

April 2008

MILITARY TRANSFORMATION

DOD Needs to Strengthen Implementation of Its Global Strike Concept and Provide a Comprehensive Investment Approach for Acquiring Needed Capabilities



Report Documentation Page

Form Approved
OMB No. 0704-0188

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1. REPORT DATE APR 2008		2. REPORT TYPE		3. DATES COVERED 00-00-2008 to 00-00-2008	
4. TITLE AND SUBTITLE Military Transformation. DOD Needs to Strengthen Implementation of Its Global Strike Concept and Provide a Comprehensive Investment Approach for Acquiring Needed Capabilities				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Government Accountability Office, 441 G Street NW, Washington, DC, 20548				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 63	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			



Highlights of [GAO-08-325](#), a report to Congressional Requesters

Why GAO Did This Study

To increase the range of options available to the President, the Department of Defense (DOD) is taking steps to develop a portfolio of capabilities, referred to as global strike, to rapidly plan and deliver limited duration and extended range precision strikes against highly valued assets. GAO was asked to assess (1) whether DOD has clearly defined and instilled a common understanding and approach for global strike throughout the department, (2) the extent to which DOD has developed capabilities needed for global strike, and (3) the extent to which DOD has identified the funding requirements and developed an investment strategy for acquiring new global strike capabilities. GAO reviewed and analyzed plans and studies within DOD, the services, and several commands on global strike implementation and capabilities development.

What GAO Recommends

GAO recommends several actions to strengthen DOD implementation of its global strike concept by improving communications and mutual understanding among stakeholders; providing a complete assessment of supporting capabilities needed to conduct global strike; assessing the full breadth of global-strike-related capabilities and technologies; and ensuring that the results of related studies are integrated into a prioritized investment strategy for global strike. DOD agreed with the report and with GAO's eight recommendations.

To view the full product, including the scope and methodology, click on [GAO-08-325](#). For more information, contact Janet St. Laurent, 202-512-4402, stlaurentj@gao.gov.

MILITARY TRANSFORMATION

DOD Needs to Strengthen Implementation of Its Global Strike Concept and Provide a Comprehensive Investment Approach for Acquiring Needed Capabilities

What GAO Found

DOD has taken a number of steps to implement its global strike concept and has generally assigned responsibilities for the planning, execution, and support of global strike operations. However, key stakeholders, particularly the geographic combatant commanders, have different interpretations of the concept, scope, range, and potential use of capabilities needed to implement global strike. Several factors affect the understanding and communication of DOD's global strike concept among key stakeholders, including the extent to which DOD has (1) defined global strike, (2) incorporated global strike into joint doctrine, (3) conducted outreach and communication activities with key stakeholders, and (4) involved stakeholders in joint exercises and other training involving global strike. GAO's prior work examining successful organizational transformations shows the necessity to communicate to stakeholders often and early with clear and specific objectives on what is to be achieved and what roles are assigned. Without a complete and clearly articulated concept that is well communicated and practiced with key stakeholders, DOD could encounter difficulties in fully implementing its concept and building the necessary relationships for carrying out global strike operations.

DOD has underway or completed several global strike assessments to identify potential conventional offensive strike weapons systems, particularly those for prompt global strike, which would provide capabilities sometime after 2018. However, DOD has not fully assessed the requirements or coordinated improvements for related enabling capabilities that are critical to the planning and execution of successful global strike operations. These critical enabling capabilities include intelligence collection and dissemination, surveillance and reconnaissance, and command and control, communications, and battlefield damage assessment. Furthermore, DOD has not coordinated its efforts to improve these capabilities with potential offensive systems it intends to develop. Without fully assessing the enabling capabilities required or coordinating with other DOD studies, DOD might not make the best decision of which enabling capability to pursue in meeting global strike requirements.

DOD has not yet established a prioritized investment strategy that integrates its efforts to assess global strike options and makes choices among alternatives given the department's long-term fiscal challenges. GAO's prior work has shown that a long-term and comprehensive investment approach is an important tool in an organization's decision-making process to define direction, establish priorities, assist with current and future budgets, and plan the actions needed to achieve goals. While DOD studies and officials recognize a need for a broad, holistic view of global strike development, DOD has not identified and assessed all global-strike-related capabilities and technologies and has not explained how its plans to link long-term studies to identify potential weapons systems will result in a comprehensive prioritized investment strategy for global strike.

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Abbreviations

DOD	Department of Defense
FYDP	Future Years Defense Program

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United States Government Accountability Office
Washington, DC 20548

April 30, 2008

The Honorable Ellen O. Tauscher
Chairwoman
The Honorable Terry Everett
Ranking Member
Subcommittee on Strategic Forces
Committee on Armed Services
House of Representatives

The Honorable Silvestre Reyes
House of Representatives

The Department of Defense (DOD), in its December 2001 Nuclear Posture Review,¹ provided a conceptual framework for transforming U.S. strategic capabilities to address the new security risks the United States faces. The review proposed a New Triad that would bring together the capabilities of nuclear and conventional (nonnuclear) offensive strike forces, active and passive defenses, a revitalized defense infrastructure, and enhanced command and control, planning, and intelligence capabilities. The synergy realized with the integration of these capabilities, according to DOD officials, would provide the President and other senior decision makers with a wider range of military options against emerging threats while reducing U.S. reliance on the use of nuclear weapons.²

In transforming offensive strike capabilities for the New Triad, DOD plans to develop a portfolio of capabilities, referred to as global strike, that

¹ Congress directed the Secretary of Defense, in consultation with the Secretary of Energy, to “conduct a comprehensive review of the nuclear posture of the United States for the next 5 to 10 years”, in section 1041 of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001 (Pub. L. No. 106-398). The 2001 Nuclear Posture Review was the second post-Cold War review of U.S. strategic nuclear forces. The first one was conducted in 1994.

² We issued a report discussing the progress made by DOD in determining and allocating resources needed to implement the New Triad—a conceptual framework proposed to bring together the capabilities of nuclear and conventional offensive strike forces (including global strike); active and passive defenses; and a revitalized defense infrastructure. See GAO, *Military Transformation: Actions Needed by DOD to More Clearly Identify New Triad Spending and Develop a Long-term Investment Approach*, [GAO-05-540](#) and [GAO-05-962R](#) (Washington, D.C.: June 30, 2005, and Aug. 4, 2005).

would provide the United States with an ability to rapidly plan and deliver limited duration and extended range precision strikes against highly valued assets, such as weapons of mass destruction production, storage, and delivery systems and adversary leadership power bases. To provide a joint focus for global strike, the President, in January 2003, assigned the U.S. Strategic Command with responsibility for providing integrated planning and command and control support to deliver rapid, extended range, precision effects for global strike missions conducted by the geographic combatant commanders, or in some scenarios, its own global strike missions. While nuclear systems would be part of the portfolio, DOD has placed significant emphasis on the role that kinetic and nonkinetic³ conventional capabilities would provide in generating the desired strategic effects. DOD envisions that global strike missions could use existing U.S. conventional military capabilities, depending on the desired effect to be achieved and the operational scenario.

However, DOD's 2006 Quadrennial Defense Review highlighted the lack of a prompt, precise, long-range conventional strike capability for some time-critical situations as an important gap in U.S. global strike capabilities. In a September 2007 classified report, we discussed DOD efforts to develop a near-term solution to convert some of its Trident submarine-launched missiles as a means to deliver an intercontinental prompt conventional strike capability. DOD is also undertaking or has completed several analytical efforts to assess mid- and long-term options for prompt, long-range global strike and examining other conventional strike capability options, such as a new long-range bomber that would be available for global strike missions in less time-sensitive situations. In the conference report for the defense fiscal year 2008 appropriation's bill,⁴ the conferees agreed to provide \$100 million for a new prompt global strike program element within the Research, Development, Test and Evaluation, Defense-Wide appropriation for development of promising conventional prompt global strike technologies.

³ Kinetic capabilities are those capabilities that produce effects through the direct use of the force or energy of moving objects, such as bombs, while nonkinetic capabilities create operational effects that do not rely upon explosives or physical momentum, including such capabilities as information operations, space operations, computer network attack, and directed energy weapons.

⁴ H.R. Rep. No. 110-434, at 240 (2007) (Conf. Rep.).

As DOD seeks to transform its forces and organization to better meet the demands of the new security environment, we have reported⁵ that the department is faced with identifying new warfighting capabilities it needs, including critical technologies, while at the same time striking an affordable and sustainable balance in its spending for current and future investments. Furthermore, to successfully transform itself, DOD also must reshape its policies and practices and the cultural perspectives of various organizations that have responsibilities for implementing the required changes.

At your request, we reviewed DOD's actions to implement its global strike concept and increase U.S. conventional global strike capabilities. Specifically, you asked us to determine (1) whether DOD has clearly defined and instilled a common understanding and approach to its global strike concept throughout the department, (2) the extent to which DOD has assessed and developed capabilities needed for global strike, and (3) the extent to which DOD has identified the funding requirements and developed an investment strategy for acquiring new global strike capabilities.

To identify whether DOD has clearly defined and instilled a common understanding and approach to its global strike mission, we reviewed DOD guidance, concepts, studies and assessments, directives, briefings, status reports, and other pertinent documentation. We also interviewed and discussed this information with officials at the Office of the Secretary of Defense, the Joint Staff, Departments of the Army, Navy, and Air Force, Defense Intelligence Agency, Defense Advanced Research Projects Agency, Defense Threat Reduction Agency, U.S. Pacific Command, U.S. Central Command, U.S. Special Operations Command, U.S. Strategic Command, U.S. Joint Forces Command, Air Combat Command, and Air Force Space Command. We also reviewed documentation on the department's efforts to develop capabilities for global strike, as well as, the results of studies and other assessments to determine the capabilities needed and potential solutions for improving global strike operations. To determine the extent to which DOD has identified the funding

⁵ We have reported on the fiscal challenges facing DOD in transforming its force on several occasions. See: GAO, *21st Century Challenges: Reexamining the Base of the Federal Government*, [GAO-05-325SP](#) (Washington, D.C.: February 2005); *DOD Transformation: Challenges and Opportunities*, [GAO-07-435CG](#) and [GAO-07-500CG](#) (Washington, D.C.: Jan. 24, 2007, and Feb. 12, 2007); and *Defense Acquisitions: Assessments of Selected Major Weapon Programs*, [GAO-06-391](#) (Washington, D.C.: Mar. 31, 2006).

requirements and developed an investment strategy for acquiring new global strike capabilities, we reviewed documentation and interviewed DOD officials on the department's use of its Future Years Defense Program (FYDP) database⁶ and related supporting documentation to identify and manage possible programs that may contribute to global strike capabilities. We conducted an analysis of the FYDP and related supporting budget documentation for the President's fiscal year 2008 budget submission to Congress to determine the range of possible programs with global strike application. We conducted this performance audit from November 2006 through February 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based for our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. Further information on our scope and methodology appears in appendix I.

Results in Brief

DOD has taken a number of steps to implement its global strike concept and has generally assigned responsibilities for the planning, execution, and support of global strike operations. However, key stakeholders, particularly the geographic combatant commanders, do not interpret the concept uniformly, such as the differences between global strike and other strike operations that are conducted by the geographic combatant commands. This disparity in stakeholder interpretation affects their ability to clearly distinguish the scope, range, and potential use of capabilities needed to implement global strike and under what conditions global strike would be used in U.S. military operations. Our prior work examining successful organizational transformations shows the necessity to communicate to stakeholders often and early with clear and specific objectives on what is to be achieved and what roles are assigned. The U.S. Strategic Command has played a major role in DOD's implementation of global strike, but several factors continue to affect other key stakeholders' interpretation and communication of the global strike concept. First, DOD has not provided a universally accepted definition, which, according to

⁶ The FYDP is a report that resides in an automated database and provides projections of DOD's near and midterm funding needs and reflects the total resources programmed by DOD, by fiscal year. The FYDP includes data on estimates for the fiscal year reflected in the current budget request and at least 4 subsequent years. Both detailed data and a summary report are generally provided to Congress with DOD's annual budget submission.

DOD officials, can lead to different interpretations of the term among the combatant commands, services, and DOD organizations. Second, DOD has not included a detailed discussion of global strike in any existing or proposed joint doctrine publications. Third, geographic combatant command and service officials believe that the Strategic Command should conduct more outreach to mitigate any misconceptions commands may have about global strike, particularly in light of frequent staff turnover. Fourth, stakeholders have not widely participated in joint exercises and other training, which can increase their understanding of global strike. Without a complete and clearly articulated concept that is well communicated and practiced with key stakeholders, DOD could encounter difficulties in fully implementing its concept and building the necessary relationships for carrying out global strike operations. To strengthen DOD's efforts to implement its global strike concept and improve communications and mutual understanding within DOD, we are recommending that DOD develop a universally accepted joint definition of global strike, incorporate global strike more fully in joint doctrine, establish a communications and outreach approach for global strike to help foster acceptance of the concept among stakeholders, and integrate global strike into more joint exercises and other training activities.

DOD has underway or completed several global strike studies to identify potential conventional offensive strike weapons systems, particularly those for prompt global strike, which would provide global strike capabilities sometime after 2018. However, it has not fully assessed the requirements or coordinated improvements for related enabling capabilities that are critical to the planning and execution of successful global strike operations with the potential offensive systems it intends to develop. Critical enabling capabilities include intelligence collection and dissemination, surveillance and reconnaissance, and command and control, communications, and battlefield damage assessment. Although DOD has studies underway to develop prompt global strike capabilities and to examine potential offensive strike systems, these studies are limited to a particular focus of global strike or a particular weapon system and do not provide a complete assessment of enabling capabilities needed to support global strike operations. In addition, several DOD officials involved in assessing potential new global strike capabilities believe that enabling capabilities, such as intelligence, surveillance, and reconnaissance, are not being fully considered in global strike weapons studies because of assumptions that the capabilities will be available when any future system is fielded or because study staff do not have the clearances needed to access information on all DOD efforts for improving enabling capabilities. Furthermore, DOD has not coordinated all of its

efforts to improve enabling capabilities with its assessments for new offensive global strike systems to better understand the range of enabling capabilities being developed and their estimated availability. Unless it fully assesses the enabling capabilities required or coordinates with other DOD studies, DOD might not make the best decision of which enabling capability to pursue to meet global strike requirements. As a result, we are recommending that DOD conduct a comprehensive assessment of enabling capabilities to identify any specific global strike operational requirements and priorities and when these capabilities are needed to support future offensive strike systems, in addition to linking its efforts with other department efforts examining potential strike systems for global strike.

While DOD plans investments in a range of global-strike-related capabilities, it has not yet begun to develop a prioritized investment strategy that integrates its efforts to assess global strike options and makes choices among alternatives in light of the department's long-term fiscal challenges. Such a strategy could initially capture currently planned investments and be refined and updated as DOD further develops its global strike concept and identifies additional capabilities that may be needed. Our prior work has shown that a long-term and comprehensive investment approach is an important tool in an organization's decision-making process to define direction, establish priorities, assist with current and future budgets, and plan the actions needed to achieve goals. DOD long-term studies to identify potential offensive weapons systems for global strike, however, provide only limited investment information, and DOD officials have not clearly explained how the department plans to link these studies in developing a comprehensive prioritized investment strategy for global strike. In addition, DOD has not fully assessed its Future Years Defense Program (FYDP), a tool DOD uses to project resources and proposed appropriations to support its programs, projects, and activities, to determine the extent that current development programs, projects, and activities could contribute to global strike operations. Our own analysis of the FYDP identified 94 program elements that would provide funding for 135 programs, projects, and activities having possible application for global strike. DOD organizations have identified and tracked some of these efforts, but without performing a comprehensive assessment of the FYDP to identify the full extent of potential global strike capabilities being developed, DOD does not have a complete understanding of actions being taken that could increase those capabilities and would have difficulty developing a prioritized long-term investment strategy. DOD is examining portfolio management approaches as a means to collectively align investments with its strategic goals and performance

measures and provide a sound basis to justify the commitment of resources. According to the 2006 Quadrennial Defense Report, this approach enables decision makers to make informed choices about how to reallocate resources to deliver needed capabilities to the joint force more rapidly and efficiently. We are recommending that DOD perform a comprehensive review of all capabilities being developed within DOD's FYDP to determine the extent to which these capabilities contribute or can be leveraged for global strike and ensure that the results of the various studies to identify potential strike systems for global strike are evaluated and integrated into a comprehensive prioritized investment strategy for global strike.

In commenting on a draft of this report, DOD concurred with all eight of our recommendations. DOD's comments are discussed in detail later in this report and reprinted in appendix III. DOD also provided two technical comments, which we incorporated in this report.

Background

The 2001 Nuclear Posture Review envisioned that the New Triad would include the majority of current and planned conventional strike capabilities, as well as a family of unique global strike capabilities, to address the new security risks faced by the United States. Current global strike assets could include long-range precision attacks delivered from aircraft or naval platforms, such as B-52H bombers equipped with conventional air-launched cruise missiles and surface ships and submarines outfitted with sea-based Tomahawk land attack missiles. Use of nonkinetic capabilities, such as information operations, may also be needed to defeat an adversary's capability to deny U.S. forces access to areas or to achieve the surprise necessary to defeat high-value/high-payoff targets such as weapons of mass destruction, leadership, or command and control capabilities in more difficult environments. Successful conduct of global strike operations also is likely to require several enabling capabilities such as intelligence collection and dissemination, surveillance and reconnaissance, command and control, communications, and battlefield damage assessment to support all aspects of the planning and conduct of missions. Most of the platforms, weapons, nonkinetic assets and supporting command, control, communications, and computers and intelligence, surveillance, and reconnaissance capabilities used to support the global strike mission are not unique to global strike. These assets also provide general purpose capabilities used to support a variety of other missions conducted by the geographic combatant commands. However, DOD is studying several new capabilities to address shortfalls in prompt and global range conventional capabilities.

Many DOD organizations, including the Joint Staff, military services, combatant commands, and defense agencies, have responsibilities for developing and implementing the global strike concept, identifying and acquiring needed capabilities, and conducting global strike missions. Within the Office of the Secretary of Defense, two organizations have key responsibilities for overseeing and managing global strike related activities:

- The Office of the Under Secretary of Defense for Policy is responsible for developing the policy and guidance for global strike. The office is also responsible for preparing DOD's annual report to Congress on global strike, which includes information on the purpose, mission, assets, potential target, desired capabilities, and conditions for execution.⁷
- The Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics is responsible for providing oversight for the development and fielding of global strike capabilities. The office also has responsibilities for various DOD initiatives to improve the department's acquisition processes and management of investments.

Additionally, the Office of Program Analysis and Evaluation in the Office of the Secretary of Defense is responsible for assembling and distributing the FYDP, which is an automated database that DOD uses to report the estimated projected resources and proposed appropriations to support DOD programs, projects, and activities, including those related to global strike capabilities. The FYDP includes cost estimates for the fiscal year reflected in the current budget request and at least 4 subsequent years.

The Joint Staff is responsible for providing oversight of the Chairman of the Joint Chiefs of Staff's Joint Capabilities Integration and Development System process to identify improvements to existing capabilities and guide development of new capabilities from a joint perspective that recognizes the need for trade-off analysis. The various global strike analyses conducted as part of this process are intended to result in a set of potential solutions, including additional resources or changes to doctrine and

⁷ Section 1032 of the National Defense Authorization Act for Fiscal Year 2004 (Pub. L. No. 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. The Secretary issued three reports to Congress on global strike in June 2004, October 2005, and February 2007, respectively.

training designed to correct capability shortcomings. The Joint Staff, along with the Commander of the U.S. Joint Forces Command, have responsibilities for overseeing development of joint doctrine and managing and providing support for joint exercises of the combatant commands. Additionally, the military services and defense agencies also have important roles in identifying and acquiring potential technologies and weapons systems development programs that could provide global strike capabilities.

The U.S. Strategic Command has a significant role in implementing the global strike concept and supporting global strike operations. For its global strike mission, the command is responsible for providing integrated planning and command and control support to deliver rapid, extended range, and precision kinetic and nonkinetic effects in support of theater and national objectives, and in some situations, executing command and control of selected global strike missions. The command also advocates for global strike capabilities on behalf of the combatant commands, services, and defense agencies through such means as preparing and reviewing global-strike-related documentation and analyzing needed capabilities. The command supports other combatant commands during day-to-day operations by integrating their capabilities for potential global strike missions through training, exercises, and planning activities. During a crisis, the command, in close coordination with other combatant commands, would develop plans and courses of action for executing global strike missions on very tight timelines for the Secretary of Defense or the President. The command also has responsibilities for other mission areas that support global strike, including oversight of intelligence, surveillance, and reconnaissance, and global command and control; DOD information operations; space operations; and integrating and synchronizing DOD's efforts in combating weapons of mass destruction.⁸

⁸ We issued a report on the progress made by the U.S. Strategic Command in developing and integrating its missions, including global strike, to provide new capabilities and expand U.S. options for responding to global threats. GAO, *Military Transformation: Additional Actions Needed by U.S. Strategic Command to Strengthen Implementation of Its Many Missions and New Organization*, [GAO-06-847](#) (Washington, D.C.: Sept. 8, 2006).

DOD Has Taken Steps to Implement Global Strike, but Its Concept Is Interpreted Differently by Key Stakeholders

DOD has taken a number of steps to implement its global strike concept and has generally assigned responsibilities for the planning, execution, and support of global strike operations. However, key stakeholders, particularly the geographic combatant commanders, have different interpretations of the scope, range, and potential use of capabilities needed to implement global strike and under what conditions global strike would be used in U.S. military operations. Several factors affect understanding and communication of the global strike concept among key stakeholders, including the extent to which DOD has (1) defined global strike, (2) incorporated global strike into joint doctrine, (3) conducted outreach and communication activities with key stakeholders, and (4) involved stakeholders in joint exercises and other training involving global strike. Without a complete and clearly articulated concept that is well communicated and practiced with key stakeholders, DOD could encounter difficulties in fully implementing its concept and building the necessary relationships for carrying out global strike operations.

DOD Has Taken a Number of Steps to Implement Its Global Strike Concept

DOD has taken a number of steps to implement its global strike concept since completing its 2001 Nuclear Posture Review, which provided the rationale for global strike. Specifically, the U.S. Strategic Command has played a major role in DOD's implementation of global strike by helping to shape the concept, developing new processes and procedures, and providing inputs in identifying and developing new capabilities.

Since issuing its 2001 Nuclear Posture Review, DOD has conducted several analyses to evaluate desired capabilities and identify capability gaps. In January 2005, DOD completed the Global Strike Joint Integrating Concept, which describes how a global strike joint task force would operate, the time frame and environment in which it must operate, its required capabilities, and its defining physical and operating characteristics. The concept was used as input for analyses conducted under the Joint Staff's Joint Capabilities Integration and Development System requirements process to identify the desired capabilities and shortfalls in current global strike capabilities. The first two of the three analyses, the functional area analysis and functional needs analysis, were completed in 2005. The functional area analysis synthesized existing guidance to specify the military problem to be studied. The analysis identified the specific military tasks the force is expected to perform, the conditions under which these tasks are to be performed, and the required standards of performance. The functional needs analysis examined that problem; assessed how well DOD can address the problem given its current program; identified capability gaps and shortfalls, risk areas, and redundancies; and identified the

capabilities DOD should develop. The last of the analyses, Global Strike Raid Evaluation of Alternatives,⁹ will make recommendations on potential approaches to overcome capability gaps by way of doctrine, organization, training, materiel, leadership, personnel, and facilities actions. The Joint Staff plans to complete this analysis in May 2008. DOD also has several similar analytical efforts underway or completed, such as the Air Force-led Prompt Global Strike Analysis of Alternatives, to identify potential weapons systems solutions for global strike.

Moreover, the U.S. Strategic Command has been implementing its assigned planning and command and control support responsibilities for the global strike mission. In addition to the support its headquarters provides for DOD efforts to implement and develop global strike capabilities, the command established a joint functional component command for global strike and integration to provide day-to-day management for its global strike mission. The command has also initiated several activities including improving processes and procedures for command and control, communications, and decision making and the management of intelligence, surveillance, and reconnaissance assets, and incorporating global strike operations into its concept plan. For example, development of adaptive planning systems such as the theater integrated planning subsystem and the integrated strategic planning and analysis network will allow Strategic Command planners to collaborate with and support the geographic combatant commands.

Global Strike Is Interpreted Differently among Combatant Command and Service Stakeholders

While key stakeholders have been involved in various global strike development efforts, global strike is interpreted differently among combatant command and service officials, who have significant roles and responsibilities in planning, coordinating, and executing global strike operations. DOD, Joint Staff, combatant command, and service officials we spoke with generally believe that global strike is a broad and unbounded concept that could include a wide range of forces and other capabilities and involve different scenarios. As a result, the concept can be

⁹ The Joint Staff is conducting an evaluation of alternatives for global strike in lieu of the functional solutions analysis—the last of the three analyses normally conducted within the Joint Capabilities Integration and Development System for assessing capabilities and recommending solutions. The evaluation of alternatives is a pilot program to bring together selected aspects of the current functional solutions analysis and analysis of alternatives activities, which until now had been conducted separately and sequentially, into a single, integrated analytic effort.

difficult to understand and creates different interpretations among stakeholders. For example, officials from the services offered a range of different interpretations of global strike operations:

- At a roundtable discussion we held with a number of officials at the U.S. Pacific Air Force Command, which supports the U.S. Pacific Command, the consensus reached was that global strike was a mission associated with the U.S. Strategic Command and the strikes conducted would originate from the continental United States. Some of the officials said that global strike was a special capability reserved only for the President, Secretary of Defense, and a Joint Force Commander.
- U.S. Pacific Fleet headquarters representatives told us that global strike implied that the capability would originate from outside the geographic command's region and would not include maritime-based targets.
- Air Force Air Combat Command representatives told us that they viewed global strike as encompassing a mission that was an autonomous event; had a global element; occurred in days rather than months; and involved no build-up of forces in the area of the strike prior to the mission.

Additionally, U.S. Pacific Command and U.S. Central Command officials we spoke with had difficulty distinguishing the differences between global strike and theater strike operations, which are strike operations conducted by a geographic command against potential targets within its area of responsibility. U.S. Pacific Command headquarters officials told us that they did not see a clear distinction between the characteristics and objectives of global strike and a theater strike. The officials said that operations in theater conducted by their command would address all potential targets, including high-value ones that are also identified as potential targets for global strike. Some Pacific Command officials viewed global strike as a unique capability that is requested by the theater commander when it is considered a better option. Other Pacific Command officials said the only difference between the two types of strike operations is whether the U.S. Strategic Command or the affected combatant command is assigned lead responsibility for the planning and/or execution of the operation. U.S. Central Command officials also agreed that global strike is currently a broad and unbounded concept that can, depending upon interpretation, take in much of current theater operations.

Different Stakeholder Interpretation of Global Strike Exists Due to Several Factors

We identified four factors that have led to stakeholders' varying perceptions of the global strike concept. These factors include the extent to which DOD has (1) defined global strike, (2) incorporated global strike into joint doctrine, (3) conducted outreach and communication activities with key stakeholders, and (4) involved stakeholders in joint exercises and other training involving global strike. However, while DOD has taken some actions to address each of these factors, further management actions are needed to foster better understanding and communication with key stakeholders for global strike.

DOD Has Not Clearly Defined Global Strike

DOD uses several definitions to describe global strike in its key studies, reports, and other documents. However, various officials from a number of DOD organizations do not believe these definitions provide a clear and consistent description of global strike. According to officials in DOD's Program Analysis and Evaluation Office, global strike is not well-defined and the term can mean different things among the combatant commands, services, and DOD organizations. DOD Program Analysis and Evaluation Office officials said that while a Senior Warfighter Forum¹⁰ in August 2006, which was led by the U.S. Strategic Command and included participants from the services, combatant commands, and defense agencies, was able to reach a consensus on a list of attributes for global strike capabilities, the forum was unable to agree on a common definition for global strike. A senior official in DOD's Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics said that DOD does not have a common definition for global strike or for prompt global strike. Acquisition, Technology, and Logistics officials told us, however, that DOD intends to reach agreement with stakeholders on a common global strike definition through the series of ongoing studies on potential global strike weapons systems that are nearing completion. Table 1 provides some examples of the definitions used within DOD to describe global strike.

¹⁰ A Senior Warfighter Forum is a mechanism by which a combatant commander can engage with his senior warfighting counterparts to identify the issues and capabilities associated with a particular mission or function of one or more combatant commands.

Table 1: Examples of Definitions Used by DOD to Describe Global Strike

Definition of global strike	Document
“...the capability for accelerated planning and execution using the full range of kinetic and non-kinetic effects, special operations force capabilities in support of national or theater commanders’ objectives.”	<i>Report to Congress: Global Strike Plan</i> , The Office of the Secretary of Defense, June 2004
“...responsive joint operations that strike enemy high value/payoff targets, as an integral part of joint force operations conducted to gain and maintain battlespace access, achieve other desired effects and set conditions to achieve strategic and operational objectives.”	<i>Global Strike Joint Integrating Concept</i> , Department of Defense, January 2005
“...the ability to rapidly plan and deliver limited-duration and extended-range attacks to achieve precision effects against highly valued adversary assets.”	<i>Deterrence Operations Joint Operating Concept</i> , Department of Defense, July 2006
“The capability to rapidly attack fleeting or emerging high-value targets without warning, anywhere on the globe to meet national objectives. Global strike is also the capability to neutralize the adversary’s anti-access systems, paving the way for follow-on forces.”	<i>Air Force Concepts of Operations</i> , Department of the Air Force, December 27, 2006
“...as rapidly planned, limited-duration, extended-range precision attacks that are conducted to achieve strategic objectives. They may be executed against highly valued adversary assets using lethal and nonlethal methods.” ^a	<i>Homeland Security, Joint Publication 3-26</i> , August 1, 2005, and <i>Homeland Defense, Joint Publication 3-27</i> , July 12, 2007, Joint Chiefs of Staff

Source: Multiple DOD sources.

^aJoint Publication 3-27 states that the global strike term and its definition are applicable only in the context of that publication and cannot be referenced outside of the publication.

The lack of a universally accepted definition has hindered some of the services from incorporating global strike into their documents. U.S. Pacific Fleet representatives told us that because DOD has not provided a common definition or bounded the global strike concept and mission very well, the Pacific Fleet has not incorporated global strike into its planning and training activities and documents. Additionally, Department of the Army headquarters officials told us that, due to the lack of an approved joint definition of global strike, the Army has yet to incorporate global strike into its documents and publications. The officials also said the role and responsibilities and contributions of the Army for global strike operations have not been clearly defined in global strike documents. The Army would likely play a role in global strike operations by deploying follow-on forces after a global strike attack to assess battle damage and provide security and civil operations, according to the officials.

Officials at the U.S. Special Operations Command told us that the lack of a universally accepted common definition would not affect the successful planning and execution of a global strike operation. The officials said that should a decision be made to conduct a global strike operation, the specific details will be provided in various orders prior to the operation. However, the officials stated that an agreed upon definition that gave a

Global Strike Has Not Been
Widely Included in Joint
Doctrine

specific description of the global strike would provide everyone with a common point of departure and clearer understanding of the term. U.S. Central Command officials similarly agreed that a clear, accepted joint definition would help to promote a more consistent interpretation of global strike and what it entails. According to Air Force headquarters officials, while the Air Force has developed a definition that focuses on its own forces' contributions and support for global strike, a joint definition that is generally accepted and used throughout DOD would provide common ground among the services and DOD organizations for discussing and interpreting global strike. Officials in the Joint Staff's Force Structure, Resources and Assessment Directorate likewise agreed that a universally accepted global strike definition would promote greater acceptance and understanding among DOD organizations.

While the Joint Chiefs of Staff has included a short description of global strike and the responsibilities of the U.S. Strategic Command for the global strike mission in two joint doctrine publications for homeland security and homeland defense,¹¹ it has not included a more detailed discussion of global strike operations in any other existing or proposed doctrine publication. Joint doctrine consists of the fundamental principles that guide the employment of military forces in a coordinated action toward a common objective and is meant to enhance the operational effectiveness of U.S. forces. According to officials in the Joint Doctrine Group at the U.S. Joint Forces Command, global strike and the mission responsibilities of the U.S. Strategic Command were included in the homeland security and homeland defense joint publications to cite an example of a possible preemptive and/or offensive action that could be taken in defense of the United States. The officials said the publications were not intended to provide a comprehensive and specific discussion of global strike operations but rather to discuss how global strike would contribute to homeland security and defense objectives.

Although a proposed joint publication on strategic attack was to include a more detailed discussion of global strike, the publication was cancelled and there have been no other proposals for incorporating such a discussion in any new or existing joint publication. Officials in the Joint Forces Command's Joint Doctrine Group said that a detailed discussion of global strike was to be included in a proposed joint publication on

¹¹ *Homeland Security*, Joint Publication 3-26, Joint Chiefs of Staff (Aug. 2, 2005) and *Homeland Defense*, Joint Publication 3-27, Joint Chiefs of Staff (Jul. 12, 2007).

strategic attack, which would have focused on the strategic effects achieved at the theater operational and/or tactical levels of war. In June 2005, U.S. Strategic Command, the lead sponsor for the new publication, submitted a draft publication for review but the publication was subsequently cancelled after it was determined to be inconsistent with the approved Joint Staff guidance for preparing the publication. According to Joint Doctrine Group officials, the proposed publication on strategic attack would have overlapped with other publications and did not provide any unique doctrinal fundamentals that were not already covered in existing doctrine. According to officials in Joint Forces Command's Joint Doctrine Group, a proposal to include a more comprehensive discussion of global strike in joint publications could be made to the Joint Staff and their group would be responsible for conducting an analysis to determine the proposal's validity. However, the officials said they were not aware of any action by the U.S. Strategic Command or another organization to propose that global strike be considered for a new joint publication or incorporated into an existing one. The Joint Doctrine Group officials told us they believe that a proposal has not been made because the joint community may not consider global strike to be mature enough and therefore be reluctant to incorporate it into joint doctrine until the concept is better defined and demonstrated in joint exercises and actual crises. U.S. Strategic Command officials told us that their command had no current plans to resurrect the strategic attack publication or propose one for global strike.

Although some officials in the joint community say that incorporating global strike into joint doctrine is premature, several DOD officials said that developing joint doctrine would promote understanding and implementation of the concept. The Air Force's Air Combat Command and U.S. Central Command officials told us that there is sufficient reason to begin developing or incorporating global strike into existing doctrine for those forces and capabilities that are currently available to conduct a global strike operation. The Air Combat Command officials said that because of the 2-year process to develop doctrine, it makes sense to begin creating joint doctrine now for current capabilities. The officials added that the resulting doctrine would be revised as additional global strike capabilities, such as advanced prompt global strike systems, become available. Additionally, a U.S. Central Command official stated that the development of joint doctrine would help clarify the global strike concept because it could assist operational planners in explaining the situations where global strike would be a good option and the responsibilities and expectations of the U.S. Strategic Command and the geographic commands. Central Command officials said that doctrine also could

distinguish global strike from other types of strike operations conducted by geographic combatant commands. According to the Joint Chiefs of Staff's instruction on the development of joint doctrine, joint doctrine standardizes the terminology, training, relationships, responsibilities, and processes among all U.S. forces to free joint force commanders and their staffs to focus efforts on solving the strategic, operational, and tactical problems confronting them.¹² Without a more comprehensive inclusion of global strike within joint doctrine for current capabilities, the combatant commands and services will not have complete guidance to further their understanding and effectively plan, prepare, and deploy forces for global strike operations.

Opportunities Exist to Enhance U.S. Strategic Command's Outreach Approach for Global Strike

Although the U.S. Strategic Command has taken steps to explain and promote understanding of global strike operations and its mission responsibilities, various geographic combatant command and service officials we spoke with generally said that the Strategic Command should increase its global strike outreach activities (e.g., visits, briefings, and education) to reach more staff throughout the commands and services. These officials also said that these activities should be provided on a continuous and consistent basis to reach command and service staffs that experience frequent turnover. As part of its responsibilities for the global strike mission, the Strategic Command supports other combatant commanders and integrates the capabilities of all affected combatant commands through training, exercises, and planning for both theater interests and potential global strike missions. In our prior work in identifying key practices adopted by organizations undergoing successful transformations, we found that it is essential for organizations to adopt a communication strategy that provides a common framework for conducting consistent and coordinated outreach within and outside its organization and seeks to genuinely engage all stakeholders in the organization's transformation.

U.S. Strategic Command officials have conducted visits, provided briefings, and assigned liaison staff to the geographic combatant commands to promote understanding of its global strike mission and responsibilities. The Strategic Command, according the command's liaison to U.S. Central Command, initiated a visit to the Central Command in October 2006 to provide a briefing on all of the command's missions and

¹² *Joint Doctrine Development System*, Instruction 5120.02A, Chairman of the Joint Chiefs of Staff (Mar. 31, 2007).

activities, including global strike. The liaison said that the visit provided an opportunity for Central Command's staff to gain perspectives on global strike and the Strategic Command's mission responsibilities. Similarly, U.S. Special Operations Command officials told us that the Strategic Command's joint functional component commander for global strike and integration provided a global strike mission briefing to U.S. Special Operations Command's senior leadership in August 2006.

However, while Strategic Command officials are generally satisfied with the existing communications, a number of other combatant commands are looking for additional support. U.S. Pacific Command officials told us that while the Pacific Command has established a close relationship with the Strategic Command over the past few years, the command is still learning about Strategic Command's mission responsibilities, particularly for global strike. According to Pacific Command officials, the U.S. Strategic Command's liaison officer provided an outreach briefing in early 2007 to their organization which included information on the global strike concept. The officials said that similar briefings should be given regularly throughout the command because of the constant turnover of staff. According to the U.S. Strategic Command's liaison at the U.S. Pacific Command, it does not appear that information on global strike is getting out to all of the Pacific Command staff. The liaison based his statement on comments made by Pacific Command staff to GAO during a March 2007 visit to the command. This indicates, according to the liaison, that the Strategic Command should provide briefings and hold discussion sessions with more of the Pacific Command organizations, particularly on how global strike operations fit into the theater commander's plans and differ from other types of theater operations. Air Force Space Command officials told us that the Strategic Command should provide thorough and updated education and communication of its prompt global strike mission with the geographic combatant commands to increase understanding and mitigate any misconceptions the commands may have about the conduct of global strike operations in their regions. The officials said that it is important for the Strategic Command and other combatant commands to establish a consistent dialogue on their roles and responsibilities and the use of global strike weapons before any new prompt global strike weapon is deployed. Similarly, a U.S. Central Command official said that the Strategic Command should conduct more outreach activities for global strike with combatant command staffs to explain the global strike concept and the relationships with other commands. Additionally, U.S. Special Operations Command officials told us that while they found the Strategic Command's Web site beneficial, it was not widely known among the command's staff.

Global Strike Has Not Been Widely Practiced in Exercises and Training

While the U.S. Strategic Command has taken several positive actions to promote global strike and its mission, without a consistent and comprehensive outreach strategy the command may not reach the combatant commands and services to the extent needed to foster acceptance and understanding of global strike. As a result, the command may encounter difficulty in future global strike implementation efforts.

Joint exercises and other training activities can provide opportunities for service and combatant command staffs to practice operational procedures and processes to increase their understanding of global strike. However, global strike has only been included in a few major joint exercises, largely those sponsored by the U.S. Strategic Command, over the past 2 years. The U.S. Strategic Command has incorporated global strike and its other missions into its annual joint command exercises. Beginning with the command's Global Lightning exercise in November 2005, the Strategic Command has included global strike objectives in its annual Global Lightning, Global Storm, and Global Thunder exercises. According to Strategic Command officials, representatives from some of the other combatant commands have participated in portions of these exercises, while other combatant commands, such as the U.S. Central Command, may not always participate because of other commitments. A Strategic Command joint exercise division official said, however, that some global strike objectives have been incorporated into recent exercises sponsored by U.S. Pacific, European, and Special Operations Commands. For instance, global strike time-sensitive planning has been included in Special Operations Command's Able Warrior exercises.

U.S. Strategic Command officials told us that while global strike needs to be incorporated to a greater extent in joint exercises, it is often difficult because of differing exercise objectives. For example, a senior official in the Strategic Command's Joint Functional Component Command for Global Strike and Integration said that including global strike objectives in joint exercises other than those of Strategic Command can be challenging because it is often difficult to create scenarios that make sense for executing a global strike mission considering other primary exercise objectives. U.S. Central Command, for example, has not included global strike in the joint exercises it sponsors. Additionally, officials in U.S. Strategic Command's exercise branch told us that other combatant commands are hesitant to add objectives that could lessen the focus on the primary exercise objectives. As a result, Strategic Command officials said that it can also be difficult to overlap its exercises with those of another command. For example, U.S. Strategic Command proposed linking its Global Lightning 2007 exercise, which had a global strike focus,

with U.S. Pacific Command's Terminal Fury 2007 exercise. Both were scheduled for late 2006. Global Lightning and Terminal Fury are annual command post exercises sponsored by U.S. Strategic Command and U.S. Pacific Command, respectively, and involve the commanders and their staffs in testing and validating the communications within and between headquarters and simulated forces in deterring a military attack and employing forces as directed. Terminal Fury is partly intended to train the command's staff in exercising its theater warfighting concept plan and is considered by the commander of the Pacific Command to be the command's number one priority exercise. The Pacific Command agreed to overlap the two exercises after the command determined there would be only minimal impact on its objectives. However, U.S. Pacific Fleet officials told us that Pacific Command, reluctant to have another command operate forces in its theater, insisted on having control of the forces executing the global strike operation in the exercise.

U.S. Strategic Command makes some training on global strike available to its staff and those of other commands and organizations. An official in U.S. Strategic Command's joint exercise division, who was designated to speak for the command, told us that staffs from U.S. Special Operations, Pacific, and European Commands have attended basic courses on global strike during visits to Strategic Command. The official said that the global strike courses are also available on its Web site on DOD's classified computer network. Additionally, during the preparation for joint exercises, participating staffs are made aware and encouraged to take the online courses to come up to speed on various areas. However, the command is considering sending staff to other combatant commands to help provide more consistent training.

DOD Is Assessing Several Potential Offensive Strike Weapons Systems for Global Strike but Has Not Fully Assessed Related Enabling Capabilities

DOD has underway or completed several global strike assessments to identify potential conventional offensive strike weapons systems it may need in the near, mid, and long term,¹³ particularly those for prompt global strike. However, DOD has not fully assessed the requirements for various enabling capabilities it needs for global strike or coordinated its efforts to improve these capabilities with potential offensive systems it intends to develop. Enabling capabilities DOD considers critical include intelligence collection and dissemination, surveillance and reconnaissance, command and control, communications, and battlefield damage assessment. Without a full assessment of enabling capabilities, DOD may not make the best decision regarding which enabling capability improvements to pursue to meet global strike operational requirements.

DOD Efforts Largely Focus on Evaluating Potential Near-, Mid-, and Long-term Offensive Global Strike Capabilities

While DOD has several analyses underway to determine desired capabilities and identify capability gaps and shortcomings, recent efforts for global strike have largely focused on developing new offensive strike systems that provide improved prompt and long-distance response capabilities. DOD has two major efforts underway to develop potential offensive systems that provide a sea- and land-based prompt global strike capability in the near- and midterm time frames. For the long term, DOD has four key studies underway or completed that are examining potential offensive strike systems to provide global strike capabilities beginning sometime after 2018.

To provide a near-term prompt global strike capability, DOD has requested funds to develop the Navy's conventional Trident modification proposal, which would place conventional warheads on some Trident II ballistic missiles aboard strategic Trident submarines. However, while Navy plans could have the modified missile available around 2011, the proposal has not been fully funded in recent budgets because of congressional concerns over placing conventional missiles on submarines that would also carry missiles equipped with nuclear warheads. Because of these concerns, Congress has also mandated a study by the National Academy of

¹³ According to DOD, near term is defined as now to 7 years in the future (2007-2013); midterm is from 2013-2020; and long term is 2020 and beyond.

Sciences¹⁴ to review alternative prompt global strike options. The Academy provided the Senate Appropriations Subcommittee on Defense with an interim report in May 2007, which concluded that a single system for prompt global strike was not the best way to proceed in the long term given the uncertainties in the strategic environment and a range of systems that need to be developed. The report also concluded that while the conventional Trident missile is not the optimal solution, it offers the only viable prompt global strike capability within the next 6 years. The Academy plans to issue a final report in the spring of 2008. Additionally, in the conference report for the defense fiscal year 2008 appropriations bill, the conferees agreed to provide no funding for testing, fabrication, or deployment of the new conventional Trident missile.

The Air Force Space Command is examining a midterm land-based ballistic missile system that would provide a prompt global strike capability and could be available as early as 2015. The proposed conventional strike missile would carry off-the-shelf conventional weapons and may incorporate a new maneuverable weapons delivery system. The Air Force's preliminary plans would station the conventional strike missile first at Vandenberg Air Force Base in California, which has some preexisting infrastructure that can support the system, and possibly later at Cape Canaveral, Florida. However, several technical, security, and policy issues would need to be resolved before the missile could be fielded, including technological advances in thermal protection systems and resolution of Strategic Arms Reduction Treaty implications. Beginning in fiscal year 2008, the Air Force transferred its funding for prompt global strike to a defensewide account to fund a consolidated, multiservice approach, managed by the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics.

To provide global strike capabilities sometime after 2018, DOD has conducted four global strike capability assessment studies: (1) Next Generation Long-Range Strike Analysis of Alternatives, (2) Nuclear and

¹⁴ The private, nonprofit National Academy of Sciences is a society of distinguished scholars engaged in scientific and engineering research that serves as an adviser to the federal government. The conference report accompanying the 2007 DOD appropriations bill (H.R. Rep. No. 109-676, at 228 (2006) (Conf. Rep.)) contained a request for the academy to conduct a study to analyze the mission requirement for using existing Trident II missiles with conventional payloads to provide a prompt global strike capability, and where appropriate, consider and recommend alternatives that meet the prompt global strike mission in the near, mid, and long terms. The National Academies, *Conventional Prompt Global Strike Capability: Letter Report* (Washington, D.C.: May 11, 2007).

Conventional Global Strike Missile Study, (3) Prompt Global Strike Analysis of Alternatives, and (4) Global Strike Raid Evaluation of Alternatives. Each is shown in table 2.

Table 2: DOD Long-term Global Strike Studies to Identify Potential Offensive Strike Systems

Study	Lead organization responsible for conducting study	Purpose	Actual/ planned study completion date
Next Generation Long-Range Strike Analysis of Alternatives	Air Combat Command	Recommend the most cost-effective weapon system capable of penetrating and persisting in antiaccess environments by 2018 to achieve desired effects.	April 2007
Nuclear and Conventional Global Strike Missile Study	U.S. Strategic Command and U.S. Air Force	Assess the mission requirements for a successor to the Minuteman III intercontinental ballistic missile and the technical characteristics associated with those requirements. Assess the mission requirements for a prompt global strike missile and the technical characteristics associated with those requirements. Assess the potential for adapting a conventional prompt global strike missile into a Minuteman III successor.	August 2007
Prompt Global Strike Analysis of Alternatives	Air Force Space Command	Evaluate a range of system concepts to deliver precision weapons with global reach, in minutes to hours, to provide effectiveness and cost information necessary to justify initiation of an acquisition program.	Spring 2008
Global Strike Raid Evaluation of Alternatives	Joint Staff	Recommend investment alternatives for global strike to address identified capability gaps.	May 2008

Source: GAO analysis of DOD global strike studies.

DOD has completed two of its four long-term studies examining potential offensive strike systems to provide global strike capabilities sometime after 2018. Three of the four studies assess possible offensive strike weapons systems that would provide a prompt and long-range capability for global strike, while the fourth study, the Next Generation Long Range Strike Analysis of Alternatives, examines potential strike systems that could potentially travel great distances to penetrate and loiter deep within

an enemy's territory to deliver high-volume strikes against time-critical targets.¹⁵

DOD Considers Enabling Capabilities as Critical for Conducting Successful Global Strike Operations

Enabling capabilities that DOD considers critical in supporting global strike operations include intelligence collection and dissemination, surveillance and reconnaissance, command and control, communications, and battlefield damage assessment. Planning, executing, and assessing the success of global strike operations may place greater demands on enabling capabilities as new offensive capabilities are acquired. Although the successful conduct of all strike operations depends on enabling capabilities, the nature of global strike operations—such as the potentially long distances over which strike systems may be required to operate, compressed time frames for execution, improved accuracy, the fleeting nature of some global strike targets, and the high-level decision authority required—creates potential operational challenges for these capabilities. Figure 1 shows the role of enabling capabilities in supporting sequential key events in the conduct of strike operations from prior monitoring of the area; initially finding, locating, and identifying a target; executing a strike; to conducting of battlefield damage assessment to determine the success of the strike and whether further actions are required.

¹⁵ Time-critical targets are of high value, require immediate response, or have a limited window of vulnerability such as mobile theater missiles, surface-to-air missile launchers, and cruise missile batteries.

Figure 1: Support Provided by Enabling Capabilities in the Conduct of Global Strike Operations

Key event	Action	Enabling capability
Prepare and plan	Monitor, task, and integrate intelligence to predictively analyze adversary intentions.	Intelligence, surveillance, and reconnaissance
Find and fix	Find, locate, and identify target.	Intelligence, surveillance, and reconnaissance
Track	Track target until desired effect is achieved.	Intelligence, surveillance, and reconnaissance
Target	Select capability that can create desired effect against target while limiting collateral damage.	Command and control
Engage	Make decision to engage target and execute using kinetic and/or nonkinetic capabilities.	Command, control, and communications
Assess	Conduct battlefield damage assessment to verify whether desired effect was achieved and if subsequent actions are needed.	Intelligence, surveillance, and reconnaissance

Source: DOD.

According to the Defense Science Board’s Report on Future Strategic Strike Forces,¹⁶ current enabling capabilities are not sufficient to fully support the requirements for global strike operations. Current intelligence, surveillance, and reconnaissance and command and control capabilities generally do not provide the persistent coverage, processing and sharing of information, and rapid planning required for compressed global strike time frames, according to U.S. Strategic Command officials. Additionally, Air Force Space Command officials told us that they are concerned about whether current capabilities of intelligence, surveillance, and reconnaissance assets would be able to recognize and assess the damage caused by future global strike systems. For example, future systems may

¹⁶ Department of Defense, Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, *Report of the Defense Science Board Task Force on Future Strategic Strike Forces* (Washington, D.C.: February 2004).

use flechette warheads, which would disperse metal darts upon impact that do not create large craters like traditional explosive devices; therefore, the damage may not be readily visible to intelligence, surveillance, and reconnaissance assets. Further, according to U.S. Air Force officials, current enabling capabilities lack the ability to reliably produce up-to-date accurate and responsive information to strike fleeting targets that can change locations unexpectedly, particularly in areas where U.S. forces may be denied access. Fleeting targets may be difficult to detect or identify with current intelligence, surveillance, and reconnaissance sensors because of the adversary's use of techniques such as mobility and/or camouflage, concealment, and deception. Therefore, the target must be rapidly engaged before the adversary can employ these techniques and disrupt effective targeting efforts. According to Air Force, Defense Intelligence Agency, and RAND Corporation¹⁷ officials we spoke with, striking mobile and fleeting targets—the most difficult types of targets to strike—requires greater intelligence capabilities than many other types of strike operations to positively identify the target and provide persistent surveillance to track and engage the target.

DOD is pursuing several independent efforts to assess and improve enabling capabilities that are critical elements in the pre- and poststrike phases of global strike operations. For example, U.S. Strategic Command has a number of initiatives underway to improve command and control with the goal of providing military planners with a clear understanding of the threat, fast and accurate planning, and tools for timely and efficient decision making. Additionally, U.S. Strategic Command and defense agencies, such as the Defense Intelligence Agency and the Defense Threat Reduction Agency, are exploring initiatives to reduce the time needed to gather information for strike planning and assessments by increasing available intelligence, surveillance, and reconnaissance capabilities. For example, to be able to quickly assess battle damage, the Defense Threat Reduction Agency and the Defense Advanced Research Projects Agency are exploring the idea of dispensing intelligence, surveillance, and reconnaissance sensors from future prompt global strike platforms, such as the proposed conventional strike missile, around target areas shortly before the release of its weapon.

¹⁷ The RAND Corporation operates three DOD federally funded research and development centers that conduct a broad array of national security research for the Departments of the Air Force and Army, the Office of the Secretary of Defense, defense agencies, the Unified Commands, and the Joint Staff. RAND has conducted a number of studies related to global strike issues, such as research on concepts for long-range strikes.

**DOD's Recent Studies
Have Not
Comprehensively Included
Assessments of Critical
Enabling Capabilities**

Recent DOD studies to identify potential offensive strike systems for global strike provide only limited assessments of the enabling capabilities needed for a particular focus of global strike or a particular weapons system and do not collectively provide a complete assessment of enabling capabilities needed to support global strike operations. Joint Staff officials who are conducting the Global Strike Raid Evaluation of Alternatives study said they plan to assess the enabling capabilities as an important step in understanding all of the capabilities needed to support global strike operations. However, the global strike raid study will only analyze the use of global strike as a limited strike capability against time-critical targets and will not examine its use in all aspects of major combat operations. Similarly, the Nuclear and Conventional Global Strike Missile Study only examined enabling capabilities needed for the future conventional and nuclear land-based ballistic missile options considered in its assessment. However, the National Academy of Sciences, recognizing the importance and greater demand that global strike would place on enabling capabilities, plans to include an assessment of global strike capabilities in its congressionally mandated spring 2008 final report on conventional prompt global strike.

Global strike operations can increase the demand for enabling capabilities depending on the threat and the target to be attacked. For example, conducting strikes against mobile delivery systems for weapons of mass destruction poses one of the most dangerous and elusive threats for global strike operations. Defense Threat Reduction Agency officials told us that they rely on enabling capabilities to provide the information needed to locate the target and guide the weapons system to strike with accuracy within compressed time frames, while minimizing any potential collateral effects. Moreover, the intelligence needed for planning and executing strikes against mobile delivery systems for weapons of mass destruction is currently limited or incomplete, according to Defense Threat Reduction Agency officials.

Several DOD and Air Force officials we spoke with said that enabling capabilities were not being fully considered to the extent needed in global strike system studies. According to a DOD Program Analysis and Evaluation official, who has responsibility for global strike issues, both of the Air Force's analyses of alternatives studies—i.e., prompt global strike and next generation long-range strike—had methodological weaknesses because neither assessed the enabling capabilities required for conducting global strike operations. Instead, the teams conducting the two studies assumed that certain needed improvements in enabling capabilities, such as intelligence, surveillance, and reconnaissance, would be available when

any future system is fielded. The scope and range of enabling capabilities that could be assessed in the studies were limited because of the need to obtain special security clearances, according to U.S. Strategic Command and Air Force Space Command officials. Similarly, the Global Strike Raid Evaluation of Alternatives study was delayed for several months because of difficulties obtaining special access clearances needed to review enabling capability development efforts across DOD. Air Force officials responsible for conducting the Prompt Global Strike Analysis of Alternatives stated that an assessment of needed enabling capabilities should be done to complement their study. However, the officials did not know of any such assessment of enabling capabilities being conducted. The Air Force officials said that their analysis does not completely address enabling capabilities because (1) an assessment of enabling capabilities was not the focus of their analysis, (2) the analysis work required to assess offensive systems for their study alone is expected to take 2 years, (3) the study staff lacks the special access clearances required to obtain information on all DOD efforts for improving enabling capabilities, and (4) the services submitting proposals for potential prompt global strike systems wanted to limit their cost estimates to the weapon system only.

Furthermore, the analyses conducted for the conventional Trident missile and conventional strike missile proposals have not fully included assessments of required enabling capabilities. According to Joint Staff officials we spoke with, the analyses conducted for the Navy's conventional Trident missile proposal did not fully consider intelligence capabilities and requirements. As a result, the intelligence, surveillance, and reconnaissance capabilities needed to support this potential global strike system, which are currently in limited availability, may not be in place since an analysis of enabling capabilities has not yet been performed for it. Air Force Space Command officials developing the conventional strike missile told us that they have yet to perform an analysis of the enabling capabilities that potential strike systems would require.

Additionally, DOD has not coordinated all of its efforts to improve enabling capabilities with its assessments for new offensive global strike systems. Because DOD has not fully assessed the enabling capabilities required or coordinated various department efforts to improve enabling capabilities alongside its plans for future strike systems, it may not have all of the key enabling capabilities in place when needed to support new offensive capabilities if and when they are funded. For example, Defense Advanced Research Projects Agency officials told us that the agency recognizes that such efforts as its Rapid Eye program, which is examining concepts for an aircraft that would arrive within hours in an emerging area

of interest to provide a limited persistent intelligence, surveillance, and reconnaissance capability, could potentially fill gaps in enabling capabilities needed for global strike. Nevertheless, the officials said that DOD has not yet recognized the importance of coordinating these efforts with ongoing offensive global strike system assessments to better understand the range of enabling capabilities being developed and their estimated availability. DOD has taken some important first steps to formulate a strategy for improving the integration of future intelligence, surveillance, and reconnaissance requirements through the development of its *Intelligence, Surveillance, and Reconnaissance Integration Roadmap*. However, as we previously reported in 2007, the roadmap does not define requirements for global persistent surveillance; clarify what intelligence, surveillance, and reconnaissance requirements are already filled; identify critical gaps as areas for future focus; or otherwise represent an enterprise-level architecture of what the intelligence, surveillance, and reconnaissance enterprise is to be for future operations, such as global strike.¹⁸

Since DOD has not fully assessed the required enabling capabilities or coordinated various department efforts to improve enabling capabilities, such as intelligence, surveillance, and reconnaissance and command and control, for future strike systems, DOD might not make the best decisions regarding which enabling capabilities to pursue. As a result, the effectiveness of these new offensive capabilities against critical high-value targets may be limited when initially fielded.

¹⁸ GAO, *Intelligence, Surveillance, and Reconnaissance: Preliminary Observations on DOD's Approach to Managing Requirements for New Systems, Existing Assets, and Systems Development*, [GAO-07-596T](#) (Washington, D.C.: Apr. 19, 2007).

DOD Has Identified and Tracked Some Investments Related to Global Strike but Has Not Developed a Prioritized Global Strike Investment Strategy

While DOD plans investments in a range of global-strike-related capabilities, it has not yet begun to develop a prioritized investment strategy that considers the breadth of current efforts and future plans to develop capabilities for global strike, integrates these efforts to assess global strike options, and makes choices among alternatives in light of the department's long-term fiscal challenges. Such a strategy would initially capture currently planned investments and would be refined and updated as DOD further develops its concept and identifies additional capabilities. Our prior work has shown that a long-term and comprehensive investment approach is an important tool in an organization's decision-making process to define direction, establish priorities, assist with current and future budgets, and plan the actions needed to achieve goals. DOD studies and officials have identified a need for a broad, holistic view of global strike development that captures and gives visibility to all its efforts—proposed or underway—for increasing both offensive and enabling global strike capabilities. However, DOD has not fully assessed its FYDP to determine the extent to which current development programs, projects, and activities could contribute to global strike capabilities or explained how it plans to link its long-term studies to identify potential offensive weapons systems for global strike that will result in a comprehensive prioritized investment strategy. Ongoing DOD initiatives examining portfolio management approaches to manage selected groupings of investments could help DOD in developing a comprehensive prioritized investment strategy for global strike.

Comprehensive Investment Strategies Are an Important Tool in an Organization's Decision-making Process

Our prior work has shown that developing a long-term, comprehensive investment strategy provides an organization with an important tool in its decision-making process to define direction, establish priorities, assist with current and future budgets, and plan the actions needed to achieve goals. This strategy is intended to be a dynamic document, which would be refined and updated to adapt to changing circumstances. Such a strategy addresses needs, capabilities gaps, alternatives, and affordability, and includes information on future investment requirements, projected resources, investment priorities and trade-offs, milestones, and funding timelines. It allows an organization to address requirements on an enterprisewide, or departmentwide, basis and provides a means to evaluate the efficacy and severity of capability gaps or, alternatively, areas of redundancy. Without a long-term, comprehensive prioritized investment strategy, it is difficult to fully account for and assess real and potential contributions from other current and future weapons and supporting systems providing similar capabilities, mitigate capability shortfalls and eliminate duplication, and allocate scarce funds among a range of priorities.

DOD Has Not Conducted a Comprehensive Assessment of Global-strike-related Efforts in Its FYDP

Various DOD officials we spoke with recognize the need for DOD to have a broad, holistic view of global strike development that captures and gives visibility to all its efforts—proposed or underway—for increasing both offensive and enabling global strike capabilities. DOD, however, has yet to perform a comprehensive assessment to identify and track all potential global-strike-related efforts in its FYDP. An official in DOD’s Office of Program Analysis and Evaluation, who has responsibility for global strike issues, told us that his office tracks several significant FYDP programs that have specific global strike application, such as the Conventional Trident Modification, Common Aero Vehicle, and Falcon programs.¹⁹ The U.S. Strategic Command, according to command officials, informally tracks global-strike-related programs through DOD-wide conferences and periodic meetings with various contractors that are working on global-strike-related technology efforts. Additionally, in February 2007, the U.S. Strategic Command sponsored a prompt global strike technology conference to identify ongoing research, development, test, and evaluation efforts being conducted by the services, DOD laboratories, and defense agencies that would support development of prompt global strike capabilities.

While DOD organizations have conducted some assessments of global strike capabilities in the FYDP, they have not conducted a comprehensive assessment of the FYDP to manage and track DOD’s global-strike-related investments in conventional offensive and enabling capabilities. For example, according to an office official who has responsibility for global strike issues, DOD’s Office of Program Analysis and Evaluation has not determined the full range and status of science and technology development efforts with potential global strike application in the FYDP. As we reported in 2005, DOD’s Program Analysis and Evaluation office conducted a limited analysis of the FYDP and related budget documents and internal reviews to identify the range of New Triad spending, including spending for global strike.²⁰ However, Program Analysis and Evaluation

¹⁹ For the Conventional Trident Modification proposal, the Navy has sought funds to develop a conventional version of the Trident submarine-launched ballistic missile. The Common Aero Vehicle program is developing a maneuverable, global range, delivery vehicle carrying conventional warheads. Beginning in fiscal year 2008, the Air Force transferred the funding for this program to a defensewide account as part of a consolidated, multiservice effort, managed by the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics. The Falcon program intends to develop and demonstrate in flight hypersonic technologies that will enable prompt global reach missions.

²⁰ [GAO-05-540](#) and [GAO-05-962R](#).

officials told us that their analysis, which has not been updated, did not attempt to capture all of the potential global-strike-related development efforts in the FYDP. One Program Analysis and Evaluation official said that if a comprehensive assessment of all global-strike-related development efforts was conducted, it might show that existing systems could provide the high volume and compressed time required for prompt global strike with only limited investments in enabling and offensive capabilities. This lack of complete knowledge about how existing systems could be adapted to meet global strike requirements underscores the need for a more holistic assessment of DOD's efforts related to global strike.

The U.S. Strategic Command also has not conducted a comprehensive assessment of global strike investments that included DOD's FYDP. For example, the Strategic Command's 2007 prompt global strike technology summit did not fully capture development of offensive global strike technology or enabling capabilities, such as command and control, intelligence, and surveillance and reconnaissance. One of the summit's purposes was to inform and raise the awareness of prompt global strike technology development at the service laboratories and defense agencies. According to a Strategic Command official, however, the summit focused only on those efforts that could improve offensive kinetic global strike capabilities.

Our Analysis Identified 135
Global Strike and Related
FYDP Programs, Projects, and
Activities

Given that DOD has not conducted a comprehensive assessment of its FYDP for global-strike-related investments, we performed an analysis of FYDP program elements²¹ in the President's fiscal year 2008 budget submission to Congress to identify the range of potential global-strike-related research and development efforts. We established criteria and a list of key terms to use in our assessment from a review of descriptions, terms, and characteristics used by DOD in its principal global strike documents, including the Global Strike Joint Capabilities Document and Deterrence Operations Joint Operating Concept, and information obtained in discussions with DOD officials. Such an analysis would need to be conducted in developing a comprehensive prioritized investment strategy for global strike. Other global strike assessments of the FYDP programs,

²¹ Program elements are the primary data elements in the FYDP that generally represent organizational entities and their related resources. They represent descriptions of the various missions of DOD and are the building blocks of the FYDP, and they may be aggregated in different ways, including to show total resources assigned to a specific program, or to identify selected functional groupings of resources. Each program element can be made up of programs, projects, and activities.

projects, and activities may determine different criteria and methodologies to use and thus, may yield different results.

In our analysis, we identified 94 FYDP program elements in the fiscal year 2008 budget request that would provide funding for 135 programs, projects, and activities to develop conventional offensive and enabling capabilities having possible application for global strike. Of the 135 programs, projects, and activities we identified in our analysis:

- 85 would improve offensive capabilities, including efforts to improve kinetic weapons, nonkinetic weapons, and propulsion systems;
- 41 would improve enabling capabilities such as command, control, communications and computers and surveillance and reconnaissance systems; and
- 9 would improve both offensive and enabling capabilities such as predator development.

Also, we determined that 13 of the 135 programs, projects and activities, such as the Air Force's Common Aero Vehicle program, were exclusively for research and development of global strike capabilities. The remaining 122 programs, projects, and activities support research and development of offensive and enabling capabilities with potential application for global strike operations.

While the programs, projects, and activities we identified in our analysis are largely directed at developing capabilities for a wide range of military needs other than just global strike, these efforts reflect substantial near-term investments of several billions dollars in capabilities that could potentially be used in conducting future global strike operations. Appendix II summarizes the results of our analysis to identify global strike and related development in DOD's FYDP.

DOD Has Not Explained How Results of Its Global Strike Studies Will Be Integrated into a Prioritized Investment Strategy

DOD officials also have not clearly explained whether DOD plans to integrate the results of its four global strike studies to identify potential weapons systems into a comprehensive prioritized investment strategy. Additionally, none of the four studies would provide a roadmap that shows DOD's plans and schedules for developing and acquiring the full range of strike and enabling capabilities identified for global strike. For example, both of the Air Force's analyses of alternatives for prompt global strike and next generation long-range strike will provide investment information as a part of their final products, but that information will be limited to life-cycle costs for the preferred weapons system solution and will not address any needed investments required for enabling capabilities. Similarly, DOD

also plans to provide investment information in its Nuclear and Conventional Global Strike Missile Study and the Global Strike Raid Evaluation of Alternatives. However, DOD intends to prepare cost estimates only for capabilities required for the future ballistic missile solutions identified in the Nuclear and Conventional Global Strike Missile Study. Additionally, while DOD plans to review the full range of global-strike-related offensive and enabling capabilities in its Global Strike Raid Evaluation of Alternatives study, it only intends to provide possible investment options for offensive strike capabilities.

Portfolio Management Initiatives Could Help DOD Develop an Investment Strategy for Global Strike

The use of portfolio management, a best business practice, could help DOD in developing a prioritized investment strategy for global strike. Portfolio management is used to manage selected groupings of investments, or portfolios, at the enterprise level to collectively align investments with strategic goals and performance measures and provide a sound basis to justify the commitment of resources. In our March 2007 report examining the use of the portfolio management approach to improve DOD's ability to make weapon system investment decisions, we determined that although the military services fight together on the battlefield as a joint force, they identify needs and allocate resources separately, using fragmented decision-making processes that do not allow for an integrated portfolio management approach like that used by successful commercial companies.²² Through portfolio management, an organization can explicitly assess the trade-offs among competing investment opportunities in terms of their benefit, costs, and risks. Investment decisions can then be made based on a better understanding of what will be gained or lost through the inclusion or exclusion of certain investments. Use of portfolios in investment planning, according to DOD, could improve its efforts to increase interoperability, minimize redundancies and gaps, and maximize capability effectiveness.

²² GAO, *Best Practices: An Integrated Portfolio Management Approach to Weapon System Investments Could Improve DOD's Acquisition Outcomes*, [GAO-07-388](#) (Washington, D.C.: Mar. 30, 2007). Our report recommendations included that DOD should establish an integrated, portfolio-based approach to investments that incorporates best practices of successful commercial companies and establish a single point of accountability at the department level with the responsibility, authority, and accountability for ensuring that portfolio management for weapon system investments is effectively implemented across the department.

As part of its Defense acquisition transformation,²³ DOD is examining the use of portfolio management and has begun two initiatives—concept decision and capability portfolio management—within the past year that focus on the use of portfolio management approaches to manage capability investments in a mission area. If either is successful, these approaches could benefit DOD’s management and tracking of its global strike investments. The concept decision initiative is using four pilot studies that apply portfolio management techniques and other tools to merge information on requirements, technology maturity, and available resources to improve the range of choices for strategic investment decision making.²⁴ If successful, the pilots would ensure that DOD is making investment choices that balance operational and programmatic risks, are affordable, and can be successfully developed, produced, fielded, and maintained within planned funding levels. DOD plans to complete each of the four pilots by May 2008. The other initiative—capability portfolio management—is to investigate approaches to consider investment trades across previously stove-piped areas, and to better understand the implications of investment decisions across competing priorities. For example, senior decision makers, if the approach is successful, would be able to determine the implications of additional investments in prompt global strike with investments for joint command and control.

Viewing capabilities across the entire portfolio of assets, according to the 2006 Quadrennial Defense Review Report, enables decision makers to make informed choices about how to reallocate resources among previously stove-piped programs and hence to deliver needed capabilities to the joint force more rapidly and efficiently. DOD and U.S. Strategic Command officials involved with the Global Strike Raid Evaluation of Alternatives said that formulating portfolio options and making investment trade-offs for global strike will be difficult, because few of the capabilities are uniquely for global strike. However, DOD officials in the Office of the Secretary of Defense we spoke with stated that managing future global strike development as a portfolio of capabilities could result in more effective development of this mission area. Officials who are involved with

²³ See DOD reports: *Defense Acquisition Transformation Report to Congress*, Office of the Secretary of Defense, Department of Defense, February 2007 and July 2007.

²⁴ The concept decision pilots are (1) the Joint Lightweight Tactical Mobility program, (2) the Integrated Air and Missile Defense program, (3) the Global Strike Raid Scenario, and (4) the Joint Rapid Scenario Generation program.

the DOD concept decision pilot studies stated that a broader look at all related capabilities would likely increase the extent of improvements that could be made for the mission area when compared with a more limited look at solutions available from a single service or functional area.

Conclusions

While DOD has taken a number of steps to advance its global strike concept and assign responsibilities, its ability to implement the concept will be limited among key stakeholders until it more clearly defines global strike, begins incorporating global strike into joint doctrine, increases outreach and communication activities, and involves stakeholders to a greater extent in joint exercises and other training. Without a complete and clearly articulated concept that is well communicated and practiced with key stakeholders, DOD could encounter difficulties in fully implementing its concept and building the necessary relationships for carrying out global strike operations.

DOD has begun to identify a range of potential conventional offensive weapons systems to provide global strike capabilities. However, without fully assessing the requirements for various enabling capabilities that DOD considers critical to the success of global strike operations and coordinating its efforts to improve these capabilities with potential offensive systems it intends to develop, DOD may not have the enabling capabilities it needs to support new offensive capabilities, if and when they are funded. Similarly, without fully assessing the breadth of capabilities and technologies being developed within its FYDP that potentially contribute to global strike, DOD does not have the complete information it needs to track and manage its capability development efforts and develop a prioritized long-term investment strategy for global strike.

Recommendations for Executive Action

We recommend that the Secretary of Defense take the following four actions to strengthen DOD's efforts to implement its global strike concept and improve communications and mutual understanding within DOD of the scope, range and use of capabilities, and the incidence of global strike operations:

- Direct the Under Secretary of Defense for Policy, in consultation with the Under Secretary of Defense for Acquisition, Technology, and Logistics, the Chairman of the Joint Chiefs of Staff, and the Commander, U.S. Strategic Command, to develop and approve a common, universally accepted joint definition for "global strike," and

consistently incorporate this definition in global strike documents and joint doctrine.

- Direct the Chairman of the Joint Chiefs of Staff and the Commander, U.S. Joint Forces Command, in consultation with the Under Secretaries of Defense for Acquisition, Technology, and Logistics and Policy and the Commander, U.S. Strategic Command, to determine possible changes to existing joint doctrine or development of new joint doctrine that may be required to incorporate global strike operations, including the terminology and discussion of training, relationships, responsibilities, and processes for these operations, and initiate any subsequent doctrine development activities.
- Direct the Commander, U.S. Strategic Command, in consultation with the Chairman of the Joint Chiefs of Staff and the Under Secretaries of Defense for Acquisition, Technology, and Logistics and Policy, to establish an ongoing communications and outreach approach for global strike to help guide DOD's efforts to promote, educate, and foster acceptance of the concept among the combatant commands, military services, and other DOD organizations.
- Direct the Commander, U.S. Strategic Command, in consultation with the Commander, U.S. Joint Forces Command, to identify additional opportunities where global strike can be integrated into major joint exercises and other training activities.

We further recommend that the Secretary take the following four actions to provide the most complete information on the range of capabilities needed for global strike and to determine an affordable and sustainable balance in its spending for current and future global strike investments.

- Direct the Under Secretary of Defense for Acquisition, Technology, and Logistics, in consultation with the Chairman, Joint Chiefs of Staff, the Commander, U.S. Strategic Command, and the Secretaries of the Army, Navy, and Air Force, to conduct a comprehensive assessment of enabling capabilities to identify (1) any specific global strike operational requirements and priorities, (2) when these capabilities are needed to support future offensive strike systems, and (3) what plans DOD has for developing and acquiring these capabilities. DOD should link this assessment with other assessments examining potential strike systems for global strike and those being conducted for any specific supporting capability area to ensure that it has the most complete information available when making decisions on future global strike investments.

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- Direct the Under Secretary of Defense for Acquisition, Technology, and Logistics, in consultation with the Secretaries of the Army, Navy, and Air Force, to provide guidance on how the results of DOD studies to identify potential strike systems for global strike will be integrated into a comprehensive prioritized investment strategy for global strike, including a roadmap that shows the department’s plans and schedules for developing and acquiring offensive strike and enabling capabilities.
 - Direct the Under Secretary of Defense for Acquisition, Technology, and Logistics, in consultation with the Director, Office of Program Analysis and Evaluation and the Vice Chairman, Joint Chiefs of Staff, to perform a comprehensive review of all capabilities being developed within DOD’s Future Years Defense Program to determine the extent to which these capabilities contribute or can be leveraged for global strike and incorporate the results of this review into the development of a comprehensive prioritized investment strategy for global strike. The investment strategy should be updated, as needed, to adapt to changing circumstances.
 - Direct the Deputy Secretary of Defense, in consultation with the Deputy’s Advisory Working Group, the Under Secretary of Defense for Acquisition, Technology, and Logistics, and Director for Program, Analysis, and Evaluation, to determine the appropriateness of using a portfolio management approach for global strike to align its investments with strategic goals and performance measures and provide a sound basis to justify the commitment of resources, develop a prioritized investment strategy, and manage development and acquisition of global strike capabilities.

Agency Comments and Our Evaluation

In written comments on a draft of this report, signed by the Director, Joint Advanced Concepts, Office of the Under Secretary of Defense (Acquisition, Technology, and Logistics), DOD agreed with the report and with all of its eight recommendations. The department’s comments are discussed below and are reprinted in appendix III.

DOD concurred with our four recommendations intended to strengthen the department’s efforts to implement its global strike concept and improve communications and mutual understanding within DOD of the scope, range, and use of capabilities, and the incidence of global strike operations. Specifically, DOD concurred with our recommendations to (1) develop and approve a common, universally accepted joint definition for “global strike,” and consistently incorporate this definition in global strike documents and joint doctrine; (2) determine possible changes to

existing joint doctrine or development of new joint doctrine that may be required to incorporate global strike operations; (3) establish an ongoing communications and outreach approach for global strike; and (4) identify additional opportunities where global strike can be integrated into major joint exercises and other training activities. DOD stated that the Commander, U.S. Strategic Command, in consultation with the Under Secretary of Defense for Policy, the Under Secretary for Acquisition, Technology, and Logistics, and the Chairman of the Joint Chiefs of Staff, would develop a common, universally accepted concept and definition for “global strike.” DOD also stated that global strike, as a validated and executable concept, had not matured to the point that it is an extant executable capability, which DOD considers a prerequisite for incorporating global strike into joint doctrine. According to the department, when the concept is fully developed and validated, the U.S. Joint Forces Command will prepare the appropriate doctrine or determine possible changes in existing doctrine. While these are positive steps, we continue to believe that DOD can and should take additional steps now to facilitate the development of joint doctrine. For example, DOD should establish a time soon for completing development and reaching approval of its global strike concept and definition and incorporating the approved concept and definition in department documents. Reaching agreement on the concept and definition is also important as DOD moves ahead with its decisions on new investments in weapons systems and other capabilities for global strike and continues implementation of the concept among key stakeholders. In regard to our recommendations that U.S. Strategic Command establish an ongoing communications and outreach approach for global strike and identify additional opportunities where global strike can be integrated into major joint exercises and other training activities, DOD stated that the socialization of evolving concepts contributes to their maturing and validation and that it is U.S. Strategic Command’s responsibility, with support and assistance from the U.S. Joint Forces Command, to establish its training requirements and objectives for global strike. Considering the different interpretations of global strike we found among combatant command and service officials, we continue to believe that our recommendations, when fully implemented, would strengthen the positive actions currently being taken by the U.S. Strategic Command to conduct outreach and include global strike in major exercises and other training activities; promote greater understanding, involvement, and experience among these key stakeholders; and further DOD’s efforts to implement the global strike concept. In taking actions to implement our recommendations, for example, we believe that the Strategic Command could begin by consulting with combatant command and service stakeholders to identify opportunities to increase and enhance the

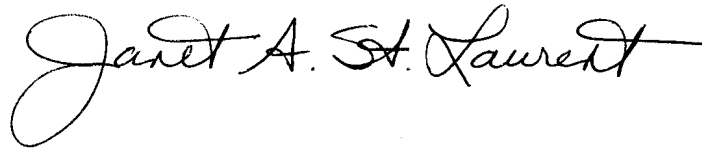
command's current outreach activities (e.g., visits, briefings, and education) and include additional global strike segments in major exercises and other training activities.

DOD also concurred with our four recommendations intended to provide more complete information on the range of capabilities needed for global strike and to determine an affordable and sustainable balance in its spending for current and future global strike investments. Specifically, DOD concurred with our recommendations to (1) conduct a comprehensive assessment of enabling capabilities (intelligence collection and dissemination, surveillance and reconnaissance, command and control, communications, and battlefield damage assessment); (2) provide guidance on how the results of its studies to identify potential strike systems for global strike would be integrated into a comprehensive prioritized investment strategy for global strike; (3) perform a comprehensive review of all capabilities being developed within DOD's FYDP to determine the extent to which these capabilities contribute or can be leveraged for global strike; and (4) determine the appropriateness of using a portfolio management approach for global strike. DOD's responses to our recommendations largely focus on conventional prompt global strike, which is a subset of the broader global strike mission area. In regard to enabling capabilities, DOD stated that its departmentwide capability portfolio management provides the means to optimize capabilities through the integration, coordination, and synchronization of department investments. Managers of the individual capability portfolios are responsible for identifying those aspects of their portfolios that are connected to more than one portfolio because of the breadth and depth of mission areas such as prompt global strike. According to DOD, as part of its comprehensive assessment for conventional prompt global strike, it intends to include ongoing and follow-on studies, such as the Air Force-led prompt global strike analysis of alternatives, in identifying operational requirements and priorities to determine when they are needed to support development of future offensive strike systems. DOD also stated that it plans to use its fiscal year 2008 Defense-wide Research, Development, Testing, and Evaluation account for prompt global strike to provide limited funding for mission-enabling capabilities. In regard to guidance for integrating the results of its long-term global strike studies, DOD stated that the Under Secretary of Defense for Acquisition, Technology, and Logistics will provide guidance for developing a comprehensive prioritized investment strategy and roadmap. It stated that for conventional prompt global strike in fiscal year 2008 the department will pursue an integrated approach in crafting this investment strategy, which will emphasize the application of ongoing and follow-on studies, including the Air Force-led

prompt global strike analysis of alternatives and the congressionally-mandated National Research Council's Committee on Conventional Prompt Global Strike Capability report provided by the National Academy of Sciences, and reference the evolving operational requirements and constraints described by U.S. Strategic Command and validated by the Joint Staff. DOD stated that its effort will also emphasize full utilization and collaboration with separately funded programs throughout DOD and the Department of Energy that potentially support conventional prompt global strike and cross-service and agency transparency and collaboration of all technology and experimentation matters. Concerning our recommendation to identify FYDP capabilities that could contribute or be leveraged for global strike, DOD stated that the Under Secretary of Defense for Acquisition, Technology, and Logistics would lead a comprehensive, capability-based review and prioritization of the global strike investment strategy within the FYDP. According to DOD, the goal of the FYDP for fiscal years 2008 through 2013 is to apply, advance, and demonstrate engineering for the selection and development of material solutions for the conventional prompt global strike mission area so that individual service acquisition programs can be funded and executed. DOD stated that it plans to submit a conventional prompt global strike research and development testing plan to Congress in April 2008, as required by the fiscal year 2008 National Defense Authorization Act. This plan will describe the strategy and investment needed over the next 5 years to develop and field full-mission prototypes. And lastly, in regard to our recommendation on portfolio management, DOD stated that with the creation of the Defense-wide Research, Development, Test, and Evaluation program element for prompt global strike in the President's 2009 budget, a portfolio management approach is being initiated. DOD further stated that the department fully supports using a portfolio management approach for conventional prompt global strike to align its investments with strategic goals and performance measures and provide a sound basis to justify the commitment of resources. The specific actions that DOD described in its comments for these four recommendations are positive steps in providing greater focus, transparency, and accountability for the department's efforts to increase global strike capabilities.

We are sending electronic copies of this report to interested congressional committees; the Secretary of Defense; the Chairman, Joint Chiefs of Staff; and the Commander, U.S. Strategic Command. We will also make electronic copies available to others on request. In addition, the report will be available at no charge on the GAO Web site at <http://www.gao.gov>.

If you or your staffs have any questions, please contact me at (202) 512-4402 or stlaurentj@gao.gov. Contact points for our Office of Congressional Relations and Public Affairs may be found on the last page of this report. Other major contributors to this report are listed in appendix IV.

A handwritten signature in black ink that reads "Janet A. St. Laurent". The signature is written in a cursive style with a large, looping initial "J".

Janet A. St. Laurent
Managing Director
Defense Capabilities and Management

Appendix I: Scope and Methodology

To identify whether the Department of Defense (DOD) has clearly defined and instilled a common understanding and approach to its global strike mission, we reviewed relevant global strike concept documents, studies, reports, briefings, and other pertinent documents to determine the scope, capabilities, range of operations, types of targets, doctrine, and other factors that make up the global strike concept and identify the definitions that are used throughout DOD to define the term “global strike.” For example, we reviewed the April 2006 *Global Strike Joint Capabilities Document*, a key document that identifies the set of capabilities required across all functional areas to accomplish the global strike mission, to obtain information on current global strike capabilities and shortfalls. Additionally, we reviewed various DOD guidance documents to identify assigned roles and responsibilities for global strike, including concept development, implementation, and operations. We reviewed, for instance, the most recent *2006 Unified Command Plan*, which establishes the missions and responsibilities, geographic areas of responsibilities, and functions for the commanders of the combatant commands, to identify the roles and responsibilities for the U.S. Strategic Command and the respective geographic combatant commands related to the global strike operations. We also met with officials from the Office of the Secretary of Defense; U.S. Joint Forces Command; U.S. Central Command; U.S. Special Operations Command; U.S. Pacific Command; U.S. Strategic Command; the Air Force, Army, and Navy headquarters and commands; and Defense Threat Reduction Agency to obtain information on various global strike areas such as roles and responsibilities, the global strike concept and its implementation, and joint doctrine. With these officials, particularly the geographic combatant commands, we also discussed their participation and inputs into relevant global strike exercises, training, and relative educational activities and with communication strategy used by the U.S. Strategic Command to explain and promote understanding of global strike operations and its mission responsibilities. Additionally, we met with officials from the U.S. Strategic Command to discuss challenges faced by the command and DOD in developing and implementing the global strike concept and communicating the concept to the combatant commands and other relevant entities within DOD.

To assess the extent to which DOD has assessed and developed capabilities needed for global strike, we reviewed the study plans, supporting and relevant documentation, and final reports, if available, for DOD’s four principal global strike assessments—Next Generation Long-Range Strike Analysis of Alternatives; Nuclear and Conventional Global Strike Missile Study; Prompt Global Strike Analysis of Alternatives; and Global Strike Raid Evaluation of Alternatives—to identify potential

conventional offensive strike weapons systems it may need in the near, mid, and long term. We discussed these assessments with officials at the Air Combat Command, U.S. Strategic Command, U.S. Air Force headquarters, Air Force Space Command, Joint Staff, and other lead and supporting organizations that were participants or had knowledge about the assessments. In discussing the ongoing Prompt Global Strike Analysis of Alternatives, for example, with officials at the Air Force Space Command at Colorado Springs, Colorado, we obtained documentation of the assessment, including its methodology, scope, assumptions, and schedule, as well as the organizations involved and the status of work to date. For each of the four major studies, we also examined the extent to which DOD has considered the requirements for enabling capabilities, such as intelligence and command and control, and their importance in achieving desired mission effectiveness. We reviewed studies and assessments on enabling capabilities from various organizations such as RAND Corporation, the Air Force, the Defense Intelligence Agency, the Defense Threat Reduction Agency, and U.S. Strategic Command, and discussed the information with officials from each of these organizations. We also reviewed our prior work, including our recent report on DOD's approach to managing requirements for intelligence, surveillance, and reconnaissance capabilities, to determine how DOD has coordinated and integrated its efforts to improve enabling capabilities. Additionally, we reviewed the Defense Science Board's 2004 report on Future Strategic Strike Forces¹ to obtain their assessment of enabling capabilities requirements and recommendations for future strategic strike systems. In our discussions with officials at various combatant commands—such as U.S. Strategic Command, U.S. Pacific Command, the Defense Intelligence Agency, the Defense Threat Reduction Agency, and military services—we obtained information on the roles and requirements for enabling capabilities in support of global strike systems and availability and shortfalls for these capabilities.

To assess the extent to which DOD has identified the funding requirements and developed an investment strategy for acquiring new global strike capabilities, we obtained and analyzed information and interviewed officials within the Office of Secretary of Defense, including the Office of Program Analysis and Evaluation, the Defense Science Board,

¹ Department of Defense, Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, *Report of the Defense Science Board Task Force on Future Strategic Strike Forces* (Washington, D.C.: February 2004).

the Hypersonics Joint Technology Office, and the Under Secretary of Defense for Acquisition, Technology, and Logistics, the Joint Chiefs of Staff, and U.S. Strategic Command. We documented DOD's research and development efforts with possible application to global strike and investment information provided in ongoing and completed studies on potential global strike weapons systems. Additionally, we reviewed reports and studies and interviewed officials at the Joint Chiefs of Staff, the Defense Science Board, the Under Secretary of Defense for Acquisition, Technology, and Logistics, and GAO to determine how DOD initiatives, particularly for portfolio management, could be used to manage global strike investments. We also obtained information on DOD's efforts to identify funding requirements and develop an investment strategy for global strike. We conducted an analysis of the Future Years Defense Program (FYDP) that supports the President's fiscal year 2008 budget submission to Congress to determine the range of programs, projects, and activities within various research and development program elements in the FYDP that could have potential application for improved conventional global-strike-related capabilities.² To establish criteria and create a list of key terms to use in conducting our assessment, we reviewed the descriptions, terms, and characteristics used by DOD in its principal documents describing global strike characteristics, including the Global Strike Joint Capabilities Document, Global Strike Joint Integrating Concept, and Deterrence Operations Joint Operating Concept, and information obtained in discussions with knowledgeable DOD, combatant command, defense agency, and service officials. We then reviewed supporting research and development budget submission documents from all the military services, the Office of the Secretary of Defense, two defense agencies, and Special Operations Command. We also discussed our analysis with an official from DOD's Office of Program Analysis and Evaluation, who generally concurred that our methodology and results were sound and reasonable. Other global strike assessments of the FYDP programs, projects, and activities may determine different criteria and methodologies to use and, hence, may yield different results. Our assessment also does not include those programs, projects, and activities in any classified program elements or data from nuclear systems development. It also includes some, but not all, nonkinetic capabilities that could contribute to improving global strike.

² The Future Years Defense Program is a DOD centralized report that provides information on DOD's current and planned out-year budget requests.

We conducted this performance audit from November 2006 to February 2008 in accordance with generally accepted government auditing standards. In conducting our work, we contacted officials at several DOD organizations and agencies; joint combatant and service commands; and think-tank organizations. Table 3 shows the organizations and offices we contacted during our review.

Table 3: Organizations and Offices Contacted During Our Review

Department of Defense

- Office of the Secretary of Defense,
 - Acquisition, Technology, and Logistics Directorate
 - Policy Directorate, Deputy Assistant Secretary of Defense for Strategic Capabilities
 - Office of Program Analysis and Evaluation
 - Defense Science Board
- Joint Chiefs of Staff
 - J-3 (Space and Nuclear Operations)
 - J-5 (Strategic Plans and Policy)
 - J-8 (Sea/Air Branch)
- Defense Advanced Research Projects Agency
- Defense Intelligence Agency
- Defense Threat Reduction Agency
- Hypersonics Joint Technology Office

Combatant commands

- U.S. Strategic Command
 - Joint Functional Component Command for Global Strike and Integration
- U.S. Central Command
- U.S. Joint Forces Command
- U.S. Pacific Command
 - Pacific Air Force
 - Pacific Fleet
- U.S. Special Operations Command

Services

- Department of the Air Force
 - Headquarters, Air Staff
 - U.S. Air Force Combat Command
 - U.S. Air Force Space Command
 - Air Force Space and Missile Systems Center
- Department of the Army
 - Headquarters, Army Staff
 - U.S. Army Space and Missile Defense Command
- Department of the Navy
 - U.S. Fleet Forces Command

Other organizations

- RAND Corporation

Source: GAO.

Appendix II: GAO's Analysis of DOD's Research and Development Efforts for Global Strike in Its Future Years Defense Program

We conducted an analysis of the Future Years Defense Program (FYDP) that supports the President's fiscal year 2008 budget submission to Congress to determine the range of programs, projects, and activities within various research and development program elements in the FYDP that could have potential application for improved conventional global-strike-related capabilities. We established criteria and a list of key terms to use in our assessment from a review of descriptions, terms, and characteristics used by the Department of Defense (DOD) in its principal global strike documents, including the Global Strike Joint Capabilities Document and Deterrence Operations Joint Operating Concept, and information obtained in discussions with DOD officials. While our methodology and results were discussed with a DOD Office of Program Analysis and Evaluation official and were determined to be reasonable and relevant, other global strike assessments of the FYDP programs, projects, and activities may determine different criteria and methodologies to use and therefore, may yield different results. Additionally, our assessment does not include those programs, projects, and activities in any classified program elements or data from nuclear systems development. It also includes some, but not all, nonkinetic capabilities that could contribute to improving global strike.

Our analysis of research and development budget submission documents from a number of DOD organizations identified 94 FYDP program elements in the fiscal year 2008 budget request related to global strike. The 94 FYDP program elements provide funding for 135 programs, projects, and activities that are developing conventional offensive strike and enabling capabilities that could contribute to improved global strike capabilities. Of the 135 programs, projects, and activities identified in our analysis:

- 85 would improve offensive capabilities, including efforts to improve kinetic weapons, nonkinetic weapons, and propulsion systems;
- 41 would improve enabling capabilities such as (1) command, control, communications, and computers and (2) surveillance and reconnaissance systems; and
- 9 would improve both offensive and enabling capabilities such as Predator development.

Table 3 summarizes the results of our analysis to identify global strike and related development by category and type of offensive, enabling, or multiple capabilities in DOD's FYDP.

**Appendix II: GAO's Analysis of DOD's
Research and Development Efforts for Global
Strike in Its Future Years Defense Program**

Table 4: Global Strike and Related Global Strike Research and Development Efforts in DOD's FYDP for Fiscal Years 2007 through 2009 Identified by GAO

Capabilities category	Examples of global strike and related programs, projects, or activities in each category	Number of programs, projects, or activities identified
Offensive capabilities		
Kinetic weapons	<ul style="list-style-type: none"> • Joint Air-to-Surface Standoff Missile • Small Diameter Bomb • Tomahawk Weapons System 	23
Nonkinetic weapons	<ul style="list-style-type: none"> • Directed Energy Technology • Special Operations Technology Development • Airborne Electronic Attack 	21
Weapon platforms	<ul style="list-style-type: none"> • Next Generation Bomber aircraft, • MQ-9 Reaper UAV • Space Launch Vehicle technology 	30
Propulsion systems	<ul style="list-style-type: none"> • Air Force, Army, and Defense Advanced Research Projects Agency hypersonics propulsion development efforts 	14
Subtotal		85
Enabling capabilities		
Command, control, communications and computers	<ul style="list-style-type: none"> • Common Operational Picture • Interoperable Data Links • Large Data 	22
Intelligence, surveillance, and reconnaissance, information operations, and planning	<ul style="list-style-type: none"> • Persistent Surveillance Technologies • Strategic War Planning System • Networked Bionic Sensors for Language/Speaker Detection 	19
Subtotal		41
Multiple capabilities^a		
	<ul style="list-style-type: none"> • Predator Development • Counterforce • Weapons of Mass Destruction Battle Management 	9
Subtotal		9
Total		135

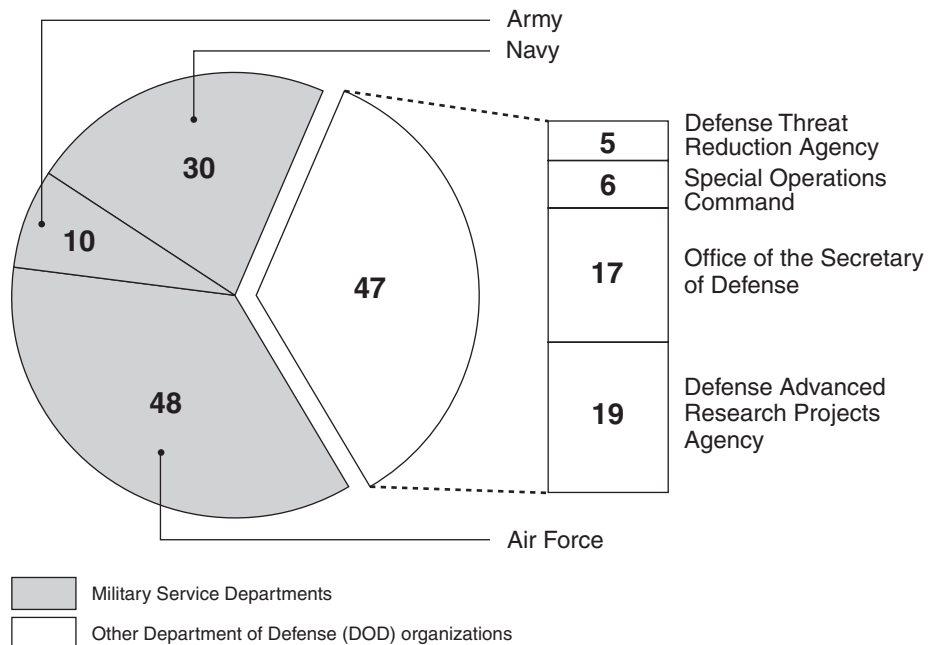
Source: GAO analysis of programs, projects, and activities in the President's Fiscal Year 2008 budget submission to Congress based on derived criteria.

^aProgram elements that include programs, projects, and activities that are developing both offensive and enabling capabilities.

Of the 135 programs, projects, and activities, we determined that 13, such as the Air Force's common aero vehicle, were exclusively for research and development of global strike capabilities. The remaining 122 programs, projects, and activities support research and development of offensive and enabling capabilities that were not specifically for global strike but had potential application for global strike operations.

In conducting our analysis, we reviewed the research and development budget submissions from the Departments of the Air Force, Navy, and Army; Office of the Secretary of Defense; Defense Advanced Research Projects Agency; Defense Threat Reduction Agency; and U.S. Special Operations Command. Figure 2 shows that the majority (88) of the 135 research and development programs, projects, and activities we identified were in the budgets of the services, with the Department of the Air Force budget having the largest number (48) among the three services. The remaining 47 programs, projects, and activities were in the budgets of the Defense Threat Reduction Agency (5); Special Operations Command (6); Office of the Secretary of Defense (17); and Defense Advanced Research Projects Agency (19).

Figure 2: Number of Global Strike and Related Research and Development Programs, Projects, and Activities by DOD Organization



Source: GAO analysis based on fiscal year 2008 DOD budget documentation.

The programs, projects, and activities we identified in our analysis are largely directed at developing capabilities for a wide range of military needs other than just global strike and their associated funding, and therefore should not be considered when determining DOD's total spending for global strike. However, these efforts reflect substantial near-term investments of several billions of dollars in capabilities that could potentially be used for future global strike operations. For example, DOD plans to spend about \$4.8 billion then-year dollars in fiscal years 2007 through 2009 for the 29 weapon platforms programs, projects, and activities we identified, and about \$2.6 billion for other offensive capabilities including kinetic weapons, nonkinetic weapons, and propulsion system programs, projects, and activities over the same period. Additionally, DOD plans to spend about \$3.0 billion then-year dollars in fiscal years 2007 through 2009 for the 41 programs, projects, and activities we identified to improve enabling capabilities. And lastly, DOD plans to spend about \$0.7 billion then-year dollars for the 9 programs, projects, and activities included in our analysis for multiple capabilities over the period.

Appendix III: Comments from the Department of Defense



ACQUISITION
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MAR 28 2008

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This is the Department of Defense (DoD) response to the GAO draft report, GAO-08-325, 'MILITARY TRANSFORMATION: DoD Needs to Strengthen Implementation of Its Global Strike Concept and Provide a Comprehensive Investment Approach for Acquiring Needed Capabilities,' dated February 25, 2008 (GAO Code 350899).

On the whole, the Department agrees with the report and the included recommendations. Detailed comments to each recommendation are enclosed. DoD technical inputs and the results of the security review were provided separately.

A handwritten signature in black ink, appearing to read "James M. Durham".

James M. Durham
Director
Joint Advanced Concepts

Enclosure:
As stated



GAO DRAFT REPORT – DATED FEBRUARY 25, 2008
GAO CODE 350899 /GAO-08-325

"MILITARY TRANSFORMATION: DoD Needs to Strengthen Implementation of Its
Global Strike Concept and Provide a Comprehensive Investment Approach for Acquiring
Needed Capabilities"

DEPARTMENT OF DEFENSE COMMENTS
TO THE RECOMMENDATIONS

RECOMMENDATION 1: The GAO recommends that the Secretary of Defense direct the Under Secretary of Defense for Policy, in consultation with the Under Secretary of Defense for Acquisition, Technology and Logistics, the Chairman of the Joint Chiefs of Staff, and the Commander, U.S. Strategic Command, to develop and approve a common, universally accepted joint definition for "global strike," and consistently incorporate this definition in global strike documents and joint doctrine.

DOD RESPONSE: DoD concurs. Commander, United States Strategic Command (USSTRATCOM), in consultation with the Under Secretary of Defense for Policy, the Under Secretary of Defense for Acquisition, Technology and Logistics, and the Chairman of the Joint Chiefs of Staff, will develop a common, universally accepted concept and definition for "global strike."

RECOMMENDATION 2: The GAO recommends that the Secretary of Defense direct the Chairman of the Joint Chiefs of Staff and the Commander, United States Joint Forces Command (USJFCOM), in consultation with the Under Secretary of Defense for Acquisition, Technology and Logistics, the Under Secretary of Defense for Policy, and the Commander, USSTRATCOM, to determine possible changes to existing joint doctrine or development of new joint doctrine that may be required to incorporate global strike operations, including the terminology and discussion of training, relationships, responsibilities, and processes for these operations, and initiate any subsequent doctrine development activities.

DOD RESPONSE: DoD concurs. USJFCOM assists the Chairman of the Joint Chiefs of Staff in the development of joint doctrine in accordance with Chairman Joint Chiefs of Staff Instruction 5120.02A and in conjunction with the Joint Doctrine Development Community. Currently, global strike, as a validated and executable concept, has not matured to the point that it is an extant executable capability, a prerequisite for incorporation into joint doctrine. Current joint doctrine, as it is already written (Joint Publication (JP) 3-0 *Joint Operations* and JP 5-0 *Joint Operations Planning*), addresses the planning, preparation, execution, and assessment of joint operations, including strikes. When the concept of global strike is fully developed and validated, USJFCOM will write the appropriate doctrine. USJFCOM will determine possible changes to existing joint doctrine when development of new joint doctrine that may be required to incorporate global strike operations is required.

RECOMMENDATION 3: The GAO recommends that the Secretary of Defense direct the Commander, USSTRATCOM, in consultation with the Chairman of the Joint Chiefs of Staff, the Under Secretary of Defense for Acquisition, Technology and Logistics, and the Under Secretary of Defense for Policy, to establish an ongoing communications and outreach approach for global strike to help guide DoD's efforts to promote, educate, and foster acceptance of the concept among the combatant commands, military services, and other DoD organizations.

DOD RESPONSE: DoD concurs. Socialization of evolving concepts contributes to their maturing and validation leading to timely incorporation into joint doctrine as extant capability.

RECOMMENDATION 4: The GAO recommends that the Secretary of Defense direct the Commander, USSTRATCOM, in consultation with the Commander, USJFCOM, to identify additional opportunities where global strike can be integrated into major joint exercises and other training activities.

DOD RESPONSE: DoD concurs. Each Combatant Commander establishes training requirements and objectives. USJFCOM supports and assists the Combatant Commander in accomplishing identified training requirements and objectives.

RECOMMENDATION 5: The GAO recommends that the Secretary of Defense direct the Under Secretary of Defense for Acquisition, Technology and Logistics, in consultation with the Chairman, Joint Chiefs of Staff, the Commander, USSTRATCOM and the Secretaries of the Army, Navy and Air Force, to conduct a comprehensive assessment of enabling capabilities to identify: (1) any specific global strike operational requirements and priorities; (2) when these capabilities are needed to support future offensive strike systems; and (3) what plans DoD has for developing and acquiring these capabilities. DoD should link this assessment with other assessments examining potential strike systems for global strike and those being conducted for any specific supporting capability area to ensure that it has the most complete information available when making decisions on future global strike investments.

DOD RESPONSE: DoD concurs. The Deputy Secretary of Defense initiated Capability Portfolio Management (CPM) that applies Department-wide. CPM is designed to manage capability optimization through the integration, coordination and synchronization of Department investments through Capability Portfolios in order to improve: (1) strategic force management and force development decision making; (2) the level of joint warfighter outcomes; and (3) mission effects of all known operational requirements, including those emerging operational requirements such as Prompt Global Strike (PGS). The CPM managers were designated to ensure portfolio balance and optimization within their respective portfolios. Additionally, the managers are responsible to identify those aspects of their portfolios that are connected to more than one portfolio because of the breadth and depth of the mission area, such as PGS, overseen by the Force Application CPM manager. For Conventional Prompt Global Strike (CPGS), the

Department intends to include as part of this comprehensive assessment ongoing/follow-on studies, including the Air Force-led PGS Analysis of Alternatives (AOA) in March 2008, the Congressionally-mandated National Research Council *Committee on CPGS Report* provided by the National Academy of Sciences, as well as reference to evolving operational requirements and constraints as set forth by USSTRATCOM and validated by the Joint Staff. This effort will be essential in identifying PGS operational requirements and priorities, and when these are needed to support development of future offensive strike systems. In addition, in Fiscal Year (FY) 2008, using the Defense-wide Research, Development, Testing and Evaluation (RDT&E) account on PGS, the Department intends to provide limited funding towards full mission planning techniques, command and control provisions, strategic requirements and policy compliance, alternative intermediate missile range concepts, advanced non-nuclear warheads, and other mission enabling capabilities.

RECOMMENDATION 6: The GAO recommends that the Secretary of Defense direct the Under Secretary of Defense for Acquisition, Technology and Logistics, in consultation with the Secretaries of the Army, Navy and Air Force, to provide guidance on how the results of DoD studies to identify potential strike systems for global strike will be integrated into a comprehensive prioritized investment strategy for global strike, including a roadmap that shows the Department's plans and schedules for developing and acquiring offensive strike and enabling capabilities.

DOD RESPONSE: DoD concurs. As noted in the response to Recommendation 5, the Force Application CPM is the cognizant CPM for global strike. As the civilian co-lead for the Force Application CPM, the Under Secretary of Defense for Acquisition, Technology and Logistics, will provide guidance to develop a comprehensive prioritized investment strategy and roadmap for global strike. Specifically, for CPGS, in FY08, utilizing the Defense-wide RDT&E account on PGS, the Department will pursue an integrated approach to craft a comprehensive prioritized investment strategy. In particular, this effort will emphasize: (1) application of ongoing/follow-on studies, including the Air Force-led PGS AOA in March 2008, the Congressionally-mandated National Research Council *Committee on CPGS Report* provided by the National Academy of Sciences, as well as reference to evolving operational requirements and constraints as set forth by USSTRATCOM and validated by the Joint Staff; (2) full utilization and collaboration with separately funded programs throughout DoD and Department of Energy (DoE), to include other technology development efforts (e.g., warheads, guidance, targeting, etc.) and other science and technology activities potentially supporting CPGS; and (3) cross-service and Agency transparency and collaboration, organized and overseen by the Under Secretary of Defense for Acquisition, Technology and Logistics, on all technology and experimentation matters, with overlap or duplication only in those areas where the technology challenges compel "competitive" efforts.

RECOMMENDATION 7: The GAO recommends that the Secretary of Defense direct the Under Secretary of Defense for Acquisition, Technology and Logistics, in consultation with the Director, Program Analysis and Evaluation, and the Vice Chairman, Joint Chiefs of Staff, to perform a comprehensive review of all capabilities being developed within DoD's Future Years Defense Program (FYDP) to determine the extent to which these capabilities contribute,

or can be leveraged for global strike and incorporate the results of this review into the development of a comprehensive prioritized investment strategy for global strike. The investment strategy should be updated, as needed, to adapt to changing circumstances.

DOD RESPONSE: DoD concurs. As the civilian co-lead for the Force Application CPM, the Under Secretary of Defense for Acquisition, Technology and Logistics, will lead a comprehensive, capability-based review and prioritization of the global strike investment strategy within the Future Years Defense Program (FYDP). Specifically, for CPGS, the FY08-13 FYDP goal is to apply, advance, and demonstrate engineering for the selection and development of material solutions to the CPGS mission area in order that individual service acquisition programs may be funded and executed. FY08 and FY09 Research and Development (R&D) will be directed at technical capabilities for precision guidance and control, payload delivery vehicle (PDV) construction and performance, warhead effectiveness, test-range development, and alternative booster rocket assessments. An R&D and testing plan will describe the strategy and investment needed over the next five years to develop and field full-mission prototypes. The CPGS R&D testing plan will be submitted to Congress in April 2008 as required by the National Defense Authorization Act for FY08. Additionally, the Department recently formed a Joint Analysis Team for PGS that will address these exact issues.

RECOMMENDATION 8: The GAO recommends that the Secretary of Defense direct the Deputy Secretary of Defense, in consultation with the Deputy's Advisory Working Group, the Under Secretary of Defense for Acquisition, Technology and Logistics, and the Director, Program Analysis and Evaluation, to determine the appropriateness of using a portfolio management approach for global strike to align its investments with strategic goals and performance measures and provide a sound basis to justify the commitment of resources, develop a prioritized investment strategy, and manage development and acquisition of global strike capabilities.

DOD RESPONSE: DoD concurs. With the creation of the President's Budget-09 Defense-wide Research, Development, Test and Evaluation program element for PGS, a portfolio management approach is already underway. For CPGS, the Department fully supports using a portfolio management approach to align its investments with strategic goals and performance measures and provide a sound basis to justify the commitment of resources, develop a prioritized investment strategy, and manage development and acquisition of conventional prompt global strike capabilities. Additionally, the Department recently formed a Defense-Wide Account, managed by the Under Secretary of Defense for Acquisition, Technology and Logistics, that will address these exact issues.

Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contact

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Acknowledgments

In addition to the individual named above, Gwendolyn R. Jaffe, Assistant Director; Lisa M. Canini; Grace A. Coleman; David G. Hubbell; Jason E. Porter, Sr.; and Mark J. Wielgoszynski, Analyst-in-Charge, made key contributions to this report.

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