Test Case AvnFPS View Current TAF

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	7, 8	Redlines per PDT

Table of Contents

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_ ViewCurrentTAF _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

Test case verifies that the user is able to view current Terminal Aerodrome Forecasts (TAF) and Meteorological Aviation Reports (METAR) in the viewer mode for a particular site. The test case also verifies that when viewing All Metars the order of observations is grouped by site, then issuance time.

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 AvnFPS Monitor 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 TAF Editor

4.0 TEST SCENARIO

Step #	Action	Result	Pass/Fail
1.	In CAVE, select 'CAVE' -> 'New' -> 'Aviation' -> 'AvnFPS Menu…'.	The AvnFPS Menu opens.	
2.	From the AvnFPS Menu, select a forecaster's name and Mouse Button (MB) 1 click on the 'TAFs' button.	The AvnFPS Monitor window displays.	
3.	Verify the AvnFPS Monitor provides a row of buttons and labels for each TAF site.	A row of buttons and labels are available for each TAF site.	
4.	Verify the AvnFPS TAF Monitor window contains one or more Site ID buttons.	The AvnFPS TAF Monitor window contains one or more Site ID buttons.	
5.	Verify the AvnFPS TAF Monitor window contains an Active Toggle check box associated with each Site ID button.	The AvnFPS TAF Monitor window contains an Active Toggle check box with each Site ID button.	
6.	Verify the AvnFPS TAF Monitor window contains TAF/MTR Time Labels associated with each Site ID button.	The AvnFPS TAF Monitor window contains TAF/MTR Time Labels with each Site ID button.	
7.	Verify the TAF/MTR Time Labels display the most recent issuance time of the TAF or METAR.	The TAF/MTR Time Labels display the most recent issuance time of the TAF or METAR.	DR #1340
8.	Verify the AvnFPS TAF Monitor window contains Observation/Guidance Status associated with each Site ID button.	The AvnFPS TAF Monitor window contains Observation/Guidance Status associated with each Site ID button.	
9.	Verify the AvnFPS TAF Monitor window's Observation/Guidance Status contains groupings of weather elements in seven distinct categories: -METAR -Persistence 1 Hr -Lightning (ltg) -Lightning Probability Guidance (rltg) -Collaborative Convective Forecast Product (ccfp) -Gridded Forecasts (grid) -Latest Wind Profile (llws)	The AvnFPS TAF Monitor window's Observation/Guidance Status contains the following categories: -METAR -Persistence 1 Hr -Lightning (ltg) -Lightning Probability Guidance (rltg) -Collaborative Convective Forecast Product (ccfp) -Gridded Forecasts (grid) -Latest Wind Profile (llws)	
10.	Verify the AvnFPS TAF Monitor window's Observation/Guidance Status' METAR weather element contains a grouping of five sub-elements: TEMPO (tpo), Visibility (vis), Wind (wnd), Weather (wx), and Ceiling (cig).	The AvnFPS TAF Monitor window's Observation/Guidance Status' METAR weather element contains the following sub-elements: TEMPO (tpo), Visibility (vis), Wind (wnd), Weather (wx), and Ceiling (cig).	

Step #	Action	Result	Pass/Fail
11.	Verify the AvnFPS TAF Monitor window's Observation/Guidance Status' Persistence weather element contains a grouping of four distinct sub-elements: -Visibility (vis) -Wind (wnd) -Weather (wx) -Ceiling (cig)	The AvnFPS TAF Monitor window's Observation/Guidance Status' Persistence weather element contains the following sub-elements: -Visibility (vis) -Wind (wnd) -Weather (wx) -Ceiling (cig)	
12.	Verify the AvnFPS TAF Monitor window's Observation/Guidance Status' Lightning (ltg) weather element contains one distinct sub-element: Number of strikes (ts).	The AvnFPS TAF Monitor window's Observation/Guidance Status' Lightning (ltg) weather element contains the following sub-element: Number of strikes (ts).	
13.	Verify the AvnFPS TAF Monitor window's Observation/Guidance Status' Lightning Probability Guidance (rltg) weather element contains one distinct sub-element: Lightning Probability (ts).	The AvnFPS TAF Monitor window's Observation/Guidance Status' Lightning Probability Guidance (rltg) weather element contains the following sub-element: Lightning Probability (ts).	
14.	Verify the AvnFPS TAF Monitor window's Observation/Guidance Status' Collaborative Convective Forecast Product (ccfp) weather element contains one distinct sub-element: Convection Potential (ts).	The AvnFPS TAF Monitor window's Observation/Guidance Status' Collaborative Convective Forecast Product (ccfp) weather element contains the following sub-element: Convection Potential (ts).	
15.	Verify the AvnFPS TAF Monitor window's Observation/Guidance Status' Gridded Forecasts (grid) weather element contains four distinct sub-elements: -Visibility (vis) -Wind (wnd) -Weather (wx) -Sky Cover (sky)	The AvnFPS TAF Monitor window's Observation/Guidance Status' Gridded Forecasts (grid) weather element contains the following sub-elements: -Visibility (vis) -Wind (wnd) -Weather (wx) -Sky Cover (sky)	
16.	Verify the AvnFPS TAF Monitor window's Observation/Guidance Status' Latest Wind Profile (llws) weather element contains one distinct sub-element: Wind Shear Value (ws).	The AvnFPS TAF Monitor window's Observation/Guidance Status' Latest Wind Profile (llws) weather element contains the following sub-element: Wind Shear Value (ws).	
17.	Verify the AvnFPS TAF Monitor window's menu bar contains the following drop-down menus: -File -Options -Help	The AvnFPS TAF Monitor window's menu bar contains the following drop-down menus: -File -Options -Help	

Step #	Action	Result	Pass/Fail
18.	Verify the AvnFPS TAF Monitor window contains a message bar at the very bottom of the dialog that shows messages.	The AvnFPS TAF Monitor window contains a message bar at the bottom of the dialog that displays messages.	
19.	Verify the AvnFPS TAF Monitor contains a message severity indicator at the very bottom left corner of the dialog that displays the message severity.	The AvnFPS TAF Monitor contains a message severity indicator at the very bottom left corner of the dialog that displays the message severity.	
20.	Verify the AvnFPS TAF Monitor contains a message display button at the very bottom right corner of the dialog that allows the operator the capability to view all the messages that have been displayed in a separate dialog.	The AvnFPS TAF Monitor contains a message display button at the very bottom right corner of the dialog that allows the operator the capability to view all the messages that have been displayed in a separate dialog.	
21.	Verify the AvnFPS TAF Monitor contains a queue button that allows the operator the capability to view the status of the queues.	The AvnFPS TAF Monitor contains a queue button that allows the operator the capability to view the status of the queues.	
22.	Select a Site ID button to view current TAFs and METARs for a particular site in the Viewer mode.	The AvnFPS TAF Editor window opens with the selected site displayed in the Viewer mode. Verify the Metars and Data Sources display on a tab of the second half of the screen (one data source on each tab, e.g., Metar, GFS-MOS, TAF/GFSLAMP, GFSLAMP, ETA-MOS, NGM-MOS, NAM-WRF profile, and Grids) Note: Depending on the configuration at the WFO, only a subset may visible.	
23.	Select another site id button.	The current TAF for a selected site displays accordingly.	
24.	Select the ‘Metars’ tab to view the latest observations for the selected site.	The Metars’ latest observations are displayed.	
25.	In the lower half of the GUI, on the right hand side, is a popup-menu list titled ‘Num Hours’. MB1 click on that menu and change ‘Num Hours:’ to ‘3’ to display the last 3 hours worth of observations in the Metar Display below.	The Num Hours is set to 3. The last 3 hours of observations display in the window under the ‘Metars’ tab.	
26.	MB1 click the ‘All’ button.	The observations from all sites are displayed and grouped by site, then issuance time.	
27.	Close the AvnFPS Editor, AvnFPS Monitor, and AvnFPS Menu windows.	The AvnFPS TAF Editor, AvnFPS Monitor, and AvnFPS Menu windows close.	
	End of test.		

5.0 REQUIREMENTS VERIFICATION TRACEABILITY MATRIX (RVTM)

Number	Description	Test Step(s)
SYSR2073	The AWIPS system shall implement the GFE AvnFPS for TAFs capability.	ALL
SYSR2073.1	CAVE shall provide the user the capability to launch AvnFPS from the CAVE Menu resulting in the display of the AvnFPS Menu as a SWT Dialog on the CAVE Workstation.	1
SYSR2073.2	AvnFPS shall provide TAF (Terminal Aerodrome Forecast) Monitoring capability via the AvnFPS Menu's TAFs Button.	2
SYSR2073.3	AvnFPS TAF Monitor shall provide a row of buttons and labels for each TAF site that has been configured.	3
SYSR2073.4	AvnFPS TAF Monitor Window shall contain a Site ID Button or Site ID Buttons.	4
SYSR2073.6	AvnFPS TAF Monitor Window shall contain an Active Toggle Button associated with each Site ID Button.	5
SYSR2073.8	AvnFPS TAF Monitor Window shall contain TAF/MTR Time Labels associated with each Site ID Button.	6
SYSR2073.9	AvnFPS TAF Monitor Window's TAF/MTR Time Labels shall display the most recent issuance time of an associated TAF or METAR.	7
SYSR2073.11	AvnFPS TAF Monitor Window shall contain Observation/Guidance Status associated with each Site ID Button.	8
SYSR2073.12	AvnFPS TAF Monitor Window's Observation/Guidance Status shall contain groupings of weather elements in seven distinct categories: METAR, Persistence for a selectable duration, Lightning, Lightning Probability Guidance, Collaborative Convective Forecast Product, Gridded Forecasts, and Latest Wind Profile.	9
SYSR2073.13	AvnFPS TAF Monitor Window's Observation/Guidance Status' METAR weather element shall contain a grouping of five distinct sub-elements: TEMPO, Wind, Visibility, Weather, and Ceiling.	10
SYSR2073.14	AvnFPS TAF Monitor Window's Observation/Guidance Status' Persistence for a selectable duration weather element shall contain a grouping of four distinct sub-elements: Wind, Visibility, Weather, and Ceiling.	11
SYSR2073.15	AvnFPS TAF Monitor Window's Observation/Guidance Status' Lightning weather element shall contain one distinct sub-element: Number of strikes.	12

Number	Description	Test Step(s)
SYSR2073.16	AvnFPS TAF Monitor Window's Observation/Guidance Status' Lightning Probability Guidance weather element shall contain one distinct sub-element: Lightning probability.	13
SYSR2073.17	AvnFPS TAF Monitor Window's Observation/Guidance Status' Collaborative Convective Forecast Product weather element shall contain one distinct sub-element: Convection potential.	14
SYSR2073.18	AvnFPS TAF Monitor Window's Observation/Guidance Status' Gridded Forecasts weather element shall contain a grouping of three distinct sub-elements: Wind, Weather, and Sky cover.	15
SYSR2073.19	AvnFPS TAF Monitor Window's Observation/Guidance Status' Latest Wind Profile weather element shall contain one distinct sub-element: Wind shear value.	16
SYSR2073.37	AvnFPS TAF Monitor Window's Menu Bar shall provide the user three distinct pulldown menus: File, Options, and Help.	17
SYSR2073.144	AvnFPS TAF Monitor Window shall contain a message bar at the very bottom of the dialog that shows messages.	18
SYSR2073.145	AvnFPS TAF Monitor Window shall contain a message severity indicator in the very bottom left hand corner of the dialog that shows message severity.	19
SYSR2073.146	AvnFPS TAF Monitor Window shall contain a message display button in the very bottom right hand corner of the dialog that allows the operator the capability to view all of the messages that have been displayed in separate dialog.	20
SYSR2073.147	AvnFPS TAF Monitor Window shall contain a queue button that allows the operator the capability to view the status of queues.	21