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Summaries of the 1994, 2001, and 2010 Nuclear Posture Reviews

By:
Kurt Guthe
Director, Strategic Studies
National Institute for Public Policy

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Introduction

Since the end of the Cold War, three overall reviews of the U.S. nuclear posture have been conducted by the executive branch. One was done in 1994 by the Clinton administration, another in 2001 by the Bush administration, and the third in 2010 by the Obama administration. If history is any guide, the next administration will perform its own review. Examining the results of the three previous efforts can provide useful background for the prospective fourth review. Summaries of the past Nuclear Posture Reviews (NPRs) can be used to answer questions about the international conditions taken into account, the key problems addressed, the objectives set for the United States, and the ways and means recommended to achieve those ends. Careful comparison among the summaries can reveal significant changes and continuities from one review to the next. Perhaps most important, reviewing the reviews can aid thinking about what a future NPR should aim to accomplish.

This working paper offers summaries of the NPRs done to date. Each summary is intended to present the findings of its related NPR in an accurate, if abbreviated, manner. Quotations are frequently used to let those responsible for the reviews speak for themselves. Short reference notes that appear in brackets give the sources for quotations. A full list of references, virtually all of which are official sources, can be found at the end of the paper.

The summaries follow a common format to facilitate comparisons, although, aside from one parenthetical observation, no comparisons are made here. The categories for the common format are: 1) security environment; 2) policy and strategy; 3) forces and related programs; 4) command and control; 5) safety and security; 6) defense-industrial infrastructure; and 7) arms control.

The paper originally was prepared as background information for a small group engaged in a broader study effort currently under way at the National Institute for Public Policy. Its appearance as something between an outline and a typical paper reflects its origin. It may be of interest to a wider audience, and thus is being issued as part of the National Institute's Information Series.



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1994 Nuclear Posture Review

Security Environment

- --"Although the security environment has changed dramatically since the end of the Cold War, there is still great uncertainty about the future, particularly in the Newly Independent States where the process of denuclearization and reduction is underway but by no means completed." ['95 DoD Annual Report, 83]
 - -U.S.-Russian relations are improving, but the possible failure of political and economic reforms in Russia could bring a hostile authoritarian regime to power.
 - -The Russian conventional threat to Europe has decreased, but a large Russian nuclear arsenal (approximately 25,000 weapons) remains.
 - -The inadequate safety and security of Russian nuclear weapons pose the dangers of unauthorized use or theft.
- --The increased threats to the U.S. and its allies from WMD proliferation and regional conflicts present greater risks than nuclear-armed Russia.
- --Nuclear force planning is taking place in the context of rapid and substantial U.S. nuclear reductions that have been ongoing since 1988:
 - -active stockpile \downarrow 59%; deployed strategic warheads \downarrow 47%; nonstrategic weapons \downarrow 90%; weapons storage locations \downarrow 75+%;
 - -no weapons deployed with U.S. ground forces; no nonstrategic weapons deployed at sea;
 - -over 15 nuclear weapons system types eliminated, cut back, or never deployed;
 - -no heavy bombers on day-to-day alert; fewer SSBNs on alert (more on modified alert); no ICBMs or SLBMs targeted on any country day-to-day; command post structure reduced and operations tempo lowered for the airborne element (NEACP, TACAMO, ABNCP);
 - -primary duty nuclear personnel (those with nuclear access or control) \(\preceq 70\%; \)
 - -nuclear program spending \(\frac{1}{2} 70\%; \) and



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- -"significant reduction...in the target base as a result of the change in the circumstances after the Cold War." [DEPSECDEF Deutch, SASC testimony, 22 Sep 94, 8]
- -- Constraints on defense spending limit funding for nuclear forces.

Policy and Strategy

- --The U.S. will pursue a "lead but hedge" strategy, which will create the conditions that lead to further nuclear reductions and a "safer world," but hedge against the unlikely reversal of Russian reforms, the return of a hostile authoritarian regime in Moscow, the end of progress in nuclear arms control, and a Russian nuclear buildup.
- --Post-Cold War conditions mean nuclear weapons play a smaller role in U.S. security than at any time since the beginning of the nuclear age.
 - -"U.S. nuclear weapons for years were justified by the potential for a massive conventional attack by the Warsaw Pact through the Fulda Gap which would overwhelm NATO conventional forces. ...No equivalent threat to American vital interests can be identified in the post-Cold War era, and for very few of the existing threats are nuclear weapons appropriate responses." ['95 DoD Annual Report, 84-85]
 - -No new nuclear missions or scenarios are envisioned.
 - -The U.S. will not use nuclear weapons against a nonnuclear state party to the NPT, except in the case of an attack on the U.S., its forces, or its allies by such a state in league with a nuclear state. (This is a reaffirmation of the 1978 U.S. negative security assurance.)
 - -Conventional responses to the threat or use of WMD will be pursued, without excluding a deterrent role for nuclear weapons in this regard.
- --Deterrence of a *hostile* Russia is "the most stressing case" for U.S. nuclear forces. ['95 DoD Annual Report, 87]
- --U.S. nuclear forces, including a strategic reserve force, may be needed to deter "other potentially hostile powers." (These other powers are not identified.) ['95 DoD Annual Report, 87; DEPSECDEF Deutch, HFAC testimony, 5 Oct 94, 36]
- --Strategic nuclear forces will be of "sufficient size and capability" to "deter any future hostile foreign leadership with access to strategic nuclear forces from acting against our vital interests



and to convince it that seeking a nuclear advantage is futile," by "hold[ing] at risk a broad range of assets valued by such political and military leaders." [PDD/NSC-30, 21 Sep 94, 2]

- -The nuclear response options needed are "not the massive kind of SIOP options we are so familiar with from the Cold War, but include many options to give the President…a much richer menu of options consistent with a complete change in the Cold War environment and contributing importantly to deterrence by the credibility of these options." [DEPSECDEF Deutch, SASC testimony, 22 Sep 94, 13]
- -- The U.S. will continue to extend its nuclear deterrent for the defense of allied countries.
 - -"The United States does not have a purely national deterrent posture; it extends the deterrent protection of its nuclear arsenal to its allies. A very progressive aspect of U.S. nuclear posture is that it is, in part, an international nuclear posture. The NPR strongly supports continued commitment to NATO and Pacific allies." ['95 DoD Annual Report, 83]
 - -Nonstrategic nuclear forces are an important part of this commitment to allied security.

Forces and Related Programs

- --Post-Cold War circumstances permit a much smaller nuclear arsenal.
- --Reductions in U.S. forces and programs set an example for other nuclear powers, notably Russia, to follow (although the '95 DoD Annual Report also says, "Potential proliferators are more likely to be driven by concerns about neighbors' capabilities or desire for prestige or regional hegemony than by decisions America makes about its nuclear arsenal." [p. 85]).
- --Strategic nuclear
 - -The force structure has flexibility to reconstitute (hedge) or further reduce (lead).
 - -The triad is maintained as a hedge against technical failures or adversary technological breakthroughs that endanger a triad leg (SSBNs, ICBMs, or bombers), and because of the useful attributes of each leg.

SSBNs will carry roughly half of U.S. accountable warheads under START II; "a significant portion" of the force "is at sea at any given time," where the SSBNs are "virtually undetectable," making them "the most survivable and enduring element" of the



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triad; and D5 SLBMs have the accuracy, range, and payload to "hold at risk almost the entire range of strategic targets."

ICBMs, with their high alert rate and short time of flight, provide a "prompt-response capability"; they have the "ability to strike selectively"; three-warhead Minuteman III missiles downloaded to one warhead apiece offer a "significant upload hedge"; and downloaded Minuteman IIIs "also increase the cost ratio of an adversary attempting a first strike."

Bombers are survivable when on alert at air bases; they "provide a hedge against a catastrophic failure of either the SSBN or ICBM leg"; and, because of their dual capability, they "can help in conventional contingencies." ['95 DoD Annual Report, 88; DEPSECDEF Deutch, HFAC testimony, 5 Oct 94, 56]

-The planned force structure is consistent with START II limits (3,000-3,500 total deployed strategic nuclear warheads; no more than 1,700-1,750 SLBM warheads; and no MIRVed ICBMs).

14 Trident SSBNs (down from 18), each with 24 D5 SLBMs (D5s replace C4s on 4 SSBNs), and 5 RVs per SLBM; SSBN fleet size maintains two-ocean basing (Bangor, WA and Kings Bay, GA); the option of reducing to 10 SSBNs was rejected; the future of the 4 decommissioned SSBNs is not yet decided.

500/450 single-warhead Minuteman III ICBMs at three wings (the partially declassified PDD/NSC-30 says "or 350/300 missiles" at two wings); the option of eliminating ICBMs was rejected.

66 B-52H cruise missile-armed bombers (down from 94 B-52Hs previously planned); 20 B-2 bombers with gravity bombs (no more B-2s are needed for nuclear missions); all 94 B-1B bombers are reoriented to a nonnuclear role; the conventional role of bombers is emphasized.

-The hedge comprises: 1) the nuclear weapons complex and other relevant parts of the defense-industrial infrastructure; 2) "where possible in near term, maintenance of platforms" [DEPSECDEF Deutch, briefing slide, HFAC testimony, 5 Oct 94, 59]; and 3) a stockpile able to support uploading of additional warheads on SLBMs, ICBMs, and bombers. "3" is emphasized in DoD descriptions of the hedge.

-No new strategic nuclear systems are under development or planned.



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-No change in the existing readiness and alert status of the nuclear forces is made.

-FY92-FY01 strategic forces (Major Force Program 1) total obligational authority in billions of FY17 constant dollars: FY92: 26.4 FY93: 21.6 FY94: 15.3 FY95: 12.8 FY96: 12.0 FY97: 9.8 FY98: 10.3 FY99: 10.2 FY00: 10.2 FY01: 9.9 [FY17 DoD Green Book, 103-104]

--Nonstrategic nuclear

- -The "theater presence" of nonstrategic nuclear forces "reinforce[s] resolve, commitment through visibility" and "makes [the] nuclear weapons role concrete." "Rapidly deployable" nonstrategic forces can "respond to [an] emergent crisis" and "react early or late." These forces have the "ability to hold at risk key targets" and to carry out proportionate responses. Their "low profile" "support[s] the nonproliferation regime." [DEPSECDEF Deutch, briefing slide, SASC testimony, 22 Sep 94, 16]
- -Dual-capable aircraft are kept at existing strength in CONUS and Europe; the capability to deploy TLAM-N on SSNs is retained; and the planned nonstrategic nuclear force supports alliance commitments.
- -The capability to deploy nuclear weapons on carrier-based aircraft and surface ships is eliminated; this, it is hoped, can encourage Russia to follow suit.
- -The options of a "more robust [nonstrategic nuclear force] structure" or elimination of all nonstrategic nuclear forces are rejected. ['95 DoD Annual Report, 89]
- -No new delivery systems are under development or planned.

--Nuclear warheads

-No new-design nuclear warheads are under development or planned.

-- Missile defense

-"The NPR did not look at the ballistic missile defense program, because that was an area that was carefully and extensively studied in the Bottom-Up Review." [DEPSECDEF Deutch, SASC testimony, 22 Sep 94, 46]



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Command and Control

- --"Adequate funding of critical programs" will be continued.
- --Remedies for deficiencies in the communication system and in tactical warning/attack assessment capabilities will be pursued.
- --Intelligence systems providing "timely information and threat characterization and warning indicators" will be supported.
- --"Programs for assured NCA survivability and connectivity" will continue to be supported. ['95 DoD Annual Report, 89-90; PDD/NSC-30, 21 Sep 94, 2]

Safety and Security

- -- The highest standards and U.S. leadership in nuclear safety and control will be maintained.
- --The equipping of Trident SSBNs with coded locking devices will be accelerated and the devices on Minuteman III ICBMs and B-52H bombers will be upgraded.
- --Minuteman III W62 warheads will be retired for lack of certain safety features.
- -- The number of response teams for nuclear accidents and incidents will be "optimized." [DEPSECDEF Deutch, briefing slide, HFAC testimony, 5 Oct 94, 70]
- --A regular nuclear procedures exercise program in which senior defense officials and military leaders participate will be reestablished.
- -- The U.S. will encourage Russia to take corresponding actions to improve nuclear safety and security.

Defense-Industrial Infrastructure

- -- The smaller post-Cold War force and the absence of nuclear testing present challenges in sustaining the infrastructure supporting that force.
- --Measures that help sustain the nuclear-related defense-industrial base include: continued production of D5 SLBMs to replace C4 missiles in four Trident SSBNs; replacement of guidance



systems and remanufacture of motors for Minuteman III ICBMs; and additional funds allocated to support the base for guidance systems and RVs.

- -Work on stealth (e.g., for the F-22) and on commercial aircraft makes funding to support the bomber industrial base unnecessary.
- --Sustaining the nuclear weapons infrastructure involves: developing a stockpile surveillance engineering base; maintaining the capability to design, fabricate (or refabricate), and certify existing nuclear weapon types and new warheads; maintaining an S&T base to support nuclear weapons; and DoD and DOE making a prompt decision on a source and production program for the tritium supply to support nuclear weapons.
 - -No production is required for new-design nuclear warheads.

Arms Control

- --START II ratification, NPT indefinite extension, and CTBT negotiation and ratification are endorsed.
- --Future options are considered for further and faster reductions in strategic arms: accelerated implementation of START I and II; negotiation of a follow-on agreement to START II; and unilateral U.S. cuts.
- --Strong interest is expressed in reducing the Russian advantage in nonstrategic nuclear weapons.
- --In addition to treaties, "unilateral and informal bilateral reductions in nuclear weapons play a much greater role in U.S. security." ['95 DoD Annual Report, 10]
- --Initiatives considered to address the "more urgent issues" of the safety and security of nuclear weapons and materials include removing ICBM warheads, stockpile data exchanges, acceleration of warhead dismantlements, and storage of Russian weapons or materials under international custody. ['95 DoD Annual Report, 91; DEPSECDEF Deutch, SASC testimony, 22 Sep 94, 24; DEPSECDEF Deutch, briefing slide, HFAC testimony, 5 Oct 94, 73]



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2001 Nuclear Posture Review

Security Environment

- --In comparison to the Cold War, the security environment is more dynamic and unpredictable.
 - -The U.S. confronts a range of potential adversaries, including hostile states (regional powers and latent peer competitors), possible coalitions of opposing states, and nonstate actors.
 - -The leaders of adversary states "generally are subject to few if any institutional restraints," their "decision-making processes are obscure," and their "behavior is often unpredictable," all of which makes the effectiveness of deterrence more uncertain. ['01 NPR, 6]
 - -Adversaries could be armed with WMD and ballistic missiles, which could threaten the U.S., its allies and friends, and its forward-deployed forces.
 - -Multiple crises and conflicts could arise, some of which could be unexpected.
 - -Under these conditions, "the probability of surprise and ubiquity of uncertainty are dominant strategic considerations for the U.S." ['02 DoD Annual Report, 84]
- -- A number of countries represent potential adversaries.
 - -Unlike the Soviet Union, Russia is not an enemy. The U.S. seeks a "new strategic framework" with Russia, involving greater cooperation in the security, diplomatic, economic, and other realms.

While Russia is not now a threat, nor is likely to become one in the future, the possibility remains that Russia could change for the worse. Consequently, the U.S. must "determine its nuclear force requirements at a time when a major nuclear power is neither a traditional ally nor an implacable foe." ['01 NPR, 6]

- -The potential of China to become a hostile nuclear-armed power is also a source of concern. [SECDEF Rumsfeld, SFRC testimony, 17 Jul 02, 111; USD(P) Feith, SASC testimony, 14 Feb 02, 354; NIPP, Planning the Future Nuclear Force, v. 2, C-3]
- -"We also in [the NPR] direct the Pentagon to take note of and consider possible threats to the United States from those nations that are seeking to acquire weapons of mass destruction. And the report specifically cited, as the press has reported, Iraq, Iran, Syria, Libya, North Korea." [VP Cheney, media availability in London, White House transcript, 11 Mar 02]



- -- There are three general types of contingencies for which U.S. nuclear forces should be sized.
 - -Immediate: "well-recognized, current dangers," such as "an attack using WMD on U.S. forces or a key friend or ally in the Middle East." No immediate contingency involves Russia.
 - -Potential: "plausible, but not immediate, dangers" that can be anticipated and for which there is adequate warning. Examples include "the emergence of a new, hostile military coalition against the United States or its allies in which one or more members possess WMD and the means of delivery," and the "re-emergence of a hostile peer competitor."
 - -Unexpected: "sudden and unpredicted security challenges," for example, "a sudden regime change by which an existing nuclear arsenal comes into the hands of a new, hostile leadership group," and "an adversary's surprise acquisition of WMD capabilities." ['02 DoD Annual Report, 88-89]

Policy and Strategy

- --The range of possible opponents, potential conflicts, and uncertainties confronting the U.S. in the post-Cold War security environment requires a capabilities- rather than a threat-based approach to defense planning.
 - -In contrast to threat-based planning, capabilities-based planning "focuses more on how an adversary might fight and the means it might use than who the adversary might be and where a war might occur." ['01 NPR, 8] (The capabilities-based approach is carried over from the 2001 Quadrennial Defense Review of overall U.S. defense strategy and military forces.)
- --Under the capabilities-based approach, the nuclear triad of SSBNs, ICBMs, and heavy bombers, along with the nonstrategic nuclear forces, will become part of a "New Triad," a broader, more diverse portfolio of strategic capabilities comprising nuclear and nonnuclear strike forces, active and passive defenses, and the related R&D and industrial infrastructure. Command and control, planning, and intelligence capabilities tie together the offensive, defensive, and infrastructure elements of the New Triad.
 - -The New Triad will offer additional and more varied options for countering threats and responding to aggression, including response options developed during the course of a crisis.



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- --New Triad capabilities, including the nuclear forces, will be shaped and evaluated with reference to four defense policy goals: assure allies and friendly countries of U.S. security commitments; dissuade adversaries from competing militarily with the U.S.; deter coercion or attack against the U.S. or its allies and friends; and decisively defeat an enemy while defending the U.S. and its security partners. (These goals also are from the 2001 QDR.)
- --Within the New Triad, nuclear forces "will continue to play a critical role in the defense capabilities of the United States, its allies and friends. They provide credible military options to deter a wide range of threats, including WMD and large-scale conventional military force. These nuclear capabilities possess unique properties that give the United States options to hold at risk targets important to achieve strategic and political objectives." ['01 NPR, 7]
 - -"The United States must retain sufficient strategic nuclear forces to deter any hostile foreign leadership from using weapons of mass destruction against U.S. vital interests." ['01 NPR, 15] (This is a variation on a similar statement associated with the 1994 NPR.)

Forces and Related Programs

--Strategic nuclear

-The changed relationship with Russia—notably that it no longer is an immediate threat—along with anticipated improvements in nonnuclear offensive and defensive capabilities, give the U.S. the opportunity to reduce both its dependence on nuclear weapons and the number of operationally deployed warheads in its nuclear stockpile.

The capabilities-based approach to force planning will provide "a credible deterrent at the lowest level of nuclear weapons consistent with U.S. and allied security" [SECDEF Rumsfeld, '01 NPR, ii], the goal set by President Bush in a May 2001 NDU speech.

-Between 2002 and the end of 2012, U.S. operationally deployed strategic nuclear warheads (ODSNWs) will be reduced to a range of 1,700-2,200, from a level of 6,000 START-accountable warheads.

ODSNWs are RVs on ICBMs in their launchers, RVs on SLBMs in their SSBN launch tubes, and nuclear weapons on heavy bombers or stored at bomber bases.

The 1,700-2,200 range reflects the inability to predict future nuclear force requirements with precision and allows flexibility for adjusting to changes in the security environment.



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-To support the four QDR/NPR defense policy goals, the ODSNW level and the associated delivery vehicles take into account:

"an assurance-related requirement for U.S. nuclear forces that they be judged second to none;

the force structure needed to provide options to halt the drawdown or re-deployment of warheads to enforce the goals of deterrence and dissuasion;

the number and types of targets to be held at risk for deterrence; and

the forces needed to defeat adversaries across a spectrum of conflicts and scenarios." ['01 NPR, 15-16]

-The decrease in ODSNWs will be accomplished through the withdrawal of delivery platforms from nuclear service and the downloading of warheads from remaining platforms.

50 Peacekeeper ICBMs will be retired (silos retained), with their modern W87 warheads replacing W62 warheads on certain Minuteman III ICBMs configured to carry single RVs.

4 Trident SSBNs will be removed from nuclear service.

The capability to reconvert the conventional-only B-1B bombers to nuclear missions will be eliminated.

- -The force structure retained comprises:
 - 14 Trident SSBNs, all with D5 SLBMs, operating from two bases;
 - 500 Minuteman III ICBMs, some number with single RVs; and
 - 76 B-52H bombers with cruise missiles and 21 B-2 bombers with gravity bombs.
- -To achieve the 1,700-2,200 ODSNW level, an appropriate number of warheads will be downloaded from retained ballistic missiles and removed from storage areas at bomber bases on a schedule subject to periodic review, including assessment of changes in both the security environment and the development of New Triad nonnuclear elements.



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-Some downloaded warheads will be retired and dismantled, but a significant number (not determined at the time the NPR was issued) will be kept in the nuclear stockpile as part of a responsive capability.

While the operationally deployed force, which is ready on short notice, is intended to be sufficient for immediate and unexpected contingencies, the responsive capability augments that force to address potential contingencies (see the three contingency types discussed in the Policy and Strategy section) and, like the operationally deployed force, serves the defense policy goals of assure, dissuade, deter, and defeat.

Until a responsive defense-industrial infrastructure is in place, one that, among other things, can produce additional or new types of warheads and delivery means, the responsive capability will be limited to the ability to upload stored warheads on the ballistic missiles and bombers of the operationally deployed force.

The size and composition of the NPR-endorsed operationally deployed force reflect "the need to preserve force structure that can be reconstituted to provide a responsive capability for dissuasion and deterrence of potential contingencies." [USD(P) Feith, SASC testimony, 14 Feb 02, 379]

In general, uploading will take weeks for bombers, months for SLBMs, and a few years for ICBMs. The NPR implementation plan "directs [the] services to retain sufficient warheads and support equipment to respond to unforeseen events and be able to augment (upload) nuclear warheads," and "provides specific timeliness goals for [the] services to plan augmentation capabilities." [DoD, NPR Implementation Plan, Feb 03, unnumbered last page]

-De-alerting proposals intended to reduce the risk of accidental or unauthorized launches were examined, as required by Congress, but no change in the launch readiness of nuclear forces is announced.

The New Triad "will provide a spectrum of defensive and non-nuclear response options to an accidental or unauthorized launch, allowing the United States to tailor an appropriate response to the specific event and to limit the danger of escalation." ['01 NPR, 54]

-Life extension, sustainment, and upgrade programs for existing SLBMs, ICBMs, bombers and bomber-delivered cruise missiles will be continued, and alternatives for follow-on ballistic missiles, SSBNs, and bombers will be studied.



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-FY00-FY09 strategic forces (Major Force Program 1) total obligational authority in billions of constant FY17 dollars: FY00: 10.2 FY01: 9.9 FY02: 11.4 FY03: 11.0 FY04: 11.5 FY05: 11.3 FY06: 11.8 FY07: 11.9 FY08: 12.2 FY09: 11.2 [FY17 DoD Green Book, 104]

--Nonstrategic nuclear

- -CONUS- and Europe-based dual-capable aircraft are maintained.
- -Existing nuclear weapons storage sites in Europe will be maintained through FY04.
- -"DoD is considering options and their associated costs to either extend the life of the dual-capable F-16C/Ds and F-15Es or make a block upgrade to the Joint Strike Fighter (JSF) aircraft." ['01 NPR, 44]
- -TLAM-Ns, removed from ships and SSNs after the 1991 Presidential Nuclear Initiative, will remain in a "reserve status." ['02 DoD Annual Report, 86]

--Nuclear warheads

- -The decision to retire the W62 (Minuteman III) warhead by 2009 is reaffirmed.
- -The stockpile refurbishment plan for the W80 (ALCM, ACM, and TLAM-N warhead), W76 (Trident D5 warhead), and B61 (bomber and DCA warhead) is reaffirmed.
- -The "exact quantities and readiness requirements" of the nonstrategic warheads in the nuclear stockpile "are still to be determined." [NNSA Administrator Gordon, SASC testimony, 14 Feb 02, 338]
- -While there are no recommendations to develop new nuclear weapons, the U.S. "must...have the capability to respond to changes in the strategic environment, if need be, by being able to reconstitute larger force levels with safe and reliable warheads and develop, produce, and certify new or modified nuclear warheads to meet new military requirements." [NNSA Administrator Gordon, SASC testimony, 14 Feb 02, 341]

--Nonnuclear strike

-"Non-nuclear strike capabilities include advanced conventional weapons systems (long-range, precision-guided weapons and associated delivery means), offensive information operations, and special operations forces (the latter can be used to hunt for mobile missiles or operate against WMD facilities)." ['01 NPR, 10]



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- -The four Trident SSBNs removed from nuclear service will be modified to become SSGNs armed with conventional cruise missiles.
- -Proposed for funding in FY03 are programs for "a fast-response, precision-impact, conventional penetrator for hard and deeply buried targets," "modification of a strategic ballistic missile system to enable the deployment of a non-nuclear payload," and "concept development...to explore options for advanced strike systems." [USD(P) Feith, SASC testimony, 14 Feb 02, 329]

--Defenses

- -"Active defenses include ballistic missile defense and air defense. Passive defenses include measures that reduce vulnerability through mobility, dispersal, redundancy, deception, concealment, and hardening; warn of imminent attack and support consequence management activities that mitigate the damage caused by WMD use; and protect against attacks on critical information systems." ['01 NPR, 10]
- -Proposed for funding in FY03 is "an aggressive R&D program for ballistic missile defense" to evaluate "a spectrum of technologies and deployment options." [USD(P) Feith, SASC testimony, 14 Feb 02, 329]

Command and Control

- --"The New Triad is bound together by enhanced command and control (C2) and intelligence systems. ...Improved command and control, planning and intelligence can increase the effectiveness of the elements of the New Triad, both separately and in combination." ['01 NPR, 15]
- --Efforts are underway to "develop secure, wide-band communications between national decision makers, command centers and operational forces"; "develop advanced technology programs for intelligence, e.g., for Hard and Deeply Buried Targets and mobile targets"; and "upgrade STRATCOM's capability for adaptive planning" to enable "rapid, flexible crisis response that integrates nuclear, conventional, and non-kinetic weapons into our war plans." [ASD(ISP) Crouch, briefing slide, 9 Jan 02 briefing; CINCSTRAT ADM Ellis, SASC testimony, 14 Feb 02, 384]

Safety and Security

--The topic of the safety and security of nuclear weapons, U.S. and foreign, received less attention in the 2001 NPR than in the previous review. A federal advisory committee established



by DoD to perform an independent review of "all activities involved in maintaining the highest standards of nuclear weapons safety, security, control, and reliability" had not completed its assessment in time to inform the work for the NPR. ['01 NPR, 26]

Defense-Industrial Infrastructure

- --"The R&D and industrial infrastructure includes the research facilities, manufacturing capacity, and skilled personnel needed to produce, sustain, and modernize the elements of the New Triad as well as the supporting intelligence and command and control capabilities." ['01 NPR, 10]
- --The infrastructure is a central element of the New Triad. "In particular, a modern, responsive nuclear weapons sector is indispensable, especially as the size of the operationally deployed nuclear arsenal is reduced." ['01 NPR, 10-11]
- --The "technology base and production readiness infrastructure of both DoD and NNSA must be modernized so that the United States will be able to adjust to rapidly changing situations." ['01 NPR, 26]
- --The DOD effort to improve the infrastructure for strategic forces includes the funding of technology sustainment programs for "reentry systems, solid rocket motors, guidance systems, and radiation hardened electronic parts," as well as for surveillance and testing to support life extension programs for weapons systems. ['01 NPR, 45]
- --"NNSA has initiated efforts to recapitalize deteriorating facilities (or build entirely new facilities), restore lost production capabilities and modernize others, sustain and modernize the R&D base for nuclear weapons, and develop new tools, as required, to assure safety and reliability of the nuclear stockpile." ['01 NPR, 33]
- --"Small, advanced warhead concept teams" will be reestablished at the national labs and NNSA headquarters to "carry out theoretical and engineering design work on one or more concepts, including options to modify existing designs or develop new ones." [NNSA Administrator Gordon, SASC testimony, 14 Feb 02, 339; '01 NPR, 35]
- --Nuclear test readiness will be increased to reduce the time needed to conduct an underground test from 24-36 months to "something substantially less" (specific time period to be determined). Improved readiness will hedge against a critical safety or reliability problem that cannot be fixed without testing. [ASD(ISP) Crouch and NNSA official Harvey, 9 Jan 02 briefing]



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Arms Control

- --Nuclear reductions will be achieved without the adversarial negotiations and rigid treaties of the Cold War. The planned U.S. reduction to 1,700-2,200 ODSNWs is a unilateral decision (informed by work for the NPR), reciprocated by Russia, and subsequently codified in the three-page 2002 Moscow Treaty.
- --The Moscow Treaty offers considerable flexibility for force planning and reductions: delivery platforms are not limited; Trident SSBNs and B-1B bombers can be converted to nonnuclear roles; nondeployed warheads can be stored rather than destroyed; the implementation deadline is 10 years from the treaty's entry into force; and the withdrawal notification requirement is three months (half the six months often required by other treaties). [CJCS Gen Myers, SFRC testimony, 17 Jul 02, 90-91]
- --U.S. compliance with START I will continue and its verification regime will remain in effect.
- --Shortly before the NPR is submitted to Congress, the U.S. gives notice that it will withdraw from the ABM Treaty in six months, in order to counter new ballistic missile threats with defenses more capable than what the treaty permits.
- --A moratorium on nuclear testing will continue, but the Bush administration does not support CTBT ratification.
- --Russian nonstrategic nuclear weapons remain a concern. The U.S. will consult with Russia on providing greater transparency with regard to these weapons.



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Security Environment

- --Since the end of the Cold War, the "threat of global nuclear war has become more remote, but the risk of nuclear attack has increased." ['10 NPR, 3]
 - -With regard to NATO, "the risk of nuclear attack against [Alliance] members is at an historical low" (but the NATO nuclear posture still "contribute[s] to Alliance cohesion and provide[s] reassurance to allies and partners who feel exposed to regional threats"). ['10 NPR, 32]
- -- "The most immediate and extreme threat is nuclear terrorism." ['10 NPR, 3]
 - -Al-Qa'ida leaders and other terrorists seek nuclear weapons and, if they were acquired, would use them.
 - -The vulnerability of nuclear materials to theft and the availability of nuclear-related equipment and technologies raise the risk of terrorist acquisition of a nuclear weapon.
- -- "Today's other pressing threat is nuclear proliferation." ['10 NPR, 3]
 - -North Korea and Iran are in violation of their nonproliferation obligations, they have programs for nuclear-capable missiles, and they threaten aggression against their neighbors.
- --In addition, the U.S. faces "the more familiar challenge of ensuring strategic stability with existing nuclear powers—most notably Russia and China." ['10 NPR, 4]
 - -Russia "is not an enemy," "the prospects for military confrontation have declined dramatically," and Moscow is cooperating with the U.S. in "areas of shared interest, including preventing proliferation and nuclear terrorism." ['10 NPR, 4, 15] At the same time, Russia is the only nuclear peer of the U.S. and is modernizing its nuclear forces.
 - -China and the U.S. "are increasingly interdependent and their shared responsibilities for addressing global security threats, such as WMD proliferation and terrorism, are growing." But China's military modernization, including increases in the size and improvements in the capabilities of its nuclear force, worries countries in Asia. Lack of transparency about its nuclear strategy, programs, and forces "raises questions about China's future strategic intentions." ['10 NPR, 5]



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--There is also a danger of "geopolitical surprise." (This term appears several times in the NPR report with reference to a "hedge" of nondeployed warheads.)

Policy and Strategy

- -- "Five key objectives of our nuclear weapons policies and posture [are]:
 - 1. Preventing nuclear proliferation and nuclear terrorism;
 - 2. Reducing the role of U.S. nuclear weapons in U.S. national security strategy;
 - 3. Maintaining strategic deterrence and stability at lower nuclear force levels;
 - 4. Strengthening regional deterrence and reassuring U.S. allies and partners; and
 - 5. Sustaining a safe, secure, and effective nuclear arsenal." ['10 NPR, 2]
 - -"For the first time, preventing nuclear proliferation and nuclear terrorism is now at the top of America's nuclear agenda." [President Obama, NPR statement, 6 Apr 10]
- --"The long-term goal of U.S. policy is the complete elimination of nuclear weapons." Implementing the measures recommended by the NPR will "bring us significant steps closer to the President's vision of a world without nuclear weapons." ['10 NPR, 48]
- --Contemporary conditions warrant reduction in the role and number of U.S. nuclear weapons.
 - -"The massive nuclear arsenal we inherited from the Cold War era of bipolar military confrontation is poorly suited to address the challenges posed by suicidal terrorists and unfriendly regimes seeking nuclear weapons." ['10 NPR, 6]
 - -"Since the end of the Cold War, the United States and Russia have reduced operationally deployed strategic nuclear weapons by about 75 percent, but both still retain many more nuclear weapons than needed for deterrence." ['10 NPR, 19]
- --The role of nuclear weapons can be reduced by shifting more of the burden for deterrence and defense to nonnuclear capabilities, and by adopting a new declaratory policy concerning nuclear use.



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-Along with the end of the Cold War rivalry, the overall superiority of U.S. conventional forces, the improvements in U.S. missile defenses, and the advances in U.S. "counter-WMD capabilities" make possible a reduced role for nuclear weapons in deterring nonnuclear attacks, as well as further reductions in the number of nuclear weapons.

As part of "regional security architectures," these same nonnuclear military means will be increasingly important in assuring allies and partners of U.S. security commitments.

-A change in U.S. declaratory policy also will reduce the nuclear role.

"The United States will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the Nuclear Non-Proliferation Treaty and in compliance with their nuclear non-proliferation obligations." ['10 NPR, 15] (This is a revision of the long-standing U.S. negative security assurance.)

States in this category that used chemical or biological weapons against the U.S., its allies, or its partners "would face the prospect of a devastating conventional military response," and the "national leaders or military commanders" behind the attack "would be held fully accountable." ['10 NPR, 16]

Adverse changes in the existing threat from biological weapons or in U.S. counter-BW capabilities could result in the modification of this policy.

For nuclear weapons states and states not in compliance with their nuclear nonproliferation obligations, "there remains a narrow range of contingencies in which U.S. nuclear weapons may still play a role in deterring conventional or CBW attack" against the U.S., its allies, or its partners. This narrow range would involve "extreme circumstances" in which "vital interests" were at stake. [10 NPR, 16]

The new assurance excludes Russia and China (as nuclear weapons states) and North Korea and Iran (as noncompliant states).

The new declaratory policy is intended to 1) assure compliant states that they face no nuclear threat from the U.S., 2) encourage those states to join with the U.S. in nonproliferation efforts, 3) send a deterrent message to noncompliant states that "all options are on the table" [SECDEF Gates, NPR briefing, 6 Apr 10], and 4) give those states an incentive to comply with their nuclear nonproliferation obligations.



-The NPR "closely considered the option of establishing deterrence of nuclear attack as the sole purpose of nuclear weapons, and concluded that the conditions for...making such a declaratory policy don't exist today." [PDUSD(P) Miller, HASC testimony, 14 Apr 10, 14]

"Allies and friends around the world...indicated that such a radical shift in U.S. approach could be unsettling to them. And so we went with this [revised] negative security assurance." [State Dept. Special Advisor Einhorn, NPR briefing, 7 Apr 10]

"We obviously are not prepared to do 'no first use' or 'sole purpose' because that could raise questions about our commitment to use the full range of our military power to protect our friends." [White House Coordinator for Arms Control and WMD Samore, Carnegie conference, 22 Apr 10]

But the U.S. "will work to establish conditions"—including further improvements in nonnuclear capabilities and reduction in the CBW threat—"under which a [sole-purpose] policy could be safely adopted." ['10 NPR, 16]

-Nuclear weapons retain an important role in the security of the U.S., its allies, and its partners.

"The fundamental role of U.S. nuclear weapons, which will continue as long as nuclear weapons exist, is to deter nuclear attack on the United States, our allies, and partners." ['10 NPR, 15]

In the absence of conditions necessary for a sole-purpose policy, "Nuclear weapons continue to play an important role in deterring non-nuclear attack, including conventional or chemical-biological attack arising from a nuclear weapons state." [PDUSD(P) Miller, HASC testimony, 14 Apr 10, 15]

Nuclear weapons "will continue to play an essential role in deterring potential adversaries, reassuring allies and partners around the world, and promoting stability globally and in key regions." ['10 NPR, 6]

--Improved U.S.-Russian relations means "strict numerical parity" is less "compelling" than it was during the Cold War. But it will be important for Russia to join the U.S. in further nuclear reductions because "large disparities in nuclear capabilities could raise concerns on both sides and among U.S. allies and partners, and may not be conducive to maintaining a stable, long-term strategic relationship," particularly at significantly lower force levels. ['10 NPR, 30]



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--To help prevent nuclear terrorism, the U.S. reaffirms its commitment "to hold fully accountable any state, terrorist group, or other non-state actor that supports or enables terrorist efforts to obtain or use weapons of mass destruction, whether by facilitating, financing, or providing expertise or safe haven for such efforts." ['10 NPR, 12]

Forces and Related Programs

--Strategic nuclear

-After a "wide range" of alternative strategic force postures were examined, including options that eliminated a leg of the nuclear triad, "a smaller Triad" was endorsed as the posture that "will best maintain strategic stability at reasonable cost, while hedging against potential technical problems or vulnerabilities." ['10 NPR, 21]

Each triad leg has advantages that warrant its retention in the force structure as a whole.

SSBNs are the most survivable triad element. Their SLBMs are not vulnerable to air defenses.

ICBMs have "extremely secure command and control, high readiness rates, and relatively low operating costs." Like SLBMs, they are not vulnerable to air defenses. Single-warhead ICBMs are stabilizing. The ICBM force offers "a hedge against any future vulnerability of U.S. SSBNs." ['10 NPR, 23]

Bombers, unlike ballistic missiles, "can be visibly forward deployed, as a signal to strengthen deterrence of potential adversaries and assurance of allies and partners." ['10 NPR, 24] They provide a hedge that rapidly can be put in place in the event technical problems afflict one of the other triad legs or if "geopolitical uncertainties" pose new dangers. ['10 NPR, 24] In addition, bombers can be used in a conventional role.

-The strategic force structure under the New START treaty was determined according to four requirements:

"Supporting strategic stability through an assured second-strike capability;

Retaining sufficient force structure in each leg to allow the ability to hedge effectively by shifting weight from one Triad leg to another if necessary due to unexpected technological problems or operational vulnerabilities;



Retaining a margin above the minimum nuclear force structure for the possible addition of non-nuclear prompt-global strike capabilities (conventionally-armed ICBMs or SLBMs) that would be accountable under the Treaty; and

Maintaining the needed capabilities over the next several decades or more, including retaining a sufficient cadre of trained military and civilian personnel and adequate infrastructure." ['10 NPR, 20-21]

-The New START-compliant baseline force structure is composed of:

14 Trident SSBNs, with the launch tubes on each submarine reduced from 24 to 20, and no more than 240 SLBMs deployed at any time;

up to 420 Minuteman III ICBMs, each with a single RV; and

up to 60 deployed nuclear-capable B-52H and B-2 bombers. [unclassified White House fact sheet on the classified Report in Response to NDAA FY10 Section 1251: New START Framework and Nuclear Force Structure Plans, 13 May 10]

(The New START central limits are: 700 deployed ICBMs, SLBMs, and nuclear-capable heavy bombers; 1,550 accountable nuclear warheads on deployed ICBMs, SLBMs, and nuclear-capable heavy bombers; and 800 deployed and nondeployed ICBM launchers, SLBM launchers, and nuclear-capable heavy bombers.)

- -"Depending on future force structure assessments and how remaining SSBNS age in the coming years, the United States will consider reducing from 14 to 12 Ohio-class [Trident] submarines in the second half of this decade." ['10 NPR, 22)]
- -The size of the "technical hedge" in the nuclear stockpile will be "significantly" reduced, but some number of nondeployed warheads will be retained to upload on existing SLBMs, ICBMs, or bombers in the event of technical problems with certain delivery vehicles or warheads, or in response to "geopolitical surprise." "Preference will be given to upload capacity for bombers and strategic submarines." ['10 NPR, 22, 25]
- -The current alert posture of the strategic force will be maintained: a "significant number" of SSBNs always at sea in the Atlantic and Pacific oceans; "nearly all" ICBMs routinely on alert; and bombers off "full-time alert." [10 NPR, 22, 25]



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Reducing SSBN and ICBM alert rates "could reduce crisis stability by giving an adversary an incentive to attack before 're-alerting' was complete." ['10 NPR, 26]

-The NPR endorses Navy R&D activities to develop a replacement for the Ohio-class SSBN, Air Force efforts to extend the service life of the Minuteman III to 2030; and Air Force studies for follow-on ICBMs, bombers, and air-launched cruise missiles.

-FY08-FY16 strategic forces (Major Force Program 1) total obligational authority in billions of constant FY17 dollars: FY08: 12.2 FY09: 11.2 FY10: 11.0 FY11: 13.1 FY12: 13.5 FY13: 11.7 FY14: 12.1 FY15: 11.9 FY16: 13.3 [FY17 DoD Green Book, 104]

--Nonstrategic nuclear

- -The F-35 Joint Strike Fighter will replace F-16s in the dual-capable aircraft role.
- -The B61 bomb will undergo a full-scope life extension program "to ensure its functionality" with the F-35, and to make safety, security, and use control improvements in the bomb. [10 NPR, 27]
- -Nuclear capability for the F-35 and life extension for the B61 will "keep open all options" for future NATO decisions regarding the "requirements of nuclear deterrence and nuclear sharing." ['10 NPR, 27-28]
- -The TLAM-N will be retired as "redundant" because of the similar ability of forward-deployable dual-capable fighters and heavy bombers to assure allies, to deter states that threaten allies, and, along with ICBMs and SLBMs, to carry out strikes against aggressors. [10 NPR, 28]

--Nuclear warheads

- -No new nuclear warheads will be developed. No life extension programs will be undertaken to give existing warheads new military capabilities or to adapt them for new military missions. ['10 NPR, 39] Examples of new nuclear warheads are "enhanced radiation weapons, electromagnetic pulse weapons, and nuclear-explosive driven x-ray weapons." [NNSA Administrator D'Agostino, SASC testimony, 22 Apr 10, 39]
- -LEPs "will only use nuclear components based on previously tested designs." ['10 NPR, 39]
- -To ensure warhead safety, security, and reliability, the full range of life-extension options will be considered: "refurbishment of existing warheads, reuse of nuclear components from



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different warheads, and replacement of nuclear components." "Strong preference" will be given to refurbishment and reuse options. ['10 NPR, 39]

- -The NPR endorses full-rate production for the W76 SLBM warhead, full-scope life extension of the B61 bomb, and study of LEP options for the W78 ICBM warhead, including possible use of the life-extended warhead on SLBMs. [10 NPR, 39]
- -"The United States has made the decision not to design and produce new nuclear warheads; however, we will preserve our capability for doing so...should national security require it in the future." [NNSA Administrator D'Agostino, SASC testimony, 22 Apr 10, 56; see also PDUSD(P) Miller, HASC testimony, 14 Apr 10, 30]

--Nonnuclear strike

- -Some B-52H bombers will be converted to a conventional-only role.
- -"The United States will...develop non-nuclear prompt global strike capabilities," but only as a "limited," "niche capability" oriented toward "regional threats while not undermining strategic stability with Russia or China." ['10 NPR, 33, 34; CJCS ADM Mullen, SFRC testimony, 18 May 10, 85; DUSD(P) Miller, SFRC testimony, 16 Jun 10, 275; PDUS(P) Miller, SASC testimony, 22 Apr 10, 9]

-- Missile defense

-Ballistic missile defense policy, strategy, and capabilities are addressed in the DoD *Ballistic Missile Defense Review Report* (February 2010).

Command and Control

--The Secretary of Defense directs "a number of initiatives to further improve the resiliency of the NC3 [Nuclear Command, Control, and Communication] system and the capabilities for the fully deliberative control of the force in time of crisis." These initiatives include:

"modernizing 'legacy' single-purpose NC3 capabilities to meet current and projected challenges";

"continuing to invest in secure voice conferences for NC3"; and

conducting a DoD-led interagency study to "determine the investment needed and organizational structure best suited to further strengthening NC3 capabilities." ['10 NPR, 26]



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- --A key aim of NC3 investments is to "further reduce the risk of false warning or misjudgments related to nuclear use" and "maximize Presidential decision time in a nuclear crisis." ['10 NPR, x, 47]
- --More survivable basing for a follow-on ICBM also would help maximize decision time and "further reduce any incentives for prompt launch." ['10 NPR, x]

Safety and Security

--To prevent nuclear terrorism, the U.S. is "committed to improving nuclear security worldwide." Efforts to ensure the security and control of nuclear materials and weapons include:

expanding international cooperation to strengthen "nuclear security standards, practices, and international safeguards";

"remov[ing] and secur[ing] high-priority vulnerable nuclear materials around the world" and "complet[ing] the repatriation of U.S.- and Russian-origin highly enriched uranium from research reactors worldwide" (Global Threat Reduction Initiative);

accelerating the installation of "nuclear security upgrades at Russian weapons complex sites" and "expand[ing] cooperation to new high priority countries" (International Nuclear Material Protection and Cooperation Program);

securing and eliminating WMD and related delivery means through cooperative threat reduction programs (e.g., Nunn-Lugar); and

improving national and international capabilities to detect and interdict nuclear smuggling. ['10 NPR, 11-12]

--NPR-endorsed life extension programs provide opportunities to increase the safety and security of U.S. warheads, for example, "by switching all conventional high explosive (CHE) primaries with insensitive high explosive (IHE) primaries to increase the safety margins and deploying certain intrinsic surety systems in the stockpile to better meet today's security challenges." [LANL Director Anastasio, SFRC testimony, 15 Jul 10, 403]



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Defense-Industrial Infrastructure

- ---"Today's nuclear weapons complex…has fallen into neglect," with "oversized and costly-to maintain facilities built during the 1940s and 1950s" and a scientific and engineering workforce that has been "underfunded and underdeveloped." ['10 NPR, 40]
- --Rebuilding and modernizing the complex is necessary to 1) ensure a "safe, secure, and effective" stockpile without nuclear testing or new warheads, 2) reduce the size of the warhead hedge for responding to technical problems or geopolitical surprise, thereby moving the U.S. along the path toward zero nuclear weapons, 3) dissuade adversaries from "believing they can permanently secure an advantage by deploying new nuclear capabilities," and 4) "assure non-nuclear allies and partners they need not build their own [nuclear weapons]" because the reliability of each U.S. weapon type has been well certified. ['10 NPR, 41]
- --To help renew the nuclear infrastructure, DoD is transferring nearly \$5 billion to DOE over FY11-FY15 to fund, among other efforts:
 - "design and initial construction of the Chemistry and Metallurgy Research Replacement Nuclear Facility at Los Alamos and the Uranium Processing Facility at Oak Ridge";
 - "increased plutonium manufacturing capacity at the PF-4 facility at Los Alamos"; and
 - "a revitalized warhead surveillance effort and associated science and technology support." [PDUS(P) Miller, SASC testimony, 22 Apr 10, 57; see also '10 NPR, 42]
- --New nuclear production facilities will have "some modest capacity...to surge production in the event of significant geopolitical 'surprise." ['10 NPR, 41]
- --Between FY10 and FY20, a total of \$80 billion is planned to be spent to "sustain and modernize the nuclear weapons complex" [unclassified White House fact sheet on the classified Report in Response to NDAA FY10 Section 1251: New START Framework and Nuclear Force Structure Plans, 13 May 10]
- --"DoD is also studying emerging challenges in the defense industrial base. As commitments are made to life extend or replace current weapons, challenges are likely to emerge that could impair needed progress. Steps can be taken now to mitigate some of these risks." ['10 NPR, 24]
 - -The production capabilities and design teams for solid rocket motors, for example, are essential to keep the Air Force Minuteman III ICBM and the Navy Trident D5 SLBM in service through 2030 and 2042, respectively. To help sustain this part of the defense-industrial base, "a research and development program is being initiated that focuses on



commonality between the Military Departments and joint scalable flight test demonstrations." ['10 NPR, 25]

Arms Control

-- The U.S. will follow a three-fold approach to countering the most pressing nuclear threats—nuclear proliferation and nuclear terrorism:

"bolster the nuclear non-proliferation regime, and its centerpiece, the NPT, by reversing the nuclear ambitions of North Korea and Iran, strengthening International Atomic Energy Agency safeguards and enforcing compliance with them, impeding illicit nuclear trade, and promoting the peaceful use of nuclear energy without increasing proliferation risks";

"secure all vulnerable nuclear materials in four years"; and

"pursue [other] arms control efforts...as a means of strengthening our ability to mobilize broad international support" to strengthen the nonproliferation regime and secure nuclear materials. ['10 NPR, vi-vii]

- --The U.S. will not conduct nuclear testing and will "seek ratification and entry into force of the Comprehensive Nuclear Test Ban Treaty and prompt commencement of negotiations on a verifiable Fissile Material Cutoff Treaty." ['10 NPR, 46]
- --The U.S. "will meet its commitment under Article VI of the NPT to pursue nuclear disarmament and will make demonstrable progress over the next five to ten years." ['10 NPR, 16]
- --The Obama administration will seek ratification of, and then implement, the New START Treaty.
 - -"The NPR was tied to the New START process. Indeed our explicit guidance from the president was that the first phase of the Nuclear Posture Review would focus on providing guidance to the New START negotiators, in terms of the requirements of strategic stability, at a lower number." ["Senior defense official," NPR background briefing, 6 Apr 10]
 - -Within the New START limits, the U.S. can preserve the nuclear triad for strategic stability; continue to field nuclear forces sufficient for an "assured devastating second-strike capability"; maintain the capacity and nondeployed warheads for uploading strategic delivery vehicles if circumstances warrant; keep open the option of deploying a suitable number of nonnuclear ICBMs or SLBMs; and, in general, "retain the power to determine the



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composition of our force structure, allowing the United States complete flexibility to deploy, maintain, and modernize our strategic nuclear forces in a manner that best protects our national security interests." [DUSD(P) Miller, SFRC testimony, 16 Jun 10, 274; SECDEF Gates, SFRC testimony, 18 May 10, 44]

- --"The U.S. is committed to the long-term goal of a world free of nuclear weapons. The President has directed a review of potential future reductions in U.S. nuclear weapons below New START levels." ['10 NPR, 29]
 - -"Non-strategic nuclear weapons, together with the non-deployed nuclear weapons of both sides, should be included in any future reduction arrangements between the United States and Russia." ['10 NPR, 27]
- --"Following substantial further nuclear force reductions with Russia, [the U.S. will] engage other states possessing nuclear weapons, over time, in a multilateral effort to limit, reduce, and eventually eliminate all nuclear weapons worldwide." ['10 NPR, 47]
- --The U.S. will "pursue high-level dialogues with Russia and China to promote more stable, transparent, and non-threatening strategic relationships between those countries and the United States." ['10 NPR, 46]
- --"The conditions that would ultimately permit the United States and others to give up their nuclear weapons without risking greater international instability and insecurity are very demanding," including

"resolution of regional disputes that can motivate rival states to acquire and maintain nuclear weapons";

"success in halting proliferation of nuclear weapons";

"much greater transparency into the programs and capabilities of key countries of concern";

"verification methods and technologies capable of detecting violations of disarmament obligations"; and

"enforcement measures strong and credible enough to deter such violations."

"Clearly, such conditions do not exist today. But we can—and must—work actively to create those conditions." ['10 NPR, 48-49]



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