The Honorable Carl Levin
Ranking Minority Member, Subcommittee
    on Oversight of Government Management
Committee on Governmental Affairs
United States Senate

Dear Senator Levin:

Subject: Allegations of an Inappropriate Army Sole-Source Award for Commercial Construction Equipment (PLRD-82-13)

On April 24, 1981, you asked us to assess the Department of the Army's decision to buy commercial construction equipment from Caterpillar Tractor Company on a sole-source basis.

The Army's justification for this sole-source procurement is based on Defense Acquisition Regulation (DAR) 3-210-2(i) which allows competition to be waived when "supplies or service can be obtained from only one person or firm (sole source of supply)." However, we found that several other suppliers could have furnished the equipment and that the Army had ample opportunities to solicit this procurement competitively. By using a "fleet-buy" concept (restricting consideration only to those firms that could manufacture all of the desired pieces of equipment), the Army eliminated several potential suppliers.

Also, because the award had not yet been made to Caterpillar at the time of our review, we discussed our findings with U.S. Army Tank-Automotive Command (TACOM) officials and suggested they resolicit the procurement on a competitive basis. They declined to do so because the equipment is urgently needed for the Army's rapid deployment force and because, in their view, a delay of up to a year for a resolicitation, negotiation, and award would seriously jeopardize the Army's mission.

OBJECTIVE, SCOPE, AND METHODOLOGY

Our objective was to assess the appropriateness of and justification for the Army's decision to buy construction equipment from Caterpillar Tractor Company on a sole-source basis. To accomplish our objective, we reviewed (1) Army procurement regulations and policy concerning sole-source procurements, (2) the proposed contract and support files at TACOM and the
industry correspondence files maintained by the Military Equipment Research and Development Command (MERADCOM) at Fort Belvoir, Virginia, and (3) cost data, parts commonality information, and industry worldwide support capabilities.
In addition, we interviewed TACOM, MERADCOM, and construction equipment industry officials.

BACKGROUND

The XVIII Airborne Corps, consisting of the 82d and 101st Airborne Divisions, will use the commercial construction equipment. Because it is the only large airborne organization within the Army, the Corps is the Army's primary rapid deployment force and, as such, must quickly respond to aggression directed against the United States.

The Corps must be self sufficient in the field because it could be conducting land operations in undeveloped areas or in areas where quick defensive construction is needed. These types of construction would include building airstrips and roads so that other ground combat units could be brought quickly into the troubled area. Other defensive earth-moving construction would include building artillery positions and antitank ditches. The nature of these missions requires that the earth-moving equipment be both air-mobile and air-droppable.

The proposed procurement is designed to replace outdated earth-moving equipment within the XVIII Airborne Corps. The present equipment, which the Army bought between 1962 and 1969, had an expected machine life of from 8 to 10 years. The Army stated that because of the age of this equipment, maintenance is hampered due to the shortage of spare parts, and thus, the rapid deployment mission is or could be adversely affected.

The types of construction equipment required to replace the existing inventory and to improve the mission capabilities of the XVIII Corps are as follows:

--T-3 and T-5 size bulldozer tractors - level ground, spread dirt, and dig out ditches.

--Scoop loader - loads dump trucks and stockpiles dirt.

--Scraper - scrapes ground surfaces and levels roadbeds.

--Road grader - maintains roads and spreads and levels fill dirt over uneven terrain.
--Water distributor - hauls and distributes water over construction sites.

Because Army medium lift helicopters must transport this equipment, some of it will require sectionalization. Sectionalization is a process by which a machine can be broken into two or more major components, each of which is within the weight limitations for helicopter airlift.

In addition to helicopter airlift, all the equipment must conform to both weight and dimensional restrictions for air-transport or air-drop from the C-130 and C-141 Air Force cargo aircraft.

The specific number of equipment to be procured follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>No. of nonsectionalized equipment</th>
<th>No. of sectionalized equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-3 bulldozer tractor</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>T-5 bulldozer tractor</td>
<td>26</td>
<td>8</td>
</tr>
<tr>
<td>Scoop loader</td>
<td>20</td>
<td>6</td>
</tr>
<tr>
<td>Scraper</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Road grader</td>
<td>20</td>
<td>11</td>
</tr>
<tr>
<td>Water distributor</td>
<td>9</td>
<td>3</td>
</tr>
</tbody>
</table>

Army officials told us they intend to buy loaders, graders, and the bulldozer tractors with fiscal year 1981 funds and the scrapers and water distributors with fiscal year 1982 funds. Also, the Army intends to exercise a future contract option to buy 53 additional items to meet war reserves and maintenance float requirements.

**FLEET-BUY CONCEPT**

To meet its rapid deployment mission, the XVIII Airborne Corps requested that the equipment be procured under a fleet-buy concept. Under this concept, it was envisioned that all of the desired pieces of equipment would be obtained from one manufacturer rather than from various manufacturers as was done in the past. The Corps believed that its mission capability would be increased if only one supplier was responsible for parts supply, training, and equipment maintenance. The following factors were among those cited as advantages of the fleet concept:
--A high degree of parts commonality provides for a greater number of interchangeable spare parts, thereby reducing the requirements for parts in stock.

--A single supply source enhances the mission capability of the military unit, allowing uniform maintenance procedures and a common supply source.

--A family of vehicles with common parts reduces training time for operators and mechanics as well as simplifying maintenance procedures.

Although TACOM procurement officials initially expressed some concern over the possible impropriety of purchasing the entire fleet from a single source, they decided to support the fleet-buy concept. In reaching this decision, they considered a precedent set by the U.S. Air Force Bare Base Program of 1970-73. Under that program, the Air Force, using the fleet-buy concept, successfully bought similar equipment from a single supplier following competitive bidding procedures.

SOLE-SOURCE PROCUREMENT DECISION NOT JUSTIFIED

The Army could not show us evidence from its records or industry analyses to support its decision to purchase construction equipment on a sole-source basis from Caterpillar Tractor Company.

In May 1980, the Army surveyed the construction equipment industry to determine the availability of the types of equipment needed and the extent of competition that could be obtained under its fleet-buy concept. The industry surveys prepared by the Army indicated three companies—Caterpillar, John Deere and Company, and International Harvester Company—could provide five of the six pieces of equipment. Two other companies—Clark Equipment Company and J.I. Case—could produce three pieces of equipment. Further, several other construction equipment manufacturers could produce one or two pieces of equipment. Although these Army surveys are not meant to be all-inclusive as to industry’s capabilities and potential suppliers, they did demonstrate competition could be obtained.

After preparing industry surveys and equipment specifications and considering industry correspondence and comments regarding these equipment specifications, the Army decided to buy the equipment sole source from Caterpillar. This decision was based on the Army’s judgment that Caterpillar was the only company expressing interest in the fleet-buy concept, and other equipment manufacturers either did not produce the necessary equipment or could not meet equipment specifications because of the increased engineering, redesign, and costs involved.
Mainly, this decision was directly attributable to the restrictive interpretation of the fleet-buy concept adopted by the Army for this procurement. Unlike the fleet-buy definition used by the Air Force in its precedent setting Bare Base Program, the Army’s definition required that a successful bidder must have manufactured or marketed all of the vehicles in the fleet. In contrast, under the Air Force’s definition, bidders were free to supply equipment manufactured by other companies, as well as their own.

Even under the Army’s definition, TACOM found it necessary to make an exception in the case of the water distributor because none of the potential sources of supply surveyed for the fleet buy manufactured this piece of equipment. This exception, as well as TACOM’s interpretation of the fleet-buy concept and its intention to buy the remaining equipment on a sole-source basis from Caterpillar, was clearly stated in its Request For Proposal, dated February 3, 1981:

"We are proposing to negotiate on a sole source basis for the entire fleet with Caterpillar Tractor Company * * *. 'Fleet Approach' requires that the offeror submit a proposal for the entire fleet and have manufactured or marketed all of the vehicles in the fleet except the water distributor * * *.*"

In response to the Request For Proposal, TACOM received one proposal from Caterpillar. Although none of the other manufacturers responded, several of them questioned the Army’s justification for its sole-source decision.

In reply to these inquiries, the Army reiterated the desirable benefits of obtaining the entire fleet of vehicles from one source. While we do not dispute the benefits to be derived from obtaining the equipment from one source under the fleet-buy concept, we did not find sufficient justification supporting the sole-source selection of Caterpillar for the fleet buy.

Our review of Army files disclosed no significant advantages in limiting this procurement to Caterpillar. Parts commonality, one of the claimed benefits for a fleet buy, did not appear to be any greater for Caterpillar equipment than for others. For example, our analysis and comparison of available file data disclosed the commonality of Caterpillar equipment to be no greater than for equipment manufactured by John Deere and Company. Moreover, we found that the Army made no attempt to determine the relative commonality of the equipment manufactured by the potential suppliers.
Concerning other benefits of the fleet concept, that is, common supply source, uniform maintenance, and training procedures, it also appears that the other potential suppliers could have satisfied the Army's needs. For example, we found that all of the other major manufacturers (Case, International Harvester, Deere, and Clark), as well as Caterpillar, possess worldwide parts distribution and most already supply spare parts for Army equipment throughout the world. Again, as in the parts commonality example, we found that the Army had not analyzed the relative capabilities of the potential suppliers.

Finally, we uncovered no evidence which supports the Army's claim that other potential suppliers expressed an unwillingness to bid on this procurement. Our review of Army files disclosed that most of the correspondence from these companies related to equipment specifications. Although some industry responses state problems in meeting various specification requirements because of the increased engineering, redesign, and costs involved, these letters and correspondence do not support the Army's contention that only Caterpillar expressed a willingness to supply this equipment.

Rather, we believe that these files substantiate the problems which would be experienced by the entire construction equipment industry in complying with the specification requiring that the equipment be air-transportable and air-droppable. We believe this is evidenced by the fact Caterpillar is having difficulty meeting air transportability requirements for the scraper and only until recently did Caterpillar indicate that it could comply with the specifications for the grader, loader, and two tractors. The specification problems Caterpillar experienced and is currently trying to solve were specifically cited in Army-industry correspondence files.

In our view, competition would be encouraged if the Army were to revise its definition of the fleet-buy concept to permit a given company to bid under the concept without requiring that the prospective bidder manufacture each piece of equipment. Therefore, companies which manufacture some but not all of the equipment would have an opportunity to bid, as long as they were able and willing to provide worldwide support for all the equipment.

If this were to occur, the fleet-buy concept would feature a family of vehicles, increased competition, a possibly lower unit price, and viable options to those manufacturers otherwise restricted from bidding, without abandoning the concept and all its merits applicable to rapid deployment.
The Army has not yet awarded a contract to Caterpillar, since negotiations continue regarding price, delivery dates, and specification requirements. Current estimates are that the contract will be awarded in October 1981. The current value of the proposed contract is $22 million, an almost 50-percent increase from the original Army estimate of $14 million. In view of the pending award, we discussed our findings with TACOM officials on September 22, 1981, and recommended they consider terminating the ongoing negotiations with Caterpillar and resoliciting the procurement on a competitive basis.

In reply, TACOM officials informed us that it is necessary to proceed with the contract award because the XVIII Airborne Corps is in dire need of the equipment and its rapid deployment mission would be seriously jeopardized as a result of any further delay in obtaining the needed equipment. TACOM officials estimated that resoliciting for competitive proposals, negotiating with a contractor, and awarding a contract would result in an additional 1-year delay in supplying equipment to the Corps.

CONCLUSIONS

The Army's decision to negotiate a sole-source contract with Caterpillar Tractor Company is not adequately justified and lacks sufficient support documenting Caterpillar as the only capable and willing manufacturer and/or supplier of the construction equipment in question. By restricting consideration only to those firms that could manufacture all the equipment to be purchased, the Army eliminated several potential suppliers who do not manufacture all the pieces of equipment or could not meet vehicle specifications with their own equipment. In the future, this procurement, as well as others of a similar nature, should be procured competitively.

As directed by your Office, we did not obtain written comments from Defense or Army officials. However, we did discuss the results of our review with Army officials and considered their comments in preparing this report.
As arranged with your Office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of the report. Then, we will send copies to interested parties and make copies available to others upon request.

Sincerely yours,

Donald J. Horan
Director