

UNCLASSIFIED//FOUO

STRATEGIC CHALLENGES

OF THE 21ST CENTURY

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The Threat Spectrum

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Air Force Global Operations

Integrity - Service - Excellence



Non-Traditional Threats

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Irregular

Catastrophic

*Disruptive
Technology*



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Non-Traditional Threats: Irregular

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IRREGULAR: Employs unconventional methods to counter traditional advantages of stronger opponents



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Irregular Threat: Terrorism

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NORTH AMERICA:
Al Qa'ida and associated extremist networks



EUROPE:
Al Qa'ida network, affiliated Sunni extremist organizations



SOUTH AMERICA:
Revolutionary Armed Forces of Colombia (FARC); Islamic extremist organizations



NORTHWEST AFRICA:
Al Qa'ida in the land of the Islamic Maghreb (AQIM)



SOUTHEAST ASIA:
Muslim separatists and Communists; Jemmah Islamiyah, Abu Sayyaf Group



MIDDLE EAST:
Al Qa'ida and al Qa'ida associated groups

Democracies at Risk Globally from Radical Islamic Terrorists

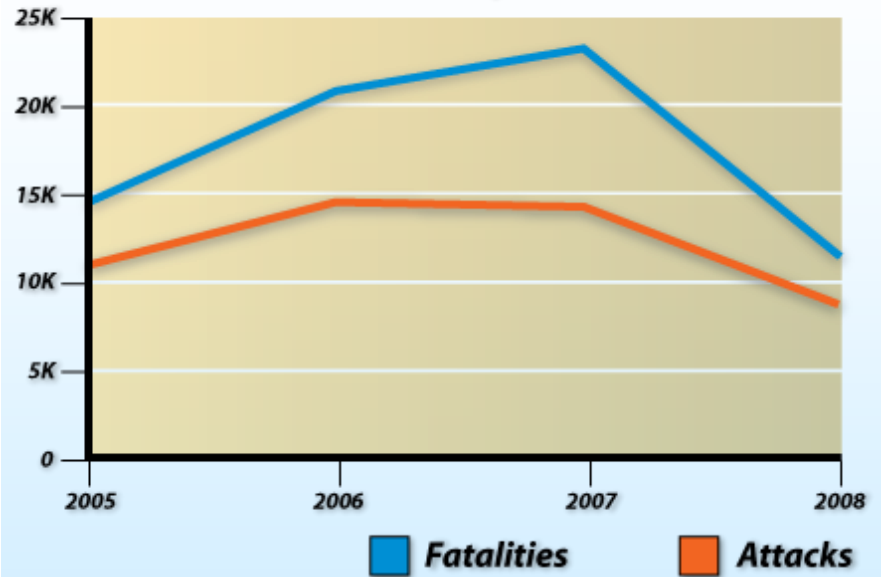


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Terrorism: Rise of Extremist Ideology



Terrorist Activity 2005 - 2008





Al Qa'ida: Our Biggest Threat

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2008 What's Next?

2007 al Qa'ida in Islamic Maghreb Founded

2005 UK Subway Attacks

2003 al Qa'ida in Iraq Founded

2002 Bali Night Club Attack

2001 Sept 11

2000 USS Cole

1998 Fatwa Against U.S.

1996 Khobar Towers

1993 First WTC Attack

1988 al Qa'ida Founded

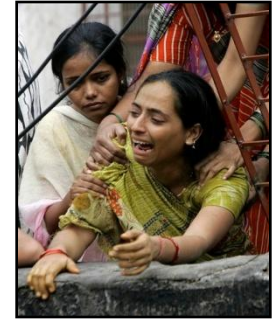
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India: Mumbai Terror Attacks

- Pakistan-based extremist group Lashkar-e-Tayyiba (LT) executed attacks against 7 primarily Western targets in Mumbai
- LT is an Islamic extremist group with some ties to al Qa'ida; main goal removal of India from Kashmir
- At least 10 operatives involved in attacks
- IEDs, grenades and small arms used in attack; approx 195 reported dead, over 300 wounded



Event Significantly Altered Existing Complex Regional Dynamics



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Emerging States: Iraq & Afghanistan

IRAQ

- Over 10,000 Airmen deployed
- USAF has flown over 380,000 OIF sorties (~180/day in 08); 140/day over the last 3 months
- AQI degraded, still dangerous
- Weak governance lagging behind security advances



AFGHANISTAN

- Over 6,000 Airmen deployed
- USAF has flown over 210,000 OEF sorties (~90/day in 08); 180/day over the last 3 months
- Illicit poppy income aiding insurgency
- Government/Security Forces slowly improving



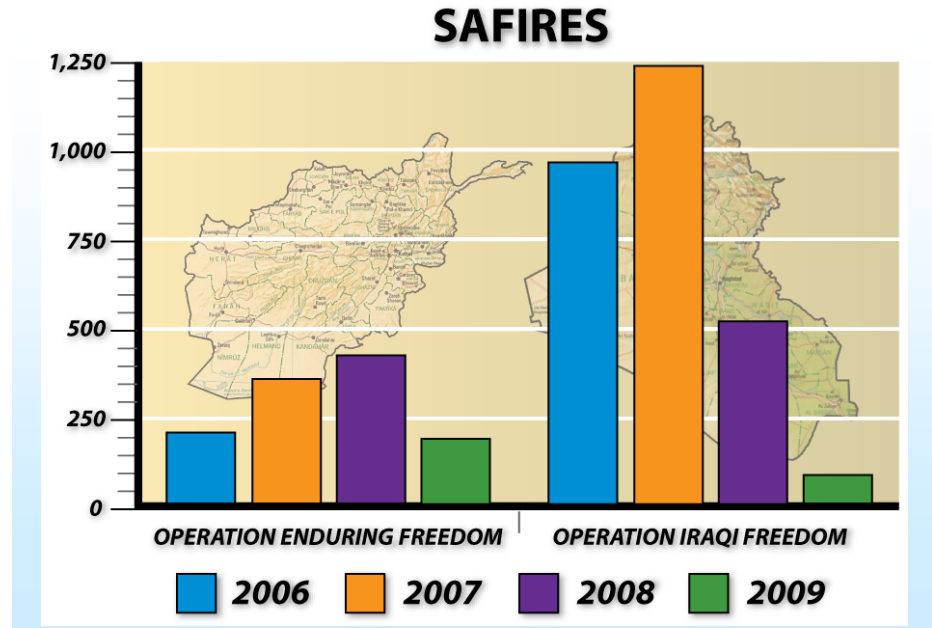
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Emerging States: Iraq & Afghanistan

- Threats to Air Operations
 - Air Base Attacks
 - Suicide Attacks
 - Indirect Fire
 - Surface-to-Air Fire (SAFIRES)
 - Improvised Explosive Devices (IEDs)



IED vs. MRAP



2007 Suicide Attack—Bagram



CH-47



Predator



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Emerging States: Iraq & Afghanistan

Syria: Staging area
for foreign fighters

Pakistan:
Safe-haven for Insurgent
and Terrorist Leaders



Iran: Provides Advanced
Weapons and Training

RPG-29



FALAQ-1 ROCKET



EXPLOSIVELY-FORMED
PENETRATOR IED



MISAGH-1 MANPADS

**Pakistani-Based
Militants**

Osama Bin Laden (AQ)
Mullah Omar (Taliban)
Baitullah Mehsud (Tribal)





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Africa: Regional Issues

AQIM

- Al Qa'ida in the Islamic Maghreb largest threat
- Strategic energy resources primary target
- Criminal activity funds terrorism



HORN OF AFRICA

- Terrorist recruitment, training safe haven; Al Qa'ida-inspired Somalia-based networks expanding
- Ethnic conflict, domestic politics destabilizing region
- Porous borders enabling terrorist movement

DARFUR

- Large Al Qa'ida presence; fertile recruitment ground
- Rebellion, insurgency lead to world's worst humanitarian crisis
- 2 million internally displaced; 75% of farms and villages destroyed



**USAF
OPERATIONAL
IMPACT**





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Venezuela: Shifting Alliances

- Chavez pursuing “Bolivarian Revolution”
- Shift in arms purchases; Russia and China main suppliers
- Foreign policy campaign: Belarus, Russia, China, Syria, Iran, Qatar, Vietnam, Cuba, Bolivia



Chavez and Russian Prime Minister Vladimir Putin



Chavez and Iranian President Ahmadinejad



Chavez and Fidel Castro



Chavez and Nicaraguan President Ortega



Chavez and Syrian President Bashar Assad



Chavez and Bolivian President Morales



Chavez and Chinese President Hu-Jintao



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Non-Traditional Threats: Catastrophic

CATASTROPHIC: Involves acquisition, possession, and use of WMD or methods producing WMD effects

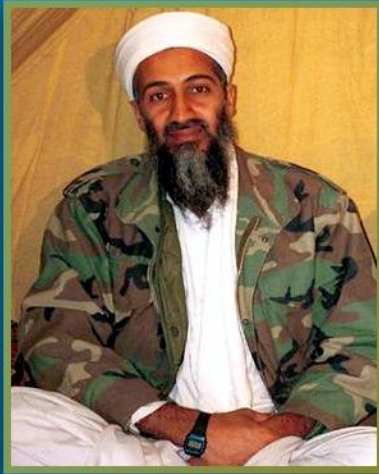


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Catastrophic Challenges: WMD Threat



“Acquiring chemical and nuclear weapons for the defense of Muslims is a religious duty.”

Osama bin Laden



ONE



DOZENS



THOUSANDS



MILLIONS

Casualty Producing Capabilities

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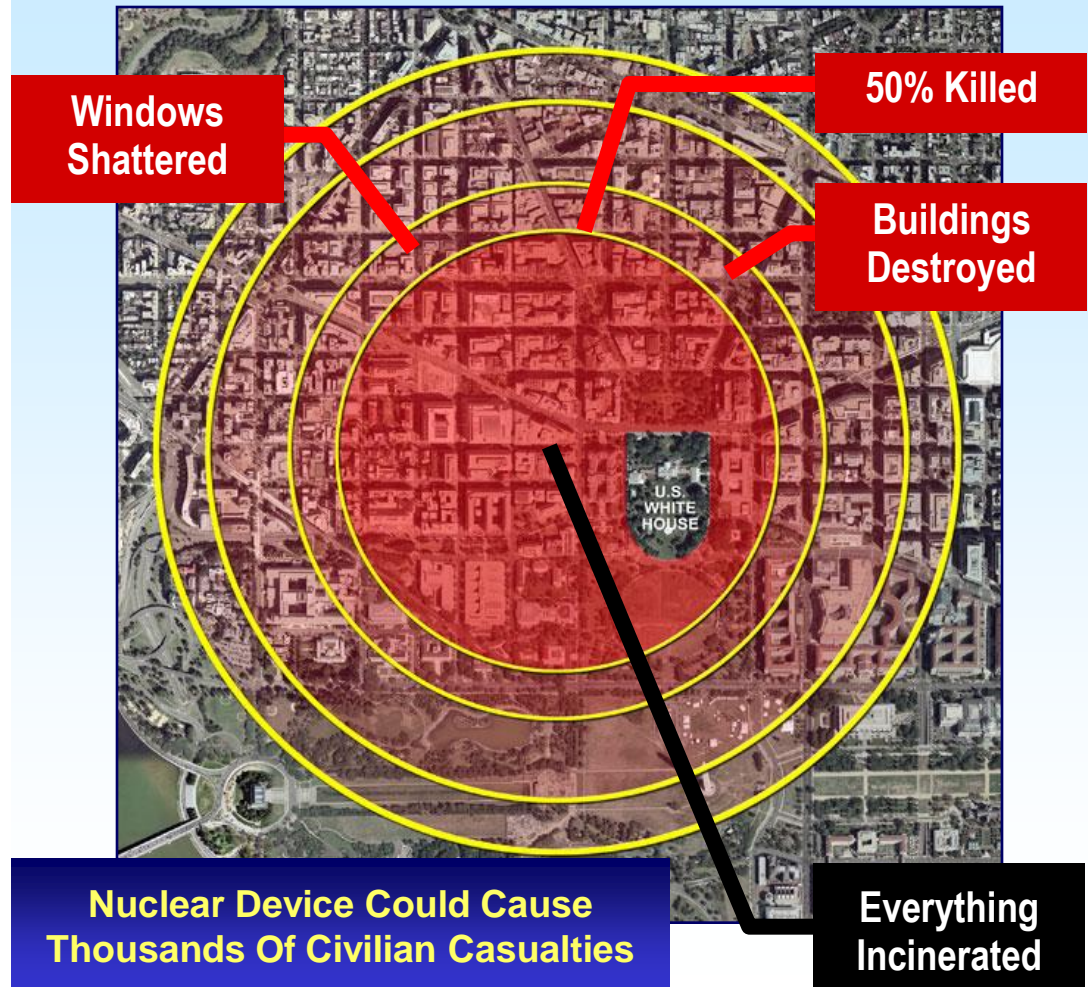
Catastrophic Challenges: WMD Proliferation

■ Terror Scenario:

- 10 KT Nuclear Weapon
- Ground Burst near White House
- Small enough to fit into a mini-van



Nuclear Weapon Detonated In Washington, D.C.





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Iran: Catastrophic Threat

- Developing civilian nuclear capability; infrastructure could aid future weapons research
- Possible, but unlikely, to produce needed fissile material by 2009, more likely by 2015
 - Limited success with enriching uranium
 - However, technological challenges remain
- Rudimentary weapon within months to a year of obtaining fissile material
- SHAHAB-3 MRBM/ASHURA MRBM most likely candidate for nuclear delivery vehicle



Range of Iran's Shahab-3 & Ashura Missiles



Pres Ahmadinejad Inspecting Centrifuges



Ashura MRBM Launch



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North Korea: Catastrophic Threat

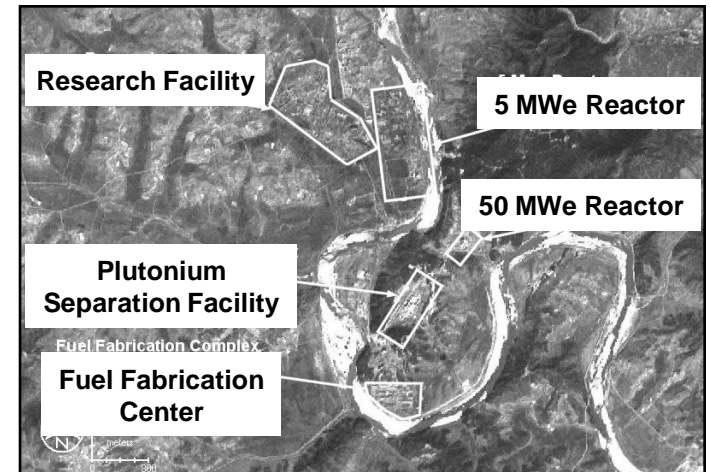
- Assessed to have 6-12 plutonium weapons
 - Indigenously-produced plutonium
 - Low yield during nuclear test, more testing needed to refine design
- Probably pursuing uranium weapons, several years from enriching enough
- 25 May: conducted 2nd nuclear test; continued hostile rhetoric in wake of UN condemnation
- Technical ability to build nuclear warhead for current ballistic missiles
 - Using SCUD-based missiles for long range programs
 - Taepo Dong-2 (TD-2) could reach U.S. Territory; technical issues abound



TD-2



N. Korea Missile Ranges



Yongbyon Nuclear Complex



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Syria: Catastrophic Threat

- Covert nuclear reactor destroyed by Israel, Sep 2007
- Sole function: Producing weapons-grade plutonium
- After attack, demolished site and removed evidence
- North Korean Connections
 - Provided experts and equipment in 2001
 - Multiple visits in 2007 including post-strike assessment



Post-Strike
Removal

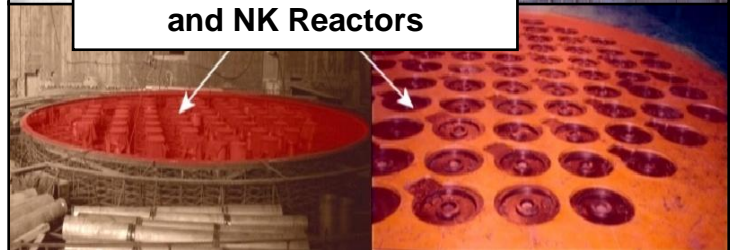


NK and Syrian
Nuclear Experts

Al Kibar Reactor



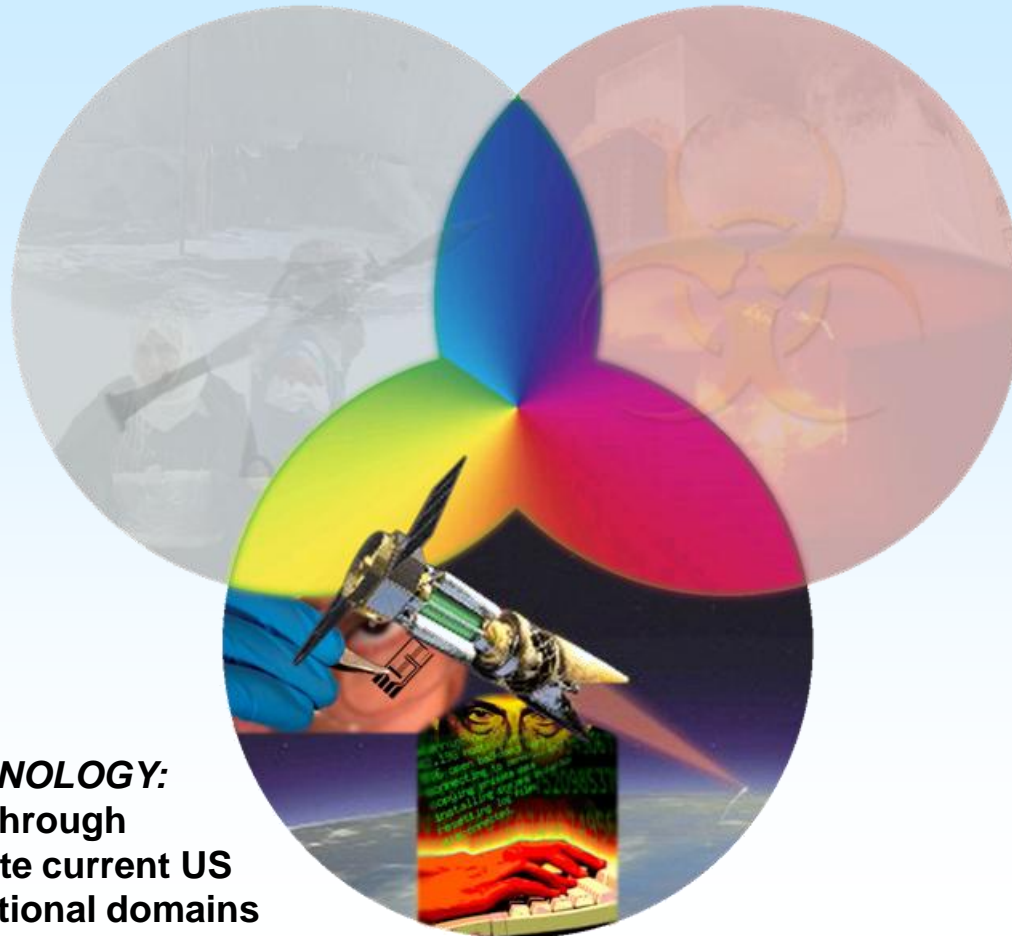
Similarities Between Syrian
and NK Reactors





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Non-Traditional Threats: Disruptive Technology



DISRUPTIVE TECHNOLOGY:
Enemy uses breakthrough
technology to negate current US
advantage in operational domains

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Disruptive Challenges: Terrorists' Increasing Comm Ability



“In the absence of popular support, the Islamic mujahed movement would be crushed in the shadows, far from the masses who are distracted or fearful.”

Ayman al-Zawahiri



Information Sharing Capabilities

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Disruptive Challenges: Emerging Technology

Globalization and commercialization of technology resulting in potential disruptive threats worldwide



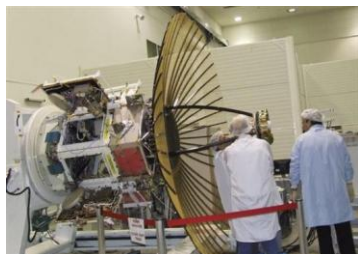
GPS Jammers



Laser



Anti-missile Defense



Satellites



Energy Directed



Cyber



Biometrics/Nano

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Non-Traditional Challenges

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	<i>Near-term</i>	<i>Mid-term</i>	<i>Long-term</i>
IRREGULAR	<ul style="list-style-type: none">■ Al Qa'ida		
CATASTROPHIC	<ul style="list-style-type: none">■ Bio-Terror (Anthrax)		
DISRUPTIVE	<ul style="list-style-type: none">■ Commercial Off the Shelf (COTS) Technology (GPS Jammers)		

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Non-Traditional Challenges

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	Near-term	Mid-term	Long-term
IRREGULAR		<ul style="list-style-type: none">■ Globalization of Islamic Front	
CATASTROPHIC		<ul style="list-style-type: none">■ Iranian Nuclear Weaponization	
DISRUPTIVE		<ul style="list-style-type: none">■ Cyber Terrorism	

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Non-Traditional Challenges

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Near-term

Mid-term

Long-term

IRREGULAR



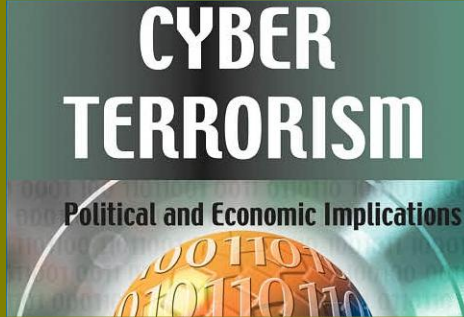
■ Global Techno-Terrorism

CATASTROPHIC



■ Non-State Actors with WMD

DISRUPTIVE



■ Debilitating Technology Breakthroughs

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Non-Traditional Challenges

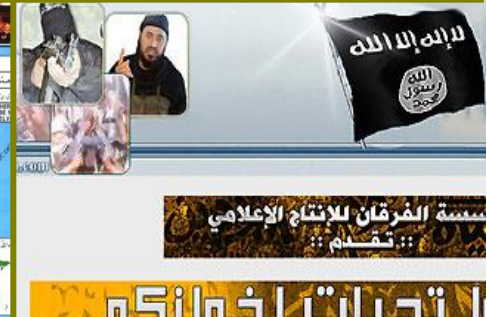
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Near-term

Mid-term

Long-term

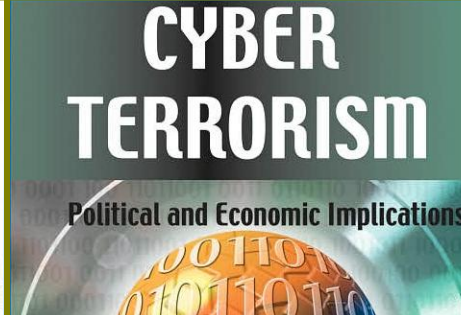
IRREGULAR



CATASTROPHIC



DISRUPTIVE



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