

CHAPTER THREE

The Security of NATO Nuclear Weapons

Issues and Implications

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At the Lisbon Summit in November 2010, NATO confirmed that as long as there are nuclear weapons in the world, NATO will remain a nuclear Alliance, and that deterrence based on an appropriate mix of nuclear and conventional capabilities remains a core element of NATO's overall strategy.

NATO is now reviewing its nuclear posture as part of a broader Deterrence and Defense Posture Review (DDPR) tasked at Lisbon. A key question for that review should be: What are the security concerns and related risks associated with NATO's existing nuclear posture? Of course, this begs the following question: How can these concerns and risks be reduced?

CURRENT U.S./NATO NUCLEAR POSTURE AND RECENT NUCLEAR SECURITY CONCERNS

Estimates from various nongovernmental sources indicate that the United States currently deploys approximately 150–250 air-delivered nuclear weapons (B-61 gravity bombs) that are deliverable by NATO aircraft (F-15Es, F-16s, and Tornados) at a handful of storage sites in Europe.¹

A combined force of U.S. and European NATO personnel assigned to the storage sites retains the custody and provides security of these nuclear weapons. The B-61 weapons are stored in underground hardened storage bunkers at undisclosed locations around each storage site. Custody, repair, and improvements to the weapons and the storage bunkers are the responsibility of the U.S. Air Force.

1. Malcolm Chalmers, *Occasional Paper, March 2010: NATO's Tactical Nuclear Dilemma*, (Washington, DC: Royal United Services Institute, March 2010), 1–2.

CHAPTER THREE: KEY FINDINGS

- ▶ NATO is now reviewing its nuclear posture as part of a broader Deterrence and Defense Posture Review (DDPR) tasked at the November 2010 Lisbon Summit. Several core issues surrounding non-strategic nuclear weapons (NSNW) now deployed in Europe are expected to receive prominent attention, including nuclear sharing, reassurance of Allies, NATO's relationship with Russia, and the appropriate mix of nuclear and conventional capabilities required for deterrence. The security of NSNW is central to each of these core issues, and thus must be treated as a core issue in the DDPR process.
- ▶ The risk of a terrorist attack against a European NATO base with U.S. nuclear weapons is real, and the political and security consequences of any infiltration of the site would be potentially severe for the Alliance, whether or not the attackers gained access to a nuclear weapon. The security imperative should therefore be at the forefront of NATO's current nuclear posture, and also a guiding principal for further changes to that posture.
- ▶ Within the past three years, the U.S. Air Force has publicly expressed concerns regarding the security of U.S. nuclear weapons—B-61 bombs—currently deployed in Europe.
- ▶ Security concerns exist against the global backdrop of an increasing threat from terrorism, and more specifically, a planned attack against a U.S. Air Force facility. Based on publicly available information, it is reasonable to surmise that the threat from a terrorist attempting to damage, destroy, or steal a nuclear weapon from a NATO nuclear weapon storage site is real; and that site security needs to be under constant review.
- ▶ The security of U.S. nuclear weapons deployed in Europe must remain the highest priority for the United States and all NATO member states. Any NATO nation that possesses or stores nuclear weapons on its territory must be committed to responsible stewardship. Indeed, if security at NATO nuclear storage sites has not been or cannot be corrected quickly and completely, consideration should be given to immediately removing all remaining B-61s from Europe as an urgent measure to improve NATO security.
- ▶ Even with enhanced site security, the continuing terrorist threat, the inherent security risks in storing B-61s in Europe, and the questionable military utility of the B-61 in a NATO context demands that alternatives to NATO's current nuclear posture should be given high priority—alternatives that are more credible and secure as a deterrent and consistent with NATO remaining a nuclear alliance.
- ▶ NATO should also seek to make security with respect to NSNW the highest priority with Russia, and move without delay to adopt a series of reciprocal steps that will improve the security of nuclear weapons now. As stated recently by former U.S. Senator Sam Nunn, "As long as U.S. tactical nuclear weapons remain deployed in Europe, all of NATO has a stake in their security; all of NATO also has a stake in the security of Russian tactical nuclear arms; and Russia has an equal stake in the security of NATO weapons as well as their own."

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Perimeter security (fences, monitors, and motion detectors) and access to the storage sites is the responsibility of the host nation. Training, exercises, inspections, maintenance operations, and related activities are coordinated between the United States and host nation forces at each site.

There have been several security concerns raised regarding U.S. nuclear weapons deployed in Europe. In the wake of two nuclear security lapses in the United States when six nuclear weapons were flown from North Dakota to Louisiana without authorization and four Intercontinental Ballistic Missiles components were mistakenly shipped to Taiwan, the Chief of Staff of the U.S. Air Force commissioned a Blue Ribbon Security Review of all Air Force nuclear forces. The 30-member review team conducted an “enterprise-wide” investigation of nuclear operations in the United States and Europe. In a public report, the review concluded that most sites in Europe “require additional resources to meet [DoD] standards.” The report also found “inconsistencies in personnel facilities and equipment provided to the security mission by the host nation.” In particular, the report noted that areas in need of repair at several of the sites included “support buildings, fencing, lighting and security systems.” The report recommended that U.S. nuclear assets in Europe be consolidated.²

NATO has not been clear whether and how these concerns have been addressed in the near term, or whether NATO nations have committed to the estimated hundreds of millions of dollars required for improvements in nuclear storage facilities. The U.S. Air Force has developed an implementation plan for security improvements at the storage sites and is executing the plan in 2011 (a precise description of the plan and its elements are classified).

In June 2008, following the Blue Ribbon Review, Secretary of Defense Robert M. Gates commissioned former Secretary of Defense James R. Schlesinger and eight distinguished former and retired members of government and the military to address the nuclear mission. Phase I of this effort focused on the Air Force’s nuclear mission and Phase II addressed the nuclear enterprise across the DoD. The Task Force was commissioned to “recommend improvements necessary to ensure that the highest levels of accountability and control are maintained in the stewardship and operation of nuclear weapons, delivery vehicles, and sensitive components.” The Task Force was also charged with “recommending measures both to enhance and sustain public confidence in the Defense Department’s ability to handle its nuclear assets safely and to foster a clear international understanding of the continuing role and credibility of the U.S. nuclear deterrent.”³

2. Hans Kristensen, *Most Nuclear Weapon Sites in Europe Do Not Meet US Security Requirements* USAF Report, (FAS Strategic Security Blog, June 19, 2009), <http://www.fas.org/blog/ssp/2008/06/usaf-report>.

3. *Report of the Secretary of Defense Task Force on DoD Nuclear Weapons Management—Phase I: The Air Force’s Nuclear Mission*, September 2008, 13–14, http://www.defense.gov/pubs/phase_i_report_sept_10.pdf.

The Task Force visited several command headquarters in the United States and Europe and operational nuclear facilities in the United States, but did not visit operational nuclear sites in Europe.

The Task Force prepared a formal report for Secretary Gates at the end of each phase of the investigation. Although the two reports addressed concerns regarding the organization, personnel management, inspections, inventory control, storage, and security of all weapons in the DoD-wide nuclear enterprise, neither report addressed shortcomings at the nuclear storage sites in Europe.

In the Phase II report, in the discussion subtitled “Deterring Terrorists,” the report acknowledged that the acquisition by a terrorist of a WMD capability “is a very high priority—in Osama bin Laden’s words: ‘a sacred duty.’”⁴ Yet, the report offers little discussion and no acknowledgment of the security lapses at NATO’s nuclear storage sites. Finally, the two reports offer a combined total of 115 recommendations; however, not a single recommendation was offered to address security problems at the storage sites in Europe.

In the section titled “The Special Case of NATO,” the report cites five “benefits” of deploying B-61s in Europe: (1) they provide cohesion within the Alliance and assure U.S. commitment to NATO security; (2) they serve as an “anti-proliferation” tool, preventing Allies from building their own nuclear capability; (3) they require all members of NATO to share in the enterprise while all members benefit from the weapons’ presence; (4) they are spread out across Europe and thus, less vulnerable; and (5) NATO Dual-Capable Aircraft contribute to the deterrence mission and increase the value of the weapons.⁵ Each of these points should be subject to further scrutiny in the DDPR; in particular, the perceived benefits of locating nuclear weapons at several locations throughout Europe to make them less vulnerable to a Cold War-era preemptive attack must be viewed in a broader context: that is, in today’s threat environment, locating nuclear weapons at several locations throughout Europe is precisely what makes them more vulnerable to a terrorist attack.

AN IMAGINATIVE AND DEADLY ADVERSARY

Several publicly documented incidents associated with the security of NATO bases have rightly led to questions regarding the potential threat of a terrorist attack on NATO nuclear storage sites. A brief review of several terror plots and

4. *Report of the Secretary of Defense Task Force on DoD Nuclear Weapons Management—Phase II: Review of the DoD Nuclear Mission*, December 2008, 10, <http://www.defense.gov/pubs/pdfs/PhaseIIReportFinal.pdf>.

5. *Report of the Secretary of Defense Task Force on DoD Nuclear Weapons Management—Phase II: Review of the DoD Nuclear Mission*, December 2008, page 14, <http://www.defense.gov/pubs/pdfs/PhaseIIReportFinal.pdf>.

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successful attacks over the past two decades underscores the terrorist threat, and may provide insights as to the “who, what, when, where, and how” of a future terror plot.

Before September 11, 2001, there were several terror plots and successful attacks that illuminate the new threat. The first attack on the World Trade Center (WTC) occurred in February 1993. This attack, where a truck bomb was driven into the parking garage of Tower One, was designed to take Tower One down and have it crash into Tower Two, killing thousands. The template for this attack came from the barracks bombings in Beirut in 1983 and plans for an attack on New York skyscrapers that were revealed in 1990 after an FBI raid of the New Jersey home of El Sayyid Nosair, the man ultimately convicted in connection with the WTC bombing and the murder of Rabbi Meir Kahane. The Beirut bombings (two separate barracks bombings just two minutes apart) also served as a template for the U.S. Embassy bombings in Nairobi, Kenya, and Dar es Salaam, Tanzania (two separate embassy bombings just 10 minutes apart). The attack on 9-11 followed this same pattern.

The 1994 hijacking of Air France Flight 8969 (by the Armed Islamic Group, or GIA) also served as a template for the 9-11 attack in that the airliner in this hijacking was intended to be flown over the Eiffel Tower and then to explode, killing hundreds on the ground in Paris. The Bojinka Plot of 1995 provided even more insight into the planning for the 9-11 attack and the 2006 transatlantic airline plot that followed. The Bojinka plot was designed to bring down a dozen airliners returning to the United States from the Far East over a period of a few hours after bombs placed on board these aircraft were detonated. This plot required suicidal terrorists on board for the plan to succeed.

Between March and September 2001, several separate intelligence warnings from overseas were passed to U.S. intelligence agencies regarding a “massive strike involving airplanes.” These included that 20 Al Qaeda jihadists were in the United States, that four of them were receiving flight training, and that a massive attack was imminent.⁶ In fact, the President’s Daily Brief of August 6, 2001, prepared by the CIA, included this prescient statement: “Although bin Laden has not succeeded, his attacks against the U.S. Embassies in Kenya and Tanzania in 1998 demonstrates that he prepares operations years in advance and is not deterred by setbacks.”

Taken together, these examples underscore that we are facing adversaries that are clever, committed, and not deterred by failure. Moreover, they have a track record of planning and conducting high profile attacks with a high prospective payoff. It is certain that these adversaries will continue planning these attacks despite (or even emboldened by) Osama bin Laden’s death. Although many plots

6. Carl Cameron, “Clues Alerted White House to Potential Attacks,” *Fox News* (May 17, 2002).

have been foiled before their execution, the most common methods to combating terror have been largely reactive and not proactive; an attack takes place and is followed by actions to prevent a similar attack from happening again.

CONNECTING THE DOTS: TERRORIST INTEREST IN NATO NUCLEAR STORAGE SITES

In summer and early fall 2001, U.S. intelligence monitored calls between an Al Qaeda hub in Yemen and an operative in Europe. These communications revealed several operatives were involved in a plot to attack the U.S. Embassy in Paris. Two days after 9-11, Nizar Trabelsi was apprehended and questioned regarding this plot. Trabelsi was eventually linked to two “shoe bombers,” Richard Reid and Saajit Badat. Reid’s suicide attack on December 22, 2001, on American Airlines Flight 63 was foiled and he was arrested, tried, and sentenced to life in a federal prison in Colorado; Badat failed to go through with his attack and was arrested in November 2003 and subsequently sentenced to 13 years in jail in England.

During Trabelsi’s questioning and subsequent trial, he revealed that he was to be the first suicide bomber in a plot to attack a U.S. Air Force dining facility at an air base in Europe. In May 2003, Trabelsi revealed the details of the bomb plot at the air base. Trabelsi told the court that he was sent by Osama bin Laden to conduct a truck-bomb attack at the base (Trabelsi met with bin Laden during a trip to Afghanistan in 2001). Trabelsi also revealed that he was helped by an American service member stationed at the base who sold him pictures of the facility. It was also publicly asserted during the trial that the air base housed nuclear weapons. Trabelsi was convicted on September 30, 2003, and sentenced to 10 years in prison.

In 2009, Naima Trabelsi, Trabelsi’s wife, claimed on an Islamic web-based TV broadcast that her husband “had plotted to carry out an attack on the U.S. military base after he returned from Afghanistan to destroy the weapons arsenal located on the base.”⁷

For exhibiting such great interest in the air base, it can be hypothesized, if not assumed, that the weapons of interest to Al Qaeda were the B-61 nuclear bombs publicly asserted during the Trabelsi trial to be stored there. Thus in this instance, one could plausibly connect Trabelsi, who was aided by an American service member, to Osama bin Laden, to other Al Qaeda operatives, to publicly available information on the supposed locations of the weapons, to weaknesses in security at the sites publicly disclosed by the U.S. Air Force, and ultimately to an attack against the weapons. Moreover, even if in this case all the dots did

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7. CBS News Investigates, *Naima Trabelsi Says Her Husband Sought to Destroy Weapons Arsenal at U.S. Base in Belgium*, (March 18, 2009), http://www.cbsnews.com/8301-502684_162-4877845-502684.html.

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not connect and there were no nuclear weapons stored at the air base, it should underscore that there are credible scenarios relating to terrorism and NSNW in Europe that require the highest possible standards of security at all NATO nuclear storage sites.

Security arrangements at NATO bases have been challenged on several occasions since 9-11. The most significant recent event occurred in January 2010 when a handful of nuclear activists breached the perimeter fence at an air base. They were arrested after nearly an hour on the base and had their cameras confiscated; nonetheless, they had removed the memory cards and smuggled them out of the base. These videos and photos contained on the memory cards are available on line on YouTube and at the Federation of American Scientists (FAS) website.

Indeed, information on NATO bases in Europe is available on several websites, including detailed satellite images.⁸ We must then presume that terrorists already have access to plenty of information to plan and conduct an attack at NATO bases in Europe—and with their recent history of high profile, high consequence attacks, may already be planning to do so.

SCENARIOS FOR A TERRORIST ATTACK ON A NUCLEAR STORAGE SITE

For the scenarios provided below, terrorists are presumed to be located over an underground storage vault before they are detected.

- ▶ **THEFT OF A NUCLEAR WEAPON.** The most serious event imaginable would be the theft of one or more nuclear weapons. Although this is not likely given safeguards built into the vault system making the timely theft of a B-61 extremely difficult, it is still possible to imagine a well-armed and well-informed team eventually gaining access to a bomb inside the vault. This team would have to fight off defenders for a considerable time and their ability to get away with the bomb is negligible, but still possible.
- ▶ **DESTRUCTION OF A NUCLEAR WEAPON.** Next down the list of serious events would be the destruction of one or more weapons within the vault; this type of attack would trigger a radiation event. This event is more likely than the theft of a weapon and is easier to imagine. In this scenario, a well-armed team would access the top of the vault and set off an explosive charge on the lid of the vault. The right-size shaped charge could open a large hole in the lid of the vault and damage the B-61s within. The time of access over the vault required for such an attack can be measured in just a few seconds versus many minutes.

8. FAS Strategic Security Blog, *Kleine Brogel Nukes: Not There, Over Here!*, <http://www.fas.org/blog/ssp/2010/02/kleinebrogel2.php>.

- ▶ **DAMAGE TO A NUCLEAR WEAPON.** Next down the list but no less serious would be damage to a weapon with no radiation event. The problem is that it would take some time to determine that no radiation has leaked from a damaged weapon; moreover, it would take an additional time to convince the nearby public that there was no health risk.
- ▶ **DAMAGE TO FACILITIES; NO WEAPONS COMPROMISED.** This scenario might include damage to a vault, a hardened aircraft shelter, or any of the facilities on a nuclear storage site that result in no damage to any nuclear weapon.
- ▶ **FOILED OR THWARTED ATTACK.** Finally, this scenario has already occurred: the attack planned by Nizar Trabelsi that was thwarted by his arrest in September 2001.

THE CONSEQUENCES OF AN ATTACK

It should be assumed that any attempt to attack a nuclear site in Europe storing U.S. B-61 bombs will have operational and political consequences, whether or not terrorists were to gain access to a nuclear bomb. For example, the operational consequences of an event involving the actual theft of a nuclear weapon would likely include the immediate withdrawal of all B-61s stored in Europe. One could also surmise that the political consequences might go so far as the outright rejection of U.S. military forces—not just nuclear weapons—in some or all NATO countries.

The consequences of an event involving the destruction of or damage to a nuclear weapon most immediately would be cordoning a nuclear radiation leak and consequence management by local authorities; most countries in Europe are not equipped to address this type of disaster and it would take hours, or perhaps days, to handle such an event. Here too, the political consequences could lead to a partial or full withdrawal of nuclear weapons from Europe.

Even in a less severe event involving damage to facilities with no compromise of a weapon, political pressure could be brought to bear against the continued storage of weapons in Europe, leading to a partial or full withdrawal.

SERIOUS IMPLICATIONS FOR NATO

The combination of the known terrorist threat and publicly acknowledged security challenges require the United States and NATO to be more imaginative and proactive in preventing an attack on nuclear storage sites. If such an attack can be imagined, it must be addressed. As an immediate issue, the security of nuclear weapons deployed in Europe should be and must remain the highest priority for NATO. Indeed, if security at NATO nuclear storage sites has not been or cannot

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be corrected quickly and completely, consideration should be given to pulling all remaining B-61s from Europe as an urgent measure to improve NATO security.

NATO should also seek to make the issue of security with respect to NSNW the highest priority with Russia, and move without delay to adopt a series of reciprocal steps that will improve the security of nuclear weapons now in the context of enhancing Euro-Atlantic security. This is the argument posed by former Senator Sam Nunn, co-chairman of the Nuclear Threat Initiative, in a recent article published in the *International Herald Tribune*.⁹ Nunn argues for Russia to become a partner in combating the threat of a terrorist attack on nuclear weapons in Europe and Russia. Russia is as vulnerable to terrorism as NATO is, perhaps even more so because of the size and dispersal of its nuclear arsenal and the demonstrated intent of its terrorist adversaries. Nunn offers several steps that can be taken by NATO and Russia together and serve both sides equally:

- ▶ A threat assessment focused on how terrorists might seek to penetrate sites where tactical nuclear weapons are located and gain access to a nuclear bomb;
- ▶ A security assessment that identifies vulnerabilities and build improvements to nuclear storage;
- ▶ A combined recovery exercise where NATO and Russian forces work together to recover stolen nuclear material or weapons;
- ▶ Site visits to NATO and Russian nuclear storage sites to encourage security and build confidence;
- ▶ A shared commitment to separate nuclear weapons from operational units; and
- ▶ A declaration of the exact total number of tactical nuclear weapons located in NATO and Russia.

Both Russia and NATO face the threat of terrorism on their soil; combining forces against this dangerous and persistent threat makes great sense.

CONCLUSION

As NATO proceeds with its DDPR in the months ahead, it must give a serious and realistic assessment of the benefits derived from maintaining its present nuclear posture and the potential costs, including a successful terrorist attack at a NATO nuclear site. The B-61 bomb serves more as a “symbol” of deterrence and reassurance rather than an instrument of such. Given the demonstrated terrorist threat

9. Sam Nunn, “NATO, Nuclear Security and the Terrorist Threat,” *The International Herald Tribune*, November 16, 2010.

and the inherent and possibly unavoidable security risks in maintaining the deployment of B-61s in Europe, it would seem that alternatives to NATO's current nuclear posture—alternatives that are more credible as a deterrent and consistent with NATO remaining a nuclear alliance—should be given high priority.