



DEPARTMENT OF THE AIR FORCE
AIR FORCE RESEARCH LABORATORY (AFRL)

21 JUN 2000

MEMORANDUM FOR ESC/SRI

ATTN: Captain Benjamin Glazer
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FROM: AFRL/IFEB

32 Brooks Road
Rome NY 13441-4114

SUBJECT: Department of Defense Intelligence Information System (DODIIS) Joint Integration Test Facility (JITF) Final Test Report for Automated Message Handling System (AMHS) 2.3.6

1. Attached is the final version of the DODIIS JITF test report for AMHS 2.3.6. This report identifies the objectives of testing and documents the results of all test activities. A recommendation based upon evaluation of test activities is included in this report.
2. This report was provided in draft to your office.
3. Note that JITF testing was performed for AMHS 2.3.6, at your request, to ensure that DODIIS integration requirements were met and to provide the best possible product for AMHS users. Funding for the JITF AMHS testing was provided by your office.
4. If you have any questions please contact the DODIIS JITF at Comm 315-330-1781 or DSN 587-1781.

Attachment

1. DODIIS JITF AMHS 2.3.6 Final Test Report

cc: 497IG/INDIS Mr. Steve Fager
DODIIS Management Board
DODIIS Engineering Review Board/ System Integration Management Office
Joint Interoperability Test Command
CUBIC Library

JOHN F. VONA, CHIEF
Information Handling Branch
Info & Intel Exploitation Div
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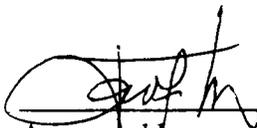
JOINT INTEGRATION TEST FACILITY FINAL TEST REPORT

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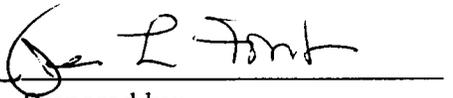
AUTOMATED MESSAGE HANDLING SYSTEM 2.3.6

21 JUNE 2000

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SECTION 1

1. EXECUTIVE SUMMARY

1.1 BACKGROUND

The Department of Defense Intelligence Information System (DODIIS) Management Board (DMB) has directed the Joint Integration Test Facility (JITF) to conduct testing as part of the DODIIS Certification Process. This level of testing verifies infrastructure compliance, identifies resource conflicts, and identifies the operational impacts of applications residing in a common DODIIS environment. JITF personnel conduct integration testing with support from the Program Management Office (PMO), operational users are also encouraged to participate. This coordinated team effort minimizes the risks associated with deploying intelligence applications into operational environments.

1.2 PURPOSE

The purpose of this document is to report the results of integration testing conducted for the Automated Message Handling System (AMHS) PMO in a secure environment at Air Force Research Lab (AFRL), Rome Research Site, Rome, New York. Version 2.3.6 was tested from 5 to 12 June 2000.

AMHS is used to send and receive messages via the Automated Digital Network (AUTODIN). It provides connectivity to and interoperability with other Government agencies, allies, tactical users, defense contractors and other approved entities external to the Defense Message System (DMS) community. It also provides guaranteed delivery to the intended recipients and maintains writer to reader accountability.

1.3 OBJECTIVE

The overall objectives of integration testing conducted by the JITF are to perform analyses and provide recommendations to IMA users, PMO, DMB, Engineering Review Board (ERB)/Systems Integration Management Office (SIMO), and the DODIIS Executive Agent for Test and Evaluation (DexA for T&E), regarding integration testing results.

In accordance with the *DODIIS Instructions 2000*, the JITF is tasked to make “go/no go” recommendations for IMAs to the DMB as a result of integration testing. The evaluation of integration quality of the IMA is based on the integration requirements specified in the *JITF DODIIS Integration Requirements and Evaluation Procedures*.

Criteria for successful evaluation of IMA are grouped in the following categories:

- Documentation
- Installation and Configuration
- Environment

- Operation
- User Interface
- Integration security

For each category, the JITF identifies and reports specific findings. The findings are analyzed to determine the effect each finding will have on the overall quality of the IMA.

The DexA for T&E, test organizations and the IMA PMO determined the specific objectives of the certification testing process for the AMHS IMA at the Joint Test Planning Meeting (JTPM) on 9 March 2000. They are:

Mandatory Objectives:

- Perform integration testing using the *JITF DODIIS Integration Requirements and Evaluation Procedures*. This includes testing of the IMA's installation and configuration process and compliance with integration requirements.

Additional objectives:

- Support security certification testing.
- Support interface testing in coordination with the Joint Interoperability Test Command (JITC).

For additional information on the JTPM, the JTPM Memorandum for Record (MFR) is available on the Virtual Test Folder (VTF) on Intelink (web1.rome.ic.gov/vtf.cgi).

1.4 TEST SUMMARY

The remaining sections of this report provide further explanation and additional details of Document Findings (DFs) and Software Findings (SFs). These findings document discrepancies and problems encountered during testing. This report is provided to the DMB, ERB, SIMO, DEXAs, and the AMHS PMO, and is also available on the VTF on Intelink.

Objective	Summary
INSTALLATION	Installation and integration testing of AMHS 2.3.6 proceeded smoothly. The server installation required approximately two hours, while the client installation was completed in minutes. DFs and SFs were written to enhance the installation process.
INTEGRATION	AMHS 2.3.6 met 104 of 117 applicable integration requirements.
SECURITY	The accreditation authority, 497IG/INDIC, provides this report under separate cover.
INTEROPERABILITY	JITC conducted interoperability testing and will provide a report under separate cover.

Objective	Summary
RECOMMENDATION	The JITF recommends that AMHS 2.3.6 proceed to Beta II testing.

Table 1-1 JITF Summary Test Results for AMHS 2.3.6

1.4.1 Test Statistics

The following charts provide a graphical depiction of test results. Figure 1-1 identifies the number of applicable integration requirements met and unmet. In order to receive a recommendation to proceed to Beta II testing, seventy percent (70%) of the applicable requirements must be met and there can be no open Impact Code 1 findings. Impact code levels are defined in the *JITF DODIIS Integration Requirements and Evaluation Procedures* and are provided in Section 7 of this report.

Figures 1-2 and 1-3 report the status of SFs and DFs respectively, by impact code, and identify the following information:

- New findings – SFs or DFs identified against AMHS 2.3.6
- Closed findings – SFs or DFs identified during previous program tests that are verified by the JITF as corrected or overcome by events.
- Total findings – The total number of SFs or DFs open against the program under test including findings identified during previous tests that have not been corrected. All findings identified during previous tests of AMHS have been corrected.

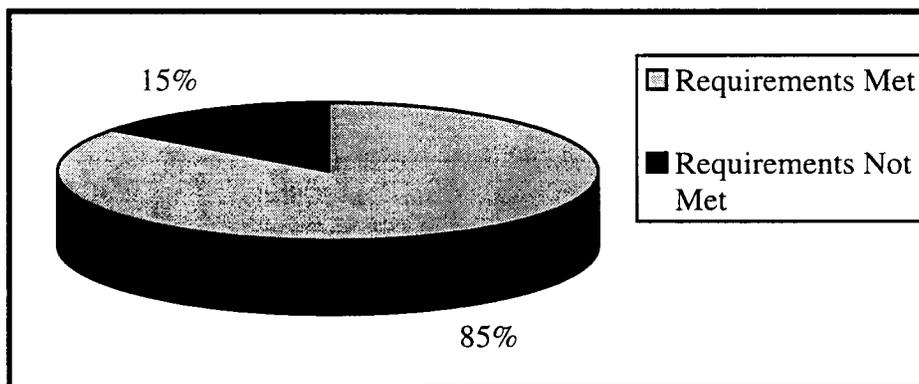


Figure 1-1 Integration Requirements Met and Unmet for AMHS 2.3.6