

Interoperability Test Plan of AMHS Service Between the United States and the Dominican Republic

[Note: This procedure is intended to be seen as a representative sample for testing between the U.S. and members of the CAR Region. It must be tailored by the FAA for each interoperability test prior to use.]

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1 Test Objectives

1.1 This test plan describes the test procedures and results associated with the following: -

AMHS Interoperability Tests	EUR AMHS Manual, Appendix E Version 4

1.2 The objectives of the test are as follows: -

- Test that both systems successfully connect, in accordance with the stated Interoperability Test
- To highlight any potential issues in the connected systems and identify any mitigation required

2 Test Environment

2.1 This Interoperability testing will be carried out on the environment detailed in Figure 1.
[Further written information can be provided here, if needed.]

Test Environment

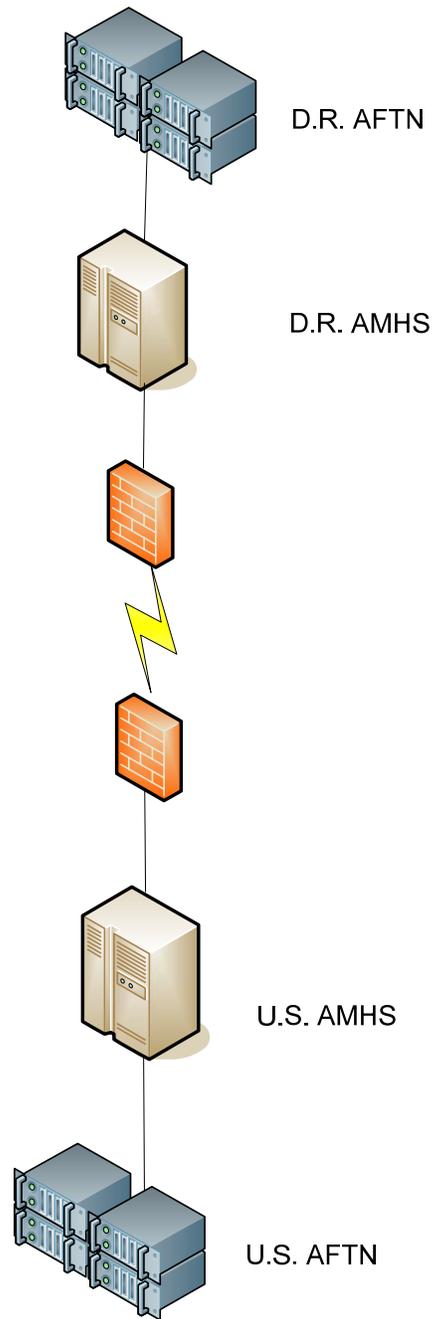


Figure 1

3 Test Schedule

3.1 The test will comprise the following steps.

Step 1.	Establish VPN connection between test systems.
Step 2.	Run the tests described in section 4.
Step 3.	Confer between states regarding test results.

The specific dates and times of test schedules will be agreed to via email exchange between the states involved.

4 Test Scripts

4.1 Submit, Transfer and Deliver an IPM (US-DR)

Test Script Title: Submit, transfer and deliver an IPM (US-DR); IT101 and IT801.		
Test Criteria: This test is successful if the US MTA transfers the submitted messages (IPM) correctly with different ATS-message-priorities to the DR MTA which delivers the ATS messages (IPM) to the DR AMHS. From the UA of US, send a sequence of five ATS messages (IPMs) to the DR AMHS.		
AMHS Technical Specification reference:		
Test Procedure	Expected Results	P/F
a) From the US AMHS (UA) send Message 1, priority KK to address MDAAAMHS (DR AMHS)	Check the correct reception of the message on the DR system. Check and confirm -the ATS-message-priority: PRI: non-urgent -the ATS-message-filing-time and -the ATS-message-text	
b) From the US AMHS (UA) send Message 2, priority GG to address MDAAAMHS (DR AMHS)	Check the correct reception of the message on the DR system. Check and confirm -the ATS-message-priority: PRI: non-urgent -the ATS-message-filing-time and -the ATS-message-text	
c) From the US AMHS (UA) send Message 3, priority FF to address MDAAAMHS (DR AMHS)	Check the correct reception of the message on the DR system. Check and confirm -the ATS-message-priority: PRI:normal -the ATS-message-filing-time and -the ATS-message-text	
d) From the US AMHS (UA) send Message 4, priority DD to address MDAAAMHS (DR AMHS)	Check the correct reception of the message on the DR system. Check and confirm -the ATS-message-priority: PRI:normal -the ATS-message-filing-time and -the ATS-message-text	
e) From the US AMHS (UA) send Message 5, priority SS to address MDAAAMHS	Check the correct reception of the message on the DR system.	

(DR AMHS)	Check and confirm -the ATS-message-priority: PRI:urgent -the ATS-message-filing-time and -the ATS-message-text Check Receipt Notification sent back to US AMHS		
Test Result:	PASS	FAIL	INCONCLUSIVE

4.2 Submit, Transfer and Deliver an IPM (DR-US)

Test Script Title: Submit, transfer and deliver an IPM (DR-US); IT101 and IT801.		
Test Criteria: This test is successful if the DR MTA transfers the submitted messages (IPM) correctly with different ATS-message-priorities to the US MTA which delivers the ATS messages (IPM) to the US AMHS. From the UA of DR, send a sequence of five ATS messages (IPMs) to the US AMHS.		
AMHS Technical Specification reference:		
Test Procedure	Expected Results	P/F
a) From the DR AMHS (UA) send Message 1, priority KK to address KATLATNA (US AMHS)	<p>Check the correct reception of the message on the US system.</p> <p>Check and confirm</p> <ul style="list-style-type: none"> -the ATS-message-priority: PRI: non-urgent -the ATS-message-filing-time and -the ATS-message-text 	
b) From the DR AMHS (UA) send Message 2, priority GG to address KATLATNA (US AMHS)	<p>Check the correct reception of the message on the US system.</p> <p>Check and confirm</p> <ul style="list-style-type: none"> -the ATS-message-priority: PRI: non-urgent -the ATS-message-filing-time and -the ATS-message-text 	
c) From the DR AMHS (UA) send Message 3, priority FF to address KATLATNA (US AMHS)	<p>Check the correct reception of the message on the US system.</p> <p>Check and confirm</p> <ul style="list-style-type: none"> -the ATS-message-priority: PRI:normal -the ATS-message-filing-time and -the ATS-message-text 	
d) From the DR AMHS (UA) send Message 4, priority DD to address KATLATNA (US AMHS)	<p>Check the correct reception of the message on the US system.</p> <p>Check and confirm</p> <ul style="list-style-type: none"> -the ATS-message-priority: PRI:normal -the ATS-message-filing-time and -the ATS-message-text 	
e) From the DR AMHS (UA) send Message 5, priority SS to address KATLATNA (US AMHS)	<p>Check the correct reception of the message on the US system.</p> <p>Check and confirm</p> <ul style="list-style-type: none"> -the ATS-message-priority: PRI:urgent -the ATS-message-filing-time and 	

		-the ATS-message-text Check Receipt Notification sent back to DR AMHS	
Test Result:	PASS	FAIL	INCONCLUSIVE

4.3 Convert an AFTN Message to AMHS Format (US to DR)

Test Script Title: Convert an AFTN message to AMHS format (US to DR); IT202.		
Test Criteria: Conversion of messages with different AFTN priorities, sent from the AFTN terminal of US, converted to AMHS and received at DR.		
AMHS Technical Specification reference:		
Test Procedure	Expected Results	P/F
a) From the US AFTN terminal, create and send an AFTN Message with priority KK to address MDAAAMHS (DR UA)	<p>Check the correct reception of the message on the DR AMHS system.</p> <p>Check and confirm</p> <ul style="list-style-type: none"> -the ATS-message-priority: PRI: non-urgent -the ATS-message-filing-time and -the ATS-message-text 	
b) From the US AFTN terminal, create and send an AFTN Message with priority GG to address MDAAAMHS (DR UA)	<p>Check the correct reception of the message on the DR AMHS system.</p> <p>Check and confirm</p> <ul style="list-style-type: none"> -the ATS-message-priority: PRI: non-urgent -the ATS-message-filing-time and -the ATS-message-text 	
c) From the US AFTN terminal, create and send an AFTN Message with priority FF to address MDAAAMHS (DR UA)	<p>Check the correct reception of the message on the DR AMHS system.</p> <p>Check and confirm</p> <ul style="list-style-type: none"> -the ATS-message-priority: PRI: normal -the ATS-message-filing-time and -the ATS-message-text 	
d) From the US AFTN terminal, create and send an AFTN Message with priority DD to address MDAAAMHS (DR UA)	<p>Check the correct reception of the message on the DR AMHS system.</p> <p>Check and confirm</p> <ul style="list-style-type: none"> -the ATS-message-priority: PRI: normal -the ATS-message-filing-time and -the ATS-message-text 	
e) From the US AFTN terminal, create and send an AFTN Message with priority SS to address MDAAAMHS (DR UA)	<p>Check the correct reception of the message on the DR AMHS system.</p> <p>Check and confirm</p> <ul style="list-style-type: none"> -the ATS-message-priority: PRI: urgent -the ATS-message-filing-time and 	

	-the ATS-message-text Check Receipt Notification sent back to FAA AMHS and AFTN ACK message received at FAA AFTN Originator.		
Test Result:	PASS	FAIL	INCONCLUSIVE

4.4 Convert an AFTN Message to AMHS Format (DR to US)

Test Script Title: Convert an AFTN message to AMHS format (DR to US); IT201.			
Test Criteria: Conversion of messages with different AFTN priorities, sent from the AFTN terminal of DR, converted to AMHS and received at the US.			
AMHS Technical Specification reference:			
Test Procedure	Expected Results		P/F
a) From the DR AFTN terminal, create and send an AFTN Message with priority KK to address KATLATNA (FAA UA)	Check the correct reception of the message on the US system. Check and confirm -the ATS-message-priority: PRI: non-urgent -the ATS-message-filing-time and -the ATS-message-text		
b) From the DR AFTN terminal, create and send an AFTN Message with priority GG to address KATLATNA (FAA UA)	Check the correct reception of the message on the US system. Check and confirm -the ATS-message-priority: PRI: non-urgent -the ATS-message-filing-time and -the ATS-message-text		
c) From the DR AFTN terminal, create and send an AFTN Message with priority FF to address KATLATNA (FAA UA)	Check the correct reception of the message on the US system. Check and confirm -the ATS-message-priority: PRI:normal -the ATS-message-filing-time and -the ATS-message-text		
d) From the DR AFTN terminal, create and send an AFTN Message with priority DD to address KATLATNA (FAA UA)	Check the correct reception of the message on the US system. Check and confirm -the ATS-message-priority: PRI:normal -the ATS-message-filing-time and -the ATS-message-text		
e) From the DR AFTN terminal, create and send an AFTN Message with priority SS to address KATLATNA (FAA UA)	Check the correct reception of the message on the US system. Check and confirm -the ATS-message-priority: PRI:urgent -the ATS-message-filing-time and -the ATS-message-text Check Receipt Notification sent back to DR AMHS and AFTN ACK message received at DR AFTN Originator.		
Test Result:	PASS	FAIL	INCONCLUSIVE

4.5 Convert an IPM to AFTN Format (US-DR)

Test Script Title: Convert an IPM to AFTN format (US-DR); IT301.		
Test Criteria: This test is successful if the receiving (DR) AMHS converts IPMs correctly into AFTN format. Tested functionality is the conversion of messages with different ATS-message-priorities; for example, a KK priority message, will be submitted from the UA of US, converted to AFTN by the DR AMHS and received at the AFTN terminal of DR.		
AMHS Technical Specification reference:		
Test Procedure	Expected Results	P/F
a) From the US AMHS (UA) send Message 1, priority KK to address MDAAAFTN (DR AFTN)	<p>Check the correct reception of the message on the DR system.</p> <p>Check and confirm</p> <ul style="list-style-type: none"> -the ATS-message-priority: PRI: KK -the ATS-message-filing-time and -the ATS-message-text 	
b) From the US AMHS (UA) send Message 2, priority GG to address MDAAAFTN (DR AFTN)	<p>Check the correct reception of the message on the DR system.</p> <p>Check and confirm</p> <ul style="list-style-type: none"> -the ATS-message-priority: PRI: GG -the ATS-message-filing-time and -the ATS-message-text 	
c) From the US AMHS (UA) send Message 3, priority FF to address MDAAAFTN (DR AFTN)	<p>Check the correct reception of the message on the DR system.</p> <p>Check and confirm</p> <ul style="list-style-type: none"> -the ATS-message-priority: PRI: FF -the ATS-message-filing-time and -the ATS-message-text 	
d) From the US AMHS (UA) send Message 4, priority DD to address MDAAAFTN (DR AFTN)	<p>Check the correct reception of the message on the DR system.</p> <p>Check and confirm</p> <ul style="list-style-type: none"> -the ATS-message-priority: PRI: DD -the ATS-message-filing-time and -the ATS-message-text 	
e) From the US AMHS (UA) send Message 5, priority SS to address MDAAAFTN (DR AFTN)	<p>Check the correct reception of the message on the DR system.</p> <p>Check and confirm</p> <ul style="list-style-type: none"> -the ATS-message-priority: PRI: SS -the ATS-message-filing-time and 	

		-the ATS-message-text Check Receipt Notification sent back to US AMHS	
Test Result:	PASS	FAIL	INCONCLUSIVE

4.6 Convert an IPM to AFTN Format (DR-US)

Test Script Title: Convert an IPM to AFTN format (DR-US); IT301.		
Test Criteria: This test is successful if the receiving (US) AMHS converts IPMs correctly into AFTN format. Tested functionality is the conversion of messages with different ATS-message-priorities; for example, a KK priority message, will be submitted from the UA of DR, converted to AFTN by the US AMHS and received at the AFTN terminal of US.		
AMHS Technical Specification reference:		
Test Procedure	Expected Results	P/F
a) From the DR AMHS (UA) send Message 1, priority KK to address KATLEDIT (US AFTN)	<p>Check the correct reception of the message on the US system.</p> <p>Check and confirm</p> <ul style="list-style-type: none"> -the ATS-message-priority: PRI: KK -the ATS-message-filing-time and -the ATS-message-text 	
b) From the DR AMHS (UA) send Message 2, priority GG to address KATLEDIT (US AFTN)	<p>Check the correct reception of the message on the US system.</p> <p>Check and confirm</p> <ul style="list-style-type: none"> -the ATS-message-priority: PRI: GG -the ATS-message-filing-time and -the ATS-message-text 	
c) From the DR AMHS (UA) send Message 3, priority FF to address KATLEDIT (US AFTN)	<p>Check the correct reception of the message on the DR system.</p> <p>Check and confirm</p> <ul style="list-style-type: none"> -the ATS-message-priority: PRI: FF -the ATS-message-filing-time and -the ATS-message-text 	
d) From the DR AMHS (UA) send Message 4, priority DD to address KATLEDIT (US AFTN)	<p>Check the correct reception of the message on the DR system.</p> <p>Check and confirm</p> <ul style="list-style-type: none"> -the ATS-message-priority: PRI: DD -the ATS-message-filing-time and -the ATS-message-text 	
e) From the DR AMHS (UA) send Message 5, priority SS to address KATLEDIT (US AFTN)	<p>Check the correct reception of the message on the DR system.</p> <p>Check and confirm</p> <ul style="list-style-type: none"> -the ATS-message-priority: PRI: SS 	

	-the ATS-message-filing-time and -the ATS-message-text Check Receipt Notification sent back to DR AMHS		
Test Result:	PASS	FAIL	INCONCLUSIVE

4.7 Convert an AFTN Message to AMHS and Back to AFTN Format (DR to US)

Test Script Title: Convert an AFTN message to AMHS and back to AFTN format (DR to US); IT401.		
Test Criteria: This test is successful if DR AMHS converts AFTN user messages correctly to AMHS messages (IPM) and the IPMs are converted back to AFTN in the US. Conversion of messages with different AFTN priorities will be sent from the AFTN terminal of DR to the AFTN terminal of US via the AMHS connection.		
AMHS Technical Specification reference:		
Test Procedure	Expected Results	P/F
a) From the DR AFTN terminal, create and send an AFTN Message with priority KK to address KATLEDIT (FAA AFTN)	Check the correct reception of the message on the US AFTN system. Check and confirm -the ATS-message-priority: PRI: KK -the ATS-message-filing-time and -the ATS-message-text	
b) From the DR AFTN terminal, create and send an AFTN Message with priority GG to address KATLEDIT (FAA AFTN)	Check the correct reception of the message on the US AFTN system. Check and confirm -the ATS-message-priority: PRI: GG -the ATS-message-filing-time and -the ATS-message-text	
c) From the DR AFTN terminal, create and send an AFTN Message with priority FF to address KATLEDIT (FAA AFTN)	Check the correct reception of the message on the US AFTN system. Check and confirm -the ATS-message-priority: PRI: FF -the ATS-message-filing-time and -the ATS-message-text	
d) From the DR AFTN terminal, create and send an AFTN Message with priority DD to address KATLEDIT (FAA AFTN)	Check the correct reception of the message on the US AFTN system. Check and confirm -the ATS-message-priority: PRI: DD -the ATS-message-filing-time and -the ATS-message-text	
e) From the DR AFTN terminal, create and send an AFTN Message with priority SS to address	Check the correct reception of the message on the US AFTN system. Check and confirm -the ATS-message-priority: PRI: SS	

<p>KATLEDIT (FAA AFTN)</p> <p>From KATLEDIT, send an AFTN ACK message to the originator of the SS message.</p>	<p>-the ATS-message-filing-time and</p> <p>-the ATS-message-text</p> <p>Check Receipt Notification sent back to DR AMHS and AFTN ACK message received at DR AFTN Originator</p>		
Test Result:	PASS	FAIL	INCONCLUSIVE

4.8 Convert an AFTN Message to AMHS and Back to AFTN Format (US to DR)

Test Script Title: Convert an AFTN message to AMHS and back to AFTN format (US to DR); IT402.		
Test Criteria: This test is successful if US AMHS converts AFTN user messages correctly to AMHS messages (IPM) and the IPMs are converted back to AFTN in the DR. Conversion of messages with different AFTN priorities will be sent from the AFTN terminal of US to the AFTN terminal of DR via the AMHS connection.		
AMHS Technical Specification reference:		
Test Procedure	Expected Results	P/F
a) From the US AFTN terminal, create and send an AFTN Message with priority KK to address MDAAAFTN (DR AFTN)	Check the correct reception of the message on the DR AFTN system. Check and confirm -the ATS-message-priority: PRI: KK -the ATS-message-filing-time and -the ATS-message-text	
b) From the US AFTN terminal, create and send an AFTN Message with priority GG to address MDAAAFTN (DR AFTN)	Check the correct reception of the message on the DR AFTN system. Check and confirm -the ATS-message-priority: PRI: GG -the ATS-message-filing-time and -the ATS-message-text	
c) From the US AFTN terminal, create and send an AFTN Message with priority FF to address MDAAAFTN (DR AFTN)	Check the correct reception of the message on the DR AFTN system. Check and confirm -the ATS-message-priority: PRI: FF -the ATS-message-filing-time and -the ATS-message-text	
d) From the US AFTN terminal, create and send an AFTN Message with priority DD to address MDAAAFTN (DR AFTN)	Check the correct reception of the message on the DR AFTN system. Check and confirm -the ATS-message-priority: PRI: DD -the ATS-message-filing-time and -the ATS-message-text	
e) From the US AFTN terminal, create and send an AFTN Message with priority SS to address MDAAAFTN (DR AFTN)	Check the correct reception of the message on the DR AFTN system. Check and confirm -the ATS-message-priority: PRI: SS	

	-the ATS-message-filing-time and -the ATS-message-text Check Receipt Notification sent back to FAA AMHS and AFTN ACK message received at FAA AFTN Originator		
Test Result:	PASS	FAIL	INCONCLUSIVE

4.9 Distribute an IPM to AFTN and AMHS Users (DR to US)

Test Script Title: Distribute an IPM to AFTN and AMHS users (DR to US); IT501.			
Test Criteria: This test is successful if the DR AMHS distributes an IPM addressing both an AFTN and an AMHS user correctly. A message will be sent from the DR AFTN terminal to US with Primary Recipients addressing both AFTN and AMHS.			
AMHS Technical Specification reference:			
Test Procedure	Expected Results		P/F
a) From the DR AFTN terminal, create and send an AFTN message with priority FF to addresses KATLEDIT (FAA AFTN) and KATLATNA (FAA AMHS)	Check the correct reception of the messages on the FAA system. Check and confirm -the ATS-message-priority: PRI: FF (on AFTN) -the ATS-message-priority: PRI: normal (on AMHS) -the ATS-message-filing-time and -the ATS-message-text		
Test Result:	PASS	FAIL	INCONCLUSIVE

4.10 Distribute an IPM to AFTN and AMHS Users (US to DR)

Test Script Title: Distribute an IPM to AFTN and AMHS users (US to DR); IT501.			
Test Criteria: This test is successful if the US AMHS distributes an IPM addressing both an AFTN and an AMHS user correctly. A message will be sent from the US AFTN terminal to DR with Primary Recipients addressing both AFTN and AMHS.			
AMHS Technical Specification reference:			
Test Procedure	Expected Results		P/F
a) From the US AFTN terminal, create and send an AFTN message with priority FF to addresses MDAAAFTN (DR AFTN) and MDAAAMHS (DR AMHS)	Check the correct reception of the messages on the DR system. Check and confirm. -the ATS-message-priority: PRI: FF (on AFTN) -the ATS-message-priority: PRI: normal (on AMHS) -the ATS-message-filing-time and -the ATS-message-text		
Test Result:	PASS	FAIL	INCONCLUSIVE

4.11 Distribute an IPM to AMHS and AFTN Users (DR to US) including Primary, Copy and Blind Copy Recipients

Test Script Title: Distribute an IPM to AMHS and AFTN users (DR to US) including Primary, Copy and Blind Copy recipients; IT501.		
Test Criteria: This test is successful if the US AMHS distributes an IPM addressing both an AMHS and an AFTN user correctly. A message will be sent from the DR UA to the US with Primary Recipients, Copy Recipients and Blind Copy Recipients, addressing both AFTN and AMHS.		
AMHS Technical Specification reference:		
Test Procedure	Expected Results	P/F
<p>a) From the create AMHS message Box of the DR UA, send a Message, priority FF to:</p> <p>b) addresses KATLEDIT and KATLATNA as Primary Recipients</p> <p>c) addresses KATLYTBB and KATLATNB as Copy Recipient</p> <p>d) addresses KATLYTCC and KATLATNC as Blind Copy Recipients</p>	<p>Check the correct reception of the messages on the US system.</p> <p>Check and confirm</p> <p>-the ATS-message-priority: PRI: FF (on AFTN)</p> <p>-the ATS-message-priority: PRI: normal (on AMHS)</p> <p>-the ATS-message-filing-time and</p> <p>-the ATS-message-text</p> <p>-Check that Primary and Copy Recipients cannot see Blind Copy Recipients</p>	
Test Result:	PASS	FAIL
		INCONCLUSIVE

4.12 Expand a DL Addressing Both AMHS and AFTN Users (US-DR).

Test Script Title: Expand a Distribution List addressing both AMHS and AFTN users (US-DR); IT502 TC01 TC04.			
<p>Test Criteria: This test is successful if the receiving (DR) AMHS distributes an IPM, addressing AMHS and AFTN users in a distribution list correctly. From US AFTN send a message to DR AMHS. The recipient contained in the MTE addresses a distribution list MDDILIST. The distribution list shall have the addresses of one AMHS user and two AFTN users on DR AMHS as members. The message shall have the dl-expansion-prohibited attribute set to "false". Check the messages received in each AFTN user address verifying that each one contains its corresponding address.</p> <ul style="list-style-type: none"> <i>This test should be deleted if the distribution list is not used in DR.</i> 			
AMHS Technical Specification reference:			
Test Procedure	Expected Results		P/F
<p>a) Create a message on US AFTN. Send the message, priority normal, to DL address MDDILIST.</p> <p>DL MDDILIST contains the following addresses:</p> <p><i>(fill in addresses here)</i></p>	<p>Check the correct reception of the messages on DR AMHS system.</p> <p>Check and confirm</p> <ul style="list-style-type: none"> -the ATS-message-priority: PRI: FF (on AFTN) -the ATS-message-priority: PRI: normal (on AMHS) -the ATS-message-filing-time and -the ATS-message-text. 		
Test Result:	PASS	FAIL	INCONCLUSIVE

4.13 Send an IPM to an AMHS User With an ATS-message-text Containing More Than 1800 Characters (DR to US)

Test Script Title: Send an IPM to an AMHS user with an ATS-message-text containing more than 1800 characters (DR to US).

Test Criteria: From DR AMHS send an ATS message (IPM) containing ATS-message-text of 2900 characters to a US AMHS recipient. FAA does not have AFTN user with more than 3700 total message limit.

In DR, set message limit to 3000 for this test address.

AMHS Technical Specification reference:

Test Procedure	Expected Results	P/F
a) Create an AMHS message on DR AMHS with message text of length 2900 and send to address KATLATNA.	Check the correct reception of the messages on US system. Check and confirm -the ATS-message-priority: PRI: FF (on AFTN) -the ATS-message-priority: PRI: normal (on AMHS) -the ATS-message-filing-time and -the ATS-message-text	
Test Result:	PASS	FAIL
		INCONCLUSIVE

4.14 Reject an IPM Sent to a AFTN User if the ATS-message-text Contains More Than 1800 Characters (DR to US)

Test Script Title: Reject an IPM sent to an AFTN user if the ATS-message-text contains more than 1800 characters (DR to US).

Test Criteria: From DR AMHS send an ATS message (IPM) containing ATS-message-text of 2900 characters to a US AFTN recipient. Verify that US AMHS does not convert the IPM into AFTN format, but returns an NDR. Check the NDR content received at DR AMHS. Verify that the NDR contains the following elements:

- “unable-to-transfer” for the non-delivery-reason-code;
- “content-too-long” for the non-delivery-diagnostic-code; and
- “unable to convert to AFTN due to message text length” for the supplementary-information.

In DR, set message limit to 3000 for this test address.

AMHS Technical Specification reference:

Test Procedure	Expected Results	P/F	
a) Create an AMHS message on DR AMHS with message text of length 2900 and send to address KATLEDIT.	Verify that the US AMHS does not convert the IPM into AFTN format, but returns an NDR. Check the NDR content on the outgoing system for the following elements: <ul style="list-style-type: none"> • “unable-to-transfer” for the non-delivery-reason-code; • “content-too-long” for the non-delivery-diagnostic-code; • “unable to convert to AFTN due to message text length” for the supplementary-information. 		
b) On DR AMHS, confirm that NDR has been received.	Check the NDR content on the incoming for the following elements:- <ul style="list-style-type: none"> • “unable-to-transfer” for the non-delivery-reason-code; • “content-too-long” for the non-delivery-diagnostic-code; • “unable to convert to AFTN due to message text length” for the supplementary-information. 		
Test Result:	PASS	FAIL	INCONCLUSIVE

4.15 Split an Incoming IPM Addressing More Than 21 AFTN Users (US to DR)

Test Script Title: Split an incoming IPM addressing more than 21 AFTN users (US to DR); IT504.			
Test Criteria: This test is successful if the DR AMHS receives an ATS message (IPM) addressing more than 21 AFTN users and splits the received IPM into several messages each addressing 21 or less AFTN users.			
AMHS Technical Specification reference: 4.5.2.1.8			
Test Procedure	Expected Results		P/F
a) From the US send an ATS message (IPM) to the DR AMHS. The message shall address 50 AFTN users as primary recipients (use MDAAFTN to MDBXAFTN)	Verify that the DR AMHS converts the IPM into AFTN format and sends three AFTN messages to its AFTN component. Check the addressee indicators contained in the AFTN messages. Verify that no AFTN recipient is lost and the total number of AFTN addressee indicators contained in all three messages is 50. For example: <ul style="list-style-type: none"> • the first AFTN message contains addressee indicators for the first 21 recipients, and • the second AFTN message contains addressee indicators for the next 21 recipients, and • the third AFTN message contains addressee indicators for the remaining 8 recipients. 		
Test Result:	PASS	FAIL	INCONCLUSIVE

4.16 Split an Incoming IPM Addressing More Than 21 AFTN Users (DR to US)

Test Script Title: Split an incoming IPM addressing more than 21 AFTN users (DR to US); IT504.			
Test Criteria: This test is successful if the US AMHS receives an ATS message (IPM) addressing more than 21 AFTN users and splits the received IPM into several messages each addressing 21 or less AFTN users.			
AMHS Technical Specification reference: 4.5.2.1.8			
Test Procedure	Expected Results		P/F
a) From the DR send an ATS message (IPM) to the US AMHS. The message shall address 50 AFTN users as primary recipients (use KATLYTAA to KATLYTBX)	<p>Verify that the US AMHS converts the IPM into AFTN format and sends three AFTN messages to its AFTN component. Check the addressee indicators contained in the AFTN messages. Verify that no AFTN recipient is lost and the total number of AFTN addressee indicators contained in all three messages is 50. For example:</p> <ul style="list-style-type: none"> • the first AFTN message contains addressee indicators for the first 21 recipients, and • the second AFTN message contains addressee indicators for the next 21 recipients, and • the third AFTN message contains addressee indicators for the remaining 8 recipients. 		
Test Result:	PASS	FAIL	INCONCLUSIVE

4.17 Probe Conveyance Test (US to DR)

Test Script Title: Probe Conveyance Test (US to DR); IT505 TC01.			
Test Criteria: This test is successful if the DR system generates a report (Delivery Report or Non-Delivery Report) as indicated, upon receipt of probes.			
AMHS Technical Specification reference: 4.5.5 (reception of AMHS probe), 4.5.6.2.27			
Test Procedure	Expected Results		P/F
a) From the US, send AMHS probes to the DR addressing two AFTN recipients (MDAAAFTN and MDBBAFTN) and one AMHS recipient (MDAAAMHS)	<p>Verify that the DR AMHS returns one Delivery Report with 2 AFTN recipients from the MTCU and one Delivery Report with one recipient from the MTA.</p> <p>Verify in all cases that the Delivery Reports regarding the AFTN addresses which could be translated contain the supplementary information "This report only indicates successful (potential) conversion to AFTN, not delivery to a recipient".</p>		
b) From the US, send AMHS probes to the DR addressing two AFTN recipients, one of which can be mapped (MDAAAFTN and one of which cannot be mapped onto a valid AFTN address (MDAAUNKN)	<p>Verify that the DR AMHS returns one Delivery Report and one Non-Delivery Report in response to the probes received.</p> <p>Verify that the Delivery Report regarding the AFTN address which could be translated contains the supplementary information "This report only indicates successful (potential) conversion to AFTN, not delivery to a recipient".</p>		
Test Result:	PASS	FAIL	INCONCLUSIVE

4.18 Probe Conveyance Test (DR to US)

Test Script Title: Probe Conveyance Test (DR to US); IT505 and TC01.				
Test Criteria: This test is successful if the US system generates a report (Delivery Report or Non-Delivery Report) as indicated, upon receipt of probes.				
AMHS Technical Specification reference: 4.5.5 (reception of AMHS probe), 4.5.6.2.27				
Test Procedure		Expected Results		P/F
a) From the DR, send AMHS probes to the US addressing two AFTN recipients (KATLEDIT and KATLXXXX) and one AMHS recipient (KATLATNA)		<p>Verify that the US AMHS returns one Delivery Report with 2 AFTN recipients from the MTCU and one Delivery Report with one recipient from the MTA.</p> <p>Verify in all cases that the Delivery Reports regarding the AFTN addresses which could be translated contain the supplementary information "This report only indicates successful (potential) conversion to AFTN, not delivery to a recipient".</p>		
b) From the DR, send AMHS probes to the US addressing two AFTN recipients, one of which can be mapped (KATLEDIT and one of which cannot be mapped onto a valid AFTN address ("PRMD=MA,O=AFTN,OU=MAXXXXXX" – unknown nationality)		<p>Verify that the US AMHS returns one Delivery Report and one Non-Delivery Report in response to the probes received.</p> <p>Verify that the Delivery Report regarding the AFTN address which could be translated contains the supplementary information "This report only indicates successful (potential) conversion to AFTN, not delivery to a recipient".</p>		
Test Result:	PASS	FAIL	INCONCLUSIVE	

4.19 Stress Load on AMHS Link

Test Script Title: Stress load on AMHS link; IT601, IT903 and IT904.		
Test Criteria: This test is successful if both AMHS systems perform AMHS traffic interchange correctly for a number of messages queued in advance. The load will be built up to 1500 messages with length between 1000 and 2000 characters in the payload.		
AMHS Technical Specification reference:		
Test Procedure	Expected Results	P/F
a) On US AMHS, close connection to DR AMHS	Connection is closed, may still indicate connected.	
b) On DR AMHS, create an AMHS message and send it to US AFTN address KATLEDIT with priority normal	A bind error alarm will be generated on DR AMHS and data will be queued on the outgoing channel.	
c) Create another 9 messages and send them to KATLEDIT	All ten messages will be queued on DR AMHS.	
d) On US AMHS, create 10 messages and send to DR AFTN address MDAAFTN with priority normal	All ten messages will be queued on US AMHS.	
e) Open US connection to DR AMHS	<p>Check the correct reception of the messages on US AFTN system.</p> <p>Check and confirm</p> <ul style="list-style-type: none"> -the ATS-message-priority: PRI: FF (on AFTN) -the ATS-message-priority: PRI: normal (on AMHS) -the ATS-message-filing-time and -the ATS-message-text <p>Check the correct reception of the messages on DR AFTN system.</p> <p>Check and confirm</p> <ul style="list-style-type: none"> -the ATS-message-priority: PRI: FF (on AFTN) -the ATS-message-priority: PRI: normal (on AMHS) -the ATS-message-filing-time and -the ATS-message-text 	
f) On US AMHS close connection to DR AMHS	Connection is closed, may still indicate connected.	
g) On DR AMHS start message generator to build a queue of 1500 messages of normal priority destined for KATLEDIT. Note that all messages generated should	All 1500 messages will be queued on DR AMHS.	

have a sequence number embedded in the message. Note first number of sequence.		
h) On US AMHS start message generator to build a queue of 1500 messages of normal priority destined for MDAAAFTN. Note that all messages generated should have a sequence number embedded in the message. Note first number of sequence.	All 1500 messages will be queued on US AMHS.	
i) Open connection to DR AMHS	In DR, queue starts to go down after connection established. Verify messages are received at US.	
	In US, queue starts to go down after connection established. Verify messages are received at DR.	
j) When Queue drops to around 750 messages close connection in US	Message flow stops. Note the identifier of last message sent in either direction.	
k) Enable the connection and allow message flow again	At both sites, queue starts to go down after connection established. Verify messages are being received at US and DR. Verify message identifiers and check for message repeats after the re-establishment of the connection.	
l) Confirm that the correct number of messages have been received at each system and that, with relation to the circuit bandwidth confirm that delay was within expected tolerances	Confirm 1510 messages received at US and 1510 messages received at DR.	
Test Result:	PASS	FAIL
		INCONCLUSIVE

4.20 Submission / Transfer / Delivery Between the Partner MTAs of Recipients Using a Combination of Addressing Schemes (US Sending)

Test Script Title: Submission / Transfer / Delivery between the partner MTAs of recipients using a combination of addressing schemes (US sending); IT701.			
Test Criteria: This test is successful if the messages from the US are received by DR AMHS and the Test System of ??*.			
<i>* This will be a test system mimicking the adjacent partner for this testing (if there is one).</i>			
AMHS Technical Specification reference:			
Test Procedure	Expected Results		P/F
a) From the US send a message, priority FF (normal) to address MDAAAMHS and to address ?????????	Check the correct reception of the message on the DR system and on the adjacent test system (?????????). -the ATS-message-priority: PRI: normal -the ATS-message-filing-time and -the ATS-message-text		
Test Result:	PASS	FAIL	INCONCLUSIVE

4.21 Submission / Transfer / Delivery Between the Partner MTAs of Recipients using a Combination of Addressing Schemes (DR Sending)

Test Script Title: Submission / Transfer / Delivery between the partner MTAs of recipients using a combination of addressing schemes (DR sending); IT702.			
Test Criteria: This test is successful if the messages from DR are received by the US and the Test System SB*.			
<i>* This will be a test system mimicking the adjacent partner for this testing.</i>			
AMHS Technical Specification reference:			
Test Procedure	Expected Results		P/F
a) From DR send a message, priority FF (normal) to address KATLEDIT (US AFTN) and to addresses LEMDZTZX (CAAS: Spain) and TJSJYFYX (XF: Puerto Rico).	Check the correct reception of the message on the US AFTN system and on the adjacent test systems (Chile and Venezuela). -the ATS-message-priority: PRI: normal -the ATS-message-filing-time and -the ATS-message-text		
Test Result:	PASS	FAIL	INCONCLUSIVE

4.22 Relay of Message Through US MTA Using XF Originator and Destination Addressing Scheme IT703

Test Script Title: Relay of message through US MTA using XF Originator and Destination Addressing Scheme; IT703.		
Test Criteria: This test is successful if the messages specified are correctly relayed by the US MTA.		
<i>* RK system will be a test system mimicking the adjacent partner for this testing.</i>		
AMHS Technical Specification reference:		
Test Procedure	Expected Results	P/F
a) From RKSIIYPYX (Korea) send a message, priority FF (normal) to address MDAAAMHS (DR AMHS).	Check the correct reception of the message on the DR AMHS. -the ATS-message-priority: PRI: normal -the ATS-message-filing-time and -the ATS-message-text Check that MDAAAMHS was correctly relayed through the US MTA.	
b) From DR AMHS send a message, priority FF (normal) to address VABBAICO (India).	Check the correct reception of the message on the US system. -the ATS-message-priority: PRI: normal -the ATS-message-filing-time and -the ATS-message-text Check that VABBAICO was correctly relayed through the US MTA.	
Test Result:	PASS	FAIL
		INCONCLUSIVE

4.23 Relay of Message Through US MTA Using CAAS Originator and XF Destination Addressing Scheme; IT704.

Test Script Title: Relay of message through US MTA using CAAS Originator and XF Destination Addressing Scheme; IT704.			
Test Criteria: This test is successful if the messages specified are correctly relayed by the US MTA.			
<i>* SB system will be a test system mimicking the adjacent partner for this testing.</i>			
AMHS Technical Specification reference:			
Test Procedure	Expected Results	P/F	
<p>a) From OERKKNEO (Saudi Arabia) send a message, priority FF (normal) to address MDAAAMHS (DR AMHS).</p> <p>Check the correct reception of the message on the DR AMHS system.</p>	<p>Check the correct reception of the message on the DR AMHS system.</p> <ul style="list-style-type: none"> -the ATS-message-priority: PRI: normal -the ATS-message-filing-time and -the ATS-message-text <p>Check that MDAAAMHS was correctly relayed through the US MTA.</p>		
<p>b) From DR AMHS send a message, priority FF (normal) to address CZZZZQZQ (Canada).</p>	<p>Check the correct reception of the message on the US system.</p> <ul style="list-style-type: none"> -the ATS-message-priority: PRI: normal -the ATS-message-filing-time and -the ATS-message-text <p>Check that CZZZZQZQ was correctly relayed through the US MTA.</p>		
Test Result:	PASS	FAIL	INCONCLUSIVE

4.24 Relay of Message Through DR AMHS to/from K Region Using XF Originator and Destination Addressing Scheme.

Test Script Title: Relay of message through DR AMHS to/from K Region using XF Originator and Destination Addressing Scheme; IT705.			
Test Criteria: This test is successful if the messages to/from ?????????* are correctly relayed by DR AMHS.			
<i>* This will be a test system mimicking the adjacent partner for this testing (if there is one).</i>			
AMHS Technical Specification reference:			
Test Procedure	Expected Results	P/F	
a) From ????????? (XF originator), send a message, priority FF (normal) to address KATLEDIT.	Check the correct reception of the message on the DR AMHS system. -the ATS-message-priority: PRI: normal -the ATS-message-filing-time and -the ATS-message-text Check that KATLEDIT was correctly relayed through the DR AMHS. Check that the message was received at KATLEDIT.	<input type="checkbox"/> P <input type="checkbox"/> F	
b) From KATLEDIT send a Message, priority FF (normal) to address ????????? (XF destination).	Check the correct reception of the message on the ?? system. -the ATS-message-priority: PRI: normal -the ATS-message-filing-time and -the ATS-message-text Check that ????????? was correctly relayed through the DR AMHS.	<input type="checkbox"/> P <input type="checkbox"/> F	
Test Result:	PASS	FAIL	INCONCLUSIVE

4.25 Relay of Message through DR AMHS to/from K Region Using CAAS Originator and XF Destination Addressing Scheme.

Test Script Title: Relay of message through DR AMHS to/from K Region using CAAS Originator and XF Destination Addressing Scheme; IT706.		
Test Criteria: This test is successful if the messages to/from ?????????* are correctly relayed by DR AMHS.		
<i>* This will be a test system mimicking the adjacent partner for this testing (if there is one).</i>		
AMHS Technical Specification reference:		
Test Procedure	Expected Results	P/F
<p>a) From ????????? (CAAS originator), send a Message, priority FF (normal) to address KATLEDIT.</p> <p>Check the correct reception of the message on US AFTN.</p>	<p>Check the correct reception of the message on US AFTN.</p> <p>-the ATS-message-priority: PRI: normal</p> <p>-the ATS-message-filing-time and</p> <p>-the ATS-message-text</p> <p>Check that KATLEDIT was correctly relayed through the DR AMHS.</p>	
<p>b) From DR AMHS, send a Message, priority FF (normal) to address ????????? (CAAS destination).</p>	<p>Check the correct reception of the message on the ?? system.</p> <p>-the ATS-message-priority: PRI: normal</p> <p>-the ATS-message-filing-time and</p> <p>-the ATS-message-text</p> <p>Check that ????????? was correctly relayed through the DR AMHS.</p>	
Test Result:	PASS	FAIL
		INCONCLUSIVE

4.26 Acknowledgement and Service Messaging Tests (US Sending)

Test Script Title: Acknowledgement and service messaging tests (US sending).		
Test Criteria: This test is successful if the correct DN or NDR is sent to the sending station.		
AMHS Technical Specification reference:		
Test Procedure	Expected Results	P/F
a) From US AFTN send a message, priority SS, to address MDAAAFTN (DR AFTN).	Check the correct reception of the message on the DR AMHS system. Check and confirm -the ATS-message-priority: PRI: urgent -the ATS-message-filing-time and -the ATS-message-text	
b) On DR AMHS, Acknowledge the SS message.	Check Receipt Notification sent back to US.	
c) From US AFTN send a message, priority FF (normal), to MDAAAFTN and MDUNKNWN. The MDUNKNWN address is an AFTN address unknown at DR AMHS but default routed to MTCU.	Trace Message received and forwarded to X400_MTCU. IPM converted to AFTN address, trace forward on message and check SVC ADS message generated. Trace forward and find SVC ADS converted to AMHS NDR. NDR sent back to US with Reason Code : UNABLE_TO_TRANSFER Diagnostic Code: UNRECOGNISED_OR_NAME. Message to MDAAAFTN delivered as expected.	
d) Check at US that NDR has been received.	NDR received at US with Reason Code : UNABLE_TO_TRANSFER Diagnostic Code: UNRECOGNISED_OR_NAME.	
Test Result:	PASS	FAIL
		INCONCLUSIVE

4.27 Acknowledgement and Service Messaging Tests (DR Sending)

Test Script 22: Acknowledgement and service messaging tests (DR sending).		
Test Criteria: This test is successful if the correct DN or NDR is sent to the sending station.		
AMHS Technical Specification reference:		
Test Procedure	Expected Results	P/F
a) From DR AMHS send a message, priority SS, to address KATLEDIT (US AFTN).	Check the correct reception of the message on the US AFTN system. Check and confirm -the ATS-message-priority: PRI: urgent -the ATS-message-filing-time and -the ATS-message-text	
b) On US AFTN Acknowledge the SS message.	Check Receipt Notification sent back to DR.	
c) From DR AMHS send a message, priority FF (normal), to KATLEDIT and KATLUNKN. The KATLUNKN address is an AFTN address unknown at US AMHS but default routed to MTCU.	Trace Message received and forwarded to X400_MTCU. IPM converted to AFTN address, trace forward on message and check SVC ADS message generated. Trace forward and find SVC ADS converted to AMHS NDR. NDR sent back to DR with Reason Code : UNABLE_TO_TRANSFER Diagnostic Code: UNRECOGNISED_OR_NAME. Message to KATLEDIT delivered as expected.	
d) Check on DR that NDR has been received.	NDR received at DR with Reason Code : UNABLE_TO_TRANSFER Diagnostic Code: UNRECOGNISED_OR_NAME.	
Test Result:	PASS	FAIL
		INCONCLUSIVE

4.28 Switch-Over Test on DR AMHS

Test Script Title: Switch-Over Test on DR AMHS			
Test Criteria: The test is successful if the call re-establishes on the standby DR AMHS with no message loss.			
<ul style="list-style-type: none"> <i>If feature is appropriate for DR system. If not, test script should be deleted.</i> 			
AMHS Technical Specification reference:			
Test Procedure	Expected Results		P/F
a) On DR AFTN start a message stream towards KATLEDIT at a rate of 20 messages per minute.	Messages flowing to KATLEDIT via AMHS connection. Confirm traffic received at US AFTN.		
b) On US AFTN start a similar message stream towards MDAAAFTN.	Messages flowing to MDAAAFTN via AMHS connection. Confirm traffic received at DR AFTN.		
c) On DR AMHS initiate a system switch-over.	Traffic will be interrupted for a brief period while the standby system establishes and then message traffic will be re-established. Check that there is no message loss or repetition on the AMHS link.		
d) Stop the message generation on both systems.			
Test Result:	PASS	FAIL	INCONCLUSIVE

4.29 Test of Bind Error Events Raised by Distant End Activity as Seen on DR AMHS

Test Script Title: Test of bind error events raised by distant end activity as seen on DR AMHS.		
Test Criteria: Confirm to operator at DR AMHS what bind error event descriptions are raised if the distant end (US) cannot accept X.400 message traffic.		
AMHS Technical Specification reference:		
Test Procedure	Expected Results	P/F
a) Ensure both systems are reporting the AMHS/X.400 connection is enabled and reachable. Sent a Probe in both directions to confirm this.	A potentially reachable report is received on both US and DR AMHS systems.	
b) Disconnect the US AMHS application from the network by shutting down the MTA listener service.*	Application is disconnected.	
c) Send an AMHS message from DR AMHS to KATLEDIT (US AFTN).	Bind error reported at DR stating....	
d) Reconnect application at US AMHS, message sent and received.	Bind confirmed and message sent. Confirm message received at US AFTN.	
e) Disconnect the US AMHS application from the network by disabling the input from the MTA channel to the DR.*	Application is disconnected.	
f) Send an AMHS message from the DR AMHS to KATLEDIT (US AFTN).	Bind error reported at DR stating....	
g) Reconnect application at US AMHS, message sent and received.	Bind confirmed and message set. Confirm message received at US AFTN.	
h) On DR AMHS set association limit to 5 (1 default for atl MTA).	Application is still connected.	
i) On DR AMHS start a message generator with 100 messages per minute addressed to KATLEDIT (US AFTN).	One association binds to US AMHS and sends messages. Bind error reported as DR AMHS tries to establish more than one connection.	

j) Stop message generator on DR AMHS and change association limit back to 1. Send a single test message to KATLEDIT.	Bind confirmed and message sent. Confirm message received at US AFTN.	
k) On US test platform change TSAP from atl to SLC and leave IP addresses and MTA passwords the same. +	Confirm with DR settings change.	
l) Send an AMHS message from DR AMHS to KATLEDIT (US AFTN).	Bind error reported at DR stating....	
m) Change TSAP back to atl.	Message received at US AFTN.	
n) Note password on US test system, then change MTA password on US test system to 'password'.	Change confirmed.	
o) Send an AMHS message from DR AMHS to KATLEDIT (US AFTN).	Bind error reported at DR stating....	
p) Change password back on US test system.	Message received at US AFTN.	
Test Result:	PASS	FAIL
		INCONCLUSIVE

* To replicate a loss of upper layers of connection but with network connectivity still in place.

+ To replicate a network switchover to the Salt Lake City Centre if Atlanta goes offline, assumption that TSAP's are different at each MTA but passwords are the same and that IP address presented to DR as network address is the same.

4.30 Test of Bind Error Events Raised by Distant End Activity as Seen on US AMHS

Test Script Title: Test of Bind Error Events raised by distant end activity as seen on US AMHS.		
Test Criteria: Confirm to operator at US AMHS what Bind Error event descriptions are raised if the distant end (DR) cannot accept X.400 message traffic.		
AMHS Technical Specification reference:		
Test Procedure	Expected Results	P/F
a) Ensure both systems are reporting the AMHS/X.400 connection is enabled and reachable. Sent a Probe in both directions to confirm this.	A potentially reachable report is received on both US and DR AMHS systems.	
b) Disconnect the AMHS application at DR AMHS from the network*	Application is disconnected.	
c) Send an AMHS message from US AMHS to MDAAAFTN and MDAAAMHS.	Bind error reported to US Control Position. Check MTA logs and sniffer at FAA.	
d) Reconnect application at DR AMHS, message sent and received.	Bind confirmed and message set. Confirm messages received at DR.	
e) On DR test platform change TSAP from P1 (0x5031) to P2 (0x5032) and leave IP addresses and MTA passwords the same.	Confirm DR settings change.	
f) Send an AMHS message from US AMHS to MDAAAFTN and MDAAAMHS.	Bind error reported to US Control Position. Check MTA logs and sniffer at FAA.	
g) Change TSAP back to P1 (0x5031).	Messages received at DR.	
h) Note password on DR test system then change MTA password on DR test system to 'password'.	Confirm DR password change.	
i) Send an AMHS message from US AMHS to MDAAAFTN and MDAAAMHS.	Bind error reported to US Control Position. Check MTA logs and sniffer at FAA.	
j) Change password back on	Messages received at DR.	

DR test system.			
Test Result:	PASS	FAIL	INCONCLUSIVE

*To replicate a loss of upper layers of connection but with network connectivity still in place.

4.31 Test of Validly Formatted Address With Incorrect O Value

Test Script Title: Test of validly formatted address with a valid but incorrect O value.			
Test Criteria: Confirmation of transmission/reception of AFTN messages with a validly formatted CAAS address with a valid, but incorrect 'O' value. (SEE APPENDIX A)			
AMHS Technical Specification reference:			
Test Procedure	Expected Results	Actual Results	Obs. Ref.
a) Change the O value in the DR CAAS addressing table for Germany from EDWW to EDDD.	Changes are accepted on DR AMHS.		
b) Send an AMHS message from MDAAAFTN to EDDMZTZ.	Message sent via US.		
c) Message routed onward to Germany at US AMHS.	Message routed and event logged.		
d) Change the O value in the US CAAS addressing table for.... (only applies if DR routes messages).	Changes are accepted on US AMHS.		
e) Send an AMHS message from KATLEDIT to ?????????.	Message sent via DR.		
f) Message routed onward to ????????? at DR AMHS.	Message routed and event logged.		
Test Result:	PASS	FAIL	INCONCLUSIVE

4.32 Test of PRMD Value Not Known to the Receiving AMHS

Test Script Title: Test of PRMD value that is not known to the receiving AMHS.			
Test Criteria: This test is designed to simulate the case where a state changes its PRMD value. An AFTN message will be sent with a validly formatted CAAS address, with a PRMD value that is not known to the receiving AMHS. If the change is not introduced in both sites, an error will occur.			
AMHS Technical Specification reference:			
Test Procedure	Expected Results	Actual Results	Obs. Ref.
a) Add CAAS route SPAINX to DR addressing table and route via US AMHS.	Changes are accepted on DR AMHS.		
b) Send an AMHS message from MDAAAFTN to LEMDZTZX.	Message sent via US.		
c) Message NDR sent from US to MDAAAFTN.	NDR received at DR AMHS.		
d) Add CAAS route ???? to US addressing table and route via DR AMHS (only applies if DR routes messages).	Changes are accepted on US AMHS.		
e) Send an AMHS message from KATLEDIT to ?????????.	Message sent via DR.		
f) Message NDR sent from DR AMHS to KATLEDIT.	NDR received at US.		
Test Result:	PASS	FAIL	INCONCLUSIVE

4.33 Test of PRMD Value That Does Not Map to the Corresponding O, OU1, and CN Values

Test Script Title: Test of PRMD value that does not map to the corresponding O, OU1, and CN values.			
Test Criteria: Confirmation of transmission/reception of AFTN messages with a validly formatted CAAS address, with a PRMD value that does not correctly map to the corresponding O, OU1, and CN values.			
AMHS Technical Specification reference:			
Test Procedure	Expected Results	Actual Results	Obs. Ref.
a) Change the PRMD value in the DR CAAS addressing table for Portugal from Portugal to Spain.	Changes are accepted on DR AMHS.		
b) Send an AMHS message from MDAAFTN to LPPOZQZX.	Message sent via US.		
c) Message routed onward to Portugal at US AMHS.	Message routed and event logged.		
d) Change the PRMD value in the US CAAS addressing table for.... (only applies if DR routes messages).	Changes are accepted on US AMHS.		
e) Send an AMHS message from KATLEDIT to ????????	Message sent via DR.		
f) Message routed onward to ???????? at DR AMHS.	Message routed and event logged.		
Test Result:-	PASS	FAIL	INCONCLUSIVE

Appendix A Additional Information

This section provides additional information for tests 4-31 through 4-33. The purpose of these tests is to introduce potential errors or inconsistencies between the AMHS CAAS or AMHS Management Domain tables at US and DR. The result will be to ensure operational awareness of what might be encountered in these instances. These inconsistencies will usually be handled in the following manner:

- 1) logging of the inconsistency and transferring the message to its recipient, or
- 2) generation of a Non Delivery Report for the recipient.

These tests may require temporary change to the CAAS or Management Domain table at US or DR. Data should be captured for analysis.

Detailed message data and addressing information are provided below for these 3 tests.

Test 4-31: Test of validly formatted address with a valid but incorrect O value.

Changes should be made to the tables as shown in **RED**.

The CAAS addresses to be used for this test are shown in the table below.

	Value (DR)	Value (US)
Common Name	EDDMZTZX	
C	XX	
ADMD	ICAO	
PRMD	GERMANY	
O	EDWW (EDDD)	
OU1	EDDM	

a) DR to US – Change the DR CAAS table to reflect the values shown in **RED** in the DR column.

The recipient address that the US AMHS would receive would be:

/C=XX/ADMD=ICAO/PRMD=GERMANY/O=EDDD/OU1=EDDM/CN=EDDMZTZX

GG EDDMZTZX

ddhhmm MDAAFTN

TEST 4-31 FOR CAAS ADDRESSING WITH INCONSISTENT ORGANIZATION VALUE - TO US FROM DR

We would expect that the inconsistency would be logged and the message would be delivered to the remote MTA or the remote user.

b) US to DR - Change the US CAAS table to reflect the values shown in **RED** in the US column.

Need to determine relevance of this test before assigning address.....

At the completion of the test, the changes made for this test should be removed. The CAAS addressing for DR and US should reflect the values shown in BLACK in the table above. These are the operational values.

Test 4-32: Test of PRMD value that is not known to the receiving AMHS.

Changes should be made to the tables as shown in **RED**.

The CAAS addresses to be used for this test are shown in the table below.

	Value (DR)	Value (US)
Common Name	LEMDZTZX	
C	XX	
ADMD	ICAO	
PRMD	SPAIN (SPAINX)	
O	LEEE	
OU1	LEMD	

a) DR to US – PRMD with a value of SPAINX is not known to ICAO, FAA, or DR. DR will add the route for PRMD = SPAINX and an entry in the Management Domain and CAAS table to match the entry in the above table, including what is marked in **RED** under the DR column.

The recipient address that the US AMHS would receive would be:

/C=XX/ADMD=ICAO/PRMD=SPAINX/O=LEEE/OU1=LEMD/CN=LEMDZTZX

GG LEMDZTZX

ddhhmm MDAAAFTN

TEST 4-32 FOR CAAS ADDRESSING WITH AN UNKNOWN PRMD VALUE - TO US FROM DR

We would expect that the inconsistency would produce a Non Delivery from the US AMHS as that PRMD value is not known to the US AMHS.

b) US to DR - Change the US CAAS table to reflect the values shown in **RED** in the US column.

Need to determine relevance of this test before assigning address.....

At the completion of the test, the addressing added for this test should be removed.

Test 4-33: Test of PRMD value that does not map to the corresponding O, OU1, and CN values. Changes should be made to the tables as shown in **RED**.

The CAAS addresses to be used for this test are shown in the table below.

	Value (DR)	Value (US)
Common Name	LPPOZQZX	
C	XX	
ADMD	ICAO	
PRMD	PORTUGAL (SPAIN)	
O	LPAZ	
OU1	LPPO	

a) DR to US – Ensure there is an entry in Management Domain and CAAS table to reflect the table above, including what is marked in **RED**, under the DR column. SPAIN is a valid PRMD value, but one that should not correspond to the AFTN address LPPOZQZX.

The recipient address that the US AMHS would receive would be:

/C=XX/ADMD=ICAO/PRMD=SPAIN/O=LPAZ/OU1=LPPO/CN=LPPOZQZX

GG LPPOZQZX

ddhhmm MDAAAFSTN

TEST 4-33 FOR CAAS ADDRESSING WITH INCONSISTENT PRMD VALUE - TO US FROM DR

We would expect that the inconsistency would be logged and the message would be delivered to the remote MTA or the remote user.

b) US to DR- Ensure there is an entry in Management Domain and CAAS table to reflect the table above, including what is marked in **RED**, under the US.

Need to determine relevance of this test before assigning address.....

At the completion of the test, the addressing added for this test should be removed.

Appendix B Address Tables

The following non-operational addresses must be added for test purposes, as detailed in the test scripts in Section 4 above.

Addressing Scheme	AFTN Address	AMHS Address
USA AMHS ADDRESSING		
XF	KATLYTAA	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAA
XF	KATLYTAB	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAB
XF	KATLYTAC	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAC
XF	KATLYTAD	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAD
XF	KATLYTAE	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAE
XF	KATLYTAF	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAF
XF	KATLYTAG	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAG
XF	KATLYTAH	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAH
XF	KATLYTAI	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAI
XF	KATLYTAJ	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAJ
XF	KATLYTAK	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAK
XF	KATLYTAL	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAL
XF	KATLYTAM	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAM
XF	KATLYTAN	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAN
XF	KATLYTAO	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAO
XF	KATLYTAP	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAP
XF	KATLYTAQ	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAQ
XF	KATLYTAR	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAR
XF	KATLYTAS	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAS

XF	KATLYTAT	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAT
XF	KATLYTAU	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAU
XF	KATLYTAV	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAV
XF	KATLYTAW	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAW
XF	KATLYTAX	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAX
XF	KATLYTAY	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAY
XF	KATLYTAZ	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTAZ
XF	KATLYTBA	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTBA
XF	KATLYTBB	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTBB
XF	KATLYTBC	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTBC
XF	KATLYTBD	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTBD
XF	KATLYTBE	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTBE
XF	KATLYTBF	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTBF
XF	KATLYTBG	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTBG
XF	KATLYTBH	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTBH
XF	KATLYTBI	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTBI
XF	KATLYTBJ	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTBJ
XF	KATLYTBK	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTBK
XF	KATLYTBL	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTBL
XF	KATLYTBM	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTBM
XF	KATLYTBN	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTBN
XF	KATLYTBO	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTBO
XF	KATLYTBP	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTBP
XF	KATLYTBQ	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTBQ
XF	KATLYTBR	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTBR
XF	KATLYTBS	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTBS

XF	KATLYTBT	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTBT
XF	KATLYTBU	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTBU
XF	KATLYTBV	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTBV
XF	KATLYTBW	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTBW
XF	KATLYTBX	C=XX/A=ICAO/P=K/O=AFTN/OU1=KATLYTBX
DR AMHS ADDRESSING		
		Insert all test addresses here.....