
October 10, 2003



Acquisition

Acquisition Management
of the Army's All Source
Analysis System
(D-2004-006)

Department of Defense
Office of the Inspector General

Quality

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Acronyms

| | |
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| ASAS | All Source Analysis System |
| ATCCS | Army Tactical Command and Control System |
| COICs | Critical Operational Issues and Criteria |



INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202-4704

October 10, 2003

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE (ACQUISITION,
TECHNOLOGY AND LOGISTICS)
DIRECTOR OF OPERATIONAL TEST AND EVALUATION
AUDITOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: Report on the Acquisition Management of the Army's All Source Analysis System (Report No. D-2004-006)

We are providing this report for your review and comment. We considered management comments on a draft of this report when preparing the final report.

DoD Directive 7650.3 requires that all recommendations be resolved promptly. Recommendation 5. was revised based on the results of a meeting with the staff of the Director, Operational Test and Evaluation. Therefore, we request that the Program Executive Officer, Command, Control and Communications Tactical and the Commanding General, U.S. Army Test and Evaluation Command provide additional comments on restated Recommendation 5. by December 9, 2003.

If possible, please provide management comments in electronic format (Adobe Acrobat file only). Send electronic transmission to the e-mail addresses cited in the last paragraph of this memorandum. Copies of the management comments must contain the actual signature of the authorizing official. We cannot accept the / Signed / symbol in place of the actual signature. If you arrange to send classified comments electronically, they must be sent over the SECRET Internet Protocol Router Network (SIPRNET).

We appreciate the courtesies extended to the audit staff. For additional information on this report, please contact Mr. David M. Wyte at (703) 604-9027 (DSN 664-9027) (dwyte@dodig.osd.mil). See Appendix F for the report distribution. The team members are listed inside the back cover.

By direction of the Deputy Inspector General for Auditing:

A handwritten signature in black ink, appearing to read "Mary L. Ugone".

Mary L. Ugone
Acting Director
Acquisition Management Directorate

Office of the Inspector General of the Department of Defense

Report No. D-2004-006
(Project No. D2002AL-0157)

October 10, 2003

Acquisition Management of the Army's All Source Analysis System

Executive Summary

Who Should Read this Report and Why? DoD acquisition executives, program managers, and independent testers and evaluators should read this report because similar management control issues may apply to other weapons and information technology acquisitions.

Background. The All Source Analysis System (ASAS) is an Army Acquisition Category II, mission-critical weapon system that has been in development since 1979. It is a family of systems being acquired and deployed by evolutionary blocks and spiral version enhancements. A key ASAS component is the Remote Workstation. The combination hardware and software system provides automated information support to intelligence staff elements and other designated intelligence organizations.

The Program Executive Officer, Command, Control and Communications Tactical is the ASAS Milestone Decision Authority. The Project Manager, Intelligence and Effects, in coordination with the Army Training and Doctrine Command System Manager and the Army Test and Evaluation Command, acquires, tests, and deploys ASAS hardware and software components. Total Army acquisition development and deployment costs for ASAS could exceed \$2.5 billion.

Results. The Army redesignated the ASAS as an Acquisition Category II program when it should have remained an Acquisition Category I program. Further, the ASAS Remote Workstation with Version 4 Software did not demonstrate intended results when it was tested and evaluated by the Army Test and Evaluation Command. In addition, the Office of the Director, Operational Test and Evaluation expressed a qualified opinion in its FY 1999 Annual Report that the Remote Workstation should be fielded, despite problems with software interoperability and logistics supportability.

Management controls need to be implemented for the ASAS acquisition to ensure that ASAS products demonstrate results in accordance with operational requirement documents. Specifically, the Under Secretary of Defense for Acquisition, Technology, and Logistics should elevate the acquisition from an Acquisition Category II Major Defense Acquisition Program to an Acquisition Category I Major Defense Acquisition Program and assume responsibility for acquisition management oversight. In addition, the Under Secretary of Defense for Acquisition, Technology, and Logistics, in coordination with the Under Secretary of Defense (Intelligence), should establish benchmarks for critical operational issues and criteria as deployment thresholds for operational tests. Further, the Program Executive Officer, Command, Control and Communications Tactical should implement comparative cost, schedule, and performance parameters for measuring system efficiency and effectiveness and for projecting program results; and test and evaluation results should validate that the ASAS was ready for

operational testing and that operators and analysts were sufficiently trained to use the system. Also, the Director, Operational Test and Evaluation should provide unqualified opinions for ASAS effectiveness and suitability. (See the Finding section of the report for the detailed recommendations.)

Management Comments and Audit Response. The Under Secretary of Defense for Acquisition, Technology, and Logistics nonconcurred, although he agreed in principle with the recommendation to elevate the ASAS Program to an Acquisition Category I and provide appropriate acquisition management oversight if the dollar thresholds for a major defense acquisition program are met. He will decide whether to evaluate the acquisition after the Major Defense Acquisition Program List is updated in December 2003. In addition, the Under Secretary concurred with raising the deployment threshold for operational tests and will issue updated program guidance if the ASAS is elevated to an Acquisition Category I program.

The Program Executive Officer, Command, Control and Communications Tactical concurred with the recommendation to implement comparative cost, schedule, and performance parameters. The Director, Operational Test and Evaluation concurred in principle with providing unqualified opinions on the effectiveness and suitability of tested systems. However, he will provide his opinion on the ASAS Block II after the initial operational test and evaluation rather than after tests of system components, which the All Source Analysis System Test and Evaluation Master Plan requires. Because the ASAS Block II development is near completion, we request that the Director, Operational Test and Evaluation provide the Inspector General of the Department of Defense with a copy of his assessment of the Army's ASAS Block II Initial Operational Test and Evaluation after tests are completed. Also, changes that addressed user training were made to the report as a result of a meeting with the Director's staff.

As a result of discussions with personnel in the Office of the Director, Operational Test and Evaluation, we restated the recommendation directed to the Commanding General, Army Test and Evaluation Command to ensure that ASAS products and personnel are ready for operational testing. Therefore, we request that the Commanding General, Army Test and Evaluation Command and the Program Executive Officer, Command, Control, and Communications Tactical comment on the revised recommendation by December 9, 2003. See the Finding section of the report for a discussion of the management comments and the Management Comments section of the report for the complete text of the comments.

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Background

The All Source Analysis System (ASAS) is an Army Acquisition Category II mission-critical weapon system. It is a family of systems and is the Army's primary tactical electronic intelligence system. As the intelligence and electronic warfare command and control node (cluster) of the Army's Tactical Command and Control System, ASAS interfaces with other key systems in the Army Battle Command System.¹ The ASAS filters large volumes of incoming raw data and provides intelligence staff elements with targeting information, predictions on enemy courses of action, and threat and force protection alerts in near real time at collateral and compartmented security levels. Variations of ASAS have been in development since 1979.

Acquisition Strategy. Following Office of Management and Budget and DoD guidance, the Army is acquiring ASAS component systems by evolutionary² blocks with spiral³ version enhancements. Each block and version builds on previously deployed capabilities and functions. Block I, deployed between FY 1993 and FY 1995, provided the initial capabilities for intelligence analysis and dissemination. Block II development began in FY 1994 and will enhance the intelligence fusion capabilities and interoperability of Block I when deployed in its final version. The Milestone C acquisition decision for ASAS Block II is planned for April 2004. Block III was the planned objective capability for ASAS. However, the Army has revised the ASAS acquisition strategy and plans to replace it after deployment of Block II.

Program Management. There is no ASAS Program Management Office; the Program Executive Office, Command, Control and Communications Tactical is the ASAS Program Executive Office and its milestone decision authority. Acquisition management and life-cycle support is a team effort. The Project Manager, Intelligence and Effects in the Program Executive Office acquires, tests, and deploys system hardware and software components, in coordination with the System Manager, Army Training and Doctrine Command and the Army Test and Evaluation Command. The Army Communications and Electronics Command assumes life-cycle support of ASAS blocks after deployment. Lockheed Martin Mission Systems, Denver, Colorado, is the ASAS Block II prime contractor and was awarded a \$247 million, cost-plus-award-fee contract for software development and integration in FY 1994.

In June 1999, the Army redesignated ASAS from an Acquisition Category I to an Acquisition Category II program.⁴ As a result, the Army

¹The Army's link to the Global Command and Control System that receives and transmits information to the joint forces.

²Evolutionary acquisition quickly delivers functional capabilities in increments and allows for future improvements.

³Spiral development is an evolutionary acquisition strategy that continually refines requirements through demonstration and risk management.

⁴Although managers of Acquisition Category I programs are required to report program status to DoD and Congress at least annually, those reports are generally not required for Acquisition Category II programs.

provides the Under Secretary of Defense for Acquisition, Technology, and Logistics with a quarterly progress report; however, progress is not comparatively measured with cost, schedule, and performance baselines for determining efficiency indexes and projecting results. Total Army acquisition development and deployment costs for ASAS from inception to completion could exceed \$2.5 billion. From FY 1983 through FY 2002, obligations exceeded \$2 billion. Planned obligations for ASAS development and procurement for FY 2003 exceed \$113 million.

Remote Workstation. A key component of the ASAS family of systems is the Remote Workstation, which is a combination information hardware and software system that provides automated support to intelligence staff elements and other designated intelligence organizations. The Remote Workstation is connected to the existing Intelligence and Electronic Warfare Battlefield Operating System and the Army Battle Command System architectures. Version 4 has been deployed, and Version 6 is being operationally tested. Since FY 1994, the Army has expended more than \$166 million on hardware and software products for the Block II Remote Workstation.

The General Accounting Office has listed the acquisition of DoD weapon systems as a high risk since 1990. Two prior audits⁵ addressed the ASAS Block II Acquisition. Both reports concluded that DoD and the Army prematurely commenced deployment of Block I before tests demonstrated that the system acquisition met operational effectiveness and suitability requirements. The Inspector General of the Department of Defense reported that milestone reviews by the Defense Acquisition Board were inadequate to support a decision to proceed into Block II.

Objective

The overall audit objective was to evaluate the acquisition management of the ASAS. Specifically, the audit determined whether the ASAS was being cost-effectively acquired, monitored, tested, and prepared for deployment and system life-cycle support in accordance with Office of Management and Budget and DoD guidance. We also evaluated the management control program related to the objective. See Appendix A for a discussion of the audit scope and methodology and the review of the management control program.

⁵General Accounting Office Letter Report, GAO/NSIAD-94-49, "Army Needs to Reconsider and Test the All Source Analysis System Alternative," March 7, 1994, and Inspector General of the Department of Defense Report No. 93-087, "Review of the All Source Analysis System as a Part of the Audit of the Effectiveness of the Defense Acquisition Board Review Process – FY 1993," April 20, 1993.

Acquisition Management of the All Source Analysis System

The Army redesignated the ASAS as an Acquisition Category II program when it should have remained an Acquisition Category I program. Further, the ASAS Remote Workstation with Version 4 software did not demonstrate the intended results when it was operationally tested. Those conditions occurred because the Under Secretary of Defense for Acquisition, Technology, and Logistics and the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence),⁶ as the functional proponent of intelligence systems for the Office of Secretary of Defense, did not require that management and testing controls be implemented when the system's acquisition approach was redefined. Also, the Army Test and Evaluation Command did not conduct tests in a realistic environment with skilled military intelligence personnel, and the Director, Operational Test and Evaluation did not report test results and conclusions in accordance with section 2399, title 10, United States Code and DoD guidance. As a result:

- The Army could not determine whether it had cost-effectively acquired, monitored, tested, and prepared the Remote Workstation for deployment and system life-cycle support,
- DoD and Army independent evaluators unnecessarily expended resources on a system that required additional hardware and software development and user training; and
- Army intelligence units had to apply alternate information solutions to compensate for missing or inoperable system capability when the deployed ASAS Block II Remote Workstation did not achieve the intended results.

Guidance

The Office of Management and Budget issued guidance addressing management controls in Circular A-123, "Management Accountability and Control," June 21, 1995, which defines management controls as the organization, policies, and procedures used to reasonably ensure that:

- programs achieve their intended results;
- resources are used consistent with mission;

⁶Reorganized as the Under Secretary of Defense (Intelligence) and the Assistant Secretary of Defense for Networks and Information Integration/DoD Chief Information Officer.

-
- programs and resources are protected from waste, fraud, and mismanagement;
 - laws and regulations are followed; and
 - reliable and timely information is obtained, maintained, reported, and used for decision making.

Further, Circular A-109, “Major Systems Acquisitions,” April 1976, states that Federal agencies should ensure that each major system, such as ASAS, fulfills a mission need, operates effectively in its intended environment, and demonstrates a level of performance and reliability that justifies the allocation of the Nation’s limited resources for its acquisition and ownership. DoD Instruction 5010.40, “Management Control (MC) Program Procedures,” August 28, 1996, and DoD Instruction 5000.2, “Operation of the Defense Acquisition System,” May 12, 2003, implement Office of Management and Budget guidance. In addition, Army Regulation 73-1, “Test and Evaluation Policy,” January 7, 2002, and Army Pamphlet 73-5, “Test and Evaluation: Operational Test and Evaluation Guidelines,” September 30, 1997, reinforce this guidance by requiring effective operational tests and evaluations for system acquisitions.

ASAS Management Controls

The Under Secretary of Defense for Acquisition and Technology⁷ did not rigorously apply management controls for the acquisition of the ASAS Block II and its key component, the Remote Workstation. When he defined the management approach to the Army Tactical Command and Control System,⁸ the Under Secretary allowed the Army to redesignate the ASAS as an Acquisition Category II program and to delegate oversight to its materiel developer without concurrently revising requirements, schedule, and performance parameters to coincide with the revised baseline costs. Further, the Under Secretary allowed the Army to deploy the Remote Workstation with Block II software without conclusively demonstrating that it was effective and suitable in an operational environment.

Acquisition Thresholds and Oversight

Section 2430, title 10, United States Code defines development cost thresholds for major systems acquisitions. In turn, DoD applies those thresholds to prioritize its acquisitions and assign organizational oversight. As gatekeepers, overseers attempt to instill discipline and accountability into major acquisitions by requiring program managers to periodically report on cost, schedule, and performance and demonstrate results for program milestone advancements.

⁷Currently, the Under Secretary of Defense for Acquisition, Technology, and Logistics.

⁸The Army Tactical Command and Control System includes ASAS; the Advance Field Artillery Tactical Data System; the Forward Area Air Defense Command, Control and Intelligence System/Air and Missile Defense Workstation; the Combat Service Support Control System; and the Maneuver Control System.

Program Oversight. Prior to June 1999, ASAS was designated an Acquisition Category I program with oversight responsibility and milestone decision authority assigned to the Under Secretary of Defense for Acquisition and Technology. As an Acquisition Category I program, the Army was required to measurably demonstrate to DoD and Congress in annual Selected Acquisition Reports⁹ that its capital investment in the ASAS family of systems was progressing according to baseline plans and meeting milestone goals. However, the Selected Acquisition Reports ceased when the Under Secretary of Defense for Acquisition and Technology, in a December 10, 1998, memorandum, redirected DoD acquisition oversight for ASAS and four other systems to the Army Tactical Command and Control System (see Appendix B).

Rebaseline Direction. In addition to the change in oversight, the Under Secretary's memorandum, "Army Tactical Command and Control System (ATCCS) Management Approach," directed the Army to work with the Office of the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) to revise the baseline for the ASAS and the four other Army Tactical Command and Control System Acquisition Category I programs into separate program blocks to synchronize and coordinate them with software releases from the Army Battle Command System. However, ASAS was midway through its Block II system acquisition when the memorandum requiring synchronization and coordination was released.

Compliance with the Rebaseline Direction. As a result of the Under Secretary's memorandum, the Army divided costs for the Block II ASAS into two parts. Costs accumulated prior to January 1, 1999, were identified as Block IIa and costs planned after December 31, 1998, were identified as Block IIb. However, when the Army revised the baseline for the ASAS, it did not recognize \$264 million that it previously invested in Block IIa. According to Army personnel,¹⁰ the revised cost baseline for ASAS recognized planned costs only after December 31, 1998. Further, operational requirements, schedules, key performance parameters and budgets were not revised to coincide with the reduced baseline cost. As a result of those differences, the Army could not determine ASAS progress, evaluate effectiveness and efficiency, or project program results because management control baselines for the revised Block II acquisition were incompatible for measuring cost, schedule, and performance. Also, the Army subsequently redesignated the ASAS as an Acquisition Category II program in June 1999, and delegated acquisition oversight to the Program Executive Officer for Command, Control and Communications Systems¹¹ when

⁹The Selected Acquisition Report is a comprehensive status report that is required by section 2432, title 10, United States Code to be submitted to Congress at least annually for all Acquisition Category I programs. It provides congressional committees with key cost, schedule, and performance information.

¹⁰In the absence of documentation, we relied on discussions with personnel involved with ASAS development at the Offices of the Program Executive Officer, Command, Control and Communications Tactical and the Project Manager, Intelligence and Effects.

¹¹Subsequently renamed Program Executive Officer for Command, Control and Communications Tactical.

Block II development costs slipped below the Acquisition Category I threshold for research, development, test and evaluation.¹²

Remote Workstation Users

Army intelligence units began receiving Remote Workstations with Block II, Version 4 software in FY 2000. To determine whether the Remote Workstation supported mission requirements, we visited deployed sites and, from user interviews, documented observations on the system's operational effectiveness and suitability¹³ at five Army installations and three National Guard locations. Users generally agreed that the Remote Workstation was a useful planning tool; however, they also believed that the Remote Workstation had operational effectiveness and suitability limitations. Specifically, at all sites visited users stated that:

- the system was unable to maintain around-the-clock operations,
- training was inadequate and/or infrequent,
- certain environmental conditions affected hardware operations,
- system operations were overly dependent on contractor support, and
- the system lacked multi-Service interoperability.

Further, intelligence units with deployed Block II Remote Workstations with Version 4 software had to compensate for missing and inoperable information system capability with alternative solutions, such as Power Point presentations, map boards, and radios and telephones because the Remote Workstation could not support intelligence collecting, analysis, and targeting functions. Appendix C lists, by topic, general and specific observations made by users.

Test and Evaluation

The Army conditionally deployed the Remote Workstation with Block II, Version 4 software when test results and evaluations did not conclusively demonstrate that the Remote Workstation was effective and suitable in an operational environment. Contrary to Office of Management and Budget, DoD, and Army guidance, the Army did not demonstrate that the Remote Workstation, was effective and suitable when operated in a realistic environment by skilled military intelligence personnel.

¹²Acquisitions totaling more than \$355 million in research, development, test and evaluation expenditures were identified as Acquisition Category I programs.

¹³Army Regulation 73-1, "Test and Evaluation Policy," January 7, 2002, defines operational suitability as "The degree to which a system can be satisfactorily placed in field use with consideration given to availability, compatibility, transportability, interoperability, reliability, wartime usage rates, maintainability, safety, human factors, manpower supportability, logistics supportability, and training requirements."

The Under Secretary of Defense for Acquisition and Technology, in his December 10, 1998, memorandum, granted the Army a waiver that effectively reduced the deployment threshold for ASAS operational tests. The Under Secretary allowed the Army to deploy ASAS components if test and training events confirmed that functionality was migrating toward Block III requirements, rather than satisfying operational requirements. However, our review of the Army operational test report,¹⁴ as well as a report prepared for the Director, Operational Test and Evaluation by a Federally Funded Research and Development Center,¹⁵ concluded that tests, results, and evaluations for the Remote Workstation did not demonstrate system functionality in an operational environment.

Quality of Tests. The Army did not conduct operational tests in a realistic environment in accordance with Army Pamphlet 73-5. Instead of conducting a single operational test for measuring effectiveness and suitability, the Army conducted two separate and distinct tests. One limited user test, conducted in a controlled environment, demonstrated technical capability, and the other limited user test, conducted during a scheduled warfighting exercise, demonstrated operational performance. Neither test demonstrated operational effectiveness and suitability in a realistic environment.

The Army, in the technical capability test, interfaced Remote Workstations with the Army Tactical Command and Control System on the local area network rather than using redundant communication and data feeds in accordance with the system's Operational Requirements Document. Further, The Army also did not test production representative system configurations. The Army updated software between the two exercises and tested hardware that did not include production representative processors. Also, more contractor support staff participated in tests than will support the Remote Workstation in the field. As a result, the Army did not conduct tests with tactics, doctrine, logistics, and maintenance support in accordance with Army guidance.

Test Results. Test results for the Remote Workstation did not decisively demonstrate that the system was migrating towards objective requirements. Users, demonstrating effectiveness and suitability experienced difficulties analyzing information and operating system hardware and software. Contrary to the Army's evaluation, test results demonstrated that Remote Workstation users were unable to perform substantive intelligence functions when compared with the Critical Operational Issues and Criteria (COICs) identified in the ASAS Test and Evaluation Master Plan.

COICs. COICs provide objective and subjective benchmarks for measuring test results and evaluating mission performance. They address the functional requirements for determining effectiveness and training readiness, deployability, sustainability, and survivability. According to Army Regulation

¹⁴“System Evaluation Report for the All Source Analysis System (ASAS) Block II Remote Workstation (RWS),” Army Operational Test and Evaluation Command, September 1999.

¹⁵“Operational Testing of the ASAS Remote Workstation,” Institute for Defense Analyses Paper P-3490, November 12, 1999, performed for the DoD Director, Operational Test and Evaluation.

73-1, “Test and Evaluation Policy,” COICs must be answered before systems are ready to enter full-rate production for deployment.

The Army’s decision to conditionally deploy the Remote Workstation was based on four COICs. COICs 1 and 2 measured functional effectiveness, and COICs 3 and 4 measured system suitability. The key effectiveness and suitability issues were:

- Does the system satisfy the Commander’s intelligence and targeting support requirements? (COIC 1)
- Does the system establish and maintain interfaces with other systems to provide required information exchanges? (COIC 2)
- Does the system deploy and operate on the battlefield? (COIC 3)
- Does the system provide a wartime capability for sustained combat operations with the level of system training and readiness during peacetime for operators/analysts/maintainers? (COIC 4)

Criteria. The Army selected 76 effectiveness and suitability criteria for testing and evaluating whether the Remote Workstation was migrating towards Block III requirements. Forty-four criteria measured functional effectiveness and 32 criteria measured suitability. However, the Army did not test and evaluate all the selected criteria. Thirty-one criteria were deferred or not evaluated because the Army believed that tests required Remote Workstation interoperability and interfaces with other ASAS components and support systems. The following tables show the results of the Army’s effectiveness and suitability criteria evaluations for the Remote Workstation.

Table 1. Effectiveness Evaluations
(in percent)

| <u>Criteria Met</u> | <u>Criteria Partially Met</u> | <u>Criteria Not Met</u> | <u>Criteria Deferred</u> | <u>Criteria Not Evaluated</u> |
|---------------------|-------------------------------|-------------------------|--------------------------|-------------------------------|
| 36 (16 of 44) | 25 (11 of 44) | 16 (7 of 44) | 23 (10 of 44) | 0 (0 of 44) |

Table 2. Suitability Evaluations
(in percent)

| <u>Criteria Met</u> | <u>Criteria Partially Met</u> | <u>Criteria Not Met</u> | <u>Criteria Deferred</u> | <u>Criteria Not Evaluated</u> |
|---------------------|-------------------------------|-------------------------|--------------------------|-------------------------------|
| 28 (9 of 32) | 3 (1 of 32) | 3 (1 of 32) | 50 (16 of 32) | 16 (5 of 32) |

Evaluations of Effectiveness. The Army’s evaluations of system effectiveness showed that 61 percent (27 of 44)¹⁶ of the test results met or partially met criteria. However, we believe that even those results were overstated and not balanced because comparisons between criteria and test results for the criteria met and partially met categories did not recognize the offsetting effects of the user’s inability to operate the system and reliance on support contractor assistance.

Using the Army’s criteria for measuring effectiveness, we derived different results for 11 criteria that the Army categorized as “Criteria Met” and “Criteria Partially Met.” We believe that only 36 percent¹⁷ (16 of 44) of the tests met or partially met criteria. Criteria test differences between the Army and the audit evaluations of Remote Workstation effectiveness can be found in Appendix D. The following three examples explain why the audit team’s evaluations differ with the Army’s “Criteria Partially Met” evaluations.

Criterion 1.2.1.4. Criterion 1.2.1.4 requires analysts and operators to provide complete answers to more than 85 percent of priority intelligence requirements and answers to all requests for information. However, when the Army tested this criterion, analysts and operators provided complete answers to only 12 percent (2 of 17) of the priority intelligence requirements and did not answer all requests for information. Rather than attribute the results to the tested Remote Workstation, the Army attributed the below-threshold performance for providing answers to requirements and requests to users who were unable to operate the Remote Workstation; the absence of an operations staff to guide the intelligence process; and ineffective or nonexistent tactics, techniques and procedures.

Criterion 1.2.3.5. Criterion 1.2.3.5 requires analysts and operators to nominate 70 percent of the unique high value and high payoff targets that meet target criteria. However, when the Army tested this criterion, the analysts and operators identified only 28 percent (55 of 195) of high payoff targets. The below-threshold performance was not due to the Remote Workstation, according to the Army, but to the inability of analysts and operators to operate the system. The Army indicated that a separate test achieved the desired goal when support contractors operated the Remote Workstation in a nonoperational environment.

Criterion 1.2.4.8. Criterion 1.2.4.8 requires analysts and operators to prepare, edit, and transmit and disseminate a selected set of collection management messages and graphic products. However, because of system instability, difficulty of use, and lack of shared capability, users were unable to

¹⁶Seventy-nine percent (27 of 34) of the test results met or partially met effectiveness criteria when deferred criteria were eliminated from the determinations.

¹⁷Forty-seven percent (16 of 34) of the test results met or partially met effectiveness criteria when deferred criteria were eliminated from the determinations.

perform the complete function. Analysts and operators had to find alternate solutions for the message preparation and editing processes. Despite these functional limitations, the Army believed that the Remote Workstation partially met this criterion because it could transmit and disseminate selected sets of collection management messages and graphic products when data were placed into the system from the alternate sources.

Evaluations of Suitability. The Army's evaluations for suitability showed that 91 percent (10 of 11)¹⁸ of test results met or partially met the criteria. However, we believe that the Army's results were overstated because users demonstrating the system had to rely on contractor assistance due to technical issues and operators who were not sufficiently trained to operate the system. We believe that 60 percent (6 of 10) of Army criteria met or criteria partially met evaluations were overstated. Criteria test differences between the Army and audit evaluations for logistics support, software maturity, system stability and robustness, subsystem interoperability, and the ability of representative soldiers to perform critical functions and maintain and support the Remote Workstations in an operational environment can be found in Appendix E.

Effectiveness and Suitability. The Remote Workstation did not demonstrate that it could provide commanders with qualitative intelligence data to support military operations. Army Field Manual 34-1, "Intelligence and Electronic Warfare Operations," September 27, 1994, requires that military intelligence be timely, relevant, accurate, and synchronized to support tactical, operational, and strategic commanders across the range of military operations. Because the Army overstated the test results for hardware and software effectiveness and suitability from nonrepresentational tests, and deferred or did not test more than 40 percent (31 of 76) of the required effectiveness and suitability criteria, the Army did not convincingly demonstrate that the Remote Workstation was migrating towards Block III requirements.

Operational Testing Requirements

The Army and the Director, Operational Test and Evaluation did not adequately comply with requirements for operational testing. The Remote Workstation with Version 4 software was allowed to be deployed when operational test results demonstrated that the system required additional development and that users required additional training prior to testing.

Army Operational Testing and Evaluation. The Army had not prepared the Remote Workstation or personnel demonstrating the system for operational testing and evaluation. Army Regulation 73-1 requires that only operationally effective, suitable, and survivable systems are delivered to users. Further, operational test readiness is confirmed after systems have been stressed to at least the levels expected in the operating environment, and demonstrate a level of achievement of system performance, safety, health hazards, survivability, human

¹⁸After eliminating deferred criteria from determinations of system suitability.

factors engineering, reliability, availability, maintainability, and integrated logistics support. Based on the Army Test and Evaluation Command's test results and evaluations for the Remote Workstation, we believe that the Army had not prepared the Remote Workstation for operational testing and unnecessarily expended resources on a system that required additional development and user training prior to testing. Army Pamphlet 73-5 states that, in the past, where tests were eliminated or reduced, deficient systems were deployed, resulting in costly modifications. However, when testing is adequate and complete, a system is deployed with favorable results in the field.

Director, Operational Test and Evaluation. The Director, Operational Test and Evaluation expressed a qualified opinion in its FY 1999 Annual Report that the Remote Workstation did not fully meet the requirements for effectiveness and suitability, as defined by the Army's Critical Operational Issues. Section 2399, title 10, United States Code and DoD Instruction 5000.2 require that the Director, Operational Test and Evaluation express an opinion on whether tests and evaluations were adequate and whether the results confirmed that tested items or components were effective and suitable for combat. However, instead of stating an unqualified opinion addressing the quality of tests and results, the Director concluded that the Remote Workstation should be fielded, despite software, interoperability, and demonstrated logistics supportability problems, because it provided operational value. We believe that the conclusion was inconsistent with the Director's responsibility for assessing operational tests and subsequent results, because it did not address the system's effectiveness and suitability for combat.

Conclusion

The Under Secretary of Defense for Acquisition, Technology, and Logistics, in coordination with the Under Secretary of Defense (Intelligence), needs to reconsider the decision to redirect acquisition oversight for ASAS to the Army Tactical Command and Control System. That decision allowed the Army to revise the baseline for program costs without concurrently adjusting schedule and performance baselines; to redesignate the program's acquisition category; and, subsequently, to delegate oversight responsibilities and milestone decision authority to the ASAS Program Executive Officer. The decision reduced testing thresholds and allowed the Army to deploy ASAS components that did not always satisfy user requirements.

In addition, the Army Test and Evaluation Command's test and evaluation results did not validate that the Remote Workstation developed by the Program Executive Officer, Command, Control and Communications Tactical was ready for operational testing; and the Director, Operational Test and Evaluation expressed a qualified opinion on whether tests and evaluations were adequate and whether the test results confirmed system effectiveness and suitability.

As a result and as identified in prior audits, the Army could not determine whether ASAS and a key component, the Remote Workstation with Version 4 Software, were cost-effectively acquired, monitored, tested, and prepared for

deployment and system life-cycle support¹⁹ in accordance with Office of Management and Budget, DoD, and Army guidance. In addition, Army intelligence units with Remote Workstations had to apply alternate information solutions to compensate for missing and inoperable system capability, and DoD and Army independent evaluation organizations unnecessarily expended resources on an ASAS component that required additional development and user training prior to testing.

Recommendations, Management Comments and Audit Response

Revised Recommendation. We revised Recommendation 5 in response to suggestions by the Director, Operational Test and Evaluation at a meeting with his staff. Specifically, the recommendation directs the Commanding General, Army Test and Evaluation Command and the Program Executive Officer, Command, Control and Communications Tactical to jointly ensure that All Source Analysis System products are adequately tested and users demonstrating system products are adequately trained.

1. We recommend that the Under Secretary of Defense for Acquisition, Technology and Logistics:

a. Redesignate the All Source Analysis System as an Acquisition Category I Major Defense Acquisition Program in accordance with DoD guidance.

b. Assume responsibility for providing DoD acquisition management oversight for the All Source Analysis System Block II acquisition.

Under Secretary of Defense for Acquisition, Technology and Logistics Comments. The Under Secretary of Defense for Acquisition, Technology, and Logistics nonconcurrent, although he agreed in principle with the recommendation. Rather than immediately upgrading the All Source Analysis System to an Acquisition Category I, the Under Secretary believed that it would be appropriate to reevaluate the system acquisition when the Major Defense Acquisition Program List is updated in December 2003. In addition, if the weapon system meets the dollar thresholds for a Major Defense Acquisition Program and is elevated to a Acquisition Category I program, management oversight would be provided.

Audit Response. Management comments meet the intent of the recommendation to reevaluate the ASAS acquisition. We believe that the ASAS Block II acquisition meets the Major Defense Acquisition Program threshold and is an Acquisition Category I program.

¹⁹Acquisition system life-cycle support for Army acquisitions concludes after deployment.

2. We recommend that the Under Secretary of Defense for Acquisition, Technology, and Logistics, in coordination with the Under Secretary of Defense (Intelligence), raise the deployment threshold for the All Source Analysis System operational tests from “migrating towards objective requirements” to satisfying benchmarks for critical operational issues and criteria.

Under Secretary of Defense for Acquisition, Technology, and Logistics Comments. The Under Secretary of Defense for Acquisition, Technology, and Logistics concurred, and stated that guidance will be issued if the All Source Analysis System is elevated to an Acquisition Category I program.

3. We recommend that the Program Executive Officer, Command, Control and Communications Tactical restore baseline integrity to the All Source Analysis System by ensuring that cost, schedule, and performance parameters measure progress, determine effectiveness and efficiency indexes, and project program results.

Program Executive Officer, Command, Control and Communications Tactical Comments. The Program Executive Officer, Command, Control and Communications Tactical concurred and will implement the recommendation by October 15, 2003.

4. We recommend that the Director, Operational Test and Evaluation, when evaluating the quality of the All Source Analysis System operational tests and analyzing subsequent results, express an unqualified opinion on whether the:

a. Tests and evaluations are adequate, and

b. Results confirm that items or components are effective and suitable for combat.

Director, Operational Test and Evaluation Comments. The Director of Operational Test and Evaluation concurred and stated that he would provide an operational effectiveness, survivability, suitability, and test adequacy assessment of the ASAS Block II when the Army completes its ASAS initial operational test and evaluation in October 2004.

Audit Response. We request that the Director, Operational Test and Evaluation provide us a copy of his assessment when completed.

5. We recommend that the Commanding General, U.S. Army Test and Evaluation Command, in coordination with the Program Executive Officer, Command, Control and Communications Tactical, comply with Army Regulation 73-1, “Test and Evaluation Policy,” January 7, 2002, by ensuring that:

a. All Source Analysis System products are stressed to levels expected in an operating environment, and

b. Personnel demonstrating the All Source Analysis System are sufficiently trained to operate system products and analyze resulting information in accordance with operational requirements.

Management Comments Required. Management Comments from the Commanding General, Army Test and Evaluation Command were received too late to be incorporated into the final report. However, we revised this recommendation to ensure that ASAS products and personnel are ready for operational testing. Accordingly, we request that the Commanding General, Army Test and Evaluation Command and the Program Executive Officer, Command, Control and Communications Tactical comment on the revised recommendation by December 9, 2003.

Appendix A. Scope and Methodology

We reviewed documentation dated from March 1995 through May 2003 and interviewed officials in the Office of the Secretary of Defense and Army and contractor personnel. To accomplish the audit objectives, we:

- Interviewed officials and obtained documentation from the Offices of the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence); the Under Secretary of Defense for Acquisition, Technology and Logistics; the Assistant Secretary of the Army (Acquisition, Logistics, and Technology); the Program Executive Officer Command, Control and Communications Tactical; the Project Manager, Intelligence and Effects; the Army Training and Doctrine Command System Manager for ASAS; the Army Test and Evaluation Command; the Army Intelligence Center and Fort Huachuca; the Institute for Defense Analysis; the Arctic Slope Regional Corporation; and Sytex, Incorporated, to identify system background, history, and reasons for acquisition decisions.
- Reviewed program documents including the Operational Requirements Document, Change 3, March 1997; the Acquisition Strategy Report, September 2000; and the ASAS Test and Evaluation Master Plan, May 2000, to determine whether the project office developed and implemented an acquisition strategy and a test and evaluation master plan that were linked to user requirements.
- Reviewed contract documents for Lockheed Martin Mission Systems and Austin Information Systems; cost performance reports, February 2002; and monthly acquisition program review reports to identify work performed by contractors and to determine the adequacy of the Army's oversight of ASAS contractors.
- Reviewed ASAS life-cycle cost estimates conducted in 1997 and 2002 to determine total life-cycle costs, total acquisition costs, and the basis of support for the cost estimates.
- Reviewed ASAS funding summaries for FYs 1983 through 2002, and FY 2003 and FY 2004 budget documents to determine the investment in the program.
- Analyzed ASAS Research, Development, Test and Evaluation Budget Item Justification Sheets (R-2 Exhibits) for FYs 1996 through 2002 to determine whether the split in the ASAS Block II Development Costs was reflected in budget submissions.
- Analyzed the ASAS Acquisition Program Baseline from 1995 to 2002 to identify baseline trends.

-
- Reviewed the ASAS Selected Acquisition Report for the year-ended December 1998 to identify development costs for ASAS Block IIA and Block IIB.
 - Analyzed the “System Evaluation Report (SER) for the All Source Analysis System (ASAS) Block II Remote Workstation (RWS),” Army Operational Test and Evaluation Command, September 1999, to determine whether operational tests and evaluations performed were adequate, and whether test and evaluation results confirmed that deployed items and components were effective and suitable for combat in accordance with section 2399, title 10, United States Code and DoD guidance.
 - Reviewed a DoD contractor-prepared report, “Operational Testing of the ASAS Remote Workstation,” by the Institute for Defense Analyses to evaluate the DoD assessment of the ASAS test program as prescribed by section 2399, title 10, United States Code and DoD guidance.
 - Used 24 standard questions derived from the Test and Evaluation Master Plan and interviewed 165 users and 6 field support contractors to document observations on the operational effectiveness and suitability of the Remote Workstation with Version 4 software. Interviews took place at Fort Gordon, Georgia; Fort Campbell, Kentucky; Fort Bliss, Texas; Fort Hood, Texas; Fort Lewis, Washington, Camp Mabry, Texas; Camp Murray, Washington; and Kent Armory, Washington.

We performed this audit from July 2002 through June 2003 in accordance with generally accepted government auditing standards.

Use of Computer-Processed Data. We did not use computer-processed data to perform this audit.

Use of Technical Assistance. We did not use technical assistance to perform this audit.

General Accounting Office High-Risk Area. The General Accounting Office has identified several high-risk areas in DoD. This report provides coverage of the Weapons Acquisition Process and the Information Technology Investment high-risk areas.

Management Control Program Review

DoD Directive 5010.38, “Management Control (MC) Program,” August 26, 1996, and DoD Instruction 5010.40, “Management Control (MC) Program Procedures,” August 28, 1996, require DoD organizations to implement a comprehensive system of management controls that provides reasonable assurance that programs are operating as intended and to evaluate the adequacy of those controls.

Scope of the Review of the Management Control Program. In accordance with DoD policy, acquisition managers are to use program cost, schedule, and performance parameters as control objectives to implement the requirements of DoD Directives 5010.38. Accordingly, we limited our review to management controls in the Office of the Secretary of Defense and the Army that were directly related to program cost, schedule, and performance.

Adequacy of the Management Controls. Management controls were inadequate. We identified material management control weaknesses in the Office of the Secretary of Defense and the Army, as defined by DoD Instruction 5010.40, "Management Control (MC) Program Procedures." August 28, 1996. The Under Secretary of Defense for Acquisition and Technology decreased management controls when he allowed the Army to recategorize the ASAS from an Acquisition Category I to an Acquisition Category II program, and thereby eliminated Selected Acquisition Reports for measuring cost, schedule, and performance progress. In addition, Army baselines for measuring cost, schedule, and performance could not be compared to determine ASAS progress, evaluate effectiveness and efficiency, and project program results. Further, by reducing operational testing thresholds, the Under Secretary allowed the Army, with support from independent testers, to deploy ASAS products without demonstrating operational effectiveness and suitability. In addition, we believe that DoD and Army independent evaluators did not adequately comply with laws and regulations when reporting and reviewing operational test results from a system that required additional development. If implemented, the recommendations will correct the identified weaknesses. We will provide a copy of this report to the senior officials responsible for management controls in the Office of the Secretary of Defense and the Army.

Adequacy of Management's Self-Evaluation. Officials in the Project Management Office, Intelligence and Effects did not identify the ASAS as an assessable unit and therefore did not identify or report the material management control weaknesses identified by the audit.

Prior Coverage

No prior coverage has been conducted on the acquisition management of the Army All Source Analysis System during the last 5 years.

Appendix B. Under Secretary Of Defense Memorandum, December 10, 1998



ACQUISITION AND
TECHNOLOGY

THE UNDER SECRETARY OF DEFENSE
3010 DEFENSE PENTAGON
WASHINGTON, D. C. 20301-3010



DEC 10 1998

MEMORANDUM FOR DISTRIBUTION

**SUBJECT: ARMY TACTICAL COMMAND AND CONTROL SYSTEM (ATCCS)
MANAGEMENT APPROACH**

As follow-up to the April 1998 DAES Agreements and Assignments memo (attachment), I reviewed the proposed management approach for the Army Tactical Command and Control System (ATCCS) on October 29, 1998. Based on the following guidance, I approve the management approach to focus OSD oversight at the system-of-systems level, re-baseline the five ATCCS ACAT I programs, continue spiral development, and adopt a modular contracting approach for these programs.

For the near term, the Army and OSD will implement the system-of-systems oversight approach by reporting and assessing at the level of ATCCS and its interfaces to other key systems in the Army Battle Command System (ABCS). The Army will report on the system-of-systems in a Quarterly Integrated Summary, a tailored DAES-like narrative report, beginning in January 1999. The report will include (1) insight into system-of-systems reliability, focusing on how reliability improves over time, and how it changes as system-of-systems functionality changes; and (2) progress in achieving joint interoperability requirements of the digitized battlefield, emphasizing the status of interfaces with other Services and Allies. OSD, with the Army, will establish benchmarks for assessing the summary, using existing Army documents such as the ABCS Capstone Requirements Document, the Integrated System Evaluation Master Plan, and the individual Operational Requirements Documents of the Battlefield Functional Areas where practical. OSD will provide quarterly feedback on the appropriate content of this report through the C3I DAES points of contact to the Army. While OSD oversight will be at the system-of-systems level, the Army will maintain an acquisition management process for each individual system.

For the long term, OSD, in coordination with the Army, will determine the most appropriate system-of-systems level for oversight. The objective for OSD oversight is a system-of-systems level (1) that encompasses the ATCCS systems and linkages to the other C2 and communications systems that together achieve the digitized battlefield, and (2) with natural benchmarks such as a requirements document; a test plan and appropriate confirmation events; and performance, cost, and schedule parameters against which progress can be measured. Confirmation events may be operational tests, as well as appropriate training and experimentation events that are conducted in the field, such as the Division Capstone Exercise slated for 2QFY01. These events must



demonstrate in the operational environment that functionality is migrating toward objective requirements.

The Army will work with Acquisition Program Integration (API) and OASD(C3I) to re-baseline the five ACAT I programs into separate program blocks that better represent the current efforts and synchronize requirements and schedules with ABCS software releases. The new Acquisition Program Baselines will include the First Digitized Division and the First Digitized Corps as common schedule milestones where an integrated product will be delivered. For each program block meeting Selected Acquisition Report (SAR) termination criteria, the Army will prepare a final SAR. Should any of the programs remain ACAT I programs, API will work with the other OSD agencies to ensure DAES reporting requirements capture information of interest to the DAE that complements information in the Quarterly Integrated Summary.

The Army will work with Defense Procurement (DP) to implement modular contracting on the five programs. The Army, including elements outside the Army Acquisition Executive (AAE) chain, will manage change to achieve this common goal: requirements for each modular contract increment remain stable once that increment is underway. Stable contract requirements, stated in terms of the performance or functionality required in deliverable software, can coexist with the interactive software development process in which the development contractor makes use of ongoing user feedback. Toward this end, requirements must be effectively coordinated before contract award, and user feedback should naturally be within the boundaries set by the contract requirements. After one modular contracting cycle has taken place, the Army and DP will assess and report on improvements in requirements stability attained, the utility of the modular contracting approach in achieving cost control and contractor accountability, and adaptations made in the Army requirements process.

The C3ISR & Space Systems OIPT will oversee the ATCCS/ABCS system-of-systems. An OSD/Army IPT was an effective means for developing the new approach and should now develop a plan for implementing the approach, including the recommendations briefed on October 29, in accordance with the guidance in this memorandum. The IPT will report in 12-18 months the progress made in implementing the plan, including progress on initiatives for broader application in DoD spiral development, system-of-systems integration and oversight, and inclusion into DoD acquisition policy as appropriate.



J. S. Gansler

Attachment

Distribution:
PDUSD(A&T)
VCJCS

USD(C)
ASD(C3I)
ASD(S&TR)
ARMY AE
NAVY AE
AIR FORCE AE
DDR&E
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DUSD(AT)
DUSD(I&CP)
DUSD(IA&I)
DUSD(L)
DIR, PROGRAM ANALYSIS & EVALUATION
DOT&E
DIR, STRATEGIC & TACTICAL SYSTEMS
DIR, TEST, SYSTEMS ENGINEERING & EVALUATION
DIR, ACQUISITION PROGRAM INTEGRATION
DIR, DEFENSE PROCUREMENT
DIR, SPECIAL PROGRAMS
BMDO/PO
ARMY PEO C3S

Appendix C. Remote Workstation Users' Observations

Table C-1. Overall Assessment of Operational Effectiveness and Suitability

| <u>User Comments Addressing System Limitations</u> | <u>Fort Gordon</u> | <u>Fort Campbell</u> | <u>Fort Bliss</u> | <u>Fort Hood</u> | <u>Fort Lewis</u> | <u>National Guard²⁰</u> |
|---|--------------------|----------------------|-------------------|------------------|-------------------|------------------------------------|
| The system was able to maintain around-the-clock operations | No | No | No | No | No | No |
| Training was adequate and/or frequent | No | No | No | No | No | No |
| Certain environmental conditions affected hardware operations | Yes | Yes | Yes | Yes | Yes | Yes |
| System operations were overly dependent on contractor support | Yes | Yes | Yes | Yes | Yes | Yes |
| The system is multi-service interoperable | No | No | No | No | No | No |

Table C-2. Operational Suitability

| <u>User Comments Addressing System Limitations</u> | <u>Fort Gordon</u> | <u>Fort Campbell</u> | <u>Fort Bliss</u> | <u>Fort Hood</u> | <u>Fort Lewis</u> | <u>Field Support Contractors</u> | <u>National Guard</u> |
|--|--------------------|----------------------|-------------------|------------------|-------------------|----------------------------------|-----------------------|
| Mobility | | | | | | | |
| Impairs unit movements | | Yes | | Yes | Yes | | Yes |
| Too large | | Yes | Yes | Yes | | | Yes |
| Setup and teardown times vary | Yes | Yes | | Yes | Yes | Yes | Yes |
| Ease of Operation | | | | | | | |
| Familiar with UNIX operating system | | No | | No | No | | No |
| Consistent menu formats | | | | No | | No | |
| Overall system is difficult to operate | | Yes | Yes | | | Yes | Yes |
| Personnel | | | | | | | |
| Understaffed | | Yes | Yes | Yes | Yes | Yes | |
| Shortage of trained personnel | Yes | Yes | Yes | | | | Yes |
| Training | | | | | | | |
| Mostly on-the-job-training | Yes | Yes | | Yes | Yes | | |
| Available time to train | | No | | No | No | | |
| Need leadership training | | Yes | | | Yes | | Yes |
| Perishable operator skills | | Yes | | Yes | Yes | Yes | |
| Sufficient training for analytical skills | | | | No | No | No | |
| Contractor Support | | | | | | | |
| Operators can troubleshoot | | | | No | No | | No |
| Response/repair times vary | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

²⁰ National Guard installations visited included Camp Mabry, Camp Murray, and Kent Armory.

Table C-3. Operational Effectiveness

| User Comments Addressing System Limitations | Fort Gordon | Fort Campbell | Fort Bliss | Fort Hood | Fort Lewis | Field Support Contractors | National Guard |
|---|--------------------|----------------------|-------------------|------------------|-------------------|----------------------------------|-----------------------|
| Hardware | | | | | | | |
| Adequate processing speed | | No | No | No | No | No | |
| Slow repair times | | | Yes | | Yes | | |
| Adequate repairs | | | | | | No | |
| Can handle advanced software | | No | | | | No | |
| Adequate peripheral support | No | No | No | No | No | | No |
| Interoperability | | | | | | | |
| Software versions are interoperable | | | | No | | No | |
| Lacks communication with other systems | | Yes | | | | Yes | Yes |
| System can operate in a stand-alone mode | | Yes | | Yes | | | Yes |
| Can share graphics | | No | | No | No | | |
| Received incorrect threat information | | Yes | | Yes | | | |
| Message Rates | | | | | | | |
| Message traffic not getting through | | | | Yes | | | |
| Incorrect text recognition | Yes | Yes | Yes | Yes | | Yes | |
| Incorrect data correlation | | Yes | Yes | | Yes | | |
| Message overload upon connection | | | | | | | Yes |
| Software | | | | | | | |
| Unstable (crashing/freezing) | | Yes | | Yes | Yes | Yes | Yes |
| Version 6 lacks functionality | | | | Yes | | | |
| Excessive patches | | Yes | | Yes | Yes | Yes | |
| Too much code | | | | Yes | | Yes | |
| Fielding | | | | | | | |
| Delivery priorities need to be reassessed | | | | | | | Yes |
| Disruptive software releases | Yes | | | Yes | | | |
| Adequate operational testing | | No | | No | | | |
| Need better communication on future software versions | | | | Yes | | Yes | |
| Usage | | | | | | | |
| Required for everyday mission | | | | No | No | | |
| Used for exercises/training only | | Yes | | | Yes | | Yes |

Table C-4. Other Operational Issues

| User Comments Addressing System Limitations | Fort Gordon | Fort Campbell | Fort Bliss | Fort Hood | Fort Lewis | Field Support Contractors | National Guard |
|---|--------------------|----------------------|-------------------|------------------|-------------------|----------------------------------|-----------------------|
| Commander Perceptions | | | | | | | |
| Because system is deployed, soldiers are required to make the system work | | Yes | | Yes | Yes | Yes | Yes |
| Lack of trust | Yes | Yes | | Yes | Yes | | Yes |
| Unrealistic expectations | | Yes | | Yes | Yes | Yes | Yes |
| Forced to use the system | | | | Yes | | | |
| Desired Improvements | | | | | | | |
| User friendliness | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Commercial off-the-shelf products | Yes | Yes | | | Yes | | |
| Increased/standardized functionality | Yes | Yes | | Yes | Yes | Yes | Yes |
| Multi-Service interoperability | Yes | Yes | Yes | Yes | | | |
| Mobile and smaller | | Yes | Yes | Yes | Yes | | Yes |
| Actions To Compensate For Lost Capability | | | | | | | |
| Backup map boards | | Yes | Yes | Yes | Yes | | Yes |
| PowerPoint | Yes | Yes | Yes | Yes | | | Yes |
| Use of other systems | | Yes | Yes | Yes | Yes | | Yes |
| Radio/telephone | | | | Yes | | | Yes |
| Websites | | Yes | Yes | Yes | Yes | | Yes |
| Segregated server for booting | | | | Yes | | | |
| Constant rebooting | | Yes | | | | Yes | |
| Supplemental actions are standard procedures | | | | Yes | Yes | | Yes |


Appendix D. Assessments of Operational Test Results for Measuring Remote Workstation Effectiveness

Table D-1. Critical Operational Issues and Criteria 1
Does the ASAS Satisfy the Commander’s Intelligence and Targeting Support Requirements?

| Criteria Met | Criteria Partially Met | Criteria Not Met | Criteria Deferred |
|---|--|--|---|
| Imagery products Intelligence messages and graphics Large screen graphics Overlays Historical tracking Situation messages/graphics Generate target intelligence data (2 minutes) Targeting messages Queries (less than 1 minute) Install 80 percent of databases No information loss due to power failure Relevant common picture | Templates Alerts Answer 85 percent of priority intelligence requirements Red course of action Criteria to identify high priority/interest information Nominate targets Targeting criteria Nominate 70 percent of high priority targets Track [collection] requirements Collection messages Auto forward messages | Target definitions [Collection] asset management Develop special intelligence requirements Intelligence synchronization matrix/collection plan Track 90 percent of [collection] assets Match [collection] assets/requirements Tasking messages | Correlate Nodal analysis Damage assessment All-source interoperability Receive weather data |

Table D-2. Critical Operational Issues and Criteria 2
Can the ASAS Establish and Maintain Interfaces to Provide Required Information Exchanges?

| Criteria Met | Criteria Partially Met | Criteria Not Met | Criteria Deferred |
|---|------------------------|------------------|---|
| Messages/graphics/imagery Backward compatible External imagery Home page | n/a | n/a | Analysis and Control Element processes messages Analysis and Control Element’s levels of classification Interfaces with command, control, communications and intelligence Systems Analysis and Control Element interface with Army Battlefield Command and Control System Interfaces with DoD |

 Denotes Disagreement Between U.S. Army and Audit Findings

 Denotes Significant System Attributes Not Tested

Appendix E. Assessments of Operational Test Results for Measuring Remote Workstation Suitability

**Table E-1 Critical Operational Issues and Criteria 3
Can ASAS deploy and operate on the battlefield?**

| Criteria Met | Criteria Partially Met | Criteria Not Met | Criteria Deferred | Criteria Not Evaluated |
|---|------------------------|-------------------------|--|--|
| Set-up (45 min.), tear down (30 min.) Security Level Time to repair (1 hr) Meets reliability & Maintainability standards for government/commercial off the-shelf systems | N/A | Add/delete workstations | Extended operations Analysis and Control Element (ACE) Jump operations ACE resynchronization ACE split-based operations Signature suppression Nuclear, biological and chemical conditions Decontamination Mission-oriented protective posture IV Battlefield conditions Destroy classified Restore system function (min. 3 hr, full 12 hr) 80 percent availability rate Electromagnetic environmental effect Information operations | The ASAS must be deployable on C-130 and larger aircraft The ASAS must be rail transportable The ASAS must be transportable externally by CH-47 The ASAS will meet U.S. and NATO highway legal limits The ASAS must be marine transportable on LACV 30 or larger vessels |

**Table E-2. Critical Operational Issues and Criteria 4
Can the ASAS operators/analysts/maintainers achieve a level of system training readiness during peacetime that provides a wartime capability for sustained combat?**

| Criteria Met | Criteria Partially Met | Criteria Not Met | Criteria Deferred | Criteria Not Evaluated |
|---|------------------------|------------------|---|------------------------|
| Logistics support Software maturity System stability System robustness Subsystem interoperability | Soldier sustainment | n/a | Leave behind training program On-line help, CD ROM | n/a |



Denotes Disagreement Between U.S. Army and Audit Findings



Denotes Significant System Attributes Not Tested

Appendix F. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition, Technology, and Logistics
Under Secretary of Defense (Comptroller)/Chief Financial Officer
 Deputy Chief Financial Officer
 Deputy Comptroller (Program/Budget)
Under Secretary of Defense for Intelligence
Assistant Secretary of Defense for Networks and Information Integration/DoD Chief
 Information Officer
Director, Operational Test and Evaluation

Department of the Army

Assistant Secretary of the Army (Financial Management and Comptroller)
Assistant Secretary of the Army (Acquisition, Logistics and Technology)
 Program Executive Officer, Command, Control and Communications Tactical
 Project Manager, Intelligence and Effects
System Manager for All Source Analysis System, Training and Doctrine Command
Commander, Army Test and Evaluation Command
Auditor General, Department of the Army

Department of the Navy

Naval Inspector General
Auditor General, Department of the Navy

Department of the Air Force

Auditor General, Department of the Air Force

Non-Defense Federal Organization

Office of Management and Budget

Congressional Committees and Subcommittees, Chairman and Ranking Minority Member

Senate Committee on Appropriations
Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Committee on Governmental Affairs
Senate Select Committee on Intelligence
House Committee on Appropriations
House Subcommittee on Defense, Committee on Appropriations
House Committee on Armed Services
House Committee on Government Reform
House Subcommittee on Government Efficiency and Financial Management, Committee on Government Reform
House Subcommittee on National Security, Emerging Threats, and International Relations, Committee on Government Reform
House Subcommittee on Technology, Information Policy, and Intergovernmental Relations, and the Census, Committee on Government Reform
House Permanent Select Committee on Intelligence

Under Secretary of Defense for Acquisition, Technology, and Logistics Comments



ACQUISITION,
TECHNOLOGY
AND LOGISTICS

OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON
WASHINGTON, DC 20301-3000

SEP 16 2003

MEMORANDUM FOR DEPARTMENT OF DEFENSE INSPECTOR GENERAL

SUBJECT: DoD IG Draft Report, "Acquisition Management of the Army's All Source Analysis System (ASAS)," (Project No. D2002AL-0157)

This is the Under Secretary of Defense (Acquisition, Technology and Logistics) response to the DoD IG Draft Report, "Report on the Acquisition Management of the Army's All Source Analysis System (Project No. D2002AL-0157).

We have reviewed and non-concur with recommendation 1.a, and concur with comment on recommendations 1.b. and 2. of the subject report, see enclosure for detailed comments.

Nancy L. Spruill

Nancy L. Spruill
Director, Acquisition Resources
and Analysis

Attachment:
As stated



**IG DRAFT REPORT – DATED JUNE 30, 2003
PROJECT NO. D2002AL-0157**

**ACQUISITION MANAGEMENT OF THE ARMY'S ALL SOURCE
ANALYSIS SYSTEM**

**DEPARTMENT OF DEFENSE RESPONSE TO THE
RECOMMENDATIONS**

RECOMMENDATION 1a. Recommend the USD(AT&L) redesignate All Source Analysis System as an Acquisition Category I Major Defense Acquisition Program in accordance with DoD guidance.

DoD RESPONSE: **Nonconcur with comment:** The DoD Major Defense Acquisition Program (MDAP) list will be updated prior to the end of calendar year 2003. The ASAS will be evaluated prior to the end of CY2003 in accordance with the dollar thresholds of Title 10, Section 2430, United States Code for MDAP, to determine the appropriate MDAP level.

RECOMMENDATION 1b: Recommend the USD(AT&L) assume responsibility for providing DoD acquisition management oversight for the All Source Analysis System Block II acquisition.

DoD RESPONSE: **Concur with comment:** If ASAS meets the statutory dollar thresholds for an MDAP, it will be designated an Acquisition Category (ACAT) I program with OUSD(AT&L) acquisition management oversight.

RECOMMENDATION 2: Recommend that the USD(AT&L) in coordination with the Under Secretary of Defense (Intelligence), raise the deployment threshold for the All Source Analysis System operational tests from "migrating towards

objective requirements” to satisfying benchmarks for critical operational issues and criteria.

DoD RESPONSE: Concur with comment: If ASAS is designated an ACAT I program, the USD(AT&L) in coordination with the USD(I) and DOT&E will issue updated program guidance, to include revisions to the Acquisition Program Baseline (APB), Acquisition Strategy, and Test and Evaluation Master Plan (TEMP).

Director, Operational Test and Evaluation Comments



OPERATIONAL TEST
AND EVALUATION

OFFICE OF THE SECRETARY OF DEFENSE
1700 DEFENSE PENTAGON
WASHINGTON, DC 20301-1700

AUG 19 2003

MEMORANDUM FOR INSPECTOR GENERAL OF THE DEPARTMENT OF DEFENSE

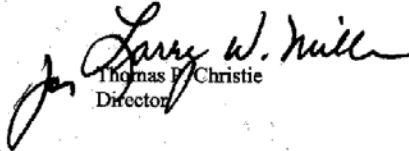
SUBJECT: Report on the Acquisition Management of the Army's All Source Analysis System (ASAS), dated June 30, 2003

We have reviewed the subject document and are unable to respond to the recommendations at this time due to discrepancies in the report's analysis of the ASAS test program. The office provided a number of comments on the draft of this report. These are significant concerns and I ask that the audit team contact my staff to discuss them.

We have closely monitored the intermediate release of all the ASAS components and have approved their operational test plans. We have worked closely with the Army Test and Evaluation Command on their assessments and find no misrepresentation of test results or performance assessments. Operational tests were adequate representations of an operational environment.

DOT&E will provide an assessment of operational effectiveness, survivability, and suitability, as well as test adequacy of the ASAS Block II family of systems following the conclusion of the Block II Initial Operational Test and Evaluation event scheduled for October 2004.

The point of contact for this action is Ms. Susan J. Wright, (703) 681-1440 ext 115, susan.wright@osd.mil.


Thomas F. Christie
Director



Department of the Army Comments



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
PROGRAM EXECUTIVE OFFICE
COMMAND, CONTROL, AND COMMUNICATIONS TACTICAL
FORT MONMOUTH, NEW JERSEY 07703-5401



SFAE-C3T-OPS

MEMORANDUM FOR INSPECTOR GENERAL, DEPARTMENT OF DEFENSE, 400
ARMY NAVY DRIVE, ARLINGTON, VA 22202-4704

SUBJECT: Report on the Acquisition Management of the Army's All Source Analysis System
(Project No. D2002AL-0157)

1. Program Executive Office Command, Control and Communications Tactical (PEO C3T) has reviewed the subject Inspector General Report and submits a concurrence. PEO C3T is working with the Program Management Office to re-establish baseline integrity NLT 15 October 2003 by ensuring that cost, schedule and performance parameters measure progress, determine effectiveness and efficiency indexes, and project program results.
2. If you have any questions on this matter, please direct them to Mr. Edward Karol, DSN: 987-1789 or COML: 732-427-1789.


JOHN C. PERRAPATO
Deputy Program Executive Officer for C3T

Team Members

The Acquisition Management Directorate, Office of the Deputy Inspector General for Auditing of the Department of Defense prepared this report. Personnel of the Office of the Inspector General of the Department of Defense who contributed to the report are listed below.

Charles M. Santoni
David M. Wyte
Stephen J. Bressi
George A. Leighton
MAJ William C. Busch
Robert R. Johnson
John R. Huddleston
Leann A. Alwood
Jacqueline N. Pugh