

Audit



Report

OFFICE OF THE INSPECTOR GENERAL

ARMY PROCUREMENT AND CONTRACT
ADMINISTRATION PRACTICES ON COMPUTER
SOFTWARE SERVICE CONTRACTS

Report No. 95-184

May 2, 1995

20000202 070

Department of Defense

DTIC QUALITY INSPECTED 4

AOI00-04-1095

Additional Copies

To obtain additional copies of this audit report, contact the Secondary Reports Distribution Unit, Audit Planning and Technical Support Directorate, at (703) 604-8937 (DSN 664-8937) or FAX (703) 604-8932.

Suggestions for Future Audits

To suggest ideas for or to request future audits, contact the Planning and Coordination Branch, Audit Planning and Technical Support Directorate, at (703) 604-8939 (DSN 664-8939) or FAX (703) 604-8932. Ideas and requests can also be mailed to:

Inspector General, Department of Defense
OAIG-AUD (ATTN: APTS Audit Suggestions)
400 Army Navy Drive (Room 801)
Arlington, Virginia 22202-2884

Defense Hotline

To report fraud, waste, or abuse, contact the Defense Hotline by calling (800) 424-9098; by sending an electronic message to Hotline@DODIG.OSD.MIL; or by writing the Defense Hotline, The Pentagon, Washington, D.C. 20301-1900. The identity of each writer and caller is fully protected.

Acronyms

AMC	Army Materiel Command
CIM	Corporate Information Management
DSAA	Defense Security Assistance Agency
FMS	Foreign Military Sales
GSA	General Services Administration
PM	Project Manager
SA3	Security Assistance Automation, Army
SIMA	Systems Integration and Management Activity
USASAC	U.S. Army Security Assistance Command



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



May 2, 1995

MEMORANDUM FOR DIRECTOR, DEFENSE SECURITY ASSISTANCE
AGENCY
AUDITOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: Audit Report on Army Procurement and Contract Administration Practices
on Computer Software Service Contracts (Report No. 95-184)

We are providing this audit report for review and comment. We performed the audit in response to a congressional request. We considered management comments on a draft of this report in preparing the final report.

DoD Directive 7650.3 requires that all unresolved issues be resolved promptly. The Defense Security Assistance Agency did not comment as requested on the potential monetary benefits. As a result of management comments, we revised Recommendation 1.c. to clarify our intention. Therefore, we request that the Defense Security Assistance Agency provide additional comments on Recommendation 1.c. and comment on the potential monetary benefits. We also revised Recommendation 3.b. in response to Army comments. Those comments are responsive, and no further comments are required. We request that Defense Security Assistance Agency provide comments by June 30, 1995.

We appreciate the courtesies extended to the audit staff. Questions on the audit should be directed to Mr. Terry L. McKinney, Audit Program Director, at (703) 604-9288 (DSN 664-9288) or Mr. Ronald W. Hodges, Audit Project Manager, at (703) 604-9291 (DSN 664-9291). See Appendix I for the report distribution. The audit team members are listed inside the back cover.

Robert J. Lieberman
Assistant Inspector General
for Auditing

Office of the Inspector General, DoD

Report No. 95-184
(Project No. 4CF-5004)

May 2, 1995

Army Procurement and Contract Administration Practices on Computer Software Service Contracts

Executive Summary

Introduction. This audit was performed in response to a congressional inquiry regarding the Army's procurement of computer software services. On behalf of a constituent, Congressman Jim Talent requested the Inspector General, DoD, to review the contracting practices of the U.S. Army Security Assistance Command and the Systems Integration and Management Activity, both subordinate commands of the Army Materiel Command. The constituent alleged that fraud, waste, and mismanagement occurred on contracts used to develop computer software for the Security Assistance Automation, Army (SA3), and that the Army seldom or never used the developed software.

Objectives. The audit objectives were to determine whether the Army followed Federal and DoD acquisition regulations when awarding and administering computer software service contracts and to review internal controls applicable to the award and administration of the contracts. To adequately answer the allegations, we amended the audit objectives to focus on whether the Army's SA3 development followed required Defense and Army information system development policies and procedures. Additionally, we assessed internal controls as they applied to the development of SA3.

Audit Results. The Army did not follow Defense and Army policies and procedures on information system development. The Army spent more than \$46 million on SA3, a system that does not fully satisfy mission and user requirements. The U.S. Army Security Assistance Command SA3 project manager and the Systems Integration and Management Activity management did not establish a sound SA3 project baseline or prepare necessary cost information throughout the system's life cycle. As a result, the Army continues to spend approximately \$3.7 million annually on SA3, a system that does not meet user needs. See Part II for details.

We determined that about \$3.7 million annually in Security Assistance Program funds could be put to better use when the Defense Security Assistance Agency requires the Army to justify all future funding requests for SA3. Justifying funding requests will ensure that SA3 funds are spent only for essential maintenance of SA3. The Security Assistance Program funds could be better used by the Defense Security Assistance Agency to develop a standard security assistance information system for the Military Departments. Appendix G summarizes the potential benefits resulting from the audit.

The allegations concerning waste, mismanagement, and the development of useless software were generally substantiated. The allegations concerning fraud were not substantiated. Appendix B discusses the results of the audit concerning the specific allegations.

Summary of Recommendations. We recommend that the Defense Security Assistance Agency discontinue funding for development of SA3 in accordance with DoD guidance and withhold funding for system maintenance until the U.S. Army Security Assistance Command identifies and justifies essential maintenance for the

system. The Defense Security Assistance Agency should fund only essential maintenance requirements identified in the evaluation. We also recommend that the U.S. Army Security Assistance Command and the Systems Integration and Management Activity improve internal controls over the management of SA3.

Management Comments. The Defense Security Assistance Agency agreed to discontinue all funding beyond essential maintenance for SA3. The Defense Security Assistance Agency did not provide comments as requested on the potential monetary benefits. The Army generally concurred with the recommendations, but disagreed with our finding, stating that SA3 development was completed in FY 1990 and that SA3 fully satisfies mission and user requirements. See Part II for a summary of management comments and Part IV for the complete text of management comments.

Audit Response. Based on management comments, we revised a recommendation for the Defense Security Assistance Agency to perform site visits within the Army to determine what resources are needed for Security Assistance automation. We also modified a recommendation to the Army eliminating reference to limitations on internal projects. Although we consider the Army's comments on the recommendations responsive, we disagree with the Army's position that SA3 fully satisfies mission and user needs. We request comments from the Defense Security Assistance Agency on the unresolved issues, including potential monetary benefits, by June 30, 1995.

Table of Contents

Executive Summary	i
Part I - Introduction	
Background	2
Objectives	3
Scope and Methodology	4
Internal Controls	5
Prior Audits and Other Reviews	6
Other Matters of Interest	7
Part II - Finding and Recommendations	
Management of Security Assistance Automation, Army	10
Part III - Additional Information	
Appendix A. Additional Security Assistance Automation, Army, Background	34
Appendix B. Summary of Allegations and Audit Results	36
Appendix C. Results of M204 Case Print Program Comparison	40
Appendix D. Cost Avoidance on Future Security Assistance Automation, Army, Development Efforts	45
Appendix E. Assessment of Automation to Support Security Assistance at Major Subordinate Commands	46
Appendix F. Management Comments on the Finding and Audit Response	60
Appendix G. Summary of Potential Benefits Resulting From Audit	63
Appendix H. Organizations Visited or Contacted	65
Appendix I. Report Distribution	67
Part IV - Management Comments	
Defense Security Assistance Agency Comments	70
Department of the Army Comments	73

Part I - Introduction

Introduction

Background

In September 1993, Congressman Jim Talent requested the Inspector General, DoD, to review the contracting practices of the U.S. Army Security Assistance Command (USASAC) and the Army Systems Integration and Management Activity (SIMA) on behalf of a constituent. The constituent alleged that fraud, waste, and mismanagement occurred on computer software service contracts used by the Army to develop an automated system for the Army Security Assistance Program.

Defense Security Assistance Program. The Defense Security Assistance Agency (DSAA) has overall responsibility for administering the DoD Security Assistance Program. Generally, the Army, the Navy, and the Air Force execute foreign military sales (FMS) cases in which foreign customers pay for Defense goods and services. FMS cases generally require foreign customers to pay, in advance, amounts sufficient to cover all costs associated with the sales agreements. DSAA then uses the funds, which are held in an FMS trust fund, to reimburse the Military Departments for the cost of executing and administering FMS cases.

Army Security Assistance Program. The Commanding General, Army Materiel Command (AMC), assigns responsibility for the Army Security Assistance Program to the Commander, USASAC. In 1982, USASAC initiated development of an automated information system, known as Security Assistance Automation, Army (SA3), to perform FMS case development and security assistance management functions that were previously performed manually. The development of SA3 was funded through the FMS trust fund.

Automated Information System Life-Cycle Management. DoD and Army regulations on information system life-cycle management provide guidance on developing and enhancing automated information systems, such as SA3. DoD Instruction 7920.2, "Automated Information System (AIS) Life-Cycle Management Review and Milestone Approval Procedures," March 7, 1990, and the subsequent DoD Instruction 8120.2, "Automated Information System (AIS) Life-Cycle Management (LCM) Process, Review, and Milestone Approval Procedures," January 14, 1993, require Defense organizations to follow a structured process, called life-cycle management, for developing or enhancing automated information systems. Life-cycle management is intended to ensure that Defense management is accountable for the success or failure of its information systems.

Army Regulation 25-3, "Army Life-Cycle Management of Information Systems," November 27, 1989, establishes guidelines and procedures that apply to all Army information systems. Army guidelines for life-cycle management define development phases and decision points at which system progress should be assessed and documented.

SA3 Life-Cycle Management and Funding Responsibilities. The DoD and Army offices responsible for approving funds and for providing life-cycle management and technical and functional support for SA3 are shown in Figure 1. Additional details on SA3 and the offices identified in the figure are discussed in Appendix A.

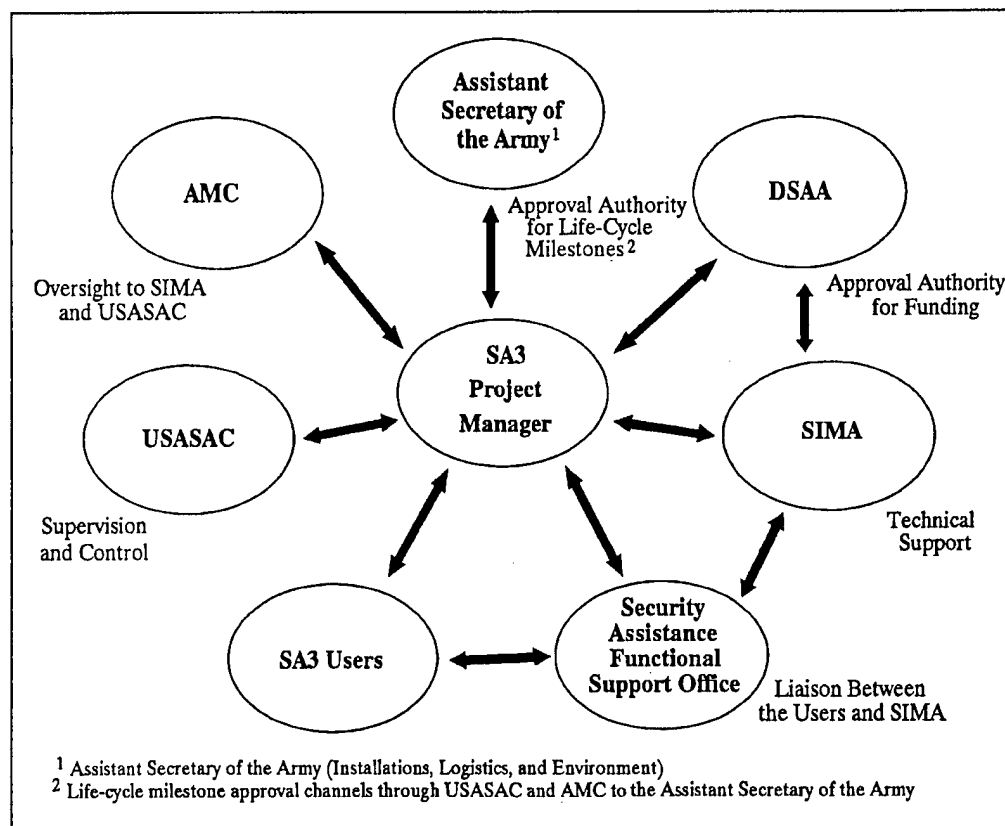


Figure 1. Overall Responsibilities and Organization of SA3 Development and Management

Objectives

The audit objectives were to determine whether the Army followed Federal and DoD acquisition regulations when awarding and administering computer software service contracts and to review internal controls applicable to the award and administration of those contracts. To adequately answer the allegations, we amended the audit objectives to focus on whether the Army's SA3 development followed required Defense and Army system development

Introduction

policies and procedures. Additionally, we assessed internal controls as they applied to the development of SA3. See Appendix B for audit results in response to the allegations.

Scope and Methodology

Audit Methodology. To answer the audit objective concerning the specific allegations, we reviewed documentation in the project files for the four specific software applications identified in the allegations. We performed a comparison test of the SIMA-developed M204 case print program and the contractor-developed M204 case print program. We also identified and reviewed four additional software applications and the M204 conversion of the applications.

To answer the objective concerning management of SA3, we reviewed specific budget and financial information to determine previous and current funding levels for SA3. Also, we reviewed all available documentation that was required to support SA3 development. Specifically:

- o at SIMA, we reviewed the total in-house FMS funding, valued at \$4.4 million, from FYs 1990 through 1994. We identified and reviewed 15 task orders, valued at \$2.3 million, that were issued by the General Services Administration (GSA) since FY 1990 for contractor technical support on SA3. Also, we evaluated 114 SA3 taskings, completed between October 1990 and February 1994, identified by SIMA as its total SA3 effort, to determine compliance with existing regulations.

- o at USASAC, we reviewed budget documents and policies concerning the development and status of SA3. The documents covered the entire life cycle of SA3 from FYs 1982 through 1994.

- o at DSAA, we obtained copies of the Army's FYs 1990 through 1994 FMS budget requests, including the Army's justification for requirements that were partially or never funded by DSAA. We specifically reviewed the portions of Army FMS budget requests related to SA3, USASAC, and SIMA.

Audit Locations. We obtained our audit information primarily by examining records and conducting interviews at the GSA Regional Office, Fort Worth, Texas; SIMA-West, St. Louis, Missouri, and SIMA-East, Chambersburg, Pennsylvania; USASAC headquarters, Alexandria, Virginia; and USASAC field offices, New Cumberland, Pennsylvania, and St. Louis. In addition, we examined documentation and interviewed personnel in the Computer Data Systems, Incorporated, regional office in Fort Worth and in the field office in St. Louis. See Appendix H for a complete list of organizations visited or contacted.

Use of Technical Experts. We obtained software engineering assistance from the Audit Planning and Technical Support Directorate, Assistant Inspector General for Auditing, DoD, to evaluate the technical and engineering issues of

the software applications reviewed. The Quantitative Methods Division, Assistant Inspector General for Auditing, DoD, provided statistical support for selecting test cases in our comparison of the SIMA- and contractor-developed M204 case print programs. See Appendix C for the results of our comparison.

Estimating Procedures. Appendix D shows the calculated funding levels for SA3 after FY 1991. Starting in FY 1992, SA3 was not identified separately, but was reported in the USASAC total budget request. We used the USASAC total budget request to estimate the cost avoidance that USASAC may recognize on future SA3 development efforts.

Audit Period and Standards. This economy and efficiency audit was conducted from October 1993 through September 1994 in accordance with auditing standards issued by the Comptroller General of the United States as implemented by the Inspector General, DoD. Accordingly, the audit included tests of internal controls as necessary.

Use of Computer-Processed Data. To develop cost data, we relied on the hours charged to development and maintenance projects in the SIMA automated resource management system. We tested the reliability of hours charged (computer-processed data) by comparing hours worked by employees with hours charged against the project. We also evaluated the procedures used by the SIMA resource management system to charge and record hours by project number. We did not identify any significant errors or problems that would cause us to doubt the reliability of the hours charged.

Internal Controls

Internal Controls Reviewed. The audit evaluated the implementation of the DoD Internal Management Control Program as it related to internal controls over the development of SA3. Specifically, we assessed existing DSAA and Army policy and procedures used to oversee and control the development and maintenance processes of SA3.

Adequacy of Internal Controls. The audit identified material internal control weaknesses as defined by DoD Directive 5010.38, "Internal Management Control Program," April 14, 1987. Internal controls were not effective to ensure that SA3 was developed in accordance with existing DoD and Army policy.

Adequacy of Management's Self-Evaluation. Although USASAC and SIMA had established an internal management control program and had performed vulnerability assessment reviews, USASAC and SIMA management failed to identify the internal control weaknesses because the internal management control program did not identify SA3 as an assessable unit.

We could not determine monetary benefits associated with holding the Army accountable for life-cycle management and funds expended on SA3.

Introduction

Implementing the report recommendations, however, should provide DSAA and USASAC with information necessary to make cost-effective decisions regarding the future of SA3. Recommendations will also ensure that SIMA will perform necessary planning before further development and modification of SA3. Recommendations 1.d., 2.a., 2.b., and 3., if implemented, will assist in correcting the material internal control weaknesses. Potential benefits resulting from implementation of the recommendations are in Appendix G. Copies of the report will be provided to the senior officials in charge of internal controls for DSAA and the Department of the Army.

Prior Audits and Other Reviews

Inspector General, DoD. Report No. 92-077, "Software Development at Central Design Activities," April 17, 1992. The audit addressed software changes within DoD. The report states that economic analyses were not prepared, costs were not measured or tracked, identified benefits were not achieved, and the Defense Logistics Agency did not comply with the DoD Accounting Manual. The report recommended that a standard cost accounting system be developed and implemented by the DoD central design activities and that procedures for preparing and using economic analyses, recording labor hours, measuring costs, and achieving identified benefits be developed and implemented.

The Under Secretary of Defense (Comptroller) concurred with the recommendation to develop and implement a single cost accounting system that complies with the DoD Accounting Manual. The Army and the Defense Logistics Agency agreed with all recommendations. The Navy and the Air Force agreed with all recommendations, except the recommendation restricting overtime to only cost-effective milestones. The recommendation was changed to include authorization of overtime for DoD Hotline and mission priorities.

Army Audit Agency. Report No. MW 90-1, "Audit of System Change Requests U.S. Army Materiel Command Systems Integration and Management Activity (Provisional)," October 26, 1989. The report states that cost and benefit analyses required for information system development and modification were not adequate and that an effective system was not established to validate actual benefits. In addition, some system change requests were processed even though estimated costs exceeded expected benefits.

The report recommended that AMC establish effective guidance and procedures for estimating expected benefits and reporting actual benefits. In addition, AMC should halt development on information systems until all regulatory guidance is followed and all required documents are prepared. The report also recommended that AMC issue policies and procedures to ensure that all data are properly recorded in the systems.

AMC agreed with the recommendations and stated that guidance and procedures would be established in Technical Bulletin 18-100, "Army Automation Life Cycle," and Army Regulation 25-3 and that AMC major subordinate commands would be directed to follow the established guidance and procedures. AMC also stated that all documents would be prepared or waivers would be processed before any further development.

Report No. MW 88-6, "Audit of Contracting Services U.S. Army Materiel Command Central System Design Activity [now SIMA], St. Louis, Missouri," June 1, 1988. The report discusses deficiencies in the following areas: controls used to monitor contract services, controls over funds used to acquire contract services, and the decision to use contracted services through GSA.

The report recommended that SIMA develop procedures to identify fund control responsibilities of personnel involved in contracting with GSA to include maintaining current fund balance records. The report further recommended that personnel responsible for billing verification should have access to task orders and completion reports. The report also recommended that SIMA justify the need for contracted programming support, including descriptions of all policies and personnel responsibilities on contracting for programming services. The justification should include cost comparisons of in-house and contract alternatives.

SIMA agreed with the findings and recommendations, stating that all recommended procedures would be established or reemphasized in the Design Activity Regulation 715-1, "Resource Acquisition," June 27, 1988, which included the recommended policies, procedures, and personnel responsibilities.

Other Matters of Interest

The DoD Corporate Information Management (CIM) initiative, which began in October 1989, was intended to achieve substantial savings, in part, by developing standard, Defense-wide automated information systems for common business or functional areas. In November 1990, the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) assumed responsibility for CIM and all other information management and technology policies. The Assistant Secretary established a new office, the Director, Defense Information, with the Defense-wide responsibility for implementing and overseeing the development of standard information systems under the DoD CIM initiative.

The Director, Defense Information, now the Deputy Assistant Secretary of Defense (Information Management), devised a strategy for reviewing systems within the DoD CIM initiative that were under development or being modernized. The strategy required the Defense organization with functional oversight responsibility to perform a business case analysis to streamline business methods and processes for selected operations within the function. For example, analysis of logistics systems, including those used in the Security

Introduction

Assistance Program, is the responsibility of the Deputy Under Secretary of Defense (Logistics). To comply with the requirements of the DoD CIM initiative, the Deputy Under Secretary of Defense (Logistics) established the Joint Logistics Systems Center in February 1992 to implement improvements in the business process for the logistics function.

Part II - Finding and Recommendations

Management of Security Assistance Automation, Army

The Army spent more than \$46 million on SA3, a system that does not fully satisfy mission and user requirements. This wasteful situation occurred because of mismanagement or inattention throughout the SA3 community. Specifically:

- o the SA3 Project Manager (PM), USASAC, failed to follow established Army regulations and guidance in developing and maintaining SA3;

- o SIMA management failed to provide adequate technical support for SA3;

- o Army management did not provide adequate oversight of SA3; and

- o DSAA management did not hold the Army accountable for funds expended on SA3.

As a result, a sound SA3 baseline was never established and cost information was not available to justify further enhancements to the system. Meanwhile, USASAC continued to spend approximately \$3.7 million annually to develop and maintain SA3, a system that does not fully meet basic mission or user needs.

Background

Information System Life-Cycle Management. Army Regulation 25-3 establishes the processes and procedures that apply to the life cycle of all Army information systems. The regulation prescribes milestone guidance to manage the design, development, acquisition, deployment, operation, maintenance, and termination of a system, according to the size and complexity of the system. To ensure adequate oversight, the regulation categorizes all systems into six classes. The assigned class, which is based primarily on program cost, establishes the approval authority, management oversight, and documentation requirements for each system. A Class I system, the highest class, has a cost threshold expected to exceed \$1 billion. A Class VI system, the lowest class, has a cost threshold under \$2.5 million.

Specifically, when estimated program costs (costs incurred from justification through total deployment) for system development and modernization exceed \$2.5 million (Class V and higher systems), the regulation requires establishment of a baseline agreement plan. The baseline agreement plan is a formal agreement between the program participants and executive management outlining the program requirement, content, schedule, and cost. The baseline

agreement plan is then used to help management control program resource changes such as cost growth, schedule slippage, and requirement changes. Army Regulation 25-3 further requires the project manager to provide immediate written notification to the appropriate approval authority if a project will likely exceed its baseline cost by 15 percent in any given phase or if a major schedule change is needed.

SA3 Information System. Before 1983, the majority of the Army's Security Assistance Program case development, management, and documentation, including crisis management, was performed manually or using off-line commercial software packages. These management methods used excessive time and resources to perform duplicate entry and storage of similar and redundant security assistance data, resulting in a lack of standardization between AMC and its major subordinate commands.

To correct those issues, the Army initiated action to develop SA3. Basically, SA3 was intended to improve and centralize the security assistance case development and management by developing standard software applications and integrating these standard software applications with the existing Army Commodity Command Standard System.

SA3 Information System Management Responsibility and Oversight. According to Army Regulation 25-3, SA3, with program costs exceeding \$10 million, is a class IV information system; therefore, all SA3 life-cycle milestones are subject to approval by the Assistant Secretary of the Army (Installations, Logistics, and Financial Management), now the Assistant Secretary of the Army (Installations, Logistics, and Environment).

The Assistant Secretary of the Army (Installations, Logistics, and Environment) approved the SA3 PM charter in 1983. The charter assigned responsibility for total management of SA3 to the SA3 PM. The charter further required the SA3 PM to perform the assigned mission and responsibilities in accordance with established Army life-cycle management guidance provided in Army Regulation 25-3.

SA3 Technical Support. The SIMA Materiel Management and Procurement Division is responsible for the development of AMC standard information systems. SIMA provides the functional and technical support necessary to maintain and develop SA3. Specifically, SIMA:

- o provides user assistance, advice, and guidance during all phases of life-cycle development;
- o develops various system and life-cycle management documentation;
- o develops and monitors multi-level application testing;
- o develops statements of work; and
- o monitors contractor performance.

Resources Spent Without Satisfying Mission or User Requirements

Resources Invested in SA3. From FYs 1983 through 1994, the Army spent more than \$46 million* on SA3, although the latest approved cost estimate from September 1982 indicated that the Army originally planned to invest only about \$18.3 million in SA3 over an estimated 8-year system life cycle.

The Army has little to show for the \$46 million invested in SA3. Figure 2 shows four of the major SA3 system applications that were part of the initial SA3 plan. These initial major SA3 system applications were:

- o Case Development,
- o Case Management,
- o International Logistics Supply Delivery Plan, and
- o AMC Standard FMS Pricing System.

Two additional major SA3 applications, the Security Assistance Management Acquisition Program and the Communications-Electronics Command version of the International Logistics Supply Delivery Plan (under development), and two minor SA3 applications, 760 and 1404, are also shown in Figure 2. See page 24 and Appendix B for details on the two minor SA3 applications.

*The Army was unable to provide documentation to support a breakdown of SA3 development and enhancement costs versus maintenance costs through FY 1994. The SA3 PM reported \$34.9 million spent on SA3 through FY 1990, the year the Army reported SA3 a fielded system. The \$34.9 million did not include the cost to develop the M204 conversion (\$3.4 million) or the Security Assistance Management Acquisition Program (\$651,000). See discussion on Reporting SA3 Information System Cost, page 17.

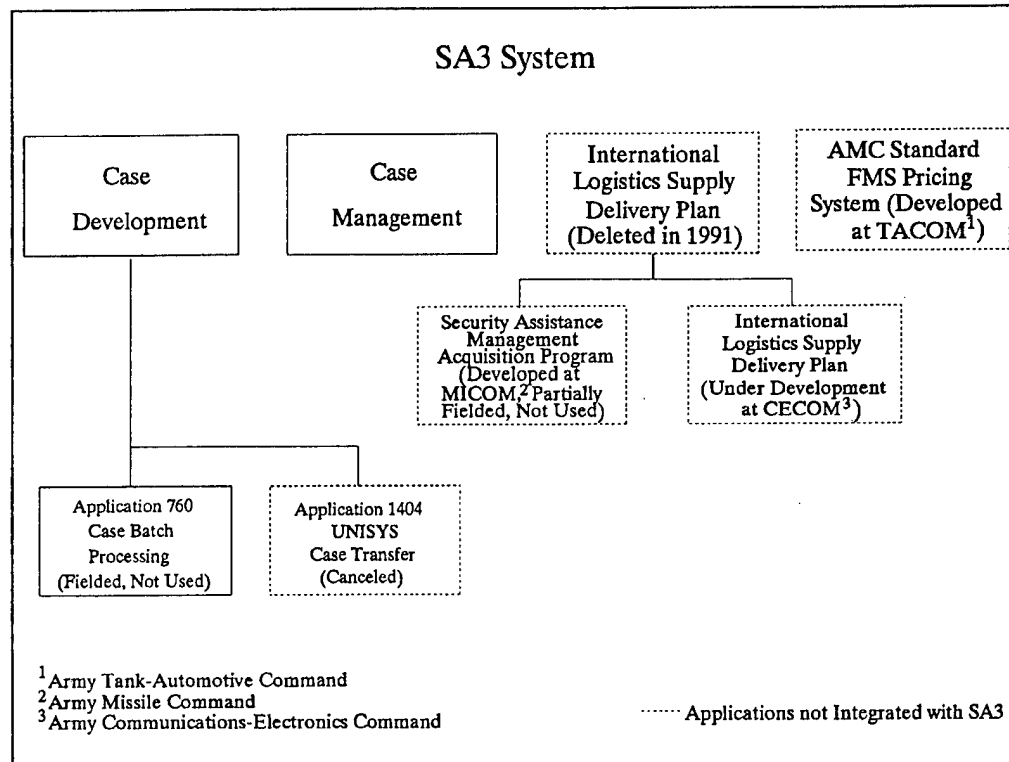


Figure 2. SA3 System Applications That Were Developed

Of the four major SA3 systems applications that were reported as completed, some were seldom used, were developed without use of SA3 resources, or were not fully integrated into SA3. For example, the International Logistics Supply Delivery Plan, one of four completed major SA3 systems applications, was seldom used and was deleted in 1991. The application was supposed to provide case managers a system of monitoring case status (primarily tracking customer requisitions) once a case had been implemented.

Two additional attempts were made to satisfy the same requirement. The Security Assistance Management Acquisition Program was developed at the Missile Command (an AMC major subordinate command) at a cost of \$651,000 over a 3-year period. Phase I of this application was fielded in March 1993 but experienced little, if any, use and has not been integrated with SA3. During June 1994, we determined that the Communications-Electronics Command (an AMC major subordinate command) had tasked a contractor to develop a similar application for internal use, a third attempt to satisfy this same functional need. The Communications-Electronics Command application was intended for use only within the Communications-Electronics Command and was not scheduled to be integrated with SA3. In addition, SA3 integration was not complete, as only the Case Development and Case Management SA3 system applications were fully integrated into SA3, which is a part of the Army Commodity Command Standard System.

Management of Security Assistance Automation, Army

Failure to Satisfy Mission or User Requirements. SA3 had limited capabilities and did not fully satisfy basic Security Assistance Program mission or user requirements. Review of existing documentation and discussions with case developers and case managers at six (now five) AMC major subordinate commands showed that SA3 did not correct deficiencies that existed under the prior system. The following deficiencies are examples of the SA3 failure to meet user needs.

- o Users continued to develop a significant number of cases off-line, without using SA3.
- o Users managed cases primarily off-line.
- o Users duplicated entry and storage of similar and redundant data.

As a result of the three deficiencies, USASAC could not use SA3 to centralize or standardize management of the Security Assistance Program or to avoid duplicate efforts of managing the Security Assistance Program. In addition, users at the AMC major subordinate commands continued to develop their own applications to satisfy needs not met by SA3. Consequently, SA3 did not fully satisfy basic mission requirements.

Users Continued to Develop Cases Off-Line. In April 1994, 11 years into the SA3 life cycle, users were just beginning to use SA3 to develop cases. Users provided several reasons why they previously elected not to use SA3 to develop their cases. The most frequent comment made was that SA3 was fine for simple cases but that the system was too rigid to accommodate unique or complex cases. In addition, users expressed frustration with having to wait overnight for information requested from the system. For example, of the average of 1,100 cases developed by the Missile Command between October 1990 and April 1994, 674 (61 percent) were developed off-line, using a commercial software package.

In January 1990, USASAC, aware that users were not using SA3, tasked SIMA to upgrade SA3. The upgrade, which became known as the M204 conversion, primarily converted the existing SA3 data base from S2K, a hierarchical format, to M204, a relational format. This conversion provided users a quicker and more user-friendly method of retrieving data. However, the M204 conversion also affected all previously developed SA3 applications and related programs that used the S2K format. For example, one of the programs that formed the case development application was the case print program. This program performed the print function for the case development application. When SIMA was tasked to convert the SA3 data base from the S2K format to M204 format, the case print program had to be redesigned to be compatible with the M204 format.

Case managers at USASAC-New Cumberland, responsible for managing 30 percent of the Army's average 6,000 open FMS cases, did not use SA3 to develop cases before June 1994. When the SA3 prototype was first tested at

USASAC-New Cumberland in 1991, users tried to develop and print cases using SA3, but most became frustrated and chose to use an off-line commercial software package to develop and print their cases.

Although SA3 development began in 1983, users only recently began using the system on a regular basis to develop and print their cases. SIMA fielded the SA3 M204 database conversion to the five AMC major subordinate commands in April 1994 and to USASAC-New Cumberland in May 1994. According to users, the SA3 M204 database conversion made developing cases easier; however, shortfalls in SA3 still prevented users from using SA3 to manage their cases.

Users Continued to Manage Cases Off-Line. Users at the five AMC major subordinate commands managed their cases off-line because the capability to manage cases using SA3 was never successfully developed. Case management is the ability to manage a case from implementation through close out by measuring the performance and status of a foreign customer's goods and services.

Two attempts were made to provide SA3 with case management capabilities.

- o The International Logistics Supply Delivery Plan was the original attempt to provide a management application. This application, fielded in 1989, was designed to provide case tracking and reporting capabilities. The application was canceled after a March 1991 study determined that the application was not being used.

- o The Missile Command Security Assistance Management Acquisition Program was the second attempt to develop case management capabilities within SA3. Although fielded, this application received minimal use. As of July 1994, users still had not received training, and they expressed skepticism as to whether this latest application would provide the necessary management capabilities. Further, the Communications-Electronics Command initiated development efforts for its own case-tracking system, also known as the International Logistics Supply Delivery Plan.

Users Duplicate Entry and Storage of Data. SA3 did not eliminate the need for duplicate entry and storage of similar and redundant data. The recording of basic case information and the capability of the AMC Standard Foreign Military Sales Pricing System provide significant examples of the continued duplication of effort in managing the Security Assistance Program.

Cases are managed and tracked in varying levels of detail at several AMC major subordinate commands, but the basic case information is needed at all AMC major subordinate commands. The basic information for every implemented case includes case and country designator; case description; case value; implementing agency; and significant action dates such as dates of offer, acceptance, and implementation. This basic information is entered by users at least three times on different information systems, as shown in Figure 3.

Basic case information, along with other necessary detailed information, is entered first at an AMC major subordinate command, where the case is developed and managed either on SA3 or off-line. The case is printed and sent to USASAC-New Cumberland, where the same basic information is entered on the Centralized Integrated System-International Logistics to maintain overall case tracking and management information for the country case manager. The case is then sent to USASAC-Alexandria, where the same basic case information is entered again on a third system, the Security Assistance Case Tracking System. This tracking system maintains overall case tracking and management information for the country program manager. The country program manager oversees all requests and cases for a specific country and delegates the responsibility of overseeing cases to subordinate country case managers.

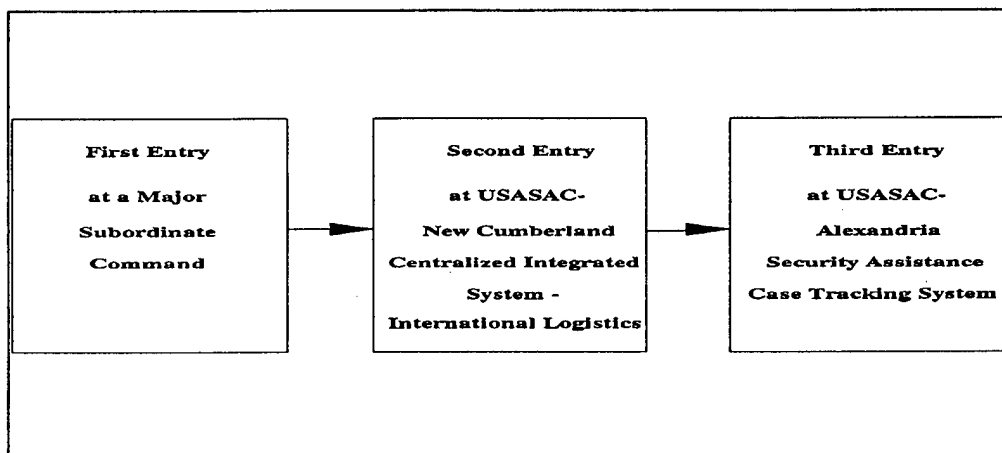


Figure 3. Basic Case Information Entered Three Separate Places

Without a centralized security assistance data base of FMS cases, the Army will continue to waste limited resources through duplicate efforts to manage the Security Assistance Program. Unsuccessful attempts were made to integrate the International Logistics Supply Delivery Plan. Integrating the two related applications at Missile Command and Communications-Electronics Command discussed earlier have not been attempted.

Capability of Standard Pricing System. One intended goal of the AMC Standard FMS Pricing System was to eliminate the need for dual entry when pricing FMS cases. The AMC Standard FMS Pricing System, one of the four completed major SA3 system applications (see Figure 2), was developed at the Tank-Automotive Command (an AMC major subordinate command) as a stand-alone system and, subsequently, was made available to the other AMC major subordinate commands. Users at the various AMC major subordinate commands considered the pricing feature of the AMC Standard FMS Pricing System to be useful; however, the current version of the pricing system has not been integrated with the new M204 data base. For example, although the AMC Standard FMS Pricing System was integrated into the SA3 S2K data base, it

was seldom used because the process used to retrieve pricing information from the S2K data base took too long. As a consequence, users had to extract pricing data from the standard pricing system and re-enter the applicable prices when developing a case. Also, when SA3 was converted to a M204 data base, the Tank-Automotive Command was tasked by USASAC to develop another pricing application to be used with the SA3 M204 data base, but the application has not been integrated with SA3. As a result, the AMC Standard FMS Pricing System failed to satisfy SA3 mission requirements and to achieve the original goal of eliminating duplicate entries for pricing FMS cases.

Project Management to Develop and Maintain the SA3 Information System

The SA3 PM did not follow established Army life-cycle management policies and processes during system development. In some cases, the SA3 PM did not report required information to Army and USASAC management, or information reported to management was inaccurate or misleading. As a result, management did not have a sound basis for evaluating the status of SA3. In other instances, USASAC failed to address problems, even when available information indicated significant system deficiencies, cost overruns, and schedule slippages. The following examples summarize the inadequacy of information the SA3 PM reported to management, and management's failure to respond to problem indicators.

Reporting SA3 Information System Cost. The SA3 PM did not prepare cost estimates or report significant cost increases for SA3, as required by Army guidance on life-cycle management. Army regulations require that the approving official receive immediate written notification if a project is expected to exceed its baseline cost by 15 percent in any given phase. The mission element needs statement, approved in September 1982 by the Assistant Secretary of the Army (Installations, Logistics, and Environment), was the last approved estimate of the projected investment cost for SA3.

The September 1982 mission element needs statement showed estimated SA3 software development and procurement costs to be \$18.3 million through full extension of the SA3 to all planned sites. The inaccuracy of this information should have been evident when the actual cost information in the USASAC May 1989 management plan was much higher. For example, the May 1989 management plan showed that, as of May 1989, year 7 of an estimated 8-year life cycle, the Army had invested \$25.6 million in SA3, exceeding the latest approved baseline estimate (\$18.3 million in 1982) by 40 percent. The USASAC May 1989 management plan also reported that, as of May 1989, the required system programming was only 33 percent complete, when, in fact, the system programming should have been at least 75 percent complete. See Figure 4.

Management of Security Assistance Automation, Army

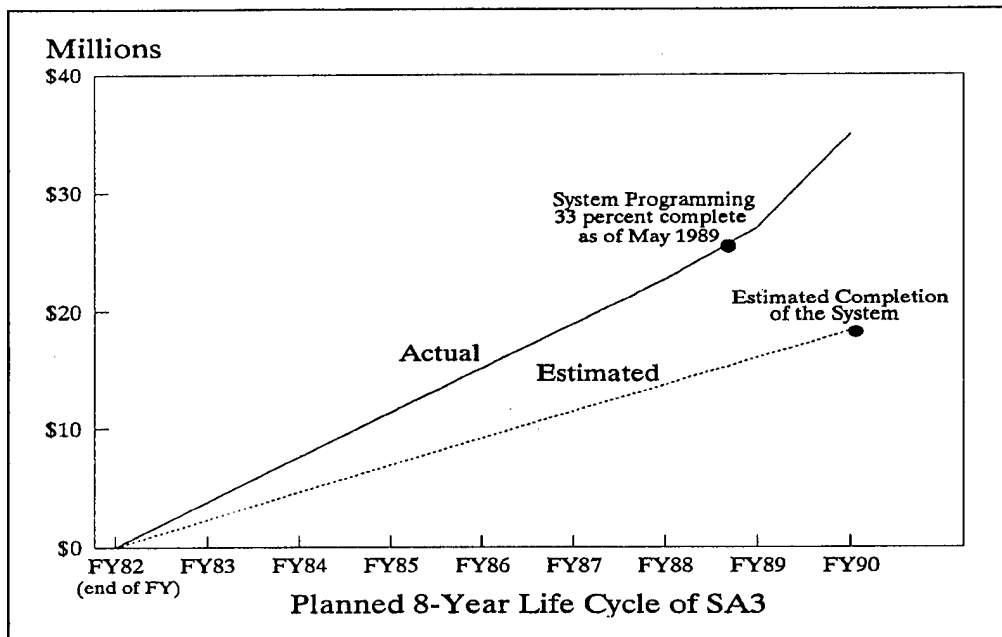


Figure 4. Actual SA3 Development and Procurement Costs Exceeded Estimated Costs

Information prepared 16 months later indicated that the SA3 PM continued to spend money for SA3 without revising and reporting cost estimates, while receiving little in return. For example, in an October 1990 mid-term analysis report of SA3, the SA3 PM office reported that \$34.9 million was spent on SA3, with only 6 of 21 planned system applications completed. The total spent as of October 1990 exceeded the baseline estimate by 91 percent. Further, the \$34.9 million did not include one of the four completed applications, the AMC Standard FMS Pricing System. This application was developed at the Tank-Automotive Command without the use of SA3 resources, and the cost to develop the application was unknown.

Although the October 1990 SA3 PM mid-term analysis report, the last formal documentation prepared by the SA3 PM on the status of SA3, showed that the SA3 project had significant cost overruns and schedule stoppages, the SA3 PM never presented this report to Army management. Without current information regarding the cost and status of SA3, Army management could not determine the most cost-effective alternative for completing the project. The SA3 PM stated that Army management generally considered security assistance a low priority area; therefore, any briefings that were presented to management usually occurred after action was already taken.

Documentation of Major Modification. The SA3 PM did not provide required documentation or obtain necessary approval in support of the SA3 M204 conversion, a major SA3 modification costing at least \$3.4 million over 4 years. The \$3.4 million estimate is a conservative rate based on an average SIMA-computed rate of \$29 per hour. Current Army guidance suggests that a rate of \$55 per hour would be more accurate.

Management of Security Assistance Automation, Army

In January 1990, USASAC directed SIMA to convert the existing SA3 data base from S2K, a hierarchical format, to M204, a relational format. USASAC levied the tasking with little, if any, analysis on what resources were required, how long the effort would take, how much it would cost, and what the anticipated benefits would be.

Failure to Evaluate Feasibility of Modification. The SA3 PM did not evaluate and report the feasibility of converting to M204 or the overall effect the M204 conversion had on the existing SA3 software applications or programs. According to Army life-cycle guidance, the SA3 PM is required to obtain milestone approval authority from the Assistant Secretary of the Army (Installations, Logistics, and Environment) for any major modification to an existing system.

The objective of milestone approval at this phase in a system's life cycle is to revalidate whether the existing system conforms to architectural requirements and whether the system continues to satisfy validated mission needs or whether the system should be terminated. This revalidation helps milestone approval officials to determine whether modifying the system is the most cost-effective alternative.

To accomplish the milestone approval, the PM is required to update all life-cycle documentation, including previously approved baseline cost, schedule, and program requirements. Additionally, the cost of implementing the recommended modification should be compared with other alternatives. The SA3 PM did not prepare the required updates for the designated milestone approval official, and the SA3 PM did not consider other alternatives to the M204 conversion. Without updated cost and program requirements and evaluation of other available alternatives, the milestone approval official could not determine whether the M204 conversion was the most cost-effective solution.

Modification Improperly Based on AMC Direction. USASAC officials stated that alternatives to the SA3 M204 conversion were not evaluated because USASAC was directed by AMC to convert the SA3 S2K format to a M204 format, in accordance with AMC Regulation 18-2, "AMC Standard Mainframe Data Base Management Systems," November 21, 1988. AMC Regulation 18-2 designated M204 format as the standard mainframe data base management system for use in logistics business systems within AMC. However, the regulation was rescinded November 29, 1989, before USASAC initiated action to develop the M204 conversion. Further, our discussions with users indicated that SA3 needed M204 format capabilities for the system to be used at the AMC major subordinate commands.

The dissatisfaction with SA3 at the AMC major subordinate commands was confirmed by the results of a USASAC assessment completed in March 1991.

Command-Level Assessment Confirmed User Dissatisfaction. A March 1991 command-level assessment of SA3, conducted at all six (now five) AMC major subordinate commands, confirmed user dissatisfaction with the system. The written assessment was prepared as a result of input received during site

Management of Security Assistance Automation, Army

visits to the commands by the USASAC Director of Information Management and the SA3 PM. See Appendix E for the full text of the assessment of automation to support security assistance at AMC major subordinate commands. The assessment showed that SA3 did not meet its objectives and that system users were not satisfied with the initial software release. Specifically, the assessment stated:

- o The Armament, Munitions, and Chemical Command, Rock Island, Illinois, was the only AMC major subordinate command to accept and use the SA3 International Logistics Supply Delivery Plan.

- o The Aviation Systems Command (now Aviation and Troop Command), St. Louis, Missouri, did not transmit cases electronically because of communication problems. Case designs were not standardized and many manual changes were made to cases. Also, local automation tools were frequently used.

- o The Communications-Electronics Command, Fort Monmouth, New Jersey, used SA3 for most cases; however, the command made limited use of management tools in SA3.

- o The Missile Command, Huntsville, Alabama, showed relatively slow acceptance of SA3 in favor of locally developed tools.

- o The Troop Support Command (now Aviation and Troop Command), St. Louis, Missouri, expressed particular frustration with the SA3 International Logistics Supply Delivery Plan and identified a specific need for standardized case management tools.

- o The Tank-Automotive Command, Warren, Michigan, used SA3 for some case development, but had old equipment and had communication difficulties when transmitting cases electronically.

As a whole, the assessment clearly showed that USASAC and the AMC major subordinate commands had received little benefit from the \$37 million spent on SA3 by March 1991.

USASAC Actions Taken as a Result of Assessment. Although USASAC performed the assessment more than 3 years ago, we found no planning documents or action plan to address the problems noted and no estimate of the cost to correct the deficiencies and make SA3 useful and effective.

Adequacy of Technical Support SIMA Provided

SIMA did not follow established procedures or provide adequate technical support during SA3 development. Specifically, SIMA did not always obtain system change requests or prepare planning and design documentation as required before modifying and enhancing SA3. In addition, SIMA failed to

perform key functions during SA3 development because SIMA management, in some instances, allowed the Security Assistance Functional Support Office, USASAC, to perform duties that overlapped and interfered with SIMA's responsibility as a central design activity.

Controls on System Change. SIMA performed development efforts on the M204 conversion, a major system modification costing at least \$3.4 million, without an approved system change request. Development and Readiness Command [now Army Materiel Command] Regulation 18-17, "Automatic Data Processing Systems Configuration Management," September 17, 1979, requires a system change request for all taskings that involve a change to an information system.

SIMA treated the M204 conversion as an internal project, bypassing the internal controls established for system change requests. Internal projects do not require a system change request. USASAC submitted a system change request for the M204 conversion that did not include a cost-benefit analysis. The system change request was appropriately rejected by the system change control officer at SIMA. However, SIMA bypassed its own control mechanism and developed the M204 conversion without an approved system change request. As a result, 74,549 of the total 111,369 hours (67 percent) that SIMA charged to SA3 taskings from October 1990 through February 1994 were performed without SIMA evaluating the alternatives and determining whether the proposed change was necessary or cost-effective.

According to SIMA management, no regulations, policies, or guidance cover the creation or use of internal projects. Further, SIMA permitted lower level management personnel such as branch chiefs or project managers to authorize the use of internal projects.

Controls on Contractor Work Orders. Over a 2-year period ending April 1994, SIMA submitted 38 percent of its work orders to the contractor through a task order contract without evaluating whether the planned work was beneficial to the Government and without maintaining adequate oversight of the requested actions in the work orders. SIMA bypassed existing internal controls by submitting work orders to the contractor without first obtaining required supporting documentation.

Contractor Support Through Task Order Contract. SIMA obtained contractor support through a technical support task order contract to:

- o analyze system change requests for maintenance of and enhancements to SA3;
- o determine the impact of changes to the operational system; and
- o develop system programs, program revisions, and related documentation.

When technical support is needed from the contractor, SIMA should submit work orders, along with supporting documentation, to the contractor.

Supporting Documentation. Review of the contractor's list of work orders performed on technical support task orders, valued at \$909,000, during FYs 1993 and 1994 showed that SIMA submitted 46 of 121 work orders (38 percent) to the contractor without first obtaining the required supporting documentation. Either an approved system change request or a SIMA Form 366a, "Environmental System Test Report," should be submitted with each work order to ensure the planned efforts are beneficial to the Government and to maintain oversight of the requested action. SIMA Form 366a is a SIMA internal document to report, correct, and track deficiencies that occur during, and as a result of, pre-installation testing within SIMA.

Planning and Design Documentation for Case Print Application. SIMA did not adequately manage the development of the SIMA-developed M204 case print application. More precisely, SIMA management allowed SIMA programmers to code (program) the case print application without proper planning. Specifically, SIMA did not:

- o prepare functional descriptions of the requirements,
- o perform a technical analysis of the requirements, and
- o develop specifications.

Army Guidance Existed To Prevent Misinterpretation. According to Army Technical Bulletin 18-103, "Army Automation Software Design and Development," January 1983, SIMA should have properly planned the case print application effort to prevent misinterpretation and to provide continuity between the SIMA and the USASAC functional proponent. Further, one stated objective of Army Technical Bulletin 18-103 is to reduce the cost of implementation, maintenance, and modification of Army automated systems, such as SA3.

SIMA's Failure to Enforce Existing Guidance. Because SIMA management did not enforce Army Technical Bulletin 18-103 and existing Army guidance, the SIMA programmers determined specific M204 case print requirements on their own with minimal functional input from SIMA management or USASAC. SIMA management stated they agreed that the procedures spelled out in Army Technical Bulletin 18-103 should have been followed for effective software development; however, USASAC controlled the money needed to implement the processes and had directed that M204 be developed using USASAC ideas regardless of the procedures in Army Technical Bulletin 18-103. SIMA management further stated that, because SIMA is a "fee-for-service" organization, SIMA had no alternative but to adhere to the USASAC directions.

As a result of the decision by SIMA management to follow USASAC direction rather than Army guidance, the SIMA programmers working on the M204 case print program were not provided with adequate guidance on the M204 case print program requirements. Therefore, SIMA programmers determined that the best approach for accomplishing the M204 case print program was to design and develop new software. The USASAC functional proponent, on the other hand,

Management of Security Assistance Automation, Army

DSAA must also assume responsibility for life-cycle management of existing Army security assistance information systems, such as SA3, to ensure compliance with established life-cycle management policies and procedures.

Internal Controls on Funds Expended. DSAA, responsible for funding SA3 based on annual budget submissions from USASAC and SIMA, did not establish internal controls to maintain visibility over funds expended on SA3. As a result, USASAC continued to fund SA3 development and enhancement, ignoring DSAA and other DoD guidance that imposed strict limitations on further development and enhancement of security assistance and other DoD information systems.

Guidance Limited Further Development. In April 1980, DSAA issued guidance to the Military Departments that indicated its intention to actively participate in the early review of planned information system development and maintenance before approving related requests for funds. The guidance required that all information system projects with development and investment costs of \$100,000 or more, or estimated annual operating and maintenance costs of \$200,000 or more, or both be submitted to DSAA for approval before inclusion in the annual budget.

In addition, the Joint Logistics Systems Center, established February 11, 1992, required that no further development and only essential maintenance should be performed on existing logistics information systems that were not selected as standard DoD systems. The Joint Logistics Systems Center was created in response to a DoD CIM initiative to standardize DoD automated information systems. (See Part I, Other Matters of Interest for details on the initiative.)

USASAC Continued Development on SA3. Although DSAA denied numerous USASAC and SIMA budget requests to develop and enhance SA3, the Army continued to develop and enhance SA3. USASAC and SIMA accomplished this work on projects that were previously denied funding by using excess funds available from prior years and by using funds approved by DSAA to accomplish other specific projects. Further, of the total funds provided to USASAC and SIMA, neither activity could provide a breakdown of development costs versus maintenance costs. The following examples demonstrate how USASAC and SIMA continued funding projects to develop and enhance SA3 without DSAA approval.

- o Over the past 6 years, USASAC consistently funded work years for SA3 at a significantly high level despite USASAC claims that SA3 is considered fully developed and that budget requests are only for system maintenance.

In FY 1989, when the system was still under full development, USASAC funded 49 work years of effort. However, in FY 1994, 5 years later, USASAC funded 44 work years of effort even though SA3 was supposed to be fully developed in FY 1990. The 44 work years funded in FY 1994 do not include the approximate 24 work years of effort designated for automation support at

Management of Security Assistance Automation, Army

depended on the Security Assistance Functional Support Office personnel, who had knowledge of security assistance functions, but had little or no skills to resolve technical problems.

As a result of the inadequate test and evaluation, SIMA accepted and paid for at least two minor software applications (see Figure 2), valued at about \$160,000, without adequate testing and that users never used. For example, case batch processing was a contractor-developed application to allow the transfer of data from an outside source into the S2K data base format. At the time of development, no software was available to provide sources of data necessary for testing this application. USASAC accepted the application, even though data was not available to fully test it.

Inadequate Customer Support. SIMA did not provide adequate customer support for SA3. As a central design activity, SIMA is responsible for providing user assistance, advice, and guidance during all phases of standard systems life-cycle processing. USASAC officials stated that because SIMA did not perform most of the SA3 division-level testing, SIMA lacked required knowledge on SA3 applications. USASAC officials also stated that SIMA did not provide adequate assistance to the users who were experiencing problems with SA3 applications. To keep SA3 properly functioning, the Security Assistance Functional Support Office personnel, not SIMA personnel, responded to user problems and questions.

The lack of direct communication between SIMA and its customers may have impeded its ability to correct identified problems and deficiencies. See examples of the problems with the SIMA-developed case print application in Appendix C. As a result of our audit, both SIMA and USASAC took action to further define their responsibilities. For example, user problems and concerns are now directly communicated to and resolved by SIMA. SA3 users at the AMC major subordinate commands indicated that problems were quickly and effectively resolved when they dealt directly with SIMA programmers.

Contractor Oversight. SIMA did not provide adequate oversight of contractor performance on the personal computer case print application. As a central design activity, SIMA is responsible for initially deciding whether a proposed task will be performed using SIMA or contractor personnel. When the contractor is selected to perform the task, SIMA is responsible for developing the statement of work and monitoring contractor performance. In this instance, however, the Security Assistance Functional Support Office improperly directed that SIMA task the contractor to develop the personal computer case print application. In addition, SIMA prepared the statement of work without adequate review or input from SIMA programmers.

Requirement Not Clearly Defined. SIMA did not adequately respond to strong indications from the contractor that the contractor misunderstood the overall requirement for the personal computer case print application. The requirement for the personal computer case print application was not clearly defined, as evidenced by the contractor's bid of \$160,000 to develop the personal computer case print application, compared to the GSA estimate of \$37,413. SIMA did not develop its own estimate or review

and otherwise approve either the contractor bid or the GSA estimate. Consequently, GSA negotiated a final price of \$80,182 (including a 13.9 percent GSA surcharge) for the contractor to develop the personal computer case print application. Appendix A provides further details on the GSA role in procuring SA3 software applications.

Before GSA awarded the ceiling price task order to the contractor, the SIMA client representative noted in a memorandum to GSA:

I do not agree with the total amount of funding shown for this task . . . there is no way this total analysis program effort can be developed for \$80,000, even if GSA cost was not included. . . . I don't know what (the contractor) submitted to you for their estimate, however, if theirs was in the amount on the agreement, I don't believe the overall requirements were clearly understood.

Even with the comments from its own client representative that the requirements were not clearly understood by both parties, SIMA took no action to clarify the requirements.

Consequence of Unclear Requirements. Because SIMA did not clarify the requirements for the personal computer case print application, the Army spent \$73,852 on the application without receiving an application that could be used to print FMS cases. A ceiling-price task order was issued that required the contractor to develop the personal computer case print application by accomplishing the following three tasks:

- o develop a technical system design document;
- o code, test, and debug the software application; and
- o perform training.

However, after incurring costs of \$73,852 (including the GSA surcharge) and only completing the first task, the contractor reported that the application could not be completed on schedule. SIMA canceled the task order and stated that GSA provided inefficient contract administration. Although the requirement still existed, neither SIMA nor USASAC took action to finish the personal computer case print application.

Adequacy of Army Management Oversight of SA3

The Assistant Secretary of the Army (Installations, Logistics, and Environment), as the responsible information systems approval authority within the Army, did not approve SA3 at critical milestones, did not ensure that development efforts were accomplished within approved milestones, and did not ensure that SA3 met mission and user needs. AMC supplemented the approval authority that existed at the Assistant Secretary-level by establishing the

Management of Security Assistance Automation, Army

Logistical Systems Review Committee (the Committee) to review and approve development and modifications and provide mission analysis on all AMC information systems.

The Committee did not obtain and review required life-cycle management documentation. Figure 4 clearly shows that updated cost and program requirements could have helped Army management to determine whether it was more cost- and mission-effective to continue with SA3 development as planned or to terminate, or possibly redirect, ongoing and planned development efforts. In addition, the Committee did not verify that SA3 met mission and user needs once the system was deployed.

We attribute Army management's apparent lack of interest in SA3 to the fact that SA3 was funded using Defense Security Assistance Agency (DSAA) rather than Army funds.

Although Army management did not perform the required oversight of SA3, we made no recommendations to the Army because the Joint Logistics Systems Center is now responsible for approving the development and modification of logistics information systems, including SA3. (See Part I, Other Matters of Interest.)

Adequacy of DSAA Oversight of SA3 Funding

DSAA did not adequately oversee SA3 life-cycle management responsibilities that were delegated to the Army. In addition, DSAA did not effectively monitor the funds provided to the Army for SA3 development and maintenance. As a result, USASAC continues to spend as much as \$3.7 million annually to upgrade and enhance SA3 without a current management plan. Further, DSAA allowed USASAC to use the money to fund developmental efforts that were never approved or that were previously denied funding by DSAA.

Internal Controls on Life-Cycle Management. DSAA did not establish internal controls to verify that the Army complied with existing life-cycle management regulations when developing and maintaining information systems funded by DSAA. For SA3 development and maintenance, DSAA relied on the Army to follow established DoD and internal Army guidance on life-cycle management. However, as discussed previously, Army officials did not perform required life-cycle management reviews of SA3 or provide critical system milestone approval. In addition, Army officials are no longer responsible for approving development and modification efforts on Army logistics information systems, such as SA3.

DSAA recently requested approval from the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) to initiate and oversee plans to develop a standard security assistance information system. If DSAA is delegated this oversight responsibility for new information system development,

Management of Security Assistance Automation, Army

DSAA must also assume responsibility for life-cycle management of existing Army security assistance information systems, such as SA3, to ensure compliance with established life-cycle management policies and procedures.

Internal Controls on Funds Expended. DSAA, responsible for funding SA3 based on annual budget submissions from USASAC and SIMA, did not establish internal controls to maintain visibility over funds expended on SA3. As a result, USASAC continued to fund SA3 development and enhancement, ignoring DSAA and other DoD guidance that imposed strict limitations on further development and enhancement of security assistance and other DoD information systems.

Guidance Limited Further Development. In April 1980, DSAA issued guidance to the Military Departments that indicated its intention to actively participate in the early review of planned information system development and maintenance before approving related requests for funds. The guidance required that all information system projects with development and investment costs of \$100,000 or more, or estimated annual operating and maintenance costs of \$200,000 or more, or both be submitted to DSAA for approval before inclusion in the annual budget.

In addition, the Joint Logistics Systems Center, established February 11, 1992, required that no further development and only essential maintenance should be performed on existing logistics information systems that were not selected as standard DoD systems. The Joint Logistics Systems Center was created in response to a DoD CIM initiative to standardize DoD automated information systems. (See Part I, Other Matters of Interest for details on the initiative.)

USASAC Continued Development on SA3. Although DSAA denied numerous USASAC and SIMA budget requests to develop and enhance SA3, the Army continued to develop and enhance SA3. USASAC and SIMA accomplished this work on projects that were previously denied funding by using excess funds available from prior years and by using funds approved by DSAA to accomplish other specific projects. Further, of the total funds provided to USASAC and SIMA, neither activity could provide a breakdown of development costs versus maintenance costs. The following examples demonstrate how USASAC and SIMA continued funding projects to develop and enhance SA3 without DSAA approval.

- o Over the past 6 years, USASAC consistently funded work years for SA3 at a significantly high level despite USASAC claims that SA3 is considered fully developed and that budget requests are only for system maintenance.

In FY 1989, when the system was still under full development, USASAC funded 49 work years of effort. However, in FY 1994, 5 years later, USASAC funded 44 work years of effort even though SA3 was supposed to be fully developed in FY 1990. The 44 work years funded in FY 1994 do not include the approximate 24 work years of effort designated for automation support at

Management of Security Assistance Automation, Army

the AMC major subordinate commands during the same period. The work years funded also do not include contractor support obtained for internal use by the commands.

- o From FYs 1988 through 1990, USASAC funded GSA \$2.8 million to develop a statement of work for the integration of SA3 (GSA integration project). On May 31, 1991, USASAC canceled the project and transferred the remaining balance of \$2.7 million to continued funding maintenance and development efforts, abandoning SA3 integration. Integration with the Army Commodity Command Standard System is a primary objective for SA3 and was one of the major deficiencies noted by SA3 users. USASAC continues to address the importance of SA3 integration and, in FY 1991, reported to DSAA that an internal initiative would streamline operations and fully integrate SA3. Integration of SA3 was not achieved because USASAC has continued to fund SA3 maintenance and other development efforts at the expense of integration.

- o USASAC funded the Missile Command at least \$651,000 over 3 years to develop the Security Assistance Management Acquisition Program application. This application was never referred to in any budget documents and, therefore, was never approved by DSAA. The application was to replace the International Logistics Supply Delivery Plan, a major SA3 systems application that was fielded and never used.

Best Position for Oversight. Although SA3 falls within Joint Logistics Systems Center cognizance, the Joint Logistics Systems Center does not have visibility over SA3 funding. Because SA3 is funded by DSAA, DSAA is in the best position to provide oversight of SA3 and to enforce accountability of the funds provided for SA3. This oversight should include site visits by DSAA to the AMC major subordinate commands to determine what resources are necessary to manage the Security Assistance Program through automation.

Conclusion

To avoid costly and duplicative information system development for the Security Assistance Program, DSAA should discontinue further funding for SA3 development and enhancement, in accordance with current DoD CIM and other DoD initiatives. In addition, to ensure that unjustified development is not performed, DSAA should withhold funds for SA3 maintenance until the Army identifies and justifies only essential software and hardware maintenance costs.

Without updated overall planning documents or an estimated cost to complete the system, USASAC was forced to develop SA3 on a piece-meal basis. In addition, because USASAC did not establish a sound project baseline, including reliable cost and program requirements, SA3 could not be developed in a cost-effective manner or meet its intended objective. In the final analysis, SA3 did not provide the Army with a highly responsive and flexible automated system necessary for total management of the Security Assistance Program.

Unless required documentation and cost estimates are properly prepared with current, accurate, and complete information, management cannot ensure that:

- o available resources are used to provide the most beneficial results,
- o expected benefits are worth projected costs, and
- o the lowest cost approach is selected and will be followed during system development and use.

The Army needs to ensure that required life-cycle management policies and procedures are followed. DSAA needs to develop effective oversight of funding provided to the Army to maintain SA3.

Further, SIMA has not provided adequate technical support of SA3 development and enhancement. Problems with the development and enhancement of software applications will continue unless more rigorous software maintenance processes are followed at SIMA.

Management Comments on the Finding and Audit Response

Although DSAA did not comment on the finding, the Army commented extensively. See Appendix F for a summary of the Army comments and the audit response.

Recommendations, Management Comments, and Audit Response

Revised Recommendations. Based on DSAA comments, we revised Recommendation 1.c. to perform site visits at the AMC major subordinate commands to determine resources necessary to manage the Security Assistance Program. Based on Army comments, we modified draft report Recommendation 3.b., eliminating reference to limitations on internal projects.

1. We recommend that the Director, Defense Security Assistance Agency:

a. **Discontinue funding for the future development of the Security Assistance Automation, Army, information system in accordance with Joint Logistics Systems Center policies.**

b. **Withhold funding for future maintenance of the Security Assistance Automation, Army, information system until the U.S. Army Security Assistance Command identifies and justifies only essential maintenance expenditures of software and hardware requirements for the Security Assistance Automation, Army, information system in accordance**

with DoD Instruction 8120.2, "Automated Information Systems Life-Cycle Management Process, Review, and Milestone Approval Procedures," and Army Regulation 25-3, "Life-Cycle Management of Information Systems."

c. Perform site visits at the Army Materiel Command major subordinate commands to determine resources necessary to manage the Security Assistance Program through automation.

d. Establish internal control procedures to verify that the U.S. Army Security Assistance Command adheres to DoD and Army life-cycle management regulations and accounts for funds expended on the Security Assistance Automation, Army, information system.

Management Comments. DSAA concurred with Recommendations 1.a., 1.b., and 1.d., stating that, during the FY 1995 budget process, DSAA disapproved funding for all but maintenance of SA3 and that Army funding for SA3 has been reduced to only essential maintenance. In addition, within 90 days of finalizing the audit report, DSAA will require the Army to provide quarterly reports on the life-cycle management and status of funds for SA3. DSAA concurred with the intent of draft report Recommendation 1.c., but stated that the responsibility for identifying and reviewing alternatives and costs for system development and identifying and meeting user needs is a Department of the Army responsibility.

Audit Response. Based on management comments, we revised Recommendation 1.c. Management did not comment on the potential monetary benefits associated with Recommendation 1.a. We ask that management provide those comments and comment on the revised recommendation in response to the final report.

2. We recommend that the Commander, U.S. Army Security Assistance Command, Army Materiel Command:

a. Establish procedures to verify that approval of software changes for the Security Assistance Automation, Army, information system and that tracking, updating, and reporting of costs associated with the system comply with Army Regulation 25-3, "Life-Cycle Management of Information Systems."

b. Periodically review the Security Assistance Automation, Army, information system as a control technique to determine compliance with DoD Instruction 8120.2, "Automated Information Systems Life-Cycle Management Process, Review, and Milestone Approval Procedures," and Army Regulation 25-3, "Life-Cycle Management of Information Systems."

c. Evaluate the Security Assistance Automation, Army, information system to identify total user software and hardware requirements, including all personnel required to support the system.

d. Based on the evaluation of the Security Assistance Automation, Army, information system performed in Recommendation 2.c., determine the estimated cost to complete the system, the estimated cost to maintain the system, and the expected benefits and cost reductions that will be achieved when the system is completed. This information should be included as part of the command's annual budget submission to the Defense Security Assistance Agency.

e. Disestablish the Security Assistance Functional Support Office, St. Louis, Missouri, as it adds no value to the Security Assistance Automation, Army, information system program function, and develop functions that can be adequately provided by the Systems Integration and Management Activity, Army Materiel Command.

Management Comments. The Army concurred with our recommendations, stating that a senior-level review committee will be established to provide oversight of security assistance information systems and that the committee will assess compliance semiannually, beginning in July 1995. The Army also stated that it will prepare a business case and a functional economic analysis to evaluate SA3 and that, based on the evaluation, the Army will provide estimated costs and expected benefits of the SA3 information system to DSAA as part of the command's annual budget submission, beginning in August 1995. In addition, the Army stated that action will be taken to disestablish the functional support office by October 1995.

Audit Response. The Army comments were responsive.

3. We recommend that the Director, Systems Integration and Management Activity, Army Materiel Command:

a. Develop additional internal control objectives and techniques on the documentation requirements for the Security Assistance Automation, Army, information system.

b. Establish procedures on the use of internal projects.

c. Develop and issue policy prohibiting the acceptance of work to enhance or modify the Security Assistance Automation, Army, information system unless a system change request accompanies the work request.

d. Develop and issue policy discontinuing the practice of submitting work orders for Security Assistance Automation, Army, information system to the contractor without required supporting documentation.

e. Create a formal plan, including design and testing requirements, before performing any additional Security Assistance Automation, Army, information system development, maintenance, or modification.

Management Comments. The Army fully concurred with Recommendations 3.a., 3.c., 3.d., and 3.e. and partially concurred with Recommendation 3.b. The Army stated that it will develop additional internal

Management of Security Assistance Automation, Army

control objectives and techniques on the documentation requirement for SA3 and establish procedures on the use of internal projects. The Army agreed to issue policy statements that a system change request is required before accepting work to modify and enhance SA3 and that supporting documentation is required for all work orders submitted to contractors. The Army also agreed to create a formal project plan before performing additional SA3 development, modification, or maintenance. The Army nonconcurred with the part of draft report Recommendation 3.b. that limited the use of internal projects to administrative support functions. The Army stated that projects other than administrative support functions are managed as internal projects. The Army provided specific dates of completion for each planned action and estimated the completion of all planned actions by March 31, 1995.

Audit Response. Management comments were responsive. The Army's plan to establish procedures on the use of internal projects meets the intent of our recommendation.

Part III - Additional Information

Appendix A. Additional Security Assistance Automation, Army, Background

The primary objective of SA3 was to provide the necessary software, hardware, and communications to fully support the Army Security Assistance Program and FMS case management through automation. SA3 was expected to serve about 1,455 potential users and to link all organizations supporting the Security Assistance Program, including:

- o Office of the Secretary of Defense,
- o Department of the Army,
- o AMC and its major subordinate commands,
- o DSAA, and
- o GSA.

The development SA3 was financed through the FMS Trust Fund. From FYs 1983 through 1994, USASAC spent more than \$46 million. Since FY 1992, USASAC continued to spend a relatively consistent amount per year on SA3. The table below shows SA3 costs from the inception of the program in FY 1983 through FY 1994.

SA3 Costs Through FY 1994		
<u>FY</u>	<u>Annual Cost</u>	<u>Cumulative Cost</u>
1983-1988	\$22,803,000	
1989	5,504,000	\$28,307,000
1990	6,550,000	34,857,000
1991	4,015,000	38,872,000
1992	2,614,000	41,486,000
1993	2,375,000	43,861,000
1994	2,836,000	46,697,000

Information System Development Project Management. The then-Assistant Secretary of the Army (Installations, Logistics, and Financial Management) approved the SA3 PM's charter in 1983. The charter placed the SA3 PM under the supervision and control of the Commander, USASAC, and also required that the SA3 PM report to executive management within the Department of the Army headquarters and AMC on the overall status of SA3. Also, in 1983, USASAC established the Security Assistance Functional Support Office, St. Louis, Missouri, to provide customer support and perform the liaison functions between SIMA and users at AMC major subordinate commands.

Technical Support for Information System Design, Development, and Maintenance. SIMA, a subordinate activity under AMC, is responsible for the design, development, and maintenance of information systems that support

Appendix A. Additional Security Assistance Automation, Army Background

AMC. The Army Commodity Command Standard System, the standard information system in AMC, is designed to provide uniform application of logistics policy throughout the Army supply system. SA3 was expected to be integrated with the Army Commodity Command Standard System to support the FMS mission. SIMA uses in-house and contractor personnel to support its mission. Contract support is provided through task order contracts issued and administered by GSA.

GSA Role in SA3 Procurements. A memorandum of understanding establishes an interagency agreement between GSA and SIMA (the client). Through the Federal Information Systems Support Program, GSA provides information processing services and contract administration services to various clients (including SIMA). When SIMA requires contractor support to supplement its in-house development efforts, SIMA submits a statement of work to GSA. GSA issues a task order with the statement of work to the contractor. GSA provides these services for a fee, which is currently a 13.9 percent surcharge added to the cost of the task order.

Appendix B. Summary of Allegations and Audit Results

Allegation 1. A fixed-price contract was awarded to a contractor to develop application 760 (case batch processing). The contractor received full payment even though the application was not usable by the Government.

Audit Results. Allegation 1 is substantiated. Application 760 was developed and tested, the contractor received full payment of \$74,800, and the application was fielded to end users. Audit results indicate that the application was never used.

Allegation 2. Government employees (Mr. * and Mr. *, USASAC, and Mr. *, SIMA), who were responsible for determining whether the terms of the contract were complete, participated in the process to pay the contract with full knowledge that application 760 (case batch processing) would be unusable to the Government.

Audit Results. Allegation 2 is not substantiated. We did not substantiate that Government employees had any knowledge that application 760 would be unusable. The application was accepted with the understanding that it could not be fully tested until application 1404 was developed (see allegation 3).

Allegation 3. A fixed-price contract was awarded to a contractor to develop application 1404 (UNISYS case transfer). The contractor received full payment even though the application was not usable by the Government.

Audit Results. Allegation 3 is substantiated. The contractor received full payment of \$85,400 for developing application 1404 under a fixed-price contract. USASAC canceled the requirement for this application before full testing. As a result, the application was not used.

Allegation 4. Government employees (Mr. * and Mr. *, USASAC, and Mr. *, SIMA), who were responsible for determining whether the terms of the contract were complete, participated in the process to pay the contract with full knowledge that application 1404 (UNISYS case transfer) would be unusable to the Government.

Audit Results. Allegation 4 is partially substantiated. Government employees accepted the application after it was developed. The contractor did receive full payment. The application was then canceled before testing. We could not substantiate whether the Government employees had "full knowledge".

*Privacy Act information deleted.

Appendix B. Summary of Allegations and Audit Results

Allegation 5. A ceiling-price contract was awarded to a contractor to develop a personal computer case print application. The scope of the contract was changed to make work for the contractor, work on the contract has been completed by Government employees, and the contractor is still billing hours against the contract, even though the contract has been completed by Government employees.

Audit Results. Allegation 5 is partially substantiated. A ceiling-price contract was awarded to the contractor to develop the personal computer case print application. The scope of the contract was not changed. While the contractor was developing the personal computer case print application, SIMA employees were developing a program called M204 case print. Audit results indicate that this SIMA effort also could have produced a personal computer case print program. We found no evidence that the contractor submitted false billings.

Allegation 6. Two USASAC employees, Mr. * and Mr. *, have engaged in making work for the contractors.

Audit Results. Allegation 6 is not substantiated. Poor management by USASAC and SIMA contributed to the perception of making work for the contractor. The three applications mentioned in allegations 1 through 5 are examples of poor management that resulted in the perception of making work for the contractor.

Allegation 7. Two USASAC employees, Mr. * and Mr. *, have continued to issue contracts for the development of useless computer programs that have been fielded to the end users, never or seldom used, and subsequently deleted.

Audit Results. Allegation 7 is partially substantiated. USASAC does not issue contracts. Contracts are issued by GSA through an interagency agreement with SIMA. Three applications named in the allegations were awarded to the contractor on task orders. One application (760) was developed, fielded, and never used. USASAC canceled the second (1404) before it was fielded. The SIMA canceled the third (personal computer case print) before its completion. The contractor received full payment for each of these task orders. Additionally, audit results indicated that several other applications, because of mismanagement, were unusable by the Government (for example, the International Logistics Supply Delivery Plan and the Security Assistance Management Acquisition Program). See the finding in Part II for details.

Allegation 8. Three USASAC employees, Mr. *, Mr. *, and Mr. *, have engaged the contract programmers for personal services.

Audit Results. Allegation 8 is not substantiated. Audit results were inconclusive in determining whether USASAC employees used contract employees to perform personal services (see allegation 9).

*Privacy Act information deleted.

Appendix B. Summary of Allegations and Audit Results

Allegation 9. A SIMA employee, Mr. **, has used contractors to perform personal services, such as typing, flow chart development, and other secretarial services.

Audit Results. Allegation 9 is not substantiated. No documents supported the allegation that Mr. * or SIMA used the contractor to perform personal services. However, in July 1993, GSA representatives visited SIMA to discuss regulations for avoiding personal services. Two GSA information technology managers had alleged perceptions of personal services and other irregularities at SIMA. During this visit, GSA provided a new memorandum of understanding to SIMA, re-establishing the understanding that SIMA will go through GSA when contracting for computer software services. GSA also gave SIMA a copy of the Federal Information Systems Support Program guidelines on avoiding personal services.

Allegation 10. A SIMA employee, Mr. *, has used contractor employees to prepare statements of work that have been subsequently awarded to this contractor.

Audit Results. Allegation 10 is not substantiated. Audit results did not indicate that this employee or SIMA used the contractor to write statements of work.

Allegation 11. SIMA personnel who have responsibility for overseeing the progress of the contracting effort have been willfully negligent in their duties and have conspired to exclude SIMA programmers from the contracting process. This negligence has resulted in wasteful spending on Government contracts.

Audit Results. Allegation 11 is not substantiated. Audit results did not support that SIMA personnel were willfully negligent. We did identify one case, the personal computer case print application, in which a SIMA employee purposely excluded a SIMA programmer from the contract process. However, we found no evidence that the exclusion of the programmer represented conspiracy.

Allegation 12. The contractor may have submitted false hourly billing statements against ceiling price contracts.

Audit Results. Allegation 12 is not substantiated. We did not identify false hourly billings being submitted by the contractor.

Allegation 13. The contractor was tasked to develop the M204 case print program after SIMA employees had already developed a M204 case print program, and the SIMA-developed case print program worked as well as or better than the contractor-developed case print program.

Audit Results. Allegation 13 is partially substantiated. The contractor was tasked to develop a M204 case print program after SIMA employees had

*Privacy Act information deleted.

Appendix B. Summary of Allegations and Audit Results

developed a M204 case print program that printed with minor technical deficiencies. We did not substantiate that the SIMA-developed M204 case print program was better than the contractor-developed M204 case print program. See Appendix C for more details on both M204 case print programs.

Appendix C. Results of M204 Case Print Program Comparison

Comparison of Contractor- and SIMA-Developed M204 Case Print Programs. Our comparison test of the contractor- and SIMA-developed M204 case print programs showed that both programs were capable of printing cases. We performed a comparison test of both case print programs to adequately answer allegation 13. The allegation stated that the contractor was tasked to develop a M204 case print program previously developed by SIMA and that the SIMA-developed M204 case print program worked as well as or better than the contractor-developed M204 case print program.

We conducted the comparison test at USASAC-New Cumberland in June 1994 with the assistance of an Inspector General, DoD, software engineer. We selected USASAC-New Cumberland as the site to run the tests because it was the only site at which the SIMA-developed program had been installed. To perform the comparison, we statistically selected and printed 54 cases on both systems (for a total of 108 printed cases). We requested that two security assistance personnel responsible for writing cases at USASAC-New Cumberland review both sets of 54 cases and identify any errors or differences with the 2 sets of cases.

Our review of the contractor version identified 28 different types of errors on the 54 printed cases. A description of the errors and the number of occurrences for each error type are shown in Table C-1.

Table C-1. Errors Identified on the Contractor Version

<u>Error</u>	<u>Error Type</u>	<u>Number of Occurrences</u>
1	One extra line space on page 3	1
2	Country address should be in three blocked lines	7
3	Incorrect dollar amount on page 2	2
4	Missing data ("See note 4") after line item 1	1
5	Missing data ("See notes 4 and 6") after line item 2	1
6	Data printed on the wrong line	5
7	Printer error when printing the seal	2
8	Extra characters printed at the top of the page	8
9	Blank space as a result of a file change	2
10	"(T14.H1)" printed on the wrong line	14
11	Missing period in note 1	1
12	Title line in note 7 is left justified, misaligning the column data	1

Appendix C. Results of M204 Case Print Program Comparison

Table C-1. Errors Identified on the Contractor Version (cont'd)

<u>Error</u>	<u>Error Type</u>	<u>Number of Occurrences</u>
13	Financial worksheet dollar amounts should be the same	11
14	Data in note 9 should not wrap	1
15	Data in note 2 should not wrap	1
16	Missing "()" in column 5 on page 2	1
17	Dollar amounts in a case notes schedule did not line up	14
18	Data in note 8 should not wrap	1
19	Wording different from SIMA version	1
20	Words are wrapping differently than on SIMA version	1
21	Incorrect word order in note 16	1
22	Incorrect word order in note 26	1
23	Word with a space in the middle on page 4	1
24	Data in case notes schedule did not line up	1
25	Cost schedule did not line up	4
26	Payment schedule did not line up	1
27	Missing data and dollar amounts on page 1	1
28	Missing revised dollar amounts on page 2	1

Our review of the SIMA version identified 27 different types of errors on the 54 printed cases. A description of the errors and the number of occurrences for each error type are shown below.

Table C-2. Errors Identified on the SIMA Version

<u>Error</u>	<u>Error Type</u>	<u>Number of Occurrences</u>
1	Double line spaces between each note	49
2	Missing financial worksheet	54
3	Blank space as a result of a file change	2
4	Missing dollar symbol and dollar amounts	4
5	Incorrect spacing between "U.S. Government"	1
6	Missing line space between note 5 and note 6	1
7	Missing line space between note 12 and note 13	1
8	Missing line space between note 18 and note 22	1
9	Missing last two lines of data in note 17	1
10	"(T14.H1)" printed on the wrong line	6
11	Missing a line space and data before note 1	1
12	Dollar amounts in case notes schedule did not line up	14

Appendix C. Results of M204 Case Print Program Comparison

Table C-2. Errors Identified on the SIMA Version (cont'd)

Error	Error Type	Number of Occurrences
13	Triple line spacing after note 8	1
14	Extra line spacing on the cover page	1
15	Missing space between words on cover page	2
16	Two tilde "~" marks at the end of a paragraph	2
17	Incorrect wording on page 2	1
18	Amendment paragraphs instead of modification	1
19	Leading zeros on page 2 should not print	1
20	Missing line space before line item 1	8
21	Word with a space in the middle on page 4	1
22	Data in case notes schedule did not line up	1
23	Cost schedule did not line up	3
24	Missing dollar amount on page 2	1
25	Missing payment schedule on page 2	2
26	Missing data and dollar amounts on page 1	1
27	Missing revised dollar amounts on page 2	1

Correcting the Errors. We determined that most errors could have been readily corrected by a skilled programmer. In August 1994, we discussed the errors identified on the test cases printed on the two M204 case print programs with both SIMA and the contractor.

Correcting Errors in the Contractor Version. Of the 28 errors identified on the contractor version, 6 (errors 3, 4, 5, 13, 27, and 28 in Table C-1) were considered to be more important than the other errors because these errors involved missing or incorrect data. At the time of our review, four errors (3, 5, 27, and 28) had either been fixed or were attributed to errors in the data base and, therefore, were not the result of the print program. We determined that only two of the remaining errors on the contractor's version were substantial (errors 4 and 13). (We defined substantial as requiring as much as 1 week for correction.) We estimated that errors 4 and 13 require up to 1 staff-week of effort to correct. We discussed the errors with the contractor staff and they agreed with our assessment. According to the contractor, one error (error 13) had been partially corrected during a recent software release and would be fully corrected in the next release. We identified the remaining error (error 4) to the SIMA SA3 PM.

Correcting Errors in the SIMA Version. Using the same criteria, we evaluated errors generated by the SIMA version of the M204 case print program. Of the 27 errors, 9 (errors 2, 4, 9, 11, 18, 24, 25, 26, and 27 in Table C-2) involved missing or incorrect data. Of the 9 errors, 3 (errors 11, 26, and 27) were attributable to errors in the data base. Of the remaining six errors, two (errors 9 and 18) were considered to involve simple fixes, for example, re-entering the data. We estimated that three (errors 4, 24, and 25) of the other four errors could be corrected within several weeks. We believe that several staff-months of effort would be needed to correct the most significant

Appendix C. Results of M204 Case Print Program Comparison

error, the missing financial worksheet (error 2). We discussed our assessment with the SIMA programmer. The SIMA programmer believed that all errors, except the missing financial worksheet, could be corrected in 1 to 2 weeks.

The SIMA programmer also stated that he was originally told not to develop M204 case print capabilities for the financial worksheet because a second contractor was developing the financial worksheet. Nevertheless, in August 1993, 2 months before the SIMA work on the M204 case print program was terminated, the SIMA programmer was tasked to develop the financial worksheet because the contractor effort was unsuccessful. The SIMA programmer stated that he requested guidance from the USASAC support office but did not receive guidance from USASAC or SIMA before he was removed from the project.

Type of Printer Used. We performed our test of the SIMA-developed print program on the Model 47 printer because the program was written for that printer. The Model 47 printer was being replaced by the Model 37 printer at the major subordinate commands; however, the SIMA programmer stated that the Security Assistance Functional Support Office would not provide him access to the newer Model 37 printer. A review of the source code indicated that the SIMA-developed print program could be written to accommodate both printers. However, we did not test that feature.

Chronology of M204 Case Print Development. The following provides a chronology of events for the M204 case print program development.

- o In the first quarter 1990, SIMA programmers were verbally tasked to develop the M204 conversion with M204 case print capabilities (referred to in this appendix as M204 case print program).

- o In the third quarter 1991, M204 case print program was installed at USASAC-New Cumberland for prototype testing, with updates and improvements fielded in the first quarter 1993.

- o In the third quarter 1993, SIMA programmer was tasked to develop financial worksheet.

- o In the fourth quarter 1993, USASAC and SIMA management agreed to terminate work on the SIMA-developed M204 case print program and assigned the task to the contractor.

- o In the first quarter 1994, the contractor version of the M204 case print program prototype was tested at the Army Armament, Munitions, and Chemical Command, an AMC major subordinate command.

- o In the second quarter 1994, the contractor version of the M204 case print program was fielded at the four remaining AMC major subordinate commands.

- o In the second quarter 1994, the contractor version of the M204 case print program was fielded at USASAC-New Cumberland.

Appendix C. Results of M204 Case Print Program Comparison

Lack of Coordination. SIMA management did not allow SIMA programmers to coordinate with the USASAC-New Cumberland customers who were using the SIMA-developed M204 case print program. This case print program was initially fielded at USASAC-New Cumberland during the third quarter 1991 and was subsequently updated during the first quarter 1993. Following the update, SIMA programmers expected to receive environmental system test reports (SIMA Forms 366a) or system change requests from customers reporting problems that were identified during system use. Because SIMA programmers did not receive a significant number of deficiency reports, they thought the program was working well. If SIMA programmers had communicated with the users at USASAC-New Cumberland, they would have found that many users were not using the M204 case print program because of errors. The users were frustrated with the M204 case print program and most users went back to developing cases off-line using word processors.

We found other indications that the SIMA-developed M204 case print program could have worked if proper coordination had taken place between SIMA and USASAC. For example, one problem USASAC-New Cumberland users experienced while printing cases was not related to the print program. The printer used was old and printed lines across the cases, making the cases unusable. Further, one case writer at USASAC-New Cumberland was willing to work with the print program and the printer. This user liked the SIMA M204 case print program and used the program regularly until an unrelated computer file added to the USASAC-New Cumberland computer system caused the SIMA M204 case print program to stop working around December 1993.

SIMA programmers were not aware that the M204 case print program at USASAC-New Cumberland stopped working. Because SIMA programmers received minimal deficiency reports, they continued to believe the print program was working and being used. If the SIMA programmers had communicated with the users, they would have found that a file had been added to the USASAC-New Cumberland system that caused the print program to stop printing. A SIMA programmer identified this file in June 1994 while the audit team was running the comparison test of SIMA- and contractor-developed print programs. Once the file was deleted from the USASAC-New Cumberland system, we were able to print cases using the SIMA-developed M204 case print program.

Conclusion. We did not substantiate the complainant's allegation that the SIMA version was better than the contractor version. While both print programs were capable of printing cases, the contractor's version had errors that could be fixed in a more timely manner. The lack of communication between SIMA and the users at USASAC-New Cumberland caused a delay in the successful completion of the SIMA-developed M204 case print program. We also discussed the results of our comparison with the SIMA SA3 PM. The current SIMA SA3 PM was assigned to the position in November 1993, which followed the contractor tasking to develop the M204 case print program. She was surprised to hear that the SIMA version of the M204 case print program actually printed cases. She was told that the SIMA-developed M204 case print program did not work.

Appendix D. Cost Avoidance on Future Security Assistance Automation, Army, Development Efforts

DSAA should discontinue future funding of SA3 development and maintenance efforts until USASAC identifies essential maintenance in accordance with current Joint Logistics Systems Center initiatives. Because SIMA and USASAC accounting systems failed to account for SA3 development and maintenance costs, we calculated our funding reduction as follows.

Potential Reduction in SA3 Funding

Fiscal Year	SIMA <u>Actual Funding</u>	USASAC <u>Actual Funding</u> ¹
1990	\$800,700	--
1991	917,700	--
1992	903,600	\$2,395,234
1993	929,000	2,460,529
1994	919,200	2,443,778
Average funding	\$894,040	\$2,433,180
	85-Percent <u>Reduction</u> ²	\$200,000 <u>Reduction</u> ¹
Proposed average reduction	\$759,934	\$2,233,180
Total average reduction (SIMA plus USASAC)		\$2,993,114
AMC major subordinate commands		<u>700,000</u> ³
Total		\$3,693,114

¹We calculated that SA3 requires 3 staff-years of effort at USASAC for systems maintenance, which equates to \$200,000 per year. Funds not shown for FYs 1990 and 1991 because actual breakdown was not available; includes contractor services, automated data processing equipment, and personnel costs.

²From FYs 1990 through 1994, 85 percent of SIMA funding was for SA3 development. Therefore, SIMA funding should be reduced by 85 percent.

³Estimate based on AMC major subordinate commands supporting 24 staff-years of effort. We estimate that 1 staff-year of effort at each of the five AMC major subordinate commands and at USASAC-New Cumberland is necessary for minimum SA3 maintenance cost. Therefore, cost avoidance of \$700,000 will result when personnel billets for the 18 staff-years of effort are eliminated as a result of SA3 budget reductions.

Appendix E. Assessment of Automation to Support Security Assistance at Major Subordinate Commands

VISION 2000 Security Assistance PAT Report - Automation to Support Security Assistance



PREFACE

The VISION 2000 Security Assistance (SA) Process Action Team (PAT) requested that the U. S. Army Materiel Command (AMC) Major Subordinate Commands (MSC) Security Assistance Management Directorates (SAMD)/International Logistics Directorates (ILD) (the directorate) be visited to review the current state of automation and to make recommendations to the PAT regarding incorporation of unique MSC requirements into the proposed VISION 2000 Security Assistance structure. The review was conducted at the six MSC's between 12 March and 20 March 1991 by Mr. Robert M. Singer, USASAC Director of Information Management (DOIM) and Mr. Chester Jay Freedenthal, Acting Product Manager, Security Assistance Automation, Army (SA3). Each review consisted of an entrance interview with the Director, followed by detailed interviews and discussions with the supervisory and functional personnel directly involved in Directorate automation. In some instances discussions with representatives of the MSC DOIM were also held. The criteria on which the interviews were based consisted of 1) Systems Administration, 2) Hardware/Software/Communication, 3) Training and 4) Standard/Unique Systems.

EXECUTIVE SUMMARY

The utilization of automation at each MSC can be attributed to a number of related factors: a) embracing of automation by senior management, b) organizational structure within the directorate to support automation, c) overall automation support provided by the MSC DOIM and, d) assessed need for automation tools by the directorate.

All of the MSC's operate in the Commodity Command Standard System (CCSS) mainframe and the SA3 (Sperry) minicomputer environment, and have adopted a microcomputer (PC) environment to varying degrees. The organizational structure to support automation varies considerably among the MSC's, from a low of one at CECOM to eight at AMCCOM. All are organized to support both the standard system through a Functional Coordinating Group (FCG) representative, and office automation and unique MSC requirements utilizing the same or different individuals.

SA3 Case Development and Case Management tools are being used, supplemented by locally developed tools. The automated SA3 International Logistics Supply Delivery Plan (ILSDP) has not found

Appendix E. Assessment of Automation to Support Security Assistance at Major Subordinate Commands

VISION 2000 Security Assistance PAT Report - Automation to Support Security Assistance



great acceptance except at AMCCOM. The MSC's were generally satisfied with the support provided by SA3 and the SAFSO office, but felt that there were still many things that could improve the SA3 system. Standard non-SA3 CCSS applications (i.e., Cooperative Logistics Supply Support Arrangements (CLSSA), Concurrent Spare Parts) are used on an equal basis at all MSC's. Most MSC's voiced a need for additional software and systems training, need for additional or replacement hardware and the willingness to share locally developed tools. While many of the tools were created to satisfy peculiar MSC requirements, they essentially serve the same purposes and therefore could be standardized.

MICOM is currently the only directorate that reimburses the DOIM for services and support; some of the other MSC's have recently received notice that they will have to similarly reimburse in the near future. This will increase the budget requirements for automation in the coming years. There are many actions that can be taken in the short-term to improve automation, save resources and move to a standardized environment, resulting in less turbulence as organizational changes occur. Automation planning must play a significant roll in the VISION 2000 SA PAT.

MSC REVIEW AND ANALYSIS

AMCCOM

SUMMARY: AMCCOM is the most progressive of the MSC's for automation. Management support is pervasive and is reflected in the significant efforts the directorate has accomplished. They have the largest and most diversified organization to support automation, which provides an important advantage. The working relationship with the DOIM is excellent, even to having an analyst assigned to the directorate. All systems administration and office automation support is accomplished within the directorate. SA3 applications are utilized to the maximum, including structured language querying of databases. They have created an automated process to e-mail a response to the maker of the query, which could be useful to the other MSC's. In addition, they have taken the lead in Unix application development with Oracle databases developed for Special Defense Acquisition Fund and ILSDP management. They are the only MSC to fully utilize the SA3 automated ILSDP. Every individual has a terminal, with PC's being used by management and for special programs; access is through the AMCCOM Local Area Network (LAN). E-mail is used extensively. The standard suite of PC and Unix software is used and group and individualized training is conducted. The PAT process has been used to improve SA3 and local

Appendix E. Assessment of Automation to Support Security Assistance at Major Subordinate Commands

VISION 2000 Security Assistance PAT Report -- Automation to Support Security Assistance



automation. Many of the AMCCOM developed automation tools could be utilized to significant advantage by the other MSC's.

1. SYSTEMS ADMINISTRATION:

- a. Large dedicated staff.
- b. Self supporting and well trained.
- c. Works well with DOIM.
- d. Full utilization of e-mail

2. HARDWARE/SOFTWARE/COMMUNICATION:

- a. All hardware/software meet requirements to support current mission/function.
- b. Received a special requirement from MG Lightner for a publishing system to produce a "Training Devices Brochure" for PM trade. Requires purchasing Desktop Publishing hardware/software.
- c. Long lead times (9-12 months) to procure through DOIM.

3. TRAINING:

- a. Need Model 204 training.
- b. Need SA3 training package.

4. STANDARD SYSTEMS:

- a. Fully utilize SA3 Case Development and Management System; using SA3 Automated ILSDP; transmits cases electronically.
- b. Have developed numerous UNIX-based systems that can be ported to other commands (Scorecard, Case Tracking, Automated S2K Query, etc.).
- c. Willing to share systems.
- d. Willing to provide on-site assistance to other MSC's.
- e. Has had problems with Oracle download. Also experienced excessive run time for SA3 applications.

Appendix E. Assessment of Automation to Support Security Assistance at Major Subordinate Commands

VISION 2000 Security Assistance PAI Report: Automation to Support Security Assistance



AVSCOM

SUMMARY: AVSCOM has a strong staff of four to support automation, but management support is less evident than at other MSC's. They appear to have only a pedestrian relationship with the DOIM. While SA3 is used to prepare most cases, electronic transmission is not utilized because of communication problems and SA3 case design differs from AVSCOM case design and many manual changes are made to cases. Local automation tools have been developed, the most significant being the Case Management Plan. This program closely aligns with the Case Evaluation Profile and should be looked at closely for its potential as a standard tool. Almost all individuals have terminals with access through the AVSCOM LAN. The standard suite of PC and Unix software is used. There is limited use of e-mail. The directorate is acquiring Bernoulli Boxes for classified processing. System administration is provided by the DOIM, with initial help desk support provided by Directorate personnel.

1. SYSTEMS ADMINISTRATION:

- a. Systems administration are non-ADP personnel.
- b. Lack training required to perform function of system administrator.
- c. Receive system administration support from DOIM.
- d. E-mail not integrated into systems.

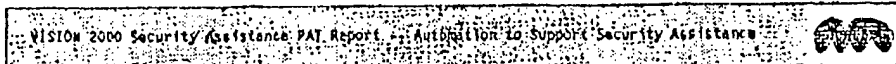
2. HARDWARE/SOFTWARE/COMMUNICATIONS:

- a. Problem with KNET.
- b. Do not use DDN to send cases due to no connection to DOIM DDN.
- c. Long lead time (9 months) to procure through DOIM.
- d. Have a need for additional equipment/software due to expanding staff.

3. TRAINING:

- a. Need SA3 training package.

Appendix E. Assessment of Automation to Support Security Assistance at Major Subordinate Commands



b. Need system administration and Model 204 training.

c. Would like "C" Programming training.

4. STANDARD SYSTEMS:

a. Use SA3 to develop case, but make manual changes; do not submit electronically. Does not use Oracle download.

b. Strong support and utilization of non-SA3 CCSS applications.

c. Have developed systems that can be ported to other MSC's.

d. Does not use Oracle download.

CECOM

SUMMARY: CECOM has only one individual working automation. All systems administration is performed by the DOIM. The DOIM maintains complete control over the minicomputers and affords very limited access to the directorate; the relationship is good but tight controls hinder flexibility. E-mail is limited and is not located on the directorate Sperry. The one individual provides functional support to the users for both CCSS standard systems and local automation. Management support of automation is evident but not exploited. SA3 is used for case development and management and cases are electronically transmitted. Terminals are available to most individuals and access is through the CECOM LAN. The standard suite of PC and Unix software is used. Limited local user tools have been developed using PC based software. Some may be usable by other MSC's, but they do not appear to be as strong as Unix based tools.

1. SYSTEMS ADMINISTRATION:

a. System administration accomplished by CECOM DOIM.

b. ILD automation functional has no system access to the SPERRY or use of ORACLE; e-mail (MMDFII) not on IL SPERRY.

c. Small staff (one non-ADP person) provides system administration assistance.

d. Needs training on system administration.

Appendix E. Assessment of Automation to Support Security Assistance at Major Subordinate Commands

VISION 2000 Security Assistance PAT Report... Automation to Support Security Assistance



2. HARDWARE/SOFTWARE/COMMUNICATION:

- a. Long lead time (9-12 months) to buy through CBCOM DOIM.
- b. Need additional hardware/software.
- c. System access okay.
- d. No problem with KNET.

3. TRAINING:

- a. Need system administration training.
- b. Need SA3 training.

4. STANDARD SYSTEMS:

- a. Strong user of CCSS Standard Systems; SA3 being used for most cases; electronic transmission also used. Limited use of case management tools. Cannot use Oracle download.
- b. Extensive use of PC based user tools.
- c. Would like to review Unix systems developed by the other commands.

MICOM

SUMMARY: MICOM has a strong staff of seven to support automation and has been automated the longest of any MSC. They have an excellent relationship with the DOIM and work very closely together. They are currently the only Directorate that reimburses the DOIM for its services. Management support has not been as strong as it currently is, so there has been a relatively slow acceptance of the use of SA3 tools in favor of locally developed tools. All systems administration functions are performed by the DOIM, but the directorate has open access to databases and software. MICOM is a very strong user of CCSS Standard Systems, particularly CLSSA. All users have access through multiplexers to the extensive MICOM computer network (largest of the MSC's, over 7000 users). There is extensive use of e-mail. The standard suite of PC and Unix software is used, except for the use of MICOM standard database management systems on the Sperry computers in lieu of Oracle. There is also a MICOM executive network of

Appendix E. Assessment of Automation to Support Security Assistance at Major Subordinate Commands

VISION 2000 Security Assistance PAT Report - Automation to Support Security Assistance



Macintosh PC's, the directorate has ordered some of the machines to comply with the standard. They have recently started using SA3 to prepare cases and will begin transmitting electronically. There are a significant number of local tools developed in both the Unix and mainframe environment that should be reviewed for standardization.

1. SYSTEM ADMINISTRATION:

- a. Well staffed to provide system administration functions.
- b. Receives excellent support from MICOM DOIM.

2. HARDWARE/SOFTWARE/COMMUNICATIONS:

- a. Have had communications problems accessing Case Closeout Program at NCAD.
- b. Takes 6 to 9 months to procure requirements through MICOM DOIM.
- c. Have a need for additional hardware/software.
- d. Reimburses DOIM for services/support provided.

3. TRAINING:

- a. Need SA3 training package.
- b. Need Model 204 training.

4. STANDARD SYSTEM:

- a. Very strong user of CCSS Standard Systems. Have recently started using SA3 for case development. Many local tools developed in the mainframe and Unix environment.
- b. Have developed systems that could be ported to other MSC's.

TACOM

SUMMARY: A small staff of two supports the entire Directorate automation program. The SA3 minicomputer is located in the directorate and system administration, database administration, office automation, help desk support and CCSS standard Systems management are all the responsibility of the small staff. TACOM is

Appendix E. Assessment of Automation to Support Security Assistance at Major Subordinate Commands

VISION 2000 Security Assistance PAT Report - Attention to Support Security Assistance



the only MSC where the Sperry computers are still located within the directorate. Management support of automation is apparent, but could be stronger. There is a weak relationship with the DOIM, resulting in less than acceptable support in most cases. The standard suite of PC and Unix software is used. Access to the system is through the TACOM LAN. There is a need for additional equipment and terminals. SAJ is used for some case development and they have been transmitting cases electronically, although with some communications difficulty. They have a variety of old equipment, including an Intel 310, which needs to be replaced. Most of the unique automation tools are on the Intel and could be moved to the Sperry with some programming and systems support. E-mail is not used extensively. TACOM was openly receptive to any assistance that could be provided in improving their automation program. Even with weaknesses, they have made significant strides in a short period of time.

1. SYSTEMS ADMINISTRATION:

- a. Small non-ADP staff supports the SPERRY Computer Systems.
- b. Need more emphasis on having personnel dedicated to systems administration on SPERRY and PC's.
- c. Lack UNIX System administration training.
- d. Need assistance in systems configuration/management.
- e. Receive little support from DOIM.

2. HARDWARE/SOFTWARE/COMMUNICATIONS:

- a. Lacking PC/terminals/software and printers.
- b. Still using INTEL 310 for processing.
- c. Need to convert from INTEL 310 to SPERRY ORACLE.
- d. No more ports available on SPERRY.
- e. Having problem with KNET.
- f. No DDN connection exists between SPERRY and mainframe.
- g. Long lead times to procure hardware/software/communication requirement through DOIM.

Appendix E. Assessment of Automation to Support Security Assistance at Major Subordinate Commands

VISION 2000 Security Assistance PAT Report - Automation to Support Security Assistance



3. TRAINING:

- a. Lack system administration and PC hardware/software training.
- b. Need UNIX/ORACLE DBMS and Model 204 training.
- c. Need a list of all system and program documentation.

4. STANDARD SYSTEMS:

- a. Uses CCSS Standard systems extensively. Expanding use of SA3 for case development; has transmitted cases electronically.
- b. Eager to obtain any systems that are available from other MSC's.
- c. Have little to offer other MSC's but willing to share ideas.

TROSCOM

SUMMARY: Though it is the smallest Directorate (really a Division in the Materiel Management Directorate), TROSCOM has a strong staff of two supporting automation. There is a very good working relationship with the DOIM. Management support is significant and is looking for more standardization. There was particular frustration over the automated SA3 ILSDP. Office automation is strong and some specialized tools have been developed, but they could benefit from standardized case management tools. Access is provided through the AVSCOM LAN. All individuals have terminals and PC's are being used by management. The standard suite of PC and Unix software is used. Most cases are prepared using SA3 and are transmitted electronically.

1. SYSTEMS ADMINISTRATION:

- a. Staff small but performs all required administration.

2. HARDWARE/SOFTWARE/COMMUNICATION:

- a. Connected to DDN.

Appendix E. Assessment of Automation to Support Security Assistance at Major Subordinate Commands

VISION 2030 Security Assistance RPT Report of Automation to Support Security Assistance



- b. Have a problem with KNET.
- c. Need additional equipment/software.

3. TRAINING:

- a. Need Model 204 training.

4. STANDARD SYSTEMS:

a. Uses CCSS Standard Systems; transmits cases electronically. Would like to use automated ILSDP, but feels it has too many problems.

- b. Would like to share in systems developed by other MSC's.

AUTOMATION ASSESSMENT AND RECOMMENDATIONS

1. ASSESSMENT/SITUATION - Centralize Automation Procurement:

a. All ILD/SAMD indicated they go through long lead times to procure hardware/software after the CAPR is submitted to the DOIM. This causes a problem in providing real time support to the staff and a delay in supporting requirements.

- RECOMMENDATIONS:

a. All MSC's submit their hardware/software requirements to AMSAC-IM for central procurement and distribution.

- BENEFITS:

a. Will provide central control/management of all MSC procurement using SA3 funds.

b. Allow for USASAC to establish standards with all MSC's.

c. Reduce long lead time (9-12 months) to a time of 1-3 months after receipt of MSC CAPR.

2. ASSESSMENT/SITUATION - Select and Proliferate Standard Systems:

Appendix E. Assessment of Automation to Support Security Assistance at Major Subordinate Commands

VISION 2000 Security Assistance PAT Report - Automation to Support Security Assistance



a. Various security assistance sub-systems have been developed on both the SPERRY and the S2K System. All ILD/SAMD cited a need to review these systems, pick "best-of-breed" and proliferate to all MSC's thus establishing standards.

- RECOMMENDATION:

a. Obtain detailed documentation on each system and form a PAT to review and select systems for proliferation plus determine the MSC that will be the proponent for system maintenance and distribution. USASAC should be included on the PAT to insure system interface requirements are considered.

- BENEFITS:

a. Allows for those MSC's with less resources to obtain an already developed/documented system.

b. Provides for standard systems within Security Assistance.

c. Ensures an easier transition to Vision 2000.

d. Enables MSC's to share information and resources.

e. Provides for increased accuracy of data in disbursed databases.

3. ASSESSMENT/SITUATION - Improve Communications Protocols:

a. The communications protocol between the commands and USASAC (ALEX and NCAD) is not compatible and creates a hardship in trying to query for information.

- RECOMMENDATION:

a. AMSAC-IM send a communications specialist to each command to review, standardize and test communications protocol between each ILD/SAMD and USASAC.

- BENEFITS:

a. Provide communication standards.

b. Allow for easy access to USASAC databases.

Appendix E. Assessment of Automation to Support Security Assistance at Major Subordinate Commands



c. Provide means for exchange of data.

4. ASSESSMENT/SITUATION - Establish Standard Support Structure:

a. The system administration function on the SPERRY Systems are performed by various type non-ADP personnel with each IL/SAMD staffing varying between one person at CECOM to eight persons at AMCCOM. Personnel are, in most cases, not trained in all aspects of systems administration.

- RECOMMENDATION:

a. Develop a proposed manning structure for system administration at each IL/SAMD.

b. Develop a training matrix and plan for system administration personnel.

c. Organize a system administration user group by having representatives from each IL/SAMD meet annually.

d. IM send a systems administrator (along with a communications specialist) to visit and work with all IL/SAMD systems administrators in solving problems, sharing ideas and assisting in developing standards.

5. ASSESSMENT/SITUATION - Review ILSDP Process and Automated ILSDP:

a. The SA3 automated ILSDP has been fielded for two years and modified several times. It is based on the current ILSDP prepared using word processing. The automated ILSDP, for a number of reasons, has only been accepted by AMCCOM. Management of the ILSDP has recently transferred from USASAC Alexandria to USASAC New Cumberland. A positive step needs to be taken to review the needs of USASAC relative to ILSDP type data and reporting requirements of the ILSDP.

- RECOMMENDATION:

a. Establish a PAT to review the ILSDP process, requirements for procurement data and the ILSDP report.

Appendix E. Assessment of Automation to Support Security Assistance at Major Subordinate Commands



b. Exclude the current automated ILSDP from Model 204 development pending results of the PAT.

c. Encourage the MSC's to utilize the automated ILSDP to the maximum extent possible.

d. Continue with plans to transfer the MSC ILSDP files electronically to USASAC.

- **BENEFITS:**

a. Final decision on need for an ILSDP or ILSDP type report.

b. Improve accuracy of data across databases.

6. ASSESSMENT/SITUATION - Ensure SA3 Functionality:

a. There are many small areas where policy and the systems capability of SA3 differ to the extent that some MSC's find SA3 unusable for some cases. Most of these areas are the legacy of pre-SA3 case preparation, when word processing made changes easy and each MSC had their own standards. Before full conversion of SA3 to Model 204 these areas need to be resolved. Additionally, many of the MSC's are experiencing excessive run times for SA3 applications. In some instances, runs were aborted because of the runtime involved.

- **RECOMMENDATIONS:**

a. Issue a data call for all MSC's to identify those areas where they feel there is a contention between SA3 and USASAC or local policy mandating how cases be prepared. Request that SIMA look at the excessive runtimes being experienced by the MSC's. In other words, "What's wrong with SA3?".

b. Convene a USASAC management level panel to review the data call and SIMA study of runtime and direct policy and system changes as appropriate to resolve the differences.

c. Implement changes in the existing SA3 system that are determined to be top priority. Insure that all changes are incorporated into the Model 204 system before it is proliferated. Take required action to optimize the runtime of SA3 applications.

Appendix E. Assessment of Automation to Support Security Assistance at Major Subordinate Commands

VISION 2000 Security Assistance PAI Report - Automation to Support Security Assistance



d. Establish a USASAC Strategic Planning Group for strategic planning management and control of systems to ensure the quality and vitality of existing and developmental automated systems. This Group would focus on all automated efforts supporting security assistance and serve as the focal point for Corporate Information Management implementation.

- BENEFITS:

a. Ensure that Model 204 provides the MSC's and USASAC the required capability. Minimizes the chances of significant changes after field.

b. Assurance that developmental systems are functionally responsible and comply with known long-range automation plans.

CONCLUSION

All of the MSC's appear to be comfortable with the automation they have, but would benefit from the recommendations cited in this report. Those recommendations that can be acted upon immediately should be, so that the process of removing the many unique sub-systems that exist can begin and move towards standard tools. Care must be taken however, to insure that any move toward standardization takes into account all of the current and planned automation efforts within USASAC, AMC and DSAA, and that USASAC direct and coordinate any standardization effort. This is especially important because standards established by the DOIM at each MSC differ. In addition, some of the recommendations make good sense to implement regardless of the direction VISION 2000 or any other current organizational re-structuring effort places security assistance.

Mr. Singer and Mr. Freedenthal would like to thank each of the SAMD/ILD Directors for the cooperation and support they showed during this review. The presentations were well prepared and discussions were open and honest. A special thanks to the automation functionals at all the MSC's. Your hard work does not go unnoticed.

Appendix F. Management Comments on the Finding and Audit Response

Management Comments on Satisfying Mission and User Requirements. The Army stated that the SA3 information system is fully operational and that SA3 fully satisfies mission and user requirements. According to the Army, cases have been prepared in SA3 since 1988 and management modules have been in use since 1987. A data call to SA3 users in October 1994 demonstrates mission and user satisfaction. (See Part IV, pages 80-97 for results of the data call.)

Audit Response. We maintain our position that SA3 does not fully satisfy mission and user needs. We agree that SA3 may have been used to prepare a few cases as early as 1988; however, we concentrated our review on how much SA3 was used and what it was used for. SA3 was not consistently used for case preparation (referred to in the finding as case development) until M204 was fielded in April 1994. We expected SA3 usage for case preparation to increase, stating in our draft report that, according to users, the M204 data base conversion made case development easier. However, because the M204 conversion was only recently fielded at the time of our audit, we did not evaluate how much SA3 was used after the conversion.

Although timely and accurate case preparation is crucial to establishing an FMS case, the actual preparation of the case represents only a small part in the overall life of an FMS case. Based on our discussions with case managers, managing a case once it has been accepted by a foreign country occupies the majority of a case manager's time. The Army expected SA3 to provide significant assistance with case management through the International Logistics Supply Delivery Plan. As stated in the finding, that application was seldom used and was deleted in 1991. The Army maintains that another application, the Security Assistance Management Acquisition Program, now provides case managers with a system of monitoring case status, a user requirement that was to be satisfied through the International Logistics Supply Delivery Plan. However, case managers stated that, although the Security Assistance Management Acquisition Program was available on the SA3 menu, case managers had not received training on the application and were not confident that the application would work. Results of the SA3 data call (Part IV, page 88) confirmed that, as of December 1994, the Security Assistance Management Acquisition Program still was not being used.

Management Comments on SA3 Improvements Resulting From Data Base Conversion to M204. The Army stated that initially SA3 was to be primarily a standardized and centralized case preparation system that provided case management tools. With the availability of M204, the Army could use the data in SA3 for other applications. The Army further stated that the improvements made to SA3 since FY 1990 should not be linked to SA3 for life cycle-management purposes. Specialized applications such as the Security Assistance Management Acquisition Program resulted in improvements to SA3 that were possible because of the outgrowth of M204 advances.

Appendix F. Management Comments on the Finding and Audit Response

Audit Response. We disagree that initially SA3 was to be primarily a case preparation system. As stated in several SA3 planning documents beginning in FY 1983, a primary objective of SA3 was to "provide the required databases, processes, and capabilities necessary for *total management* (emphasis added) of the Security Assistance Program, during routine as well as emergency, crisis, and mobilization situations." We do not believe this objective in any way emphasizes case preparation.

We also disagree with the Army's statement that improvements made to SA3 since FY 1990 should not be linked to SA3 for life-cycle management purposes. Life-cycle management does not end, as Army comments implied, when an information system is fielded. According to Army life-cycle guidance, the SA3 PM was required to obtain milestone approval authority from the Assistant Secretary of the Army (Installations, Logistics, and Environment) to develop the M204 conversion, a major modification to the existing SA3 information system. That approval was to include an update of all previously approved baseline cost, schedule, and program requirements. The updated information could assist management in evaluating whether the benefits to be received from SA3 warranted additional costs, which significantly exceeded original cost estimates. For cost information to be useful, the actual investment cost of SA3 should include the development and hardware costs necessary for the system to satisfy approved basic mission and user requirements. The M204 conversion should be included as an actual investment cost, because without the M204 conversion, SA3 did not satisfy even the most basic requirement of case preparation.

Management Comments on the \$46 Million Cost Incurred on SA3. The Army stated that \$46 million for SA3 development was overstated. The Army maintains that SA3 system development was completed by FY 1990, the system was fielded, and the project manager position was abolished in February 1991. The Army further stated that the audit report was incorrect in its assumption that SA3 remained in design and development status through FY 1994. By failing to recognize that SA3 had been fielded for 3 years, the report understated the capabilities of SA3.

Audit Response. The report did not state that the Army spent \$46 million for SA3 development. Although the Army considered SA3 a fielded system in FY 1990, the Army continued to fund 44 work years of effort for SA3 through FY 1994 (Part II, page 27). The Army was unable to provide supporting documentation of a breakdown on SA3 development and enhancement cost versus maintenance cost. The SA3 PM reported \$34.9 million spent on SA3 through FY 1990, the year the Army considered SA3 to be a fielded system. In addition, the \$34.9 million spent as of FY 1990 did not include, at a minimum, the cost to develop the M204 conversion (\$3.4 million) and the Security Assistance Management Acquisition Program (\$651,000). We revised the report to clarify our understanding of what costs are included in the \$46 million. (See Part II, page 12.)

The year SA3 was fielded has little to do with the capabilities of SA3. A fielded information system has limited value if it is seldom used. Even if we assume that SA3 is currently used to prepare 100 percent of the Army's FMS cases, SA3 did not become an effective tool for case preparation until the

Appendix F. Management Comments on the Finding and Audit Response

M204 conversion was fielded in April 1994. The results of the SA3 data call as of December 1994 (Part IV, pages 80-97) confirmed that, as far as users are concerned, SA3 capabilities beyond case preparation remain limited.

Management Comments on Controls Bypassed on System Change. The Army stated that it could not explain why established internal controls on system changes were bypassed when developing the M204 conversion. The Army justified its failure to obtain an approved system change request by stating that M204 was a legitimate project and that the conversion of SA3 from an S2K data base to an M204 data base was a needed change. The Army disagreed that SIMA inappropriately used internal projects on tasks other than the M204 conversion.

Audit Response. The Army's attempt to justify why established internal controls on system changes were bypassed when developing the M204 conversion indicates that SIMA does not understand the importance of internal controls. We agree that a change from the initial S2K data base was needed for SA3 to be used. However, the Army has no way to determine whether the conversion to M204 was the change that was needed because the Army did not evaluate alternatives. The established controls over system changes provided for the evaluation of cost-effective alternatives.

Based on the Army comments and the insignificance of the other internal projects in the draft report we identified as inappropriate, we deleted from the final report our discussion on improper use of other internal projects. The Army's planned action to establish procedures on the use of internal projects is fully responsive to our concerns regarding SIMA's use of internal projects.

Army Comments on Capabilities of Contractor-Developed Versus SIMA-Developed Case Print Process. The Army did not agree with our conclusion that both the SIMA and contractor M204 case print programs were capable of printing cases, with minor deficiencies, stating that the report failed to mention that the case print process the SIMA programmer developed did not work with the Model 37 laser printer. The Army considered this deficiency to be critical. The Army also stated that the tests run at USASAC-New Cumberland were not representative of the cases that are run at the major subordinate commands. Therefore, the report was wrong to conclude that the SIMA-developed case print process had only minor deficiencies.

Audit Response. We performed our test of the SIMA-developed print program on the Model 47 printer because the program was written for that printer. The SIMA programmer stated that the Security Assistance Functional Support Office would not provide him access to the newer Model 37 printer. A review of the source code indicated that the SIMA-developed print program could be written to accommodate both printers. We revised Appendix C to include a discussion of the printer used during the test. As stated in Appendix C, we selected USASAC-New Cumberland as the site to run the tests because it was the only site at which the SIMA-developed program had been installed. We never stated or implied that the cases run at USASAC-New Cumberland are representative of the cases that are run at the major subordinate commands.

Appendix G. Summary of Potential Benefits Resulting From Audit

Recommendation Reference	Description of Benefit	Amount and Type of Benefit
1.a.	Economy and Efficiency. Requires compliance with existing DoD guidance and DoD CIM initiatives requiring no further DoD information system development.	Avoidance of as much as \$3.7 million of SA3 development costs annually would allow appropriation 97XX funds to be put to better use on standard FMS information system. ¹
1.b.	Economy and Efficiency. Requires DSAA to fund only essential maintenance on SA3.	Undeterminable. ¹
1.c.	Economy and Efficiency. Requires SA3 funds to be spent on most cost-effective alternative.	Undeterminable. ¹
1.d.	Internal Controls. Verifies that the Army performs life-cycle management and accounts for funds expended for SA3.	Nonmonetary.
2.a.	Internal Controls. Establishes procedures to approve SA3 system changes and to track, update, and report SA3 costs as required.	Nonmonetary.
2.b.	Internal Controls and Compliance with Laws or Regulations. Verifies compliance with existing life-cycle management regulations.	Nonmonetary.
2.c.	Economy and Efficiency. Identifies all SA3 costs, including personnel requirements.	Nonmonetary.

See footnotes at end of appendix.

Appendix G. Summary of Potential Benefits Resulting From Audit

Recommendation Reference	Description of Benefit	Amount and Type of Benefit
2.d.	Economy and Efficiency. Provides DSAA with accurate information on status of SA3 to decide future of FMS automation.	Undeterminable. ¹
2.e.	Economy and Efficiency. Avoids unnecessary SA3 support costs that occurred through duplication of effort.	Undeterminable. ²
3.a.	Internal Controls. Requires SA3 to be properly documented.	Nonmonetary.
3.b.	Internal Controls. Limits use of internal projects to administrative support functions.	Nonmonetary.
3.c.	Internal Controls. Requires SA3 system changes to be made with an approved change request.	Nonmonetary.
3.d.	Internal Controls. Verifies contractor work orders include required supporting documents.	Nonmonetary.
3.e.	Internal Controls. Requires preparation of design and test plans before performing additional SA3 development, maintenance, or enhancement.	Nonmonetary.

¹Actual monetary benefits will be determined when USASAC identifies and justifies essential maintenance costs for SA3.

²Monetary benefits were undeterminable because the resources of the Security Assistance Functional Support Office could be utilized elsewhere.

Appendix H. Organizations Visited or Contacted

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition and Technology, Washington, DC
Assistant Deputy Under Secretary of Defense (Logistics Business Systems and
Technology Development), Washington, DC

Department of the Army

Army Materiel Command, Alexandria, VA
Systems Integration and Management Activity-East, Chambersburg, PA
Systems Integration and Management Activity-West, St. Louis, MO
Foreign Military Sales Automation Project Management Division, U.S. Army
Security Assistance Command, Alexandria, VA
Security Assistance Functional Support Office, St. Louis, MO
U.S. Army Security Assistance Command-New Cumberland, PA
Security Assistance Management Directorate, Armament, Munitions, and Chemical
Command, Rock Island, IL
International Logistics Directorate, Aviation and Troop Command, St. Louis, MO
Security Assistance Management Directorate, Communications-Electronics
Command, Fort Monmouth, NJ
Security Assistance Management Directorate, Missile Command,
Redstone Arsenal, AL
Security Assistance Center, Tank-Automotive Command, Warren, MI
Auditor General, Department of the Army, Alexandria, VA

Department of the Air Force

Deputy Under Secretary of the Air Force for International Affairs, Washington, DC

Defense Organizations

Defense Security Assistance Agency, Washington, DC
Regional Office, Defense Criminal Investigation Service, St. Louis, MO
Joint Logistics Systems Center, Wright-Patterson Air Force Base, OH

Non-Defense Federal Organizations

General Services Administration, Washington, DC
Regional Office, Fort Worth, TX

Appendix H. Organizations Visited or Contacted

Non-Government Organizations

Computer Data Systems, Incorporated, Rockville, MD
Computer Data Systems, Incorporated, St. Louis, MO
Computer Data Systems, Incorporated, Fort Worth, TX
OAO Corporation, Greenbelt, MD

Appendix I. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition and Technology
Director, Defense Logistics Studies Information Exchange
Under Secretary of Defense (Comptroller)
Deputy Under Secretary of Defense (Comptroller/Management)
Deputy Under Secretary of Defense (Comptroller/ Program/Budget)
Assistant Deputy Under Secretary of Defense (Logistics Business Systems and Technology Development)
Assistant to the Secretary of Defense (Public Affairs)

Department of the Army

Assistant Secretary of the Army (Financial Management)
Assistant Secretary of the Army (Installations, Logistics, and Environment)
Assistant Secretary of the Army (Research, Development, and Acquisition)
Commander, Army Materiel Command
Commander, Armament, Munitions, and Chemical Command
Commander, Aviation and Troop Command
Commander, Communications-Electronics Command
Commander, Missile Command
Commander, Tank-Automotive Command
Commander, U. S. Army Security Assistance Command
Director, Systems Integration and Management Activity
Auditor General, Department of the Army

Department of the Navy

Comptroller of the Navy
Auditor General, Department of the Navy

Department of the Air Force

Assistant Secretary of the Air Force (Financial Management and Comptroller)
Deputy Under Secretary of the Air Force (International Affairs)
Auditor General, Department of the Air Force

Other Defense Organizations

Director, Defense Contract Audit Agency
Director, Defense Logistics Agency

Appendix I. Report Distribution

Director, National Security Agency
Inspector General, National Security Agency
Director, Defense Information Systems Agency
Director, Defense Security Assistance Agency
Inspector General, Central Imagery Office

Non-Defense Federal Organizations and Individuals

General Services Administration
Office of Management and Budget
Technical Information Center, National Security and International Affairs Division,
General Accounting Office

Chairman and ranking minority member of each of the following congressional
committees and subcommittees:

Senate Committee on Appropriations
Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Committee on Governmental Affairs
House Committee on Appropriations
House Subcommittee on National Security, Committee on Appropriations
House Committee on Government Reform and Oversight
House Subcommittee on National Security, International Affairs, and Criminal
Justice, Committee on Government Reform and Oversight
House Committee on National Security
Honorable Jim Talent, U.S. House of Representatives

Part IV - Management Comments

Defense Security Assistance Agency Comments



DEFENSE SECURITY ASSISTANCE AGENCY

WASHINGTON, DC 20301-2800

03 FEB 1995
In reply refer to:
I-006344/95

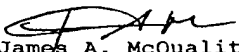
MEMORANDUM FOR DIRECTOR, FINANCIAL MANAGEMENT DIRECTORATE,
DEPARTMENT OF DEFENSE, INSPECTOR GENERAL

SUBJECT: Draft Audit Report on Army Procurement and Contract
Administration Practices on Computer Software Service
Contracts, dated December 6, 1994, (Project No. 4CF-
5004)

REFERENCE: Inspector General, Contract Management Directorate,
Memorandum of December 6, 1994, Same subject.

Our detailed comments on the Draft Audit Report, same
subject as above, are attached.

Please address any additional questions or comments to DSAA-
COMPT-PAID. The primary action officer (PAO) for this audit is
Ms. Ruth Sanders, 604-6599.


James A. McQuality
Comptroller

Attachment
(a/s)

Defense Security Assistance Agency Comments

Final Report
Reference

**Defense Security Assistance Agency Comments on
DoDIG Draft Audit Report, "Army Procurement and Contract
Administration Practices on Computer Software Service
Contracts," draft dated December 6, 1994
(Project No. 4CF-5004)**

RECOMMENDATIONS FOR CORRECTIVE ACTION:

FINDING 1.a. Discontinue funding for the future development of the Security Assistance Automation, Army, information system in accordance with Joint Logistics Systems Center policies.

DSAA RESPONSE: Concur. During the FY 1995 budget process, DSAA disapproved funding for all but maintenance of SA3. This action is complete.

FINDING 1.b. Withhold funding for future maintenance of the Security Assistance Automation, Army, information system until the U.S. Army Security Assistance Command identifies and justifies only essential maintenance expenditures of software and hardware requirements for the Security Assistance Automation, Army, information system in accordance with DoD Instruction 8120.2, "Automated Information Systems Life-Cycle Management Process, Review, and Milestone Approval Procedures," and Army Regulation 25-3, "Life-Cycle Management of Information Systems."

DSAA RESPONSE: Concur. The Army funding for SA3 has been reduced to only essential maintenance. This action is complete.

FINDING 1.c. Review and validate requirements and budget documentation on the Security Assistance Automation, Army, information system to determine whether all available alternatives and costs are identified to meet user needs and recommend how the U.S. Army Security Assistance Command should proceed.

DSAA RESPONSE: Concur with exception. The responsibility of identifying and reviewing alternatives and costs for system development and identifying and meeting user needs is a Department of the Army responsibility. DSAA has oversight over the program and systems used to accomplish the management functions. We concur that this action should be accomplished, but it should be assigned within the Department of the Army.

Revised
Recommendation 1.c.

FINDING 1.d. Establish internal control procedures to verify that the U.S. Army Security Assistance Command adheres to DoD and Army life-cycle management regulations and accounts for funds

Defense Security Assistance Agency Comments

Final Report
Reference

expended on the Security Assistance Automation, Army, information system.

DSAA RESPONSE: Concur. Within 90 days of finalizing the audit report, DSAA will require the Army to provide quarterly reports on the life-cycle management and status of funds for SA3.

OTHER EDITORIAL COMMENTS AND/OR CORRECTIONS:

Reference Page 29, Paragraph: "Guidance Limiting Further Development. In April ~~1990~~ 1980, DSAA issued guidance ..."
(Change as indicated)

DSAA COMMENT: This memo was issued on 8 April 1980 and was subsequently included in most DSAA Comptroller budget calls from 1981 onward.

Page 27

Department of the Army Comments



DEPARTMENT OF THE ARMY
OFFICE OF THE DEPUTY CHIEF OF STAFF FOR LOGISTICS
WASHINGTON, DC 20310-0500



DALO-SAA

9550012L

14 February 1995

MEMORANDUM THRU

DEPUTY CHIEF OF STAFF FOR LOGISTICS

F DIRECTOR OF THE ARMY STAFF

ASSISTANT SECRETARY OF THE ARMY (INSTALLATIONS, LOGISTICS AND ENVIRONMENT)

FOR INSPECTOR GENERAL, DEPARTMENT OF DEFENSE (AUDITING)

SUBJECT: IG DoD DRAFT Audit Report on Army Procurement and Contract Administration Practices on Computer Software Contracts (Project No. 4CF-5004)--INFORMATION MEMORANDUM

1. This is in response to USAAA memorandum of 9 January 1995 (Tab A), which asked ODCSLOG to respond to your memorandum of 6 December 1994 (Encl to Tab A). Your memorandum requested that ODCSLOG formulate an Army position on IG DoD DRAFT Audit Report on Army Procurement and Contract Administration Practices on Computer Software Contracts (Project No. 4CF-5004).

2. The Army's position on the IG DoD DRAFT Audit Report on Army Procurement and Contract Administration Practices on Computer Software Contracts (Project No. 4CF-5004) is at Tab B.

2 Encls

FRANK S. BESSON III
Director of Security Assistance

CF:
VCSA
ASA(FM&C)
CDR, AMC
SAAG-PRF-E

AMC, AMCIR-A, Mr. Kurzer, 274-9025
USASAC, AMSAC-SI, Mr. Haskins, 977-7389

Peter Liszewski/X50390

Protective marking is removed
when separated from enclosure(s)

NASA(L) # 0094

Department of the Army Comments



REPLY TO
ATTENTION OF

AMCIR-A (36-2b)

FOR THE USE OF ONLY
DEPARTMENT OF THE ARMY
HEADQUARTERS, U.S. ARMY MATERIEL COMMAND
5001 EISENHOWER AVENUE, ALEXANDRIA, VA 22333 - 0001



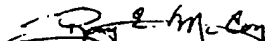
8 February 1995

MEMORANDUM FOR MR. PETER LESZEWSKI, OFFICE OF THE DEPUTY CHIEF OF
STAFF FOR LOGISTICS, DEPARTMENT OF THE ARMY,
WASHINGTON D.C. 20310-0500

SUBJECT: Department of Defense Inspector General Draft Report,
Army Procurement and Contract Administration Practices on
Computer Software Service Contracts (AMC No. D9409)

1. We are forwarding our position on subject report IAW AR 36-2. Recommendations addressed to the Commander, U.S. Army Security Assistance Command are at Enclosure 1. Recommendations addressed to the Director, AMC Systems Integration and Management Activity are at Enclosure 2.
2. Point of contact for this action is Mr. Robert Kurzer, (703) 274-9025.
3. AMC -- America's Arsenal for the Brave.

Encl
as


RAY E. MCCOY
Major General, USA
Chief of Staff

THE OFFICE OF THE CHIEF OF STAFF

Department of the Army Comments

Final Report
Reference



DEPARTMENT OF THE ARMY
U.S. ARMY SECURITY ASSISTANCE COMMAND
8001 EISENHOWER AVENUE
ALEXANDRIA, VA 22304-0001



AMSAC-IM (36-2b)

1 February 1995

MEMORANDUM FOR Chief, Internal Review and Audit Compliance
Office, U.S. Army Materiel Command

SUBJECT: Department of Defense Inspector General (DODIG) Draft
Proposed Audit Report; Project Number 4CF-5004; Army Procurement
and Contract Administration Practices on Computer Software
Service Contracts (AMC No. D9409)

1. Reference DODIG Draft of a proposed Audit Report, 6 December
1994, subject: Army Procurement and Contract Administration
Practices on Computer Software Services Contracts.

2. The U.S. Army Security Assistance Command concurs with the
recommendations of the audit, but disagrees with many of the
findings and statements contained in the body of the report. My
major areas of disagreement are:

a. The statement that the Security Assistance Automation,
Army (SA3) system does not fully satisfy mission and user
requirements is incorrect. The SA3 is fully operational. A data
call to the system users in October 1994 shows this to be true.
Cases have been prepared in SA3 since 1988 and management modules
have been in use since 1987. As an element of foreign policy,
security assistance responds to the flux of world politics at the
national, international and country levels: as an information
system SA3 responds to both the fluidity of security assistance
policy and the constant changes to information management systems
imposed by Government regulation and technological change. Since
its inception, SA3 system development was impacted by ADP
acquisition reform, technological change, Army Automatic Data
Processing architectural changes and fluctuations in funding from
the Defense Security Assistance Agency. Mission and user
requirements have also constantly changed in this dynamic
environment and SA3 has changed to accommodate all changes. The
broad statement that the system "... does not fully satisfy
mission and user requirements... does not fully meet user
needs... and... was wasteful," is not substantiated in the
report. I believe SA3 satisfies its initial focus of providing a
centralized and standardized system with rapid access to current
information. I know that it is currently capable of preparing
100 percent of the Army's new Foreign Military Sales (FMS) cases
because it has been amended whenever possible to incorporate user
identified requirements when they proved beneficial across
command lines.

Page 10

ENC 1

Department of the Army Comments

Final Report
Reference

AMSAC-IM (36-2b)
SUBJECT: Department of Defense Inspector General (DODIG) Draft
Proposed Audit Report; Project Number 4CF-5004; Army Procurement
and Contract Administration Practices on Computer Software
Service Contracts (AMC No. D9409)

b. The draft report moves between history and the present failing to identify whether it is addressing the old S2K data base or newer M204 data base version of SA3. As initially conceived, the SA3 was primarily a standardized and centralized case preparation system that provided case management tools. With the availability of M204, the Army could use the data residing in SA3 for other applications such as the Security Assistance Management Acquisition Program. The improvements made to SA3 since FY90 should not be linked to SA3 for life cycle management purposes. They are specialized applications and improvements that were possible because of the outgrowth of M204 advances. The SA3 currently provides a uniform process for case development, a set of tools for case management, and a repository of data that is both current and accurate. It serves the customers of Army FMS well and has proved its' value under crisis situations. Examples of benefits of SA3 are:

- The SA3 took security assistance out of the automation dark ages by providing three generations of automation equipment to over 1200 individuals in the security assistance process in the Army Materiel Command.

- During Desert Shield and Desert Storm FMS cases were tasked, written, electronically transmitted, signed and ready to go to DSAA within 8 hours.

- The SA3 provides one-stop, one data element entry access to FMS case logistical, financial and procurement information contained in Commodity Command Standard System files. Prior to SA3 access to this information required multiple file accesses using a number of different access methods.

- The SA3 provides communications connectivity for electronic data transmission and electronic mail capability through the Internet.

- The SA3 established the first dedicated facsimile network for security assistance which grew to over 100 machines world-wide in a few short years and is still a viable money saving project today.

AMSAC-IM (36-2b)
SUBJECT: Department of Defense Inspector General (DODIG) Draft
Proposed Audit Report; Project Number 4CF-5004; Army Procurement
and Contract Administration Practices on Computer Software
Service Contracts (AMC No. D9409)

The SA3 was (and continues to be) a leader in systems and functional training, providing Computer Based Training for modules of SA3 as well as other security assistance functions.

c. The SA3 system development was initiated in FY82 and completed by FY90. The system was fielded and in February 1991 the Project Manager position was abolished. An SA3 maintenance team was retained to ensure maintenance of the system, integration of Army directed "state-of-the-art" technological improvements to the system, and oversight of system improvements requested by the users. Yet the audit team declared SA3 to still be in design and development status and addressed their findings without regard to the fact that the system has been fielded for over 3 years. This increased the cost figure of \$46 million reported for the development of the system and understates capabilities of the system since it is not considered fielded.

3. I hope that the Draft Report can be revised to accommodate the information provided by the USASAC system managers (Enclosure). The developers of SA3 did a good job and the system maintainers are also doing excellent work to insure that the system can be used to support Army managers and the FMS customers. My plan to accommodate the recommendations of the report follows:

a. Recommendation 2.a. Establish procedures to verify that approval of software changes for the SA3 information system and that tracking, updating and reporting of costs associated with the system comply with Army Regulation 25-3, "Life-Cycle Management of Information Systems."

CONCUR - A senior level review committee will be established to provide oversight of security assistance information systems. Target date for establishing committee: April 1995.

b. Recommendation 2.b. Periodically review the SA3 information system as a control technique to determine compliance with DOD Instruction 9120.2, "Automated Information Systems Life-Cycle Management Process Review, and Milestone Approval Procedures," and Army Regulation 25-3, "Life-Cycle Management of Army Information Systems."

*Partially omitted because of length. Copies will be provided upon request.

Department of the Army Comments

AMSAC-IM (36-2b)

SUBJECT: Department of Defense Inspector General (DODIG) Draft Proposed Audit Report; Project Number 4CF-5004; Army Procurement and Contract Administration Practices on Computer Software Service Contracts (AMC No. D9409)

CONCUR - The senior level review committee will assess compliance semi-annually. Target date for first review: July 1995.

c. Recommendation 2.c. Evaluate the SA3 information system to identify total user software and hardware requirements, including personnel required to support the system.

CONCUR - A Business Case and Functional Economic Analysis for SA3 will be prepared. Software has been requested from the Defense Information Systems Agency. All project actions will be tracked using a PC based project management program, already available. Target date for completion of Business Case: June 1995. Target date for completion of FEA: August 1995.

d. Recommendation 2.d. Based on the evaluation of the SA3 information system performed in recommendation c. above, determine the estimated cost to complete the system, the estimated cost to maintain the system, and the expected benefits and cost reductions that will be achieved when the system is completed. This information should be included as part of the command annual budget submission to the Defense Security Assistance Agency.

CONCUR - The information will be obtained from the Functional Economic Analysis. It will be used for the FY96 budget submission. Target date: August 1995.

e. Recommendation 2.e. Disestablish the FMS Automation Project Design Field Office, St. Louis, Missouri, as it adds no value to the SA3 information systems program function and develops functions that can be adequately provided by the Systems Integration and Management Activity, U.S. Army Materiel Command.

CONCUR - Alternatives will be developed for disestablishment of the field office. Target Date for developing alternatives: May 1995. Target Date for disestablishing office: October 1995.

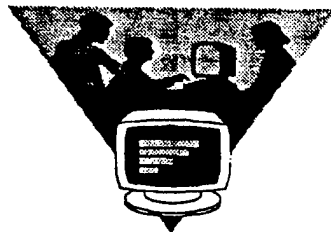
AMSAC-IM (36-2b)
SUBJECT: Department of Defense Inspector General (DODIG) Draft
Proposed Audit Report; Project Number 4CF-5004; Army Procurement
and Contract Administration Practices on Computer Software
Service Contracts (AMC No. D9409)

4. If additional information is needed, please contact
Mr. Alfred D. Haskins, AMSAC-SI, DSN 977-7389/5133.

Encl


MICHAEL S. DAVISON, JR.
Major General, USA
Commanding

U.S. Army Security Assistance Command
Information Management Directorate
FMS Automation Project Management Division



Results and Analysis of Security Assistance
Automation, Army (SA3)
Data Call

OCT - DEC 1994

Chester Jay Freedenthal
DSN 284-4018
email cfreed@alexandria-emh8.army.mil
January 1995

Enclosure to Enclosure



SA3 Data Call Oct-Dec 1994

SUMMARY

In reviewing a working draft of an audit by the DODIG it became apparent that many of the conclusions of the IG were inaccurate. These inaccuracies led to findings and recommendations that needed to be refuted.

I developed a data call of 13 questions for each of the SA3 user sites and requested they be as candid as possible in their response. I identified the purpose of the data call and assured them that all responses would be included in a summary, but that no identification would be placed with the responses. The data call was issued in October and it took until early December for all responses to be received. Numeric responses were tabulated and averaged and text responses were used verbatim.

This document is a compendium of all responses. It provides the question, the responses and a short analysis and comment section for each question.

The responses were favorable to SA3 and provide substantial evidence about the inaccuracy of many of the IG's conclusions and subsequent findings. There were no real surprises and in many instances the weaknesses perceived by the users are being addressed. This data call can be used as baseline, and with slight modification, could be used every year to gauge the level of customer satisfaction how well SA3 is doing.

Department of the Army Comments



SA3 Data Call Oct-Dec 1994

1. At the current time, what percentage of the following documents are prepared using SA3? (7 sites reporting)

LOA	98.4%
Modifications	79.7% (92.7% without USASAC 2%)
Amendments	79.7% (92.7% without USASAC 2%)

ANALYSIS AND COMMENT - These figures show that that all sites are using SA3 successfully. There are two significant reasons LOAs may not be prepared in SA3 ; the LOA may be classified, or the user decides not to use the system. Modifications and amendments not prepared in SA3 mostly result from the basic LOA or previous modifications or amendments not being in SA3 and the user not desiring to load them. This often occurs on old LOAs and when simple modifications are done during case close-out. USASAC has only been preparing basics for a short time; therefore they have limited use of modifications or amendments unless they back load. This is why two figures are shown for modifications and amendments.



SA3 Data Call Oct-Dec 1994

2. What would you estimate to be the percent increase in your commands use of SA3 (7 sites reporting)

over the last 6 months? 0 to 73%

over the last year? 0 to 95%

over the last 2 years? 0 to 100%

ANALYSIS AND COMMENT - Although somewhat confusing when arrayed, the responses were as expected. Users responses were indicative of the level of experience with the system in LOA preparation. More experienced sites showed 0 to a small percent increase over the last year. Inexperienced sites showed medium to large increases over the last 2 years, and somewhat smaller increases over the last 6 months. This shows that as users become more familiar and comfortable with the system, they use it more. This data and the data for question 1 validates that the system is used and satisfies mission requirements for case development.

Department of the Army Comments



SA3 Data Call Oct-Dec 1994

3. Do you feel that SA3 has helped to reduce case development time at your command? If yes, please estimate by how many days. If no, please explain why you believe it has not. (7 sites reporting)

Yes, total time around 7 days. SA3 has also eliminated the mail time to USASAC. It has also reduced time to make revisions to cases.

Yes, definitely. Most managers enter data as they gather it. Especially since we have cut and paste features and are able to pull data from similar or model cases. Days are hard to estimate since cases come in such different sizes, complexities and variations.

SA3 has helped reduce case development time by 5-7 days when the system is fully operational. Does not account for downtime of laser printers. Another measure is that development time is reduced 50% after receipt of P&A data.

Have saved 1 day in prep time, not including time saved in mailing.

Some users responded a definite yes and they estimate anywhere from 4 to 20 days savings in time to prepare a case. Other users say no, citing downtime and print problems as impeding their preparing a case.

Yes. Prior to SA3 cases were hand-written and forwarded for typing by secretarial staff consisting of 1 or 2 secretaries for 25-30 people. This created a backlog. With the implementation of SA3, submission is still driven by item manager's price and availability and other directorate's input, but each case writer is responsible for their own case preparation- the actual LOA preparation time is between 4-7 days for the novice writer.

Yes. Conservatively it saves 5-7 days processing time. Each case writer prepares the final LOA, mod or amend to transmit to USASAC. The alternative is to have one or two secretaries typing for all 27 case writers.

ANALYSIS AND COMMENT - One of the goals of SA3 was to reduce case development time. The responses show an average saving in LOA preparation of about 20% of the total allowed time. Additional time is saved by eliminating mail time (1-3 days); mail costs are also eliminated. Recent industry studies show that the cost of electronic transmission is one 1/3 that of regular mail. The automated system reduces typing workload as well. Not included in the responses is the significant reduction in preparation time for modifications and amendments. In some instances the time has dropped to less than one work day for development, approval and transmission.



SA3 Data Call Oct-Dec 1994

4. What is the most significant reason for not using SA3 to develop a basic LOA?

Emergency requirement when SA3 is down

Case is classified - 2 responses

None 4 responses

System Downtime

Lack of on-line edits, i.e. MASL

... a modification?

Basic case/mod/amend not in SA3. 6 responses

Previous Mod/Amend not implemented.

If case is in close out and there are too many lines to back load. 3 responses

... an amendment?

None

Basic case/mod/amend not in SA3. 6 responses

Previous Mod/Amend not implemented.

If case is in close out and there are too many lines to back load. 3 responses

ANALYSIS AND COMMENT-(7 sites reporting; similar responses from multiple sites identified. Some sites reported more than one reason.) SA3 can and does perform well and satisfies mission requirements. These response validate the high percentage of use identified in question 1. The only significant reasons are the case is classified (SA3 was never designed to process classified data) or the basic LOA, modification or amendment is not in SA3. This could be because of the age of the case, to many modifications or amendments to load , or changes required on closed cases, or some other reason. System down time is a legitimate response, but is not a factor of the system, but outside influence on the system. Most downtime is experienced as a result of mainframe hardware downtime rather than SA3 system downtime.



SA3 Data Call Oct-Dec 1994

5. If SA3 is not used, what method do you use for case development?

Word Perfect 2 responses

Program created In-house

Sperry Word Processing prototype program. Most case writers and secretaries are unfamiliar with it and case prep time doubles. 2 responses

Multimate

A PC based LOA format (Program not identified) 2 responses

ANALYSIS AND COMMENT- This was an information gathering question to determine what was being used as a case development alternative. As expected, all responses indicated either a PC based or mini-computer UNIX based alternative. What is significant is that there is such a divergence among the sites as to the tool used. The automated system provides a standard means of case preparation at all sites as well as a means of storing information in a database for easy manipulation of the data for changes.



SA3 Data Call Oct-Dec 1994

6. How extensive is the use of the SA3DOCU file at your command? If low, what is it that inhibits its use? If high, what is it that makes it usable?

Used by financial and case close-out people. Not used as extensively as it should be.

Moderate. Most users use "CISIL" or internal CCSS document control file (DCF) or REACT for requisition status. It is used as a historical record when files have been purged in CCSS.

Not used extensively because of lack of information and training.

Low usage. Users generally use DCF or REACT for requisition status, comparing the data to CISIL. In the past much of the data has seemed to be incomplete and/or incorrect and there is not a great deal of confidence in the file. As a historical record it is used when the DCF has been purged.

Users were not familiar with the name SA3DOCU - everyone said they did not use it. However it is available for their use. They sometimes use this option, but not often, saying the data is unreliable.

We do not know what it is. If it is there to help in case development, then its capabilities should have been identified and promoted to the field.

ANALYSIS AND COMMENT- The response to this question showed that we had not educated our users successfully on what SA3DOCU is and how it is used. We have developed a CBT course for SA3DOCU which will be called Security Assistance Logistics Data. It will be ready for users in February 1995. When we moved from System 2000 (S2K) data base to the Model 204 (M204) data base we combined our old SA3DOCU and SAAD files into the SA3DOCU files. This caused some confusion. Although we provided documentation and limited training on its purpose and use, it did not get to the users as it should have. Our SA3DOCU files contain replicated CCSS data in a more accessible format. Users show a reluctance to use it because they doubt the credibility of CCSS data in general, or because the SA3 files are updated less frequently at some MSCs (anywhere from multi-daily at one MSC to twice a week at another.) Many users stay with old ways and refuse to access the data in any way other than how they used to access it prior to SA3. The SA3DOCU file, unlike CCSS, is never purged of data and so provides an excellent audit trail for logistics transactions. Those users familiar with SA3 noted this as a distinct advantage.

Department of the Army Comments



SA3 Data Call Oct-Dec 1994

7. Do you use SAMAP? If so, how effective have you found it? If not, why not, what are the significant weaknesses? (7 sites reporting)

No. Have not been able to run. We are willing to give it a try. We are currently working to get functional help from another MSC.

Yes but very little. We have no comment as to weakness because of little knowledge of the system. We are slowly starting to use it. The CBT has been made available to the case managers and it is being pushed to be used.

We have approximately 50 cases loaded. We have not had the resources to train all users. Plans are being made to train users. The inability to report directly to USASAC has hindered acceptance.

Have opted not to use SAMAP due to problems users have found.

Not used extensively due to lack of policy and procedures.

Case writers are aware to utilize the SAMAP indicator code. SAMAP was not usable on our commodity till late FY94. Due to possibility of file corruption during file split, intensive training was delayed.

ANALYSIS AND COMMENT- Acceptance of SAMAP has been slow, as indicated by the responses. The SAMAP was developed in response to USASAC leadership dropping the ILSDP process and desiring to create a new automated system that would provide a tool for users and managers to be pro-active in the management of major acquisitions. It would also be the source of procurement data for the USASAC CISIL, since no other automated source is available. SAMAP was designed by the user's and developed cooperatively by MICOM and SIMA. Its desired capability grew so fast that we had to break it into pieces to field it. If those pieces desired by a particular MSC were not fielded they chose to not use it. The Policy office would not work with us in developing rules for use of SAMAP and some MSCs chose to continue to use the old ILSDP even though it had been canceled. Its use was compounded by the retirement of the senior USASAC leader that spearheaded its creation. We developed a SAMAP CBT course and offered group training at each MSC. Several changes have been made to SAMAP to enhance its usability, but there is a continuing reluctance to use it. There needs to be a concerted effort to publish guidance on its use and for users to learn how to use it.



SA3 Data Call Oct-Dec 1994

8. What do you consider to be the 3 most significant benefits that SA3 has provided for case development? case management?

CASE DEVELOPMENT

Faster 5 responses
Calculations Automated 4 responses
Notes Automated
Simplicity/User Friendly 2 responses
Accurate/Uniform/Standardized format 5 responses
Time savings of transmission vs. mail 4 responses
Has put control of input and data in case managers hands
Generation of Mods and Amends

CASE MANAGEMENT -

Case Duplication
Permanent Reference/Visibility to all case documents 2 responses
Document history (Requisition) can be accessed longer than in CCSS files
Case reports
Not used at this MSC

ANALYSIS AND COMMENT- The responses say good things about SA3... it does what it was designed to do. The responses to case management show some misunderstanding about its use. Some users see it as an extension of case development where it provides a historical record of the case, others viewed it as the SA3DOCU file which is the way it was intended. Case development encompasses all of the actions needed to prepare a case and any changes to it. Case management is the retrieval, storage and analysis of logistics data supporting the execution of the case. This relates to the analysis of question 6.



SA3 Data Call Oct-Dec 1994

9. What do you consider the 3 most critical weaknesses of SA3?

Lack of/Limited Word Processing Features 2 responses [We have provided as much word processing capability as the system architecture will allow. We recently added a line insert and delete capability which will help on changes to long text fields.]

No Cut & Paste at subline, annex line [Cut and paste capability is a relatively new feature that the users like. This takes it to amore detailed level. We are looking at how we can implement it, but it may not be possible.]

Lack of Classified capability [SA3 never was designed to handle classified cases. The small number of classified cases (less than 1%) could not justify the tremendous cost involved in providing a classified system.]

Needs more error checking capabilities (spelling, typos, code checks) 2 responses [This relates to both word processing and edits. We cannot include a spell checker. We are in a continual foot race with users and policy on data edits and code checks. Some want more, others want less, some want none at all! We feel that we have a manageable amount now and we are always reviewing to see where changes can be made].

Rounding Problem on FABS/FICS Worksheet [We have addressed this many times and it continues to be a spurious problem. The rounding occurs in a number of places and is difficult to trace an error. See next response.]

Inaccuracy of mathematical calculations [As indicated above, rounding occurs at many places and causes some minor math errors when adding or subtracting. The errors are infrequent and can be corrected manually. We developed a requirement document to totally revamp the math processes, but it most likely will not get programmed. Where we identify critical system errors we will change the code.]

System Downtime/Mainframe Dependency 6 responses [We have no control over system downtime when the mainframe is at fault. When it is an SA3 problem , it gets top priority and fixed ASAP. We are a mainframe based system and do not have the resources to go to a PC based or client server environment (both of which have inherent problems of their own.)

Printing Downtime 2 responses [The print process is admittedly the weakest link in SA3. We use old technology and old equipment, but we don't have the resources to change it. We have excellent technicians that diagnose and fix problems very quickly. Over the last six months we have not had critical print problems. WE also use the systems remote print capability as a back-up for serious problems.]



SA3 Data Call Oct-Dec 1994

Requires users to have extensive training to understand all case development nuances [This appears to be an isolated problem. We have many training avenues available that the user can take advantage of. Responses to other questions indicates that as users become more familiar with the system they find it easier to use.

Having to load previous actions in order to process Mods and amends [SA3 is also a database, we need complete data to maintain accuracy and integrity.]

Unable to page print from mainframe 2 responses [We would like for this to be available, but the system architecture does not permit it. Users can print pages from the UNIX mini-computer.]

Need a User Friendly Guide (Desk Procedure) to SA3's menus and uses [We have such a desk guide in preparation and it will be available in March 1995.]

SA3DOCU is not always accurate or complete and does not seem to pull in all CCSS updates 2 responses [This issue is addressed in question 6. SA3DOCU data is as accurate as the data in CCSS.]

To rigid - want a more flexible system [This relates to a previous response. Users are as different as night and day in their desires for flexibility. The system is very flexible now and can't bend much more without losing its accuracy and integrity.]

Relationship of policy to SA3 system-- not always tolerant of SA3 problems, work at cross purposes [We continually work with policy to make sure SA3 is in synch with current policy. Sometimes the policy office does not coordinate prior to release of a policy change and we either must accomplish the change in a slightly different way in SA3 or cannot do it at all. Either way it appears to the user that SA3 is in conflict with policy. Often, policy is still developed in the 'word processing' mode, with no thought being given to the ramifications on an automated system.]

SAMAP does not update after manual load [This is a problem that we have addressed as an enhancement to SAMAP. It is unscheduled at the present time.]

SAMAP does not reflect correct forecast dates for shipped items [Again, this is a problem that we have addressed and it is unscheduled.]

ANALYSIS AND COMMENT- Overall the responses were no surprise, as all of the weaknesses had been voiced before. These are the ones that are left after we took care of many others to improve the system. None of them prevent the system from being

Department of the Army Comments



SA3 Data Call Oct-Dec 1994

used to develop a case, but they may account for the 2 percent of new LOAs that are not developed in SA3. Each of them have been addressed individually to provide a more thorough analysis (comments are [bracketed].) Most of the weaknesses were going to be addressed in future changes to the system as resources and priorities permitted. This most likely will not happen.



SA3 Data Call Oct-Dec 1994

10. To what extent does your command use the AMC Standard FMS Pricing System (ASFPS)? Has the loss of the interface between SA3 and the ASFPS made a difference to you?

Do not use. 2 responses

Use extensively. Lack of interface has caused uses to go back to dual line item entry.

We provide pricing data using ASFPS about 80% of the time. It is currently used for procurement items, SDAF, excess, DBOF and stocked items where price is constant. Interface was never functional.

Used by financial office on every case. We do compare calculations from both systems against each other. In our case the pricing system is used for case preparation but not by the case manager. The interface was never very reliable.

The ASFPS was established for items which are being procured and have planned future procurement. All items meeting this criteria are in the pricing system and data is used for pricing the item. The usage has been expanded to include SDAF, EDA and DBOF items. Usage also includes frequently requested items from stock, if price is constant. The interface between the ASFPS system was never functional to date, therefore no difference.

ANALYSIS AND COMMENT. The ASFPS history is long and harrowing. Bottom line is that we paid a lot of money to document it, re-program it and get it installed at all sites, only to have another activity continue to develop new and improved versions. The interface was a mistake to do, but it was a directed action. Had the original development of the ASFPS been part of SA3 they would have been complimentary, instead they worked at odds with each other. The use of the system is varied across the MSCs and the loss of the interface didn't mean much. The major asset of the ASFPS for SA3 was the automated development of a payment schedule. SA3 will still have to wait for this capability.



SA3 Data Call Oct-Dec 1994

11. How beneficial has the SA3 Computer Based Training (CBT) courses to your command? Do you use the SA3 on-line help function?

The M204 is the only one that has really been used. It was helpful to those who took the time to compete it. On-line help functions were not there for so long, it seems most people are unaware they exist.

Some have taken the course, but most users responded it was too time consuming or easier to ask someone else who knows case development better than themselves. On-line help used by a few, unused by most.

Some case managers have taken it. Others have said they just "dived-in" to SA3 without using CBT. On-line is not used.

The CBT training is beneficial, but normally the functional users have already had hands-on training and it does not benefit them. The SAMAP course will be an asset. The on-line help is not used often. It might be more useful if the definitions included the code options or listed the choices of responses that could be included in the field.

Not used. Use only hands-on training.

The CBT courses are very beneficial in preparing developers/managers to use new system. Responses were positive and enthusiastic. On-line help is having a user manual at your finger tips.

The CBT training is beneficial to those just becoming familiar with SA3. Most functionals have case writing experience and have hands-on training and are familiar with the system. When SAMAP is implemented the SAMAP course will be essential to provide an overview of SAMAP and what it does and how to access it. On-line help function is not accessed often.

ANALYSIS AND COMMENT- These responses were disappointing. The SA3 CBT courses were among the best work we did. The CBT expands beyond SA3 as well, including many security assistance peculiar functional areas. It appears that the users just weren't ready for this type of training. The courses are well done, accurate and entertaining. Most users appear to want hands-on training. The CBT was actually designed to do that, as they include considerable simulation as part of the instruction. We have found that many of the errors reported by users could have been avoided if they had used the CBT. When used the CBT provides a good opportunity for the user to know the system before they use it or to refresh their knowledge. The on-line help function is new to SA3 and many users don't know it exists. It reinforces what is in the CBT and can be customized by the MSC. Users need to be informed it is there and how to use it.



SA3 Data Call Oct-Dec 1994

**12. How would you rate the support (i.e., training, customer response, problem solving) you have received over the years from the following activities?
(1=poor,2=satisfactory,3=good,4=excellent)**

SA3 PM Office (My Office)	3.4
St. Louis Field Office (Mr. Keeling's Office)	3.1
SIMA	3.9
Other (Fill in) _____	No Responses

(7 responses received)

What do you feel has been the best and worst services provided by the above. ?

Quick, professional, friendly quality service. Has improved since we began talking directly to the programmers and functionals.

Responses have been quick and with good attitude.

Best is guidance and technical training. Worst is occasional breakdown in communication.

Timely answers, supportive, good corporate knowledge. Field office often took to long to answer problems (several days). Also felt as if problems were always perceived as user error first, even if system error. Have had good response with contacting programmers or functionals directly. Downside is problems experienced with EUCPs. Many times it seems that the change produces additional problems.

Possibly more thorough testing should be done.

This is hard because sometimes we receive excellent support and at others it was satisfactory. Depends on the situation and who you talk to. The best service is solving SA3 problems quickly.

Best is response by SIMA programmer/functionals on conversion from S2K to M204. Situation Room wasn't very responsive. Also release management had problems getting out correct release tape or EUCP was incorrect.

Timely, patient answers. Good corporate knowledge of database. Always supportive and willing to resolve problems. Responsive. Good problem analysis. Worst is user manual for SA3 - not user friendly.



SA3 Data Call Oct-Dec 1994

ANALYSIS AND COMMENT- These response reflect the insights of the new people working on SA3 and changes in the support structure we put in place over the last year. The predominance of support used to be provided by my field office. Because of personnel changes and other factors we switched the first line of support directly to SIMA. This apparently worked to our benefit. It pleased the users and freed the field office to pursue their original mission of requirements analysis and generation. The new staff at SIMA and the new systems technicians at the MSCs never knew the 'old' way we did business and so they responded accordingly. Those that did remember indicated a preference for direct contact with SIMA, something we never could do before, because the expertise was never there; it was only with my field office. Other issues identified in the response such as the situation room and the user manual have been raised before. They are isolated problems in most cases sparked by a bad situation. The issue of testing is addressed in the next question.



SA3 Data Call Oct-Dec 1994

13. How would you like to utilize Mr. Keeling's office in the future? (Some example's...)

- Continue to generate new requirements?
- Have them generate all requirements including maintenance?
- Be the focal point for all communication with our developers?

Would prefer not to use the office. Don't want a "middle-man". 2 responses

Test and evaluate SA3 programs in process (development). Be a consolidation point for SA3 requirements.

Be focal point for communication with developer's.

Generate new requirements. 2 responses

Conduct tests 3 responses

Conduct tests on EUCPs.

ANALYSIS AND COMMENT- The response reflect the changing role of the office from a front line support office to a requirements analysis and design office. They are available to assist SIMA in testing changes. (We had released some changes that some users felt were not tested satisfactorily.) They see the field office as a redundant check for SIMA to make sure testing is complete. The responses to 'not use' stem from some dealings between the users and the field office that were unpleasant, and that was addressed accordingly. As we move toward a DOD standard system the field office will take on a greater responsibility as the liaison to the MSCs and generator of Army requirements for the new system. They have knowledge of the functional and technical aspects of the current system that is critical to success.

Department of the Army Comments

Final Report
Reference



DEPARTMENT OF THE ARMY
U.S. AMC SYSTEMS INTEGRATION AND MANAGEMENT ACTIVITY
1222 SPRUCE STREET
ST. LOUIS, MO. 63103-2834

REPLY TO
ATTENTION OF

AMXSI-Z

MEMORANDUM FOR COMMANDER, U.S. ARMY MATERIEL COMMAND,
ATTN: AMCIR-A, 5001 EISENHOWER AVENUE,
ALEXANDRIA, VA 22333-0001

SUBJECT: DODIG Draft Report, Army Procurement and Contract Administration
Practices on Computer Software Service Contracts, Project 4CF-5004 (AMC No. D9409)

1. Reference memorandum, Department of the Army, Headquarters U.S. Army Materiel
Command, 14 Dec 94, subject as above.

2. Comments to Adequacy of Technical Support Provided by SIMA. (p21-27)

*Control Bypassed on System Change. (p22)

One of the biggest issues was that there was no System Change Request (SCR) associated with the conversion of SA3 from S2K to M204. Unfortunately, the project manager at the time retired and no one can explain the circumstance behind this situation. However, this was a legitimate project. The auditors' discussion stated that "SA3 needed M204 format capabilities for the system to be used at the AMC Major Subordinate Commands." (p20). Also, a survey conducted by USASAC during Oct-Dec 1994 indicated that MSCs & USASAC use M204 SA3 to prepare 98.4% of their Letter of Offer and Agreement (LOA), and that MSCs use M204 SA3 to prepare 92.7% of their modifications and amendments. Therefore, the conversion of SA3 to M204 was a needed change.

The report cited that SIMA inappropriately used internal projects. Of the 114 tasks reviewed, the report cited 7 taskings which were inappropriate. Of the 7, three were related to M204 conversion of SA3 which should be associated with a SCR. From the titles of the remaining projects, they appeared to be projects that were not associated with any system modifications. For example, EA-LISS-SA3 and HQAMC FSI SA3 were projects associated with supporting the Executive Agent and the HQ AMC Functional System Integration group for data calls, inquiries, meetings, etc. SA3-SAMAP was a project in support of a MICOM developed system.

*Control Bypassed on Contractor Work Order. (p23)

Since July 1993, a new SIMA client representative was assigned to the Security Assistance Automation project. Since then, work orders were properly processed against the SA3 Technical Support Task Order specifying legitimate workload and requirements. Only a minimal amount of work orders were processed for customer support type requirements which does not associate with any SCR, 366a's or User Test.

Page 20-25

Page 21

Revised

Page 21

*SIMA Failure to Enforce Existing Guidance. (p24)

Page 22

The report indicated that SIMA did not prepare design documentation. Detailed design documentation was prepared for all software with the exception of Case Print.

*Inadequate Customer Support. (p26)

Page 24

Since early 1994, SIMA/USASAC redefined responsibilities. SIMA gained the responsibility to directly support the customer. The survey conducted by USASAC during Oct-Dec 1994, the following question was asked of the customer:

How would you rate the support (i.e., training, customer response, problem solving) you have received over the years from the following activities? (1=poor, 2=satisfactory, 3=good, 4=excellent)

SIMA received a rating of 3.9.

*Capabilities/deficiencies of the Contractor-developed versus SIMA-developed M204 caseprint process. (p25 and appendix C)

Page 24

The report failed to mention that the case print process developed by the SIMA programmer did not work with Model-37 laser printer which was a critical factor.

Revised
Appendix C

Also, the test cases that were run at USASAC-New Cumberland were not representative of the cases that are run at the MSCs. Therefore, one could not conclude that the case print process developed by the SIMA programmer had only minor deficiencies.

3. The Findings and Recommendations are as follows:

Finding: SIMA did not follow established procedures or provide adequate technical support during SA3 development. Specifically, SIMA did not always obtain system change requests or prepare planning and design documentation as required before modifying and enhancing SA3. In addition, SIMA failed to perform key functions during SA3 development because SIMA management, in some instances, allowed the Security Assistance Functional Support Office, USASAC, to perform duties that overlapped and interfered with SIMA's responsibility as a central design activity.

Recommendation 3a: Develop additional internal control objectives and techniques on the documentation requirement for the Security Assistance Automation, Army information system.

Department of the Army Comments

Final Report
Reference

Revised

ACTION TAKEN: Concur. SIMA will develop internal control objectives and techniques on the documentation requirement for the Security Assistance Automation, Army information system. A target date of 31 March 1995 has been established.

Recommendation 3b: Establish procedures on the use of internal projects and define and limit the use of internal projects to administrative support functions for all information systems.

ACTION TAKEN: Concur with the establishment of procedures on the use of internal projects. Nonconcur on the limitation of these projects to administrative support functions only.

The terminology "internal projects" is misleading. SIMA's Resource Management System (RMS) consists of individual work projects. Not all projects are associated with System Change Requests (SCRs). The projects that have no SCRs are not necessarily administrative support functions, e.g. legitimate design and development workload in support of the Joint Logistics Systems Center. SIMA also responds to many data calls, customer inquiries, support work for system software, release management and etc. None of these have SCRs. We cannot restrict projects to only administrative support functions. A target date of 31 March 1995 for the establishment of procedures has been established.

Recommendation 3c: Develop and issue policy prohibiting the acceptance of work to enhance or modify the Security Assistance Automation, Army information system unless a system change request accompanies the work request.

ACTION TAKEN: Concur. SIMA will develop and issue a policy statement prohibiting the acceptance of work to enhance or modify the Security Assistance Automation, Army information system unless a system change request accompanies the work request. A target date of 28 February 1995 has been established.

Recommendation 3d: Develop and issue policy discontinuing the practice of submitting work orders for Security Assistance Automation, Army information system to the contractor without required supporting documentation.

ACTION TAKEN: Concur. SIMA will develop and issue a policy statement that work orders submitted requesting contract support for systems changes to Security Assistance Automation, Army information system will require supporting documentation. A target date of 28 February 1995 has been established.

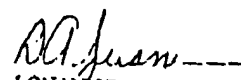
Recommendation 3e: Create a formal plan, including design and testing requirements, before performing any additional Security Assistance Automation, Army information system development, maintenance, or modification.

ACTION TAKEN: Concur. SIMA will insure that a project plan is developed for each software release. A target date of 1 February 1995 has been established.

Department of the Army Comments

4. If questions should arise, please contact Darwin Thompson at DSN 555-4219.

wd all encls


LOUANN ELLEDGE
Director, SIMA-West

Audit Team Members

This report was prepared by the Contract Management Directorate, Office of the Assistant Inspector General for Auditing, DoD.

Paul J. Granetto
Terry L. McKinney
Salvatore D. Guli
Ronald W. Hodges
Myra M. Frank
Robert W. Smith
Dora Y. Lee
Jasper J. Sciuto
Lorin T. Pfeil
Darwin F. Webster
Ana M. Myrie

INTERNET DOCUMENT INFORMATION FORM

A . Report Title: Army Procurement and Contract Administration Practices on Computer Software Service Contracts

B. DATE Report Downloaded From the Internet: 02/01/99

C. Report's Point of Contact: (Name, Organization, Address, Office Symbol, & Ph #):
OAIG-AUD (ATTN: AFTS Audit Suggestions)
Inspector General, Department of Defense
400 Army Navy Drive (Room 801)
Arlington, VA 22202-2884

D. Currently Applicable Classification Level: Unclassified

E. Distribution Statement A: Approved for Public Release

F. The foregoing information was compiled and provided by:
DTIC-OCA, Initials: __VM__ Preparation Date 02/01/99

The foregoing information should exactly correspond to the Title, Report Number, and the Date on the accompanying report document. If there are mismatches, or other questions, contact the above OCA Representative for resolution.