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United States Government Accountability Office  
Washington, DC 20548

October 11, 2007

Congressional Committees

*Subject: Improvement Continues in DOD's Reporting on Sustainable Ranges, but Opportunities Exist to Improve Its Range Assessments and Comprehensive Plan*

In the midst of the global war on terrorism and recent operations in Iraq and Afghanistan, the Department of Defense (DOD) is working to make U.S. forces more agile and expeditionary. This transformation involves a shift from a Cold War era defense posture to a military that can surge quickly to trouble spots around the globe. In order to accomplish this transformation, it is vital for U.S. forces to train as they intend to fight. New advances in technology, coupled with this shift in force posture, mean that DOD needs to continually update and maintain its training ranges. Military training ranges vary in size from a few acres—for small arms training—to over a million acres for large maneuver exercises and weapons testing, as well as broad open ocean areas that provide for offshore training and testing. These ranges face ever increasing limitations and restrictions on land, water, and airspace as residential, commercial, and industrial development continues to expand around and encroach upon once remote military training and testing installations.

Section 366 of the Bob Stump National Defense Authorization Act for Fiscal Year 2003,<sup>1</sup> dated December 2, 2002, required that the Secretary of Defense report on several items. First, the Secretary of Defense was required to develop a comprehensive plan for using existing authorities available to the Secretary of Defense and the military services to address training constraints caused by limitations on the use of military lands, marine areas, and airspace—both in the United States and overseas. As part of the preparation of the plan, section 366 required the Secretary of Defense to conduct an assessment of current and future training range requirements and an evaluation of the adequacy of current DOD resources, including virtual and constructive assets, to meet current and future training range requirements. Section 366 further required the Secretary to submit the plan, the results of the assessment and evaluation, and any recommendations for legislative or regulatory changes to address training constraints in a report to Congress at the same time the President submitted the budget for fiscal year 2004. Further, the Secretary was required to submit to Congress a report annually between fiscal years 2005

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<sup>1</sup>Pub. L. No. 107-314 (2002).

and 2013<sup>2</sup> describing the progress made in implementing the 2004 plan and any additional actions taken or to be taken to address training constraints caused by limitations on the use of military land, marine areas, or airspace. Second, section 366 required the Secretary of Defense to report to Congress, not later than June 30, 2003, on the plans to improve DOD's system to reflect the readiness impact that training constraints caused by limitations on the use of military lands, marine areas, and airspace have on specific units of the military services. Third, section 366 required the Secretary to develop and maintain an inventory that identifies all available operational training ranges, all training range capacities and capabilities, and any training constraints caused by limitations at each training range in fiscal year 2004, and provide an updated inventory to Congress for fiscal years 2005 through 2013.<sup>3</sup> The Under Secretary of Defense for Personnel and Readiness signed DOD's fourth annual sustainable ranges report and inventory on July 13, 2007.<sup>4</sup> We received the report and inventory on July 20, 2007. (Enc. I contains the text of section 366 of the Bob Stump National Defense Authorization Act for Fiscal Year 2003.)

Section 366(d) of the Bob Stump National Defense Authorization Act for Fiscal Year 2003 requires GAO to submit to Congress an evaluation of DOD's report regarding its training range comprehensive plan and its readiness reporting improvements within 90 days<sup>5</sup> of receiving the report from DOD. In 2006, we found that DOD had made improvements to its annual sustainable ranges report, but it needed additional time to fully implement key sustainment initiatives.<sup>6</sup> Enclosure II summarizes our prior reports about military training ranges sustainment.

This report is our fourth review in response to our mandate in section 366 of the Bob Stump National Defense Authorization Act for Fiscal Year 2003.<sup>7</sup> This report discusses (1) the extent to which DOD's 2007 sustainable ranges report and training range inventory address the elements of section 366 that were required to be in DOD's fiscal year 2004 sustainable ranges report and (2) an opportunity for DOD to improve its comprehensive plan within the sustainable ranges report to better address the elements

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<sup>2</sup>Section 366 originally required reports for fiscal years 2005 through 2008. However, this requirement was extended through 2013 by section 348 of the John Warner National Defense Authorization Act for Fiscal Year 2007, Pub. L. No. 109-364 (2006).

<sup>3</sup>Id.

<sup>4</sup>Department of Defense, Office of the Under Secretary of Defense for Personnel and Readiness, *Report to Congress on Sustainable Ranges* (Washington, D.C.: July 2007).

<sup>5</sup>Section 366 originally required GAO to submit its report to Congress within 60 days of receiving the original report from DOD, but this was extended to 90 days by section 348 of Pub. L. No. 109-364 (2006).

<sup>6</sup>GAO, *Improvement Continues in DOD's Reporting on Sustainable Ranges but Additional Time Is Needed to Fully Implement Key Initiatives*, [GAO-06-725R](#) (Washington, D.C.: June 20, 2006).

<sup>7</sup>GAO was not specifically required by section 366 to review DOD's training range inventory. However, because DOD submits this inventory with its sustainable ranges report, we elected to review DOD's training range inventory, as we have done in past years.

of section 366. Enclosure III discusses the progress that the services have made in their individual initiatives to sustain their training ranges.

Because DOD has not yet satisfied all of the elements of section 366 that were to be addressed in fiscal year 2004, we focused our review on the progress DOD has made in addressing these original elements and not on the subsequent requirement for DOD to describe its progress made in implementing its original comprehensive plan. To determine the extent to which DOD's 2007 sustainable ranges report and training range inventory address the elements of section 366 that were required to be in DOD's original fiscal year 2004 plan, we reviewed the report and inventory and met with DOD and service officials to discuss them. We discussed challenges DOD faced in meeting the congressionally mandated requirements in fiscal year 2004 and continues to face and changes in the report and inventory since 2006. We also compared the report and inventory to the criteria in section 366 of the National Defense Authorization Act for Fiscal Year 2003 to determine the extent to which this year's report addresses the elements of section 366 that were required to be in DOD's original fiscal year 2004 plan. To identify opportunities for DOD to improve its comprehensive plan within the sustainable ranges report, we compared the 2007 report with elements of the comprehensive plan required by section 366. We also compared DOD's 2007 report and inventory to prior DOD and GAO reports. To determine the progress that the services have made in their initiatives to sustain their training ranges, we met with service officials about their inputs to DOD's 2007 sustainable ranges report and inventory, key initiatives they have undertaken to address range sustainment, challenges in addressing range sustainment and encroachment issues, and progress or changes since we last reported. Due to the 90-day requirement for this review, we did not attempt to comprehensively evaluate the data presented in the report.

We conducted our work from April 2007 through August 2007 in accordance with generally accepted government auditing standards.

## **Summary**

Although DOD's 2007 sustainable ranges report and inventory still do not fully address all of the elements of section 366 required for DOD's original fiscal year 2004 report and inventory, DOD has continued to improve them and the current report and inventory represent an improvement over those from previous years. First, in an effort to improve the annual report and inventory, DOD has taken initial steps to provide the results of an assessment of current and future training range requirements and an evaluation of the adequacy of current DOD resources. DOD's 2007 report presents information that illustrates the services' assessments of their range capabilities and encroachment issues. These assessments also help improve the training range inventory by helping to identify all training capacities and capabilities available at each training range and to identify training constraints caused by limitations on the use of military lands, marine areas, and airspace at each training range. However, some of the capability assessments provided in the DOD report are based on subjective evaluations rather than evaluations against standardized criteria, and the factors used for the assessments vary from service to

service. DOD officials told us that they need to develop better criteria and a more standardized methodology for the assessment of range capabilities and encroachment across the department, but that these criteria and methods had not yet been fully developed because DOD has just begun to develop these processes in the past year and intends to improve on them over time. Until better criteria and a more standardized methodology are developed, DOD and the services will not be presenting a consistent and accurate picture of range capabilities and needs, and will therefore be unable to identify shortfalls or gaps in their capabilities or make informed decisions about where to invest sustainment dollars DOD-wide. Second, like previous years' reports, DOD's 2007 report does not provide new recommendations for legislative or regulatory changes to address training constraints, although DOD's original 2004 report was required by section 366 to include any recommendations that the Secretary may have for legislative or regulatory change to address training constraints identified pursuant to section 366. However, the 2007 report provides a summary of legislative changes that DOD has recommended through other means and explains DOD's position as to why this report is not the appropriate place for making such proposals. Third, although DOD's readiness reporting system does not yet include training ranges, DOD's 2007 sustainable ranges report describes DOD's plans to improve its reporting system to reflect the readiness impact that training constraints have on the services. DOD officials told us that workshops had been scheduled to develop the system and that it should be initially operational by the end of calendar year 2008.

Even with these improvements in the sustainable range report and inventory, DOD has the opportunity to improve its comprehensive plan presented within its sustainable ranges report by including projected funding requirements for implementing planned actions. Like previous years' reports, DOD's 2007 report does not provide projected funding requirements for implementing planned actions. Instead, the report provides a general explanation of the challenges of projecting funding requirements. According to DOD, this requirement is difficult to meet for several reasons, particularly because funding for range sustainment is spread across multiple funding lines within each service's budget. We asked the services for information about their range sustainment funding, and each service was able to provide us with an estimate of its budget for range sustainment for fiscal year 2008. According to DOD officials, this information was not included in the report because it presents only a partial picture of the money being spent on range sustainment. We believe, however, that even this partial information is important to include in the report because without it, Congress will have difficulty making informed decisions about funding range sustainment activities.

We are making recommendations designed to improve the range requirements and capabilities assessments and future comprehensive plans. In commenting on a draft of this report, DOD agreed with our recommendations. We discuss DOD's comments later in this report. DOD also provided technical comments on a draft of this report, which we incorporated where appropriate.

## **Progress Made in Addressing Section 366 Requirements**

DOD's 2007 sustainable ranges report and inventory are responsive to the congressionally mandated requirement to describe the progress made in implementing its sustainable ranges plan and any additional actions taken, or to be taken, to address training constraints caused by limitations, and contains an updated training range inventory. In addition, DOD has continued to improve its annual sustainable ranges report and inventory and has taken steps toward addressing the congressionally mandated reporting requirements that were to be addressed in DOD's fiscal year 2004 report, but previously had not been addressed. Specifically, DOD has made progress in providing the results of an assessment of current and future training range requirements; identifying training capacities, capabilities, and constraints at training ranges; making recommendations for legislative or regulatory changes to address training constraints; and detailing plans for improving DOD's readiness reporting system to reflect the readiness impact of constraints on training.

### Assessment of Current and Future Training Range Requirements

In an effort to address the elements of section 366 that required DOD, in its fiscal year 2004 report, to provide the results of an assessment of current and future training range requirements and an evaluation of the adequacy of current DOD resources to meet those requirements, DOD's current report includes assessments of the services' current range capabilities and the external pressures that constrain training ranges. These assessments are presented in table format to convey the severity of impacts caused by shortfalls in required capabilities. For example, the Army assessed shortfalls in Fort Irwin's military operations on urban terrain facilities as severely affecting Fort Irwin's overall mission while shortfalls in its range scheduling system have only minimal impact on the mission. In addition, the services have begun individual efforts to more fully assess training range requirements and identify gaps in capabilities. For example, the Marine Corps has fully assessed 5 of its 14 range complexes, including providing information on shortfalls and plans to address these shortfalls. In its Range Complex Management Plan for Hawaii, it identifies several gaps in capabilities, such as lack of a training facility for military operations on urban terrain and limited targets for artillery training, and it lays out plans to address these gaps. As the overall assessments develop, they will also help DOD's efforts to propose enhancements to training range capabilities and to address any shortfalls in current DOD resources.

These assessments are an important first step toward addressing the congressionally mandated requirement; however, the assessments are based on best available data, which may not be complete or accurate enough to reflect current conditions. In addition, they were not conducted using a common set of issues or standard criteria for measuring the impact of capability against requirements, and they are partially based on subjective evaluation. According to the Office of the Secretary of Defense (OSD) officials, the overall capability and encroachment assessments are fairly accurate based on available

data, and serve as a starting point to develop methodologies for assessing capabilities and encroachment. DOD's directive on the sustainment of ranges states that the Under Secretary of Defense for Personnel and Readiness is responsible for establishing means to assess the readiness benefits of range sustainment initiatives and to monitor the impact that external encroachment has on training ranges.<sup>8</sup> However, when collecting information for the sustainable ranges report, DOD provided guidance to the services only in the form of a reporting structure, and did not establish clear criteria for how to assess the ranges. Therefore, the services used an informal process to develop their assessments and based their assessments on different levels of documentation. The Navy provided assessments based on preexisting Range Complex Management Plans that matched the format that DOD prescribed for the assessments, but because the databases and reports that Army officials used did not align with the format prescribed by DOD, Army officials had to quickly figure out how to fit existing information into the format provided. In addition, according to service officials, there was relatively little time to conduct these assessments and information needed to make the assessments was sometimes difficult to obtain or unavailable. DOD officials said that they need to develop better criteria and a more standardized methodology for these assessments, but that these criteria and methods had not yet been fully developed because the department has just begun to develop these processes in the past year and intends to improve on them over time. Until better criteria and a more standardized method are developed, DOD and the services will be unable to present a consistent and accurate picture of range capabilities or needs, or to make informed decisions about where to invest sustainment dollars DOD-wide.

### Training Capabilities and Capacities

Like prior range inventories, DOD's 2007 inventory does not identify the specific capacities, capabilities, and constraints of all the ranges, although it was required by section 366 to do so in DOD's fiscal year 2004 inventory. However, the capability and encroachment assessments, included for the first time in this year's report, provide some of this information for selected ranges and represent a first step toward meeting this requirement. As stated above, each service presented a summary of the capabilities of selected ranges or range complexes and evaluated the status of these capabilities. For example, the Navy evaluated its ranges based on nine capabilities, including airspace, sea space, and communication systems. These capabilities were evaluated based on the level of impact that shortfalls in these areas have on each range's mission and were presented in table format. These tables allow the reader to quickly see specific capability areas that are affected at selected ranges. In addition, the services present encroachment assessments, summarizing the constraints experienced by the individual ranges in specific encroachment areas. For these assessments, all of the services used the same 12 encroachment issues to assess their ranges.<sup>9</sup>

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<sup>8</sup>Department of Defense Directive 3200.15, *Sustainment of Ranges and Operating Areas* (Jan. 10, 2003).

<sup>9</sup>The 12 encroachment issues are endangered species/critical habitat, unexploded ordnance/munitions, frequency encroachment, maritime sustainability, airspace restrictions, air quality, airborne noise, urban growth, cultural resources, water quality, wetlands, and range transients.

OSD officials stated that the inventory deviates very little from last year's. The 2007 inventory, like the 2006 inventory, lists available operational training ranges and provides data on the size and type of ranges (e.g., air to ground, land maneuver, and urbanized terrain). OSD officials stated that it is impractical to include the large volume of data needed to identify the specific capacities, capabilities, and constraints of each range, and as a result these types of detailed data were omitted. In addition, because in most instances these data exist only at individual ranges, DOD would have to expend significant time and resources to retrieve and centralize the information.

We previously recommended that the Secretary of Defense create a DOD database that identifies all ranges available to the department and what they offer, regardless of service ownership, so that commanders can schedule the best available resources to provide required training. DOD did not concur with this recommendation and reported that significant challenges exist in creating a common range scheduling tool. Therefore, DOD is exploring the feasibility of leveraging existing service scheduling systems to create a net-centric scheduling visibility capability that permits a cross-service look at available range capacity. For example, the Marine Corps and the Army both have a Web-based inventory and scheduling system that is accessible to all users, regardless of service, for scheduling training exercises. DOD stated again this year that a Web-based system similar to those developed by the Marine Corps and the Army, which could be linked to each service's range inventories and schedules, is an achievable and satisfactory way to arrive at a DOD-wide system. We continue to believe that this suggestion is a step in the right direction and could achieve many of the benefits we envisioned in our prior recommendation for an inventory that could be readily accessible to users across the department.

### Recommendations for Legislative or Regulatory Changes

Like prior reports, DOD's 2007 report does not include new recommendations for legislative or regulatory changes to address training constraints, although section 366 required the inclusion of any recommendations that the Secretary may have for legislative or regulatory changes to address training constraints in DOD's fiscal year 2004 report. In this year's report, DOD states that there is an existing process by which DOD must submit all requests for legislative language that includes, among other things, obtaining approval from DOD's Office of Legislative Affairs and the Office of Management and Budget, and that the deadline for this process is the same as the deadline for the sustainable ranges report. Therefore, DOD states that it is unable to include final DOD legislative or regulatory proposals in the sustainable ranges report and believes this requirement should be omitted from this report. However, DOD does include a summary of proposals previously submitted to Congress, including recommendations to modify the Clean Air Act, the Resource Conservation and Recovery Act, and the Federal Land Policy and Management Act.

## Readiness Reporting Improvements

In describing plans to improve the readiness reporting system to reflect the readiness impact of training constraints, DOD's 2007 report states that the Defense Readiness Reporting System is currently being modified to provide the ability to relate changes in reported unit readiness to training constraints caused by limitations on the use of military lands, marine areas, and airspace. Although DOD was required to submit a report on its plans to improve its readiness reporting system to reflect the readiness impact that training constraints caused by certain limitations have on specific units no later than June 30, 2003, this is the first time that the Defense Readiness Reporting System has been addressed in DOD's sustainable ranges report. OSD officials told us that the system is scheduled to be initially operational by the end of calendar year 2008, although this is not mentioned in the sustainable ranges report. To meet this deadline, DOD has scheduled a series of workshops during 2007 that will bring together various DOD range stakeholders with the intent of establishing clear expectations and coordinating actions to support this readiness reporting functionality. DOD officials expect that next year's report will describe the status of DOD's efforts to improve the reporting system to reflect the readiness impact caused by training constraints.

### **Opportunity to Improve DOD's Comprehensive Plan**

DOD's 2007 comprehensive plan within its sustainable ranges report, as in previous years' reports, still does not provide projected funding requirements for implementing planned actions, although this was required to be included in DOD's fiscal year 2004 report. According to DOD's report, it is difficult to quantify funding needs for range sustainment because such funding is managed differently by each service, and the costs are spread across multiple funding categories (e.g., manpower and training) and types of funds (e.g., operations and maintenance and military construction). DOD formed a working group in 2004 that meets periodically to develop and refine a framework for funding sustainable range activities. However, this group has been unable to develop a framework for capturing information from the services about their range sustainment funding.

We asked the military services for information about their range sustainment funding and each service was able to provide us with an estimate of its budget for range sustainment for fiscal year 2008. The Navy has budgeted about \$24 million, the Air Force \$200 million, the Marine Corps \$60 million, and the Army \$129 million, primarily from operations and maintenance funds.<sup>10</sup> In addition, DOD has budgeted \$30 million for fiscal year 2008 for the Readiness and Environmental Protection Initiative to provide funding for the military to work with state and local governments and nongovernmental organizations to pursue cooperative sustainability and conservation efforts around key test and training ranges. According to OSD officials, this information was not included in

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<sup>10</sup>The figures provided by the Marine Corps also include procurement and research, development, test, and evaluation funds.

the 2007 sustainable ranges report because it presents only a partial picture of the money being spent on range sustainment and may not be consistent across services. Although we agree that there may be money spent on range sustainment that is in addition to these amounts, we believe that DOD should include this information in its reports so that Congress can begin to see the amount of money that is needed to adequately sustain the services' training ranges and can therefore make more informed decisions about funding range sustainment activities.

## **Conclusions**

DOD has continued to improve its annual sustainable ranges report over the past few years. Yet, as we have reported since 2004, opportunities still exist to provide more standardized range requirements and capabilities assessments and a more complete plan. DOD has taken steps toward addressing the elements of section 366 that were required to be in DOD's original fiscal year 2004 report to assess current and future training range requirements and evaluate the adequacy of current DOD resources; however, it has not developed clear criteria or standard methods for the assessments presented in the report. Without clear criteria and standard methodology, DOD and the services will be unable to present a consistent and accurate picture of range capabilities or shortfalls or to make informed decisions about where to focus their sustainment efforts or invest sustainment dollars DOD-wide. In addition, DOD still has not presented information on the funding required for range sustainment. DOD has noted that it faces several challenges in presenting this information, such as the individual ways that the services manage their own budgets. However, we were able to identify range sustainment funding from each service for fiscal year 2008, and we believe that this information, even if it is not complete, should be included in future annual reports to help Congress make more informed funding decisions related to the sustainment of training ranges.

## **Recommendations for Executive Action**

To improve the range requirements and capabilities assessments and future comprehensive plans within the sustainable ranges reports, we recommend that the Secretary of Defense direct the Under Secretary of Defense for Personnel and Readiness, in consultation with the secretaries of the military departments, to take the following two actions:

- Develop clear criteria and standard methods for assessing current and future training range requirements and capabilities.
- Include funding information on the services' range sustainment efforts in future reports.

## Agency Comments and Our Evaluation

In written comments on a draft of this report, the Deputy Under Secretary of Defense for Readiness agreed with our recommendations and indicated that actions were under way to address them. The Deputy Under Secretary of Defense's comments are reprinted in enclosure IV. DOD also provided technical comments, which we have incorporated where appropriate.

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We are sending copies of this report to the appropriate congressional committees. We are also sending copies to the Secretary of Defense; the Secretaries of the Army, the Navy, and the Air Force; the Commandant of the Marine Corps; and the Director, Office of Management and Budget. Copies will be made available to others upon request. In addition, this report will be available at no charge on our Web site at <http://www.gao.gov>. If you or your staff have any questions about this report, please contact me at (202) 512-4523 or [leporeb@gao.gov](mailto:leporeb@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in enclosure V.

A handwritten signature in black ink, appearing to read "Brian Lepore". The signature is written in a cursive, flowing style.

Brian J. Lepore, Director  
Defense Capabilities and Management

*List of Committees*

The Honorable Carl Levin  
Chairman  
The Honorable John McCain  
Ranking Member  
Committee on Armed Services  
United States Senate

The Honorable Daniel K. Inouye  
Chairman  
The Honorable Ted Stevens  
Ranking Member  
Subcommittee on Defense  
Committee on Appropriations  
United States Senate

The Honorable Ike Skelton  
Chairman  
The Honorable Duncan L. Hunter  
Ranking Member  
Committee on Armed Services  
House of Representatives

The Honorable John P. Murtha  
Chairman  
The Honorable C. W. Bill Young  
Ranking Member  
Subcommittee on Defense  
Committee on Appropriations  
House of Representatives

**Section 366 of the Bob Stump National Defense  
Authorization Act for Fiscal Year 2003**

SEC. 366. Training Range Sustainment Plan, Global Status of Resources and Training System, and Training Range Inventory.

(a) PLAN REQUIRED—(1) The Secretary of Defense shall develop a comprehensive plan for using existing authorities available to the Secretary of Defense and the Secretaries of the military departments to address training constraints caused by limitations on the use of military lands, marine areas, and airspace that are available in the United States and overseas for training of the Armed Forces.

(2) As part of the preparation of the plan, the Secretary of Defense shall conduct the following:

(A) An assessment of current and future training range requirements of the Armed Forces.

(B) An evaluation of the adequacy of current Department of Defense resources (including virtual and constructive training assets as well as military lands, marine areas, and airspace available in the United States and overseas) to meet those current and future training range requirements.

(3) The plan shall include the following:

(A) Proposals to enhance training range capabilities and address any shortfalls in current Department of Defense resources identified pursuant to the assessment and evaluation conducted under paragraph (2).

(B) Goals and milestones for tracking planned actions and measuring progress.

(C) Projected funding requirements for implementing planned actions.

(D) Designation of an office in the Office of the Secretary of Defense and in each of the military departments that will have lead responsibility for overseeing implementation of the plan.

(4) At the same time as the President submits to Congress the budget for fiscal year 2004, the Secretary of Defense shall submit to Congress a report describing the progress made in implementing this subsection, including—

(A) the plan developed under paragraph (1);

(B) the results of the assessment and evaluation conducted under paragraph (2);  
and

(C) any recommendations that the Secretary may have for legislative or regulatory changes to address training constraints identified pursuant to this section.

(5) At the same time as the President submits to Congress the budget for each of fiscal years 2005 through 2008,<sup>11</sup> the Secretary shall submit to Congress a report describing the progress made in implementing the plan and any additional actions taken, or to be taken, to address training constraints caused by limitations on the use of military lands, marine areas, and airspace.

(b) READINESS REPORTING IMPROVEMENT—Not later than June 30, 2003, the Secretary of Defense, using existing measures within the authority of the Secretary, shall submit to Congress a report on the plans of the Department of Defense to improve the Global Status of Resources and Training System to reflect the readiness impact that training constraints caused by limitations on the use of military lands, marine areas, and airspace have on specific units of the Armed Forces.

(c) TRAINING RANGE INVENTORY—(1) The Secretary of Defense shall develop and maintain a training range inventory for each of the Armed Forces—

(A) to identify all available operational training ranges;

(B) to identify all training capacities and capabilities available at each training range; and

(C) to identify training constraints caused by limitations on the use of military lands, marine areas, and airspace at each training range.

(2) The Secretary of Defense shall submit an initial inventory to Congress at the same time as the President submits the budget for fiscal year 2004 and shall submit an updated inventory to Congress at the same time as the President submits the budget for fiscal years 2005 through 2008.<sup>5</sup>

(d) GAO EVALUATION—The Secretary of Defense shall transmit copies of each report required by subsections (a) and (b) to the Comptroller General. Within 60 days after receiving a report, the Comptroller General shall submit to Congress an evaluation of the report.<sup>12</sup>

(e) ARMED FORCES DEFINED—In this section, the term ‘Armed Forces’ means the Army, Navy, Air Force, and Marine Corps.

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<sup>11</sup>This requirement was extended through 2013 by section 348 of the John Warner National Defense Authorization Act for Fiscal Year 2007.

<sup>12</sup>This requirement was extended to 90 days by section 348 of the John Warner National Defense Authorization Act for Fiscal Year 2007.

## GAO Prior Work Related to Military Training Ranges Sustainment

The following tables summarize our previous reports related to military training ranges sustainment. Table 1 lists our previous reports evaluating the Department of Defense's (DOD) annual sustainable ranges report. Table 2 lists our related reports on military training ranges sustainment. Overall, for the past several years, we have pointed to the need for DOD to have a comprehensive plan for managing its training ranges.

**Table 1: Summary of GAO's Previous Evaluations of DOD's Sustainable Ranges Report**

GAO report	Summary
<i>Military Training: DOD Report on Training Ranges Does Not Fully Address Congressional Reporting Requirements</i> (GAO-04-608, June 4, 2004)	The Office of the Secretary of Defense's (OSD) training range inventory does not yet contain sufficient information to use as a baseline for developing the comprehensive training range plan required by section 366. As a result, OSD's training range report does not lay out a comprehensive plan to address training constraints caused by limitations on the use of military lands, marine areas, and airspace that are available in the United States and overseas for training. In addition, OSD's training range report does not fully address other requirements mandated by section 366. For example, the report does not fully assess current and future training range requirements; fully evaluate the adequacy of current resources to meet current and future training range requirements in the United States and overseas; identify recommendations for legislative or regulatory changes to address training constraints, even though DOD submitted legislative changes for congressional consideration on April 6, 2004; or contain plans to improve readiness reporting.
<i>Some Improvements Have Been Made in DOD's Annual Training Range Reporting but It Still Fails to Fully Address Congressional Requirements</i> (GAO-06-29R, Oct. 25, 2005)	<p>Similar to the inventory OSD submitted to Congress in 2004, the 2005 training range inventory does not contain sufficient information to use as a baseline for developing a comprehensive plan to address training constraints and help ensure range sustainability because it does not identify specific capacities, capabilities, and training constraints for ranges of all the services as required by section 366. Instead, it is a consolidated list of ranges provided by the individual services that lacks critical data and is not integrated or easily accessible by potential users.</p> <p>OSD's 2005 training range report—similar to the one issued to Congress in 2004—fails to meet other requirements mandated by section 366 that could help guide OSD and the services in ensuring the long-term sustainability of their training ranges. Like the 2004 report, OSD's 2005 report does not include an assessment of current and future training range requirements; an evaluation of the adequacy of current resources, including virtual and constructive assets, to meet current and future training range requirements; or recommendations for legislative or regulatory changes to address training constraints—although specifically required to do so by section 366. In addition, OSD's 2005 report does not include its plans to improve the department's readiness reporting system, despite a specific mandate in section 366 that it do so no later than June 30, 2003.</p>
<i>Improvement Continues in DOD's Reporting on Sustainable Ranges but Additional Time Is Needed to Fully Implement Key Initiatives</i> (GAO-06-725R, June 20, 2006)	While still not fully addressing all elements of the congressionally mandated reporting requirements, such as providing an assessment of training range requirements and recommendations for legislative or regulatory changes, OSD has continued to improve its annual sustainable range reporting by better describing the encroachment challenges and their effects on training, identifying

GAO report	Summary
	<p>tools for range management, and focusing on key initiatives needed to address encroachment.</p> <p>Although specifically required by section 366, OSD's 2006 inventory does not identify specific capacities, capabilities, and constraints of all the ranges. OSD officials said that it is impractical to include such a large volume of data needed to identify capacities, capabilities, and constraints where they are known as, in most instances, these data only exist at individual ranges, and the department would have to expend significant time and resources to retrieve and centralize the information.</p>

Source: GAO.

**Table 2: Summary of Related Reports on Military Training Ranges Sustainment**

GAO report	Summary
<p><i>Military Training: Limitations Exist Overseas but Are Not Reflected in Readiness Reporting</i> (GAO-02-525, Apr. 30, 2002)</p>	<p>Our objectives in this report were to assess (1) the types of training constraints that forces overseas face and whether they are likely to increase in the future, (2) the impact these constraints have had on the ability of military units to meet their training requirements and on their reported readiness, and (3) alternatives that exist to increase training opportunities for these forces. We found that:</p> <ul style="list-style-type: none"> <li>• Combat units stationed outside the continental United States are able to meet many of their training requirements but face constraints in such areas as (1) maneuver operations, (2) live ordnance practice, and (3) night and low altitude flying.</li> <li>• Training constraints cause adverse effects, including (1) requiring workarounds that can breed bad habits affecting combat performance, (2) requiring military personnel to be away from home more often, and (3) preventing training from being accomplished.</li> <li>• To address these concerns, military commands and services are negotiating with host governments to lessen restrictions on existing training areas, but such actions are often done at an individual-service level and sometimes create unforeseen problems for other services and for existing training capabilities.</li> </ul>
<p><i>Military Training: DOD Lacks a Comprehensive Plan to Manage Encroachment on Training Ranges</i> (GAO-02-614, June 11, 2002)</p>	<p>We examined (1) the impact that encroachment has had, or is likely to have, on the services' training range capabilities; (2) the effect training range losses have on the services' readiness and costs; and (3) DOD's progress in formulating a comprehensive plan for addressing encroachment issues. We found that over time, the military services report they have increasingly lost training range capabilities because of encroachment. Each of the four installations and two major commands we visited reported having lost some capabilities in terms of the time training ranges were available or the types of training that could be conducted. Despite the loss of some capabilities, service readiness data do not indicate the extent to which encroachment has significantly affected reported training readiness. Although encroachment workarounds may affect costs, the services have not documented the overall impact of encroachment on training costs. The services face difficulties in fully assessing the impact of training ranges on readiness because they have not fully defined their training range requirements and lack information on the training resources available to support those requirements. DOD officials recognize the need for a comprehensive plan</p>

GAO report	Summary
	<p>to address encroachment issues but have not yet finalized a plan for doing so. We recommended that DOD finalize a comprehensive plan for managing encroachment issues, develop the ability to report critical encroachment-related training problems, and develop and maintain inventories of its training infrastructure and quantify its training requirements. DOD concurred with our recommendations.</p>
<p><i>Military Training: Implementation Strategy Needed to Increase Interagency Management for Endangered Species Affecting Training Ranges</i> (GAO-03-976, Sept. 29, 2003)</p>	<p>DOD and other federal land managers have taken some steps to implement interagency cooperative efforts to manage endangered species on a regional basis, but the extent to which they are using this approach for military training ranges is limited. The Departments of the Interior and Agriculture have issued policies, and DOD has issued directives to promote cooperative management of natural resources. They have also outlined specific actions to be taken—such as identifying geographic regions for species management and forming working groups. However, follow-through on these actions has been limited, with few of the prescribed actions being implemented.</p> <p>The Departments of Defense, the Interior, and Agriculture have identified a number of factors that can limit cooperative management for endangered species on military training ranges, such as limited interaction among agencies and limited resources to employ cooperative programs. Moreover, federal agencies cannot easily share information—such as best practices and land management plans—because there is no centralized source of such information. Given that federal agencies have made little progress in implementing the various agreements for cooperative management, an interagency reporting requirement would provide a basis to hold agencies accountable for sharing endangered species management on training ranges.</p>
<p><i>Military Training: Better Planning and Funding Priority Needed to Improve Conditions of Military Training Ranges</i> (GAO-05-534, June 10, 2005)</p>	<p>Our visits to eight training ranges, along with DOD’s own assessments, show that ranges are deteriorating and lack modernization, adversely affecting training activities and jeopardizing the safety of military personnel. 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 this is partially caused by a lack of a comprehensive approach to ensure that ranges provide the proper setting for effectively preparing its forces for warfare.</p>
<p><i>Military Training: Actions Needed to Enhance DOD’s Program to Transform Joint Training</i> (GAO-05-548, June 21, 2005)</p>	<p>DOD expects its Training Transformation Program, currently in its early implementation stages, to be fully operational by 2009, when it has established a robust network of training capabilities that are integrated throughout the department to provide enhanced joint individual and unit training focused on combatant commanders’ needs and linked to readiness assessments. Two significant challenges that have emerged early and will require continued focus are (1) establishing effective partnerships with program stakeholders via comprehensive communication and coordination to gain their full participation and buy-in to achieve training transformation goals and (2) developing joint training requirements—and the specific training tasks that support the requirements—that meet combatant command mission needs. Both these challenges, if left unaddressed, have the potential for eroding support among program stakeholders, which in turn places the goals of the Training Transformation Program at risk.</p>
<p><i>Military Training: Funding Requests for Joint Urban Operations Training and Facilities Should Be Based on Sound Strategy and Requirements</i> (GAO-06-193, Dec. 8, 2005)</p>	<p>Since 2002, DOD has made limited progress in developing an overall joint strategy for urban operations training and related facility and training requirements. While the services have identified some facility needs, Joint Forces Command and service representatives have been unable to reach consensus on the level or types of joint training necessary to prepare troops for urban operations. As a result, Joint Forces Command has been unable to</p>

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**GAO report****Summary**

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finalize the strategy or the facility and joint training requirements that will form the baseline for measuring capabilities within each service and across DOD. Until Joint Forces Command develops an overall strategy for joint urban operations training and related requirements, neither the Secretary of Defense nor Congress will have a sound basis for evaluating service facility and training plans and related funding requests.

Despite DOD's increased emphasis on the importance of training for joint urban operations before deployment, few opportunities currently exist for joint urban operations training that places troops from different services on the ground working under a joint headquarters. Without a strategy, defined requirements, and a joint scheduling mechanism, DOD cannot be assured that joint urban operations training will occur or that it will maximize the joint usage of training facilities. To increase the opportunities for joint urban operations training, we are recommending that DOD establish a mechanism for joint scheduling of joint urban operations training at major training centers.

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Source: GAO.

## **The Services Continue to Make Progress in Their Initiatives to Address Training Range Sustainment**

The services continue to make various degrees of progress in their individual sustainable range initiatives since we last reported.

### **Summary of Army Initiatives**

The Army continues initiatives to improve its assessment and management of training ranges as part of its sustainable range program through the following key efforts.

- The Army developed the Sustainable Range Program Web Portal, a single entry point for Sustainable Range Program information, tools, and capabilities related to Sustainable Range Program activities and management. This Web portal facilitates information exchange among unit commanders and trainers.
- The Army is in the process of conducting environmental assessments on all of its training ranges in the United States as part of its operational range assessment program. The Army plans to complete these initial assessments, designed to better manage the ranges to have a trained and ready force while ensuring the protection of human health and the environment in the communities surrounding ranges, in fiscal year 2009.
- Within its sustainable range program regulation issued in 2005, the Army developed a policy to address clearance of training ranges. Range clearance is conducted to allow safe access to ranges and preclude accumulation of munitions and debris.
- To develop an Army-wide range inventory and database, the Army is using geographic information system data and storing this information on a central server managed by the Office of the Assistant Chief of Staff for Installation Management.
- To more effectively address encroachment concerns, the Army has completed its Sustainable Range Program Outreach Policy and Communications Plan, which it began in 2003. The plan provides policy guidance and tools to assist installations in effectively communicating live training requirements and encroachment challenges with the public.

### **Summary of Navy Initiatives**

Listed below are several of the Navy's initiatives to improve its assessment and management of training ranges.

- The Navy has completed Range Complex Management Plans on 12 out of 16 range complexes, and intends to complete the remaining plans by the end of 2007. The purpose of the Range Complex Management Plans is to assess training range capabilities and encroachment issues and to assist in the day-to-day management of the training ranges.
- The Navy headquarters range office, in conjunction with the Navy environmental readiness office, is developing a servicewide range sustainment policy that assigns specific range sustainment responsibilities to each level of the range support command structure and integrates sustainment strategies from the test and training communities. The policy was originally scheduled to be issued by September 2006; however, due to funding issues and changes in organizational responsibility, Navy officials believe this policy will not be issued until September 2007.
- To assess off-range migration of munitions contaminants, the Navy conducted range assessments on 11 training range complexes and 2 major range and test facilities bases.
- In late 2006, the Navy completed initial development of a Navy-wide encroachment database. The Navy will work to finalize database development and link it to established repositories of information. The Navy will use this repository of information to prepare reports and testimony to Congress and for encroachment program funding justification.

### **Summary of Marine Corps Initiatives**

The Marine Corps has made progress through the following initiatives to improve its assessment and management of training ranges.

- The Marine Corps has been working to modernize its ranges to include more urban terrain and improvised explosive device training.
- The Marine Corps issued its Training Ranges Required Capabilities Document in June 2006. This document validates the requirements for its ranges and training areas over the next 10-year period and identifies shortfalls in range capabilities that will form the basis for the Marine Corps' investment strategies for range operations, maintenance, and modernization.
- The Marine Corps has developed several management tools, such as its training range encroachment information system and range environmental vulnerability assessment program, to evaluate and report to decision makers on encroachment and its impacts and to assist in the development of strategies to engage federal, state, and local agencies in solving encroachment issues. The encroachment

information system was initiated at Camp Pendleton in 2003. According to Marine Corps officials, current plans are to implement the system at all of their ranges by the end of 2007. The prior year's plans were to have the system completely implemented by the end of fiscal year 2006, but actual system implementation was more difficult than originally planned.

- To assess off-range migration of munitions contaminants, the Marine Corps conducted eight visits to Marine Corps training ranges between fiscal years 2004 and 2006. The Marine Corps is currently conducting analysis of the data gathered during these site visits. During fiscal year 2007, the Marine Corps will conduct an additional four site visits.
- The Marine Corps developed a Training Range Encroachment Information System Tool to automate range and training capability analyses. This tool will interface with and provide capabilities assessment data to the Marine Corps' Range and Training Area Management System and the Range Complex Management Plans. This tool is entering a proof-of-concept phase to be completed in 2007.

### **Summary of Air Force Initiatives**

The Air Force has also made strides through the following initiatives to improve its assessment and management of training ranges.

- The Air Force developed a management tool to standardize its comprehensive range plans and intends to have comprehensive range plans for all training ranges by 2008.
- The Air Force completed its Operational Range Assessment Plan in March 2006, which provided guidance for assessing off-range migration of munitions contaminants. By the end of 2006, eight major air-to-ground ranges or range complexes had been assessed, with three more scheduled to begin in 2007.
- The Air Force developed a Natural Infrastructure Assessment Process to evaluate the availability or lack of availability of the natural infrastructure needed to support current and future mission requirements at major installations and ranges. This assessment includes quantifying mission impacts caused by encroachment and will assist commanders in identifying and prioritizing initiatives to address mission inefficiencies and encroachment. The Air Force plans to assess all of its installations and ranges by the end of 2008.

**Comments from the Department of Defense**PERSONNEL AND  
READINESS**OFFICE OF THE UNDER SECRETARY OF DEFENSE**  
4000 DEFENSE PENTAGON  
WASHINGTON, D.C. 20301-4000**SEP 26 2007**

Mr. Brian J. Lepore  
Director, Defense Capabilities and Management  
U.S. Government Accountability Office  
Washington, D.C. 20548

Dear Mr. Lepore:

This is the Department of Defense (DoD) response to the General Accounting Office Draft Report GAO-08-10R, "TRAINING RANGES: Improvement Continues in DOD's Reporting on Sustainable Ranges but Opportunities Exist to Improve Its Range Assessments and Comprehensive Plan," August 30, 2007.

Thank you for the opportunity to comment on this draft. The DoD appreciates the GAO's assessment of the encroachment challenges facing our nation's military ranges and operating areas and the Department's comprehensive plan to sustain these critical assets. As the GAO observes, we believe that annual reporting to Congress continues to improve over time as the Department's sustainable ranges effort matures. Further improvement is possible in some subject areas, and DoD is committed to continuing the development of and reporting on our range assessment and comprehensive planning processes, in consonance with the GAO recommendations.

DoD responses on the specific GAO recommendations are enclosed. Several technical comments on the report have also been provided for GAO consideration. We look forward to continuing to work with Congress and the GAO to maintain a ready and sustainable military testing and training infrastructure.

Sincerely,

A handwritten signature in cursive script that reads "Paul W. Mayberry".

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

Enclosure:  
As stated

**GAO-08-10R DRAFT REPORT****“TRAINING RANGES: Improvement Continues in DOD's Reporting on Sustainable Ranges but Opportunities Exist to Improve Its Range Assessments and Comprehensive Plan”****DEPARTMENT OF DEFENSE COMMENTS  
TO THE RECOMMENDATIONS**

**RECOMMENDATION 1:** The GAO recommends that the Secretary of Defense direct the Under Secretary of Defense for Personnel and Readiness, in consultation with the secretaries of the military departments to develop clear criteria and standard methods for assessing current and future training range requirements and capabilities. (p. 12/GAO Draft Report)

**DOD RESPONSE:** The DoD concurs with this recommendation, and will continue to develop and improve the criteria and methodology associated with our range requirements and capabilities assessment processes in our subsequent reports.

**RECOMMENDATION 2:** The GAO recommends that the Secretary of Defense direct the Under Secretary of Defense for Personnel and Readiness, in consultation with the secretaries of the military departments to include funding information on the services' range sustainment efforts in future reports. (p. 12/GAO Draft Report)

**DOD RESPONSE:** The DoD concurs. Programmed funding data associated with range sustainment will be captured and documented in future Sustainable Ranges Reports to Congress to the extent possible. However, any funding data presented beyond the current year will be subject to the caveat that final Service budgets for out years are subject to change.

## **GAO Contact and Staff Acknowledgments**

### **GAO Contact**

Brian Lepore, (202) 512-4523 or [leporeb@gao.gov](mailto:leporeb@gao.gov)

### **Acknowledgments**

In addition to the person named above, Mark Little, Assistant Director; Leslie Bharadwaja; Larry Bridges; Joanne Landesman; and Katherine Lenane made key contributions to this report.

(351030)

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