Issue: After a decade of decline in defense spending, DOD has seen a gradual increase in recent years. The fiscal year 2002 budget of about $331 billion represented the largest increase in defense spending in recent years and came amidst growing concerns over the readiness of U.S. forces. The budget included additional resources for operational maintenance, quality-of-life programs, pay raises, and improvements to crumbling facilities. The most recent Quadrennial Defense Review charts a new defense strategy emphasizing homeland security, military transformation, joint operations, and advanced capabilities related to information technology, intelligence, and space operations. Follow-on studies will more precisely define how existing defense programs and priorities will change. The new defense strategy also highlights the criticality of reforming the department’s business practices, streamlining organizational structures, and eliminating excess infrastructure that unnecessarily diverts resources from other defense priorities.

Obviously, the nature and intensity of the expected defense debate changed on September 11. The terrorist attacks heightened the debate over types of military capabilities and tactics required to address this threat and ensure adequate homeland protection. The Congress appropriated $40 billion in supplemental funds to deal with the immediate consequences of the attacks, with a large portion subsequently designated for increased defense spending. Requests for significant additional increases in defense spending are planned for fiscal year 2003 and beyond. The debate about what capabilities DOD must maintain and develop, where they should exist, and to what extent additional defense spending is required will be significantly shaped by the debate over the military’s role in homeland security and the augmentation of the civilian agencies’ roles in the fight against terrorism. The Quadrennial Defense Review is the linchpin tying many of these issues together (see fig. 2.1).

Performance Goals: To support efforts by the Congress and the federal government to address these issues, GAO will

- assess the ability of DOD to maintain adequate readiness levels while addressing the force structure changes needed in the 21st century;
- assess overall human capital management practices to ensure a high-quality total force;
- identify ways to improve the economy, efficiency, and effectiveness of DOD’s support infrastructure and business systems and processes;
- assess the National Nuclear Security Administration’s efforts to maintain a safe and reliable nuclear weapons stockpile;
- analyze and support DOD’s efforts to improve budget analyses and performance management;
assess whether DOD and the services have developed integrated procedures and systems to operate effectively together on the battlefield; and

assess the ability of weapon system acquisition programs and processes to achieve desired outcomes.
**Assess the Ability of the Department of Defense to Maintain Adequate Readiness Levels While Addressing the Force Structure Changes Needed in the 21st Century**

### Key Efforts

- Assess the basis for key changes resulting from the Quadrennial Defense Review and other strategic reviews
- Evaluate DOD’s progress in developing and implementing its role in homeland security
- Assess the services’ training and readiness to accomplish their missions
- Assess the basis for force structure requirements and evaluate alternatives for achieving national security goals
- Assess service plans for transforming their forces to meet future challenges
- Assess the ability to deploy and sustain U.S. forces overseas
- Assess DOD’s efforts to effectively integrate active, reserve, civilian, and contractor personnel

### Significance

The conclusion of the Quadrennial Defense Review presents many opportunities for GAO to assist the Congress in analyzing the basis for and effect of changes to defense strategies and programs. The Congress will be especially interested in the Department of Defense’s (DOD) strategy for homeland security and how it will affect DOD’s ability to carry out more traditional missions. GAO’s independent assessments will highlight potential risks associated with proposed changes and examine how such changes will affect DOD’s ability to address readiness problems. New areas of emphasis in the defense strategy, such as homeland security, force transformation, space, and information warfare, will force tough trade-off decisions and closer examination of how to achieve defense goals in the most cost-effective manner. Accordingly, analyses of the cost-effectiveness of defense alternatives and options will be needed. Similarly, the Congress and DOD are likely to focus more attention on how DOD can best blend the diverse elements of its total force to achieve economies and increase effectiveness and how it can better contain costs related to overseas operations.

### Potential Outcomes that Could Result when GAO’s Work Is Used

- Greater congressional understanding of the basis for key change in defense programs
- DOD actions to speed progress toward an effective homeland security strategy
- Improved military readiness to accomplish the national military strategy and elimination of barriers to achieving expected levels of readiness
- More rigorous requirements determination processes, less duplication of forces, and better data for considering force structure alternatives
- DOD actions to address inconsistencies between transformation plans, programs, milestones, and resources in relation to future warfighting needs
- Improvements in strategic airlift capabilities and management, and better data on costs and implications of overseas training and operations
- More cost-effective integration of military and civilian personnel, contractors, allies, and host nations to meet defense requirements
Assess Overall Human Capital Management Practices to Ensure a High-Quality Total Force

**Key Efforts**

- Assess DOD’s human capital management of its civilian workforce
- Examine benefits structure for active duty and reserve components to determine whether benefits have kept pace with the changing demographics
- Analyze data from surveys of reserve component personnel to provide information on perceptions of quality-of-life issues and their relationship to recruiting and retention of reserve personnel
- Assess DOD’s professional military education programs
- Evaluate the U.S. Investigations Service’s quality assurance procedures for personnel security investigations performed under contract with DOD

**Significance**

DOD faces a tremendous challenge in sustaining and managing its large and diverse workforce of more than 3 million people, including military personnel (both active duty and reserves), federal civilian personnel, and private sector contract personnel. The U.S. Commission on National Security/21st Century noted in its February 2001 report that America’s military is losing too many key personnel—some with unique and valuable skills. Moreover, the increased operations tempo has placed higher demands on both the active duty and reserve components, raising quality-of-life concerns that affect personnel recruitment and retention. In addition, DOD faces complex and difficult challenges in managing its civilian workforce, which has a significant imbalance in shape, skills, and experience because of extensive downsizing. To shape and sustain a total force able to meet 21st century needs will require flexible, creative, and dynamic personnel and compensation systems. A February 2000 DOD Science Board report stated that more deliberate and integrated shaping of the civilian and military force is needed. It recommended that DOD address its human capital challenges by establishing a strategic management plan, encompassing all elements of the total force—military, civilian, and private sector personnel. DOD’s human capital challenges represent an urgent concern for the Congress.

**Potential Outcomes that Could Result when GAO’s Work Is Used**

An integrated, more strategic approach to DOD human capital planning and overall management of civilian workforce

Improved benefits structure that will better support today’s forces and enhance recruitment and retention of personnel

Better understanding of attitudes, experiences, and opinions of reserve component personnel and factors most related to intent to leave or remain in the reserves

A more effective professional military education system that enhances total force management and jointness among the services, as envisioned by the Goldwater-Nichols Act

A more accurate, complete, timely, and cost-effective personnel security investigations process
Identify Ways to Improve the Economy, Efficiency, and Effectiveness of DOD’s Support Infrastructure and Business Systems and Processes

Key Efforts

- Identify ways to improve the economy, efficiency, and effectiveness of existing logistics support activities (transportation, inventory management, maintenance, disposal, and so forth)
- Identify ways to help DOD reengineer its logistics systems to meet future needs
- Identify ways to improve the economy, efficiency, and effectiveness of other DOD business processes and management plans and assess progress being made in identifying best practices and implementing reforms such as competitive sourcing, privatization, and partnership arrangements
- Identify ways to reduce excess facilities infrastructure and costs, improve the maintenance and repair of facilities, and improve planning for long-term recapitalization of facilities
- Assess DOD compliance with legislative mandates governing provision of logistical support

Significance

Although the United States significantly reduced its defense force structure and military spending in the decade following the end of the cold war, similar reductions did not occur in the defense support infrastructure, which has historically consumed about 60 percent of DOD’s budget. (This represents mission support funding for various program elements, such as central logistics and installation support.) Operating efficiencies and reductions have resulted from efforts such as base realignment and closure, consolidations, organizational and business process reengineering, privatization, and competitive sourcing. However, DOD is faced with the need to address substantial inefficiencies in support operations; aging equipment and facilities; and continuing problems in the areas of spare parts, maintenance, and repair. DOD officials recognize that they must achieve greater efficiencies to more effectively manage their support operations, contain costs, and provide increased funding for weapon system modernization and other priority needs. Such pressures are likely to continue despite recent growth in the defense budget and pressures for significant additional increases are likely in future years.

Potential Outcomes that Could Result when GAO’s Work Is Used

- Costs avoided and opportunities identified to reprogram funding for other priority needs while strengthening efficiency and effectiveness of existing support systems
- Improved logistics support that will enhance the readiness and sustainability of U.S. military forces
- Reduced costs and improved program efficiency and effectiveness
- Reduced facilities infrastructure, improved facilities maintenance and planning for facility needs and recapitalization costs, and improved overall cost-effectiveness of facilities management
- Increased compliance with legislative requirements
Assess the National Nuclear Security Administration’s Efforts to Maintain a Safe and Reliable Nuclear Weapons Stockpile

Key Efforts

- Assess NNSA’s efforts at establishing effective personnel, procurement, and planning systems to address the workforce and infrastructure challenges it faces.
- Assess NNSA’s capabilities to build and maintain the necessary experimental and production facilities to support a safe and reliable stockpile.
- Assess the extent to which DOE and NNSA have developed an effective and efficient security program to protect nuclear weapons material and information.

Significance

In response to repeated management and security problems, the Congress passed legislation in October 1999 that established the National Nuclear Security Administration (NNSA). NNSA, a semiautonomous agency within the Department of Energy (DOE), is responsible for nuclear weapons production, prevention of the proliferation of weapons of mass destruction, and the production of naval reactors. Since its establishment in March 2000, NNSA has begun to develop approaches for addressing issues associated with planning, organization, procurement, personnel, and security. NNSA is still ramping up its organization, but concern has been expressed in the Congress about the slow pace of NNSA’s organization and how effective its new structure will be. New management approaches are vital if NNSA is to effectively address the programmatic challenges before it. Because it is assumed that the United States will continue its policy of no testing, NNSA must develop first-of-a-kind experimental facilities and advanced supercomputing technology to ensure that the nation’s nuclear weapons stockpile is safe and reliable without underground testing. It must ensure that there is a modern and efficient infrastructure to maintain and refurbish the stockpile as it ages. It must find effective human capital strategies to respond to an aging contractor and federal workforce. It must continue to improve its project management and contract administration to ensure results since it relies on nonprofit organizations and for-profit businesses to carry out its missions. Finally, it must improve security operations at all its facilities to ensure that classified information, nuclear materials, and weapons are adequately protected. Complicating this approximately $7.5 billion per year effort is the fact that the ongoing defense review may fundamentally change how the United States uses its nuclear deterrent.

Potential Outcomes that Could Result when GAO’s Work Is Used

A better understanding of the stockpile stewardship program to help the Congress ensure that the annual investment of more than $4.5 billion is spent efficiently and supports specific program outcomes.

Improved DOE process for the safe production and storage of nuclear materials and components at the nuclear weapons complex.

Improved DOE program for ensuring the safety of international nuclear facilities.

Better information to help decision makers gauge the ability of NNSA’s stockpile stewardship program to ensure the safety and reliability of existing nuclear weapons.
Analyze and Support DOD’s Efforts to Improve Budget Analyses and Performance Management

Key Efforts

- Track DOD’s obligations of its annual appropriations and examine how various elements of the defense budget are being spent, including special supplemental appropriations.
- Analyze the extent to which key aspects of the DOD budget submission are reasonable and justified.
- Assess the DOD future years’ plans for their long-term realism and affordability.
- Assess DOD’s implementation of GPRA principles and whether they address DOD’s major management challenges and high-risk areas.
- Assess the effectiveness of DOD’s efforts to improve its overall operations and to address major performance and accountability challenges and areas identified as high risk.

Significance

By law, DOD is required to undertake a comprehensive review of its defense programs every 4 years. This Quadrennial Defense Review is expected to provide a blueprint for changes to plans, programs, budgets, goals, and objectives and has been dually designated as DOD’s strategic plan for purposes of meeting the requirements of the Government Performance and Results Act of 1993 (GPRA). Thus, the Quadrennial Defense Review provides a view of future management directions and serves as a strategic framework for assessing results.

DOD operations currently involve over $1 trillion in assets, a budget authority of approximately $330 billion in 2002, and about 3 million military and civilian employees. Planning and budgeting for DOD represent one of the largest management challenges within the federal government. While DOD has the most effective warfighting organization in the world, the same level of excellence is not evident in many of its business processes that are critical to the achievement of DOD’s mission in a reasonably economical, efficient, and effective manner. GAO’s work has identified a number of DOD operations and programs as “high risk” because of their vulnerabilities to waste, fraud, abuse, and mismanagement. DOD has prided itself in its recent efforts in strategic planning and its decades-old planning, programming, and budgeting system, but many of the management and budgeting processes are not linked in a coherent, results-oriented manner. As a result, DOD cannot ensure that its budgets and its annual and future years’ plans are reasonable or affordable and will achieve the results necessary to ensure national security. To provide such assurances, DOD faces challenges to (1) improve its budgeting activities by focusing on performance and results, (2) align its organizational structures with its new strategic plan, (3) effectively employ management initiatives and incentives, and (4) focus on results-oriented performance information for its outcomes.

Potential Outcomes that Could Result when GAO’s Work Is Used

- Increased accountability of the military services and defense agencies for executing their budgets to achieve their objectives.
- Improved accountability by providing information to defense-related appropriations and authorization committees in their deliberations of DOD’s budgets.
- Improved budget and program planning to realistically address changing national security needs with limited resources.
- Improved performance of DOD programs through a greater focus on results and high-risk areas.
Assess Whether DOD and the Services Have Developed Integrated Procedures and Systems to Operate Effectively Together on the Battlefield

Key Efforts

- Evaluate how DOD is equipping its forces to achieve joint capabilities
- Evaluate DOD’s efforts to field integrated command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) and weapons systems
- Assess extent to which DOD’s development and acquisition of C4ISR systems will lead to information superiority and greater battlefield awareness
- Assess DOD’s efforts to experiment with future joint warfighting concepts and capabilities
- Assess DOD’s activities to prepare its forces for joint operations
- Evaluate DOD’s plans for conducting integrated military operations with the North Atlantic Treaty Organization and other international partners

Significance

As recent experience has shown in Desert Storm and Kosovo, success in military operations is highly dependent on the ability of military forces to work effectively in a joint environment. The ability to conduct joint and combined operations is a key enabler to maintaining a superior force in an era where the nature and extent of national security missions have become broader and more varied. Not only must the military integrate its own forces; it must also have the capabilities to operate with those of its allies and coalition partners. Implementing Joint Vision 2020 and its principal concepts of dominant maneuver, precision engagement, focused logistics, and full dimensional protection require that the U.S. military develop the doctrine, organization, training, systems, and leadership to function as a truly integrated joint force. Through integration, the military can become faster, more lethal, and more precise.

To make effective decisions, joint commanders must have a complete, accurate, and timely picture of the battlefield and must be confident that command, control, communications, computers, intelligence, surveillance, and reconnaissance systems can exchange information quickly and accurately. In addition, appropriate concepts and doctrine must be in place, and forces must be structured and trained to facilitate joint operations. In the past, DOD and the services have lacked coordinated or common procedures and interoperable systems to carry out joint military operations. This is largely because the services have traditionally developed separate approaches on how to fight and have built the forces and capabilities needed to execute their own individual approaches. One consequence of this has been the acquisition of costly overlapping and duplicative systems. These separate approaches worked in the past because the battle space was segmented and controlled by different services. Current and anticipated future missions will require more coordinated joint and combined operations that optimize and leverage all services’ capabilities.

Potential Outcomes that Could Result when GAO’s Work Is Used

- More cost-effective, integrated acquisition of weapons systems and materiel
- Improved interoperability of systems and exchange of information necessary for effective command, control, and communications
- Improved management of battlefield information and communications
Assess Whether DOD and the Services Have Developed Integrated Procedures and Systems to Operate Effectively Together on the Battlefield (cont.)

- Improved coordination of service and joint warfighting experimentation efforts
- More effective joint exercises and training
- Enhanced ability of U.S. forces to operate with allies
Assess the Ability of Weapon System Acquisition Programs and Processes to Achieve Desired Outcomes

Key Efforts

- Provide brief annual status and risk updates on a wide range of weapon systems, observing trends in acquisition performance and opportunities for budgetary actions
- Target reviews of individual weapon systems to assess their ability to achieve outcomes early enough so that DOD can take action well ahead of major decisions
- Assess barriers that prevent DOD from advancing technology while at the same time developing new weapons more quickly and predictably
- Assess how the processes that provide key resources to acquisition programs help—or hinder—achieving desired outcomes

Significance

DOD invests $100 billion each year in a wide array of weapon systems to equip U.S. armed forces. These systems range from upgrades to tanks and fighter aircraft to sophisticated satellites and networks of systems, such as those used for national missile defense. It is not unusual for a single program to cost over $40 billion. These investments represent the largest discretionary portion of the U.S. budget.

DOD’s acquisition process has produced the best weapons in the world. At the same time, the process routinely yields weapons that exceed cost and schedule estimates by significant amounts. The opportunity costs of such increases are significant—a mere 3-percent cost growth per year means that $3 billion of scarce discretionary funds are not available for new investments. Given the complexity of modern weapons, some problems can be expected. Many, however, can be predicted and avoided. It is not unusual for a new program to rely on fledgling technologies for high performance, only to report late in development that insufficient time and money had been estimated to mature the technologies and incorporate them into an overall design. As unplanned cost increases occur, activities such as testing are deferred, giving rise to the late discovery of problems. Ultimately, it takes more money to buy fewer of a new weapon, thereby limiting anticipated capabilities. DOD recognizes this pattern and has signaled its intention to improve acquisitions. Recently, DOD has begun to recognize the potential of using best practices adopted from world-class enterprises to field systems within predicted estimates and to reduce the time and cost of doing so.

Potential Outcomes that Could Result when GAO’s Work Is Used

- More relevant knowledge base for congressional decision making
- Increased use of best practices to achieve desired outcomes
- Better transition of new technologies to weapon programs and reduced acquisition cycle times
- Efficient and effective allocation of resources, such as people, funding, and training, to acquisition programs