

**Audit**



**Report**

OFFICE OF THE INSPECTOR GENERAL

**OPERATIONAL TEST AND EVALUATION OF NONMAJOR  
SYSTEMS**

Report Number 92-079

April 17, 1992

**Department of Defense**

The following acronyms are used in this report.

LPU.....Limited Procurement-Urgent  
NAVSEA.....Naval Sea Systems Command  
NDI.....Nondevelopmental Item  
OPTEC.....Operational Test and Evaluation Command  
OPTEVFOR.....Operational Test and Evaluation Force  
OTA.....Operational Test Agency  
OT&E.....Operational Test and Evaluation  
PINS.....Precise Integrated Navigation System  
RDC.....Rapid Development Capability  
ROC.....Required Operational Capability  
SARTIS.....Shipboard Advanced Radar Target Identification Program  
SOICS.....Special Operations Improved Cryptographic System  
TEIN.....Test and Evaluation Identification Number  
TEMP.....Test and Evaluation Master Plan  
USASOC.....U.S. Army Special Operations Command  
USSOCOM.....U.S. Special Operations Command



INSPECTOR GENERAL  
DEPARTMENT OF DEFENSE  
400 ARMY NAVY DRIVE  
ARLINGTON, VIRGINIA 22202-2884



April 17, 1992

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION  
ASSISTANT SECRETARY OF THE ARMY (FINANCIAL  
MANAGEMENT)  
ASSISTANT SECRETARY OF THE NAVY (FINANCIAL  
MANAGEMENT)  
ASSISTANT SECRETARY OF THE AIR FORCE (FINANCIAL  
MANAGEMENT AND COMPTROLLER)

SUBJECT: Audit Report on Operational Test and Evaluation  
of Nonmajor Systems (Report No. 92-079)

We are providing this final report for your information and use. Comments on a draft of this report were considered in preparing the final report. DoD Directive 7650.3 requires that all audit recommendations be resolved promptly. Therefore, the Commander in Chief, Special Operations Command; the Assistant Secretary of the Navy (Research, Development and Acquisition); and the Chief of Naval Operations must provide final comments on the unresolved recommendations by June 16, 1992. We also ask that your comments indicate concurrence or nonconcurrence with the internal control weakness highlighted in Part I. See the "Status of Recommendations" section at the end of each finding for the unresolved recommendations and the specific requirements for your comments. If appropriate, you may propose alternative methods for accomplishing desired improvements.

The courtesies extended to the audit staff are appreciated. If you have any questions on this audit, please contact Mr. Raymond A. Spencer at (703) 614-3995 (DSN 224-3995) or Mr. Nicholas Como at (703) 614-3462 (DSN 224-3462). The planned distribution of the report is listed in Appendix E.

*Robert J. Lieberman*

Robert J. Lieberman  
Assistant Inspector General  
for Auditing

Enclosure

cc:  
Secretary of the Army  
Secretary of the Navy  
Secretary of the Air Force  
Director, Operational Test and Evaluation



April 17, 1992

OPERATIONAL TEST AND EVALUATION OF NONMAJOR SYSTEMS

EXECUTIVE SUMMARY

**Introduction.** Operational Test and Evaluation is the field testing of equipment or munitions to ensure that only operationally effective and suitable systems are delivered to the operating forces. Nonmajor Defense Acquisition Programs (nonmajor systems) are those systems for which Research, Development, Test and Evaluation funding is less than \$300 million and procurement funding is less than \$1.8 billion (1990 constant dollars).

**Objectives.** The overall objective was to evaluate the adequacy of the Military Departments' operational test and evaluation of nonmajor systems and the use of test results for nonmajor systems acquisition. In addition, we evaluated the oversight provided by cognizant offices within OSD and the Military Departments. We also evaluated the effectiveness of applicable internal controls.

**Audit Results.** The Military Departments generally planned and conducted adequate Operational Test and Evaluation of nonmajor systems and used the test results in making the production decision for systems procured using normal acquisition procedures. However, we found that Operational Test and Evaluation was inappropriately limited or omitted for eight systems for which special acquisition procedures were used.

- o The U.S. Army Special Operations Command procured nonmajor systems without conducting required Operational Test and Evaluation. This resulted in at least two systems being produced with serious operational deficiencies (Finding A).

- o Nonmajor systems were procured without having either a formal full-rate production decision or favorable test results to support procurement. Operational Test and Evaluation of a foreign-developed system was limited because the foreign producer withheld technical data that limited the scope of the Military Departments' Operational Test and Evaluation. As a result, the system was not fully tested for its intended use (Finding B). On the basis of the comments of the Director of Defense Research and Engineering, we have deleted Recommendation 3 in the draft report. This recommendation addressed establishing guidance for operational testing for systems developed under the Foreign Comparative Testing Program.

**Internal Controls.** The audit disclosed material internal control weaknesses in that controls were not established to require that Operational Test and Evaluation was an integral prerequisite to a nonmajor system classified Limited Procurement-Urgent. Similar controls are required for the testing of nondevelopmental items. The internal control weaknesses are summarized in Finding A. Additional details on internal control weaknesses are addressed in Part I of this report.

**Potential Benefits of Audit.** This report does not identify any quantifiable potential monetary benefits. However, other benefits would be derived from implementing the recommendations stated in this report. A summary of the benefits resulting from this audit is in Appendix C.

**Summary of Recommendations.** We recommended that Operational Test and Evaluation be required for nonmajor systems classified Limited Procurement-Urgent. We also recommended clarification of, and compliance with, existing requirements. In addition, we recommended follow-on Operational Test and Evaluation on one system developed under the Foreign Comparative Testing Program.

**Management Comments.** The Army Deputy Chief of Staff for Operations and Plans concurred with Recommendation A.1. and provided additional comments. The Commander in Chief, Special Operations Command, partially concurred with Recommendation A.2. The complete texts of management's comments are included in Part IV of the report. Comments to the final report are requested from the Commander in Chief, Special Operations Command; the Assistant Secretary of the Navy (Research, Development and Acquisition); and the Chief of Naval Operations by June 16, 1992.

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This report was prepared by the Acquisition Management Directorate, Office of the Assistant Inspector General For Auditing, DoD. Copies of the report can be obtained from the Information Officer, Audit Planning and Technical Support Directorate, (703) 614-6303.



## PART I - INTRODUCTION

### Background

Operational Test and Evaluation (OT&E) is the field testing of weapons, equipment, or munitions to ensure that operationally effective and suitable systems are delivered to the operating forces. DoD Directive 5000.1, "Defense Acquisition," February 23, 1991, defines nonmajor systems as those systems for which Research, Development, Test and Evaluation funding is less than \$300 million and total procurement funding is less than \$1.8 billion (1990 constant dollars).

Each Military Department has a major Operational Test Agency (OTA) that oversees, plans, and conducts OT&E of nonmajor systems. The Agencies include the Army Operational Test and Evaluation Command <sup>1/</sup>, the Navy Operational Test and Evaluation Force, and the Air Force Operational Test and Evaluation Center.

### Objectives

The overall audit objective was to evaluate the Military Departments' operational test planning, test execution, and use of test results for nonmajor system acquisitions. In addition, we evaluated the oversight provided by cognizant offices within the Office of the Secretary of Defense and the Military Departments. We also evaluated the effectiveness of applicable internal controls.

### Scope

As of December 1990, we identified 85 nonmajor systems for which a procurement decision (Milestone III) was made or scheduled during FYs 1990 or 1991. For the Army systems included in this total, we included systems for which a Milestone III decision was made or scheduled between FYs 1989 and 1991. Based on the survey results, we expanded our scope to focus on certain nonstandard and accelerated acquisition procedures used to develop and procure nonmajor systems. We included the following nonstandard acquisition categories in our expanded scope of review because of their significant and recent activity.

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<sup>1/</sup> Formerly the Operational Test and Evaluation Agency

- o Army systems classified as Limited Procurement-Urgent (LPU). We identified 41 such systems as of July 1991.

- o Army systems initially developed and procured under the Army's Quick Reaction Capability procedures. We identified seven such systems as of February 1990.

- o Navy systems developed and procured under the Rapid Development Capability (RDC) procedures. We identified five such systems as of February 1991.

In addition, we identified 14 nonmajor systems originally evaluated under the Foreign Weapons Evaluation or North Atlantic Treaty Organization Comparative Test programs from 1985 to 1991 where OT&E was scheduled or conducted.

This program audit was conducted from October 1990 through September 1991. The audit was made in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD, and accordingly included such tests of internal controls as were considered necessary. Activities visited or contacted are listed in Appendix D.

### Internal Controls

We reviewed the DoD and Military Department acquisition and OT&E policies, procedures, and practices to determine if controls were established and effective to ensure that OT&E results are an integral part of the procurement decision for nonmajor systems. The audit identified material internal control weaknesses as defined by Public Law 97-255, Office of Management and Budget Circular A-123, and DoD Directive 5010.38. Controls were either not established or not effective in the Army to ensure compliance with requirements that OT&E be an integral part of the procurement decision for systems classified as LPU. Controls requiring OT&E of nondevelopmental items (NDI) before procurement were similarly ineffective. Recommendation A.1. in this report, if implemented, will correct these weaknesses. A copy of this report is being provided to the senior official responsible for internal controls within the Department of the Army.

### Prior Audits and Other Reviews

We identified 36 prior audit reports, issued between March 1987 and September 1991, addressing OT&E. Seven of these reports addressed OT&E of nonmajor systems or NDIs. A summary of the seven prior audit reports is contained in Appendix A.

## Other Matters of Interest

Recent Army initiatives. The Army Materiel Command issued guidance on the release of materiel in December 1990. This guidance mandates that an Operational Test and Evaluation Command (OPTEC) opinion is required before any new materiel or equipment is released for use by Army forces. Our discussions with the Army Materiel Command confirmed that this policy applies to Army-directed procurements and nonmajor systems classified as LPU. OPTEC published interim policy in March 1991 that provides procedures for conducting OT&E of urgently needed systems. The Army's Program Executive Officer for Intelligence and Electronic Warfare, as a result of our audit, has proposed changes to the draft Army Regulation 70-1, "Systems Acquisition Policy and Procedures" (Appendix B). We believe that these changes will help prevent unsafe or ineffective systems from being fielded, and we commend the Army Commands for their actions.

Quick-Reaction report. During this audit, we issued Report No. 91-083, "Quick-Reaction Report on the Audit of Operational Test and Evaluation of Nonmajor Systems--Vertical Launch Antisubmarine Rocket," May 17, 1991. The report contained the following conditions.

- o The Naval Sea Systems Command recommended approval for full-rate production of the Vertical Launch Antisubmarine Rocket despite operational testing, which demonstrated that it did not meet operational requirements.

- o The number of test articles was insufficient to fully prove its performance, and the test execution was inadequate.

We recommended that approval for full-rate production be deferred until the Vertical Launch Antisubmarine Rocket could be proven operationally effective and suitable. The Assistant Secretary of the Navy (Research, Development and Acquisition) concurred and stated that the Navy plans additional operational testing to determine whether the Vertical Launch Antisubmarine Rocket is operationally effective and suitable.



## PART II - FINDINGS AND RECOMMENDATIONS

### A. OPERATIONAL TEST AND EVALUATION OF NONMAJOR SYSTEMS

The U.S. Army Special Operations Command (USASOC) procured nonmajor systems without performing required operational tests and evaluations. USASOC received a LPU classification for systems previously developed and procured. USASOC believed that because the systems were comprised of NDIs, operational testing was not required before the item was procured. Two of the five systems reviewed had serious operational deficiencies that were not detected until after the systems were procured.

#### DISCUSSION OF DETAILS

##### Background

Special Operations Command. The U.S. Special Operations Command (USSOCOM) is a unified command that exercises command authority, direction, and control over the assigned Special Operations Forces. USSOCOM's Commander in Chief, who is headquartered at MacDill Air Force Base, Florida, provides combat-ready Special Operations Forces for rapid reinforcement of other unified commands. USASOC, which is headquartered at Fort Bragg, North Carolina, is the Army component command of the USSOCOM.

As of June 1991, the Army Communications-Electronics Command, Fort Monmouth, New Jersey, was developing 25 nonmajor systems for the USASOC. Eight of these twenty-five systems were procured on a limited quantity and urgent basis. We judgmentally selected five of these eight systems for review.

Criteria. DoD Instruction 5000.2,<sup>2/</sup> part 8, "Test and Evaluation," defines OT&E as the field test, under realistic conditions, of an item or key component of weapons, equipment, or munitions to determine operational effectiveness and suitability. The results of testing production-representative articles should confirm, before production or procurement, that design problems have been identified, solutions are available, and the items tested are effective and suitable for their intended use.

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<sup>2/</sup> DoD Directive 5000.3 was combined with DoD Instruction 5000.2 on February 23, 1991.

The Instruction requires that the Test and Evaluation Master Plan (TEMP), which is the overall planning and scheduling document, defines test objectives, critical issues, system characteristics, responsibilities, resources, and schedules for OT&E. The TEMP must be approved before any system testing begins. Specific operational test scenarios and events are covered by operational test plans. Test plans include test objectives, measures of effectiveness, and planned operational scenarios including operational realism.

The Instruction also requires that the DoD Components' independent OTAs plan and conduct OT&E and report the test results to verify operational effectiveness and suitability of the system and to ensure that required operational thresholds are met. Furthermore, NDI should follow the same principles for OT&E as for developed systems.

Army Regulation 70-1, "Systems Acquisition Policies and Procedures," requires that OPTEC manage all Army OT&E. OPTEC is required to assist in the preparation of the operational testing portion of the TEMP and to participate in developing operational issues and criteria. OPTEC is also required to review and comment on waivers and exclusions from operational testing. Although testing may be waived, an operational evaluation is still required before the system is procured.

Army Regulation 70-1 further states that testing is required when NDIs are to be used in a different environment than the NDI was originally designed (adaptation) or incorporated into subsystems, modules, or components (integration).

The Regulation further states that candidate NDIs must undergo OT&E before type classified as standard. An exception exists when the acquisition approval authority makes and documents a decision that prior testing or other data provide sufficient evidence of material suitability. However, an acquisition requirement that cannot be eliminated from an NDI approach is independent OT&E planning and reporting.

AR 70-1 requires that the materiel developer/mission assignee develop plans and documents necessary to ensure that adequate OT&E is conducted on LPU procurements. The LPU classification is used to meet urgent operational requirements that cannot be satisfied with existing materiel.

### Operational Test Planning

USASOC did not prepare a Required Operational Capability (ROC), TEMP, or Test Plan for four of the five systems we reviewed. Test

plans were not prepared because USASOC believed the systems were to be comprised of NDI, which did not require that a ROC, TEMP, or Test Plan be prepared. The systems reviewed and the status of test documents were as follows.

<u>SYSTEM</u>	<u>ROC</u>	<u>TEMP</u>	<u>TEST PLAN</u>
SOICS	Yes	Yes	Yes
AN/MSQ-85B	No	No	Yes
AN/TSC-122	No	No	No
AN/GSC-59A	Draft	No	No
OP-177/U	Draft	Draft	No

USASOC did not consult OPTEC on the testing requirements of these systems; however, on November 7, 1990, OPTEC issued a memorandum that instructed USASOC to implement requirements specified in the directed procurement to include preparation of a formal test plan and scheduling of OT&E before awarding production contracts.

The systems we reviewed were in various stages of development before approval of the directed procurement and before each system was classified as LPU, as follows.

- o Special Operations Improved Cryptographic System (SOICS) began as an advanced development program in 1986. The directed procurement was issued before the start of initial OT&E.

- o USASOC procured 46 of the planned 48 AN/MSQ-85B units before the approval of the LPU classification in September 1989.

- o AN/TSC-122 was previously classified as LPU in 1986. However, this system was part of the 1989 directed procurement. Army Regulation 70-1 does not specify a blanket waiver of OT&E when a system is classified as LPU. The March 1989 direction specifically required OT&E.

### Operational Test Conduct

USASOC did not schedule operational testing of any of the five systems before procuring quantities that exceeded those needed for testing. Testing was not conducted because USASOC believed the systems were comprised of NDI. USASOC also contended that Army-directed procurements did not require operational testing before procurement.

These five systems' components were nondevelopmental. However, OT&E of these systems before procurement was required because the systems were integrations of components, modules, or subsystems. The systems' subsequent performance in initial OT&E demonstrated the risk of not testing before procurement.

The Army Audit Agency issued a report addressing operational test requirements for NDI in the Army. Report No. NE 91-204, "Acquisition of Nondevelopmental Items," June 17, 1991, stated that technical and operational test and evaluation often was not conducted for NDIs before production contracts were awarded. NDIs requiring adaptation or integration were usually tested on a limited basis, and the test results did not adequately show that the items were operationally suitable or ready for production. The Report stressed that controls need to be established to ensure that NDIs are adequately tested and evaluated before production unless independent evaluation or other data conclude that testing can be reduced or eliminated. Since the Report addressed deficiencies of testing NDI in the Army, no recommendation involving NDI testing is being made in our report.

#### Effect of not Testing Nonmajor Systems Before Procurement

Two of the five systems reviewed demonstrated serious operational deficiencies that were not discovered until after the systems were procured. This occurred because USASOC did not conduct operational testing of the systems, which would have quickly demonstrated system deficiencies, before the procurement was authorized. The other three systems reviewed did not display any significant operational deficiencies.

SOICS. SOICS was in advanced development when it was designated an Army-directed procurement and classified as LPU. The Communications-Electronics Command then awarded a production contract for 209 outstations and 8 base stations costing \$4.1 million. The TEMP required 10 outstations and 2 base stations for OT&E. No operational testing was planned or conducted for this LPU quantity. However, when initial OT&E was conducted on the advanced development model 1 year later, serious operational failures occurred. These failures involved component incompatibilities resulting in electrical shocks to the operators. The SOICS also failed several operational requirements and failed to meet the National Security Agency's certification standards. The initial OT&E was suspended for safety reasons, and the SOICS development program and contract were subsequently terminated. Although none of the LPU units have been accepted, the Communications-Electronics Command reported that about \$3.5 million of the \$4.1 million was unrecoverable.

AN/MSQ-85B. USASOC purchased 48 of the authorized 66 systems under the terms of the LPU classification without conducting OT&E. This procurement exceeded that needed for testing and was not supported by a documented operational

urgency. During OT&E, the system was found to significantly exceed the carrying capacity of the designated host vehicle. This occurred because the system was not tested for total weight, a critical attribute of any system that is dependent on a vehicle for transport. The deficiency would have been revealed by operational testing. As a result, each of the 48 systems to be deployed will require an unplanned second vehicle, significant redesign to reduce total weight, or a single larger host vehicle.

RECOMMENDATIONS, MANAGEMENT COMMENTS, AND AUDIT RESPONSE

1. We recommend that the Army's Deputy Chief of Staff for Operations and Plans require Operational Test and Evaluation of systems exceeding a test quantity when granting the Limited Procurement-Urgent classification.

Army comments. The Assistant Deputy Chief of Staff for Operations and Plans, Force Development, concurred with Recommendation A.1. and stated the Army is standardizing formats for all directed procurements, addressing the issue of type classification regarding directed procurements, and establishing procedures to control the validation of directed procurements.

Audit response. We request that management provide a completion date for this action when responding to the final report. The Assistant Deputy Chief of Staff provided additional comments to the draft report that require clarification. Minor corrections were made to this report, where appropriate. However, we were correct in reporting that the Army Materiel Command issued guidance addressing materiel release policies in December 1990 (Part I, Other Matters of Interest). The Assistant Deputy Chief of Staff emphasized that this was not the first Army guidance on the matter. We did not imply that this was the initial guidance on materiel release policies involving test and evaluation in the Army. The Assistant Deputy Chief of Staff also contended that the Army communication system, the AN/TSC-122, was not part of the March 1989 directed procurement. However, the Army's response states that \$14.4 million was provided for this system from the \$108 million Congress authorized. It remains our contention that directed procurements classified LPU are not exempt from operational testing.

2. We recommend that the Commander in Chief, Special Operations Command, implement operational testing requirements when developing and procuring nonmajor systems.

USSOCOM comments. The Commander in Chief, Special Operations Command, partially concurred with Recommendation A.2. and stated that the recommendation should be addressed to the Department of the Army.

Audit response. The Commander in Chief's comments are not considered responsive because they do not address the requirement to implement operational testing when developing and procuring nonmajor systems. The Army stated in their comments to this report that this recommendation should be addressed by USSOCOM. In addition, AR 70-1, Chapter 3, states that requirements documents are normally generated by the combat developer with participation by the trainer, personnel manager and logistician. Therefore, we contend that this recommendation is properly addressed to USSOCOM, the combat developer for the systems addressed in this report. We request that management reconsider its position when responding to the final report.

STATUS OF RECOMMENDATIONS

<u>Number</u>	<u>Addressee</u>	<u>Response Should Cover:</u>			<u>Related Issues*</u>
		<u>Concur/ Nonconcur</u>	<u>Proposed Action</u>	<u>Completion Date</u>	
A.1.	ODCSOPS			X	IC
A.2.	USSOCOM	X	X	X	

\*IC=Material Internal Control Weakness

## B. SPECIAL PROCUREMENTS OF NONMAJOR SYSTEMS

The Navy procured nonmajor systems using special acquisition procedures without either conducting OT&E or using the OT&E results to support a procurement decision. In addition, a producer of a foreign weapon system restricted data required for OT&E for the Navy. The Navy misinterpreted the regulation that defines required test procedures and a Chief of Naval Operations authorization that a nonmajor system could be procured without conducting OT&E. The Navy was unable to negotiate removal of a foreign country restriction when planning for operational testing. The Navy increased the risk that the systems procured under special acquisition procedures would fail in their intended use. The Navy also could not test Critical Operational Issues of one foreign system.

### DISCUSSION OF DETAILS

Navy Rapid Development Capability program. The Navy established the Rapid Development Capability (RDC) program so that it could react quickly to newly discovered threats through special administrative procedures designed to expedite development, testing, and procurement of existing or new systems. Projects requiring lengthy research and development generally are not designated RDC. Rather, RDC is used to exploit and/or develop existing technology.

Navy Instruction 3900.37A, "Rapid Development Capability for Warfare Systems," October 27, 1971, establishes policy and procedures and assigns responsibilities for maintaining the RDC program. However, this Instruction does not obviate the need for operational testing for all acquisition programs. RDC projects are approved by the Assistant Secretary of the Navy (Research, Development and Acquisition).<sup>3/</sup>

We identified five active nonmajor systems that were being developed under the RDC program. We reviewed four of these systems and found that one was not operationally tested before the award of the production contract.

The Shipboard Advanced Radar Target Identification System (SARTIS) enables surface ships to positively identify military and civilian aircraft. In February 1986, the Navy approved the operational requirement for a noncooperative target recognition

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<sup>3/</sup> RDC projects were formerly jointly approved by the Assistant Secretaries of the Navy (Research and Development) and (Shipbuilding and Logistics). These offices have been combined.

system. SARTIS is one of four components of this system. Initially, a RDC designation was approved authorizing the procurement of 20 SARTIS units. However, funding constraints limited the total procurement to 13 units.

In April 1989, the Naval Air Systems Command, Air Traffic Control and Landing Systems Program Management Office (PMA-213), requested and received a Test and Evaluation Identification Number (TEIN) from the Director, Navy Test and Evaluation and Technology Requirements (OP-91). The TEIN permits the independent test agency to plan and monitor testing. The Director required that the program office submit a TEMP to the Chief of Naval Operations for approval.

The program office misinterpreted Navy Instruction 3900.37A, which stipulated that operational testing was required before production. The program office did not submit a TEMP because it did not consider SARTIS to be a "formal program." The program office also contended that operational testing would prolong the development and fielding of a SARTIS. However, during our discussions with the Operational Test and Evaluation Force (OPTEVFOR) and with representatives of OP-91, we were informed that SARTIS is a formal program because it has been assigned a TEIN and an acquisition category. We were subsequently informed that in September 1991, the program office requested that the TEIN be canceled. This cancellation would remove SARTIS from OPTEVFOR budget and test planning responsibilities. We also learned that the program office's plans for the 13 funded SARTIS' will be comprised of 2 units for first article testing and 11 units for production. The 13 units will be used to develop performance parameters to be used in planning and conducting operational testing.

As of September 1991, the program office had not planned to conduct OT&E before the procurement of the 11 SARTIS. Without successful completion of OT&E, the Navy cannot provide reasonable assurance that the SARTIS can meet its specified operational requirements.

**Authorized Procurement--Precise Integrated Navigation System.** The Precise Integrated Navigation System (PINS) is used on the Mine Countermeasures class of ships. It provides navigation, position fixing, and command and control functions. The Navy established the operational requirement for PINS in 1977 and purchased three engineering development models in 1981. PINS was subsequently developed in three phases, each distinguished by changes in computers and other components designed to enhance system quality and performance.

In April 1984, the Chief of Naval Operations authorized procurement of four units of PINS, Phase I, plus one training unit. In April 1985, the Naval Sea Systems Command (NAVSEA) awarded a contract for this procurement, based on the Chief's authorization, before conducting OT&E and without OPTEVFOR concurrence. The initial OT&E of PINS, conducted in October 1985, found that the system was potentially operationally effective and suitable. However, the test report recommended the correction of 14 deficiencies and the verification of those corrections during additional OT&E.

In November 1985, the Chief of Naval Operations authorized the in-house assembly of four units of PINS, Phase II. A work order for the four units was issued in March 1986 before additional OT&E was conducted. NAVSEA claimed that changing computer hardware and software between Phases I and II did not change the PINS' capacity. However, the changes to reconfigure to Phase II were significant, and the deficiencies disclosed during OT&E of Phase I were not corrected before procurement of the Phase II units. The initial Phase I units were reconfigured to Phase II capability between January 1988 and May 1989.

In February 1988, the Chief of Naval Operations directed that OT&E of Phase II be conducted to allow the OPTEVFOR to recommend procurement of five additional units. Initial OT&E of Phase II was conducted in June 1989. The OPTEVFOR recommended that limited fleet introduction be withheld until six of the reported deficiencies were corrected and verified by additional testing. The 14 deficiencies reported during OT&E of Phase I increased to 24, of which 7 were repeat deficiencies, during OT&E of the Phase II units.

NAVSEA, via the acquisition authorization from the Chief of Naval Operations, incrementally procured 9 of the 14 PINS before conducting required OT&E and before correcting deficiencies disclosed during subsequent testing. Retrofitting Phase III components into Phase II units may create unforeseen integration problems if the corrections to the deficiencies reported during OT of Phase II are not verified before conducting OT&E on Phase III.

Foreign Weapons Evaluation program. The Foreign Weapons Evaluation program is a DoD-wide effort to evaluate foreign-produced weapon systems for their potential to meet U.S. operational needs. Systems that successfully undergo Foreign Weapons Evaluation and are of interest to the Military Departments are subjected to OT&E.

DoD Directive 5000.3-M-2, "Foreign Weapons Evaluation and NATO Comparative Test Programs," establishes policy and procedures for evaluating foreign systems, including the requirement that systems being procured by the Military Departments first undergo OT&E, as prescribed by DoD Instruction 5000.2, part 8. Consequently, access to a complete system and the supporting technical data are necessary if the operational tester is to fully evaluate the Critical Operational Issues of the system.

We identified 14 foreign weapon systems for which OT&E was conducted or scheduled by the Military Departments. We reviewed eight of the tested systems and found that, in one system, the foreign producer restricted the scope of OT&E and withheld technical data.

FWE -- Penguin Missile. The Penguin Missile is a short range cruise missile that was developed by Norway and used in both air and surface-to-surface applications. The Navy is procuring the Penguin to be used as a helicopter launched anti-ship missile.

The Navy became interested in the Penguin in the 1970's and entered into a Memorandum of Understanding with Norway before conducting a series of Foreign Weapons Evaluations. The Memorandum granted Norway approval authority for certain types of tests of the Missile guidance system. The Navy subsequently determined that the Penguin could be modified and used as a helicopter-launched weapon and began a joint development program with Norway.

While the Navy was preparing the required operational test plans, Norway objected to the conduct of certain tests designed to evaluate a critical portion of the system in a realistic threat environment. Norway contended that the proposed testing violated the Memorandum of Understanding. The Navy program office contended that the proposed testing did not violate the Memorandum. However, Navy legal counsel informed the program office that it could take several years to resolve the dispute. The Navy then agreed to defer the disputed operational test events until Follow-on Test and Evaluation, which would not be conducted until at least 50 missiles were procured at a cost of about \$65 million.

The Penguin Missile program office requested and received a full-rate production decision based on an analysis performed by the Naval Research Laboratory, other available data, and limited initial OT&E results. The Navy exercised contract options for the procurement of the Penguin Missiles, costing about \$84 million, without the assurance of operational effectiveness and suitability that adequate OT&E would have provided.

## RECOMMENDATIONS FOR CORRECTIVE ACTION

1. We recommend that the Assistant Secretary of the Navy (Research, Development and Acquisition):

a. Direct the Naval Air Systems Command, Air Traffic Control and Landing Systems Program Management Office, to prepare a Test and Evaluation Master Plan for the Shipboard Advanced Radar Target Identification System.

b. Defer exercising contract options of the Shipboard Advanced Radar Target Identification System contract until the system successfully completes Operational Test and Evaluation.

c. Direct that a Follow-on Operational Test and Evaluation be conducted for the Penguin Missile addressing all critical issues before executing remaining contract options.

2. We recommend that the Chief of Naval Operations, on future directed procurements, specifically include operational testing and evaluation to support the procurement decision.

## MANAGEMENT COMMENTS

We requested that comments on the draft report be provided to us by February 28, 1992. As of April 14, 1992, we had not received responses to the draft report. Therefore, we request that the Assistant Secretary of the Navy (Research, Development and Acquisition) and the Chief of Naval Operations provide comments to the final report.

## STATUS OF RECOMMENDATIONS

<u>Number</u>	<u>Addressee</u>	<u>Response Should Cover:</u>		
		<u>Concur/ Nonconcur</u>	<u>Proposed Action</u>	<u>Completion Date</u>
B.1.a.	ASN (RDA)	X	X	X
B.1.b.	ASN (RDA)	X	X	X
B.1.c.	ASN (RDA)	X	X	X
B.2.	CNO	X	X	X



**PART III - ADDITIONAL INFORMATION**

- Appendix A - Prior Audits and Other Reviews
- Appendix B - Proposed Change to Army Regulation 70-1
- Appendix C - Summary of Potential Benefits Resulting from  
Audit
- Appendix D - Activities Visited or Contacted
- Appendix E - Report Distribution



## APPENDIX A: PRIOR AUDITS AND OTHER REVIEWS

Air Force Audit Agency Project No. 5026210, "Management of MAJCOM-Conducted Operational Test and Evaluation," May 20, 1987, stated that planned test objectives were insufficient to address the system's primary purpose; final conclusions were drawn without adequately considering all test results and/or scope limitations; controls over deficiency reporting and related directive guidance were inadequate; data banks for OT&E data were incomplete and underused; and monitoring of OT&E by Air Force OT&E monitors was not always effective. The Air Force report provided 10 recommendations that addressed the revision of existing Air Force regulations and the correction of noted deficiencies. Management concurred in principle. However, the planned corrective actions were considered to be fully responsive to the recommendations.

Army Audit Agency Report No. HQ 88-600, "Audit of the Development Process for Nonmajor Systems," December 15, 1987, concluded that nonmajor systems were not properly tested before they were produced and were fielded before deficiencies were corrected; and the Army developed systems that were available commercially and could have been acquired as NDIs. The report recommended:

- o revision and clarification of existing guidance to emphasize the need for testing and for correction of deficiencies before systems are fielded, and

- o enhancement of existing and new procedures to identify commercially available materiel to meet Army requirements at less cost than developing new systems.

The Army concurred with the recommendations and implemented corrective actions.

**APPENDIX A: PRIOR AUDITS AND OTHER REVIEWS (cont'd)**

General Accounting Office Report No. NSIAD 90-168, (OSD Case No. 8325 and 8325X) "Electronic Warfare: Need to Strengthen Controls Over Air Force Jammer Programs," July 1990, stated that the Air Force procured jammers before their performance capability had been tested. This resulted in procurement of jammers that had limited effectiveness. The report recommended that the Secretary of Defense prohibit the Air Force from awarding further production contracts until operational test results demonstrate that the jammers will meet performance requirements and require the establishment of adequate internal controls over jammer programs to ensure adequate testing and require that favorable test results are attained before systems are produced and deployed. DoD acknowledged the deficiencies in past jammer programs, but stated that no programs proceed to full-rate production without an assessment of operational performance. DoD also stated that internal controls are in place to prevent premature full-rate production but proposed no specific corrective actions.

Army Audit Agency Report No. EC 90-211, "Acquisition of Nondevelopmental Items," August 21, 1990, stated that tests of most NDIs were not adequately planned and conducted, test results were not properly evaluated, and quantitative reliability requirements were not used when required and appropriate reliability testing was not conducted. The report recommended that reliability be determined for systems that do not already have a reliability determination before additional procurements are made. If reliability does not meet minimum requirements, additional procurements should be canceled. The Army concurred and stated that reliability assessments will be a prerequisite for further procurements. However, the Army did not propose specific actions to address systems for which reliability could not be brought into compliance with minimum requirements.

Office of the Assistant Inspector General for Auditing Report No. 90-111, "Development and Operational Testing for the Tube-Launched, Optically-Tracked, Wire-Guided (TOW-2B) Missile System," September 21, 1990, stated that the Army established a preliminary operational test plan, which was inadequate to

APPENDIX A: PRIOR AUDITS AND OTHER REVIEWS (cont'd)

demonstrate all operational requirements. The plan did not include testing to demonstrate the Missile's performance in a realistic combat environment. The report contained five recommendations. The Army concurred with the recommendations.

Army Audit Agency Report No. NE-91-204, "Acquisition of Nondevelopmental Items," June 17, 1991, was a summary report of a multilocation audit. The report stated that developers excessively streamlined the acquisition process by eliminating the research, development, and prototype phases; projects were costly and complex systems integrations that required substantial development and testing efforts; and systems proceeded into production without the required operational testing to provide assurance that the systems met requirements. The report recommended that:

- o developers be required to request waivers and fully justify any actions to consolidate, abbreviate, or eliminate any component, including research and development, of the concept formulation package; and

- o Army Regulation 70-1 be revised to more clearly require integration projects to undergo development and testing before production.

The Assistant Secretary of the Army (Research, Development and Acquisition) concurred with the findings and recommendations. The Army was developing a pamphlet that would address testing and other requirements for NDI's. The Army Audit Agency considered the actions responsive to the recommendations. The report was issued after the events discussed in this report. We therefore do not consider that the conditions discussed in our report resulted from any failure to respond to the Army Audit Agency's recommendations.

**APPENDIX A: PRIOR AUDITS AND OTHER REVIEWS** (cont'd)

Naval Audit Service Report No. 061-C-91, "Operational Test and Evaluation of Nonmajor Systems," September 30, 1991, stated that operational tests were not adequately documented, test results were not adequately documented, contractors were monitoring and participating in the testing, Navy program decision authorities used Low-Rate Initial Production approvals to authorize piecemeal procurement of major portions of system requirements, and OT&E results were not given adequate consideration in production decisions. The report contained 28 recommendations for corrective action. The addressees agreed either fully or in principle with all 28 recommendations. Their management responses cited corrective actions already implemented or planned, which met the intent of the recommendations.

# Appendix B: Proposed Change to Army Regulation 70-1



DEPARTMENT OF THE ARMY  
OFFICE OF THE  
PROGRAM EXECUTIVE OFFICER  
INTELLIGENCE AND ELECTRONIC WARFARE  
VINT HILL FARMS STATION  
WARRENTON, VIRGINIA 22186-5115

REPLY TO  
ATTENTION OF

SFAE-IEW-OP

28 JUL 1991

MEMORANDUM FOR HQDA, ATTN: SARD-RP (Mr. John Haug),  
Washington, D.C. 20310-0103

SUBJECT: Additional Comments to Draft AR 70-1, System  
Acquisition Policy and Procedures

1. Reference memorandum, PEO IEW, 16 July 1991, subject:  
PEOIEW Review Comments to Draft AR 70-1, System Acquisition  
Policy and Procedures.
2. As a result of a recently completed DoDIG audit concerning  
operational testing of non-major systems, several sections of  
Draft AR 70-1 in the area of non-standard Acquisition  
Requirements appear to need further clarification.  
Consequently, additional comments addressing these sections are  
forwarded (encl) for your consideration as recommended changes.
3. Questions concerning these comments may be addressed to my  
Operations Division Chief, Mr. Harry Wiggins, at DSN 229-5179  
or my T&E Manager, Mr. Jim Carman, at DSN 229-5938.

Encl

  
WILLIAM H. CAMPBELL  
Brigadier General, U.S. Army  
Program Executive Officer  
Intelligence and Electronic  
Warfare

CF: DoDIG, Acquisition Management Directorate  
Rm 725 (Mr. N. Como), 400 Army-Navy Dr ✓  
Arlington, VA 22202

PMSW

PROPOSED CHANGES TO DRAFT AR 70-1

Change pg 54, para 3-22.b.(3) to read: "Milestone decision review(s) replaced or eliminated by the tasking and any exceptional management procedures required to expedite the task. Operational testing waived or required will be specifically identified."

Change pg 54, para 3-22.c(4) to read: "Ensure that essential product characteristics are adequately tested and evaluated, with emphasis on any specific DA directed tests."

**APPENDIX C - SUMMARY OF POTENTIAL BENEFITS RESULTING FROM AUDIT**

<u>Recommendation Reference</u>	<u>Description of Benefit</u>	<u>Type of Benefit*</u>
A.1.	Program Results and Internal Controls. Requires operational testing of systems classified as LPU before procurement of quantities greater than that needed for testing.	Nonmonetary.
A.2.	Compliance with Regulations. Requires Special Operations Command to implement existing DoD and Military Department operational test requirements.	Nonmonetary.
B.1.a.	Compliance with Regulations and Program Results. Prepare required test documents and plan required operational test of untested system.	Nonmonetary.
B.1.b.	Program Results. Defer production until system operational effectiveness and suitability is proven.	Nonmonetary.
B.1.c.	Program Results. Withhold further production until all critical issues are resolved in operational testing.	Nonmonetary.
B.2.	Program Results. Provides operational test results to support procurement decisions.	Nonmonetary.

\* Although we classify improved compliance with DoD Instruction 5000.2, part 8, and the implementing Military Department's operational testing requirements as a nonmonetary benefit, it should be recognized that the underlying goals of these requirements are to improve the quality and performance of weapon systems, decrease costs of retrofitting fielded systems to correct deficiencies, and reduce the likelihood of procuring ineffective systems. While significant cost savings could be achieved through increased operational testing, the amounts are not readily quantifiable.



## APPENDIX D: ACTIVITIES VISITED OR CONTACTED

### Office of the Secretary of Defense

Office of the Deputy Director, Defense Research and Engineering,  
Washington, DC  
Deputy Under Secretary of Defense International Programs,  
Washington, DC  
Director, Operational Test and Evaluation, Washington, DC  
U.S. Special Operations Command, MacDill AFB, FL

### Department of the Army

Office of the Assistant Secretary of the Army (Research,  
Development and Acquisition) Washington, DC  
Deputy Chief of Staff for Operations and Plans, Washington, DC  
U.S. Army Materiel Command, Alexandria, VA  
U.S. Army Operational Test and Evaluation Command, Alexandria, VA  
U.S. Army Communications-Electronics Command, Ft. Monmouth, NJ  
U.S. Army Medical Research and Development Command,  
Ft. Detrick, MD  
U.S. Army Missile Command, Huntsville, AL  
U.S. Army Special Operations Command, Ft. Bragg, NC  
U.S. Army International Materiel Evaluation Division,  
Aberdeen Proving Ground, MD  
U.S. Army Armament Research, Development and Engineering Center,  
Picatinny Arsenal, NJ  
U.S. Army Chemical Research, Development and Engineering Center,  
Aberdeen Proving Ground, MD  
Combined Arms Combat Development Activity, Ft. Leavenworth, KS  
Program Executive Officer, Intelligence and Electronic Warfare,  
Vint Hill Farms Station, VA  
Project Manager, Tactical Management Information System,  
Ft. Belvoir, VA

### Department of the Navy

Chief of Naval Operations, Washington, DC  
Marine Corps Operational Test and Evaluation Activity,  
Quantico, VA  
Naval Sea Systems Command, Washington, DC  
Naval Air Systems Command, Washington, DC  
Space and Naval Warfare Systems Command, Washington, DC  
Navy Operational Test and Evaluation Force, Norfolk, VA  
Naval Air Development Center, Warminster, PA  
Navy International Program Office, Washington, DC

APPENDIX D: ACTIVITIES VISITED OR CONTACTED (cont'd)

Department of the Air Force

Office of the Assistant Secretary of the Air Force,  
(Test and Evaluation), Washington, DC  
Headquarters, United States Air Force, Washington, DC  
Air Force Operational Test and Evaluation Division,  
Washington, DC  
Air Force Operational Test and Evaluation Center,  
Kirtland AFB, NM  
Air Force Systems Command, Andrews AFB, MD  
Tactical Air Command, Langley AFB, VA  
Strategic Air Command, Offutt AFB, NE  
Air Force Space Command, Peterson AFB, CO  
Military Airlift Command, Scott AFB, IL  
Aeronautical Systems Division, Wright-Patterson AFB, OH  
Electronic Systems Division, Hanscom AFB, MA  
Space Systems Division, Los Angeles Air Force Base, CA  
USAF Tactical Air Warfare Center, Eglin AFB, FL  
AFOTEC Detachment 2, Eglin AFB, FL  
AFOTEC Detachment 4, Peterson AFB, CO  
1017th Test and Evaluation Squadron, Buckley AFS, CO  
Air Force Audit Agency, Eglin AFB, FL

## APPENDIX E: REPORT DISTRIBUTION

### Office of the Secretary of Defense

Under Secretary of Defense for Acquisition  
Comptroller of the Department of Defense  
Director, Operational Test and Evaluation  
Deputy Director, Defense Research and Engineering  
Assistant Secretary of Defense, Special Operations Low  
Intensity Conflict  
Commander in Chief, U.S. Special Operations Command

### Department of the Army

Secretary of the Army  
Assistant Secretary of the Army (Financial Management)  
Assistant Secretary of the Army (Research, Development and  
Acquisition)  
Deputy Chief of Staff for Operations and Plans  
Commander, Army Operational Test and Evaluation Command  
Commander, U.S. Army Communications-Electronics Command  
Commander, U.S. Army Medical Research and Development Command  
Commander, U.S. Army Missile Command  
Commander, U.S. Army Special Operations Command  
Commander, U.S. Army Chemical Research, Development and  
Engineering Center  
Commander, U.S. Army Combined Arms Combat Development Activity  
Program Executive Officer, Intelligence and Electronic Warfare

### Department of the Navy

Secretary of the Navy  
Assistant Secretary of the Navy (Financial Management)  
Assistant Secretary of the Navy (Research, Development and  
Acquisition)  
Chief of Naval Operations  
Commander, Operational Test and Evaluation Force  
Commander, Naval Sea Systems Command  
Commander, Naval Air Systems Command  
Commander, Space and Naval Warfare Systems Command  
Navy International Program Office

APPENDIX E: REPORT DISTRIBUTION (cont'd)

Department of the Air Force

Secretary of the Air Force  
Assistant Secretary of the Air Force (Financial Management and  
Comptroller)  
Assistant Secretary of the Air Force, Director of Test and  
Evaluation  
Air Force Operational Test and Evaluation Division  
Commander, Air Force Operational Test and Evaluation Center  
Commander, Air Force Systems Command  
Commander, Strategic Air Command  
Commander, Tactical Air Command  
Commander, Air Force Space Command

Non-DoD Activities

Office of Management and Budget  
U.S. General Accounting Office, NSIAD Technical Information  
Center

Congressional Committees:

Senate Subcommittee on Defense, Committee on Appropriations  
Senate Committee on Armed Services  
Senate Committee on Governmental Affairs  
Ranking Minority Member, Senate Committee on Armed Services  
House Committee on Appropriations  
House Subcommittee on Defense, Committee on Appropriations  
Ranking Minority Member, House Committee on Appropriations  
House Committee on Armed Services  
House Committee on Government Operations  
House Subcommittee on Legislation and National Security,  
Committee on Government Operations

**PART IV - MANAGEMENT COMMENTS**

Department of the Army, Deputy Chief of Staff for  
Operations and Plans

Commander in Chief, Special Operations Command



# Management Comments: Department of the Army

Final Report  
Reference



DEPARTMENT OF THE ARMY  
OFFICE OF THE DEPUTY CHIEF OF STAFF FOR OPERATIONS AND PLANS  
WASHINGTON DC 20310-0460



REPLY TO  
ATTENTION OF

DAMO-FDR

4 Mar 92

MEMORANDUM FOR INSPECTOR GENERAL, DEPARTMENT OF DEFENSE  
(AUDITING)

SUBJECT: Audit Report on Operational Test and Evaluation of  
Non Major Systems (Project No. 1AB-0009)

1. Reference memorandum, HQDA (SAIG-PA), 6 January 1992, SAB.
2. Reference memorandum requires comments on actions assigned to ODCSOPS and internal review issues. Only one action, Finding A.1, belongs to ODCSOPS. The other recommendations belong to USSOCOM, Department of the Navy, and USD(A).

a. The Army concurs with concept and rationale for Finding A.1. This has already been implemented and has been a requirement in all directed procurements issued by the ADCSOPS-FD for the past three to four years. This is a requirement irregardless of test quantities to be purchased. Currently, this office is working with OASA(RDA) to standardize formats for all directed procurements, address the issue of type classification with respect to directed procurements, and to control the internal ODCSOPS development of directed procurements to be validated through ADCSOPS-FD.

b. In addition, during the OSD staffing of AR 70-1, there was concern about the concept of directed procurements. OSD expressed the thought that these are in fact directed "requirements" which can be handled as streamlined acquisition programs under the same concepts as any other program. This was the same position expressed to ADCSOPS-FD in January of this year by personnel from Army General Counsel. The potential outgrowth is that directed procurements will change drastically and this action may be overcome by the change.

3. Material facts which need to be corrected are as follows.

a. Pg 5, Recent Army Initiative. First sentence is incorrect. The initial regulation on Materiel Release, Fielding, and Transfer, AR 700-142, was issued in 1986 by the Office of the Deputy Chief of Staff for Logistics. AMC may have provided internal guidance or implemented the program in more detail in the December 1990 timeframe but, that command did not issue the first Army guidance on the release issue. Furthermore, the requirement for the Operational Test and Evaluation community to participate in a decision for release predates even the 1986 regulation as it

3

## Management Comments: Department of the Army (Continued)

### Final Report Reference

DAMO-FDR  
SUBJECT: Audit Report on Operational Test and Evaluation of  
Non Major Systems (Project No. 1AB-0009)

was incorporated in the draft guidance issued by ODCSLOG by direction of the VCSA from 1984 until the regulation was published.

6

b. Pg 9, 2nd paragraph. AR 70-1, the current version of which is dated 1988, does not "require OPTEC to participate in all Army OT&E". It requires the test and evaluation community to be involved in all acquisitions to ensure that appropriate test and evaluation is conducted. OPTEC did not exist in its current form in 1988; the test and evaluation community was spread out among several commands but has since been consolidated. Most test and evaluation of non major programs was conducted by TRADOC test boards in conjunction with TECOM because OTEA was responsible primarily for major programs with some ACAT II. An outgrowth of the consolidation of test and evaluation activities is that the managers of non major programs can not now forget T&E issues.

6

c. Pg 10, 1st Paragraph. AR 70-1 specifies that NDI must undergo OT&E prior to being type classified as STANDARD not Generic which could be the first step in type classification (see para 7-3b and 7-8b(4), AR 70-1, 10 Nov 88).

7

d. Pg 12, Subparagraph 3. AN/TSC-122 was not one of the seven systems approved by the ADCSOPS-FD in the March 1989 directed procurement funded from the \$108M provided by Congress. The AN/TSC-122 was upgraded in 1988 by the original issuing offices in OASA(RDA) (previously ODCSRDA), ODCSOPS (MOSO), and ODISC4 (previously OACSIM) with resources out of the \$108M. In no place in the original two messages (1986/1988) is there a requirement for testing. Both messages and the OTEA letter to JFK Special Warfare Center on the subject are enclosed.

4. Reference internal control issues, by establishing a set format for directed procurements and forcing the use of In-Process Review procedures, the T&E activities would be able to remain involved in the acquisition of these type systems. The format for a directed procurement specifies test and evaluation requirements and the involvement of the T&E community.

5. This memorandum was coordinated with SARD-RP who is responsible for AR 70-1. POC this office is M. Frick, x79712.



Encl

JAY M. GARNER  
Major General, GS  
Assistant Deputy Chief of Staff  
for Operations and Plans,  
Force Development

Management Comments: Department of the Army (Continued)

ROUTINE ZYUW RUEADWD8086 3432224  
R 092224Z DEC 86  
FM HQ DA WASHDC //DAMA-CSZ-A//  
TC CDR AMC ALEX VA//AMCRE/AMXSO/ANCSM-WC//  
INFO DA WASHDC //DAIM-OI/DAMA-CSC-CM/DALO-SMC/DAMO-OD/DALO- /DALO-  
PLO//  
CDR FORSCOM FT MCPHERSON GA//AFDC/AFLG//  
CDR TRADOC FT MONROE VA//ATCD-ML//  
CDRTROSCOM ST LOUIS MO //AMXSO-TLI//  
CDRCECOM FT MONMOUTH NJ //AMSEL-ED-F/AMSEL-MM//  
CDR 1ST SOCOM FT BRAGG NC//AFVS-CE/AFVS-GC-FD/AFVS-  
GD//  
CDR USA JFKSWCS FT BRAGG NC//ATSU-CD-ML-C//  
CDRUSALEA NCAD PA //DALO-LEI//

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UNCLAS  
SUBJ: LIMITED PROCUREMENT URGENT (LPU) TYPE CLASSIFICATION FOR  
AN/TSC-XXX FOR SOF  
A. JCS MSG 022023Z DEC 85 SUBJECT: MRDC FOR IMPROVED COMMUNICATIONS  
CAPABILITY FOR UNCONVENTIONAL WARFARE/SPECIAL OPERATIONS FORCES  
(UW/SOF) (S) (NOTAL)  
B. US ARMY SPECIAL OPERATIONS FORCES MODERNIZATION ACTION PROGRAM (U)  
5 SEP 86 (S) (NOTAL)  
1. THE PURPOSE OF THIS MESSAGE IS TO DIRECT LP(U)TYPE CLASSIFICATION  
OF 16 HF MULTICHANNEL SYSTEMS (AN/TSC-XXX) AND PECULIAR ASSOCIATED  
SUPPORT ITEMS OF EQUIPMENT (ASIOE).  
2. THERE IS AN URGENT REQUIREMENT TO FILL THE 112TH SIGNAL BN MTOE  
REQUIREMENT FOR HF MULTICHANNEL SYSTEMS. HQS CECOM HAS EXPEDITED THE  
PROCUREMENT PLANNING FOR 16 EACH AN/TSC-XXX, Z LINE NO. 33859.  
3. THIS LP(U)TYPE CLASSIFICATION IS VALID FOR 6 SYSTEM THROUGH DEC  
1990.  
4. INITIAL DEPLOYMENT OF THE AN/TC-XXX MAY NOT PEERMIT FULL MILITARY  
SUPPORT. THEREFORE, CONTRACT MAINTENANCE AND TECHNICAL ASSISTANCE  
SUPPORT MAY BE REQUIRED UNTIL FULL SUPPORT IS AVAILABLE. THE MATERIAL  
DEVELOPER IN COORDINATION WITH THE COMBAT DEVELOPER AND FORSCOM WILL  
DEVELOP A SUPPORT PLAN AND PROVIDE FOR ITS IMPLEMENTATION.  
5. INFORMATION REQUIRED BY PARA 2-3A(3) OF AR 70-61 MUST BE PROVIDED  
THIS HQS NLT 27 FEB 1987.  
6. THIS IS A COORDINATED OACSIM/ODCSRDA/ODCSLOG MESSAGE. POCS FOR  
THIS MESSAGE ARE LTC WILSON (ODCSRDA) AV 224-8398; LTC CROCKETT  
(OACSIM) AV 224-0417; MAJ LOPEZ (ODCSLOG) AV 225-3280.  
BT

ACTION DAMA(2) (F)  
INFO DALO(6) DAMO(6) SCB REVIEW(1) DAIM(4)

MCN=86343/28115 TOR=86343/1936Z TAD=86343/2334Z CDSN=MAD761  
PAGE 1 OF 1  
092224Z DEC 86

UNCLASSIFIED

Management Comments: Department of the Army (Continued)

UNCLASSIFIED

01 02 101520Z NOV 88 RR RR UUUU

DA WASHINGTON DC //SAIS-PPT//  
CDR CECOM FT MONMOUTH NJ //AMSEL-RD-SOF//  
INFO CDR 1ST SOCOM FT BRAGG NC //ASOF-IM/ASOF-SIG//  
USCINCSOC MACDILL AFB //SOJB//  
CDR AMC ALEX VA //AMC-DE-F//  
DA WASHINGTON DC //MOSO-ODF/DAMO-FDC//

UNCLAS

SUBJ: HIGH FREQUENCY {HF} MULTICHANNEL {AN/TSC-122} LIMITED  
PROCUREMENT URGENT AUTHORIZATION

A. ASD FOR CBI MEMO, DTD 19 AUG 88, SUBJ: HIGH FREQUENCY {HF}  
MODEMS FOR SPECIAL OPERATIONS FORCES {SOF} - ACTION MEMORANDUM.

B. HQ DA MSG, DTD 092224Z DEC 86, SUBJ: LIMITED PROCUREMENT  
URGENT {LPU} TYPE CLASSIFICATION FOR AN/TSC-XXX FOR SOF.

1. THE PURPOSE OF THIS MESSAGE IS TO PROVIDE AUTHORIZATION TO  
EXTEND THE LPU IN REF B THROUGH THE FOURTH QUARTER FY92.  
ADDITIONALLY THE QUANTITIES OF 16EA SYSTEMS IS CHANGED TO 8EA WITH  
A 200% OPTION. CONCURRENTLY WITH THE EXECUTION OF THIS LPU CECOM  
SHOULD CONTINUE NECESSARY EFFORTS REQUIRED FOR THE FULL COMPETITIVE  
PROCUREMENT OF THE AN/TSC-122 PROGRAM.

2. THIS MESSAGE ALSO CONSTITUTES APPROVAL, INACCORDANCE WITH REF

MAJ CROCKETT, SAIS-PPT, 40417

MICHAEL P. KAPLAN, COL, GS, C, PPT

*Michael P. Kaplan*

UNCLASSIFIED

## Management Comments: Department of the Army (Continued)

UNCLASSIFIED

02 02

UUUU

A. FOR THE PROCUREMENT OF HF MODEMS IN SUPPORT OF THIS LPU. REF A PROVIDES FOR AN EXEMPTION FOR SOF AS APPROVED ON 24 AUG 88. THE REQUIREMENT FOR THE AN/TSC-122 LPU WAS PART OF THE JUSTIFICATION FOR OBTAINING THE OASD (CBI) EXEMPTION. PER THE OASD (CBI) EXEMPTION, THE MODEMS PROCURED MUST BE COMPATIBLE WITH EXISTING OPERATIONAL RADIOS WHILE BEING CAPABLE OF MEETING THE NEW MODEM STANDARDS AS DEVELOPED BUT NOT YET MADE OFFICIAL. THIS MESSAGE ONLY PERMITS THE PROCUREMENT OF MODEMS IN SUPPORT OF THE AN/TSC-122 PROGRAM.

3. FUNDING FOR THIS LPU HAS BEEN IDENTIFIED AS A PRIORITY ITEM. \$14.4M (FY89) HAS BEEN FENCED FOR THE AN/TSC-122 PROGRAM, AS PART OF THE \$108M FY89 FUNDING RECENTLY PROVIDED BY CONGRESS IN SUPPORT OF ARMY SOF COMMUNICATIONS.

4. THIS IS A 1STSOCOM, USCINCSOC-J6 AND MOSO-ODF COORDINATED MESSAGE. POC THIS HEADQUARTERS IS MAJ CROCKETT, AV 224-0417.

UNCLASSIFIED



# Management Comments: Special Operations Command



UNITED STATES SPECIAL OPERATIONS COMMAND  
OFFICE OF THE DEPUTY COMMANDER IN CHIEF AND CHIEF OF STAFF  
MACDILL AIR FORCE BASE, FLORIDA 33608-6001

04 MAR 1992

MEMORANDUM FOR: Office of the Inspector General, Department of Defense, Attn: Director, Acquisition Management, 400 Army Navy Drive, Arlington, VA 22202-2884

SUBJECT: DODIG Draft Report on Project No. 1AB-0009, IRAC No. 09-91

1. The U. S. Special Operations Command has reviewed subject Draft Report.

2. In compliance with the requested format, CINCSOC offers a partial concurrence because facts as presented should be clarified and the recommendation should be addressed to the Department of the Army.

a. **FUNDING.** The programs mentioned in the report were directed procurements under the \$108 million plus-up approved by Congress in 1989. The report does not discuss that the funding provided these systems was received by the activities in March 1989 and had to be obligated--that is, a contract had to be awarded by September 30, 1989, or the money would expire. The funding dilemma unique to these acquisitions should not be presented as an excuse for cutting corners and making costly decisions. However, the short life of the money permeated many decisions regarding the programs and should be presented to the reader.

b. **TESTING RESPONSIBILITY.** These programs were authorized as a directed procurement. AR 70-1 discusses HQDA directed procurements in Chapter 4 and states that the Materiel Developer is responsible to develop plans and documents necessary to ensure conduct of adequate test and evaluation. For these programs USASOC was the Combat Developer and AMC (CECOM) was the Materiel Developer. Although there is disagreement addressed later in this memorandum about testing of the systems, it was the Army's responsibility for the testing, therefore the recommendation concerning testing should be addressed to the Army, not USSOCOM.

c. **TEST DOCUMENTS.** AR 70-1 also states that the HQDA directive for a directed procurement will be considered as the Army-validated operational requirement in lieu of a materiel requirements document and will include a statement of need. It was the directive that was used as a basis for not preparing a Required Operational Capability (ROC), not because the systems were NDI.

## Management Comments: Special Operations Command (Continued)

SUBJECT: DODIG Draft Report on Project No. 1AB-0009, IRAC  
No. 09-91

d. **OPTEC.** As stated above, USASOC was the Combat Developer, and not responsible for contacting OPTEC. However, the memorandum mentioned in the report was sent after the production contracts were awarded. From the present wording in the report, a reader could believe that contacting OPTEC was required of USASOC and that USASOC awarded production contracts despite a memorandum that may have prohibited it.

e. **EFFECT OF NOT TESTING.** The report says that two of the five systems had serious operational deficiencies that were not detected because operational testing was not conducted.

(1) **SOICS:** Operational testing was conducted. An initial OT&E found a shock hazard. The hazard was identified and was being corrected. It was not a serious operational deficiency as represented in the DODIG report and it was not the reason the program was cancelled. The program was cancelled because the system could not meet certification requirements of the National Security Agency. This could not have been predicted nor remedied.

(2) **AN/MSQ-85B:** The OT&E for weight was tested on 11 Jul 89 at SAAD. A waiver was requested for the system being overweight for the target vehicle. The waiver was approved 25 May 90.

f. **OT&E OVERSIGHT RESPONSIBILITIES.**

(1) **SORDAC:** The Special Operations Research, Development and Acquisition Center (SORDAC) has been established only since February 1, 1991, and is responsible to monitor the acquisition of SOF unique equipment. Many of the acquisition programs already underway before SORDAC's establishment were being managed by the services. SORDAC has since taken over monitorship and refers to these as "inherited" programs. These programs have been inherited programs by the SORDAC and will be monitored for compliance with acquisition regulations.

(2) **USSOCOM OT&E:** DOD Directive 5000.1, dated 23 Feb 91, mandated that each Military Department, and as appropriate, Defense agency establish an independent operational test and evaluation activity. In response to this directive, CINCSOC authorized the establishment of an independent OT&E organization for SOF programs by 1 Oct 92.

## Management Comments: Special Operations Command (Continued)

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SUBJECT: DODIG Draft Report on Project No. 1AB-0009, IRAC  
No. 09-91

3. USSOCOM appreciates the opportunity to comment. Should you have further questions or requests, please contact Ms Sherry Roberson, DSN 968-2302, USSOCOM Internal Review, Building 501, MacDill Air Force Base, Florida, 33608-6001.

  
THOMAS E. EGGERS  
Major General, USAF  
Deputy Commander in Chief  
and Chief of Staff



**AUDIT TEAM MEMBERS**

Donald E. Reed, Director, Acquisition Management Directorate

Raymond A. Spencer, Program Director

Nicholas Como, Project Manager

Geraldine M. Edwards, Team Leader

Bucceroni Mason, Team Leader

Jonathan M. Rabben, Team Leader

Gopal K. Jain, Auditor

Margaret P.B. Richardson, Auditor

Robert T. Briggs, Auditor