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REPORT TO THE CONGRESS



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Improvements Being Made In The Controls Over Government Test Equipment Acquired By Contractors

B-140389

Department of Defense

BY THE COMPTROLLER GENERAL
OF THE UNITED STATES

APRIL 9, 1971

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COMPTROLLER GENERAL OF THE UNITED STATES

WASHINGTON, D.C. 20548

B-140389

To the President of the Senate and the
Speaker of the House of Representatives

This is our report on the improvements being made in the controls over Government test equipment acquired by contractors for the Department of Defense.

Our review was made pursuant to the Budget and Accounting Act, 1921 (31 U.S.C. 53), and the Accounting and Auditing Act of 1950 (31 U.S.C. 67).

Copies of this report are being sent to the Director, Office of Management and Budget; the Secretary of Defense; the Secretaries of the Army, Navy, and Air Force; and the Director, Defense Supply Agency.

A handwritten signature in cursive script that reads "James B. Stacks".

Comptroller General
of the United States

D I G E S T

WHY THE REVIEW WAS MADE

In performing Government work, defense contractors use a variety of equipment, machine tools, furniture, vehicles, and similar property. These articles are known as plant equipment. Department of Defense (DOD) regulations provide that, with some exceptions, contractors furnish all plant equipment needed for contract performance.

Equipment so specialized that its use is limited to testing in the development or production of particular items or performance of particular services is not considered plant equipment. This type is known as special test equipment. It is needed for the performance of negotiated Government contracts and generally is acquired by contractors for the account of the Government. Its cost is borne directly by the Government and ownership is retained by the Government.

Prior work by the General Accounting Office (GAO) indicated that some plant equipment had been inappropriately classified as special test equipment and therefore was acquired by the contractor for the account of the Government. The review was made to inquire into the extent that this might still be occurring and its effects.

FINDINGS AND CONCLUSIONS

Significant quantities of plant equipment--specifically, general-purpose test equipment--have been acquired as special test equipment and paid for by the Government.

GAO found that five contractors had special test equipment on hand costing about \$62 million that had been purchased for the account of the Government. Of this amount an estimated \$12 million represented plant equipment which should have been provided by private investment.

Classification of the \$12 million worth of plant equipment as special test equipment and its subsequent acquisition for the account of the Government was contrary to the policy of Government reliance on contractors to provide plant equipment needed for contract performance. Moreover, this increased the Government's investment in plant equipment inventories along with the costs associated with maintenance of these inventories. (See pp. 12 and 13.)

Had the equipment been classified properly as general-purpose test equipment and been furnished by DOD under a separate contract for providing facilities, it would still have been contrary to the Government's interest for the reasons cited above. Such action would, however, have had the following advantages over the acquisition as special test equipment.

- Total costs to the Government probably would have been lower because fees, which are generally allowed on equipment acquired under production contracts, are not allowed on equipment furnished by the Government under a facilities contract. (See p. 13.)
- The Government would have better assurance that the equipment was not used for commercial purposes because closer controls are prescribed for Government-furnished plant equipment. (See pp. 13 and 14.)
- The reuse potential for idle equipment would be increased because surveillance designed for reporting plant equipment for disposition, or reuse, is more stringent than it is for special test equipment. (See pp. 14 to 16.)

The acquisition of plant equipment as special test equipment has been permitted by the Armed Services Procurement Regulation definition of special test equipment which specifically includes *"*** all components of any assemblies of such equipment ***"*. This definition permits the acquisition of plant equipment as special test equipment when it is to be included in a group of test equipment items assembled for a specific use. (See p. 4.)

A need exists to revise and clarify the regulations governing the classification and acquisition of special test equipment. GAO believes that general-purpose components assembled to form special test equipment should be subject to the same approval criteria as established for other pieces of plant equipment.

GAO believes that it is feasible to require contractors to provide their own general-purpose components of special test equipment and that such a requirement should result in significant cost savings on new weapons systems currently undergoing design, development, or initial production. (See pp. 20 and 21.)

RECOMMENDATIONS OR SUGGESTIONS

The Secretary of Defense should act to:

- Revise the definition of special test equipment in the Armed Services Procurement Regulation and other pertinent Department of Defense regulations to exclude items that are really plant equipment. (See p. 21.)

--Require contracting officers to review proposals for special test equipment to ensure that plant equipment is not included. (See p. 21.)

AGENCY ACTIONS AND UNRESOLVED ISSUES

DOD concurred in general in the GAO findings and recommendations.

The Assistant Secretary of Defense (Installations and Logistics) stated that the recommendation to revise the definition of special test equipment to exclude general-purpose equipment was concurred in and that necessary action in this regard was being developed and would be made effective soon. (See p. 30.)

Action has begun to describe more clearly the limited and special purpose of special test equipment specifically excluding general-purpose test equipment. Guidance is being developed which will further limit the circumstances under which DOD may take title to contractor-purchased special test equipment. (See p. 31.)

The Assistant Secretary also told GAO that the Armed Services Procurement Regulation had been revised to provide a specific requirement for the separate identification and reporting of general-purpose test equipment used as components of special test equipment. This is an interim measure designed to eliminate the improper classification, authorization, reporting, and utilization of current inventories of general-purpose equipment acquired as special test equipment. (See p. 30.)

The Assistant Secretary did not comment on the GAO recommendation that contracting officers be required to review proposals for special test equipment to ensure that plant equipment is not included. Subsequent discussions with an official of his office indicated that DOD feels that the revised definition of special test equipment, combined with present practices for reviewing proposals for such equipment, will be sufficient to ensure that items of plant equipment are not included. (See p. 22.)

GAO believes that the actions taken or scheduled by DOD are appropriate and should help bring about improvements in the management of Government test equipment. To ensure that the redefinition of special test equipment will have its desired effect, however, contracting officers should be specifically required to ensure that items of plant equipment are not included when they review proposals for special test equipment. (See p. 22.)

MATTERS FOR CONSIDERATION BY THE CONGRESS

This report is being issued to inform the Congress of the actions taken or planned by DOD to improve controls over the acquisition and management of special test equipment to reduce the Government's inventory of this type of equipment and related administrative costs.

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ABBREVIATIONS

ASPR	Armed Services Procurement Regulation
DOD	Department of Defense
GAO	General Accounting Office

D I G E S T

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CHAPTER 1

INTRODUCTION

Armed Services Procurement Regulation (ASPR) 13-101.1 establishes five separate categories of Government-owned property. These are material, special tooling, special test equipment, military property, and facilities.

Special test equipment is defined in ASPR 13-101.6 as:

"*** electrical, electronic, hydraulic, pneumatic, mechanical or other items or assemblies of equipment, which are of such a specialized nature that, without modification or alteration, the use of such items (if they are to be used separately) or assemblies is limited to testing in the development or production of particular supplies or parts thereof, or in the performance of particular services. The term 'special test equipment' includes all components of any assemblies of such equipment, but does not include:

- (i) consumable property;
- (ii) special tooling; or
- (iii) buildings, nonseverable structures (except foundations and similar improvements necessary for the installation of special test equipment), general or special machine tools, or similar capital items."

The major characteristic of this type of equipment is indicated by its name. Special test equipment is intended for specific testing usage in the development or production of particular items or the performance of particular services.

The total amount of special test equipment owned by the Government is not known. For one thing, administration of this type of equipment is fragmented; although many plants are under the cognizance of the Defense Contract

Administration Services, others (those dealing with major weapons systems contracts) are handled by Army, Navy, and Air Force administrators. A property management official of the Defense Contract Administration Services informed us that, as of March 30, 1970, it was estimated that active and idle special tooling and special test equipment under the cognizance of that organization was valued at \$605 million and \$656 million, respectively. The same official estimated that the total active and idle Government-owned special tooling and special test equipment under DOD administration would be about \$3 billion to \$3.5 billion. The latter figures do not provide a breakout of special test equipment, but we have been told that it is considered to be a significant part of the total.

It is DOD policy to offer existing Government-owned special test equipment or components thereof to contractors for use in the performance of Government contracts if this action will not interfere with higher priority programs and if it is otherwise advantageous to the Government. To minimize the acquisition of new special test equipment or components thereof, contracting officers are required to screen existing Government production and research property before authorizing the procurement of any item or components with an acquisition cost of \$1,000 or more to ascertain whether any Government-owned property can be furnished. Contractors may acquire new special test equipment for the account of the Government when existing equipment is not available and when such acquisition is advantageous to the Government in the light of specific criteria set forth in ASPR.

Facilities is defined in ASPR 13-101.8 as industrial property, including real property and rights therein, building structures, improvements, and plant equipment. Plant equipment, as defined in ASPR B-102.10, means personal property of a capital nature, including equipment, machine tools, test equipment, furniture, vehicles, and accessory and auxiliary items. The definition of plant equipment specifically excludes special tooling and special test equipment.

Thus, while special test equipment is intended to be limited to a specific use, plant equipment is general purpose in nature and has multiuse characteristics. These

differences are reflected in the methods prescribed for the acquisition and management of special test equipment and plant equipment.

ACQUISITION AND MANAGEMENT OF SPECIAL TEST EQUIPMENT

The special test equipment discussed in this report is acquired by contractors for Government account under negotiated research or supply contracts. In nonnegotiated contracts, contractors do not normally acquire special test equipment for Government account.

When acquired under a negotiated contract, the prices paid by the Government normally include a fee or profit computed on the estimated cost of the equipment. Because the intended use of special test equipment is limited to specific products or services, very little control is exercised by DOD over its utilization, or lack thereof, until the contractor determines that it is no longer needed.

ACQUISITION AND MANAGEMENT OF PLANT EQUIPMENT

Defense Procurement Circular 63, which was incorporated into ASPR 13-301 by Revision 3, dated June 30, 1969, states that, with certain limited exceptions, it is DOD policy that contractors furnish all facilities, including plant equipment, required for the performance of Government contracts. Facilities are not to be provided to contractors except:

- For use in a Government-owned contractor-operated plant.
- For mobilization production in accordance with an approved mobilization plan package.
- When DOD determines that the furnishing of facilities is necessary or in the public interest. Such determinations must be supported by the contractor's written statement that he is unwilling or unable to acquire the necessary facilities with his own resources.

Defense Procurement Circular 61, dated June 10, 1968, prohibits the provision of any item of plant equipment

having a unit cost less than \$1,000 to contractors except those operating Government-owned plants on a fee basis.

Needed plant equipment, which meets the approval criteria above and which cannot be furnished from Government inventory, generally is acquired by the contractor on a cost-reimbursable basis under no-fee facilities contracts. Such contracts normally provide that contractors pay rent to the Government for any use of the items not authorized in advance as rent-free. Contractors are required to report idle plant equipment on a timely basis so that it can be made available for reutilization.

The requirement with respect to reporting of idle plant equipment does not apply to special test equipment. The principal control over special test equipment is the requirement that it be reported to the procuring activity upon completion of the contract under which it was acquired. Following such reporting, no additional reporting of its status or use is required. Further, the lack of controls over the utilization of special test equipment makes it questionable whether provisions for rent payments to the Government for non-Government use of such equipment are as effective as those governing rent payments for plant equipment.

Our review was made to determine the effectiveness of management controls over the classification, acquisition, and reutilization of special test equipment. We found that agency and contractor actions in these areas were generally consistent with existing regulations. The weaknesses described in the following chapters, however, evidence a need to revise and clarify the regulations governing the classification of special test equipment.

The scope of our review is described in chapter 6.

CHAPTER 2

GENERAL-PURPOSE TEST EQUIPMENT CLASSIFIED AND ACQUIRED AS SPECIAL TEST EQUIPMENT

Our review showed that significant quantities of plant equipment--more specifically general-purpose test equipment--have been acquired as special test equipment and paid for by the Government.

INAPPROPRIATE CLASSIFICATION PERMITTED BY ASPR DEFINITION OF SPECIAL TEST EQUIPMENT

The classification of general-purpose test equipment as special test equipment has been permitted by the ASPR definition of special test equipment. If acquired for separate use, items of general-purpose test equipment would be subject to approval as plant equipment. As defined by ASPR, however, special test equipment specifically includes "*** all components of any assemblies of such equipment ***." Consequently, any item of plant equipment can be acquired as special test equipment when it is included in a group of test equipment items assembled for a specific use.

IDENTIFICATION OF GENERAL-PURPOSE ITEMS ACQUIRED AS SPECIAL TEST EQUIPMENT

At the five contractor locations visited during our review, we estimated the acquisition cost of special test equipment on hand to be about \$62 million. Of this amount, an estimated \$12 million represented items which properly should have been classified as plant equipment and paid for by the contractors. Sufficient data are not available to enable us to estimate, on a nationwide basis, the total amount of general-purpose test equipment which has been acquired as special test equipment. The results of our review at the five locations visited, however, clearly indicate that the total is of such significance as to warrant early corrective action.

The following examples are illustrative of the information we obtained which leads us to conclude that

substantial amounts of general-purpose test equipment have been acquired as special test equipment. We believe that, despite the relatively small number of contractors visited, these examples are representative of the problems that exist throughout DOD concerning the classification of test equipment.

General-purpose items
identified by agency personnel

The Defense Industrial Plant Equipment Center manages selected classes of idle Government-owned plant equipment to facilitate reutilization and thereby avoid unnecessary procurement of new equipment. We requested assistance from the Center in determining whether a group of test equipment, which had been acquired by a contractor as special test equipment, was properly classified as such. With the help of technical personnel made available by the Center, we identified 116 items, with a total cost of \$220,511, which were general purpose in nature and therefore should not have been bought as special test equipment.

Identical items accountable
under facilities contracts

For a number of items classified as special test equipment, we found that there were identical items on hand at contractors' plants which were accountable as plant equipment under facilities contracts. For example, at one contractor location we found four Tekronix model RM 33 oscilloscopes included as components of consoles accountable as special test equipment under an Air Force supply contract. Three other identical model RM 33 oscilloscopes were accountable as plant equipment under a Navy facilities contract.

At another location we identified 49 different line items of general-purpose test equipment which had, in different instances, been classified as special test equipment and plant equipment.

Items acquired as special test equipment used,
or made available for use,
on other programs

We found also that items acquired as special test equipment had been used, or made available for use, on other programs. For example, at one contractor location we found that 49 general-purpose components had been removed from five test consoles which were accountable as special test equipment under an Air Force production contract and had been transferred to the Air Force facility contract for use on other programs. An Air Force letter sent to Property Administrators in January 1969 indicated that such transfers were common.

At another location we were told that it was common practice to shift general-purpose components from one test console to another as needed.

At two locations we found that special test equipment acquired for one program had subsequently been used on one or more other programs.

The use of these items on other programs, or their retention for such use, indicates that they have multiuse characteristics and should properly have been classified as plant equipment.

Items acquired as special test equipment
identified as standard items
in suppliers' catalogs

We found that data contained in suppliers' catalogs for many of the items acquired as special test equipment clearly indicated that they were standard items with multi-use potential. For example, an Atec model 6C86 counter is described as a "*** general purpose counter/timer incorporating many measurement capabilities and featuring economical design ***." A North Atlantic model VM-204 phase angle voltmeter is described as "*** a multi-functional instrument designed to meet laboratory, production line and ground checkout requirements for precise measurement of complex AC signals ***."

The above examples demonstrate that special test equipment, as now defined, can and does include many items which are general purpose in nature. By reason of their classification as special test equipment, such items have not been subjected to the appropriate controls over acquisition and subsequent management.

CHAPTER 3

ADVERSE EFFECTS OF INAPPROPRIATE CLASSIFICATION

The acquisition of plant equipment items as special test equipment has resulted in

- increased Government investment in plant equipment inventories;
- increased acquisition costs;
- reduced control over commercial use;
- reduced reutilization potential for idle equipment; and
- disposition without appropriate screening.

INCREASED GOVERNMENT INVESTMENT IN PLANT EQUIPMENT INVENTORIES

The most serious adverse effect of acquiring plant equipment items as special test equipment is the expenditure of Government funds for items which should be provided by private investment. As stated in chapter 1, Defense Procurement Circular 61 prohibits the furnishing of plant equipment items costing less than \$1,000 to contractors other than those operating Government-owned plants on a fee basis. The purpose of this restriction is to minimize the large expense associated with maintaining Government ownership of equipment in contractors' plants. At three of the five contractor plants we visited, however, we identified 340 examples of plant equipment costing less than \$1,000 an item that were classified and purchased as special test equipment. These items, with a total acquisition cost of approximately \$95,000, ranged in price from \$89 for a power supply unit to \$995 for a converter.

Defense Procurement Circular 63 (subsequently incorporated into ASPR 13-301) provides that contractors furnish all facilities required for the performance of Government contracts, with certain limited exceptions. (See p. 6.) It is our opinion that strict application of this policy to

general-purpose test equipment, currently being improperly acquired as special test equipment, would result in the contractors' being required to furnish the items. This could result in a substantial decrease in the amount of equipment acquired for the account of the Government with an associated reduction in the cost of maintaining Government equipment inventories.

INCREASED ACQUISITION COSTS

Classifying plant equipment items as special test equipment and acquiring the items under supply contracts result in additional costs. Plant equipment items which satisfy the approval criteria previously discussed are generally provided under no-fee facilities contracts, whereas the cost of special test equipment acquired under supply contracts generally includes a fee or profit. From a cost point of view, it is, therefore, not in the best interest of the Government to acquire plant equipment items as special test equipment.

For example, at one contractor location we identified 182 plant equipment items with an acquisition cost of more than \$1,000 a unit which had been acquired as special test equipment during the past 3 years. The total cost of these items was \$590,000. The supply contracts under which these items were acquired included negotiated fees or profits of about 10 percent of the estimated costs.

At another location, we found that the price of plant equipment items to be acquired under one contract included a profit allowance of about \$72,000.

Since substantial quantities of special test equipment are acquired by subcontractors, it is logical to assume that acquisition costs are further increased by the application of profit factors by higher tier contractors.

REDUCED CONTROL OVER COMMERCIAL USE

There is no requirement for contractors to maintain utilization records for special test equipment. Consequently, there is relatively little control over the utilization of

such equipment compared to those items which satisfy the approval criteria and which are furnished by the Government under facilities contracts.

At two contractor locations we found that plant equipment acquired as special test equipment had been located in areas where both Government and commercial work was processed. The equipment was not monitored for utilization, nor was it covered by any rental agreement. The contractors were unable to provide any assurance that the equipment had not been used for commercial work.

We did not identify any specific instances of commercial use of the equipment in question. Due to the absence of controls, however, there is no assurance that uncompensated commercial use had not occurred.

REDUCED REUTILIZATION POTENTIAL FOR IDLE EQUIPMENT

At all of the contractor locations visited, we found that many plant equipment items acquired for the account of the Government as special test equipment were idle. These included items which had not been reported for disposition, as well as items which were awaiting disposition instructions from higher tier contractors.

Idle items not reported

Many plant equipment items acquired as special test equipment were idle but had not been reported to the Government or the prime contractor for disposition. For example, at one contractor location, we identified 198 idle plant equipment items, valued at about \$162,000, which had not been reported. Examination of 33 of these items, valued at \$33,870, showed that they had been idle for periods ranging from about 6 months to more than 3 years.

At another location we identified 47 items, with a total recorded cost of \$60,371, which had been idle, awaiting disposition, for periods ranging from 1 to 3 years without being reported as such.

At a third location we questioned the contractor's need to retain 76 test consoles which we found to be idle

during a physical inspection. As a result, the contractor agreed to release 22 consoles with a total cost of \$990,235. These consoles included 155 general-purpose components with a total cost of about \$154,603.

We did not attempt to determine the extent to which the items we identified as idle could have been utilized elsewhere within the Government. Officials of the Defense Industrial Plant Equipment Center, however, informed us that they had been able to fill only about 15 percent of the requisitions received for general-purpose electronic test equipment.

It is our opinion that proper classification of general-purpose test equipment would largely eliminate the accumulation of unreported idle inventories of Government-owned plant equipment items. In most cases, the contractor would be required to furnish these items. Furthermore, the items which could be justified for Government funding normally would be provided under facilities contracts and subjected to a higher degree of control and surveillance. Consequently, idle items could be more readily identified and made available for reutilization.

Prime contractor delays in directing disposition

At one subcontractor's plant we found that Government-owned plant equipment items reported to prime contractors as excess had remained idle for long periods of time, pending the receipt of disposition instructions. The two prime contractors involved took about 9 months and 10 months, respectively, to furnish disposition instructions.

This problem should be reduced substantially by proper classification of proposed acquisitions. Had the equipment been properly classified as plant equipment, in all probability the contractor would have been required to furnish the item. The disposition of plant equipment which meets the approval criteria and which is furnished by the Government would not be subject to the control of a higher tier contractor since the equipment would be provided under a facilities contract to the subcontractor.

Items purchased while identical
items were idle

At one contractor location we identified four plant equipment items which were acquired as special test equipment under a supply contract while identical items of Government-owned equipment, also acquired as special test equipment under a different supply contract, were in storage awaiting disposition. The contractor stated that it would have taken too long to obtain authorization to use the equipment awaiting disposition.

Proper classification should help eliminate unnecessary acquisitions such as those described above. If the plant equipment items in question had been furnished under a facilities contract, they would have been available for use on all Government contracts without special authorization, whereas, because they were acquired as special test equipment, they were not to be used on other work without specific authorization.

CHAPTER 4

RESULTS OF RECENT INTERNAL AUDITS

DEFENSE SUPPLY AGENCY AUDIT

In April 1969 the Auditor General, Defense Supply Agency, issued a report concerning an audit of the inventory mission of the Defense Industrial Plant Equipment Center. One of the objectives of this audit was to evaluate a recently completed reconciliation of the Center's records and the records at 1,733 contractor locations possessing Center-controlled industrial plant equipment.

In comparing Center records with industrial plant equipment on hand at about 10 percent of the total contractor locations and four Defense Supply Agency storage sites, the Agency auditors identified 5,791 items of industrial plant equipment with acquisition costs totaling \$25,884,657 which had not been reported to the Center because they were classified as special test equipment.

The auditors attributed the lack of reporting to two causes. First, a conflict existed between section 13 and appendix B of ASPR regarding the reporting to the Center of general-purpose components of special test equipment. Section 13 required that contracting officers report general-purpose components of special test equipment to the Center at the time of acquisition, whereas appendix B excluded general-purpose components of special test equipment from such reporting requirements. The second cause was the fact that many contracts, written before ASPR required the reporting of industrial plant equipment to the Center, had not been modified to incorporate later ASPR provisions which require such reporting.

The Agency auditors recommended that the conflict between section 13 and appendix B be resolved and that all Defense contracts in force be updated to require the reporting of industrial plant equipment to the Center. The conflict in ASPR was subsequently resolved by Revision 3, dated June 30, 1969, which amended appendix B to require the reporting to the Center of components of special test equipment at the time of their receipt by the contractor.

The Agency report supports our conclusion that significant quantities of plant equipment have been acquired as special test equipment. This is even more apparent when considering that items costing almost \$26 million were identified at a small proportion of the total locations possessing Center-controlled industrial plant equipment. Furthermore, the \$26 million worth of plant equipment includes only those items with an acquisition cost of \$1,000 or more. Our review showed that, in addition, there were many items of plant equipment acquired as special test equipment for the account of the Government which cost less than \$1,000 and therefore were not reportable to the Center.

The Auditor General's recommendations concerning general-purpose components of special test equipment deal only with the reporting of such items to the Center. Although proper reporting is important, the basic problem concerning the general-purpose components lies in the initial classification. If properly classified as plant equipment prior to acquisition, most general-purpose test equipment items would be provided by private investment, including all such items with an acquisition cost of less than \$1,000. Furthermore, if properly classified, general-purpose test equipment, which meets the approval criteria to be furnished as Government-owned plant equipment, would be provided under facilities contracts and would be subject to reporting as industrial plant equipment.

AIR FORCE AUDIT

The Auditor General, Department of the Air Force, issued a report dated March 17, 1970, entitled "Management of Special Tooling and Special Test Equipment." The audit was performed during the period August through October 1969. The report dealt primarily with the screening and retention of special tooling and special test equipment to determine proper disposition, control, and reutilization of these items. The Auditor General pointed out that special tooling and special test equipment in use on active contracts and in storage was estimated to exceed \$1 billion, and the condition disclosed in his report indicated that actions were necessary to improve procedures for monitoring, screening, controlling, reporting, and disposing of this equipment.

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Implementation of the recommendations made as a result of the internal audits discussed above should help to improve procedures for the reporting, screening, and retention of special test equipment. Actions recommended in chapter 5, dealing with the problems of initial classification and acquisition of general-purpose components of special test equipment, should result in even further improvement in the management of this equipment.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Defense Procurement Circular 61 and ASPR 13-301 provide, with certain limited exceptions, that contractors furnish all plant equipment required for the performance of Government contracts. Significant quantities of general-purpose test equipment, however, have been acquired for Government account as special test equipment under supply contracts. As a result, Government funds have been used to furnish items which should have been provided by private investment. Furthermore, items which might have met the criteria for approval as Government-furnished plant equipment have been subjected to a lesser degree of control when utilized and administered as components of special test equipment. Consequently, the Government's investment has not yielded maximum benefits.

The acquisition of plant equipment as special test equipment has been permitted by the ASPR definition of special test equipment which specifically includes "*** all components of any assemblies of such equipment ***." This definition permits the acquisition of any item of plant equipment as special test equipment when it is to be included in a group of test equipment items assembled for a specific use.

On the basis of our review, we believe that general-purpose items in special-purpose test sets can usually be readily removed from the assembly and be made available for general purpose use as plant equipment. One contractor official stated that 90 percent of the general-purpose test equipment components used in special test sets were merely plugged into a power supply and could be made available for reuse by removing a few bolts and a connector. In our opinion, it is illogical to classify plant equipment as special test equipment simply because it is to be used in testing in the development or production of a particular item or performance of a particular service. Classification should be based on the equipment's capabilities and should be made for individual items or components rather than for the composite assembly. The practical effect of proper classification would be that contractors would be required to

provide a greater proportion of their needed general-purpose test equipment items.

Potential economies are suggested by the fact that several new weapons systems likely to require significant quantities of special test equipment are undergoing design, development, or initial production. These include the Navy's F-14 and S-3A aircraft and the Underwater Long-range Missile System and the Air Force's B-1 and F-15 aircraft.

It is our conclusion that significant quantities of general-purpose plant equipment have been improperly acquired as special test equipment by contractors for Government account. Furthermore, we believe that proper handling of the purchase of such items in the future can result in significant cost savings through a reduction in the number of new items acquired for Government account as well as increased control over those items which can be justified in the light of ASPR 13-301 criteria.

RECOMMENDATIONS TO THE SECRETARY OF DEFENSE

We recommend, therefore, that the Secretary of Defense require that the definition of special test equipment in ASPR and other pertinent DOD regulations be revised to exclude items of plant equipment. We recommend also that the Secretary require contracting officers to review proposals for special test equipment to ensure that items of general-purpose plant equipment are not included.

DOD ACTIONS AND GAO EVALUATION

In a letter, dated October 20, 1970, the Assistant Secretary of Defense (Installations and Logistics) provided DOD's comments on a draft of this report and stated that DOD concurred in general in our findings and recommendations. Specifically, he advised us that our recommendation to revise the definition of special test equipment to exclude general-purpose test equipment was concurred in and that necessary action in this regard was being developed and was scheduled for early implementation.

The Assistant Secretary also indicated that actions had been taken which were designed to improve the reporting and

control procedures governing general-purpose test equipment. These actions include the establishment of a specific requirement for the separate identification and reporting of general-purpose test equipment used as components of special test equipment.

The Assistant Secretary of Defense stated that DOD believed that contractors should furnish all equipment and other property as required for their performance on defense contracts. (A proposed policy change is currently undergoing study which would require defense contractors to retain title to special test equipment that they acquire for performance on Government work except in cases where retention and reuse of such equipment is required in support of approved Government in-house maintenance and repair programs.)

The Assistant Secretary's comments were not addressed, as such, to our recommendation that contracting officers be required to review proposals for special test equipment to ensure that items properly classified as plant equipment are not included. Subsequent discussions with an official of the Assistant Secretary's office indicate that DOD feels that the revised definition of special test equipment, combined with present practices for reviewing proposals for such equipment, will be sufficient to ensure that items of plant equipment are not included.

We believe that the actions taken or scheduled by DOD--especially the planned redefinition of special test equipment to exclude general-purpose components--should help bring about improvements in the management of special test equipment and would tend to reduce the Government's investment in this type of equipment. We believe also that, to ensure that the revision of the ASPR definition of special test equipment will have its desired effect, contracting officers, in reviewing proposals for special test equipment, should be specifically required to ensure that items of plant equipment are not included.

CHAPTER 6

SCOPE OF REVIEW

Our review was primarily directed to an examination of the management controls over the classification, acquisition, and reutilization of special test equipment. The review was made at five contractors' plants and at the Defense Industrial Plant Equipment Center, Memphis, Tennessee.

We examined pertinent DOD regulations and contractors' documents and records and interviewed responsible officials at the locations visited. We also reviewed selected audit reports issued by the Auditors General of the Air Force and the Defense Supply Agency.

The results of our review were discussed with contractor and DOD officials.

APPENDIXES



ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, D.C. 20301

INSTALLATIONS AND LOGISTICS

20 OCT 1970

Mr. C. M. Bailey
Director, Defense Division
U. S. General Accounting Office
Washington, D. C. 20548

Dear Mr. Bailey:

Reference is made to your memorandum of 12 August 1970, in which you enclosed a draft report on the need for improved controls over the classification and acquisition of test equipment, (OSD Case # 3159). This report has been reviewed and the recommendations studied. Our comments on the recommendations are attached and set forth the actions completed and proposed by the Department of Defense.

Your interest and comments on this specific aspect of our overall efforts to improve control over Government-owned property in the possession of contractors are sincerely appreciated. The planned and recently implemented corrections cited in the attachment should when given an opportunity for full implementation, including audit, fully correct this problem. We would appreciate your assistance in examining this matter again in later surveys in about eight (8) to twelve (12) months, including your further suggestions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Tony Hillits".

Attachment
as

APPENDIX I
Page 2

DOD Statement on GAO Report (OSD Case # 3159)

TITLE:

"Need for Improved Controls Over the Classification and Acquisition of Test Equipment"

GAO FINDINGS AND RECOMMENDATIONS

In performing Government work defense contractors use a variety of equipment, machine tools, furniture, vehicles, and other personal property. Such items are known as plant equipment. Department of Defense regulations provide that, with some exceptions, contractors will furnish all the plant equipment needed for contract performance.

Special test equipment (STE), which is so specialized that its use is limited to testing in the development or production of particular items or performance of particular services, is not considered as plant equipment. STE needed for the performance of negotiated Government contracts is generally acquired by contractors for the account of the Government. Its cost, therefore, is born directly by the Government and ownership rests with the Government.

In a review completed during the latter part of 1969, GAO found that significant quantities of plant equipment more specifically general purpose test equipment have been acquired as special test equipment and paid for by the Government under supply contracts. At five contractor locations, GAO found STE on hand costing about \$62 million which had been purchased for the account of the Government, and of this amount, an estimated \$12 million represented plant equipment which normally should be furnished and paid for by the contractor. GAO states that acquisition of the \$12 million as STE was contrary to the best interests of the Government for the following reasons: (1) Government funds were spent to furnish contractors with equipment which should properly have been provided by private investment; (2) total costs to the Government were higher because the cost of STE acquired under supply contracts generally includes a fee or profit; (3) the Government received less assurance that its equipment was not used for commercial purposes without proper compensation, as there is relatively little control over the utilization of STE as compared with the controls prescribed for Government-furnished plant equipment and (4) reutilization potential for idle equipment was reduced because surveillance designed to ensure the reporting of idle equipment for disposition or reuse is less stringent for STE than it is for plant equipment.

GAO states that the acquisition of plant equipment as STE has been permitted by the ASPR definition of STE (ASPR-130101.6) which specifically includes "----all components of any assemblies of such equipment----". This definition permits the acquisition of plant equipment as STE when it is to be included in a group of test equipment items assembled for a specific use.

GAO believes that: (1) general purpose components assembled to form STE should be subject to the same approval criteria as established for other items of plant equipment, and (2) it is feasible to require contractors to provide their own general purpose components of STE and that such a requirement should result in significant cost savings on new weapons systems currently undergoing design, development, or initial production.

GAO recommends that OASD take action to: (1) revise the definition of STE in the ASPR and other pertinent DOD regulations to exclude items that are really plant equipment and (2) require contracting officers to review proposals for STE to ensure that plant equipment is not included.

DOD COMMENTS ON THE FINDINGS AND RECOMMENDATIONS:

The DOD concurs fully in the main thrust of the findings and recommendations of the GAO. We believe that contractors should furnish all equipment and other property as required for their performance on defense contracts. This certainly would properly include equipment identified as special test equipment (STE) which is of such a specialized nature that their use is entirely limited to the sole support of the development, production or maintenance requirements of a particular end item procured on a specific supply contract, upon completion of which would normally become excess to the needs of the Government. A proposed policy change is currently undergoing study requiring defense contractors to retain title to both special tooling and special test equipment that he acquires for performance on Government work. An example¹ would be where retention and reuse is required in support of approved in-house maintenance and repair programs. Recent changes to ASPR, as discussed in detail below, should correct the GAO stated deficiencies on the management of general purpose test equipment.

SPECIFIC COMMENTS ON GAO STATEMENTS:

GAO Statement (Page 4): "Because the intended use of STE is limited to specific products or services, DOD exercises very little control over it until the contractor determines that it is no longer needed."

DOD Comment: Tho such conditions do probably occur, defense policy does require that the minimum requirements of contractors property control systems (ASPR supplement 3-301), in order to qualify for Government approval, must provide for the separate identification of each item of special test equipment (ASPR B-305), including a breakout listing of all general purpose components incorporated therein. Further, ASPR B-603 states that contractor procedures concerning the control of Government property shall be adequate to assure that such property is used only for the purpose authorized in the contract and ASPR 24-205.1(f) requires that special test equipment is subject to and must be separately identified in the screening of the contractors' inventory schedules prior

¹GAO footnote: In subsequent discussions with DOD officials, it was determined that the word "example" should properly be "exception."

to disposition. In addition, ASPR B-306.1 also provides for separately identifying and reporting to the Government of general purpose test equipment which is used as components of STE both upon acquisition and when the item is no longer required for the purpose authorized or provided.

The foregoing is not intended to modify the fact that misclassification and mal-utilization does occur. However, the management of STE across the board is generally acceptable as was so indicated in your statement on page 6, as follows: "We found that agency and contractor actions in these areas were generally consistent with regulations." Since the regulations cited above were being implemented during and subsequent to your inspection, future discrepancies of this nature should diminish in the future.

GAO Statement (Page 6): "The requirement with respect to payment of rentals and reporting of Idle Plant Equipment do not apply to STE."¹

DOD Comment: ASPR 13-404 provides that " - the rent for all Government production and research property shall be computed in accordance with the Use and Charges Clause set forth in ASPR 7-702.12 for facilities." Special and general purpose test equipment is Government property.

GAO Statement (Page 7): "Our review showed that significant quantities of plant equipment, more specifically, general purpose test equipment, have been acquired as STE and paid for by the Government."

DOD Comment: During the period of your review, several concurrent actions were being implemented by DOD to update the definition of Industrial Plant Equipment and to improve the reporting and control procedures of general purpose test equipment. Specifically, the definition of Industrial Plant Equipment was revised and republished in ASPR, (Appendix B-102.11 and C-102.11) on 31 December 1969. On this same date changes concerning the central reporting of Industrial Plant Equipment were also published in ASPR B-306.1 and C-306.1 including a specific requirement for the separate identification and reporting of general purpose test equipment used as components to special test equipment. Also, in order to insure the prompt implementation of these provisions, Item VI, "Reporting and Controlling Industrial Plant Equipment" was published in Defense Procurement Circular No. 80 dated 20 June 1970. This item directed that immediate action be taken by contractors possessing Government-owned plant equipment to comply with the provisions of ASPR which were cited above. These directed changes, given time, for implementation will for the most part correct this type of deficiency. The GAO recommendation to revise the definition of STE, so as to exclude general purpose test equipment is concurred in and necessary action in this regard is being developed and is scheduled for early implementation.

¹GAO footnote: This statement, made in a draft of this report, is clarified on pages 7, 13 and 14.

GAO Statement (Page 8): "We found, for a number of items classified as STE that there were identical items on hand at contractor plants which were accountable as plant equipment under facilities contracts."

DOD Comment: Such a condition is consistent with current regulations provided the plant equipment items are intergral parts of STE and other identical items of plant equipment are being utilized separately.

GAO Statement (Page 9): "Items acquired as STE used, or made available for use, on other programs".

DOD Comment: Such actions contradict the intent of ASPR 13-301. Test equipment, usable on two or more different programs, are not STE, but are in fact, general purpose equipment and should not be provided to contractors. The improved ASPR provisions cited above for the identification inventory control and idle reporting of general purpose test equipment will permit proper compliance with the provisions of ASPR 13-301. In addition, our planned revision to the definition of STE to exclude general purpose components, will be the major contributing factor in the eventual resolution of this problem.

DOD CORRECTIVE ACTIONS:

Contractor compliance with the requirements of Item VI of DPC # 80 would resolve the improper classification authorization reporting and utilization of general purpose equipment as if it were STE. Current Department of Defense policy does not adequately recognize the very limited circumstances under which the Government should assume the costly administrative and inventory burden that results from taking title to special test equipment. The existance today of large idle inventories indicates there is an urgent requirement to restrict further Government Ownership to discrete cases of demonstrated need. In this regard, action has been initiated to more clearly describe the limited and special purpose of STE and specifically excluding general purpose test equipment therefrom. Secondly, guidance is being developed that will limit the taking of title to STE to demonstrated cases where subsequent in-house support of approved maintenance and repair programs is determined to be essential.

These policies when published and given a reasonable time for implementation will substantially reduce or eliminate the discrepancies stated in the GAO report.

<u>Tenure of office</u>		
	<u>From</u>	<u>To</u>

DEPARTMENT OF THE NAVY

SECRETARY OF THE NAVY:

John H. Chafee	Jan. 1969	Present
Paul R. Ignatius	Aug. 1967	Jan. 1969

UNDER SECRETARY OF THE NAVY:

John W. Warner	Feb. 1969	Present
Charles F. Baird	July 1967	Jan. 1969

ASSISTANT SECRETARY OF THE NAVY
(INSTALLATIONS AND LOGISTICS):

Frank Sanders	Feb. 1969	Present
Barry J. Shillito	Apr. 1968	Feb. 1969

DEPARTMENT OF THE AIR FORCE

SECRETARY OF THE AIR FORCE:

Dr. Robert C. Seamans, Jr.	Jan. 1969	Present
Dr. Harold Brown	Oct. 1965	Jan. 1969

UNDER SECRETARY OF THE AIR FORCE:

John L. McLucas	Feb. 1969	Present
Townsend Hoopes	Sept. 1967	Feb. 1969

ASSISTANT SECRETARY OF THE AIR
FORCE (INSTALLATIONS AND LOGIS-
TICS):

Philip N. Whittaker	May 1969	Present
Robert H. Charles	Nov. 1963	May 1969

DEFENSE SUPPLY AGENCY

DIRECTOR:

Lt. Gen. Earl C. Hedlund, USAF	July 1967	Present
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