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The Pentagon, Room MB917
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Since the attacks of September the 11th, we have been on the offense. I believe the best way to do our duty in securing the homeland is to stay on the offense. And we're not alone. That's what our fellow citizens have got to understand. We're not in this fight against extremists and murders alone . . . The enemy is active, and so are those of us who love freedom. It's in the interests of the United States to encourage other nations not to relent and not to give in, but to keep the pressure on those who try to have their way by murdering the innocent. And that's exactly what we'll continue to do.

— President George W. Bush
February 15, 2007

But the challenge posed by violent extremism today is unlike anything the West has faced in many generations. In many ways it is grounded in a profound alienation from the foundations of the modern world—religious toleration, freedom of expression, and equality for women. As we have seen, many of these extremist networks are homegrown, and can take root in the restless and alienated immigrant populations of Europe. The dark talent of the extremists today is, as President Bush said, to combine “new technologies and old hatreds.” Their ability to tap into global communications systems turns modern advances against us and turns local conflicts into problems potentially of much wider concern. The interest they have shown in weapons of mass destruction is real and needs to be taken seriously. We have learned that from a distant and isolated place, from any failed or extremist state—such as Afghanistan during the 1990s—these networks can plan and launch far-reaching and devastating attacks on free and civilized nations.

— Secretary of Defense Robert Gates
February 11, 2007

This is a fight worth fighting. It is clear that the terrorists intend to bring this fight to America. They want to establish caliphates in every country that has the kind of freedoms we do. This is a long-term fight, and I have great faith that the American people understand the nature of this threat, and we will do what we must to defend ourselves.

— General Peter Pace
February 22, 2007



Over the course of the past several months, I have asked the staff to re-examine the way we conduct AT/FP business with an aim at making sure we remain relevant while divesting ourselves of archaic practices. And so it is with this publication. Historically, *The Guardian* has been a technical journal that has mainly emphasized the procurement of equipment and the development of tactics, techniques, and procedures to counter the terrorist threat. Is it time for an overhaul?

I need your help with delivering a high-quality product and I ask you to do two things.

- First, please contact my staff and give us AT/FP-related topics that you would like addressed.
- Second, write and submit your articles based on your invaluable field experience and analysis for the benefit of the entire AT/FP community. Collectively, our efforts will ensure we continue to deliver timely and useful information.

Another way we attempt to provide informative and relevant content is through the Antiterrorism Enterprise Portal (ATEP). This forum provides an additional valuable instrument to collaborate, educate, and facilitate worldwide AT/FP information in both unclassified and classified environments. The unclassified version is located at <https://atep.dtic.mil>. These sites are not mere repositories of instructions and directives; rather, they are meant to be collaborative electronic workspaces to connect everyone in the AT/FP community, including combatant commander's J-34 staffs, installation physical security officers, and battalion antiterrorism officers. These sites are designed to quickly satisfy the community's requirements to hammer out guidance, solve problems, and pass on the right AT/FP mission details. Ultimately, our goal is to provide useful content that will make you, the user, more informed and more productive for the Long War.

As a result of the field's feedback, we recently opened our Level IV Antiterrorism Force Protection Seminar to senior O-5s, but on a limited quota system. We recognized the demands of the ongoing Long War have in many cases resulted in senior O-5s serving in O-6 billets. The Level IV Seminar remains the premier AT/FP forum in DOD.

Finally, we recently completed our annual Joint Staff AT conference and received some great feedback that we plan to incorporate in our next annual event. The next conference is scheduled for 18-20 March 2008 and will emphasize AT/FP best practices and lessons learned. In addition, we will include Service and issue-specific breakout sessions that will focus on critical AT program elements.

In closing, I applaud your continued commitment to serving our nation during the ongoing Global War on Terrorism. At the end of the day, our Soldiers, Sailors, Airmen, and Marines deserve our due diligence and collective best efforts. As Thomas Jefferson noted long ago, "The price of freedom is eternal vigilance."

Peter M. Aylward
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J-3, Deputy Director for Antiterrorism/Homeland Defense

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SUBMITTING NEWS & ARTICLES

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Force Protection Detachments: Partnering with Foreign Nation Counterparts

By Scott Dominick and P. Cole Hanner, Force Protection Detachment Program Office, DOD Counterintelligence Field Activity

In April 2006, *The Guardian* published a detailed article on the background and responsibilities of the Force Protection Detachments (FPDs). This joint service program was established to detect, warn of, and deter threats to Department of Defense (DOD) personnel and assets that are in transit overseas. Each FPD functions as a “force protection, force multiplier” for the US Embassy Country Team, while also supporting the security responsibilities of the US DOD Unified Combatant Commander (COCOM) in theater.

As members of the Force Protection (FP) community, agents liaison with law enforcement, military, and security services to implement and coordinate the following FP-related functions: route, harbor, airfield, and rail assessments; FP briefings; protective service operational support; surveillance detection and counter-surveillance; investigative leads; and generation and dissemination of FP products and reports.

Program Development

As of February 2007, the FPD program has been established in 22 countries, with plans to expand to others based on requirements levied by the geographical COCOMs, subject to the approval of the respective US ambassadors. As the FPD program has grown and evolved, the various offices have developed innovative ways to leverage host nation capabilities to assist in the FP mission. The activities and benefits of the program will be the central focus at the upcoming second FPD Worldwide Conference scheduled for May 2007.

The US military remains dependent on host nation support to ensure the safety and security of its forward-deployed forces in many countries throughout the world. An effective FP program is

equally dependent on timely receipt of accurate threat information and a thorough understanding of a particular country’s security capabilities, limitations, and intentions.

The following examples illustrate how FPDs engage and leverage host nation resources in country.



Australia

In May 2006, FPD Australia, working with the Naval Criminal Investigative Service

Security Training Assessment and Assistance Team Pacific (STAAT PAC), coordinated a counter-surveillance and surveillance-detection seminar for representatives from various law enforcement agencies. This seminar provided host nation law enforcement agencies with tools for effectively tightening security around the country by tracking suspected terrorist activity and protecting themselves against foreign and enemy surveillance. The seminar was hosted by the Queensland Police Service (QPS) at its Queensland Training Academy and included the following participants: Australian Federal Police (AFP), Australian Customs Service, Australian Protective Service (APS), New South Wales Police Service, Victoria Police Service, Western Australia Police, and Northern Territory Police Service. Participants engaged in a variety of activities, from technological training to instruction in effective surveillance/counter-surveillance techniques. The seminar generated rave reviews from all of the participants, and the attendees requested future iterations of the seminar at their individual agencies.



Djibouti

FPD Djibouti, working closely with the Regional Security Office (RSO), sponsored a 6-day VIP security training seminar for 100 officers of the Djibouti Police Nationale (DNP). The Director General of the DNP requested this training to prepare his officers for the arrival of numerous dignitaries and heads of state from more than 20 African nations during the Common Markets for Eastern and Southern Africa (COMESA) Conference in October 2006. To conduct the training, the RSO and FPD offices enlisted the help of the NCIS STAAT PAC, which tailored the seminar to prepare the officers of the DNP for the rigors of VIP security. Courses taught during the seminar included motorcade route analysis and operations, VIP protection, and detection of improvised explosive devices (IEDs).



US Senate Foreign Relations Committee Professional Staff Member Michael Phelan visits the course site with RSO Gary Stoner and Douglas Robinson from NCIS.

Thailand

IEDs account for a significant number of casualties in the Global War on Terrorism (GWOT) and certainly represent one of the greatest threats to US forces and personnel in areas with high levels of terrorist activity. Counter Intelligence and FP efforts play a major role in protection from and/or prevention of IED attacks. FPD Thailand took the initiative to provide a 5-day antiterrorism training course in Phuket for 57 officers from the Phuket Island Tourist Police and the nearby southern tourist destinations of Phang Nga, Krabi, and Koh Samui. In addition to the valuable training, the Army donated \$50,000 worth of IED detection equipment to the Thai police, including hand-held metal detectors, lights, and mirrors for checking under cars for concealed bombs. The training course focused on the proper use of this equipment to detect IEDs and on other security measures necessary to prevent terrorist attacks.



Panama

FPD Panama recognized a critical need to expand the protection of high-value transits through the Panama Canal. The FPD office, working in concert with the Embassy Country Team and the Technical Judicial Police (PTJ), was able to create a viable new program to protect the canal. The office leased vehicles for the team and coordinated training, assessments, and technical equipment to facilitate the functions required to implement and support this new counter-surveillance initiative. The PTJ Director now operates an efficient, proactive terrorism-prevention program that works seamlessly with the FPD in Panama. The United States maintains a strong partnership in the protection of American assets transiting the canal, and the Embassy has the benefit of another force multiplier in expanding its mission in Panama.



El Salvador

FPD El Salvador was recently able to secure updated forensic equipment from the NCIS Forensic Lab in San Diego. The FPD transferred this equipment to the US Embassy in El Salvador, which subsequently donated it to the country's National Police Forensic Laboratory. The FPD facilitated effective transfer of the equipment by coordinating with host nation law enforcement. With the new equipment and training, El Salvador law enforcement now has an improved ability to collect important evidence and conduct more thorough forensic analyses.

Conclusion

The *USS COLE Commission Report* addresses the premise that a worldwide US military presence and continuous transit of ships, aircraft, and units is an essential part of the National Security Strategy and in our nation's best interest. Operating in the current environment exposes US personnel and equipment to terrorist attacks and requires that additional and improved resources be used to protect critical units while in transit. By enhancing host nation law enforcement and security capabilities, FPDs are making a vital contribution to the National Security Strategy and the protection of American personnel and assets traveling abroad.

The relationships between the FPDs and the host nations discussed above, as well as in other locations where FPDs have been established, continue to grow and improve as friendships are established and cooperation expands.



Our Own Worst Enemy: Why Our Misguided Reactions to 9-11 Might Be America's Greatest Threat

By Randall J. Larsen, former chairman, Department of Military Strategy and Operations at the National War College

PART 1

This is Part 1 of a two-part article originally published by the National Legal Center for the Public Interest in July 2005. It addresses the shortcomings of America's response to the terrorist threat and puts forth a strategy for containing that threat and deciding where to concentrate our efforts. Part 2, which will appear in the next issue of The Guardian, discusses various elements that will support these efforts, such as executive education (teaching our leaders how to think), information systems (knowing what we know), and both protecting and leveraging corporate America in the Global War on Terrorism.

Introduction

Most Americans equate the attacks of September 11, 2001, with the beginning of what we now call "homeland security." However, the US government began spending money on homeland security in 1995 as a result of the attacks on the World Trade Center (1993), the Murrah Federal Building in Oklahoma City (1995), and the sarin attack on the Tokyo subway system (1995). After the government spent hundreds of billions of dollars during the last decade, your family, your local community, and your corporations are not significantly more secure than they were 10 years ago. Wasting money with good intentions makes us no more secure.

If we continue down this same road, our own incompetence will become a greater threat to our security than al Qaeda. If we do not display the vision, discipline, and courage to properly analyze this new security environment; develop a long-range, comprehensive strategy; and provide bipartisan priorities for the tough budgetary decisions that lie ahead, we may become our own worst enemy.

Today, we continue to waste enormous sums of money on homeland security programs. Billions of dollars are being spent on uncoordinated, ill-conceived programs that focus on buying additional gates, guns, guards, and Geiger counters—the toys, technology, and pork of homeland security. This means we do not have adequate resources for those initiatives that would make a difference. Furthermore, some of the current and proposed programs (spending

and regulatory) could cause more damage to corporations and America's economic well-being than an al Qaeda attack.

How is it possible that we could become our own worst enemy? Simple. A large percentage of America's leaders, in both the public and private sectors, do not have a solid understanding of the 21st-century international security environment. On one hand, this is somewhat understandable, because the change has been considerable. On the other, it is inexcusable, because there is no higher priority for a nation's leaders than to provide security to its citizens.

When the Cold War ended, General Colin Powell predicted it would take at least a decade before we understood the new international security environment. We all knew it was transforming from bi-polar to multi-polar, or perhaps, uni-polar. However, our intelligence community, executive, and legislative branches of government, major corporations, and academic community failed to understand the role that technology would play in shaping the new security era — what we now call homeland security.

Fifty years ago, Osama bin Laden would have been just another angry guy in the desert with a rifle. Twenty-first century technology provides bin Laden, and other terrorists, with the means to threaten a superpower. In the decade preceding 9-11, we failed to recognize this fact. We must not fail a second time. Or, to borrow a phrase from President Harry Truman, "No learning takes place the second time you are kicked by a mule."

This monograph will not provide all of the answers. It will provide some, but, even more important, it will provide the reader with the strategic perspective required to better understand the challenges and opportunities of homeland security. This strategic perspective will apply to a wide audience: leaders in the executive and legislative branches of federal, state, and local governments, and leaders in corporate America.

As I noted in a Washington Post op-ed on May 20, 2005, it had been 1,347 days since 9-11. Why 1,347 days? That was the number of days between Pearl Harbor and VJ Day—a reasonable measurement of progress. Starting from an abysmally unprepared posture, America required only 1,347 days to defeat Nazi Germany and Imperial Japan. Unfortunately, using this benchmark, our progress today is not impressive.

I finished writing this monograph in July 2005, so there is no way of predicting whether we will have had another attack on our homeland by the time this text is read. But, for discussion purposes, let us assume that there have been no further terrorist attacks on the American homeland until one week before this monograph is read. Ask yourself this question: “In light of the most recent attack, what should be America’s spending priorities?” You might respond with the following query, “What type of attack just occurred?” And I would say, “That is totally irrelevant.”

We, not the enemy, must be in charge of our destiny. The strategies and spending priorities discussed in this monograph will remain constant over the next decade, regardless of what is in the next news cycle. This is true because they are strategic, not tactical. We have spent far too much time thinking about homeland security from the tactical rather than from the strategic level. However, this is not the first time that America’s national security leaders have had difficulty with the strategic perspective.

When General Eisenhower returned from World War II, he stated that American military officers were equal to the British officers at the tactical and operational levels. However, when it came to strategic thinking, the British officers were far superior. Ike said, “Fix it.” And, the National War College was created. Its purpose is to teach America’s future military leaders how to think strategically. The college has produced many strategic thinkers, including General Brent Scowcroft and former Secretary of State Colin Powell. Strategic thinking is what is sorely missing in the homeland security community today.

So that is where we will begin.

Think Strategically, Not Tactically

The most common mistake made in Washington, D.C., is called: “Ready, shoot, aim.” In response to the attacks on the World Trade Center, the Federal Building in Oklahoma City, and the attack on the subway system in Tokyo, America began spending money on homeland security in 1995. After 9-11, we vastly increased the rate of spending, but it was not until the summer of 2002 that we actually published a national strategy for securing the homeland. And even then, it was not really a strategy. The principal author of the document agreed it was not a strategy; he said it was a “good plan.”

Nearly four years after 9-11, America still does not have a long-range, comprehensive strategy for defending the American homeland. This is why it frequently looks as if the right hand is not communicating with the left hand. This is why we are spending enormous sums of money and enacting legislation that hurts our economy, but fails to provide the security we require.



In preparation for a congressional hearing in 2004, I examined six strategies published by the Bush administration since the summer of 2002: The National Security Strategy of the United States of America, The National Strategy for Homeland Security, The National Strategy for Combating Terrorism, The National Strategy to Combat Weapons of Mass Destruction, The National Strategy to Secure Cyberspace, and The National Strategy for the Physical Protection of Critical Infrastructures and Key Assets. These are all useful documents. Some provide strategies for certain sectors, and most provide good plans. However, none provide a national strategy for defending the American homeland that is all-encompassing in terms of missions and participants.

That is what is missing, a single unifying theme that integrates all missions—from deterrence, prevention, and preemption to incident management and recovery, and all participants—from the President to the police officer, from Members of Congress to mayors, and from a cabinet secretary to a soldier, to a county public health officer, and to a corporate CEO.

Some critics would question whether it is possible to develop a concise yet broad strategy such as Europe first in World War II and containment in the Cold War. I believe it is not only possible, but essential to our success, and there is certainly precedent.

In 1947, George Kennan provided America with a strategy that guided 8 Presidents, 20 Congresses, and ultimately led to victory in the Cold War. It was a strategy that could be boiled down to a single word: containment. Kennan stated that if we and our allies contained Soviet expansion, the empire would eventually collapse from its own inefficiencies. That strategic concept guided us through the Berlin Crisis of 1948, the creation of NATO, the Korean War, the Cuban Missile Crisis, the Vietnam War, our efforts in Latin America, and, perhaps most important, the collapse of the Soviet Empire and the accompanying threat of global thermonuclear war. That single concept, and the philosophy behind it, guided policy and spending programs for more than three decades. Today, no one has yet to offer a single unifying strategy for the challenges ahead.

A strategy to defend the homeland is more complex than winning the war against al Qaeda. We must understand this strategy is about a permanent change in the international security environment. We must think long-term, and we must seek an end-state that is realistic.

Realistically, how many leaders in this nation have read the six documents mentioned previously? Not many, I suspect. But if leaders have not read these documents, how can they successfully develop and implement plans and programs to defend our homeland? It would be like going to the Super Bowl without a game plan.

To design a single strategy for homeland security, one must begin with assumptions, and these assumptions are far different from the Cold War, or, perhaps, any other time in our history. Strategists talk of ends, ways, and means. Most agree that the ways and means have changed dramatically. During the Cold War, preemption was considered taboo, because it was a euphemism for the first use of nuclear weapons. Whether or not you agreed with President Bush's decision to oust Saddam Hussein from power in Iraq, preemption is clearly an option of American security policy in the 21st century. In Afghanistan, an army — that had prepared for large tank battles in central Europe and in the deserts of Southwest Asia — found its soldiers riding into battle on horseback, using laser designators and satellite radios to guide 500-pound bombs being dropped from airplanes built in the 1960s

to fight a nuclear war. The ways and means have definitely changed. I am not sure, however, that most leaders understand the change in the end-state.

When America entered World War II, we understood that Nazi Germany and Imperial Japan could be defeated. When the Cold War began, we believed that a containment of Soviet expansion eventually would lead to the collapse of the Soviet Empire. But who today truly believes we can defeat terrorism?

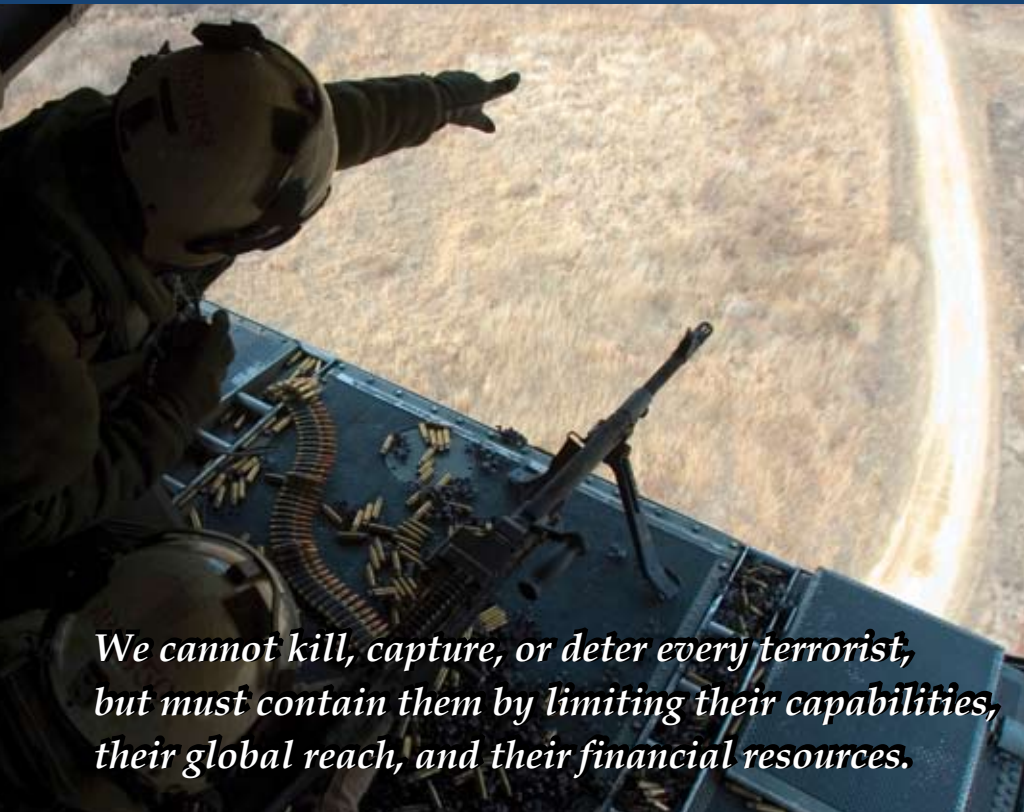
In 1967, the President of the American Medical Association stated that the end of infectious disease was at hand through the use of vaccinations and antibiotics. Obviously, he was mistaken. While it may be possible to eradicate some infectious diseases, just as it may be possible to eliminate al Qaeda, winning the war against terrorism is as likely as winning the war against all infectious diseases. The best we can realistically hope for is to contain the frequency and severity of their attacks.

A strategy to defend the homeland is far more complex than winning the war against al Qaeda. (Al Qaeda is an organization that is now in the third generation of its evolutionary development. This term will be used throughout this monograph as shorthand for "Islamic terrorist organizations that threaten the United States and our allies.") We must understand this strategy is about a permanent change in the international security environment. We must think long-term, and we must seek an end-state that is realistic. The technological genie is out of the bottle — small actors can now threaten a superpower. This fact will not change.

Therefore, a single unifying strategy for defending the American homeland must contain the following elements:

- Relentless pursuit, on a multilateral basis when possible, of individuals and organizations that threaten our homeland — this includes those who support them
- Renewed and aggressive programs to prevent the proliferation of weapons of mass destruction, particularly nuclear and biological weapons — such as the Nunn-Lugar program
- Concerted effort to win the war of ideas, particularly important in the Information Age — the least publicized, yet excellent, recommendation from the 9-11 Commission
- Development of standards for prevention, mitigation, and incident management programs that are fiscally sustainable for the long haul





We cannot kill, capture, or deter every terrorist, but must contain them by limiting their capabilities, their global reach, and their financial resources.

- Understanding that overreactions by Congress and the administration could cause more long-term damage to the American economy than terrorists

For more than three years, I have been searching for a single word or phrase that could capture these five elements. The single word capable of providing an overall strategy for defending the American homeland is not new. George Kennan used it in reference to Communism in 1947; however, the philosophy behind the strategy of containment in the 21st century is far different.

It is unrealistic and even naïve to believe that we can permanently end terrorism or terrorist threats to our homeland. In early 2004, one of the candidates for President stated in a television advertisement that he could prevent attacks on the American homeland—a preposterous idea that he quickly withdrew (shortly before he withdrew from the race). Nevertheless, in the case of defending our homeland, we all hate to admit that which is true. We cannot defeat terrorism. We cannot win the War on Terrorism.

Unconditional surrender by Nazi Germany and Imperial Japan ended the threat that caused us to enter World War II. That is not possible today. Former Secretary Ridge has stated, “There will be no victory parades.” He is correct. Therefore, let us make our strategy reflect this reality. We should seek to control certain factors or, better yet, contain the threat from terrorism.

We must contain the capabilities, global reach, and financial resources of terrorists and terrorist organizations. We must contain the proliferation of weapons

of mass destruction, particularly those weapons that most threaten our survival, nuclear and biological.

We must contain the spread of hatred with our own offensive campaign in the war of ideas. We must contain the vulnerabilities of our nation. And we must seek to contain our response to the new threats. We must not overreact.

Some readers will comment that this is a defeatist strategy. It is realistic. We cannot stop every determined truck bomber, but we must prevent a mushroom cloud over an American city or a catastrophic biological attack on the nation. We cannot kill, capture, or deter every terrorist, but must contain them by limiting their capabilities, their global reach, and their financial resources.

We cannot prevent the proliferation of all weapons of mass destruction. Chemical agents, including industrial chemicals, are far too easy to produce or buy. Radiological material for use in a dirty bomb has already proliferated beyond control. It exists in most hospitals, laboratories, and even at many large construction sites around the world. However, we must contain the proliferation of nuclear weapons and biological weapons. Programs such as Nunn-Lugar are great investments in homeland security.

The Nunn-Lugar Cooperative Threat Reduction Program began in 1991 to reduce (eventually eliminate) the threat of weapons of mass destruction from the former Soviet Union’s arsenal. The two most important elements are the nuclear and bioweapons programs. The nuclear program has enjoyed the greater success of the two. Today, 1 out of every 10 lightbulbs in America receives its electricity from weapons-grade nuclear material that the United States has bought from Russia and reprocessed into fuel that is not capable of producing a bomb, but can be used in our nuclear power plants. In other words, there is a great dual benefit to this type of program. But most important, these types of programs contain the threat of a nuclear attack on the United States. If properly funded and supported, they could virtually eliminate this threat. Unfortunately, this glass is only half full. (See www.nti.org for more information.)

The Wahabi sect of Islam supports schools, organizations, and special programs, some in our own country. Registered with the IRS as 501(c)(3) charitable institutions, they preach hatred and violence against America and Americans. We cannot end all

coordinated information campaigns against the United States, but we must retaliate with our own offensive campaign to contain this contagion of hatred, disinformation, and instigation. (This was one of the least publicized recommendations of the 9-11 Commission.)

America is a free and open nation. That makes us a target-rich environment for terrorists. We must take prudent and fiscally responsible actions to reduce these vulnerabilities and implement realistic and measurable prevention and incident management programs. The measurement aspect is critically important. If we do not set standards and goals, how can we measure progress?

One distinguished group of Americans released an often-quoted report in late 2003 calling for an increase in spending on security within US borders that would approach \$100 billion over five years. But we had not yet established standards and measurable goals for such programs. (For the most part, we still have not.)

Al Qaeda and other international terrorists are not done yet. We must have a single unifying strategy that responds to the realities of the 21st century.

How did the group determine these numbers? How would Congress allocate and prioritize spending? (Ready, shoot, aim.) It would be great for pork – it would send money to every congressional district. But would it make us more secure? No.

The press had a field day when a college student smuggled a few box cutters onto an airliner, but do we really want a security system that is 100 percent successful? If so, it will take us hours to get through an airport. A system that is 80 percent effective is not an attractive target – even to a suicide bomber. A system that stops four out of five attackers is a strong deterrent, and one we can afford. If it is part of a layered defense, it will provide the security required. A passenger and cargo screening system, backed up by hardened cockpit doors, thousands of armed sky marshals, armed pilots, and passengers who have not forgotten Todd Beamer and his compatriots is the type of security system we need and can afford.

What we cannot afford are wasteful programs. The Transportation Security Administration (TSA) recently initiated a program to fingerprint all people who have a permit to transport hazardous cargo. These fingerprints will then be compared to the fingerprints of known terrorists. On the surface, it sounds like a reasonable idea. By the way, this idea did not originate on Capitol Hill; it came from TSA. Today, there are 2.7 million people with hazardous cargo permits. TSA estimates it will cost \$100 each to fingerprint them and compare them to known terrorist fingerprints. In other words, this program is costing more than a quarter of

a billion dollars. As of this writing, there are only three locations in California where drivers can have their fingerprints taken. So, the \$270 million figure does not take into account the lost time (and fuel) that will be consumed by drivers going to these locations. Does it sound like a waste of time and effort? Wait, it gets worse.

By definition of the Department of Transportation (DOT), the following items are considered hazardous cargo: paint, Coke syrup, fingernail polish remover, and my favorite, Listerine. I guess we should all sleep better tonight knowing that TSA is preventing al Qaeda from attacking us with Coke syrup and Listerine bombs.

But it is not just the executive branch that has been misguided in some of its actions. On some days, the hyperbole, hype, and hollow promises from Capitol Hill frighten me more than terrorists. Following the President's 2004 State of the Union address, a prominent Congressional leader stated that less than 5

percent of cargo entering the United States is currently inspected. She demanded that 100 percent of cargo that comes into this country by sea, and 100 percent of the cargo carried on domestic and international flights, be inspected. The cost to the consumer would be mind-boggling. It would be a recipe for economic disaster. This is an example of the US government doing more damage to the American economy than terrorists.

I have heard troubling statements from Congress, such as "building a wall from Brownsville, Texas, to Imperial Beach, California." According to the Department of Homeland Security, there are 7,500 miles of borders and 95,000 miles of shoreline in this country. Understanding that we are in this for the long haul, how can we ever hope to seal our borders against terrorists? Imagine the costs. It is not economically feasible.



We must contain our impulse for overreaction. Programs such as these will make us no more secure and will divert money away from programs that could make a difference. This tendency for impulse spending and overregulation will most likely occur during election years and immediately following attacks.

And yes, there will be more attacks. We must never forget the words of Ramsey Yousef, the mastermind of the 1993 bombing of the World Trade Center. After his arrest in 1995, he was being flown to New York City for arraignment. As the helicopter flew up the Hudson River, an FBI agent pointed to the World Trade Center towers and said, "They are still standing." Yousef answered, "We are not done yet."

Al Qaeda and other international terrorists are not done yet. We must have a single unifying strategy that responds to the realities of the 21st century. Containment is the single unifying strategy that provides the common thread to all other strategies and plans associated with defending the American homeland. It is a strategy that provides guidance for actions and spending. It is a strategy that is attainable and affordable. Containment is both the strategy and the end-state we seek.

Strategy Drives Spending Priorities

To defend America from the Soviet threat, Congress provided funds to the Department of Defense and the intelligence community. For the threats of the 21st century, Congress will be required to fund programs in the departments of Homeland Security, Health and Human Services, Justice, Agriculture, Defense, Treasury, and the Environmental Protection Agency; the intelligence community; and state and local governments. One estimate stated that as many as 87,000 government jurisdictions are involved in homeland security – most, or perhaps all, of which look to the US Congress for funding. How can the Members of Congress possibly establish priorities within all of these stovepipes?

We should focus our efforts on threats, not organizations. Some critics will say that the range of threats is nearly as diverse as the government organizations

involved. That also may be true, but it is critical to understand that there are only two threats capable of bringing this nation to its knees – nuclear and biological weapons. These two threats must receive top priority for spending. Additionally, there are two other areas that can provide

the American taxpayer with the best return on investment for the broad range of threats we will face in the coming years: education and information technology. Education programs and information systems can provide substantial security benefits for the broad range of threats – from weapons of mass destruction to suicide bombers in shopping malls.

Nuclear Weapons

Since the United States lost its monopoly on nuclear weapons in 1949, no other weapon has emerged that equals the severity of the nuclear threat. One Hiroshima-sized bomb in an American city would forever change the course of our history. A second nuclear weapon in a second city would threaten the foundations of our political, economic, and social structures. A nuclear-armed al Qaeda would be an existential threat to the United States of America. This is neither hyperbole nor fear mongering. It is simply a fact.

There are no means to mitigate the effects of a nuclear detonation. Once the Soviets improved the accuracy of their missiles, we learned that even a super-hardened facility buried under tons of solid granite was vulnerable. It is physically and economically impossible to harden America against a nuclear attack. Likewise, there is no effective response after an attack. Therefore, the only effective strategy is prevention.

The good news in this case is that there is a relatively simple solution to preventing such an attack: do not let al Qaeda or any other terrorist organization get their hands on weapons-grade nuclear material. I am confident that no terrorist organization today, or at any time in the next few decades, will have the capability to build a nuclear weapon from scratch. Numerous independent studies have concluded that it would cost more than a billion dollars. This is just not within the capabilities of even the richest terrorist organizations.

The problem, however, is that it only requires 35 pounds of highly enriched uranium (HEU) or 9 pounds of plutonium to produce a bomb. In other words, a large briefcase could contain enough material to build a nuclear weapon. Unfortunately, building a crude nuclear device, similar to the one that destroyed Hiroshima, is far easier than most understand. The scientists who built the Hiroshima bomb (Little Boy) were confident their design would work; they did not require a test. The designers placed two pieces of HEU in opposite ends of a Navy gun barrel. Behind one piece of HEU (about the size of a soda can), they placed a large bullet that would propel the soda-can-sized piece of HEU down the gun barrel tube so that it would strike a slightly larger piece of HEU. This crude device killed 70,000 people.

Without question, America's number-one spending priority should be ... preventing the terrorists from getting their hands on weapons-grade nuclear materials.

Some readers might find it odd that a bomb that killed 70,000 people is referred to as being crude. This, however, is a term that is commonly used when describing a HEU, gun-type bomb—also called an “atom bomb.” Little Boy was nearly 1,000 times more powerful than the largest bombs used in World War II, which were the dam busters that contained about 14,000 pounds of conventional explosives. In the Cold War, both the United States and the Soviet Union built incredibly complex fission-fusion bombs (often called “hydrogen bombs”) that were 1,000 times more powerful than Little Boy.

The good news is that there is no chance a terrorist organization could build a hydrogen bomb. Even if they stole one or bought one from the former Soviet arsenal, it is highly unlikely they could make it work. Therefore, no one needs to lose sleep worrying about a terrorist attack with a hydrogen bomb. The bad news is that terrorists who obtained HEU could build a crude bomb—a bomb that would completely destroy a one-mile radius in a city, and make a much larger area uninhabitable. (If you wonder why Hiroshima and Nagasaki are inhabited today, it is because both Little Boy and Fat Man exploded well above the cities so that the fireball did not touch the ground. Most likely, a terrorist bomb would be detonated on the ground and create an enormous amount of radioactive material.)

Where could a terrorist find highly enriched uranium? It is not as difficult as you may think. There is enough HEU sitting in research reactors to build scores of Hiroshima-sized bombs. There are more than 100 such reactors in 40 countries that use HEU as their fuel. The research reactor at the University of Wisconsin contains enough HEU to build three Hiroshima-sized bombs. The security at these research reactors is nothing like the security at nuclear power plants, which is actually very high.

Furthermore, the fuel in these research reactors is generally not highly radioactive. Unlike the fuel rods in a nuclear power plant, these fuel elements would not require massive shielding to protect the individuals who would transport them. Several research reactor fuel elements could be safely carried in an ordinary suitcase. A 1977 unclassified report from the Argonne National Laboratory stated that the processing required to convert these fuel elements into weapons-grade material could be accomplished with commercial off-the-shelf equipment. Details on the chemical processes required also are available in open literature.¹

In addition to the material in research reactors, there are hundreds of tons of weapons-grade material inadequately protected in the former Soviet Union. Progress has been made in locating, locking down, and eliminating these nuclear materials, but we still have a long way to go. As Vice President Cheney said, “If we secure 99 percent of the Russian weapons-grade nuclear material, it will still leave enough available for terrorists to make scores of nuclear weapons.”

Nevertheless, neither the administration nor

Congress is placing the proper priority on locating, locking down, and eliminating weapons-grade nuclear materials. This is not just my opinion. On March 31, 2005, the Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction released its final report. Its assessment of the intelligence community’s priority for preventing a terrorist nuclear attack on our homeland was frightening:

“... we would like to emphasize that the United States has not made collection on loose nukes a high priority.”

In a hearing before the House of Representatives Homeland Security Committee on April 19, 2005, I read this quote and asked, “What could possibly be a higher priority?” No one could answer my question. Perhaps you should send a short e-mail to the three

people who represent you in the US Congress and ask them the same simple question. You can find their e-mail addresses at www.senate.gov and www.house.gov.

The President’s budget for fiscal year 2006 proposes the creation of a new organization to help protect America against nuclear terrorism: the Domestic Nuclear Detection Office in the Department of Homeland Security. The two problems with this initiative are clearly identified in the title: domestic and detection. While most details on the roles and responsibilities of this office have yet to be determined, the word domestic leads me to believe its focus will be inside US borders. Most of the nuclear material that we must contain is outside US borders. Additionally, detecting nuclear material inside our borders is the last step in a long process, and what may be described as a desperate effort with low probability of success. Or, as I asked the Homeland Security Committee in a recent hearing, “Why are you spending my taxes putting gamma detectors outside of this building? Don’t you understand that when a nuclear weapon gets that close, it is already too late?”



America's goal must be to contain the proliferation of nuclear material and to prevent it from ever reaching our shores. That is where we should focus our spending. Nunn-Lugar-type programs will provide America with the best return on investment for securing our homeland.

Without question, America's number-one spending priority should be exactly what both presidential candidates said at the end of their first televised debate on September 30, 2004 — preventing the terrorists from getting their hands on weapons-grade nuclear materials.

Biological Weapons

Protecting America against nuclear terrorism is a daunting challenge, but the action required is not complicated — we only need to prevent the terrorists from obtaining weapons-grade nuclear material. Unfortunately, protecting America against bioterrorism is far more complex, and, therefore, a far greater challenge. Equally troubling is the fact that the revolution in biotechnology means that the likelihood of a sophisticated biological attack during the next decade is far greater than a nuclear attack.

Going back to the strategy of containment, we must understand that it is impossible to prevent bioattacks. I demonstrated this to Vice President Cheney just nine days after the 9-11 attacks. We were talking about the threat of a biological attack on the American homeland. The Vice President asked, "What does a biological weapon look like?"

I reached into my pocket and pulled out a test tube containing weaponized *Bacillus globigii*. I said, "Sir, it looks like this, and by the way, I did just carry this into the White House." I continued, "This was produced with equipment bought off of the Internet for less than \$250,000. Because of the biotechnical revolution of the past decade, any well-funded, well-educated terrorist group now has the capability to produce biological weapons."

The weaponized *Bacillus globigii* was produced a few years ago in a government program called Bacchus. Genetically, *Bacillus globigii* is nearly identical to *Bacillus anthracis*, the bacteria that causes anthrax. Many nations, including the United States and the Soviet Union, used *Bacillus globigii* to test their production and dispersal equipment. If you can weaponize *Bacillus globigii*, you can weaponize *Bacillus anthracis*. Weaponization means that it is in a three-micron-sized powder. (A human hair is about 100 microns in width.) Release this powder into the air and it tends to remain suspended, rather than falling to the floor or ground. When you breathe it in, it goes right into the smallest alveoli sacks in your lungs and then directly into your bloodstream. In about 3-4 days you will develop flu-like symptoms, and without

rapid and heroic efforts you will be dead in less than 10 days.

A small team of scientists with no experience in the production of bioweapons or access to classified information on the process demonstrated how easy it is to weaponize *Bacillus globigii* by using open source information and equipment bought over the Internet. They showed that the funding required to weaponize *Bacillus globigii* and other pathogens is less than the price of a luxury car. (Had they bought used lab equipment instead of new equipment, it would have only cost them \$50,000.) The seed stock for bioweapons — such as *Bacillus anthracis* (anthrax), *Yersinia pestis* (plague), and viral hemorrhagic fevers (Ebola and Marburg) — exists in laboratories around the globe. With the exception of variola virus (smallpox), all of the 40 pathogens tested in various bioweapons programs exist in countless laboratories around the world. In fact, if you want to find anthrax or plague, you don't even have to go to a laboratory. The anthrax bacteria can be found in the soil in Texas and Kansas. The plague bacteria can be found in rats above the 5,000-foot level in the Rocky Mountains. Various hemorrhagic fevers are endemic in certain parts of Africa.



Let there be no question in your mind, the biological weapons genie is out of the bottle. There are no actions that the President, Congress, or anyone else can take to prevent terrorists from obtaining and weaponizing these pathogens. It is only a matter of time until a significant bioterrorism event occurs. And when it occurs, it will not be an isolated event. Because of something called the "reload factor," the moment we detect a bioattack in one city, we will need to assume it could quickly appear in many cities. Richard

Danzig, a former Secretary of the Navy, and one of America's leading biodefense strategists, coined this term several years ago.

Someday, terrorists may be able to obtain a nuclear weapon, but it is not likely that they would be able to buy or steal many. On the other hand, once a terrorist organization learns how to make a few ounces of a weaponized pathogen, making pounds will be cheap and easy. (According to the US Office of Technology Assessment, under ideal conditions, 220 pounds of dry powdered anthrax would kill more people than a one-megaton hydrogen bomb. A one-megaton hydrogen bomb is the equivalent of 70 Hiroshima bombs.) If we detect anthrax in New York City, we must understand that attacks have occurred, or will soon occur, in many other cities. This is an unfortunate fact of life in the 21st century. We must not put our heads in the sand and hope it won't happen. Therefore, the second priority for spending homeland security funds must be for the mitigation and response to bioattacks.

I have spent more than a decade studying the bioterror threat, and it is at times mind-boggling. I am fortunate to have worked with many of America's top experts in the field of biodefense.² However, you do need to understand that the current system for biodefense and public health in America is broken. Some experts will go one step farther and say there is no system.

Organization

A national public health system in the 21st century will be as important to national security as the Department of Defense was in the 20th century. Unfortunately, we have no effective national public health system in America today. Pouring millions, even billions, of dollars into biodefense today will provide little benefit if we do not first create the system needed to manage such an effort.³

The problem is twofold: no one is in charge, and the current organization is dysfunctional.

First, no one is in charge of biodefense in America. According to a recent report from the Center for Biosecurity, we currently have 26 presidentially appointed and Senate-confirmed individuals working in a dozen different agencies managing an annual biodefense budget of \$5.5 billion. But not one of them has this mission as a full-time job, and no one is in charge. Not all national security programs have this problem.

One person, appointed by the Secretary of Defense, leads the missile defense program, and a presidentially appointed, Senate-confirmed Under Secretary controls the \$7.7 billion annual budget. We seem to be far better organized for a delivery system than for the weapons themselves. By the way, the most likely delivery system for biological (or nuclear) weapons is

not intercontinental ballistic missiles (missiles come with return addresses – bad news for the sender). The last time America suffered a biological attack, the US Postal Service provided the delivery vehicles, and we still don't have a return address for the sender.

Second, the organizational structure for biodefense is a disaster. As General Eisenhower said, "The right organization will not guarantee success, but the wrong organization will guarantee failure." Today, we are not properly organized to defend this nation against a biological attack. The following analogy describes this egregious situation.

Many people have submitted plans to transform the Department of Defense for the 21st century. Here is my plan. Instead of having it centrally organized, I suggest that we do away with the Pentagon and give each of the 3,066 counties the following: one tank, one fighter plane, and one infantry platoon. Each state will be provided with a few Navy ships. There will be no standards for credentialing the officers or NCOs. Some will be political appointees. Funding will come from various sources, and money that is sent from Washington can be easily moved to other programs outside of defense.

Sound like a good idea? Well, that is a reasonable description of our current public health system in this country. In fact, it is not a system. In some states, like Maryland, all of the county public health offices are under the centralized control of the state public health officer. In other states, such as New Jersey and Massachusetts, city and county public health offices are decentralized – marching to their own drummers. In South Carolina, there is no state official whose primary responsibility is public health. There are no nationally recognized standards for the credentialing of state and local public health officers, and the funding of these offices comes from a hodgepodge of uncoordinated sources. Furthermore, it has not been uncommon for federal bioterrorism funds to be diverted to programs that have no connection to bioresponse efforts.

Prior to the 1960s, environmental issues were primarily seen as state and local responsibilities. We have since learned that the only effective way to approach the issue is with a national strategy, a national plan, and a national organization. This recommendation will not be well received from most state and local public health officers. They do not want Washington telling them what to do. I understand their concerns. Much of what state and local public health offices do on a daily basis is unique to their locations. But during a crisis, we must have a national response capability.

Building such a national system will require the long-term commitment of significant funds, although it would likely be just a fraction of what is spent

each year on national missile defense. Why are we spending more on defense against a delivery system than we do on defense against the actual weapons?

One bit of good news regarding biodefense—some of the changes needed will not require enormous amounts of taxpayers' money. For instance, the state of Texas has more than 40,000 nurses who no longer work in health care. Creating a reserve corps of health care workers would require only a few weekends a year for training, but could deliver enormous surge capability during a crisis—either man-made or natural. It would provide the American taxpayer with a significant return on investment. The reserve component of the Department of Defense played a major role in winning the Cold War, and it continues to play an important role today. Why not develop a homeland security reserve corps?

Senior citizens and corporations could play a major role in this volunteer effort.

If (or more accurately, when, since it is only a matter of time) we have to deploy a Push Pack, trained volunteers could save thou-

sands of lives. A Push Pack is about 97,000 pounds of antibiotics and other medical supplies needed to respond to a bioattack. A Push Pack fits inside a 747 freighter or seventeen 18-wheel trucks. The creation of Push Packs is one of the few biodefense success stories for the Federal Government. It is a program initiated in 1999 by a senior official in the Department of Health and Human Services, Dr. Peggy Hamburg. It was a success for the Federal Government, but it won't be a success for the nation until state and local governments develop and test plans to distribute the drugs.

The primary problem with Push Packs is that most state and local governments are not prepared to distribute the medicines once they are delivered by the Feds. Fifty tons of antibiotics and medical supplies sitting in containers at the airport will not help the citizens of a community. In the TOPOFF exercise in Denver (2000) the Push Pack arrived, but just sat on the ramp at the airport. Significant improvements for breakdown and distribution are still not in place today. Without the means to rapidly dispense these drugs, the Push Packs are virtually useless. This does not, however, mean we need to hire more government employees.

Trained volunteers would allow these critically important drugs to be distributed throughout a metropolitan area. Community service organizations such as the Rotary and Kiwanis Clubs could play a major role in this critical process. It is like having a high-speed Internet cable on your street, but no connection to your house. It is that last short distance that is critical.



Volunteers could make the difference between success and failure. One weekend a year of training for these volunteers could save thousands of lives in a bio crisis.

Another effective, yet low cost, option is an N-95 mask. According to a recent study by RAND, and tests from four decades ago by the US Army, a simple mask can be highly effective for preventing the spread of a contagious disease. Last year, the Director of the Centers for Disease Control and Prevention, Dr. Julie Gerberding, said that if SARS were to come to America, “. . . everyone who walked into an emergency room with a cough would be given a[n] [N-95] mask.”

A simple N-95 mask costs about one dollar at your local hardware store. The RAND study said it would not only be effective in controlling the spread of a

According to a recent study by RAND, and tests from four decades ago by the US Army, a simple mask can be highly effective for preventing the spread of a contagious disease.

contagious disease, it would also be important to wear if there were a dirty bomb (radiological dispersal device) or even a large conventional explosion that caused the collapse of a building. The mask would protect one from inhaling the dust.⁴

Since the spring of 2000, I have provided a bioterrorism education program for 500 senior military officers each year. During this time, I have tried to convince the Department of Defense to purchase N-95 masks for the troops. Under the current procedures, military forces would be required to wear the bulky chemical masks to operate in a biological threat environment.

When wearing those bulky masks, it is difficult to see and communicate. Most people cannot sleep while wearing the mask or properly aim their rifles. As a pilot, I was always concerned about the maintenance performed on my aircraft by someone who was wearing a M1-A1 chemical mask. On the other hand, an N-95 mask, similar to what medical personnel wear in operating rooms, and, more precisely, what medical personnel wear when treating people with contagious diseases, does not interfere with vision or communications. If properly worn, it is just as effective against biothreats as the far more expensive and restrictive chemical mask.

The Department of Defense has not adopted the N-95 mask because there are no lobbyists on K Street in Washington, D.C., convincing members of Congress to buy them. It is not a big-ticket item. No defense contractor will make millions of dollars selling N-95 masks. Nevertheless, you can go out tomorrow

and buy them for your family. It would be a very small investment on an item that could save lives and prevent needless suffering.

Another low-cost solution could play a major role in solving the problem of situational awareness during a biological crisis — either man-made or natural. While the technology exists to create such a system, one has not been deployed. America needs a system that would provide public health officers, medical staffs, and local, state, and federal officials with near real-time information on the spread of the disease and the resources available to respond. This one system would be a major step forward in our mitigation efforts. Without such a system, there is little or no hope of an adequate response.

One such system, called 922, could provide a major step forward in resolving this deficiency. It uses existing technology and infrastructure (home telephones) to provide situational awareness. The developer believes that the most cost-effective way to determine the health of a community, or the nation, during a man-made or naturally occurring epidemic, would be to ask them. This would be accomplished by using radio and TV to ask people in certain mailing zip codes to call 922. A computer system would collect health-related information. It is a simple, low-cost system that has received high praise from a wide range of public health and biodefense experts. It appears, however, the greatest weakness of this system is that it does not have a billion dollar price tag.

Bottom line: not all effective homeland security programs have billion dollar price tags; however, it is the expensive programs that get support from the high-powered (and highly paid) lobbyists.

Research and Development

Bioweapons such as smallpox, anthrax, and plague are yesterday's weapons. The bioweapons that are the most alarming are the pathogens we will face in the future. Unfortunately, this future could be now. A genetically engineered pathogen that is contagious, lethal, and resistant to our vaccines and treatments would be an existential threat to America. It is a very real possibility, and it is the reason why spending priorities must focus on the biological threat.

Most people are not aware of the incredible advances in the field of biology.

In 2002, a team of scientists at The State University of New York at Stony Brook began an experiment combining proteins — nonliving material — in their laboratory. After three years of work, they created a virus from nonliving materials — the polio virus. Most people outside the field of biology are not aware that this happened. The most amazing aspect of this story is that it took three years to make the first virus from

nonliving materials, but only two weeks to make the second one.⁵

The incredible pace of the biotechnical revolution will provide us, our children, and our grandchildren with a far better quality of life than our ancestors. Unfortunately, there also is a dark side to this science. The same technology will also produce weapons that most people have never imagined in their worst nightmares.

That is why research and development in the field of biodefense is one of the most important defense investments we will make in the coming decade. This is a part of homeland security that will require billions of dollars, and it is why we must not waste money elsewhere on foolish programs.

Goals and Dual Benefits

The short-term goal for biodefense should be on information technology that will provide improvements in mitigation and response capabilities, primarily in the area of situational awareness. The mid-term goal (three-five years) should be the creation of a national public health system that can detect, respond to, and mitigate catastrophic health crises, either man-made or naturally occurring. The long-term goal should be focused on research and development programs that will best use our technological advantage to create revolutionary capabilities, such as “bug-to-drug in 24 hours” (as recommended by the 2002 Defense Science Board Study) and something called “preclinical detection.”

“Bug-to-drug in 24” means we need the capability to identify a new disease, and with genetic engineering techniques, create a successful treatment within 24 hours. It sounds like science fiction, and today it is. But just remember, in 1950, when airliners had propellers, someone who claimed that within 20 years we could put people on the moon and safely return them to earth would have likely drawn some skeptical comments. Bug-to-drug in 24 hours is a realistic and obtainable long-term goal, but only if we make the investment. If we continue to waste money, we will not be able to invest in the programs that could make a difference.

Preclinical detection is another concept that could make an incredible difference. It could move the advantage from the attacker to the defender in both man-made and naturally occurring diseases. For instance, if you were exposed to variola virus while at work today, you would not begin to show symptoms for at least 7 days — some employees would take as long as 17 days to become ill. In other words, you would be a “walking time bomb.” You would unknowingly be carrying a contagious and lethal disease to your families and friends. No currently available test could detect this disease in your body.

Only when you became symptomatic, and began to experience high fever and rash, would today's laboratory tests diagnose smallpox. There is a 30 percent chance you would die. If you survived, you could be blind, you would have suffered extraordinary pain and would carry the scars of smallpox pustules for life.

With preclinical detection, the variola virus could be detected soon after it entered your body. The smallpox vaccine is effective if given within four days of exposure. Likewise, early antibiotic treatment against anthrax and plague would make the difference between a bio-incident and a biocatastrophe. Preclinical detection would not end the biothreat, but it would significantly contain the consequences. It could, over time, reduce the effects of such attacks to a degree that it would serve as a deterrent. Preclinical detection can be achieved, but we must make the investment in research and development today.

The ability to detect disease before the onset of symptoms should be one of America's top funding priorities. This capability would also provide an incredible dual benefit to the health of all Americans. For any disease, man-made or naturally occurring, early detection is critically important.

One great advantage of spending on biodefense is this dual benefit. When you buy a new nuclear-powered aircraft carrier for national security, you get a powerful weapons system to defend America against its enemies, but in the end, it is just a weapons system. A properly designed biodefense system will reduce the vulnerability of America to a bioattack or a naturally occurring epidemic, and, at the same time, significantly improve health care and food security — an extraordinary return on investment for the American taxpayer.

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 - 3 Gursky, Dr. Elin. *Public Health: Drafted to Protect America?* www.homelandsecurity.org/bulletin/drafted_gursky.pdf.
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Consequence Management Planning: A Link Between MapPoint and ATEP

By Mr. Terry Wiemann, Action Officer, HQDA Antiterrorism Branch

In July 2006, the HQDA Force Protection Assessment Team (FPAT) conducted a Higher Headquarters Assessment and Program Review of US Army Europe (USAREUR). During the Consequence Management portion of the assessment, while conducting a briefing on its planning program, the USAREUR DPTMS demonstrated its ability to utilize Microsoft MapPoint, a commercial off-the-shelf (COTS) software product, to import planning information from a Microsoft Access database to plot Consequence Management elements on a map and share the data with civilian counterparts in the emergency services. This process received a “Best Practice” designation from the evaluator, and its use should most definitely be expanded.

In developing the process, the USAREUR DPTMS Program Manager had already been working on collecting various types of data from his civilian counterparts from the ambulance service, CBRNE, EOD, fire, HAZMAT, hospitals, and police. He then began researching MapPoint, which is designed to enable users to visualize, analyze, and communicate information using maps and geographical information. MapPoint allows users to import Microsoft Access tables and Excel spreadsheets to plot locations, estimate response times, and make essential contact information available. The application combines high-quality maps, easy-to-use visualization tools, and intuitive wizards and also includes tools that allow the user to estimate drive times, establish zones, estimate standoff, convert street addresses to latitudes/longitudes, manually mark key locations, embed hyper-

links to unclassified satellite photos, and provide GPS support—while remaining completely unclassified.

In addition, some of the information in the database is related to HAZMAT, including:

- Radiation detection
- Chemical detection
- Biological detection
- Limitations
- Radiation decontamination
- Chemical decontamination
- Biological decontamination
- Equipment.

These files can be found under “MapPoint Related Files” on the Antiterrorism Enterprise Portal (ATEP). Click on “DES Categories” for the eight categories listed above.

The basic goal of the DPTMS was to establish the baseline information required for each event category, collect and centralize this data, then share the files with civilian counterparts so that all parties involved would have access to the same information. MapPoint meets these requirements, giving civilian organizations the ability to import files at the reasonable cost of approximately \$300 for a licensed copy. MapPoint also appears on the GSA schedule for purchase at approximately the same price, with additional licenses priced at about \$150.

Figure 1 depicts the types of information that can be mapped out and displayed in MapPoint.

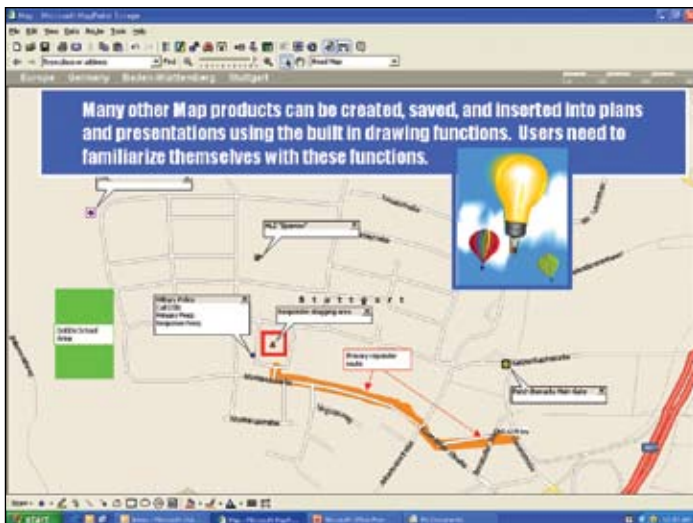


Figure 1. Sample MapPoint screen showing the various types of data that can be imported or entered manually.

MapPoint also allows users to color-code geographical regions. Figure 2, for example, shows relevant locations and color-coded FEMA regions to assist with planning.

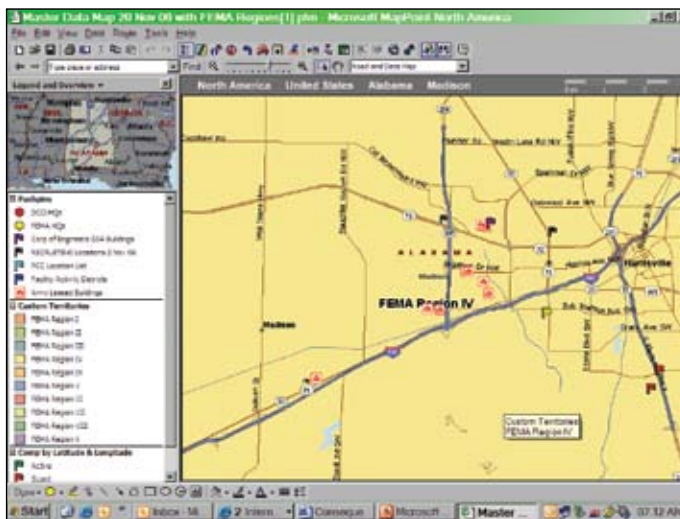


Figure 2. MapPoint screen with color coding to indicate FEMA regions (source file available on the Army service page of ATEP for download and use).

For those seeking further details, USAREUR's briefings can be downloaded through ATEP from the Army service page by clicking on the folder named "MapPoint Related Files," then clicking on "USAREUR Briefs." Those who are not already members can visit <https://atep.dtic.mil/> to register for access.

Microsoft MapPoint is an excellent resource for enhancing an installation's ability to plan and prepare for Consequence Management activities while sharing pertinent information with civilian counterparts who need only to make a small investment in the COTS application. The only significant limitation of the software is that not all geographical areas are currently electronically mapped down to the street level, but even for these areas, users can still examine satellite images and plot relevant locations.

[Editor's note: This article describes a working solution using an available software tool and is not intended as an advertisement for Microsoft products.]



RAMP: Identifying Vulnerabilities at Navy Installations

By Mr. Rick Jones, Navy Facility Engineering Service Center

The Commander, Naval Installations Command (CNIC) has tasked the Naval Facilities Engineering Service Center (NFESC) with developing and implementing a risk-based process for screening and validating all observations (findings) in the Core Vulnerabilities Assessment Management Program (CVAMP). In response, NFESC has assembled a team that will screen vulnerabilities across all Navy installations over the next three years. The observations to be screened are derived from Vulnerability Assessment (VA) reports produced by the Joint Services Integrated Vulnerability Assessment (JSIVA) teams, the Navy Integrated Vulnerability Assessment (NIVA) teams, and local assessment teams. Observations in CVAMP are categorized according to the designations of vulnerability, concern, positive, or neutral.

The current scope of work as defined by CNIC is to analyze only observations that are designated as actual vulnerabilities, and not as less serious concerns. It is estimated that more than 1,000 observations in CVAMP are designated as Navy vulnerabilities. Upon completion of the current phase, the RAMP team will proceed to analyze observations designated as concerns and neutrals, a task that will entail another 1,000 observations.

After several evolutions of development, testing, and validation, the RAMP was fielded to achieve the following critical objectives: (1) screen observations, (2) validate options (recommendations) for mitigating risk to determine their cost-effectiveness, and (3) develop cost-effective Mitigation Action Plans (MAPs) and associated cost estimates for addressing the

RAMP

RISK ASSESSMENT MANAGEMENT PROGRAM

vulnerabilities noted in CVAMP. The RAMP process, which is diagrammed in Figure 1, includes the following core capabilities:

- Identifying all validated vulnerabilities in CVAMP
- Identifying cost-effective MAPs or countermeasures that reduce or eliminate each validated vulnerability
- Estimating the costs associated with implementing each MAP
- Calculating a level of risk for each validated vulnerability (in terms of threat likelihood, criticality, and vulnerability)
- Calculating a cost/benefit ratio (in terms of risk reduction) to determine whether funding for the MAP should be recommended
- Identifying the specific MAPs that have been economically justified and reconciled with the installation and that should be considered for funding by CNIC
- Providing a status management system for the process.

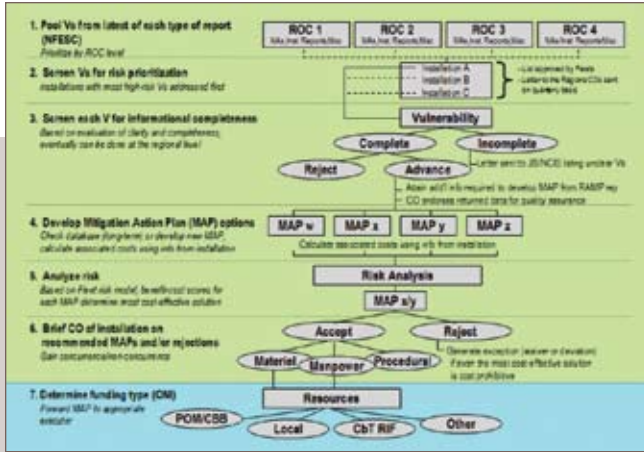


Figure 1. The RAMP Process

The initial RAMP effort, which ended in December 2006, included nearly 20 Navy installations and hundreds of observations. To date, the average cost reduction for an installation is about 55 percent (Figure 2).

Table L. Risk and Cost Benefit Analysis Summary (continued)
Cost Savings Report *Costs include area cost factor

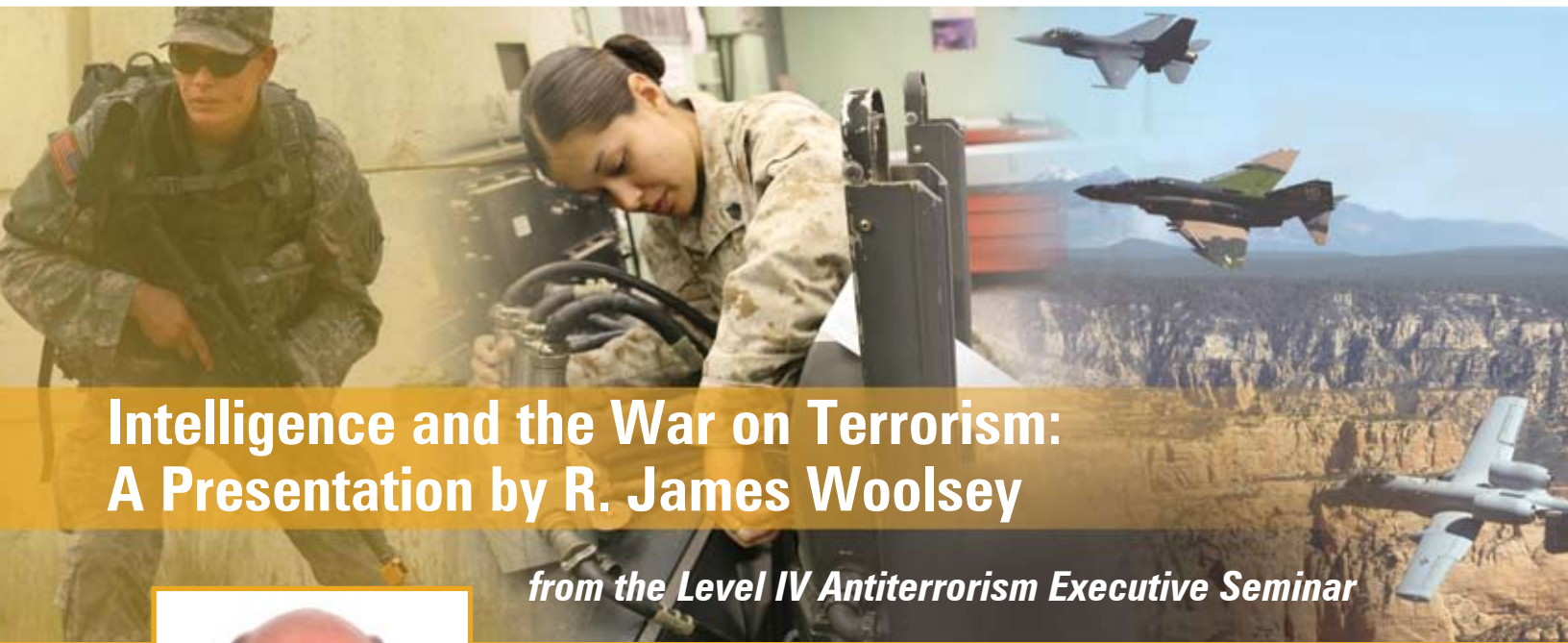
CVAMP #	MAP	COST	ACTION	RESULT
01XX	1	\$180,000	Deferred to MAP 1	N/A
	2	\$136,000	Deferred to MAP 1	N/A
	3	\$536,000	Proceed	\$536,000
07XX	1	\$81,000	Proceed	\$81,000
	2	\$2,800,000	Not Recommended	\$0
08XX	1	\$4,000	Not Recommended	N/A
	2	\$3,000	Not Recommended	N/A
	3	\$2,000	Deferred to MAP 1	N/A
04XX	4	\$3,162,000	Proceed	\$3,162,000
	1	\$30,000	Not Recommended	\$0
	2	\$2,000	Proceed	\$2,000
Totals				
Percent Reduction	51%			\$3,780,000

*Highlighted figures are used to determine the total cost.

Figure 2. Sample Cost Savings Achieved through RAMP

During FY07 and the out-years, the RAMP team will analyze observations for 30 Navy installations per year. Considering the large number of observations, this process will rely heavily on the front-end work completed by individual installations in populating CVAMP. As stated above, only those observations entered into CVAMP will be considered by the RAMP, and thus ultimately considered for mitigation by CNIC. It is therefore imperative that installations ensure that all vulnerability assessment reports are entered into CVAMP as soon as they are received.

For additional information on RAMP, please contact Mr. Victor A. Vella of NFESC at 805-982-4817.



Intelligence and the War on Terrorism: A Presentation by R. James Woolsey

from the Level IV Antiterrorism Executive Seminar



The Honorable R. James Woolsey is an attorney and foreign policy specialist who has served the government in numerous capacities through six administrations, most notably as Director of the Central Intelligence Agency from 1992 to 1994. The remarks that follow are excerpted from a speech that Mr. Woolsey delivered at the February 2007 Joint Staff Level IV Antiterrorism Executive Seminar.

I was honored to be asked to be here with you today, but to tell you the truth, since I spent 22 years as a Washington lawyer and then some time out at the CIA in the Clinton Administration, I'm actually honored to be invited into any polite company for any purpose at all.

People sometimes ask me why I kept leaving a perfectly fine law practice to go into government a bunch of times. You all work for the government. You know why you work for the government. You work for the government because of the public appreciation. Right?

I had an example of that after I'd been in office in the CIA about eight months. My wife and I were classmates at Stanford and decided to go to our class reunion. Cash in the old frequent flier miles, take a long weekend off, and see some old friends. The first thing that happened was that my chief of security at the CIA said this:

"Mr. Director, we want Mrs. Woolsey to go on a different plane because we don't want anybody named 'Woolsey' on your plane." And I said, "But my name's Woolsey." And they said, "Oh, no, sir. You need to fly in alias." And so of course my first

thought was, "Uh oh, there go the frequent flier miles."

So my two security guys and I go out to Dulles, and as we head for the back of the plane, they stop in the cockpit, show the pilot and chief flight attendant they were carrying weapons and were authorized to do so, and we go to the back row. You know, those three seats right in front of the bulkhead where you can't even lean back. And I'm kind of wedged in between these two guys in the middle, and we fly out to California uneventfully.

As we're walking away from the jet, the flight attendant comes over and whispers something to one of my guys, and he just cracks up. And since he was a sort of stolid guy I was kind of curious and I said, "Murph, what's so funny?" He said, "You know what she just said? She said, 'I've been on these flights for 20 years and that is the politest and best behaved prisoner that we've ever had.'"

So like I say, that's why you do it. It's the public appreciation.

Well, most of my life, and pretty much all of my professional life at least up until the beginning of the 90s, was spent during the Cold War. We got used to

some assumptions during the Cold War. We were fighting a very rigid and big bureaucratic empire that restively ruled much of Eurasia. It was economically inept, we found out. And its relative poverty helped us a lot when its economy effectively collapsed. We could afford to pay essentially no attention to its ideology. Because since Stalin's crimes were well known by the beginning of the 50s, I think there were more truly believing communists in some bookstores on the Upper West Side of New York, and one or two Ivy League colleges, than there were in the Soviet Union. They didn't want to die for the principle of "from each according to his ability, to each according to his need." They wanted to keep their dachas.

of them is true is not only misleading, but I believe very dangerous.

The Cold War Versus the Long War

First of all, far from constituting a single empire, our enemies have a set of complex and shifting relationships with several states. Totalitarian Shiite theocracy is reflected in the Ahmadinejad regime in Iran, and it does have its own ideology; it is working hard to get nuclear weapons and has close ties to the world's most professional terrorist organization, Hezbollah.

But al Qaeda has a different kind of relationship with states. We've had sort of terrorist-sponsored states now twice with al Qaeda: Sudan and



Our enemies' ideology is deeply rooted. They believe it. They believe that Allah requires them to do what they are doing. They do not fear death. They welcome it. And they are patient because they are ideologically and religiously motivated.

Other than the very unlikely event of a full nuclear exchange, to which we may have come close during the Cuban Missile Crisis, there was no real likelihood of the enemy striking the American homeland. Any hot wars that occurred, occurred overseas, and so our intelligence activities could be focused overseas. And here at home we were in the important business of tracking individual, traditional spies, but that was a very limited and professional process. Sometimes we succeeded. Sometimes we failed. But that was essentially the Soviet presence here in North America. Terrorism we treated pretty much like other crimes. You capture terrorists, you prosecute them, you convict them, and thereby deter other terrorists. And the Cold War didn't really affect most Americans' daily lives.

Finally, developments in electronics were led principally by the Defense Department and NASA. By the time they hit the commercial world, we were on to something else. We in the national security business were generally in the lead, technologically.

None of these assumptions is true in the long war in which we are now engaged. And assuming that any

Afghanistan. And it's working hard to have a base in western Iraq.

The Wahhabis of Saudi Arabia, whose fanatic ideology is essentially identical to that of al Qaeda, constitute the religious infrastructure of a state with whom we have cordial relations and with whom we work on a number of things.

Containment, as in the Cold War, has virtually nothing to do with ideological movements driven by religious fervor. And as far as deterrence is concerned, what does one hold at risk in order to deter an al Qaeda attack?

Our enemies are not poor. They are fabulously wealthy, almost entirely from the sale of oil. As Tom Friedman put it, this is first war we have ever fought, except of course, the Civil War, in which we pay for both sides.

Our enemies' ideology is deeply rooted. It is not an excuse, as Marxism came to be, for self-interested thuggery. They believe it. They believe that Allah requires them to do what they are doing. They do not fear death. They welcome it. And they are patient because they are ideologically and religiously

motivated. What they want is for each attack on us to be bigger than the one before. But they don't care that much about timing.

Far from being safe behind our shores, we have already been invaded, albeit not occupied. I watched the Pentagon burn on 9-11, having just received the news that my youngest son had made it out of the World Trade Center by about 30 seconds, thanks to a heroic New York policeman who died getting him out.

It is clear from 9-11 that important, major combat will occur here in North America as terrorists attack. The penalties imposed by criminal law have almost

I think the first and principal lesson of the current circumstances in which we find ourselves is that reliance on what many of us learned during the Cold War, and what our institutions learned during the Cold War, and what our institutions assumed during the Cold War, a war in which we were phenomenally successful, is very, very misleading.

nothing to do with effectively deterring fanatic, religiously rooted terrorism. And, finally, Moore's law, the doubling every 18 months of the capability of basic electronic components, such as computer chips, means that we in the government usually are behind, not ahead, of what is happening electronically around the world: throwaway cell phones and internet Websites and chat rooms are now available for easy use by terrorists.

So, I think the first and principal lesson of the current circumstances in which we find ourselves is that reliance on what many of us learned during the Cold War, and what our institutions learned during the Cold War, and what our institutions assumed during the Cold War, a war in which we were phenomenally successful, is very, very misleading.

If we fight the last war — as is often the case for any institution, at least, at the beginning — we will lose.

Now, there are many aspects of this that one can discuss. I'm going to talk just about two because I think in some ways they are the hardest to deal with: ideology and infrastructure vulnerability. Particularly energy. I'll try to leave plenty of time for questions and some of what I say is drawn from various

bits of testimony and articles I've written that are going to be available, as I understand it.

The Threat of Ideology

First, ideology. During the Cold War, Americans took a little bit of time to get clear on what it meant for someone to call themselves a socialist. But after awhile, we got it pretty well. There were good socialists and there were bad socialists. There were people like Helmut Schmidt, chancellor of Germany. He called himself a socialist. We probably had some disagreements with him — most Americans would — over how to pay for health care, but other than that he was our guy. He stood up to the Communists. He helped defeat the Soviet Union. He helped to deploy the Intermediate Range Nuclear Forces in Europe. For many years, we couldn't have had a better partner than the socialist Helmut Schmidt.

Yuri Andropov, head of the KGB and briefly first Secretary of the Soviet Communist Party, also called himself a socialist. He was almost certainly behind the Bulgarian effort to assassinate the Pope and much other evil work as well.

But after some time of a little confusion in the early 50s, Americans got it fairly clear that there were the socialists who believed in democracy and were with us, and there were the people who called themselves socialists and were totalitarian fanatics, and they were on the other side.

But while the communist version of socialism was initially an ideological movement, it became basically a political and social structure, and we didn't have too much difficulty dealing with that. After a while, we figured out that the American Communist Party meant what it said, that it was not going to directly pursue violence, and it was not trying to bring about the dictatorship of the proletariat by violent revolution, and that what it really wanted to do was run Gus Hall for president every four years. Nonetheless, they were supporters and effective members of the Soviet team. And so, although it was held by the Supreme Court, when it invalidated the Smith Act after World War II, that we could not make communism illegal in the United States, we were reasonably able through legislation to make communists' lives miserable.

We made them register every time they turned around. We infiltrated their party with FBI agents. One wonderful, small, quiet man with the code name Solo was the treasurer of the American Communist Party and secretly received the Order of Lenin. He was flown into the Soviet Union to receive it. What the Soviets didn't know until the end of his career was that he was also with the FBI and, as soon as that was disclosed, he received the Presidential Medal of Freedom from President Reagan. He was the only

man to ever have received both. We made their lives miserable.

If we move to today's circumstances, we find that the Wahhabi movement in Saudi Arabia (which, were it not for oil, would be regarded by most Muslims as a group of some thousands of crazed folks out there in the North Arabian desert), controls, according to

mosque and state, a theocracy, essentially a religious dictatorship. They believe they can start with the Arab world and move to the rest of the Muslim world, then move to cover the world that was once Muslim but is no longer, such as Spain. Their ultimate, long-term goal is to finally cover the whole world with Sunni Muslim dominance.

Wahhabi ideology is essentially the same ideology as that of al Qaeda. It is genocidal with respect to Shiite Muslims, Jews, homosexuals, and apostates, and is fanatically repressive, particularly of women, but also of virtually everyone else. The only difference between the Wahhabis of Saudi Arabia and al Qaeda is that they disagree about who should be in charge.

various estimates, something between 70 to 90 percent of the Sunni Islamic institutions in the world. Why? Because Saudi Arabia gets about \$160 billion a year from the sale of oil. It gives several billion dollars to the Wahhabis, who also get some funding from wealthy individuals in the Persian Gulf Area. They [the Wahhabis] set up institutions all over the world, including in this country. The more radical madrassas in Pakistan and in the West Bank teach young 7- and 8-year-old boys to be suicide bombers. Wahhabi ideology is essentially the same ideology as that of al Qaeda. It is genocidal with respect to Shiite Muslims, Jews, homosexuals, and apostates, and is fanatically repressive, particularly of women, but also of virtually everyone else.

This is also al Qaeda's ideology. The only difference between the Wahhabis of Saudi Arabia and al Qaeda is that they disagree about who should be in charge. The underlying ideology is, for all practical purposes, identical. In this way there is some similarity to the Stalinists and the Trotskyites of the 20s and 30s who agreed that one wanted a dictatorship of the proletariat, one wanted to kill the bourgeoisie, etc., but the Stalinists believed that one subordinated everything tactically to the needs of the Soviet Union, whereas Trotsky believed one should feel free to start revolutions anywhere and everywhere one wanted. This historical struggle has some rough parallels with the Wahhabis (as similar to Stalinists) on the one hand, and al Qaeda (as similar to Trotskyites) on the other, who believe that they should feel free to fly airplanes into buildings whenever and wherever they want.

So these two ideologies on the Sunni side of the great divide within Islam have the ultimate objective of establishing a worldwide caliphate: a union of

If you talk with, or cross-examine, I should say, someone from a Wahhabi organization whose bread and butter is provided by the Wahhabis, even if he says that he is nonviolent at the core, his objective is still a caliphate: worldwide domination and worldwide religious dictatorship.

I think that while it's important for us to understand this point, it is equally important to realize that there are hundreds of millions of good and decent Muslims in the world who don't want to live in a caliphate, who don't want to be terrorists, who don't want to live in a religious dictatorship. One of the reasons they don't talk up more is that they are scared.

I would recommend highly to you a book by a former Mossad officer, Shmuel

Bar, called *Warrant for Terror*. It's about the fatwas; specifically, the fatwas that are issued as soon as any moderate Muslim speaks up in the pages of a Beirut newspaper, or in a mosque in Cairo, or says anything remotely suggesting cooperation or dialogue with Christians and Jews, or has hostile words on the idea of a religious dictatorship. Within days, that person will be named in fatwas, mainly from Saudi Arabian Imams, and put under death



threats. So when you see Muslim individuals or groups, such as Sufi organizations, that are in fact standing up to this, you see very brave individuals indeed.

There is, I'm convinced, a silent massive majority of Muslims in the world who do not subscribe to the tenets of Wahhabi Islam or al Qaeda's views. But they are frightened, and we need to do more to help them.

Leaving behind the moderates of the Sunni totalitarian theocratic persuasion and moving over to the real hardliners on the Shiite side, we come around to Mr. Ahmadinejad and the circle around him in Iran.

The idea of a religious dictatorship from the Shiite perspective is not new — it has been true since 1979. In terms of Iran, though, what's relatively new is the inner circle- centered around Ahmadinejad's spiritual advisor Mesbah Yazdi — and their acceptance of, even eagerness for, the return of the Mahdi and the end of the world. I would caution that with totalitarians, it is good to listen to what they say, because sometimes they mean it. Just as Hitler meant what he said in Mein Kampf.

What the circle around Ahmadinejad says is that it is time for the destruction of both Israel and the United States.

The other thing that's troubling about the Hojatieh and the people around Mesbah Yazdi and Ahmadinejad is that, in addition to talking about destroying Israel and the United States, and in addition to pursuing their nuclear weapons program, which of course their nuclear program is, these men are given to talk of the importance of being martyrs and of the possibility that Iran may be called upon to be a martyr state. If they are ever asked, "Are you suggesting you might begin a war, even a nuclear war, in which millions of people die?" their response is, "Allah will know his own." In other words, it doesn't much matter if lots of people die. Those of us who deserve to be transported up to the delights of heaven will be and the rest of you will not, and that's fine with them.

Some of the more extreme members of Mezbah Yazdi's circle even talk about near-term, large-scale war being a signal to the Mahdi, the hidden Imam, to return from the 10th century and to preside over the battles that will end the world. Ahmadinejad talks like

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this all the time. He goes off and communes with the Mahdi. He stands and speaks at the United Nations and believes that the Mahdi has put a halo around his head.

So we are not in Kansas anymore. We are not dealing with good old-fashioned, stubborn, but largely rational, self-interested, bureaucratic Soviets.

When I used to run into trouble with my Soviet counterparts in the five different sets of negotiations I was in

with them, I would from time to time invite them out one on one for dinner in a nice restaurant in Geneva or Vienna, and buy a nice bottle of wine, and after a while start telling jokes. You know, Russian jokes and American jokes are quite compatible. The sense of humor of the two peoples is rather similar. Things would loosen up, and maybe some weeks later one could do a little bit of a deal on this or that. Try to think of working with someone on that sort of a basis who works for the Wahhabis or Ahmadinejad or al Qaeda. I don't think so. I don't think the humor is likely to be compatible.

So, for starters, we are in a very, very difficult and different situation than we have been in, really ever in our history, with respect to the nature of our enemy. As a means of transition though, I think now a few words about one of our major vulnerabilities need to be addressed.

The Vulnerability of Our Electricity and Oil Infrastructure

There are a lot of works on proliferation of nuclear and biological weapons. I usually talk about those two more than chemical weapons, because chemical tends to carry more battlefield potential, whereas nuclear and biological weapons could destroy very large numbers of people in civilian society — even with a small amount of material. There's a lot about those issues and about threats to the air transportation system. But this work shouldn't suggest that these are the only threats, or even the most grave ones.

Two critical areas that need our attention are our electricity infrastructure and our oil infrastructure. Our electricity grid is composed of a number of individual utilities that used to serve just their local customers and from time to time, connected by

transmission lines, would sell some power to neighboring localities. The creation of the national structure for an electricity grid, and the privatization of the system so that people have an incentive to sell and buy the cheapest electricity they can anywhere around the country, has put a big strain on this system. We don't have anywhere close to the transmission lines that we need in order to operate the system that has been adopted.

Indeed, nobody wants transmission lines built in their backyard or indeed anywhere near them. We have gone from NIMBY (not in my backyard) to BANANA (build absolutely nothing anywhere near anything).

So the notion of making all this work by building adequate transmission lines is something of a pipe-

Oil is different. The oil infrastructure, at least the most vulnerable and important parts of it, aren't here. They're in the Middle East. Almost exactly a year ago, pursuant to a fatwa that he obtained from Saudi Imams, Osama bin Laden decided to attack a major Saudi oil refinery. He has said often that about \$200 is the right price for a barrel of oil and that attacks on the oil infrastructure are preferable to attacks on Americans in Iraq because they can damage the Western economy so severely.

I have seen several books and television shows that are now centered on terrorists hijacking an airliner and flying it into the sulfur clearing towers at a Saudi oil production facility. One in particular, Abqaiq, handles about two-thirds of Saudi crude every day. The sulfur clearing towers are a single point of failure because



Any day we wake up and find that an al Qaeda mortar crew has not gotten within range of Abqaiq, and has not taken six to seven million barrels a day off-line for a year or two, and oil is not headed toward \$200 a barrel, that is a good day.

dream in our current regulatory environment, national posture, and given the way litigation works in the United States.

So what happens? Three years and a bit ago in August a tree branch falls on some power lines in Ohio. Within I think about 90 seconds, eighty-some power plants worth of power are down for a day or so in New York, New England, and eastern Canada.

Our first move, as is sometimes the case, is to blame all this on the Canadians. But the Canadians, after only brief study, pointed out that Ohio was in fact in the United States. And that pretty much thwarted our effort to model our policy after the South Park kids and "blame Canada."

But, with the electricity grid, at least it's here. If we try to figure out what the problem is, at least it's available to us to work on. Our baroque—no, that's too kind—rococo regulatory system for regulating the grid hinders us, but at least the problem is physically here. And if we can get together with the Canadians, because it's all one grid east of the Rockies, except for Texas, which is of course out on its own, but if we can get together with the Canadians, we can put something together and get some things done.

you have to get the sulfur out of Saudi crude before you can do anything with it, even ship it. Well, my old friend, Bud McFarlane, who was President Reagan's National Security Advisor, and I were talking not too long about this scenario and he said this:

"Jim, I'm an old Marine artilleryman and I can tell you, you don't need to hijack any aircraft to get those sulfur clearing towers. I've been up there and seen those things. I could quickly deal with those with a decent Marine mortar crew."

So any day we wake up and find that an al Qaeda mortar crew has not gotten within range of Abqaiq, and has not taken six to seven million barrels a day off-line for a year or two, and oil is not headed towards \$200 a barrel, that is a good day. But that's not the only vulnerability in the international oil system of distribution.

In addition to the other problems that I've summarized, I think it is important for us to realize the need to begin to move toward ways in which we can substitute other fuels, and to some extent some types of generated electricity for oil, while also addressing the already noted flaws. I'll tick off a few of these. Maybe you want to ask questions about them.

The Promise of Alternative Fuels

One of the most interesting topics is plug-in gasoline-electric hybrids. The reason is that a hybrid gasoline-electric vehicle, such as the current Toyota Prius, gets better mileage by having an electric motor about the same size as its gasoline motor, each about 70 to 75 horsepower. And by going back and forth between them, and electricity doing what it can do best, the battery being charged by the regenerative braking, and gas doing what it can do best, you get a substantial improvement in mileage, say up to around 50 miles a gallon.

But, with new technology, the possibility of having a battery in that vehicle that's, say, five or six times as capable as the battery that's there now is really

available on a very near horizon. If you plug it in overnight, then drive 20 or 30 miles as an all-electric vehicle before your battery gets down to say 50 percent charge, and then you start going back and forth between drive trains as a hybrid, this increases your mileage to something on the order of 120 miles per gallon on the average. That's already starting to look very interesting, and keep in mind, after the 30 miles or so of overnight charge driving, you do not need to find someplace else to plug in like you did in the old electric cars. You just become a regular hybrid.

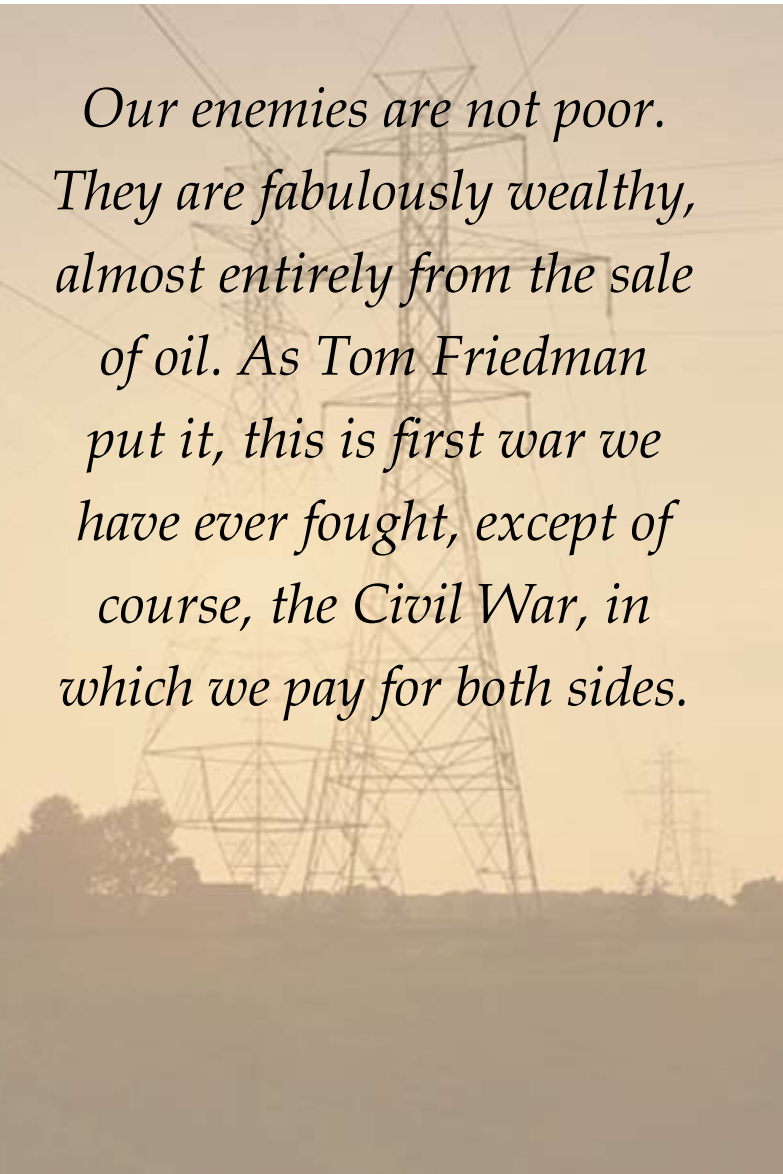
So 120 miles a gallon is very interesting. In the meantime, coming up on the inside track, are biofuels. Some of these are going to take longer to develop than others. Some of these have advantages more than others. But with electricity taking up a substantial share of the transportation load, if one is, let's say, running a plug-in hybrid with 85 percent ethanol in the tank for when one needs it, one is getting something on the order of 500 mpg of gasoline, because it's only 15 percent of the liquid fuel that you're using. And you're only using liquid fuel to a limited degree because you're using electricity more.

500 mpg ought to be enough to make a Wahhabi frown. These technological developments I think are coming, but they are absolutely going to require us to pay attention to the vulnerability of our electricity system. And one of the things that the Defense Department and the rest of the government need to cooperate on and work together on closely is steps to use more geothermals and more renewables, especially once some of the improvements and cost reductions in solar and wind energy make possible distributed electricity generation.

It is one thing for us to be hit by a terrorist attack that takes the grid down and sends us back to the 19th century, but if in a few years from now we pay attention to what we're doing, we may lose some air conditioning or perhaps a few more of the luxuries we now enjoy for a few days, but we would still be able to keep going with distributed generation covering the essential functions.

Well, ideology and energy are two important fronts in this long war that we're engaged in. They're not the only ones. Many of the more direct ones involving battlefield operations and counterterrorist operations are extremely important as well, but I hope I've been able to at least suggest a few new things of interest for this new world and new war we're in. We really are going to have to pay attention to ideas and issues that are a bit different from some of the things we've paid attention to before.

Thank you for your attention.



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Question and Answer Session

Q *The recommendations you make about changing our energy demands, what prevents the enemy from shifting his target set?*

A One thing I didn't have time to say, more than a very vague allusion, is that the importance of concentrating on oil is dual. It's not only being able to be a lot more resilient and take away the ability of al Qaeda to cripple a refinery and bankrupt much of the oil-importing world. It's also that over time, by changing the emphasis on oil

above us, there's one democracy: Canada. Most all of OPEC, most all of the oil exporters, are not democracies – and if they dabbled in democracy like Russia, as oil goes up they get less and less democratic. Thomas Friedman says, "The price of oil and the path of freedom run in opposite directions." Now, there's a real reason for that, which is that oil has a lot of economic rent attached to it. That is, return over and above any kind of reasonable return on investment. And as a result, it tends to concentrate power in the hands of a central government. For example, the Saudis don't have a central legislature – a real one – because the main reasons

Oil is the heart and soul of their economy and it's the heart and soul of the Wahhabi dominance of 70 to 80 percent of the world's Islamic institutions.

and moving to other fuels, we reduce its value and we make it more likely that some of these states are going to move toward other undertakings. Right now they [oil-producing states] don't do anything except pump oil and gas. Twenty-two Arab states plus Iran have a population approaching that of the US and Canada, roughly 350 million. Other than oil and gas, they export to the world less than Finland, which is country of 5 million people. So oil, particularly since it's a lot more easily transportable than LNG [liquid natural gas], is the heart and soul of their economy and it's the heart and soul of the Wahhabi dominance of 70 to 80 percent of the world's Islamic institutions.

I gave the energy part of these remarks at a conference in Georgetown a few months ago. A senior Saudi was there and he came up to me afterward and he said, "Jim, 500 miles a gallon? You're going to bankrupt Saudi Arabia! And I said, 'No, we don't want to ruin you, but we would like for you to get work.'" If you look at the 10 largest holders of oil reserves in the world, we're the 11th. With the 10

countries develop legislatures is to legitimize taxation. The reason they don't need a legislature is because they don't need taxes. They don't need taxes because they have oil. So there's nothing to interfere with the central concentration of power.

This long war we're involved in is not just to defeat individual terrorist groups from flying planes into buildings. We have to think in terms of undercutting the economic base of those that are essentially behind the war against us, and helping change the nature of their societies. Now, I don't mean necessarily going in and saying, "You. You're about to become a democracy." We're working on that in Afghanistan and Iraq. I hope to God we pull it off, but not all of this is that way. Some of this is making the economic underpinnings of our enemies far less valuable. That's the best I can say it. There is a certain amount of, "they'll shift to other targets," but we have to deal with them strategically as well as tactically, and oil is a very important strategic component of the enemy's strength.

Q *A lot has been said and written about the value and the criticality of our strategic seaports. I was wondering if you had any thoughts with regard to where our nation's ability to mitigate offensive mining stands, both from strategic and economic perspectives.*

A I haven't focused much on this. Of course, our main defense against this type of threat is going to be the Coast Guard and the Navy, combined with improved technological surveillance. The real problem is that you could have things like tramp steamers with registration in Liberia, containing a bunch of small boats that could do things at night. There are just a lot of ways that, as technology has made it possible to have smaller and smaller tools with high destructive powers, that threats like the one you mentioned must be monitored. Shipping containers are another issue here; we inspect so few of them, and it would be a very good way to get things into the country or even just into a port with



The Strait of Hormuz

the intention of detonation there, for example. We do have a very serious problem, I think particularly with small boats operating out of things like tramp steamers, and I have no very good answer to it other than to present the challenge to the fine institutions in the US Coast Guard and the US Navy.

Q *By all accounts, a big part of the rise in demand for fuel oil is from China. Is there any chance, any prospects of collaboration with them on undercutting the underpinnings of our enemy?*

A There really should be. I sometimes wince at the term "engagement" because it tends to be so often used to refer to talking to folks about things where I don't think we have a real good opportunity for success. But this is one area where we ought to be engaging with China six ways from Sunday. We should be delighted for China to use American technology to be able to hydrolyze cellulose and turn rice straw into ethanol for transportation fuel, to use solar and wind technology to produce electricity, and drive around in plug-in hybrids rather than in gas-guzzling cars.

Part of China's incentive for military buildup, particularly its bases in Pakistan and Burma, is to keep open its path to the Strait of Hormuz. The Chinese are very worried that, if some hostility should come about with the United States, we'd be able to cut off their oil supply rather quickly and readily. But their concern about their oil supply also has them dashing around Africa building soccer stadiums and other infrastructure for every dictator they can find who has some oil on his land. It leads China to block us from doing anything through the United Nations to stop the genocide in Darfur. It leads China to help Russia block any real sanctions with teeth against Iran for its nuclear weapons work. And so on and so on. Oil, in part, is motivating China for I think a substantial share, certainly not all, of its military buildup and, to a certain degree, its aggressiveness around the world today. Any scenarios wherein China can be seen to rely less on oil, I feel is a good scenario for everyone. I think in time it would help move China into a position of cooperation with the US on some very important other matters.

Q *You talk of encouraging nations to explore other export options. I've sat here and tried to think about an example or a model that we could offer up to them for a country that has basically reinvented itself, to bolster the argument that, say, an OPEC country should go from being a petrochemical-based exporter to possibly a service industry or an intellectual property exporter, and I'm not able to think of a model where that has effectively worked. It seems to me we are asking these countries to risk a great deal. You can see this in our own country with the old steel towns that have been abandoned as that technology was abandoned.*

A Well, hey, whether it's here or anyplace else, if you do move decisively away from oil, cities that have depended very heavily on refineries are going to be replaced by those that are near places where ethanol or butanol is being produced. There will be those types of changes. But if you look at the society as a whole, my home state of Oklahoma and its southern neighbor, that we sometimes call Baja Oklahoma, they have done a pretty good job over the years of transitioning.

Up until 1970, the Texas railroad commission was OPEC. It set the world's price for oil. On an international level, the problem is that oil supplies may be starting to peak. It may not be peaking yet, it may be close, but it may peak soon. We [the United States] peaked in 1969–1970. And we were the main supplier of much of the world's oil for a long time. We were Saudi Arabia in the 50s and 60s. So, the other places either haven't peaked, or may be about to peak, and as a result you don't have many real examples of states that have made those transitions, specifically the one away from petroleum. Some of the Middle Eastern states are starting to think and worry about it, even investing in things like renewables, but you are correct to say the direct examples of this are few.

However, there are other very interesting, and I would argue very valuable, examples out there of states that never had natural resources and have done very well without them. Japan is one perfect example. But my favorite one is another Middle Eastern country that has basically sand and a little bit of water. Its GDP per capita is over \$18,000, whereas Saudi Arabia's is just over \$15,000 per capita. And that country is Israel.

Now one interesting thing about Israel, unlike Saudi Arabia and unlike some of the other Gulf States, is that it educates its women, so it doesn't start off by denying itself the utility of half its population for intellectual property and work. It teaches things at its colleges and university like software engineering, instead of just recitation of religious documents. It is possible in these days and times, including in the Middle East, to have a successful, functioning, democratic, capitalist society with virtually no natural resources. But it is not possible if your approach toward life is to just to sit there and pump oil and figure that the world owes you a living. You have to change the nature of your society and its incentives in such a way that people work for a living, a middle class is built up, and a functioning, participating society is formed. Yet oil has worked directly against these tenets, to produce societies that are currently in opposition to such thoughts, to put it mildly. Part of our long-term strategy has to be helping these

countries move to being different types of societies. I think, for example, one of the most morally and strategically important things that we could do would be to promote the rights of women in the Middle East and the Arab world, because once a state like Bahrain, or any other for that matter, starts to recognize women's rights, other freedoms will follow: a bit more freedom of speech, a bit more freedom of religion, and so forth. But those types of changes are fundamentally resisted by the Wahhabis, by the al Qaeda, by the folks around Ahmadinejad. I think this is something that is both morally terribly important but also strategically a very useful tool for us to work on.



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WOT Notes

The military plays a large role in establishing conditions to counter terrorist ideologies. Toward this effort, daily events should be analyzed to better appreciate how the events are viewed by all involved. The J-5 Strategic Plans and Policy Directorate endeavors to provide a weekly snapshot of worldwide events and their strategic significance through the War on Terrorism (WOT) Notes.

COUNTERING IDEOLOGICAL SUPPORT FOR TERRORISM

Markers on the Path:

“The narratives of insurgent groups rely on three themes: humiliation, impotence due to (other Muslims’) collusion, and redemption through faith and sacrifice. These themes are often presented separately, but sometimes they are delivered in a sequence as if to suggest a crisis, a causal explanation of the crisis, and the solution to alleviate the suffering of Muslims ... Discourse is necessary, but not sufficient, to mobilize people for violent action or suicide operations. Factors such as military and sectarian strife, preexisting jihadi networks, and permissive security and cultural environments are necessary for suicide terrorism to develop on the scale witnessed in Iraq. Martyrdom mythologies, therefore, are not sufficient to explain why suicide bombings have become almost a daily event in Iraq. However, ideology, religious framing, and emotional narratives that go into the construction of martyrdom mythologies help explain how jihadists deactivate self-inhabiting norms against murder and mayhem. These discursive ploys allow jihadists to appear as moral agents even when they are acting in immoral ways.” —Mohammed Hafez, *Martyrdom Mythology in Iraq*, University of Missouri/KC, 2007

“It is the Internet that enables jihadist networks to continue to exist despite the military might of the United States.”
—Rita Katz, SITE Institute, BBC, 19 February 2007

“The enemies of Islam are seeking to create division between Muslims to thwart our efforts to unite all Muslims ... Now that the US Broad Middle East Project has failed, problems have accumulated for the Americans, preventing them from achieving their goals in the region via their occupation of Iraq. They imagine that they can achieve their goals through inciting sectarian violence ... [We] should not relinquish our unity, and it is the responsibility of Muslim scholars to continue their efforts ... in facing the plots seeking to create division among Muslims in Iraq, Lebanon, Afghanistan, Palestine, Sudan, and Somalia ... Laymen and [both Sunni and Shiite] extremists ... should not incite ... disunity among Muslims. We should unite in facing the main dangers confronting the Islamic umma ... These dangers are Zionism, Israel, and ‘global arrogance’ ... ‘Global arrogance’ incites sectarian strife and occupies a number of our countries. Their goal is to control our resources ... This is not a time to exchange blame. It is time to join forces and defend ... Islam ... The killings in Iraq are great sins and the fire of hell will be the lot of those who commit them. Muslims should not fight each other.” —Chairman of Iranian Expediency Council Akbar Hashemi Rafsanjani, Al-Jazeera/CIIR, 14 February 2007

“The world today has fallen under the arrogance and tyranny of a nation of slaves who, despite their masters’ stupidity, have become the strongest economic and military power, not with their minds and capabilities, but through the theft of other peoples’ resources, including brains and thinking. Oh free people, America, the state of slaves and drugs, looks down upon, with haughty superiority, all of the nations of the world, not just the Muslims and the terrorists, as they claim.” —Abu Umar Al-Baghdadi, “Emir” of “Islamic State of Iraq,” Islamist Website/*Global Issues Report*, 3 February 2007

“Trying to resolve terrorism without examining its root causes is like trying to fertilize the fruits and not the roots ... Many Muslims aspire to set up an Islamic government. I don’t think that Islam is the only way to solve all problems.” —Malaysian Prime Minister Abdullah Badawi, *Financial Times*, 29 January 2007

“Pakistan is making all possible efforts for checking the entry of unauthorized persons into Afghanistan. It cannot do more than what it is doing right now.” —Pakistani Foreign Minister Khurshid Mahmood Kasuri, *Dawn*, 28 January 2007

“Do not lose heart. The war is not over yet. I call on you to fight with every means at your disposal, even with a stick, even with propaganda ... [Muslims worldwide should] come to Somalia to fight Ethiopia ... No Muslim must surrender to a Christian who attacks him. The best way we have of dying is fighting for our people, our land, our religion.” —Shaykh Hasan Dahir Aweys, Spiritual Leader of Union of Islamic Courts, *L’Espresso*, 11 January 2007

ISSUES AFFECTING THE GLOBAL ANTITERRORIST ENVIRONMENT (GATE)

India: Train Bombing. Bombs detonated on the cross-border Delhi-Lahore "Friendship" express train just outside Delhi on 18 February killing 68 people, mostly Pakistanis returning home. The attack came just before an Indo-Pakistani foreign ministers' meeting, at which the officials condemned the bombing, agreed to cooperate on an investigation, and announced a new agreement to decrease the chance of accidental nuclear war.

Strategic Significance: No group has claimed responsibility, but suspicion reportedly fell on Pakistan-based violent Muslim extremists, such as Laskar-e-Taiba, who want to block Indo-Pakistani cooperation on the disputed Kashmir region and other contentious issues. There is no indication the bombing will disrupt bilateral relations.

Iran: Iranian Officials and Media Accuse US, UK, Israel of Backing Terror Attacks. Following the bus bombing in Zahedan on 14 February that killed 12 Revolutionary Guards and wounded more than 30, Iranian officials publicly hanged one of the alleged perpetrators at the attack site and charged the US, UK, and Israel with fomenting terrorism in various parts of the country. Iranian media alleged that the US trained and assisted the Zahedan bombers and provided US-made detonators used in their attack. The People's Resistance Movement of Iran (Jondallah), which claimed responsibility for the bombing, issued a statement that it had acted without foreign assistance.

Strategic Significance: Iran may be preparing to retaliate against those it deems responsible for the attack on the Revolutionary Guards, a pillar and symbol of the clerical government.

Algeria: GSPC Terror Group Renamed. The violent extremist Salafist Group for Preaching and Combat (GSPC) has renamed itself "al Qaeda in the Islamic Maghreb" (AQIM). The terrorist group had previously claimed links with al Qaeda (AQ) and a transnational coordination role in the Maghreb. AQ No. 2 Zawahiri recently announced GSPC had joined AQ. The group has reportedly been linked to recent attacks in Mauritania, Niger, and Tunisia, and to Moroccan militant groups. Algerian security forces reportedly killed 10 GSPC/AQIM fighters in eastern Algeria on 29 January, losing five soldiers.

Strategic Significance: The GSPC/AQIM's assertion of a formal tie with AQ may indicate growing overseas threat capability and underscore the need for intensified counterterrorism cooperation among the Maghreb, European states, and the US.

Indonesia: Bali Bomber Preaches to Militants by Phone from Jail. According to Indonesian police, one of the Bali bombers on death row, Mukhlas, bribed guards to allow him to preach to militants in Sulawesi by mobile phone. One of the Islamist militants arrested recently in Poso, central Sulawesi, said he had been inspired by Mukhlas's phone preaching.

Strategic Significance: Despite improvements, the Indonesian government's antiterrorism laws and detention procedures remain too lax. Jemaah Islamiyah spiritual leader Abu Bakar Ba'asyir, while imprisoned for 26 months, was also reportedly allowed to communicate with outside supporters.

UK: Muslim Youth Attitudes. A survey indicates 37 percent of British Muslims age 16–24 support Sharia law, and 13 percent express admiration for organizations such as al Qaeda that fight the West. The role of Muslim schools in instilling such attitudes continues to generate controversy. A Saudi-funded Islamic school in London, criticized for using textbooks containing derogatory references to Jews and Christians, said on 7 February it had removed the offending chapters.

Strategic Significance: Such material is reportedly often disseminated at Muslim schools in Western nations. UK counterterrorism efforts will be hampered if a sizeable minority of British Muslim youth sympathize with or support (if not join) violent extremist groups.

Morocco: More Arrests of Violent Extremists. Moroccan authorities announced the arrest of 26 people in Ouazzane (northern Morocco) on 4 January for trying to recruit volunteers to fight in Iraq.

Strategic Significance: Moroccan authorities are targeting groups of violent Islamists who are sending suicide bombers to Iraq and may be planning attacks in Morocco or Europe. Last month, the Moroccans arrested suspects from alleged terror cells in Tetouan and near the Spanish enclave of Ceuta.

Singapore: Ideological Rehabilitation of Terrorists. Several years ago, Singapore jailed 60 members of the regional terrorist organization Jemaah Islamiyah for plotting attacks against foreign embassies, military bases, and water pipelines. The 34 men remaining in detention undergo weekly counseling sessions with Islamic religious teachers to alter their radical beliefs. According to the 30-member Religious Rehabilitation Group, the detainees' misinterpretation of Islamic doctrine led them to believe their faith justified violence against non-Muslims. Since the sessions began in 2003, 11 men have been released on restriction orders and some of the remaining 34 detainees are displaying improved attitudes.

Strategic Significance: Such rehabilitation efforts have also been attempted in Saudi Arabia, Yemen, Morocco, and Indonesia, with mixed results. Some radicals respond positively, but many remain convinced that their cause is justified and supported by Islamic doctrine. Such reprogramming may prove more effective in non-Muslim Singapore, where authorities have a greater ability to monitor and control radicals released from detention.

Iraq: Al-Zawraa TV Criticizes AQI. On 16 February Al-Zawraa TV, an Iraqi satellite channel that transmits from an unknown location, broadcast a message by its owner, Mish'an al-Jurburi, accusing al Qaeda in Iraq (AQI) of attacking other insurgent leaders and civilians, according to the BBC. Al-Jurburi asked AQI to release all captives and to stop killing fellow insurgents, policemen, and civilians.

Strategic Significance: Criticism of AQI by this TV station, which supports the insurgency and specializes in broadcasting graphic footage of insurgent attacks on coalition and Iraqi government forces, may be an indication of deepening conflict between AQI and elements of the Sunni Arab insurgency.