Deterrence Logic and NATO's Nuclear Posture

Damon V. Coletta

At an April 2010 meeting of NATO foreign ministers in Tallinn, Estonia, Secretary of State Hillary Clinton announced a key policy principle—that US tactical nuclear weapons would remain in Europe—thus avoiding consternation within the alliance. Anticipating the New Strategic Concept that would win consensus later that year, Secretary Clinton linked NATO's nuclear capability to the continued presence of nuclear weapons in the rest of the world. The weapons in question were approximately 200 adjustable-yield gravity bombs that remain near NATO air bases after the dramatic drawdown of the 1990s. A heated dispute might have jeopardized the solidarity of the alliance during discussions to formulate a new strategic concept.[1] That said, the controversy over NATO's nuclear posture has not been entirely resolved. Despite the tenor of subsequent declarations at the Lisbon and Chicago summits, where leaders reaffirmed that NATO would remain a nuclear alliance, the current deployment of US nuclear bombs in Europe cannot be chalked up as a routine chore for collective defense without second thought.

Both a German-led initiative to remove the weapons and official US acquiescence in the status quo highlight that American B61 warheads remain in Europe under the banner of deterrence. What has not been determined is how the alliance can prepare for a most extreme crisis—one evoking nuclear threats and straining the Article 5 guarantee of mutual defense—if, under close analysis, deterrence logic undermines justification for such weapons as the backbone of NATO's nuclear posture.

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Dr. Damon V. Coletta is a professor of political science at the US Air Force Academy. He holds a PhD in political science from Duke University and a master's degree in public policy (MPP) from Harvard's Kennedy School of Government. He is the author of *Trusted Guardian: Information Sharing and the Future of the Atlantic Alliance* (Ashgate, 2008) and co-edited *American Defense Policy* (Johns Hopkins University Press, 2005) and *Space and Defense Policy* (Routledge, 2009).

The Obama administration's *Nuclear Posture Review*, released the same month as the foreign ministers meeting, notably incorporated the final decision-making process on alliance nuclear posture neatly within NATO institutions. This was in marked contrast to bilateral action that heralded the previous administration's move to deploy missile defense elements in Poland and the Czech Republic, or to the Obama team's essentially unilateral decision to retract these plans. Nevertheless, once Secretary Clinton spoke in Tallinn, it was hard to imagine NATO's New Strategic Concept saying anything different than what it eventually declared just seven months later in Lisbon: NATO would retain an "appropriate mix" of assets to deter any attack on the territorial integrity of member states.[2]

The reference to deterrence and the explicit link to collective defense under Article 5 of the North Atlantic Treaty sent a reassuring signal to new NATO members in Central and Eastern Europe, including the Baltic States. These allies, more than others, feared intimidation tactics and escalating demands from evidently fluid Russian diplomacy in the wake of its military invasion of Georgia. To the extent that protection at lower levels of aggression depended on the credibility of NATO going all-out to defend its members in extremis, these states had wondered, again, what the removal of US nonstrategic nuclear weapons might mean.

Yet, in the venerable tradition of Article 5, language in the New Strategic Concept left some discretion. Although the preface reprised Secretary Clinton's formulation—as long as nuclear weapons remained in the rest of the world, NATO would remain a nuclear alliance—the very same section committed members to creating a world without nuclear weapons. The juxtaposition of contradictory impulses—nuclear reliance and nuclear abolition—reflected the politics of the moment. It also opened the door to new shades of meaning, if only to pull the concept into a safe harbor of logical consistency.

What, for example, were the minimum requirements for NATO to remain a "nuclear alliance"? Would it be enough to retain the Nuclear Planning Group and the capacity to reconstitute capabilities once it mothballed its US warheads? Did explicit reference to the "supreme guarantee" of independent strategic nuclear forces controlled by the United States, Great Britain, and France imply that the gravity bombs in Germany, for example, were less than crucial for deterring threats to NATO's territorial integrity? In short, use of the term *nuclear alliance* primarily for deterring

nuclear attacks by the rest of the world opened "Pandora's box," calling forth old debates that racked the alliance throughout the Cold War.[3]

As heartfelt supporters of the status quo, the coalition of Central and Eastern European members, who equate US nonstrategic bombs in Europe with indispensable proof of the commitment to collective defense, had the most to fear from previous contests. The flexible response and multilateral force debates of the 1960s, on top of NATO's two-track decision and the short-range nuclear forces (SNF) clashes of the 1980s, probed deeply into the nature and plausibility of a US commitment to defend Europe from the Soviets at all costs. Contemporary advocates of keeping the US weapons, reiterating an established line from previous debates, naturally justified NATO's nuclear posture in terms of deterrence. However, an alliance of democracies with special regard for transparency and accountability sooner or later must confront actual deterrence logic and the question of whether current nuclear deployments make strategic sense.

Deterrence logic—at least the kind formulated by legendary theorists such as Bernard Brodie, Glenn Snyder, and Thomas Schelling—may actually *exclude* current nuclear warheads from NATO's appropriate mix under the new strategic concept and within the framework of the Deterrence and Defence Posture Review (DDPR) announced at the Chicago Summit.[4]

To see how authentic deterrence eliminates the need for US nonstrategic nuclear weapons in Europe, it is useful to remember how NATO ended up with these weapons and the roles proposed for this arsenal by constituencies within the alliance. When policymakers, in consultation with think tanks and academics, formulated deterrence strategy for the deployment of nuclear weapons, they did not theorize in a political vacuum. Avoiding nuclear war was a top priority, or on par with national success against rivals, for many of them.[5] When the present NATO mix is mapped against requirements for this kind of nuclear deterrence—one that recognizes a general nuclear exchange as unwinnable—the best fit theoretically and politically, given the alignment of stakeholders on this issue, occurs when gravity bombs under dual responsibility are taken out of the NATO posture for collective defense.

NATO's Nuclear Capability and another Great Debate

In his history of the short-range nuclear forces controversy that roiled NATO meetings in the late 1980s, Tom Halverson noted with relief that

the SNF most likely represented the last great nuclear debate for NATO; by the mid 1990s the alliance had endorsed near-complete removal of US nuclear weapons from Europe in response to implosion of the Soviet threat.[6] Halverson aligned with several scholars who saw little need for nuclear weapons to reinforce Article 5 commitments following the withdrawal of Soviet forces from Central Europe and unilateral arms cuts undertaken by both sides after the Cold War.[7] Indeed, the greater concern was whether the alliance could maintain its cohesion without a common military threat.[8]

Twenty years later, however, experienced hands found darker auguries among those few remaining NATO weapons.[9] After so much time, standards and objectives had changed for a new generation of political actors adapting to dramatic shifts in the international distribution of power. Attention once again turned toward nonstrategic nuclear weapons, and despite the hopes of historians at the end of the Cold War, policymakers in charge of NATO found them increasingly difficult to ignore.[10]

Obligations of declared nuclear weapon states under Article VI of the 1970 Non-Proliferation Treaty (NPT) have become more salient as emerging powers and violent nonstate actors flirt with weapons of mass destruction. Established powers aim to strengthen the international nonproliferation regime by eliminating nuclear warheads without clear military utility or political purpose.[11] Meanwhile, as post–Cold War NATO enlarged into the former Soviet sphere of influence, Article 5 of the North Atlantic Treaty became more important. Small or mid-size members in Central and Eastern Europe aimed to strengthen collective defense commitments from their colleagues in Western Europe and North America by persuading them, through the North Atlantic Council, to maintain their current nuclear obligations irrespective of military utility or shifting political significance.

The largely forgotten gravity bombs of the 1990s now lie at the center of a brewing policy debate. The stakes are high, since these weapons conjure primal threats against the national security of at least some alliance members. Also, the institutional processes to forge consensus promise to be complicated, since these tactical nuclear weapons are tangible, undeniable reminders that the number one concerns on the security agendas of NATO allies are not, unfortunately, always identical.

NATO's Faulty Deterrence Logic

If the United States and NATO enter discussions with Russia to reduce tactical nuclear weapons, the opening gambit will likely present the B61s as a key component of NATO's extended deterrent. Withdrawing them will therefore require a corresponding relaxation on the Russian side—a proportionate reduction or, better yet, a disproportionate cut to transform Russia's current tenfold superiority in tactical warheads into something approaching parity.

Equating relative numbers of deployed US weapons to the strength of NATO's deterrent may, however, prove invalid. NATO calculations and the implications of its New Strategic Concept rest on a questionable premise—that US B61s offer a unique capability and serve as indispensable proof of alliance solidarity, thus reinforcing the collective defense commitments under Article 5. In fact, B61s provide totemic protection, akin to the Maginot Line, rather than the politically important troop deployments to Berlin during the 1960s. Whatever effect they may have now works at the margins to further placate NATO members already under the protection of US strategic arms. Where is the sign that these B61s constrain any Russian designs for Europe? Once tactical arms control negotiations begin, and the longer talks stumble along, the weaker NATO's negotiating position will be because the more exposed these warheads will become as false talismans.

During Cold War strategy debates, when NATO divisions faced far superior numbers on the other side of the Fulda Gap, 10-kiloton gravity bombs had a plausible military function. If the Soviets attempted to exploit their conventional advantage, a seamless fabric of response options ran from conventional denial capabilities through short-range nuclear forces to NATO nuclear weapons states' strategic arsenals. *Seamless* meant there was no identifiable break in the escalation chain. To forestall a catastrophic defeat by Soviet mechanized armies, the allies could credibly cross the nuclear threshold without ending the world, employing tactical nuclear warheads to break up Soviet formations or in some other way signal NATO's resolve. If the Soviets responded by launching nuclear bombs and destroying cities in Central Europe, Article 5 announced that all bets were off. The allies would consider punishing Russia to get the Kremlin to stop. Once that occurred, the situation could spin out of control, and the world would be on the verge of a general nuclear exchange. During the evolution of Cold War debates, Germany eventually

supported short-range forces like the B61 bombs but in tandem with US intermediate-range nuclear missiles on its territory to reduce the likelihood of a limited war terminating shortly after the destruction of the German homeland. German elites wanted Soviet leaders to face a steep, slippery slope from their first aggressive move toward Armageddon to deter that first thrust.

In a 1989 comprehensive treatise, *NATO Strategies and Nuclear Weapons*, Stephen Cimbala explained why the Germans at times objected strenuously to US formulas for deterring Soviet aggression in Europe. He argued that deterrence during the Cold War followed not one but two separate logics.[12] Cimbala's first deterrence logic properly emphasized what might happen if a crisis slipped out of control: mutual destruction or death and mayhem, all out of proportion to any conceivable political objective. Following the first generation of deterrence theorists of the 1960s, this logic focused on the competition in risk-taking.[13] Declarations and deployments in support of deterrence were crafted to influence an adversary's perceptions that the unthinkable and irrational could still happen. Since few crises justified running a substantial risk of losing everything, the deployment of nuclear weapons defended Western interests and thwarted Soviet aggression without their ever being used, either on the battlefield or against utterly vulnerable population centers.

The original deterrence reasoning did have major drawbacks, particularly for an alliance championing liberal democratic values. Under deterrence, national security depended on the vagaries of losing control at the critical moment and doing something irrational to seal the fate of ordinary people. This madman strategy undercut transparency and accountability of decision makers before their fellow citizens—despite the fact that transparency and accountability were pillars of democratic governance.

Moral questions surrounding deterrence encouraged US statesmen to raise the threshold for using nuclear weapons in Europe. Defense Secretary Robert McNamara attempted this with his flexible response advocacy of the 1960s. Remaining in control as long as possible, however, opened the possibility that the United States might refuse to launch weapons when the massive destruction they caused would serve no political purpose. A reasonable suspicion that the United States might spare the world, even in the throes of a communist triumph, left NATO's European allies naked before overwhelming Soviet and Warsaw Pact conventional arms.

This newer "deterrence" analyzed by Cimbala nevertheless survived NATO's internal policy debates; it answered the understandable desire for US officials to remain in charge of their nation's destiny, to retain freedom to decide on life-or-death questions, and to escape the unyielding tyranny of the first deterrence logic.

The second approach, under the name of deterrence, clawed back control step-by-step, breaking superpower crisis scenarios into discreet stages. At each stage—a Soviet probe into West Germany, a communist-inspired insurgency in Southeast Asia, the clash of mechanized divisions, or the exchange of tactical nuclear warheads on military targets—the United States, as the alliance's great protector, should be prepared to dominate at every level through the entire arc of escalation. Any Soviet leader surveying this smothering posture would conclude that no form of aggression against the West could pay dividends.[14] Whereas the original competition in risk-taking dared adversaries to test US resolve, escalation dominance was an attempt to shut down Soviet options systematically until their only rational course was to avoid the initial provocation.

Nuclear control seemed safer and morally appealing for democratic leaders who wanted to discharge their national security responsibilities until the very end, but it was no longer tied to the original deterrence logic, and it, too, had flaws. Perhaps the greatest of these were the challenge of defining superiority at the final strategic level of escalation and the tension that strategic superiority created against stabilizing concepts such as mutual assured destruction and secure second strike.[15] Cimbala observed that his two versions of deterrence, actually two distinct logics under the same label, fought each other through the end of the Cold War. In retrospect, only the first described true deterrence; the second posed under the same label but actually rested on a different, and ultimately less realistic, logic of control.

With the Russian threat reduced, though not eliminated after 20 years, and the transatlantic alliance now acutely aware of its political as well as military functions, NATO rediscovered its clashing "deterrence" alternatives.[16] Its Deterrence and Defence Posture Review in the wake of its new Strategic Concept conceded—as both President Reagan and Chairman Gorbachev did in 1985 after an especially contentious period in the superpower relationship—that "nuclear war cannot be won and must never be fought."[17] The 2010 concept already implied as much when it reiterated how the supreme guarantee of deterrence under Article 5

inheres in the strategic forces of NATO nuclear weapon states.[18] Those are precisely the weapons with upward of a half-million megatons of TNT, the detonation of which could not serve any purpose trumpeted in NATO enlargement, NATO partnership, or NATO diplomacy.[19] Although New START, the strategic arms reduction treaty ratified with Russia shortly after NATO published its new concept, represented a reset of US-Russian relations, treaty limits remain high enough to reinforce international understandings of secure second strike and mutual assured destruction.[20]

In short, there is little reason to imagine that Cimbala's original deterrence logic, the one involving risk-taking under uncertainty, is nothing less than *the* operating deterrence logic which rests, as ever, on the possibility that nuclear powers could make a mistake through a psychological or organizational breakdown and release their absolute weapons.[21] Nonetheless, highly sophisticated analyses of national security strategy often rely on a simpler, broader, and ultimately misleading definition of deterrence: nothing more than convincing potential adversaries not to attack.[22] Nuclear deterrence in this casual usage sounds more prudent than arming for war, despite some of the possibilities lurking inside the umbrella definition, including *limited nuclear strikes* to establish escalation dominance over an adversary. The deterrence brand, whether connoting the logic or not, almost always hits the right chord in policy discussions after its widely regarded contribution to Cold War containment and eventual defeat of the Soviet Union. In twenty-first-century variants, defense planners turn first to less reprehensible means of altering an adversary's expected utility of attack, although how often these purported deterrence measures work or how logic flows through a final decision, or endgame, are not clearly defined. Moreover, a wide variety of national and allied security stakeholders can participate: the vaguer the deterrence concept, the bigger the potential coalition in favor of the strategy.

Despite all the rhetoric, however, the clear alternative to deterrence by punishment so provocative or disproportionate that a rational defender would hesitate to unleash it is some form of control. *Control* means the enemy cannot hurt the homeland regardless of its intentions, or however the enemy prepares to strike, it must contemplate a rational nightmare—a near certain and proportional price—that torpedoes its enterprise. It describes the opposite of what happens at the true deterrence endgame, when the supreme guarantee of strategic nuclear warheads

comes into play because of a kind of weakness in leadership—the substantial yet incalculable likelihood that responsible officials or administrations under stress may succumb to irrational forces.

With respect to NATO's current tangle over the appropriateness of its nuclear posture, three contending alternatives all seek protection, and legitimation, under the banner of deterrence. Either k*eeping the weapons* or *cashing in the B61s* for reductions on the Russian side might still end up being effective policies of control, particularly as more information becomes available on Russian calculations. But in an honest debate, only the German-sponsored proposal—*eliminate the weapons*—merits designation as a deterrence strategy. It is the only alternative that works based on authentic deterrence logic. The others may purport to strengthen deterrence, but in fact, they invest in sophisticated manipulation of adversary utility functions, which, like flexible response and escalation dominance of old, come with their own set of risks.

Keep the Weapons

Poland, the Czech Republic, the Baltic States, and Turkey were vocal in support of NATO freezing its nuclear posture and holding the US bombs in Europe. Interestingly, only one of these members, Turkey, actually hosts a B61 base. Central and Eastern European allies nevertheless feel protected by the estimated 200 bombs in Germany, Belgium, the Netherlands, Italy, and Turkey which may be delivered by US or NATO fighter-bomber aircraft.[23]

The US warheads, according to the Central and Eastern European perspective, signal to a resurgent Russia or any adversarial power the seriousness with which NATO members, especially those with strong conventional militaries and strategic nuclear arsenals, treat their Article 5 commitment to defend the territorial integrity of fellow allies. Any power that attempted to intimidate Poland or Estonia, for example, would have to consider that coercive tactics could escalate out of control. While it might not be credible to imagine that the United States would launch a nuclear warhead from one of its ballistic missile submarines to turn back military encroachment on a frontline NATO state, it is more plausible, at least to some, that the alliance as a whole would mobilize the fighter-bombers of dual-capable aircraft (DCA) states. Such a decision by NATO would arguably bring the United States closer to crossing the threshold of nuclear use than it has ever been since 1945.

NATO's nuclear mobilization, according to the B61 defenders, might succeed in reminding all parties of the disproportionate risks involved in pressing a military advantage against any NATO ally without actually dropping a bomb. Simply eliminating the B61 might send the opposite message to potential aggressors—that they could crowd the newest NATO states without rousing the full capabilities of the alliance as a whole. Unless nonstrategic nuclear weapons are reserved on behalf of NATO, an adversary might find the vaunted indivisibility of allied security to be a mere slogan—once the salami slices taken from Central and Eastern European members were each made sufficiently thin.

A critical evaluation of this argument for keeping the weapons must note that the military capability of NATO's short-range nuclear forces has fallen dramatically since the Cold War. The Brookings Institution reported that the state of readiness for employing the remaining warheads is now measured in months.[24] Several high-profile exercises would likely be required to make those weapons effective tactically against advancing columns of mechanized forces.[25] Without refueling assets, which are in short supply, these bombs could ultimately explode on NATO territory. Unclassified US Air Force factsheets list the unrefueled combat radius of the F-16 fighter-bomber as roughly 500 miles. That figure, of course, cannot support genuine military planning, but it does send a message to the public. That capability would carry the bombs from a base in Western Germany to somewhere in Poland, or bombs from a base in Italy might end up in central Romania. To reach Moscow, the notional combat range from the closest European bases would nearly be tripled.[26]

The political utility of NATO's posture also remains ambiguous due to a significant feature of the B61. The adjustable-yield warhead ranges from 0.3 kiloton—50 times smaller than the explosion over Hiroshima—to a city-busting 170 kilotons.[27] At the moment when nuclear-capable fighter-bombers took off from their European bases, an adversary attempting to read NATO's crisis escalation would have little certainty of what to expect, with worst-case scenarios reinforcing the conclusion that a full-blown strategic exchange had already begun.

Cash in the B61s

Ultimately, the most influential opponents of keeping the weapons may operate behind the diplomatic scenes through transgovernmental connections. The official US view has already linked reduction of nonstrategic

weapons assigned to NATO with proportional or even accelerated cuts from the Russian arsenal. In doing so, the United States struck a double compromise. First, it opened the possibility of withdrawing the B61s from Germany and other DCA states while it signaled for frontline members in Central and Eastern Europe that removal will take a while. An agreement to dramatically reduce US (and Russian) nuclear arms could occur but not without concurrent political changes that (it is hoped) would relieve security pressure on the frontline members. The second and concurrent compromise disappointed opponents of keeping the B61s in Europe, for the time being, while signaling they would not have to pry very far behind official language to find kindred spirits across the Atlantic—the US compromise policy of seeking negotiation on the B61s was also patching a rift within the US government.

The timeline of the US formula, as it emerged in spring 2010, spoke to the sand at its foundation. Secretary Clinton did give speeches before and during the April 2010 Tallinn meeting to rein in NATO abolitionists, but the US president followed a different tack. Not that he contradicted the notion of NATO as a nuclear alliance, but he devoted his spring to strengthening the regime anchored in the NPT which committed nuclear powers to good faith efforts at general and complete disarmament. In the same month as the foreign ministers' meeting in Tallinn, President Obama signed the New START treaty. This symbolically reset relations with Russia after the debacle caused by its invasion of Georgia during his election campaign 20 months earlier and marked a significant reduction in strategic nuclear weapons. The president also convened a summit of 47 countries to discuss greater cooperation in the control of weapons material, and he released the aforementioned *Nuclear Posture Review*. This new document emphasized incentives for nonnuclear weapon states to follow the NPT regime, the importance of the United States along with other powers reducing reliance on nuclear weapons, and the wisdom of deciding future NATO posture within alliance processes.[28] All this came at the one-year anniversary of Obama's Prague speech to a packed Hradčany Square in a country that strongly supported US warheads in Europe as part of NATO's deterrent. The president opened his essay on the nuclear future saying, "The existence of thousands of nuclear weapons is the most dangerous legacy of the Cold War." To applause, he laid out "clearly and with conviction

America's commitment to seek the peace and security of a world without nuclear weapons."[29]

The Prague speech would inspire the Foreign Ministry in Germany during late 2009 and 2010. Looking back, the speech adopted tones from two riveting newspaper editorials by America's own gang of four wise men, who called for abolition of nuclear weapons in the foreseeable future. The open letters in 2007 and 2008 from unimpeachable US Cold Warriors set the stage and format for the German plea signed by Helmut Schmidt and his compatriots just three months before Obama's speech.[30]

Officially, the Obama administration and leading members of the German foreign policy establishment disagreed over whether eliminating tactical weapons in Europe should occur late or early in the disarmament process. At the same time, the two allies agreed on means and ends of greater significance: national policies, for example, should be modified to reduce reliance on nuclear weapons and strengthen the NPT regime; arms reductions constituted meaningful steps toward abolition; and abolition was the most effective way to prevent nuclear weapons use by state or nonstate actors.

Intriguingly, wariness from nuclear weapons may now extend beyond political levels of the US administration.[31] Nongovernmental organizations promoting arms control have found allied officers who, off the record, question the utility of the B61s in Europe, given the costs required to maintain the safety and security of the warheads.[32]

Officially, of course, the armed services will do whatever is necessary to accomplish the deterrence mission as set by civilian authorities. Still, the extraordinary lapse involving unauthorized transport of nuclear-armed air-launched cruise missiles across the United States, the conclusions of a Pentagon investigation into the matter, and the pain imposed on units of the US Air Force—the organization responsible for bombers, missiles, and land-based nuclear ordnance, including the nonstrategic warheads in Europe—all point to a desire, albeit closely held, to ease the institutional burden of these weapons.[33] The US military-industrial complex, often accused of inflating acquisition and modernization budgets, will not necessarily dig in to keep the B61s in Europe.

The US formulation—no abolition for NATO as long as nuclear weapons remain in the rest of the world—sounded firm in Lisbon, but the position was born of US resignation rather than the conviction displayed earlier in Prague. If only, one might imagine members of the

Obama administration reflecting, there was a path to reduce holdover B61s without discomfiting the newer frontline members of NATO. The only way to nurture the grand bargain underpinning the international nonproliferation regime and simultaneously reinforce extended deterrence under NATO's Article 5 appeared to be through arms control progress on tactical nuclear weapons—following the success of New START at the strategic level.[34] Under this scenario, elimination was not taken off the table, which gave hope to the German-led coalition on nonproliferation. Yet, any reductions were tied to Russian disarmament, which reassured the frontline states.

Unfortunately, the US-brokered compromise, rather than entombing NATO's next great nuclear debate, actually planted new seeds. Pursuit of an agreement on tactical nuclear weapons cannot be put off forever, and negotiations with the Russians are bound to expose certain contradictions in NATO's approach.

Eliminate the Weapons

Low military utility against conventional or in-kind attacks, a real likelihood of garbling the political signal when mobilizing variable-yield B61s, and a desire to advance the global nonproliferation agenda and reduce reliance on nuclear weapons, encouraged several Western allies, led by Germany, to call for elimination of the US tactical nuclear weapons reserved for NATO. Germany did sign conservative formulations in the New Strategic Concept and at the 2012 Chicago Summit, but its reasoning leading up to the alliance decisions of 2010 merits reexamination. Despite NATO's rhetoric on continuing the nuclear alliance and endorsing the status quo as an appropriate posture—for now—the camp arguing against NATO-designated B61s still enjoys advantages in the long run.

With Germany's economy remaining strong, the key proponent for eliminating the weapons occupies the diplomatic center stage, orchestrating intergovernmental efforts to rescue the euro zone from the global financial crisis.[35] Germany will also have an influential voice in how Europe answers US calls to share the international security burden, as the last superpower reins in its own defense budget for the first time since the 9/11 terrorist attacks. Moreover, for many years, even before unification, several historians recorded how West Germany leveraged institutional structures within the alliance to shed the stigma of World

War II and punch above its weight on several issues, especially nuclear policy.[36] Finally, on the present question of eliminating residual US nuclear weapons in Europe, Germany has many friends and few steadfast opponents.

Germany's position derived officially from an agreement by Chancellor Angela Merkel's Christian Democrats and Foreign Minister Guido Westerwelle's Free Democratic Party to pursue the removal of US nuclear weapons from German soil as a goal of their coalition government in fall 2009.[37] The parties were appealing to public opinion, but they also codified and reinforced a long-simmering ambition among German foreign policy elites. Frank-Walter Steinmeier, the Social Democratic Party foreign minister from the previous coalition, had endorsed the new US president's call in Prague to work toward a nuclear-weapon-free world. In doing so, he referred to an extraordinary open letter from four senior statesmen of Germany, including former chancellor Helmut Schmidt, that advocated concrete steps toward that goal such as implementation of disarmament obligations under the NPT and removal of nuclear weapons from German territory.[38] The German editorial received more serious attention than previous post–Cold War calls from the Foreign Ministry to reduce reliance on the nuclear option. The names on this piece hearkened back to the Cold War when West German diplomacy exerted formidable influence on NATO's nuclear policy.

When NATO shifted to a "flexible response" strategy in 1967, the Federal Republic of Germany (FRG) resolutely exercised its new voice on the alliance's Nuclear Planning Group and later the advisory High Level Group to steer political guidelines away from controlled, or gradual, escalation during a nuclear crisis. The eminently comprehensible German fear was that the Americans, to spare New York and Washington from a strategic missile exchange, would employ conventional and short-range nuclear forces to wage a drawn-out defensive campaign on German soil: "The shorter the missiles [and the longer the strategic lag], the deader the Germans."[39]

Throughout the Cold War, West German diplomats largely succeeded in resisting the coupling of tactical forces to the supreme deterrent of US strategic weapons. The 1969 Provisional Political Guidelines for nuclear use remained pointedly ambiguous—against US preferences for caution—on just how quickly tactical and follow-on warheads would come into play. The 1986 revision of the guidelines also accounted for

FRG objectives, linking thousands of NATO and US short-range warheads to higher—not lower—probability of intermediate-range and strategic-level responses to Soviet aggression.[40] Helmut Schmidt, the famed signatory on the German letter of 2009, was also a catalyst in the development of NATO's so-called two-track decision 30 years earlier when the alliance elected to pursue new arms control agreements with the Soviet Union at the same time it incorporated intermediate-range nuclear forces—ballistic and ground-launched cruise missiles—as part of a *comprehensive*, and continuous, mix to deter superior Soviet conventional forces.[41]

The double-zero agreement achieved by the Intermediate-Range Nuclear Forces (INF) Treaty of 1987, the first arms control initiative to eliminate an entire class of US and Soviet delivery systems, admittedly undercut long-standing German interests. Yet, West Germany almost immediately leveraged its rising credibility in NATO to push a triple-zero outcome, going after those SNFs that dangled German territory as a buffer to absorb fallout from even a temporary breakdown of the superpower relationship. West Germany turned up the heat on George H. W. Bush's administration to include SNFs in arms reduction talks at any sign of progress in conventional force redeployments.[42] Disintegration of the Warsaw Pact and unilateral force withdrawals by both superpowers during the 1990s rendered the question moot but in a way compatible with German views. Today, only an estimated 20 B61s remain on German soil.[43] If the history of NATO nuclear debates offers any track record, it favors the persistence, quality, and effectiveness of German advocacy in alliance forums.

As always, there are limits to how far any ally can stretch the bonds of transatlantic solidarity, but on the issue of nonstrategic nuclear weapons, Germany has several friends. Parliamentarians in the Netherlands, Belgium, and Norway have offered declaratory support for elimination. Two of these countries are basing nations, along with Germany. Norway, a traditional advocate for Article 5 and the integration of the Baltic States into NATO, may be considered a frontline state in negotiations with Russia. The remaining basing allies are Italy and Turkey. Both have expressed preferences for building cooperation with Russia after the violence in Georgia, and hints from the arms control literature question the readiness of Turkish aircraft to deliver their B61s following a transfer from US custody.[44]

Governments in the United Kingdom and France are reluctant to discuss changes to NATO's deterrence posture. Yet, both these independent nuclear powers are hard-pressed to elaborate on the deterrent value of the B61 vaults in NATO Europe. The main concern seems to be that the North Atlantic Council not rattle the confidence of new members by unilaterally dismantling its nuclear deterrent with respect to Russia.[45]

This suggests that other Western European powers might join Germany and the Benelux parliaments, especially if withdrawing the weapons today drew a reciprocal response from Russia. Though the New Strategic Concept declared NATO's intention to continue as a nuclear alliance, the precise meaning of that phrase, in accordance with the accompanying summit declaration at Lisbon and the DDPR at Chicago, was held open for further review.[46]

Whither NATO's Nuclear Weapons

NATO's B61 gravity bombs are, despite careful upkeep by small groups of Americans within the dual-capable aircraft states, vestigial arms from a bygone era when the alliance urgently prepared a *comprehensive mix* of capabilities to complicate Soviet plans. The current strategic concept omits that requirement, calling only for an "an appropriate mix" as collateral on nuclear members' Article 5 commitments. NATO officials will not concede the point in current discourse, but the B61s now are hardly appropriate: their range does not appear to be right; neither do their numbers nor their readiness for ending battle or sending a political signal during crises. Deterrence based on the risk of strategic exchange should trump less practical hopes based on escalation control. Yet, no advocate for keeping the B61s has presented publicly a convincing scenario in which launching an attack with these weapons from Western Europe or Turkey would pin the last clear chance for avoiding nuclear war on a nuclear-armed adversary.[47]

After the Georgia operation, the Russians appear to suffer conventional inferiority to NATO but retain dramatic quantitative superiority in tactical nuclear weapons, affording a clear response option against US B61s and making reciprocal, not to mention proportional, agreements to reduce the number of tactical weapons problematic. Also, designated nonnuclear states hosting the B61s in Europe wield a kind of veto; they can unilaterally reduce NATO's effective nuclear ordnance by replacing

current fighter-bombers with the Eurofighter, which unlike the US-sponsored F-35, is not certified to carry nuclear payloads.[48]

Admittedly, US nuclear weapons assigned to NATO provide an option for the alliance to cross the nuclear threshold. What remains unsaid is that this option will not shape Russian utility calculations within some neatly discrete stage of conflict escalation. Crossing the nuclear threshold with these B61s would not defeat Russia militarily, so advocates must believe it could change Russian perceptions as to the risk of escalation leading to a large-scale nuclear response.

Accordingly, B61s as a deterrent force should be a tripwire of the kind Glenn Snyder, one of the first-generation deterrence theorists, used to describe outgunned American troops in West Berlin: that brigade's involvement in combat and resulting casualties would have made it difficult for any US commander in chief to slow crisis momentum. An adversary contemplating the first aggressive move would have to think twice about the tripwire force, since rolling it would raise the probability of US escalation and eventual resort to strategic nuclear weapons use rather than calm acceptance of defeat in Europe.[49]

For a few reasons, though, today's B61s are not as appropriate as the Berlin Brigade for manipulating risk under deterrence logic. Unlike the brigade, the B61s are likely to be *distant* from initial action if it took place, say, in the territory of Baltic allies. NATO members would have to make a consensus decision to involve the B61s, and this choice would not be automatic. No one can say precisely what provocation would be enough to justify an alliance representing values of Western civilization crossing the nuclear threshold first. Moreover, if the allies decided to launch a nuclear bombing run, the signal would be very different from the sacrifice of a brigade. The capacity to dial up B61 yield to 170 kilotons and to extend aircraft range through refueling or radical mission profiles would make the approach of NATO fighter-bombers far more threatening—the B61s might communicate *uncontrolled* escalation, inflating the risk of an irrational exchange too abruptly.

Finally, if deterrence and competitive risk-taking are truly the main concern, there ought to be alternative means for conveying NATO's resolve in a crisis. The value of allied missile defense equipment in Poland or the Baltic States could substitute for the old symbolic units in beleaguered West Berlin without perturbing the independent and jealously guarded strategic forces of the United Kingdom or France. Meanwhile,

the punitive capacity of precision-strike conventional munitions and the demonstrated will to use them, even in less than vital out-of-area operations, might provide more utility for raising the stakes in a bid to strengthen immediate deterrence: getting an adversary to desist after it crossed a redline. Still another possibility would build an alliance protocol, a multilateral decision process to bring US nuclear warheads, perhaps even the B61s, into NATO-Europe from *au-delá de l'horizon* (from over the horizon). US warheads stored in Europe are not the only or necessarily the best way of structuring shared risks and responsibilities for extended deterrence.

The striking weakness of the official NATO position, as well as the US compromise for eventually altering the nuclear status quo, is that the B61s are justified as bolstering deterrence when they actually defy the risk-based logic of nuclear deterrence. Even in the twenty-first century, deterrence yet rests on the supreme guarantee of absolute weapons—the heavy arsenals of NATO's nuclear member states—the engagement of which would be irrational in the sense that megatons of TNT and widespread radiological poisoning serve no legitimate political purpose. The costs of US tactical warheads in Europe must be tolerated, it is said, to strengthen deterrence. Yet, a wartime transfer of nuclear bombs to European fighters in reluctant DCA states offers no positive prospect of managing or winning a competition in risk-taking against a virulent Russia or an emergent power that attacked NATO's territorial integrity and triggered Article 5 commitments.

Assuming NATO reserves collective defense as its core task, it will pay a political price for weapons programs that dismiss ground truth. Russia or any potential adversary can observe the low military utility of 200 B61s dotting Belgium, the Netherlands, Germany, Italy, and Turkey, where most of these allies signal their desire to abandon a nuclear combat role. Parties outside or within the alliance can challenge the feasibility of controlling escalation at every point along the arc to some ill-defined threshold when crisis moves finally take their own momentum and an exchange of strategic nuclear weapons becomes a real possibility. In short, they can plainly see the differences between residual gravity bombs stored in reserve vaults and a genuine tripwire such as the forward-deployed Berlin Brigade in its prime.

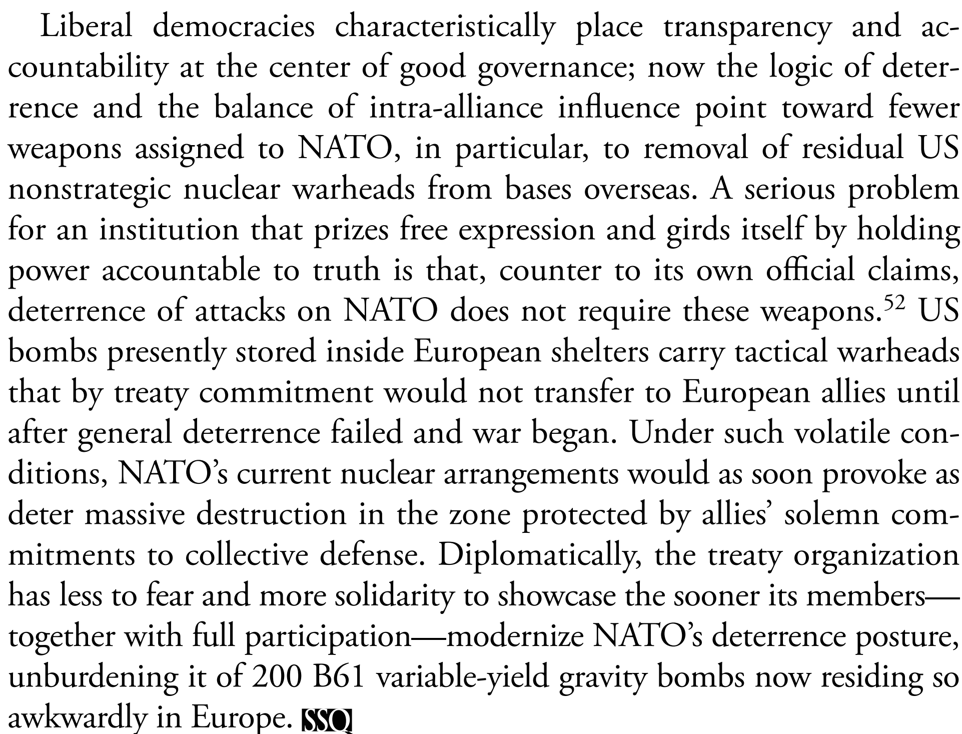
The truth about the B61s has serious consequences for the present US compromise—the idea that reduction of US tactical nuclear weapons

in Europe should only take place in the context of negotiated reductions in the far superior Russian tactical arsenal. US diplomats cannot count on the specter of large-scale Russian cuts scaring their interlocutors away from the negotiating table. The Russians have much to gain from protracted haggling that could only bear fruit if the West offered up more serious stakes—perhaps involving US space and missile systems or impinging upon the national interests of Georgia and Ukraine—to spark Russian motivation for discarding its quantitative advantage in nonstrategic warheads.

Given long experience in arms control on all sides, NATO should expect to gain little, indeed, for bargaining chips that carry questionable military or political value. Worse from the alliance's perspective, nonstrategic arms negotiations will play out during an ongoing review of NATO's nuclear posture in which the logical inconsistencies of its current policy present an inviting target. Moreover, Germany's economic growth, defense reform, and increased willingness—Libya notwithstanding—to participate in international security missions, all point to a secular rise in its influence. Should this intra-alliance shift continue, now more than 20 years after German unification, NATO will have to make appropriate adjustments in any case, but US-driven arms negotiations will complicate the process of accommodation.

As in the late 1970s and 1980s, German officials again have a strong case in a tense nuclear debate. Bargaining within the alliance promises to be hard because of increasing US vulnerability, its faltering claim to leading "from behind" or from Asia rather than the front of the transatlantic pack, and because remaining defenders of US B61 deployments into Western Europe will dig in for psychological reasons, quixotically invoking their narrowly defined national interest and their Article 5 ancestral bond to a now sprawling 28-member pact.[50] Even if Russia intends *friendly* competition among pan-European strategic partners before eventual agreement on a peaceful vision for the world, the recovering Russians should welcome complex and tortuous arms control that would exacerbate NATO's internal divisions.[51]

The 2010 strategic concept reconfirmed collective defense as a core task of the alliance, but the same document also embraced the notion of NATO as a special political group, one sharing common values and a pledge to cooperation that went beyond combining forces against obvious military threats. The very definition of threat and meaning of security



have been fluid over the past decades, and the alliance has closed ranks, shifting toward liberal democratic principles to remain cohesive during turbulent times.

Liberal democracies characteristically place transparency and accountability at the center of good governance; now the logic of deterrence and the balance of intra-alliance influence point toward fewer weapons assigned to NATO, in particular, to removal of residual US nonstrategic nuclear warheads from bases overseas. A serious problem for an institution that prizes free expression and girds itself by holding power accountable to truth is that, counter to its own official claims, deterrence of attacks on NATO does not require these weapons.[52] US bombs presently stored inside European shelters carry tactical warheads that by treaty commitment would not transfer to European allies until after general deterrence failed and war began. Under such volatile conditions, NATO's current nuclear arrangements would as soon provoke as deter massive destruction in the zone protected by allies' solemn commitments to collective defense. Diplomatically, the treaty organization has less to fear and more solidarity to showcase the sooner its members—together with full participation—modernize NATO's deterrence posture, unburdening it of 200 B61 variable-yield gravity bombs now residing so awkwardly in Europe. SSQ

Notes

1. Nicole Gaouette, "Clinton Says NATO Should Keep Tactical Nuclear Arms," *Bloomberg BusinessWeek*, 22 April 2010.

2. *Active Engagement, Modern Defence*—"Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organization," adopted by heads of state and government in Lisbon, 19 November 2010, para. 17, http://www.nato.int/lisbon2010/strategic-concept-2010-eng.pdf.

3. Thomas Halverson, *The Last Great Nuclear Debate: NATO and Short-Range Nuclear Weapons in the 1980s* (New York: St. Martin's Press, 1995); and Franklin Miller, George Robertson, and Kori Schake, "Germany Opens Pandora's Box," *Centre for European Reform*, 8 February 2010, http://www.cer.org.uk/publications/archive/briefing-note/2010/germany-opens-pandoras-box.

4. "Deterrence and Defence Posture Review," NATO press release, 20 May 2012, esp. section II, http://www.nato.int/cps/en/SID-193D7980-4A881D9C/natolive/official_texts_87597.htm?mode=pressrelease.

5. For reviews coming out of this realization, see David Hamburg, *Avoiding Nuclear War and Strengthening International Security: Can the Scientific Community Do More*? (Washington: American Association for the Advancement of Science, 1987); Albert Carnesale, Paul Doty, Stanley Hoffman, Samuel Huntington, Joseph Nye, and Scott Sagan, *Living with Nuclear Weapons* (Cambridge, MA: Harvard University Press, 1983); Robert Jervis, *Perception and Misperception in International Politics* (Princeton, NJ: Princeton University Press, 1976); and

Alexander George and Richard Smoke, *Deterrence in American Foreign Policy: Theory and Practice* (New York: Columbia University Press, 1974).

6. Halverson, *Last Great Nuclear Debate*, 142–43.

7. Christoph Bluth, *Britain, Germany, and Western Nuclear Strategy* (Oxford, UK: Clarendon Press, 1995); and Helga Haftendorn, *NATO and the Nuclear Revolution: A Crisis of Credibility, 1966–1967* (Oxford: Clarendon Press, 1996).

8. John Mearsheimer, "Back to the Future: Instability in Europe after the Cold War," *International Security* 15, no. 1 (Summer 1990): 5–56; and David Yost, *NATO Transformed: The Alliance's New Role in International Security* (Washington: US Institute of Peace, 1998).

9. David Yost, *The Future of NATO's Nuclear Deterrent: The New Strategic Concept and the 2010 NPT Review Conference*, workshop report (Rome: NATO Defense College, April 2010); Steven Pifer, Richard Bush, Vanda Felbab-Brown, Martin Indyk, Michael O'Hanlon, and Kenneth Pollack, *U.S. Nuclear and Extended Deterrence: Considerations and Challenges* (Washington: Brookings Institution, May 2010), esp. chap. 5; and Detlef Waechter, "Why NATO Is on the Right Track," *Carnegie Endowment Policy Outlook*, October 2010, esp. 2–3.

10. Pifer et al., *U.S. Nuclear and Extended Deterrence*, 18–19.

11. This impulse, for example, manifested in the former head of US Strategic Command advocating deeper reductions in strategic weapons and *total elimination of tactical nuclear weapons*, even if they were unilateral US cuts, well beyond the limits achieved by New START. *Modernizing U.S. Nuclear Strategy, Force Structure and Posture*, Global Zero US Nuclear Policy Commission Report, May 2012, esp. 8–9, http://www.globalzero.org/en/us-nuclear-policy-commission-report. The commission was chaired by Gen James Cartwright, USMC, retired.

12. Stephen Cimbala, *NATO Strategies and Nuclear Weapons* (London, UK: Pinter Publishers, 1989), 72–77.

13. Thomas Schelling, *The Strategy of Conflict* (Cambridge, MA: Harvard University Press, 1960); and Schelling, *Arms and Influence* (New Haven, CT: Yale University Press, 1966).

14. Herman Kahn, *Thinking about the Unthinkable* (New York: Avon Books, 1962); and Cimbala, *NATO Strategies and Nuclear Weapons*, 66, 163–68.

15. Spurgeon Keeny Jr. and Wolfgang Panofsky, "MAD versus NUTS: Can Doctrine or Weaponry Remedy the Mutual Hostage Relationship of the Two Superpowers?" *Foreign Affairs* 60, no. 2 (Winter 1981/82): 287–304; and Keir Lieber and Daryl Press, "The Rise of Nuclear Primacy," *Foreign Affairs* 85, no. 2 (March/April 2006): 42–54, esp. 52–54.

16. Karl-Heinz Kamp, "NATO's Nuclear Weapons in Europe: Beyond 'Yes' or 'No,'" (Research paper no. 62, NATO Defense College, September 2010). See also Kamp and David Yost, eds., *NATO and 21st Century Deterrence* (Rome: NATO Defence College, May 2009).

17. William Hyland, "Reagan-Gorbachev III," *Foreign Affairs* 66, no. 1 (Fall 1987): 11.

18. *Active Engagement, Modern Defence*, para. 18.

19. Alexandra Gheciu, *NATO in the "New Europe": The Politics of International Socialization after the Cold War* (Stanford, CA: Stanford University Press, 2005); and Rebecca Moore, *NATO's New Mission: Projecting Stability in a Post–Cold War World* (Westport, CT: Praeger Security International, 2007).

20. Rose Gottemoeller, "New START: Security through 21st Century Verification," *Arms Control Today*, September 2010, http://www.armscontrol.org/act/2010_09/Gottemoeller. This is why the four horsemen of Global Zero, in a third open letter *after* the December 2010 ratification of New START, urged the United States to move away from deterrence based on mutual assured destruction. George Shultz, William Perry, Henry Kissinger, and Sam Nunn, "Deterrence in the Age of Nuclear Proliferation," *Wall Street Journal*, 7 March 2011, http://online.wsj.com/article/SB10001424052748703300904576178760530169414.html.

21. Bernard Brodie, ed., *The Absolute Weapon: Atomic Power and World Order* (New York: Harcourt, Brace, and Co., 1946); and Robert Powell, "Nuclear Deterrence Theory, Nuclear Proliferation, and National Missile Defense," *International Security* 27, no. 4 (Spring 2003): 86–118.

22. Jacquelyn Davis, Robert Pfaltzgraff, Charles Perry, and James Schoff, *Updating U.S. Deterrence Concepts and Operational Planning: Reassuring Allies, Deterring Legacy Threats, and Dissuading Nuclear "Wannabes"* (Cambridge, MA: Institute for Foreign Policy Analysis, 2009), 2–3; Pifer et al., *U.S. Nuclear and Extended Deterrence,* 1; and Shultz et al., "Deterrence in the Age."

23. Robert Norris and Hans Kristensen, "U.S. Nuclear Forces, 2010," *Bulletin of the Atomic Scientists* 66, no. 3 (May/June 2010): 57–70, esp. 67–68; and Robert Norris and Hans Kristensen, "U.S. Tactical Nuclear Weapons in Europe, 2011," *Bulletin of the Atomic Scientists* 67, no. 1 (January/February 2010): 64–73.

24. Pifer et al., *U.S. Nuclear and Extended Deterrence*, 19.

25. Indeed, NATO strategy does not have a war-fighting concept for nuclear operations. Since the late 1960s, NATO political guidelines have described a political use for the weapons—to confront the enemy with the prospect of escalation, presumably toward an exchange that would bring about mass destruction. David Yost, "The History of NATO Theater Nuclear Force Policy: Key Findings from the Sandia Conference, *Journal of Strategic Studies* 15, no. 2 (June 1992): 228–61, esp. 229–33.

26. Among NATO's nuclear alternatives, Jeffrey Larsen included moving "all US nuclear weapons to storage sites in Southern Europe to be closer to the most likely near-term threats." Jeffrey Larsen, "Future Options for NATO Nuclear Policy," *Issue Brief*, Program on International Security (Washington: Atlantic Council of the United States [ACUS], August 2011), 4. A US Air Force–sponsored workshop noted how the successful NATO air campaign over Libya in 2011 demonstrated refueling capabilities of European strike aircraft. Polly Holdorf and Jeffrey Larsen, "Extended Deterrence and NATO/Europe," workshop report compiled for the USAF Institute for National Security Studies (INSS) and the USAF Strategic Plans and Policy Division, June 2011, 8, available from INSS. The same campaign, of course, revealed the scarcity of refueling resources and weeks of delay as European fighter-bombers spun up operations. The Libyan affair, therefore, sent a mixed and less than helpful political message about how present tactical weapons would shape escalation in a complex nuclear crisis also involving rapid conventional mobilization. Paolo Foradori, "European Perspectives," in *Tactical Nuclear Weapons and NATO*, eds. Tom Nichols, Douglas Stuart, and Jeffrey McCausland (Carlisle, PA; Army War College, Strategic Studies Institute, April 2012), 282–83.

27. Norris and Kristensen, "U.S. Nuclear Forces," 58. Most of the strategic warheads deployed on US submarine-launched ballistic missiles have a yield of 100 kilotons, just 60 percent of the maximum setting on the European B61s.

28. *Nuclear Posture Review Report* (Washington: DoD, April 2010), http://www.defense.gov/npr/docs/2010%20Nuclear%20Posture%20Review%20Report.pdf.

29. "Remarks of President Barack Obama, Hradčany Square, Prague, Czech Republic, April 5, 2009," http://prague.usembassy.gov/obama.html.

30. Op-eds by George Shultz, William Perry, Henry Kissinger, and Sam Nunn were published in the *Wall Street Journal* on 4 January 2007 and 15 January 2008.

31. For the need to improve policy recommendations on sustainment of US nuclear weapons maintenance and secure storage in Europe, see James Schlesinger, chair, *Report of the Secretary of Defense Task Force on DoD Nuclear Weapons Management, Phase I: The Air Force's Nuclear Mission* (Arlington, VA: DoD, September 2008), section 3—"Atrophy of the Nuclear Mission," and 59, http://www.defense.gov/pubs/Phase_I_Report_Sept_10.pdf.

32. Pifer et al., *U.S. Nuclear and Extended Deterrence*, 22; and "Experts Urge NATO Ministers to Rethink Alliance Nuclear Policy," Arms Control Association press release, 11 October 2010, http://www.armscontrol.org/pressroom/NATONukePolicy. For historical background on the institutional burden of remaining nonstrategic nuclear weapons in Europe, see Jeffrey Larsen, "The Future of U.S. Non-Strategic Nuclear Weapons and Implications for NATO: Drifting Toward the Foreseeable Future," report prepared in accordance with the requirements of the 2005–06 NATO Manfred Wörner Fellowship (Brussels: NATO Public Diplomacy Division, October 2006), 42–45, 86–87, www.nato.int/acad/fellow/05-06/larsen.pdf.

33. Peter Feaver and Kristin Thompson Sharp, "The United States," in *Governing the Bomb: Civilian Control and Democratic Accountability of Nuclear Weapons*, eds. Hans Born, Bates Gill, and Heiner Hanggi (Oxford, UK: Oxford University Press, 2010), 25–50, esp. 47–50.

34. Steven Pifer, "After New START: What Next?" *Arms Control Today*, December 2010, http://www.armscontrol.org/act/2010_12/%20Pifer.

35. "Can Angela Merkel Hold Europe Together?" *Economist*, 12 March 2011, http://www.economist.com/node/18332786?story_id=18332786; and Steven Erlanger and Judy Dempsey, "Germany Steps away from European Unity," *New York Times*, 24 March 2011, A-14. A broader review of Germany's changing role in transatlantic relations is provided by Gale Mattox, "Germany: From Civilian Power to International Actor," in *The Future of Transatlantic Relations: Perceptions, Policy, and Practice*, eds. Andrew Dorman and Joyce Kaufman (Stanford, CA: Stanford University Press, 2011), 113–36.

36. Bluth, *Britain, Germany, and Western Nuclear Strategy*; Halverson, *Last Great Nuclear Debate*; and Haftendorn, *NATO and the Nuclear Revolution*.

37. Sonia Phalnikar, ed., "New German Government to Seek Removal of US Nuclear Weapons," *Deutsche Welle*, 25 October 2009, http://www.dw-world.de/dw/article/0,,4824174,00.html.

38. International Panel on Fissile Materials (IPFM), *Reducing and Eliminating Nuclear Weapons: Country Perspectives on the Challenges to Nuclear Disarmament* (Princeton, NJ: IPFM, 2010), 22–24, http://www.fissi.org/ipfm/site_down/gfmr09cv.pdf.

39. This oft-repeated line was attributed to West German moderate, Volker Rühe, in the context of intermediate-range nuclear forces (INF) debates of the late 1980s. Thomas Risse-Kappen, "Odd German Consensus against New Missiles," *Bulletin of Atomic Scientists* 44, no. 4 (May 1988): 14–17, esp. 14; and Robert Zoellick, "Two plus Four," *National Interest*, Fall 2000, para. 5, http://nationalinterest.org/article/two-plus-four-1205.

40. Haftendorn, *NATO and the Nuclear Revolution*, 172–73; Michael Wheeler, "NATO Nuclear Strategy, 1949–1990," in *A History of NATO: The First Fifty Years*, vol. 3, ed. Gustav Schmidt (Hampshire, UK: Palgrave, 2001), 121–39, esp. 132; and Bluth, *Britain, Germany, and Western Nuclear Strategy*, 261–63.

41. This history is well known but curiously shelved by distinguished B61 advocates who darkly accuse Germany—and by extension Chancellor Schmidt—of hypocrisy *and* naiveté on deterrence strategy for the alliance. Lord Robertson, Franklin Miller, and Kori Schake, "It's Time to Put the Nuclear Issue Behind Us: The Chicago Summit Has More Urgent Priorities than Nuclear Theology," issue brief (Washington: ACUS, May 2012), http://www.acus.org/files/publication_pdfs/403/93516_AC_ChicagoSummit_IB_p2-final.pdf; and Miller, Robertson, and Schake, "Germany Opens Pandora's Box."

42. Halverson, *Last Great Nuclear Debate*, 102, 124–33.

43. Norris and Kristensen, "U.S. Tactical Nuclear Weapons in Europe," 68–69.

44. Ibid., 69–70.

45. This point does not address Turkey's concern with respect to a nuclear-armed Iran. Even so, there are questions about the B61's military utility for punishing Iran, most of which lies beyond the published 500-mile combat radius of delivery aircraft. Moreover, no NATO member is likely to endorse a posture in which Turkey became the only dual-key state in the alliance.

46. NATO, "Lisbon Summit Declaration," 20 November 2010, para. 30–31, http://www.nato.int/cps/en/natolive/official_texts_68828.htm. See Hans Kristensen, "NATO Strategic Concept: One Step Forward and a Half Step Back," *Federation of American Scientists Strategic Security Blog*, 19 November 2010, http://www.fas.org/blog/ssp/2010/11/nato2010.php; Oliver Meier, "NATO Revises Nuclear Policy," *Arms Control Today*, December 2010, http://www.armscontrol.org/act/2010_12/NATO_Nuclear; and Daryl Kimball, Oliver Meier, and Paul Ingram, "NATO on Nuclear Weapons: Opportunities Missed and Next Steps Forward," *Arms Control Now*, 21 May 2012, http://armscontrolnow.org/tag/nato-2012-chicago-summit/.

47. Turkey is distinguished here from Western Europe not to debate the merits of European integration, but to recognize the militarily significant longitudinal shift between host country air bases in

Germany and Italy versus the base in Turkey. In "Nuclear Issues for NATO after the Strategic Concept," *EUCOM Task Force* (Washington: ACUS, June 2011), 7, Walt Slocombe pointed out operational and targeting difficulties in employing the European-based B61s not just on the battlefield, but as a political demonstration during a crisis to discourage further escalation. High-profile advocates for robust and flexible nuclear arsenals failed to include a scenario in which tactical gravity bombs stored in Europe would save the United States or its allies. Keir Lieber and Daryl Press, "Obama's Nuclear Upgrade: The Case for Modernizing America's Nukes," *Foreign Affairs*, 6 July 2011, www.foreignaffairs.com/articles/67973/keir-a-lieber-and-daryl-g-press/obamas-nuclear-upgrade; and Keith Payne, "Maintaining Flexible and Resilient Capabilities for Nuclear Deterrence," *Strategic Studies Quarterly* 5, no. 2 (Summer 2011): 13–29.

48. Pifer et al., *U.S. Nuclear and Extended Deterrence*, 23.

49. Glenn Snyder, "Deterrence and Power," *Journal of Conflict Resolution* 4, no. 2 (June 1960): 163–78.

50. David Yost, "The US Debate on NATO Nuclear Deterrence," *International Affairs 87*, no. 6 (November 2011): 1401–38. Yost provided perhaps the most comprehensive public review to date of contending positions on the fate of US nuclear bombs in Europe. Psychological reasons were referenced on a number of occasions as compensation for the lack of military utility or US military requirement for the DCA-designated B-61s (p. 1420 in reference to the 2008 Schlesinger Report on DoD nuclear weapons management; p. 1429 on the Estonian defense minister's case for "demonstrating and maintaining capability to employ them"; p. 1432 on a former Czech Foreign Ministry official's rhetorical question about whether allies could "imagine nuclear deterrence without the physical presence of American weapons in Europe"; and p. 1435 on former OSD official Elaine Bunn's perceptual metaphor likening B61 withdrawal to removing a wedding ring.) The crucial psychology in all these examples is not that of the unknown adversary in some undetermined future but of the known emotions among those allies who seek reassurance, now. Such reassurance at home can happen, or not, quite independently of deterrence logic as applied to enemies. Edward Seay, "NATO's Incredible Nuclear Strategy: Why U.S. Weapons in Europe Deter No One," *Arms Control Today*, November 2011, http://www.armscontrol.org/act/2011_11/NATO_Incredible_Nuclear_Strategy_Why_US_Weapons_in_Europe_Deter_No_One.

51. Even better from the Russian perspective, since the US administration has already promised publicly to pursue an agreement addressing the disparity in nonstrategic nuclear weapons, demand a high price from the Americans—in B61s, space and missile systems, or other creatively linked assets—just to enter the negotiations, and then drag out the talks. Stela Petrova, *New START: A Net Assessment*, policy brief no. 3 (London, UK: European Leadership Network, August 2012), 18–20.

52. For brief identification of this looming problem and the role public discussion should play on the nuclear deployment issue so internally sensitive to the alliance, see George Perkovich, Malcolm Chalmers, Steven Pifer, Paul Schulte, and Jaclyn Tandler, *Looking Beyond the Chicago Summit: Nuclear Weapons in Europe and the Future of NATO*, Carnegie Papers (Washington: Carnegie Endowment for International Peace, April 2012), 36.