Audit Report

YEAR 2000 COMPLIANCE OF THE STANDOFF LAND ATTACK MISSILE

Report No. 99-157
May 14, 1999

Office of the Inspector General
Department of Defense

DISTRIBUTION STATEMENT A
Approved for Public Release
Distribution Unlimited
Additional Copies

To obtain additional copies of this audit report, contact the Secondary Reports Distribution Unit of the Audit Followup and Technical Support Directorate at (703) 604-8937 (DSN 664-8937) or fax (703) 604-8932 or visit the Inspector General, DoD, Home Page at: www.dodig.osd.mil.

Suggestions for Future Audits

To suggest ideas for or to request future audits, contact the Audit Followup and Technical Support Directorate at (703) 604-8940 (DSN 664-8940) or fax (703) 604-8932. Ideas and requests can also be mailed to:

OAIG-AUD (ATTN: AFTS Audit Suggestions)
Inspector General, Department of Defense
400 Army Navy Drive (Room 801)
Arlington, VA 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 to the Defense Hotline, The Pentagon, Washington, D.C. 20301-1900. The identity of each writer and caller is fully protected.

Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLAM B/L</td>
<td>Standoff Land Attack Missile System, Baseline</td>
</tr>
<tr>
<td>Y2K</td>
<td>Year 2000</td>
</tr>
</tbody>
</table>
MEMORANDUM FOR COMMANDER IN CHIEF, U.S. PACIFIC COMMAND
ASSISTANT SECRETARY OF THE NAVY (FINANCIAL
MANAGEMENT AND COMPTROLLER)

SUBJECT: Audit Report on Year 2000 Compliance of the Standoff Land Attack
Missile (Report No. 99-157)

We are providing this report for your information and use. This is one in a
series of reports being issued by the Inspector General, DoD, in accordance with an
informal partnership with the Chief Information Officer, DoD, to monitor efforts to
address the year 2000 computing challenge. Because this report contains no findings or
recommendations, no written comments were required, and none were received.
Therefore, we are publishing this report in final form.

We appreciate the courtesies extended to the audit staff. Questions on the audit
should be directed to Mr. Joseph Doyle at (703) 604-9348 (DSN 664-9348) or
Mr. John Yonaitis, at (703) 604-9340 (DSN 664-9340). See Appendix B for the report
distribution. The audit team members are listed inside the back cover.

Robert J. Lieberman
Assistant Inspector General
for Auditing
Executive Summary

Introduction. This is one in a series of reports being issued by the Inspector General, DoD, in accordance with an informal partnership with the Chief Information Officer, DoD, to monitor DoD efforts to address the year 2000 computing challenge. For a list of audit projects addressing the issue, see the year 2000 webpage on the IGnet at http://www.ignet.gov.

Objectives. The overall audit objective was to assess the status of Military Department and Defense agency mission critical systems, identified by the U.S. Pacific Command and U.S. Forces Korea as being of particular importance to them, in attaining compliance with year 2000 conversion requirements. Specifically, we reviewed the progress of each system toward year 2000 compliance, testing and integration of modifications, and contingency plans. For this report, we reviewed the Navy Standoff Land Attack Missile system, baseline version, and three interface systems.

Results. The Standoff Land Attack Missile system, baseline version, was appropriately certified year 2000 compliant in November 1998. The three interface systems were appropriately certified year 2000 compliant in December 1998 and March 1999. The program executive officer followed the Navy year 2000 certification process and documented the system verification, testing, and contingency documentation before certification.

Management Comments. We provided a draft of this report on April 16, 1999. Because this report contains no findings or recommendations, written comments were not required, and none were received. Therefore, we are publishing this report in final form.
# Table of Contents

**Executive Summary**  

<table>
<thead>
<tr>
<th>Introduction</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background</td>
<td>1</td>
</tr>
<tr>
<td>Objectives</td>
<td>1</td>
</tr>
</tbody>
</table>

**Discussion**  

| Year 2000 Compliance of the Standoff Land Attack Missile | 2 |

**Appendixes**  

| A. Audit Process | 4 |
| Scope | 4 |
| Methodology | 5 |
| Summary of Prior Coverage | 5 |

| B. Report Distribution | 6 |
Background

The Executive Order, “Year 2000 Conversion,” February 4, 1998, mandates that Federal agencies do what is necessary to ensure that no critical Federal program experiences disruption because of the year 2000 (Y2K) computing problem. The Executive Order also requires that the head of each agency ensure that efforts to address Y2K issues receive the highest priority.

The Assistant Secretary of Defense (Command, Control, Communications and Intelligence) is the principal staff assistant responsible for the DoD Y2K management plan. The DoD Y2K Management Plan, version 2, December 1998, provides guidance for testing and certifying systems, and preparing contingency plans for those systems, and stipulates the criteria that DoD Components must use to meet reporting requirements.

The U.S. Navy Year 2000 Action Plan, September 1998, provides the guidance for planning and implementing all information technology, software and systems in the Navy that face a Y2K problem. The Navy must ensure the Y2K readiness of the Standoff Land Attack Missile system, baseline version (SLAM B/L).

The SLAM B/L is a medium-to long-range precision strike weapon that is launched from the Navy F/A-18 Hornet, and P-3C Orion aircraft using an on-board guidance system. SLAM B/L is also an infrared variant of the Harpoon missile, having conventional warhead capability of reaching land targets exceeding 50 nautical miles. The SLAM B/L interfaces with three systems used on the F/A-18 and the P-3 aircraft.

Objectives

The overall objective was to assess the status of Military Department and Defense agency mission critical systems identified by the U.S. Pacific Command, and U.S. Forces Korea as being of particular importance to them, in attaining compliance with year 2000 conversion requirements. Specifically, we reviewed the progress of each system toward year 2000 compliance, testing and integration of modifications, and contingency plans. For this report, we reviewed the Navy SLAM B/L. See Appendix A for a discussion of the audit scope, methodology, and summary of prior coverage.
Year 2000 Compliance of the Standoff Land Attack Missile

The Standoff Land Attack Missile system, baseline version (SLAM B/L) was appropriately certified as year 2000 compliant in November 1998, and the three interface systems were certified as year 2000 compliant in December 1998, and March 1999. The SLAM B/L program executive officer followed the Navy certification process and documented verification, testing, interfaces, and contingency management plan before certification of SLAM B/L. As a result, the Navy minimized the risk of year 2000 failure of the SLAM B/L.

Y2K Compliance of SLAM B/L

The Naval Air Systems Command Program Executive Officer, Cruise Missiles and Joint Unmanned Aerial Vehicles, is responsible for the life cycle management of SLAM B/L. The Naval Air Warfare Center, Weapons Division, China Lake, California, conducted the year 2000 tests of SLAM B/L, and the interfacing systems starting in March 1996. The program executive officer certified SLAM B/L as year 2000 compliant in November 1998.

SLAM B/L Tests. The Naval Air Warfare Center, Weapons Division, China Lake, California, conducted the year 2000 tests of SLAM B/L. Those tests included planning valid missions using "rollover" events for the time of launch and time on target. In addition, the testing included loading global positioning system data into the tactical automated mission planning system to enable realistic testing of the missile. Each missile contained four possible missions: three preset and one target of opportunity. The SLAM B/L passed the tests and was determined to be Y2K compliant.

SLAM B/L Interfaces. The SLAM B/L interfaces with three other systems. The three systems are the F/A-18 Command Launch System, the P-3 Real Time Mission Planning System, and the Tactical Automated Mission Planning System. The Naval Air Warfare Center, Weapons Division, China Lake, California, successfully conducted the Y2K interface rollover data entry tests on the three systems in December 1998, and March 1999, and determined them to be Y2K compliant with SLAM B/L.
Contingency Management Plan

The Naval Air Systems Command Program Executive Officer identified risks to the SLAM B/L and developed a series of contingency management plans to correct potential problems with the SLAM B/L or its interfaces. The contingency management plans covered procedures for invoking and operating in a contingency operating mode, procedures for returning to normal operating mode, and procedures for recovering lost or damaged data. The plans identified specific risks, the probability of occurrence, and the corrective action to be taken.

Conclusion

The SLAM B/L program executive officer complied with the DoD and Navy guidance when processing the SLAM B/L Y2K certification. The SLAM B/L has been determined to be Y2K compliant. Therefore, we have no recommendations.
Appendix A. Audit Process

This is one in a series of reports being issued by the Inspector General, DoD, in accordance with an informal partnership with the Chief Information Officer, DoD, to monitor DoD efforts to address the year 2000 computing challenge. For a list of audit projects addressing the issue, see the Y2K web page on the IGnet at http://www.ignet.gov.

Scope

We reviewed and evaluated the SLAM B/L, and interfacing systems. We visited the Naval Air Systems Command Program Executive Officer responsible for the SLAM B/L to obtain the year 2000 status of the mission critical system.

DoD-wide Corporate Level Government Performance and Results Act Goals. In response to the Government Performance Results Act, the Department of Defense has established 6 DoD-wide corporate level performance objectives and 14 goals for meeting these objectives. This report pertains to achievement of the following objectives and goals.

Objective: Prepare now for an uncertain future. Goal: Pursue a focused modernization effort that maintains U.S. qualitative superiority in key war fighting capabilities. (DoD-3)

DoD Functional Area Reform Goals. Most major DoD functional areas have also established performance improvement reform objectives and goals. This report pertains to achievement of the following functional area objectives and goals.

- Information Technology Management Functional Area.
  Objective: Become a mission partner. Goal: Serve mission information users as customers. (ITM-1.2)

- Information Technology Management Functional Area.
  Objective: Provide services that satisfy customer information needs. Goal: Modernize and integrate DoD information infrastructure. (ITM-2.2)

- Information Technology Management Functional Area.
  Objective: Provide services that satisfy customer information needs. Goal: Upgrade technology base. (ITM-2.3)
General Accounting Office High Risk Area. In its identification of high-risk areas, the General Accounting Office has specifically designated risk in resolution of the Y2K problem as high. This report provides coverage of that problem and the overall Information Management and Technology high risk area.

Methodology

Audit Type, Dates, and Standards. We performed this program audit from March 16, 1999 to April 16, 1999, in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD. We did not use computer-processed data to perform this audit.

Contacts During the Audit. We visited or contacted individuals and organizations within DoD, Brandes Associates, Inc., DCS Co., Prometheus Inc, and Raytheon Systems Co. Further details are available upon request.

Management Control Program. We did not review the management control program related to the overall audit objective because DoD recognized the Y2K issue as a material management control weakness area in the FY 1998 Annual Statement of Assurance.

Summary of Prior Coverage

The General Accounting Office and the Inspector General, DoD, have conducted multiple reviews related to the Y2K issues. General Accounting Office reports can be accessed over the Internet at http://www.gao.gov. Inspector General, DoD, reports can be accessed over the Internet at http://www.dodig.osd.mil.
Appendix B. 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 Chief Financial Officer
  Deputy Comptroller (Program/Budget)
Under Secretary of Defense for Personnel and Readiness
Assistant Secretary of Defense (Command, Control, Communications, and Intelligence)
  Deputy Assistant Secretary of Defense (Command, Control, Communications and Intelligence, Surveillance, Reconnaissance, and Space Systems)
  Director Chief Information Officers, and Deputy Assistant Secretary of Defense (Chief Information Officers, Policy and Implementation)
  Principal Deputy – Y2K
Assistant Secretary of Defense (Public Affairs)

Joint Staff

Director, Joint Staff

Department of the Army

Assistant Secretary of the Army (Financial Management and Comptroller)
Auditor General, Department of the Army

Department of the Navy

Assistant Secretary of the Navy (Financial Management and Comptroller)
Auditor General, Department of the Navy
Chief Information Officer, Navy
Commander, Naval Air Systems Command
Department of the Air Force

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

Unified Commands

Commander in Chief, U.S. European Command
Commander in Chief, U.S. Pacific Command
Commander in Chief, U.S. Atlantic Command
Commander in Chief, U.S. Central Command
Commander in Chief, U.S. Special Operations Command

Defense Organizations

Director, Defense Information Systems Agency
   Chief Information Officer, Defense Information Systems Agency
   Inspector General, Defense Information Systems Agency
   United Kingdom Liaison Officer, Defense Information Systems Agency
Director, National Security Agency
   Inspector General, National Security Agency
Inspector General, Defense Intelligence Agency
Inspector General, National Imagery and Mapping Agency
Inspector General, National Reconnaissance Office

Non-Defense Federal Organizations and Individuals

Office of Management and Budget
   General Accounting Office
      National Security and International Affairs Division
      Technical Information Center
Congressional Committees and Subcommittees, Chairman and Ranking Minority Member

Senate Committee on Appropriations
Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Committee on Governmental Affairs
Senate Committee on Intelligence
Senate Special Committee on the Year 2000 Technology Problem
House Committee on Appropriations
House Subcommittee on National Security, Committee on Appropriations
House Committee on Armed Services
House Committee on Government Reform
House Subcommittee on Government Management, Information, and Technology, Committee on Government Reform
House Subcommittee on National Security, Veterans Affairs, and International Relations, Committee on Government Reform
House Subcommittee on Technology, Committee on Science
House Permanent Select Committee on Intelligence
Audit Team Members

The Contract Management Directorate, Office of the Assistant Inspector General for Auditing, DoD, prepared this report.

Paul J. Granetto
Joseph P. Doyle
John Yonaitis
Charles R. Johnson
Michael J. Guagliano
INTERNET DOCUMENT INFORMATION FORM

A. Report Title: Year 2000 Compliance of the Standoff Land Attack Missile

B. DATE Report Downloaded From the Internet: 08/16/99

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 08/16/99

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.