United States General Accounting Office

GAO

Report to the Chairman, Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, House of Representatives

September 1988

ARMY DISPOSAL

Construction Equipment Prematurely Disposed of in Europe

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GAO

United States
General Accounting Office
Washington, D.C. 20548

National Security and
International Affairs Division

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September 20, 1988

The Honorable John Dingell
Chairman, Subcommittee on Oversight
and Investigations
Committee on Energy and Commerce
House of Representatives

Dear Mr. Chairman:

The Army, having decided that its fleet of construction vehicles was becoming too costly to keep in repair, directed European units in 1985 to dispose of commercially available combat engineer construction vehicles. The Army purchased 850 replacement vehicles for Europe costing about $79 million. The purchase was part of a worldwide replacement program totaling about $470 million through fiscal year 1987.

As you requested, we reviewed the Army's replacement of construction vehicles in Europe. Our objective was to determine the basis for replacing these vehicles.

We agree with the Army's goal to replace worn-out vehicles with standardized ones, but question its decision to dispose of usable vehicles without showing that it was cost-effective to do so. Army officials stated that old construction vehicles were difficult to support and that high repair costs made replacing the entire fleet —regardless of condition—cost-effective. We found no analyses to support the Army's position.

In addition, users in Europe expressed concern that one of the three types of new vehicles, a scraper, does not dig antitank ditches as well as the one it replaced. Scrapers have a large, open bowl used to load, carry, and dump earth. Unit officials in Europe stated that the replacement scraper requires more bulldozer assistance for scraping than the previous scraper. They expressed particular concern about the new scraper's limitations in digging antitank ditches, a task they said was important at the beginning of hostilities.

During our review, we briefed Department of Defense (DOD) and Army representatives regarding our concerns. As a result, the DOD Inspector General began an investigation in October 1987 and completed it in November. Also, an Army Task Force began a review in January 1988 and completed it in February.

Neither organization found improprieties, and the Army Task Force report approved by the Vice Chief of Staff found the Army's actions to be "an unqualified success." However, as discussed on pages 7 and 8, neither organization's review resolved the questions we raised. The DOD investigation addressed the Army's disposal of the equipment, but did not analyze the Army's decision to replace all construction vehicles. The Army Task Force report stated that the replacement of the construction equipment was cost-effective and that the new equipment met its requirement. However, none of the supporting data provided to us showed whether it was cost-effective to replace usable vehicles, or that the new scrapers can perform all the tasks the older ones could.

Background

In a 1981 memorandum, the Commander, U.S. Army Forces Command, suggested to the Army Vice Chief of Staff that the Army replace construction vehicles that were becoming obsolete with standardized equipment. The affected vehicles included earth-moving equipment, such as scrapers, scoop loaders, and graders. He said that the mix of existing vehicles from various manufacturers had placed a strain on the Army's logistics, training, and readiness. Subsequent memoranda showed that the Vice Chief of Staff and other Army headquarters officials agreed with the suggestion. Accordingly, the U.S. Army Materiel Development and Readiness Command planned the replacement of construction vehicles. In 1983, the Army Tank and Automotive Command awarded contracts that totaled about $470 million to purchase 4,789 vehicles during fiscal years 1983 through 1987.

Because existing vehicles had been held by many smaller units, we did not determine the exact number replaced in Europe. However, an Army official's estimate indicated that about 800 vehicles were to be disposed of in Europe under the replacement program. His estimate was based on a September 1985 inventory report.

Usable Vehicles Sent to Disposal

According to Army officials, 15- to 18-year-old vehicles were becoming increasingly difficult to support because parts were no longer readily available. The officials said that replacement of the entire fleet was cost-effective because the repair costs were high, but we found no cost analysis to support their statement. In addition, limited available data indicated that repair costs for some items were reasonable in relation to the cost of equipment. Repair estimates to bring seven vehicles at the Kaiserslautern disposal site to usable condition ranged from $230 to $13,000 for vehicles whose replacement costs ranged from $74,000 to

$148,000. Repair estimates for the remaining vehicles at this site had not been prepared because the Army had directed that vehicles be replaced regardless of condition.

We found no evidence of any cost analysis which evaluated a phased replacement where unrepairable vehicles or vehicles with excessive repair estimates would be replaced until the fleet replacement was complete. Nor did we find evidence of an analysis of the cost to support an inventory consisting of a mix of makes and models to the cost to support a single family of construction equipment. Although we did not assess the vehicles' military capability, available evidence indicated that many of the replaced vehicles in Europe were operable.

The Army originally intended to phase out existing equipment but did not do so. The 1982 revised Required Operational Capability document (a document stating the operating requirements for the vehicles to be acquired) for the new scraper stated that the Army planned to retain the existing equipment until it exhausted existing stocks. Instead, in 1985 the Army directed its units in Europe to dispose of scrapers and other vehicles regardless of vehicle condition. The Army made that decision after being told by the Army's European material management center that it had "no requirements for these assets in theater, and storage space is critically short."

Personnel at units with construction vehicles indicated that some replaced vehicles were usable, but others were not. Army personnel at two of the three brigades in Germany told us that the vehicles they turned in for disposal were in usable condition. However, personnel at the third brigade said its vehicles were in poor condition because of heavy use and discontinued maintenance. They said they discontinued maintenance because the vehicles were to be turned in for disposal.

Our observations and the data we obtained indicated that over 240 of the approximately 800 vehicles to be disposed of in Europe were operable. These included 35 vehicles we examined, 160 vehicles selected for acquisition by the General Services Administration, and 47 vehicles selected for acquisition by the government of Portugal. We did not obtain information on the condition of about 560 other vehicles.

During April through August 1987, we examined 35 of 320 vehicles that remained with the Army or at disposal sites in Europe and found that

all seemed to be in usable condition. We saw three vehicles in prepositioned storage that appeared to have never been used. An Army supply representative concurred with our observation.

The General Services Administration arranged for delivery of 160 vehicles to 21 state government agencies in the United States. From vehicles available at the time, an agency representative selected those that could be driven and needed few, if any, repairs.[1] The state agencies paid shipping, administrative, and repair costs. Representatives from eight state organizations told us that the receiving agencies use the equipment mainly for building and repairing roads. They also said that

- most of the vehicles needed only a battery charge to be driven away and estimated that shipping and repair costs averaged less than $9,000 per unit,
- users had no difficulty finding repair parts and expected no such problems in the future, and
- minimum estimates of vehicle life expectancy ranged from 3 to 10 years.

The government of Portugal selected 47 vehicles from disposal sites but had not taken possession of the vehicles at the time of our field work. A disposal office official told us that this purchase was to be under the foreign military sales program, and that Portugal would pay about $11,500, or about $240 per vehicle, in handling charges.

New Scrapers May Not Fully Perform Required Tasks

As part of its procurement, the Army replaced a four-wheel drive tractor-towed scraper with a two-wheel drive, single-engine, self-propelled model. The Army purchased 158 of the new vehicles for Europe for $23.3 million, an average of about $148,000 per vehicle.

In documents justifying buying the new scraper, the Army stated it considered the replacement scraper to be more mobile and versatile. The Army considered the replacement scraper cost-effective because its added mobility and versatility would allow it to perform more operations per hour. Although the Army stated that the existing vehicles required less bulldozer assistance and were more economical under tough job conditions and shorter hauls, it believed that the replacement scraper would be as capable as the existing scraper.

[1]The General Services Administration selected, but did not obtain, some additional vehicles because of the DOD freeze on disposals. The agency may obtain more vehicles as DOD releases them.

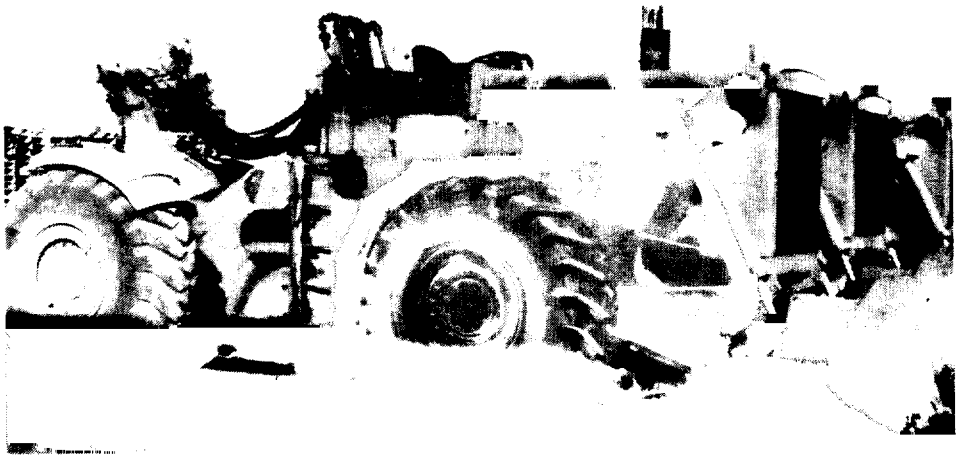
The wartime missions for two of the three Army brigades that we visited included digging antitank ditches and building and repairing airfields and roads. Unit officials and equipment operators confirmed that the replacement scraper requires more bulldozer assistance for scraping than the old ones did. Instead of using the new scraper, one of the brigades now plans to use its bulldozers for digging antitank ditches because of the limited capability of the new scraper for performing this function.

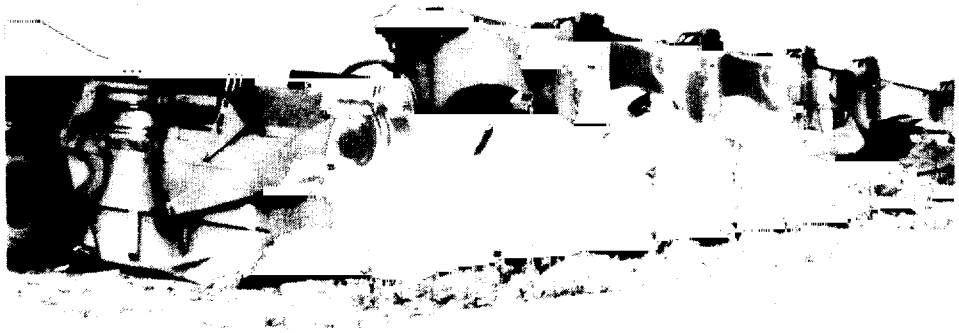
U.S. Army, Europe, officials expressed the view that any differences in vehicle capability did not degrade wartime readiness. In an October 1, 1987, memorandum to Army headquarters, the command stated that its units' reports indicated that the new scraper "works fine." This assessment conflicts with some unit documents we obtained. For example, commanders of engineer brigades in Europe forwarded comments such as "significant problems were identified with this (scraper) . . ." and ". . . we are currently rethinking the composition of our tank ditch task force teams in light of (the new scraper's) diminished capabilities."

The Army Task Force that investigated those issues stated that "any criticism of the new (equipment) appeared to be based on experiences from personnel who lacked the fundamental education and training in actual construction practices." Although training may alleviate some perceived problems, the concerns raised in Europe were not isolated cases or individual complaints. Problems surfaced in exercise results, in field command correspondence, and in 10 of 12 units' comments to the Engineering School. The concerns about the capability of the new scrapers to perform ditch-digging tasks continued to be raised after the Army Engineering School had concluded that more training of field personnel would resolve the problems. The personnel expressing concerns included a former instructor at the engineering school on both the existing and new scrapers.

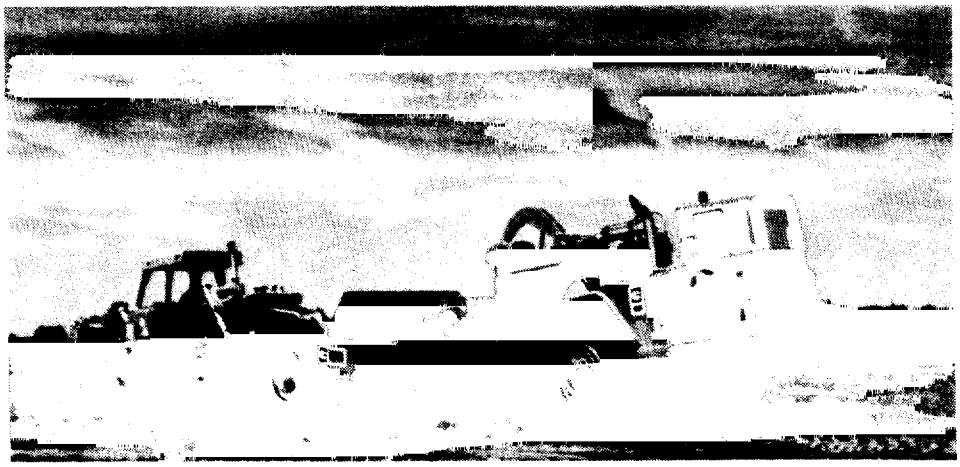
Two future systems may help alleviate field unit concerns about reduced antitank capability. Army officials told us that the Army will field an armored bulldozer in Europe in 1989 to replace some existing bulldozers. Also, the Army is developing a new system to create antitank ditches with explosives. In its October 1987 memorandum, the U.S. Army, Europe, stated that these plans will increase antitank ditch digging capabilities. According to Army officials, the armored bulldozer has not yet been fully tested and the explosives system is still being developed. Thus, the extent to which the systems will address the concerns is

Figure 1: Scrapers Used by the Army in Europe





Replaced scraper and four-wheel drive tractor in two-piece configuration.



Replacement two-wheel drive scraper and assisting bulldozer.

uncertain. The new scraper can be used regardless of these plans, because it has other missions such as repairing airfields and roads.

DOD and Army Actions During Our Review

During our review, a limited examination by the DOD Inspector General and a broader review by an Army Task Force were made of the replacement program.

In September 1987, we briefed DOD and Army officials on our concerns about the premature replacement of vehicles. On October 7, 1987, the DOD Inspector General's office notified DOD and the Army that it planned an investigation. In December the Inspector General's office notified the Army and the Defense Logistics Agency that it found no improprieties in the disposal of equipment.

DOD Inspector General representatives told us that they did not prepare a report of their investigation. They said that their work was intended to focus on whether procedures were followed in disposing of equipment and did not include an analysis of the Army decision to replace all construction vehicles.

On January 6, 1988, the Director of the Army Staff established a task force to review issues involving construction vehicles. On February 18, 1988, a General Officer Oversight Committee approved the task force report, which concluded that "the Army Leadership made an excellent, cost effective and well informed decision that has been effectively executed." The report noted that "the old engineer construction equipment was of multiple makes/models, overage, outmoded, expensive to maintain, severely impacted readiness and frustrated mission effectiveness." The report included the recommendation "that in light of the fact that the (commercial construction equipment) Standardization Program has been an unqualified success, single source, multi-year fleet wide non-developmental item procurement should be used for other items as appropriate."

The Army Task Force report does not provide support for its positions beyond the Army documents, such as the General Officer correspondence, that we examined during our review. These documents assert, but do not demonstrate, that all or most construction vehicles were outmoded, expensive to maintain, or impacted readiness.

At a February 26, 1988, meeting we requested the Army to provide any documents to support its decision to replace all construction vehicles

worldwide, regardless of condition, and their position that the new scraper performs as well as the old one. The Army officials said that no documentation in addition to that provided during our review was available.

Conclusions and Recommendations

The Army had no documented analysis to support its decision to replace all vehicles. As evidenced by its 1982 requirements document, the Army had planned to retain the existing equipment until it exhausted existing stocks. Without analyses to determine whether it was cost-effective, the Army decided to replace all construction vehicles, regardless of their condition.

In view of the size of this program, we believe that the Army should have conducted a more comprehensive analysis of the costs and benefits of buying new vehicles to replace usable and supportable vehicles.

The ability to cancel orders for new equipment no longer exists, because purchases of construction vehicles for Europe are now complete. Although the Army believes the acquisition has been an unqualified success, it (1) may have bought some vehicles sooner than needed, and (2) has not yet resolved field units' concerns about the new scraper's capability to meet wartime needs. We agree that training may alleviate some of the perceived problems with the new scraper, but believe that such options as using bulldozers to perform ditch digging, as suggested by one field unit, may also be necessary.

We recommend that the Secretary of Defense direct the Secretary of the Army to

- ensure that, for any future Army fleet replacement actions, the Army has a documented analysis of the cost-effectiveness of retaining existing equipment for the remainder of its useful life, and
- reassess the problems identified by field commands in Europe to determine if those problems require changes beyond just retraining field personnel.

Objectives, Scope, and Methodology

The Chairman, Subcommittee on Oversight and Investigations, House Committee on Energy and Commerce, requested that we determine the basis for DOD's disposal of equipment in Europe. Of the items we found, we selected Army commercial construction vehicles for detailed examination because some items at a disposal site appeared usable.

Our review of the Army's disposal of commercial construction vehicles in Europe was conducted at DOD and Army headquarters, selected field locations, and the General Services Administration. At headquarters we reviewed policies, justifications, and worldwide construction vehicle data. We also interviewed manufacturer representatives and officials of eight state government surplus property agencies. In Europe, we examined documents and interviewed officials, and examined construction vehicles. We visited the following locations:

- Defense Reutilization and Marketing Region Europe, Wiesbaden, West Germany, and its sites at Kaiserslautern, Seckenheim, and Germersheim, West Germany, and at Chievres, Belgium;
- U.S. Army, Europe, Deputy Chiefs of Staff for Logistics and for Engineering;
- 200th Theater Army Materiel Management Center;
- 18th, 130th, and 7th Army Engineering Brigades; and
- storage sites for prepositioned materiel at Pirmasens, West Germany, and Grobbendonk, Belgium.

We selected three brigades because they were the largest individual units being furnished construction equipment. We examined vehicles at the Grobbendonk, Belgium, prepositioned storage site because it stored vehicles transferred for disposal; and at the Defense Marketing and Reutilization sites at Kaiserslautern and Seckenheim, West Germany.

We performed our work from February 1987 to August 1987 in Europe, with follow-up work in the United States from September 1987 to February 1988. Our work was conducted in accordance with generally accepted government auditing standards. As you requested, we did not obtain official DOD comments on this report.

Unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from its date of issue. At that time, we will send copies of the report to the Chairmen, Senate and House Committees on Armed Services, and Subcommittees on Defense,

Senate and House Committees on Appropriations; the Secretaries of Defense and the Army; and other interested parties upon request.

Sincerely yours,

Frank C. Conahan
Assistant Comptroller General

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