NUCLEAR PLANNING IN EUROPE MODERNIZED

STRATCOM to Support European Command

The extensive military reorganization following the ending of the Cold War also affected those responsible for nuclear strike planning in the European theater. Up until the early 1990s, the U.S. European Command (EUCOM) was essentially single-handedly in charge of the U.S. part of planning and maintaining the nuclear strike plans for tactical nuclear force employment in Europe. That changed after the creation of U.S. Strategic Command (STRATCOM) in June 1992.

The U.S. military leadership initially created STRATCOM with the intention of placing all U.S. nuclear planning and execution under a single command, whether strategic or tactical. This plan met with considerable opposition from the regional Commander In Chiefs (CINCs) who thought that their close involvement in their regions made them better qualified to do the regional planning. STRATCOM’s strength was its expertise in target identification and analysis, force execution planning, and calculation of probability of arrival and damage expectancy, skills developed through 50 years of maintaining the SIOP (Single Integrated Operational Plan), the U.S. strategic nuclear war plan.

With the Clinton administration’s initiation of the Counterproliferation Program in 1993, strike planning against regional WMD targets became a new focus. STRATCOM already had a role in countering the WMD in the context the former Soviet Union and was assigned to assist regional commands in drawing up their regional nuclear strike plans. But the command wanted more. STRATCOM commander General Lee Butler testified before Congress in April 1993 that at the request of the Joint Chiefs of Staff Chairman General Colin Powell, STRATCOM was "working with selected regional Unified Commands to explore the transfer of planning responsibilities for employment of nuclear weapons in theater conflicts." Doing so could "save manpower and further centralize the planning and control" of U.S. nuclear forces, an objective both he and Powell shared. Part of the result of this effort was the SILVER Books project.

The SILVER Books were plans for military strikes against WMD facilities in a number of "rogue" nations in a regional context. As such, the project was a precursor to the doctrine of preemption adopted by the Bush administration in September 2002. SILVER was an acronym for Strategic Installation List of Vulnerability Effects and Results, a project that involved "the planning associated with a series of ‘silver bullet’ missions aimed at counterproliferation." Targets included nuclear, chemical, biological, and command, control and communications (C3) installations. (See Figure 13)

Regional nuclear targeting was the turf of the regional CINCs, however, and for STRATCOM to take over part or the entire mission required delicate maneuvering. To prepare the framework, the Weapons Subcommittee of STRATCOM’s Strategic Advisory Group (SAG) in early 1994 began analyzing regional target sets and weapons capabilities needed for representative SILVER Book strikes. The primary analysis centered on defeat mechanisms for chemical/biological and buried targets. A total of six
facilities were analyzed using conventional, unconventional, and nuclear weapons appropriate for the attack,98 with a focus on fixed installations.99 By April 1994, the process had advanced far enough so that the new STRATCOM commander, Admiral Henry G. Chiles, Jr., could report to Congress:

"Systems and procedures to accomplish this task have been developed, and planning coordination with regional commanders has begun….In a supporting role, STRATCOM will provide its planning expertise to assist geographic unified commanders when required."100

The SILVER Books project was focused on counterproliferation and was part of a broader effort called the Theater Nuclear Support model to more fully integrate STRATCOM into theater nuclear planning. By February 1994, the necessary directives had been drafted to support DCA planning and promulgate mission plans to the CINCs. This included an update of the Theater Support STRATCOM Administrative Instruction (SAI) with several sections that formalized all internal procedures for theater nuclear support. Another concerned the assignment of STRATCOM as manager of the worldwide SAS/PAL system for non-strategic nuclear forces.101

Several disagreements were hammered out during this period. A conference organized by Joint Staff at the Pentagon in early February 1994 included staff from STRATCOM, ACC, and the regional CINCs. ACC objected to STRATCOM providing “stick routes” to the ACA fighter-bombers, arguing that “the pilots in the field are better equipped to
determine the best route to fly.” Likewise, EUCOM staff later visited Offutt Air Force Base to discuss its concerns. STRATCOM reciprocated by sending staff to brief EUCOM. Commander in Chief, U.S. European Command (CINCEUR) indicated “substantial agreement with the Theater Nuclear Support model” in early 1994, according to STRATCOM.

To better establish close collaboration with the regional CINCs, STRATCOM planners envisioned appointing a single point of contact to develop a uniform method of interfacing with the theater CINCs that request deliberate planning of Theater Nuclear Options (TNOs) for targets identified in their theater. A representative from CINCEUR visited STRATCOM in February 1994 to discuss EUCOM’s specific concerns with the support model and the support plan, and STRATCOM intended to follow up with a visit to EUCOM “to tailor their support plan, particularly with regard to execution.”

During a visit to EUCOM in May 1994, the two unified commands briefed each other on the various elements of their mission. EUCOM staff presented briefings on EUCOM’s roles and missions, nuclear weapons requirements, and Theater Missile Defense Initiative. STRATCOM staff gave briefings on the Theater Nuclear Support Model and Counterproliferation Initiatives.

These meetings helped resolve their differences, and by examining the discussions we can better understand the reasons why the United States adjusted nuclear war planning in Europe and its periphery to the post–Cold War era. The May 1994 meeting dealt with issues such as U.S. Air Force support of NATO nuclear missions with DCA based in the United States. The aircraft would, under the various Operational Plans (OPLAN), deploy to staging bases in Europe. The CINCEUR adjusted STRATCOM’s support plan to operate nuclear aircraft in other countries, and both sides agreed to modify the plan so that nuclear deployment and overflight of other countries would be “subject to agreement of the host nation.” A draft nuclear support annex to OPLAN 4122 (rapid reinforcement of Europe in a general war) was being finalized.

The participants also discussed EUCOM’s support of Central Command’s (CENTCOM) nuclear mission in the Persian Gulf region, including deployment of command and control aircraft from the EUCOM’s area. At the time, a final draft of the nuclear annex to OPLAN 1002 for countering a Persian Gulf conflict was being finalized by the Joint Staff, and EUCOM and STRATCOM agreed to exchange PAL materials for use in nuclear strike “missions not executed from CINCEUR’s AOR [Area of Responsibility] using CINCEUR delivery platforms/weapons.” This apparently meant that nuclear weapons stationed in Europe also had roles outside of Europe in the CENTCOM area, which includes Iran, Iraq, and Syria.

With these issues sorted out, it was time to implement the planning. On June 28, 1994, the Joint Chiefs of Staff Chairman issued Change 4 to the Joint Strategic Capabilities Plan nuclear Annex C (JSCP CY 93-95). This guidance formally assigned the Theater Nuclear Support mission to STRATCOM. The new directive included guidance for
CINC’s “requesting preplanned targeting outside their own Area of Responsibility (AOR).”

Building on the Theater Nuclear Support mission and the authority that flowed from it, STRATCOM continued to fine tune the SILVER Books. By late 1994, a prototype SILVER Book was ready for the European Command to support deliberate planning, crisis planning (adaptive planning), and contingency planning. STRATCOM briefed the EUCOM staff in November 1994. The SILVER Book contained a menu of options for striking known, fixed WMD sites in the region.

For STRATCOM, the advantages of taking responsibility for counterproliferation targeting were obvious. With 50 years experience in target analysis, strike planning, and damage expectancy calculations, STRATCOM would bring superior skills to the regional planning. EUCOM would be able to save manpower for more important missions. Nevertheless, the regional CINC’s remained concerned that the SILVER Books project would grant STRATCOM too much authority in theater strike planning.

Eventually, the Joint Staff agreed with the regional CINC’s. The Final Report of the Counterproliferation Missions and Functions Study of March 1995 recommended that the SILVER Books concept should not be implemented as envisioned by STRATCOM. Nonetheless, the regional CINC’s should ensure that their counterproliferation concept plans (CONPLANS) and counterproliferation-related portions of OPLANS addressed the types of considerations highlighted by the SILVER Books prototype. For STRATCOM this was only half a defeat. Although it failed to get responsibility for the counterproliferation mission, STRATCOM was assigned the Theater Nuclear Support mission that would, in any case, involve planning Theater Nuclear Options (TNO) against WMD targets.

The final communiqué from NATO’s NPG meeting in May 1994 did not mention this important development, but it did talk in vague terms about intensifying and expanding NATO’s efforts against proliferation. The group said it “reviewed with satisfaction work recently begun in the Senior Defence Group on Proliferation to assess the proliferation threat and to consider how better to protect against it.”

The modernization of EUCOM’s nuclear war planning coincided with STRATCOM’s upgrade of the U.S. Strategic War Planning System (SWPS) from an inflexible and lengthy war planning system to a flexible and adaptive planning tool. Begun in 1993 and completed in 2003, the modernized SWPS incorporated not only strategic nuclear forces but also planning for non-strategic aircraft and sea-launched cruise missiles in support of the regional CINC’s. One of the most important innovations was that nuclear planning had to be an ongoing and flexible process.

NATO matched the U.S. modernization by developing an automated nuclear planning system to support and integrate the full range of NATO nuclear planning and management functions throughout Command Europe. A proof-of-principle system was delivered by 1994 to create, synchronize, and disseminate nuclear war plans during
peacetime and update war plans quickly in war. These were capabilities one might envision were needed during the Cold War with thousands of nuclear facilities being targeted, but NATO’s nuclear planners thought this expanded capability was also needed more than a decade after the end of the Cold War.

The result of the modernization was the NATO Nuclear Planning System (NNPS), a force-level nuclear operations planning system designed to automate NATO’s coordinated adaptive nuclear planning process. The system came online in 2003 and enables dispersed users to access the NNPS server at SHAPE Headquarters via remote fixed and mobile PC workstations. It provides the capability to load data from external commands and agencies; develop Major Contingency Options (MCOs) and Selective Contingency Option (SCOs) plans, including target development, DGZ (aimpoint coordinates) construction, force application, aircraft route planning, timing and deconfliction, and consequences of execution; and prepare planning products and messages for external commands and agencies. NNPS interfaces with the NATO Nuclear Command and Control Reporting System (NNCCRS), a joint U.S.-NATO nuclear command and control system.

The parallel modernization of the NATO and U.S. nuclear war planning systems reflects the close and unique relationship between Supreme Headquarters Allied Powers Europe (SHAPE) and the U.S. Under the 2001 Unified Command Plan, European Command (EUCOM) covers all of Russia, and STRATCOM’s nuclear support role in the European theater is different and deeper than in Central Command (CENTCOM) and Pacific Command (PACOM). Yet despite STRATCOM’s extensive support role, the regional commands still “own” the TNO planning process.

Beyond creating more flexible and responsive nuclear strike planning, the modernization of NATO’s nuclear war planning system was also necessary to better integrate nuclear and conventional forces. Forward-deployed nuclear air forces are sometimes seen as stand-alone and autonomous strike capabilities, but executing a nuclear strike mission with a fighter-bomber in a regional scenario may require a significant conventional support package that involves everything from aerial refueling to air defense and aircraft recovery.

During a simulated strike against North Korea conducted by the 4th Fighter Wing at Seymour Johnson Air Force Base in North Carolina in June 1998, for example, the half a dozen F-15E strike aircraft required a support package of E-3A Airborne Warning and Control System (AWACS) aircraft for early warning, KC-135 tankers for refueling, and F-16CJ and F-15C for protection against hostile aircraft. Without this extensive support from conventional forces, the nuclear strike would not have been effective. With the exception of aircraft at Incirlik Air Base, nuclear strike aircraft in Europe require refueling to reach their presumed targets in western Russia or the Middle East region.

The modernization of the war planning system has created a paradox: While NATO officials describe the number of nuclear weapons in Europe as greatly reduced and their role truly that of weapons of last resort, the modernized nuclear war planning systems
have created a capability to design and execute nuclear strike options that is greater than at any time during the Cold War.

**Nuclear Strike Training**

Maintaining credible wartime nuclear strike missions require training in peacetime. To support the forward deployment of U.S. nuclear weapons in Europe and the assignment of nuclear strike missions to aircraft from non-nuclear NATO countries, USAFE and NATO maintain an extensive infrastructure of bombing ranges where U.S. and NATO pilots can practice their skills in dropping nuclear bombs. In 1994, after the withdrawal of ground-launched nuclear weapons was completed in 1993, the USAFE maintained 15 bombing ranges in eight countries expressly used for nuclear weapons training (see Table 9).

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<td>Italy</td>
<td>Capo Frasca</td>
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<td>Maniago II</td>
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* All ranges (except Maniago II) are for both nuclear and conventional bombing.

There was at least one bombing range in each NATO nation that hosts U.S. nuclear weapons, except Greece. The list also included France, which is a member of NATO but does not store U.S. nuclear weapons and is not part of NATO’s integrated nuclear command structure. Compared with 1992, the 1994 list deleted a second French range and a “nuclear-only” bombing range in Italy.
One interesting change in 1994 list was the addition of a new nuclear-capable bombing range in Northern Africa: Ben Ghilouf in Tunisia. It is unclear whether Tunisia knows that Ben Ghilouf is for nuclear training. The use of the Tunisian range apparently became available as a result of the Joint Contact Team Program (JCTP), which was designed to “bring military personnel together and share the ideals of democracy with central and eastern European countries.” Nuclear strike training appears to have been one of the results.\textsuperscript{119}

\begin{figure}[h]
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\includegraphics[width=\textwidth]{b61_shapes_dropped_vliehors_range.png}
\caption{B61 Shapes Dropped at Vliehors Range\textsuperscript{120}}
\end{figure}

Three unarmed “dummies” (probably BDU-38) of the B61 tactical nuclear bomb dropped by NATO aircraft at the Vliehors (Cornfield) Range in the Netherlands.

THE 1994 NUCLEAR POSTURE REVIEW
European Nuclear Deployment Reaffirmed

Shortly after the completion of the withdrawal of ground-launched nuclear weapons from Europe, and coinciding with the modernization of the nuclear planning capabilities, the Clinton administration completed the Nuclear Posture Review (NPR) in September 1994. The NPR was portrayed by U.S. government officials as reducing the role of nuclear weapons, but it decided to “maintain current DCA strength in the continental United States (CONUS) and Europe.”[121] In reaching this decision, the NPR looked more to the past than to the future. When presenting the findings to Congress, Deputy Secretary of Defense John Deutch acknowledged that the threat of a massive Soviet conventional attack on Europe had vanished, but instead he pointed to the Russian arsenal of non-strategic nuclear weapons as the principal rationale:

“Let me now turn to the most important – not the most important, but a very important area of our deliberations, which are non-strategic forces. I remind you of the slide I showed earlier, where it showed the Russians have somewhere between [deleted] non-strategic nuclear warheads, while our total inventory is more like [deleted]. And, of course, most of the non-strategic nuclear weapons in Russia are located at distances which can be easily delivered against European targets. So this disparity in non-strategic nuclear forces, those which are not covered by START [Strategic Arms Reduction Treaty], is a matter of considerable concern.”[122]

Deutch added that the political role was also important: shared responsibility for nuclear forces and making sure the Europeans know that they can rely in a serious way on our nuclear forces as well as our conventional forces. This was an important element, he explained, in understanding “what changes are possible and the pace of changes with respect to non-strategic nuclear forces.” In outlining the reduced force level, Deutch repeatedly underscored the issue of Russia’s non-strategic weapons:

“…I want to emphasize that [the actions we have taken] do not solve the problem of our great concern about the disparity of the non-strategic nuclear forces between the Russians and ourselves. On the one hand, the Russians have not yet explored fully the changed considerations that have occurred within NATO about the role of nuclear weapons. Both of those items remain to be done.”[123]

Initially the scope of the NPR appears to have been more visionary. The review grew out of a study known as Presidential Review Directive 34 (PRD-34) and was initially intended by then Defense Secretary Les Aspin as a “bottom-up” review of nuclear policy. But after Aspin died and was succeeded by William Perry in January 1994, the Washington Post reported that Pentagon hawks and STRATCOM took over and scaled
back the scope of the review. Other than the removal of nuclear capability from surface ships, the NPR offered little that was new but instead merely continued a scaled-down Cold War posture. The most innovative feature was the “lead and hedge” doctrine, which was portrayed as aiming toward lower force levels and a reduced role of nuclear weapons but at the same time hedged against an uncertain future by maintaining a large force structure with thousands of warheads held in reserve.

For Europe, this meant that the 480 forward-deployed nuclear weapons would stay. Deutch showed Congress a chart that set the “current level” of the European non-strategic nuclear force commitment at nine percent of the Cold War level. President Clinton made the NPR official U.S. nuclear policy on September 21, 1994, when he signed Presidential Decision Directive/National Security Council-30 (PDD/NSC-30).

The NPR was completed and the force level set, but the role of nuclear weapons in Europe was far from clear. In his presentation to the Congress, Deutch indicated that the NPR had failed to complete its analysis of the non-strategic force level. Apparently, the consultations with NATO had not brought clarity to the issue of the future role of forward-deployed nuclear weapons in Europe:

“So, an important question is, what is the basis for the presence of any nuclear weapons in NATO now within the framework of the alliance. Of course, it’s still true that the Russians possess a lot of non-strategic nuclear weapons, but the original military justification is certainly changed, although the political value of those weapons as a commitment to the alliance is still high. I believe we have a very long diplomatic road to travel to understand better with NATO what the role is of nuclear weapons in NATO. Indeed, one of the most important outcomes of the Nuclear Posture Review was this notion about how we’re going to address non-strategic nuclear weapons, of which the NATO question is one.”

Such concern, however, was not evident in the final communiqué from NATO’s NPG meeting in December 1994. Instead, the NATO ministers “expressed our deep satisfaction for the reaffirmation of the United States' nuclear commitment to NATO.” Intrinsic to this commitment, according to the communiqué, was a widespread deployment of the nuclear weapons in Europe:

“In this context, we reiterate the essential value of maintaining widespread deployment of NATO's sub-strategic nuclear forces by the United States and European Allies. These forces, which are an integral part of NATO's nuclear posture, represent an essential element of the trans-Atlantic link and are visible evidence of NATO's cohesion, solidarity, and burden-sharing.”

Setting commitments was simpler than setting force levels because so many of the normal parameters were gone. And for the military that had to translate the guidance into
plans for the potential use of those political weapons, the decision did not bring clarity. In its history for 1994, the Headquarters for U.S. Air Forces in Europe explained:

“Decisions regarding the proper level of nuclear readiness were not easy to make. The fundamental purpose of nuclear forces was political: to preserve peace, prevent coercion, and deter war. The threat of large-scale nuclear assault on Europe dissipated with the collapse of the Soviet Union, and the need for a large, combat-ready stockpile of nuclear weapons was gone. NATO leaders were hopeful that the foundation of European security and stability would shift increasingly from reliance on military might to reliance on international diplomacy and cooperation. At the same time, parts of Europe were far from peaceful, and NATO recognized that diplomacy and conventional forces alone might not be enough to deter aggression and prevent war. USAFE conducted its planning in the context of NATO policy, which stated that the alliance would, for the foreseeable future, maintain an appropriate mix of conventional and nuclear forces in Europe. The question remained: How many, where, and what balance among the member nations, and at what level of readiness?”

The U.S. Office of the Secretary of Defense was much more euphoric about the impact of the NPR, suggesting it had created a whole new nuclear doctrine: “The new posture…is no longer based on Mutual Assured Destruction, no longer based on MAD,” stated Defense Secretary William Perry. “We have coined a new word for our new posture, which we call Mutual Assured Safety, or MAS.” The new terminology has not been used by the Pentagon since.

**Nuclear Deployment Reorganized**

In addition to strategic factors such as Russian non-strategic nuclear force levels, proliferation, general war prevention, and political imperatives, NATO’s non-strategic nuclear posture in the mid1990s was also strongly affected by internal reorganization. The major Base Realignments and Closures (BRAC) that were undertaken by the United States in 1993–1995 resulted in concentrating U.S. Air Force nuclear operations at four main bases; RAF Lakenheath in England, Ramstein Air Base in Germany, Incirlik Air Base in Turkey and Aviano Air Base in Italy. At the same time, nuclear weapons were withdrawn from several host country nuclear air bases, beginning with including Rimini Air Base in Italy in August 1993, followed by Nörvenich Air Base and Memmingen Air Base in Germany in 1995.

The remaining MUNSS were organized under three Regional Support Groups (RSGs) activated on July 1, 1994: the 603 RSG at RAF Mildenhall to manage the nuclear weapons stored in the United Kingdom; the 616 RSG at Aviano Air Base in Italy for management of nuclear weapons stored in Italy and Greece; and the 617 RSG at Sembach Air Base in Germany covering nuclear weapons stored in Belgium, the Netherlands, and Germany. In Turkey, the 39th Wing had administrative control for the MUNSS since the wing had no permanently assigned aircraft.
Reorganization continued in April 1995, with the Pentagon announcement of the withdrawal of the 39th MUNSS from Balikesir Air Base and the 739th MUNSS from Akinci Air Base in Turkey. The phase-out of the two 110-men units was completed on April 15, 1996. The nuclear weapons at the two bases were transferred to Incirlik Air Base, where they continue to be earmarked for delivery by the Turkish Air Force.

The life of the RSG concept was soon cut short by further reorganization that resulted from the inactivation of the 17th Air Force in early 1996. The RSGs were inactivated and their function as MUNSS caretakers was given to the 16th Air Force.

The mid-1990s also saw the withdrawal of the last British nuclear weapons from bases in continental Europe, eventually ending the RAF nuclear mission altogether. The United Kingdom briefed the NATO NPG meeting in June 1995 about its decision to phase out its WE177 gravity bombs. As a result, the Tornado strike aircraft based at RAF Brüggen were withdrawn in 1998 and the 10 WS3 nuclear weapons storage vaults where up to 40 WE177 bombs had been stored were deactivated. The British declared that the sub-strategic role would instead be taken over by a portion of the warheads on Trident II SLBMs on Vanguard-class SSBNs.

Despite all of these changes, however, NATO once again reaffirmed the importance of U.S. nuclear bombs in Europe. Exactly two months after the U.S. completed the deactivation of the 39th MUNSS and 739th MUNSS from the Akinci and Balikesir air bases in Turkey, the U.S. Air Force signed an $11.6 million contract with Bechtel National Incorporated to build six nuclear weapons storage vaults at each base (and also Araxos Air Base in Greece) for completion in October 1997.
The meeting of NATO’s Defence Planning Commission in ministerial session in October 13, 1996, declared that the remaining nuclear weapons “are no longer targeted against anyone and the readiness of NATO’s dual capable aircraft has been recently adapted.” At the same time, NATO reemphasized that U.S. nuclear forces based in Europe provided “an essential and enduring political and military link between the European and the North American members of the alliance.” This posture would, the ministers stated, “for the foreseeable future, continue to meet the requirements of the alliance.”

**European Changes Increase Importance of U.S. Fighter Bombers**

A curious effect of NATO’s nuclear reductions and relaxations of readiness levels of the remaining dual-capable aircraft (DCA) was that it increased the importance of the nuclear fighter-bombers based in the United States. “With the downsizing of theater nuclear forces worldwide,” the U.S. Air Force stated in 1995, “the capability of CONUS-based DCA resources to deploy rapidly was imperative.” DCA based at Seymour Johnson Air Force Base in North Carolina and Cannon Air Force Base in New Mexico were tasked to deliver nuclear bombs in support of European and Pacific command contingencies.

Fighter-bomber squadrons were urgently needed in the regional wars in the Middle East and Balkans at the time. This caused Air Combat Command (ACC) to recommend a reduction in the nuclear readiness level of DCA based in the United States so that the more important conventional missions could be fulfilled. A second reason was that ACC thought the DCA readiness levels were in general too high for any real-world threats.

The Joint Staff gradually accommodated some of these concerns by lowering somewhat the readiness level of DCA based in the United States. But the commitment to “maintain the total number of CONUS-based DCA squadrons [deleted] seems strong,” ACC reported. The alternative readiness posture would assign the most capable aircraft to perform the nuclear mission, with the Joint Staff making aircraft type a contingency of reduced readiness requirements. What flowed from this reorganization was that fewer aircraft were maintained at a higher-force readiness level to allow ACC and U.S. Atlantic Command (USACOM, later U.S. Joint Forces Command) greater flexibility in meeting nuclear and conventional war-fighting requirements. These changes were incorporated into the updated Nuclear Appendix (Annex C) to the Joint Strategic Capabilities Plan (JSCP), effective January 1, 1997.

Subsequent queries sent to the regional CINCs about their need for nuclear fighter wing support revealed that the European Command was “the only unified command to express a requirement for DCA support.” As a result, Joint Staff in April 1998 decided to change the JSCP Annex C to reduce the readiness requirement. Once again, the Joint Staff decided to maintain “the entire CONUS-based DCA force for worldwide commitment” to supplement tactical nuclear operations in “any theater.” The new guidance became effective April 24, 1998.
Part of the justification for this was the large number of Russian tactical nuclear weapons. The NATO Nuclear Planning Group (NPG) in June 1997 hinted at this in the final communiqué, but the language was vague. Much more direct was an internal message sent by the U.S. Commander in Chief, European Forces (USCINCEUR) in December 1997 in response to ACC’s suggestion to change the readiness level of DCAs. The elements of the threat were, according to USCINCEUR:

- “The strategic threat to NATO territory has been significantly reduced, but Russian tactical nuclear weapons and the doctrine to employ them remain a threat to NATO. Russia maintains at least a 3 to 1 advantage in tactical nuclear weapons as compared to the U.S. and a vastly greater advantage over NATO. The Russians enjoy a near 40 to 1 advantage in delivery systems. Significantly, Russian tactics have evolved to lean more heavily than before on tactical nuclear weapons as their conventional force effectiveness has declined.
- Additionally, the proliferation of weapons of mass destruction by states within the EUCOM AOR/AOI and their ability to target the capitals of Europe is of growing concern.”

This rationale had one leg in the past (Russian nuclear forces) and another in the future (proliferation). USCINCEUR drew a line in the sand to any further considerations of changing the posture and said that the readiness levels for DCAs in the United States...
supporting NATO’s posture should not be changed. The USCINCEUR emphasized what he saw as the unique capability of the non-strategic aircraft:

“No weapon system is more capable than DCA with regards to the flexibility of employment, political statement, yield delivery, and attained accuracy.”\footnote{50}

The USCINCEUR believed that the non-strategic nuclear forces in Europe were one of the most potent elements of the U.S. arsenal and they were not going to be removed from Europe anytime soon. “USCINCEUR’s DCA requirements are not short-lived contingencies, but rather critical and enduring elements of the trans-Atlantic alliance,” USCINCEUR concluded.\footnote{51}

**NATO Expansion East Reaffirms Status Quo**

The concern with Russia was further complicated by plans to expand NATO eastward to include former Warsaw Pact countries. NATO assured Moscow in September 1995 that there “is no [sic] a priori requirement for the stationing of nuclear weapons on the territory of new members.” The alliance’s study on NATO enlargement stated that there was “no need now to change or modify any aspect of NATO’s nuclear posture or policy.” But the study also cautioned that “the longer term implications of enlargement for both [NATO’s nuclear posture and policy] will continue to be evaluated.”\footnote{52} Membership in NATO meant that the new countries would become inextricably involved in nuclear war planning in Europe:

“The new member will, as do current members, contribute to the development and implementation of NATO’s strategy, including its nuclear components; new members should be eligible to joint the Nuclear Planning Group and its subordinate bodies and to participate in nuclear consultation during exercises and crisis.”\footnote{53}

Once again, an opportunity was missed to remove nuclear weapons from Europe and reduce the involvement of non-nuclear weapons states. Instead NATO reaffirmed the importance of such weapons to the security of the expanded alliance.

An additional reason for the United States to maintain nuclear weapons in Europe was prompted by a French offer in 1995 to extend its nuclear umbrella over European countries, particularly Germany. Washington interpreted this as another French attempt to undermine U.S. influence in Europe, and saw the value of “extended deterrence” in preventing new nuclear powers or nuclear alliances from emerging. France was unable to explain why its nuclear umbrella would be more effective than the United States and the initiative instead had the effect of causing NATO to reaffirm the status quo.

**More Safety Concerns Raise Alarm**

The substantive changes in the DCA taskings and employment concepts also caused the U.S. Air Force to update its Operational Plan Data Document (OPDD) for dual-capable F-15E and F-16C and D aircraft based in the United States. These aircraft support NATO
and could in case of war or a serious crisis be moved to bases in Europe. The new OPDD was published in February 1997 and was “significantly changed” from the previous OPDD of August 1994. The document formed part of the preparation for (and was included as an annex to) the Operational Safety Review (OSR) Report that recommended new weapon system safety rules to the Secretary of Defense for signature.

The OSR began on April 14, 1997, at Kirtland Air Force Base with a series of briefings for the USAF Nuclear Weapons System Safety Group (NWSSG) and was followed up with a road trip to several nuclear bases. First stop was Cannon Air Force Base in New Mexico to observe F-16 operations on April 17 and 18. Next, the team traveled to Europe for briefings at Ramstein Air Base and a field trip to RAF Lakenheath April 22–25 to observe F-15E operations and weapons operations in the WSV and upload to aircraft.154

After the visits, the NWSSG concluded that while the F-15E and F-16C/D weapon systems continued to meet the Department of Defense (DOD) nuclear weapons system safety standards, several improvements were necessary to the new WS3 sites in Europe. These included:

- Improving protection from lightning during weapon maintenance in hardened aircraft shelters (HAS);
- Improving the condition of Type 3E weapon trainers;
- Providing guidance for WS3 code module handling and control;
- Evaluating the WS3 security monitoring system.155

The group also proposed changes to the U.S. strike aircraft weapon system safety rules. One change prohibited training with actual nuclear weapons, which was apparently still taking place in 1997. An alternative procedure would use “dummies,” where the nuclear package had been replaced with an electronic unit to simulate warhead interface. The NWSSG report also recommended that safety rules for non–U.S. NATO strike aircraft incorporate similar rules for mitigating lightning risks. Finally, the concept of operation for when both nuclear weapons and conventional munitions are present in the same HAS (with or without a WSV) had to be streamlined.156

The potential consequence of lightning striking a nuclear weapon or the Protective Aircraft Shelter where it was located could, under certain conditions, increase the risk of a nuclear detonation. The major concern had to do with a lightning strike when a weapon was in a disassembled state during maintenance and did not have the protection from high voltage that is inherent in an assembled weapon. There was uncertainty as to whether the hardened aircraft shelter construction would provide an adequate “Faraday cage” to protect operations during lightning storms. According to the F-15E and F-16C/D Operational Safety Review from April 1997:

“It cannot be assured that the B61 meets military characteristics (MC) requirements in abnormal environments when the electrical regions are breached and the nuclear systems remain functional. Under these
conditions, *nuclear detonation may occur* if energy capable of initiating
the nuclear system is present."\(^{157}\)

This was a startling discovery. Weapons Maintenance Trucks (WMT) regularly visited
the aircraft shelters to partially disassemble B61 weapons for maintenance and
inspection. The safety review concluded that these operations created, under certain
conditions, a risk of nuclear detonation. The review therefore recommended that all U.S.
and non–U.S. NATO WS3-equipped shelters be equipped with electrical surge protection
for AC-power and communication system connections between the Weapons
Maintenance Trucks and the protective aircraft shelter.\(^{158}\)

![Figure 17: B61 Nuclear Bomb Disassembly](image)

B61 maintenance with Weapons Maintenance Truck inside Protective Aircraft Shelter. A
U.S. Air Force safety review determined in 1997 that there was a risk of accidental nuclear
explosion during service of B61 nuclear bombs in NATO’s protective aircraft shelters.

*Source: U.S. Air Force.*

The update to the U.S. Air Force Instruction on Safety Rules for Non-US NATO Strike
Aircraft from May 2000 removed the WMT grounding requirement to facilitate WMT
isolation for lightning protection.\(^{159}\) And in June 2001, the NATO NPG once again
declared: “We are assured that the allies' nuclear weapons and their storage continue to
meet the highest standards of safety and security.”\(^{160}\)
NEW PRESIDENTIAL GUIDANCE BUT NO CHANGE

While the political circumstances and the number of nuclear weapons in Europe changed dramatically between 1990 and 1997, the U.S. presidential guidance for how the military should plan for the potential use of the weapons did not. In mid-1997, White House guidance for how the military should plan nuclear war was still based on the guidance issued by President Reagan in 1981. Finally, in October 1997, President Clinton signed Presidential Decision Directive 60 (PDD-60) ordering the military to no longer plan for fighting a protracted nuclear war with the Soviet Union.

The half a decade that passed between the demise of the Soviet Union and this document should have enabled the president to safely order the removal of nuclear weapons from Europe. But the focus of PDD-60 was about reducing strategic forces in preparation for a START III agreement, and the non-strategic nuclear weapons commitment to NATO was not changed.

Shortly after PDD-60 was issued, amidst a debate over whether NATO would deploy nuclear weapons to the new member states, the U.S. Under Secretary of Defense for Policy Walter Slocombe published an article in NATO Review, where he explained that the “current nuclear posture is adequate for an enlarged alliance.”

Part of that posture was tested in late 1998, when F-15Es from the 4th Fighter Wing at Seymour Johnson Air Force Base in North Carolina simulated a nuclear strike in support of NATO. The simulated strike occurred as part of STRATCOM’s Global Guardian 99 exercise held from October 24 to November 2, 1998. STRATCOM initially showed little interest in incorporating fighter-bomber nuclear operations into Global Guardian 99, and this was only the second year that the 4th Fighter Wing participated in the global nuclear exercise. The employment phase of the Wing’s operations included dropping 10 BDU-38s (B61 shapes filled with concrete) on a bombing range (presumably Florida).

Incorporating dual capable aircraft into a STRATCOM exercise was a new phenomenon reflecting the command’s increasing role in regional nuclear targeting and a softening of the separation of strategic and non-strategic nuclear forces. Today, STRATCOM is tasked by the Joint Staff to produce, at the theater CINC’s request, a series of planning documents for the planning and execution (probability of strike success, probability of weapon arrival, fatalities, casualties, dispersion patter of radioactive debris, etc.) of various nuclear strikes with ballistic missiles, cruise missiles, and gravity bombs. As of mid-1997, this planning was completed, except for DCA and gravity bombs. One objective of the 1998 exercise was to verify the route planning for the 4th Fighter Wing aircraft to their intended targets.

Call for Review of NATO Policy Opens Debate

The 1999 Washington Summit provided an opportunity for NATO to reshape its mission for the twenty-first century. A review of the nuclear policy and posture was part of this process. Yet the road to the new Strategic Concept was far from a smooth ride. In November 1998, Canada and Germany staged what looked like a nuclear revolt by
suggesting that NATO review its nuclear policy and specifically the first-use option, which has characterized NATO doctrine for decades. Their proposal collided with the adjustments of U.S. and NATO nuclear strategy undertaken in the 1990s to use nuclear weapons to deter not only nuclear but other types of weapons of mass destruction as well.\textsuperscript{164} Without the option to use nuclear weapons first, some feared, NATO would relinquish its ability to deter attacks by chemical and biological weapons. The rejection of the proposal was swift, and U.S. Defense Secretary William Cohen stated:

"We think that the ambiguity involved in the issue of the use of nuclear weapons contributes to our own security, keeping any potential adversary who might use either chemical or biologicals [sic] unsure of what our response should be. So we think it's a sound doctrine. It was adopted certainly during the Cold War, but modified even following and reaffirmed following [sic] at the end of the Cold War. It is an integral part of our strategic concept, and we think it should remain exactly as it is."\textsuperscript{165}

On the one hand, the revolt suggested that the challenges facing the alliance almost 10 years after the end of the Cold War were not only external but that major NATO allies were beginning to think anew about the role of nuclear weapons. On the other hand, the revolt provided an opportunity for the nuclear weapon states to reaffirm the status quo. Eventually, Canada and Germany were persuaded to keep their differences of opinion about nuclear doctrine private and to discuss them internally within the alliance. After all, this was a time when NATO was about to present a new Strategic Concept to explain to the world why it was still relevant in the twenty-first century.

The new Strategic Concept was formally approved at the NATO Summit in Washington, D.C., in April 1999. From the perspective of reducing or eliminating reliance on nuclear weapons, the Strategic Concept was a disappointment because it failed to change or scale back the forward deployment of U.S. nuclear weapons in Europe. Instead, it essentially maintained the nuclear status quo repeating past accomplishments and reaffirmed a continuing role in Europe for U.S. non-strategic nuclear weapons and British warheads on strategic submarines.\textsuperscript{166}

The failure to adjust nuclear policy was twofold in that the Strategic Concept also failed to eliminate a nuclear role for non-nuclear NATO countries at a time when European and U.S. nonproliferation efforts forcefully urged other non-nuclear countries to refrain from developing nuclear weapons capabilities. Instead the Strategic Concept highlighted the involvement of non-nuclear NATO states in nuclear weapons storage and strike planning:

“A credible alliance nuclear posture and the demonstration of alliance solidarity and common commitment to war prevention continue to require widespread participation by European allies involved in collective defence planning in nuclear roles, in peacetime basing of nuclear forces on their territory, and in command, control, and consultation arrangements. Nuclear forces based in Europe and committed to NATO provide an essential political and military link between the European and the North American members of the alliance. The alliance will
therefore maintain adequate nuclear forces in Europe. These forces need to have the necessary characteristics and appropriate flexibility and survivability to be perceived as a credible and effective element of the allies' strategy in preventing war. They will be maintained at the minimum level sufficient to preserve peace and stability.\textsuperscript{167}

With the adoption of the Strategic Concept, NATO reaffirmed U.S. nuclear forward deployment in Europe and the involvement of non-nuclear countries in nuclear strike planning. The first steps to implement the new concept were quickly taken at the June 2000 NPG meeting by setting new force-level goals to the year 2006.\textsuperscript{168}

**Nuclear Burden-Sharing Begins to Unravel**

By the end of November 2000, however, it was clear that the agreement over nuclear burden sharing began to fray with the authorization to remove the remaining nuclear weapons from Greece. The NATO meeting of December 2001 was silent about this historic event and the implications it may have had on the principle of nuclear-burden sharing. The removal of nuclear weapons from Greece is a clean break with the 1999 Strategic Concept, but the language of the final communiqué from the December meeting of the NPG remained the same, affirming “the continuing validity of the fundamentally political purpose and the principles underpinning the nuclear forces of the Allies as set out in the Alliance's 1999 Strategic Concept.”\textsuperscript{169}

**Figure 18:**

Greek A-7E Fighter-Bombers in Formation

Nuclear weapons intended for delivery by Greek A-7E aircraft were removed from Araxos Air Base in 2001, but the Weapons Storage Vaults at the base are maintained on caretaker status. *Source: Hellenic Air Force.*

The 20 B61 bombs at Araxos Air Base were airlifted out in the spring of 2001. Inactivation of the U.S. 731\textsuperscript{st} MUNSS was authorized on March 23, the order issued on
April 6, and the unit stood down on June 20, 2001, ending more than 40 years of U.S. nuclear weapons deployment to Greece. The Greek media issued contradictory reports about the Greek government’s response, with some saying a government spokesperson had confirmed the removal in a brief statement, but others saying the government spokesperson stated that there would be no further comment. In Washington, a Pentagon spokesman declined to comment: “We have a long-standing policy of neither confirming nor denying the presence or absence of nuclear weapons on any installation, and that is still our policy. It’s served us well over the years.”

Rumors about the removal began several years before the weapons were withdrawn from Araxos Air Base. In July 1994, the Bulletin of the Atomic Scientists reported that the nuclear bombs “may be gone from Greece altogether.” Several years later, in January 2001, media reports in Greece reported that special truck convoys had moved the weapons off the base. The reports were premature, but their removal was imminent. On April 6, 2001, U.S. Air Force Headquarters in Europe issued the Special Order that directed the deactivation of the 731st MUNSS at Araxos by June 20, 2001.

It is not known if the weapons were moved to Aviano Air Base in Italy (the U.S. custodial unit at Araxos Air Base was subordinate to the 31st Wing at Aviano), another base in Europe, or were flown back to the United States. The initial reports in Greek press said that the Italian base was the destination, but Aviano Air Base already stored 50 weapons, and with a maximum WSV capacity of 72, adding 20 bombs from Araxos would fill Aviano almost to capacity. Incirlik Air Base in Turkey did not have room for 20 extra weapons, so if the Araxos bombs were kept in Europe to meet a fixed force level they might have been transferred to Ramstein Air Base. With some redeployment capacity maintained at Araxos Air Base similar to the Akinci and Balikesir air bases in Turkey, the weapons may still be in Europe. If Araxos Air Base had been closed, the bombs would probably have been returned to the United States. The Nuclear Weapons Deployment Plan (NWDP) that authorizes the number of weapons the U.S. Air Force must store at each base permits a deviation from the total of up to plus or minus 10 percent.

The reason for the Greek withdrawal is not clear, and NATO has not offered an explanation. NATO statements have continued to emphasize the principle of burden sharing and the widespread deployment of nuclear weapons in Europe. NATO reportedly asked Greece in 1998 to use new F-16s to take over the nuclear strike role from the outdated A-7s, but the Greek government declined because its scarce resources were more urgently needed for air defense and conventional missions.

The denuclearization of Greece is important also because it is the latest in a series of gradual withdrawals of nuclear weapons from host nation air bases over the past decade. Since 1990, the number of host nation air bases that store U.S. nuclear bombs has declined by two-thirds from 12 bases in 1990 to only four today (see Table 10). Most dramatic has been the decline in Turkey, where U.S. nuclear bombs were stored at four national air bases in 1990 compared with none today.
Greece’s decision is also important because it represents the first case where nuclear weapons have been completely removed from a burden-sharing NATO country. The removal of nuclear weapons from the Turkish bases Erhac and Eskisehir in 1991 and the Italian Rimini base in 1993 was part of the 1991 decision by NATO to reduce air bombs by 50 percent. In those cases, the weapons were returned to the United States, but allied wings maintained a nuclear strike role. The removal of nuclear weapons from the German bases at Nörvenich and Memmingen180 and the Turkish bases at Akinci and Balikesir was different because the weapons were not returned to the United States but have remained in storage at Ramstein and Incirlik earmarked for host-nation use.

Germany’s contribution to NATO’s nuclear strike mission also seems to be at stake. Nuclear weapons have already been removed from two of three bases that until 1996 stored nuclear weapons (Nörvenich Air Base and Memmingen Air Base).181
The 34 fighter-bomber wing (Jagdbombergeschwader or Jabo G-34) at Memmingen Air Base ceased operations in 2002 and the base was closed in 2003.\textsuperscript{182} The Tornado fighter-bombers of the 31\textsuperscript{st} Wing (Jabo G-31) at Nörvenich Air Base (the weapons have already been transferred to Ramstein Air Base) will be replaced with non-nuclear capable Eurofighter (EFA 2000) aircraft in 2007–2010. The 33\textsuperscript{rd} Wing (Jabo G-33) at Büchel Air Base still stores nuclear weapons but will transition to the Eurofighter in 2012–2015.\textsuperscript{183}

*Figure 20: Büchel Air Base*

The southwestern end of Büchel Air Base showing the northern “loop” with aircraft shelters and storage buildings. Protective Aircraft Shelters (PAS) are visible along this loop and the loop on the other side of the runway. Twenty nuclear bombs are stored in 11 PAS on the base.

*Source: http://de.indymedia.org/

Descriptions of nuclear weapons certification inspections of non-nuclear NATO countries are rare, but one such instance involves the German Jabo G-33 at Büchel Air Base. In April 1996, the same year nuclear weapons were removed from Memmingen Air Base and Nörvenich Air Base, NATO conducted a Tactical Evaluation (TAV EVAL) at the base only three months after USAFE carried out a full force Site Assistance Visit of the 817\textsuperscript{th} MUNSS. The JABOG-33 “did a superb job during the [TAC EVAL] inspection” and the 817\textsuperscript{th} MUNSS received an “Excellent” rating from the TAC EVAL. According to the 817 MUNSS, the “Jabo G-33 and the 817 MUNSS showed others why our motto is ‘Partners in Peace’”.\textsuperscript{184}

“The GAF [German Air Force] performed superbly during the JSSI [Joint Safety and Security Inspection] portion of the inspection. There [sic] overall ‘Excellence’ rating is testimony to the hard effort that the Jabo G-33 personnel have contributed since the last inspection. The Maintenance Personnel and
Security Force personnel were lauded by inspectors. The contributions of both German and American forces were noted by all.

**Notable Performers:** *IG Award of Excellence:* Presented to: The Jabo G-33 Weapons Maintenance Section and the Joint US/GAF Eagle Team (Emergency Services Recapture Team).  *IG Pat on the Back:* Presented to [deleted] the GAF Fire Department, the GAF Security Training Section, the GAF Vehicle Transportation Squadron, and the Wartungstaffel."185

The German government is on record stating that it will continue its contribution to NATO’s nuclear mission at least through 2006, but that there are no plans, at least at this point, to equip the Eurofighter with a nuclear capability.186 So unless these circumstances change, Germany may abandon the nuclear mission over the next decade.

![Figure 21: Turkish F-16 Near Hangar at Akinci Air Base](http://www.cavok-aviation-photos.net/)

A Turkish F-16 fighter-bomber in front of a Protective Aircraft Shelter at Akinci Air Base. Twenty nuclear bombs were moved from the base to Incirlik Air Base in 1995 but continue to be earmarked for delivery by the Turkish aircraft.

*Source: http://www.cavok-aviation-photos.net/*

As a result of these developments, only four non-nuclear European countries (Belgium, Germany, Italy, and the Netherlands) today store U.S. nuclear weapons at their national air bases. This reduction in the contribution of host nation participation in the nuclear mission raises important questions about the credibility of NATO’s explanation of the nuclear burden-sharing principle and the need to maintain nuclear weapons in Europe. The trend seems clear: Nuclear burden-sharing in NATO, in as far as host country nuclear strike missions are concerned, is on a slow but steady decline toward ending altogether. The only question seems to be when and whether it will be constrained defense budgets and force structure reorganization or a political decision that will end it.
More Policy Refinement but Little Actual Change

Greece’s historic departure from NATO’s nuclear club was not cited in the final communiqué from the NPG meeting in Brussels in June 2001, which reaffirmed the importance of the nuclear posture and declared that it had finally implemented the Strategic Concept adopted in 1991:

“Ten years ago, with the 1991 Strategic Concept, the alliance embarked on a number of decisive strategy and policy changes to adapt to the post–Cold War security situation. Looking back, we are satisfied that NATO’s new strategy of reduced reliance on nuclear weapons, reaffirmed in the 1999 Strategic Concept, has been fully translated into NATO doctrine, and that NATO’s drastically reduced nuclear force posture fully complies with alliance key principles. Nuclear forces are a credible and effective element of the alliance's strategy of preventing war; they are maintained at the minimum level sufficient to preserve peace and stability, under conditions that continue to meet the highest standards of safety and security.”

The strategy of reduced but continued reliance on U.S. forward-deployed nuclear weapons in Europe as adopted by the 1991 Strategic Concept (and “reaffirmed in the 1999 Strategic Concept”), emanated from a time when the Soviet Union still existed and NATO deployed some 4,000 nuclear weapons in Europe. In the early 1990s, it was important to draw down the forces and reduce the alert level, but one would have hoped that that process had been completed long before 2001 and that a realization had emerged that the remaining nuclear bombs in Europe do not serve NATO’s interests in the 21st century. But NATO continues to say they do. There seems little difference between the rationale used for keeping U.S. nuclear bombs in Europe under the 1991 Strategic Concept and that offered by the NATO communiqué a decade later:

1991 Strategic Concept: “A credible alliance nuclear posture and the demonstration of alliance solidarity and common commitment to war prevention continue to require widespread participation by European allies involved in collective defence planning in nuclear roles, in peacetime basing of nuclear forces on their territory and in command, control, and consultation arrangements. Nuclear forces based in Europe and committed to NATO provide an essential political and military link between the European and the North American members of the alliance. The alliance will therefore maintain adequate nuclear forces in Europe. These forces need to have the necessary characteristics and appropriate flexibility and survivability to be perceived as a credible and effective element of the Allies' strategy in preventing war. They will be maintained at the minimum level sufficient to preserve peace and stability.”
2001 NPG Final Communiqué: “At our Nuclear Planning Group meeting, we reaffirmed the continuing validity of the fundamentally political purpose and the principles underpinning the nuclear forces of the allies as set out in the alliance's 1999 Strategic Concept. We emphasize again that nuclear forces based in Europe and committed to NATO continue to provide an essential political and military link between the European and North American members of the alliance.”

Instead of formulating a clear and bold new vision for its nuclear policy for the 21st century, NATO bureaucrats have put together a hodgepodge of justifications consisting of slightly rewritten policy language from the past, outdated remnants of Cold War threats (Russian non-strategic nuclear weapons), unsubstantiated claims of deterring proliferators of weapons of mass destruction, vague and exaggerated rhetoric about preserving peace and preventing “any kind of war,” and peripheral managerial issues of providing a political and military link between Europe and the United States. Under this vision, forward-deployed U.S. nuclear weapons appeared to serve essentially any purpose against any opponent in Europe or outside the region.
THE 2001 NUCLEAR POSTURE REVIEW
Clinton Era Nuclear Force Unchallenged

One of the Clinton administration’s last acts in 2000 was to authorize the continued deployment of 480 nuclear bombs in Europe, a force level first set in 1994. With the election of President George W. Bush, it was possible that the new president might share his father’s boldness on unilateral nuclear reductions and would finish the disarmament process begun a decade earlier. In a speech to the National Defense University in May 2001, President Bush pledged that he was “committed to achieving a credible deterrent with the lowest-possible number of nuclear weapons consistent with our national security needs, including our obligations to our allies. My goal,” he said, “is to move quickly to reduce nuclear forces.”

One of his first acts as president was to order a Nuclear Posture Review (NPR) intended to bring U.S. nuclear policy more into accord with the international and domestic situation. NATO wanted to be consulted, and as work got under way on the NPR, the final communiqué from the NATO NPG meeting in June 2001 “expressed interest in consulting with the United States on its deliberations to adapt deterrence concepts and forces to meet future security challenges…”

When the NPR was completed in December 2001, and parts of it were leaked to the press a few weeks later, it turned out that the administration’s focus had been on incorporating conventional forces and missiles defense into strategic planning rather than reexamining nuclear policy. The nuclear posture was not changed significantly compared with that envisioned under the START III framework agreed between Washington and Moscow in 1997. Concerning the nuclear weapons in Europe, however, the NPR hinted that there might be some changes in the future. The document mentioned that a NATO review was under way to present plans to the defense ministers in the summer of 2002:

"Dual-capable aircraft and nuclear weapons in support of NATO. DoD will not seek any change to the current posture in FY02 but will review both issues to assess whether any modifications to the current posture are appropriate to adapt to the changing threat environment. A plan is already under way to conduct a NATO review of U.S. and allied dual-capable aircraft in Europe and to present recommendations to Ministers in summer of 2002. Dual-capable aircraft and deployed weapons are important to the continued viability of NATO’s nuclear deterrent strategy and any changes need to be discussed within the alliance.”

The NPR included language suggesting that plans existed to phase out the F-16 once a dual-capable F-35 Joint Strike Fighter (JSF) was deployed. The F-15E, however, with it considerable range and greater capacity (up to five nuclear bombs), would be retained. All of these plans were subject to further study, but the Operational Requirements Document (ORD) for the JSF “requires that initial design permit nuclear capability to be
incorporated at a later date (after Initial Operational Capability (IOC), currently scheduled for 2012) at an affordable price.\textsuperscript{194}

Since the NPR was released, neither NATO nor the United States has announced that weapons have been reduced, but some adjustment appears to have taken place. At the NPG meeting in June 2002, NATO declared that it had “adopted a new set of NATO Force Goals covering the period until 2008” and “provided guidance to further adapt NATO's dual-capable aircraft posture.” Yet at the same time, the final communiqué declared: “We continue to place great value on the [nonstrategic] nuclear forces based in Europe and committed to NATO.”\textsuperscript{195} As usual, a potential change was immediately followed by a reaffirmation of nuclear weapons.

The reaffirmation was followed by a reorganization of the remaining four MUNSS units at the national air bases in Belgium, Germany, Italy, and the Netherlands. This happened on May 27, 2004, when the 38th Munitions Maintenance Group (MMG) was stood up at Spangdahlem Air Base as part of a command-wide reorganization of geographically separated units. The MUNSS at Ghedi Torre Air Base previously was under the 31st Fighter Wing at Aviano Air Base, but under the new structure all four MUNSS units are subordinate to the 38th MMG at Spangdahlem Air Base.\textsuperscript{196}

As part of this reorganization, the unit designations of each U.S. nuclear weapons custodian unit was changed: the 52 MUNSS at Kleine Brogel Air Base became the 701 MUNSS; the 852 MUNSS at Büchel Air Base became the 702 MUNSS; the 752 MUNSS at Volkel Air Base became the 703 MUNSS; and the 831 MUNSS at Ghedi Torre Air Base became the 704 MUNSS (see Appendix A).

Apart from this, no dramatic changes occurred. An issue paper published by NATO in June 2004 appears to confirm that the number of nuclear weapons in Europe has remained essentially unchanged since 1993. As mentioned above, the only change appears to have been the removal of the British nuclear bombs in 1998. Compared with 1999, the issue paper also confirms that the number of nuclear weapons storage sites has remained essentially unchanged\textsuperscript{197} (the only differences apparently being the status of Araxos Air Base and Memmingen Air Base).

The adjustments that have occurred appear to have involved a slight reduction in the number of host-nation aircraft assigned nuclear delivery missions.\textsuperscript{198} This appears to reflect the closure of the German Air Base at Memmingen. As a result of the new

\textbf{Figure 22: F-35 Joint Strike Fighter}

A portion of the Air Force version of the F-35 Joint Strike Fighter is planned to be nuclear-capable.

\textit{Source: U.S. Air Force.}
guidance, NATO explained in 2003, its “dual-capable aircraft posture has been further adapted, and readiness requirements for these aircraft have been further relaxed.”\textsuperscript{199} The readiness of nuclear strike aircraft now should be measured in months, according NATO.\textsuperscript{200}

At the same time, the stock language was used to stress the importance of the U.S. nuclear weapons: “We continue to place great value on the nuclear forces based in Europe and committed to NATO, which provide an essential political and military linkage between the European and the North American members of the alliance.”\textsuperscript{201} The subsequent NPG meeting in December 2003 declared that the DCAs were maintained at a readiness level “consistent with the prevailing security environment.” The contribution of the British Trident force to deterrence and the overall security of the allies were also highlighted.\textsuperscript{202}

Since the 2001 NPR, the U.S. Air Force and NATO have been busy keeping the nuclear capability in Europe up to date. Various awards are routinely given to Munitions Support Squadrons at the host nation bases, Nuclear Surety Inspections and NATO Tactical Evaluations are held regularly, and maintenance of the WS3 storage sites continues. Both in January 2002 and July 2004, for example, the 48\textsuperscript{th} Fighter Wing at RAF Lakenheath practiced its nuclear skills. In April 2003, security forces of the 39\textsuperscript{th} Fighter Wing at Incirlik Air Base exercised defense against a simulated attempt by hostile forces to gain access to and capture nuclear weapons from a Protective Aircraft Shelter at the base (see Figure 23). In preparation for a subsequent Surety Inspection, members of the
39th Security Force Squadron Security forces were required to respond in five minutes or less after initial notification.\textsuperscript{203}

Incirlik Air Base had difficulties in late 2003 preparing for a critical readiness inspection of its nuclear weapons storage facilities. Apparently the condition of the WS3 system fell below standard and Headquarters U.S. Air Force Europe directed that “activation be accelerated by one year.” The Air Force dispatched a special team of engineers to the base to ensure that the facilities could be recertified as operational. Inspection and repairs were done to all 25 Weapons Storage Vaults at the base in only one week, enabling the 39th Wing to achieve a ready rating for 100 percent of its WS3 Vaults in the subsequent certification inspection.\textsuperscript{204}

**Prospects for Change**

The Bush administration declared in connection with the completion of the NPR that Russia no longer is an immediate threat. At the same, the NPR emphasized “capability-based planning” versus planning based on likely threats, so intentions are less relevant than capabilities. As a result, scrupulous targeting of Russian facilities continues, and part of the justification for retaining U.S. nuclear weapons in Europe is Russia’s large number of non-strategic nuclear weapons.

The Russian military apparently is aware of that and is concerned that the U.S. “tactical nuclear weapons deployed in Europe are for Russia acquiring a strategic nature, since theoretically they could be used on our command centers and strategic nuclear centers.”\textsuperscript{205} The U.S. government belittles such concern and argues that the problem is Russia’s own tactical nuclear weapons. During a visit to Moscow in October 2004, U.S. Assistant Secretary of State for Arms Control Stephen Rademaker stated:

> “I can assure you that when European audiences talk about the problem of tactical nuclear weapons in Europe, their concern is directed toward the Russian tactical nuclear weapons and what countries they might be targeted on rather than the relatively small number of tactical nuclear weapons that remain in the NATO arsenal.”\textsuperscript{206}

Rademaker used the occasion to formally criticize what he described as Russia’s lack of implementation of its earlier promises to reduce and dismantle tactical nuclear weapons. It is the view of the U.S. government, he stated, that “considerable concern exists that the Russian commitments have not been entirely fulfilled.”\textsuperscript{207}

The Russian Ministry of Foreign Affairs quickly fired back, saying “commitments” is the wrong word to use because the promises were goodwill gestures and not part of a treaty. Russia has “practically carried out in full” all of the reductions it promised, the Ministry said, including “liquidation” of more than 50 percent of all sea-based tactical missiles and naval aviation, anti-aircraft missiles and nuclear aviation bombs. Moreover, the reduction of tactical nuclear weapons is continuing, the Russian government stressed, and reminded: “All of those weapons, unlike the situation with the United States, are located solely within our national territory.”\textsuperscript{208}
Such nuclear bickering between U.S. and Russian government officials was common during the Cold War. The fact that it occurs today – nearly three years after the 2001 NPR declared an end to nuclear animosity with Russia and Presidents Bush and Putin proclaimed a new partnership between their countries – illustrates the danger of continuing the status quo. It shows that the forward deployment of U.S. nuclear weapons in Europe is an important irritant to improved relations between Russia and NATO, far out of proportion to the vague and unspecific benefits these weapons allegedly contribute to NATO’s security interests.

Clearly there is a need to change the situation. Statements made by U.S. government officials in 2004 and unconfirmed rumors suggest that NATO once again may be considering adjusting the nuclear deployments in Europe. Such speculations have occurred before in the 1990s and resulted in the mistaken estimates about the number of nuclear weapons deployed in Europe. This time, however, the indications appear more explicit and take place in the framework of a major U.S. realignment of forward-deployed military forces.

The U.S. Congress has authorized a base realignment and closure (BRAC) round in 2005. When ordering the military to begin planning for BRAC 2005, U.S. Defense Secretary Donald Rumsfeld stated that, at a minimum, the process “must eliminate excess physical capacity; the operation, sustainment, and recapitalization of which diverts scarce resources from defense capability.” At the same time, the reconfiguration of the infrastructure should maximize war-fighting capability and efficiency. The basis for BRAC 2005 is a long-term force structure plan developed by the Chairman of the Joint Chiefs of Staff for the 20-year period 2005-2025. A BRAC Commission will be appointed in March 2005 by the president, and in May the Secretary of Defense will announce what bases and installation will be considered for eventual closure. Finally, in September 2005, the president will approve (or disapprove) the commission’s recommendations.

Whether BRAC 2005 will affect the nuclear deployment in Europe remains to be seen. A hint of things to come may have been provided in March 2004 by General James Jones, NATO Supreme Allied Commander and Commander of United States European Command. In response to a Belgian Senate committee member’s question about U.S. nuclear weapons and the risk of an accident on Belgian soil, Jones allegedly stated: “The reduction will be significant. Good news is on the way.” NATO sources later pointed out that Jones did not mention nuclear weapons specifically, but the Belgian government later stated for the record: “…the United States has decided to withdraw part of its nuclear arsenal deployed in Europe.…” German weekly Der Spiegel followed up by asking “whether German nuclear weapons sites will benefit from Gen. Jones’ ‘good news.’”

According to the Los Angeles Times, roughly 200 bases are likely to be closed worldwide as a result of BRAC 2005, down from 560 to 360 over the next six to eight years. Ironically, part of the guidance provided by the Secretary of Defense for overseas
installations could be seen as arguing against a reduction in the number of nuclear bases. The DOD’s 2005 BRAC report emphasizes the development of flexibility “by not overly concentrating military forces in a few locations for particular scenarios.”

Nuclear forces seem inherently in conflict with this principle. As this report illustrates, they have consistently been reduced to fewer and fewer bases since the early 1990s, and the weapons are intended for very particular scenarios. As for the main operating bases in Europe, where most of the nuclear weapons are located (including nuclear weapons intended for “host-nation use”), the 2005 BRAC report expresses a strong commitment:

“A network of main operating bases, with forward-stationed combat forces, will continue to provide the United States with an unmatched ability to conduct military missions worldwide. While some bases will be realigned or consolidated to gain efficiencies and to eliminate excess infrastructure as a result of the overseas posture review, in the foreseeable future main operating bases will continue to be located on reliable, well-protected territory primarily in Europe and East Asia.”

It may be, therefore, that the “reduction” mentioned by General Jones might be in the number of nuclear weapons deployed on the remaining host-nation bases. The Pentagon already has canceled a large number of military construction projects (26 in Germany alone worth $280 million) in 2003 and 2004 for the “repositioning of our global footprint.” The purpose of this effort is to shift funds away from “non-enduring” overseas bases – those where the military’s long-term presence is questionable – to installations that will fulfill critical operational, logistical, or training mission requirements” that are “key to [the U.S.] global basing posture.”

Yet this change in priorities apparently does not affect the nuclear weapons storage facilities. In July 2004, the U.S. Air Force awarded a $2 million contract to upgrade the monitoring and console equipment for the WS3 facilities at 12 NATO installations. Unless this contract is canceled as a result of BRAC 2005, the United States apparently intends to maintain its nuclear “footprint” in Europe for some time to come.

One other possibility concerning the reduction suggested by General Jones may be that the deployment of nuclear weapons at northern European bases might be adjusted. There are recent reports that 48 F-15s of the 4th Fighter Wing at RAF Lakenheath may be withdrawn. There are 48 F-15Es at the base organized under the 492nd and 494th Fighter Squadrons, the two squadrons tasked with the nuclear strike mission. Withdrawing these aircraft would likely result in the withdrawal of the nuclear weapons from the base. Another possibility is that the squadrons could be moved to Incirlik Air Base in Turkey or Aviano Air Base in Italy on a permanent or rotating basis. The U.S. Air Force is also considering shifting one or two F-16 wings from Germany to Incirlik Air Base. Shifting aircraft south would likely not include their nuclear weapons because the nuclear storage facilities at Incirlik Air Base and Aviano Air Base are almost full.
Short of reducing nuclear weapons across the board or withdrawing them altogether, the most likely outcome may be the removal of the remaining nuclear weapons from host-nation bases. Under that scenario, only the United States would continue to store nuclear weapons at its main operating bases in Europe. The persistent emphasis by NATO officials about the principle of burden-sharing would appear to argue against this option, but it is the direction that NATO has been moving toward for years. Since 1993, Munitions Support Squadrons (MUNSS) have been withdrawn from all or some of German, Greek, Italian, and Turkish air bases and the nuclear weapons moved to the main U.S. operating base in the area. To complete this transition, the MUNSS at Kleine Brogel Air Base in Belgium, Volkel Air Base in the Netherlands, Büchel Air Base in Germany, and Ghedi Torre Air Base in Italy could be transferred to main U.S. operating bases in each area or returned to the United States.

The BRAC process coincides with another major review in 2005: The Quadrennial Defense Review (QDR). Launched every four years, the congressionally mandated QDR reviews the nation’s defense strategy, budget, force structure and modernization plans. Nuclear forces are also reviewed, but both the Clinton and Bush administrations conducted separate Nuclear Posture Reviews in 1994 and 2001, respectively. The Bush administrations planned a new Nuclear Posture Review for 2005, but this now appears to have been combined with the 2005 QDR. The deployment in Europe will likely be reviewed again as part of the QDR.

Whether or not the BRAC or QDR process results in a reduction, the most serious challenge to the continued deployment of U.S. nuclear weapons in Europe ironically comes from NATO itself. In June 2004, a little noticed “issue paper” published by NATO disclosed that the readiness level of the nuclear strike aircraft had been reduced to “months” rather than weeks, days, or hours. During the Cold War, the readiness level was measured in minutes (for a small number of aircraft on quick-alert) and in hours or days for the remaining force. Under the new and reduced readiness level implemented in 2002, it would supposedly take “months” for NATO to use the fighter-bombers to launch a nuclear strike (see Table 11).

A readiness level of “months” suggests that some of the mechanical and electronic equipment on the fighter aircraft needed to arm and deliver the nuclear bombs may have been removed and placed in storage.

Table 11: NATO Nuclear Aircraft Readiness

<table>
<thead>
<tr>
<th>Year</th>
<th>Minutes (on alert)</th>
<th>Hours/Day</th>
<th>Weeks</th>
<th>Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2005</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

NATO says it has reduced the number and the readiness level of its nuclear strike aircraft in Europe, most recently in 2003. Source: NATO.
This development raises the question of whether there any longer is an operational need – even if one believes such a need exists – to keep the nuclear weapons in Europe. Since training at the forward bases does not involve live nuclear weapons anyway but uses trainers and “dummies,” there doesn’t seem to be a need to have nuclear weapons physically present at the bases. If a crisis were to emerge, the readiness level of “months” would provide ample time to transport the weapons from storage sites in the United States to the bases in Europe if needed.

The Pentagon planned a separate review of U.S. nuclear forces in 2005 as part of its implementation of the decisions from the 2001 Nuclear Posture Review. The new review now appears to have been merged with the Quadrennial Defense Review (QDR) which is scheduled for completion in February 2006. More than a decade after the U.S. last reduced its nuclear deployment in Europe, the QDR must take a critical look at the rationale used to keep most of America’s non-strategic nuclear weapons deployed overseas.
CONCLUSIONS AND RECOMMENDATIONS

The reductions in the number of nuclear weapons in Europe in the early 1990s were a bold and necessary step. They enhanced European security and helped facilitate the ending of the Cold War and the transformation of NATO. What has been lacking since then is a vision for how to follow up and finish the process of withdrawing U.S. forward-deployed nuclear weapons from Europe.

At every juncture and following every reductions and modification of the posture, NATO bureaucrats have reaffirmed the importance of maintaining U.S. nuclear weapons forward-deployed in Europe. The justifications are poorly explained and muddled, consisting of remnants of Cold War rationales about a Russian threat, vague missions such as war prevention, ambiguous suggestions like deterring proliferation of weapons mass destruction, and dubious claims about nuclear weapons providing a unique link between Europe and its North American allies.

What characterizes these justifications is an infatuation with Cold War rationales and a fear of taking the next bold step to finally bring Europe out of the Cold War:

At a time when NATO and the United States seek a new partnership with Russia and are concerned over the security of Russian tactical nuclear weapons, the interests of the alliance are not served by keeping hundreds of nuclear weapons forward-deployed in Europe. The presence of these weapons is a continuous irritant to normalizations and an unnecessary and counterproductive factor in Russian military planning.

At a time when Europe and the United States need to build a foundation for political and military cooperation to address the challenges facing both countries and their regions, the interests of NATO are not served by suggestions that remnants of a Cold War nuclear posture is the “glue” that ensures close ties across the Atlantic. European NATO allies have plenty of burden to share on non-nuclear missions, such as force structure modernizations, peacekeeping operations, and rapid reaction forces. Those are the issues that NATO should focus on to provide the “glue” across the Atlantic since they will determine the future of the alliance, rather than clinging to outdated arrangements from a time and situation that has now passed. Besides, if the 480 nuclear weapons were removed tomorrow, NATO’s security interests would still be supported by thousands of other United States, British, and French nuclear weapons that continue to be modernized for essentially the same reasons.

At a time when both Europe and the United States are engaged in high-profile diplomatic nonproliferation efforts around the world to promote and enforce non-proliferation of nuclear weapons, deploying hundreds of such weapons in non-nuclear NATO countries and training the air forces of non-nuclear NATO countries – in peacetime – to deliver these weapons in times of war is at cross purposes with an effective non-proliferation message. All of the non-nuclear NATO countries that host nuclear weapons on their
territory (Belgium, Germany, Italy, the Netherlands, Turkey) have signed the 1970 nuclear Non-Proliferation Treaty (NPT) under which they pledge:

"... not to receive the transfer ... of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly...."^{219}

Likewise, as a nuclear weapons state party to the NPT, the United States has committed itself to:

"... not to transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices directly, or indirectly...."^{220}

U.S. forward-deployed nuclear weapons in Europe are extensively integrated into the military infrastructure of the countries that host these weapons. Nuclear cooperation agreements exist with Belgium, Germany, Italy, the Netherlands, and Turkey to enable their national air forces to deliver U.S. nuclear bombs in times of war. The United States insists that no transfer of the nuclear bombs or control over them is intended "unless and until a decision were made to go to war, at which the [NPT] treaty would no longer be controlling."^{221} Therefore, the United States argues, there is no breach of the NPT. But the nuclear mission is not dormant until a decision has been made to go to war, and there is no provision that the near-universal treaty expires if one or a few of its signatory states decide to go to war. Even in peacetime, the fighter-bomber pilots of the "non-nuclear" NATO nations practice and prepare for handling and delivering the U.S. nuclear bombs.

Besides, the strictly legal argument misses the point. Such peacetime operations certainly contravene both the objective and the spirit of the NPT. It endorses the concept that non-nuclear countries may adopt "surrogate" nuclear roles on behalf of nuclear powers. If China deployed nuclear weapons at North Korean air bases, equipped North Korean fighter jets with the capability to carry nuclear weapons, and trained North Korean pilots to design nuclear strike missions and deliver the weapons against targets in South Korea and Japan, the United States and NATO would raise hell – and rightly so.

Yet the U.S. government and NATO continue to cling to the Cold War practice – dating as far back as to the early 1960s – of training pilots from non-nuclear NATO countries to deliver U.S. nuclear weapons.^{222} This practice contradicts and severely muddles the nonproliferation message the United States and NATO are trying to impress upon the world community.

NATO’s contradictory nonproliferation policy of providing non-nuclear NATO countries with the capability to deliver nuclear weapons in wartime, while insisting that other non-nuclear countries must not pursue nuclear weapons capability, reveals a deeply incoherent vision for nuclear security in the 21st Century.
The contradiction also colors NATO’s position on nuclear disarmament. At the same time that NATO insists it needs to keep U.S. non-strategic nuclear weapons forward deployed in Europe, all of the NATO member countries – with the notable exception of the United States – voted in favor of a United Nations resolution in October 2004 that called for “further reductions of non-strategic nuclear weapons.” Indeed, the resolution specifically recognized that beyond the reductions currently underway in U.S. and Russian strategic arsenals, “the realization of a world free of nuclear weapons will require further steps, including deeper reductions in all types of nuclear weapons by all the nuclear weapons States in the process of working towards achieving their elimination.”

Since the largest portion of U.S. active non-strategic nuclear weapons are deployed in Europe, “further reductions of non-strategic nuclear weapons” must require that NATO ends its requirement for U.S. nuclear weapons in Europe.

Another claim is that U.S. nuclear bombs are needed in Europe to dissuade European countries from pursuing nuclear weapons capabilities themselves. But this is also no longer a credible argument. All NATO countries are under the umbrella of long-range U.S. and British nuclear forces, and tactical nuclear weapons in Europe make no clear difference. Moreover, in the case of South Korea and Japan, countries located in areas where tension exists – unlike in Europe – that could potentially result in the use of nuclear weapons, tactical nuclear bombs were completely withdrawn in 1991. Neither the United States nor its two allies in that region argue that it is necessary to forward deploy U.S. tactical nuclear weapons.

There is also the issue of safety. Throughout the 1990s, NATO and U.S. officials assured the public that the nuclear weapons in Europe were secure, only to admit in internal upgrade programs and inspections that serious concerns existed. At one point in 1997, they found, this even included the risk of an accidental nuclear detonation.

Despite efforts to improve nuclear proficiency of its nuclear personnel, the U.S. Air Force continues to experience serious deficiencies. In 2003, the pass rate for Air Force Nuclear Surety Inspection hit an all-time low, with only half of the inspections resulting in a pass (the historical pass rate is 79 percent).

And then there is the question of how forward deployment fits the new reality of war on terrorism. Are the benefits of deploying 480 nuclear weapons at a dozen installations throughout Europe justified considering the potential threat from a terrorist attack?

In October 2003, Tunisian born Nizar Trabelsi was sentenced to 10 years in prison for plotting to bomb the Kleine Brogel Air Base in Belgium. Trabelsi joined the al Qaeda terrorist network and planned to drive a car containing a bomb into the canteen of the base to kill American soldiers. Two accomplices received lesser sentences. Trabelsi said he did not plan to detonate nuclear weapons stored at the base. The incident followed a drug-related case in 2001, where six Belgian servicemen from Kleine Brogel were taken into custody and charged with exporting hashish to other NATO countries onboard army aircraft.
After the terrorist attacks on September 11, 2001, the U.S. government has changed the way it views security of its nuclear weapons. Prior to 2001, the nuclear weapons security philosophy was based on the premise that “people would try to steal them,” according to National Nuclear Security Administration (NNSA) Director Linton Brooks. But now it is obvious that there are individuals who are willing to sacrifice their lives just to create a nuclear incident, he said. As a result, NNSA has expanded its security perimeters so that potential attackers can be stopped farther away from a nuclear facility.

In the case of the nuclear weapons deployed in Europe, however, the aircraft shelters that store the weapons are dispersed across eight different bases in six countries. In many cases, the shelters are located only a few hundred meters or less from the fence surrounding the base (see Appendix C). The idea of dispersing the weapons to shelters across the bases instead of storage in a central Weapons Storage Area at each base emerged in the 1970s as a way of ensuring survival of nuclear weapons in case of a Soviet surprise attack. With the Soviet threat gone, however, the assessment of security of nuclear weapons on forward locations must be based on the threats that exist today. The question is whether the vague and nonessential role that U.S. forward-deployed nuclear weapons in Europe play today can any longer be argued to outweigh the potential consequences of a successful terrorist attack – no matter how theoretical that may be.

Withdrawing the remaining U.S. nuclear weapons from Europe would alleviate that unnecessary risk, finish the withdrawal process that was begun in 1991 but which has been dormant for a decade, and enable NATO to focus on the security challenges that are relevant for the future. Perhaps changes might be possible under the current U.S. global posture decision and the impending Base Realignment and Closure (BRAC) process.

The most compelling opportunity to end the forward deployment of nuclear weapons in Europe may be the announcement by NATO that it has reduced the readiness level of the aircraft that are intended to deliver the U.S. nuclear bombs to “months.” The very low readiness level suggests that the electronic and mechanical interfaces that enable the aircraft to carry and deliver the nuclear bombs may have been dismantled and placed in storage. Since training at nuclear bases does not require live nuclear weapons but is done with “dummy” weapons, such a low readiness level calls into question the need to continue to forward deploy U.S. nuclear weapons in Europe because it allows for plenty of time to transfer the weapons in a crisis if needed.

The need for these weapons is rapidly eroding. While NATO still talks about their unique contribution to the alliance, the U.S. Defense Science Board Task Force on Future Strategic Strike Forces recommended in February 2004 that the nuclear capability of the forward-based, tactical, dual-capable aircraft should be eliminated because there is “no obvious military need for these systems….” Because the use of nuclear weapons in a conflict could provoke serious political, economic, military, and environmental consequences, according to the latest U.S. Doctrine for Joint Nuclear Operations, “allied as well as adversary understanding of US nuclear weapon policy is essential.” Yet the vague and unspecific role attributed by NATO to the weapons in Europe suggests that the alliance – and therefore also potential adversaries – is uncertain about the exact role.
Finally, there is the question of burden sharing and whether this long-held principle of NATO nuclear planning is eroding. Although a third of the U.S. forward-deployed nuclear bombs in Europe are earmarked for deliver by half a dozen non-nuclear NATO countries, many of those countries are showing signs of retreating from of the nuclear mission. Nuclear weapons were removed from Greece in 2001, Italy only has nuclear weapons on one national air base, Germany also only has nuclear weapons left on one national air base and closed another base in 2003. And Germany may phase out its nuclear mission altogether with its planned replacement of the Tornado aircraft with the Eurofighter in the next decade.

Turkey no longer stores nuclear weapons on its national air bases, and the Turkish government has made decisions during the last couple of years that strongly call into question the credibility of nuclear operations from Turkey territory. During the 2003 war against Iraq, Turkey refused to give the United States permission to move major ground forces through Turkey into northern Iraq. And as recently as in December 2004, the Turkish government announced that it would “not back any U.S. military action on Iran.” NATO’s nuclear posture in Europe is partially justified as a potential deterrent against proliferating countries, and Incirlik Air Base in Turkey is the only NATO nuclear air base within striking range of Iran. The credibility of that deterrent – even if one believes it existed – seems to have eroded with Turkey’s stand.

In conclusion, a final review of the forward deployment of U.S. nuclear weapons in Europe is long overdue. This time, the U.S. Congress and European parliaments must ask tough questions about the rationale for the deployment. They should not be content with vague justifications from the past about nuclear weapons “preventing war” or “providing a political link between Europe and North America.” The focus must be on exactly who the enemy is and where the targets are for these weapons, which essential and unique benefits the weapons provide to NATO’s security that cannot be met through other means, and how the training in peacetime of pilots from non-nuclear countries to deliver nuclear weapons in wartime matches European and U.S. nonproliferation messages.