The program allows intelligence analysts to search large video data sets to quickly and reliably locate clips showing a particular type of event.



### Next Generation Defense Technologies

Source:

<http://www.informationweek.com/news/galleries/government/security/225702281?pgno=1>



#### A160 Hummingbird

The A160 Hummingbird, manufactured by Boeing, is an unmanned surveillance helicopter equipped with a Forester radar antenna that's capable of identifying troops and vehicles by penetrating the foliage below. DARPA and the U.S. Special Operations Command have ordered A160s. (Image: DARPA)



#### Vulture Program

DARPA's Vulture program aims to develop an unmanned aircraft that's capable of remaining aloft for five years, performing satellite-like intelligence, surveillance, and reconnaissance and communications over areas of interest. (Image: DARPA)



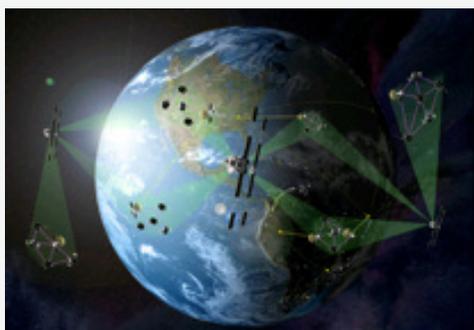
#### Big Dog

Big Dog is a DARPA-funded, four-legged robot that would be used to support military operations in rough terrain. Components include a small engine and a PC board to control the robot. (Image: U.S. Marine Corps)



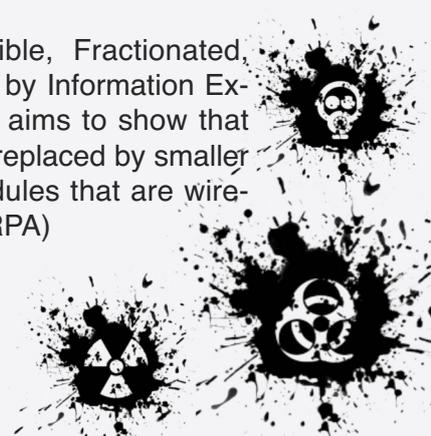
#### Legged Squad Support System

The Legged Squad Support System, or LS3, is a joint effort between DARPA's Tactical Technology Office and the U.S. Marine Corps Warfighting Lab. The program goal is to develop a quadruped platform that will augment troops by carrying equipment autonomously. (Image: Department of Defense)



#### System F6

DARPA's Future, Fast, Flexible, Fractionated, Free-Flying Spacecraft United by Information Exchange (System F6) program aims to show that conventional satellites can be replaced by smaller "cluster-flown" spacecraft modules that are wirelessly networked. (Image: DARPA)



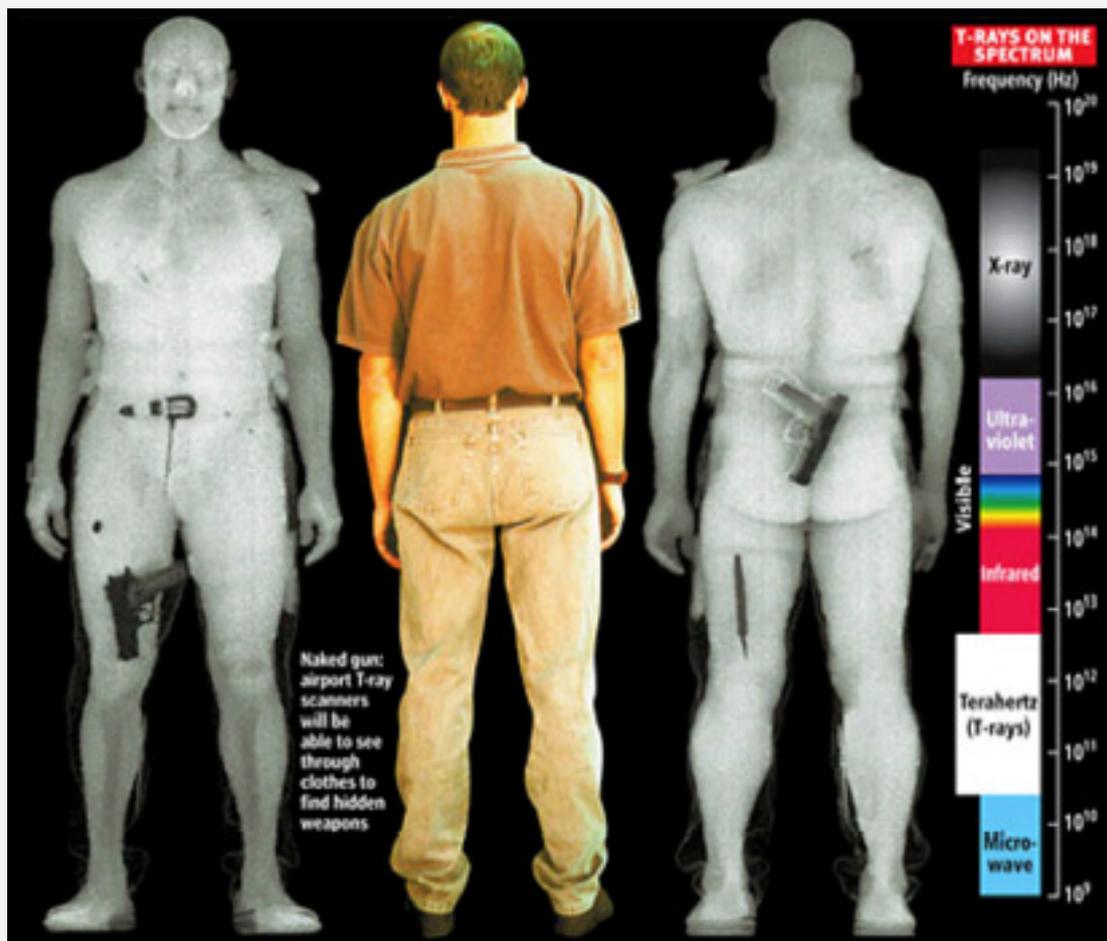
### Scientists continue to raise doubts about safety of full body scanners

Source: <http://www.propublica.org/documents/item/april-2011-letter-to-john-holdren>

The controversy over the Transportation Security Administration's (TSA) body scanners lingers on as scientists continue to question the safety of these devices that expose millions of people to trace amounts of radiation;

tion the safety of these devices, which expose thousands of people to trace amounts of radiation every day.

TSA officials maintain that their full body x-ray scanners are safe as they only expose



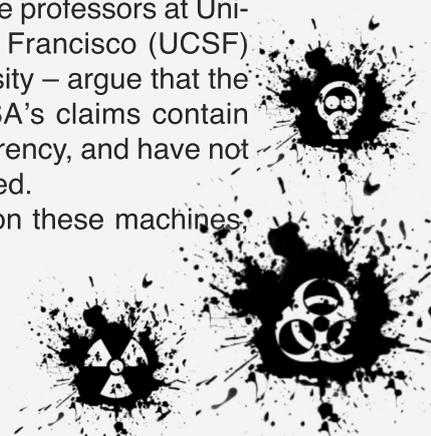
TSA officials maintain that their full body x-ray scanners are safe as they only expose individuals to negligible amounts of radiation, the equivalent of two minutes of flying; despite these assurances, a group of five scientists recently sent an open letter to the White House Science advisor; the scientists argue that the tests used to validate TSA's claims contain critical flaws, lack transparency, and have not been independently verified

The controversy over the Transportation Security Administration's (TSA) body scanners lingers on as scientists continue to ques-

tion the safety of these devices, which expose thousands of people to trace amounts of radiation every day. But despite these assurances, a group of five scientists recently sent an open letter to John Holdren, the White House Science advisor, questioning these assertions.

The scientists – who are professors at University of California, San Francisco (UCSF) and Arizona State University – argue that the tests used to validate TSA's claims contain critical flaws, lack transparency, and have not been independently verified.

“There's no real data on these machines.”



and in fact, the best guess of the dose is much, much higher than certainly what the public thinks,” said John Sedat, a professor emeritus in biochemistry and biophysics at UCSF and the primary author of the letter.

In the letter, the scientists note that the test results that the TSA cites come from a Johns Hopkins University lab which did not have access to the actual x-ray machine used at airports. Instead researchers were only able to observe as Rapiscan, the machine’s manufacturer, ran their own tests on a mock up

Many scientists and radiation experts agree with TSA’s conclusions that the doses are so low that individuals would have to pass through the machines at least a thousand times before the exposure levels could be harmful.

But Professor Sedat and his team argue that “It is still unclear how much damage to cells occurs with low dose X-rays.” In particular, they worry that “potential X-ray damage, primarily to skin cells and adjacent tissues, would lead to a ‘damage response’ by the



model built using spare parts and configured to resemble the TSA machines.

In addition, the Johns Hopkins lab report was so “heavily redacted” that “there is no way to repeat any of these measurements.”

To bolster its case, TSA argues that the backscatter technology used in some of its body scanners has been evaluated by the Food and Drug Administration, the National Institute for Standards and Technology, and the John Hopkins University Applied Physics Laboratory.

TSA also says that it has deployed survey teams with radiation detectors at airports to check the machines. According to TSA, the results indicate that the body scanners do not pose a significant risk to public health.

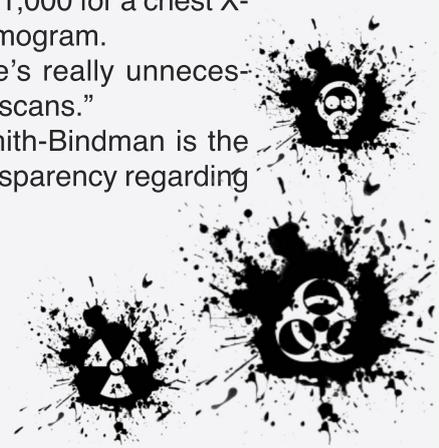
cells.”

A fellow UCSF faculty member, Rebecca Smith-Bindman, a radiologist, disagrees with Sedat’s medical findings, but still has qualms with how TSA is operating their machines.

In an article for the Archives of Internal Medicine, Smith-Bindman writes that the risks of airport body scanners are “truly trivial.” As an example, she says a passenger would have to undergo fifty airport scans to reach the level of a dental X-ray, 1,000 for a chest X-ray, and 4,000 for a mammogram.

She concludes, “There’s really unnecessary fear related to these scans.”

But what concerns Smith-Bindman is the lack of regulation and transparency regarding these machines.



"What I'm not as comfortable with is that there has not been access to these machines. They are not being tested on the same regulatory basis that we see on medical equipment," she said.

Smith-Bindman's request that she or a team of outside researchers test the machine was rebuffed by a TSA public affairs officer who said that allowing outsiders to have access to the machine could compromise national security.

Before the House Committee on Oversight and Government, Robin Kane, TSA's assistant administrator for security technology, re-

iterated the agency's insistence on keeping third-party researchers from testing the body scanners because if it did, it would expose sensitive information that the agency does not normally share with the public.

But Kane said that if the tests were set up in a secure manner, the agency would allow more testing.

In the meantime, the controversy will likely continue until proper tests can be run by medical researchers that will give undisputable scientific evidence to settle this debate once and for all.

### FBI: We want Unabomber's DNA in 1982 laced-Tylenol case

Source: <http://news.blogs.cnn.com/2011/05/19/officials-want-unabomber-dna-sample-for-laced-tylenol-investigation/>

Authorities want to take DNA samples from "Unabomber" Ted Kaczynski in connection with their investigation into the 1982 incident in which seven people died after taking Tylenol capsules laced with potassium cyanide, according to the FBI office in Chicago. "As part of the re-examination of the 1982 Tylenol poisonings, the FBI attempted to secure DNA from numerous individuals, including Ted Kaczynski," said Cynthia Yates, FBI spokeswoman. "To date, Kaczynski has declined to voluntarily provide samples." However, in a handwritten motion filed in federal court aimed at stopping the online auction of possessions taken from his Montana cabin in 1996, Kaczynski writes that he did agree - with a condition - to provide the sample.

Kaczynski, 68, killed three people and wounded 23 others in a string of bombings from 1978 to 1995. The FBI dubbed him the

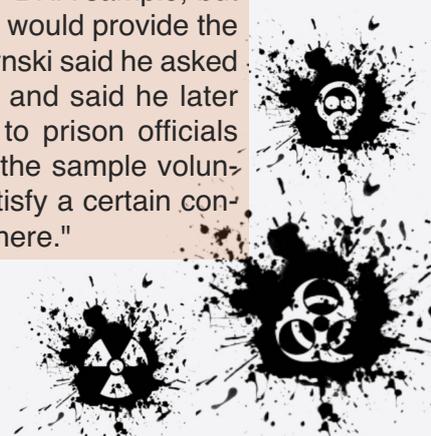
"Unabomber" because of his early targets - universities and airlines. He was arrested in 1996, pleaded guilty in 1998 and is now serving a life term in the federal "Supermax" prison in Florence, Colorado. On April 27,



Ted Kaczynski, the convicted killer known as the Unabomber, is escorted from court after being sentenced to life in jail in 1998.

On April 27, Kaczynski writes in the motion filed May 9, prison officials told him that "the Chicago office of the FBI wanted a sample of my DNA to compare with some partial DNA profiles connected with a 1982 event in which someone put potassium cyanide in Tylenol. The officers said the FBI was prepared to get a court order to compel me to provide the DNA sample, but

wanted to know whether I would provide the sample voluntarily." Kaczynski said he asked for time to think about it, and said he later sent a written response to prison officials saying he would provide the sample voluntarily "if the FBI would satisfy a certain condition that is not relevant here."



### **Ships increasingly turning to armed guards to combat piracy**

Source:<http://www.bloomberg.com/news/2011-05-17/armed-guards-fighting-somali-pirates-to-rise-trade-group-says.html>

To stem the rapidly growing number of pirate attacks in the Indian Ocean, more shipping companies are turning to armed guards; last year attacks off the Somali coast hit an all-time high with forty-nine ships hijacked along with 1,016 crew members; to combat the growing threat of piracy an estimated 20 per-



Member of Dutch special forces on Dutch merchant ship  
// Source: stripes.com

cent of ships operating in the Indian Ocean and the Gulf of Aden will hire armed guards within the next eighteen months, up from 12 percent; analysts say no ships have been successfully hijacked when armed guards were present.

In addition, last year pirate attacks added \$2.4 billion in costs to shipping companies and the average ransom payments increased to \$5.4 million. In 2005, the average ransom was \$150,000.

To combat the growing threat of piracy, Peter Cook, a spokesman for the Security Association for the Maritime Industry, said that an estimated 20 percent of ships operating in

the Indian Ocean and the Gulf of Aden will hire armed guards within the next eighteen months, up from 12 percent.

Andrew Bardot, the executive officer of the International Group of P&I Clubs, which insures 90 percent of the world fleet against liability claims, explained that when faced with piracy, armed guards is an appealing option for shipping companies because they have proven effective. Bardot said, "There is a wish by some shipowners to have armed guards on board and you can't dispute the fact they are successful." As evidence, he said that no ships have been successfully hijacked when armed guards were present. Cook said that most shipping companies employ three to five guards and will hire extra staff on a freelance basis paying about \$100 million a year to security companies for their services. He added that at any given time there are an estimated fifty to eighty teams of armed guards deployed on vessels.

To regulate the maritime security industry, the International Maritime Organization (IMO), the shipping arm of the United Nations, is expected to approve vetting procedures for private security guards this month. IMO discourages shipowners from hiring private guards, but likely faces no option but to issue regulations as private security has become a growing trend. "The maritime security industry wants to be regulated," said Cook. His organization, the Security Association for the Maritime Industry, represents one fifth of all private security firms and help shipping companies distinguish between "good maritime companies" and "entrepreneurs."



## Al Qaeda's Saif al-Adal masterminded Pakistani base assault

Source: <http://www.debka.com/article/20961/>

The fingerprints of Al Qaeda's interim operations commander Saif al Adal were all over the assault on the important Pakistani PNS Mehran naval air base in Karachi, which began Sunday night, May 22 and ended only after 17 hours of fierce combat, debkafile's counter-terror sources report. It was the jihadist group's first major revenge operation for Osama bin Laden's death in Pakistan on May 2. Fourteen Pakistani military personnel were killed and 15 injured. Four attackers died, 4 were captured and 2 got away.

### The operation had four telltale features:

1. In planning and execution, the Merhan hit



looked as though it was modeled on the Al Qaeda attack of May 12, 2003 on three fortified estates populated by a Saudi-foreign mix in Riyadh, Saudi Arabia, which Saif al Adal orchestrated.

2. The Pakistani base also had a strong foreign military presence of at least five Americans and 11 Chinese naval personnel. The attack therefore aimed at damaging the US-Pakistani intelligence collaboration which al Qaeda believes to have been indispensable to the operation for killing Osama bin Laden in Abbottabad. Targeting Chinese personnel was meant to tear a hole in Islamabad's ties

with Beijing which contribute substantially to Pakistan's military potency. According to official statements, no Americans or Chinese advisers were hurt in the attack despite earlier reports that hostages were taken from the latter group.

3. The military professionalism exhibited by the estimated 12-15 attackers was greater than the usual combat standards of terrorist organizations or Pakistani Taliban. The outer walls of the base were smashed in with explosives and the intruders used ladders to climb in, a method used in al Qaeda's attack on the US consulate in Jeddah on December 7, 2004 and believed adopted by Saif al-Adal

based on mistakes he made in the break-in to the Riyadh estates.

4. Meticulous and detailed advance surveillance of the base's layout armed the attackers with precise targets, indicating aid from an inside accomplice or long and careful reconnaissance by spies disguised in Pakistani military uniforms with false ID.

### The operation's objectives were:

- First, -to impair Pakistan's intelligence-gathering capabilities: Pakistani surveillance aircraft take off from Mehran for their missions over the tribal districts bordering Afghanistan, especial North Waziristan, home to terrorist strongholds. Some of this information is passed on to the Americans for Predator drone missile strikes.

-Second, to destroy the three P-3C Orion surveillance





The attackers destroyed at least two P-3C Orion maritime surveillance aircraft given to Pakistan by the US.

planes the US had given Pakistan: Two were totaled and a third badly damaged. The hangars housing them, which contained a substantial amount of surveillance and technical equipment, were blown up and set on fire.

-Third, to disable Islamabad's intelligence operations over the Arabian Sea coastal area and water which separates Pakistan from India.

No indigenous Pakistani element, including Taliban, which claimed responsibility for the attack in Karachi, would have wanted to harm Pakistani's intelligence capacity against India.

Al Qaeda's motives were quite separate from those of Taliban in this case: In recent years, a high goal on its agenda has been to stir up trouble, up to and including war, be-

tween the two nuclear neighbors by means of terrorist operations in India which are clearly labeled "made in Pakistan." By hitting Mehran and so removing the seeing eyes of Pakistani surveillance, al Qaeda aimed to give itself a free hand to launch more attacks on India.

In summing up the operation, debkafile's military sources judge it was not one of the biggest or most dramatic al Qaeda has ever perpetrated. But it achieved its goals in terms of strategic gains, precision and rapid organization at very short notice after the death of its leader. Saif al-Adal does not specialize in the mega-attacks typical of al Qaeda's late leader. His expertise lies in medium-scale, precisely targeted serial terror recurring at short intervals. More attacks are therefore coming.



## Houston ship operators adjust security to new al-Qaida information

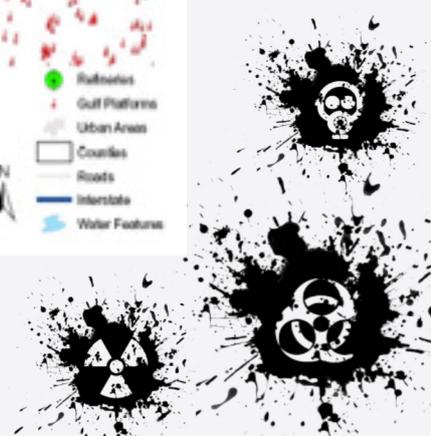
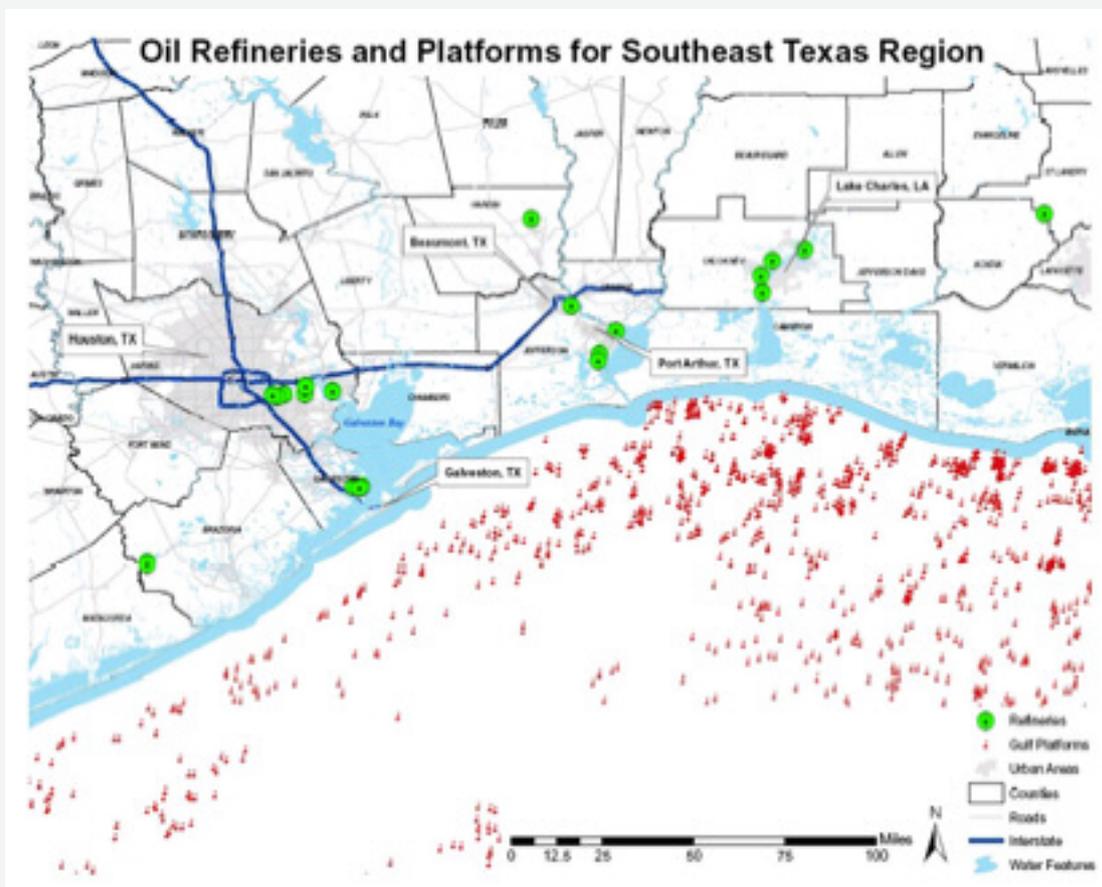
Source: <http://www.kcentv.com/story/14690900/houston-ship-operators-adjust-security-to-new-al-qaida-information>

Refineries and ship operators moved to adjust their security plans in response to new al-Qaida intelligence. The U.S. Department of Homeland Security issued a warning to law



enforcement nationwide, saying documents from the raid that killed al-Qaida's leader show

the terrorist group has studied bombing oil tankers. The alert spells out that al-Qaida discussed performing dry runs last summer to try hijacking and bombing oil tankers to cause "an extreme economic crisis" in the United States. "The Houston petro-chemical complex is the largest in the United States. It's the second largest in the world. We move almost 8,000 ships a year here, and 3,700 of those were tankers," said Patrick Seeba, project manager for the Greater Houston Port Bureau. "We move more vessels than any other port in the country. We move more than New York and (Los Angeles) combined," said Seeba. He estimated between 25 and 30 oil and chemical tankers sail through the Houston Ship Channel daily, so he said the latest terrorism warning is getting attention from





every industry along the way. "They place a premium on safety," he said.

Another former FBI terrorism agent said, "We're the energy capital of the US. This is a target-rich environment," he said on the condition of anonymity. He said, "They know we're paying \$4 a gallon" for gas, so even a small attack could raise prices at the pump by a dollar or more, severely denting the entire nation's economy. The DHS bulletin to law enforcement agencies nationwide said that al-Qaida documents show the group considers mid-spring to late summer as the ideal times to infiltrate oil tankers. The group also suggested they would need to be blown apart

from within, due to the reinforced hulls on those ships.

Coast Guard officers said their heavily armed terrorism boat patrols are ready to speed to any confirmed threat along the Houston Ship Channel. The Coast Guard and local police are all plugged in to a real-time satellite tracking system that pinpoints the exact size and location of every tanker in and around Houston. The system is secured and only accessible to law enforcement and shipping interests. DHS issued a statement saying the nationwide terrorism alert level is not being raised because there is no specific threat of a plot already in progress.

## Explaining Lone Wolf Terrorism

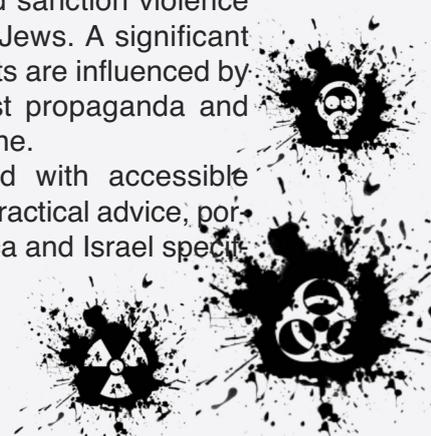
Source: [http://www.adl.org/main\\_Terrorism/lone\\_wolf\\_terrorism.htm](http://www.adl.org/main_Terrorism/lone_wolf_terrorism.htm)

The arrest of two men suspected of plotting to attack a synagogue in New York City on May 11 serves as a stark reminder that Jews and Jewish institutions continue to be a favorite target for extremists motivated by radical interpretations of Islam.

Although they do not constitute a fully coherent movement in the U.S., more and more American-born citizens, naturalized U.S. citi-

zens and residents have attempted to act on ideologies that justify and sanction violence against Westerners and Jews. A significant number of these extremists are influenced by English-language terrorist propaganda and recruitment materials online.

These materials, filled with accessible Western references and practical advice, portray the West (and America and Israel specifi-



ically) as being at war with Islam and often feature calls for attacks on American soil. In addition to Jewish or Israeli institutions, the most common targets are U.S. military installations, major landmarks and transit systems.



One indication of the influence this propaganda has is the number of extremists that have been found in possession of this type of material. The list includes many arrested in 2010, among them Antonio Martinez, a Maryland man arrested for attempting to detonate what he believed to be a car bomb at a Maryland Army recruiting center in December; Barry Walter Bujol, Jr., a Texas resident arrested for attempting to deliver money and other equipment to Al Qaeda in the Arabian Peninsula; and Mohamed Osman Mohamud, who was arrested in November 2010 for attempting to blow up a Christmas tree lighting with a car bomb in Portland, Oregon. Mohamud went so far as to submit an article to AQAP's online English-language magazine, Inspire (it was not published), as well as to another English language online terror magazine called Jihad Recollections.

Each of these cases demonstrates not only the growing threat posed by individuals who self radicalize online without any physical interactions with established terrorist groups, but also their willingness to act alone to further the objectives and ideologies commonly propagated by Islamic terrorist movements overseas.

While media reports on the latest synagogue plot explained that Ahmed Ferhani and Mohammad Mamdouh targeted Jews to ad-

vance their radical ideological goals, several reports erroneously described them as "lone wolf" terrorists, apparently basing the description on the fact that they had no direct ties to Al Qaeda or any other terrorist organization.

A "lone wolf" is an individual extremist who seeks to commit violent acts on his own without belonging to an organized extremist or terrorist group or cell. While the "lone wolf" description in this case does not fit Ferhani and Mamdouh conspired together, according to authorities understanding this phenomenon is critical to responding to the serious threat it poses.

"Lone wolves" often operate by different dynamics than groups or cells - even cells of two. Most terrorist plots and conspiracies in the United States are detected and prevented by law enforcement officers before their planned acts of violence can be carried out precisely because they are not "lone wolves".

When extremists plan and execute attacks alone, as individuals, there are far fewer opportunities for law enforcement to detect them in advance and they are much more difficult to prevent. Consequently, "lone wolf" actions tend to be more deadly.

Two shooting incidents against military personnel in 2009 demonstrate the particular danger posed by "lone wolf" extremists who,



though unaffiliated with terrorist groups, nevertheless share their ideological goals. In November 2009, Major Nidal Malik Hasan (right) opened fire at the Fort Hood soldier readiness center, killing 13 people and wounded 32 oth-





ers. The shooting at Fort Hood followed a separate incident in June 2009 when Abdulahakim Mujahid Muhammad (photo below), allegedly shot two uniformed American soldiers, killing one of them, at a military recruiting center in Arkansas.

While Hasan and Muhammad were motivated by radical interpretations of Islam, "lone wolves" can be motivated by beliefs across the ideological spectrum. James Von Brunn,

who opened fire inside the U.S. Holocaust Memorial Museum, killing a security guard, was a white supremacist. Scott Philip Roeder, who fatally shot a physician whose clinic provided abortions, was an anti-abortion extremist and sovereign citizen.

While there are no easy ways to prevent terror attacks, true "lone wolves" present a special problem for security officials. Because lone wolves are far less likely to be caught in the earliest stages of planning an attack, the opportunity to stop them often occurs well after they have moved from thought to action and usually no earlier than when they are surveilling or approaching their targets. This means, among other things, that the responsibility for identifying a potential perpetrator or even initially responding to such an attack may well fall to the institution being attacked, not with law enforcement. Simply put, "lone wolves" are very different than small groups or cells and we confuse the two at our peril.

## US adds Islamic Caucasus Emirate to list of terror groups

Source: [http://www.longwarjournal.org/archives/2011/05/us\\_adds\\_islamic\\_cauc.php](http://www.longwarjournal.org/archives/2011/05/us_adds_islamic_cauc.php)

On May 26th, 2011 under Executive Order 13224, the US State Department added the Islamic Caucasus Emirate, or Imarat Kavkaz, to the list of terrorist organizations. The designation allows the US to freeze the terror group's assets, prevent it from using financial institutions, and prosecute members for terrorist activities.

"Imarat Kavkaz uses bombings, shootings, and attempted assassinations to provoke a revolution and expel the Russian government from the North Caucasus region," according to a statement released by the US State Department announcing the designation.

"The designation of Caucasus Emirate is in response to the threats posed to the United States and Russia," Ambassador Daniel Benjamin, the Department of State's Coordinator for Counterterrorism, was quoted as saying in the press release. "The attacks perpetrated by Caucasus Emirate illustrate the global nature of the terrorist problem we face today. We stand

in solidarity with the Russian people in our condemnation of these deplorable terrorist acts."

The US indicated that additional actions would be taken against the Islamic Caucasus Emirate. "This designation represents just one phase of the United States Government's response to the threat posed by Caucasus Emirate," the press release stated.



From left to right: Khamzat, the commander of the Riyadh-us-Saliheen Martyr Brigade; Doku Umarov, the leader of the Caucasus Emirate; and Saifullah, the suicide bomber of the deadly Jan. 24 suicide attack at Domodedovo International Airport in Moscow that killed 35 people.





Suicide attack at Domodedovo International Airport – Moscow (2011)



The designation of the Caucasus Emirate

Russia," he continued. "The situation is visi-



Female suicide bombers' attack in the Moscow metro (2010)



takes place 11 months after the terror group's leader, Doku Umarov, was added to the US' list of foreign terrorists. Umarov has admitted to planning and executing numerous terror attacks in the Caucasus and in Russia since he declared the establishment of the Islamic Caucasus Emirate in November 2007.

Two of the most deadly attacks claimed by Umarov have occurred in Moscow. Umarov took credit for the deadly Jan. 24, 2011 suicide attack at Domodedovo International Airport in Moscow that killed 35 people and wounded scores more. Umarov also claimed responsibility for the March 29, 2010 suicide attack by two female bombers that killed 39 people in the Moscow metro.

Umarov has repeatedly vowed to continue attacks inside of Russia. Most recently, in an interview with Kavkaz Center, the terror group's propaganda arm, Umarov said he considers "the Caucasus Emirate and Russia as a single theater of war." The interview was released on May 17.

"Today, the battlefield is not just Chechnya and the Caucasus Emirate, but also the whole

ble to everybody who has eyes. The Jihad is spreading, steadily and inevitably, everywhere. I've already mentioned that all those artificial borders, administrative divisions, which the Taghut [false leader or liar] drew, mean nothing to us. The days when we wanted to secede and dreamed of building a small Chechen Kuwait in the Caucasus are over."



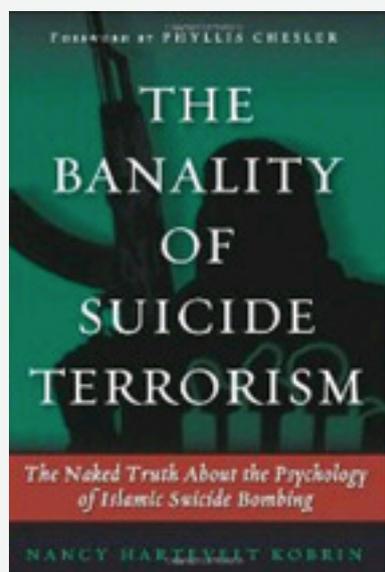
The Islamic Caucasus Emirate has close ties to al Qaeda. Some members of the group have fought in Afghanistan and Pakistan. Meanwhile, the International Islamic Battalion, the unit comprised of Arab and other foreign fighters that fights in the Caucasus, has been

led by senior al Qaeda leaders. The top leaders of the International Islamic Battalion have included al Qaeda commander Ibn al Khattab (killed in 2002); Abu al Walid (killed in 2004); Abu Hafs al Urduni (killed in 2006); and and Muhannad (killed in April 2011).

## The Banality of Suicide Terrorism: The Naked Truth About the Psychology of Islamic Suicide Bombing

Nancy Hartvelt Kobrin (Author), Phyllis Chesler (Foreword)

Potomac Books Inc.; 1st edition (March 31, 2010)



Terrorist organizations have been able to market mass murder under hysteria's banner of alleged martyrdom. But when it comes to understanding Islamic suicide terrorism in particular, there is much more to it than

bond with the mother of early childhood—known as maternal fusion—by means of a “death fusion” with their enemies, who subconsciously represent the loved (and hated) maternal figure. The terrorist’s political struggle merely serves as cover for this emotionally terrifying inner turmoil, which can lead down the path of ultimate destruction.

### Editorial Reviews

"A fascinating and brilliant book that goes through the hearts and minds of the suicide bombers." --Jean-Charles Brisard, former chief investigator, 9/11 families' lawsuits

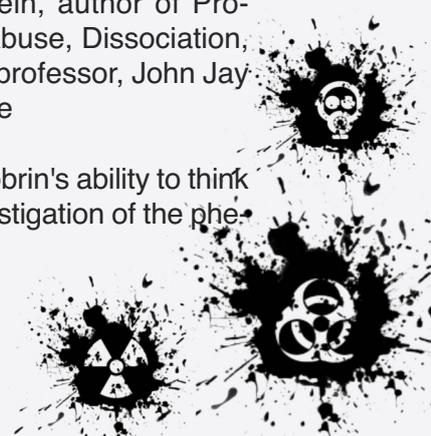
"Nancy Kobrin reveals the reason why so-called jihadist martyrs do what they do and act the way they act. Riveting, revelatory and right on target, this book will revolutionize the way we view and treat radical Islamic extremism and suicide terrorism. . . . A must-read for the lay person and the professional alike." --Jeffrey Denning, author of *The Work of Death: For God, Family and Country* and former federal air marshal and military intelligence officer

"Nancy Kobrin's book is a stark reminder of the ways that rigid adherence to any unexamined orthodoxy can indemnify oppression and violence." --Abby Stein, author of *Prologue to Violence: Child Abuse, Dissociation, and Crime* and associate professor, John Jay College of Criminal Justice

"I deeply admire Nancy Kobrin's ability to think outside the box in her investigation of the phe-

martyrdom. In this groundbreaking book, Nancy Kobrin dismantles the psychological dynamics of suicide terrorism to help the reader gain a new perspective on one of the most destructive forces the world has witnessed to date.

Until now, no one has explained why the mother-child relationship is central to understanding Islamic suicide terrorism. *The Banality of Suicide Terrorism* exposes the very ordinariness of one of the deepest yet most poorly understood causes of the suicide bomber's motivation: a profound terror of abandonment that is rooted in the mother-child relationship. According to Kobrin, this terror is so great in the would-be suicide terrorist that he or she must commit suicide (and mass murder in the process) in order to fend off that terror of dependency and abandonment. Suicide terrorists seek a return to the



nomenon of dying as a martyr among young Muslims. Whether or not one agrees with all of her theories, one cannot help but applaud Kobrin's ability to analyze the cultural and psychological dimensions in creating terrorist minds without ignoring the theological dimension." --Tawfik Hamid, former Islamic extremist and Chair for the Study of Islamic Radicalism, Potomac Institute for Policy Studies

"An astounding and courageous book, essential reading for academics and policymakers as a tool to understand and manage the tsunami of Islamist terrorism." --Anat Berko, research fellow, International Institute for Counter-Terrorism (ICT) Herzliya, and author of *The Path to Paradise: The Inner World of Suicide Bombers and Their Dispatchers*

## Homeland Security testing mind-reading terrorist 'pre-crime' detectors

Source:[http://blogs.computerworld.com/18388/homeland\\_security\\_testing\\_mind\\_reading\\_terrorist\\_pre\\_crime\\_detectors?source=rss\\_blogs](http://blogs.computerworld.com/18388/homeland_security_testing_mind_reading_terrorist_pre_crime_detectors?source=rss_blogs)

Many times, technologies from popular science fiction movies have later blended with real science and technology to become reality. Deployment of just such surveillance technology, somewhere between mind-reading machines and a "pre-crime" program, is cur-



rently being tested against real life to remotely detect terrorists or assassins, to find people with malicious intentions.

So whether someone cut you off in traffic or you had a spat with your significant other, if you are having adrenaline-driven aggressive thoughts and you are in northeastern USA, you might quickly take a chill pill because that's where terrorist "pre-crime" detectors are being tested by the Department of Homeland Security (DHS).

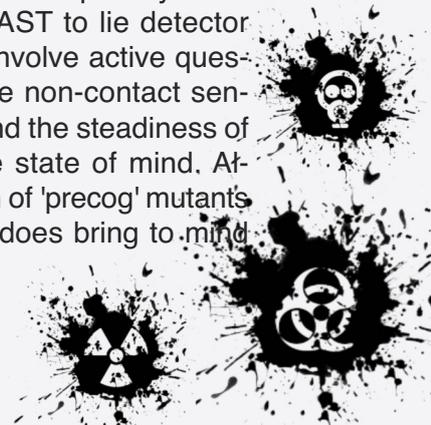
According to *Nature* magazine, in an undisclosed location in the northeast, Homeland Security has been testing its Future Attribute Screening Technology (FAST) program which is designed to 'sense' and spot people who intend to commit a terrorist act. Critics of

FAST have compared the system to the 'pre-crime' concept that was made famous in the film *Minority Report*. FAST technology uses remote sensors to detect when a person experiences irregular physiological properties like increased heart rate and darting eye movements that are supposedly associated with malicious intent.

FAST merges technology with behavioral science and has been in development since 2008. According to the DHS privacy impact document, there are five remote sensors that can measure heart and respiration rates, and remote eye trackers that can measure pupils, position and gaze of eyes. There are also thermal cameras as well as audio to analyze pitch changes in human voices. High resolution video is used to analyze facial expressions and body movement. "Other sensor types such as pheromones detection are also under consideration." Previous FAST testing involved people passing through the system while role-playing that they would carry out a "disruptive act."

As TechEye noted, "DHS claimed the machine was accurate 70 percent of the time [and] the other 30 percent will probably get out of Guantanamo Bay in a couple of years."

DHS has compared FAST to lie detector tests, except it does not involve active questioning of the subject. The non-contact sensors measure sweating and the steadiness of a person's gaze to judge state of mind. Although there is no mention of 'precog' mutants like in *Minority Report*, it does bring to mind



# CBRNE-Terrorism Newsletter

## Summer 2011

564

the pre-crime program from the movie. Aren't terrorists trained to avoid detection and possibly beat lie detector tests?

Tom Ormerod, a psychologist in the Investigative Expertise Unit at Lancaster University, UK, told Nature, "Even having an iris scan or fingerprint read at immigration is enough to raise the heart rate of most legitimate travelers." Other critics have been concerned about "false positives." For example, some travelers might have some of the physical responses that are supposedly signs of mal-intent if they

were about to be groped by TSA agents in airport security.

Yes, FAST is much more advanced than a "mood ring" or stress detector, but for people who feel like false positives can grind against the grain of liberty, then perhaps attempt to be very mellow in public? If you don't travel much, then let's hope that experienced security or customs agents can use their better judgment to determine that is why you are nervous.



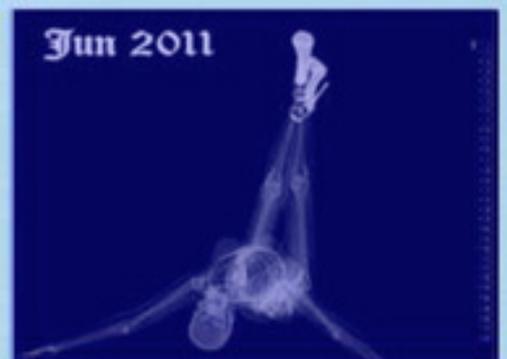
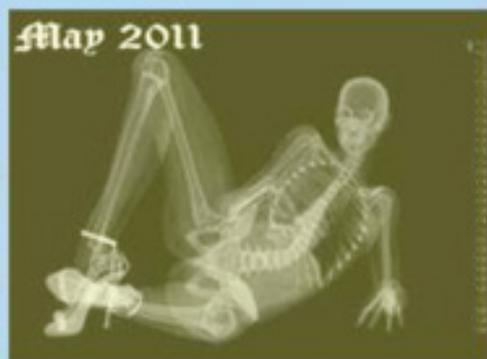


Transportation  
Security  
Administration

Your Safety Is Our Priority



# 2011 MISS TSA CALENDAR



Better exposed than sorry !

### Changing Trends in Maritime Piracy: A New & Major Threat

by Michael S. Brewer and Scott Brewer

Source: [http://www.domesticpreparedness.com/Infrastructure/Transportation/Changing\\_Trends\\_in\\_Maritime\\_Piracy:\\_A\\_New\\_&\\_Major\\_Threat/](http://www.domesticpreparedness.com/Infrastructure/Transportation/Changing_Trends_in_Maritime_Piracy:_A_New_&_Major_Threat/)

The recent killings of four American hostages on board their captured yacht, S/V Quest, provides a stark indicator to both the commercial maritime sector and the U.S. public at large

world's oceans regularly, supporting not only international commerce, but also humanitarian efforts such as the World Food Program.

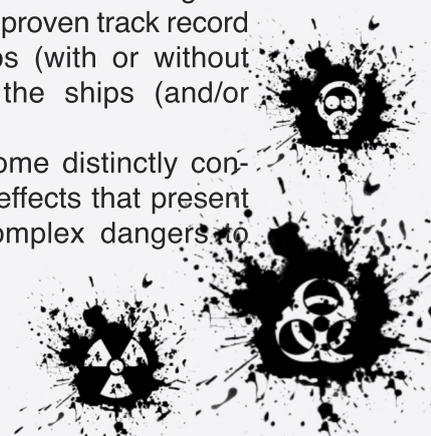
Modern maritime piracy continues to use



that maritime piracy is no longer an easily dismissed "cost of doing business," but a serious impediment to freedom of movement on the seas as well as a deadly crime against humanity. The sheer volume of trade and commerce flowing through high-risk-of-piracy areas such as the Indian Ocean also make maritime piracy a serious U.S. domestic concern. American mariners, imports, exports, and ships all traverse these areas of the

age-old techniques to serve age-old motivations – grand theft for major economic gain. Piracy as a business model has a long-established and consistently proven track record – seize commercial ships (with or without hostages) and ransom the ships (and/or hostages) for profit.

However, there are some distinctly contemporary concerns and effects that present new and exceedingly complex dangers to



U.S. and international communities. Not only does the equipment used today differ considerably from that used in the so-called "Golden Age of Piracy" in the late 17th and early 18th centuries, but the pirate methodologies themselves are "evolving."

### **2010: The First Step on an Evolutionary Ladder?**

In terms of maritime piracy, 2010 was a particularly important year. First, there were more acts of maritime piracy in 2010 than in any previous year of the modern era. Second, the cost of ransoms soared from an average of \$80,500 per incident in 2005 to over \$1 million in 2010. In purely financial terms, this escalation places maritime piracy among the highest-growth "industries" on the planet. In practical terms, maritime piracy has become big business with huge profits. For that reason alone, modern pirates – as well as those who benefit not only economically but also politically from their attacks – will go to great lengths to ensure that nothing changes these new operational realities of maritime life.

There are, though, four critical changes in pirates' methodology that have emerged in recent years, each of them marking the potential genesis of a still evolving adaptation that carries with it the ability to thwart and/or otherwise mitigate counter-piracy efforts. Those changes are: (a) using large commercial vessels both as mother ships and as mobile "attack platforms"; (b) using hostages aboard mother ships, and in some cases aboard skiffs or other small vessels, as human shields; (c) forcing hostages to take part in boarding activities; and (d) brokering deals with terrorist organizations, both for financial reasons and for the guaranteed "freedom to operate" without outside interference – particularly from the United States and/or other nations of the Free World.

Each of these tactics provides a greater degree of security to the pirates, mitigating if not completely eliminating potentially effective counter-piracy operations. In addition, each has the potential, if used on a broad scale, to greatly hamper counter-piracy efforts throughout the region and the world. U.S. and allied policy makers often discuss armed security as

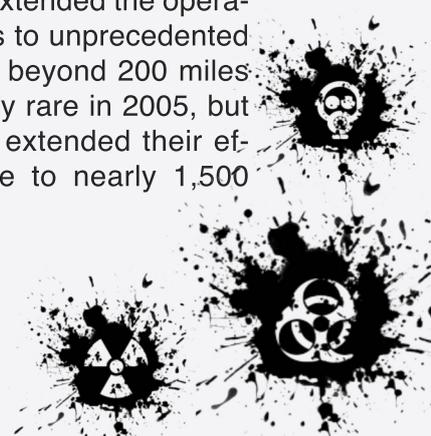
the first option needed to effectively address the pirate threat, and the public debates the need for the world's navies to do more. For these reasons, among others, many of the pirates' tactics are shifting to a new or greater focus on defeating armed responses.

To fully comprehend the ramifications of the four tactical changes mentioned earlier, it is important to first understand two new truths of the modern maritime world: (a) piracy is a profitable endeavor that its participants are willing to risk their lives (and, more often, the lives of others) to preserve; and (b) pirates are typically not radical ideologues, but profit-motivated criminals. In that context and under those circumstances, it becomes clear that pirates' responses are likely to be both indirect and asymmetrical, and can be achieved primarily by focusing their strengths on the weaknesses of counter-piracy forces.

### **Using Captured Merchant Vessels as Attack Platforms**

The first way in which pirates apply asymmetric tactics is through "dispersion." The combined maritime forces operating on counter-piracy missions in the Horn of Africa and Gulf of Aden region number approximately 30 ships at any given time. To cover the greatly expanded areas of the Indian Ocean as well, this force would have to patrol an area exceeding 20 million square miles, which would make the search akin to looking for the proverbial needle in a haystack. In short, by extending their range and operating across a much broader expanse of ocean, pirates have significantly reduced the risk of interdiction by the world's navies.

In the past 18 months alone, at least five large captured merchant vessels were used as mother ships by pirates. In all of those cases, crew members of the merchant vessels were kept aboard as hostages during the pirates' follow-on operations. Use of these commercial ships extended the operational reach of the pirates to unprecedented distances. Pirate attacks beyond 200 miles offshore were exceedingly rare in 2005, but by 2010 the pirates had extended their effective operational range to nearly 1,500 miles.



The faster and more frequent attacks in recent years – carried out over a vastly expanded operational range – have greatly reduced the risks that pirates face from counter-piracy forces, making the pirates' use of large commercial vessels a trend that is likely to continue.

### **The Use of Hostages as Human Shields**

In addition to capturing a valuable ship and its cargo, pirates have sought to use the ship's crew either for ransom or as human shields. The hostages held aboard ships, in addition to others (passengers and/or crew members) who were disembarked and held captive elsewhere, can help the pirates ward off counter-piracy or rescue operations because the pirates can threaten to immediately execute the hostages (ashore as well as afloat) if and when such operations are launched. In those circumstances, even a "successful" hostage rescue may not be viewed as a complete victory because, for every hostage rescued, other hostages held elsewhere may be killed or punished in other ways. Without diminishing in any respect the heroic efforts of those who have previously rescued captive mariners in such operations, it is now recognized by most maritime nations that the use of violence against pirates carries with it the risk of retribution against hostages ashore (or on other pirate ships) who cannot be rescued at the same time.

In 2010, there was a dramatic spike in the use of hostages as human shields during pirate operations. Large ships are not only easier to spot but also harder for relatively small bands of pirates to control in the event of a counter-piracy boarding by military forces. Largely to mitigate that risk, pirates have elected to keep hostages aboard during their own operations, thus reducing the possibility that a military rescue force would risk harming the hostages by launching an attack against the pirates. The holding of hostages also gives pirates the ability to bargain for supplies, fuel, and safe passage, even as ransom negotiations are ongoing.

Another evolution of this tactic was seen in the case of the crew of the South Korea-owned F/V Golden Wave. It was reported in

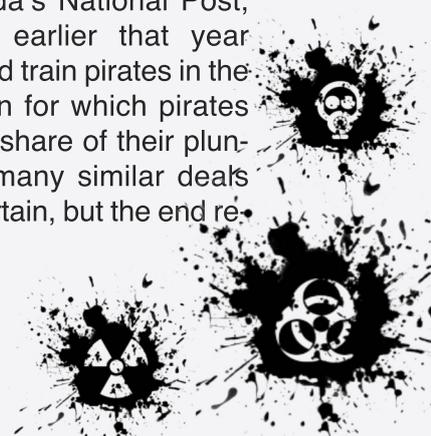
February 2011 that Somali pirates forced some of that ship's 43-member crew to participate in the hijacking and/or raiding of 17 other vessels – picked off one at a time. One Golden Wave crew member later said that the hostages were given three choices: (a) persuading the ship's owner(s) to pay a \$6 million ransom; (b) having the ship's captain beheaded; and/or (c) participating in the raids on the other ships.

The pirates' use of this tactic obviously presents yet another difficulty to counter-piracy operations, because armed security teams might very easily mistake, for pirate raiders, the hostages being forced to raid client vessels. Although the February 2011 incident was the first report of pirates using such a tactic, use of that option clearly reduces the pirates' own personal and collective risks when attacking commercial ships protected by well-armed security teams.

### **Piracy's Links to Terrorism – The Emperor's New Clothes**

Although some analysts downplay the possibility of tangible links between Somali piracy and the spread of radical Islamic terrorism in Somalia, top secret intelligence reports leaked to the press over three years ago clearly indicate that such links of convenience do exist – and are growing in magnitude. Negotiations between various pirate groups and the Somalia-based al Qaeda-affiliated al-Shabaab group are and have been commonplace. In areas such as Harardhere, on the central coast of Somalia – where al-Shabaab has, for most practical purposes, relative control of the countryside – the terrorist negotiators often demand 20 percent or more of the ransoms in exchange for allowing the pirate groups to operate freely in the offshore waters.

The pirates also benefit when al-Shabaab fighters keep government forces occupied or at bay. According to a December 2009 report by Stewart Bell in Canada's National Post, deals had been made earlier that year whereby al-Shabaab would train pirates in the use of weapons, in return for which pirates would give al-Shabaab a share of their plunder and ransoms. How many similar deals have been made is not certain, but the end re-



sult is that, willingly or not, pirate groups now contribute hundreds of thousands if not millions of dollars annually to terrorist organizations – and by doing so are not only permitted but frequently assisted by the terrorists, in various ways, in their maritime piracy operations.

Although the piracy/terrorism relationship may not yet be systemic, cooperation occurs at several different levels, and through a host of separate channels. It is known, for example, that pirate fundraisers and sponsors often share links with al-Shabaab backers. Indicators of regular negotiations between these bankrollers and al-Shabaab terrorists can be seen in operations almost anywhere in the world in which pirate operating bases and terrorist offensives overlap – which is exactly what happened in February 2011 when al-Shabaab extremists “arrested” four pirate leaders in order to “negotiate” a richer share of pirate ransoms.

The complexities of the political as well as financial relationships between the two groups suggest, moreover, that the pirate/terrorist relationship is one that neither can terminate easily. That difficult situation makes clear what many experts have long suspected – namely, that there is in fact a close working relationship, for business purposes or otherwise, between various pirate groups and al-Shabaab. That relationship is a clear strategic threat to U.S. and international interests because it represents one of the most important illicit revenue streams to the al Qaeda-affiliated terrorist network. Moreover, as the piracy/terrorism relationship grows, so does the degree of danger posed to those same U.S. and allied interests.

### **Proactive Measures Needed to Seize Initiative**

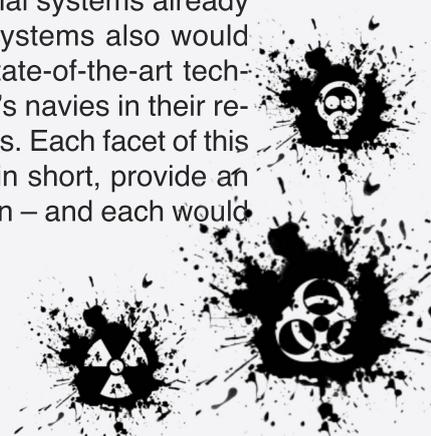
The growing piracy problem posed by Somali pirates to the world’s maritime commerce begs for a solution. Commercial shippers have searched for years for an effective, long-term, purpose-built, ship-level, self-defense capability. The possession and use of such a capability would significantly augment the protection currently offered by naval forces of several nations, which operate under different rules of engagement and with different means

at their disposal, but share a common end goal.

It is generally agreed that the key to meeting and defeating the clear and present danger posed by modern piracy would be to ensure that naval and commercial efforts to thwart pirate attacks mutually support one another. At the tactical level, this would require that ship-based anti-piracy operations be fully integrated through development and use of: (a) a cohesive intelligence capability that can communicate both with military forces and with commercial shippers; (b) ship-based defensive measures built upon a layered or “concentric” model; and (c) the application of new and/or upgraded technology to facilitate much more rapid responses during a piracy incident. The same integrated capabilities also would address the “before, during, and after” phases of counter-piracy operations: predictive analytics, deterrence and defense, ransom negotiations, and the management and use of critical-incident tools and services.

Groups such as the United Nations International Maritime Organization’s Maritime Security Council, headquartered in London, and the U.S.-based internet service Global Incident Tracker, among others, would act as the principal information dissemination centers for the collective knowledge of the shipping industry and open-source government releases, as well as specialized predictive analytical products designed to warn of specific piracy threats.

In the private sector, insurance markets would work in tandem with anti-piracy equipment manufacturers to incentivize the use of their products throughout the shipping industry, thereby not only reducing the risk to the insurers but also decreasing the number and amounts of payouts. The equipment manufacturers themselves would design and build more effective defensive systems to work in tandem with other systems across the spectrum of lethal and non-lethal systems already operational. The newer systems also would incorporate the newest state-of-the-art technologies to help the world’s navies in their responses to critical incidents. Each facet of this cooperative effort would, in short, provide an added degree of protection – and each would



complement the others in both form and function.

Like the current and ongoing evolutions in pirate tactics, the new solutions to piracy must constantly evolve to not merely overtake but actually outpace the problems threatening maritime commerce in the 21st century. To begin with, the pirates' new operational environment must be both directly and adversely affected so that evolutionary adaptations work for, rather than against, the world's counter-piracy forces and humanitarian as well as commercial interests. Cooperation between and among the world's military, commercial, and private sectors is needed now more than ever before. Such cooperation has too often been lacking in the past, but its transformation into a positive force for good also can be seen as a necessary evolution.

**Michael S. Brewer** is the CEO and Co-Founder of International Maritime Security Corporation (IMSC), a service-disabled, veteran-owned small business built upon the principle of protecting ships, their cargo, and, most importantly, their crews from pirate and terrorist threats. He has served as a Special Operations soldier in the United States Army, and has been a subject matter expert on terrorism and piracy for numerous civilian firms and government agencies over the past 13 years.

**Scott Brewer** is the President and Co-Founder of International Maritime Security Corporation as well as a lifelong blue water sailor. With service in the U.S. Army, as well as subject matter expertise on terrorism and piracy, he has been consulted by senior policy makers and industry leaders for solutions to the world's most pressing maritime security issues.

**Lawrence O'Connell, Mark Gillespie, and Brad Garrison**, all of IMSC, also contributed to the writing of this report.

## Protective Intelligence Lessons from an Ambush in Mexico

By Scott Stewart

Source: [http://www.stratfor.com/weekly/20110601-protective-intelligence-lessons-ambush-mexico?utm\\_source=SWeekly&utm\\_medium=email&utm\\_campaign=110602&utm\\_content=readmore&elq=4f7bd0a5e118411a9a56e68ffce5206d](http://www.stratfor.com/weekly/20110601-protective-intelligence-lessons-ambush-mexico?utm_source=SWeekly&utm_medium=email&utm_campaign=110602&utm_content=readmore&elq=4f7bd0a5e118411a9a56e68ffce5206d)

On the afternoon of May 27, a convoy transporting a large number of heavily armed gunmen was ambushed on Mexican Highway 15 near Ruiz, Nayarit state, on



Mexico's Pacific coast. When authorities responded they found 28 dead gunmen and another four wounded, one of whom would later die, bringing the death toll to 29. This is a significant number of dead for one incident, even in Mexico.

According to Nayarit state Attorney General Oscar Herrera Lopez, the gunmen ambushed were members of Los Zetas, a Mexican drug cartel. Herrera noted that most of the victims were from Mexico's Gulf coast, but there were also some Guatemalans mixed into the group,

including one of the wounded survivors. While Los Zetas are predominately based on the Gulf coast, they have been working to provide armed support to allied groups, such as the Cartel Pacifico Sur (CPS), a faction of the former Beltran Leyva Organization that is currently battling the Sinaloa Federation and





other cartels for control of the lucrative smuggling routes along the Pacific coast. In much the same way, Sinaloa is working with the Gulf cartel to go after Los Zetas in Mexico's northeast while protecting and expanding its home turf. If the victims in the Ruiz ambush were Zetas, then the Sinaloa Federation was likely the organization that planned and executed this very successful ambush.

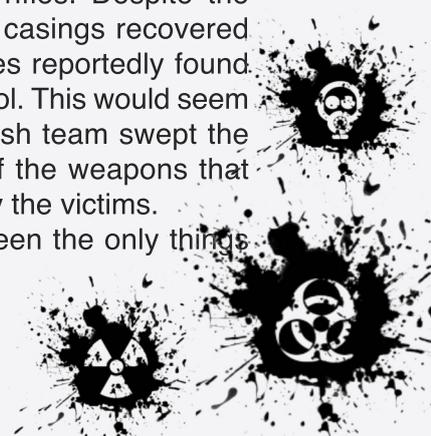
Photos from the scene show that the purported Zetas convoy consisted of several pickup trucks and sport utility vehicles (two of which were armored). The front right wheel on one of the armored vehicles, a Ford Expedition, had been completely blown off. With no evidence of a crater in the road indicating that the damage had been caused by a mine or improvised explosive device (IED), it would appear that the vehicle was struck and disabled by a well-placed shot from something like a rocket-propelled grenade (RPG) or M72 LAW rocket, both of which have been seen in cartel arsenals. Photos also show at least one heavy-duty cattle-style truck with an open cargo compartment that appears to have been used as a troop transport. Many of the victims died in the vehicles they were traveling in, including a large group in the back of the

cattle truck, indicating that they did not have time to react and dismount before being killed.

Unlike many other incidents we have examined, such as the ambush by CPS and Los Zetas against a Sinaloa Federation convoy on July 1, 2010, near Tubutama, Sonora state, the vehicles involved in this incident did not appear to bear any markings identifying them as belonging to any one cartel. In the Tubutama incident, the vehicles were all marked with large, highly visible "X"s on the front, back and side windows to denote that they were Sinaloa vehicles.

Most of the victims were wearing matching uniforms (what appear to be the current U.S. Marine Corps camouflage pattern) and black boots. Many also wore matching black ballistic vests and what appear to be U.S.-style Kevlar helmets painted black. From the photos, it appears that the victims were carrying a variety of AR-15-variant rifles. Despite the thousands of spent shell casings recovered from the scene, authorities reportedly found only six rifles and one pistol. This would seem to indicate that the ambush team swept the site and grabbed most of the weapons that may have been carried by the victims.

Guns may not have been the only things



grabbed. A convoy of this size could have been dispatched by Los Zetas and CPS on a military raid into hostile Sinaloa territory, but there is also a possibility that the gunmen were guarding a significant shipment of CPS narcotics passing through hostile territory. If that was the case, the reason for the ambush may have been not only to kill the gunmen but also to steal a large shipment, which would hurt the CPS and could be resold by Sinaloa for a substantial profit.

Whether the objective of the ambush was simply to trap and kill a Zetas military team conducting a raid or to steal a high-value load of narcotics, a look at this incident from a protective intelligence point of view provides many lessons for security professionals operating in Mexico and elsewhere.

### **Lesson One: Size Isn't Everything**

Assuming that most of the 29 dead and three wounded gunmen were Zetas, and that most of the 14 vehicles recovered at the scene also belonged to the convoy that was attacked, it would appear that the group believed it was big enough to travel without being attacked. But, as the old saying goes, pride goeth before destruction.

In an environment where drug cartels can mass dozens of gunmen and arm them with powerful weapons like machine guns, .50-caliber sniper rifles, grenades and RPGs, there is no such thing as a force that is too big to be ambushed. And that is not even accounting for ambushes involving explosives. As evidenced by events in places like Iraq and Afghanistan, even convoys of heavily armored military vehicles can be ambushed using large IEDs and smaller, sophisticated explosive devices like explosively formed projectiles.

There are people in both the private and public sectors who cling to the erroneous assumption that the mere presence of armed bodyguards provides absolute security. But this is simply not true, and such a misconception often proves deadly. Indeed, there are very few protective details in all of Mexico that employ more than two dozen agents for a motorcade movement — most are smaller and less well-equipped than the Zetas force that

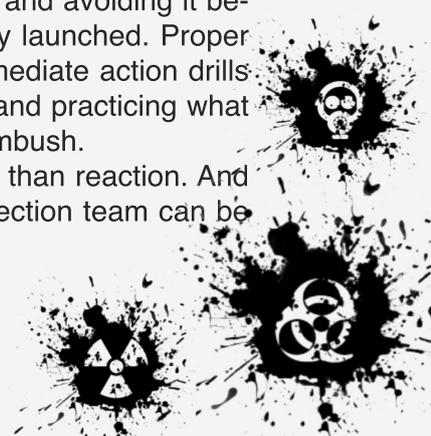
was destroyed May 27. Most protective details do not wear heavy raid vests and Kevlar helmets. This means that government and private-sector protective details in Mexico cannot depend on their size alone to protect them from attack — especially if the attackers are given free rein to conduct surveillance and plan their ambush.

In an environment where the threat is so acute, security managers must rely on more than just big men carrying guns. The real counter to such a threat is a protective detail that practices a heightened state of situational awareness and employs a robust surveillance-detection/countersurveillance program coupled with careful route and schedule analysis.

Indeed, many people, including police and executive protection personnel, either lack or fail to employ good observation skills. These skills are every bit as important as marksmanship (if not more) but are rarely taught or put into practice. Additionally, even if a protection agent observes something unusual, in many cases there is no system in place to record these observations and no efficient way to communicate them or to compare them to the observations of others. There is often no process to investigate such observations in an attempt to determine if they are indicators of something sinister.

In order to provide effective security in such a high-threat environment, routes and traveling times must be varied, surveillance must be looked for and those conducting surveillance must not be afforded the opportunity to operate at will. In many cases it is also far more prudent to maintain a low profile and fade into the background rather than utilize a high-profile protective detail that screams “I have money.” Suspicious events must be catalogued and investigated. Emphasis must also be placed on attack recognition and driver training to provide every possibility of spotting a pending attack and avoiding it before it can be successfully launched. Proper training also includes immediate action drills in the event of an attack and practicing what to do in the event of an ambush.

Action is always faster than reaction. And even a highly skilled protection team can be



defeated if the attacker gains the tactical element of surprise — especially if coupled with overwhelming firepower. If assailants are able to freely conduct surveillance and plan an attack, they can look for and exploit vulnerabilities, and this leads us to lesson two.

### Lesson Two: Armored Vehicles Are Vulnerable

Armored vehicles are no guarantee of protection in and of themselves. In fact, like the presence of armed bodyguards, the use of armored vehicles can actually lead to a false sense of security if those using them do not employ the other measures noted above.

If assailants are given the opportunity to thoroughly assess the protective security program, they will plan ways to defeat the security measures in place, such as the use of an armored vehicle. If they choose to attack a heavy target like the Los Zetas convoy, they will do so with adequate resources to overcome those security measures. If there are protective agents, the attackers will plan to neutralize them first. If there is an armored vehicle, they will find ways to defeat the armor — something easily accomplished with the RPGs, LAW rockets and .50-caliber weapons

on many armored vehicles will not do much good if the entire wheel has been blown off by an anti-tank weapon.

Armored vehicles are designed to protect occupants from an initial attack and to give them a chance to escape from the attack zone. It is important to remember that even the heaviest armored vehicles on the market do not provide a mobile safe-haven in which one can merely sit at the attack site and wait out an attack. If assailants know their target is using an armored vehicle, they will bring sufficient firepower to bear to achieve their goals. This means that if the driver freezes or allows his vehicle to somehow get trapped and does not “get off the X,” as the attack site is known in the protection business, the assailants can essentially do whatever they please.

It is also important to recognize that high-profile armored vehicles are valued by the cartels, and the types of vehicles usually armored generally tend to be the types of vehicles the cartels target for theft. This means that the vehicle you are riding in can make you a target for criminals.

While armored vehicles are valuable additions to the security toolbox, their utility is greatly reduced if they are not being operated by a properly trained driver. Good tactical driving skills, heightened situational awareness and attack recognition are the elements that permit a driver to get the vehicle off the X and to safety.

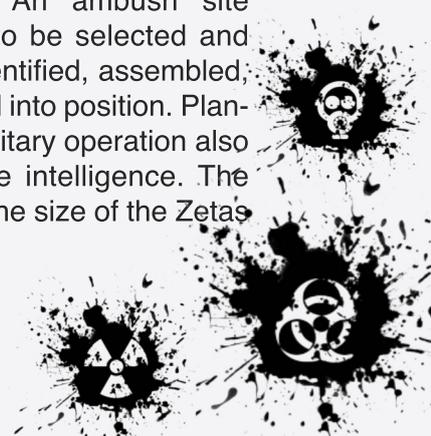
### Lesson Three: Protect Your Schedule

Even for an organization as large and sophisticated as the Sinaloa Federation, planning and executing an operation like the Ruiz ambush took considerable time and thought. An ambush site needed to be selected and

gunmen needed to be identified, assembled, armed, briefed and placed into position. Planning that type of major military operation also requires good, actionable intelligence. The planner needed to know the size of the Zetas



found in the arsenals of Mexican cartels. The photographs and video of the armored Ford Excursion that was disabled by having its front right wheel blown off in the Ruiz ambush remind us of this. Even the run-flat tires installed



convoy, the types of vehicles it had and its route and time of travel.

The fact that Los Zetas felt comfortable running that large a convoy in broad daylight demonstrates that they might have taken some precautionary measures, such as deploying scouts ahead of the convoy to spot checkpoints being maintained by Mexican authorities or a competing cartel. It is highly likely that they consulted with their compromised Mexican government sources in the area to make sure that they had the latest intelligence about the deployment of government forces along the route.

But the route of the Zetas convoy must have been betrayed in some way. This could have been due to a pattern they had established and maintained for such convoys, or perhaps even a human source inside the CPS, Los Zetas or the Mexican government. There was also an unconfirmed media report

that Los Zetas may have had a base camp near the area where the ambush occurred. If that is true, and if the Sinaloa Federation learned the location of the camp, they could have planned the ambush accordingly — just as criminals can use the known location of a target's home or office to plan an attack.

If an assailant has a protectee's schedule, it not only helps in planning an attack but it also greatly reduces the need of the assailant to conduct surveillance — and potentially expose himself to detection. For security managers, this is a reminder not only that routes and times must be varied but that schedules must be carefully protected from compromise.

While the Ruiz ambush involved cartel-on-cartel violence, security managers in the private and public sectors would be well-served to heed the lessons outlined above to help protect their personnel who find themselves in the middle of Mexico's cartel war.

## **\$1,766 for Unabomber's tools Sold: the bomb-making tools of Theodore Kaczynski**

Source:[http://www.fox10tv.com/dpps/news/strange\\_news/sold-the-bomb-making-tools-of-theodore-kaczynski-ob11-jgr\\_3835694](http://www.fox10tv.com/dpps/news/strange_news/sold-the-bomb-making-tools-of-theodore-kaczynski-ob11-jgr_3835694)

To most people, Theodore Kaczynski's bomb-making tools are meaningless relics from a life devoted to mayhem. To Janine Vaccarello, chief operating officer at the National Museum of Crime & Punishment in Washington, they're priceless.

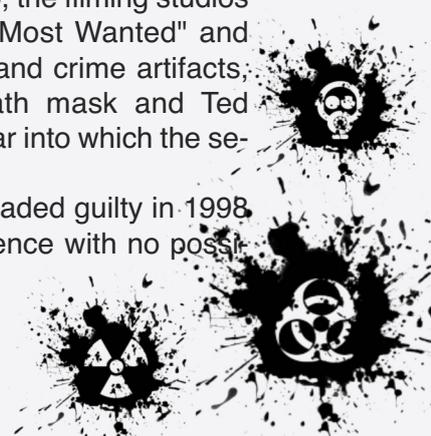
For a mere \$1,766 at an online government auction that ended Thursday, Vaccarello's museum was the winning bidder for Kaczynski's black and white passport photos, along with the wood saw and Hanson Model 1509 scale that the man known as the Unabomber used in his deadly attacks.

Carried out under court order by the U.S. Marshals Service and the General Services Administration, the auction was revenge of a sort for the victims and the families terrorized by Kaczynski's acts of violence that left three people dead and 23 injured from 1978 to 1995. In all, collectors paid more than \$200,000 for 58 items seized during the raid of Kaczynski's remote Montana cabin in 1996. The money goes to victims and their families.

In Washington, Vaccarello monitored the auction all day long. "There is something strange about describing emotions of happiness and a criminal artifact in the same sentence," Vaccarello said. "I am happy that the funds raised are going to victims and I am happy that our museum can add some artifacts regarding Kaczynski. I think items like this belong in a museum, and a crime museum is the best fit."

She bid unsuccessfully for two of Kaczynski's typewriters, as the price doubled in five minutes to \$3,600. The three pieces of Kaczynski paraphernalia that Vaccarello won will be welcome additions to the museum, which includes a crime lab, the filming studios for the show "America's Most Wanted" and hundreds of interactives and crime artifacts, like John Dillinger's death mask and Ted Bundy's VW Beetle, the car into which the serial killer lured his victims.

Now 69, Kaczynski pleaded guilty in 1998 and is serving a life sentence with no possi-





bility of parole. "He wanted his stuff back, and this way he doesn't get it back. He also hasn't paid a cent in restitution," said Susan Mosser, whose advertising executive husband became one of Kaczynski's victims, killed by a parcel bomb in 1994. Kaczynski's personal journals fetched \$40,676; the iconic hooded sweatshirt and sunglasses depicted in police sketch artist renderings brought in \$20,025, and his handwritten "manifesto" — a 35,000-word screed against modern technologies seeking to justify his crimes — sold for \$20,053. Other items included \$22,003 for the Smith Corona typewriter seized from the cabin and \$17,780 for his autobiography.

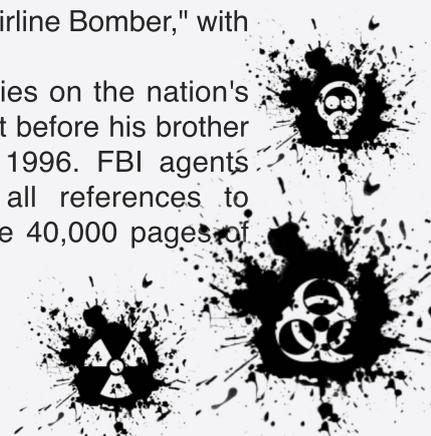
Measuring instruments and hand tools sold for \$2,603, a hatchet and small handheld knives sold for \$1,662, and a long black knife brought in \$3,060. On the auction website, those items all carried an explanatory note saying that Kaczynski's construction of Unabom explosive devices was all done by hand

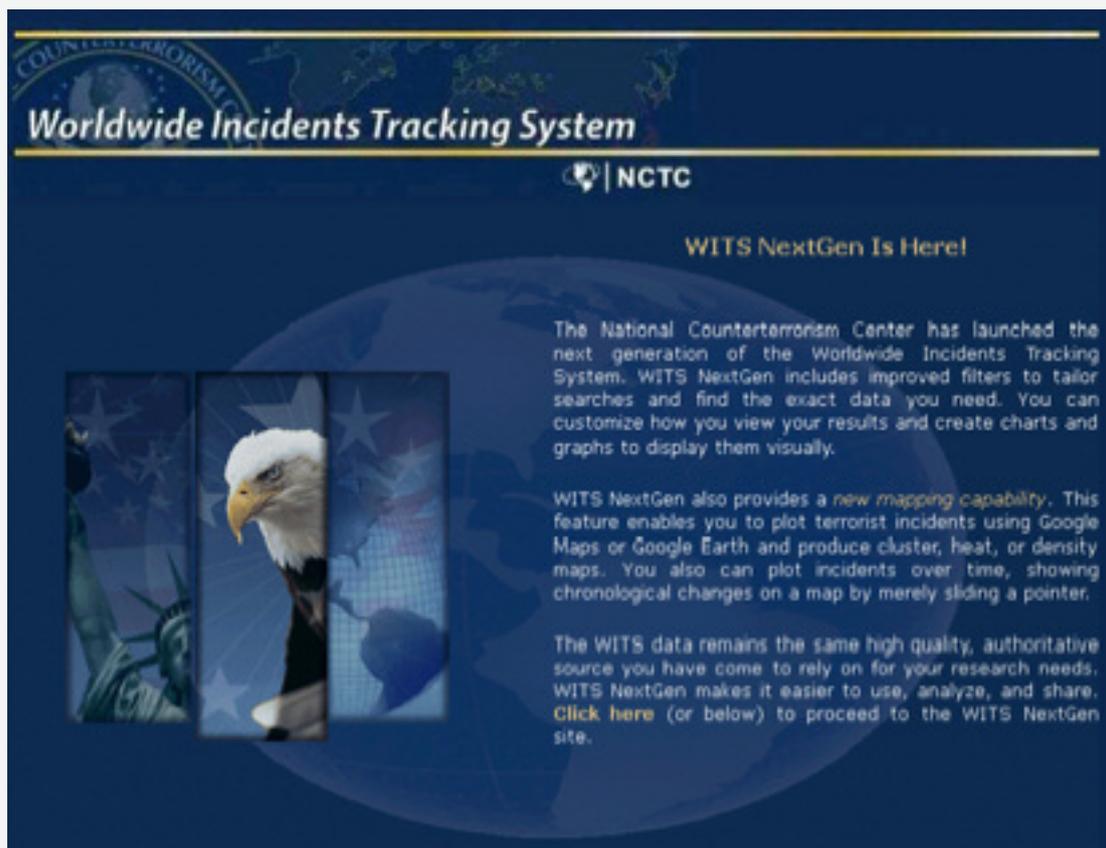
without assistance of power tools and using where possible wood and metal scraps obtained from trash.

Some victims and others opposed the auction as unseemly. They feared the publicity surrounding the event would add to Kaczynski's renown at a time when they want him to languish quietly in the supermax federal prison in Florence, Colo.

There was concern that some of the writings contained Kaczynski's gloating over the bombings between 1978 and 1995. Kaczynski, who sent bombs to university professors and planted one on a plane, got his nickname after the FBI dubbed the still-unidentified suspect the "University and Airline Bomber," with the FBI code UNABOM.

Kaczynski led authorities on the nation's longest, costliest manhunt before his brother tipped off authorities in 1996. FBI agents painstakingly censored all references to Kaczynski's victims in the 40,000 pages of





**Worldwide Incidents Tracking System**

NCTC

**WITS NextGen Is Here!**

The National Counterterrorism Center has launched the next generation of the Worldwide Incidents Tracking System. WITS NextGen includes improved filters to tailor searches and find the exact data you need. You can customize how you view your results and create charts and graphs to display them visually.

WITS NextGen also provides a new *mapping capability*. This feature enables you to plot terrorist incidents using Google Maps or Google Earth and produce cluster, heat, or density maps. You also can plot incidents over time, showing chronological changes on a map by merely sliding a pointer.

The WITS data remains the same high quality, authoritative source you have come to rely on for your research needs. WITS NextGen makes it easier to use, analyze, and share. [Click here](#) (or below) to proceed to the WITS NextGen site.

Check this site by clicking on the picture.

documents and other items seized from the cabin and put up for sale. "You find that people are all over the board in terms of how we should deal with those who are responsible," said Albert Najera, the U.S. marshal for the eastern district of California, where Kaczynski

was charged. While some victims and their families don't want to relive the past, others "are very glad we're doing this," said Najera, who has worked in law enforcement for 36 years and has dealt with thousands of victims.

## QinetiQ's OptaSense to protect India's major oil pipeline

Source: <http://www.homelandsecuritynewswire.com/qinetiqs-optasense-protect-indias-major-oil-pipeline>

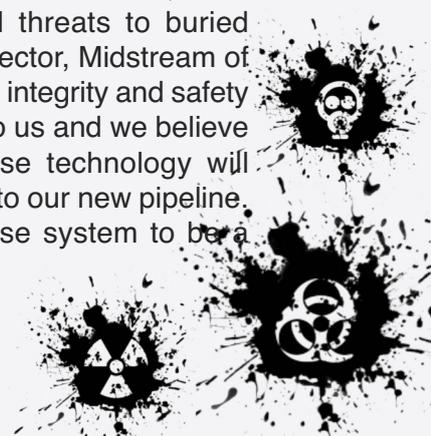
QinetiQ's OptaSense technology has been chosen as the security system for the 670 kilometer Mangala Development Pipeline (MDP) in India. The contract was awarded by Cairn India and ONGC Joint Venture through Qine-

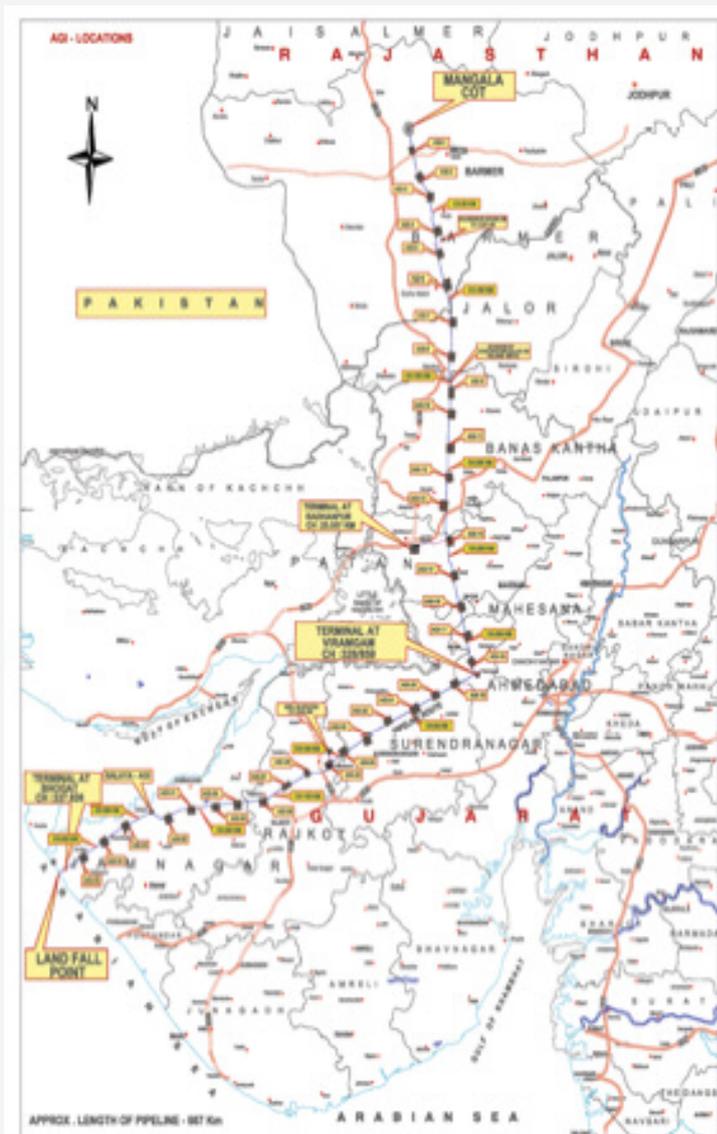


Monitoring the OptaSense system // Source: [qinetiq.com](http://qinetiq.com)

tiQ's distribution partner, Optilan, following successful field trials last year.

The contract calls for QinetiQ's OptaSense system to be installed along the entire length of the pipeline to provide security. The OptaSense system is designed to detect, classify, and locate potential threats to buried pipelines. H. P. Bhalla, director, Midstream of Cairn India, said: "Pipeline integrity and safety are of prime importance to us and we believe the addition of OptaSense technology will help us prevent incidents to our new pipeline. We believe the OptaSense system to be a





jarat. The MDP originates from Mangala Processing Terminal in Barmer, Rajasthan and passes through eight districts in the states of Rajasthan and Gujarat before it reaches its end point at the coastal location of Bhogat near Jamnagar on the western coast line of India.

Magnus McEwen-King, managing director QinetiQ OptaSense, said: "This new contract with Cairn India will extend our reach into India and coincides with a major upgrade of the system functionality. The contract builds on our existing security and monitoring solutions for other linear assets principally in the oil and gas industry. We look forward to providing valuable security and monitoring information to protect this important pipeline."

OptaSense system will be installed into existing pipeline block valve stations and will utilize the existing communications cable installed adjacent to the pipeline. The installation and commissioning of the project will be carried out by Optilan.

The contract with Cairn India follows a contract with BP to install the OptaSense system on the 1,770 km Turkey section of the BTC pipeline.

The BTC is a long crude oil pipeline from the Azeri-Chirag-Guneshli oil field in the Caspian Sea to the Mediterranean Sea. It connects Baku, the capital of Azerbaijan; Tbilisi, the capital of Georgia; and Ceyhan, a port on the south-eastern Mediterranean coast of Turkey.

cost effective way of monitoring the security of our pipeline."

The Mangala Development Pipeline (MDP) operated by Cairn India is the world's longest continuously heated and insulated pipeline. It will have access to 75 percent of India's refining capacity when it reaches Bhogat in Gu-



### Gait biometrics still walking the walk

Source: <http://www.ecs.soton.ac.uk/about/news/3750>

Research on gait biometrics at the University of Southampton has passed another landmark with the first public demonstration of the technology's ability to withstand deliberate spooking.

In a programme shown in the Discovery Channel's 'Planet Earth' series, Professor Mark Nixon of ECS-Electronics and Computer Science explained how his research on gait – the way we walk – has progressed over the years. The programme was filmed in the ECS Biometrics Tunnel [photo] – the only one of its kind in the world. The technology based in the Tunnel combines and processes data from 12 cameras to produce an individual 'signature' of a person's walk that is unique and recognizable with over 90 per cent accuracy.

In the first public test of the system, Professor Nixon and two of his PhD students, John Bustard and Darko Matovski, tried to fool the software by swapping clothes,

wearing hats and scarves, and even a motorcycle helmet [photo below]. The technology stood up to all these tests and Professor Nixon explained how this robustness has been able to help the UK police and security services. It may even be able to detect padding underneath clothing – for example, the changed body profile and walk of a suicide bomber.

"People are unique by quite a variety of different measures," said Professor Nixon, "and that rich diversity is fascinating."



### Why did my brother become an extreme Islamist?

By Robb Leech (Film-maker)

Source: <http://www.bbc.co.uk/news/uk-12900460>

Robb Leech's brother Richard/Salahuddin would only shake his hand using his "dirty hand". It was in a national newspaper that my step-brother Richard's transformation into an extreme Islamist called Salahuddin was revealed to me. The article was about "the most dangerous man in Britain", Anjem Choudary. He was the leader of the now banned

Islam4UK, an extremist Islamist group intent on implementing Sharia law across the UK. A few paragraphs down was Richard's name and that of our hometown, Weymouth, in Dorset. Apparently he was Mr Choudary's newest protege. He had chosen his new name carefully, and its irony is chillingly revealing. Salahuddin was a 12th Century Mus-



lim sultan who drove the crusading King Richard the Lionheart - a title Rich had embraced during his childhood - out of Jerusalem. Of course I could not quite believe it. Who could?

### Devastated family

Our parents married in 1992 and we grew up together in Dorset. Richard moved to London



five years ago and the family began to grow apart. But only in 2008 we spent two weeks sharing a room on a family holiday to Cyprus, playing volleyball on the beach. And now a year later he was in a national newspaper talking of his willingness to fight and die overseas for the Islamist cause.



Rich/Salahuddin and Ben, 17, often hand out Islamist leaflets in east London

Our family was devastated. No-one knew anything - it was a huge, ominous unknown. I decided there and then that I would make a documentary, as my way of tackling the situation. I suppose I remained in a state of disbelief, or denial, until the moment I met with him a few weeks later. I travelled up from

Weymouth and met him outside an east London tube station. Rich was dressed in an Islamic robe and sported a surprisingly well-developed beard. "You see all this filth, all this munkar, it will all be gone when the Sharia comes in," he remarked, scanning disdainfully around him. By "munkar" he meant sin, evil. He was disgusted by what surrounded him.

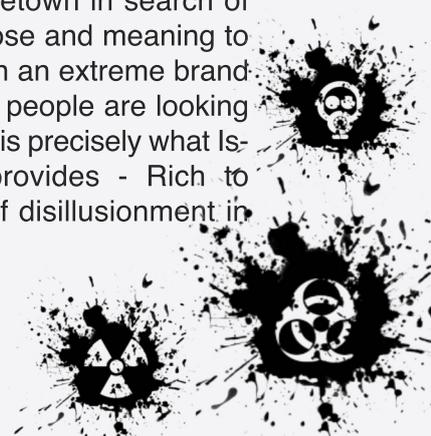
We walked back to his flat where for five hours he talked about Sharia law, hell-fire and how the majority of Muslims were misled. I left on the train home convinced he had been brainwashed. "Allah does say in the Koran not to take disbelievers as your friends and helpers, because they seek to misguide you" Rich, now known as Salahuddin. A question I repeatedly asked myself

was how had it happened and why? It is a question I still find difficult to answer. Rich has



Rich/Salahuddin protested in Barking at the return of British troops from Afghanistan

never revealed to me a single moment when he decided to take a right turn, and we both had relatively normal childhoods. Like many people, Rich left his hometown in search of something more - a purpose and meaning to life, something he found in an extreme brand of religion. Many of these people are looking for transformations, which is precisely what Islamism demands and provides - Rich to Salahuddin. The sense of disillusionment in



Western society was widely apparent among Rich and his "brothers".

Abdul Dean, another white man, who was once a drum and bass MC, became a Muslim after his sister died of a cocaine overdose aged 18, while Zacariah, once a musician and called Charles, could not relate to former US President George W Bush and the response to the 11 September attacks.

He said: "Basically what spurred me into reading about Islam was George Bush, funnily enough. He said you're either with us or not. And I thought I'm not with him." When I first began making the documentary and set out on my journey, I expected suspicion, hostility and coldness from those within Rich's group. They were, after all, brainwashed, hate-filled, crazy people, as often portrayed in the media. But to my genuine surprise, many of these people were extremely likable, personable and even funny. It would never be long though before they would be planning another demonstration, where, under the spotlight of the media, these guys would scream: "Murderers" at returning soldiers or burn poppies on Remembrance Day.

It was always a sobering reminder of actually just how far detached from normal society and just how insensitive they had become. Rich preached: "You foolish people risking your lives for these degenerate rulers, these people who conspire to misguide you into the hellfire." To begin with, when Rich had been a Muslim for just a few months, everything was new to him, as it was to me. He was living in a world of perpetual fear, not fully knowing what he was permitted to do and say and what was forbidden in accordance with strict Islamist rulings. The relationship with non-Muslims such as myself was one of these grey areas, and I found our relationship to be that of just a formality. Rich told me: "Allah does say in the Koran, not to take disbelievers as your friends and helpers, because they

seek to misguide you."

### 'Shock and hurt'

Gradually he became more relaxed and we have since enjoyed many moments of laughter together. But his extremist beliefs are always lurking just beneath the surface. There were moments of real shock and hurt, such as when Rich told me he wouldn't shake my hand because I was a "dirty kafir [unbeliever]", or when I watched as he and his "brothers" publicly burned the American flag on the anniversary of 9/11. But since the documentary, there have been moments of real hope too. I recently met Rich after he had been given the rare opportunity of a preview of my film. His feelings were mixed, but after we had finished talking and I had got back into my car, I noticed he was walking back towards me. I switched off the engine and got out. He shook my hand. "Sorry about the handshaking thing," he said. "I didn't mean to cause offence." I drove away with a smile on my face. It was comforting to know that things could change, even if only with a fleeting handshake.

### My Brother the Islamist

Part 1:

<http://www.youtube.com/watch?v=Gz5c4NtmbCA>

Part 2:

<http://www.youtube.com/watch?v=HN0Cd-hhfbtE>

Part 3:

<http://www.youtube.com/watch?v=c1obC5WLH-Q>

Part 4:

<http://www.youtube.com/watch?v=yZMEg-gAatsA>

Part 5:

<http://www.youtube.com/watch?v=ltrhxR-jTeNA&feature=related>



## Best Management Practices to Deter Piracy in the Gulf of Aden and off the Coast of Somalia

Source: <http://www.marisec.org/piracybmp.htm>

This document has been developed by ICS/ISF and other shipping industry organizations, in cooperation with military navies, and provides Best Management Practices (BMPs) to assist companies and ships avoid becoming victims of piracy in the Gulf of Aden, off the Coast of Somalia and in the Western Indian Ocean. It offers specific, practical advice for companies in order to avoid, deter, or delay pirate attacks, and it is strongly sup-

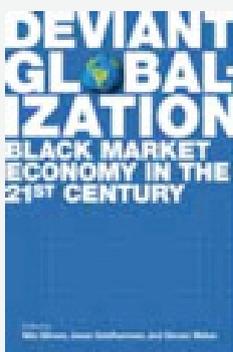
ported by a broad coalition of industry and intergovernmental organisations. The guidance is updated from time to time to reflect the evolving piracy situation in the region, and it is strongly recommended that all ships transiting the risk area comply with the BMPs.

**NOTE:** You can download full paper from "CBRNE-CT Papers" section of the Newsletter's website

## Deviant Globalization: Black Market Economy in the 21st Century

Edited by Nils Gilman, Jesse Goldhammer, and Steven Weber

Source: <http://www.continuumbooks.com/books/detail.aspx?BookId=134454&SubjectId=1023>



This collection of essays introduces the thriving illicit industries and activities within the global economy whose growth challenges traditional notions of wealth, power, and progress. Through essays contributed by leading experts and scholars, Deviant Global-

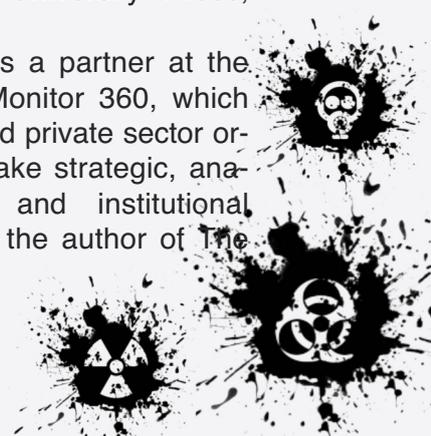
ization argues that far from being marginal, illicit activities are a fundamental part of globalization. Narcotrafficking, human trafficking, the organ trade, computer malware, transnational gangs are just as much artifacts of globalization as are CNN and McDonald's, free trade and capital mobility, accessible air travel and container shipping. In fact, almost every technology, process, and regulation that enables mainstream globalization is an enabler of deviant globalization.

This unique book explains why understanding deviant globalization as a systemic and integral part of globalization is crucial for setting up policies that will maximize the benefits of globalization and minimize its ill ef-

fects. Going beyond the usual pro/con arguments about globalization, Deviant Globalization seeks to initiate a critical debate about the choices it presents to governments, firms, supra-national organizations, and individuals. An accessible treatment of the underbelly of globalization, the book offers a systematic treatment of the difficult policy choices that it creates and describes a much more complex and symbiotic relationship between illicit and mainstream globalization.

### Authors

- Nils Gilman, is Senior Practitioner at Monitor 360, a San Francisco based group that helps organizations make sense of complex geo-strategic issues. He is the author of *Mandarins of the Future: Modernization Theory in Cold War America* (Johns Hopkins University Press, 2003).
- Jesse Goldhammer, is a partner at the Monitor Group and Monitor 360, which helps governments and private sector organizations to undertake strategic, analytic, organizational and institutional transformation. He is the author of *The*



Headless Republic: Sacrificial Violence in Modern French Thought (Cornell University Press, 2005).

- Steven Weber, is Professor, Political Science and School of Information UC Berkeley, and advisor to Monitor 360.

## Understanding crowd behavior in disasters

Source: <http://homelandsecuritynewswire.com/understanding-crowd-behavior-disasters>

Researchers have developed a new model for the behavior of pedestrians and crowds; most simulation software is often based on physics-inspired assumptions, such as repulsive forces between pedestrians; the new, psychologically based model, in contrast, assumes that pedestrians try to minimize the coverage of their vision field, while adjusting the walking speed to keep a safety distance from other people; the new approach can help in understanding and preventing tragic crowd

disasters. Hochschule Zürich (ETH Zurich) have now developed a simple cognitive model that explains how pedestrians move and how the surprising self-organization of human flows comes about.

Computer simulation models of pedestrian and crowd behavior are not new. Today's simulation software, however, is often based on physics-inspired assumptions, such as repulsive forces between pedestrians. The new, psychologically based model, in contrast, assumes that pedestrians try to minimize the coverage of their vision field, while adjusting the walking speed to keep a safety distance from other people. It is based on two heuristic rules — decisions that people make without much thinking about their behavior. If you combine these rules with the contact forces that occur in extremely high pedestrian densities, the model can also realistically depict crowd disasters.



Crowd movement shows defineable patterns // Source: [unc.edu](http://unc.edu)

disasters, developing better architectural designs and new navigation approaches in robotics

During rush hours, every train station is flooded with people on the way to or from work. The crowds stream from the tracks to the exits, the escalators, the bus stops. Despite this, collisions are rare. Sometimes one person makes way, sometimes another, but everyone gets to the destination amazingly quickly. Mehdi Moussaid and Guy Theraulaz from the Centre national de la recherche scientifique (CNRS) in Toulouse and Dirk Helbing from Eidgenössische Technische

**Hunting for gaps**  
Previously it was assumed that each obstacle has a repulsive effect on pedestrians. The new approach instead assumes that pedestrians are seeking gaps, and



that groups are perceived as a whole. In contrast to previous models, which decompose a pedestrian's environment into separate effects, the new approach describes the scene in a holistic, integrated manner. In response to a complex environment, a person may realign, slow down his or her steps or deviate from a certain direction to avoid collisions. Nevertheless, nobody realistically calculates thousands of variations to select the optimum route. That is done, for example, by some approaches in robotics, where people are sometimes seen as a homo economicus, that is, strict optimizers. It is, however, sufficient to apply simple rules to find the almost perfect path of minimum effort through the crowd, says Helbing.

### Approach simpler than expected

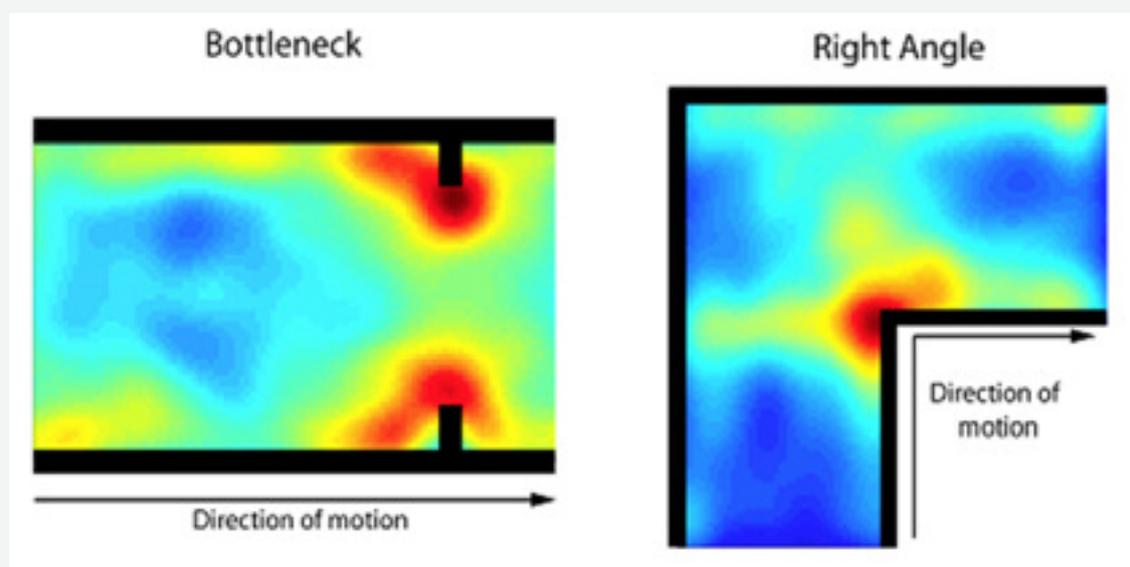
The researchers verified their model with different data sets, from the single individual up to flows of pedestrians at bottlenecks and in evacuation situations. Never before were so many different tests conducted to support a

movements of crowds. The simulations demonstrate that pedestrian flows self-organize. When pedestrians walk in opposite directions, such as in a heavily frequented railway underpass, separate lanes of uniform walking direction form — both in the model and in reality. This minimizes mutual obstructions, and makes the flow of pedestrians more efficient. It may be seen as a result of collective intelligence.

### If a crowd quake strikes

The model also shows what can happen if the pedestrian density exceeds a critical value. If people have to go shoulder to shoulder, stop-and-go waves may arise. If the density increases even further, the coordinated pattern breaks down completely, giving rise to a turbulent motion which can eventually lead to fatal crowd disasters, in which people are trampled to death.

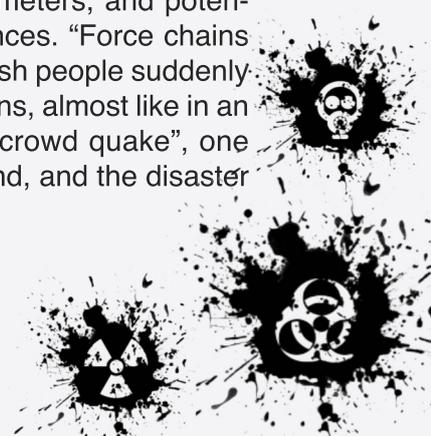
Helbing has observed that, before such a disaster, the crowd undulates, and people trapped in the crowd are pushed back and



model, says Helbing, but this was necessary since the new model represents a paradigm shift. It is a scientific breakthrough, because experts believed that a cognitive approach would be much more complicated than a physical one. "Now we experience a big surprise: The cognitive model is substantially simpler!"

With the new model, researchers can simulate the behavior of individuals as well as the

forth and, in fact, into all possible directions. The forces are transmitted from one person to another and add up, sometimes over distances of more than ten meters, and potentially with fatal consequences. "Force chains are forming, which can push people suddenly into unpredictable directions, almost like in an earthquake." In such a "crowd quake", one can easily fall to the ground, and the disaster takes its course.



### Real-time video analysis could help prevent disasters

In Duisburg, Germany, at the Love Parade in the summer of 2010, twenty-one people died in a crowd disaster, and more than 500 were injured. The new model can help to elucidate the cause of the accident and plan prevention measures for future mass events. At first, it was assumed that the disaster had happened because people fell from a narrow staircase onto the crowd. A closer analysis, however, reveals that the crowd began to undulate before the panic broke out. "A crowd quake was the cause of the disaster." Crowd management at major events needs special tools to assess such situations. For example, a real-time analysis of surveillance videos can help to save lives, as it facilitates to recognize earlier where problems are building up.

### Crisis management by the FuturICT Flagship Project

The project illustrates what is planned on a much larger scale by the FuturICT EU project, led by Helbing. Pedestrian crowds are a perfect example of a social system, in which social interactions can lead to unintended consequences. Even though normal pedestrians try to avoid harming others, crowd disasters have occurred again and again. How they happen has long been a mystery, but thanks to a better understanding of social interactions, the underlying mechanisms have been identified, and early warning signs as well. Moreover, one can take counter measures

and prevent crises, as has been successfully shown by the re-organization of the Hajj, the annual Muslim pilgrimage to Mecca.

"From this perspective, the pedestrian crowd project fits the framework of FuturICT perfectly, which aims to develop new risk management tools. "Indeed, one of the goals of the project is to prevent disasters through the use of new computer technologies and by learning to better understand the complexity of social systems," says Helbing. International workshop on crises An international workshop on Coping with Crises in Complex Socio-Economic Systems will be held in Zurich, 20-25 June 2011. Social systems typically feature crises, that is, unstable and dangerous situations that are characterized by abrupt and large-scale changes. Such disruptions are very hard to predict with any precision and even harder to control. Indeed, crises often convey an impression that key decision makers have lost control and that events unfold in an unstoppable and even catastrophic way. Examples include environmental crises, the collapse of transportation systems, as well as financial and social crises such as poverty, social conflicts, or wars. These and other issues will be addressed during the meeting.

— Read more in Mehdi Moussaïd et al., "How simple rules determine pedestrian behavior and crowd disasters," Proceedings of the National Academy of Sciences (18 April 2011) (doi: 10.1073/pnas.1016507108)PNAS

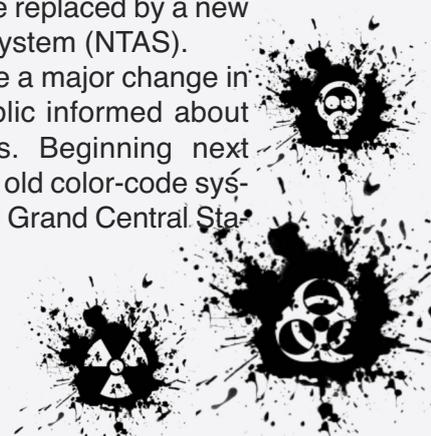
### 2002 Color-code terror alert system

Source: [http://www.upi.com/Top\\_News/US/2011/04/20/Color-coded-terror-alerts-fade-away/UPI-92461303320191/](http://www.upi.com/Top_News/US/2011/04/20/Color-coded-terror-alerts-fade-away/UPI-92461303320191/)

On 26 April a new terrorist alert system -- the National Terrorism Alert System (NTAS) -- will go into effect, replacing the color-code alert system which has been in effect since 2002; the new system will include "imminent threat" and "elevated threat" alerts; the "imminent threat" alert will warn of a credible, specific, and impending terrorist threat against the United States; in some cases, alerts will be sent directly to law enforcement or affected areas of the private sector

DHS secretary Janet Napolitano, in a speech in New York on Wednesday, announced that the color-code terror alerts system has been retired, to be replaced by a new National Terrorism Alert System (NTAS).

"I am here to announce a major change in the way we keep the public informed about potential terrorist threats. Beginning next week we will eliminate the old color-code system," Napolitano said from Grand Central Station, UPI reports.





The new National Terrorism Advisory System will issue two types of alerts:

- “Imminent threat” — along with clear language about the threat, warning of a cred-

ible, specific, and impending terrorist threat against the United States

- “Elevated threat” — when a credible terrorist threat against the United States is discovered

“The alerts will expire of their own in two weeks, unless the intelligence community recommends ... and I agree that the alert needs to be continued,” Napolitano said. The guide released Wednesday morning also notes that “In some cases, alerts will be sent directly to law enforcement or affected areas of the private sector, while in others, alerts will be issued more broadly to the American people through both official and media channels.”

The NTAS system will officially be in operation on April 26.

## Rorschach test for terrorists

Source: [http://www.wired.com/politics/security/news/2007/09/mind\\_reading?currentPage=all](http://www.wired.com/politics/security/news/2007/09/mind_reading?currentPage=all)

DHS wanted to test a Russian mind-reading technology which worked, more or less, like a Rorschach test for terrorists; developers of the method insisted that the technique was



The underlying premise of the technology is that terrorists would recognize a scrambled terrorist image like this one without even realizing it, and would be betrayed by their subconscious reaction to the picture.

sound and objective; it is not clear what happened with the research work and whether or not it has yielded any practical results; neither the agency nor the institute contracted to do the work issued follow-up information

The Department of Homeland Security’s determination to leave no stone unturned in its quest to secure the nation can sometimes lead it to some odd places.

One of the oddest is a circular, windowless room near the end of a Moscow subway line that houses the test chamber of the Psy-

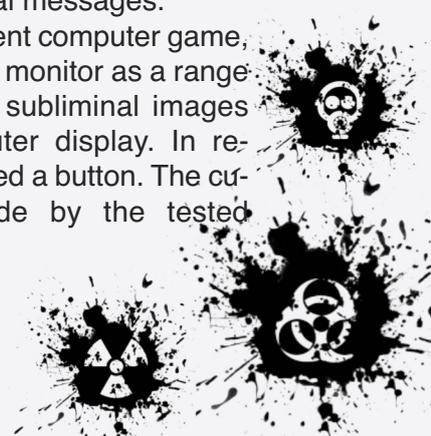
chotechnology Research Institute.

Back in September of 2007, Wired.com reported that DHS was pressing forward with testing of the mind-reading method by awarding a sole-source contract to investigate its effectiveness. In May of that year, DHS had announced plans conduct the first U.S.-government sponsored testing of SSRM Tek.

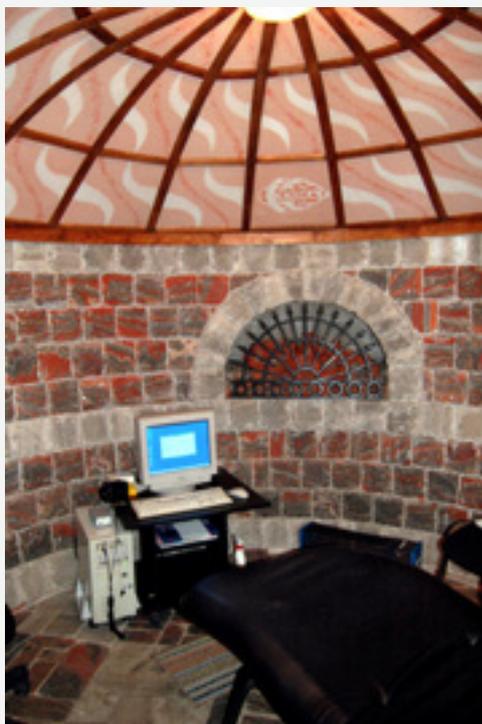
The research center, directed by the grandmotherly Elena Rusalkina, stressed the technology’s objectivity. “We worked out a program with (a psychiatric facility) to study criminals. There’s no way to falsify the results. There’s no subjectivism,” she insisted. She maintained that the system was ideal for use in airports and other travel hubs, because of its evaluative speed.

The institute is the research center for SSRM Tek, acronym for Semantic Stimuli Response Measurements Technology, a method that that reportedly tested a subject’s involuntary response to subliminal messages.

Presented as an innocent computer game, a test subject sat before a monitor as a range of apparently scrambled subliminal images flashed across a computer display. In response, the subject pressed a button. The cumulative selections made by the tested



individual would indicate whether or not there should be further investigation.



A dungeon-like room in the Psychotechnology Research Institute in Moscow is used for human testing. The institute claims its technology can read the subconscious mind and alter behavior

Rusalkina is the widow of the late Igor Smirnov, the controversial Russian scientist often portrayed in the media as having Rasputin-like persuasive powers. Smirnov has long been considered the “father” of Russian psychotronic, or mind-control weapons.

In the West, mind-control is generally considered to be safely in the realm of tin-foil-hatted conspiracy theorists, but in the now-defunct Soviet Union, it was considered to be a legitimate area of research and development.

Smirnov, who died in 2004, was consulted by the FBI during the Branch Davidian stand-off in Waco, Texas in 1993. His suggestion

was to broadcast the equivalent of pig squeals into the compound to persuade David Koresh and his followers to surrender.

The FBI was put off by his unorthodox approach to resolving the stand-off, and dismissed his suggestion. Since the initial announcement by DHS of intent to grant the evaluation contract, no word has been released concerning the evaluation, the contract, the results, or, for that matter, any other aspect of the matter. HSNW’s extensive research has been unable to uncover any information on developments related to the project



Gear for testing MindReader 2.0 software hangs on a wall at the Psychotechnology Research Institute in Moscow. Marketed in North America as SSRM Tek, the technology will soon be tested for airport screening by a U.S. company under contract to the Department of Homeland Security.

since the contract announcement. There have been no statements about SSRM from any source. Inquiring minds want to know: We wonder whether any of our readers would have knowledge of what happened with the research work the contract called for, and whether or not that work has yielded any results.



## White House Taking 'Seriously' Al Qaeda's Eying Of America's Gun Show Loophole

Source:[http://www.huffingtonpost.com/2011/06/07/white-house-taking-seriously-al-qaeda-gun-show\\_n\\_872413.html](http://www.huffingtonpost.com/2011/06/07/white-house-taking-seriously-al-qaeda-gun-show_n_872413.html)

The Obama administration says it's taking "seriously" a statement from an al Qaeda spokesman that instructs sympathizers of the terrorist group to exploit soft spots in U.S. gun laws. Last week, Adam Gadahn, an American-born spokesman for al Qaeda, released a video informing followers that, "America is absolutely awash with easily obtainable firearms" and urging them to exploit what is

what are you waiting for?"

The remarks alarmed gun control advocates, who have warned for years that lax background checks at gun shows provided the easiest of vehicles for terrorists (foreign or domestic) to get their hands on firearms. That al Qaeda's awareness of the so-called loophole was getting scant attention in the press raised concerns further.



Asked for comment on Monday by The Huffington Post, White House Press Secretary Jay Carney acknowledged that he was "not aware of [Gadahn's] statement," before adding that members of the administration were "very mindful of any threats emanating from al Qaeda and take them seriously."

commonly known as the gun show loophole. "You can go down to a gun show at the local convention center and come away with a fully automatic assault rifle without a background check and, most likely, without having to show an identification card," Gadahn added. "So

A gun rights advocate who has worked alongside the administration said that the president's team had both seen Gadahn's remarks and was aware of the concerns stemming from them.

Matt Miller, a spokesman for the Justice





Department, told The Huffington Post that the administration "supports closing the gun show loophole so that criminals and other people who are prohibited by law from purchasing guns can't acquire them."

Under current law, private sellers are not required to perform background checks at gun shows, something that federal licensed dealers are required to do. By some estimation, private sales make up 40 percent of total gun show sales. The Justice Department held discussions several months ago about various ways to apply more comprehensive screens to firearm sales. The final product of those talks is not yet known -- a growing point of frustration for gun-control advocates. But there is hope that, at the very least, some executive actions will be taken to strengthen gun protection laws.

But closing the gun show loophole is not a possible executive action. To change the current gun show system to require background checks from private sellers would take an act from the legislative branch. Obama could instruct the Bureau of Alcohol, Tobacco, Firearms and Explosives to ramp up undercover investigations of sales at gun shows, something that advocates have encouraged him to do.

Gadahn's statement has also raised concerns about the so-called 'terror gap' in cur-

rent gun policy: Gun sellers do not have power under law to stop the purchase of a firearm even if the purchaser is on the terror watch list. The Government Accountability Office has determined that more than 1,200 sales to individuals on the watch list took place between February 2004 and February 2010.

A high-profile hearing on the matter ended with Republican senators insisting they would be uncomfortable restricting firearm access to individuals wrongly put on the terror watch list. There is bipartisan legislation pending that would give the Attorney General discretion to slow down such sales, but its path for passage remains obscure.

"A terror suspect can't take a regular sized tube of Crest into the airport, much less board a plane, but they can buy an AK-47 with no questions asked," said Mark Glaze, Director of the group Mayors Against Illegal Guns. "I'm pretty sure if the NRA membership knew its leadership was fighting to protect that special privilege for terrorists, they'd object." The NRA did not immediately return request for comment Tuesday.

### [UPDATE: 2:30 pm:

Multiple readers have noted that Gadahn's statement -- that you can buy a fully automatic weapon at a gun show -- is not true. You can, in fact, get (nearly) everything but a full-automatic. That being said, one gun control advocate notes that purchasers can buy "conversion kits" to turn semi-automatics into full-automatics, and there have been documented cases of individuals doing so.]

\* This update was edited for more clarity.

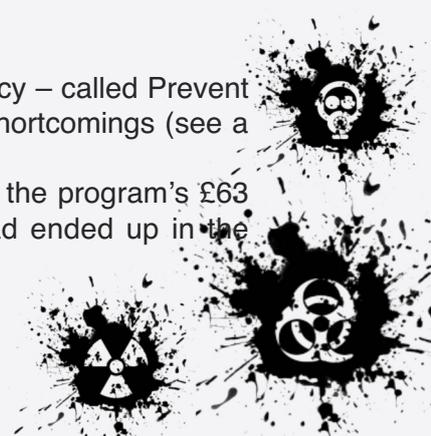
## U.K. unveils new strategy to tackle extremism

Source: <http://www.homelandsecuritynewswire.com/uk-unveils-new-strategy-tackle-extremism>

The U.K. Home Secretary Theresa May yesterday unveiled the government's updated strategy for tackling terrorism. The new approach emphasizes preventing extremism at community levels. She said than an internal

review of the existing policy -- called Prevent -- identified a series of shortcomings (see a Telegraph report here).

She said that some of the program's £63 million annual budget had ended up in the



hands of the very extremist organizations the program was supposed to monitor. Here are the highlights of the new strategy, based on reports in the BBC, the Daily Telegraph.

- The revised strategy will see £36 million spent
- The strategy targets twenty-five areas in England as priorities. They include Birmingham, Leicester, Luton, Manchester, Leeds, and some London boroughs.
- The government will withdraw support from extremist groups — even non-violent ones — and cut off funding to those opposed to what the government calls “fundamental and universal” British values.



In February, Prime Minister David Cameron said some organizations presented themselves as a gateway to the Muslim community and were showered with public money despite doing little to combat extremism.

Prevent was originally launched after the 7 July bombings in 2005 to stop the growth of home-grown terrorism. Among other things, the program sought to do it by supporting Muslim organizations which were considered moderate. May has now said that as a result of the review of government support, about twenty of the organizations that received funding over the past three years would have their cash withdrawn.

- The new strategy puts a renewed focus on the use of the Internet and says the government will consider a “national blocking list” of violent and unlawful websites. Under the plans, computers in schools, libraries, and colleges will also be barred from accessing unlawful material on the internet.

May said while any anti-terrorism strategy must target “those forms of terrorism which pose the greatest risk to our national security,” such programs “must also recognize and tackle the insidious impact of non-violent extremism, which can create an atmosphere conducive to terrorism and can popularize views which terrorists exploit.”

May made clear that when she was speaking about the “insidious impact of non-violent extremism,” she was not referring only to Muslim organizations: on Monday, she accused universities of complacency in tackling Islamist extremism.

## U.S. Africa Embassy Bombing Suspect Killed in Somalia

Source:<http://www.foxnews.com/world/2011/06/11/us-africa-embassy-bombing-suspect-reportedly-killed/>

The Al Qaeda operative behind the 1998 U.S. Embassy bombings in Kenya and Tanzania has been killed, U.S. officials tell Fox News.

Somali officials have determined that a man killed by security forces on Tuesday was Fazul Abdullah Mohammed, said a spokesman for Somalia's minister of information, Abdifatah Abdinur.

"We've compared the pictures of the body to his old pictures," he said. "They are the same. It is confirmed. He is the man and he is



dead. The man who died is Fazul Abdullah."

Mohammed, a native of the Comoros Islands, was on the FBI's most-wanted terrorist list had a \$5 million bounty on his head for allegedly planning the Aug. 7, 1998, embassy bombings. The blasts killed 224 people in Nairobi, Kenya and Dar es Salaam, Tanzania combined. Most of the dead were Kenyans. Twelve Americans also died.



"We commend the good work by the TFG. Fazul's death removes one of the terrorist group's most experienced operational planners in East Africa and has almost certainly set back operations," a senior Obama administration official told Fox News.

Abdinur said the government is planning to issue a statement confirming Mohamed's death.

Earlier in the week, a security officer described the deaths of two men in Mogadishu, one of whom is now believed to have been Mohammed. The security official, Osman Nur Diriye, said that two men riding in a luxury car pulled up to a government-run checkpoint Tuesday night. After security forces found a pistol on one of the men, gunfire was exchanged. Diriye said a Somali and a man believed to be South African died. The man identified as South African is now believed to have been Mohammed, Abdinur said.

Mohammed's death would be the third major strike against Al Qaeda in the last six weeks. Navy SEALs killed Al Qaeda leader Usama bin Laden on May 2 at his home in Pakistan. Just a month later, Ilyas Kashmiri, an Al Qaeda leader sought in the 2008 Mumbai siege and rumored to be a longshot choice to succeed bin Laden, was reportedly killed in a U.S. drone attack in Pakistan.

The strike against Kashmiri was not the direct result of intelligence material seized from the bin Laden compound, U.S. and Pakistan officials say. If the account of the killing at the security checkpoint killing is confirmed, it would appear Mohammed's death is also not the result of new intelligence.

Gen. Abdikarim Yusuf Dhagabadan, Somalia's deputy army chief, said officials at first did not know who the dead man was.

"We buried him," he said. "But soon after checking his documents, (we) exhumed his body and took his pictures and DNA. Then we had learned that he was the man wanted by the U.S. authorities.

He described the death as "similar to Usama bin Laden's."

"He was worse to us than bin Laden," he said. "It is a victory for the world. It is a victory for Somali army."

Members of Somalia's most dangerous militant group, al-Shabab, have pledged allegiance to Al Qaeda. Al-Shabab's members include veterans of the Iraq and Pakistan conflicts.

Hundreds of foreign fighters are swelling the ranks of al-Shabab militants who are trying in vain to topple the country's weak U.N.-backed government.

Somalia has been mired in violence since 1991, when the last central government collapsed.



### Intelligence agencies get an inside look at al Qaeda

Source: <http://www.homelandsecuritynewswire.com/intelligence-agencies-get-inside-look-al-qaeda>

As analysts pour through the files confiscated from Osama bin Laden's compound, U.S. intelligence agencies are gaining valuable insights into al Qaeda's operations and plans as well as how they think and operate; during the raid that killed bin Laden, Navy SEALs managed to take bin Laden's handwritten journal, five computers, ten hard drives, and 110 thumb drives; so far cyber experts and translators are "95 percent done" with decrypting and translating the confiscated information.



Bin Laden raid yielded a vast amounts of intel // Source: [wbur.org](http://wbur.org)

Testifying before the Senate Judiciary Committee last Wednesday, FBI director Robert Mueller said the documents indicate that al Qaeda is still actively seeking to attack the United States.

"We are focused on the new information about the homeland threat gained from this operation," he added. So far the documents that have been unencrypted and translated have revealed that al Qaeda actively sought to attack America's railways an oil and gas tankers, leading to stepped up security at these transportation hubs.

In addition, the CIA and other counter-terrorism agencies have increased their focus on midlevel leaders who have been revealed to be more critical to the group's operations than previously believed.

The documents also reveal that al Qaeda feels the pressure of U.S. surveillance and operatives are acutely aware that they could be

captured or killed. For instance, the data showed that two terrorists altered their travel plans to avoid becoming targets of U.S. counterterror actions.

During the raid that killed bin Laden, Navy SEALs managed to take bin Laden's handwritten journal, five computers, ten hard drives, and 110 thumb drives.

Copies of the captured data have been distributed to several federal intelligence agencies including the FBI and the Defense Intelligence Agency for analysis.

An anonymous official speaking to Time Magazine, said that cyber experts and translators are "95 percent done" with decrypting and translating the confiscated information.

Officials were careful to specify that none of the files indicated that an attack is imminent. Instead, the data has opened up what an official called "new avenues of research" into potential terrorist targets.

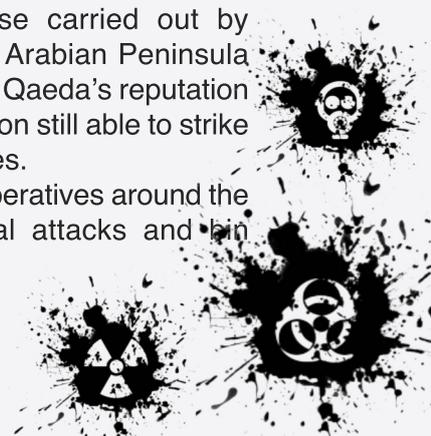
Investigators believe they may have also found information regarding bank accounts or phone numbers as they have discovered several sequences of numbers that they are trying to decode.

Officials say that correspondences between bin Laden and operatives from around the world have been particularly insightful as they offer a better glimpse at the personalities and thinking of well-known al Qaeda operatives.

In correspondence, it appears that some leaders have pushed for large mass casualty attacks like 9/11 while others have proposed smaller targets around the world to avoid increasing security measures.

Bin Laden did not specify a preference for either one, but he did seem to embrace smaller attacks like those carried out by Yemen's al Qaeda in the Arabian Peninsula as they helped promote al Qaeda's reputation as a dangerous organization still able to strike targets in the United States.

While bin Laden and operatives around the world discussed potential attacks and bin



Laden going so far as to advise followers on how best to execute strikes, there has been no evidence to suggest that any of these plans were actually carried out.

The United States is keeping its allies like Britain, Germany, and other European nations up to date on any new information gleaned from the bin Laden files.

Officials have also said that intelligence agencies have shared information with Pakistan in an effort to mend strained ties with the country following the secret raid on the bin Laden compound deep in their territory.

### 3i-MIND

3i-MIND is the pioneer in a new category of technology that leverages data, operational know-how and human intuition to dramatically advance the value of intelligence and insights. Our customers include the world's most demanding government and security organizations, urban authorities and law enforcement organizations. We apply ground-breaking technologies, machine learning, modeling and decision-support systems across our proprietary 3i-MIND Framework, making it simple to acquire real-time and comprehensive knowledge even in the most complex of environments.

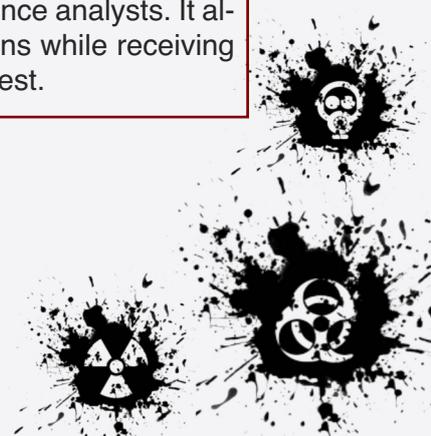


### 3i-MIND Offerings

**OpenMIND™ Software** - provides end-to-end open-source intelligence (OSINT) collection, visualization, analysis and management tools, including deep-web technologies that surface information located in social networks. Harvested in real time from today's vast amounts of open-source data, OpenMIND-generated intelligence helps law enforcement personnel manage threats, identify new leads and close investigations faster. OpenMIND is operated at your site by members of your own team.

**Worldcue® Subscription** - Operates 24x7 in our Intelligence Operations Center. 3i-MIND analysts gather, vet, analyze and relay OSINT to analysts and investigators, providing a comprehensive perspective on threats and enhancing investigations. Worldcue® provides real-time threat dashboard, alerts and domain-specific reports.

**OpenMIND™ Software + Worldcue Analysts** - Augment OpenMIND's OSINT harvesting and analysis capabilities with consultation from 3i-MIND's team of intelligence analysts. It allows law enforcement professionals to retain full control over investigations while receiving reports from 3i-MIND analysts, specifically targeted to their points of interest.



## Communicating in a Crisis: Researchers Devise New Technique to Help Rescuers Communicate After Terrorist Attacks

Source: <http://www.sciencedaily.com/releases/2011/06/110609083222.htm>

In the aftermath of the London bombings mobile phones and radios stopped working making the already tricky rescue operation even more difficult. Now experts from Kingston University have developed a solution to ensure breakdowns in communication are a thing of the past for emergency workers responding to disasters.



A team led by Dr Christos Politis has designed a sophisticated, internet-based technique to keep rescuers and their central control room in touch independently, rather than using central wireless access points or the

TETRA police radio system. The app, which can be used on an i-pad or other personal digital assistant (PDAs), will also allow emergency service workers in the United Kingdom to talk to counterparts across Europe on a secure system.

"This research looked at how we communicate in a major disaster or emergency," Dr Politis said. "When there's a major terrorist event, earthquake or forest fire, traditional phone lines and radios often can't cope and tend to jam because of the volume of calls and other multimedia traffic, like video. Using our new application, emergency service staff will be able to communicate on their own autonomous network using any available smart device without having to rely on a central communication system."

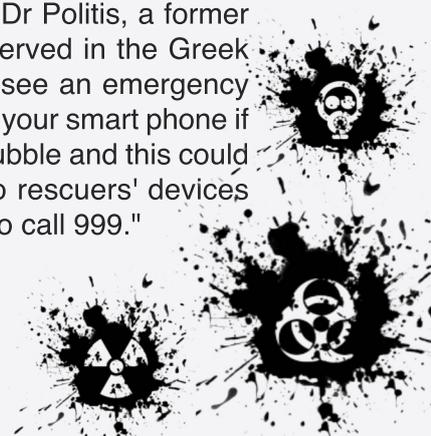
The research, funded by the European Union's PEACE project, built on existing work into mobile networks, known as MANETs. These are networks of mobile devices which

work independently and are connected by individual wireless links. Rather than connecting through an external internet network, the new technique allows rescue workers to set up an independent communication system designed for their specific purposes at the scene whatever the situation or location -- be it an underground tube station or next to a collapsed office block.

The design allows one of the mobile devices carried by a rescue worker to act as the super-node -- a bit like a mini satellite -- letting other mobile devices communicate with each other. As soon as a device passes a virtual intelligence security-check, it can start to find others in the location. Each worker can then talk or send video or data to individual workers or entire groups.

By installing our app the devices can also be used to work with new sensors being created by research partners in the PEACE project. "In the future the technology will also be able to act as sensors and pick up humidity levels, workers' heart rates, temperatures, movement and pass these on to a central operator," Dr Politis said. "These statistics can then be checked by central control workers who can advise crews if they need to get out if it is getting too hot for example." Important buildings such as government buildings and tube stations may have permanent sensors in the future.

Dr Politis and his team believe their invention offers huge potential in the aftermath of terrorist events and natural disasters. "If the application takes off then in the future it could transform the way rescuers search for survivors in an earthquake," Dr Politis, a former telecoms engineer who served in the Greek airforce, said. "We could see an emergency button you could press on your smart phone if you were trapped under rubble and this could send your co-ordinates to rescuers' devices without you even having to call 999."



The Kingston design recently won backing from emergency service experts at a European-wide conference in Portugal. The team has also liaised with the Internet Engineer Task Force (IETF), an international commu-

nity of internet professionals who work to advance internet architecture, as the application has been developed. The Kingston prototype will now be refined and could be rolled out to emergency services within two years.

## Possible Al-Qaida Hit List Targets Specific Americans

Source:<http://www.nbcnewyork.com/news/local/Possible-Al-Qaida-Hit-List-Targets-Specific-Americans.html>

An al-Qaida-linked website has posted a potential hit list of targets that include names and photos of several U.S. officials and business leaders, calling for terrorists to target these Americans in their own homes, NBC New York has learned.



Shown here is an image from the Shumukh forum, an Al Qaeda-linked website.

The FBI has sent out a new intelligence bulletin to law enforcement agencies, warning that this new web-based threat, while not a specific plot, is very detailed. The bulletin said the list includes leaders "in government, industry and media." The FBI has notified those individuals who are named.

NBC New York will not identify them or their companies. The list includes Wall Street firms, political leaders, leaders with think tanks and contractors who do business with the military. The websites contain 40 specific names, 26 of them with photos attached, and they call for posting home addresses. One jihadist called for sending package bombs to any listed address as just one possibility. An

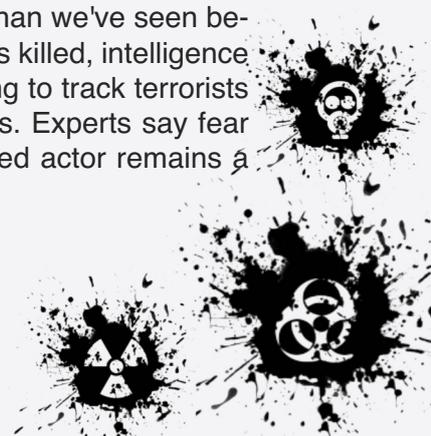
FBI spokesman declined to comment. The FBI is calling the list of names the most detailed web-based al-Qaida-linked threat since Osama bin Laden was killed. The list has also been discussed on another al-Qaida-linked web forum. The concern is a lone actor could

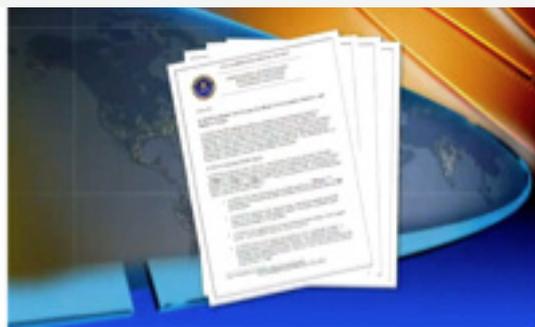
try to use the specific information for a plot. The FBI letter says the information on the overseas websites "is aspirational and it's unknown if the threat will progress beyond these discussion forums."

These specific postings follow calls by Adam Gadahn -- al-Qaida's American-born communication chief -- for individual attacks. Officials are concerned the list has been shared on numerous jihadist sites.

"What's scary about this is how specific the individual information is," said former New

York State Homeland Security Director Michael Balboni. "What you don't know is, when does aspirational become operational in cases like this, involving a possible lone actor here inspired by a website." The FBI memo stresses al-Qaida and its supporters have a history of making web based threats with little result. "Part of this is a necessary precaution. You don't want to scare people," Balboni said. "But there is much more specific, individual targeting than we've seen before." Since bin Laden was killed, intelligence officials have been working to track terrorists and monitor possible plots. Experts say fear of a homegrown or isolated actor remains a concern.





## Islamists may attack Womens' World Soccer Cup

Source: <http://vladtepesblog.com/?p=34615>



The Womens World Cup of Football being held over June and July in Germany may provoke violence by Islamic fundamentalists, German police have warned according to a report in Der Spiegel. Germany is hosting the June 26 to July 17 women's world cup.

The report said Islamist extremists regarded women playing football as epitomizing western decadence, and said there was an 'especial risk' that 'lone-wolf' militants might disrupt games. Germany's Federal Crime Office in Wiesbaden declined to confirm to the German Press Agency.





# CRISTANINI CBRN DECONTAMINATION SYSTEMS



A5009

CONFORM TO THE QUALITY SYSTEM STANDARD AQAP 2110  
and ISO 9001:2008



DEPLOYABLE CBRN  
ANALYTICAL  
LABORATORY (STANAG 4632)



DDMAS LARGE SCALE  
DECONTAMINATION SYSTEM  
HIGHLY DEPLOYABLE



DEPLOYABLE BIO LABORATORY  
CLASS III BIO SECURITY LEVEL



DDMAS LARGE SCALE  
DECONTAMINATION SYSTEM  
DUAL OPERATORS



RVCBRN TRAILER FOR CBRN  
DECONTAMINATION AND  
DETOXIFICATION



MOBILE SYSTEM FOR  
AIRCRAFT DECONTAMINATION



TSDM-TACTICAL STEAM  
DECON MODULE

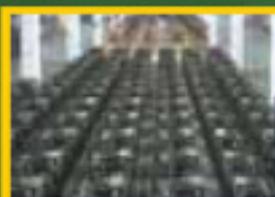
**ONLY ONE PERSON  
ONLY ONE MACHINE  
ONLY ONE PRODUCT**



SANJET C 1126 HR CBRN DUAL  
OPERATOR DECONTAMINATION  
AND DETOXIFICATION GROUP



SC34 CBRN DECONTAMINATION  
OF SENSITIVE EQUIPMENT  
AND SURFACES



CBRN PRODUCTION LINE



**CRISTANINI**

37010 RIVOLI - VERONA - ITALY

Tel. +39-045-6269400 - Fax +39-045-6269411

cristanini@cristanini.it - [www.cristanini.com](http://www.cristanini.com)

Osama bin Laden – the End

# CBRNE-TERRORISM Newsletter

Volume 38 - 2011



Japan's triple catastrophe  
CBRN security at London 2012  
UK DGBRNC  
Agroterrorism  
Forest Fires can be a **Tactic of Terrorism**  
Climate change and global **security**  
CBRN training for **Photographers and TV Crews**  
Innovative chem-bio sensor  
E. Coli 0104 – **Terror in Germany**  
Iran has secretly stocked **enriched uranium**  
for 4 nuclear bombs  
15 US nuclear reactors are **located in**  
an active seismic zone

Osama bin Laden



*Fukushima*

Carry **spice** could be used  
to detect explosives  
How IEDs work  
What if there is a **US-China**  
cyber-**war in 2020?**  
Latin **America: Terrorism issues**

[www.cbrne-terrorism-newsletter.com](http://www.cbrne-terrorism-newsletter.com)

# Osama bin Laden

## U.S. commandos kill Osama bin Laden

Source: <http://homelandsecuritynewswire.com/us-commandos-kill-osama-bin-laden>

In a brilliant special forces operation (“Neptune Spear”) deep inside Pakistan, U.S. special forces yesterday (Sunday) attacked a compound in the town of Abbottabad, killed al Qaeda founder and leader Osama bin Laden, and took his body to an American military base in Afghanistan for DNA analysis.

The operation was carried out by a team of Navy SEALs who arrived at the location by helicopters. The operation lasted less than forty minutes. One of the helicopters crashed on its way to the target owing to mechanical failure. No American soldiers were injured in the crash, and the helicopter was destroyed to prevent al Qaeda from gaining any intelli-

gence information from sifting through the wreckage.

The operation killed three adult males in addition to Bin Laden — one of the dead was Bin Laden’s son —

and a female resident of the compound who was used as a human shield by the men.

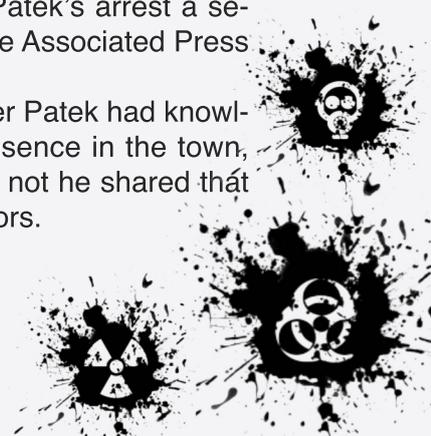
President Barack Obama, who made the announcement late Sunday evening in a live speech to the nation, revealed that information about Bin Laden’s whereabouts was discovered last August, and that in the months since, as the information was ascertained and augmented, contingency plans were developed for yesterday’s raid.

President Obama gave the go-ahead for the operation on Friday, 29 April.

The Pakistani NDTV reports that on 25 January this year, Pakistani forces arrested another wanted terrorist who was hiding in Abbottabad — Umar Patek, an al Qaeda-linked Indonesian militant who, for ten years, had been on the run from a \$1 million bounty on his head. Patek allegedly helped build the bombs used in the 2002 bombings of nightclubs in Bali that killed 202 people.

The Pakistanis kept Patek’s arrest a secret until 1 April, when the Associated Press came out with the story.

It is not known whether Patek had knowledge of Bin Laden’s presence in the town, and if he did, whether or not he shared that information with his captors.



The town of Abbottabad – a mid-size town of 81,000 residents — is situated in the Orash Valley, 150 km north of Islamabad and 200 km east of Peshawar. The city is known for its beautiful vistas (it is located at an altitude of 4,120 feet, or 1,260 meter), its pleasant weather, high standard educational institutions, and military establishments.



Bin Laden lived in a compound which was built in 2005. It was the largest estates in the town, was surrounded by security

walls 12- and 18-ft tall and topped with razor wire. U.S. intelligence noted that although it was valued at a \$1 million, it had no telephone or Internet connection. Also, unlike neighboring residences which left their trash for collection outside their gates, the residents of this compound were in the habit of burning their own trash. Another anomaly: although the residents of the compound were listed as two brother and a sister and their children, the number of people who appeared to live in the compound was much larger and their ages did not match the ages of families with kids.

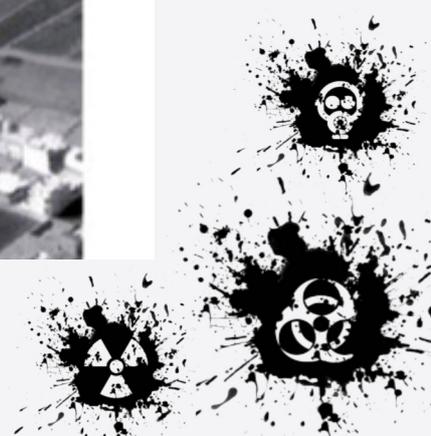


### Abbottabad Compound

Preconstruction, 2004

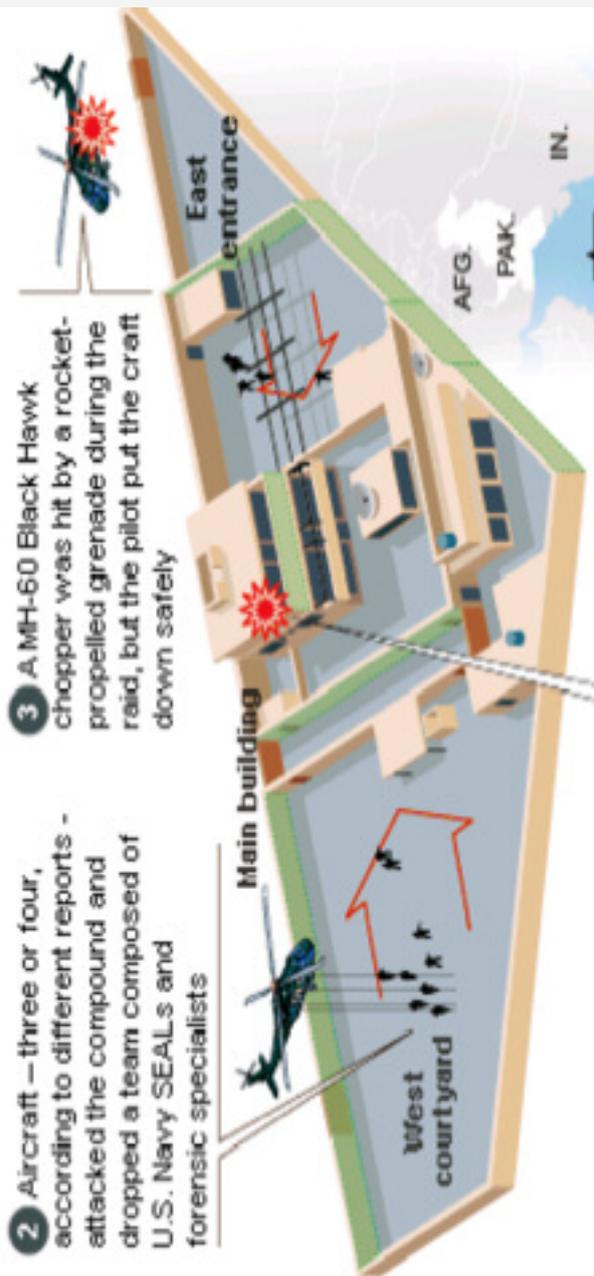
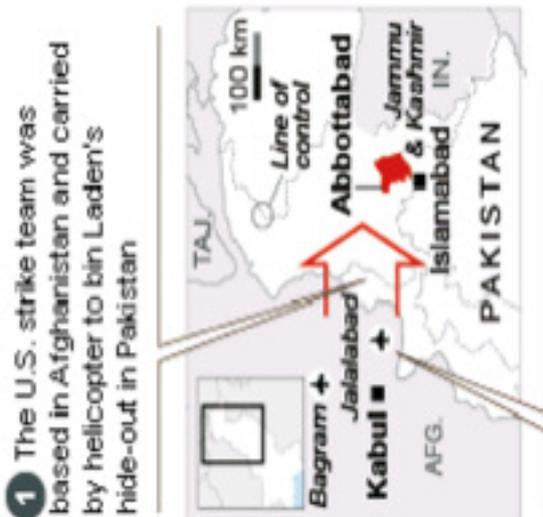


Postconstruction, 2011



### Bin Laden "kill operation"

A U.S. strike team of about 15 special forces operatives, dropped by helicopter to bin Laden's hide-out near the Pakistani capital Islamabad under the cover of night, shot the al Qaeda leader to death on Sunday.



- 1 The U.S. strike team was based in Afghanistan and carried by helicopter to bin Laden's hide-out in Pakistan
- 2 Aircraft — three or four, according to different reports - attacked the compound and dropped a team composed of U.S. Navy SEALs and forensic specialists
- 3 A MH-60 Black Hawk chopper was hit by a rocket-propelled grenade during the raid, but the pilot put the craft down safely

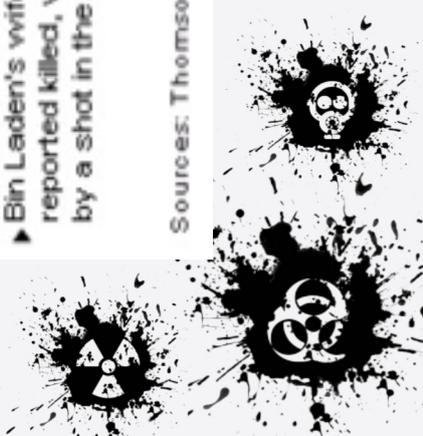
Team probably took off from Jalalabad or Bagram airbases

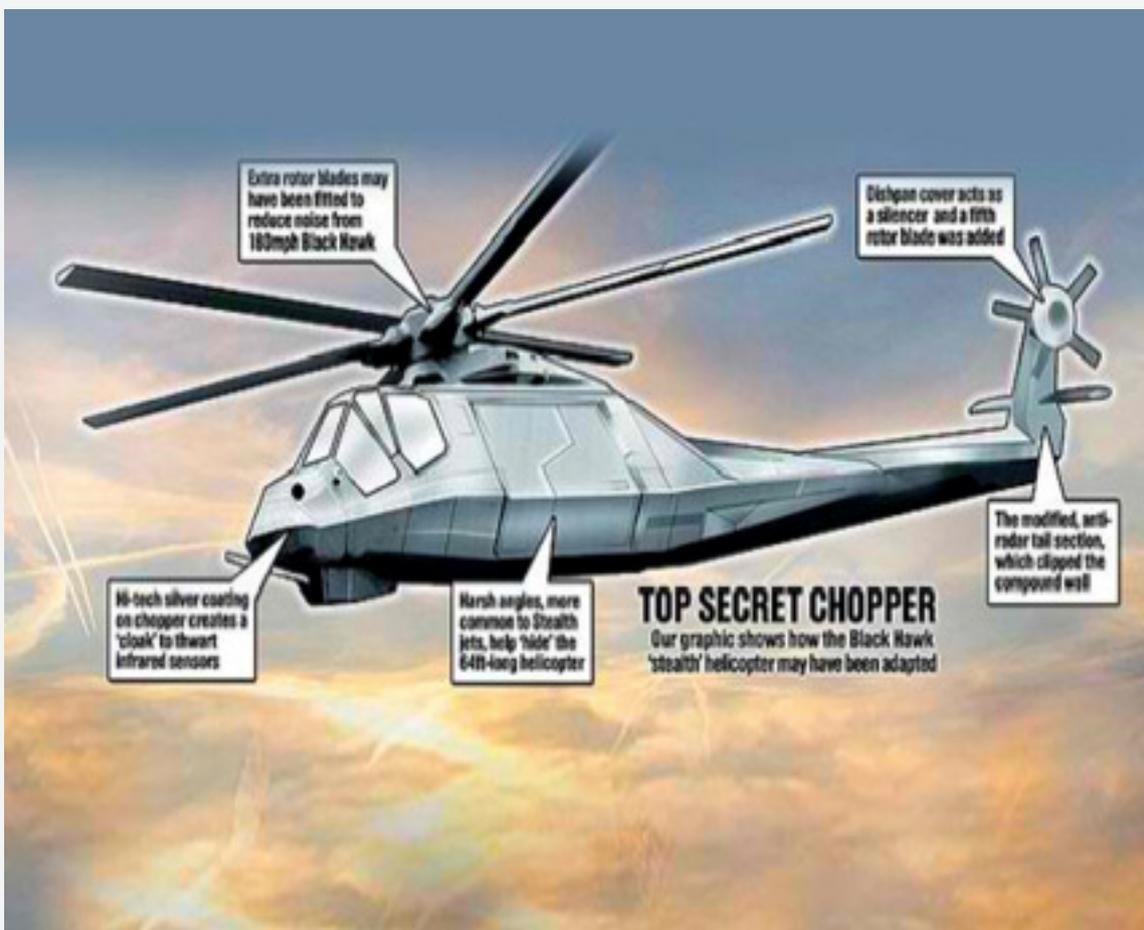
- ▶ Bin Laden was unarmed but offered "resistance"
- ▶ Bin Laden's wife, originally reported killed, was wounded by a shot in the leg

- 4 Commandos cleared the building where one family lived, while another team entered the first floor of bin Laden's house, where another family lived
- 5 On the ground floor two al Qaeda couriers and a woman were killed. The commandos then found bin Laden and his family on the second and third floor

Bin Laden's body was taken to Afghanistan and later buried at sea

Sources: Thomson Reuters, media reports, U.S. officials



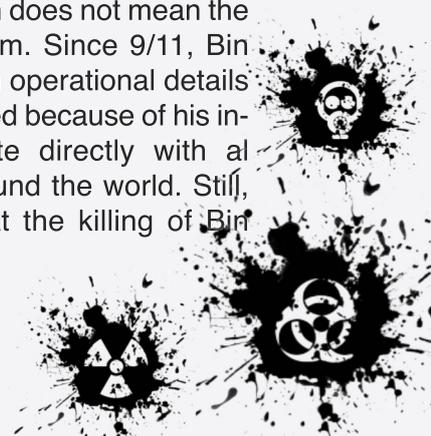




GeoEye IKONOS Sat image few hours after the attack

### Analysis

1. The killing of Bin Laden is an impressive achievement for the U.S. intelligence community and military. In the military they say that persistence overcomes resistance, and in this case, the sheer persistence of the U.S. intelligence community – and the unwavering determination of the Bush and Obama administrations – overcame years of confusing information and lack of information, and the frustration of pursuing leads which led nowhere except dead-ends and trails which grew cold.
2. The last preparations for the operation began six weeks ago. During that period, Obama's national security team met five or six times, in secrecy, to hash out the details. It is impressive – very impressive – that these preparations were kept in total
3. The fact that Bin Laden was not killed by a UAV but by a Navy Seals team means that Pakistan allowed a U.S. ground operation deep inside Pakistan. Pakistan's attitude toward cooperating with the United States in the war on terrorism has been ambivalent at best. It is not clear whether the permission to the United States to launch the ground operation signifies a change of direction on the part of the Pakistanis.
4. The killing of Bin Laden does not mean the end of Islamic terrorism. Since 9/11, Bin Laden's involvement in operational details of operations was limited because of his inability to communicate directly with al Qaeda operatives around the world. Still, there is no denial that the killing of Bin



Laden is a major psychological and symbolic blow to al Qaeda and terrorism.

The analysis can wait for another day. Today we should reflect on pledges made and promises kept. In his speech to Congress on 20 September 2001, President George W.

Bush said: "Our grief has turned to anger and anger to resolution. Whether we bring our enemies to justice or bring justice to our enemies, justice will be done."

On Sunday, the United States fulfilled that pledge, and brought justice to its enemies.

## Osama Bin Laden: The most wanted face of terrorism

Osama bin Laden, who was killed in Pakistan on Sunday (May 1st, 2011), was a son of the Saudi elite whose radical, violent campaign to recreate a seventh-century Muslim empire redefined the threat of terrorism for the 21st century.

With the attacks on the World Trade Center and the Pentagon on Sept. 11, 2001, Bin Laden was elevated to the realm of evil in the American imagination once reserved for dictators like Hitler and Stalin. He was a new national enemy, his face on wanted posters, gloating on videotape, taunting the United States and Western civilization.

"Do you want bin Laden dead?" a reporter asked President George W. Bush six days after the Sept. 11 attacks.

"I want him — I want justice," the president answered. "And there's an old poster out West, as I recall, that said, 'Wanted: Dead or Alive.'"

It took nearly a decade before that quest finally ended in Pakistan with the death of Bin Laden during a confrontation with American forces who attacked a compound where officials said he had been hiding.

The manhunt was punctuated by a December 2001 battle at an Afghan mountain redoubt called Tora Bora, near the border of Pakistan, where Bin Laden and his allies were hiding. Despite days of pounding by American bombers, Bin Laden escaped. For more than nine years afterward, he remained an elusive, shadowy figure frustratingly beyond the grasp of his pursuers and thought to be hiding somewhere in Pakistan and plotting new attacks.

Long before, he had become a hero in much of the Islamic world, as much a myth as a man — what a longtime officer of the C.I.A. called "the North Star" of global terrorism. He

had united disparate militant groups, from Egypt to Chechnya, from Yemen to the Philippines, under the banner of his Al Qaeda organization and his ideal of a borderless brotherhood of radical Islam.

Terrorism before Bin Laden was often state-sponsored, but he was a terrorist who had sponsored a state. For five years, 1996 to 2001, he paid for the protection of the Taliban, then the rulers of Afghanistan. He bought the time and the freedom to make his group, Al Qaeda — which means "the base" — a multinational enterprise to export terror around the globe.

For years after the Sept. 11 attacks, the name of Al Qaeda and the fame of Bin Laden spread like a 21st-century political plague. Groups calling themselves Al Qaeda, or acting in the name of its cause, attacked American troops in Iraq, bombed tourist spots in Bali and blew up passenger trains in Spain.



### Holy war

To this day, the precise reach of his power remains unknown: how many members Al Qaeda could truly count on, how many countries its cells had penetrated, and whether, as Bin Laden boasted, he sought to arm Al Qaeda with chemical, biological and nuclear weapons.

He waged holy war with distinctly modern methods. He sent fatwas — religious decrees — by fax and declared war on Americans in an e-mail beamed by satellite around the world. Al Qaeda members kept bomb-making



manuals on CD-ROM and communicated with encrypted memos on laptops, leading one American official to declare that Bin Laden possessed better communication technology than the United States. He railed against globalization, even as his agents in Europe and North America took advantage of a globalized world to carry out their attacks, insinuating themselves into the very Western culture he despised.

He styled himself a Muslim ascetic, a billionaire's son who gave up a life of privilege for the cause. But he was media savvy and acutely image conscious; before a CNN crew that interviewed him in 1997 was allowed to leave, his media advisers insisted on editing out unflattering shots. He summoned reporters to a cave in Afghanistan when he needed to get his message out, but like the most controlling of C.E.O.'s, he insisted on receiving written questions in advance.

His reedy voice seemed to belie the warrior image he cultivated, a man whose constant companion was a Kalashnikov rifle that he boasted he had taken from a Russian soldier he had killed. The world's most threatening terrorist, he was also known to submit to frequent dressings down by his mother. While

he built his reputation on his combat experience against Soviet troops in Afghanistan in the 1980s, even some of his supporters question whether he had actually fought.

And though he claimed to follow the purest form of Islam, many scholars insisted that he was glossing over the faith's edicts against killing innocents and civilians. Islam draws boundaries on where and why holy war can be waged; Bin Laden declared the entire world fair territory.

Yet it was the United States, Bin Laden insisted, that was guilty of a double standard.

"It wants to occupy our countries, steal our resources, impose agents on us to rule us and then wants us to agree to all this," he told CNN in the 1997 interview. "If we refuse to do so, it says we are terrorists. When Palestinian children throw stones against the Israeli occupation, the U.S. says they are terrorists. Whereas when Israel bombed the United Nations building in Lebanon while it was full of children and women, the U.S. stopped any plan to condemn Israel. At the same time that they condemn any Muslim who calls for his rights, they receive the top official of the Irish Republican Army at the White House as a political leader. Wherever we look, we find the U.S. as the leader of terrorism and crime in the world."

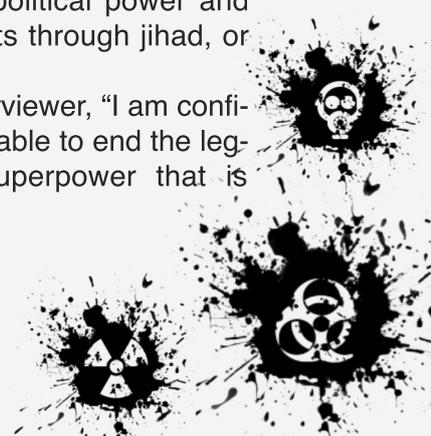
### The turning point

For Bin Laden, as for the United States, the turning point came in 1989, with the defeat of the Soviets in Afghanistan.

For the United States, which had supported the Afghan resistance with billions of dollars in arms and ammunition, that defeat marked the beginning of the end of the cold war and the birth of a new world order.

Bin Laden, who had supported the resistance with money, construction equipment and housing, saw the retreat of the Soviets as an affirmation of Muslim power and an opportunity to recreate Islamic political power and topple infidel governments through jihad, or holy war.

He declared to an interviewer, "I am confident that Muslims will be able to end the legend of the so-called superpower that is America."



In its place, he built his own legend, modeling himself after the Prophet Muhammad, who in the seventh century led the Muslim people to rout the infidels, or nonbelievers, from North Africa and the Middle East. As the Koran had been revealed to Muhammad amid intense persecution, Bin Laden saw his own expulsions during the 1990s — from Saudi Arabia and then Sudan — as affirmation of himself as a chosen one.

In his vision, he would be the “emir,” or prince, in a restoration of the khalifa, a political empire extending from Afghanistan across the globe. “These countries belong to Islam,” he told the same interviewer in 1998, “not the rulers.”



Al Qaeda became the infrastructure for his dream. Under it, Bin Laden created a web of businesses — some legitimate, some less so — to obtain and move the weapons, chemicals and money he needed. He created training camps for his foot soldiers, a media office to spread his word, even “shuras,” or councils, to approve his military plans and his fatwas.

Through the 90s, Al Qaeda evolved into a far-flung and loosely connected network of symbiotic relationships: Bin Laden gave affiliated terrorist groups money, training and expertise; they gave him operational cover and a furthering of his cause. Perhaps the most important of those alliances was with the Taliban, who rose to power in Afghanistan largely on the strength of Bin Laden’s aid, and in turn provided him refuge and a launching pad for holy war.

Long before Sept. 11, though the evidentiary trails were often thin, American officials considered Bin Laden at least in part responsible for the killing of American soldiers in So-

malia and in Saudi Arabia; the first attack on the World Trade Center, in 1993; the bombing of the Khobar Towers in Saudi Arabia; and a foiled plot to hijack a dozen jets, crash a plane into C.I.A. headquarters and kill President Bill Clinton.

In 1996, the officials described Bin Laden as “one of the most significant financial sponsors of Islamic extremism in the world.” But he was thought at the time to be primarily a financier of terrorism, not someone capable of orchestrating international terrorist plots. Yet when the United States put out a list of the most wanted terrorists in 1997, neither Bin Laden nor Al Qaeda was on it.

Bin Laden, however, demanded to be noticed. In February 1998, he declared it the duty of every Muslim to “kill Americans wherever they are found.” After the bombings of two American Embassies in East Africa in August 1998, President Clinton declared Bin Laden “Public Enemy No. 1.”

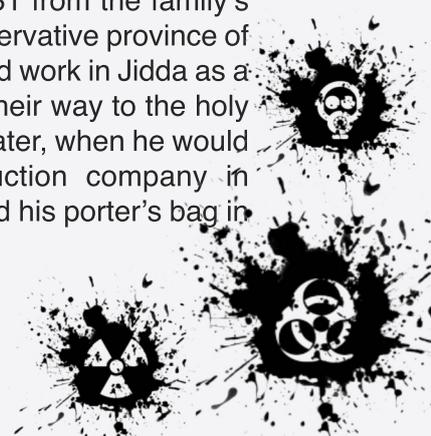
The C.I.A. spent much of the next three years hunting Bin Laden. The goal was to capture him with recruited Afghan agents or to kill him with a precision-guided missile, according to the 2004 report of the 9/11 commission and the memoirs of George J. Tenet, director of Central Intelligence from July 1997 to July 2004.

The intelligence was never good enough to pull the trigger. By the summer of 2001, the C.I.A. was convinced that Al Qaeda was on the verge of a spectacular attack. But no one knew where or when it would come.

### The early life

By accounts of people close to the family, Osama bin Muhammad bin Awad bin Laden was born in 1957, the seventh son and 17th child among 50 or more of his father’s children.

His father, Muhammad bin Awad bin Laden, had emigrated to what would soon become Saudi Arabia in 1931 from the family’s ancestral village in a conservative province of Southern Yemen. He found work in Jidda as a porter to the pilgrims on their way to the holy city of Mecca, and years later, when he would own the largest construction company in Saudi Arabia, he displayed his porter’s bag in





the main reception room of his palace as a reminder of his humble origins.

According to family friends, the Bin Laden family's rise began with a risk — when the father offered to build a palace for King Saud in the 1950s for far less than the lowest bid. By the 1960s he had ingratiated himself so well with the Saudi royal family that King Faisal decreed that all construction projects be awarded to the Bin Laden group. When the Aksa Mosque in Jerusalem was set on fire by a deranged tourist in 1969, the senior Bin Laden was chosen to rebuild it. Soon afterward, he was chosen to refurbish the mosques at Mecca and Medina as well. In interviews years later, Osama bin Laden would recall proudly that his father had sometimes prayed in all three holy places in one day.

His father was a devout Muslim who welcomed pilgrims and clergy into his home. He required all his children to work for the family company, meaning that Osama spent summers working on road projects. The elder Bin Laden died in a plane crash when Osama was 10. The siblings each inherited millions — the precise amount was a matter of some debate — and led a life of near-royalty. Osama — the name means “young lion” — grew up playing with Saudi princes and had his own stable of horses by age 15.

But some people close to the family paint a portrait of Bin Laden as a misfit. His mother, the last of his father's four wives, was from Syria, the only one of the wives not from Saudi Arabia. Bin Laden senior had met her on a vacation, and Osama was their only child. Within the family, she was said to be known as “the slave” and Osama, “the slave child.”

Within the Saudi elite, it was rare to have both parents born outside the kingdom. In a

profile of Osama bin Laden in *The New Yorker*, Mary Anne Weaver quoted a family friend who suggested that he had felt alienated in a culture that so obsessed over lineage, saying: “It must have been difficult for him, Osama was almost a double outsider. His paternal roots are in Yemen, and within the family, his mother was a double outsider as well — she was neither Saudi nor Yemeni but Syrian.”

According to one of his brothers, Osama was the only one of the Bin Laden children who never traveled abroad to study. A biography of Bin Laden, provided to the PBS television program “Frontline” by an unidentified family friend, asserted that Bin Laden never traveled outside the Middle East.

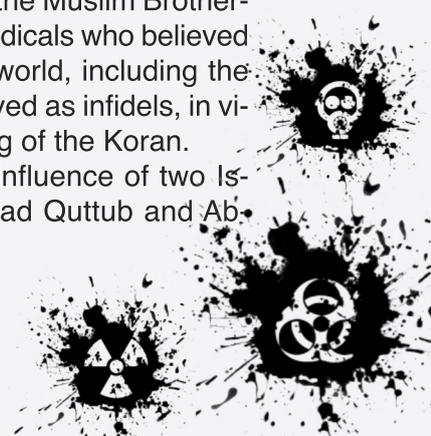
That lack of exposure to Western culture would prove a crucial distinction; the other siblings went on to lead lives that would not be unfamiliar to most Americans. They took over the family business, estimated to be worth billion, distributing Snapple drinks, Volkswagen cars and Disney products across the Middle East. On Sept. 11, 2001, several Bin Laden siblings were living in the United States.

Bin Laden had been educated — and, indeed, steeped, as many Saudi children are — in Wahhabism, the puritanical, ardently anti-Western strain of Islam. Even years later, he so despised the Saudi ruling family's coziness with Western nations that he refused to refer to Saudi Arabia by its modern name, instead calling it “the Country of the Two Holy Places.”

Newspapers have quoted anonymous sources — particularly, an unidentified Lebanese barber — about a wild period of drinking and womanizing in Bin Laden's life. But by most accounts he was devout and quiet, marrying a relative, the first of his four wives, at age 17.

Soon afterward, he began earning a degree at King Abdul-Aziz University in Jidda. It was there that he shaped his future militancy. He became involved with the Muslim Brotherhood, a group of Islamic radicals who believed that much of the Muslim world, including the leaders of Saudi Arabia, lived as infidels, in violation of the true meaning of the Koran.

And he fell under the influence of two Islamic scholars: Muhammad Quttub and Ab-





dullah Azzam, whose ideas would become the underpinnings for Al Qaeda. Mr. Azzam became a mentor to the young Bin Laden. Jihad was the responsibility of all Muslims, he taught, until the lands once held by Islam were reclaimed. His motto: "Jihad and the rifle alone: no negotiations, no conferences and no dialogue."

The Middle East was becoming increasingly unsettled in 1979, when Bin Laden was at the university. In Iran, Shiite Muslims mounted an Islamic revolution that overthrew the shah and began to make the United States a target. Egypt and Israel signed a peace treaty. And as the year ended, Soviet troops occupied Afghanistan.

Bin Laden arrived in Pakistan on the border of Afghanistan within two weeks of the occupation. He said later that he had been asked to go by Saudi officials, who were eager to support the resistance movement. In his book "Taliban," the Pakistani journalist Ahmed Rashid said that the Saudis had originally hoped that a member of the royal family might serve as an inspirational leader in Afghanistan but that they settled on Bin Laden as the next closest thing when no princes volunteered.

He traveled like a visiting diplomat more than a soldier, meeting with leaders and observing the refugees coming into Peshawar, Pakistan. As the family friend says, it "was an

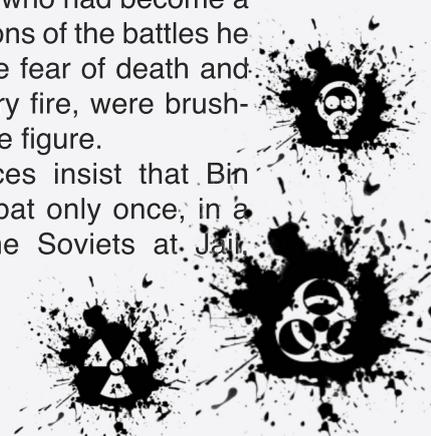
exploratory rather than an action trip." He would return twice a year for the next few years, in between finishing his degree and lobbying family members to support the Afghan mujahedeen.

Bin Laden began traveling beyond the border into Afghanistan in 1982, bringing with him construction machinery and recruits. In 1984, he and Mr. Azzam began setting up guest houses in Peshawar, which served as the first stop for holy warriors on their way to Afghanistan. With the money they had raised in Saudi Arabia, they established the Office of Services, which branched out across the world to recruit young jihadists.

The men came to be known as the Afghan Arabs, though they came from all over the world, and their numbers were estimated as high as 20,000. By 1986, Bin Laden had begun setting up training camps for them as well, and was paying roughly \$25,000 a month to subsidize them.

To young would-be recruits across the Arab world, Bin Laden's was an attractive story: the rich young man who had become a warrior. His own descriptions of the battles he had seen, how he lost the fear of death and slept in the face of artillery fire, were brushstrokes of an almost divine figure.

But intelligence sources insist that Bin Laden actually saw combat only once, in a weeklong barrage by the Soviets at Jalal



where the Arab Afghans had dug themselves into caves using Bin Laden's construction equipment.

"Afghanistan, the jihad, was one terrific photo op for a lot of people," Milton Bearden, the C.I.A. officer who described Bin Laden as "the North Star," said in an interview on "Frontline," adding, "There's a lot of fiction in there."

Still, Jaji became a kind of touchstone in the Bin Laden myth. Stories sent back from the battle to Arab newspaper readers, and photographs of Bin Laden in combat gear, burnished his image.

The flood of young men following him to Afghanistan prompted the founding of Al Qaeda. The genesis was essentially bureaucratic; Bin Laden wanted a way to track the men so he could tell their families what had happened to them. The documentation Al Qaeda provided became a primitive database of young jihadists.

Afghanistan also brought Bin Laden into contact with leaders of other militant Islamic groups, including Ayman al-Zawahri, the bespectacled doctor who would later appear at Bin Laden's side in televised messages from the caves of Afghanistan. Ultimately Dr. Zawahri's group, Egyptian Jihad, and others would merge with Al Qaeda, making it an umbrella for various terrorist groups.

### The movement

Through the looking glass of Sept. 11, it seemed ironic that the Americans and Osama bin Laden had fought on the same side against the Soviets in Afghanistan — as if the Americans had somehow created the Bin Laden monster by providing arms and cash to the Arabs. The complex at Tora Bora where Al Qaeda members hid had been created with the help of the C.I.A. as a base for the Afghans fighting the Soviets.

Bin Laden himself described the fight in Afghanistan this way: "There

I received volunteers who came from the Saudi kingdom and from all over the Arab and Muslim countries. I set up my first camp where these volunteers were trained by Pakistani and American officers. The weapons were supplied by the Americans, the money by the Saudis."

In truth, however, the American contact was not directly with Bin Laden; both worked through the middlemen of the Pakistani intelligence service.

In the revisionism of the Bin Laden myth, his defenders would later say that he had not worked with the Americans but that he had only tolerated them as a means to his end. As proof, they insisted he had made anti-American statements as early as 1980.

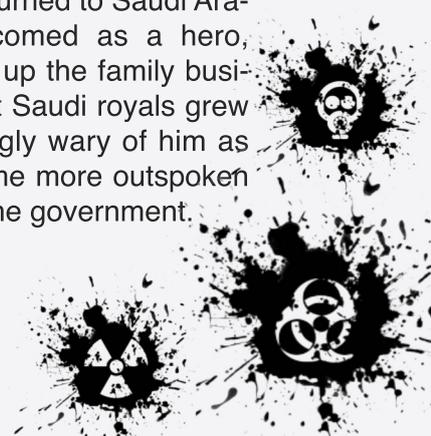
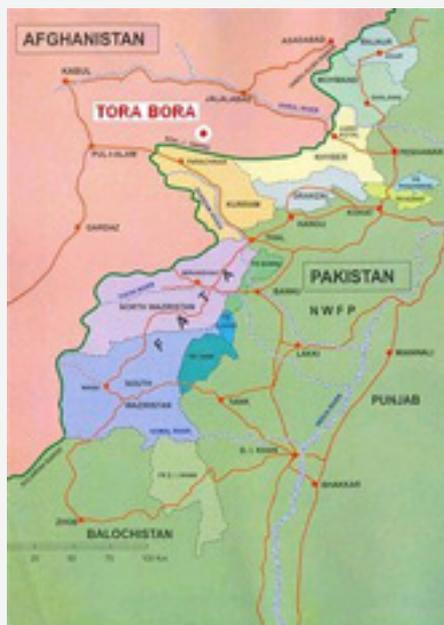
Bin Laden would say in retrospect that he was always aware who his enemies were.

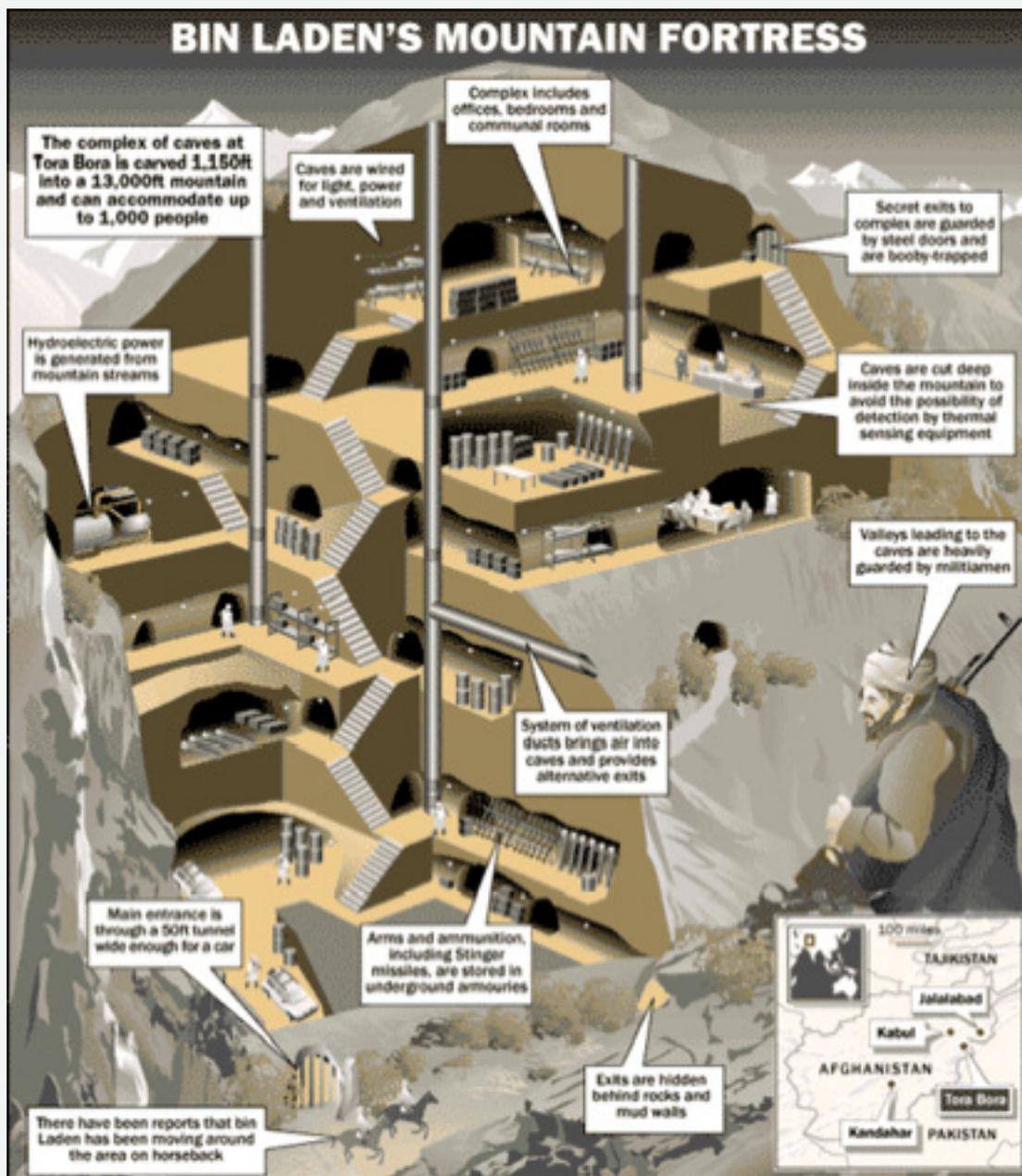
"For us, the idea was not to get involved more than necessary in the fight against the Russians, which was the business of the Americans, but rather to show our solidarity with our Islamist brothers," he told a French journalist in 1995. "I discovered that it was not enough to fight in Afghanistan, but that we had to fight on all fronts against Communism or Western oppression. The urgent thing was Communism, but the next target was America."

Afghanistan had infused the movement with new confidence.

"Most of what we benefited from was that the myth of the superpower was destroyed not only in my mind but also in the minds of all Muslims," Bin Laden later told an interviewer. "Slumber and fatigue vanished, and so was the terror which the U.S. would use in its media by attributing itself superpower status, or which the Soviet Union used by attributing itself as a superpower."

He returned to Saudi Arabia, welcomed as a hero, and took up the family business. But Saudi royals grew increasingly wary of him as he became more outspoken against the government.





The breaking point — for Bin Laden and for the Saudis — came when Iraq invaded Kuwait in August 1990. Bin Laden volunteered to the Saudis that the men and equipment he had used in Afghanistan could defend the kingdom. He was “shocked,” a family friend said, to learn that the Americans — the enemy, in his mind — would defend it instead. To him, it was the height of American arrogance.

The United States, he told an interviewer later, “has started to look at itself as a master of this world and established what it calls the new world order.”

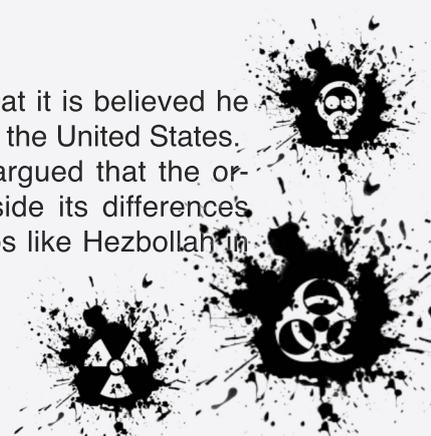
The Saudi government restricted him to Jidda, fearing that his outspokenness would

offend the Americans. Bin Laden fled to Sudan, which was offering itself as a sort of haven for terrorists, and there he began setting up legitimate businesses that would help finance Al Qaeda. He also built his reserves, in 1992, paying for about 500 mujahedeen who had been expelled from Pakistan to come work for him.

### The terrorism

It was during that time that it is believed he honed his resolve against the United States.

Within Al Qaeda, he argued that the organization should put aside its differences with Shiite terrorist groups like Hezbollah in



Lebanon, the better to concentrate on the common enemy: the United States. He called for attacks against American forces in the Saudi peninsula and in the Horn of Africa.

On Dec. 29, 1992, a bomb exploded in a hotel in Aden, Yemen, where American troops had been staying while on their way to Somalia. The troops had already left, and the bomb killed two Austrian tourists. American intelligence officials later came to believe that that was the first Bin Laden attack.



On Feb. 26, 1993, a bomb exploded in a truck driven into the underground garage at the World Trade Center, killing six people. Bin Laden later praised Ramzi Yousef, who was convicted of the bombing. In October of that year in Somalia, 18 American troops were killed — some of their bodies dragged through the streets — while on a peacekeeping mission; Bin Laden was almost giddy about the deaths.

“After leaving Afghanistan, the Muslim fighters headed for Somalia and prepared for a long battle, thinking that the Americans were “like the Russians,” he told an interviewer.

“The youth were surprised at the low morale of the American soldiers and realized more than before that the American soldier was a paper tiger and after a few blows ran in defeat,” he said. “And America forgot all the hoopla and media propaganda about being the world leader and the leader of the new world order, and after a few blows, they forgot about this title and left, dragging their corpses and their shameful defeat.”

By 1994, Bin Laden had established new training camps in Sudan, but he became a man without a country. The Saudi government froze his assets and revoked his citizenship. His family, which had become rich on its relations to the royals, denounced him publicly after he was caught smuggling weapons from Yemen.

This only seemed to make him more zealous. He sent an open letter to King Fahd, out-

lining the sins of the Saudi government and calling for a campaign of guerrilla attacks to drive Americans from Saudi Arabia. Three months later, in November 1995, a truck bomb exploded at a Saudi National Guard training center operated by the United States in Riyadh, killing seven people. That year, Belgian investigators found a kind of how-to manual for terrorists on a CD-ROM. The preface dedicated it to Bin Laden, the hero of the holy war.

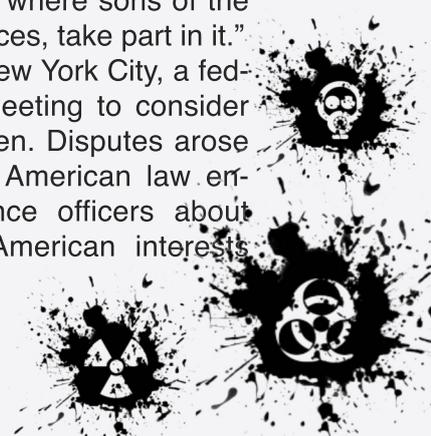
The next May, when the men accused of the Riyadh bombing were beheaded in Riyadh’s main square, they were forced to read a confession in which they acknowledged the connection to Bin Laden. The next month, June 1996, a truck bomb destroyed Khobar Towers, an American military residence in Dhahran. It killed 19 soldiers.

Bin Laden fled to Afghanistan that summer after Sudan expelled him under pressure from the Americans and Saudis, and he forged an alliance with Mullah Muhammad Omar, the leader of the Taliban. In August 1996, from the Afghan mountain stronghold of Tora Bora, Bin Laden issued his “Declaration of War Against the Americans Who Occupy the Land of the Two Holy Mosques.”

“Muslims burn with anger at America,” it read. The presence of American forces in the Persian Gulf states “will provoke the people of the country and induces aggression on their religion, feelings, and prides and pushes them to take up armed struggle against the invaders occupying the land.”

The imbalance of power between American forces and Muslim forces demanded a new kind of fighting, he wrote, “in other words, to initiate a guerrilla war, where sons of the nation, not the military forces, take part in it.”

That same month in New York City, a federal grand jury began meeting to consider charges against Bin Laden. Disputes arose among prosecutors and American law enforcement and intelligence officers about which attacks against American interests





could truly be attributed to Bin Laden — whether in fact he had, as an indictment eventually charged, trained and paid the men who killed the Americans in Somalia.

His foot soldiers, in testimony, offered differing pictures of Bin Laden's actual involvement. In some cases he could be as aloof as any boss with thousands of employees. Yet one of the men convicted of the bombings of the embassies said that Bin Laden had been so involved that he was the one who had pointed at surveillance photos to direct where the truck bomb should be driven.

Bin Laden was becoming more emboldened, summoning Western reporters to his hideouts in Afghanistan to relay his message: He would wage war against the United States and its allies if Washington did not remove its troops from the gulf region.

“So we tell the Americans as a people,” he told ABC News, “and we tell the mothers of soldiers and American mothers in general that if they value their lives and the lives of their children, to find a nationalistic government that will look after their interests and not the interests of the Jews. The continuation of tyranny will bring the fight to America, as Ramzi Yousef and others did. This is my message to the American people: to look for a se-

rious government that looks out for their interests and does not attack others, their lands, or their honor.”

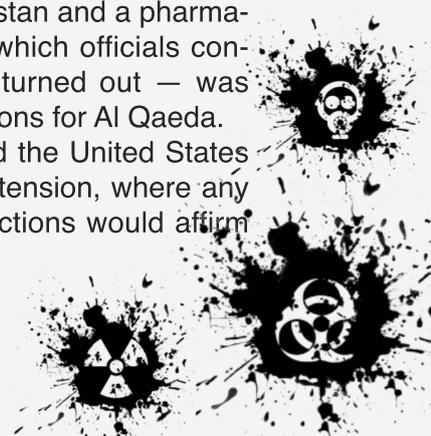
In February 1998, he issued the edict calling for attacks on Americans anywhere in the world, declaring it an “individual duty” for all Muslims.

In June, the grand jury convened two years earlier issued its indictment, charging Bin Laden with conspiracy to attack the United States abroad, for heading Al Qaeda and for financing terrorist activities around the world.

On Aug. 7, the eighth anniversary of the United States' order sending troops into the gulf region, two bombs exploded simultaneously at the American Embassies in Nairobi, Kenya, and Dar es Salaam, Tanzania. The Nairobi bomb killed 213 people and wounded 4,500; the bomb in Dar es Salaam killed 11 and wounded 85.

The United States retaliated two weeks later with strikes against suspected terrorist training camps in Afghanistan and a pharmaceutical plant in Sudan, which officials contended— erroneously, it turned out — was producing chemical weapons for Al Qaeda.

Bin Laden had trapped the United States in an escalating spiral of tension, where any defensive or retaliatory actions would affirm



the evils he said had provoked the attacks in the first place. In an interview with Time magazine that December, he brushed aside President Clinton's threats against him, and referred to himself in the third person, as if recognizing or encouraging the notion that he had become larger than life.

"To call us Enemy No. 1 or Enemy No. 2 does not hurt us," he said. "Osama bin Laden

against them on terrorism; Bin Laden held up a mirror image, declaring the world divided between infidels and believers.

Bin Laden had never before claimed or accepted responsibility for terrorist attacks. In a videotape found in the southern Afghan city of Kandahar weeks after the attacks, he firmly took responsibility for — and reveled in — the horror of Sept. 11.



is confident that the Islamic nation will carry out its duty."

In January 1999, the United States government issued a superseding indictment that affirmed the power Bin Laden had sought all along, declaring Al Qaeda an international terrorist organization in a conspiracy to kill American citizens.

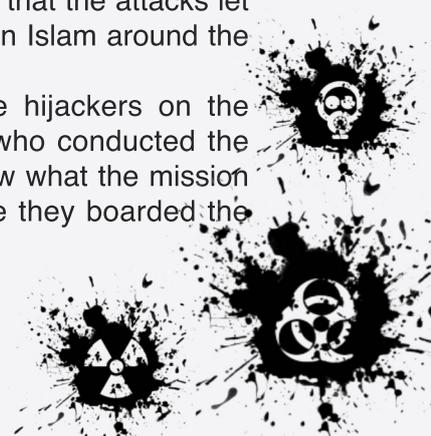
### The aftermath

After the attacks of Sept. 11, Bin Laden did what had become routine: He took to Arab television. He appeared, in his statement to the world, to be at the top of his powers. President Bush had declared that the nations of the world were either with the Americans or

"We calculated in advance the number of casualties from the enemy, who would be killed based on the position of the tower," he said. "We calculated that the floors that would be hit would be three or four floors. I was the most optimistic of them all."

In the videotape, showing him talking to followers nearly two months after the attacks, Bin Laden smiles, hungers to hear more approval, and notes proudly that the attacks let loose a surge of interest in Islam around the world.

He explained that the hijackers on the planes — "the brothers who conducted the operation" — did not know what the mission would be until just before they boarded the



planes. They knew only that they were going to the United States on a martyrdom mission.

Bin Laden had long eluded the allied forces in pursuit of him, moving, it was said, under cover of night with his wives and children, apparently between mountain caves. Yet he was

determined that if he had to die, he, too, would die a martyr's death.

His greatest hope, he told supporters, was that if he died at the hands of the Americans, the Muslim world would rise up and defeat the nation that had killed him.

## Bin Laden's killing: intriguing questions, few answers

Source: <http://www.homelandsecuritynewswire.com/bin-ladens-killing-intriguing-questions-few-answers>

The brilliant operation conducted by the U.S. Navy SEALs to kill Osama bin Laden should be celebrated, but the information provided so far by the administration leaves many questions unanswered; one of them has to do with Pakistan: it is inconceivable that bin Laden and his entourage could have stayed in their ostentatious compound for five years without elements in the Pakistani security services protecting them; it is bad enough for Pakistan to train and support several local Islamist terrorist groups so that they do Pakistan's bidding in its conflict with India; it is another thing altogether for Pakistan to help hide the leader of a movement that declared war on -- and has pursued active acts of war against -- the United States, and do so while receiving billions of dollars in aid from the United States; we typically use the adjective "ambivalent" to describe Pakistan's attitude toward the war on Islamic terrorism; perhaps it is time to search for another adjective; there are also some intriguing questions about the operational aspects of the raid on bin Laden's compound

The brilliant operation conducted by the U.S. Navy SEALs to kill Osama bin Laden should be celebrated, but the information provided so far by the administration leaves many questions unanswered. Here are a few of them:

### 1. Pakistan

#### A. Advise and consent

In his speech last night, the president thanked Pakistan for its help in the operation, and gave the impression that the Pakistanis gave permission for the operation. Other administration officials, in background conversations,

said no other country was involved, or informed about, the operation.

The truth is probably something like this:

There is little doubt that there was no consultation or sharing of information at the professional level. It is highly unlikely that the CIA and the U.S. military advised their Pakistani counterparts of the information that reached the United States last August about bin Laden's location, and about the plans being drawn up to kill him. The Pakistani military and intelligence service (ISI) are so penetrated by Islamists sympathetic to the Taliban and al Qaeda, that sharing information with these organizations means that the information will find its way to the terrorists sooner rather than later.

Some parts of ISI support the Taliban and several Pakistani Islamist organizations with weapons, training, and intelligence, and use them as foot soldiers in Pakistan's campaign to gain control of the disputed territory of Kashmir and, more generally, as a weapon against India and pro-Indian actors in the region.

Not sharing information at the professional level before or during the operation does not mean that President Obama did not call President Asif Ali Zardari of Pakistan while the helicopters were on their way to bin Laden's compound -- or, more likely, after the operation was concluded but before the Navy Seal team left Pakistani soil -- to advise the Pakistani president of the operation.

This way, the United States could "share" information with the Pakistani leadership, in the process giving the impression of consultation and information sharing -- that the United States was seeking Pakistan's advice



and consent — but without jeopardizing the operation. Obama could thus thank Zardari for Pakistani cooperation — an assertion which can be seen as technically and linguistically correct — and thus maintain the appearance that the United States did not violate Pakistani sovereignty and that the Pakistani leadership was on board.

### B. Pakistan's ambivalence

There is no hiding the fact that bin Laden's presence, in his ostentatious compound in the middle of a Pakistani town and right next to a Pakistani military academy — Pakistan's West point — means only one thing: Bin Laden was protected by elements within the Pakistani government. It is inconceivable — inconceivable — that bin Laden and his entourage could have lived in that place for the last five years without the knowledge of at least some elements — perhaps rogue elements — of the ISI.

Pakistan is not exactly a country where the security services and law enforcement units are hampered by notions of civil rights or the right to privacy. The reach of the government is more limited in the semi-autonomous North-western tribal regions, but that reach is unlimited in Pakistan proper.

The fact that bin Laden could have received the protection of important elements in a government that receives billions of dollars in aid from the United States is troubling. It is troubling enough that the ISI trains and supports local or regional Islamist groups that do Pakistan's bidding against India, but it is another thing to hide the leader of a movement that declared war on — and has pursued active acts of war against — the United States.

We should also be disappointed in the Pakistani lack of sophistication here: they should have understood that they would have been better off sacrificing bin Laden and giving him to us. Just think of the good will they would have generated in U.S. — and Western — public opinion. Moreover, they should have realized that, for their own strategic goals, they should strive more energetically to prove to the United States that they make a distinction between groups fighting for what they — the Pakistanis — regard as their rights in Kashmir, and groups that fight the United States.

The fact that important elements in the Pakistani ruling circles did not make this distinction may raise questions about whether or not the adjective “ambivalent,” so often used to describe Pakistan's attitude toward Islamic terrorism and those who carry terrorist acts in the name of Islam, should be replaced. We may conclude that the protection bin Laden has received may justify the realization that perhaps the Pakistani true attitude is not so ambivalent after all.

## 2. Operational aspects

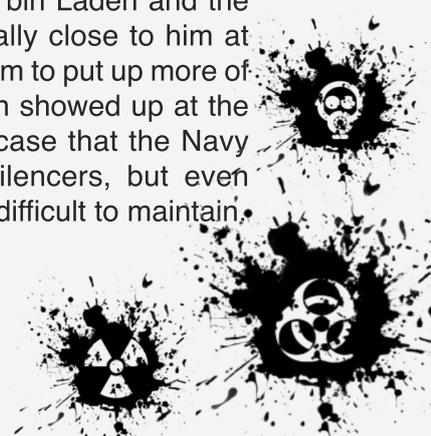
There three things that are unclear about the operational aspects of what happened yesterday.

### A. The number of dead

Too few people were killed — and thankfully, no Americans were killed — for there to have been a real “firefight.” In a firefight in which the two sides are seriously engaged, more people die and get injured on both sides. In this instance only three combatants other than bin Laden were killed — two of his couriers and possibly one of his sons. Where were bin Laden's many body guards? We were told that he was surrounded by a phalanx of guards who were willing to die protecting their leader. Where were they? How many of them were there? Why did they not spring into action to protect their leader?

### B. Compound layout

This was a large compound — large enough and ostentatious enough for Donald Trump to be its proud owner. How did the Navy SEALs know in which of the many rooms in the compound bin Laden was staying? How did they manage to get to that room without being noticed? If they had been noticed, they would have had to overpower those sentries and guards who noticed them. This would have created a lot of noise — not just any noise, but fire arms noise — alerting bin Laden and the guards who were physically close to him at the time, thus allowing them to put up more of a fight when the American showed up at the door. It may well be the case that the Navy Seals used guns with silencers, but even then, complete silence is difficult to maintain.



### C. Escape route

How come bin Laden did not have an escape route – a tunnel leading outside the compound? The compound was built in 2005 and whoever designed it, knew it was designed for a wanted man. It may well be the case that there was an escape tunnel, but that bin Laden and his people were taken by surprise and thus were unable to reach it.

There are other questions to which we may receive answers in days to come. For now, it appears that the United States may have had someone on the inside providing information. The ability to arrive stealthily, enter the highly

secure compound, find the room where bin Laden was staying, kill only four people, and do it all in less than forty minutes means that the Navy Seals team had either unusually precise and current information, or an unusually high degree – extremely high degree – of sheer luck.

I vote for precise and current actionable information.

Ben Frankel is editor of the Homeland Security NewsWire

## 2009 – Geographers Had Calculated 89% Chance That Osama Was in Abbottabad

Source: <http://news.sciencemag.org/scienceinsider/2011/05/geographers-had-calculated.html?ref=hp>

Could Osama bin Laden have been found faster if the CIA had followed the advice of ecosystem geographers from the University of California, Los Angeles? Probably not, but the predictions of UCLA geographer Thomas Gillespie, who, along with colleague John Agnew and a class of undergraduates, authored a 2009 paper predicting the terrorist's whereabouts, were none too shabby. Accord-

was killed last night. And they correctly predicted that he would be in a large town, not a cave. The bin Laden tracking idea began as a project in an undergraduate class on remote sensing that Gillespie, whose expertise is using remote sensing data from satellites to study ecosystems, taught in 2009. Based on information from satellites and other remote sensing systems, and reports on his move-



Credit: MIT International Review

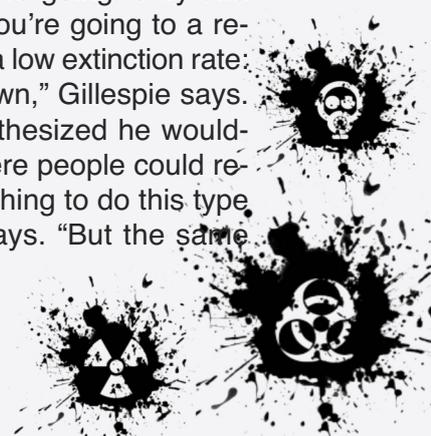
ments since his last known location, the students created a probabilistic model of where he was likely to be. Their prediction of a town was based on a geographical theory called “island biogeography”: basically, that a species on a large island is much less likely to go extinct following a catastrophic event than a species on a small one.

“The theory was basically that if you’re going to try and survive, you’re going to a region with a low extinction rate: a large town,” Gillespie says.

“We hypothesized he wouldn’t be in a small town where people could report on him.” “It’s not my thing to do this type of [terrorism] stuff,” he says. “But the same

ing to a probabilistic model they created, there was an 88.9% chance that bin Laden was hiding out in Abbottabad, Pakistan, where he

n’t be in a small town where people could report on him.” “It’s not my thing to do this type of [terrorism] stuff,” he says. “But the same



theories we use to study endangered birds can be used to do this.” In the end, they zeroed in on a Pakistani border town called Parachinar which has, among other things, access to medical care. Then they predicted the exact building he would be in by making assumptions as to the characteristics of the building itself, such as high enough ceilings to accommodate bin Laden’s 6’4” frame, a fence, privacy, and electricity. The undergraduates did such a nice job on the project, Gillespie says, that he wrote the results up as a paper and submitted it to a small journal, MIT International Review. The next day, he was shocked to find his inbox full of requests for interviews from everyone from USA Today to Sean Hannity. (He declined the latter.)

The paper’s precise predictions were treated with some skepticism by other researchers, who said the authors were overconfident in predicting the terrorist’s hidey hole down to specific buildings. Gillespie says that one of its weaknesses was a lack of hard data on bin Laden’s location, last known in

2001. As to intelligence agencies’ taking interest in his work, “I didn’t hear from them, didn’t expect to. But they obviously did a pretty good job,” he says. Gillespie says he was surprised to hear bin Laden ended up being only 268 km away from his last known location, but not surprised that he was in a town. “Caves are cold, and you can’t see people walking up to them,” he says. Still, the late Al Qaeda leader made a bad choice of real estate, in Gillespie’s opinion. “An inconspicuous house would have suited him better.” Finding bin Laden’s deputies—the terrorist mastermind is said to be only one of 40 “high-value” targets the Pentagon seeks—is not on Gillespie’s to-do list. “Right now, I’m working on the dry forests of Hawaii where 45% of the trees are on the endangered species list,” says Gillespie. “I’m far more interested in getting trees off the endangered species list.”

**NOTE:** Download the full paper from “CBRNE-CT Papers” section of Newsletter’s website.

## CSI bin Laden: Commandos Use Thumb, Eye Scans to Track Terrorists

Source: [http://www.wired.com/dangerroom/2011/05/csi-bin-laden-commandos-use-thumb-eye-scans-to-track-terrorists/?utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+WiredDangerRoom+%28Blog+-+Danger+Room%29&utm\\_content=Google+Reader](http://www.wired.com/dangerroom/2011/05/csi-bin-laden-commandos-use-thumb-eye-scans-to-track-terrorists/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+WiredDangerRoom+%28Blog+-+Danger+Room%29&utm_content=Google+Reader)

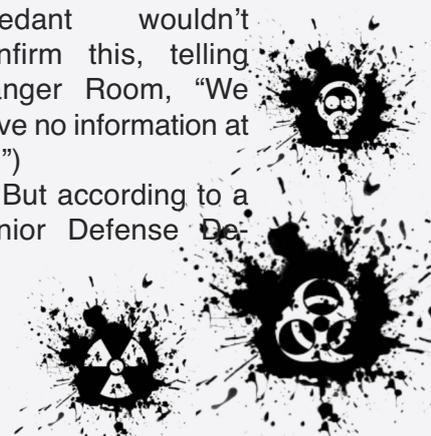
The U.S. forces who killed Osama bin Laden in his Abbottabad compound were more than expert marksmen. Some of them were forensics experts as well, using sophisticated tools to ensure that they got the right man. Speaking at a White House briefing, counterterrorism adviser John Brennan said he had “99 percent” certainty the commando team killed bin Laden, thanks to “facial recognition, [his] height, [and] an initial DNA analysis.” The initial DNA analysis appears to have been done far from the scene, by “CIA and other spe-

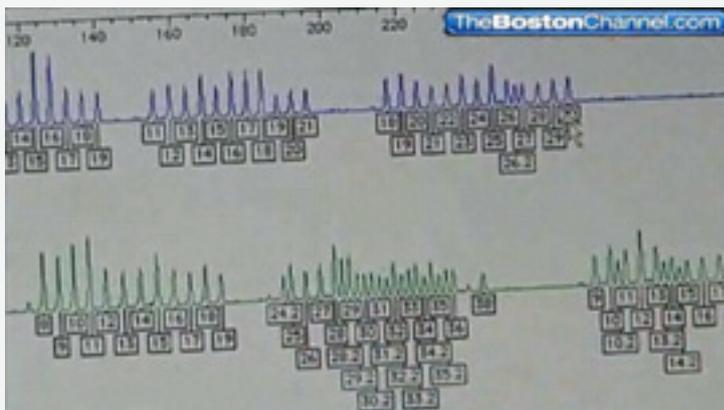


cialists in the intelligence community” on Monday, according to an intelligence official who briefed Pentagon reporters, and it returned a “virtually 100 percent DNA match.”

Press reports say the DNA used to identify bin Laden may have come from one of his sisters, who allegedly died at Boston’s Massachusetts General Hospital. (However, hospital spokeswoman Katie Marquedant wouldn’t confirm this, telling Danger Room, “We have no information at all.”)

But according to a senior Defense De-

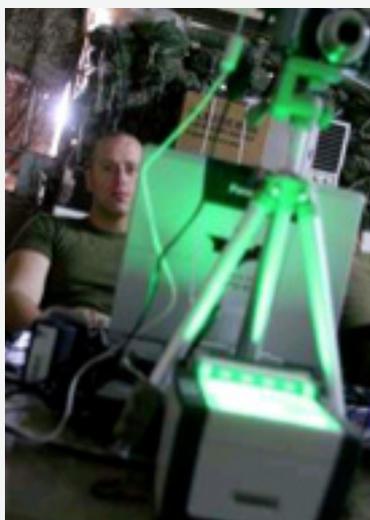




partment official, chances are they used the tool pictured above to verify his biometric in-



formation. The device is called a Secure Electronic Enrollment Kit, or SEEK, a handheld biometrics recorder that takes iris scans, fingerprints and facial scans and ports them back to an FBI database in West Virginia in seconds.

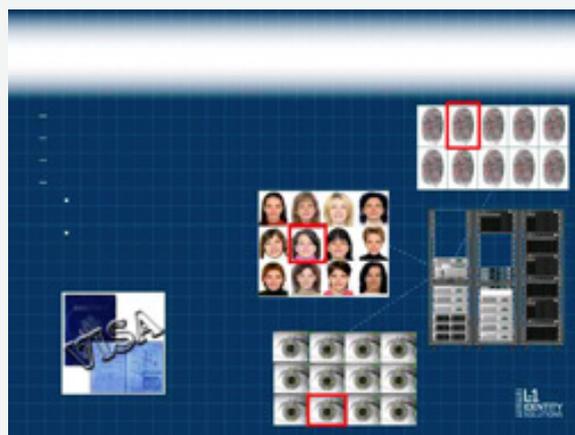


"We've always said this is about more than finding people in a crowd," said the senior defense official, who requested anonymity to talk about the CSI-like gear that Special Operations Forces carry.

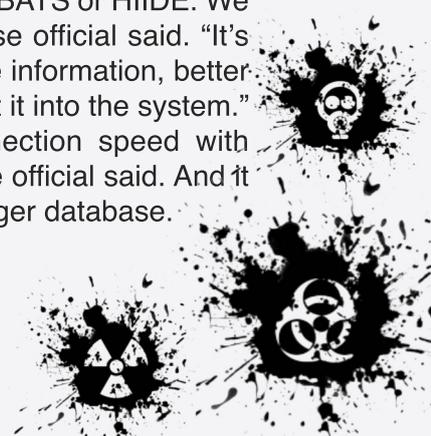
The latest version, developed by a company called Crossmatch, is known as SEEK II (picture – left), and it came out last year. It weighs less than 4 pounds, and its ability to send information back to the FBI database is "wham-bam," even from low-connectivity areas. To pull that off, SEEK II has built-in wireless capability and optional 3G to push or pull biometric info from the database. If that doesn't work, USB ports connect SEEK to other computers.

The device runs on Windows XP. SEEK II doesn't have a touch-screen, so troops or their FBI partners will still need to key in information the old fashioned way. But its fingerprint sensors are more sensitive, allowing troops to scan in both pressed and rolled prints for a fuller scope of whom they're targeting. According to the defense official, it took "probably a million, 2 million" dollars to develop.

The U.S. military has other biometric tools that it's put to work in Iraq and Afghanistan to identify insurgents and distinguish them from civilians. One's called the Biometrics Automated Toolset, or BATS (picture below). Another's called the Handheld Interagency Identification Detection System, or HIIDE. Those don't appear to be state-of-the-art any-



more. "This is better than BATS or HIIDE. We did that early," the defense official said. "It's faster, it can pick up more information, better than the iris scan, and get it into the system." For one thing, the connection speed with SEEK II is a lot better, the official said. And it syncs up with a much bigger database.





AN/PPS-26 STTW  
("Sense Through  
The Wall")

BATS and HIIDE feed into a military database called the Automated Biometric Information System. ABIS contains detainee information only from the country in which U.S. forces are operating. SEEK II, on the other hand, feeds into an FBI database with far more fingerprint and biometric data than the military possesses, the defense official said. Plus, the machine has its own "local database," allowing operators to store specific biometric data on the device if they know who they're looking for.

But for all you're hearing now about facial recognition, the official said, the old-fashioned fingerprint remains more reliable. SEEK has facial-recognition capability, but it's still pretty weak. "We've evolved face recognition very significantly, but it's still not as good as people would like you to believe," the official said. Several factors still mess up positive identification: "different angles, different lighting, a lot of false pieces."

It wasn't long ago that Special Operations Forces didn't have access to much biometric data of any kind. "Matthew Alexander" is a pseudonym for one of the members of a special mission unit that hunted and ultimately killed the leader of al-Qaida in Iraq, Abu

Musab al-Zarqawi, in 2006. "I'm working for an elite task force," Alexander recalled. "We're supposed to have the best of everything. But we had just then started entering people's biometric data. We were basically creating this database in '06, three years into the war."

Facial recognition was a far-off dream. All of this had real consequences for the manhunt. "One guy fooled us," he remembered. "He gave us a fake name. It was not till an analyst found a picture of him on old slides [that we learned] he was an operations commander for northern Iraq." But before the SEALs can verify the data they find during their raids, they've got to finish the raids first. The scene of a firefight like the one that killed bin Laden isn't the place for checking information, given the insecurity of the locations where troops are fighting. To prepare them for what they're getting into, elite troops also have a tool called Forward Looking Infrared, or FLIR (picture – left). A more mature technology than SEEK, the optic-mounted FLIR system gives troops a sense of where their enemies are inside a compound by tracking their heat sensors. It's not that sensitive — "it can't see through a wall," the defense official said — but it provides a glimpse of where in an open space someone might be, using his heat signature. (The Army's currently working on a device called Sense Through The Wall, which, as its name suggests, has a sophisticated sensor to learn where people are on the other side of structures that are too dense for heat scanning.)



If all of this seems like the Joint Special Operations Command is acting like a federal SWAT team, that's not by accident. These days, special operations teams "have FBI representation on them," said Ali Soufan, a former FBI counterterrorism agent who hunted al-Qaida before and after 9/11. The FBI might not go on raids with the commandos, but back at the base, "they do the fingerprints, they can do the DNA [analysis] and collect the evidence."

That was something Alexander saw firsthand. "It's definitely moving more toward police work," he said, because law enforcement has more experience painstakingly collecting, analyzing and tracing evidence to get the right man. SEEK II represents an unlikely mind-meld — or, at least, fingerprint meld — between the door-kickers at JSOC and the FBI. But the apotheosis of this new influence now has global prestige, as the commandos just took down the FBI's most-wanted terrorist.

## Already-Written Book About Navy Seal Group That Killed Osama Bin Laden Suddenly Hot

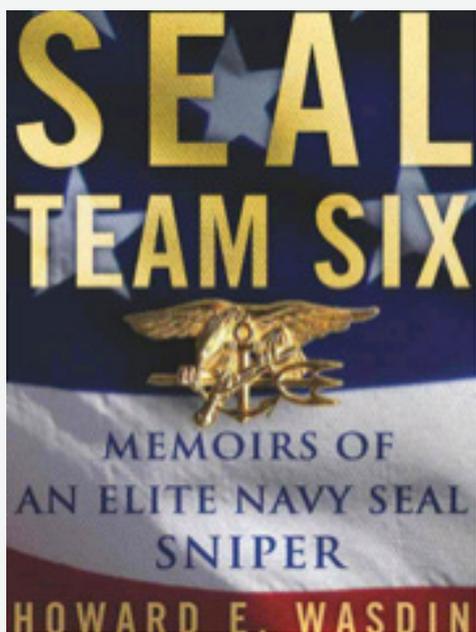
Source: <http://www.hollywoodreporter.com/news/written-book-navy-seal-group-184084>

A book about the Navy Seal group Seal Team Six, members of which killed Osama Bin Laden in a mansion near Islamabad, will be published this May. According to Publisher's

wood Reporter when asked about the print run, an updated publish date and if movie rights had been optioned. The book will be published by Thomas Dunne. Scott Miller of the Trident Media Group tells The Hollywood Reporter that he's "already gotten calls" from scouts and studios to turn the film into a movie. As for the print run, he says it's "too soon to tell how many more copies [the publisher] will get out."

It will chronicle the specialized military group, called Naval Special Warfare Development Group or DevGru for short. It's a unit of the Joint Special Operations Command, which costs the country more than \$1 billion annually to fund. Members flew to the Abbottabad mansion in which Bin Laden was captured from the Ghazi Air Base in Pakistan. The gunfire went on for more than 40 minutes. 22 people were killed or captured.

Laura Ingraham will have the first interview Monday with Wasdin, who was a Navy Seal in the first Gulf War and in the Somalia conflict. He was a top-ranked sniper of the Seal Team Six, and tasked with trying to kill warlord Mohamed Farrah Aidid.



Weekly, the book, Seal Team Six is by Howard Wasdin, is due to hit stores on May 24. Wasdin declined comment to The Holly-





## Ilyas Kashmiri

Source: [http://www.globaljihad.net/view\\_page.asp?id=1799](http://www.globaljihad.net/view_page.asp?id=1799)

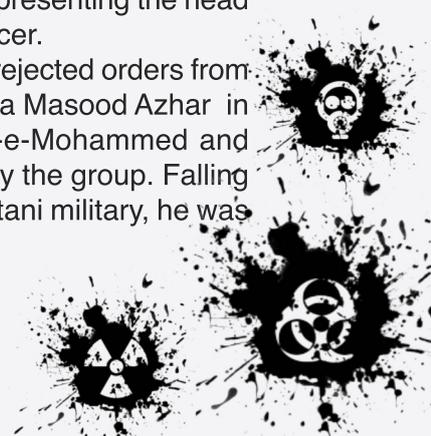


Ilyas Kashmiri came from the Kotli District of Azad-Kashmir, the Pakistani administrated part of Kashmir. Ilyas Kashmiri was a junior commander in Afghanistan in the war against the Russians in the 80s. He trained the Afghan Mujahideen in mine warfare in Miran-shah on behalf of Pakistani ISI and at one point lost an eye.

After the war ended with the withdrawal of the Soviet Union from Afghanistan in 1989, Ilyas Kashmiri continued his official militant work in Kashmir with the Harkat-ul-Jihad al-Islami HuJI. Disagreements with leader Qari Saifulah Akhtar led Ilyas Kashmiri, in the mid 90s, to establish his own new unit within HuJI, know as the 313 Brigade.

During the mid-1990s Ilyas Kashmiri and Nasrullah Mansoor Langrial were captured by the Indian Army near Poonch in Indian Kashmir and sent to prison, where he would spend the next two years before escaping and returning to Pakistan. Upon his return Ilyas Kashmiri continued to conduct operations against India, once reportedly being rewarded personally with cash by then Army Chief General Pervez Musharraf for presenting the head of a dead Indian army officer.

In 2000 Ilyas Kashmiri rejected orders from ISI to serve under Maulana Masood Azhar in the newly founded Jaish-e-Mohammed and was even once targeted by the group. Falling out of favor with the Pakistani military, he was



even taken into custody and tortured in late 2003 in the wake of President Musharraf's assassination attempts in 12/2003.

In 02/2004 Ilyas Kashmiri was released from jail. Until the Lal Mosque Crisis, in 07/2007, he apparently did little, but afterwards he returned to the 313 Brigade in Harkat-ul-Jihad-al-Islami and rebuilt its strength while collaborating with the Taliban. Ilyas Kashmiri moved his base of operation from his home town Kotli, in Kashmir, to FATA Waziristan, Razmak district, on the Afghan border.

Ilyas Kashmiri was pronounced dead following the USA UAV missile attack, on 09/14/2009, in which Kalimullah Mehsud was, probably, killed, but later reports



suggested he escaped the attack unharmed. Ilyas Kashmiri granted an interview with Asia Times Online in mid 10/2009. Ilyas Kashmiri was associated with a number of attacks, including a 2008 plan to assassinate the Pakistani Army Chief Gen. Ashfaq Kayani, but Al Qaeda leadership rejected the plan on strategic grounds.

Ilyas Kashmiri was in regular contact for some time with David C. Headley, who was arrested in Chicago, USA, on 10/27/2009 (see - Headley and Rana). Their communications suggested that they were in the process of plotting fresh attacks in India. (It is most likely that the communication was monitored by USA intelligence, which led to the missile attack, on 09/14/2009, in which Kalimullah Mehsud was killed). Ilyas Kashmiri was also in contact with Raja L. Khan, a Pakistani from Chicago, who was arrested in USA for sending money to support terror in Pakistan, on Friday 03/26/2010.

- Ilyas Kashmiri was charged, on 01/14/2010, in absentia, in USA, with plotting international terror attacks (see - Chicago 01.14.10).
- Following the Times-Square plot investigation, in 05/2010, Intelligence sources said that the prime suspect Faisal Shahzad was, during his visit to Peshawar in 07/2009, in direct contact with Ilyas Kashmiri.
- The USA announced a reward of \$5 million, on Wednesday 04/06/2011, for information leading to the arrest of HuJI commander Mohammad Ilyas Kashmiri, holding him responsible for a 2006 attack on its consulate in Karachi, among others.

## Bin Laden Raid Discovery: Al Qaeda Considered Attacking U.S. Train On 9/11 Anniversary

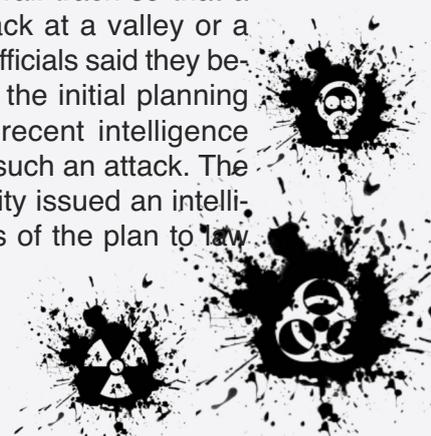
Source: [http://www.huffingtonpost.com/2011/05/06/bin-laden-raid-train\\_n\\_858315.html](http://www.huffingtonpost.com/2011/05/06/bin-laden-raid-train_n_858315.html)

Holed up in a compound in Pakistan, Osama bin Laden was scheming how to hit the United States hard again, according to newly uncovered documents that show al-Qaida plans for derailing an American train on the upcoming 10th anniversary of the 9/11 attacks.

Details of the plan emerged Thursday as some of the first intelligence was gleaned from the trove of information found in bin Laden's residence when Navy SEALs killed the al-Qaida leader and four of his associates. They took his body and scooped up computers, DVDs and documents from the com-

pound where U.S. officials think he had been living for as long as six years.

The confiscated materials reveal the rail attack planning as of February 2010. One idea outlined in handwritten notes was to tamper with an unspecified U.S. rail track so that a train would fall off the track at a valley or a bridge. Counterterrorism officials said they believe the plot was only in the initial planning stages, and there is no recent intelligence about any active plan for such an attack. The FBI and Homeland Security issued an intelligence bulletin with details of the plan to law





enforcement around the country. The bulletin, marked "for official use only," was obtained by The Associated Press.

Other intelligence pulled from the compound represented a terrorist wish list but has revealed no specific plan so far. Some documents indicated a desire to strike the U.S. with large-scale attacks in major cities and on key dates such as anniversaries and holidays. But there never was any sign that those were anything more than ambitions, said a U.S. official who spoke on condition of anonymity to discuss the intelligence.

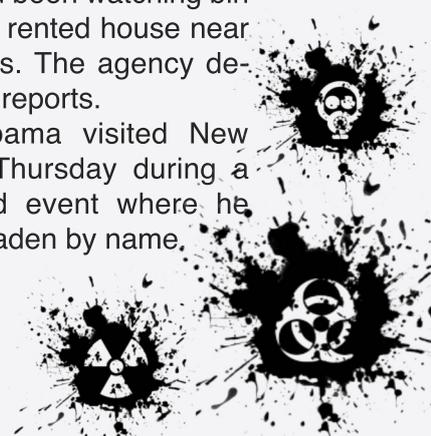
Even before the raid, intelligence officials for years had warned that al-Qaida

was interested in attacking major U.S. cities on prominent dates on the American calendar.

Monday's raid by helicopter-borne SEALs was fraught with risk, sensationally bold and a historic success, netting a man who had been on the run for nearly a decade after his terrorist organization pulled off the devastating Sept. 11, 2001, attacks that killed nearly 3,000 people in New York, Washington and Pennsylvania. During the raid, the SEALs met far less resistance than the Obama administration initially described. The commandos encountered gunshots from only one man, whom they quickly killed, before sweeping the house and shooting others, who were unarmed, a senior defense official said in the latest account.

The New York Times and Washington Post reported Thursday on their websites that a CIA surveillance team had been watching bin Laden's residence from a rented house near the compound for months. The agency declined to comment on the reports.

President Barack Obama visited New York's ground zero on Thursday during a somber and understated event where he avoided mentioning bin Laden by name.



# CBRNE-Terrorism Newsletter

## Summer 2011

The U.S. account of what happened inside bin Laden's Abbottabad compound is so far the only one most Americans have. Pakistan has custody of the people rounded up after-

ward, including more than two dozen children and women. Differing accounts purporting to be from witnesses have appeared in Pakistani and Arab media, and on the Internet.

**EDITOR'S NOTE:** Surprised? If yes, this is another proof of why terrorists are always ahead of us. Train attack – especially derailment is far much easier than airplane operations, equally or more catastrophic and of high impact if timing is successful i.e. a chemical train derailment... So take nothing for granted and keep an eye on all possible scenarios – even those who look simplistic.

### My name is Cairo and I serve at SEAL Team VI !



### Semper Fido

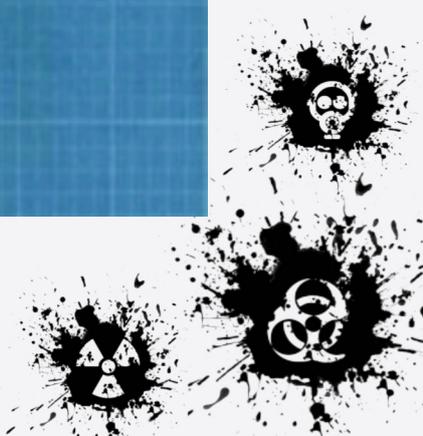
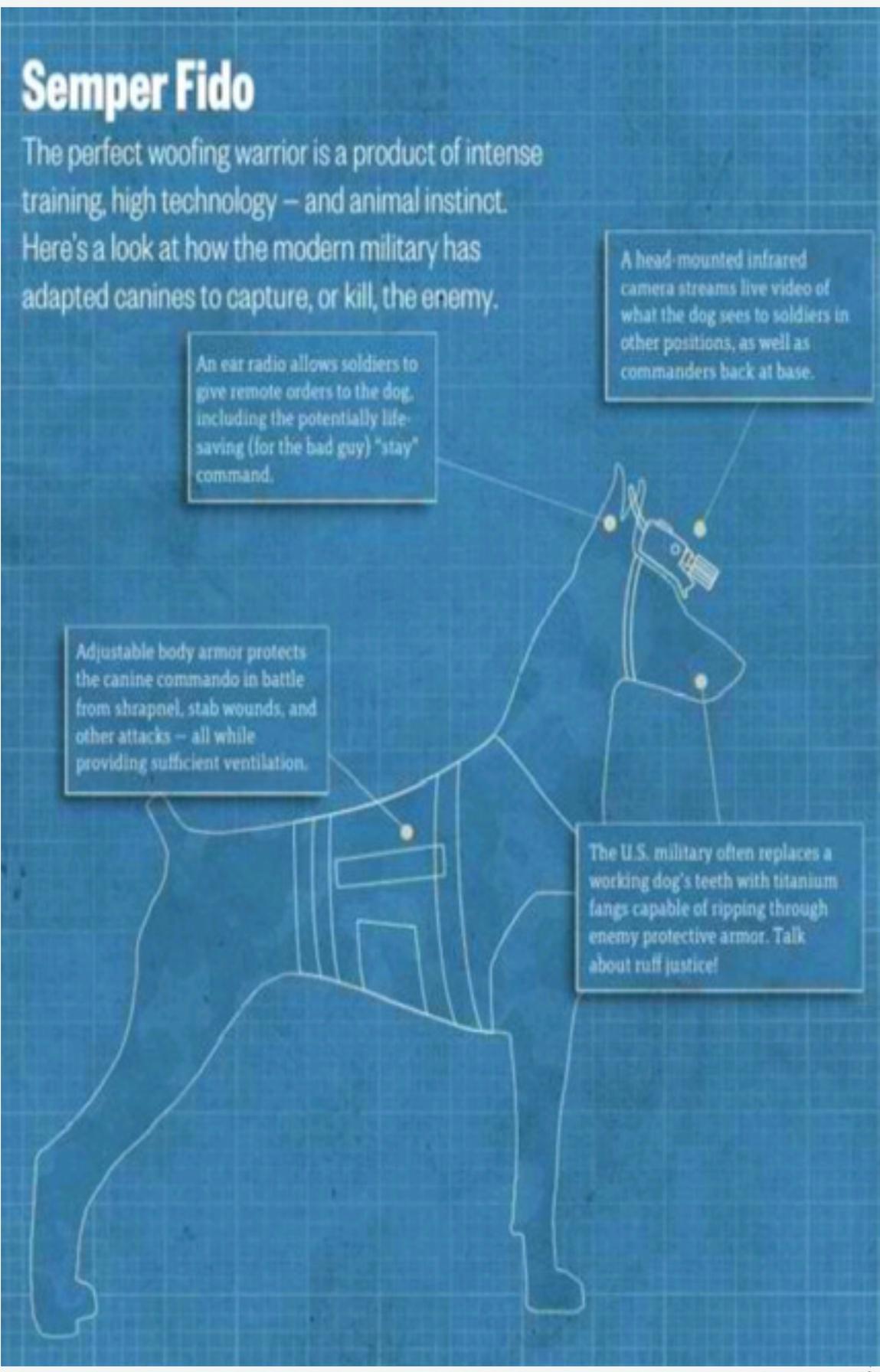
The perfect woofing warrior is a product of intense training, high technology – and animal instinct. Here's a look at how the modern military has adapted canines to capture, or kill, the enemy.

An ear radio allows soldiers to give remote orders to the dog, including the potentially life-saving (for the bad guy) "stay" command.

A head-mounted infrared camera streams live video of what the dog sees to soldiers in other positions, as well as commanders back at base.

Adjustable body armor protects the canine commando in battle from shrapnel, stab wounds, and other attacks – all while providing sufficient ventilation.

The U.S. military often replaces a working dog's teeth with titanium fangs capable of ripping through enemy protective armor. Talk about ruff justice!





Belgian Malinois "Cairo" - The 80th SEAL hero!!!



### The Bulletproof Dog That Stormed Bin Laden's Lair

Source: <http://www.fastcompany.com/1753360/the-tech-that-outfits-the-dogs-of-war>

If you see this dog coming for you, run. Thanks to his extensive training--and customized body armor that can cost upwards of \$30,000--he's bulletproof, can hear through concrete, and can record high-def video of missions, even in the dead of night.

who has trained dogs from Israeli bomb-sniffing units to the Navy SEALs. "It is much more than just body armor."

The big idea behind the armor add-ons boils down to a simple one: the key to any healthy relationship is communication. Each



160digg Since the moment it was revealed that the "nation's most courageous dog" [Update: named "Cairo"] served alongside the 80 Navy SEALs who took out Osama bin Laden, America's fascination with war dogs has hit a fevered pitch. And while the heart-tugging photos of these four-legged heroes are worth a look, so is the high-tech gear that helps them do their job.

Last year, the military spent \$86,000 on four tactical vests to outfit Navy Seal dogs. The SEALs hired Winnipeg, Canada-based contractor K9 Storm to gear up their four-legged, canine partners, which it has used in battle since World War I. K9 Storm's flagship product is the \$20,000-\$30,000 Intruder, an upgradeable version of their doggie armor. The tactical body armor is wired with a collapsible video arm, two-way audio, and other attachable gadgets.

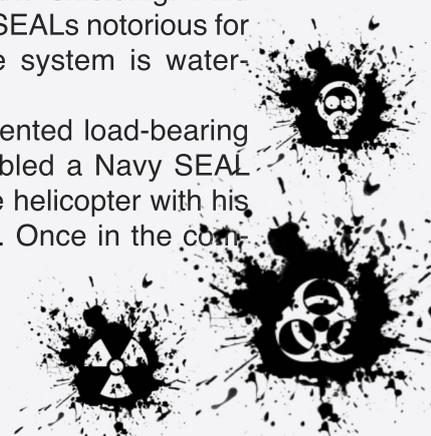
"Various special ops units use the vest, including those in current headlines," says Mike Herstik, a consultant with International K-9,

dog is assigned one human handler. To operate efficiently in a tactical situation, they need to be connected.

#### So how much high-tech connectivity does a dog get for \$30,000 anyway?

Using a high-def camera mounted on the dog's back, handlers can see what the dog sees, using handheld monitors. Jim Slater, who cofounded K9 Storm with his wife Glori, says footage is stable because the entire module is sewn into the vest. With unpredictable light conditions, like middle-of-the-night missions, the camera adjusts automatically to night vision. The lens is protected by impact-resistant shielding. And since we're talking about SEALs notorious for amphibious assaults, the system is waterproof.

In Abbottabad, the patented load-bearing harness would have enabled a Navy SEAL handler to rappel from the helicopter with his dog strapped to his body. Once in the com-

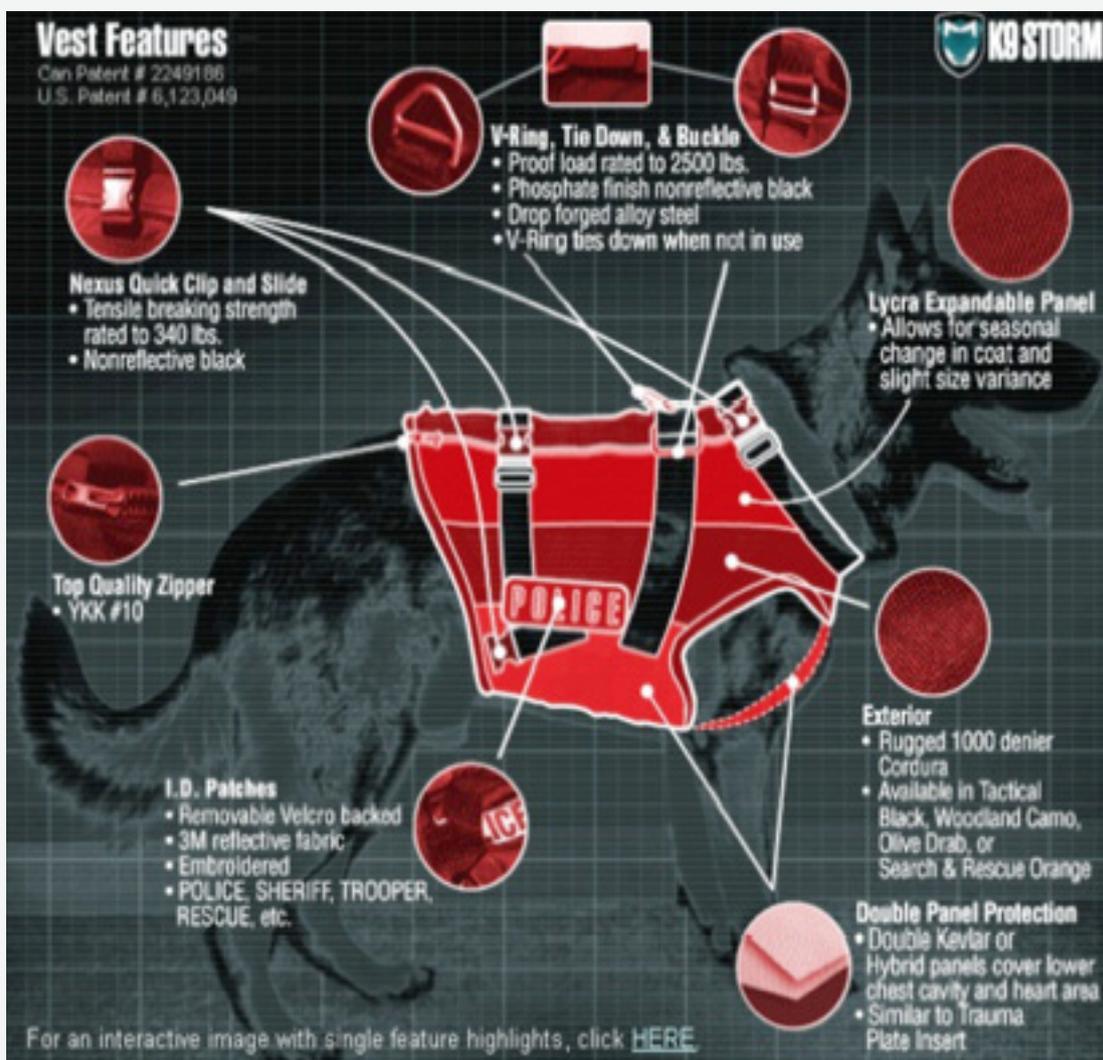


pound, the dog could run ahead to scout as the handler issued commands through an integrated microphone and speaker in the armor. The proprietary speaker system enables handlers to relay commands at low levels to the dog. "Handlers need to see and hear how their dog is responding," said Slater. "In a tactical situation, every second counts." The encrypted signal from dog to handler penetrates fortified barriers like concrete, steel-fortified ships, and tunnels. That translates to standard operating ranges up to four football fields.

or ice picks like a mitt wrapping around a baseball; knives and sharpened screw drivers wielded by prisoners require tighter weaves.

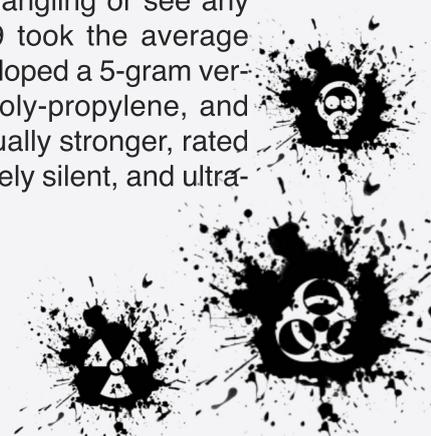
Keeping the armor strong, but light, is a priority. "Every gram counts for our clients. So we prefer advanced fibers and innovative textiles," said Slater. "The entire communication module is 20 ounces." The average armor weighs between three to seven pounds, depending on the size of the dog and the level of protection.

They've even gone stealth. A silent hardware system prevents any metal to metal con-



The armor itself protects against shots from 9mm and .45 magnum handguns. Slater is a veteran police dog trainer and built the first vest after a prison riot. He realized he wore full riot gear, while his K9 partner, Olaf, was basically naked. So he started making vests. The weave technology catches bullets

tact--you won't hear any jangling or see any reflective give-aways. K9 took the average 150-gram V-ring and developed a 5-gram version made of a Kevlar, poly-propylene, and nylon fiber blend. "It's actually stronger, rated to 2,500 pounds. Completely silent, and ultra-light," said Slater.



Of course, these systems don't come cheap--and it's the dogs themselves that are the real investment. The Navy's first Master Military Working Dog Trainer (a trainer of other dog trainers), Luis Reyes emailed from Afghanistan: "There are many products that help MWDs [military work dogs] and many are 'cool' but not necessary. No amount of money can replace the life of a canine that saves the precious lives of our troops in harm's way."

Although new tech is the buzz, what put K9 Storm on the map is dedication to customization. Its mainstay dog armor is the more-affordable \$2,000-\$3,000 base model. Each vest they make is custom sized for the dog. "The fit has to be perfect or it will flop around," said Slater. That hinders mobility, or worse, can cause injury.

Clients can measure dogs themselves, or Slater will fly out for dog fittings. They've done 15-pound West Highland Terriers--which look like playful white puffballs but were bred to scare badgers out of holes, and are helpful in drug raids with confined spaces like air ducts.

On the other end are St. Bernards, which push 240 pounds.

K9's client list spans 15 countries, from China to Switzerland. Buyers include SWAT teams, police and corrections agencies, security firms, search and rescue units, and border patrols. Slater and 12 employees spent years developing a proprietary computer-assisted design program to translate measurements into accurate patterns, which are hand sewn. However, it's as much a tech company as it is an armor manufacturer.

The next phase of development includes plans for remote-delivery systems and enhanced accessory functionality. They describe a system that would help dogs transport medical supplies, walkie-talkies, or water into constricted areas like rubble. They're also planning new appendages like air-level quality meters for mines.

No word on mounting mini heat-seeking missiles just yet. So, for now, bad guys will only have to tussle with highly-trained fangs exerting 700 pounds of pressure per square inch.

## One Osama gone: Many more in the making

By Anita Rai

Source: <http://www.rieas.gr/research-areas/global-issues/islamic-studies/1490-one-osama-gone-many-more-in-the-making.html>

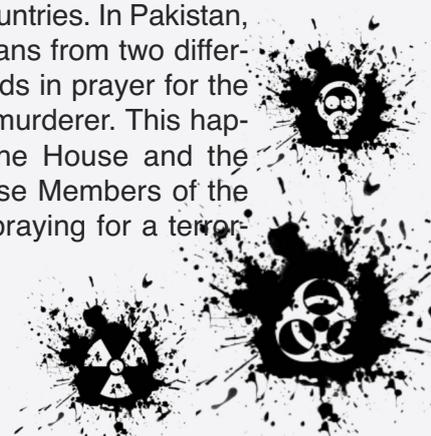
Osama bin Laden is dead. Islamist terrorism, is nonetheless alive and kicking. US Navy Seals sealed his fate and buried him at sea. The fight against terrorism is however, far from over. This century is going to be shaped by how we fare in this war and how heavy the cost will be in terms of invaluable lives, both military service members and civilians. Muslim supremacists have thrust this war upon the free world and in order to survive we have to fight back. Human hearts should welcome the news of Osama's elimination. Somehow the concept and clear identification, of good and evil and a clear difference between the two are lost upon many people.

Ismail Haniya, the head of Hamas administration in the Gaza strip expressed his sorrow and anger at the death of this monster terrorist in these words: "We condemn the assassination and the killing of an Arab holy

warrior. We ask God to offer him mercy with the true believers and the martyrs."

How can anyone forget the response of the people of Gaza to the news of the slaughter of 9/11? They erupted into loud cheers and vulgar chants. Sweets and candies were distributed in celebration of the carnage. Haniya told the reporters that Hamas sees the killing of Osama bin Laden as "a continuation of the American policy based on oppression and the shedding of Muslim and Arab blood".

We have seen comparable show of solidarity with, and sympathy for the dead terrorist in numerous Muslim countries. In Pakistan, two elected parliamentarians from two different parties lifted their hands in prayer for the departed soul of a mass murderer. This happened on the Floor of the House and the Speaker did not stop these Members of the National Assembly from praying for a terror-



ist. The headline of Daily Ausaf, a Pakistan-based Urdu newspaper, read: American Raid, Osama “martyred”.

An Imam of Al-Aqsa mosque when expressing his support for the dead terrorist threatened President Obama and Bush (Jr.) with death. Imam of a mosque is extremely important for Muslims and plays an intrinsic role. Mosque plays a pivotal role in the lives of Muslims everywhere. And it acquires an immensely heightened significance on Fridays. For Muslims, Friday is the most sacred day of the week. Most Muslims including those who do not pray the daily five obligatory prayers attend the Friday congregational prayers held in the mosques. While many perform the daily prayers at home or at work, the Friday prayers would necessarily mean a large gathering of Muslims in the mosques. Khutbaah (Sermon) is an integral part of Friday congregational Salaat / Namaaz (prayer). It is delivered by the cleric of the particular mosque who leads the congregation in prayer. He is known as the Imam of the mosque.

Most of the clerics who on a weekly basis lecture large-to-huge gathering of Muslims and lead them in prayers, are devoid of any creditable education at the formal level. At most mosques the sermon comes before the obligatory prayer. Be it a mosque in a remote village of Indonesia or Bangladesh, the Al-Aqsa Mosque in Jerusalem, the Great Mosque in Mecca or the University of Tehran, the congregation of Muslims are obligated by religious pinning to sit through the clerics' sermons. This is how a clergy that is highly uneducated commands the attention and attendance of masses of worshippers when they are riding a religious high.

The Friday sermon has a set theme. The khateeb (lecturer/sermon-deliverer) and the mosque's financier however have the privilege of choosing its tone and scale. Thematically, the Friday sermon is: Christians, Jews, every other non-Muslim and those Muslims who prefer peaceful co-existence to Islamist supremacy, are all enemies of Allah, and therefore your enemies too. Infidels can never be your friends. Muslims who are friends with non-Muslims are bad Muslims and must not be trusted. These bad Muslims, Jews, Chris-

tians, and every other infidel are hostile to the fundamentals of Islam, which is to convert, conquer, and coerce until all submit to the one true creed of Allah. It is therefore, the obligation of all true Muslims to fight for the destruction of Satans of all sizes (USA, UK, and other free nations) and to wipe Israel “from the face of the earth”.

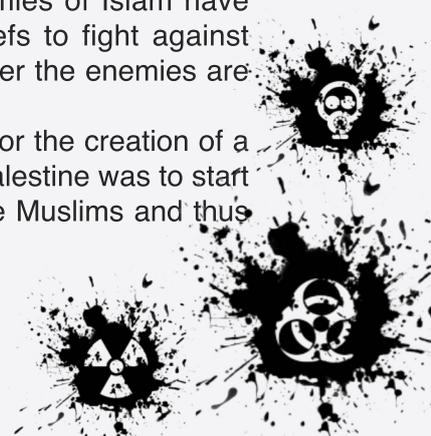
Special mention is made of the “holy” warriors like Hamas and Hezbollah and in a highly charged atmosphere of religious ardour, their horrific deeds are heroised. The total thrust of the sermon is on a Muslim's holy duty of combative jihad and how to sustain an atmosphere of continuous aggression until the Muslim domination over the infidels is complete and conclusive.

On Friday 13 March 1998, Sheikh Ali Abdur-Rahman al-Huzaifi, Imam of Masjid-e-Nabavi (the Prophet's Mosque in Medina, Saudi Arabia) said the following in his sermon to a huge congregation of Muslims. For Sunni Muslims, the Imam of this mosque is amongst the excellent of Allah's creation. He is revered as a Muslim man of extraordinary virtue, wisdom, piety and truth. His words are believed to be in perfect alignment with the “Will of Allah”. In his sermon, Imam Huzaifi said: “... How can there be any similarity, any bond between Islam and Yehudiyyat, (the Jewish faith) when... Yehudiyyat is a collection of materialism and narrow-mindedness, bears malice towards humanity, is steeped in moral degradation, greed and covetousness. ... Can the Muslims bear the presence of the Jews who call Hazrat Esa Alayhissalam (Jesus) the son of a whore? ...

Similarly there is no similarity between Christianity and Islam. Islam is a pure and clean religion believing in the oneness of Allah, in Tauheed....Whereas Christianity is a deviation from the right path...

The Shias are the followers of Ibn Sabaa, the Yehudi, and of Abu Lulu, the Majoosi (Zoroastrian)... The enemies of Islam have united in their false beliefs to fight against Islam. This applies whether the enemies are of old or new.

Thus the only reason for the creation of a Jewish, Zionist state in Palestine was to start an armed conflict with the Muslims and thus



create tension and terror in the region. After they had succeeded in creating Israel, the Jewish colonial powers then set in motion such basic and collective plans....Among these the major plan was to bring about a dissolution of all Sharaee courts from the Islamic countries....To a large extent the Kuffar succeeded in their aim. But praise is to Allah Ta-Aala, that the Saudi government did not fall a prey to this conspiracy and there still exist many Sharaee courts in the country. Today, amongst all the Muslim governments of the world, the government of Saudi Arabia is the only representative, model Islamic government. ...forces of Kufr (infidelity) have now all united against Islam and the Muslims.

The evil intentions and aims of the world powers are:

- To strengthen and fortify the Zionist, Jewish state of Israel
- To tear down Al-Aqsa Mosque and build a synagogue in its place, thus satisfying the ancient desire of the Jews
- To maintain the military supremacy of the Jews over the Muslim Arab countries
- To appropriate a major part of the oil-wealth of the Gulf States for themselves, leaving the Saudis with the residue only
- To deal a death-blow to Islam at the slightest provocation
- To promote everything which is against Islam...

The Americans should learn a lesson from the Muslims of Afghanistan who had started Jihad against Russia armed with sticks only. They had thus brought about the total destruction of the super power of the day...

O people! There is religious enmity between the Muslims and the Kuffar. So how can they be the well-wishers of the Muslims? ...Muslims cannot tolerate...the presence of any power of Kufr in the Arabian Peninsula... Two religions cannot co-exist in Arabia...

Ya Allah! Confer upon the Muslims and Islam, honour and victory, upon Kufr and the Kuffar dishonour and defeat.... Ya Allah! Lord of the universe cause the powers of Kufr to go to war against each other.... Ya Allah! Seize the Jews and Christians in the grip of your punishment. Seize the Hindus and the Mushrikeen (polytheists) too.... Ya Allah!

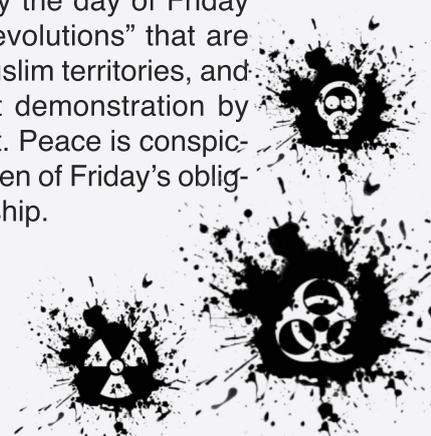
Send down upon them a torment most grievous.... Ya Allah, we seek only thy shelter against the mischief of the Rawafiz (Shias), the heretics..."

The current Imam of the Great Mosque in Mecca, Sheikh Abdulrahman al-Sudais, is one of the most powerful religious advisors of the Saudi government. On Friday 19 April 2002, he delivered a sermon from the Great Mosque to a large gathering of pilgrims in which he said: the Jews are, "the dregs of the human race... the rats of the planet...killers of prophets...pigs and monkeys," and prayed to Allah to "exterminate them". (Laurent Murawiec, Princes of Darkness, 2003, chapter 8, p 88).

Thursday 24 March 2011, this Saudi cleric came to India upon the invitation of Jamiatul Ulema-e-Hind, an organisation of hardliner Sunni clerics. Hundreds of thousands of Muslims from different parts of the country flocked to the Darul-Uloom seminary (founded and run by Deoband Muslims who follow the Wahhabi school of Islam) in the state of Uttar Pradesh to welcome their Imam.

On Friday 25 March 2011, Imam Al-Sudais led this sea of Indian Muslims in prayer. Every road and alley leading to this Wahhabi seminary was bursting to its seams with people who had come to offer their Friday Namaaz (Salaat) under the leadership of Imam Sudais. The Friday fervour was such that worshippers prayed from every place conceivable and otherwise. Streets, lanes, pavements, parks, rooftops, terraces, verandas, back and front yards, highways – all became grounds for prayer.

Around the world the Friday prayer is followed by a Dua (supplication) marking the end of the midday worship session. Suppliant Muslims invoke Allah to annihilate the Jews and grant fataah (victory) to Filisteen (Palestine) and bless the Muslim ummah (community) with victory over the kuffar (infidels). It is not incomprehensible why the day of Friday is so important in the "Revolutions" that are rising and rolling in the Muslim territories, and in every anti-government demonstration by Muslims living in the West. Peace is conspicuously absent in the regimen of Friday's obligatory congregational worship.



Muslim clerics easily obtain Visas to Western countries as appointed Imams of mosques and/or as visiting preachers/lecturers. A greater number of Sunni brand of mosques, Islamic centres, and schools in the West are run by Wahhabi and Salafi Islamists blessed by the Saudi government. Likewise, centres labelled Shiite are “inspired” and “moved” by the Islamist Revolution of Iran. The “spiritual” sustenance these “men of Allah” serve to the believers inside these places of worship has little difference to what they feed the millions of Muslims inside the mosques and madrassas in Islamic countries. Large number of young generation Muslims are growing up on a staple diet of hatred dished up to them inside places of worship.

The show put up by the mosques and Islamic centres in the West for the benefit of law enforcement and security agencies is truly a master workmanship of duplicity and hypocrisy. Every prominent Islamist organisation in the West carefully and meticulously keeps and updates a “front-office” for inter-faith understanding and peace. An army of Western educated professional Muslim brothers and sisters are assigned the ‘jihad’ of glossing the way for various government aids and charity grants to glide in. For one who is not aware of what is really going on behind

the showbiz of Islamism, legions of clerics barely versed in one Western language and basic IT skills and donning robes of religion are damn convincing in their public performances. More than anything else, this has more to do with performance-based pay packets here, and a congregation of paradisiacal virgins hereafter.

Freedom of the West, enshrined in its laws, allows people of all faiths to practice, preach, and promote their faiths without any fear and discrimination. Hence, the Muslim minorities easily build mosques and religious centres in the West, some of which stand out in size and opulence. Like believers of other faiths, they too practice, preach, and promote their respective sects of Islam in an atmosphere of fairness and freedom. The minorities in Muslim countries on the other hand do not have this privilege. People are being slain just because they subscribe to faiths other than Islam. Their places of worship and those who worship therein are constantly terrorised by Muslims inflamed by Islamist clerics and preachers at home and abroad.

Anita Rai is the author of the book: Jihad and Terrorism

## Understanding Strategic Change in al-Qaeda’s Central Leadership after Bin Laden

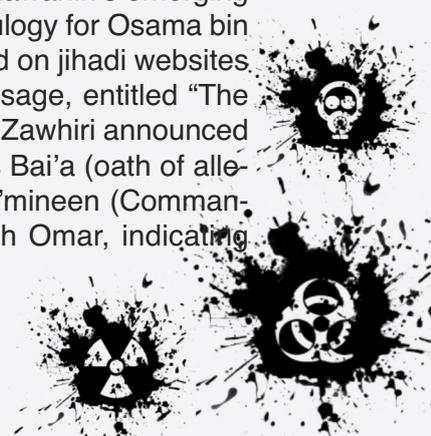
By Murad Batal al-Shishani

Source: <http://www.jamestown.org>

Since the leader of al-Qaeda, Osama Bin Laden, was killed on May 2, much analysis has appeared speculating potential changes to the organization and its leadership. This article aims to answer the basic question of in which direction core al-Qaeda (based along the Afghanistan-Pakistan border) will go in the post-Bin Laden era according to the ideology of its remaining leaders. These figures include Egyptian jihadist Dr. Ayman al-Zawahiri, who will probably emerge as the undeclared leader, as al-Qaeda members considers themselves not an organization, but rather “vanguards” of the jihadist movement. As al-

Qaeda ideologue Abdul Majid Abdul Majid put it: “Al-Qaeda is no longer just a hierarchal organization [built] on specific names, but has become a jihadi mission held [in common] by all mujahedeen of the umma [Islamic community].” [1]

Some indication of al-Zawahiri’s emerging role can be found in his eulogy for Osama bin Laden which was released on jihadi websites on June 8. [2] In the message, entitled “The Noble Knight Alighted,” al-Zawahiri announced the renewal of al-Qaeda’s Bai’a (oath of allegiance) to the Amir al-Mu’mineen (Commander of the Faithful) Mullah Omar, indicating



that al-Zawahiri has the authority to do so on behalf of those “vanguards.”

In order to assess the future behavior of al-Qaeda this article will examine the ideology of three members of al-Qaeda’s Shura council in addition to al-Zawahiri: Abu Yahya al-Libi (a.k.a. Hassan Muhammad Qaid), Abu Abdulrahman Attiya al-Libi (a.k.a. Jamal Ibrahim Shtelwi al-Misrati) and Abdul Majid Abdul Majid. A fourth Shura member, Abu Khalil al-Madani, is not included in this analysis due to a lack of information about his views.

### **Saif al-Adel in the al-Qaeda Leadership**

Although al-Zawahiri has been described as the deputy leader of al-Qaeda over the last 15 years, some recent reports have suggested that Egyptian commander Saif al-Adel would be appointed as the new al-Qaeda leader. However, al-Adel is a military professional, as can be noted from his writings, which means that his lack of ideological credentials make such reports unlikely. [3] A retired Egyptian military officer, al-Adel is believed to be the leader of al-Qaeda’s military committee and returned to Waziristan in 2010 after being released from detention in Iran (Foreign Policy, May 26). Saif al-Adel is commonly identified in reports as the alias of a retired Egyptian intelligence (or Special Forces) officer named Muhammad Ibrahim Makkawi; however, there are reasons to question this identification. Al-Adel’s father-in-law, an Afghan jihad veteran named Abu Hamid al-Masri (a.k.a. Mustafa Hamid), has denied Makkawi is al-Adel’s real name. In 2004, the London-based “Islamic Media Observatory” released a statement saying al-Adel and Makkawi are not the same person. [4] More recently, an Egyptian newspaper published a letter from an individual identifying himself as Muhammad Ibrahim Makkawi, a veteran of the Afghan jihad, stating that he is not Saif al-Adel and has been experiencing problems as a result of this misidentification. The author appears to also be in the Afghanistan-Pakistan region, but claims to have denounced al-Qaeda since 9/11 (al-Youm al-Sabi’i, May 18).

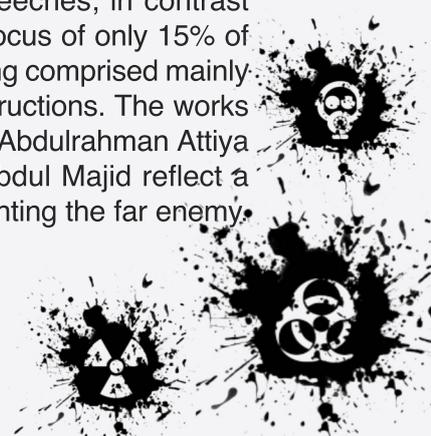
It is important to note that killing Bin Laden does not mean the dismantlement of al-Qaeda. A June 16, 2010 video recording by

Abu Yahya al-Libi, entitled “Our Leaders’ Blood Fuels Our Battle”, eulogized the former leaders of al-Qaeda in Iraq, Abu Omar al-Baghdadi and Abu Hamza al-Muhajir, who were killed in a U.S. air strike on April 19, 2010. Al-Libi’s eulogy indicates the mind-set influencing the behavior of al-Qaeda post-Bin Laden: “There is no mujahid who has fought in bouts and stepped into battlefields, whether he is a leader or a soldier, [who] has not prepared himself for death; he is eagerly awaiting it, hour by hour, no, moment by moment... this worship [Jihad], which is part of our glorious religion, cannot be stopped, disrupted or delayed by the death, killing or capture of someone, whoever he is and [whatever] his status is.” [5] Abu Yahya escaped from the American detention centre in Bagram-Afghanistan in 2005. Since then he has appeared as one of the most prominent ideologues of Salafi-Jihadism after studying Islamic fiqh (jurisprudence) in Mauritania. Jihadists often refer to his writings, especially his opinions on killing civilians.

### **Far Enemy and Near Enemy**

Bin Laden was fond of the idea of fighting against “the far enemy” (the “Crusaders and Jews”). Seventy percent of his speeches and appearances were focused on the far enemy, with 20% consisting of general advice and instructions to jihadis, and just 10% directed at toppling local regimes of “the near enemy” (“apostate” regimes in the Muslim world). [6] These figures suggest that although Bin Laden served as a symbol for jihadis, he was a strategist more than a religious ideologue.

Unlike Bin Laden, al-Zawahiri is focused more on the near enemy, this being due to his background as leader of a national jihad group before it adopted Salafism and joined the larger international jihad movement in the 1980s, of which al-Qaeda is the prime example. Al-Zawahiri’s focus on “the near enemy” comprised 50% of his speeches; in contrast “the far-enemy” was the focus of only 15% of his speeches, the rest being comprised mainly of general advice and instructions. The works of Abu Yahya al-Libi, Abu Abdulrahman Attiya al-Libi and Abdul Majid Abdul Majid reflect a similar lack of focus on fighting the far enemy.



This suggests that core al-Qaeda will focus on targeting near enemies in the future. In his June 8 eulogy for Bin Laden, al-Zawahiri made explicit calls for jihad against the near enemy in Pakistan, Syria, Yemen and Libya.

### **Ideologues and Operatives**

Al-Qaeda and all its branches have a functional division between political-ideological leaders and military operatives. Switching broad strategies would increase the roles of certain leaders from both groups. For instance, al-Zawahiri will rely on operatives who prefer to target near enemies, such as his old comrade Abu Muhammad al-Masri (a.k.a. Abdullah Ahmad Abdullah). Al-Masri's preference for targeting "near enemies" was a source of disagreement with Bin Laden himself after the 9/11 attacks (al-Sharq al-Awsat, May 17, 2003). Al-Masri is an al-Qaeda operative and appears on the FBI's most wanted list. He is accused of involvement in the August 7, 1998 bombings of the U.S. embassies in Dar es Salaam and Nairobi and is believed to be located in the area of the Afghanistan-Pakistan border.

Al-Zawahiri will also need to rely on operatives such as al-Adel and Muhammad Ilyas Kashmiri to maintain al-Qaeda ties with local insurgents in the Afghanistan-Pakistan region. Kashmiri's current status is uncertain; a statement allegedly from Harkat-ul-Jihad-al-Islami (HuJI) announced his death in a June 3 drone strike in North Waziristan, although the spokesman was previously unknown, there were mistakes in the text unlikely to be made by a HuJI spokesman. Moreover, the photo of an allegedly dead Muhammad Ilyas Kashmiri was actually the dead body of Abu Ismail Khan, one of the LeT terrorists involved in the 2008 Mumbai attack (The News International [Islamabad], June 7; Asia Times Online, June 8). Kashmiri is known to be an al-Qaeda commander and leader of the Waziristan-based and HuJI-associated "Brigade 313," which is made up of members of the Tehrik-e-Taliban Pakistan (TTP) and allied Kashmiri groups, including Lashkar-e-Taiba (LeT) and the Karachi-based Jundallah movement.

However, focusing on the near enemy could be the first challenge to al-Zawahiri's

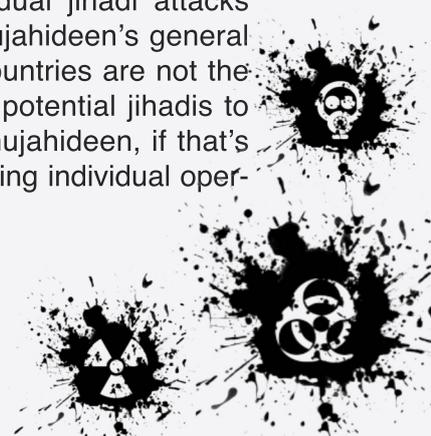
leadership. Al-Qaeda's rhetoric promoting violent jihad has had very little effect on the youths agitating for political change in the streets of the Arab world, which has also hurt its recruitment base.

However, if political violence were to continue to escalate in Libya, Syria and Yemen, for instance, it would provide new opportunities for a movement that has always gravitated to areas in crisis.

### **Individual Jihad**

In this context, it is expected that the ideological role of Abu Abdulrahman Attiya al-Libi will increase. Attiya is a prominent al-Qaeda theorist and a leader of the jihadist movement in Libya (see *Terrorism Monitor*, August 12, 2010). A graduate of Shari'a studies in Mauritania and an expert in explosives, he is considered close to al-Zawahiri. He was also close to Bin Laden and al-Qaeda in Iraq leader Abu Mus'ab al-Zarqawi before the latter was killed in 2006. Attiya has also been described as a coordinator between al-Qaeda leaders and other Islamic groups. Looking at his writings, one notes that all of them fell into the category of "general advice and instructions" until the turmoil in Libya started last February. At that point he started to send messages more regularly denouncing Mu'ammarr al-Qaddafi and NATO military operations in Libya.

Attiya al-Libi's role as a general theorist is essential for al-Qaeda. This was indicated in a recent two-part video recording produced by al-Sahab Media Production entitled "La Tukulif ila Nafsak" (You are not tasked [held responsible] except for yourself only). The first one hour episode was devoted to encouraging al-jihad al-fardi (individual jihad), particularly among Muslims who live in the West. The tactic was described in the recording by both Attiya al-Libi and Abu Yahya al-Libi (asansar.com, June 3). [7] Attiya al-Libi stressed the importance of individual jihadi attacks being in line with "the mujahideen's general strategy... all Western countries are not the same." He further urged potential jihadis to contact "the leaders of mujahideen, if that's possible" before undertaking individual operations.



Besides its tactical advantages, individual jihad suggests that the "far enemy" remains a priority for al-Qaeda. This will increase the importance of the work of Abdul Majid, who clearly stated the priority of targeting the United States when he was asked about the strategy of jihadists: "As for the overall strategy of jihad, I think it is known to all, which is [based] on the importance of focusing on the head of kufr [disbelief] and corruption in the globe - America." [8]

### Conclusion

Al-Qaeda will continue after Bin Laden by relying on its ideology, but a change will be seen in its behavior. These changes will be reflected in new roles for the movement's leaders, particularly those involved in developing the group's ideology.

Under al-Zawahiri's leadership, al-Qaeda will be more near-enemy-oriented, but this will depend on developments in the Arab world and the direction of the popular opposition movements. Relying on military operatives to maintain ties with locals in the region could become a problem for core al-Qaeda if they do not dedicate an ideologue for such missions. Though al-Zawahiri will play an important role as al-Qaeda's new leader, the increased roles of various ideologues will mean that the movement will be led in a more collective fashion than has existed previously.

Murad Batal al-Shishani is an Islamic groups and terrorism issues analyst based in London. He is a specialist on Islamic Movements in Chechnya and in the Middle East.

### Notes:

1. Not much is known about him or whether this is his real name. Unlike most Egyptian jihadists he has not come from al-Gama'a al-Islamiya or al-Jihad, but is rather a product of the traditional Egyptian Salafist movement. For the full text of his interview, see: <http://www.tawhed.ws/r?i=19061015>, June 19, 2010.
2. <http://www.as-ansar.com/vb/showthread.php?p=193941>.
3. For Saif al-Adel's writings, see: <http://www.tawhed.ws/a?a=nkpabwye>.
4. <http://www.aljihad.info/vb/showthread.php?t=5859>.
5. The video can be watched at this link: <http://www.archive.org/details/dema3>.
6. All figures compiled by the author.
7. For more details on the al-jihad al-fardi tactic, which was first encouraged by Bin Laden, see Terrorism Monitor, June 17, 2010.
8. <http://www.tawhed.ws/r?i=19061015>, June 2010.

## Al Qaeda Says Al-Zawahiri Has Succeeded Bin Laden

Source: <http://www.foxnews.com/world/2011/06/16/al-qaeda-says-al-zawahiri-has-succeeded-bin-laden/> #ixzz1PRyFYw9xPublished June 16, 2011

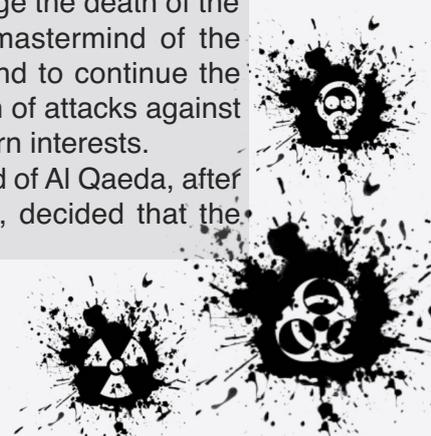
Usama bin Laden's longtime deputy Ayman al-Zawahiri has taken control of Al Qaeda, the group said Thursday, a widely anticipated move that comes at a time the terror network is struggling for relevance amid a wave of Arab uprisings that has threatened to upstage it.

Al-Zawahiri, a surgeon by training, has long brought ideological fire as well as tactical and organizational cunning to Al Qaeda, which has found itself increasingly decentralized and prone to internal disputes following

its expulsion from Afghanistan after its invasion by U.S. forces in 2001.

Thursday's announcement comes more than six weeks after the U.S. killed bin Laden in a May 2 raid on his home in Pakistan. Al-Zawahiri pledged to avenge the death of the Al Qaeda founder and mastermind of the Sept. 11 terror attacks and to continue the terror network's campaign of attacks against the U.S. and other Western interests.

"The general command of Al Qaeda, after completing consultations, decided that the





sheik doctor Abu Mohammed Ayman al-Zawahiri take the responsibility and be in charge of the group," said a statement purportedly by Al Qaeda and posted on militant websites, including several known to be affiliated with the group.

Al Qaeda gave no details about the selection process for bin Laden's successor but said that it was the best tribute to the memory of its "martyrs."

Al-Zawahiri, who turns 60 on Sunday and has a \$25 million bounty on his head, has been behind the use of suicide bombings and the independent militant cells that have become the network's trademarks. But U.S. intelligence officials have said that some Al Qaeda members find al-Zawahiri to be a controlling micromanager who lacks bin Laden's populist appeal.

He also faces significant challenges in promoting Al Qaeda's agenda of a religiously led state spanning the Muslim world after finding itself sidelined in the wake of popular revolts that have been driven by aspirations for Western-style democracy instead.

Al-Zawahiri has been in hiding for nearly 10 years and is widely believed to be near the Pakistan-Afghanistan border. He has appeared in dozens of videos and audiotapes in recent years, increasingly becoming the face of Al Qaeda as bin Laden kept a lower profile.

Most of his pronouncements on the videos and audiotapes show him to be a man consumed by deep hatred for the West, particularly the United States, and Israel.

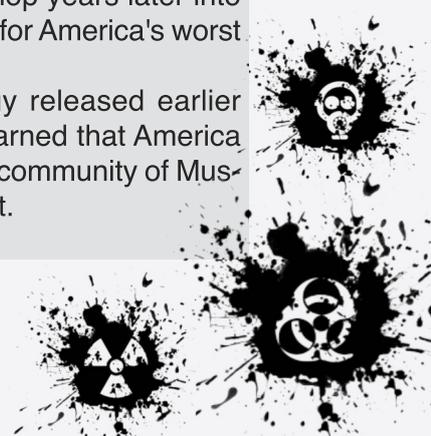
Al-Zawahiri had been considered the most likely successor because of his longtime collaboration with bin Laden. Analysts had said that few were likely to challenge the Al Qaeda deputy leader for the top spot despite some reservations.

Many predicted he would step up attacks to prove himself.

"He was a given leader from the outset. But he doesn't have the same iconic status or personality as bin Laden," said Magnus Ranstorp, a terror analyst at the Royal Swedish Defense College. "He will focus on attacking the West in a big way. To avenge (bin Laden's death), but also to make himself ... even more effective and relevant."

Al-Zawahiri and bin Laden first crossed paths in the late 1980s in the caves of Afghanistan, where the Egyptian reportedly provided medical treatment to bin Laden and other Islamic fighters battling Soviet forces. Their alliance would develop years later into the terror network blamed for America's worst terror attack in its history.

In a videotaped eulogy released earlier this month, al-Zawahiri warned that America still faces an international community of Muslims that seek to destroy it.



"Today, praise God, America is not facing an individual, a group or a faction," he said, wearing a white robe and turban with an assault rifle leaned on a wall behind him. "It is facing a nation that is in revolt, having risen from its lethargy to a renaissance of jihad."

Al-Zawahiri also heaped praise on bin Laden and criticized the U.S. for burying him at sea.

"He went to his God as a martyr, the man who terrified America while alive and terrifies it in death, so much so that they trembled at the idea of his having a tomb," he said.

Al-Zawahiri is the son of an upper middle class Egyptian family of doctors and scholars. His father was a pharmacology professor at Cairo University's medical school and his grandfather was the grand imam of Al-Azhar University, Sunni Islam's formal seat of learning.

At the age of 15, he founded his first underground cell of high school students to oppose the Egyptian government. He continued his militant activities while earning his medical degree, later merging his cell with other militants to form Islamic Jihad.

Al-Zawahiri served three years in an Egyptian prison before heading to Afghanistan in 1984 to fight the Soviets, where he linked up with bin Laden. Al-Zawahiri later followed bin Laden to Sudan and then back to Afghanistan, where they found a safe haven under the radical Taliban regime.

Soon after came the 1998 bombings of the U.S. embassies in Africa, followed by the 2000 suicide bombing of the USS Cole off the coast of Yemen, an attack al-Zawahiri is believed to have helped organize.

In a 2001 treatise, he set down the long-term strategy for the jihadi movement -- to inflict "as many casualties as possible" on the Americans.

"Pursuing the Americans and Jews is not an impossible task," he wrote. "Killing them

is not impossible, whether by a bullet, a knife stab, a bomb or a strike with an iron bar."

Al-Zawahiri's hatred for Americans has also become deeply personal: His wife and at least two of their six children were killed in a U.S. airstrike following the 2001 U.S. invasion of Afghanistan after the 9-11 attacks.

Al-Zawahiri has worked in the years since to rebuild the organization's leadership in the Afghan-Pakistan border. Al Qaeda has inspired or had a direct hand in attacks in North Africa, Saudi Arabia, Yemen, Pakistan, the 2004 train bombings in Madrid and the 2005 transit bombings in London.

The CIA came close to capturing him in 2003 and killing him in 2004 -- both times in Pakistan. In December 2009, they thought they were again close only to be tricked by a double agent who blew himself up, killing seven agency employees and wounding six more in Khost, Afghanistan.

The statement announcing his succession was filled with the terror network's usual rhetoric, vowing to continue the fight against what it called "conquering infidels, led by America and its stooge Israel, who attack the homes of Islam."

The Al Qaeda statement also stated the group's support for this year's popular uprisings in the Middle East and North Africa. It vowed never to recognize the legitimacy of Israel and to support what it called the struggle of the Afghan people under the leadership of Taliban commander Mullah Omar against American occupation.

"We support the uprisings of oppressed Muslim nations in the face of corrupt and oppressive tyrants in Tunisia, Egypt, Yemen, Syria and Morocco and we encourage them along with the rest of the Muslim people to continue the struggle until all the corrupt oppressive regimes imposed by the west are removed," it said.



# CRISTANINI CBRN DECONTAMINATION SYSTEMS



A5009

CONFORM TO THE QUALITY SYSTEM STANDARD AQAP 2110  
and ISO 9001:2008



DEPLOYABLE CBRN  
ANALYTICAL  
LABORATORY (STANAG 4632)



DDMAS LARGE SCALE  
DECONTAMINATION SYSTEM  
HIGHLY DEPLOYABLE



DEPLOYABLE BIO LABORATORY  
CLASS III BIO SECURITY LEVEL



DDMAS LARGE SCALE  
DECONTAMINATION SYSTEM  
DUAL OPERATORS



RVCBRN TRAILER FOR CBRN  
DECONTAMINATION AND  
DETOXIFICATION



MOBILE SYSTEM FOR  
AIRCRAFT DECONTAMINATION



TSDM-TACTICAL STEAM  
DECON MODULE

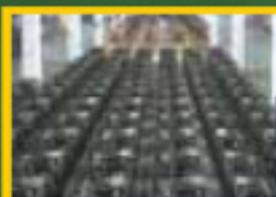
**ONLY ONE PERSON  
ONLY ONE MACHINE  
ONLY ONE PRODUCT**



SANJET C 1126 HR CBRN DUAL  
OPERATOR DECONTAMINATION  
AND DETOXIFICATION GROUP



SC34 CBRN DECONTAMINATION  
OF SENSITIVE EQUIPMENT  
AND SURFACES



CBRN PRODUCTION LINE



**CRISTANINI**

37010 RIVOLI - VERONA - ITALY

Tel. +39-045-6269400 - Fax +39-045-6269411

cristanini@cristanini.it - [www.cristanini.com](http://www.cristanini.com)

Osama bin Laden – the End

# CBRNE-TERRORISM Newsletter

Volume 38 - 2011



Japan's triple catastrophe  
CBRN security at London 2012  
UK DGBRNC  
Agroterrorism  
Forest Fires can be a **Tactic of Terrorism**  
Climate change and global **security**  
CBRN training for **Photographers and TV Crews**  
Innovative chem-bio sensor  
E. Coli 0104 – **Terror in Germany**  
Iran has secretly stocked **enriched uranium**  
for 4 nuclear bombs  
15 US nuclear reactors are **located in**  
an active seismic zone

**New Upcoming  
Events**

**Carry spice** could be used  
to detect explosives  
How IEDs work  
What if there is a **US-China**  
cyber-**war in 2020?**  
**Latin America: Terrorism issues**



*Fukushima*

[www.cbrne-terrorism-newsletter.com](http://www.cbrne-terrorism-newsletter.com)



# New Upcoming Events

## Executive Seminar: Behind the Scenes Seminar of Israel's Counter-Terrorism and Security Operations

February 18 - February 25, 2012

Contact: <http://chameleonassociates.com/SeminarTour12/>

Chameleon Associates is pleased to present a one-of-a-kind security seminar to law enforcement, military and security professionals from around the world.



This seminar provides attendees with an inside look into the security operations of some of Israel's most secured facilities and protected environments. Attendees will meet with top Israeli security and law enforcement officials and will learn first hand how Israel developed and maintains some of the world's best counter-terrorism and security systems.

Some of the facilities and locations visited in the seminar include mass-transit hubs, airports, seaports, border crossings, government facilities, critical infrastructures, shopping malls, corporate facilities and more.

Seminar sessions provide participants with an overview of Israel's security threats and mitigation methods, with emphasis on the protection of critical infrastructure and key national and local assets.

In particular, the sessions and site visits provide participants with a unique inside look into the security operations of a number of Israel's most secured facilities and protected environments, including: airports, mass transit hubs, government facilities, border crossings, critical infrastructure and shopping malls. In addition, the curricula cover many Israeli agencies involved in counter-terrorism from the national to local levels, threat identification and mitigation approaches, emergency preparedness and response capabilities, and innovations in security technology.

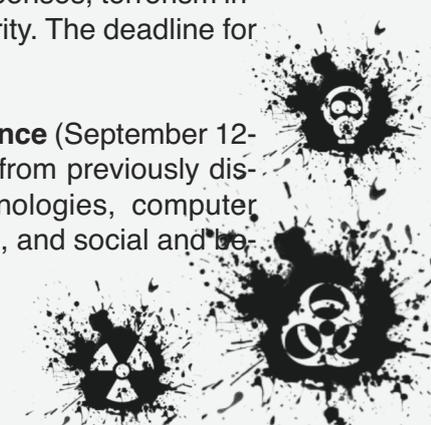
Throughout the Seminar, participant discussions will focus on the key concepts underlying the Israeli practices, their application to the participants' counter-terrorism strategies, and challenges in adopting and sustaining the concepts and practices in diverse country environments. **The seminar is restricted to 30 people**

### International Conference on Intelligence and Security Informatics (July 10-12; Beijing)

This conference of the Institute of Electrical and Electronics Engineers will focus on information sharing and data/text mining, infrastructure protection and emergency responses, terrorism informatics, and enterprise risk management and information systems security. The deadline for submitting papers is March 1. View call for papers



**European Intelligence & Security Informatics Conference** (September 12-14; Athens, Greece) This conference will gather people from previously disparate communities—researchers in information technologies, computer science, public policy, bioinformatics, medical informatics, and social and be-



havior studies as well as local, state, and federal law enforcement and intelligence experts, along with information technology industry consultants and practitioners—to support counterterrorism and homeland security missions of anticipation, interdiction, prevention, preparedness, and response to terrorist acts. The deadline for submitting papers is April 11. View call for papers



**International Defense and Homeland Security Simulation Workshop** (September 28-30; Rome) This workshop will focus on the advances and potential of using modeling and simulation in defense and homeland security applications. It will bring experts together to present and discuss all type of innovation: new concepts, methods, techniques, and tools. The submission deadline is April 15. View call for papers



“An opportunity for vendors to showcase safety and security solutions for pre-game crowd surge issues to Sports Industry management/ security personnel, as well as a chance for security and stadium operators to explain operational/ technological needs for gate crowding issues at sports venues for today and tomorrow.”

<http://www.ncs4.com/conference/>



<http://www.icbrnevents.com/>

Turkey has always been the cross-roads of the world. Poised with one foot on the European side of the Bosphorous while the other is in Asia, it has the second largest land army in Nato and many security challenges.

A secular government faces the threat from fundamentalists and from radical terrorists - with state sponsors. Istanbul, while not the capitol, is at the heart of this challenge, the largest city in Turkey, home to its major religious and cultural centres, yet at the same time it has the challenge of millions of Western tourists and waves of arrivals from the Turkish interior and beyond.

The security challenges that Turkey faces are very similar to many other parts of the world and Turkey has been steadily developing its CBRN defence, to go along with its advanced Counter IED capability. This is your chance to learn what Turkey and some of the best minds in CBRN and Counter IED have been developing. Along with the Conference will be a pre-conference workshop and we are hoping the final day will also have a dynamic demonstration.



### Need a professional speaker?

Source: <http://www.speakersite.com>

The image shows a screenshot of the SpeakerSite website. At the top, there is a yellow banner with the text "SpeakerSite™" and a megaphone icon. To the right of the banner, it says "Because everyone has a message. And every message has an audience." Below the banner, there is a navigation menu with links: "My SpeakerSite", "Book a Speaker", "Browse Speakers", "Events", "Resources", "About Us", "Advertise & Feature", "Contact", and "Groups". The main content area features a search bar with the text "Search for your topic or speaker" and a "Search" button. To the right of the search bar, there is a section titled "...or try one of our featured speakers." which displays a profile for "Dr. Ronald G. Shapiro PhD, CHFP". The profile includes a photo, a headline, a description of his presentation style, and a list of topics including "Psychology". Below the search bar, there is a link that says "Are you a Speaker? Click here to Create a Profile". At the bottom of the page, there is a section titled "Who Searches at SpeakerSite:" which lists several logos of organizations, including "FCI", "goodwill", "Columbus Chamber", and "The Mountingman". The footer of the page contains copyright information and links for "Help & Support", "Report Issue", and "Terms of Service".

The European Society for Emergency Medicine (EuSEM) is a non-profit making scientific organisation whose aim is to promote and foster the concept, philosophy and the art of Emergency Medicine throughout Europe. The ultimate objective of the Society is to help and support European nations to achieve the speciality of Emergency Medicine.





Born as a Society of individuals in 1994 from a multidisciplinary group of experts in Emergency Medicine (the Club of Leuven), EuSEM changed its Statutes in 2005, so that the Society now also represents national societies of Emergency Medicine as well as its members.

Call for papers: <http://www.eusem.org/>

## CollaBoRatioN 2010

### Canadian CBRNE First Responders' Conference

September 25 - 28, 2011

The Westin Calgary, Alberta, Canada

[http://www.cafc.ca/conference/frc\\_e.php](http://www.cafc.ca/conference/frc_e.php)



CollaBoRatioN is an annual conference for individuals working with Chemical, Biological, Radiological, Nuclear and Explosive (CBRNE) response teams. Conference participants are often front-line emergency services workers. Most participants will have attended the Canadian Emergency Management College in Ottawa and are looking to stay on top of new developments and gain further knowledge and skills in the CBRNE area.

The conference is being organized by the Calgary Fire Department.

In partnership with the Canadian Association of Fire Chiefs (CAFC) the Calgary Fire Department is looking forward to being part of the 2011 CAFC conference being held in Calgary from September 25 – 28, 2011.





### Second Israeli International Conference on Healthcare System Preparedness & Response to Emergencies & Disasters (IPRED II)

15-19 January 2012 , Israel

<http://www.ipred.co.il/>

The Israeli Ministry of Health and the Home Front Command will be hosting the Second Israeli International Conference on Healthcare System Preparedness and Response to Emergencies and Disasters. The conference will provide a unique opportunity for professionals from around the world to share the latest findings and new experiences regarding health system readiness for disasters and emergencies of all types.

#### Conference Aims:

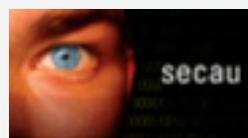
1. To provide a platform for the exchange of ideas, experience and lessons learned for practitioners and researchers involved in the field of preparedness and response to emergencies and disasters.
2. To promote international networking between health care professionals in the fields of preparedness and response to emergencies and disasters.
3. To enhance international research collaboration in the field of emergency and disaster medicine and public health preparedness.

The IPRED scientific committee invites professionals interested in the various aspects of preparedness and response to emergencies and disasters to submit abstracts of papers for presentation at the conference. Proposals for oral or poster presentations are welcome. Please submit your abstracts through the IPRED web-site.

**Abstract submission closes:** July 1, 2011

**Last day for abstract acceptance notification:** August 31, 2011

#### 2nd Australian Counter Terrorism Conference (December 5-7; Perth, Australia)

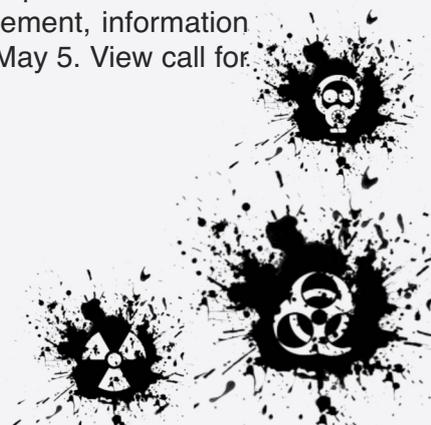


This congress incorporates a continuum of new ideas and research ranging from digital to physical security and from highly technological solutions to human factors using scientific and socially embedded frameworks. It aims to draw together competing and complementing areas of security as part of a holistic engagement with the wider security discourse. The deadline for submitting papers is September 30. View call for papers

#### 3rd ASIS Middle East Security Conference and Exhibition (February 19-21, 2012; Dubai, United Arab Emirates)



Among the many topics on which presentations are welcome: terrorism, homeland security, crisis management, information technology, and training. The submission deadline is May 5. View call for papers



### Countering Terrorism in the Post- 9/11 World



From 22 - 26 August 2011, ICCT – The Hague together with the T.M.C. Asser Instituut will organise a one-week Summer Programme on Countering Terrorism in the Post- 9/11 World. This is the first Hague-based tailor-made programme for graduate students and young professionals with an academic background in e.g. law, security studies, international relations and conflict studies, who are interested in pursuing careers in counter-terrorism and related fields of work. Whether as a lawyer, researcher, policymaker or security analyst, this Summer Programme will provide a unique insight into the preventive and international legal aspects of counter-terrorism.

Over five days, participants will

- gain increased understanding of the historical and socio-political aspects of political violence and the factors conducive to the spread of the phenomenon;
- look into the various methods and actors involved in countering violent extremism; and
- examine the international legal framework and mechanisms applicable to the struggle against terrorism, with an emphasis on human rights elements.

The various lectures will be given by top-level speakers working in the field of counter-terrorism and international law, ranging from academic researchers to judges and civil society leaders. The programme will also include a number of side events and visits to learn more about the organisations and individuals involved in countering terrorism.

[Click here for more information, draft programme and registration form.](#)

### International Conference on Intelligence and Security Informatics (July 10-12; Beijing)

**ISI 2011** This conference of the Institute of Electrical and Electronics Engineers will focus on information sharing and data/text mining, infrastructure protection and emergency responses, terrorism informatics, and enterprise risk management and information systems security. [View event website](#)



(July 19-20; Kuala Lumpur, Malaysia) This congress brings together more than 500 experts, scientists, and key players with an industry exhibition of biological and chemical safety, security, and defense equipment and services, offering an opportunity to get acquainted with commercially available state-of-the-art equipment for handling, processing, detection, and protection. [View event website](#)





**Second International Workshop on Intelligent Technologies for Counter Terrorism and Security** (July 20-24; Kochi, Kerala, India) In conjunction with the International Conference on Advances in Computing and Communications, this workshop will bring together academics and security and counterterrorism practitioners and developers to present the latest intelligent technologies to combat terrorism and to protect critical infrastructures, people, and society and provide a venue to present early work in applying various intelligent technologies. View event website



The ICTAC is pleased to invite you to the International Conference "Counter-Terrorism Today" which will be held from 12 th - 14 th October 2011, in the University Campus of Pomezia, Rome, Italy. The conference will gather a wide range of experts and decision-makers in the field of terrorism and counter-terrorism in order to discuss current counter-terrorism challenges.

ICTAC's International Conference will bring together decision-makers from around the world and renowned experts in counter-terrorism. Participants and speakers at the conference will include members of Parliament, heads of security agencies and police forces, professional experts, international organizations'.

ICTAC's International Conference is an exceptional opportunity for practitioners and researchers in the field of terrorism and counter-terrorism to present studies and to exchange views and experiences addressing current challenges in counter-terrorism.

Terrorist groups are adapting themselves to the counter terrorism measures that have been put in place worldwide in the recent years. View event website.



(July 1-2; Pune, India) The International Emergency Management Society India is organizing this Zero Tolerance to Loss of Life Due to Disasters conference on urban disaster management technology aids. It will present the core facets to "disaster stakeholders," nongovernmental organizations, technology companies, and other interested organizations. View event website





(July 19-20; Kuala Lumpur, Malaysia) This congress brings together more than 500 experts, scientists, and key players with an industry exhibition of biological and chemical safety, security, and defense equipment and services, offering an opportunity to get acquainted with commercially available state-of-the-art equipment for handling, processing, detection, and protection. View event website

## Answer to the Quiz [Terror News]

### Mexico police seize 'narco-tank' used by drug gang

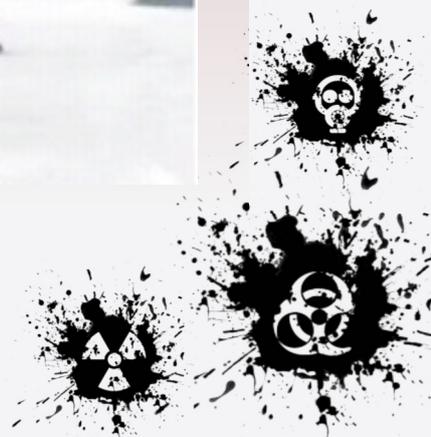
Source: <http://www.bbc.co.uk/news/world-latin-america-13488620>

Police in Mexico say they have seized a "**narco-tank**", a pickup truck fitted with steel armour that is thought to have been used by a drugs gang. The home-made armoured vehicle was



found in the western state of Jalisco. It had metal reinforcements fitted to its front, and a metal cabin covering the rear platform, presumably to protect passengers from gunfire. The security forces often complain that the drug gangs they battle are better armed and equipped than they are. The vehicle was found abandoned in a rural area of Jalisco, where criminal gangs have been fighting with the security forces and each other. Jalisco was the stronghold of the late drug baron Ignacio "Nacho" Coronel, a top member of the Sinaloa cartel. Since

he was killed by the security forces in July 2010, Jalisco has seen a violent battle for control of the area between members of the Sinaloa cartel and their rivals from the Cartel de Jalisco Nueva Generacion.





...Protecting your  
business, Preparing  
your people...



CBRNe and mass contamination:  
threats and resilience briefing

### CSARN / CBRNe and mass contamination: threats and resilience briefing

Friday 7 October, 2011, BT Theatre, BT Centre, LONDON



The threat of a Chemical, Biological, Radio Active or Nuclear (CBRN) Incident is an enduring concern to the business community. The UK has already experienced how disruptive a chemical incident can be when in 2006 Alexander Litvinenko was poisoned by Polonium 210. The aspiration for terrorist groups to deliver an attack in the West is well known and many commentators state that an incident of this type is a matter of 'when' and not 'if'. Threats and organisational vulnerabilities from Chemical, Biological, Radiological and Nuclear hazards present complex challenges for businesses and employers in relation to staff safety, business continuity and public recovery.

Within the context of an environmental and health crisis, what can your organisation do to realistically prepare, protect your colleagues and staff networks from attacks and unintended CBRN leakages?

**Bringing together key agencies, experts and emergency planners, CSARN's CBRN briefing will:**

- Brief attendees on CBRN and mass contamination case studies and how they can disrupt the economy
- Consider the future shape of potential CBRN and mass contamination threats and vulnerabilities
- Share and analyse perceived good practice in preparation and response to CBRN, including staff safety and efficient public recovery
- Foster dialogue, links and assess first responder/public sector response during and after a major UK CBRN-related incident

#### Who should attend:

- Government leaders that have a responsibility for delivering an effective CBRN response
- Police, other first responders and public agencies
- Risk managers and directors

#### Speakers will include:

- Alan King / Deputy Head of Emergency Preparedness for the Metropolitan Police Service- Planning and Emergency Services Response to Major CBR Incidents
- Paul Hayden / Director of Resolve Network Incident Management and Types of CBR Responses
- Andy Oppenheimer / CBRNE Analyst, Author of IRA: The Bombs and the Bullets Threats and Methods of CBRNe attacks



# CBRNE-Terrorism Newsletter Summer 2011

649

- Matt Tuck / Managing Director, MATOM Recovery from Mass Contamination and Radiation
- Brig (ret) Ioannis Galatas / MD, PhD, MC (Army) Consultant, Allergy & Clinical Immunology  
CBRN specialist - Senior Terrorism/ WMD Analyst Athens, Greece
- John R Robinson FBCI / Managing Director, INONI Limited Practical Continuity : the benefit of forethought
- Mick Massey / Managing Director, Hanover Associates Developing and testing CBRNE scenarios

<b>CSARN Members</b>	<b>FREE</b>
<b>Public Sector</b>	<b>£149 + VAT</b>
<b>Non Member Delegate fee</b>	<b>£ 295 + VAT</b>



- The CSARN Team
- CSARN  
01737 249 989  
[www.CSARN.org](http://www.CSARN.org)  
CSARNNews  
[twitter.com\CSARN\\_Updates](https://twitter.com/CSARN_Updates)



# CRISTANINI CBRN DECONTAMINATION SYSTEMS



A5009

CONFORM TO THE QUALITY SYSTEM STANDARD AQAP 2110  
and ISO 9001:2008



DEPLOYABLE CBRN  
ANALYTICAL  
LABORATORY (STANAG 4632)



DDMAS LARGE SCALE  
DECONTAMINATION SYSTEM  
HIGHLY DEPLOYABLE



DEPLOYABLE BIO LABORATORY  
CLASS III BIO SECURITY LEVEL



DDMAS LARGE SCALE  
DECONTAMINATION SYSTEM  
DUAL OPERATORS



RVCBRN TRAILER FOR CBRN  
DECONTAMINATION AND  
DETOXIFICATION



MOBILE SYSTEM FOR  
AIRCRAFT DECONTAMINATION



TSDM-TACTICAL STEAM  
DECON MODULE

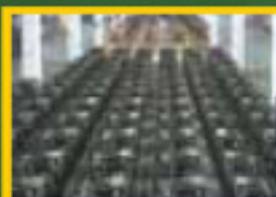
**ONLY ONE PERSON  
ONLY ONE MACHINE  
ONLY ONE PRODUCT**



SANJET C 1126 HR CBRN DUAL  
OPERATOR DECONTAMINATION  
AND DETOXIFICATION GROUP



SX34 CBRN DECONTAMINATION  
OF SENSITIVE EQUIPMENT  
AND SURFACES



CBRN PRODUCTION LINE



**CRISTANINI**

37010 RIVOLI - VERONA - ITALY

Tel. +39-045-6269400 - Fax +39-045-6269411

cristanini@cristanini.it - [www.cristanini.com](http://www.cristanini.com)