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**WEAPONS OF MASS DESTRUCTION — U.S. POLICY FOR
21ST CENTURY CHALLENGES**

BY

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Since the end of the Cold War asymmetric threats continue to usurp conventional battlefield challenges as a significant danger to US national interests. Weapons of mass destruction (WMD) pose the most catastrophic impact as a prolific non-traditional security threat. To date, the world has seen and reacted to WMD attacks on a manageable scale. This paper discusses the background and current environment of the use of WMD by rogue states and radical terrorist groups and the potential success of a massive future WMD attack on the US at home and abroad. It will conclude with recommended policy to counter the cataclysmic impact a WMD strike would have on the United States domestically and as a global leader.

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WEAPONS OF MASS DESTRUCTION – U.S. POLICY FOR 21ST CENTURY CHALLENGES

Concern about nuclear weapons is about No. 18 [in American polls]. They just don't think it's a serious problem, and young people don't have any memory of the Cold war. The threat posed by nuclear weapons is more dangerous now than it was during the Cold War because terrorist and rogue state leaders are not under the restraints they were then. Besides, there has been no significant change in nuclear policy by the US and Russia since the end of the Cold War.¹

*Alan Cranston
Former US Senator and
Founder, Global Security Institute
November 2000*

This paper will discuss the weapons of mass destruction (WMD) threat and what the United States should do to preempt an attack. International arms control measures currently in place are either products from the bipolar world (and associated camps) of the Cold War or were required to help stop the proliferation of WMD after the Cold War ended. This paper reviews the conventions covering nuclear, biological and chemical weapons, their strengths and weaknesses. It will also discuss the current environment of WMD use by rogue states and terrorists, such as the Aum Shinrikyo Japanese cult, the complexities of the Middle East, and Usama Bin Laden's Al Qaida terrorist organization. Finally it will examine the possible success of a WMD attack on the United States and make policy recommendations to preempt an attack.

WMD STRATEGY

Under the Clinton Administration the national security strategy's approach on WMD is reactive. The new Bush Administration needs to change to a preemptive strategy to be adequate in the future. The foundation of the Clinton strategy was engagement and leadership abroad to promote deterrent security issues and economic prosperity. The strategy also promoted unilateral action, when warranted, to promote national interests. The change in strategy requires keeping the reactive tenets of the Clinton policy and expanding the preemptive measures.

There has been fundamental change since the end of the Cold War. Advances in technology have penetrated into the world economy and the new world order. Positive as well as negative changes occurred. Nation states have become interdependent. The Clinton Administration pursued world conditions to keep the country secure and prosperous. Between 1992 and 2000 a resurgence in global engagement reemerged as the foundation of United States' security and economic strategies.²

US NATIONAL SECURITY ENVIRONMENT

The end of the Cold War has removed any foe that could succeed against the United States in conventional warfare. Future adversaries are likely to confront us in unconventional ways.³ Terrorism remains a significant non-traditional security threat. The threat is profound because technological advances and the efficiency of global information services make terrorist weapons more powerful; so powerful that terrorism has moved from the tactical to the strategic arena.⁴

In the era of globalization the world is emerging into two distinctive camps: the haves and have-nots. The haves (with the US as sole superpower) include democratic, capitalist oriented countries embracing sweeping information technology and global economic interdependence. The have nots are ruled by governments not fully democratic, whose citizens do not enjoy the same individual freedoms, where power politics, mercantilism and fervent nationalism continue to make life "nasty, brutish and short."⁵

WMD THREAT TO THE US

Smaller nations looking to gain prominence on the international stage, to include rogue states and terrorist groups, seek WMD as an equalizer. The difficulty or ease in obtaining and using these weapons is dependent on the category. Martin Libicki of the Rand Corporation calls chemical weapons, "the so-called poor man's bomb (PMB) as the quintessential example of superpower status on the cheap."⁶ Other prospective PMBs include biological weapons because they can be rapidly cultivated, easily handled and effective in small amounts.⁷ The greatest difficulty in producing mass casualties for both chemical and biological weapons is in dispersing them.

Nuclear weapons come in two categories - fissile (or explosive) and radiological weapons. In contrast to chemical and biological weapons, acquisition, development or procurement of nukes is expensive and difficult with global watchdog organizations like the Nuclear Suppliers Group, Missile Technology Control Regime, and the International Atomic Energy Agency monitoring and controlling the movement of fissile material.⁸

Fissile material is required for the explosive nuke, with its identifiable mushroom cloud. Stolen Soviet nukes could be sold on the black market, the technology of suitcase nukes, and the acquisition of fissile material by rogue states and terrorist groups to build nuclear weapons strike fear about proliferation. Delivery of nuclear bomb by ship, although slower, is another difficult to detect viable option. Like chemical and biological weapons, delivery of a nuclear

bomb is problematic for terrorist states like Iraq, Iran and North Korea, "who will not be able to deploy intercontinental missiles for years."⁹

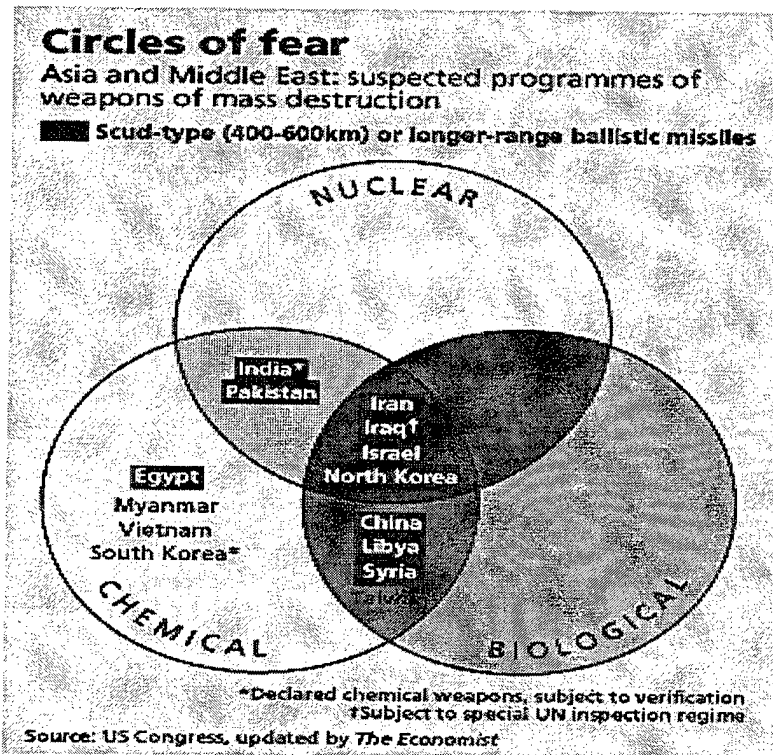
Still, the development and use of radiological weapons (RW) (like cesium) is more of a threat than fissile material. Radiological weapons are, "designed not to explode, which solves 99.9% of the design problems."¹⁰ RWs kill through radiation exposure, with no detonation. Once used they are more difficult to detect because they leave no evidence of structural damage. The first hint of an RW attack will be casualties showing up at local health clinics with radiation sickness.

WMD CONVENTIONS

Look at what we are experiencing in the environment in which we exist today: Terrorism, mass migration, ethnic conflict, transnational crime, narco trafficking, emerging and competing nation states. The potential for the proliferation of weapons of mass destruction from unfriendly nations is a real concern and a challenge.¹¹

*GEN William F. "Buck" Kernan
Commander in Chief, Joint Forces Command
November 2000*

Arms-control treaties were fashioned to prevent catastrophe and stop the proliferation of WMD. Technological advances and the efficiency of global information services challenge the effectiveness of such conventions. WMD conventions constitute obstacles to WMD proliferation and provide a high price tag for acquisition of nuclear weapons. But as Aum Shinrikyo and Saddam Hussein demonstrated, significant cracks appeared in the WMD regimes. Figure 1 shown below, shows countries in Asia and the Middle East and their suspected WMD programs.¹² The impact of WMD conventions for some of these countries follows.



Nuclear Non-Proliferation Treaty (NPT). The NPT, established in 1970 and, "extended indefinitely in 1995, divides the world into two groups: the five nuclear haves (America, Russia, China, Britain and France, which had tested a nuclear weapon before January 1st 1967) and the rest."¹³ To date, 187 nation states have signed the NPT with only India, Pakistan, Israel and Cuba remaining to join.

The United Nations (UN) condemned the nuclear tests conducted by India and Pakistan in May 1998 as a threat to non-proliferation and disarmament. The UN then strongly urged both countries to become parties to the NPT without delay or conditions.¹⁴ Neither country has signed the NPT, however in light of this crisis, the NPT has had its successes:

The NPT's system of obligations and checks has persuaded many countries that could have built nuclear weapons not to do so. In the late 1980s Argentina and Brazil used the monitoring help and methods of the International Atomic Energy Agency (IAEA), the NPT's watchdog, when they decided to roll back their competing nuclear weapons programmes. In 1993 South Africa announced that it had built, then dismantled, six nuclear devices before it joined the NPT in 1991 - and then invited the IAEA in to check its nuclear records.¹⁵

A blow to non-proliferation came after Desert Storm when Iraq was discovered to be within two years of building a nuclear weapon. Concerns also arose when IAEA inspectors found North Korea had been lying about its plutonium production. Countries, like Iran, have found a significant loophole in the NPT. As a member of the NPT, nation states "have to

declare safeguarded facilities and can legally obtain dual-use technology denied to non-NPT signatories. This dual-use equipment and sharing of expertise can then be channeled into non-declared weapons development activities.”¹⁶

In 1997 the IAEA incorporated aggressive new protocols to weed out violators; however, this amendment to the NPT has only been accepted so far by a handful of original signatories. The NPT's effectiveness is only as good as the members who are willing to abide by its rules because there is no enforcement.

Biological Weapons Convention (BWC). The 1972 BWC prohibits the development, production, stockpiling, or acquisition of biological agents or toxins, “of types and in quantities that have no justification for prophylactic, protective, and other peaceful purposes, as well as weapons and means of delivery.”¹⁷ BWC includes 143 state parties, of which 18 have yet to ratify the treaty and 33 countries that have still not signed.

Similar to the NPT, the teeth of the BWC require states to annually declare their biological containment facilities, bio-defense programs, past offensive and defensive programs, human vaccine facilities, information related to the outbreak of disease, and information on legislation and regulations implementing the BWC.¹⁸ Unfortunately, less than 50 percent of the membership has made a single declaration and only 11 have made annual disclosures. BWC inspections have been woefully inadequate as a deterrent to proliferation. States have made sketchy declarations at best and not contributed to BWC confidence building.

Weakening the effectiveness of the BWC even more is the difficulty of monitoring and tracking dual-use technology exports. Once again after the Gulf War inspectors discovered a secret large-scale Iraqi biological weapons program, which was primarily acquired through the procurement of dual-use technology. Prior to the discovery, “Saddam Hussein was buying a variety of items for Iraq to put together his weapons of mass destruction, he bought a little here, bought a little there, bought a little somewhere else, all for dual-use,” stated Senator Arlen Specter, R-PA, member of a 12-man US Commission on WMD, July 14, 1999.¹⁹

Chemical Weapons Convention (CWC). In April 1997 the CWC called for the elimination of chemical weapons and established a fixed time frame to do so. Articles IV and V call for the complete destruction of chemical weapons and production facilities, “within 10 years of the entry into force of the convention, i.e. by 29 April 2007... [with a 5 year extension under extraordinary circumstances].”²⁰ Key to the process is each state's voluntary declaration of chemical weapons within 30 days of signing. By November 2000, 174 states had signed the CWC, with 141 ratifying or acceding to the convention.

The Organization for the Prohibition of Chemical Weapons (OPCW) is the CWC watchdog group responsible for monitoring and enforcing the convention. Since April 1997 the OPCW has executed hundreds of inspections to ensure the accuracy of each state's chemical weapons declaration. Like a broken record the CWC has the same challenges as the NPT and BWC - only a limited number of declarations have been submitted and the willingness of state members to subject themselves to no-notice inspections has yet to demonstrate "the real strength of the convention."²¹ Additional criticism of the CWC is the costly inspections of declared chemical weapons stockpiles versus the required effort to track down illegal weapons production and inventories.

Dual-use issues are also prevalent and a monumental challenge because chemicals used to make dyes, pigments, inks, lubricants and pesticides are also precursors to mustard gas and nerve agents.²² The OPCW continues to work with state members and the chemical industry in as much of a non-intrusive manner as possible by categorizing potential chemicals for use in weapons making into three schedules. Again, declarations for each schedule prompt the OPCW to ensure justifiable inventories are maintained for legitimate purposes.

WMD USE BY ROGUE STATES AND TERRORIST

Former Defense Secretary William Cohen sums up the prevailing mood surrounding mass-destruction terrorism: "The question is no longer if this will happen, but when." [Fall 1998]²³

Over the last decade the following incidents/attacks have helped galvanize the international community to start asking the question when and where will a large-scale WMD attack occur?: the discovery of a sizable Iraqi WMD program after the Gulf War; the 1993 World Trade Center bombing; the 1995 Oklahoma City bombing and Aum Shinrikyo Tokyo subway nerve gas attack; the 1996 Khobar Towers bombing; Usama Bin Laden's 1998 US Embassy bombings in Kenya and Tanzania; and the October 2000 suicide bombing of the USS Cole in Yemen.

Only the Aum Shinrikyo attack can be categorized as a limited WMD assault (12 deaths, 5,500 injured). With the exception of Oklahoma City, the remaining attacks have connections to the Middle East. The following sections discuss Aum Shinrikyo, the Middle East and Al Qaida. The purpose is to evaluate if a catastrophic WMD attack against the US homeland or US interests overseas is imminent, or if more conventional terrorist attacks will continue to be the norm.

Aum Shinrikyo. Responsible for releasing sarin nerve agent on five Tokyo subway trains in 1995, Aum Shinrikyo provides important lessons in counter proliferation efforts. The most striking is the considerable financial backing necessary (similar to multimillionaire Usama Bin Laden's financing of his terrorist group Al Qaida) to acquire, develop and execute a WMD program. At one point Aum Shinrikyo had an impressive 50,000 members and a net worth of about \$1 billion.

Led by messianic figure Shoko Asahara, the cult promoted the apocalypse at the turn of the 21st Century. The cult, "pursued weapons of mass destruction driven by a range of conflicting motivations: to punish the world it ultimately hoped to save; to speed Armageddon, necessary for salvation; to protect Asahara's visionary status by ensuring that his prophecies came to fruition; and to satisfy Asahara's fascination with such weapons."²⁴ Recruiting for the cult focused on nonconformists, mavericks and radicals looking for an alternative to normal society. It specialized in recruiting Japanese and Russian university/research institute students to support their WMD programs. Cult members gave up their identity and wealth, and remained loyal through mind control, coercion, and murder.

The cult pursued several initiatives to acquire all forms of WMD. For nuclear weapons the cult: purchased property in Australia to mine uranium; attempted to purchase dual-use equipment from the US; actively recruited followers from Russian nuclear research facilities; and even tried to purchase a nuclear weapon from the Russian Energy Minister.²⁵ Fortunately the complexities of all these efforts prevented the group from succeeding.

The cult was more aggressive in its chemical and biological weapons production. The group was intent on having its own manufacturing capability as opposed to purchasing these weapons from other sources. Using front companies, Aum Shinrikyo purchased dual-use chemicals and equipment to develop the chemical weapons program. In parallel, the cult developed aerosol dispersion capabilities for biological agents. Police raids after the Tokyo subway attack discovered an industrial-size facility, with incubators, electron microscopes and nearly 300 books on biochemistry, capable of producing massive amounts of bacteria. In fact the group attempted to disperse biological agents on several occasions in Japan prior to the subway attack, but with no success.

The Middle East. The complexities of WMD proliferation in the Middle East require a more even handed approach by the United States. The continuing Arab-Israeli conflict, inter-Arab rivalries and the balance of power in the region dominates proliferation issues. The complexity is such that one country's compliance with a single WMD convention is another

country's antagonist. For all these reasons, the power playing field is not perceived as level, especially among the Arab states.

One significant reason driving this perception is that Israel has not signed the NPT. Arab states, like moderate Egypt which has signed the NPT, "recently refused to sign the Chemical Weapons Convention, linking its decision to Israel's refusal to sign the NPT. The justification is that Egypt has reservations about some countries in the region having nuclear programs not subject to international guarantees."²⁶ Other Arab states in the region, like Egypt, look to balance Israel's suspected nuclear weapons program with chemical and biological munitions.

Israel believes that Arab countries seek its destruction. She maintains strict ambiguity about her nuclear weapons program for two reasons. First, signing the NPT would authorize and subject Israeli nuclear facilities to international inspection and scrutiny. Israel feels that in a tough neighborhood like the Middle East this type of intrusiveness is not desirable. Second, facing overwhelming conventional forces from all fronts, Israel maintains an unconfirmed nuclear arsenal against a possible overpowering Arab attack that would threaten its survival.

Al Qaida. *"We don't consider it a crime if we tried to have nuclear, chemical, biological weapons. Our holy land is occupied by Israeli and American forces. We have the right to defend ourselves and to liberate our holy land."*²⁷

Usama Bin Laden

Usama Bin Laden's Al Qaida seeks to inflict graphic CNN type casualties on the United States to coerce its speedy withdrawal from the Middle East. Al Qaida differs from Aum Shinrikyo's multiple WMD motives in that its focus is based on a strictly religious foundation - to clear the Middle East of Israeli and American influence in order to reclaim and protect Islamic lands. Like Aum Shinrikyo, Al Qaida has vast financial resources to support WMD acquisition. Al Qaida sees the acquisition of WMD as a measure to counter the conventional military superiority of Israel and the United States.²⁸

In his quest for nuclear weapons Usama Bin Laden sought to purchase a warhead from the former Soviet state of Kazakhstan, where he believed his chances were better because of the dense Muslim population there. Israeli intelligence and diplomatic efforts helped thwart him. Members of Al Qaida subsequently tried to procure fissile material to build their own nuclear weapon. Speculation persists that the group was duped into buying "radioactive rubbish," unusable for nuclear weapons production.²⁹ These failures led the group to change strategy and look at alternatives to developing their own chemical and biological weapons.

International speculation continues about the following attempts of Al Qaida to obtain chemical and biological weapons: requesting assistance from Iraq to develop these type of weapons; attempting to purchase anthrax from underground labs in East Asia; and receiving an offer from a lab in the Czech Republic to provide botulinum. No hard evidence exists to substantiate any success by Al Qaida. It remains clear, however, that Al Qaida will continue to pursue WMD.

THE LIKELIHOOD OF FUTURE WMD ATTACKS - ARE WE READY?

Considerable financial backing and increasingly available sources of technology allow a terrorist organization flexibility in attempting to overcome barriers to WMD procurement and production. Financial flexibility alone separates would be terrorist thugs at the tactical level from fervent strategic WMD groups like Aum Shinrikyo and Al Qaida. Unlimited monetary support by such groups increases the likelihood of a future WMD attack against the US. Tactical terrorist attacks also remain a significant threat.

Terrorist working in a laboratory (or even basement) can produce enough chemical or biological agent to take out a large building like the World Trade Center by making a few pounds of dry agent and introducing it into the building's ventilation system... All of the present international controls are really designed to impede creation of large-scale national production programs. They are not designed to prevent tactical terrorist attacks.³⁰

WMD conventions with their respective global watchdog groups, and the WMD difficulties experienced by Aum Shinrikyo and Al Qaida, have demonstrated circumscribed success in preventing a cataclysmic WMD attack. The threat of a US nuclear counter-attack against potential WMD adversaries (e.g. made against Iraq during the Gulf War) also contributes to deterrence. Since the Aum Shinrikyo Tokyo subway attack the US has made progress in preparing for a WMD attack should one occur. These include: increased coordination and cooperation between federal and military agencies; standing up the Rapid Assessment and Initial Detection (RAID) Program; and new response protocols by fire departments across the country.

Rapid Assessment and Initial Detection (RAID) Program. Local authorities in the US have significant concerns about their resources being overwhelmed by a potential WMD attack. In 1998 the Department of Defense (DOD) established 10 twenty-two man teams located in California, Colorado, Georgia, Illinois, Massachusetts, Missouri, New York, Pennsylvania, Texas and Washington state to do the following: deploy in the event of a WMD incident; assist local

first responders to the incident; provide medical and technical advice; and prepare for the arrival of follow-on forces and authorities.³¹

RAID teams will deploy within 4 hours of notification to a terrorist incident. The states where RAID teams have been established coincide with established Federal Emergency Management Agency (FEMA) regions. Once deployed RAID will directly support civilian first responders to WMD contingencies. Local fire department chiefs will be the civilian first responder to a WMD terrorist incident. RAID teams will assist fire chiefs and other civilian officials in identifying and assessing the WMD attack and, "determine the presence and type of nuclear, chemical, biological and/or radiological (NBCR) contamination."³²

New Fire Department Protocols. The 1995 Tokyo sarin subway attack was a wake up call for local emergency services throughout the US. City and community leaders immediately asked themselves if they could respond to such an attack. In hindsight, the answer was no. Using New York City as an example, the following improvements with fire services across the country have been achieved in preparing for a chemical WMD-attack: procurement and staging of ample chemical agent detection devices; training with and increased inventories of protective clothing; improved mass decontamination capabilities; and new protocols established to recognize and react to chemical agents dubbed "haz mats with an attitude."³³

Fire services are not the right agency as a first responder to biological agents though. Local and state health/medical services are the proper proponent since a WMD attack using biological terrorism takes time for the incubation period and for symptoms to appear. The following case in The Dalles, Oregon illustrates this point.

³In September and October 1984, in the town of The Dalles, Oregon, a religious sect [the Rajneesh Cult] purposely contaminated salad bars in area restaurants with salmonella. The intent was to influence a local election. About 751 cases of salmonella were diagnosed, a particularly significant number considering that The Dalles had 10,500 residents... Doctors were required to report salmonella incidents to the local and state public health authorities, who from the combined reporting information realized that this number of cases was far out of proportion to the normal, or endemic, rate of the disease.³⁴

The perpetrators of The Dalles salmonella poisonings were eventually caught because: an investigation was initiated through state health service agencies; an information campaign aided in pinpointing the source of the salmonella; and tips from the surrounding community resulted in the arrest of two Rajneesh cult members and the discovery of the same strain of salmonella on the cult compound.

CONCLUSION - UNITY OF EFFORT

The United States must dramatically change its approach to preempt a WMD attack. This change requires a campaign plan to do the following: fuse together the country's domestic and foreign efforts to counter terrorism and stop WMD proliferation; increase and improve intelligence activities to foresee a WMD attack before it occurs; strengthen WMD conventions through a different approach in the Middle East and by focusing nonproliferation efforts aimed against people instead of governments; and finally prepare the American public for the possibility of a WMD attack and the significant preemptive efforts required to protect the US homeland and interests overseas.

The Association. Fusing domestic and foreign counter terrorism/nonproliferation efforts means combining the collective efforts of law enforcement and national security agencies. Within the DOD when two or more services operate together we call it joint. A United States military operation, in concert with one or more countries, is called a coalition. The collective efforts of US domestic and foreign government agencies to counter terrorism and preempt a WMD attack should come under a new colloquialism called the "association." The association's strengths are:

The national security paradigm fosters aggressive, active intelligence gathering. It anticipates the threat before it arises and plans preventive action against suspected targets. In contrast, the law enforcement paradigm fosters reactions to information provided voluntarily, uses ex post facto arrests and trails governed by rules of evidence, and protects the rights of citizens.³⁵

The biggest obstacle to such an association is the perceived threat to American civil liberties.

The National Terrorism Intelligence Center (NTIC). The establishment of a NTIC would significantly impact a preemptive approach to a WMD attack.³⁶ NTIC protocols would be designed to combine the resources of the FBI, CIA, DOD, US Attorney General, State Department and National Security Advisor, without violating civil liberties. Although US law prevents the FBI from active domestic intelligence gathering, the NTIC would combine the strengths of US law enforcement and national security competencies described in the previous section. The NTIC could also serve as the clearinghouse to prioritize all federal agency WMD budget requests to prioritize fiscal spending and prevent duplication of effort.

Adjusting the US Approach to WMD Conventions. The United States cannot expect Arab nations to voluntarily forego WMD development or acquisition when Israel is given preferential treatment concerning its own WMD programs. The US has the influence, through its substantial foreign support policies, to coerce Israel into signing and supporting the WMD

conventions it's not yet a member of. US expectation of WMD compliance throughout the Middle East can only be fulfilled when all nation states are treated evenly.

All WMD conventions are similar. Member states are required to voluntarily submit declarations for their respective programs. The strength of all conventions is based on the verification and monitoring of these disclosures. The weakness of the conventions is the target audience they preclude - individual terrorists. All WMD conventions should include protocols to promote international law to apprehend, extradite and prosecute individual WMD violators, similar to pirates and airline hijackers.³⁷

WMD Information Campaign. During the January 2001 Super Bowl in Tampa, Florida, law enforcement officials photographed every fan who entered the stadium. With state of the art technology these photos were rapidly analyzed to determine if known criminals or terrorist where attending the game. The American Civil Liberties Union (ACLU) protested this effort as an invasion of privacy and voiced concern about the violation of civil liberty. This episode shows the need for an information campaign to prepare the American public for significant WMD preemptive actions. Only through the collective efforts of US domestic and foreign service security agencies (to include the establishment of a NTIC), a paradigm shift in the country's approach toward WMD conventions and the information campaign mentioned above, can we expect to defeat a WMD adversary.

WORD COUNT 4,391

ENDNOTES

- ¹ Eric Brazil, "Former senator works at ridding world of nukes," The [Harrisburg, PA] Patriot-News, 23 November 2000, sec. E, p. 6.
- ² William J. Clinton, A National Security Strategy (NSS) for a New Century (Washington, D.C.: The White House, December 1999), 21.
- ³ John J. Hamre, "Counterproliferation Efforts Must Include Defense Against Cyberattacks, WMD," Defense Issues, VOL 13, Number 44 (1998): p. 2 of 6; available from Air University Library via the internet.
- ⁴ Ibid.
- ⁵ John A. Nagl, "Defending Against New Dangers: Arms Control of Weapons of Mass Destruction in a Globalized World," World Affairs, Spring 2000, VOL 162, Issue 4: p. 4 of 22; available from EBSCO Information Services via the internet.
- ⁶ Martin Libicki, "Rethinking War: The Mouse's New Roar," Foreign Policy, Winter 1999-2000, Issue 117: p. 3 of 9; available from EBSCO Information Services via the internet.
- ⁷ Cliff Gromer and Jim Wilson, "Weapons of Mass Destruction," Popular Mechanic, June 1998, VOL 175, Issue 6: p. 3 of 6; available from EBSCO Information Services via the internet.
- ⁸ Victor Zaborsky, "What to Control and How to Control: Nonproliferation Dilemmas," World Affairs, Fall 1998, VOL 161, Issue 2: p. 1-2 of 10; available from EBSCO Information Services via the internet.
- ⁹ Gromer, p. 2 of 6.
- ¹⁰ Ibid.
- ¹¹ Jack Dorsey, "Joint Forces Chief says terrorist will try to strike again," The [Norfolk] Virginian-Pilot, 18 November 2000; available from <<http://ebird.dtic.mil/Nov2000/e20001120joint.htm>>; Internet; accessed 20 November 2000.
- ¹² Economist Opinion, "The Desperate Efforts to Block the Road to Doomsday," Economist, June 6, 1998, VOL 347, Issue 8071: p. 1 of 6; available from EBSCO Information Services via the internet.
- ¹³ Ibid., p. 2 of 6.
- ¹⁴ Federation of American Scientists, "Nuclear Non-Proliferation Treaty [NPT] Chronology," 25 April 2000; available from <<http://www.fas.org/nuke/control/npt/chron.htm>>; Internet; accessed 20 January 2001.
- ¹⁵ Economist Opinion, p. 2 of 6.
- ¹⁶ Dr. Mark Williams, CIA Non-Proliferation Center, telephone interview by author (includes facsimile response), 7 March 2001.

¹⁷ Federation of American Scientists, "Biological Weapons Convention," 25 April 2000; available from <<http://www.fas.org/nuke/control/bwc/index.html>>; Internet; accessed 20 January 2001.

¹⁸ Graham S. Pearson, "The Protocol to the Biological Weapons Convention Is Within Reach," Arms Control Today, June 2000; available from <http://www.armscontrol.org/ACT/june00/bwcjun.htm>; Internet; accessed 20 January 2001.

¹⁹ Chuck McCutcheon, "Commission Outlines Steps to Address 'Chilling Reality' of Weapons Proliferation," CQ Weekly, July 17, 1999, VOL 57, Issue 29: p. 2 of 5; available from EBSCO Information Services via the internet.

²⁰ Organization for the Prohibition of Chemical Weapons (OPCW), "Fact Sheet 2, The Chemical Weapons Convention - A Synopsis of the Text," 25 July 2000; available from <<http://www.opcw.org/>>; Internet; accessed 22 January 2001.

²¹ Economist Opinion, p. 4 of 6.

²² Organization for the Prohibition of Chemical Weapons (OPCW), "Fact Sheet 7, Monitoring Chemicals With Possible Chemical Weapons Applications," 25 July 2000; available from <<http://www.opcw.org/>>; Internet; accessed 22 January 2001.

²³ Ehad Sprinzak, "The Great Superterrorism Scare," Foreign Policy, Fall 1998, Issue 112: p. 1 of 10; available from EBSCO Information Services via the internet.

²⁴ Gavin Cameron, "Multi-Track Microproliferation: Lessons from Aum Shinrikyo and Al Qaida," Studies in Conflict & Terrorism, Oct-Dec 99, VOL 22, Issue 4: p. 3 of 30; available from EBSCO Information Services via the internet.

²⁵ Ibid., P. 8 of 30.

²⁶ Sami G. Hajjar, "Regional Perspectives on the Causes of Proliferation of Weapons of Mass Destruction in the Middle East," Comparative Strategy, Jan-Mar 2000, VOL 19, Issue 1: p. 3 of 25; available from EBSCO Information Services via the internet.

²⁷ Cameron, p. 5 of 30.

²⁸ Ibid., p. 3 of 30.

²⁹ Ibid., p. 9-11 of 30.

³⁰ Dr. Williams, facsimile p. 3 of 7.

³¹ Jack Weible, "States Selected to Host Rapid-Assessment Teams," Air Force Times, 8 June 1998, VOL 58, Issue 44, p. 8.

³² Colonel Kenneth Gonzales, "Military Support Detachment (RAID) (Rapid Assessment and Initial Detection): The tip of the military spear," Engineer, April 1999, 28-31.

³³ Peter M. Stuebe, "Incidents Involving Weapons of Mass Destruction," Fire Engineering, November 1998, VOL 151, Issue 11: p. 2 of 5; available from EBSCO Information Services via the internet.

³⁴ Ibid., p. 3 of 5.

³⁵ Ashton Carter and John Deutch, "Catastrophic Terrorism," Foreign Affairs, November/December 1998, VOL 77, Issue 6: p. 2 of 10; available from EBSCO Information Services via the internet.

³⁶ Ibid., p. 3 of 10.

³⁷ Ibid., p. 4 of 10.

BIBLIOGRAPHY

- Brazil, Eric. "Former senator works at ridding world of nukes." The [Harrisburg, PA] Patriot-News, 23 November 2000, Sec. E, p. 6.
- Cameron, Gavin. "Multi-Track Microproliferation: Lessons from Aum Shinrikyo and Al Qaida." Studies in Conflict & Terrorism, Oct-Dec 99, VOL 22, Issue 4: p. 3 of 30. Available from EBSCO Information Services via the internet.
- Carter, Ashton and John Deutch. "Catastrophic Terrorism." Foreign Affairs, November/December 1998, VOL 77, Issue 6: p. 2 of 10. Available from EBSCO Information Services via the internet.
- Clinton, William J. A National Security Strategy for a New Century. Washington, D.C.: The White House, December 1999.
- Dorsey, Jack. "Joint Forces Chief says terrorist will try to strike again." The [Norfolk] Virginian-Pilot, 18 November 2000. Available from <<http://ebird.dtic.mil/Nov2000/e20001120joint.htm>>. Internet. Accessed 20 November 2000.
- Economist Opinion. "The Desperate Efforts to Block the Road to Doomsday." Economist, June 6, 1998, VOL 347, Issue 8071: p. 1-2 of 6. Available from EBSCO Information Services via the internet.
- Federation of American Scientists. "Nuclear Non-Proliferation Treaty [NPT] Chronology." 25 April 2000. Available from <<http://www.fas.org/nuke/control/npt/chron.htm>>. Internet. Accessed 20 January 2001.
- _____. "Biological Weapons Convention." 25 April 2000. Available from <<http://www.fas.org/nuke/control/bwc/index.html>>. Internet. Accessed 20 January 2001.
- Gonzales, Colonel Kenneth. "Military Support Detachment (RAID) (Rapid Assessment and Initial Detection): The tip of the military spear." Engineer, April 1999, 28-31.
- Gromer, Cliff, and Jim Wilson. "Weapons of Mass Destruction." Popular Mechanic, June 1998, VOL 175, Issue 6: p. 3 of 6. Available from EBSCO Information Services via the internet.
- Hajjar, Sami G. "Regional Perspectives on the Causes of Proliferation of Weapons of Mass Destruction in the Middle East." Comparative Strategy, Jan-Mar 2000, VOL 19, Issue 1: p. 3 of 25. Available from EBSCO Information Services via the internet.
- Hamre, John J. "Counterproliferation Efforts Must Include Defense Against Cyberattacks, WMD." Defense Issues, VOL 13, Number 44 (1998): p. 2 of 6. Available from Air University Library via the internet.
- Libicki, Martin. "Rethinking War: The Mouse's New Roar." Foreign Policy, Winter 1999-2000, Issue 117: p. 3 of 9. Available from EBSCO Information Services via the internet.

- McCutcheon, Chuck. "Commission Outlines Steps to Address 'Chilling Reality' of Weapons Proliferation." CQ Weekly, July 17, 1999, VOL 57, Issue 29: p. 2 of 5. Available from EBSCO Information Services via the internet.
- Nagl, John A. "Defending Against New Dangers: Arms Control of Weapons of Mass Destruction in a Globalized World." World Affairs, Spring 2000, VOL 162, Issue 4: p. 4 of 22. Available from EBSCO Information Services via the internet.
- Organization for the Prohibition of Chemical Weapons (OPCW). "Fact Sheet 2, The Chemical Weapons Convention - A Synopsis of the Text." 25 July 2000. Available from <http://www.opcw.org/>. Internet. Accessed 22 January 2001.
- _____. "Fact Sheet 7, Monitoring Chemicals With Possible Chemical Weapons Applications." 25 July 2000. Available from <<http://www.opcw.org/>>. Internet. Accessed 22 January 2001.
- Pearson, Graham S. "The Protocol to the Biological Weapons Convention Is Within Reach." Arms Control Today, June 2000. Available from <http://www.armscontrol.org/ACT/june00/bwcjun.htm> Internet. Accessed 20 January 2001.
- Sprinzak, Ehad. "The Great Superterrorism Scare." Foreign Policy, Fall 1998, Issue 112: p. 1 of 10. Available from EBSCO Information Services via the internet.
- Stuebe, Peter M. "Incidents Involving Weapons of Mass Destruction." Fire Engineering, November 1998, VOL 151, Issue 11: p. 2 of 5. Available from EBSCO Information Services via the internet.
- Weible, Jack. "States Selected to Host Rapid-Assessment Teams." Air Force Times, 8 June 1998, VOL 58, Issue 44, p. 8.
- Williams, Dr. Mark, CIA Non-Proliferation Center. Telephone interview by author (includes facsimile response), 7 March 2001.
- Zaborsky, Victor. "What to Control and How to Control: Nonproliferation Dilemmas." World Affairs, Fall 1998, VOL 161, Issue 2: p. 1-2 of 10. Available from EBSCO Information Services via the internet.