



UNITED STATES GENERAL ACCOUNTING OFFICE  
WASHINGTON, D.C. 20548

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NATIONAL SECURITY AND  
INTERNATIONAL AFFAIRS DIVISION

B-214401

MARCH 5, 1984

The Honorable Joseph P. Addabbo  
Chairman, Subcommittee on Defense  
Committee on Appropriations  
House of Representatives

Dear Mr. Chairman:

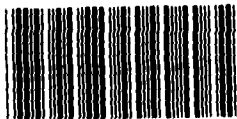
Subject: GAO Examination of Alleged Waste and  
Mismanagement in the Army's Test, Measurement,  
and Diagnostic Equipment Support Group  
(GAO/NSIAD-84-67)

As you requested, we examined the validity of the allegations regarding waste and mismanagement in the Army's Test, Measurement, and Diagnostic Equipment (TMDE) Support Group made by an employee of that group in a letter to you, dated August 25, 1983. In summary, we believe the allegations have merit. The Army agrees and is trying to resolve them. A description of the allegations and our analysis is presented in enclosure I.

As agreed with your office, we generally limited our examination to assessing the validity of the allegations. Our work was conducted primarily at the TMDE Support Group in Huntsville, Alabama, and the U.S. Army Materiel Development and Readiness Command in Alexandria, Virginia. We relied heavily on Army statements and documentation with limited independent verifications and, therefore, this examination was not performed in accordance with generally accepted government audit standards. Also, as agreed, we did not obtain formal agency comments.

The TMDE Support Group and Development and Readiness Command representatives recognize the merits of the allegations and have agreed to

--defer fiscal year 1985 and 1986 funding requests for Calibration Standards Sets totaling \$7.1 and \$8.1 million, respectively, and to cancel requirements for ancillary equipment totaling about \$1.7 million;



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- reassess the need for the National Guard Calibration Company, additional calibration equipment, and three European secondary reference laboratories;
- consolidate the Tobyhanna and Letterkenny laboratories;
- purge the inventory of the automotive test equipment being replaced by the Simplified Test Equipment/Internal Combustion Engines system; and
- consider establishing calibration requirements based on equipment use.

Additionally, the TMDE Support Group canceled the automatic data processing and calibration equipment procurements requested by its overseas activities and the Yuma Proving Ground. These procurements would have cost about \$434,000.

The actions taken or planned appear appropriate. Accordingly, we believe no further review is warranted at this time. However, ultimate resolution of several allegations will depend on the results of the Army's TMDE "optimization" study, expected to be completed in October 1984. We will monitor the progress of this study and follow up on other actions to resolve the allegations.

We are sending copies of this report to the Secretaries of Defense and Army and other interested parties.

Sincerely yours,



Frank C. Conahan  
Director

Enclosure

GAO ANALYSIS OF ALLEGATIONSALLEGATION 1:ACTIVATION OF ARMY NATIONAL GUARD  
CALIBRATION COMPANY

The Army has not adequately justified the need for and planned equipping of the Army National Guard Calibration Company.

Basis for allegation

This allegation was based primarily on a doctrinal change which could double the use of existing equipment during wartime. With "double-shifting," present mobilization requirements could be met without the National Guard Company. And, as stated in the allegation, the Army's calibration workload can be reduced significantly by removing unneeded TMDE items and by calibrating items only on the basis of how they are used. (See pp. 5 and 6 for related allegations.)

Additionally, the Army's decision to establish and equip the National Guard Company did not consider (1) using calibration equipment in 58 National Guard maintenance shops and 63 civilian calibration teams, some of which may be available for mobilization requirements, and (2) the impact of the TMDE modernization program which could significantly reduce the calibration workload. Moreover, the Army has an extensive ongoing effort to optimize its calibration and repair capabilities which could require different calibration equipment and operational concepts.

GAO observations and Army actions  
to resolve allegation

Questions about the need for the National Guard Company and additional calibration equipment should be answered before additional equipment is bought. The Army agrees and has postponed all planned procurement, pending the results of its "optimization" study expected to be completed in October 1984. Specifically, the Army will defer funding for 23 Calibration Standards Sets requested in fiscal years 1985 and 1986, totaling \$7.1 million and \$8.1 million, respectively. The Army also reevaluated its needs for related ancillary equipment (generators, air conditioners, and expansible vans) and canceled requirements costing about \$1.7 million.

ALLEGATION 2:OVERPROCUREMENT OF MICROWAVE  
CALIBRATION STANDARDS SETS

Procurement of additional microwave calibration sets is not justified based on the current microwave workload.

Basis for allegation

This allegation is based on an analysis of prior Army studies and a comparison of the current microwave calibration workload and equipment.

GAO observations and Army actions  
to resolve allegation

Our limited analysis of the studies and the microwave workload, equipment, etc., indicated that the allegation is valid. Its merits are further substantiated by Army actions to defer all microwave equipment procurement until requirements are revalidated. Funding for microwave equipment was a part of the 23 Calibration Standards Sets discussed above.

ALLEGATION 3:EXCESS SECONDARY REFERENCE LABORATORIES

The requirement for three European secondary reference laboratories needs to be reassessed and the Tobyhanna and Letterkenny laboratories need to be consolidated.

Basis for allegation

This allegation was based on an analysis of various Army studies and a cursory review of laboratory workloads.

GAO observations and Army actions  
to resolve allegation

While some of the studies are old, they generally support the allegation. For example, a 1975 study of the European facilities recommended closing the Pirmasens laboratory and transferring its workload to the Schwanheim and Augsburg laboratories. Similarly, a 1983 study recommended consolidating the Letterkenny and Tobyhanna laboratories. In fact, the Army has studied the Letterkenny/Tobyhanna issue at least five times and several reports recommended consolidation.

Our limited analysis of the present workload and operations also indicated that the allegation has merit. The present workload in Europe may not justify three laboratories. For example, with similar staffing, Schwanheim's annual calibrations and repairs are about twice those of Pirmasens and Ausburg. Of course, such things as quality and transportation costs would also have to be considered. Similarly, considering the proximity of Tobyhanna and Letterkenny, merging them could reduce some overhead costs without degrading the support for the mobile teams.

The Army agreed to revalidate the need for three laboratories in Europe and to consolidate the Letterkenny and Tobyhanna laboratories. The Army also agreed to "closely monitor and control all calibration equipment procurements and manpower "actions" for the laboratories being considered for consolidation. These issues will be addressed in the Army's TMDE "optimization" study expected to be completed in the October 1984 time frame.

#### ALLEGATION 4:

##### REDUCTION OF TMDE WORKLOAD-STE/ICE FIELDING

The Army can reduce the calibration workload by ". . . purging the inventory . . ." of the automotive test equipment being replaced by the Simplified Test Equipment/Internal Combustion Engines (STE/ICE).

##### BASIS FOR ALLEGATION

This allegation was based on the Army's failure to implement the STE/ICE basis-of-issue plan which specifies that, upon fielding STE/ICE, the Army will take ". . . appropriate action to remove replaced equipment . . ." It was alleged that, had the Army done this, 57,000 calibration staff-hours could have been saved from September 1981 through September 1983 and that further losses continue because of Army inaction.

##### GAO observations and Army actions to resolve allegation

Much disagreement existed concerning which items would be replaced by STE/ICE. Nonetheless, savings could have been realized had the Army removed them on a timely basis. Precise reduction in workload and staff savings are difficult to determine. However, our limited analysis indicated that removing the obsolete items could reduce the workload by about 49,000 calibration staff-hours and could save \$550,000 annually.

The Army has now identified the items that will be replaced and is taking action to direct users to return them. Specifically, supply catalogs are being revised to include "... upon receipt of STE/ICE, item(s) will be turned in through normal supply channels."

ALLEGATION 5:

OVERCALIBRATION OF TEST EQUIPMENT

The Army is overcalibrating some test equipment by following manufacturer specifications rather than considering how the items are actually used.

Basis for allegation

This allegation was based on the Army's failure to establish calibration requirements based on how the equipment is used rather than relying on manufacturer specifications. About 300 items were identified in the allegation as being overcalibrated. Letters were prepared by the TMDE Support Group soliciting comments from item managers and users concerning calibration requirements, but Development and Readiness Command representatives decided not to mail them.

GAO observations and Army actions to resolve allegation

The merits of this allegation were substantiated by subsequent Army actions and our discussions with test equipment users. For example, shortly after we began our review, the Army reversed its position and is now soliciting comments from item managers and users. Additionally, test equipment users at Fort Campbell, Kentucky, acknowledged that some test equipment was overcalibrated considering its use. Moreover, we identified several pieces of test equipment that were never used. Yet, cyclical calibration of this equipment continues.

Precise reductions of workload and savings resulting from the suggested calibration changes are difficult to project. However, our limited analysis of 189 items indicates that implementing the suggestions in the allegation could reduce the calibration workload by 89,000 staff-hours on these items and save about \$990,000 annually.

Calibrating test equipment based on actual use could reduce the calibration workload and provide substantial recurring benefits. But decreased flexibility and potentially increased administrative costs must be considered when determining the feasibility of implementing such a concept.

Army's actions to resolve this allegation include (1) mailing the letters addressing overcalibration in December 1983, (2) reviewing and "standardizing" its Table of Organization and Equipment, which should identify unnecessary test equipment, and (3) agreeing to study the feasibility of establishing calibration requirements based on equipment use.

#### ALLEGATION 6:

##### PROCUREMENT OF ADP EQUIPMENT

The automatic data processing (ADP) equipment requested by and approved for the overseas TMDE activities is not justified.

##### Basis for allegation

This allegation was based on a disagreement with the ADP procurement plans. It was alleged that in the development and approval of the ADP Mission Element Need Statement justifying the equipment costing about \$117,000, "the case made to support the need is a patent misrepresentation of facts" particularly concerning the need for frequent and in-depth briefings with major commanders and staff.

##### GAO observations and Army actions to resolve allegation

This allegation has been resolved. The Army canceled the planned procurement on December 15, 1983, shortly after we started our review.

#### ALLEGATION 7:

##### MICROWAVE CALIBRATION STANDARDS FOR YUMA PROVING GROUND

The microwave calibration equipment requested and approved for Yuma Proving Ground is not justified.

##### Basis for allegation

This allegation was based on a disagreement by a TMDE Support Group employee with the approved Army plans to

acquire calibration equipment costing about \$317,000. After the employee questioned the need for the equipment, the request was reviewed and a decision was made that the equipment was not justified.

GAO observations and Army actions  
to resolve allegation

This allegation has been resolved. The Army reassessed the need for the equipment and on November 17, 1983, canceled the planned procurement.