

**A** *udit*



**R** *eport*

MANAGEMENT ISSUES AT THE  
JOINT SIMULATION SYSTEM PROGRAM OFFICE

Report No. D-2001-089

March 30, 2001

Office of the Inspector General  
Department of Defense

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### **Acronyms**

JSIMS  
RDT&E  
STRICOM

Joint Simulation System  
Research, Development, Test, and Evaluation  
Simulation, Training, and Instrumentation Command



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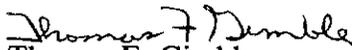
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MEMORANDUM FOR DIRECTOR, JOINT STAFF  
AUDITOR GENERAL, DEPARTMENT OF THE ARMY

Subject: Audit Report on Management Issues at the Joint Simulation System Program  
Office (Report No. D-2001-089)

We are providing this report for your information and use. The audit was performed in response to a request from the Director, Joint Staff. Because this report contains no findings or recommendations, written response to this report is not required.

We appreciate the courtesies extended to the audit staff. For additional information on this report, please contact Mr. Charles M. Santoni, at (703) 604-9051, (DSN 664-9051), [csantoni@dodig.osd.mil](mailto:csantoni@dodig.osd.mil) or Mr. Sean Mitchell at (703) 604-9034, (DSN 664-9034), [smitchell@dodig.osd.mil](mailto:smitchell@dodig.osd.mil). See Appendix B for the report distribution. Audit team members are listed inside the back cover.

  
Thomas F. Gimble

Acting  
Deputy Assistant Inspector General  
for Auditing

## Office of the Inspector General, DoD

Report No. D-2001-089

(Project No. D2000AL-0284)

March 30, 2001

### Management Issues at the Joint Simulation System Program Office

#### Executive Summary

**Introduction.** We performed this audit in response to a request from the Director, Joint Staff, to evaluate the management of the Joint Simulation System. The Joint Simulation System is a joint training, analysis, and evaluation tool that will realistically represent the full range of military Joint Task Force operations and provide a synthetic battlefield. The Director, Joint Staff, specifically requested that we determine whether the transfers of \$2.1 million in Research, Development, Test, and Evaluation funds between the Joint Simulation System Program Office and the Air Force were appropriate; adequate information was available to document and support obligations and deliverables for FY 1998 through FY 2000; conflicts of interest existed in the MITRE contract awards and direct hiring practices; and moving expenses were reimbursed by the proper organization.

**Objectives.** The overall audit objective was to evaluate the management of the Joint Simulation System and to address specific management concerns raised by the Director, Joint Staff. This report deals exclusively with the results of our audit of the four concerns raised by the Director, Joint Staff. The management of the Joint Simulation System and the adequacy of its management control program will be discussed in a subsequent report.

**Results.** We concluded that the four concerns raised by the Joint Staff do not warrant further action. In coordination with the Office of the General Counsel, DoD, we reviewed the \$2.1 million transfers and did not identify improprieties. We found no indications that the Joint Simulation System Joint Program Office made significant errors in processing obligations. Also, deliverables were adequately recorded. We did not identify any conflicts of interest or improprieties in the hiring practices of the Joint Simulation System Joint Program Office for contractor or direct-hire personnel. Further, the Joint Simulation System Joint Program Office appropriately reimbursed moving expenses in accordance with the Joint Travel Regulation.

**Summary of Recommendations.** This report contains no recommendations for corrective action.

**Management Comments.** We provided a draft of this report on February 26, 2001. No written response to this report was required, and none was received. Therefore, we are publishing this report in final form.

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## Background

This audit was performed in response to a request from the Director, Joint Staff, to evaluate the management of the Joint Simulation System (JSIMS) and to address four specific management concerns. This report deals exclusively with the results of our audit of those four management concerns.

JSIMS is a joint training, analysis, and evaluation software tool that will realistically represent the full range of military Joint Task Force operations and provide a synthetic battlefield. The JSIMS Mission Needs Statement states that:

The mission of the JSIMS is to provide readily available, operationally valid, computer-simulated environments for use by the Unified Commands, their components, other joint organizations, and the Services to jointly educate, train, develop doctrine and tactics, formulate and assess operational plans, assess warfighting situations, define operational requirements, and provide operational input to the acquisition process.

JSIMS software will be compliant with the High-Level Architecture in order to support interoperability with other DOD simulations. It will interface with command, control, communications, computers, and intelligence functions and equipment in the field. JSIMS will provide flexible support for joint force training by using efficient, composable simulations tailored to the users' needs. JSIMS will be composed of specific land, maritime, air and space, and other functional domains that will operate in a joint synthetic battlespace. It will create a coherent operational environment between the levels of war, synchronized between types of events, and realistic in the context of the specific joint training scenarios.

JSIMS software will provide the core infrastructure and life-cycle applications to support the effective design, planning, preparation, execution, and post-execution assessment for training exercises and other uses. JSIMS will facilitate scenario design, development, and execution by providing tools that systematically link scenario objectives, events, performance measures, and feedback.

On December 16, 1999, the Under Secretary of Defense (Acquisition, Technology, and Logistics) restructured the JSIMS Program. The Under Secretary designated the Army as the Program Executive Office for JSIMS, and the Commander, U.S. Army STRICOM, as the Program Manager. The JSIMS Program Manager reports directly to the Assistant Secretary of the Army (Acquisition, Logistics, and Technology). The Under Secretary also designated JSIMS as an Acquisition Category 1D program and further directed that JSIMS transition to the High-Level Architecture. Initial Operating Capability for JSIMS, originally scheduled for December 1999, was delayed three times and is scheduled for March 2003.

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JSIMS is projected to expend nearly \$1.6 billion in Research, Development, Test, and Evaluation funds from 1996 through 2007. Nine developmental agents fund the JSIMS. Each of the developmental agents is independently funded through its respective Department or agency. The nine developmental agents represent each Military Department, the Intelligence Community, and the Joint Staff. The Army is the single largest developmental agent, with a projected budget of \$627 million from 1996 through 2007. The Joint Staff Director for Operational Plans and Interoperability is responsible for the fiscal oversight of the JSIMS common components. The JSIMS Program Manager, who is also the Deputy to the Commander, U.S. Army Simulation, Training, and Instrumentation Command (STRICOM), executes those funds on behalf of the Joint Staff.

## **Joint Staff Concerns**

On August 25, 2000, the Director, Joint Staff, requested that the Inspector General, DoD, evaluate the management of JSIMS to include the following concerns:

1. Were the transfers of \$2.1 million in FY 1998 and FY 2000 for Research, Development, Test, and Evaluation (RDT&E) funds legal and appropriate?
2. Were adequate records maintained to identify what is being procured through JSIMS contracts and whether obligations are being processed on time?
3. Did the JSIMS Joint Program Office violate conflict of interest policies in its contract awards to the MITRE Company or in its direct hiring practices?
4. Should the Office of the Chief of Naval Operations, rather than the JSIMS Joint Program Office, have paid the moving expenses of the JSIMS Program Office Alliance Executive Officer?

## **Objectives**

The audit overall objective was to evaluate the management of JSIMS and to address specific management concerns. This report deals exclusively with the results of our audit of the management concerns raised by the Director, Joint Staff. The management of the JSIMS and the adequacy of its management control program will be discussed in a subsequent report. See Appendix A for a discussion of the audit scope, methodology, and prior audit coverage.

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## Joint Staff Concerns

The four concerns raised by the Joint Staff do not warrant further action. Further action is not required because:

- We did not identify improprieties in the transfers of \$2.1 million in FY 1998 and FY 2000 RDT&E funds.
- There were no indications that the Joint Simulation System Joint Program Office had made significant errors in processing obligations. Also, deliverables were adequately recorded.
- No conflicts of interest or improprieties were identified in the hiring practices of the Joint Program Office for contractor or direct-hire personnel.
- The Joint Simulation System Joint Program Office appropriately reimbursed moving expenses in accordance with the Joint Travel Regulation.

Details that discuss the concerns are provided below.

**Concern 1. The Air Force provided \$2.1 million in FY 1998 RDT&E funds to satisfy JSIMS requirements. Subsequent to that transaction, the JSIMS Joint Program Office returned \$2.1 million in FY 2000 RDT&E funds to the Air Force. The return of \$2.1 million appears to be a loan repayment. Were these transfers legal and appropriate?**

**Results.** The transactions were allowable. Towards the end of FY 1999, the JSIMS had a shortfall of about \$4 million. TRW, the integration and development contractor, had exhausted available government funds and was continuing development with its own funds at expenditure levels which would easily exceed \$2.1 million by the end of FY 1999. On September 30, 1999, the Air Force provided \$2,122,999 of expiring FY 1998 RDT&E funds to the JSIMS Joint Program Office to be applied towards the shortfall. Those Air Force funds were available for obligation until the end of the day on September 30, 1999. The transaction took place at the direction of the Air Force Program Executive Officer for Airlift, Trainers, and Modeling and Simulation, which had responsibility for JSIMS program management at that time, and at the direction of the Under Secretary of Defense (Acquisition, Technology, and Logistics). Those funds were transferred from the Air Force Electronic Systems Center, one of the nine JSIMS developmental agents, to the JSIMS Joint Program Office, in the form of a purchase request to the primary JSIMS contractor. Those funds were totally and immediately applied to the JSIMS integration and development contract.

On November 23, 1999, the Deputy Air Force Program Executive Officer, under the authority of the Program Executive Officer for Airlift, Trainers, and Modeling and Simulation, instructed that \$2,122,999 of FY 2000 RDT&E funds be transferred to the National Air and Space Model, a component of the Air

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Force Electronic Systems Center. On December 8, 1999, the JSIMS Joint Program Office complied with that direction and provided the funds to the National Air and Space Model with a Military Interdepartmental Purchase Request. According to both the JSIMS Joint Program Office and the National Air and Space Model Program Office, those funds were used by the Air Force to provide JSIMS with components for the common use of all JSIMS users. The funds were used by the National Air and Space Model for Life Cycle Applications prototyping, support to the Common Component Workstation, and support to the Alliance Common Component High Level Architecture.

The Joint Staff was concerned because the two transfers involved exactly the same amount of money. The two transactions give the appearance of being part of a tactic to keep Air Force funds from expiring by lending it to the Joint Program Office. During the audit, the Office of the General Counsel, DoD, reviewed the documentation pertinent to the original transaction of September 30, 1999, and the subsequent transaction of December 8, 1999, and compared the nature of the transactions to relevant legal criteria. Based on the results of the Office of the General Counsel, DoD, review, we concluded that the funds were used appropriately. The FY 1998 RDT&E funds were obligated for JSIMS work performed during FY 1999 and were not diverted to any other program. The FY 2000 RDT&E funds were obligated against FY 2000 JSIMS requirements.

**Concern 2. According to the Joint Staff, the Joint Program Office did not provide adequate information to the Joint Staff regarding JSIMS obligations and deliverables. Did the JSIMS Program Office maintain adequate records to identify what deliverables were being processed through the JSIMS contracts and whether obligations were being processed on time?**

**Results.** The JSIMS Joint Program Office had adequate documentation to support obligations and purchases. Although the JSIMS Joint Program Office may not have provided the Joint Staff with sufficient information to clearly demonstrate that obligations were processed on time or to specifically identify what was delivered on JSIMS contracts, the Joint Program Office was able to provide the accounting records and documentation to support obligations and deliverables. Those records confirmed that obligations were processed on time by the JSIMS Joint Program Office. Except for the differences in “element of resource” codes between the records of the Defense Finance and Accounting Service and JSIMS Joint Program Office, obligation differences were minimal between the two accounting systems.

JSIMS Joint Program Office personnel provided documentation to support receipt of the following deliverables from FY 1998 to FY 2000 for the high-level design of JSIMS:

- Build 0 in March 1998; the initial software version of the Universal Role Player workstation was released in March 1999;
- The initial test version of the JSIMS Test Harness was released in March 1999;

- 
- The Core Infrastructure team successfully delivered software in June 1999;
  - Build 1 was delivered July 1999;
  - The Synchronous Parallel Emulation and Discrete Event Simulation, version 0.73, was successfully integrated into the core infrastructure in September 1999;
  - The Synthetic Natural Environment for Build 2 was completed in September 1999;
  - JSIMS Core Infrastructure, version .2, was completed in October 1999,
  - Version .21 was completed in November 1999,
  - Version .24 was completed in December 1999, and
  - The JSIMS Final Build 2/2a (1.4 million lines of code) was completed in March 2000.

No deliverables were identified after March 2000, mainly due to the transitioning of the JSIMS program from a high-level design development to the High-Level Architecture development.

**Concern 3. Did the JSIMS Joint Program Office violate conflict of interest policies in awarding contracts for hiring personnel from the MITRE Company or violate policies in hiring employees directly for the JSIMS Joint Program Office?**

**Results.** The hiring and contracting practices of the JSIMS Joint Program Office regarding the MITRE contract did not violate any conflict of interest policies. JSIMS obtained MITRE services with Military Interdepartmental Purchase Requests to the U.S. Army Communication Electronics Command and the U.S. Air Force Electronics Systems Center, which has existing Sole Selection Contracts with MITRE to provide personnel for research and development projects. MITRE personnel were provided for engineering services and support for JSIMS, which was within the scope of work allowed on those contracts. The MITRE contracts were awarded without competition. The Sole Source Certification for MITRE, dated December 16, 1998, provides the justification for and the certification of MITRE as a sole-source contractor. The Justification and Approval for Sole Source Certification states that there are no other known contractors with the knowledgeable personnel, technical objectivity, and necessary capabilities to perform this effort; that only MITRE can satisfy the Government's requirements for this particular effort; and that it is not feasible to forego the effort without experiencing unacceptable delays in work that is vital to the national defense.

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The civilian personnel hiring practices of the JSIMS Joint Program Office, as well as the Navy support services, were in compliance with applicable laws and regulations. Due to limited JSIMS staffing, the Naval Air Warfare Center, Training Systems Division, performs the majority of civilian personnel hiring tasks. The JSIMS Joint Program Office staff create the job descriptions and conduct interviews of qualified applicants. All other functions, to include grading a position, creating a crediting plan, issuing job announcements, scoring the resumes, and identifying qualified applicants are performed by the Naval Air Warfare Center, Training Systems Division, through the Navy Human Resource Service Center, South East.

**Concern 4. Should the Office of the Chief of Naval Operations, rather than the JSIMS Joint Program Office, have paid the moving expenses of the JSIMS Program Office Alliance Executive Officer?**

**Results.** The JSIMS Program Office appropriately paid the moving expenses. The Joint Travel Regulations, Volume 2, "Department of Defense, Civilian Personnel," November 1, 2000, states that "necessary movement cost must be paid by the gaining department/agency." The current JSIMS Alliance Executive Officer transferred from the U.S. Atlantic Command (now the U.S. Joint Forces Command). The billet for the JSIMS Joint Program Alliance Executive Officer is an assigned, reimbursable, Navy Senior Executive Service-1 that is on loan for 3 years to the Department of the Navy from the Assistant Secretary of Defense (Force Management Policy) Personnel and Readiness pool. The JSIMS Joint Program Office uses two basic types of billets, direct and reimbursable. Direct billets are program specific and employees hired to fill direct billet positions are employees of the program. For reimbursable billets, personnel are assigned to work for a program and are paid by the assigning department or agency. However, the assigning department or agency is reimbursed by the program receiving the benefits of the personnel. Because the JSIMS Joint Program Office is the gaining "department or agency," it is responsible for paying the Permanent Change of Station expenses of the JSIMS Joint Program Office Alliance Executive.

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## Appendix A. Audit Process

### Scope

We examined the program management concerns of the Director, Joint Staff, from September 2000 through February 2001 and reviewed documentation dated from November 1996 through August 2000. We reviewed and analyzed memorandums, modifications of contracts, Military Interdepartmental Purchase Requests, accounting reports, letters, schedules, and briefing charts to determine the legality and appropriateness of the JSIMS fund transfers and obligations and deliverables. We also reviewed and analyzed the contractor and civilian hiring practices used by JSIMS management. We interviewed officials from the Joint Staff, the JSIMS Joint Program Office, and the Air Force Electronic Systems Center.

**DoD-Wide Corporate Level Government Performance and Results Act Coverage.** In response to the Government Performance and Results Act, the Secretary of Defense annually establishes DoD-wide corporate level goals, subordinate performance goals, and performance measures. This report pertains to achievement of the following goal and subordinate performance goal.

**FY 2001 DoD Corporate Level Goal 2:** Prepare now for an uncertain future by pursuing a focused modernization effort that maintains U.S. qualitative superiority in key warfighting capabilities. Transform the force by exploiting the Revolution in Military Affairs, and reengineer the Department to achieve a 21st century infrastructure. **(01-DoD-02)**

**FY 2001 Subordinate Performance Goal 2.5:** Improve DoD financial and information management **(01-DoD-2.5)**

**General Accounting Office High-Risk Area.** The General Accounting Office has identified several high-risk areas in the DoD. This report provides coverage of the Defense Information Management and Technology high-risk area.

### Methodology

We conducted this program audit in accordance with auditing standards issued by Comptroller of the United States, as implemented by the Inspector General, DoD. Accordingly, we included tests of management controls, as considered necessary. We did not rely on computer-processed data to perform this audit.

**Contacts During the Audit.** We visited or contacted individuals and organizations within the DoD and Defense contractors. Further details are available on request.

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## Management Control Program Review

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

**Scope of the Review of the Management Control Program.** The adequacy of the JSIMS management control program will be discussed in a subsequent report.

## Prior Coverage

During the last 5 years, no reports have been issued that exclusively focused on the management of JSIMS. Inspector General, DoD, Report No. 97-138, "Requirements Planning and the Impact On Readiness of Training Simulators and Devices," April 30, 1997, states that "the Joint Simulation System program meets the Acquisition Category-I criteria in revised DoD Regulation 5000.2-R, thereby qualifying for review by the Joint Requirements Oversight Council." The JSIMS Program Office did not begin implementing Acquisition Category-I requirements until December 1999. DoD reports can be accessed on the Internet at <http://www.dodig.osd.mil>.

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## **Appendix B. Report Distribution**

### **Office of the Secretary of Defense**

Under Secretary of Defense (Acquisition, Technology, and Logistics)  
Assistant Secretary of Defense (Command, Control, Communications, and Intelligence)  
    Director, Investment and Acquisition  
Under Secretary of Defense (Comptroller/Chief Financial Officer)  
    Deputy Chief Financial Officer  
    Deputy Comptroller (Program/Budget)

### **Joint Staff**

Director, Joint Staff

### **Department of the Army**

Auditor General, Department of the Army  
Program Manager, Joint Simulation System, Joint Program Office

### **Department of the Navy**

Naval Inspector General  
Auditor General, Department of the Navy

### **Department of the Air Force**

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Auditor General, Department of the Air Force  
Commander, Electronics Systems Center

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Director, Defense Contract Audit Agency  
Director, Defense Logistics Agency  
Inspector General, Defense Intelligence Agency  
Director, National Security Agency  
    Inspector General, National Security Agency  
Defense Systems Management College

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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 Defense, Committee on Appropriations  
House Committee on Armed Services  
House Committee on Government Reform  
House Subcommittee on National Security, Veterans Affairs, and International Relations, Committee on Government Reform  
House Subcommittee on Government Efficiency, Financial Management, and Intergovernmental Relations  
House Subcommittee on Technology and Procurement Policy

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## **Audit Team Members**

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

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