

Report to Congress on:

Prompt Global Strike Plan

Submitted by:

The Office of
The Secretary of Defense

A Report Submitted to Congress in Response to the National Defense Authorization Act for Fiscal Year 2004, Public Law No. 108-136, Section 1032.

February 2007

Report to Congress Global Strike Plan

Legislative Requirement

Section 1032 of the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108-136) provides that the Secretary of Defense shall establish an integrated plan for developing, deploying, and sustaining a prompt global strike capability in the Armed Forces, to be updated annually through 2006.

Background

The first Global Strike Report to Congress was a classified document submitted in June 2004. The second (unclassified) Global Strike Report was submitted in October 2005. The 2005 report addressed the following aspects of Global Strike:

- Definition,
- Purpose,
- Mission,
- Assets,
- Potential targets,
- Conditions for execution,
- Sustainment and modernization.
- Desired capabilities for advanced long-range strike assets,
- Command, Control, and Communications, and Intelligence, Surveillance, and Reconnaissance (ISR) characteristics, and
- Integration with theater strike capabilities.

The 2006 Global Strike Report to Congress is the third such report and is an update to the 2005 report. It explains the role of Global Strike in the New Triad, and includes a new section addressing the need to fill capability gaps that persist in Global Strike.

Global Strike and the New Triad

In 2001, President Bush directed reductions in U.S. nuclear strike capabilities to a force level of 1,700 to 2,200 Operationally Deployed Strategic Nuclear Warheads (ODSNW) by 2012. The Presidentially approved 2001 Nuclear Posture Review (NPR), which outlined the changes to the strategic environment since the end of the Cold War, established the New Triad to address these changes and prepare for a less predictable

future. The New Triad comprises a broad set of capabilities to support the four National Defense Strategy defense policy goals:

- Assurance of allies and friends,
- Dissussion of potential competitors,
- Deterrence of potential adversaries, and
- Defense against and defeat of adversaries should deterrence fail.

The old Triad, comprised solely of strategic nuclear weapon systems — Intercontinental Ballistic Missiles (ICBMs), Submarine-Launched Ballistic Missiles (SLBMs), and bomber-delivered weapons — focused on deterrence of a peer nuclear power through the threat of nuclear strikes in response to a nuclear attack. By contrast, the New Triad is designed to address a broader spectrum of security challenges by integrating defensive systems, compressing planning cycles, enhancing command and control and ISR, and leveraging the capabilities of a robust Department of Defense (DoD) and Department of Energy research, development, and industrial infrastructure.

In a significant change from the past, the offensive leg of the New Triad now includes non-nuclear systems. Although there will continue to be a national security role for nuclear weapons, non-nuclear systems represent a major element of the Global Strike mission that may be used, when appropriate, in lieu of nuclear capabilities.

Global Strike refers to a portfolio of capabilities that provide for global reach, accelerated planning, and execution of operations using the full range of kinetic and non-kinetic strike capabilities in support of national or theater commanders' objectives. As such, it provides a means to hold particularly threatening capabilities of potential adversaries at risk. Although the explosive power of non-nuclear weapons is orders of magnitude below nuclear systems, they are capable of generating strategic effects when:

- Enabled by non-kinetic capabilities,
- Mated to precision guidance and penetration capabilities,
- Integrated into a command and control system fed by persistent ISR, and
- Enabled by compressed planning and execution cycles.

U.S. Strategic Command (STRATCOM) is the operational integrator of the capabilities of the New Triad. In this context, STRATCOM has been given new missions. Besides Global Strike, the new missions include the integration of global missile defense; integration of command, control, communications, and intelligence; space operations; information operations; global network operations; and combating Weapons of Mass Destruction (WMD). In this role, STRATCOM, with oversight from the Office of the Secretary of Defense and the Joint Staff, develops operational plans that integrate the capabilities of the New Triad.

The conceptual and command arrangements supporting the New Triad aim to provide the U.S. leadership with a broader range of strategic options appropriate to achieving the security goals of the United States in the 21st-century security environment – an environment that includes the need to defeat terrorists, disrupt the development, transfer, and use of WMD, and counter rogue states and potential peer competitors, while assuring our allies and friends.

Developments since the 2005 Global Strike Report to Congress

The United States is ahead of schedule in reaching its goal for reducing ODSNW. Although it concluded that the United States should maintain a robust nuclear deterrent, the 2006 Quadrennial Defense Review (QDR) also determined that the United States can make further modest nuclear force reductions while simultaneously enhancing Global Strike capabilities. DoD plans to accomplish this by retiring 50 of the 500 deployed Minuteman III ICBMs and 38 of the 94 B-52 bombers, and utilizing the saved assets to provide for a robust Minuteman III test program as well as to help sustain and modernize the remainder of the bomber fleet.

The Minuteman III ICBM force is being sustained through a life-extension program. The program will keep this element of the New Triad's offensive leg operational and effective into the foreseeable future. DoD is also examining future approaches to a follow-on land-based long-range nuclear strike capability. The Air Force has completed an analysis of alternatives for a Land-Based Strategic Deterrent. Concept refinement work is underway, and the results of this process will be examined together with the results of other relevant studies in determining the way ahead.

Consistent with the 2005 Global Strike Report, the DoD has over the past year continued to strengthen its Global Strike capabilities with the introduction of the Joint Air-to-Surface Standoff Missile (JASSM) and the Tactical Tomahawk (TACTOM) cruise missile. These missiles offer stealthy (in the case of JASSM), standoff capabilities that can be employed in substantial numbers to destroy high-value, well-defended, and/or relocatable targets. Testing has begun on the JASSM Extended Range (JASSM-ER), which will possess more than double the range of the JASSM (over 500 nm, vice 200 nm). JASSM-ER also will be able to loiter and transmit in-flight imagery to planners. TACTOM possesses many of the same traits as JASSM-ER but also can also be retargeted in flight.

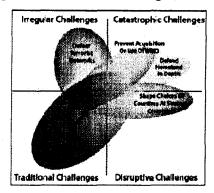
In addition, the DoD has nearly completed reconfiguring four strategic nuclear ballistic missile submarines (SSBNs) into guided-missile submarines (SSGNs). The first three SSGNs have completed their conversion with the final conversion to be completed in late FY07. Two of the SSGNs will become operational in FY07 and two more in

FY08. Capable of supporting Global Strike operations, each SSGN can carry up to 154 Tomahawk cruise missiles and deliver special operations teams.

The 2006 QDR considered the security environment of the 21st-century and underscored the need for prompt as well as high-volume Global Strike to address a range of irregular, catastrophic, and disruptive challenges (see Figure 1). The QDR identified the following objectives for Global Strike's operational and enabling capabilities:

- Provide the President with a broader range of conventional response options to deter aggression or coercion,
- Attack fleeting enemy targets rapidly,
- Fuse intelligence and operations to speed action based on time-sensitive intelligence,
- Find and precisely target enemy capabilities in denied areas,
- Deter, defend against and respond in an overwhelming manner against WMD attacks, and
- Shape and defend cyberspace.

Figure 1 - Present US Challenges, 2006 QDR

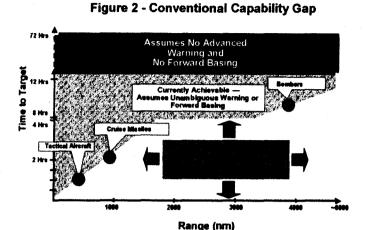


Analysis conducted during the QDR highlighted an important gap in the U.S. portfolio of Global Strike capabilities: prompt, long-range conventional (non-nuclear) strike. TACTOM and JASSM, although valuable additions to conventional forces, do not fully address this gap. Without a portfolio of prompt—i.e., capable of generating effects on a target within minutes—conventional Global Strike capabilities, America's adversaries will retain substantial freedom of action and more potential safe havens from which to operate. Prompt Global Strike may be needed for time-sensitive operations such as disrupting the transfer of WMD, preventing a rogue state from launching a ballistic missile armed with a WMD payload, or disrupting enemy actions before other U.S. forces arrive in theater.

Conventional Global Strike Capability Gap

Currently the DoD has a number of weapon systems that provide prompt and high-volume nuclear effects. However there is no similar capability for prompt high-volume non-nuclear effects. Figure 2 illustrates this gap in U.S. conventional capabilities for prompt Global Strike. Generating tactical aircraft or heavy bombers, or launching cruise missiles from maritime forces to strike a target with conventional ordnance, can take hours to days. In order to hold the types of targets identified in the QDR at risk, the U.S. Global Strike portfolio will need non-nuclear delivery systems that have a time-to-target measured in minutes—not hours or days.

The destructive power of conventional weapons is orders of magnitude below that of nuclear weapons. Increasing the lethality of long-range, prompt, conventional systems to enable their substitution for nuclear capabilities will require the application of precision targeting and engagement technologies. Precise intelligence also is needed to support the planning and decision-making necessary to ensure success in non-nuclear Global Strike missions.



Adapted from JASON's 2005 Report on Conventional Prompt Global Strike

The Future of Global Strike: New Capabilities

The portfolio of Global Strike capabilities needs to be balanced with the addition of prompt conventional capabilities. In 2005, the STRATCOM Commander led an analysis of options for fielding a prompt, global, non-nuclear strike capability. The results of this analysis and the decisions made in the QDR can be separated into near-term and longer-term categories. Near-term options are limited to modifications of legacy systems. As a result, the President's FY 2007 Budget requested funding for a Conventional Trident Modification (CTM).

The CTM involves developing precision conventional warheads and deploying them on Trident D-5 submarine-launched ballistic missiles in place of nuclear warheads. These non-nuclear warheads, coupled with the enhanced accuracy of the CTM, can be lethal against certain targets. Adapting the existing Trident D-5 missile—a weapon system with a superb reliability record—to the CTM presents a low-risk, relatively low-cost, near-term conventional option for prompt Global Strike. Deploying CTM will provide the United States its first long-range non-nuclear capability to defeat a set of threats almost anywhere on the globe, on short notice, in the event that effective forward-deployed forces are unavailable. It also continues the post-Cold War trend of reduced U.S. reliance on nuclear weapons and will provide the President with a viable non-nuclear strike option.

However, progress towards CTM has been hampered, in large part, by concerns that prompt Global Strike involving the use of conventionally-armed ballistic missiles could be misinterpreted as a potential nuclear attack. Last year's congressional CTM budget action, cutting the President's requested \$127M for research and development in FY07 to \$20M, was predicated largely on these concerns.

DoD strongly believes that conventional prompt Global Strike is a critical capability to address the United States' evolving 21st-century security needs. The joint DoD-Department of State Report on CTM, directed by the FY07 Defense Authorization Act, addresses congressional concerns and presents a clear strategy for mitigating potential risks associated with the use of a CTM. In addition, the FY07 Defense Authorization Act directed the National Academy of Sciences (NAS) to conduct a study on CTM and other potential alternatives. The DoD will support the NAS study effort fully with the intent to secure funding for CTM in FY08 in accordance with the President's budget request to Congress. The request for FY08 is for \$175.4M to cover research and development, procurement, and other costs.

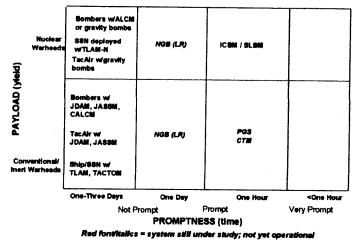
Although DoD determined CTM to be the best near-term conventional option for prompt Global Strike, the Department is considering other, longer-term solutions, both sea- and land-based, to broaden the portfolio of prompt, non-nuclear capabilities. Efforts to develop longer-term capabilities include the following:

- Analysis of options for conventional land- and sea-based Prompt Global Strike
 (PGS) capabilities in both the mid-term (~2013-2020) and long-term (~2020 and
 beyond). The range of potential PGS capabilities includes CONUS and forward deployed land- and sea-based missile options of varying ranges. Several analyses
 are underway or have been completed to assess mid-term options. The PGS
 Analysis of Alternatives, which currently focuses on long-term options, has also
 begun.
- Studies of advanced technology solutions for PGS options. This includes precision guidance; maneuverability through trajectory shaping/hypersonic glide; advanced conventional weapons; advanced propulsion systems; and varied basing options. The focus is on a family of systems approach that will leverage open architecture, interoperable and modular technologies/components that can produce tailored effects across the range of warfighting requirements.
- Development of non-kinetic strike and enabling capabilities (e.g. information operations, ISR, command and control, etc.).

The 2001 Nuclear Posture Review directed DoD to transition to a New Triad, comprising non-kinetic, kinetic-conventional, and kinetic-nuclear strike; active and passive defenses; and a robust research, development, and industrial infrastructure. As the New Triad is realized, one of the benefits will be a reduced reliance on nuclear weapons. Figure 3 shows the programs expected to produce the portfolio of capabilities needed to span the range of Global Strike payloads and promptness. The figure shows that, at present, the only existing programs with a prompt strike capability and global reach are nuclear programs. Existing conventional capabilities do not produce prompt effects at global ranges. Without a broadened and complete portfolio of strategic

capabilities, the President may find the range of options insufficient or inappropriate to meet the security challenges of the years ahead.

Figure 3 - Payload vs. Promptness



ALCM = Air-Launched Cruise Missile
CALCM = Conventional Air-Launched Cruise Missile
CTM = Conventional Trident Modification
ICBM = Intercontinental Ballistic Missile
JASSM = Joint Air-to-Surface Standoff Missile
JDAM = Joint Direct Attack Munition
NGB (LR) = Next Generation Bomber (Long-Range)
SLBM = Submarine-Launched Ballistic Missile
PGS = Prompt Global Strike
TACTOM = Tactical Tomehawk
TLAM-N = Tomehawk Land Attack Missile - Nuclear

Conclusion

The DoD seeks to expand the mix of Global Strike capabilities to meet the United States' evolving needs for assuring allies and friends, dissuading and deterring adversaries, and defeating adversaries should deterrence fail. With sustained investment in air-, land-, and sea-based Global Strike programs—including prompt kinetic (conventional and nuclear) and non-kinetic means—the Department can realize the portfolio of balanced capabilities and the supporting ISR, Command, Control, and Communications infrastructure needed to address the realities of the 21st-century security environment.