Test Case AvnFPS METARs

for the

AWIPS

Contract

DG133W-05-CQ-1067

Prepared for:

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Revision History

Revision	Date	Affected Pages	Explanation of Change
1.0	27 June 2008	ALL	Initial Draft
2.0	8 August 2008	8-10	Redlines per PDT

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1.0 SCOPE

See Software Test Plan.

2.0 APPLICABLE DOCUMENTS

2.1 Source Documents

- None

2.2 Reference Documents

- Legacy NWS Test Case: Baseline_AvnFPS_METARs_OB8.1.
- Software Test Plan for the Advanced Weather Information Processing System Project, Contract #DG133W-05-CQ-1067, August 2008.
- The Silver Spring NWS AWIPS 1 test bed application.
- Rational RequisitePro.

3.0 TEST CASE DESCRIPTION

This test case verifies that the climatology tool (METARs), launched through the AvnFPS function, performs the associated functions for Historical METARs successfully. Climatology data dependent functionality will mainly consist of GUI testing.

3.1 Assumptions, Constraints and Preconditions

- TO9 software has been installed successfully
- CAVE, EDEX and pgAdmin III are running
- Data has been ingested
- Actions, Results, and Requirements highlighted in yellow indicate requirements and/or capabilities to be included in the scope of future task orders. They are included here for purposes of continuity and traceability with the original AWIPS I test case documents.

3.2 Recommended Hardware

See Software Test Plan.

3.3 Test Inputs

Section 4.0 below contains the test procedures for this test case. Sections 2.2 – 2.9 of the Software Test Plan contain general test inputs applicable to all TO9 test cases.

3.4 Test Outputs

The METAR Display dialog is displayed and the results outlined in section 4.0 are met. The AvnFPS GUIs to be tested include:

- AvnFPS Menu
- AvnFPS Monitor
- AvnFPS Climate Menu
- METAR Display
- Print
- Save As

4.0 TEST SCENARIO

Step #	Action	Result	Pass/Fail
Launches METARs from AWIPS popup menu			
1.	Mouse Button (MB) 1 click on the workstation (blue screen).	A pop-up menu displays.	
2.	Select the AWIPS start-up menu.	The AWIPS start-up menu displays.	
3.	MB1 click 'Start AvnFPS'. Then select the 'Historical METAR Viewer' option.	The METAR Display window opens with the 'Auto Redraw' button defaults.	
4.	Select a station from the Stations list.	The METARs for a selected station display.	
5.	Select or enter the Date Selection by MB1 clicking the up and down arrow or entering the desired number in the text box below: - Year - Month - Day - Num Days Note: The historical METARs data are available from 1973 – 2004 for most sites.	The METAR for the selected Date Selection displays accordingly. Ensure the data display contains the correct information (e.g., site, month and year of the observation).	
6.	MB1 click 'File' -> 'Print'.	The Print dialog opens.	
7.	MB1 click the 'OK' button.	The print dialog closes and the data prints at the local default printer.	
8.	MB1 click 'File' -> 'Save As'.	The Save As window displays.	
9.	Enter a file name in the File name: text box and MB1 click the 'Save' button.	The Save As window closes and the data is saved in the specified directory.	
10.	Open a terminal, and verify the file is saved in the specified directory.	Verified.	
11.	From the METAR Display window, uncheck the 'Auto Redraw' button and select another station from the Stations list.	The selected station is highlighted.	
12.	Select the 'Show' button.	The METAR for the selected station displays accordingly.	
13.	Select the desired Date Selection and MB1 click the 'Show' button.	The METAR for the selected date displays accordingly.	
14.	MB1 click 'File' -> 'Quit'.	The METAR Display window closes.	
Launches METARs from AvnMenu			
15.	From CAVE, MB1 click 'CAVE' -> 'New' -> 'Aviation' -> 'AvnFPS Menu…'. Then, from the AvnFPS Menu window, select a forecaster's name and MB1 click on the 'Climate' button.	The AvnFPS Menu window opens. The AvnFPS Climate Menu window displays.	

Step #	Action	Result	Pass/Fail
16.	MB1 click the 'METARs' button.	The AvnFPS METAR Display window displays with the Auto Redraw button checked by default.	DR #1337
17.	Select a station from the Stations list.	The selected station is highlighted. The METARs for a selected station display.	
18.	Select or enter the Date Selection by MB1 clicking the up and down arrow or enter the desired number in the text box below: - Year - Month - Day - Num Days Also verify the following ranges: Month: 1-12 Day: 1-31 Num Days: 1-31 Note: The historical METARs data are available from 1973 – 2004 for most of the sites.	The Year, Month, Day and Num Days modify accordingly. The Month range extends from 1-12. The Day range extends from 1-31. The Num Days range extends from 1-31. The METARs for the selected Date Selection display accordingly. Ensure the data display contains the correct information (e.g., site, month and year of the observation).	
19.	MB1 click 'File' -> 'Print'.	The Print dialog opens.	
20.	MB1 click the 'OK' button.	The print dialog closes and the data prints at the local default printer.	
21.	MB1 click 'File' -> 'Save As'.	The Save As window displays with a default path of: /awips/adapt/avnfps/3.4/tmp	
22.	Enter the file name in the File name: text box and MB1 click the 'Save' button.	The Save As window closes and the data is saved at the path specified on the previous step.	
23.	In another terminal, enter the following command to verify the file is saved in the directory: cd /awips/adapt/avnfps/3.4/tmp/<file name entered from step 21>	Verified.	
24.	From the METAR Display window, uncheck the 'Auto Redraw' button and select another station from the Stations list.	The selected station is highlighted.	
25.	Select the 'Show' button.	The METAR for the selected station displays accordingly.	

Step #	Action	Result	Pass/Fail
26.	Select the desired Date Selection and MB1 click the 'Show' button.	The METAR for the selected date displays accordingly.	
27.	Under the AvnFPS METAR Display window, MB1 click 'File' -> 'Quit'.	The AvnFPS METAR Display window closes.	
28.	Under the AvnFPS Climate Menu window, MB1 click 'File' -> 'Quit'.	The AvnFPS Climate Menu closes.	
Launches METARs from AvnWatch GUI			
29.	From the AvnFPS Menu, select forecaster name and MB1 click on the 'TAFs' button.	The AvnFPS Monitor window displays.	
30.	MB1 click the 'Climate' button.	The AvnFPS Climate Menu window displays.	
31.	MB1 click the 'METARs' button.	The METAR Display window displays with the Auto Redraw button checked by default.	
32.	Select a station from the Stations list.	The selected station is highlighted. The METARs for a selected station displays.	
33.	Select or enter the Date Selection by MB1 clicking the up and down arrow or enter the desired number in the text box below: - Year - Month - Day - Num Days Also verify the following ranges: Month: 1-12 Day: 1-31 Num Days: 1-31 Note: The historical METARs data are available from 1973 – 2004 for most of the sites.	The Year, Month, Day and Num Days modify accordingly. The Month range extends from 1-12. The Day range extends from 1-31. The Num Days range extends from 1-31. The METAR for the selected Date Selection displays accordingly. Ensure the data display contains the correct information (e.g., site, month and year of the observation).	
34.	MB1 click 'File' -> 'Print'.	The Print dialog opens.	
35.	MB1 click the 'OK' button.	The print dialog closes and the data is printed at the local default printer.	
36.	MB1 click 'File' -> 'Save As'.	The Save As window displays with a default path of: /awips/adapt/avnfps/3.4/tmp	

37.	Enter the file name on the File name: text box and MB1 click the 'Save' button.	The Save As window closes and the data is saved at the path specified on the previous step.	
Step #	Action	Result	Pass/Fail
38.	In another terminal, enter the following command to verify the file is saved in the directory: cd /awips/adapt/avnfps/3.4/tmp/<file name entered from step 36>	Verified.	
39.	From the AvnFPS METAR Display window, uncheck the 'Auto Redraw' button and select another station from the Stations list.	The selected station is highlighted.	
40.	Select the 'Show' button.	The METAR for the selected station displays accordingly.	
41.	Select the desired Date Selection and MB1 click the 'Show' button.	The METAR for the selected date displays accordingly.	
42.	Under the METAR Display window, MB1 click 'File' -> 'Quit'.	The AvnFPS METAR Display window closes.	
43.	Under the AvnFPS Climate Menu window, MB1 click 'File' -> 'Quit'.	The AvnFPS Climate Menu closes.	
44.	Under the AvnFPS Monitor, MB1 click 'File' -> 'Quit'.	The AvnFPS Monitor window closes.	
45.	Close the AvnFPS Menu window.	The AvnFPS Menu window closes.	
	End of test.		

5.0 REQUIREMENTS VERIFICATION TRACEABILITY MATRIX (RVTM)

Number	Description	Test Step(s)
SYSR2073.101	AvnFPS shall provide Climatology Viewing capability via the AvnFPS Menu's Climate Button or via the TAF Monitor's Climate Button.	15-16, 29-30
SYSR2073.102	The Climate Button shall allow the user the capability to start any of three distinct climatology GUIs: Wind Rose, Ceiling and Visibility Distribution, and Ceiling and Visibility Trend.	16, 30
SYSR2073.148	The Metar Climatology Dialog shall allow the user the capability to display a METAR for a selected year, month, day, and duration (in days).	17-18
SYSR2073.149	The Metar Climatology Dialog shall allow the user the capability to select the location of interest, e.g., the site or sites.	17
SYSR2073.150	The Metar Climatology Dialog shall allow the user the capability to show a METAR via the Show button on the Dialog.	25-26
SYSR2073.151	The Metar Climatology Dialog shall allow the user the capability to automatically re-draw a METAR via the Auto Redraw checkbox on the Dialog.	17-18
SYSR2073.152	The Metar Climatology Dialog's File Menu's Print Image selection shall allow the user the capability to print an image.	19-20
SYSR2073.153	The Metar Climatology Dialog's File Menu's Save As selection shall allow the user to save an edited forecast to a temporary file.	21-23
SYSR2073.154	The Metar Climatology Dialog's File Menu's Quit selection shall allow the user the capability to exit the METAR climatology.	27-28
SYSR2073.155	The Metar Climatology Dialog's Option Menu's Show Decoded selection shall allow the user the capability to show either a decoded or a raw METAR climatology.	17-18