ATTACHMENT 2

TO

SYSTEMS GROUP CHAIRMAN'S FACTUAL REPORT

CEN17FA168

Aircraft Test Plan

CEN16FA372 – Aircraft Test Plan:

Aircraft setup:

- a. Install video camera (with audio recording) in cockpit focusing on mode control panel. Make sure AP mode controller, CAWS captions, EFIS tubes, and pilot Master Warning/Caution Captions are visible.
- b. Using the maintenance box, set maintenance switch to AIR.

General information:

- a. The following Cautions and Warnings will be present on the CAWS throughout the tests:
 - a. PAX DOOR warning
 - b. CARGO DOOR warning
 - c. GEN1 OFF caution
 - d. GEN2 OFF caution
 - e. FUEL PRESS caution
 - f. PUSHER caution

Additional CAWS captions may be illuminated depending on the CBs you decide to pull (probe heating etc.). Follow the maintenance technician's recommendations.

- b. Before each test, set all trims to the green range.
- c. Throughout the tests, monitor the autotrim lights on the triple trim indicator (rudder and pitch) to ensure that the AP TRIM caption on the CAWS is associated with the desired trim action, as the green AP TRIM CAWS caption will also illuminate when the AP trims the rudder.
- d. Note that the AP DISENG caution on the CAWS and the associated Master Caution will remain illuminated for 30 sec. after disengagement/disconnect, and then automatically extinguish, unless the AP is re-engaged prior. The AP test will not extinguish the caption.
- e. The AP mode controller disconnect tone is a long beep, which occurs once (e.g. after the AP test).
 - The AP mode controller trim fail warning is a continuously beeping tone.
 - The CAWS disconnect tone is a short Gong.
- f. At the end of any test, if the AP is engaged it may be disengaged with the AP DISCONNECT switch on the yoke or with the AP, YD, FD and ALT buttons on the Mode controller. The loud and annoying TRIM warning sound can only be silenced by an AP test.

Test 1

Test 1	Action	System behavior	CAWS Annu	unciation	CAWS aud	dio signal	EADI indi	cation	AP mode of audio audio ai	nd light	Master Warning/	Caution Caption
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
1.1	Perform AP test by pressing TEST on mode control panel	AP performs preflight check.	5 sec A/P TRIM (green) and A/P TRIM (red). Extinguish simultaneou sly		Gong		None		All lights/cap tions illuminate . AP TRIM (red) flashes 4 or 5 times. AP caption flashes 12 times. AP disconnec t tone.		Master Warning illuminates and extinguishes after end of test	
1.2	Pull the Trim Adapter CB	None	None		None		None		???		None	
1.3	Within 10 seconds from 1.2, close the Trim adapter CB	None	None		None		None		None		None	
1.4	Press AP, YD, and ALT on mode controller	AP and YD engage (verify by manipulating the controls)	None		None		AP and YD are shown		AP, YD, FD and ALT caption illuminate		None	

Test 1	Action	System behavior	CAWS Annu	ınciation	CAWS aud	dio signal	EADI indi	cation	AP mode of audio audio ai	nd light	Master Warning	/Caution Caption
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
1.5	Pull the control yoke slowly aft until AP TRIM (green) caption briefly illuminates	AP and YD remain engaged. Verify by manipulating controls	A/P TRIM (green) briefly illuminates, then extinguishes A/P TRIM (red) illuminates		Gong		AP and YD remain shown.		TRIM (red) caption illuminate s. AP, YD, FD and ALT caption remain illuminate d. Continous AP trim fail warning tone		Master Warning illuminates	
1.6	Disconnect AP and YD with A/P DISC switch on control yoke (iaw AFM 3.21.1)	AP and YD disconnect. Verify by manipulating controls	A/P DISENG (amber) illuminates. A/P TRIM (red) remains illuminated		Gong after 3 sec. (after Mode Controller tone has finished)		AP and YD disappear		AP disconnec t tone. Continous AP trim fail warning tone. AP caption blinks. YD, FD and ALT extinguish . TRIM (red) caption remains ON		Master Caution illuminates. Master Warning remains illuminated.	

Test 1	Action	System behavior	CAWS Annu	ınciation	CAWS aud	dio signal	EADI indi	cation	AP mode of audio ar indica	nd light	Master Warning/C	aution Caption
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
1.7	Press AP, YD, and ALT on mode controller	AP, YD, FD and ALT engage (verify by manipulating the controls)	A/P DISENG (amber) extinguishes immediately		None		AP and YD are shown		AP, YD, FD and ALT caption illuminate . TRIM (red) remains illuminate d. Continous AP trim fail warning tone.		Master Caution extinguishes when A/P DISENG extinguishes. Master Warning remains illuminated.	
1.8	Pull the control yoke slowly aft	AP and YD remain engaged. Verify by manipulating controls, but no pitch trim action (rudder trim may operate)	None, except AP TRIM (green) caption when rudder auto-trims.		None		AP and YD remain shown		Continous AP trim fail warning tone.		Master Warning remains illuminated.	

Test 2	Action	System behavior	CAWS Annu	unciation	CAWS aud	dio signal	EADI indi	cation	AP mode of audio audio ai	nd light	Master Warning/	Caution Caption
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
2.1	Perform AP test by pressing TEST on mode control panel	AP performs preflight check.	5 sec A/P TRIM (green) and A/P TRIM (red). Extinguish simultaneou sly		Gong		None		All lights/cap tions illuminate . AP TRIM (red) flashes 4 or 5 times. AP caption flashes 12 times. AP disconnec t tone.		Master Warning illuminates and extinguishes after end of test	
2.2	Pull the Trim Adapter CB	None	None		None		None		None		None	
2.3	Within 10 seconds from 2.2, close the Trim adapter CB	None	None		None		None		None		None	
2.4	Press AP, YD, and ALT on mode controller	AP and YD engage (verify by manipulating the controls)	None		None		AP and YD are shown		AP, YD, FD and ALT caption illuminate		None	

Test 2	Action	System behavior	CAWS Annu	unciation	CAWS aud	dio signal	EADI indi	cation	AP mode of audio a	nd light	Master Warning,	Caution Caption
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
2.5	Pull the control yoke slowly aft until AP TRIM (green) caption briefly illuminates	AP and YD remain engaged. Verify by manipulating controls	A/P TRIM (green) briefly illuminates, then extinguishes . A/P TRIM (red) illuminates		Gong		AP and YD remain shown.		TRIM (red) caption illuminate s. AP, YD, FD and ALT caption remain illuminate d. Continous AP trim fail warning		Master Warning illuminates	
2.6	Disconnect AP and YD with A/P DISC switch on control yoke (iaw AFM 3.21.1)	AP and YD disconnect. Verify by manipulating controls	A/P DISENG (amber) illuminates. A/P TRIM (red) remains illuminated		Gong after 3 sec. (after Mode Controller tone has finished)		AP and YD disappear		tone AP disconnec t tone. Continous AP trim fail warning tone. AP caption blinks. YD, FD and ALT extinguish . TRIM (red) caption remains ON		Master Caution illuminates. Master Warning remains illuminated.	

Test 2	Action	System behavior	CAWS Annu	ınciation	CAWS aud	dio signal	EADI indi	cation	AP mode of audio audio ai	nd light	Master Warning/0	Caution Caption
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
2.7	Perform AP test by pressing TEST on mode control panel	AP performs preflight check.	5 sec A/P TRIM (green) and A/P TRIM (red). Extinguish simultaneou sly. AP DISENG caution may still be active until 30 sec expired		Gong		None		All lights/cap tions illuminate . AP TRIM (red) flashes 4 or 5 times. AP caption flashes 12 times. AP disconnec t tone.		Master Warning illuminates and extinguishes after end of test	
2.8	Press AP, YD, and ALT on mode controller	AP and YD engage (verify by manipulating the controls)	None		None		AP and YD are shown		AP, YD, FD and ALT caption illuminate		None	
2.9	Pull the control yoke slowly aft until AP TRIM (green) caption illuminates	AP and YD remain engaged. Verify by manipulating controls	A/P TRIM (green) illuminates. Caption extinguishes when trim activity stops.		None		AP and YD remain shown		None		None	

Test 3	Action	System behavior	CAWS Annu	unciation	CAWS aud	dio signal	EADI indi	cation	AP mode of audio al indica	nd light	Master Warning,	Caution Caption
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
3.1	Perform AP test by pressing TEST on mode control panel	AP performs preflight check.	5 sec A/P TRIM (green) and A/P TRIM (red). Extinguish simultaneou sly		Gong		None		All lights/cap tions illuminate . AP TRIM (red) flashes 4 or 5 times. AP caption flashes 12 times. AP disconnec t tone.		Master Warning illuminates and extinguishes after end of test	
3.2	Pull the Trim Adapter CB	None	None		None		None		None		None	
3.3	Wait for more than 30 sec. after 3.2, close the Trim adapter CB	None	15 sec after 3.2, AP TRIM (red) illuminates		15 sec after 3.2, Gong		None		15 sec after 3.2, TRIM (red) caption illuminate s. No audio		15 sec after 3.2, Master Warning illuminates	
3.4	Press AP, YD, and ALT on mode controller	AP and YD do engage (verify by manipulating the controls), but no further pitch trim activity can be forced. Rudder may auto-trim.	No change		No change		AP and YD are shown		AP, YD, FD and ALT caption illuminate		None	

Test 4

Test 4	Action	System behavior	CAWS Annu	ınciation	CAWS aud	dio signal	EADI indi	cation	AP mode of audio artification	nd light	Master Warning/C	aution Caption
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
4.1	Perform AP test by pressing TEST on mode control panel	AP performs preflight check.	5 sec A/P TRIM (green) and A/P TRIM (red). Extinguish simultaneou sly		Gong		None		All lights/cap tions illuminate . AP TRIM (red) flashes 4 or 5 times. AP caption flashes 12 times. AP disconnec t tone.		Master Warning illuminates and extinguishes after end of test	
4.2	Pull the Trim Adapter CB	None	None		None		None		None		None	
4.3	Wait for more than 30 sec. after 4.2	None	15 sec after 4.2, AP TRIM (red) illuminates		15 sec after 4.2, Gong		None		TRIM (red) caption illuminate s 15 sec after 4.2. No audio		15 sec after 4.2, Master Warning illuminates	
4.4	Press AP, YD, and ALT on mode controller	AP and YD do not engage (verify by manipulating the controls)	No change		No change		None		No change		No change	

Test 5	Action	System behavior	CAWS Ann	unciation	CAWS aud	dio signal	EADI indi	cation	AP mode of audio ar	nd light	Master Warning/	Caution Caption
			Evnocted	Actual	Expected	Actual	Evported	Actual	indica		Evported	Actual
5.1	Perform AP test by pressing TEST on mode control panel	AP performs preflight check.	Expected 5 sec A/P TRIM (green) and A/P TRIM (red). Extinguish simultaneou sly	Actual	Gong	Actual	None None	Actual	All lights/cap tions illuminate . AP TRIM (red) flashes 4 or 5 times. AP caption flashes 12 times. AP disconnec t tone.	Actual	Expected Master Warning illuminates and extinguishes after end of test	Actual
5.2	Press Trim Interrupt	None	None		None		None		None		None	
5.3	Within 10 seconds from 5.2, reset Trim Interrupt to NORM	None	None		None		None		None		None	
5.4	Press AP, YD, and ALT on mode controller	AP and YD engage (verify by manipulating the controls)	None		None		AP and YD are shown		AP, YD, FD and ALT caption illuminate		None	

Test 5	Action	System behavior	CAWS Annu	unciation	CAWS aud	dio signal	EADI indi	cation	AP mode of audio ar indica	nd light	Master Warning	/Caution Caption
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
5.5	Pull the control yoke slowly aft until AP TRIM (green) caption briefly illuminates	AP and YD remain engaged. Verify by manipulating controls	A/P TRIM (green) briefly illuminates, then extinguishes . A/P TRIM (red) illuminates		Gong		AP and YD remain shown.		TRIM (red) caption illuminate s. AP, YD, FD and ALT caption remain illuminate d. Continous AP trim fail warning		Master Warning illuminates	
5.6	Disconnect AP and YD with A/P DISC switch on control yoke (iaw AFM 3.21.1)	AP and YD disconnect. Verify by manipulating controls	A/P DISENG (amber) illuminates. A/P TRIM (red) remains illuminated		Gong after 3 sec. (after Mode Controller tone has finished)		AP and YD disappear		tone AP disconnec t tone. Continous AP trim fail warning tone. AP caption blinks. YD, FD and ALT extinguish . TRIM (red) caption remains ON		Master Caution illuminates. Master Warning remains illuminated.	

Test 5	Action	System behavior	CAWS Annu	inciation	CAWS aud	dio signal	EADI indi	cation	AP mode of audio ar indica	nd light	Master Warning/C	aution Caption
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
5.7	Press AP, YD, and ALT on mode controller	AP, YD, FD and ALT engage (verify by manipulating the controls)	A/P DISENG (amber) extinguishes immediately		None		AP and YD are shown		AP, YD, FD and ALT caption illuminate . TRIM (red) remains illuminate d. Continous AP trim fail warning tone.		Master Caution extinguishes when A/P DISENG extinguishes. Master Warning remains illuminated.	
5.8	Pull the control yoke slowly aft	AP and YD remain engaged. Verify by manipulating controls, but no pitch trim action (rudder trim may operate)	None, except AP TRIM (green) caption when rudder auto-trims.		None		AP and YD remain shown		Continous AP trim fail warning tone.		Master Warning remains illuminated.	

Test 6	Action	System behavior	CAWS Annu	unciation	CAWS aud	dio signal	EADI indi	cation	AP mode of audio audio audio	nd light	Master Warning/	Caution Caption
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
6.1	Perform AP test by pressing TEST on mode control panel	AP performs preflight check.	5 sec A/P TRIM (green) and A/P TRIM (red). Extinguish simultaneou sly		Gong		None		All lights/cap tions illuminate . AP TRIM (red) flashes 4 or 5 times. AP caption flashes 12 times. AP disconnec t tone.		Master Warning illuminates and extinguishes after end of test	
6.2	Press Trim Interrupt	None	None		None		None		None		None	
6.3	Within 10 seconds from 6.2, reset Trim Interrupt to NORM	None	None		None		None		None		None	
6.4	Press AP, YD, and ALT on mode controller	AP and YD engage (verify by manipulating the controls)	None		None		AP and YD are shown		AP, YD, FD and ALT caption illuminate		None	

Test 6	Action	System behavior	CAWS Annu	ınciation	CAWS aud	dio signal	EADI indi	cation	AP mode of audio a	nd light	Master Warning,	/Caution Caption
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
6.5	Pull the control yoke slowly aft until AP TRIM (green) caption briefly illuminates	AP and YD remain engaged. Verify by manipulating controls	A/P TRIM (green) briefly illuminates, then extinguishes . A/P TRIM (red) illuminates		Gong		AP and YD remain shown.		TRIM (red) caption illuminate s. AP, YD, FD and ALT caption remain illuminate d. Continous AP trim fail warning tone		Master Warning illuminates	
6.6	Disconnect AP and YD with A/P DISC switch on control yoke (iaw AFM 3.21.1)	AP and YD disconnect. Verify by manipulating controls	A/P DISENG (amber) illuminates. A/P TRIM (red) remains illuminated		Gong after 3 sec. (after Mode Controller tone has finished)		AP and YD disappear		AP disconnec t tone. Continous AP trim fail warning tone. AP caption blinks. YD, FD and ALT extinguish . TRIM (red) caption remains ON		Master Caution illuminates. Master Warning remains illuminated.	

Test 6	Action	System behavior	CAWS Annu	ınciation	CAWS aud	dio signal	EADI indi	cation	AP mode audio a	nd light	Master Warning/0	Caution Caption
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
6.7	Perform AP test by pressing TEST on mode control panel	AP performs preflight check.	5 sec A/P TRIM (green) and A/P TRIM (red). Extinguish simultaneou sly		Gong		None		All lights/cap tions illuminate . AP TRIM (red) flashes 4 or 5 times. AP caption flashes 12 times. AP disconnec t tone.		Master Warning illuminates and extinguishes after end of test	
6.8	Press AP, YD, and ALT on mode controller	AP and YD engage (verify by manipulating the controls)	None		None		AP and YD are shown		AP, YD, FD and ALT caption illuminate		None	
6.9	Pull the control yoke slowly aft until AP TRIM (green) caption illuminates	AP and YD remain engaged. Verify by manipulating controls	A/P TRIM (green) illuminates. Caption extinguishes when trim activity stops		None		AP and YD remain shown		None		None	

Test 7

Test 7	Action	System behavior	CAWS Annu	ınciation	CAWS aud	dio signal	EADI indi	cation	AP mode of audio are indicated	nd light	Master Warning/	Caution Caption
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
7.1	Perform AP test by pressing TEST on mode control panel	AP performs preflight check.	5 sec A/P TRIM (green) and A/P TRIM (red). Extinguish simultaneou sly		Gong		None		All lights/cap tions illuminate . AP TRIM (red) flashes 4 or 5 times. AP caption flashes 12 times. AP disconnec		Master Warning illuminates and extinguishes after end of test	
7.2	Press Trim Interrupt	None	None		None		None		t tone. None		None	
7.3	Wait for more than 30 sec. after 7.2, reset Trim Interrupt to NORM	None	15 sec after 7.2, AP TRIM (red) illuminates		15 sec after 7.2, Gong		None		TRIM (red) caption illuminate s. No audio		15 sec after 7.2, Master Warning illuminates	
7.4	Press AP, YD, and ALT on mode controller	AP and YD do engage (verify by manipulating the controls), but no further pitch trim activity can be forced. Rudder may auto-trim.	No change		No change		AP and YD are shown		AP, YD, FD and ALT caption illuminate		None	

Test 8	Action	System behavior	CAWS Annu	unciation	CAWS aud	dio signal	EADI indi	cation	AP mode of audio a	nd light	Master Warning/C	Caution Caption
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
8.1	Perform AP test by pressing TEST on mode control panel	AP performs preflight check.	5 sec A/P TRIM (green) and A/P TRIM (red). Extinguish simultaneou sly		Gong		None		All lights/cap tions illuminate . AP TRIM (red) flashes 4 or 5 times. AP caption flashes 12 times. AP disconnec t tone.		Master Warning illuminates and extinguishes after end of test	
8.2	Press Trim Interrupt	None	None		None		None		None		None	
8.3	Wait for more than 30 sec. after 4.2	None	15 sec after 4.2, AP TRIM (red) illuminates		15 sec after 4.2, Gong		None		TRIM (red) caption illuminate s 15 sec after 4.2. No audio		15 sec after 4.2, Master Warning illuminates	
8.4	Press AP, YD, and ALT on mode controller	AP and YD do not engage (verify by manipulating the controls)	No change		No change		None		No change		No change	

Test 9	Action	System behavior	CAWS Annu	unciation	CAWS aud	lio signal	EADI indi	cation	AP mode audio a indica	nd light	Master Warning,	Caution Caption
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
9.1	Perform AP test by pressing TEST on mode control panel	AP performs preflight check.	5 sec A/P TRIM (green) and A/P TRIM (red). Extinguish simultaneou sly	Account	Gong	Account	None	- Account	All lights/cap tions illuminate . AP TRIM (red) flashes 4 or 5 times. AP caption flashes 12 times. AP disconnec	Account	Master Warning illuminates and extinguishes after end of test	Account
9.2	Press AP, YD, and ALT on mode controller	AP and YD engage (verify by manipulating the controls)	None		None		AP and YD are shown		t tone. AP, YD, FD and ALT caption illuminate		None	
9.3	Pull Trim adapter CB	AP immediately disengages	AP DISENG (amber) illuminates after 3 sec		Gong after 3 sec		AP and YD disappear immediately		AP, YD, FD and ALT captions disappear immediat ely. No AP disconnec t tone		Master Caution illuminates after 3 sec	
9.4	Within 10 seconds from 9.2, reset the Trim adapter CB.	None	AP DISENG (amber) remains illuminated for max. 30 sec		None		None		None		Master Caution remains illuminated	

Test 9	Action	System behavior	CAWS Annu	ınciation	CAWS aud	dio signal	EADI indi	cation	AP mode of audio are indicated	nd light	Master Warning	/Caution Caption
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
9.5	Press AP, YD, and ALT on mode controller	AP and YD engage (verify by manipulating the controls)	AP DISENG (amber) extinguishes (if still ON)		None		AP and YD are shown		AP, YD, FD and ALT caption illuminate		Master Caution extinguishes	
9.6	Pull the control yoke slowly aft until AP TRIM (green) caption briefly illuminates	AP and YD remain engaged. Verify by manipulating controls	A/P TRIM (green) briefly illuminates, then extinguishes A/P TRIM (red) illuminates		Gong		AP and YD remain shown		TRIM (red) caption illuminate s. AP, YD, FD and ALT caption remain illuminate d. Trim fail warning tone		Master Warning illuminates	
9.7	Disconnect AP and YD with A/P DISC switch on control yoke (iaw AFM 3.21.1)	AP and YD disconnect. Verify by manipulating controls	A/P DISENG (amber) illuminates. A/P TRIM (red) remains illuminated		Gong after 3 sec.		AP and YD disappear		AP disconnec t tone. AP, YD, FD and ALT extinguish . Red "trim" caption remains ON		Master Caution illuminates	
9.8	Press AP, then ALT on mode controller	AP and YD engage (verify by manipulating the controls)	A/P DISENG extinguishes AP TRIM remains on		None		AP and YD are shown		AP, YD, FD and ALT captions illuminate Continous AP trim fail warning tone.		None	

Test 9	Action	System behavior	CAWS Anno	unciation	CAWS aud	dio signal	EADI indi	cation	AP mode o audio ar indica	nd light	Master Warning	Caution Caption
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
9.9	Pull the control yoke slowly aft	AP and YD remain engaged. Verify by manipulating controls, but no pitch trim action (rudder trim may operate)	None, except AP TRIM (green) caption when rudder auto-trims.		None		AP and YD remain shown		Continous AP trim fail warning tone.		Master Warning remains illuminated.	

Test 10

Test 10	Action	System behavior	CAWS Annu	inciation	CAWS aud	dio signal	EADI indi	cation	AP mode of audio a	nd light	Master Warning/C	Caution Caption
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
10.1	Perform AP test by pressing TEST on mode control panel	AP performs preflight check.	5 sec A/P TRIM (green) and A/P TRIM (red). Extinguish simultaneou sly	Accuai	Gong	Accuai	None	Actual	All lights/cap tions illuminate . AP TRIM (red) flashes 4 or 5 times. AP caption flashes 12 times. AP disconnec	Actual	Master Warning illuminates and extinguishes after end of test	Accuui
10.2	Press AP, then ALT on mode controller	AP and YD engage (verify by manipulating the controls)	None		None		AP and YD are shown		t tone AP, YD, FD and ALT captions illuminate		None	
10.3	Pull Trim adapter CB	AP immediately disengages	AP DISENG (amber) illuminates after 3 sec		Gong after 3 sec		AP and YD disappear		AP, YD, FD and ALT captions extinguish immediat ely		Master Caution illuminates after 3 sec	
10.4	Within 10 seconds from 10.2, reset the Trim adapter CB.	None	AP DISENG (amber) remains illuminated		None		None		None		Master Caution remains illuminated	
10.5	Press AP, YD, and ALT on mode controller	AP and YD engage (verify by manipulating the controls)	AP DISENG (amber) extinguishes		None		AP and YD are shown		AP, YD, FD and ALT caption illuminate		Master Caution extinguishes	

Test 10	Action	System behavior	CAWS Annu	unciation	CAWS au	dio signal	EADI indi	cation	AP mode audio a	nd light	Master Warning	/Caution Caption
10.6	De ell de e	AP and YD	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
10.6	Pull the control yoke slowly aft until "AP TRIM" (green) caption briefly illuminate s	remain engaged. Verify by manipulating controls	A/P TRIM (green) briefly illuminates, then extinguishes A/P TRIM (red) illuminates		Gong		AP and YD remain shown		TRIM (red) caption illuminate s. AP, YD, FD and ALT caption remain illuminate d. Trim fail warning tone		Master Warning illuminates	
10.7	Disconnec t AP and YD with A/P DISC switch on control yoke (iaw AFM 3.21.1)	AP and YD disconnect. Verify by manipulating controls	A/P DISENG (amber) illuminates. A/P TRIM (red) remains illuminated		Gong after 3 sec.		AP and YD disappear		AP disconnec t tone. AP, YD, FD and ALT extinguish . Red "trim" caption remains ON		Master Caution illuminates	
10.8	Perform AP test by pressing TEST on mode control panel	AP performs preflight check.	5 sec A/P TRIM (green) and A/P TRIM (red). Extinguish simultaneou sly		Gong		None		All lights/cap tions illuminate . AP TRIM (red) flashes 4 or 5 times. AP caption flashes 12 times. AP disconnec t tone.		Master Warning illuminates and extinguishes after end of test	

Test 10	Action	System behavior	CAWS Annu	unciation	CAWS aud	dio signal	EADI indi	cation	AP mode of audio ar indica	nd light	Master Warning,	Caution Caption
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
10.9	Press AP, YD, and ALT on mode controller	AP and YD engage (verify by manipulating the controls)	None		None		AP and YD are shown		AP, YD and ALT captions illuminate		None	
10.10	Pull the control yoke slowly aft until "AP TRIM" (green) caption illuminate	AP and YD remain engaged. Verify by manipulating controls	A/P TRIM (green) illuminates. Caption extinguishes when trim activity stops		None		AP and YD remain shown		None		None	

Test 11

Test	Action	System behavior	CAWS Annu	ınciation	CAWS aud	dio signal	EADI indi	ication	AP mode audio al	nd light	Master Warning/0	Caution Caption
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
11.1	Perform AP test by pressing TEST on mode control panel	AP performs preflight check.	5 sec A/P TRIM (green) and A/P TRIM (red). Extinguish simultaneou sly		Gong		None		All lights/cap tions illuminate . AP TRIM (red) flashes 4 or 5 times. AP caption flashes 12 times. AP disconnec t tone.		Master Warning illuminates and extinguishes after end of test	
11.2	Press AP, YD, and ALT on mode controller	AP and YD engage (verify by manipulating the controls)	None		None		AP and YD are shown		AP, YD and ALT captions illuminate		None	
11.3	Pull Trim adapter CB	AP immediately disengages	AP DISENG (amber) illuminates after 3 sec		Gong after 3 sec		AP and YD disappear		AP, YD, FD and ALT captions disappear		Master Caution illuminates after 3 sec	
11.4	Wait for more than 30 sec. after 11.3, close the Trim adapter CB	None	15 sec after 11.3, AP TRIM (red) illuminates		15 sec after 11.3, Gong		None		TRIM (red) caption illuminate s 15 sec. after 11.3. No audio		15 sec after 11.3, Master Warning illuminates	
11.5	Press AP, YD, and ALT on mode controller	AP and YD engage	No change		No change		AP and YD are shown		AP, YD, FD and ALT captions illuminate		None	
11.6	Pull the control yoke slowly aft	No pitch trim activity may be provoked										

Test 12

Test 12	Action	System behavior	CAWS Annu	unciation	CAWS aud	dio signal	EADI indi	cation	AP mode audio au indica	nd light	Master Warning/C	Caution Caption
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
12.1	Perform AP	AP performs	5 sec A/P		Gong		None		All		Master Warning	
	test by	preflight	TRIM						lights/cap		illuminates and	
	pressing	check.	(green) and						tions		extinguishes after	
	TEST on mode		A/P TRIM (red).						illuminate		end of test	
	control		Extinguish						AP TRIM			
	panel		simultaneou						(red)			
			sly						flashes 4			
									or 5			
									times.			
									AP			
									caption			
									flashes 12			
									times.			
									AP			
									disconnec t tone.			
12.2	Press AP,	AP and YD	None		None		AP and YD		AP, YD, FD		None	
	YD, and ALT	engage					are shown		and ALT			
	on mode	(verify by							captions			
	controller	manipulating							illuminate			
		the controls)										
12.3	Pull Trim	AP	AP DISENG		Gong		AP and YD		AP, YD, FD		Master Caution	
	adapter CB	immediately	(amber)		after 3 sec		disappear		and ALT		illuminates after 3	
		disengages	illuminates						captions		sec	
			after 3 sec						disappear			
12.4	Wait for	None	15 sec after		15 sec				TRIM		15 sec after 12.3,	
	more than		12.3, AP		after 12.3,				(red)		Master Warning	
	30 sec. after		TRIM (red)		Gong				caption		illuminates	
	12.3		illuminates						illuminate			
									s 15 sec.			
									after 12.3.			
42.5	Burne AB	AD and MD /	N. a. ala		NI -		NI		No audio		No about	
12.5	Press AP,	AP and YD do	No change		No		None		None		No change	
	YD, and ALT	not engage			change							
	on mode	(verify by										
	controller	manipulating										
		the controls)						L				

Test 13

Test 13	Action	System behavior	CAWS Annu		CAWS aud	dio signal	EADI indi	cation	AP mode o audio a indica	nd light	Master Warning/Caution Caption	
13.1	Perform AP test by pressing TEST on mode control panel	AP performs preflight check.	Expected 5 sec A/P TRIM (green) and A/P TRIM (red). Extinguish simultaneou sly	Actual	Expected Gong	Actual	Expected None	Actual	Expected All lights/cap tions illuminate . AP TRIM (red) flashes 4 or 5 times. AP caption flashes 12 times. AP disconnec	Actual	Expected Master Warning illuminates and extinguishes after end of test	Actual
13.2	Press AP, YD, and ALT on mode controller	AP and YD engage (verify by manipulating the controls)	None		None		AP and YD are shown		AP, YD, FD and ALT captions illuminate		None	
13.3	Press Trim Interrupt	AP immediately disengages	AP DISENG (amber) illuminates after 3 sec		Gong after 3 sec		AP and YD disappear		AP, YD , FD and ALT captions disappear immediat ely		Master Caution illuminates after 3 sec	
13.4	Within 10 seconds from 13.2, reset Trim Interrupt to NORM	None	AP DISENG (amber) remains illuminated		None		None		None		Master Caution remains illuminated	
13.5	Press AP, YD, and ALT on mode controller	AP and YD engage (verify by manipulating the controls)	AP DISENG (amber) extinguishes		None		AP and YD are shown		AP, YD, FD and ALT caption illuminate		Master Caution extinguishes	

Test 13	Action	System behavior	CAWS Annu	ınciation	CAWS aud	dio signal	EADI indi	cation	AP mode audio a	nd light	Master Warning/Caution Caption	
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
13.6	Pull the control yoke slowly aft until "AP TRIM" (green) caption briefly illuminates	AP and YD remain engaged. Verify by manipulating controls	A/P TRIM (green) briefly illuminates, then extinguishes . A/P TRIM (red) illuminates		Gong		AP and YD remain shown		TRIM (red) caption illuminate s. AP, YD, FD and ALT caption remain illuminate d. Trim fail warning		Master Warning illuminates	
13.7	Disconnect AP and YD with A/P DISC switch on control yoke (iaw AFM 3.21.1)	AP and YD disconnect. Verify by manipulating controls	A/P DISENG (amber) illuminates. A/P TRIM (red) remains illuminated		Gong after 3 sec. (after Mode Controller tone has finished)		AP and YD disappear		tone AP disconnec t tone. AP and YD extinguish . Red "trim" caption remains ON. Trim fail warning tone		Master Caution illuminates	
13.8	Press AP, YD, and ALT on mode controller	AP and YD engage (verify by manipulating the controls)	None		None		AP and YD are shown		AP, YD, FD and ALT captions illuminate Trim fail warning tone remains active		None	
13.9	Pull the control yoke slowly aft	No pitch trim activity may be provoked	None				No change		No change			

Test 14

Test 14	Action	System behavior	CAWS Annu	inciation	CAWS aud	dio signal	EADI indi	cation	AP mode controller audio and light indication		Master Warning/Caution Caption	
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
14.1	Perform AP test by pressing TEST on mode control panel	AP performs preflight check.	5 sec A/P TRIM (green) and A/P TRIM (red). Extinguish simultaneou sly	Account	Gong	Account	None	Actual	All lights/cap tions illuminate . AP TRIM (red) flashes 4 or 5 times. AP caption flashes 12 times. AP disconnec	Account	Master Warning illuminates and extinguishes after end of test	Account
14.2	Press AP, YD, and ALT on mode controller	AP and YD engage (verify by manipulating the controls)	None		None		AP and YD are shown		t tone. AP, YD, FD and ALT captions illuminate		None	
14.3	Press Trim Interrupt	AP immediately disengages	AP DISENG (amber) illuminates after 3 sec		Gong after 3 sec		AP and YD disappear		AP, YD , FD and ALT captions disappear immediat ely		Master Caution illuminates after 3 sec	
14.4	Within 10 seconds from 14.2, reset Trim Interrupt to NORM	None	AP DISENG (amber) remains illuminated		None		None		None		Master Caution remains illuminated	
14.5	Press AP, YD, and ALT on mode controller	AP and YD engage (verify by manipulating the controls)	AP DISENG (amber) extinguishes		None		AP and YD are shown		AP, YD and ALT caption illuminate		Master Caution extinguishes	

Test 14					CAWS aud	dio signal	EADI indi	cation	AP mode audio al	nd light	Master Warning/Caution Caption	
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
14.6	Pull the control yoke slowly aft until AP TRIM (green) caption briefly illuminate s	AP and YD remain engaged. Verify by manipulating controls	A/P TRIM (green) briefly illuminates, then extinguishes A/P TRIM (red) illuminates		Gong		AP and YD remain shown		TRIM (red) caption illuminate s. AP, YD, FD and ALT caption remain illuminate d. Trim fail warning tone		Master Warning illuminates	
14.7	Disconnec t AP and YD with A/P DISC switch on control yoke (iaw AFM 3.21.1)	AP and YD disconnect. Verify by manipulating controls	A/P DISENG (amber) illuminates. A/P TRIM (red) remains illuminated		Gong after 3 sec. (after Mode Controller tone has finished)		AP and YD disappear		AP disconnec t tone. AP and YD extinguish . Red "trim" caption remains ON		Master Caution illuminates	
14.8	Perform AP test by pressing TEST on mode control panel	AP performs preflight check.	5 sec A/P TRIM (green) and A/P TRIM (red). Extinguish simultaneou sly		Gong		None		All lights/cap tions illuminate . AP TRIM (red) flashes 4 or 5 times. AP caption flashes 12 times. AP disconnec t tone.		Master Warning illuminates and extinguishes after end of test	

Test 14	Action	System behavior	CAWS Annunciation		CAWS audio signal		EADI indication		AP mode controller audio and light indication		Master Warning/Caution Caption	
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
14.9	Press AP, YD, and ALT on mode controller	AP and YD engage (verify by manipulating the controls)	None		None		AP and YD are shown		AP, YD, FD and ALT captions illuminate		None	
14.10	Pull the control yoke slowly aft until AP TRIM (green) caption illuminate	AP and YD remain engaged. Verify by manipulating controls	A/P TRIM (green) illuminates. Caption extinguishes when trim activity stops.		None		AP and YD remain shown		None		None	

Test 15

Test 15	Action	System behavior	CAWS Annu	inciation	CAWS aud	lio signal	EADI indi	cation	AP mode controller audio and light indication		Master Warning/Caution Caption	
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
15.1	Perform AP test by pressing TEST on mode control panel	AP performs preflight check.	5 sec A/P TRIM (green) and A/P TRIM (red). Extinguish simultaneou sly		Gong		None		All lights/cap tions illuminate . AP TRIM (red) flashes 4 or 5 times. AP caption flashes 12 times. AP disconnec		Master Warning illuminates and extinguishes after end of test	
15.2	Press AP, YD, and ALT on mode controller	AP and YD engage (verify by manipulating the controls)	None		None		AP and YD are shown		AP, YD, FD and ALT captions illuminate		None	
15.3	Press Trim Interrupt	AP immediately disengages	AP DISENG (amber) illuminates after 3 sec		Gong after 3 sec		AP and YD disappear		AP, YD , FD and ALT captions disappear immediat ely		Master Caution illuminates after 3 sec	
15.4	Wait for more than 30 sec. after 15.3, reset Trim Interrupt to NORM	None	15 sec after 15.3, AP TRIM (red) illuminates		15 sec after 15.3, Gong		None		TRIM (red) caption illuminate s after 15 sec.		15 sec after 15.3, Master Warning illuminates	
15.5	Press AP, YD, and ALT on mode controller	AP and YD do engage (verify by manipulating the controls)	A/P DISENG extinguishes		None		AP and YD are shown		AP, YD, FD and ALT captions illuminate		Master caution extinguishes	

Test 15	Action	System behavior	CAWS Ann	unciation	CAWS au	dio signal	EADI indi	cation	AP mode controller audio and light indication		Master Warning/Caution Caption	
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
15.6	Pull the control yoke slowly aft	No pitch trim activity may be provoked	None				No change		No change			

Test 16

Test 16	Action	System behavior	CAWS Annu	inciation	CAWS aud	lio signal	EADI indi	cation	AP mode controller audio and light indication		Master Warning/Caution Caption	
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
16.1	Perform AP	AP performs	5 sec A/P		Gong		None		All		Master Warning	
	test by	preflight	TRIM						lights/cap		illuminates and	
	pressing	check.	(green) and						tions		extinguishes after	
	TEST on mode		A/P TRIM (red).						illuminate		end of test	
	control		Extinguish						AP TRIM			
	panel		simultaneou						(red)			
			sly						flashes 4			
									or 5			
									times.			
									AP			
									caption			
									flashes 12			
									times.			
									AP			
									disconnec			
16.2	Press AP,	AP and YD	None		None		AP and YD		t tone. AP, YD		None	
10.2	then ALT on	engage	None		None		are shown		and ALT		None	
	mode	(verify by					are snown		captions			
	controller	manipulating							illuminate			
	controller	the controls)							. DOES			
		the controls,							THE			
									SWITCH			
									ILLUMINA			
									TE?			
16.3	Press Trim	AP	AP DISENG		Gong		AP and YD		AP, YD,		Master Caution	
	Interrupt	immediately	(amber)		after 3 sec		disappear		FD and		illuminates after 3	
		disengages	illuminates						ALT 		sec	
			after 3 sec						captions			
									disappear			
									immediat			
16.4	Wait for	None	15 sec after		15 sec		+		ely TRIM		15 sec after 16.3,	
10.4	more than	None	15 sec arter 16.3, AP		after 16.3,				(red)		Master Warning	
	30 sec. after		TRIM (red)		Gong				caption		illuminates	
	16.3,		illuminates		Guilg				illuminate		illullillates	
	10.5,		munimates						s 15 sec.			
									after 16.3			
									No audio			

Test 16	Action	System behavior	CAWS Annunciation		CAWS audio signal		EADI indication		AP mode controller audio and light indication		Master Warning/Caution Caption	
			Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual
16.5	Press AP, YD then ALT on mode controller	AP and YD do not engage (verify by manipulating the controls)	No change		No change		None		None		None	