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MILITARY TRAINING

DOD Approach to Managing Encroachment on Training Ranges Still Evolving

Statement of Barry W. Holman, Director
Defense Infrastructure Issues

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Highlights

Highlights of GAO-03-621T, a testimony before the Committee on Environment and Public Works, U.S. Senate

MILITARY TRAINING

DOD Approach to Managing Encroachment on Training Ranges Still Evolving

Why GAO Did This Study

DOD faces growing challenges in carrying out realistic training at installations and training ranges—land, air, and sea—because of encroachment by outside factors. These include urban growth, competition for radio frequencies or airspace, air or noise pollution, unexploded ordnance and munition components, endangered species habitat, and protected marine resources. Building on work reported on in 2002, GAO assessed (1) the impact of encroachment on training ranges, (2) DOD's efforts to document the effect on readiness and cost, and (3) DOD's progress in addressing encroachment.

What GAO Recommends

GAO is not making any new recommendations. However, GAO did make recommendations in reports issued in April and June 2002 (GAO-02-525 and GAO-02-614). They were aimed at (1) improving the quality of readiness reporting to better reflect training constraints and (2) helping DOD develop a comprehensive plan for dealing with encroachment issues and improving the information and data available for identifying and reporting on the effects of encroachment. In addition, the Congress directed DOD to report periodically on its progress in addressing encroachment issues and requires GAO to review those reports.

www.gao.gov/cgi-bin/getrpt?GAO-03-621T.

To view the full report, including the scope and methodology, click on the link above. For more information, contact Barry W. Holman at (202) 512-8412 or holmanb@gao.gov.

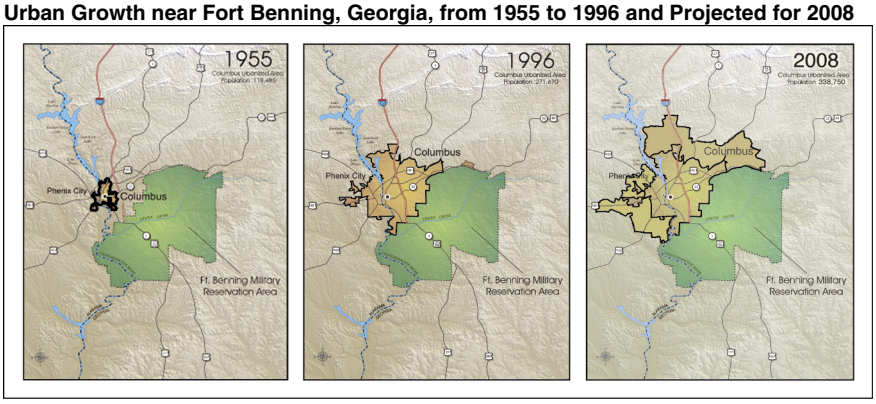
What GAO Found

Encroachment was reported as having affected some training range capabilities, requiring workarounds—or adjustments to training events—and sometimes limiting training, at all stateside installations and major commands GAO visited. GAO has identified similar effects abroad. Encroachment generally limits the time that training ranges are available and the types of training conducted. This in turn limits units' ability to train as they would fight. Most encroachment issues are caused by population growth and urban development. Because both are expected to increase, as are the speed and range of weapon systems used on training ranges, the problems are also expected to increase.

Despite DOD-voiced concerns about encroachment's effects on training, service readiness data in 2002 did not show the impact of encroachment on training readiness or costs, although DOD's most recent quarterly report to Congress on readiness did tie a training issue directly to encroachment. While individual services are making some assessment of training requirements and limitations imposed by encroachment, comprehensive assessments remain to be done. Likewise, complete inventories of training ranges are not yet available to foster sharing of ranges on an interservice or joint basis. This increases the risk of inefficiencies, lost time and opportunities, delays, and added cost. Also, although some services have reported higher costs because of encroachment-related workarounds for training, service data systems do not capture the costs comprehensively.

DOD has made some progress in addressing individual encroachment issues, such as implementing some short-term actions, proposing legislation to clarify the relationship between training and conservation statutes, and issuing a range sustainment directive. But more is required for a comprehensive plan, as recommended by GAO earlier, that clearly identifies steps to be taken, goals and milestones to track progress, and required funding.

Urban Growth near Fort Benning, Georgia, from 1955 to 1996 and Projected for 2008



Source: Department of the Army (map); GAO (emphasis).

Note: Columbus and Phenix City are shown to the upper left of Fort Benning, Georgia.

Mr. Chairman and Members of the Committee:

I am pleased to have the opportunity to discuss the results of our work involving the constraints that encroachment places on military training. As you know, senior Department of Defense (DOD) and service officials have testified that they face growing difficulties in carrying out realistic training at installations and training ranges[1] because of so-called "encroachment" [2] issues, which limit their ability to train military forces at the desired levels and proficiencies. The eight encroachment issues identified by DOD are urban growth around military installations, competition for radio frequency spectrum; air pollution; noise pollution; competition for airspace; unexploded ordnance and munitions components;[3] endangered species habitat; and protected marine resources.

My testimony is largely built on work we reported on last year concerning the effects of encroachment in the continental United States on military training and readiness.[4] Last year we also reported on the constraints on training of U.S. forces overseas.[5] The findings of the two reviews have some similarities. Today, I would like to briefly highlight our findings regarding (1) the growing impact of encroachment on training range capabilities, (2) DOD's efforts to document the effects of encroachment on readiness and costs, and (3) DOD's process in addressing encroachment.

[1] The term "training ranges" in this testimony refers to air, live-fire, ground maneuver, and sea ranges.

[2] DOD defines encroachment as the cumulative result of any and all outside influences that inhibit normal military training and testing.

[3] Unexploded ordnance are munitions that (1) have been primed, fused, armed, or otherwise prepared for action; (2) have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or material; and (3) remain unexploded either by malfunction, design or any other cause. Munitions components—which DOD calls "constituents"—include things such as propellants, explosives, pyrotechnics, chemical agents, metal parts, and other inert components that can pollute the soil or ground water.

[4] U.S. General Accounting Office, *Military Training: DOD Lacks a Comprehensive Plan to Manage Encroachment on Training Ranges*, GAO-02-614 (Washington, D.C.; June 11, 2002). The Chairmen of the Committee on Government Reform and its Subcommittee on National Security, Emerging Threats and International Relations, House of Representatives, requested this review.

[5] U.S. General Accounting Office, *Military Training: Limitations Exist Overseas but Are Not Reflected in Readiness Reporting*, GAO-02-525 (Washington, D.C.: Apr. 30, 2002). The Chairman of the Subcommittee on Readiness and Management Support, Committee on Armed Services, U.S. Senate, requested this review.

Summary

On the basis of our observations and discussions with officials at installations and major commands we visited last year here in the United States, we obtained numerous examples where encroachment had affected some training range capabilities, requiring workarounds—or adjustments to training events—and, in some cases, limited training. We identified similar effects overseas. The potential problem with workarounds is that they lack realism and can lead to the practice of tactics that are contrary to those used in combat. Officials, both stateside and abroad, reported that encroachment at times limits the time that training ranges are available and the types of training that can be conducted. Service officials believe that urbanization and population growth is primarily responsible for encroachment in the United States and is likely to cause more training range losses in the future.

Despite concerns voiced repeatedly by DOD officials about the effects of encroachment on training, DOD's readiness reports did not indicate the extent to which encroachment was adversely affecting training readiness and costs. In fact, at the time we did our review, most readiness reports showed that units had a high state of readiness; and they were largely silent on the issue of encroachment. Recently, however, one DOD readiness report indicated that the Air Force has attributed environmental encroachment to a reduced capability to conduct flight training.[6] We have previously reported on limitations in DOD's readiness reporting.[7] While improvements in readiness reporting can and should be made to better show any shortfalls in training, DOD's ability to fully assess training limitations and their overall impact on training capabilities and readiness will be limited without (1) more complete baseline data, such as a comprehensive database, on all training range capabilities and the services' training range requirements and (2) full consideration of how live training capabilities may be complemented by other forms of training, such as those available through training devices and simulations. These actions will not replace other steps needed to deal with encroachment, but they are key to better define the magnitude of the encroachment problem now and in the future. At the same time, it is important to note that while it is widely recognized that encroachment results in workarounds that can

[6] U.S. Department of Defense, *Quarterly Readiness Report to the Congress*, *Institutional Training Readiness Report for Fiscal Year 2002*, Unclassified Annex E (Washington, D.C.: Jan. 2003).

[7] U.S. General Accounting Office, *Military Readiness: New Reporting System Is Intended to Address Long-Standing Problems*, *but Better Planning Is Needed*, GAO-03-456 (Washington, D.C.: Mar. 28, 2003).

increase training costs, those costs are not easily aggregated to measure their full effect.

Although DOD has made some progress in addressing individual encroachment issues, that effort is still evolving; and more work will be required to put in place a comprehensive plan, as we recommended earlier, that clearly identifies steps to be taken, goals and milestones to track progress, and required funding. We reported last year that the department had prepared draft action plans that deal with each encroachment issue separately, but information was limited on specific actions planned, time frames for completing them, and funding needed. In December 2001, DOD directed an Integrated Product Team to act as the coordinating body for all encroachment issues, develop a comprehensive set of legislative and regulatory proposals by January 2002, and formulate and manage outreach efforts. Last year and just recently, DOD submitted a package of legislative proposals, which it describes as clarifications, seeking to modify several statutory requirements. We are aware that consideration of these and other related legislative proposals affecting existing environmental legislation will need to include potential trade-offs among multiple policy objectives and issues on which we have not taken a position. At the same time, we also understand that DOD recently asked the services to develop procedures for invoking the national security exceptions under a number of environmental laws. Historically, DOD and the services have been reluctant to seek such exceptions; and we are aware of only a couple of instances where this has been done. In our report last June on stateside encroachment issues, we made several recommendations aimed at helping DOD develop a comprehensive plan for dealing with encroachment and improve the information and data available for identifying and reporting on the effects of encroachment. [8] Our two reports last year recommended that DOD develop reports that accurately capture the causes of training shortfalls and objectively report units' ability to meet their training requirements. Following our reports, DOD issued a range sustainment directive[9] to establish policy and assign responsibilities for the sustainment of test and training ranges; and the Special Operations Command developed a database identifying the training ranges it uses, type of training conducted, and restrictions on training. The department also plans to develop a set of internal policies

[8] GAO-02-614.

[9] U.S. Department of Defense, *Directive: Sustainment of Ranges and Operating Areas (OPAREAs)*, 3200.15, Jan. 10, 2003.

and procedures based on the range sustainment directive, strengthen and empower its management structure to deal with range issues, and take a more proactive role in working with local governments and organizations.

We are not making any new recommendations in this testimony. As you may be aware, Mr. Chairman, section 366 of the Bob Stump National Defense Authorization Act for Fiscal Year 2003 requires a series of yearly reports to the Congress dealing with encroachment issues beginning this year, and a requirement for GAO to review those reports. The first of those reports was required to be submitted along with the President's budget for fiscal year 2004. That report was to describe DOD's progress in developing a comprehensive plan to use existing authorities to address training constraints on the use of military lands, marine areas, and airspace that are available in the United States and overseas for training. However, to our knowledge, DOD has not yet issued this report. The Act also requires the submission of a report not later than June 30, 2003, on plans of the department to improve its readiness reporting to reflect the readiness impact that training constraints have on specific units of the armed forces.

Background

Military ranges and training areas are used primarily to test weapon systems and train military forces. Required facilities include air ranges 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 ship maneuvers for training.

According to DOD officials, there has been a slow but steady increase in encroachment issues that have limited the use of training facilities, and the gradual accumulation of these issues increasingly threatens training readiness. DOD has identified eight such encroachment issues:

- *Designation of critical habitat under the Endangered Species Act of 1973*. Under the Act, agencies are required to ensure that their actions do not destroy or adversely modify habitat that has been designated for endangered or threatened species. Currently, over 300 such species are found on military installations. In 1994, under the previous administration 14 agencies signed a federal memorandum of

understanding[10] for implementing the Endangered Species Act.[11] The agencies agreed to establish or use existing regional interagency working groups to identify geographic areas within which the groups would coordinate agency actions and overcome barriers to conserve endangered species and their ecosystems. Such cooperative management could help DOD share the burden of land use restrictions on military installations that are caused by encroachment issues, but implementation of this approach has been limited. We are currently reviewing this issue.[12]

- *Application of environmental statutes to military munitions*. DOD believes that the Environmental Protection Agency could apply environmental statutes to the use of military munitions, shutting down or disrupting military training. According to DOD officials, uncertainties about future application and enforcement of these statutes limit their ability to plan, program, and budget for compliance requirements.

- *Competition for radio frequency spectrum*. The telecommunications industry is pressuring for the reallocation of some of the radio frequency spectrum from DOD to commercial control. DOD reports that over the past decade, it has lost about 27 percent of the frequency spectrum allocated for aircraft telemetry. And we previously reported additional allocation of spectrum could affect space systems, tactical communications, and combat training.[13]

[10] Federal Interagency Memorandum of Understanding for Implementation of the Endangered Species Act, September 1994.

[11] The 14 federal agencies included the Department of Agriculture's Forest Service; the Department of Defense; the U.S Army Corps of Engineers; the Department of Commerce's National Marine Fisheries Service; the Department of the Interior's Bureau of Land Management, Bureau of Mines, Bureau of Reclamation, Fish and Wildlife Service, Minerals Management Service, and National Park Service; the Department of Transportation's Federal Aviation Administration, Federal Highway Administration, and Coast Guard; and the Environmental Protection Agency.

[12] At the request of the Committee on Government Reform and its Subcommittee on National Security, Emerging Threats and International Relations, House of Representatives, we are reviewing (1) the extent to which management of endangered species and related land use restrictions are shared by DOD and other federal landowners and (2) the efforts that DOD and/or other federal landowners have undertaken to promote cooperative management and additional steps needed to enhance this approach. We expect to report on the results of this work later this year.

[13] U.S. General Accounting Office, *Defense Spectrum Management: More Analysis Needed to Support Spectrum Use Decisions for the 1755-1850MHz Band*, GAO-01-795 (Washington, D.C.: Aug. 20, 2001).

- *Marine regulatory laws that require consultation with regulators when a proposed action may affect a protected resource.* Defense officials say that the process empowers regulators to impose potentially stringent measures to protect the environment from the effects of proposed training in marine environments.

- *Competition for airspace.* Increased airspace congestion limits the ability of pilots to train as they would fly in combat.

- *Clean Air Act requirements for air quality.* DOD officials believe the Act requires controls over emissions generated on Defense installations. New or significant changes in range operations also require emissions analyses, and if emissions exceed specified thresholds, they must be offset with reductions elsewhere.

- *Laws and regulations mandating noise abatement.* DOD officials stated that weapon systems are exempt from the Noise Control Act of 1972, but DOD must assess noise impact under the National Environmental Policy Act. As community developments have expanded closer to military installations, concerns over noise from military operations have increased.

- *Urban growth.* DOD says that unplanned or "incompatible" commercial or residential development near training ranges compromises the effectiveness of training activities. Local residents have filed lawsuits charging that military operations lowered the value or limited the use of their property.

To the extent that encroachment adversely affects training readiness, opportunities exist for the problems to be reported in departmental and military service readiness reports. The Global Status of Resources and Training System is the primary means units use to compare readiness against designed operational goals.[14] The system's database indicates, at selected points in time, the extent to which units possess the required resources and training to undertake their wartime missions. In addition, DOD is required under 10 U.S.C. 117 to prepare quarterly readiness reports to Congress. The reports are based on briefings to the Senior Readiness

[14] The Global Status of Resources and Training System, which units use to report their readiness status monthly or whenever a change occurs. Units report readiness in four resource areas, including training. If a unit is not at the highest readiness level, it must identify the reasons from a list that includes training areas. Commanders may also include narrative statements with more detailed explanations.

Oversight Council, a forum assisted by the Defense Test and Training Steering Group. In June 2000, the council directed the steering group to investigate encroachment issues and develop a comprehensive plan of action.

The secretaries of the military services are responsible for training personnel and for maintaining their respective training ranges and facilities. Within the Office of the Secretary of Defense, the Under Secretary of Defense for Personnel and Readiness develops policies, plans, and programs to ensure the readiness of the force and provides oversight on training; the Deputy Under Secretary of Defense for Installations and Environment develops policies, plans, and programs for DOD's environmental, safety, and occupational health programs, including compliance with environmental laws, conservation of natural and cultural resources, pollution prevention, and explosive safety; and the Director, Operational Test and Evaluation, provides advice on tests and evaluations.

Encroachment Has Reduced Some Capabilities, and Its Effects Are Likely to Grow

On the basis of what we have seen, the impact of encroachment on training ranges has gradually increased over time, reducing some training capabilities. Because most encroachment problems are caused by urban development and population growth, these problems are expected to increase in the future.

Although the effects vary by service and by individual installation, encroachment has generally limited the extent to which training ranges are available or the types of training that can be conducted. This limits units' ability to train as they would expect to fight and causes workarounds that may limit the amount or quality of training. Installations overseas all reported facing similar training constraints.

Some of the problems reported by installations we visited last year were those related to urban growth, radio frequency spectrum interference, air quality, noise, air space, and endangered species habitat. For example, in response to local complaints, Fort Lewis, Washington, voluntarily ceased some demolitions training. Eglin Air Force Base, Florida, officials reported the base's major target control system received radio frequency spectrum interference from nearby commercial operators. Nellis Air Force Base, Nevada, officials reported that urban growth near the base and related safety concerns had restricted flight patterns of armed aircraft, causing mission delays and cancellations. They also reported that they receive approximately 250 complaints about noise each year. About 10 percent of Marine Corps Base Camp Pendleton, California, had been designated as

critical habitat for endangered species. Atlantic Fleet officials reported encroachment problems stemming from endangered marine mammals and noise. They said that the fleet's live-fire exercises at sea were restricted, and night live-fire training was not allowed.

More recently, in January 2003, DOD's Special Operations Command reported that its units encounter a number of obstacles when scheduling or using training ranges.[15] According to the report, the presence of endangered species and marine mammals on or near ranges result in restrictions on training for at least part of the year—closing the area to training, prohibiting live fire, or requiring modified operations. For example, a variety of endangered species live on the training areas of the Navy Special Warfare Command in California, particularly on Coronado and San Clemente islands. Due to environmental restrictions, Navy Special Warfare units report that they can no longer practice immediate action drills on Coronado beaches; they cannot use training areas in Coronado for combat swimmer training; and they cannot conduct live-fire and maneuver exercises on much of San Clemente Island during some seasons. In addition, the Special Operations Command owns no training ranges of its own and largely depends on others for the use of their training ranges. As a result, command officials advised us that they must train under operational and scheduling restrictions imposed by its host commands. For example, the command normally trains at night; and because range management personnel are not often available at night, this prevents such training. Also, on many ranges, the command reported that priority is given to larger units than special operations units causing it to postpone or cancel training. According to the report, ranges are also inadequately funded for construction, maintenance, repairs, and upgrades. This results in some commanders using their own funds in order to prevent the ranges from becoming dangerous or unusable.

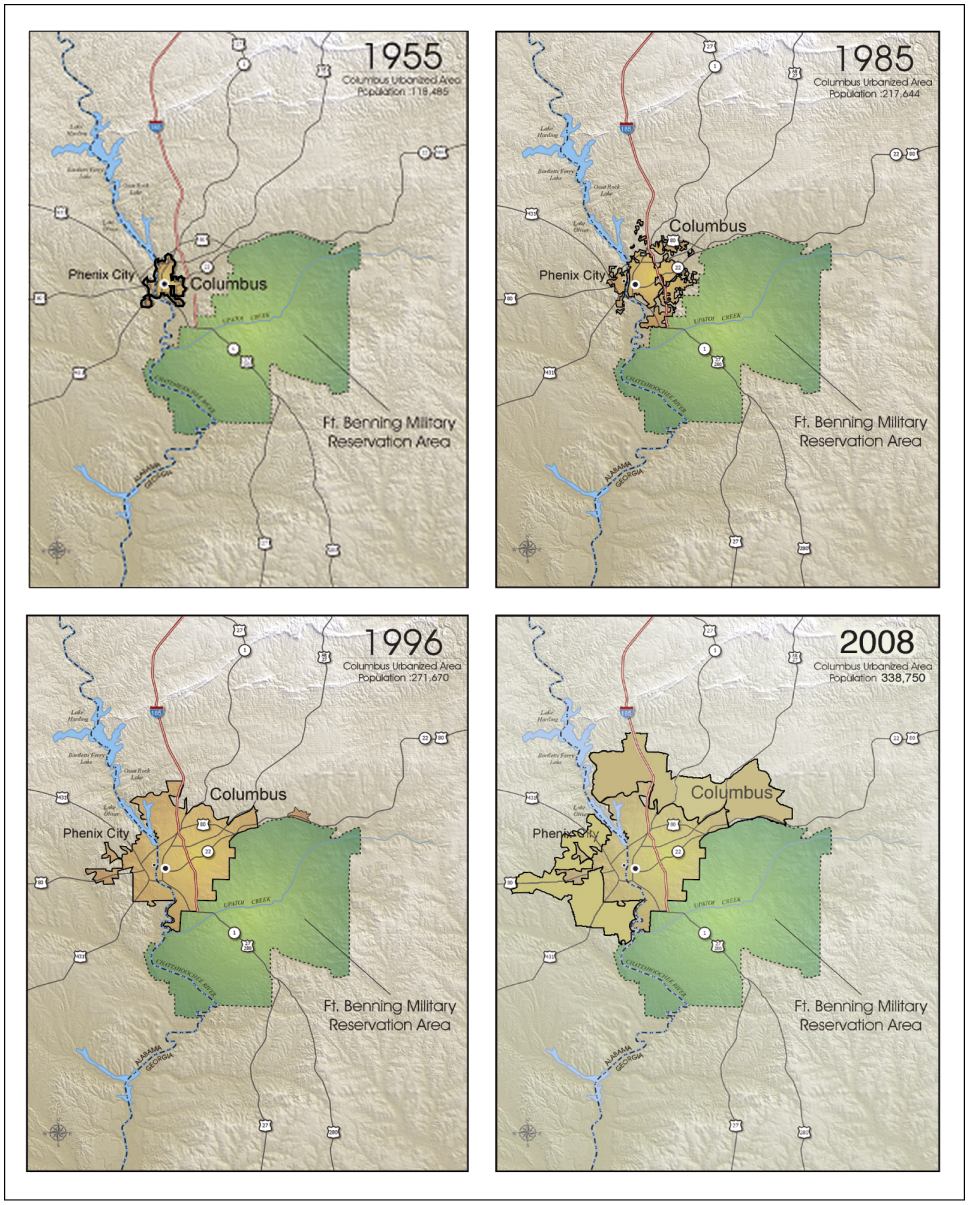
The Special Operations Command, while expressing concern for the future, reported that none of the eight encroachment issues identified by DOD had yet stopped military training, due mostly to the creativity and flexibility of its commanders and noncommissioned officers. In general,

[15] U.S. Special Operations Command, *Tiger Team Report: Global Special Operations Forces Range Study*, Jan. 27, 2003. The Special Operations Command recommended that all components needed to create master range plans that addressed their current and future range issues and solutions. The command also recommended that plans identify and validate training requirements and facilities available and define the acceptable limits of workarounds.

when obstacles threaten training, the unit will find a workaround to accomplish the training. In some instances, the unit may travel to another training facility, costing additional money for transportation and potentially requiring an extended stay at the training site. By sending units away to train, the command limits its ability to send people on future travel for training or missions due to efforts to control the number of days per year that servicemembers are deployed away from home. Other workarounds consist of commands using different equipment, such as plastic-tipped bullets; changing maneuvering, firing, and training methods to overcome training obstacles; and using facilities that need repair. According to the Special Operations Command, all of these workarounds expend more funds and manpower in order to accomplish its training mission.

DOD and military service officials said that many encroachment issues are related to urban growth around military installations. They noted that most, if not all, encroachment issues result from urban and population growth and that around DOD installations this is increasing at a rate higher than the national average. Figure 1 illustrates the increase in urban growth encroachment near Fort Benning, Georgia, while the fort has remained relatively unchanged. According to DOD officials, new residents near installations often view military activities as an infringement on their rights, and some groups have organized in efforts to reduce operations such as aircraft and munitions training. At the same time, according to Defense officials, the increased speed and range of weapon systems are expected to increase training range requirements.

Figure 1: Historical and Projected Urban Growth Near Fort Benning, Georgia



Source: Department of the Army (map); GAO (emphasis).

Note: (Top left to right) Urban growth near Fort Benning, Georgia, in 1955 and 1985. (Bottom left to right) Urban growth near Fort Benning, Georgia, in 1996 and projected for 2008.

Effects of Encroachment on Training Readiness and Costs Have Not Been Reflected in Most Service Readiness Reports

Despite the loss of some training range capabilities, service readiness data did not show the impact of encroachment on training readiness. However, DOD's January 2003 quarterly report to Congress did tie an Air Force training issue directly to encroachment.

Even though DOD officials in testimonies and many other occasions have repeatedly cited encroachment as preventing the services from training to standards, DOD's primary readiness reporting system did not reflect the extent to which encroachment was a problem. In fact, it rarely cited training range limitations at all. Similarly, DOD's quarterly reports to Congress, which should identify specific readiness problems, hardly ever mentioned encroachment as a problem.

This is not surprising to us because we have long reported on limitations in DOD's readiness reporting system and the need for improvements; our most recent report was issued just last week.[16] Furthermore, on the basis of our prior reports on readiness issues and our examination of encroachment, we do not believe the absence of data in these reports concerning encroachment should be viewed simply as "no data, no problem!" Rather, as with other readiness issues we have examined over time, it suggests a lack of attention on the part of DOD in fully assessing and reporting on the magnitude of the encroachment problem.

However, DOD's most recent quarterly report did indicate a training issue that is tied directly to encroachment. The January 2003 Institutional Training Readiness Report showed that the Air Force has rated itself as C-2 for institutional flight training.[17] This indicates that it is experiencing some deficiencies with limited impact on capabilities to perform required institutional training. The Air Force attributed this to training range availability and encroachment combined with environmental concerns that are placing increasing pressure on its ability to provide effective and realistic training. The Air Force also reported that sortie[18] cancellations are becoming a more common occurrence and may soon adversely impact the quality of training. For example, the spotting of a Sonoran Pronghorn on

[16] GAO-03-456.

[17] By a way of comparison, C-1 rating is when a unit is at its highest readiness level and is able to fully meet its mission.

[18] A sortie is one mission by a single aircraft.

the Barry M. Goldwater Range forces immediate cancellation or relocation of scheduled missions.

Readiness reporting can and should be improved to address the extent of training degradation due to encroachment and other factors. However, it will be difficult for DOD to fully assess the impact of encroachment on its training capabilities and readiness without (1) obtaining more complete information on both training range requirements and the assets available to support those requirements and (2) considering to what extent other complementary forms of training may help mitigate some of the adverse impacts of encroachment. The information is needed to establish a baseline for measuring losses or shortfalls.

We previously reported that the services did not have complete inventories of their training ranges and that they do not routinely share available inventory data with each other (or with other organizations such as the Special Operations Command). DOD officials acknowledge the potential usefulness of such data and have some efforts underway to develop these data. However, since there is no complete directory of DOD-wide training areas, commanders sometimes learn about capabilities available on other military bases by chance. All this makes it extremely difficult for the services to leverage assets that may be available in nearby locations, increasing the risk of inefficiencies, lost time and opportunities, delays, added costs, and reduced training opportunities.

Although the services have shared training ranges, these arrangements are generally made through individual initiatives, not through a formal or organized process that easily and quickly identifies all available infrastructure. Last year, for example, our reported on encroachment[19] noted that the Navy Special Operations forces recently learned that some ranges at the Army's Aberdeen Proving Grounds in Maryland are accessible from the water—a capability that is a key requirement for Navy team training. Given DOD's increasing emphasis on joint capabilities and operations, having an inventory of defense-wide training assets would seem to be a logical step toward a more complete assessment of training range capabilities and shortfalls that may need to be addressed.

This issue was recently reinforced by the January 2003 range report by the Special Operations Command, which found that none of the services had

[19] GAO-02-614.

joint databases or management tools to combine all training ranges into a single tool accessible to all commands. The command concluded that such a centralized database would contribute to improving unit readiness and mission success for all components. At the same time, we cannot be sure of the extent to which recent military operations in the Middle East could impact future training requirements. DOD will need to reassess lessons learned from these operations.

Each service has, to varying degrees, assessed its training range requirements and limitations due to encroachment. For example, the Marine Corps has completed one of the more detailed assessments of the degree to which encroachment has affected the training capability of Camp Pendleton, California. The assessment determined to what extent Camp Pendleton could support the training requirements of two unit types and two specialties by identifying the tasks that could be conducted to standards in a "continuous" operating scenario (e.g., an amphibious assault and movement to an objective) or in a fragmented manner (tasks completed anywhere on the camp). The analysis found that from 60 to 69 percent of continuous tasks and from 75 to 92 percent of the other training tasks could be conducted to standards. Some of the tasks that could not be conducted to standards were the construction of mortar- and artillery-firing positions outside of designated areas, cutting of foliage to camouflage positions, and terrain marches. Marine Corps officials said they might expand the effort to other installations. At the same time, the Air Force has funded a study at Shaw Air Force Base, South Carolina, which focuses on airspace requirements; and the Center for Navy Analysis is reviewing encroachment issues at Naval Air Station Fallon, Nevada. We have not had an opportunity to review the progress or the results of these efforts. In its 2003 range study report, the Special Operations Command compiled a database identifying the training ranges it uses, type of training conducted, and restrictions on training. In its study, the command recommended that a joint training range database be produced and made available throughout DOD so that all training ranges, regardless of service ownership, may be efficiently scheduled and utilized.

While recent efforts show increased activity on the part of the services to assess their training requirements, they do not yet represent a comprehensive assessment of the impacts of encroachments. We have also previously reported that the services have not incorporated an assessment of the extent that other types of complementary training could help offset shortfalls. We believe these assessments, based solely on live training, may overstate an installation's problems and do not provide a complete basis for assessing training range needs. A more complete assessment of

training resources should include assessing the potential for using virtual or constructive simulation technology to augment live training. However, based on our prior work I must emphasize, Mr. Chairman, that these types of complementary training cannot replace live training and cannot fully eliminate the impact of encroachment, though they may help mitigate some training range limitations.

In addition, while some service officials have reported increasing costs because of workarounds related to encroachment, the services' data systems do not capture these costs in any comprehensive manner. In its January 2003 report, the Special Operations Command noted that the services lacked a metric-base reporting system to document the impact of encroachment or track the cost of workarounds in either manpower or funds. We noted last year that DOD's overall environmental conservation funding, which also covers endangered species management, had fluctuated, with an overall drop (except for the Army) in obligations since 1999. If the services are indeed conducting more environmental assessments or impact analyses as a result of encroachment, the additional costs should be reflected in their environmental conservation program obligations.

Progress in Addressing Encroachment Issues Still Evolving

DOD has made some progress in addressing individual encroachment issues, including individual action plans and legislative proposals. But more will be required to put in place a comprehensive plan that clearly identifies steps to be taken, goals and milestones to track progress, and required funding. Senior DOD officials recognized the need to develop a comprehensive plan to address encroachment issues back in November 2000, but efforts to do so are still evolving. To their credit, DOD and the services are increasingly recognizing and initiating steps to examine range issues more comprehensively and in a less piecemeal fashion.

Recent efforts began in 2000 when a working group of subject matter experts was tasked with drafting action plans for addressing the eight encroachment issues. The draft plans include an overview and analysis of the issues; and current actions being taken, as well as short-, mid-, and long-term strategies and actions to address the issues. Some of the short-term actions implemented include the following.

- DOD has finalized, and the services are implementing, a Munitions Action Plan—an overall strategy for addressing the life-cycle management of munitions to provide a road map that will help DOD meet the challenges of sustaining its ranges.

- DOD formed a Policy Board on Federal Aviation Principles to review the scope and progress of DOD activities and to develop the guidance and process for special use air space.

- DOD formed a Clean Air Act Services' Steering Committee to review emerging regulations and to work with the Environmental Protection Agency and the Office of Management and Budget to protect DOD's ability to train.

- DOD implemented an Air Installation Compatible Use Zone Program to assist communities in considering aircraft noise and safety issues in their land use planning.

Some future strategies and actions identified in the draft plans addressing the eight encroachment issues include the following.

- Enhancing outreach efforts to build and maintain effective working relationships with key stakeholders by making them aware of DOD's need for training ranges, its need to maintain readiness, and its need to build public support for sustaining training ranges.

- Developing assessment criteria to determine the cumulative effect of all encroachment restrictions on training capabilities and readiness. The draft plan noted that while many examples of endangered species/critical habitat and land use restrictions are known, a programmatic assessment of the effect these restrictions pose on training readiness has never been done.

- Ensuring that any future base realignment and closure decisions thoroughly scrutinize and consider the potential encroachment impact and restrictions on operations and training of recommended base realignment actions.

- Improving coordinated and collaborative efforts between base officials and city planners and other local officials in managing urban growth.

In December 2001, the Deputy Secretary of Defense established a senior-level Integrated Product Team to act as the coordinating body for encroachment efforts and to develop a comprehensive set of legislative and regulatory proposals by January 2002. The team agreed on a set of possible legislative proposals for clarifying some encroachment issues. After internal coordination deliberations, the proposals were submitted in late April 2002 to Congress for consideration. According to DOD, the legislative proposals sought to "clarify" the relationship between military

training and a number of provisions in various conservation and compliance statutes, including the Endangered Species Act, the Migratory Bird Treaty Act, the Marine Mammal Protection Act, and Clean Air Act. DOD's proposals would, among other things, do the following:

- Preclude designation under the Endangered Species Act of critical habitat on military lands for which Sikes Act Integrated Natural Resources Management Plans have been completed. At the same time, the Endangered Species Act requirement for consultation between DOD and other agencies on natural resource management issues would remain.

- Permit DOD to "take" migratory birds under the Migratory Bird Treaty Act without action by the Secretary of the Interior, where the taking would be in connection with readiness activities, and require DOD to minimize the taking of migratory birds to the extent practicable without diminishment of military training or other capabilities, as determined by DOD.

- Modify the definition of "harassment" under the Marine Mammal Protection Act as it applies to military readiness activities.[20]

- Modify the conformity provisions of the Clean Air Act. The proposal would maintain the Department's obligation to conform military readiness activities to applicable state implementation plans but would give DOD 3 years to demonstrate conformity. In the meantime, DOD could continue military readiness activities.

- Change the definition of solid waste under the Solid Waste Disposal Act to generally exclude explosives, unexploded ordnance, munitions, munition fragments, or constituents when they are used in military training, research, development, testing and evaluation; when not removed from an operational range; when promptly removed from an off-range location; or when recovered, collected, and destroyed on range at operational ranges. Solid waste would not include buried unexploded ordnance when burial was not a result of product use.

[20] The Marine Mammal Protection Act's definition of "harassment" has been a source of confusion. According to DOD, the statute defines "harassment" in terms of "annoyance" or the "potential to disturb," standards that DOD asserts are difficult to interpret. The statute, 10 U.S.C. 1362, defines the term as any act of pursuit, torment, or annoyance which has the potential to injure or disturb a marine mammal by causing disruption to behavioral patterns such as migration, nursing, feeding, breeding, and sheltering.

Of the above proposals, Congress passed, as part of the fiscal year 2003 defense authorization legislation, a provision related to the Migratory Bird Treaty Act.[21] Under that provision, until the Secretary of the Interior prescribes regulations to exempt the armed forces from incidental takings of migratory birds during military readiness activities, the protections provided for migratory birds under the Act do not apply to such incidental takings. In addition, Congress authorized DOD to enter agreements to purchase property or property interests for natural resource conservation purposes, such as creating a buffer zone near installations to prevent encroachment issues, such as urban growth.[22]

In February 2003, DOD submitted to Congress the Readiness and Range Preparedness Initiative for fiscal year 2004. In it, the department restates a number of legislative proposals from 2002 and includes a proposal concerning the Marine Mammal Protection Act. In the 2004 initiative, the department seeks to reconcile military readiness activities with the Marine Mammal Protection Act by adding language to sections of title 16 of the U.S. Code.

We are aware that consideration of these legislative proposals affecting existing environmental legislation will need to include potential tradeoffs among multiple policy objectives and issues on which we have not taken a position. At the same time, we also understand that DOD recently asked the services to develop procedures for invoking the national security exceptions under a number of environmental laws. Historically, DOD and the services have been reluctant to seek such exceptions; and we are aware of only a couple of instances where this has been done.

Our two reports last year both recommended that DOD develop reports that accurately capture the causes of training shortfalls and objectively report units' ability to meet their training requirements. At the time we completed our reviews in 2002, DOD's draft action plans for addressing the eight encroachment issues had not been finalized. DOD officials told us that they consider the plans to be working documents and stressed that many concepts remain under review and may be dropped, altered, or deferred, while other proposals may be added. No details were available on overall actions planned, clear assignments of responsibilities,

[21] Section 315, P.L. 107-314, Dec. 2, 2002.

[22] Section 2811, P.L. 107-314, Dec. 2, 2002 (codified at 10 U.S.C. 2684).

measurable goals and time frames for accomplishing planned actions, or funding requirements—information that would be needed in a comprehensive plan. Our report on stateside encroachment problems also recommended that DOD develop and maintain a full and complete inventory of service and department-wide training infrastructure; consider more alternatives to live training; and ensure that the plan for addressing encroachment includes goals, timelines, responsibilities, and projected costs.[23] Our recently issued report on overseas training also recommended that DOD develop reports that accurately capture the causes of training shortfalls and objectively report units' ability to meet their training requirements.[24]

Following our reports, DOD issued a range sustainment directive to establish policy and assign responsibilities for the sustainment of test and training ranges,[25] and the Special Operations Command developed a database identifying the training ranges it uses, type of training conducted, and restrictions on training. In addition, DOD is working with the other regulatory agencies in the federal government to manage the way in which laws are enforced and plans to issue four more directives that cover outreach, range clearance, community noise, and Air Installation Compatibility Use Zone.

In the Bob Stump National Defense Authorization Act for Fiscal Year 2003, Congress required the Secretary of Defense to 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 on the use of military lands, marine areas, and airspace that are available in the United States and overseas for training.[26] As part of the preparation of the plan, the Secretary of Defense was expected to conduct an assessment of current and future training range requirements of the armed forces and an evaluation of the adequacy of current DOD 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. Also, as you

[23] GAO-02-614.

[24] GAO-02-525.

[25] U.S. Department of Defense, *Directive: Sustainment of Ranges and Operating Areas (OPAREAs)*, 3200.15, Jan. 10, 2003.

[26] Section 366, P.L. 107-314, Dec. 2, 2002.

may be aware, Mr. Chairman, that Act requires annual reports to Congress dealing with encroachment issues beginning this year and requires GAO to review those reports. The first of those reports was required to be submitted along with the President's budget for fiscal year 2004. That report was to describe the progress in developing a comprehensive plan to address training constraints. To our knowledge, Mr. Chairman, DOD has not completed a comprehensive plan or provided Congress with the progress report. Officials of the Office of the Secretary of Defense said that they plan to report to Congress later this calendar year. The Act also requires the submission of a report not later than June 30, 2003, on the department's plans to improve its readiness reporting to reflect the readiness impact that training constraints have on specific units of the armed forces.

This concludes my statement. I would be pleased to answer any questions you or other members of the Committee may have at his time.

Contact and Acknowledgment

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