The United States require a pragmatic assessment of current threats and the need for a corresponding nuclear posture to take these threats into account. In order to maintain an effective nuclear deterrent, we recommend that the United States adopt a minimal deterrence framework and a No First Use policy coupled with corresponding reductions in our strategic nuclear force.
Executive Summary

This Nuclear Posture Review (NPR) provides a strategic map for implementing this Administration’s agenda for nuclear weapons within the United States, the role they play in assuring our allies and partners, and the ways they deter our enemies and rivals. Overall, this NPR seeks to re-purpose US nuclear strategy towards a post-Cold War strategic environment.

The United States can achieve the majority of its strategic goals with its conventional capabilities. However, the US nuclear arsenal still plays an important role in ensuring the security of the United States and its allies. The United States should:

- Adopt a minimal deterrence posture, which emphasizes the reduced role of nuclear weapons in US strategic interests
- Implement a policy of No First Use (NFU) of nuclear weapons that codifies the defensive role of nuclear weapons

The US nuclear arsenal is larger than necessary considering today’s threat environment. The United States can maintain its effective deterrent by:

- Reducing our strategic nuclear forces to 440 total warheads (392 deployed) and launch vehicles, moving toward a strategic dyad
  - 200 ICBMs
  - 192 SLBMs
  - Eliminating nuclear missions for strategic bombers

Tactical nuclear weapons no longer serve a primarily military purpose. However, maintaining a small TNW presence in Europe will provide extended deterrence to our allies. The United States should:

- Remove TNW from Germany, Belgium, and the Netherlands while maintaining them in Italy and Turkey
- Engage Russia in confidence-building measures to reduce tensions related to TNW and work towards their eventual elimination

To fully ensure the stability of nuclear weapons and decrease the possibility that they will be used, weapons reductions and posture changes must be coupled with effective and verifiable multilateral and bilateral agreements.

- Ratify the CTBT and pursue FMCT negotiations
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I. Introduction

This Nuclear Posture Review (NPR) provides a strategic map for implementing this Administration’s agenda for nuclear weapons within the United States, the role they play in assuring our allies and partners, and the ways they deter our enemies and rivals. Overall, this NPR seeks to re-purpose US nuclear strategy towards a post-Cold War strategic environment.

We no longer live in a bipolar world where the threat of nuclear Armageddon is imminent and where superpowers continually attempt to make their arsenals larger, deadlier, and more accurate. At the height of the Cold War, the United States’ arsenal numbered in the tens of thousands. Currently, the US has reduced its nuclear arsenal to a maximum of 1,550 deployed warheads through bilateral reductions and multilateral arms control treaties. With this NPR, we present a plan that further reduces the nuclear arsenal of the United States and recommend a policy of No First Use (NFU) of nuclear weapons. These reductions and new declaratory policy will form the foundation of a modified minimal deterrence framework that will lead the United States into a new 21st century nuclear weapons posture better suited to the realities of the post-Cold War strategic situation.

Breaking Away From Cold War Thinking - A Minimal Deterrence Framework

The mission of our minimal deterrence framework is to deter the use of WMD by states that possess them with as few of our own weapons as possible, while ensuring survivability and maintaining second-strike retaliatory capabilities. We believe that the United States can sufficiently maintain its strong nuclear deterrent, even with a heavily reduced nuclear arsenal. Our potential rivals, adversaries, and proliferators cannot achieve strategic parity with the United States, even with further reductions in our nuclear force. Overall, we seek to prevent nuclear conflicts between nations and to keep new proliferators from providing horizontal access to nuclear weapons technology or weapons themselves to non-state actors. We also seek to lower the total number of nuclear weapons in the world today and to improve nuclear security and stability by entering into new bilateral and multilateral agreements.
This posture of minimal deterrence as we will outline in detail further on in the report will be enough to safeguard the United States, reassure our allies, and dissuade our adversaries. We believe that nuclear weapons should play a defensive rather than an offensive role in the United States posture.

Our new declaratory policy of No First Use reflects the intentions of a national leadership to move away from antiquated Cold War thinking. We advocate abandoning the strategy of calculated ambiguity that has long characterized US nuclear posture. The United States will once again seek to lead the world by setting an example for a safe and effective nuclear posture and deterrence strategy that uses the minimum number of weapons possible. This posture is a signal to both our allies and adversaries that the fundamental purpose of US nuclear weapons is to deter and, if necessary, respond to the use of nuclear weapons or weapons of mass destruction against the United States and its allies.

**Unilateral Strategic Reductions in Force - A New Strategic Dyad**

In conjunction with our deterrence framework, we offer recommendations on how to change our nuclear forces. We recommend moving forward with a strategic dyad of reduced ICBMs and SLBMs. We advocate eliminating our arsenal of strategic bombers, as our NFU policy renders the positive benefits of bombers, such as signaling and call-back abilities, irrelevant. We plan to keep our tactical weapons in Europe only in the nations of Italy and Turkey.\(^1\) We will still have a nuclear weapons capable aircraft, but only aircraft that includes our tactical weapons in Europe. By retaining dual use aircraft we can assure our allies and partners and retain our extended deterrence.

Our overall theme in this posture review is that we seek to de-emphasize the role of nuclear weapons in the 21\(^{st}\) century. The nuclear force of the United States is a small fraction of what it was at the end of the Cold War and is roughly the same as it was in the mid-1950’s when the Cold War was in its infancy. In this NPR this downward trend will continue as the United States’ conventional superiority in the current strategic environment allows us to further reduce the

\(^1\) Fitzpatrick. How Europeans view TNWs, 60.
United States’ reliance on nuclear weapons in national military strategy.

TNWs in Europe no longer serve the same military purpose they did during the Cold War, but they serve a new political function through their remaining military utility. While our NPR takes the first steps towards nuclear-free world, we are not nuclear-free yet. There are allies that depend on our ability to provide deterrence through the use of TNWs, so we cannot remove all of them at this time. However, the reduction of TNWs from Germany, Belgium, and the Netherlands should, in addition to confidence building measures, encourage Russia to return to the negotiating table, while providing enough assurance to prevent our allies from needing to proliferate to defend their own interests.

**Threats to the United States**

In our view, the existence of nuclear weapons poses a fundamental risk to global security. This Administration wishes to see a world in which nuclear weapons are no longer part of our national security strategy. However, we also acknowledge that the United States must not compromise its ability to respond to any Weapons of Mass Destruction (WMD) attack. Until nuclear weapons are completely eliminated, the United States will maintain a credible nuclear deterrent.

While nuclear terrorism does pose a threat to the security and safety of the United States and our allies, we believe that we cannot apply traditional state-based deterrence theories to non-state actors. Non-state actors are inherently undeterrable because they do not rely on state-based institutions, infrastructure, conventions, and norms that can be held in jeopardy by nuclear retaliation. While the prospect of non-state actors obtaining or using a nuclear weapon is a dangerous threat, the probability of such an event occurring is low and as of yet unmaterialized. We can address this threat through international cooperation, agreements, and improved materials and weapons security. Because each non-state actor retains a different operational framework that requires multiple iterations of nuclear strategy, we believe that composing a nuclear deterrence posture for non-state actors will not achieve its objectives and we will not pursue it.
While some nuclear weapons states are historic allies of the United States, others do pose risks to US allies and interests abroad. We hold that the most likely nuclear threat to the United States will arise from nuclear states in the form of intended or unintended proliferation risks, over-reliance on nuclear versus conventional forces, or emboldened regional actions affecting our allies.

We also cannot ignore the dangers of future nuclear states that either possess weapons or the capabilities to produce them. Emerging nuclear states may use peaceful nuclear power generation capability as starting points for nuclear weapons. These states have the potential to threaten the United States and its allies, disrupt the security and stability of the regions they inhabit, and influence other states to further their own nuclear ambitions. Emerging nuclear states further pose a proliferation risk as some of these states are unstable and may empower non-state actors or provide them with weapons, materials, or expertise because of weak central government. These proliferation risks are inherently dangerous to not only the United States but also to our allies and to the geopolitical stability of the world.

These assumptions about nuclear threats facing the United States form the basis for our Nuclear Posture Review.
II. Deterrence Framework

The main purpose of our nuclear weapons should be to discourage the use of nuclear weapons and as such should play a defensive rather than an offensive role for the United States. Today, the United States possesses unprecedented and unsurpassed conventional superiority that renders a conventional attack on our homeland among the most remote of possibilities. In order to prevent a nuclear attack, we recognize that the United States’ nuclear arsenal must continue to serve as an effective deterrent.

Minimal Deterrence

We believe that the United States can maintain the same effective nuclear deterrent with a much smaller nuclear force. Doing so will not only serve as a “good faith” effort in our bilateral negotiations with Russia, but also will lend credence to our nonproliferation efforts and strengthen the NPT regime. From this point forward, we will refer to our deterrence framework as “minimal deterrence,” in order to distinguish from our current force posture.

In formulating our deterrence framework, we assume that if the United States can deter its largest potential nuclear aggressor, then the United States will deter any potential nuclear threat. We define the “largest potential nuclear aggressor” as the state with the largest nuclear arsenal. Thus, we have carefully calibrated our force posture to the minimum number of weapons necessary to deter this greatest threat.

We believe that the ability to retaliate against up to forty targets is sufficient to deter any nuclear state from striking the United States first. While we do not believe that retaliating against forty targets will be necessary for all states if they choose to strike the United States, we retain the capability to target forty sites in a second-strike. This strategy represents the minimum number of targets necessary to deter the largest potential nuclear threat to the United States.

Our Mission
The mission of our minimal deterrence framework is to deter the use of WMD by states that possess them with as few of our own weapons as possible, while ensuring survivability and maintaining second-strike retaliatory capabilities.

“We deter the use of WMD by states that possess them”

We define “WMD” as biological, chemical, and nuclear weapons.

“As few of our own weapons as possible”

We do not conceptualize “minimal deterrence” as a specific number, but rather choose to see it as a mentality or theoretical framework from which to determine our nuclear force posture. We believe that the United States can sufficiently maintain its strong nuclear deterrent with an arsenal of 440 strategic nuclear weapons (200 ICBM, 240 SLBM), with 392 deployed at any given time.

In accordance with our minimal deterrence posture, the US will maintain its current alert status, namely open sea targeting.

“Ensuring survivability”

We assess that most states do not have the ability to eliminate our entire arsenal, or even a majority of it. We anticipate that our arsenal of ICBMs will absorb most of an enemy’s attack, which itself could require the enemy’s entire nuclear arsenal. This approach leaves our SLBM fleet available to launch a counterattack if our ICBM stockpile is eliminated, maintaining the survivability of our nuclear arsenal.

“Maintaining second-strike retaliatory capabilities”

In a worst-case scenario, a state could possess enough nuclear weapons to entirely eliminate our ICBM arsenal. Thus, we would rely on our SLBM fleet to ensure our ability to exact a massive retaliatory strike on the aggressor, retaining the ability to retaliate against up to forty targets of any given state. However, we do not believe that all nuclear states possess the capabilities to
eliminate our entire ICBM force and anticipate that the United States will be able to engage the remainder for a second-strike.

**Targeting Strategy**

The US maintains the ability to retaliate against up to forty of any state’s most valuable targets, including but not limited to political targets, economic targets, transportation hubs, important infrastructure, or any other target of strategic or nationalistic value to an aggressor. Which targets are “most valuable” depends on the aggressor state, and our posture provides the president with the necessary flexibility to strategically choose them. By doing so, the United States can maintain its effective nuclear deterrent.

**Conditions**

While we believe that a minimal deterrence posture is in our best interest, we reserve the right to request similar reductions from our peer nuclear weapons states. Some of them are already considering comparable reductions of their own. However, the US may consider setting a “floor” for our own arsenal reductions, at which point we would cease reducing our arsenal until our peer states made proportional reductions. We believe this to be a realistic possibility, as we hope that our minimal deterrence posture will increase good-faith efforts with our peer nations. More importantly, this posture will bolster the United States’ efforts toward nuclear disarmament, a stated goal of the US government.

**Role of Conventional Deterrence**

The United States possesses unrivaled conventional superiority relative to our peers and competitors. This superiority means that, even with a reduced nuclear arsenal, the United States may still reap the benefits of its substantial conventional deterrent.

**Reassuring Friends and Allies**

After WWII, the United States pledged to protect its European allies from rising threats, and this protection became known as the “nuclear umbrella” during the Cold War and beyond. Some of our allies fear that reductions in the US nuclear arsenal will compromise the safety of our allies.
However, we will reassure our allies with permanent nuclear infrastructure, demonstrating our commitment to the nuclear mission overall. Moreover, as will be discussed later, the United States will maintain its tactical nuclear weapons presence in Turkey and Italy, further ensuring the security of our allies.
III. Declaratory Policy

We recommend that the United States move away from its current declaratory policy of calculated ambiguity. A nuclear taboo has existed where presidents have refused to use these weapons since Hiroshima and Nagasaki. Yet with a policy of calculated ambiguity the possibility of the US using nuclear weapons first against another state still exists. Moreover, the threat of using nuclear weapons first can be inherently de-stabilizing and give credence to new proliferators. It is time for the United States to move forward into the 21st century with a new declaratory policy of No First Use of nuclear weapons (NFU). Having a NFU policy furthers our goal of keeping peace and stability in the world.

Our NFU policy is defined as:

*The sole purpose of US nuclear weapons is to deter and, if necessary, respond to the use of weapons of mass destruction against the United States and the allies towards whom we have extended deterrence.*

As with our minimal deterrence strategy, this new declaratory policy further strengthens our NPR’s overall theme of de-emphasizing the role of nuclear weapons in the United States’ military posture.

We have included not only nuclear weapons but biological and chemical weapons as well under our deterrence umbrella. If hostile nations are to use such WMD against us or our allies we reserve the ability to respond with our nuclear arsenal if appropriate. The allies under our nuclear umbrella include NATO member countries, South Korea, Japan and Australia. For instance, the Republic of Korea remains confident in the US extended deterrence nuclear umbrella, which has assured the ROK’s security and affirmed the relative peace and status quo on the Korean Peninsula over the past sixty years. Having a NFU policy will not change the strength of this and other relationships.

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2 ILPI Nuclear Weapons Project. The Nuclear Umbrella States, 1.
3 Bush. Extended Deterrence in East Asia, 8-9.
The US military is still decades ahead of any other military in capacity and technology. We have the only capacity to fly, sail, and deploy ground forces globally, and we have the only worldwide capability for communications, logistics, transportation, and intelligence.

During the Cold War, the United States needed the threat of first use of nuclear weapons in order to deter a Soviet invasion of our allies in Europe. Russia is not our number one geostrategic foe. We no longer live in that era and our policy of NFU reflects the current nuclear threat environment. Our conventional capabilities fall in line with our move toward de-emphasizing nuclear weapons in our force posture as there is less of a threat of nuclear war.

Keeping a calculated ambiguity with our declaratory policy risks undermining US leadership on the global nonproliferation front. Our actions and words matter, and accepting a new declaratory policy of NFU buttresses US activism geared against the spread of nuclear weapons.

To assuage our allies, we will be clear that the US adopting a policy of No First Use does not eliminate the nuclear deterrence umbrella. Sustained consultations with our allies to explain our new declaratory policy will assure them of the credibility of US extended deterrence commitments, as we have done in the past with NATO. We believe NFU does not weaken our allies and will not lead to new allied proliferators.
IV. Moving to a New Strategic Dyad

Force Structure

Within our framework of modified minimal deterrence, we recommend that the United States reduce the number of launchers and warheads that comprise its nuclear forces. This reduction envisions moving the United States from a triad to a dyad force structure of 200 deployed ICBMs and 192 deployed SLBMs, with an additional 48 undeployed SLBMs. In addition, we recommend the United States de-MIRV its SLBM force, thereby reducing its total number of launch vehicles and warheads to 440. To further contract the United States’ nuclear forces and to complete the move to a dyad system, we recommend ending the nuclear missions of all US strategic bombers. To ensure a safe, effective, and reliable nuclear arsenal we recommend maintaining a total of 880 reserve warheads for deployed warhead replacement or a source of nuclear weapons components for deployed weapons maintenance.

We recommend that the United States begin planning for both replacement warheads and launch vehicles while continuing its life extension programs and stockpile stewardship program for its current launch vehicles and warheads. By moving towards a dyad made up of ICBMs and SLBMs, the United States can maintain effective deterrence, assure its allies, ensure survivability, and maintain a secure-second strike capability.

Why Move to a Dyad and Remove Bombers?

The nuclear triad is an outdated legacy of the Cold War and the current threat of nuclear war is significantly lower than at the height of US-Soviet competition. Due to the reduced threat, the United States does not need a Cold War-sized nuclear arsenal to meet its strategic goals.

Due to the small number of nuclear bombers and their obsolete role under a proposed NFU policy, the United States can remove the nuclear mission from its strategic bombers and move to a dyad force. A NFU doctrine would eliminate the need to signal escalation by forward-deploying strategic bombers with nuclear weapons, thereby eliminating the need for nuclear-capable bombers. Currently, the United States maintains a nuclear bomber force of 44 B-52H’s
and 16 B-2’s. This represents the smallest leg of the triad in terms of delivery vehicles. With such a low number, we assess that maintenance of the nuclear-capable mission for these bombers is unnecessary, especially when future Air Force planning is considered. The US Air Force plans to retire the nuclear air-launched cruise missile (ALCM) by 2018 without a replacement, effectively removing the nuclear role for the B-52H. This would leave only 16 B-2 bombers with a nuclear role, a number too small to yield a significant strategic benefit. The US Air Force has also yet to finalize plans for a future strategic bomber, thus keeping the total number of bombers with a nuclear mission extremely low. Because of the reduced numbers, we assess it is not worth maintaining their nuclear capabilities.

Supporters of the triad argue that the bomber leg allows for signaling escalation in a crisis. However, under a NFU policy, the United States would not need to signal its intention to escalate because it would not use nuclear weapons first. Signaling is therefore irrelevant under this declaratory policy. Additionally, supporters argue that bombers can be recalled. Because the United States would not use its nuclear weapons in a first strike and would only retaliate against a nuclear strike on impact, there would be no need to recall a nuclear-equipped bomber force. The bomber leg of the triad serves no valuable strategic purpose under a NFU policy, and therefore its elimination would not harm the deterrence capabilities of the United States.

**ICBM Force**

We recommend that the United States retain a reduced ICBM force of 200 deployed launch vehicles and warheads. This will maintain stability, provide a prompt and accurate response to a nuclear attack, and assure our allies. The weapons maintain stability due to their hardened silos and therefore require multiple enemy weapons to destroy them, drawing away weapons from other targets in the United States. We determine that an enemy force would be unable to destroy a silo with one nuclear weapon and would require follow-on warheads to assure the silo’s destruction. We assume a foe would therefore be forced to make the risky choice to expend 400 to 600 warheads to possibly destroy the entire ICBM fleet. Since a potential adversary cannot ensure the destruction of every missile, a foe would run the risk of leaving a number of ICBMs available to be used in a retaliatory strike.
Furthermore, maintaining an ICBM fleet acts as a “sponge,” drawing away a foe’s nuclear weapons from attacking other targets in the United States. A foe would likely use a large portion of its nuclear force against ICBMs, therefore resulting in fewer nuclear weapons targeting US cities. While counter-value targeting would likely still occur, a foe would still be forced to commit a large portion of its first strike in order to limit the United States’ ability to carry out its retaliatory strike.

With the removal of strategic bombers from the US nuclear force, some may argue that the United States would no longer retain the capability to assure its allies. In past times of increased tension, the United States could send bombers overseas or put them on alert to display our commitment to allies. However, we believe the ICBM force will fulfill this function. The maintenance of missiles in hardened silos shows US allies that we are committed to their defense. The permanence of ICBM infrastructure paired with their visibility (unlike underwater submarines and mobile bombers) shows US allies that we are serious about maintaining a nuclear force and stand by our promise of security.

ICBMs also provide the United States with a prompt and reliable delivery vehicle. The Minuteman III missile can be on target within 30 minutes of being launched, making it one of the quickest delivery systems in the US nuclear arsenal. Furthermore, unlike bombers, ICBM missiles are able to penetrate air defense systems. Even though the United States has experimented with an anti-ballistic missile system, the technology does not yet exist to mount a reliable defense against ballistic missiles. These two factors increase their deterrence value. Potential adversaries will be less likely to attempt a first strike due to the quick and effective retaliation of the ICBM fleet.⁴

**SLBM Force**

We recommend that the United States maintain an SLBM force of 240 de-MIRVed Trident II missiles aboard ten Ohio-class submarines. Doing so would mean a reduction of four

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⁴ Senate ICBM Coalition, “The Long Pole in the Nuclear Umbrella.” Even though we assume a potential adversary would attempt to destroy the ICBM fleet, it is likely that portions of the ICBM fleet will survive a first strike and can thus contribute to the retaliatory strike.
submarines, which could then be converted from a nuclear mission to a conventional mission as has already occurred with four other *Ohio*-class submarines. We believe this is an optimal force to maintain the United States’ second-strike capabilities, while moving the United States nuclear arsenal into a post-Cold War role. With ten submarines, the United States should deploy five to the Pacific Ocean and five to the Atlantic Ocean. This would allow for even SLBM coverage around the world and allow for a quick response and a minimal time-on-target. We recommend continuing the practice of keeping two submarines in port at any given time for maintenance. This would allow for 96 missiles (four submarines) to be deployed in each theater at any given moment. This deployment schedule allows the submarine force to be redundant, accounting for command and control failures or advances in anti-submarine capabilities. With the “loss” of two submarines, there would still be 48 missiles available to carry out a second strike. Therefore, our submarine fleet would be able to destroy up to 40 enemy targets on their own. Finally, the SLBM force should be de-MIRVed. This removes unnecessary firepower and allows for ease in counting nuclear forces for future arms control treaties.

Maintaining an SLBM force is crucial to the deterrent capabilities of the United States. The United States has long relied on SLBMs to provide the United States with a secure second-strike capability, as they are nearly invulnerable from attack. Because only two submarines would be in port at any given time, the United States would retain 80% of its nuclear submarine force after a first strike. The remaining surviving submarines would be incredibly difficult to destroy, let alone detect. Therefore, potential foes will face certain destruction if they attempt a nuclear strike against the United States. Much like ICBMs, SLBMs are invulnerable to missile defenses, allowing for an extremely high penetration rate. Because the missiles are difficult to destroy both before and after launch, the United States can downsize its SLBM force and de-MIRV the missiles without harming its capacity to carry out its promised retaliatory strike.

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5 Much like the ICBM fleet, we assume that a potential adversary would target the submarine bases in Washington and Georgia where the SSBN fleet is ported.
Future of the US Nuclear Arsenal

Life Extension and Maintenance

While this force structure will be sufficient to fulfill US strategic needs, the proper maintenance and replacement programs must be in place to ensure the United States retains an effective nuclear deterrent in the future. We recommend that the Department of Defense continue current life extension programs on both ICBM and SLBM forces since there are no planned replacements for the Minuteman III and Trident II missiles or the warheads they carry. While budget constraints may be an issue, the recommended reduction in force will also mean a reduction in modernization and maintenance costs making the life extension program politically viable.

Warhead maintenance is also crucial to maintaining an effective deterrence force. If potential adversaries doubt the operability of our nuclear force, they may be more inclined to launch a first strike. For this reason, we recommend the United States maintain 880 reserve warheads. This would allow for two reserve warheads per deployed warhead in the US arsenal. These reserve warheads would be in storage and not mated with any launch vehicle. Their sole purpose is to provide replacement warheads or parts to make sure our nuclear weapons will work if needed.

Replacements

Life extension programs can only go so far. Eventually, the United States will have to field replacements for its nuclear force. In keeping with existing US policy, no replacements will include new capabilities. The replacements should include warheads. Replacement warheads will accomplish two goals. The first is the creation of reliable weapons in the future. As previously stated, potential adversaries will only be deterred when they believe the United States has a fully functioning nuclear force. Second, by allowing for the creation of replacement warheads, the United States can strengthen its knowledge base in nuclear weapons. As nuclear weapons have become less central to US national security, there has been a decreased interest in their manufacture by future generations. The creation of new warheads would help foster the intellectual and technical base required for the maintenance of US nuclear forces.
Current life extension programs have pushed the retirement dates for ICBMs, SLBMs, and submarines past previous estimates. However, the time is approaching when the United States must take a serious look at replacements for these platforms. While various proposals have been outlined in the past, we recommend some baselines for new platforms. Again, all new missiles should have no new capabilities. The replacement ICBMs should be able to be launched from existing silos, reducing the cost and need for new infrastructure. We recommend that new SLBMs be fitted to a replacement ballistic missile submarine. While some future SSBN designs have reduced the number of missile tubes, we recommend that future SSBN planning maintain SLBM parity with our recommended force.
V. Tactical Nuclear Weapons in Europe

In accordance with our minimal deterrence posture and force reductions, we will address the future of Tactical Nuclear Weapons (TNWs) and their role in a post-Cold War world. We recommend the following:

- Remove TNWs from Germany, Belgium, and the Netherlands
- Keep TNWs in Italy and Turkey
- Assuage relations with Russia through the use of confidence building (CB) measures on the future of TNWs in Europe

TNWs, historically a part of Non-Strategic Nuclear Weapons (NSNWs), refer to the 200 US B-61 gravity bombs allegedly located in five European countries (Belgium, Germany, the Netherlands, Italy, and Turkey). Our NPR addresses only TNWs, considering that our last NPR removed the last 80 ALCMs from our arsenal. TNWs were used originally to deter the Soviet conventional threat, but today their presence deters the Russian strategic threat. This NPR seeks to move towards a new posture that maximizes the importance of TNWs, reduces their numbers, and aligns US interests towards an eventual nuclear-free world.

TNWs were not addressed in previous NPRs and were never defined. The weapons are tactical due to their location in Europe, although any nuclear weapon can be used for a strategic purpose. We seek to prevent ambiguity and increase transparency by defining TNWs as “all nuclear weapons which are not covered by current strategic arms control treaties.”

Remove TNWs from Germany, Belgium, and the Netherlands

President Obama’s 2009 Prague speech promised a future world free of nuclear weapons. The results had unintended consequences. By failing to mention NSNWs or TNWs, President Obama triggered doubts about the future of these 200 US nuclear weapons in Europe. As a

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6 Pifer. Arms Control Options for Non-Strategic Nuclear Weapons, 424.
7 Chalmers. Arms Control after START, 455.
result, the new German government committed itself to a Europe free from US nuclear weapons. Russia stated new requirements for any further weapons reductions. Therefore, in order to stem this growing tide of change, we must meet the demand of nuclear weapons reductions and remove TNWs from Germany, Belgium, and the Netherlands.

**Germany**

Germany has taken leadership of NATO’s push for disarmament. Since the end of World War II, and the radiation spillover from the Chernobyl disaster, Germany has increasingly pushed for the removal of the TNWs from their country. During the Lisbon Summit, the German government called for the removal of TNWs from Germany and increased support for the Global Zero Initiative. While Germany was unsuccessful in achieving an agreement to remove the TNWs, Germany continues to voice its support towards a nuclear free world, vowing that all short-range nuclear weapons must be destroyed and all remaining US nuclear weapons should be withdrawn from German territory.

**Belgium and Netherlands**

Belgium and the Netherlands have also pushed for removal of the TNWs from their countries. In February 2010, the foreign ministers of these countries along and Germany sent a letter to NATO calling for debate on the future of TNWS and how to move closer to a world without nuclear weapons. The Netherlands’ main concern is dealing with the buildup of weapons in nearby Kaliningrad, but otherwise wants to remove the weapons from its territory. In Belgium, the call for removal of TNWs stems from a new identity shifting towards the European Union and away from NATO.

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8 Lunn. The Role and Place of Tactical Nuclear Weapons, 236.
9 Fitzpatrick. How Europeans view TNWs, 58.
10 Roberts. Role of nuclear weapons in NATO’s deterrence and defense posture review, 387-388.
Why Remove Tactical Nuclear Weapons From Northwest Europe?

Of the approximately 200 total TNWs stationed in Europe, only 30-60 are deployed to Germany, Belgium, and the Netherlands. Removing the TNWs from the countries that do not want them will strengthen our relationships with these countries and show real steps towards disarmament.

Additionally, the 2010 NPR declared that the new dual-capable F-35, which can deliver both conventional and nuclear capabilities, will be operational by 2017. The dual-capable aircraft (DCA) will continue to use the B61 gravity bomb which extends the nuclear umbrella to NATO and allies. Germany and Belgium will not support DCA in 2017 and therefore will not be able to support the nuclear mission. The Netherlands has stated its intention to purchase the DCA, but will not make a decision until 2015. By unilaterally removing TNWs from the Netherlands, we hope to increase good-faith efforts with Russia that will result in the removal of Russian TNWs from Kaliningrad. Therefore we are confident that removing the TNWs from Germany, Belgium, and the Netherlands will continue our move away from the Cold War mentality and towards a new posture promoting disarmament.

Keep TNWs in Italy and Turkey

NATO’s Article 5 clause posits the United States commitment to NATO and the security of its allies. The transatlantic alliance remains stalwart in its resolve to prevent a nuclear attack through extended deterrence, and the presence of TNW is evidence of our commitment to NATO. While our NPR calls for the removal of TNWs from three of the five states, we believe that we must keep TNWs in Italy and Turkey to provide extended deterrence to our eastern European allies.

Italy

Italy, long known for its solidarity with NATO, enjoys playing host to the US TNWs. Hosting the TNWs gives Italy more influence within NATO, leaving it less dependent on the United Kingdom and France. Although the country’s population remains anti-nuclear, the Italian

\[\text{References}\]

11 Neuneck. European and German perspectives, 269.
12 Larsen. The Role of Non-Strategic Nuclear Weapons, 341.
government enjoys the responsibility and prestige that comes with hosting the TNWs. While Italy considers the weapons to be an impediment towards nuclear disarmament, Italy is willing to postpone the remove of the TNWs to keep cohesion in NATO.\textsuperscript{13}

\textit{Turkey}

Turkey plays the most important strategic role for the future of TNWs in Europe. As the threat of nuclear attack shifted from Russia to Turkey’s regional neighbors, the need to keep and maintain our TNWs increased. Turkey’s regional link to the Middle East and Europe gives NATO extended deterrence from potential threats in the Middle East and western Asia. The presence of TNWs puts Turkey in a stronger position to mediate between Western and Middle Eastern states.\textsuperscript{14} Turkey prefers to continue its hosting duties, which prevent them from needing to proliferate to defend their own interests.\textsuperscript{15}

\textbf{Why Keep TNWs in Italy and Turkey?}

Turkey and Italy, the countries that host the largest number of our TNWs (120-140), did not write to NATO asking for the removal of their TNWs. In fact, both Turkey and Italy have agreed to buy some variant of the stealthy F-35 in the future. Keeping TNWs in the countries that actually want them and removing them from the countries that do not want them maintains our extended deterrence to our central and eastern European allies.

During the Cold War, our central and eastern European allies moved towards NATO and away from acquiring nuclear weapons because of the presence of our TNWs. Our eastern European allies still fear Russian nuclear capabilities. Maintaining our extended deterrence allays that fear and prevents other potential and existing threats. Removing our weapons in Turkey and Italy will only encourage eastern European states to proliferate their own weapons to protect themselves from nuclear threats. Therefore removing our weapons from Germany, Belgium, and the Netherlands is the first step in a logical process towards disarmament; however, by keeping

\textsuperscript{13} Foradori. European Perspectives, 289.
\textsuperscript{14} Neuneck. European and German perspectives, 268-9.
\textsuperscript{15} Fitzpatrick. How Europeans view TNWs, 61.
TNWs in Italy and Turkey we continue to provide extended deterrence to our allies in central and eastern Europe.

**Assuage Russian Concerns Through Confidence Building Measures on the Future of TNWs in Europe**

Previous NPRs have neglected any consideration of the future of TNWs. However, President Obama’s Prague speech bolstered anti-nuclear movements in Europe and increased Russian demands for dealing with TNWs as a prerequisite to any further weapons reductions. The United States and Russia have not discussed TNWs since 1991, as part of the Presidential Nuclear Initiatives in which Russia removed its TNWs from the Warsaw Pact countries. However, the Initiatives were not sustainable as the agreement was not binding and entailed no verification provisions. Meanwhile, the US unilaterally reduced its TNW presence to five countries. Russia has reduced overall TNW stockpiles, but has also built up a stockpile of TNWs in Kaliningrad, threatening our northern NATO allies. The re-emergence of Russia and its fears of TNWs represent a return to Cold War thinking that must be avoided. Therefore, we recommend a series of non-binding, confidence building measures that will address TNWs and their role with regards to Russia in the immediate future:

**Defining TNWs**

Earlier in this NPR, we defined TNWs as “all nuclear weapons which are not covered by strategic arms control treaties.” By defining these weapons, we avoid ambiguity and clarify our strategic dialogue with Russia.

**Creating a joint-TNW exercise with Russia**

While not a strategic threat to the United States, nuclear terrorism is still a concern. We acknowledge that TNWs have a higher chance of falling into terrorists’ hands since they are less secure and easier to transport than their strategic nuclear counterparts. To create more confidence

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16 Neuneck. European and German perspectives, 268.
in TNW security, the US and Russia should create a joint-exercise that simulates a terrorist acquiring a TNW and practices the means to recover that TNW.

**Fostering greater transparency with Russia**

Uncertainty surrounding the number and disposition of TNWs presents one of the largest concerns between the US and Russia. Public information states that the US has approximately 200 deployed and Russia has an estimated 2,000 deployed. However, knowing exactly where and how many weapons each side possesses creates stability and will improve relations with Russia.

**Placing an upper limit on additional TNWs deployed**

Declaring that the United States will not deploy further TNWs to Europe will express our belief to Russia that TNWs are a Cold War relic and that we are committed to disarmament and future cooperation with Russia to enhance nuclear security.
VI. Improving Nuclear Security and Stability through Multilateral Agreements and Treaties

To fully ensure the stability of nuclear weapons and decrease the possibility that they will be used, weapons reductions and posture changes must be coupled with effective and verifiable multilateral and bilateral agreements. This approach serves two purposes: one, it will lock-in the reductions already set by the United States and will create an incentive for other states to reduce with us; two, it will help to prevent the danger of non-state actors obtaining and using nuclear weapons or nuclear material. We advocate the following measures:

The Comprehensive Test Ban Treaty (CTBT)

Due to improvements in monitoring capabilities and the United States’ ability through the Stockpile Stewardship Program to guarantee a safe and durable nuclear arsenal, the United States should submit the CTBT for Senate ratification at the earliest possible date. The CTBT will prevent other states from testing and improving their nuclear arsenals, while maintaining the United States’ advantage in nuclear weapons technology. Ratifying the CTBT creates an international norm that aligns with worldwide nonproliferation efforts. The United States should continue to support and bolster the capabilities of the Comprehensive Test Ban Treaty Organization (CTBTO) and indigenous National Technical Means (NTM) to detect nuclear explosions. If a state disregards the CTBT and detonates a nuclear weapon, the United States and the international community will react accordingly.

The combination of the CTBTO’s and the United States’ NTM make detecting even the smallest nuclear explosion possible. An evasive tester would have to limit a nuclear explosion at under 1kt to reduce detection, which would be difficult to engineer without first requiring larger tests to validate a design concept.\(^\text{17}\)

Reduce the Dangers of Proliferation and Loose Nuclear Material Through the Fissile Material Cut-Off Treaty (FMCT)

\(^{17}\) National Research Council. The Comprehensive Nuclear Test Ban Treaty, 6.
The United States should pursue a Fissile Materials Cut-Off Treaty as soon as possible. Such a treaty would first cap the limit on fissile materials and then begin to reduce fissile material to a safer and more manageable level. Currently, the Conference on Disarmament (CD) is charged with negotiating the FMCT. However, because the CD has failed to reach unanimous consent, negotiations have stalled. The United States should unshackle the CD from the whims of any one state by either changing the unanimous consent rule or by taking negotiations out of the CD entirely. The United States’ main objective in future FMCT negotiations should be to end the production of fissile materials and establish a state-by-state cap that is reduced as states remove material from that cap. After negotiating and signing this treaty, the United States should pursue a treaty that reduces the amount of fissile material that each state is allowed to maintain over time. However, this treaty should allow the United States to maintain fissile material for stockpile stewardship and maintenance.

Future Treaties to Reduce Nuclear Weapons, Increase Stability, and Reduce the Possibility of Nuclear War

*De-MIRVing*

The United States and other nuclear weapons states should sign an agreement banning the use of MIRVed nuclear weapon delivery systems. This agreement will enhance stability by reducing incentives for a first strike. MIRVed weapons decrease strategic stability due to their favorable exchange ratio in that more weapons will be destroyed in an attack than used in it. Therefore, de-MIRVing will greatly reduce the number of total and deployed warheads, decreasing the possibility of nuclear war and increasing the cost for smaller nuclear weapons states, slowing the growth of nuclear arsenals.

*Mobile Missile Treaty*

The United States should formulate a multilateral treaty with the other nuclear weapons states banning the production and use of strategic nuclear weapons launched by road or otherwise mobile ICBMs.
Mobile missiles decrease stability because they are inherently difficult to detect and target. They do not require large underground silos, reducing the costs associated with expanding nuclear arsenals. These missiles’ non-fixed and exposed position increases the chances that they will be used.

Total Warhead Treaty

The United States should pursue a bilateral treaty with Russia and later with the rest of the nuclear weapons states to set a limit of deployed and non-deployed nuclear warheads. We recommend that the United States pursue a treaty that includes both deployed and non-deployed weapons in order to prevent any state from having a numerical advantage. This treaty should no longer count delivery systems and should greatly reduce the complexity of verification regimes. By not counting delivery systems, Russia, the United States, and any future states party to the treaty will have greater freedom to determine their own force composition.

Tactical Nuclear Weapons

The United States is dedicated to reducing our overall reliance on nuclear weapons while continuing to provide extended deterrence to our European allies. However, to increase stability and reduce the possibility for use, the United States should formulate a treaty with Russia that caps the current deployment of tactical nuclear weapons. In the future, the two parties should expand the treaty to the other nuclear weapons states. This treaty will further the United States’ end goal of enhancing deterrence and stability by creating a level playing field between all nuclear weapons states.
VII. Conclusion

The stated policy of the United States has been to work toward a world of total nuclear disarmament. However, we acknowledge the necessity of a pragmatic assessment of current threats facing the United States and the need for a corresponding nuclear posture that takes these threats into account. The US must be prepared to assess and respond to evolving 21st century WMD threats. In order to maintain an effective nuclear deterrent, we recommend that the US adopt a minimal deterrence framework and NFU policy with corresponding reductions in our strategic nuclear force. Moreover, to further bolster US nonproliferation efforts, we advocate alterations to our TNW presence in Europe and encourage bilateral and multilateral agreements that will strengthen nuclear safeguards and security. Our NPR de-emphasizes nuclear weapons and transforms a Cold War-era nuclear posture into one better suited to address today’s strategic environment.
Bibliography


