

June 2005

MILITARY TRAINING

Better Planning and Funding Priority Needed to Improve Conditions of Military Training Ranges





Highlights of [GAO-05-534](#), a report to the Secretary of Defense

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Why GAO Did This Study

Military training ranges are important national assets and play a critical role in preparing military forces for their wartime mission. The Department of Defense (DOD) has reported for years that it faces increasing difficulties in carrying out realistic training at its ranges due to various constraints. While encroachment issues have had high visibility within DOD and the Congress, much less attention has been given to the overall conditions of training ranges, which can also have an adverse impact on training activities.

This report, prepared under the Comptroller General's authority, discusses (1) the condition of military training ranges and their impact on training activities, and (2) what factors are affecting DOD's progress in improving training range conditions.

What GAO Recommends

GAO is recommending that DOD take various actions designed to improve training range conditions, including the implementation of a comprehensive approach to managing its ranges in order to accomplish its transformation goals and ensure the long-term viability of its ranges. DOD agreed with the recommendations, stating the department and military services are or will be taking steps to implement them.

www.gao.gov/cgi-bin/getrpt?GAO-05-534.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Barry W. Holman at (202) 512-5581 or holmanb@gao.gov.

What GAO Found

GAO's visits to eight training ranges, along with DOD's own assessments show that ranges are deteriorating and lack modernization. This adversely affects training activities and jeopardizes the safety of military personnel. To ensure readiness, servicemembers must have access to capable ranges—a key DOD transformation goal—that enables them to develop and maintain skills for wartime missions. However, GAO observed various degraded conditions at each training range visited, such as malfunctioning communication systems, impassable tank trails, overgrown areas, and outdated training areas and targets. Whenever possible, the services work around these conditions by modifying the timing, tempo, or location of training, but officials have expressed concern that workarounds are becoming increasingly difficult and costly and that they compromise the realism essential to effective training. Without adequate ranges, DOD compromises the opportunity to achieve its transformation goal and assumes the risk that its forces will be less prepared for missions and subjected to hazards.

DOD's progress in improving training range conditions has been limited and is partially attributable to a lack of a comprehensive approach to ensure that ranges provide the proper setting for effectively preparing its forces for warfare. First, while the services have individually taken a varying number of key management improvement actions, such as developing range sustainment policies, these actions lack consistency across DOD or focus primarily on encroachment without including commensurate efforts on other issues, such as maintenance and modernization. Second, even though the services cannot precisely identify the funding required and used for their ranges, identified range requirements have historically been inadequately funded, as evidenced by conditions GAO saw, and inadequately addressed. Service officials identified a variety of factors that have exacerbated funding limitations, such as ranges having a lower priority in funding decisions. Third, although DOD policy, reports, and plans have either recommended or required specific actions, DOD has not fully implemented such actions.

GAO's Analysis of DOD's Management Actions for Improving Training Range Conditions

	Policy	Sustainable range program	Strategic or implementation plan	Multilevel working groups	Range requirements	Systematic assessment of range conditions and impacts	Web-based range information management system	Local range plans
OSD	●	●	●	●	●	N/A	●	N/A
Army	●	●	●	●	●	●	●	○
Navy	○	●	○	●	●	●	○	●
Marine Corps	●	●	●	●	●	●	●	●
Air Force	●	○	●	●	●	●	○	○

N/A Not applicable ○ Action not taken ● Action taken but could be improved ● Action satisfactorily taken

Source: GAO analysis of DOD data.

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Abbreviations

DOD	Department of Defense
MOUT	Military Operations on Urban Terrain
OSD	Office of the Secretary of Defense

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United States Government Accountability Office
Washington, DC 20548

June 10, 2005

The Honorable Donald H. Rumsfeld
The Secretary of Defense

Dear Mr. Secretary:

The success of our military forces in combat is directly linked to the effectiveness of their training beforehand. A fundamental military readiness principle is that the military must train as it intends to fight, and military training ranges provide the primary means to accomplish this principle.¹ However, Department of Defense (DOD) officials have reported for years that they face increasing difficulties in carrying out realistic training at their ranges due to a variety of constraints, such as those resulting from encroachment.² While encroachment issues have had high visibility within the department and the Congress, much less attention has been given to other training range constraints, such as those resulting from inadequate maintenance and modernization, which also has an adverse impact on training activities. DOD's 2001 *Quadrennial Defense Review Report* states that one of the basic tenets needed to meet its training transformation goal is to reverse the erosion of DOD's training range infrastructure and ensure that ranges are sustainable, capable, and available. Because of the criticality of sustainable and capable training ranges to meeting the training needs of its military forces, it is imperative that the department addresses the full range of constraints that impact its training ranges.

¹ We use the term "training ranges" to collectively refer to airspace used to conduct training, live-fire and nonlive-fire and impact areas, ground maneuver areas, sea ranges (above or below the surface), and other operating areas.

² DOD defines "encroachment" as the cumulative result of any and all outside influences that inhibit normal training and testing. DOD initially identified the following eight encroachment factors: endangered species and critical habitat, unexploded ordnance and munitions constituents, competition for frequency spectrum, protected marine resources, competition for airspace, air pollution, noise pollution, and urban growth around installations. Some of the emerging factors to be worked in the future are space, overseas ranges, water use, resource extraction, and civilian access.

This report, with its focus on military training range conditions,³ is one in a series of our reports in recent years that have addressed risks associated with the department's support infrastructure management. We initially identified DOD support infrastructure as a high-risk area in the federal government in 1997 and, in our latest high-risk series report,⁴ we pointed out that we continue to believe that it remains a high-risk area. Our reports on overall infrastructure conditions have frequently cited the underfunding of maintenance and repairs, resulting in deteriorating facilities. For the most part, our prior training range reports have focused on encroachment rather than issues such as appropriate range maintenance or modernization. A common theme in these reports has been the need for more comprehensive planning to include, for example, clearly establishing goals and milestones for tracking progress in addressing issues, identifying the funding needed to accomplish tasks, and assigning responsibility for managing and coordinating departmental efforts.

In view of the department's responsibilities to ensure the long-term viability and utility of its training ranges as critical national assets to meet the defense mission, we undertook this review to more closely examine training range conditions related to the maintenance and modernization of its ranges. We performed our work on the basis of the authority of the Comptroller General to evaluate U.S. governmental programs and are reporting the results to you because of your overall responsibilities as Secretary of Defense.⁵ This report discusses (1) the current conditions of military training ranges and their impact on training activities and (2) what factors are affecting DOD's progress in improving training range conditions.

In performing our work, we collected and analyzed training range-related information from officials within the Office of the Secretary of Defense (OSD), the Joint Forces Command, the Special Operations Command, and the headquarters and selected major commands of the military services. We also visited eight active component training ranges located in the

³ In this report we use the term "condition" to refer collectively to the physical features of DOD's training ranges that rely on routine maintenance (e.g., roads and tank trails) as well as range capabilities to provide for modernized and realistic training environments (e.g., automated threat emitters, automated targets, and urban training facilities).

⁴ GAO, *High-Risk Series: An Update*, GAO-05-207 (Washington, D.C.: January 2005).

⁵ 31 U.S.C. § 7 17(b)(1).

continental United States between June and October 2004 to observe training range conditions and discuss training impacts and actions taken to improve range conditions.⁶ These ranges were selected by identifying the major training ranges for each service and seeking input from service range officials as to which ranges could best address our audit objectives. We also reviewed relevant DOD studies and audit reports addressing military training range condition and funding issues. From our review of these data and discussions with DOD officials, we believe that the data presented are sufficiently reliable for the purposes of this report. We conducted our work from August 2003 through March 2005 in completing this report as well as fulfilling congressionally mandated reporting requirements dealing with training range issues.⁷ This work was completed in accordance with generally accepted government auditing standards. A more detailed description of our scope and methodology is included in appendix I.

Results in Brief

Our visits to eight major training ranges between June and October 2004, along with DOD's own assessment, show that military training ranges are in varying degrees of degradation or lack necessary upgrades to meet current training needs, a condition that, in turn, adversely affects training activities and jeopardizes the safety of the military personnel using them. Whenever possible, servicemembers work around the degraded conditions by modifying the timing, tempo, or location of the training, but defense officials have expressed concern that these workarounds are becoming increasingly difficult and costly and that they compromise the realism essential to effective training. To ensure military readiness, servicemembers must have access to sustainable and capable training ranges—a key transformation goal—that enable them to develop and maintain their skills for wartime missions. However, we observed degraded conditions and limitations at each of the ranges we visited.

⁶ Range locations included training areas at Fort Hood, Texas; Fort Stewart, Georgia; the Southern California Offshore Range, California; Fallon Range Training Complex, Nevada; Camp Lejeune, North Carolina; Camp Pendleton, California; Nellis Test and Training Range, Nevada; and the Barry M. Goldwater Range, Arizona.

⁷ Section 366 of the Bob Stump National Defense Authorization Act for Fiscal Year 2003 required OSD to report to the Congress in 2004 on a comprehensive plan to address training range constraints with annual updates through 2007 and for GAO to evaluate each of these reports. See GAO, *Military Training: DOD Report on Training Ranges Does Not Fully Address Congressional Reporting Requirements*, [GAO-04-608](#) (Washington, D.C.: June 4, 2004). We expect to complete a separate assessment of DOD's 2005 update after it is submitted to the Congress.

Collectively, these conditions included malfunctioning communication systems, impassable tank trails and roads that jeopardize safety,⁸ training areas that were overgrown, inadequate number of automated targets, and outdated training areas and targets. At Fort Hood, erosion of the tank trails was such that tanks and other vehicles could not safely maneuver from one training area to another. DOD studies have recognized that training ranges are deteriorating. The 2001 *Quadrennial Defense Review Report*, for example, stated that an aging training range infrastructure has suffered from underlying neglect and is in need of sustainment efforts and recapitalization.⁹ Similarly, a number of service studies have reported degraded conditions. For example, a recent Navy study on the Southern California Offshore Range pointed out that, while 90 percent of the minimum antisubmarine warfare training requirements were being met, current range resources did not provide optimal training for over 60 percent of the skills needed for a wartime environment.¹⁰ Without adequately maintained and modernized ranges, the department not only compromises the opportunity to achieve its transformation goal of sustainable and capable training ranges but also assumes the risk that its forces will be less prepared for its missions and subjected to safety hazards.

While DOD has taken some actions designed to improve the conditions of its training ranges, progress has been limited, due in part to the lack of a comprehensive approach to improving them and ensuring that these ranges provide the proper setting for effectively preparing its forces for warfare. Specifically, a comprehensive approach should include several key elements, such as the following: well-defined policies that address all factors impacting range sustainability; servicewide plans that guide the timely execution of range sustainability actions; range requirements that are geared to meet both service and joint needs; adequate management of range funding; and a commitment to the implementation of this approach. While OSD and the services have individually taken a number of key actions to varying extents, such as developing policy and establishing working groups for range sustainment, these actions are incomplete,

⁸ Tank trails are unpaved roads that allow units to travel to and from their motor pools to training areas safely and reduce negative impacts to the environment.

⁹ Department of Defense, *Quadrennial Defense Review Report* (Washington, D.C.: Sept. 30, 2001).

¹⁰ CNA, *Assessing Training Range Capabilities: Application of a Range Resource Approach to SoCal ASW Training* (Alexandria, Va.: November 2004).

focusing primarily on encroachment; fail to incorporate all relevant officials; or lack consistency. Further, even though the services cannot identify precisely the funding required—or allocated—to maintain and modernize their ranges, available information indicates that identified training range requirements have historically not been adequately funded. For example, according to training range data from Fort Stewart, the installation's training range accounts were funded approximately 44 percent for fiscal years 1998 through 2002. Similarly, Camp Pendleton data indicated that the primary range accounts were funded approximately 13 percent during fiscal years 1998 and 2002.¹¹ Service officials identified a variety of factors that contributed to or exacerbated funding limitations, such as ranges being a lower priority in funding decisions. Additionally, although DOD policy, reports, and plans have either recommended or required specific actions, OSD and the services have not fully implemented such actions. For example, although the Senior Readiness Oversight Council in 2001 required the services,¹² working with OSD, to prepare a prioritized list of range sustainment and upgrade programs and estimated costs for potential inclusion in the upcoming budget, the list was never developed or submitted for potential funding opportunities. Defense officials could not provide us with an explanation as to why no appropriate action was taken. Without a fully implemented comprehensive approach, DOD will be unable to ensure that it achieves the goals of its training transformation initiative or to ensure the long-term viability of its training ranges. Furthermore, the Congress will not be in a position to fulfill its oversight role.

¹¹ For the purpose of this report, Fort Stewart's and Camp Pendleton's funding information include operations and maintenance funds, and do not include military construction funding. Fort Stewart's range account also does not include facility sustainment funds.

¹² The Senior Readiness Oversight Council advises the Secretary of Defense on matters pertaining to DOD readiness, oversees readiness-related activities, provides recommendations to the Secretary of Defense on readiness policy matters, and provides reports on current and projected readiness issues.

We are making recommendations to you that are intended to improve the conditions at military training ranges. These recommendations are focused on the need for a more comprehensive approach for addressing training range deficiencies to ensure that ranges are sustainable and modernized, to provide for more realistic training, and to achieve DOD's transformation goals. In commenting on a draft of this report, DOD agreed with our recommendations, stating the department and military services are or will be taking steps to implement them. The department also provided technical clarifications, which we incorporated as appropriate.

Background

DOD's ranges are used primarily to test weapon systems and train military forces; some ranges are used for both testing and training purposes, while others are limited to one use or the other. These ranges represent important national assets for the development and sustainment of U.S. military forces. This report focuses primarily on ranges used for training purposes. DOD requires ranges for all levels of training to include airspace for air-to-air, air-to-ground, drop zone, and electronic combat training; live-fire ranges for artillery, armor, small arms, and munitions training; ground maneuver ranges to conduct realistic force-on-force and live-fire training at various unit levels; and sea ranges to conduct surface and sub-surface maneuvers for training. In a February 2004 report to the Congress,¹³ DOD identified 70 major active-component training ranges in the continental United States—the Army has 35, the Navy 13, the Marine Corps 12, and the Air Force 10.¹⁴ The report also identified several National Guard, Reserve, and smaller training ranges.

Readiness Reporting for Defense Infrastructure to Include Training Ranges

The Office of the Secretary of Defense for Personnel and Readiness develops policies, plans, and programs to ensure the readiness of military forces and provides oversight on training issues. The Secretaries of the military departments are responsible for training personnel and for maintaining their respective training ranges and facilities. Until recent years, DOD had no readiness reporting system in place for its defense

¹³ Department of Defense, Office of the Under Secretary for Personnel and Readiness, *Implementation of the Department of Defense Training Range Comprehensive Plan* (Washington, D.C.: February 2004).

¹⁴ In this report, we refer to major training ranges as those that the services either identified as "primary" training ranges or those ranges used by major service combat commands, such as the Army's Forces Command.

installations and facilities, including training ranges. In fiscal year 2000, DOD reported to the Congress for the first time on the readiness of its defense infrastructure as an integral element of its overall Defense Readiness Reporting System. At the core of the system is a rating classification, typically referred to as a “C” rating. The C-rating process is intended to provide an overall assessment for each of nine facility classes (e.g., “operations and training” and “community and housing”) on a military installation. Training ranges fall within the operations and training facility class. While the services provide overall assessments by facility class, they may not always provide detailed separate ratings for installation assets, such as training ranges, within a class. With respect to training ranges, the Army and Marine Corps have data that provide C-ratings for their ranges, but the Navy and Air Force do not. The definitions for C-ratings are as follows:

- C-1—only minor facility deficiencies with negligible impact on capability to perform missions;
- C-2—some deficiencies with limited impact on capability to perform missions;
- C-3—significant facility deficiencies that prevent performing some missions; and
- C-4—major facility deficiencies that preclude satisfactory mission accomplishment.

Although we have previously reported concerns about the consistency and quality of the services’ approaches to completing these assessments, their assessments nonetheless have shown a large portion of DOD facilities across all classes of facilities, which include training ranges, being rated either C-3 or C-4.

DOD’s Training Transformation Initiative

To effectively support the needs of combatant commanders in the new strategic environment of the 21st century, DOD has undertaken a transformation initiative to change the way it conducts training by preparing military forces to learn, improvise, and adapt to constantly changing threats as they execute military doctrine.¹⁵ The joint national training capability is one of three capabilities of this initiative and calls for

¹⁵ We are completing a separate report that provides an overview of the training transformation program and the challenges the department faces in its implementation.

the development of a live-virtual-constructive training environment.¹⁶ To meet this effort, defense planning guidance required OSD, in collaboration with the military services, Joint Chiefs of Staff, and Joint Forces Command, to develop a plan to transform military training to, among other things, ensure that training ranges and devices are modernized and sustainable. The Training Transformation Implementation Plan, which identifies DOD's vision, goals, and milestones, was initially issued in June 2003 and subsequently updated in June 2004.¹⁷ Under the joint national training capability, DOD recognized the need for sustainable and modernized ranges and stated that range capabilities, such as instrumentation for the operating platforms, and modern range infrastructure are necessary to create the training environment, capture realistic ground situations, assess activity and performance, and promptly provide feedback to the training audience and serve as the foundation for the joint national training capability.

Prior GAO Reports on Training Ranges

In recent years, we have reviewed and reported on constraints, particularly those related to encroachment, on military training ranges. A brief summary on those reports follows:

- In June 2004, we reported that DOD's training range report to the Congress, which was mandated by section 366 of the Bob Stump National Defense Authorization Act for Fiscal Year 2003, did not provide a comprehensive plan to address training constraints caused by limitations on the use of military lands, marine areas, and air space that are available in the United States and overseas for training.¹⁸ We also reported that DOD's training report did not fully identify available training resources, specific training capacities and capabilities, and existing training constraints; fully assess current and future training requirements; fully evaluate the adequacy of current resources to meet current and future training range requirements in the United States and overseas; or include a comprehensive plan with quantifiable goals or milestones to measure progress, or projected funding requirements needed to implement the

¹⁶ A live-virtual-constructive training environment is one that integrates training ranges with simulators to support joint training objectives at single or multiple locations.

¹⁷ Department of Defense, *Training Transformation Implementation Plan* (Washington, D.C.: June 2004).

¹⁸ GAO, *Military Training: DOD Report on Training Ranges Does Not Fully Address Congressional Reporting Requirements*, [GAO-04-608](#) (Washington, D.C.: June 4, 2004).

plan. In response to our recommendation calling for a comprehensive plan to fully address training constraints, DOD stated that the services had initiated a comprehensive planning process, which it considered to be evolutionary, and disagreed with our implication that DOD has not executed a comprehensive program to improve the sustainability of its ranges.

- In September 2003, we reported that through increased cooperation DOD and other federal land managers could share the responsibility for managing endangered species on training ranges.¹⁹
- In February 2003, we also reported that while the amount of money spent on facility maintenance has increased, the amounts have not been sufficient to halt the deterioration of facilities, which include training ranges.²⁰ In addition, we also reported a lack of consistency in the services' information on facility conditions, making it difficult for the Congress, DOD, and the services to direct funds to facilities where they are most needed and to accurately gauge facility conditions.
- In April 2002, we reported that troops stationed outside of the continental United States face a variety of training constraints that have increased over the past decade and are likely to increase further.²¹ In June 2002, we reported on the impact of encroachment on military training ranges inside the United States with similar findings to those of the April 2002 report.²² In both reports, we stated that impacts on readiness were not well documented. In addition, we testified before the Congress twice on these issues—in May 2002 and April 2003.²³

¹⁹ GAO, *Military Training: Implementation Strategy Needed to Increase Interagency Management for Endangered Species Affecting Training Ranges*, [GAO-03-976](#) (Washington, D.C.: Sept. 29, 2003).

²⁰ GAO, *Defense Infrastructure: Changes in Funding Priorities and Strategic Planning Needed to Improve the Condition of Military Facilities*, [GAO-03-274](#) (Washington, D.C.: Feb. 19, 2003).

²¹ GAO, *Military Training: Limitations Exist Overseas but Are Not Reflected in Readiness Reporting*, [GAO-02-525](#) (Washington, D.C.: Apr. 30, 2002).

²² GAO, *Military Training: DOD Lacks a Comprehensive Plan to Manage Encroachment on Training Ranges*, [GAO-02-614](#) (Washington, D.C.: June 11, 2002).

²³ GAO, *Military Training: DOD Approach to Managing Encroachment on Training Ranges Still Evolving*, [GAO-03-621T](#) (Washington, D.C.: Apr. 2, 2003); and *Military Training: DOD Needs a Comprehensive Plan to Manage Encroachment on Training Ranges*, [GAO-02-727T](#) (Washington, D.C.: May 16, 2002).

See the Related GAO Products section at the end of this report for a more comprehensive list of our products related to the issues discussed in this report.

Degraded Conditions at Military Training Ranges Adversely Affect Training Activities

Our visits to eight training ranges, along with DOD's own assessments, show that military training ranges have been generally deteriorating over time and lack modernized capabilities. These degraded conditions have adversely affected training, placed the services at risk of not meeting DOD's transformation goals, and jeopardized the safety of military personnel who use the ranges. Without adequately maintained and modernized ranges, the department not only compromises the opportunity to achieve its training transformation goal of sustainable and capable training ranges but also assumes the risk that its forces will be less prepared for its missions and subjected to safety hazards.

Deficiencies Observed at Training Ranges We Visited

Table 1 shows the wide variety of identified degraded conditions or lack of upgrades to meet current training needs at the ranges that we visited. The degraded conditions comprise both (1) those physical features of a training range that are subject to maintenance (e.g., tank trails and roads) over time and (2) those capabilities that are desirable for a modernized training range (e.g., automated threat emitters, automated targets, urban training facilities). Following the table is a discussion of degraded conditions that we observed.

Table 1: Identified Condition Deficiencies at Training Ranges We Visited

Training range	C-ratings (2004)	Identified deficiencies
Fort Hood, Tex.	C-2	Degraded tank trails and training areas; shortages in sniper, multipurpose machine gun, and designated marksman ranges; inadequate number of tank video feedback systems; Military Operations on Urban Terrain (MOUT) training facility not conducive to addressing current threats.
Fort Stewart, Ga.	C-3	Eroded tank trails; inadequate electrical wiring and convoy range; MOUT training facility does not reflect current threats; no hygiene facilities.
Southern California Offshore Range, Calif.	Not rated	Nonworking undersea communication system; degraded roads; inadequate pier; insufficient mooring buoys and floating docks; no instrumented shallow water training range; insufficient and inadequate communication systems; shortage of realistic threats and targets.
Fallon Range Training Complex, Nev.	Not rated	Electronic warfare range lacks density and current capabilities, and parts for current equipment are becoming obsolete; insufficient hard targets that could take multiple hits; insufficient time-sensitive and moving targets.
Camp Lejeune, N.C.	C-3	Overgrown vegetation; unmarked firing lanes; insufficient automated ranges; no instrumented feedback and scoring systems, multipurpose machine gun range, or convoy range; insufficient grenade ranges and elevated shooting positions; MOUT training facility is small and not conducive to addressing current threats.
Camp Pendleton, Calif.	C-2	Overgrown vegetation; range is in flood plain and lacks emergency access; inadequate hygiene facilities; inadequate or lacking target maintenance and storage facilities, elevated firing points, bullet containment, and turning and moving targets; insufficient automated targets; MOUT training facility not conducive to addressing current threats.
Nellis Test and Training Range, Nev.	Not rated	MOUT training facility lacks appropriate density of buildings and scoring and feedback capabilities; insufficient surface-to-air missile threat systems and opposition forces.
Barry M. Goldwater Range, Ariz.	Not rated	Inadequate or lacking MOUT training facilities, remote feedback site and capability, targets and scoring system on live-fire ranges, remote laser system, real-time or updated imagery of range, drop zone, emergency landing training airstrip, target identification area, and diversity of realistic targets; electronic warfare range lacks density and current threat capabilities, and parts for current equipment are becoming obsolete; inadequate communication systems; obsolete and insufficient recording systems for feedback on Army helicopters.

Source: GAO observations and analysis of DOD data.

Note: The C-rating in general represents the composite rating for all training areas on these ranges, as the condition of individual training areas may vary. However, because the Army considers range conditions and property replacement values in assigning its C-ratings and some training areas do not have replacement values, these training areas are not factored into the overall C-rating. The Navy and Air Force do not annually assess the condition of their ranges.

Fort Hood, Texas

While the overall C-rating of the Fort Hood ranges in 2004 was C-2, 53 percent of the assessed training areas were identified by installation officials as having significant (C-3) or major (C-4) deficiencies that preclude satisfactory mission accomplishment. According to Army

officials, the condition of Fort Hood's training ranges is understated because the overall C-rating does not include all assessed training areas. In addition, training range officials identified 364 (91 percent) of the 400 miles of their tank trails, which are not rated under training areas, as unusable or hazardous because of deteriorated conditions (see fig. 1). As a result, units typically detoured onto paved, public roads to travel to and from training areas causing road damage and creating safety hazards to the public who use the roads.

Figure 1: Deteriorated Training Areas at Fort Hood



Source: Fort Hood Integrated Training Area Management Program

Degraded tank trails result in training impacts and damage to military property.

In addition, the urban training facilities were outdated, having been designed for Cold War scenarios that are not applicable to current military operations. For example, the facilities at Fort Hood resemble European villages with narrow streets. But in current military operations, tanks and other military vehicles patrol Middle Eastern settings and downtown cities. Also, while entrances to these European homes at Fort Hood are immediately off the road and easily accessible, homes in the Middle East are generally protected by tall, gated walls and designed around a courtyard, making soldiers more vulnerable to enemy fire before entering a home.²⁴

Fort Stewart, Georgia

While the overall C-rating of the Fort Stewart ranges in 2004 was C-3, 60 percent of the training areas were identified by installation officials as having major (C-4) deficiencies that preclude satisfactory mission accomplishment. In addition, range officials and units told us that the convoy training area limits soldiers to shoot out of only one side of a vehicle during ambush training exercises, although soldiers stated that in actual military operations they could be attacked from multiple directions. The range also lacks urban training facilities that accurately reflect the needs of current military operations, such as Middle Eastern-style building facades. A range official further stated that most of their ranges lack running water and therefore do not have functioning restrooms or showers, which leads to delays and inefficient use of training time. Similar to Fort Hood, the range also has deteriorated training areas that pose difficulties in maneuvering vehicles during training events (see fig. 2).

²⁴ We are completing a separate review of DOD's strategy for training forces to conduct urban operations, the incorporation of current operations lessons learned into recent training, and the challenges faced in implementing this training.

Figure 2: Tank Stuck in Mud at Fort Stewart Due to Lack of Hardened Crossing



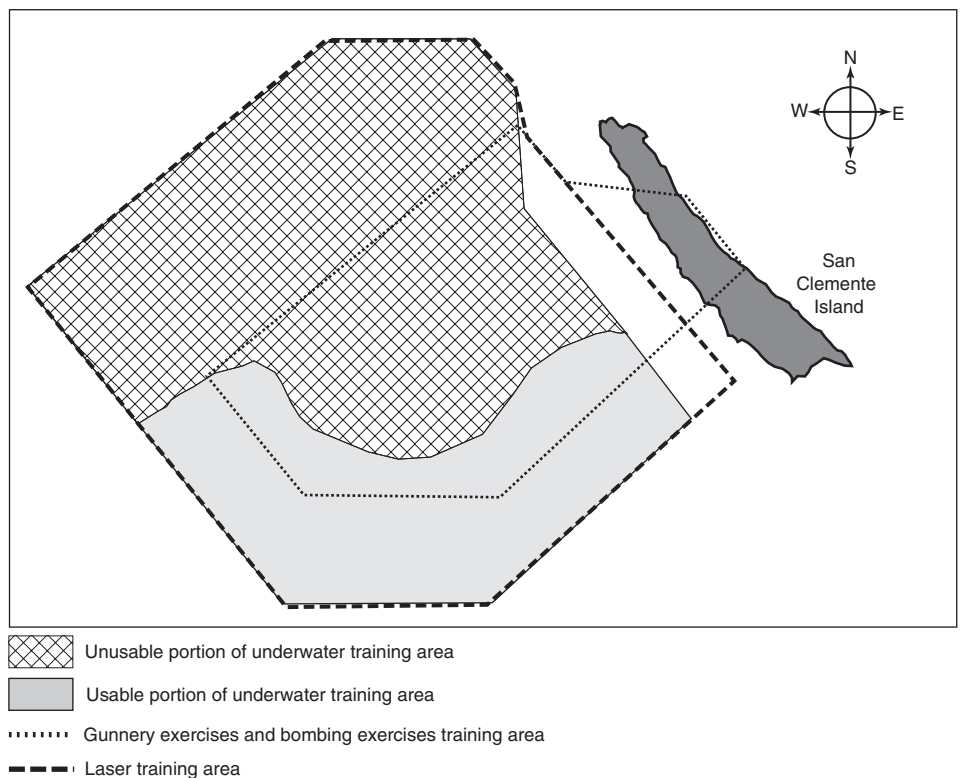
Source: Directorate of Public Works, Ft. Stewart, Ga.

A tank sinks into local vegetation due to lack of hardened crossing sites on training areas.

Southern California Offshore Range, California

There are numerous identified deficiencies at this range—a primary site for West Coast Navy units to train before deploying—that adversely affect the quantity and quality of training activities. Range and submarine squadron officials told us that a major deficiency is the malfunctioning of the undersea training area’s communications system, which effectively reduces the available training area to the southern portion of the range (see fig. 3).

Figure 3: Degraded Conditions at the Southern California Offshore Range



Source: GAO image based on information provided by the Southern California Offshore Range office.

This situation is further exacerbated because the southern portion of the undersea training area overlaps with surface ship training areas, and so concurrent training cannot be conducted. Range officials stated that this and other deficiencies could also impede their ability to meet the increased demand created by the Navy’s revised ship deployment cycle,

which requires more carrier groups to be deployable at a given time.²⁵ Moreover, the range does not have an instrumented shallow-water capability. A recent study on the range's capabilities for antisubmarine warfare found that current range resources are sufficient to meet 90 percent of the minimally required training tasks. However, the study found that the range does not provide a realistic training environment for 19 (63 percent) of 30 Navy training skills, primarily due to the lack of a shallow-water instrumented training range.²⁶ The range also lacks adequate support capabilities, such as piers, docks, and mooring buoys. For example, although range officials stated that current fleet requirements necessitate a minimum of eight mooring buoys, only two are in satisfactory condition. As a result, these buoys are rarely available, which leads to reduced training support and costly workarounds, such as travel to alternate locations for the night. In addition, the lack of mooring or docking capabilities has also resulted in damaged military property and canceled training events. Range officials and users cited other deficiencies, including an inadequate number and types of targets, electronic warfare capabilities, and tracking systems for aircraft, as well as the lack of a dependable secure high-capacity communication system. In commenting on a draft of this report, the Navy stated that it is currently funding efforts to establish dedicated shallow water training ranges on both coasts. However, during our review, Navy officials acknowledged that the west coast range will not be established until the service addresses more restrictive environmental requirements and other anticipated obstacles on the east coast.

Fallon Range Training Complex, Nevada

Pilots and training range officials stated that the Fallon Range Training Complex lacks adequate systems to replicate current threats and targets. It lacks advanced surface-to-air missile threat systems and has an inadequate concentration of electronic warfare systems. As a result, the quality of training is adversely affected. Furthermore, because replacement parts for the current electronic warfare systems are becoming obsolete, the systems are becoming difficult to maintain. In addition, the range has an insufficient number of targets, particularly time-sensitive and moving targets, to reflect the current threat.

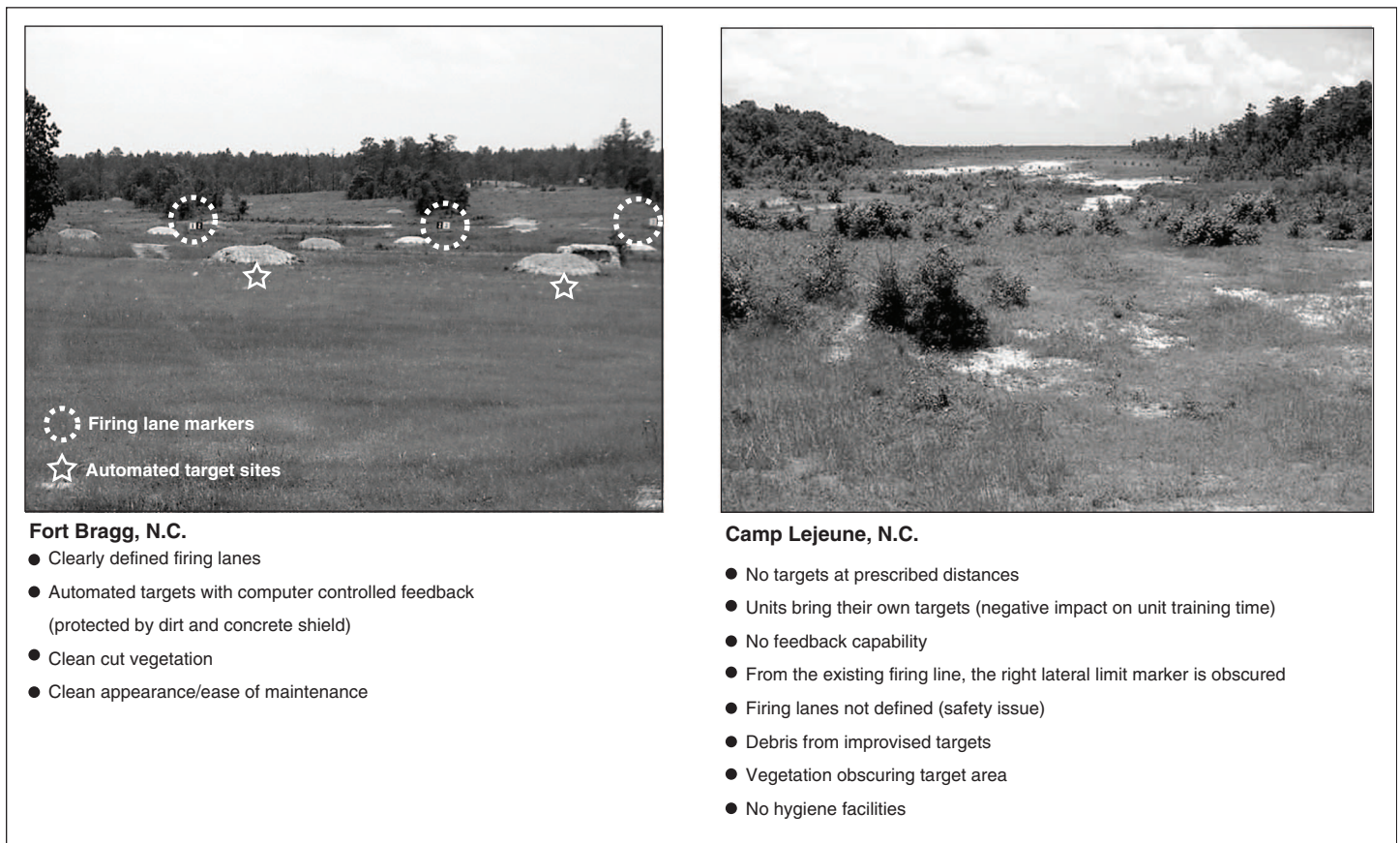
²⁵ We are performing a separate review of the Navy Fleet Response Plan, which assesses, among other things, the geographic combatant commanders' ability to meet their warfighting objectives.

²⁶ CAB D0010901.A2.

Camp Lejeune, North Carolina

While the overall C-rating of the Camp Lejeune ranges in 2004 was C-3, 12 percent of the training areas were identified by installation officials as having major (C-4) deficiencies that preclude satisfactory mission accomplishment. We observed several training areas with overgrown vegetation that obstructed the visibility of targets and range boundary markers, thereby precluding the use of highly explosive ammunition for safety reasons. This condition also diminished the trainers' ability to accurately observe the Marines' shooting proficiency. Some training areas also lack marked firing lanes, and only 5 of the 120 live-fire training areas had automated targets, thereby limiting the amount of training time available since Marines must set up and take down targets as a workaround (see fig. 4).

Figure 4: Comparison of a Degraded Camp Lejeune Training Area with a Better Maintained and Modernized Area at Fort Bragg



Source: GAO graphic based on information from the Training Range Management Division, Camp Lejeune, N.C.

Similar to the conditions found at Fort Hood and Fort Stewart, the urban training facilities were outdated and the range lacks an area to conduct training for soldiers on convoy operations. Consequently, soldiers either have to travel to other ranges to receive such training, which increases training costs and the amount of time soldiers are away from their families, or soldiers remain at their primary ranges and may be less prepared for the conditions they will face in combat.

Camp Pendleton, California

While the overall C-rating of the Camp Pendleton ranges in 2004 was C-2, 24 percent of the training areas were identified by installation officials as having significant (C-3) deficiencies that precluded accomplishment of some missions. Although encroachment is the primary problem for this range, several other deficiencies also affect its training and safety. For example, the range lacks a sufficient number of automated targets to provide feedback for users. In addition, one of the primary training areas is located in a dry riverbed lacking emergency escape routes, where range officials told us one Marine had drowned when it flooded. The training areas used by Navy special operation units have overgrown vegetation; are inadequately constructed to meet requirements and safety conditions; and lack target maintenance and storage facilities, bullet containment walls, turning and moving targets, and hygiene facilities. A lack of running water also creates a financial burden for the range office, which, as a costly workaround, must consequently rent temporary restroom structures. In addition, helicopter pilots stated that the range lacks needed mountaintop targets for them to train against threats from an elevated position.

Nellis Test and Training Range,
Nevada

Although range officials stated that the Nellis Test and Training Range is the most capable in the Air Force, we were told about and observed several deficiencies that affect training, including an insufficient concentration of buildings to replicate an urban environment, inadequate scoring and feedback capabilities, and a lack of specific urban-setting target sets. The range also lacks a sufficient number of opposition forces for training exercises and advanced surface-to-air missile threat systems, which adversaries currently own and operate.

Barry M. Goldwater Range,
Arizona

Pilots and training range officials told us that the Barry M. Goldwater Range lacks moving targets, camouflaged or concealed targets, enemy targets embedded within friendly forces and the civilian population, cave entrances, time-sensitive targets, and strafing pits at specific tactical locations, which are necessary to provide users with a more realistic training experience. It also lacks scoring and feedback capability in the live-fire training areas. Without a scoring system and targets, pilots must shoot at barren mounds of dirt, which diminishes their ability to obtain

feedback on the proficiency of their attack. The range lacks the capability to provide remote site feedback, thus diminishing the amount of training and personal time available to pilots who must as a workaround travel to another base to receive this feedback. It lacks an adequate concentration of electronic warfare systems, and the systems it has are becoming difficult to maintain as replacement parts become obsolete. Also, its communication system is inadequate.

Deficiencies Identified by DOD Studies

DOD is aware of training range deficiencies, having issued a number of studies over the past 10 years that identify these training range deficiencies. For example, DOD's 2001 *Quadrennial Defense Review Report* states that unique American training superiority is eroding from underlying neglect and needs support in sustainment and recapitalization, particularly as evidenced in the aging infrastructure and instrumentation of DOD's training ranges.²⁷ The Navy has completed a number of studies over the years that identify deficiencies at specific ranges. For example, in 1995 it issued a tactical training range roadmap identifying deficiencies at each of its ranges. Many of these deficiencies still exist, such as inadequacies of shallow-water ranges and of realistic targets. In September 2001, the Navy assessed its ranges and identified several deficiencies, including inadequate instrumentation at some of its most critical ranges.²⁸ In September 2000, it completed a range needs assessment on 19 air-to-ground ranges and identified degraded range conditions and a lack of capabilities.²⁹ A 2003 Air Force assessment of its training ranges found infrastructure deficiencies at 90 percent of its ranges, attributable to age and limited funding.³⁰ The assessment considered the deficiencies significant at 24 of its 32 training ranges. While the Army and the Marine Corps have not issued composite studies on the deficiencies of their ranges, they have conducted overall annual range assessments as part of the readiness reporting system and identified deficiencies as well. Further,

²⁷ *Quadrennial Defense Review Report*.

²⁸ Department of the Navy, *Fleet Ranges to Readiness Study* (Washington, D.C.: Sept. 30, 2001) (Unpublished).

²⁹ Department of the Navy, *Department of Navy Range Needs Assessment: Air-to-Ground Ranges* (Washington, D.C., September 2000).

³⁰ U.S. Air Combat Command, *Combat Air Forces: Training Ranges and Air Space Mission Support Plan FY 2003* (Langley Air Force Base, Va.: October 2003).

the Navy and Marine Corps have identified a number of deficiencies at their ranges while developing local range complex management plans.

Various Factors Affect DOD's Progress in Improving Training Range Conditions

While OSD and the military services have undertaken a number of management actions that could improve the conditions of their training ranges, progress in overall improvements has been limited, due in part to the lack of a comprehensive approach to manage their training ranges.

Specifically, a comprehensive approach should include, at a minimum, several key elements, such as well-defined policies that address all factors impacting range sustainability; plans that guide the timely execution of range sustainability actions; and range requirements that are geared to meet both service and joint needs. Further, while the military services lack adequate and easily accessible information that could precisely identify training range maintenance and modernization funding, available information indicates that identified training range requirements have historically not been adequately funded. Additionally, OSD and the services have not fully implemented specific actions identified in their policy, management guidance, reports, and plans for improving training range conditions. Without a fully implemented comprehensive approach, OSD and the services will not be able to ensure the long-term viability of their training ranges, nor their ability to meet transformation goals, nor will the Congress be in a position to fulfill its oversight role.

OSD and the Services Have Taken Limited Range Improvement Actions, but a Comprehensive Approach Is Lacking

OSD and the military services have collectively taken a number of steps that are designed to improve the conditions of training ranges at the service and local range level. For example, to varying extents, the military services have developed policies for training range sustainment, developed service-specific plans, established working groups to coordinate efforts among multiple organizations, defined range requirements, assessed conditions, developed Web-based systems to share information within and among OSD and the services, and developed local range management plans. While these key actions comprise elements of a comprehensive approach to training range sustainment, they have focused primarily on encroachment, or they have not been consistently implemented among the services, or they have not clearly defined the roles and responsibilities of all officials. Our analysis of the status of OSD's and the services' management actions taken to improve range conditions is shown in figure 5.

Figure 5: GAO’s Analysis of DOD’s Management Actions for Improving Training Range Conditions

	Policy	Sustainable range program	Strategic or implementation plan	Multilevel working groups	Range requirements	Systematic assessment of range conditions and impacts	Web-based range information management system	Local range plans
OSD	◐	◐	◐	◐	●	N/A	◐	N/A
Army	◐	●	◐	◐	◐	◐	◐	○
Navy	○	◐	○	◐	◐	◐	○	◐
Marine Corps	◐	●	◐	●	◐	◐	◐	◐
Air Force	◐	○	◐	●	◐	◐	○	○

N/A Not applicable
 ○ Action not taken
 ◐ Action taken but could be improved
 ● Action satisfactorily taken

Source: GAO analysis of DOD data.

- Policy**—While OSD promulgated a DOD range sustainment policy in 2003, that policy primarily focuses on external encroachment factors that impact training and does not clearly define the roles and responsibilities of several DOD commands that either provide oversight or are impacted by the conditions of the ranges.³¹ Specifically, the policy does not clearly define the maintenance and modernization responsibilities of the Deputy Under Secretary of Defense for Installations and Environment and Special Operations Command. Consequently, these organizations lack appropriate assignment of responsibility and accountability for the military training range improvements they oversee or manage. According to service officials, the Army and Marine Corps are finalizing draft revisions of their range sustainment policy, and the Air Force only recently started revising its policy. Navy officials stated that the service has not yet developed a policy to implement DOD’s 2003 policy or to clearly define the roles and responsibilities of the multiple Navy organizations responsible for maintaining and modernizing its training ranges.

³¹ Department of Defense Directive, *Sustainment of Ranges and Operating Areas (OPAREAs)*, 3200.15 (Washington, D.C.: April 2003).

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- **Range sustainment programs**—As shown in table 2, OSD and some of the services have initiated specific range sustainment programs to integrate their individual components and commands.³² The Army has developed such an integrated program that incorporates the multiple facets of range sustainment, including maintenance and modernization, and includes involvement of all responsible officials. OSD and the Navy have established similar programs, but their programs focus primarily on encroachment issues and not on other factors that impact training, such as the maintenance and modernization of ranges. The Marine Corps has taken multiple sustainment initiatives, but has not named their efforts as a program.
 - **Strategic or implementation plans**—Although DOD has developed strategic plans in other areas, such as the 2004 Defense Installations Strategic Plan and Training Transformation Strategic Plan, to guide the services with goals and milestones, it has not developed a comprehensive strategic plan for the long-term viability of its military training ranges. In June 2004, we reported that DOD’s training range report to the Congress, which was mandated by section 366 of the Bob Stump National Defense Authorization Act of Fiscal Year 2003, did not, among other things, provide a comprehensive plan to address training constraints caused by limitations on the use of military lands, marine areas, and air space that are available in the United States and overseas for training.³³ In response to our recommendation calling for a comprehensive plan to fully address training constraints, along with quantifiable goals and milestones for tracking planned actions and measuring progress, DOD stated that the services had initiated a comprehensive planning process, which it considered to be evolutionary, and disagreed with our implication that DOD has not executed a comprehensive program to improve the sustainability of its ranges. Defense planning guidance has mandated DOD to develop a plan to ensure that training ranges are sustainable, but the plan addressed only encroachment issues impacting military training ranges. Similarly, the 2004 *Defense Installations Strategic Plan* identifies and provides goals for addressing encroachment factors impacting DOD’s training ranges, but not for other issues that affect the quality of training, such as range

³² In this report, we refer to a sustainable range program generically as a collective effort that integrates the initiatives designed to ensure the long-term viability of military training ranges. Such a program should address the maintenance, modernization, environment, and encroachment issues related to the ranges.

³³ [GAO-04-608](#).

maintenance and modernization.³⁴ The absence of such a plan could adversely impact DOD-wide initiatives, such as the joint national training capability and the overseas rebasing of forces to the United States. Furthermore, lacking a comprehensive DOD strategic plan, none of the services has developed implementation plans of their own. The Army and Air Force have developed documents on their sustainable range programs, but they do not provide specific goals or milestones that the services can use to measure their progress in meeting their vision and overall goals for ensuring the long-term viability of their ranges. While the Navy has taken several actions under its sustainable range program, it still lacks a plan with specific goals, milestones, funding sources and amounts, defined roles and responsibilities, and other critical components of a strategic plan.

- **Multilevel integrated working groups**—OSD and most of the services have developed formal sustainable range working groups at multiple levels that are intended to address training range constraints, since range viability is dependent on a number of fragmented organizations within OSD and the services. For example, the Deputy Secretary of Defense established a multilevel DOD-wide working group, which includes representatives from the services and some of the other OSD offices.³⁵ However, the working group does not include a representative from Special Operations Command, although they are responsible for and impacted by the maintenance and modernization of military training ranges. Also, both the DOD-wide and Navy headquarters-level sustainable range working groups are primarily focused on encroachment issues and not on other issues that impact ranges and training, such as maintenance and modernization. For example, the Navy's southwest regional range director stated that his primary responsibility is encroachment and munitions cleanup, and that he has not been assigned or been provided the resources to address the maintenance and modernization of ranges in his region. Also, on the basis of our discussion with officials, we noted that only the Marine Corps' and Air Force's working groups included all

³⁴ Department of Defense, Deputy Under Secretary of Defense for Installations and Environment, *2004 Defense Installations Strategic Plan* (Washington, D.C.: September 2004).

³⁵ In December 2001, the Deputy Secretary of Defense directed the formation of the Defense Readiness and Range Initiative Integrated Product Team to act as DOD's coordinating body to address encroachment. The team consists of an overarching integrated product team and a working integrated product team. The overarching team is primarily responsible for strategic planning, while the working team is the staff-level working body that supports the overarching team.

relevant organizations, such as special operations units, which have an interest in having maintained and modernized ranges.

- **Range requirements**—The Navy and Marine Corps have begun to identify or have identified specific requirements or capabilities needed for their ranges, which could be used for budgeting purposes as well as assessing training range deficiencies. In addition, the Navy has linked and the Marine Corps is in the process of linking its training requirements to these range requirements so that the services can identify specific training standards that are impacted by the conditions of a specific training area. However, only the Navy's draft range requirements document links its ranges to special operations and joint training requirements to show the potential impact on the special operation units' or combatant commanders' needs, which is a key objective of DOD's training transformation initiative. Also, none of the range requirement documents identify range support facility needs, although facility conditions directly impact the quantity and quality of training provided and the level of safety on the ranges.
- **Systematic assessment of range conditions and impacts**—At the time of our review, we found that none of the services regularly assessed the conditions of their ranges, including whether the ranges are able to meet the specific training requirements of the service and combatant commanders. While the Army and Marine Corps annually assessed the physical condition of their training ranges, the services do not assess the capabilities of the ranges or any impacts to training. While the Army's assessment contained clearly defined criteria, local training range officials stated that because the criteria are revised regularly, comparing assessments across years is impossible. In addition, the overall assessment of Army training ranges does not accurately reflect the condition of all training areas on the range since it does not include the condition of a number of training areas. Also, according to service officials, both the Army's and Marine Corps' assessments are conducted by public works officials who do not have the background or specific knowledge of range infrastructure, as opposed to training range officials or training unit representatives. In addition, local officials stated that the Marine Corps' assessment is highly subjective and does not provide the evaluator with specific criteria. While the Navy and Air Force do not routinely conduct annual assessments of their training ranges, the Air Force does perform assessments from time to time and the Navy has completed some one-time assessments on their ranges while developing local range complex management plans. We also found that none of the services regularly assess the impacts to training, and none of the services have linked their funding resources to the results of the assessments.

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- **Web-based range information management system**—DOD reports and officials have increasingly called for a range information management system that would allow range offices and users to share information within and across the services. Such a Web-based system would include best practices, lessons learned, a scheduling tool, policies, points of contact, funding information, and range conditions and capabilities. Local range offices have undertaken a number of initiatives to ensure that their ranges remain viable while trying to minimize the negative impact on training, but they often lack an effective mechanism for sharing these initiatives with other organizations. For example, the range officials at the Fallon Range Training Complex routinely obtained targets and training structures at no cost from the Defense Reutilization and Marketing Service to enhance their training capability,³⁶ but other training offices we visited were having difficulty obtaining these items or were paying for the items they were able to obtain. For example, figure 5 shows a mock airfield that was constructed at the Fallon Range out of materials obtained from the Defense Reutilization and Marketing Service.

³⁶ The Defense Reutilization and Marketing Service manages the DOD surplus property sales program and disposes of excess property received from the military services.

Figure 6: Mock Airfield at the Fallon Range Training Complex



Source: Naval Surface Warfare Center, Corona, Calif.

The Marine Corps has an active, centralized training range Web site to provide information to units and ranges across the world, including related service regulations, general and detailed information about each of its ranges, and training range points of contact. The Web site also allows units from any service to schedule their training events remotely, and provides them with a map of each training range including photographs and, in some instances, video footage to assist them in scheduling and designing their training events. However, to date, the Marine Corps has not used its Web site to exchange information, such as lessons learned and best practices, between and among training range offices and military units. Meanwhile, the Army has developed an initial Web site that provides similar, but more limited, information about its sustainable range program.

The Air Force has also established a training range Web site to share information about its training ranges, but it has remained nonfunctional, since the service did not enter information into the site. The Air Force's Air Combat Command is developing a separate training range information management system. While a cognizant command official stated that the command plans on adding a chat room feature to exchange information, the official stated that the system might not be Web-based, so the information would not be available to other range offices or units within and across the services. In commenting on a draft of this report, DOD stated that the Air National Guard is in the process of developing a Web-based range scheduling system that could meet some of the service's needs, but additional funding is needed to complete this effort. While Navy reports and officials recognize the need for a servicewide training range management system, the service has not developed such a system. However, the Southern California Offshore Range has its own management system that is used for scheduling, identifying specific training requirements for each training event, documenting reasons why training is modified or canceled, tracking training range utilization rates by specific units, and recording maintenance issues and resolutions. In addition, the system allows the range office to compute the costs of training each unit using specific training requirements and warfare areas.

- **Local range complex management plans**—The Navy and Marine Corps have started to develop local range complex management plans for their training ranges, which, among other things, provide descriptions of the training ranges, a strategic vision for range operations, and recommendations for environmental planning; identify and analyze required capability shortfalls derived from fleet training needs; and include an investment strategy to address these deficiencies. Although most of the Navy's and Marine Corps' local range offices have started to develop plans with investment strategies, these strategies are not linked to any service investment strategies. Also, due to funding expectations, current needs have been pushed out 20 years. Consequently, today's training requirements are being met with yesterday's ranges and tomorrow's training requirements will be met with today's ranges. Further, six of the Marine Corps' range complex management plans, including two of the service's most significant training ranges, are currently unfunded. In addition, the Army and Air Force ranges we visited have outdated plans. The Army recently started developing standardized local range plans and the Air Force is creating a management system to develop plans for its ranges. However, the system is not scheduled to be operational until 2007. While these key actions comprise elements of a comprehensive approach to training range sustainment, they have focused primarily on

encroachment, have not been consistently implemented among the services, or have not clearly defined the roles and responsibilities of all officials. Such an approach should include, at a minimum, several key elements, such as an overall comprehensive strategic plan that addresses training range limitations, along with quantifiable goals and milestones for tracking planned actions and progress. Other key elements include well-defined policies that address all factors impacting range sustainability, servicewide plans that guide the timely execution of range sustainability actions, range requirements that are geared to meet both service and joint needs, and a commitment to the implementation of this approach. (See app. II for a more comprehensive list of what we consider to be key managerial elements of a comprehensive approach).

Services Have Not Adequately Funded Training Range Maintenance and Modernization

Various documents and training range officials report that training range requirements have not been adequately funded historically to meet training standards and needs. According to service officials, a variety of factors—such as ranges having a lower funding priority amid competing demands—have contributed to or exacerbated funding limitations. However, the military services lack adequate and easily accessible information that could precisely identify the required funding and track what is allocated to maintain and modernize its ranges.

Available Data Reflect Funding Shortages for Range Requirements

Available data indicate that funding for training ranges has historically been insufficient to meet range requirements. For example, the 2003 Special Operations Command report on training ranges states that ranges are inadequately funded for construction, maintenance, repairs, and upgrades.³⁷ In addition, a 2001 Navy range study states that both range operation funds and base operation funds, which also support range sustainment, were not adequate, thus adversely impacting utilization of the Navy's ranges.³⁸ A 2004 Naval Audit Service report also found that Navy range accounts were not being adequately funded and thus were dependent on funds from other accounts.³⁹ Further, funding information provided by training range officials during this review showed that funding has not adequately met their requirements. For example, Fort Stewart

³⁷ U.S. Special Operations Command, *Tiger Team Report: Global Special Operations Forces Range Study* (MacDill Air Force Base, Fla.: Jan. 27, 2003).

³⁸ *Fleet Ranges to Readiness Study*.

³⁹ Naval Audit Service, *Navy Range Operations Support Funding*, N2004-0061 (Washington, D.C.: June 21, 2004).

training data indicated that the installation's training range maintenance account was funded approximately 44 percent for fiscal years 1998 through 2002. Similarly, Camp Pendleton data revealed that the overall identified range needs were funded approximately 13 percent from fiscal years 1998 through 2002. DOD reports and officials identified the following as factors in the funding shortages:

- Training ranges typically have a lower funding priority than many other installation activities. Specifically, training ranges do not compete well for funding against other installation activities that are more visible or related to quality-of-life issues, such as gymnasiums, child care centers, and barracks, and consequently training funds are often reallocated from the range to support other base operations programs.⁴⁰ For example, the 2003 Air Force training range assessment stated that critically needed sustainment funds for ranges were often diverted to fund other base requirements identified as more pressing.⁴¹
- Service officials identified a number of organizational structure issues that exacerbate the extent to which training range requirements are prioritized and funded. While OSD's and the services' training range offices are located in an operations directorate, this directorate does not prioritize or fund base programs that provide resources for the sustainment, restoration, and modernization of DOD infrastructure (including ranges). Recognizing this as an issue, the Navy recently hosted a conference to address the fragmented management for budgeting and allocating funds to ranges. During the meeting, Navy officials agreed to 20 specific actions that could be taken to minimize future funding issues. Also, while local range personnel are responsible for maintaining and modernizing ranges, some of these offices are not directly linked to the command that prioritizes installation resources. For example, the range office at the Southern California Offshore Range, which is an operational unit, is not organizationally aligned with the installation management organization that prioritizes sustainment funds for San Clemente Island. In addition, although the majority of the Southern California Offshore Range's exercises are fleet operations and not air operations, the range office is aligned under a naval air command and not the fleet command.

⁴⁰ Our recently completed review of the management and funding of base operations and facilities support illustrates how funds designated for one activity are redesignated for other activities and the potential adverse effects on operations and training.

⁴¹ *Combat Air Forces: Training Ranges and Air Space Mission Support Plan FY 2003*.

In addition, the relative position of training ranges in the organizational framework affects the extent to which training range requirements are prioritized and funded. Specifically, while some local range offices report directly to the senior mission commander that prioritizes funding resources, other range offices report to offices several echelons below the commander. For example, the Air Force's Air Warfare Center commander stated that since the range office for the Nellis Test and Training Range is an Air Force wing, it has the same opportunity to identify its requirements and deficiencies to him as have the other wings at Nellis Air Force Base, Nevada. Conversely, although the Fallon Range Training Complex range office used to report directly to the Naval Strike and Air Warfare Center commander, who sets funding priorities and requirements, the range office has since been aligned to a lower echelon position, thus placing the office at a less advantageous position in having its requirements and deficiencies identified as priorities.

- A lack of clearly defined roles and responsibilities can also result in overlooked training range requirements as well. Specifically, several training range officials stated that the Navy's regional installation support structure lacks clearly defined roles and responsibilities for each of the program directors within the structure, which results in overlooked requirements at its training ranges. For example, because the Southern California Offshore Range is only a portion of the San Clemente Island in the Pacific Ocean, there are multiple officials responsible for the different operations occurring on the island, including training ranges, port, airfield, environmental, facilities, information technology, and safety. However, according to training range officials, deficiencies on the island are overlooked because the Navy has not issued guidance providing clearly defined roles and responsibilities for each of these program directors. Specifically, training range officials stated that they are unable to obtain funds to maintain or modernize support facilities on the island, such as the pier and roads, because program managers either tend to view the entire island as a training range and therefore not their responsibility or to view it as not one of their top priorities, since the adverse impact on their primary missions is relatively limited. Nevertheless, the condition of these support facilities directly impacts range activities.
- Various documented reports and testimonies of cognizant officials suggest that range needs are understated to the Congress due to the following factors: (1) installation real property inventories, which are used to calculate the installations' sustainment funding requirements, do not contain complete and accurate information needed to compute requirements; (2) commands typically understate range needs because they have come to expect lower funding amounts; and (3) ranges may

receive supplemental funding from units to help maintain conditions. For example, the 2003 Special Operations Command training range report found that Army installations had incorrectly categorized their range facilities built with operations and maintenance funds as multipurpose ranges, which are considered less costly to maintain than those specially targeted for the command. Therefore, these installations underbudgeted for the maintenance and repair of these facilities. In addition, Marine Corps officials stated that they recently updated their installation real property inventories and discovered numerous discrepancies that had resulted in understatement of their ranges' needs. Also, officials at Fort Hood stated that 30 percent of its tank trails are not included in its real property records because the tank trails do not meet military construction standards. As a result, Fort Hood is unable to obtain sufficient funds to either sustain or improve the tank trails to an acceptable standard and add them to the real property inventory. Further, officials stated that commands understate range funding requirements because they have come to expect lower funding levels. For example, officials at Fort Hood stated that although their range modernization funding requirements totaled at least \$8 million, they had programmed and budgeted for only \$4 million. Also, the requirements and budget documents at the Southern California Offshore Range office showed that the range's requirements were understated by about 30 percent for fiscal years 2005 through 2007. Consequently, range officials stated that even if this amount were fully funded and not transferred to other accounts, their needs would be unmet. Since the range has a management system that captures the cost to train units on the range, the office reported that they would have to cancel operations due to a lack of funds in May of each year, or eliminate all command and control and battle group exercises, including 20 already scheduled significant training events. In addition, a 2004 Naval audit found that the regular transfer of funds from units to training ranges resulted in understated requirements and senior Navy management, DOD officials, and the Congress not having important information needed to efficiently and effectively manage and fund Navy programs identified by the Congress as significant to readiness.⁴²

- The services do not link funding for their training ranges to range conditions, capabilities, impacts on training, or utilization. For example, while the number of training hours on the Southern California Offshore Range increased by 153 percent between fiscal years 1998 and 2001, range funding data reflect that funding increased by less than 10 percent. As a

⁴² N2004-0061.

result, range officials told us that the training range requirements continued to be underfunded, conditions continued to deteriorate, and the capabilities continued to be lacking.

- Service officials across all commands lack adequate knowledge and training about the various resources available for range maintenance and how modernization impacts funding levels. For example, very few of the training range officials that we met during our review were aware of sustainment funds that were generated by the range property in the installation's real property inventory systems.
- The services lack clearly defined range requirements that distinguish special operations-specific range needs and servicewide range needs, which results in confusion between which organization is responsible for funding range maintenance and modernization. Specifically, the 2003 Special Operations Command training range report stated that when Special Operations Forces are the primary users of a range funded with service dollars, disagreement sometimes arises over responsibility for maintenance costs. Consequently, there needs to be better clarification of what comprises Special Operations-specific facilities and what comprises service-common facilities.

Services Lack the Capability to Accurately Capture Training Range Requirements and Funding Levels

We found, and DOD recognizes, that the services lack the capability to accurately and easily capture training range funding information. DOD's sustainable range working group officials told us that the services were unable to easily and precisely identify their funding requirements, funding levels, and trends in expenditures on an annual basis. Consequently, the group developed a subcommittee in 2004 to begin addressing this issue. Also, the 2004 Naval audit on range operations funds found that the lack of a range management system resulted in problems related to the visibility of the amount and use of funds being provided.⁴³ Further, while training range officials for each of the services stated that they could identify some training range requirements or funding amounts, none were able to identify all of the funds that their ranges need and receive. For example, while the Army was able to identify its range operations requirements and funding levels, it was unable to identify its range sustainment requirements and funding levels. Officials in these range offices stated that they should have the ability to accurately identify all funding provided to their ranges if they are going to be effective program sponsors. Local training range officials were also unable to identify all their funding requirements and

⁴³ Ibid.

levels. They noted that a centralized system would provide a mechanism for service headquarters officials to identify funding requirements and at the same time relieve them of the burden of responding to constant requests for information.

OSD and the Services Have Not Fully Implemented Previously Recommended Actions

Although policy, management guidance, reports, and plans have either recommended or required specific actions, OSD and the services have not fully implemented these previously recommended actions. For example, although DOD's sustainable range policy requires OSD to, among other things, provide oversight of training ranges and ensure that DOD-level programs are in place to protect the future ability of DOD components to conduct force training, a cognizant OSD official told us that OSD believes it should be a facilitator rather than a provider of oversight. Without adequate oversight, DOD-level initiatives, such as transformation efforts, could be jeopardized. In addition, OSD has not established a means to assess the readiness benefits of range sustainment initiatives, as required by the policy. In response to DOD guidance stating that DOD was to reverse the erosion of its training range infrastructure and ensure that ranges are sustainable, capable, and available, the Senior Readiness Oversight Council required the services, working with OSD, to prepare a prioritized list of range sustainment and upgrade programs and estimated costs for potential inclusion in the fiscal year 2003 budget. However, the list was never developed and submitted for potential funding opportunities. Defense officials could not provide us with an explanation as to why no appropriate action was taken. In addition, the 2003 Special Operations Command training range report identified a number of recommendations that could improve the conditions of training ranges units within the command use.⁴⁴ For example, the report stated that all special operations' components need to create master range plans that address their current and future range issues and solutions; identify and validate training requirements as well as facilities available and needed; and define acceptable limits of workarounds. However, according to a knowledgeable defense official, these recommendations have not been implemented to date because of resource shortages. Also, in July 1995, the Navy issued a tactical training range roadmap that, among other things, applied training requirements to training range capabilities and identified deficiencies to produce an investment plan for training range development. Although the plan stated that it should be updated

⁴⁴ *Tiger Team Report: Global Special Operations Forces Range Study.*

biannually to remain current and accurately reflect fleet training requirements and associated instrumentation needs, the Navy has not updated the plan since that time. Without a commitment to implementation, it is unlikely that the OSD and the services will be able to ensure the success of their transformation efforts and long-term viability of their training ranges.

Conclusions

DOD training ranges are important national assets that have not been adequately maintained or modernized to meet today's needs. While DOD has undertaken a number of actions in an effort to maintain and modernize its training ranges, it lacks a comprehensive approach to address range issues. We have previously recommended and continue to believe that DOD needs an overall strategic plan that identifies specific goals, actions to be taken, milestones, and a process for measuring progress and ensuring accountability. In turn, each service needs to develop a comprehensive implementation plan if deteriorating conditions are to be abated and overall training capabilities improved to meet today's and tomorrow's requirements. Similarly, OSD and the services have issued policies, conducted studies containing recommendations, identified range officials at various command levels, and developed working groups. However, not all relevant officials are included, their roles and responsibilities are not clearly defined, the policies and recommendations have been ignored or only partially implemented, and several of these actions focus only on external encroachment issues. DOD needs to ensure that OSD's comprehensive strategic plan, the services' implementation plans, DOD's training transformation plan, DOD policies, and identified recommendations include all relevant officials, clearly define their roles and responsibilities, comprehensively address all sustainability issues, including the maintenance and modernization of military training ranges, and are fully implemented to ensure the long-term viability of these national assets. Although military training ranges are generally in degraded condition, which adversely affects the quantity and quality of training and safety of the users, the military services do not accurately and systematically assess their ranges, including whether the ranges are able to meet the specific training requirements of the service and combatant commanders. Without systematically assessing the conditions of their ranges, the services cannot accurately identify the ranges where the conditions negatively impact training and need improvements, the best locations for training, or which training ranges best meet the needs of DOD's training transformation plan and of service and combatant commanders. Although local training range officials have undertaken a number of initiatives to ensure that their ranges remain viable while trying

to minimize negative impact on training, the services have not provided these officials or military units with a Web-based range information management system. Without such a system, the range offices are unable to share best practices and lessons learned within and across the services and military units are unable to identify which ranges best meet their needs.

Various documents and training range officials report that training range requirements have historically not been adequately funded to meet training standards and needs. Without appropriate attention and adequate funding, the services will be unable to meet DOD's transformation goals and ensure the long-term viability of their ranges. The military services do not have the capability to accurately and easily identify the funding amounts needed or provided for maintaining and modernizing their ranges. Without this capability, the military services are constrained in their ability to accurately plan, program, and budget for the maintenance and modernization of their training ranges; provide complete and accurate information to the Congress for appropriation and legislative decision making; and obtain this information without constant requests for information from multiple officials at different commands. A variety of factors, such as ranges having a lower priority in funding, contributes to or exacerbates funding limitations. Without addressing these and other factors, training range conditions will continue to degrade.

Recommendations for Executive Action

We have previously recommended that OSD develop an overall comprehensive strategic plan for its training ranges that addresses training range limitations, along with quantifiable goals and milestones for tracking planned actions and progress.⁴⁵ In response to our recommendation, DOD stated that the services had initiated a comprehensive planning process, which it considered to be evolutionary, and disagreed with the implication that DOD has not executed a comprehensive program to improve the sustainability of its ranges. However, our work has shown that this recommendation still has merit and should be addressed because it is fundamental to the comprehensive approach for managing training ranges that we are advocating.

⁴⁵ [GAO-04-608](#).

We are making other recommendations to you as follows:

- Direct the Under Secretary of Defense for Personnel and Readiness to:
 - Update DOD Directive 3200.15 to broaden the focus of the policy to clearly address all issues that affect the long-term viability of military training ranges; and clearly define the maintenance and modernization roles and responsibilities of all relevant DOD components, including the Deputy Under Secretary of Defense for Installations and Environment, Joint Forces Command, and Special Operations Command.
 - Broaden the charter of the DOD-wide working group, the Sustainable Range Integrated Product Team, to address all issues that could affect the long-term viability of military training ranges; and include all DOD components that are impacted by range limitations.
 - Update DOD's training transformation plan to address all factors that could impact the sustainability of military training ranges and not just external encroachment issues.
- Direct the Secretaries of the Military Services to implement a comprehensive approach to managing their training ranges, to include:
 - A servicewide sustainable range policy that implements the updated DOD Directive 3200.15 and clearly defines the maintenance and modernization roles and responsibilities of relevant service officials at all levels.
 - A servicewide sustainable range implementation plan that includes goals, specific actions to be taken, milestones, funding sources, and an investment strategy for managing their ranges.
 - Defined training range requirements and a systematic process to annually assess the conditions of training ranges and their consequent impact on training, including whether the ranges are able to meet the specific training requirements of the service and combatant commanders.
 - A Web-based range information management system that allows training range officials at all levels to share information, such as range conditions and their impact on training; funding sources, requirements and expenditures; and local range initiatives.

-
- Regularly developed strategies to address the factors contributing to funding shortages for ranges, including the reassessment of funding priorities for maintaining and modernizing ranges relative to other needs.

Agency Comments and Our Evaluation

In commenting on a draft of this report, the Deputy Under Secretary of Defense for Readiness agreed with our recommendations, stating the department and military services are or will be taking steps to implement them.

The Deputy Under Secretary of Defense's comments are included in this report in appendix III. DOD also provided technical clarifications, which we incorporated as appropriate.

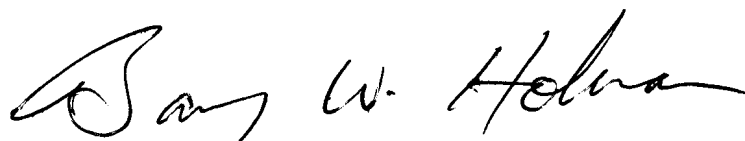
As you know, 31 U.S.C. 720 requires the head of a federal agency to submit a written statement of the actions taken on our recommendations to the Senate Committee on Governmental Affairs and the House Committee on Government Reform not later than 60 days after the date of this report. A written statement must also be sent to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of this report.

We are sending copies of this report to the appropriate congressional committees and it will be available at no charge on GAO's Web site at <http://www.gao.gov>.

If you or your staff have any questions on the matters discussed in this report, please contact me at (202) 512-5581 or holmanb@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Mark A. Little, James R.

Reifsnyder, Patricia J. Nichol, Tommy Baril, Steve Boyles, and Cheryl A. Weissman were major contributors to this report.

Sincerely yours,

A handwritten signature in black ink that reads "Barry W. Holman". The signature is written in a cursive style with a large, stylized initial 'B'.

Barry W. Holman, Director,
Defense Capabilities and Management

Appendix I: Scope and Methodology

To determine the conditions of military training ranges and their consequent impact, we collected and analyzed training-range-related information from officials within the headquarters and selected major commands of the military services. We also visited eight major active component training ranges situated at various locations in the continental United States—Fort Hood, Texas; Fort Stewart, Georgia; Southern California Offshore Range, California; Fallon Range Training Complex, Nevada; Camp Lejeune, North Carolina; Camp Pendleton, California; Nellis Test and Training Range, Nevada; and the Barry M. Goldwater Range, Arizona—to observe training range conditions and discuss consequential impacts.¹ These ranges were selected by identifying the major training ranges for each service and seeking input from service range officials as to which ranges could best address our audit objectives. During our visits we met with installation officials, range managers, and units that use the ranges. We also reviewed relevant DOD studies and audit reports identifying the conditions of military training ranges.

To assess the progress the department has made in improving training range conditions, we discussed and reviewed information relating to training range initiatives from the Office of the Secretary of Defense, the Joint Forces Command, the Special Operations Command, and the headquarters and selected major commands of the military services. We also examined key documents related to the funding of training ranges including associated funding requirements and funding allocations. In addition, we reviewed prior GAO reports and internal service audits addressing funding issues for military facilities, including training ranges.² We also obtained and reviewed range-related information from range officials of each of the eight installations that we visited. Further, we toured the training areas or support facilities at each of the ranges we visited to observe initiatives implemented by local range offices to improve the condition or capability of their ranges. Although we found

¹ While we did not specifically include National Guard, Reserve, and smaller training ranges in the scope of this review, based on discussions with DOD officials and reviews of relevant studies and audit reports many of the conditions and issues discussed in this report apply to them as well.

² GAO, *Military Infrastructure: Real Property Management Needs Improvement*, [GAO/NSIAD-99-100](#) (Washington, D.C.: Sept. 7, 1999); and *Defense Infrastructure: Changes in Funding Priorities and Strategic Planning Needed to Improve the Condition of Military Facilities*, [GAO-03-274](#) (Washington, D.C.: Feb. 19, 2003); U.S. Army Audit Agency, *Range Sustainment*, A-2003-0434-IME (Alexandria, Va.: Sept. 9, 2003); and Naval Audit Service, *Navy F/A-18 Combat Aviation Training*, N2003-0039 (Washington D.C.: Mar. 31, 2003).

limitations in the availability of certain data, we believe the available data gathered are sufficiently reliable for the purposes of this report based on our discussions with OSD and military service officials and our review of the prior GAO reports and internal service audits.

**Organizations and Units
Visited or Contacted for
This Review**

Office of the Secretary of Defense

- Office of the Director of Readiness and Training, Office of the Deputy Under Secretary of Defense for Readiness
- Office of Installations Requirements and Management, Office of the Deputy Under Secretary of Defense for Installations and Environment

Combatant Commands

- Chief of Staff, Joint Forces Command
- Joint National Training Capability Joint Management Office, Joint Forces Command
- Joint Training Policy and Validation Division, Special Operations Command

Army

- Training Directorate, Training Simulations Division, Office of the Deputy Chief of Staff
- Office of Assistant Chief of Staff for Installation Management
- Installation Management Agency—Headquarters
- Installation Management Agency—Southeast Region
- Installation Management Agency—Southwest Region
- Forces Command

Navy

- Navy Fleet Training Branch, Fleet Readiness Division, Fleet Readiness and Logistics, Office of the Deputy Chief of Naval Operations
- Operating Forces Support Division, Chief of Naval Installations
- Live Training Ranges Office, Fleet Forces Command

Marine Corps

- Range and Training Area Management Division, Training and Education Command

Air Force

- Office of the Director of Ranges and Airspace, Air and Space Operations
- Air Combat Command
- Air Education and Training Command

Fort Hood, Texas

- Garrison Commander, Fort Hood
- Office of Assistant Chief of Staff, G3, III Corps
- Headquarters Company, 4th Infantry Division
- 8th Infantry Regiment, 2nd Battalion, 4th Infantry Division
- 16th Field Artillery, 3rd Battalion, 4th Infantry Division
- Headquarters Company, 1st Cavalry Division
- 3rd Air Support Operations Group (U.S. Air Force)
- Directorate of Plans, Training and Security
- Directorate of Public Works
- Range Division, Directorate of Plans, Training and Security
- Garrison Resource Management Office

Fort Stewart, Georgia

- Deputy Garrison Commander, Fort Stewart
- 64th Armored Regiment, 1st Battalion, 1st Brigade, 3rd Infantry Division
- Headquarters Company, 3rd Infantry Division
- Training Division, Directorate of Plans, Training, Mobilization and Security
- Directorate of Public Works
- Garrison Resource Management Office

Southern California Offshore Range, California

- Commodore, Submarine Squadron 11, Commander Submarine Force, U.S. Pacific Fleet
- Training and Readiness Department, 3rd Fleet
- Expeditionary Warfare Training Group, Pacific
- Naval Special Warfare Command
- Fleet Area Control and Surveillance Facility Detachment Southern California Offshore Range
- Commander Helicopter Anti-Submarine Light Wing, Pacific
- Public Works Office, Naval Base Coronado

Fallon Range Training Complex, Nevada

- Commanding Officer, Naval Air Station Fallon
- Program Manager of Ranges, Navy Region Southwest, Chief of Naval Installations
- N5 Strike Department, Naval Strike and Air Warfare Center
- Training Range Branch, N5 Strike Department, Naval Strike and Air Warfare Center
- Comptroller, Naval Strike and Air Warfare Center

Camp Lejeune, North Carolina

- Commanding General, Marine Corps Base Camp Lejeune
- Office of Assistant Chief of Staff for Training and Operations
- Range Development Division
- Training Resources Management Division
- Modeling and Simulation Division
- School of Infantry
- Special Operations Training Group
- 2nd Marine Division, 2nd Marine Expeditionary Force
- Weapons and Field Training Battalion
- Office of the Comptroller, Marine Corps Base Camp Lejeune
- Office of the Deputy Chief of Staff, Installations and Environment Department

Camp Pendleton, California

- Office of the Assistant Chief of Staff for Training and Operations
- Range Operations Division
- Training Resources Management Division
- School of Infantry
- 1st Marine Division, 1st Marine Expeditionary Force
- Marine Aircraft Group 39, 3rd Marine Aircraft Wing, 1st Marine Expeditionary Force
- Special Operations Training Group

Nellis Test and Training Range, Nevada

- Commanding Officer, Air Warfare Center
- 98th Range Wing, Air Warfare Center
- 414th Combat Training Squadron, 57th Operations Group, 57th Wing, Air Warfare Center
- 57th Operations Support Squadron, 57th Operations Group, 57th Wing, Air Warfare Center

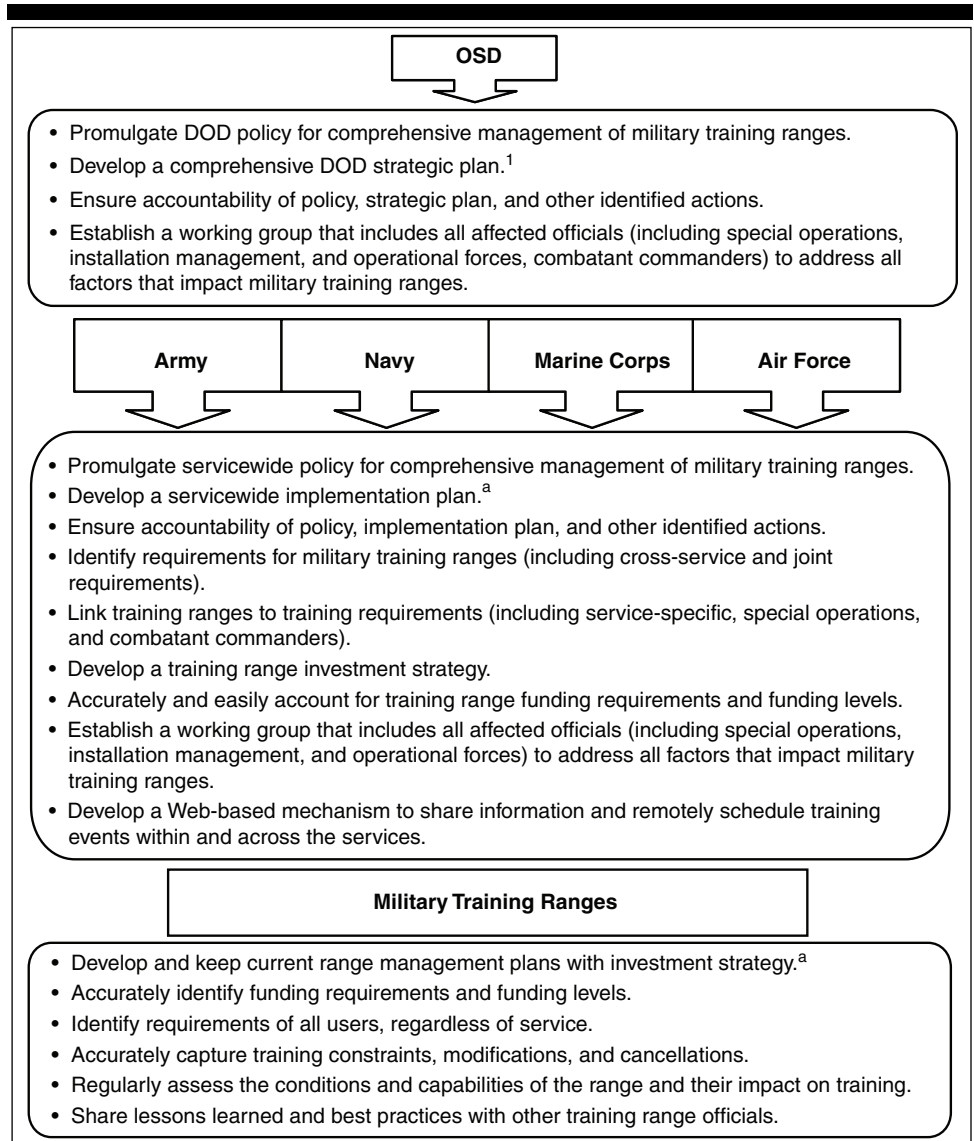
Barry M. Goldwater Range, Arizona

- 56th Fighter Wing
- 944th Fighter Wing
- 56th Fighter Wing Range Management Office
- 56th Operations Group, 56th Fighter Wing
- 355th Operations Group, 355th Wing
- 162nd Fighter Wing Operations Group, Arizona Air National Guard
- 563rd Rescue Group, Air Force Special Operations Command
- Western Army National Guard Aviation Training Site

We conducted our work from August 2003 through March 2005 in accordance with generally accepted government auditing standards.

Appendix II: Key Management Elements of a Comprehensive Approach for Managing Training Ranges

The flow chart below depicts what we consider to be the defense organizational roles and responsibilities needed to implement a comprehensive approach for managing training ranges.



Source: GAO.

^a These documents should identify, at a minimum, specific actions, quantifiable goals, and milestones to measure progress, projected funding requirements and sources, and clear assignment of responsibility.

Appendix III: Comments from the Department of Defense



PERSONNEL AND
READINESS

OFFICE OF THE UNDER SECRETARY OF DEFENSE
4000 DEFENSE PENTAGON
WASHINGTON, D.C. 20301-4000



Mr. Barry W. Holman
Director, Defense Capabilities and Management
U.S. Government Accountability Office
441 G Street, NW
Washington, D.C. 20548

Dear Mr. Holman:

This is the Department of Defense (DoD) response to the Government Accountability Office Draft Report GAO-05-534, "MILITARY TRAINING: Better Planning and Funding Priority Needed to Improve Conditions of Military Training Ranges," April 29, 2005 (GAO Code 350430).

The Department appreciates the opportunity to comment on this draft, and substantially concurs with the contents of the report and recommendations offered. In addition, the Department is providing several technical comments for consideration.

Sincerely,

Paul W. Mayberry
Deputy Under Secretary of Defense
(Readiness)

Enclosure:
As stated



GAO DRAFT REPORT – DATED April 29, 2005
GAO CODE 350430/GAO-05-534

" MILITARY TRAINING: Better Planning and Funding Priority Needed to Improve
Conditions of Military Training Ranges "

DEPARTMENT OF DEFENSE COMMENTS
TO THE RECOMMENDATIONS

RECOMMENDATION 1: The GAO recommended that the Secretary of Defense direct the Under Secretary of Defense (Personnel and Readiness) to update DoD Directive 3200.15 to broaden the focus of the policy to clearly address all issues that affect the long-term viability of military training ranges; and clearly define the maintenance and modernization roles and responsibilities of all relevant DoD components, including the Deputy Under Secretary of Defense for Installations and Environment, Joint Forces Command, and Special Operations Command. (Pages 37 and 38/GAO Draft Report)

DOD RESPONSE: Concur with comment. In general, the Department concurs that more fully articulating the complimentary roles and responsibilities of primary OSD offices, the Services, and the Combatant Commands will better address the full range of management functions required to sustain DoD ranges. Whether DoD Directive 3200.15 should be broadened to serve as the single focus point for sustainable range policy or if it would make more sense to address the myriad of sustainable range issues and articulate these complimentary responsibilities through other directives and instructions remains to be determined. The Department intends to undertake a review of policies to ensure the scope of issues to be addressed and the roles and responsibilities for addressing such issues are integrated and clearly articulated in existing, revised, or new policies.

RECOMMENDATION 2: The GAO recommended that the Secretary of Defense direct the Under Secretary of Defense (Personnel and Readiness) to broaden the charter of the DoD-wide working group, the Sustainable Range Integrated Product Team, to address all issues that could affect the long-term viability of military training ranges; and include all DoD components that are impacted by range limitations. (Page 38/GAO Draft Report)

DOD RESPONSE: Concur with comment. The Department concurs that a more broad-based, collaborative effort among its various components and agencies will better address the full range of sustainment issues. As issues have arisen that go beyond the core membership of the Sustainable Ranges Integrated Product Team (IPT) charter, various groups and agencies have been brought in to help work these issues and sub-groups have been formed to address specific issues. For example, the IPT has had a long-term working relationship with the Ordnance Environmental Executive Steering Committee and more recently is partnering with

the Defense Installation Spatial Data Infrastructure office, and the Natural Infrastructure Capabilities Working Group (a DoD Installations Capabilities Council group created to deal with natural infrastructure management and encroachment prevention). In addition, as part of the Department's response to reporting requirements pursuant to section 366 of the National Defense Authorization Act for Fiscal Year 2003, a funding subgroup was formed to develop a common construct for consistent and accurate reporting and discussions of range funding among the Services.

Although the Sustainable Ranges IPT has addressed a spectrum of sustainability issues, the group's focus has remained largely on encroachment from environmental challenges and land, air and sea-space management. Addressing internal limitations by partnering with the facilities sustainment and modernization community makes sense. The IPT will address whether to expand the IPT membership or simply develop working relationships with existing groups that already have those responsibilities.

RECOMMENDATION 3: The GAO recommended that the Secretary of Defense direct the Under Secretary of Defense (Personnel and Readiness) to update DoD's training transformation plan to address all factors that could impact the sustainability of military training ranges and not just external encroachment issues. (Page 38/GAO Draft Report)

DOD RESPONSE: Concur with comment. The Department concurs that the full breadth of sustainable range management needs to be addressed in our efforts to transform military training and establish a Joint National Training Capability. As stated in the report, the Department's Training Transformation Implementation Plan recognizes the need for sustainable and modernized ranges and provides guidance to this end. It will be a long-term effort, however, to successfully transform our ranges, given the time and resources required to make substantive changes. We will continue to work towards a more complete integration of the maintenance and modernization factors associated with our infrastructure and the environmental and encroachment factors of range sustainment in future updates of the Training Transformation Implementation Plan.

RECOMMENDATION 4: The GAO recommended that the Secretary of Defense direct the Secretaries of the Military Services to implement a comprehensive approach to managing their training ranges to include: (1) a Service-wide sustainable range policy that implements the updated DoD Directive 3200.15 and clearly defines the maintenance and modernization roles and responsibilities of relevant Service officials at all levels; (2) a Service-wide sustainable range implementation plan that includes goals, specific actions to be taken, milestones, funding sources, and an investment strategy for managing their ranges; (3) defined training range requirements and a systematic process to annually assess the conditions of training ranges and their consequent impact on training, including whether the ranges are able to meet the specific training requirements of the Service and combatant commanders; (4) a Web-based range information management system that allows training range officials at all levels to share information, such as range conditions and their impact on training; funding sources, requirements and expenditures; and local range initiatives; and (5) regularly developed

strategies to address the factors contributing to funding shortages for ranges, including the reassessment of funding priorities for maintaining and modernizing ranges relative to other needs. (Page 38/GAO Draft Report)

DOD RESPONSE:

Concur with comment. DoD concurs with the GAO that a comprehensive approach to managing training ranges is essential to successful range sustainment. However, a truly comprehensive solution calls for a collaborative approach, one that involves both OSD and the Services. The Sustainable Ranges Integrated Product Team, established by the Deputy Secretary of Defense on December 4, 2001, provides this collaborative forum ("...form an Integrated Product Team (IPT) to act as the DoD coordinating body for all issues of encroachment on our ranges, operating areas, and other locations where we train or test and evaluate new weapons and sensors."). The IPT has had notable success so far in establishing top-level sustainable ranges policy (3200.15, as well as updates to other range guidance). OSD has issued programmatic guidance to the Services on range sustainment, to include modernization aspects as well as counter-encroachment. The IPT has a standing subgroup that tracks Service programming for range sustainment and is developing a framework that provides increased visibility into year-to-year funding. The IPT has initiated a comprehensive review of range information systems and needs across all the Services. And for the past two years, the IPT has led a collaborative effort to report our comprehensive range program progress to Congress (the "Section 366 Report").

Based on the agreements and understandings reached in the IPT, and founded upon DoD-level policy and other direction, each Service must develop detailed programs for range sustainment and implement them accordingly. This entails the development and implementation of Service-level policies and plans, to include a process for evaluating and addressing range requirements, managing range funding, and effectively managing range information. While all four Services are in some stage of development on such a comprehensive Service program, not all are fully formed or well described at this stage. The IPT will undertake a detailed review of each Service range sustainment program over the coming year, to include each of the five areas mentioned by the GAO's recommendation 4. We already have a programmatic review of Service range sustainment programs planned for the August timeframe, and will widen this review in order to capture more fully the GAO's concerns. Based on the results of this review, the need for additional guidance, whether from the IPT or the Office of the Secretary of Defense, will be assessed and appropriate actions taken.

Related GAO Products

Military Training: DOD Report on Training Ranges Does Not Fully Address Congressional Reporting Requirements. [GAO-04-608](#). Washington, D.C.: June 4, 2004.

DOD Operational Ranges: More Reliable Cleanup Cost Estimates and a Proactive Approach to Identifying Contamination Are Needed. [GAO-04-601](#). Washington, D.C.: May 28, 2004.

Military Munitions: DOD Needs to Develop a Comprehensive Approach for Cleaning Up Contaminated Sites. [GAO-04-147](#). Washington, D.C.: December 19, 2003.

Military Training: Implementation Strategy Needed to Increase Interagency Management for Endangered Species Affecting Training Ranges. [GAO-03-976](#). Washington, D.C.: September 29, 2003.

Defense Infrastructure: Changes in Funding Priorities and Management Processes Needed to Improve Condition and Reduce Costs of Guard and Reserve Facilities. [GAO-03-516](#). Washington, D.C.: May 15, 2003.

Military Training: DOD Approach to Managing Encroachment on Training Ranges Still Evolving. [GAO-03-621T](#). Washington, D.C.: April 2, 2003.

Defense Infrastructure: Changes in Funding Priorities and Strategic Planning Needed to Improve Condition of Military Facilities. [GAO-03-274](#). Washington, D.C.: February 19, 2003.

Defense Infrastructure: Most Recruit Training Barracks Have Significant Deficiencies. [GAO-02-786](#). Washington D.C.: June 13, 2002.

Military Training: DOD Lacks a Comprehensive Plan to Manage Encroachment on Training Ranges. [GAO-02-614](#). Washington, D.C.: June 11, 2002.

Military Training: DOD Needs a Comprehensive Plan to Manage Encroachment on Training Ranges. [GAO-02-727T](#). Washington, D.C.: May 16, 2002.

Military Training: Limitations Exist Overseas but Are Not Reflected in Readiness Reporting. [GAO-02-525](#). Washington, D.C.: April 30, 2002.

Defense Budget: Analysis of Real Property Maintenance and Base Operations Fund Movements. [GAO/NSIAD-00-87](#). Washington, D.C.: February 29, 2000.

Military Capabilities: Focused Attention Needed to Prepare U.S. Forces for Combat in Urban Areas. [GAO/NSIAD-00-63NI](#). Washington, D.C.: February 25, 2000.

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