

February 1997

MILITARY BASES

Cost to Maintain Inactive Ammunition Plants and Closed Bases Could be Reduced



**National Security and
International Affairs Division**

B-272660

February 20, 1997

The Honorable Ronald V. Dellums
Ranking Minority Member
Committee on National Security
House of Representatives

The Honorable Gene Taylor
House of Representatives

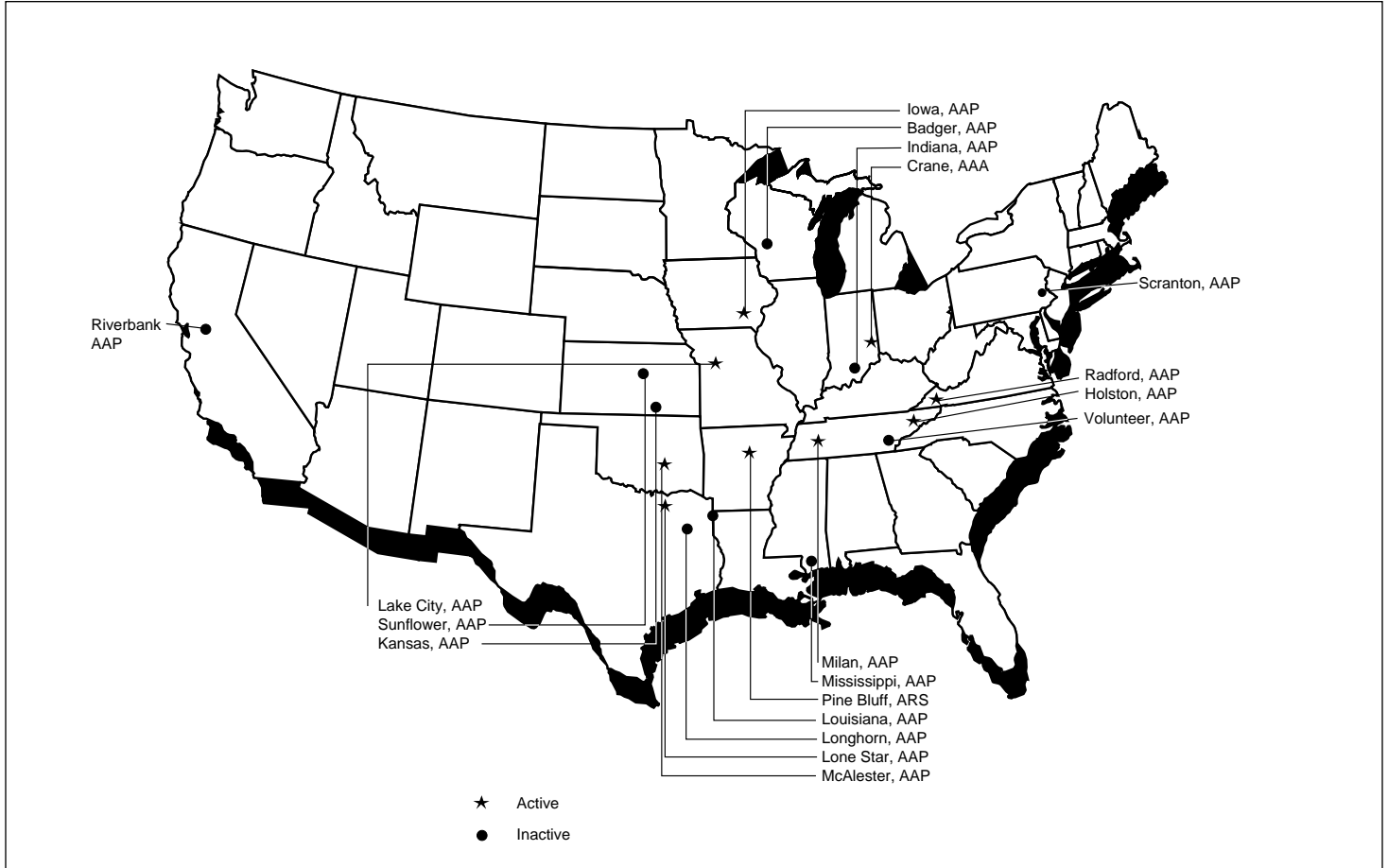
As requested, we reviewed two issues related to the Department of Defense's (DOD) management of real property. First, we assessed the opportunities to reduce the cost of maintaining inactive Army ammunition plants. Second, we assessed the same issue as it relates to military bases among all the services that were closed during the 1988 and 1991 base realignment and closure (BRAC) process.

Background

In accordance with the Defense Planning Guidance, the Army bases its ammunition requirements on projected training, testing, and war reserve requirements for two major regional contingencies. However, this requirement is subject to review as (1) DOD rethinks its requirements to respond to the two major concurrent regional conflicts, (2) war-fighting strategies and weapons technology reduce current ammunition requirements, and (3) DOD seeks to fund weapon modernization costs through infrastructure cost reductions.

In 1993, the Army's Industrial Operations Command (IOC), the Army's single manager for conventional ammunition, restructured its ammunition industrial base to include 9 active and 10 inactive plants. (See fig. 1.) Of the 10 inactive plants, 6 would be used to replenish ammunition inventories after two major regional conflicts and 4 have unique capabilities that, according to the Army, make them potentially important for future production needs. The Kansas, Louisiana, Mississippi, Riverbank, Scranton, and Sunflower ammunition plants are the six plants that would be used to replenish ammunition. The Mississippi plant is to produce the replenishment requirement for 16 percent of the shell metal parts and 78 percent of the grenade metal parts and provide 40 percent of the load, assemble, and pack capability. The Badger, Indiana, Longhorn, and Volunteer ammunition plants are the four plants that have unique capabilities.

Figure 1: Active and Inactive Army Ammunition Plants



After bases are closed, a disposal process is initiated. The property is first offered to other federal agencies, then to state and local agencies, and then to the public. Some property has remained in DOD's possession for many years while the communities have sought ways to use it. Meanwhile, DOD is responsible for the expense of protecting and maintaining these bases. Maintenance is conducted under a contract with a private entity or a cooperative agreement between base and community authorities. Our review of bases closed as a result of the BRAC process was restricted to the 1988 and 1991 rounds because sufficient time has not passed for the others in subsequent rounds to take effect.

Results in Brief

The annual cost of maintaining the Army's inactive ammunition plants, which totaled about \$118 million since 1990, has decreased over the years. This decrease is the result of various initiatives, including downsizing projects, reduced maintenance requirements, more rigorous contract negotiations with operating contractors, and the Armament Retooling and Manufacturing Support (ARMS) Act of 1992. The ARMS program provides financial incentives to ammunition plant contractors to reuse idle capacities by attracting commercial tenants to the facility. The contractors act as landlords with authority to lease buildings and equipment to commercial producers, and the revenue generated is used to offset the ammunition plants' maintenance costs. It should be noted that, while the ARMS initiative has offset some of the Army's maintenance costs, maintaining ammunition plants in inactive status still represents a significant cost to the federal government.

While some initial investments will likely be necessary, the Army could further decrease its infrastructure costs by disposing of unneeded property. The Kansas, Louisiana, and Sunflower plants—three of the six inactive plants retained for replenishment purposes—contain 37,000 acres of unneeded land, facilities, and infrastructure that could be declared excess. None of the four inactive plants retained for their unique capabilities—Badger, Indiana, Longhorn, and Volunteer—are needed because alternative sources exist, such as other active ammunition plants or the private sector, to provide the capabilities these plants provide.

The overall cost to maintain bases closed in the 1988 and 1991 rounds was approximately \$290 million through fiscal year 1996. No trends in costs are discernable because most bases have been closed only a few years and because costs at individual bases vary widely, given their different sizes, varying infrastructure, and diverse locations. Maintenance costs are higher than they need to be because DOD does not tie maintenance levels to the amount of time it takes to transfer bases to the community. The services seldom reduce the maintenance levels, even when progress toward reuse is slow. Continuing maintenance at initial levels keeps maintenance costs high and reduces the savings from base closure.

Contractors at inactive ammunition plants and closed bases we visited were satisfying the terms outlined in their maintenance contract. The Federal Property Management Regulation allows for some deterioration of buildings and equipment that are not considered critical to reactivation. During our visits, we observed peeling paint and disassembled production

lines at several ammunition plants; however, these conditions were within contract maintenance requirements.

We are recommending that DOD dispose of all unneeded property at inactive Army ammunition plants. We are also recommending that DOD establish incentives for communities to speed up the transfer of closed bases and, after the initial maintenance period has elapsed, DOD should establish criteria for a phased drawdown of maintenance until minimum levels are reached.

Maintenance Costs at Inactive Ammunition Plants Have Decreased

As shown in table 1, costs to the Army to maintain the 10 inactive ammunition plants have decreased from \$21.8 million in fiscal year 1995 to \$15 million in 1996. These costs do not include the cost of ARMS or other costs. As of May 31, 1996, \$57.5 million had been obligated for ARMS projects.

Table 1: Maintenance Costs of Inactive Ammunition Plants

Dollars in millions			
Ammunition plant	FY1994	FY1995	FY1996
Badger	\$5.3	\$5.6	\$3.9
Indiana	2.0	0.5	0
Kansas	0.1	0.2	0
Longhorn	0	0.4	0.7
Louisiana	0.5	1.6	0.7
Mississippi	4.3	3.4	3.0
Riverbank	3.1	3.3	1.5
Scranton	^a	0	0.2
Sunflower	^a	3.1	2.2
Volunteer	3.7	3.7	2.8
Total	\$19.0	\$21.8	\$15.0

^aPlants were still in an active status.

Reasons for Cost Decrease

In 1993, IOC began identifying and implementing downsizing projects that reduced ammunition plant maintenance requirements and costs. Downsizing projects included decontaminating and selling excess equipment, removing sensitive items, documenting excess real property, deactivating utilities, removing asbestos, consolidating activities, and closing buildings. These measures reduce the cost to maintain these

plants. For example, removing sensitive items reduces security costs, while deactivation reduces operation and maintenance costs. Further, excessing personal property reduces fire protection requirements and property management costs.

IOC officials also state that they have reduced inactive plants' maintenance costs by streamlining maintenance requirements and more rigorously negotiating contracts. IOC has started concentrating its maintenance requirements on facilities that are critical to production requirements, while reducing requirements at facilities that are less critical. For example, IOC used to maintain all of the Indiana plant. IOC had estimated that the maintenance cost for Indiana from 1993 to 1997 would be \$53.5 million. In 1993, IOC determined that only the black powder capability was required to be maintained for its unique capability and subsequently put 8,976 of the 9,790 total acres in modified caretaker status. This action contributed to reducing maintenance costs by an estimated \$47.5 million from 1993 to 1997. In another case, IOC did not renew a contract when the contractor's proposal for the scope of work was four times higher than IOC's estimates.

IOC has increased the number of technical staff who evaluate and annually renegotiate the maintenance contracts. As a result, IOC has been able to reduce costs by negotiating reductions in the number of contractor personnel. On the basis of their technical expertise, IOC staff determine the maintenance required to keep each plant in a state of readiness and the minimum number of personnel needed. For example, at the Indiana plant, 32 positions were eliminated in 1994.

The ARMS initiative has contributed to a reduction in maintenance costs at inactive plants. Under that initiative, the Army authorizes the ammunition plant contractor under a facility use contract to lease buildings and equipment to commercial tenants. The terms and payments of these third-party leases remain between the facility use contractor and the tenant, simplifying the Army's involvement. In return for this authority, the facility use contractor reduces or offsets its charges to the Army for maintenance at that plant.

There are facility use contracts in effect at nine of the inactive plants. At all of these plants, the ARMS initiative has produced revenue used to offset all or part of the maintenance costs. Revenue generated through leasing activities at both Indiana and Kansas has helped to offset the cost of maintenance; contractors at both of these plants provide the required maintenance at no cost to the Army. Maintenance costs at the Mississippi,

Riverbank, Sunflower, and Volunteer plants have been substantially reduced, and IOC projects that within the next few years, these plants will also be free of maintenance costs. For example, at Mississippi, leasing activities have helped reduce maintenance costs from \$4.3 million in fiscal year 1994 to the current \$3 million in fiscal year 1996. According to IOC officials and the facility use contractor, the cost to IOC to protect and maintain Mississippi should be zero by 1999. As leasing activity continues, IOC will likely realize further cost reductions at the other inactive ammunition plants. An IOC official explained that because of the funding delays, the full impact of the ARMS initiative was not realized until 1996.

Cost of ARMS Initiative

In 1992, under the ARMS initiative, the Congress appropriated \$200 million to encourage commercial use of ammunition plants, for the purpose of reducing costs, creating private sector jobs, and retaining critical skills. IOC has obligated \$57.5 million in ARMS initiative funding at the inactive plants. To date, \$21.6 million has been spent on various projects, including development of strategic plans, marketing, plant and tenant modifications, and a variety of feasibility studies for reuse of existing production equipment. For example, \$15 million has been obligated and \$3.4 million spent to help generate interest in commercial leasing activity at the Mississippi plant. Table 2 shows the total amount of ARMS funds obligated at the inactive plants and the amount of funds actually spent on ARMS projects.

Table 2: Amount Obligated and Total Disbursements of ARMS Funds as of May 31, 1996

Ammunition plant	Obligated amount	Total disbursements
Badger	\$364,000	\$364,000
Indiana	21,011,000	12,725,000
Kansas	722,000	544,000
Longhorn	916,000	916,000
Louisiana	401,000	32,000
Mississippi	15,818,000	3,428,000
Riverbank	6,963,000	1,374,000
Scranton	559,000	559,000
Sunflower	513,000	511,000
Volunteer	10,254,000	1,135,000
Total	\$57,521,000	\$21,588,000

IOC received \$10 million in initial ARMS funding in the third-quarter of 1993 but did not receive any additional funds until the first-quarter of fiscal

year 1995. At that time, the Army released an additional \$40 million, followed by \$50 million in the fourth-quarter of the same year. In the fourth-quarter of fiscal year 1995, the Army reprogrammed \$100 million of the \$200 million ARMS appropriation to fund other Army programs.

In addition to the ARMS initiative, there are costs of downsizing and modernization that are part of retaining inactive plants. For example, downsizing projects at the inactive plants have cost the Army a total of \$56.2 million since 1990. In the last decade, over \$52 million has been appropriated for modernization projects at the Badger plant. The plant has not been reactivated and the upgraded or new facilities have never been used.

Opportunities to Reduce Infrastructure Costs Even Further

Retention costs of inactive plants could be eliminated if the Army determines that these plants are unneeded and declares them excess. Currently, the Army retains plants or large portions of plants that are in excess of its mission requirements. The Federal Property Management Regulation requires agencies to conduct annual reviews of real property to ensure prompt identification and release of unneeded or underutilized property. Additionally, each agency is to maintain the minimum inventory necessary to conduct its mission.

Excess Replenishment Property That Could Be Eliminated at Three Plants

In 1996, IOC prepared an economic analysis of the 10 inactive plants. This analysis shows that six of these plants might be needed to meet inventory replenishment requirements following two concurrent major regional conflicts. However, this requirement is subject to review as (1) DOD rethinks its requirements to respond to the two major concurrent regional conflicts, (2) war-fighting strategies and weapons technology reduce current ammunition requirements, and (3) DOD seeks to fund weapon modernization costs through infrastructure cost reductions.

Even if the Army retains all six replenishment plants, only a portion of the property and infrastructure at the Kansas, Louisiana, and Sunflower plants is needed to meet replenishment requirements. Table 3 shows that there are over 37,000 acres of property in excess of what is needed for replenishment requirements at these plants.

Table 3: Acreage in Excess of IOC's Replenishment Requirement

Ammunition plant	Total acres	Acres retained for replenishment	Excess
Kansas	13,727	121	13,606
Louisiana	14,974	90	14,884
Mississippi	4,377	4,377	0
Riverbank	168	168	0
Scranton	15.3	15.3	0
Sunflower	9,500	400	9,100

IOC officials state that they are unable to excess most of this property, given the environmental contamination and the prohibitive cost of remediation. Nevertheless, in July 1996, the Army Materiel Command, IOC's parent command, tasked IOC to review its requirements for real property and to document any excess property. The Army Materiel Command recommended that preliminary reports of excess property be submitted without the extensive environmental documentation that normally accompanies the report. According to IOC officials, they are in the process of reviewing all of their property holdings. Further, an internal memo states that the Army should no longer retain title to plants unless it has a bona fide production requirement. Recent amendments to the Comprehensive Environmental Response, Compensation, and Liability Act could ease the transfer of contaminated property.

Four Plants That Could Be Eliminated

IOC officials state that the Badger, Indiana, Longhorn, and Volunteer plants are retained for their unique production capabilities that could be vital for future needs. However, according to Department of Army guidance, these plants must be economical to retain. IOC contends that the alternative sources it has identified for the items produced at these plants have experienced production delays and that the risks of not being able to obtain these items justify the cost of maintaining these plants. Table 4 lists the four plants' unique capabilities and the alternative sources available.

Table 4: Alternative Production Sources for Items Produced at Inactive Plants Retained for Unique Capabilities

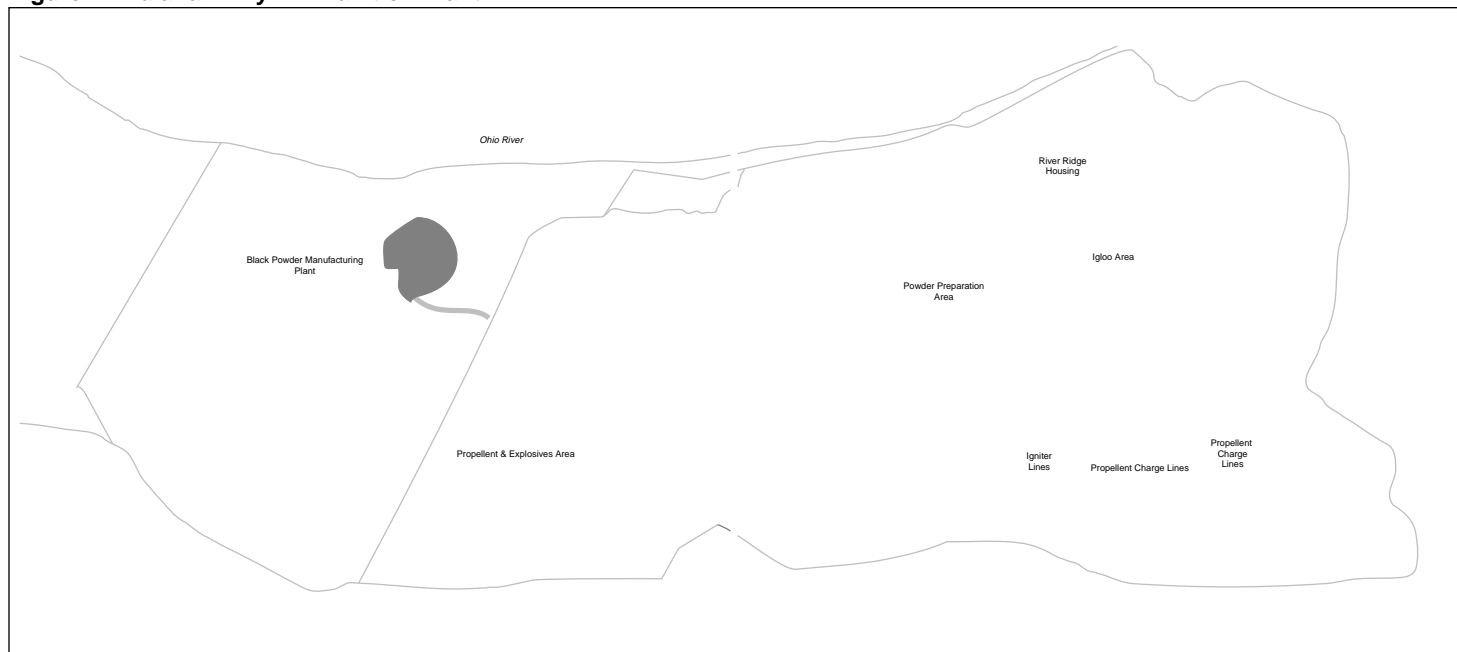
Plant	Item	Alternate sources currently identified
Badger	Propellant Ball propellant	Radford Ammunition Plant Olin-St. Marks
Indiana	Black powder	Goex, Inc.
Longhorn	HMX (MUSALL)	Holston Ammunition Plant
Volunteer	Trinitrotoluene (TNT)	Radford Ammunition Plant

The Badger and Volunteer plants are retained to back up Radford, an active plant. IOC retains these plants because Radford has experienced production delays due to explosions. However, after the last explosion in 1985 impaired Radford's ability to manufacture an item that could be produced at Badger, IOC did not reactivate Badger; instead, it used a commercial supplier. According to an IOC official, reactivating Badger would have been administratively difficult and too expensive. In addition, IOC justifies retaining the Indiana plant on the basis of its being the only government source of black powder. However, IOC purchases black powder from a commercial supplier to meet its requirements.

In June 1996, IOC declared Longhorn excess to its mission, when the operating contractor's proposal to maintain the facility was higher than IOC's estimates. According to an IOC official, on the basis of the economic analysis, excessing the Longhorn plant was the most cost-effective option. Nevertheless, the Army has yet to formally excess Longhorn or initiate the disposal process.

Even if the Army believes that the unique capabilities justify the cost of retaining these plants, only a small portion of the facilities at the Indiana and Badger plants is needed to meet those requirements. The map in figure 2 shows the small portion of the Indiana plant that is retained for the black powder capability. A similar situation exists at the Badger plant.

Figure 2: Indiana Army Ammunition Plant



Source: U.S. Army.

Maintenance Costs Differ at Bases Closed Under the BRAC Process

Maintenance costs at each base vary depending on its size, infrastructure, location, and the extent and conditions of leases. Maintenance costs at the 35 bases in our review ranged from \$13,000 to \$9 million in fiscal year 1996. (App. II shows maintenance costs at these bases.) For example, maintaining Moffet Field Naval Air Station (which was originally 1,577 acres, of which 1,440 acres were transferred to the National Aeronautics and Space Administration) cost \$13,000. At the other extreme, DOD spent \$9 million at Loring Air Force Base. The high cost of maintenance at Loring Air Force Base relates to its size (8,700 acres), infrastructure (over 3 million square feet of facilities), and location (the most northerly portion of Maine, where the winter is harsh).

There is no set formula for establishing maintenance levels at each base. For example, not all housing has heat and air-conditioning provided—only those units identified with reuse potential are maintained. The services are supposed to collaborate with the community to determine what maintenance levels will be performed. In cases where communities are not actively involved in reuse, the services will establish maintenance levels on their own. The level of activities is related to the community's intended

reuse, the amount and type of infrastructures, the base's size, and climatic conditions.

The cost of maintaining bases is also affected by leasing. Leasing is encouraged by the services, because it reduces the level of funding they must provide to closed installations but still preserves federal assets. Leasing is also valued by communities, as it can both provide a source of revenue and stimulate redevelopment on the base. Leases may be for rent or maintenance services. In general, leasing decreases the services' maintenance costs, because either tenants' rental payments offset the services' costs or tenants provide these services in lieu of rent.

Although the first round of base closure decisions occurred in 1988, it is too early to determine trends in maintenance costs. Because these bases did not close immediately after they were identified for closure, not enough data are available for identifying cost trends. For example, George Air Force Base closed in December 1992, 4 years after it was identified in the BRAC 1988 round. Further complicating the analysis, closures often occurred midyear and the associated maintenance costs reflect only that period. Those costs cannot be compared with a full year of maintenance cost to determine if costs are increasing or decreasing. Additionally, one-time costs associated with the closure, such as purchasing maintenance uniforms and computers or the movement of personnel, may or may not be included in the first year's costs and thus make comparisons with the second year's cost data difficult.

Maintenance Levels Are Not Tied to Amount of Time It Takes to Transfer a Base to Community

As a benefit to the community, the services usually continue maintaining closed bases at initial levels until the property is conveyed. In most cases, it takes several years—sometimes 6 or more—before final agreements are reached with the community to convey the property. The length of time that the services are required to maintain these properties at initial levels varies depending on the closure round. Levels of initial maintenance for bases closed in the 1988 round could be reduced by late 1995; maintenance levels at bases closed in the 1991 round could be reduced as of mid-1996.¹ Once the period for the initial levels of maintenance elapses, the services are to reduce the levels of maintenance consistent with federal government standards for surplus property. However, if requested by the communities, these initial levels can be extended by the service secretaries.

¹Subsequently, in the 1993 and 1995 rounds, the time frame for reducing the initial maintenance levels was shortened to 1 year after operational closure or 180 days after the record of disposal was approved by the service secretary.

Service officials told us that, in general, maintenance levels have not been reduced from their initial levels, even where progress toward reuse has been slow. They noted that the communities strongly advocate maintaining existing levels of maintenance and that the Congress and the President have supported efforts to assist communities experiencing base closures. Further, the services' maintenance manuals recognize that the public and the Congress expect facilities to be maintained to support reuse.

While we understand that there is a need to provide maintenance, there are indications the cost of doing this may be higher than necessary. For example, service and Office of the Secretary of Defense officials note that, while they are committed to supporting communities' reuse of the property, maintenance costs are not declining and may extend beyond the 6-year BRAC time frame for closures. To contain these costs the services are considering ways to tie maintenance funding to each community's redevelopment progress. For example, the services are developing criteria to assess community redevelopment efforts. Recently, when the Air Force was negotiating provisions for the extension of the cooperative agreement for maintenance at Loring, the Office of the Secretary of Defense suggested that the Air Force negotiate some performance criteria (e.g., leases signed, jobs created, areas occupied, or increases in state or local expenditures on the reuse implementation effort) to assess the community's efforts to develop the property.

Navy officials stated that they have an obligation to maintain BRAC property at initial levels for some period of time. However, to address the ongoing costs of providing maintenance, the Navy plans to implement a policy to control maintenance costs at BRAC bases by tying levels of maintenance to the communities' redevelopment plans and establishing clear limits on the level and amount of funding that will be provided to those bases that are not in active reuse. The Navy policy would decrease the amount of funding available over the 6-year period in which closures must take place. By the 6th year, if the property was not in active reuse, the Navy would turn off utilities, abandon unoccupied facilities, and provide only minimal security to prevent trespassing.

This policy would give the Navy some leverage at sites where the community has expressed interest in the property, but progress toward reuse appears minimal. For example, the Navy has been negotiating the disposal of Hunters Point Annex with the city of San Francisco, but agreeing on the terms of transfer has been difficult. The Navy has entered

into many small-business leases at the base, but the leases generate only about \$1 million in revenue, compared with the \$3 million the Navy now spends on providing caretaker services at the site. An established Navy policy of reduction in services could provide some incentive to settle the terms of transfer.

Contractor Maintenance Is Adequate

Ammunition Plants

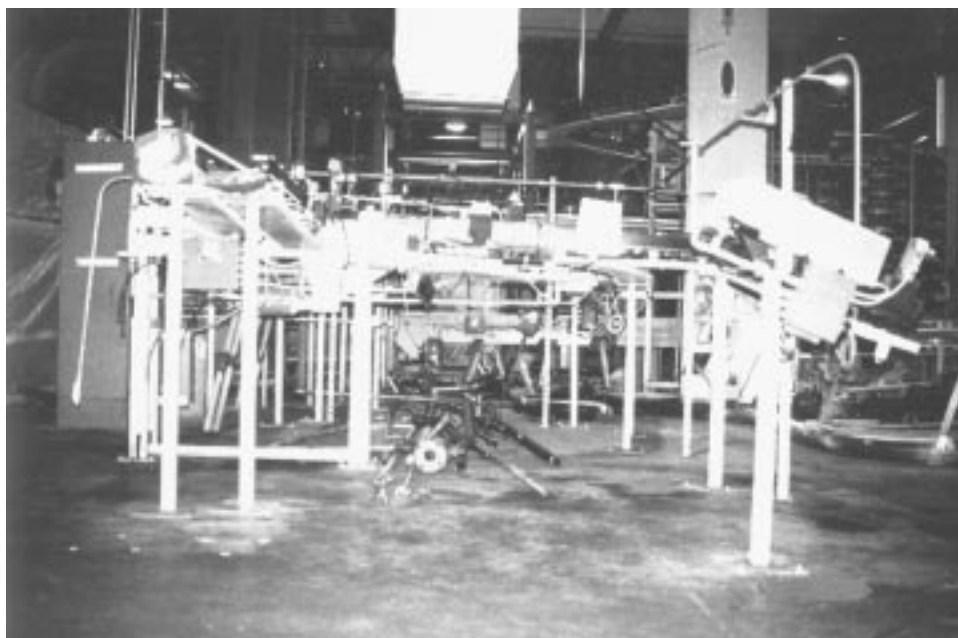
Inactive plants are maintained by the contractors who formerly operated them; IOC retains the operating contractors for their technical expertise and to ensure that critical skills are preserved. IOC determines what maintenance tasks are required at each facility to ensure that the plant can meet its production commitment in the required time frames. These tasks are contained in the scope of work or maintenance plan.

At the plants we visited, contractors were satisfactorily performing the maintenance tasks called for in the scope of work established by IOC. Civilian Army personnel were ensuring that the tasks were completed properly. During site visits, we compared activities in the scope of work with the physical conditions at the plant. We verified by comparing requirements with maintenance records that contractors were meeting their contract commitments. According to IOC officials, they monitor the contractors to ensure they fulfill their contractual obligations and, if problems are identified, processes exist to ensure they are corrected.

The Army contracts only for a level of maintenance necessary to allow a plant to reactivate and meet production levels within a required time frame. This does not require keeping plants in a higher operating condition. For example, we inspected the Mississippi plant, randomly selecting buildings and equipment, and saw some deterioration. We observed peeling paint and disassembled production lines. Figure 3 shows disassembled equipment at the Mississippi plant. Contractor and Army personnel explained that (1) the paint was peeling off of galvanized steel and would not impair production capabilities and (2) production equipment is disassembled and left at its original location to facilitate reassembly, prevent the potential loss of components, and eliminate the cost of storage. The conditions we saw at Mississippi were not unique; we

found similar conditions at other plants. Army and contractor personnel explained that these were common occurrences and were appropriately addressed given the scope of work requirements.

Figure 3: Disassembled Equipment at Mississippi Plant



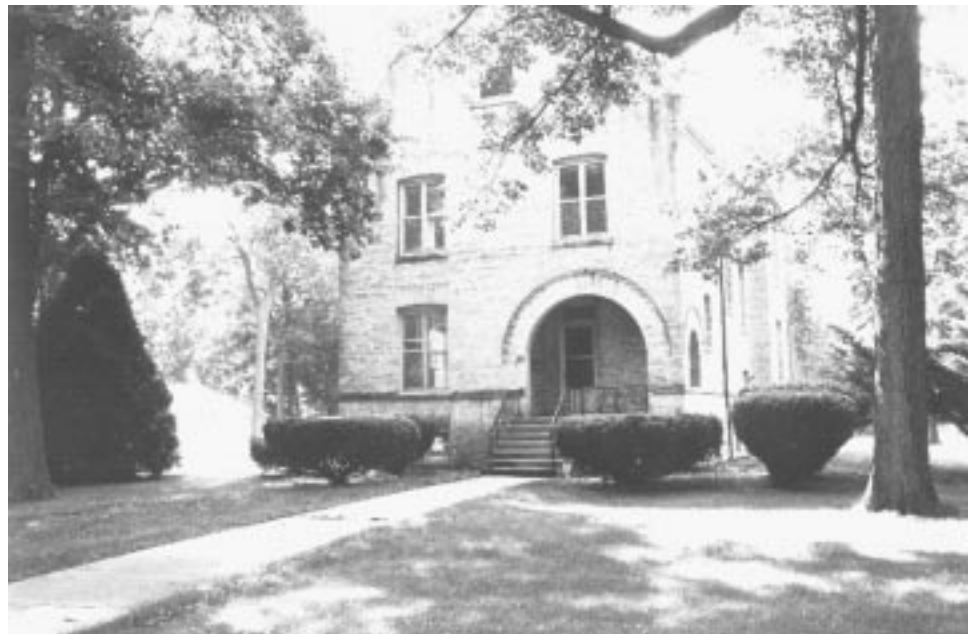
Closed Bases

The bases we selected for site inspection were maintained according to contracts or agreements with DOD. We visited six BRAC bases and compared the maintenance levels with the physical conditions at all six bases. We randomly selected buildings and toured the premises, finding that the majority of the buildings and grounds were being maintained according to the levels set forth in the cooperative agreement or maintenance contract. Additionally, civilian military and service personnel were in most cases ensuring that the tasks were completed. Most community officials were likewise satisfied with the bases' conditions. Figures 4 and 5 show the condition of the bases we visited.

Figure 4: Housing, Loring Air Force Base



Figure 5: Housing, Fort Sheridan



At each selected base, we inspected the premises for evidence of deterioration. In the majority of cases, the buildings were weather tight and secure. However, in one instance, we found substantial deterioration. At Brooklyn Naval Station, buildings were vandalized and looted. (See fig. 6.) External and internal plumbing, stoves and refrigerators, and essentially anything that was removable were taken. Naval personnel explained that the vandalism occurred between 1991 and 1994, when the Navy essentially provided no maintenance other than heat and electricity. According to the Commanding Officer, the Navy abandoned Brooklyn to minimize its expenses. However, a full-time security force now patrols the base 7 days a week, 24 hours a day.

Figure 6: Naval Hospital, Brooklyn Naval Station



Recommendations

We recommend that the Secretary of the Army begin the disposal determination process for (1) all excess real property not needed for replenishment requirements at the Kansas, Louisiana, and Sunflower Army ammunition plants and (2) all inactive plants retained only for their unique capabilities when those capabilities can be adequately provided by other sources. An integral part of this process will be identifying the costs involved in accomplishing the disposal of unneeded properties.

We also recommend that the service secretaries establish incentives for communities to speed up the transfer of closed bases. Specifically, after the initial maintenance period has elapsed, which varies by BRAC rounds, the services should establish criteria for a phased drawdown of maintenance until minimum maintenance levels are reached.

Scope and Methodology

Our review included the 10 inactive army ammunition plants and the 35 bases closed in the 1988 and 1991 BRAC rounds that had maintenance contracts or cooperative agreements in place.² We selected the 1988 and 1991 rounds because cost information was available. Cost information for the 1993 or 1995 rounds is generally not available, since operational closure in the majority of cases has not yet occurred. We performed work at the Pentagon, Army Material Command, Industrial Operations Command, Air Force Base Conversion Agency, and the Naval Facilities Engineering Command. We interviewed DOD officials, operating contractors, local reuse authorities, and tenants. We obtained and reviewed information provided by the services and visited the following selected sample of installations: Badger Army Ammunition Plant, Wisconsin; Indiana Army Ammunition Plant, Indiana; Mississippi Army Ammunition Plant, Mississippi; and Volunteer Army Ammunition Plant, Tennessee; Brooklyn Naval Shipyard, New York; Fort Sheridan, Illinois; Hunters Point Annex, California; Jefferson Proving Ground, Indiana; Loring Air Force Base, Maine; and Williams Air Force Base, Arizona. We chose these bases because they were located across the continental United States and in both urban and rural areas and were generally among the most costly.

To calculate the cost to maintain all 35 military installations in our sample, we collected and analyzed historical cost information. In the sample selected for site visits, we also reviewed contracts or cooperative agreements for maintenance and contractor cost data. The scope of our work did not include an in-depth review of the cost of the ARMS program.

We did not review or test the reliability of DOD's reported cost information discussed in this report as part of this assignment. However, DOD has acknowledged, and our financial statement audit work has consistently confirmed, significant problems with the comprehensiveness and accuracy of DOD's reported cost information. We present this cost information because it was the only relevant data readily available and because it was

²Forty-two major bases in total were closed during the 1988 and 1991 closure rounds. However, only 35 bases had either cooperative agreements or maintenance contracts in place.

not practical within the constraints of this review for us to identify and accumulate more reliable cost information from other sources. Consequently, the DOD-reported cost information presented in this report should be considered as an order of magnitude estimate of actual costs. As such, actual costs may be significantly greater or less than DOD's reported costs.

To determine if inactive facilities are still needed, we reviewed the Defense Planning Guidance, which is used to establish requirements for facilities. We reviewed documents to identify facilities or portions of facilities needed to satisfy the requirements. We interviewed agency officials to confirm the requirements. We reviewed the Federal Property and Administrative Services Act of 1949, as amended, and the Federal Property Management Regulation to determine what should be done with facilities that are no longer needed.

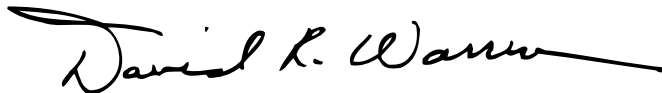
To determine the adequacy of contractor maintenance, we reviewed maintenance contracts or agreements and compared maintenance procedures with requirements. For the ammunition plants, we reviewed the procedures followed by IOC and contractor personnel for assessing the maintenance required to ensure the plants could be remobilized and meet production in the required time frames. We did not test to determine whether the levels of maintenance contained in the scope of work would allow a plant to meet remobilization time frames. We did randomly inspect facilities to ensure that maintenance procedures were followed and completed as stipulated in the contract or cooperative agreement. In addition, we interviewed Administrative Contracting Officers, Contracting Officer Representatives, and site managers to assess services' performance in ensuring that contract requirements are met. We performed our review in accordance with generally accepted government auditing standards between April and November 1996.

Agency Comments

In commenting on a draft of this report, DOD partially concurred with the report, partially concurred with the first recommendation, and concurred with the second recommendation. DOD said that the Army is currently assessing the ammunition industrial base and the assessment is to be completed and submitted to the Congress by June 1997. Therefore, at this time, DOD only agreed with the disposal of Longhorn Army Ammunition Plant and said that it would address the other plants in its June report to the Congress. DOD's comments are provided in appendix I.

We are sending copies of this report to the Secretaries of Defense, the Army, the Navy, and the Air Force; the Director, Office of Management and Budget; and other interested parties. We will also make copies available to others upon request.

Please contact me at (202) 512-8412 if you or your staff have any questions concerning this report. Major contributors to this report are listed in appendix III.

A handwritten signature in black ink that reads "David R. Warren". The signature is written in a cursive style with a long horizontal flourish extending to the right.

David R. Warren, Director
Defense Management Issues

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Abbreviations

ARMS	Armament Retooling and Manufacturing Support
BRAC	base realignment and closure
DOD	Department of Defense
IOC	Industrial Operations Command

Comments From the Department of Defense



ACQUISITION AND
TECHNOLOGY

OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON
WASHINGTON DC 20301-3000

30 JAN 1997

Mr. David R. Warren
Director, Defense Management Issues
National Security and International Affairs Division
United States General Accounting Office
Washington, DC 20548

Dear Mr. Warren:

This is the Department of Defense (DoD) response to your draft report: "MILITARY BASES: Cost To Maintain Inactive Ammunition Plants and Closed Bases Could Be Reduced," dated December 20, 1996, (GAO Code 709191/OSD case 1271).

The Draft Report makes two recommendations: 1) The Secretary of the Army dispose of all unneeded property at inactive Army ammunition plants; and 2) The Secretaries of the Military Departments establish incentives for communities to speed up the transfer of closed bases by establishing criteria for a phased drawdown of maintenance until minimum levels are reached.

The Department partially concurs with the draft report. A detailed response is enclosed.

Thank you for the opportunity to provide the Department's comments on the draft report.

Robert E. Bayer
Principal Assistant Deputy Under Secretary
(Industrial Affairs & Installations)

Enclosure



DoD RESPONSE TO
GAO DRAFT REPORT - DATED DECEMBER 20, 1996
(GAO CODE # 709191) OSD CASE 1271

**"MILITARY BASES: COST TO MAINTAIN INACTIVE AMMUNITION PLANTS AND
CLOSED BASES COULD BE REDUCED"**

RECOMMENDATION 1: The Secretary Of The Army Dispose Of All Unneeded Property At Inactive Army Ammunition Plants. The GAO Draft Report recommends that the Secretary of the Army begin the disposal determination process for (1) all excess real property not needed for replenishment requirements at the Kansas, Louisiana, and Sunflower Army Ammunition plants and (2) all inactive plants retained only for their unique capabilities when those capabilities can be adequately provided by other sources. (P. 12/GAO Draft Report)

Now p. 16.

DoD Response: Partially Concur. The Army is reviewing the GAO's recommendation to dispose of seven idle ammunition plants, in whole or in part. This Army review is part of an ongoing assessment to be completed and provided to Congress by June, 1997. At this time we agree only with disposal of Longhorn Army Ammunition Plant. We will address the GAO's recommendations for each of the others in our June report to Congress.

RECOMMENDATION A-2: The Secretaries Of The Military Departments Establish Incentives For Communities to Speed Up the Transfer of Closed Bases. The GAO Draft Report recommends that after the initial maintenance period has elapsed, which varies by BRAC round, the services should establish criteria for a phased drawdown of maintenance until minimum levels are reached. (P. 12/GAO Draft Report)

Now on p. 17.

DoD Response: Concur. The Base Reuse Implementation Manual, DoD 4165.66M, Chapter six, describes DoD's philosophy and goal for ongoing maintenance at installations selected for closure. The manual states that the Department "... recognizes the need to close bases in a manner that will preserve valuable assets and support rapid reuse and redevelopment." The general policy is to maintain initial levels of maintenance as long as reuse is being actively pursued. If reuse is not being actively pursued, the Military Departments could reduce maintenance levels to the minimum required for similar surplus government property.

Initial levels of maintenance may be sustained for the later of one year after operational closure of the base, or 180 days after the National Environmental Protection Act (NEPA) analysis and decision making process has been approved by the Secretary of the Military Department. For installations closed prior to the publication of the Department's Final Rule for Revitalizing Base Closure Communities where maintenance is still ongoing, maintenance of property not in reuse will normally extend to no longer than one year from the date of publication of the Rule.

Within this framework the Military Departments are pursuing various initiatives to reduce maintenance costs at closing installations. They have, for example, transferred properties

Appendix I
Comments From the Department of Defense

to communities via Economic Development Conveyances (EDCs) before mandated closure dates, thereby avoiding maintenance costs; reduced maintenance costs for closed facilities by negotiating minimum facility maintenance levels with Local Reuse Authorities (LRAs) as early as possible in the implementation process; and, established temporary leases and cooperative agreements with LRAs. The Navy has also implemented an aggressive plan of action to reduce caretaker budgets from 100% to 10% funding over a six year period beginning with the date of operational closure.

The Department will continue to support efforts by the Military Departments to further accelerate the transfer of closed military installations.

Protection and Maintenance Costs at Closed Bases

Dollars in millions

	Closure date	FY 1994	FY 1995	FY 1996	Total
Army Installation					
Army Material Technology Laboratory, Mass.	9/95	a	a	\$1.702	\$1.702
Fort Sheridan, Ill.	5/93	\$2.965	\$3.912	3.045	9.922
Fort Wingate, N.Mex.	1/93	0.639	0.222	0.334	1.195
Hamilton Army Airfield, Calif.	10/93	b	0.929	0.414	1.343
Jefferson Proving Ground, Ind.	9/95	0.054	0.910	0.333	1.297
Woodbridge Research Facility, Va.	9/94	a	0.400	0.232	0.632
Total Army		\$3.658	\$6.373	\$6.060	\$16.091
Navy Installation					
Brooklyn Naval Station, N.Y.	7/93	b	\$1.717	\$1.429	\$3.146
Davisville Naval Construction Battalion Center, R.I.	4/94	b	0.757	0.712	1.469
Hunters Point Annex, Calif.	4/94	\$0.809	4.059	3.456	8.324
Long Beach Naval Hospital, Calif.	3/94	b	0.332	0.229	0.561
Long Beach Naval Station, Calif.	10/94	b	0.485	1.116	1.601
Moffett Field Naval Air Station, Calif.	7/94	b	0.026	0.013	0.039
Philadelphia Naval Hospital, Pa.	9/93	b	1.598	0.373	1.971
Philadelphia Naval Station, Pa.	1/96	b	0.436	5.381	5.817
Puget Sound Naval Station (Sand Point), Wash.	9/95	b	1.229	1.892	3.121
Warminster Naval Air Warfare Center, Pa.	3/97	b	a	0.098	0.098
Total Navy		\$0.809	\$10.639	\$14.701	\$26.149
Air Force Installation					
Carswell Air Force Base, Tex.	9/93	\$7.540	\$4.117	\$4.354	\$16.011
Castle Air Force Base, Calif.	9/95	0.300	4.060	4.468	8.828
Chanute Air Force Base, Ill.	9/93	8.162	5.845	2.399	16.406
Eaker Air Force Base, Alaska	12/92	3.521	4.205	2.267	9.993
England Air Force Base, La.	12/92	4.156	8.009	0.854	13.019
George Air Force Base, Calif.	12/92	4.919	4.716	1.813	11.448
Grissom Air Force Base, Ind.	9/94	5.285	3.268	1.640	10.193
Loring Air Force Base, Maine	9/94	9.054	7.091	9.063	25.208
Lowry Air Force Base, Colo.	9/94	7.686	6.128	2.665	16.479
Mather Air Force Base, Calif.	9/93	11.559	6.888	4.864	23.311
Myrtle Beach Air Force Base, S.C.	3/93	2.725	3.139	2.715	8.579
Norton Air Force Base, Calif.	3/94	8.530	5.486	3.810	17.826
Pease Air Force Base, N.H.	3/91	8.350	7.581	1.246	17.177
Richards-Gebaur Air Reserve Station, Mich.	9/94	2.113	2.085	0.858	5.056

(continued)

**Appendix II
Protection and Maintenance Costs at Closed
Bases**

Dollars in millions

	Closure date	FY 1994	FY 1995	FY 1996	Total
Air Force Installation					
Rickenbacker Air Guard Base, Ohio	9/94	\$1.732	\$3.539	\$4.082	\$9.353
Williams Air Force Base, Ariz.	9/93	5.102	4.615	3.354	13.071
Wurtsmith Air Force Base, Mich.	6/93	11.440	9.619	5.237	26.296
Total Air Force		\$102.174	\$90.391	\$55.689	\$248.254
Total DOD		\$106.641	\$107.403	\$76.450	\$290.494

Notes:

1. The table excludes environmental remediation costs.
2. Figures at Army installations exclude onetime costs funded by the base closure and realignment process.
3. The table excludes Chase Naval Station and Salton Sea Test Base because the Navy did not provide figures due to minimal costs at these bases.

^aNot applicable because the services indicated that costs were not incurred.

^bData were not provided by the services.

Source: Army, Navy, Air Force

Major Contributors to This Report

**National Security and
International Affairs
Division, Washington,
D.C.**

James F. Wiggins
John J. Klotz

Dallas Field Office

Patricia J. Nichol

**San Francisco Field
Office**

Gary W. Ulrich
Leo G. Acosta
Julie M Hirshen
Jonathan Silverman

Related GAO Products

Military Bases: Update on the Status of Bases Closed in 1988, 1991, and 1993 (GAO/NSIAD-96-149, Aug. 6, 1996).

Military Bases: Closure and Realignment Savings Are Significant, but Not Easily Quantified (GAO/NSIAD-96-67, Apr. 8, 1996).

Closing Maintenance Depots: Savings, Workload, and Redistribution Issues (GAO/NSIAD 96-29, Mar. 4, 1996).

Military Bases: Case Studies on Selected Bases Closed in 1988 and 1991 (GAO/NSIAD-95-139, Aug. 15, 1995).

Military Bases: Challenges in Identifying and Implementing Closure Recommendations (GAO/T-NSIAD-95-107, Feb. 23, 1995).

Military Bases: Environmental Impact at Closing Installations (GAO/NSIAD-95-70, Feb. 23, 1995).

Military Bases: Reuse Plans for Selected Bases Closed in 1988 and 1991 (GAO/NSIAD-95-3, Nov. 4, 1994).

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