Audit Report

DOD YEAR 2000 COMPUTING PROBLEM REPORTS: LESSONS LEARNED FROM THE DEFENSE INTEGRATION SUPPORT TOOLS DATABASE

Report No. 98-169

June 29, 1998

Office of the Inspector General
Department of Defense

Additional Copies

To obtain additional copies of this audit report, contact the Secondary Reports Distribution Unit of the Analysis, Planning, 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 Planning and Coordination Branch of the Analysis, Planning, and Technical Support Directorate at (703) 604-8908 (DSN 664-8908) or FAX (703) 604-8932. Ideas and requests can also be mailed to:

OAIG-AUD (ATTN: APTS Audit Suggestions)
Inspector General, Department of Defense
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 to the Defense Hotline, The Pentagon, Washington, D.C. 20301-1900. The identity of each writer and caller is fully protected.

Acronyms

DIST Defense Integration Support Tools
CIO Chief Information Officer
OMB Office of Management and Budget
Y2K Year 2000

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

June 29, 1998

MEMORANDUM FOR ASSISTANT SECRETARY OF DEFENSE (COMMAND, CONTROL, COMMUNICATIONS, AND INTELLIGENCE)

SUBJECT: Audit Report on DoD Year 2000 Computing Problem Reports: Lessons Learned From the Defense Integration Support Tools Database (Report No. 98-169)

We are providing this audit report for your use. The primary purpose is to provide the DoD Chief Information Officer and other senior DoD managers with an independent assessment of the DoD progress related to year 2000 conversion efforts.

We considered management comments on a draft of this report when preparing the final report. You concurred with all the draft recommendations.

We appreciate the courtesies extended to the audit staff. Questions on the audit should be directed to Ms. Mary Lu Ugone at (703) 604-9049 (DSN 664-9049) or Mr. James W. Hutchinson at (703) 604-9060 (DSN 664-9060). See Appendix D 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. 98-169 **June 29, 1998**
(Project No. 8AS-0017)

DoD Year 2000 Computing Problem Reports: Lessons Learned From the Defense Integration Support Tools Database

Executive Summary

Introduction. Information technology systems have typically used two digits to represent the year, such as "98" representing 1998, to conserve electronic data storage and reduce operating costs. With the two-digit format, however, the year 2000 is indistinguishable from 1900. As a result of that ambiguity, computers and associated systems and application programs that use dates to calculate, compare, and sort could generate incorrect results when working with years after 1999.

This report is one of a series of reports that the Inspector General, DoD, is issuing in accordance with an informal partnership with the Chief Information Officer, DoD, to monitor DoD efforts to address the year 2000 computing challenge.

Audit Objectives. The overall audit objective was to identify significant time-sensitive issues related to DoD year 2000 reporting requirements and oversight actions and to quickly report those issues to senior DoD management. Specifically, we evaluated the problems in managing the Defense Integration Support Tools Database and how DoD can apply the lessons learned to a replacement database.

Audit Results. Currently, DoD has no viable repository of year 2000 information that DoD managers can use for tracking, reporting, monitoring, and overseeing DoD year 2000 compliance efforts. Previously, DoD used the Defense Integration Support Tools Database as the official repository of DoD year 2000 information, but discontinued it for year 2000 use. Further, DoD managers were unable to rely on the Defense Integration Support Tools Database for reporting and oversight purposes. Consequently, DoD managers do not have a DoD-wide automated mechanism for year 2000 reporting and oversight purposes. However, the DoD Chief Information Officer has recognized the importance of having a DoD-wide inventory of systems for tracking and reporting year 2000 efforts and has taken action to develop a new database tool to replace the Defense Integration Support Tools Database for year 2000 use.

Summary of Recommendations. We recommend an immediate replacement database for the Defense Integration Support Tools Database to track, monitor, report, and oversee DoD year 2000 efforts. We recommend application of the lessons learned from the Defense Integration Support Tools Database to the replacement database. Specifically, the replacement database should provide reliable information for tracking,

monitoring, reporting, and overseeing DoD year 2000 efforts; allow for flexibility to accommodate changes in external reporting requirements; provide compatibility with DoD Component internal databases for effective importing of data; and include controls for entering data to affix responsibility for accuracy at the DoD Component Year 2000 designated office level.

Management Comments. The Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) concurred with all recommendations and described initial actions taken to implement the replacement database and to avoid problems associated with the prior database. See Part I for a summary of management comments and Part III for the complete text of the comments.

Audit Response. Management comments were generally responsive. We will track implementation of the new database and of the reliability of inputs to that database through our continuing audit oversight of this area, as well as normal audit followup procedures. No additional comments are required.

Table of Contents

Executive Summary i

Part I - Audit Results

Audit Background 2
Audit Objectives 3
DoD Year 2000 Reporting and Management Oversight 4

Part II - Additional Information

Appendix A. Audit Process
Scope 12
Methodology 12
Summary of Prior Coverage 13
Appendix B. Comparison of Defense Integration Support Tools Database Data and February 1998 Reports 14
Appendix C. Completeness Analysis of the Year 2000 Data Fields in the Defense Integration Support Tools Database 15
Appendix D. Report Distribution 17

Part III - Management Comments

Office of the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) Comments 22

Part I - Audit Results

Audit Background

The year 2000 (Y2K) problem is the term most often used to describe the potential failure of information technology systems to process or perform date-related functions before, on, or after the turn of the next century. The Y2K problem is rooted in the way that dates are recorded and computed in automated information systems. For the past several decades, systems have typically used two digits to represent the year, such as "98" representing 1998, to conserve electronic data storage and to reduce operating costs. With the two-digit format, however, the year 2000 is indistinguishable from 1900, or 2001 from 1901, and so forth. As a result of the ambiguity, system or application programs that use dates to perform calculations, comparisons, or sorting could generate incorrect results when working with years following 1999. Calculation of Y2K dates is further complicated because the Y2K is a leap year, the first century leap year since 1600. The computer systems and applications must recognize February 29, 2000, as a valid date.

Because of the potential failure of computers to run or function throughout the Government, the President issued an Executive Order, "Year 2000 Conversion," February 4, 1998, making it policy that Federal agencies ensure that no critical Federal program experiences disruption because of the Y2K problem. The Executive Order also requires that the head of each agency ensure that efforts to address the Y2K problem receive the highest priority attention in the agency. In addition, the General Accounting Office has designated resolution of the Y2K problem as a high-risk area, and DoD has recognized the Y2K issue as a material management control weakness area in the FY 1997 Annual Statement of Assurance.

DoD Y2K Management Strategy. In his role as the DoD Chief Information Officer (CIO), the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) issued the "DoD Year 2000 Management Plan" (Management Plan) in April 1997. The Management Plan provides the overall DoD strategy and guidance for inventorying, prioritizing, fixing, or retiring systems, and monitoring progress. The Management Plan states that the DoD Chief Information Officer has overall responsibility for overseeing the DoD solution to the Y2K problem. Also, the Management Plan makes the DoD Components responsible for the five-phase Y2K management process, including awareness, assessments, renovations, validations, and implementation actions. The Management Plan includes a description of the five-phase Y2K management process.

The Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) is in the process of issuing an updated DoD Management Plan, which accelerates the target completion dates for the renovation, validation, and implementation phases.

In a memorandum dated January 20, 1998, for the heads of executive departments and agencies, the Office of Management and Budget (OMB)

established a new target date for March 1999 for implementing corrective actions to all systems. The new target completion dates are September 1998 for the Renovation phase and January 1999 for the Validation phase.

Audit Objectives

The primary objective of the audit is to identify significant time-sensitive issues related to DoD Y2K reporting requirements and oversight actions and to quickly report those issues to senior DoD management. Specifically, we evaluated the problems in managing the Defense Integration Support Tools Database (DIST) and how DoD can apply the lessons learned from the DIST to a replacement database. See Appendix A for a discussion of the scope and methodology and for a summary of prior coverage.

DoD Year 2000 Reporting and Management Oversight

Currently, DoD has no viable repository of Y2K information that DoD managers can use for tracking, reporting, monitoring, and overseeing DoD Y2K compliance efforts. Previously, DoD used the DIST as the official repository of Y2K information, but discontinued it for Y2K use because of national security concerns. Further, DoD managers were unable to rely on DIST data for reporting and oversight purposes. The DIST was unreliable because the data were incomplete and inconsistent with the DoD Component quarterly reports. Consequently, DoD managers do not have a DoD-wide automated mechanism for Y2K reporting and oversight purposes. However, the DoD CIO has recognized the importance of having a DoD-wide inventory of systems for tracking and reporting Y2K efforts and has taken action to develop a new database tool to replace the DIST for Y2K use. The new database tool may also encounter data unreliability unless DoD applies the lessons learned from the DIST.

Recent Developments

The DoD CIO designated the DIST as the official repository of Y2K information for DoD. The DoD CIO intended the DIST to be used by DoD managers to track and monitor the transition to Y2K compliance for mission-critical and other designated systems. The DIST was an unclassified system until February 4, 1998, when the DoD CIO issued a memorandum classifying DIST data as secret. The decision was based on a National Security Agency review that determined that the vulnerability of the information in the DIST was a threat to national security, and on March 20, 1998, the DoD CIO decided that DoD would no longer use the DIST for Y2K data reporting requirements. Some DoD Components relied heavily on the DIST to track and report Y2K efforts and may be severely impacted until a replacement alternative to the DIST is developed.

Lessons Learned From the DIST

In developing the new database tool to replace the DIST for Y2K use, DoD should apply the lessons learned from the DIST. The DoD used the DIST only minimally for reporting and oversight purposes because the data were unreliable. Specifically, DIST data were incomplete and inconsistent with the DoD Component quarterly reports.

Reporting Requirements. The DoD CIO requires quarterly reports from the DoD Components to obtain the information needed for the OMB report. The

CIO had intended to use the DIST as a more effective, automated means of collecting Y2K information. However, DoD CIO staff stated that they did not use the DIST for OMB reporting because the data were unreliable.

OMB Reporting Requirements. The OMB requires DoD to submit a Y2K status report on a quarterly basis, due on the 15th of February, May, August, and November through 1999. The report provides OMB with a status of DoD Y2K compliance efforts and provides progress information to Congress and the public. To collect the information for the OMB report, the DoD CIO requires DoD Components to submit a report to the DoD CIO on a quarterly basis, due on the 18th of January, April, July, and October through 1999.

Changes in OMB Reporting Requirements. On January 20, 1998, OMB changed the Y2K reporting requirements for the quarterly reports. The OMB revised previous reporting requirements, established on May 5, 1997, by adding requirements for data exchanges, contingency planning, Government-wide systems, and other evidence of progress. The DIST replacement database needs to be flexible to allow for unexpected changes in OMB reporting requirements.

Reliability of DIST Data. We performed several analyses to determine the reliability of DIST data. Specifically, we analyzed DIST data for completeness of data fields and for consistency as compared with the February 1998 quarterly reports. The analyses showed that DIST data were inconsistent and incomplete for most DoD Components.

Consistency of DIST Data. We reviewed mission-critical system data in the DIST for 15 DoD Components. The 15 DoD Components represented 2,014 of the 2,915 total mission-critical systems reported by DoD in the February 1998 quarterly report to OMB. Using the same timeframe, we compared DIST data with the February 1998 reports for the 15 DoD Components. We extracted the DIST data on January 21, 1998, and the DoD CIO received the quarterly reports between January 15 and January 23, 1998. Of the 15 DoD Components reviewed, our analysis showed the following discrepancies.

- Of the 15 DoD Components, 14 had an inconsistent number of mission-critical systems in the DIST and the quarterly reports. For example, the Air Force reported 191 mission-critical systems in the DIST and 472 mission-critical systems in the February 1998 report.

- Of the 15 DoD Components, 10 had an inconsistent number of Y2K-compliant mission-critical systems in the DIST and the quarterly reports. For example, the Defense Information Systems Agency reported 36 Y2K-compliant mission-critical systems in the DIST and 21 Y2K-compliant mission-critical systems in the February 1998 report.

- Of the 15 DoD Components, 13 had an inconsistent number of mission-critical systems in the renovation, validation, implementation, and completed phases in the DIST and the quarterly reports. For example, the Army reported 11 mission-critical systems in the renovation phase in the DIST and 92 mission-critical systems in the renovation phase in the February 1998 report.

We considered the differences in the data in the DIST and the quarterly reports to be material. See Appendix B for the details of the analysis.

Completeness of DIST Data. We reviewed the Minimum Required Data Elements Completeness Report* (the Report) to determine the percentage of complete fields in the DIST. According to the Report, the average percentage of complete Y2K data fields in the DIST was 59 percent, as of February 4, 1998. The Y2K fields that had the lowest percentage of completeness were as follows:

Y2K Field in the DIST	Percent Complete
Actual Termination Date	0.5
Planned Termination Date	14
Hardware Cost	47
Software Budget Shortfall	54

According to DIST staff, the Report deemed data fields incomplete when a blank field existed in a data field. The Report was made available to the DoD Components to reduce the number of blank fields in the DIST. Details of the Report are included in Appendix C.

DIST Editor Survey Results

To determine the cause of incomplete and inconsistent data, we interviewed DIST editors for six DoD Components. DIST editors stated that the data were incomplete and inconsistent with the quarterly reports because of the following:

- system program managers did not provide timely and accurate information to the DIST editors,
- DoD Component internal databases were not compatible with the DIST,
- DIST data fields menus did not consistently provide appropriate choices for some entries, and
- the DIST needed user-friendly operational improvements.

System Program Managers. The inconsistency of DIST data and the quarterly reports was a result of system program managers reporting inaccurate and untimely information to DIST editors. DIST editors stated that they do not validate the information received from system program managers to ensure that

* The Minimum Required Data Elements Completeness Report contains a listing of DoD Components and shows the percentage of complete data fields for each of the various categories of information in the DIST.

accurate and consistent data are entered in the DIST. The system program managers are a primary source of information for the status of Y2K compliance. The inconsistency of information may have been a result of DIST data not being updated in as timely a manner as the information in the quarterly reports. Additionally, DIST editors stated as a possible reason for inconsistent data that the pressure is on the system program managers to report their systems on schedule because OMB and DoD have recently moved up the Y2K compliant date from November to March 1999.

Compatible Databases. Some DoD Components maintain an internal database for tracking Y2K efforts and import data directly from their database into the DIST. Some databases do not effectively import data into the DIST because the data fields are not compatible with the DIST data fields. For example, the Air Force uses an internal database, called the Air Force Automated System Inventory Database, to track Y2K efforts. The Air Force database does not contain two DIST fields, "Application Compliant" and "Application Compliant Date." As a result, DIST data are incomplete for the fields. Additionally, the Air Force updates the DIST on a monthly basis using a batch file update process. The DIST editors for the Air Force stated that the batch update process is labor intensive, which reduces the frequency of updates because of resource limitations. Untimely updates may cause inconsistencies between DIST data and the information in the quarterly reports.

Appropriate Data Field Menu Choices. The DIST contained data fields that had menu choices that were not appropriate for some entries. For example, the DIST data fields "Planned Termination Date" and "Actual Termination Date" did not provide appropriate menu choices and accepted only a date entry. DIST editors stated that they left those fields blank because some systems were not planned to be terminated or had not been actually terminated. Entries such as "not applicable" or "no" were not accepted by the DIST for those fields. Because the DIST contained blank fields, a meaningful completeness analysis of data field entries could not be performed. The new replacement database should allow for appropriate menu choices to ensure that no blank fields will justifiably exist.

Operational Improvements. DIST editors stated that the DIST needed operational improvements to become more user friendly. The most common responses from DIST editors were that the DIST needed a user's manual and a faster response time for data entry. DIST editors needed a user's manual to clarify data field definitions and to provide adequate data entry procedures. A faster response time would allow for more updates by reducing resources spent entering data in the DIST.

Management Actions

During our audit, management took action to develop a DIST replacement tool for managing the DoD Y2K effort. The DoD CIO Y2K program office has initiated efforts to establish a database to collect and maintain DoD Y2K information. DoD will use the new database to provide external reports to OMB and Congress and to provide a current repository of system Y2K data for

oversight purposes. The DoD CIO is aware of the need to implement the replacement database, with appropriate controls in place to ensure the integrity of the data, as soon as possible.

Conclusion

The DoD CIO needs to apply the lessons learned from the DIST to the replacement database to avoid similar problems of unreliable data. The DoD CIO and DoD Components that relied on the DIST will be hampered by its absence until a replacement database is fully operational. Although a new database is being developed for Y2K, the CIO will still have to rely on each DoD Component to provide complete and accurate Y2K data.

Recommendations, Management Comments, and Audit Response

We recommend that the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence), in the role of the DoD Chief Information Officer:

1. **Immediately implement a replacement database for the Defense Integration Support Tools Database to track, monitor, report, and oversee DoD year 2000 efforts.**

2. **Apply the lessons learned from the Defense Integration Support Tools Database to the replacement database. Specifically, the replacement database should:**

    a. **Provide reliable information for tracking, monitoring, reporting, and overseeing DoD year 2000 efforts.**

    b. **Provide adequate management controls for data entry to affix responsibility for accuracy at the DoD Component Year 2000 designated office level.**

    c. **Allow for flexibility to accommodate changes in Office of Management and Budget reporting requirements.**

    d. **Be compatible with DoD Component internal databases for effective importing of data.**

    e. **Allow for appropriate menu choices to eliminate blank fields.**

Management Comments. The Office of the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) concurred with all recommendations and stated that the office had developed a replacement

database to track, monitor, and report DoD Y2K efforts at a high level. The Assistant Secretary also described several initial actions already taken to implement the replacement database and to preclude recognized operational weaknesses associated with the DIST. The complete text of management comments is in Part III of this report.

Audit Response. We consider management comments to be generally responsive. Draft Recommendation 2.b. included a requirement for a high level certification of the validity of all data inputs. While citing improved management controls for data entry, management comments on Recommendation 2.b. did not address whether those controls include such a requirement, but noted that all input to the new database would be solely from the DoD Component designated offices. This clearly affixes responsibility for data accuracy to those offices. Therefore, we reworded Recommendation 2.b.

Part II - Additional Information

Appendix A. Audit Process

This report is one in a series of reports being issued by the Inspector General, DoD, in accordance with an informal partnership with the DoD CIO, to monitor DoD efforts to address the Y2K computing challenge. For a listing of audit projects addressing this issue, see the Y2K webpage on IGnet at <http://www.ignet.gov>.

Scope

We reviewed the February 1998 Y2K reports in accordance with CIO reporting requirements and the requirements stated in the Management Plan. We evaluated DIST data for completeness of the Y2K data fields. We compared the DIST data with the February 1998 reports to determine consistency in information reported. We interviewed DoD CIO staff who are responsible for issuing reporting guidance and collecting the Y2K information from the DoD Components and submitting the information to OMB. We interviewed authorized DIST editors who are responsible for maintaining systems in the DIST, and we interviewed personnel from Electronic Data Services, the contractor responsible for the DIST.

Methodology

Audit Type, Dates, and Standards. We performed this economy and efficiency audit from January through April 1998 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 or statistical sampling procedures for this audit.

Contacts During the Audit. We visited or contacted individuals and organizations within DoD. Further details are available on 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 1997 Annual Statement of Assurance. In addition, the audit focused on data in a database that is no longer used and its control weaknesses would not be included in future management control assurance assessments and statements.

Summary of Prior Coverage

The General Accounting Office and the Inspector General, DoD, have conducted multiple reviews related to 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. Comparison of Defense Integration Support Tools Database Data and February 1998 Reports

	Mission Critical		Y2K Compliant		Renovation		Validation		Implementation		Completed	
	DIST[1]	Reports[2]	DIST[1]	Reports[2]	DIST[1]	Reports[2]	DIST[1]	Reports[2]	DIST[1]	Reports[2]	DIST[1]	Reports[2]
Air Force	191	472	1	159	75	178	0	29	39	8	65	0
Army	395	376	107	160	11	92	7	14	52	10	0	4
BMDO	6	3	0	0	1	1	1	1	0	0	0	0
DCAA	1	1	0	1	0	0	0	0	0	0	0	0
DeCA	11	9	0	0	6	6	3	3	0	0	0	0
DFAS	86	83	4	12	35	36	10	12	0	0	4	0
DISA	99	98	36	21	38	38	9	9	4	4	14	13
DLA	37	33	0	17	10	6	3	8	5	1	14	1
DSAA	4	6	0	0	3	6	0	0	1	0	0	0
DSWA	15	9	8	2	0	1	0	0	0	2	0	4
JLSC	6	2	0	0	0	0	3	2	1	0	0	0
JS	8	5	1	0	4	3	0	0	0	0	0	0
PACOM[3]	3	4	0	0	3	4	0	0	0	0	0	0
Navy[4]	705	812	8	0	174	191	253	441	25	14	213	135
OSIA	3	2	0	0	0	1	0	0	0	0	0	1
WHS[5]	55	99	24	54	19	25	27	13	9	7	0	0
Total[6]	**1,625**	**2,014**	**189**	**426**	**379**	**588**	**316**	**532**	**136**	**46**	**310**	**158**

BMDO	Ballistic Missile Defense Organization
DCAA	Defense Contract Audit Agency
DeCA	Defense Commissary Agency
DFAS	Defense Finance and Accounting Service
DISA	Defense Information Systems Agency
DLA	Defense Logistics Agency
DSAA	Defense Security Assistance Agency
DSWA	Defense Special Weapons Agency
JLSC	Joint Logistics Support Center
JS	Joint Staff
PACOM	U.S. Pacific Command
OSIA	On-Site Inspection Agency
WHS	Washington Headquarters Services

[1]We extracted the DIST data on January 21, 1998.
[2]The February 1998 quarterly reports were received by the DoD CIO from January 15 through January 23, 1998.
[3]For the unified commands under Joint Staff, only U.S. Pacific Command had mission-critical systems in the DIST for which they were listed as the sponsor component.
[4]The Navy listing includes the Marine Corps.
[5]Washington Headquarters Services includes several DoD Components, including the Inspector General, DoD; the Under Secretary of Defense for Personnel and Readiness; and the Under Secretary of Defense for Acquisition and Technology.
[6]The totals do not include the Assistant Secretary of Defense for Health Affairs and the DoD intelligence agencies.

Appendix C. Completeness Analysis of the Year 2000 Data Fields in the Defense Integration Support Tools Database

Percent of Complete DIST Y2K Data Fields
February 1998

	Hardware Compliant	Software Compliant	Application Compliant	Application Compliant Date	Phase	Strategy
Air Force	99	99	44	4	99	88
Army	100	73	73	73	70	76
ASD(HA)	100	100	99	94	100	100
BMDO	33	33	33	17	100	33
DeCA	100	100	100	82	100	100
DFAS	62	64	94	69	43	100
DISA	99	99	99	86	0	0
DLA	86	86	86	78	86	86
DoD IG	100	100	100	0	0	50
DSAA	100	100	100	100	100	100
JLSC	17	83	100	100	100	50
JS	75	75	88	75	63	63
Navy	80	79	78	71	99	98
OSIA	67	67	67	67	67	67
USMC	87	85	99	78	97	81
WHS	100	100	100	69	100	60
Averages*	**90**	**84**	**76**	**61**	**85**	**84**

* The averages are weighted to account for the number of systems that each DoD Component maintains in the DIST. For example, the Army has 395 systems in the DIST that are 100 percent complete for the Hardware Compliant data field, while conversely, the On-Site Inspection Agency has 3 systems in the DIST that are 67 percent complete for the same data field. The averages take into account the varying number of systems for each DoD Component.

Appendix C. Completeness Analysis of the Year 2000 Data Fields in the Defense Integration Support Tools Database

	Hardware Cost	Software Cost	Hardware Budget Shortfall	Software Budget Shortfall	Planned Termination Date	Actual Termination Date
Air Force	64	46	65	46	5	0.5
Army	14	63	63	64	8	1.0
ASD(HA)	95	95	94	95	97	1.3
BMDO	17	17	17	17	0	0
DeCA	36	91	82	82	0	0
DFAS	94	97	94	94	86	0
DISA	92	94	91	92	16	0
DLA	81	81	81	81	0	0
DoD IG	0	0	0	0	50	0
DSAA	100	100	100	100	100	0
JLSC	100	100	100	100	0	0
JS	75	75	75	75	13	0
Navy	29	31	28	30	4	0.3
OSIA	33	33	33	33	0	0
USMC	55	55	50	53	16	1.3
WHS	96	96	96	96	0	0
Averages *	**47**	**54**	**56**	**54**	**14**	**0.5**

ASD(HA) Assistant Secretary of Defense (Health Affairs)
BMDO Ballistic Missile Defense Organization
DeCA Defense Commissary Agency
DFAS Defense Finance and Accounting Service
DISA Defense Information Systems Agency
DLA Defense Logistics Agency
DoD IG Department of Defense, Inspector General
DSAA Defense Security Assistance Agency
JLSC Joint Logistics Support Center
JS Joint Staff
OSIA On-Site Inspection Agency
USMC United States Marine Corps
WHS Washington Headquarters Services

* See footnote on previous page.

Appendix D. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition and Technology
  Director, Defense Procurement
  Director, Defense Logistics Studies Information Exchange
Under Secretary of Defense (Comptroller)
  Deputy Chief Financial Officer
  Deputy Comptroller (Program/Budget)
Assistant Secretary of Defense (Command, Control, Communications, and Intelligence)
  Year 2000 Oversight and Contingency Planning Office
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
Chief Information Officer, Army

Department of the Navy

Assistant Secretary of the Navy (Financial Management and Comptroller)
Auditor General, Department of the Navy
Chief Information Officer, Navy

Department of the Air Force

Assistant Secretary of the Air Force (Financial Management and Comptroller)
Auditor General, Department of the Air Force
Chief Information Officer, 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. Southern Command
Commander in Chief, U.S. Central Command
Commander in Chief, U.S. Space Command
Commander in Chief, U.S. Special Operations Command

Unified Commands (Cont'd)

Commander in Chief, U.S. Transportation Command
Commander in Chief, U.S. Strategic Command

Other Defense Organizations

Director, Defense Contract Audit Agency
Director, Defense Finance and Accounting Service
Director, Defense Information Systems Agency
  Inspector General, Defense Information Systems Agency
  Chief Information Officer, Defense Information Systems Agency
Director, Defense Logistics Agency
Director, National Security Agency
  Inspector General, National Security Agency
Inspector General, Defense Intelligence Agency

Non-Defense Federal Organizations and Individuals

Chief Information Officer, General Services Administration
Office of Management and Budget
  Office of Information and Regulatory Affairs
Technical Information Center, National Security and International Affairs Division, General Accounting Office
Director, Defense Information and Financial Management Systems, Accounting and Information Management Division, General Accounting Office

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

Senate Special Committee on the Year 2000 Technology Problem
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 Government Management, Information, and Technology, Committee on Government Reform and Oversight
House Subcommittee on National Security, International Affairs, and Criminal Justice, Justice, Committee on Government Reform and Oversight
House Committee on National Security

Part III - Management Comments

Office of Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) Comments

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
6000 DEFENSE PENTAGON
WASHINGTON, DC 20301-6000

COMMAND, CONTROL, COMMUNICATIONS, AND INTELLIGENCE

June 10, 1998

MEMORANDUM FOR INSPECTOR GENERAL OF THE DEPARTMENT OF DEFENSE

SUBJECT: Audit Report on DoD Year 2000 Computing Problem Reports: Lessons Learned from the Defense Integration Support Tools Database (Project No. 8AS-0017)

This is in response to your request to review and comment on your May 4, 1998, audit report, subject as above. We concur with your recommendations with comments. We feel that the new Year 2000 (Y2K) database addresses your recommendations and will satisfy basic Y2K tracking requirements

We request that you incorporate this memorandum along with the attachment in the final audit report.

Arthur L. Money
Senior Civilian Official

Attachment

Response to OIG, DoD, Audit Report, "DoD Year 2000 Computing Problem Reports: Lessons Learned from the Defense Integration Support Tools Database" IG Project No. 8AS-0017, May 4, 1998.

Recommendation #1: Immediately implement a replacement database for the Defense Integration Support Tools database to track, monitor, report and oversee DoD Year 2000 efforts.

Response: We concur with the recommendation and have developed a replacement database which will track, monitor and report DoD Y2K efforts at a high level. Steps are being taken to prevent a repetition of the problems associated with the DIST. The first round of populating the database occurred in May 1998. On May 28, 1998, the Component representatives met to discuss the data fields and made basic directional decisions on data field modifications and response options.

Recommendation #2: Apply the lessons learned from the Defense Integration Support Tools Database to the replacement database.

Response: We concur. The new database being used for Y2K tracking is being developed with the contractor that assisted with the DIST. The use of the former DIST contractor provides the technical skills and corporate knowledge associated with the DIST Y2K effort as well as a knowledge of the pitfalls and dangers that were faced with the DIST effort.

a. Provide reliable information for tracking, monitoring, reporting, and overseeing DoD Year 2000 efforts.

Response: We concur. The new database being used for Y2K tracking was developed in a joint effort with the JCS, Component representatives and Y2K Quarterly Report personnel. Input from OMB was also included. The result is an improved approach to the tracking of information with the detailed information remaining in the Component level database.

b. Provide adequate management controls for data entry and require a high-level DoD Component official to certify the validity of the data.

Response: We concur. The new database has improved controls and will allow input from the Component Y2K designated offices, eliminating the number of individual action officers inputting data through the web.

c. Allow for flexibility to accommodate changes in the Office of Management and Budget reporting requirements.

Response: We concur. The new database maps more directly to the OMB reporting requirements and the added data that the OSD feels is important to collect. Some of the added data fields, specifically address future OMB and/or OSD requirements.

d. Be compatible with DoD Component internal databases for effective importing of data.

Response: We concur. The Components internally maintained databases are being used, for input into the new OSD Y2K database. The Navy is currently building it's own database with the requirements and design of the OSD Y2K database as the model. Other Components databases have been mapped to feed the Y2K database.

e. Allow for appropriate menu choices to eliminate blank fields.

Response: We concur. At the Component database representative meeting held on May 28, 1998, a review of all the data fields was completed. Fields that were not of value or appropriate were deleted. However, some data fields will remain as blank entries in anticipation of future requirements.

Audit Team Members

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

Thomas F. Gimble
Patricia A. Brannin
Mary Lu Ugone
James W. Hutchinson
Timothy J. Harris
Maria R. Palladino