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TITLE

ACCEPTANCE TEST PROCEDURE SPECIFICATION FOR THE T2CAS TT-950/951/952 COMPUTER UNIT, PART NO. 9000000-10001, 9000000-55001, and 9000000-20001

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ACCEPTANCE TEST PROCEDURE SPECIFICATION FOR THE T2CAS TT-950/951/952 COMPUTER UNIT, PART NO. 9000000-10001, -20001, -55001

1. SCOPE

This acceptance test procedure specification (ATP) establishes the manufacturing and operational requirements that the T2CAS TT-950. TT-951, TT-952 Computer Unit, Part No. 9000000-10001, 9000000-55001, and 9000000-20001 must meet to ensure that the unit is in proper operating condition.

2. REFERENCE DOCUMENTS

2.1 These documents are not required for performance of the test procedure. The purpose of listing these documents is to provide an aid for troubleshooting should any discrepancies occur during the performance of the test procedure.

9000000-10001	End Item Drawing – T2CAS 6MCU
9000000-20001	End Item Drawing – T2CAS 6MCU (with GPS)
9000000-55001	End Item Drawing – T2CAS 4MCU
9000001-10001	End Item Drawing – Aircraft Personality Module (APM)
9000027-001	Outline and Installation drawing
9000024-001	W1 Harness Assembly Drawing
9000050-001	W6 Cable Assy
9000038-001	W7 Coax Cbl GPS-Arinc
7517941-901	Power Supply/Interconnect Harness Assembly Drawing
9000005-001	A1 Interconnect CCA drawing
9000010-001	A1 Interconnect CCA drawing
7517923	A3A1 Spectrum Filter Assembly Drawing
7517925-902	A2 Processor CCA Drawing
7517925-903	A2 Processor CCA Drawing
9000015-001	A4 Power Supply/Modulator CCA Drawing
7517935-902	A3 Transmitter Drawing
7517935-910	A3/A2 Transmitter CCA Drawing
7517945-902	A5 Receiver I/O CCA Drawing
7517945-903	A5 Receiver I/O CCA Drawing
7517945-904	A5 Receiver I/O CCA Drawing
9000020-001	A7 TAWS CCA Drawing
9000025-001	A8 GPS CCA Drawing
IT7517900	Integrated test Specification for the TCAS

EB7517987 Product Test Software Release Numbers and CRCs

3. GENERAL INFORMATION

3.1 General Requirements

All tests shall be performed under the following conditions:
Temperature = 25+/- 5 Deg C
Relative humidity = 95% maximum
Pressure = between 20 and 32 in Hg

4. POWER REQUIREMENTS

4.1 115 V ac, 400 =/- 10 Hz, 200 W minimum, voltage variable from 90 to 140 V ac.

4.2 28 Vdc, 200 W minimum, voltage variable from 16 to 35 V dc.

5. TEST EQUIPMENT

5.1 TCAS 2000 MTS – Part No. T336255 Mod B

- Aircraft interface unit – Part No. T336253
- RF interface unit – Part No. T335254
- PDL panel – Part No. T336259
- Tray assembly – Part No. T336255-26

5.2 T2CAS PC Test Software – Part No. 9000237

- Identified equipment is included in TCAS 2000 MTS, P/N T336255 Mod B

5.3 T2CAS TAWS Card Test Station –

- TAWS Processor Test Fixture – Part No. 9000117-001
- Emulator – Wind River Vision Ice II
- Power Supplies – Part No. 9000118-001
- PC – Standard PC running Windows 9x, 2000, or NT
- Cables
    - Part No. 9000288 (APM Cable)
    - Part No. 9000227 (Test Discretes Cable)
    - Part No. 9000289 (RS232 Cable)
    - Part No. 9000290 (PCI Bus Test Adapter)
    - LATTICE Part No. pDS4102-DL2 LATTICE adapter cable (connects to parallel port on PC, other end has straight single in-line Berg pin header with pin 5 cut out for keying)

- Software
    - o VisionCLICK Rev. 7.90A from Wind River (used to load IO_FPGA and HBIT files)
    - o LATTICE ispVM System Software version 12.0 (used to program CPLD)

5.4 T2CAS Miscellaneous Test Equipment

- ATA 8840 Extraction Tool – used to extract TAWS CCA from UUT
- TAWS extender CCA – Part No. 9000070-001
- EDDIT Tool – Part No. 9000286-102 (Software used to verify T2CAS software loads)

6. TEST SETUP

6.1 Power up the MTS and allow it to warm up appropriately. Verify that test equipment used is calibrated and functioning properly.

6.2 Connect the test equipment to the UUT. Set IEEE-488 addresses as follows (in Hex):

*	Aircraft interface unit (A2 CCA in AIU)	16
*	Aircraft interface unit 2 (A4 CCA in AIU)	17
*	RF interface unit	25
*	HP 8648B signal generator	19
*	Cal instruments AC power supply 2001L	01
*	HP 8990A peak power analyzer	07
*	HP 6032A DC power supply	05
*	HP34970A Data Acquisition Switch Unit	09
*	HP34970A Data Acquisition Switch Unit	10
*	HP34970A Data Acquisition Switch Unit	11
*	HP34970A Data Acquisition Switch Unit	12

7. TEST REQUIREMENTS

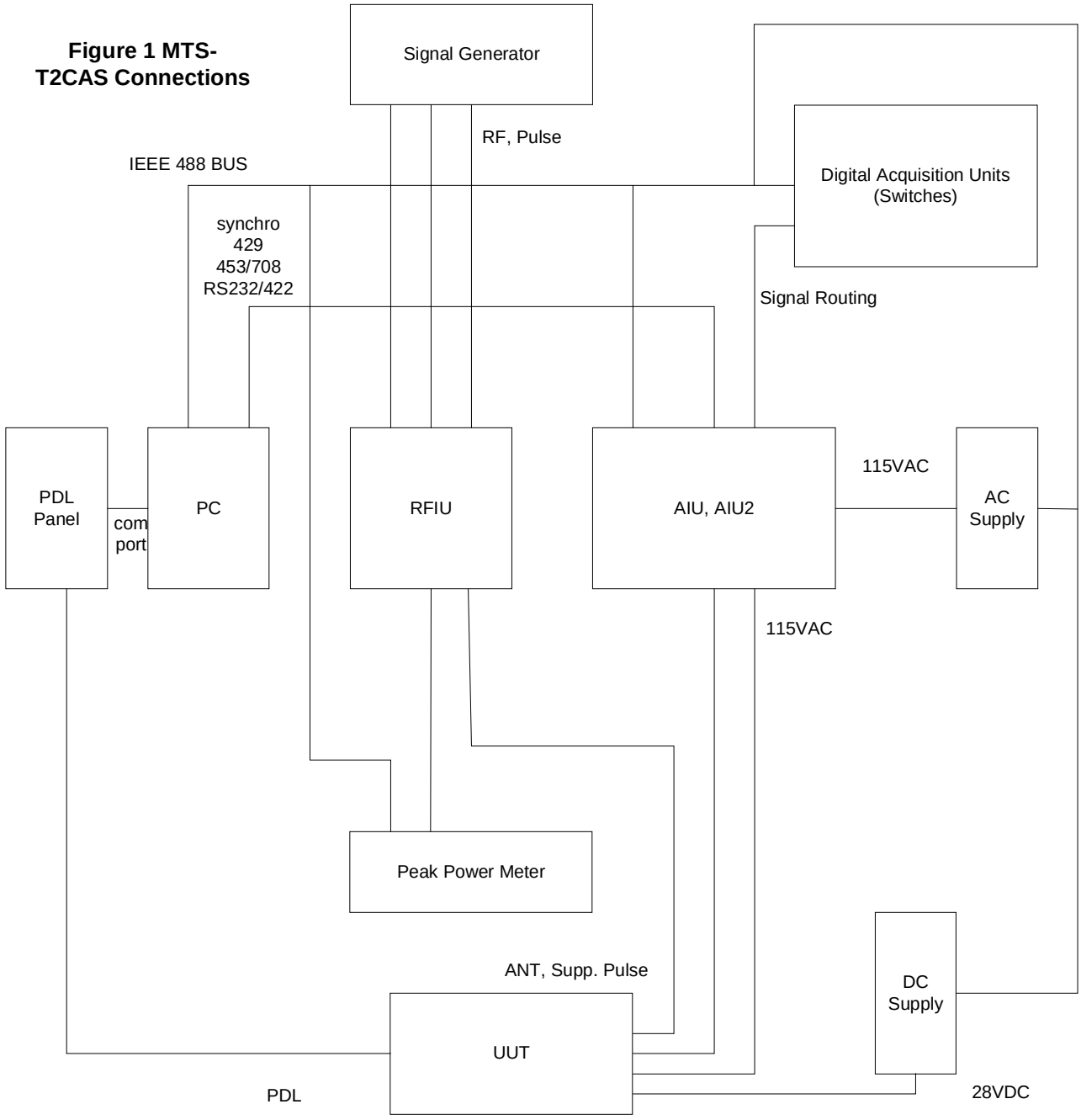
7.1 Within each section of the test procedure (indicated by an underlined title in the Test description and Work Steps columns) the test steps shall be performed in the order listed. In the event of failure and repair, the section must be performed again from the beginning. It is allowable for the sections requiring user interaction to be grouped together and run in a different order than that specified.

7.2 All control settings or external connections that are altered during the course of a section of the procedure shall be returned to their initial settings before starting a new section of the procedure.

7.3 This procedure is intended to be performed by a knowledgeable technician or engineer. It is assumed that the equipment will be energized and de-energized as appropriate when changing connections and setups.

7.4 For each end item dash number (9000000-10001, 9000000-20001 or 9000000-55001) and minimum hardware mod level, the corresponding CAS PDL part number, SURV PDL part number and FPGA truth table part number are shown in table 7-1.

Figure 1 MTS-T2CAS Connections



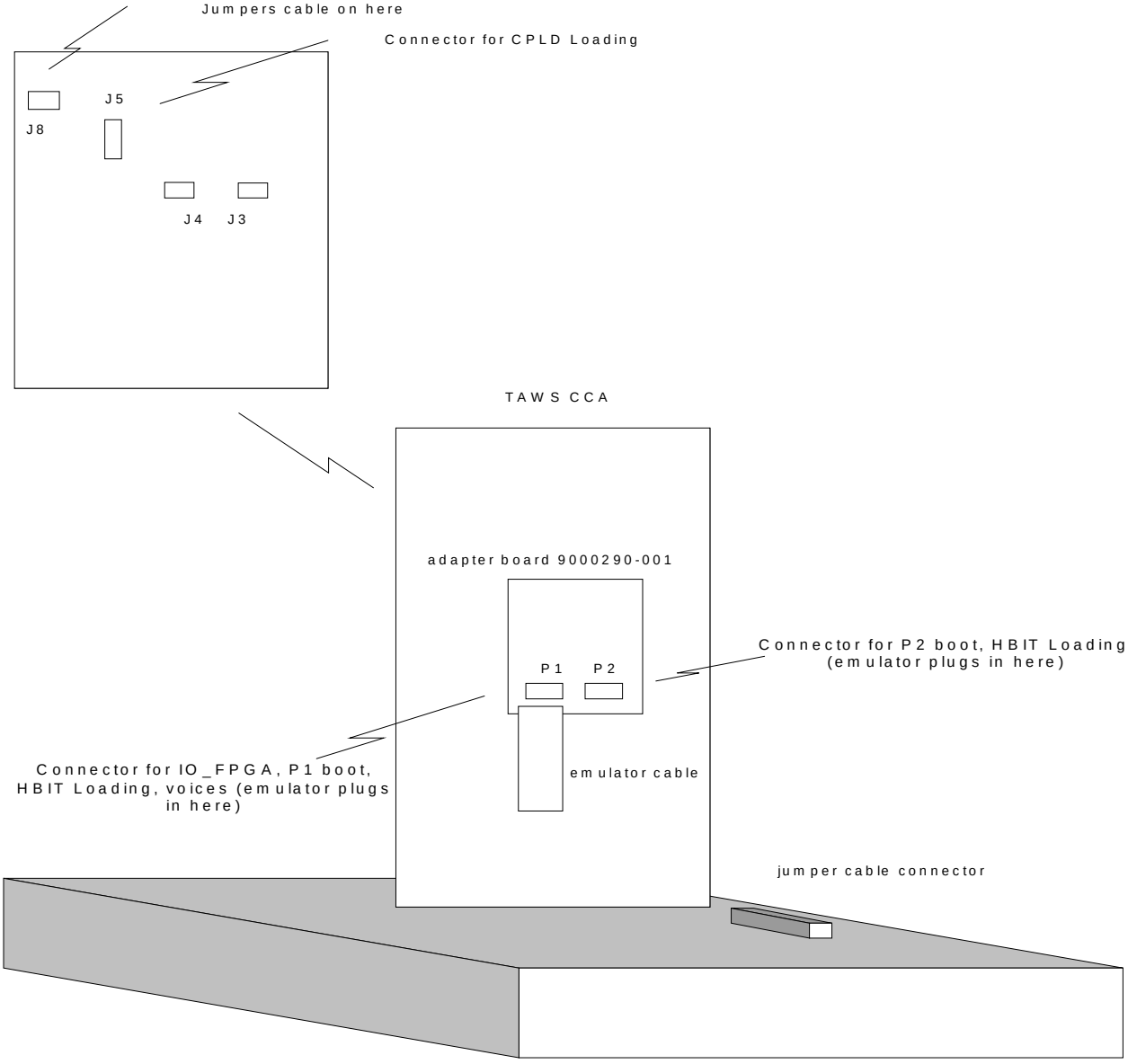
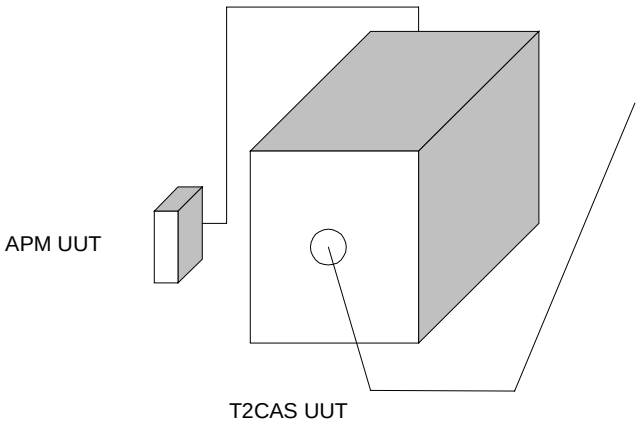


Figure 2 – TAWS Card Test Station Equipment Setup



UUT Connection to MTS

Figure 3 – MTS Test Equipment setup for the APM

Table 7-1. CAS PDL, SURV PDL and FPGA Part Numbers

Dash No.	Minimum Hardware Mod	CAS PDL Part Number	SURV PDL Part Number	FPGA TT Part Number
10001	-	PS4084562-102	PS4084562-102	TT7517989-103
20001	-	PS4084562-102	PS4084562-102	TT7517989-103
55001	-	PS4084562-102	PS4084562-102	TT7517989-103

7.5 For each end item dash number (9000000-10001, 9000000-20001 or 9000000-550001) and software mod level, the corresponding Operational software part number is shown in Table 7-2.

Table 7-2. Operations Software Part Numbers

Dash No.	Software Mod	Operational Software Part Number	Operational Software Part Number Displayed
10001	-	PS4084561-912	3416-HNP-02B-07
20001	-	PS4084561-912	3416-HNP-02B-07
55001	-	PS4084561-912	3416-HNP-02B-07

Table 7-3. Product Test Sofware Release Number and CRCs

Part No.	Product Test Software Release No.	CAS Flash Program Memory CRC	SURV Flash Program Memory CRC
9000000-xxxxx	MT4084684-904	F7C850F6	E1EFC880

Table 7-4. Production End Item Operational Software/Firmware Configuration Table SOFTWARE

Dash No.	Minimum Hardware Mod	TCAS BOOT Part Number	TCAS OPERATIONAL	TAWS P1 BOOT	TAWS P2 BOOT
10001	-	PS4084562-102 TT7517989-103	PS4084561-912	9000278-001	9000279-001
20001	-	PS4084562-102 TT7517989-103	PS4084561-912	N/A	N/A
55001	-	PS4084562-102 TT7517989-103	PS4084561-912	9000278-001	9000279-001

Table 7-4. Production End Item Operational Software/Firmware Configuration Table (continued) SOFTWARE

Dash No.	TAWS P1 DATALOAD	TAWS P2 DATALOAD	TAWS P1 OPERATIONAL	TAWS P2 OPERATIONAL
10001	9000276-001	9000277-001	9000274-001	9000275-001
20001	N/A	N/A	N/A	N/A
55001	9000276-001	9000277-001	9000274-001	9000275-001

Table 7-4. Production End Item Operational Software/Firmware Configuration Table (continued) FIRMWARE

Dash No.	TAWS CPLD	TAWS FPGA A	TAWS FPGA B
10001	9000230-002	9000231-003	9000232-001
20001	N/A	N/A	N/A
55001	9000230-002	9000231-003	9000232-001

7.6 The following is a description of the intended interpretation of the column headings:

Column	Description
Rev Ltr	Revision letters are used to identify revised material.
Test No.	Tests are numbered in sequence.
Opr Limits	Unit under test (UUT) shall meet these limits when tested at other than the manufacturing facility. When an item is marked OPTIONAL, the corresponding test is not required except as an aid in troubleshooting.
Test Description	These items are the parameters to which the UUT was designed and aid in troubleshooting by specifying the input and output signal terminals. All conditions required are not repeated for each test, and conditions established in previous test also supply.
Switch Pos	Positions to which switches must be set are listed in required order and are grouped to correspond to applicable Work Steps.
Work Steps	This column defines the operations necessary to perorm a test and achieve a result set switches to designated positions before performing a corresponding work step.
Mfg Limits	UUT shall meet these limits at final buyoff before customer delivery.

7.7 Naming Convention for Integrated Test Specification works steps:

Equipment	Reference Name	Descriptions
T336253 Aircraft Interface Unit	AIU	Precedes instructions sent via the IEEE 488 to the AIU as specified
T336254 Radio Frequency Interface Unit	RFIU	Precedes instructions sent via the IEEE 488 to the AIU as specified
T336259 Program Data Link Unit	PDL	Precedes instructions to use inputs/outputs on the Program Data Loader panel.
T336255 Manual Test Station	MTS	Precedes instructions to make measurements or manual changes on the Station.
Personal Computer	PC	Precedes instructions to use the personal computer keyboard input.
Personal Computer Monitor	CRT	Precedes instructions to view a value on the personal Computer video screen or evaluate a return from the UUT.
Unit Under Test	UUT1	Precedes instructions sent to the Unit Under Test via RS-422.
Unit Under Test	UUT2	Precedes instructions sent to the Unit Under Test via ARINC-429
+28VDC Power Supply	PSDC	Precedes instructions sent to DC power supply via IEEE 488Bus.

115 VAC 400 HZ Supply PSAC Precedes instructions sent to AC power supply via IEEE 488Bus.

7.8 The T2CAS Computer Unit shall be tested using product test software as specified in Table 7-3 for the TCAS portion of the UUT and the product test software as specified in this document for the TAWS portion of the UUT. Instructions for loading the TAWS product test software appear in this document in the test steps using the TAWS extender card, UUT, and the MTS. Instructions for loading the TCAS product test software and operational software are given in Appendix A.

1.0 Load Firmware into CPLD on TAWS CCA –

Click on the shortcut icon (9000237) on the desktop.

Log in with employee number and password

Load CLPD on TAWS CCA using Lattice Software on the MTS using the following steps:

Insert CPLD CDROM (P/N 9100003-001) into MTS PC CDROM drive.

Make sure UUT power is off on the MTS.

Install TAWS CCA into extender card on UUT. Make sure jumpers/straps are installed on J8 on CCA.

Connect cable (cable with straight single in-line Berg pin header with pin 5 cut out for keying) to J5 on CCA (J5 is located in center of CCA)

Open Lattice (ispSystem).

Get the file to be programmed (CPLD software P/N 9000230-002). This file is located on CDROM (P/N 9100003-001) (file name 9000230_002.jed, scan chain file is 9000230_002.xcf).

Power-up the UUT by selecting ADL.

Wait until Files to Upload … window opens.

Click on GO to download the file into the CPLD.

After the download is complete, power-down the UUT by clicking CANCEL on Files to Upload… window, then click on OK.

Unplug J5.

2.0 Load IO_FPGA software into TAWS CCA

Load IO_FPGA software into TAWS CCA on the MTS using the following steps:

Insert IO_FPGA CDROM (P/N 9100003-001) into emulator PC CDROM drive.

Make sure UUT power is off on the MTS.

Install TAWS CCA into extender card on UUT. Make sure jumpers/straps are installed on J8 on CCA.

Connect emulator cable (cable labeled with powerpc dual-in-line connector) to **P1** using adapter board as shown in Figure 2.

Power-up the emulator (switch is on rear). There should be a blinking light (debug) on the front of the emulator box when the emulator is ready.

On the emulator PC: Open program visionClick (system) Vision Software II\ and Vision 7.0. Make sure the IP address listed matches the IP address marked on the emulator box.

Power-up the UUT by selecting ADL.

Wait until Files to Upload … window opens.

Click on Reset (in the VisionSoftware window). The system sould respond with >BKM in the terminal network window.

Open the TF Flash Program Window.

Load IO_FPGA software into TAWS CCA on the MTS by selecting (SELECT) the path where the software P/N 9000231-003 resides on CDROM (P/N 9100003-001) (file name IO-BLD10.FGA).

SET the Bias to 7FB00000; OK;

Enter the erase and program range:

SET 7FB00000 to 7FCFFFFF; select Erase to 0x; and then click; Erase and program (see readme file for details on loading in its folder.

Look for Complete. Click OK.

Close TF FLASH PROGRAMMING Window.

Click: RESET

Response: >BKM in the terminal network window

After the download is complete, power-down the UUT by clicking CANCEL on Files to Upload… window, then click on OK.

3.0 Load HBIT P1 processor boot software into TAWS CCA

Load HBIT P1 boot software into TAWS CCA on the MTS using the following steps:

Insert HBIT CDROM (P/N 9100002-001) into emulator PC CDROM drive.

Make sure UUT power is off on the MTS.

Install TAWS CCA into extender card on UUT. Make sure jumpers/straps are installed on J8 on CCA.

Connect emulator cable (cable labeled with powerpc dual-in-line connector) to **P1** using adapter board as shown in Figure 2.

Power-up the emulator (switch is on rear).

There should be a blinking light (debug) on the front of the emulator box when the emulator is ready.

On the emulator PC: Open program visionClick: (system) VisionSoftware II \ and vision 7.0

Make sure the IP address listed matches the IP address marked on the emulator box.

Power-up the UUT by selecting ADL.

Wait until Files to Upload … window opens.

Click on Reset (in the VisionSoftware window). The system should respond with >BKM in the terminal network window.

Open TF Flash Program Window.

Load HBIT for P1 by selecting (SELECT) the path where the software P/N 9000229-002 002 resides on CDROM (P/N 9100002-001) (file name hbit_p1.bin).

SET the Bias to –80000000: OK;

Enter the erase and program range SET 7FF00000 to 7FFFFFFF;

Select erase to 0x;

Click Erase and program (see readme file for details on loading in its folder).

Look for Complete. Click OK.

Close TF FLASH PROGRAMMING Window.

Click: RESET

Response: >BKM in the terminal network window.

After the download is complete, power-down the UUT by clicking CANCEL on Files to Upload… window, then click on OK.

4.0 Load P1 mini Data Loader software into TAWS CCA

Load P1 mini Data Loader software into TAWS CCA on the MTS using the following steps:

Insert HBIT CDROM (P/N 9100002-001) into emulator PC CDROM drive.

Make sure UUT power is off on the MTS.

Install TAWS CCA into extender card on UUT. Make sure jumpers/straps are installed on J8 on CCA.

Connect emulator cable (cable labeled with powerpc dual-in-line connector) to **P1** using adapter board as shown in Figure 2.

Power-up the emulator (switch is on rear).

There should be a blinking light (debug) on the front of the emulator box when the emulator is ready.

On the emulator PC: Open program visionClick: (system) VisionSoftware II \ and vision 7.0

Make sure the IP address listed matches the IP address marked on the emulator box.

Power-up the UUT by selecting ADL on the menu bar.

Wait until Files to Upload … window opens.

Click on Reset (in the VisionSoftware window). The system should respond with >BKM in the terminal network window.

Open TF Flash Program Window.

Load P1 Mini Data Loader by selecting (SELECT) the path where the software P/N 9000229-002 resides on the CDROM (P/N 9100002-001) (filename dl_p1.bin).

SET the Bias to 7F800000: OK;

Enter the erase and program range SET 7F800000 to 7FAFFFFF;

Select erase to 0x;

Click Erase and program (see readme file for details on loading in its folder).

Look for Complete. Click OK.

Close TF FLASH PROGRAMMING Window.

Click: RESET

Response: >BKM in the terminal network window.

After the download is complete, power-down the UUT by clicking CANCEL on Files to Upload… window, then click OK.

5.0 Load Voices software into TAWS CCA

Load Voice software into TAWS CCA on the MTS using the following steps:

Insert HBIT CDROM (P/N 9100002-001) into the emulator PC CDROM drive.

Make sure UUT power is off on the MTS.

Install TAWS CCA into extender card on UUT. Make sure jumpers/straps are installed on J8 on CCA.

Connect emulator cable (cable labeled with powerpc dual-in-line connector) to **P1** using adapter board as shown in Figure2.

Power-up the emulator (switch is on rear).

There should be a blinking light (debug) on the front of the emulator box when the emulator is ready.

On the emulator PC: Open program visionClick: (system) VisionSoftware II \ and vision 7.0

Make sure the IP address listed matches the IP address marked on the emulator box.

Power-up the UUT by selecting ADL.

Wait until Files to Upload … window opens.

Click on Reset (in the VisionSoftware window). The system should respond with >BKM in the terminal network window.

Open TF Flash Program Window.Load Voice software into TAWS CCA on the card test station by selecting (SELECT) the path where software P/N 9000229-002 resides on CDROM (P/N 9100002-001) (file name phrase.bin).

SET the Bias to 0; OK;

Enter the erase and program SET 78000000 to 781FFFFF.

Select erase to 0x.

Click erase and program (see readme file for details on loading in its folder).

Look for Complete. Click OK.

Close TF FLASH PROGRAMMING Window.

Click: RESET

Response: >BKM in the terminal network window.

After the download is complete, power-down the UUT by clicking CANCEL on Files to Upload… window, then click on OK.

6.0 Load HBIT P2 processor boot software into TAWS CCA

Load HBIT P2 boot software into TAWS CCA on the MTS using the following steps:

Insert HBIT CDROM (P/N 9100002-001) into the emulator PC CDROM drive.

Make sure UUT power is off on the MTS.

Install TAWS CCA into extender card on UUT. Make sure jumpers/straps are installed on J8 on CCA.

Connect emulator cable (cable labeled with powerpc dual-in-line connector) to **P2** using adapter board as shown in Figure 2.

Power-up the emulator (switch is on rear).

There should be a blinking light (debug) on the front of the emulator box when the emulator is ready.

On the emulator PC: Open program visionClick: (system) VisionSoftware II \ and vision 7.0

Make sure the IP address listed matches the IP address marked on the emulator box.

Power-up the UUT by selecting ADL.

Wait until Files to Upload … window opens.

Click on Reset (in the VisionSoftware window). The system should respond with >BKM in the terminal network window.

Open TF Flash Program Window.

Load HBIT for P2 by selecting (SELECT) the path where the software P/N 9000229-002 resides on the CDROM (P/N 9100002-001) (file name hbit_p2.bin).

SET the Bias to –80000000: OK;

Enter the erase and program range SET 7FF00000 to 7FFFFFFF;

Select erase to 0x;

Click Erase and program (see readme file for details on loading in its folder).

Look for Complete. Click OK.

Close TF FLASH PROGRAMMING Window.

Click: RESET

Response: >BKM in the terminal network window.

After the download is complete, power-down the UUT by clicking CANCEL on Files to Upload… window, then click OK.

7.0 Load P2 mini Data Loader software into TAWS CCA

Load P2 mini Data Loader software into TAWS CCA on the MTS using the following steps:

Insert HBIT CDROM (P/N 9100002-001) into the emulator PC CDROM drive.

Make sure UUT power is off on the MTS.

Install TAWS CCA into extender card on UUT. Make sure jumpers/straps are installed on J8 on CCA.

Connect emulator cable (cable labeled with powerpc dual-in-line connector) to **P2** using adapter board as shown in Figure 2.

Power-up the emulator (switch is on rear).

There should be a blinking light (debug) on the front of the emulator box when the emulator is ready.

On the emulator PC: Open program visionClick: (system) VisionSoftware II \ and vision 7.0

Make sure the IP address listed matches the IP address marked on the emulator box.

Power-up the UUT by selecting ADL.

Wait until Files to Upload … window opens.

Click on Reset (in the VisionSoftware window). The system should respond with >BKM in the terminal network window.

Open TF Flash Program Window.

Load P2 mini Data Loader by selecting (SELECT) the path where the software P/N 9000229-002 resides on the CDROM (P/N 9100002-001) (file name dl_p2.bin).

SET the Bias to 7FC00000: OK;

Enter the erase and program range SET 7FC00000 to 7FEFFFFF;

Select erase to 0x;

Click Erase and program (see readme file for details on loading in its folder).

Look for Complete. Click OK.

Close TF FLASH PROGRAMMING Window.

Click: RESET

Response: >BKM in the terminal network window.

After the download is complete, power-down the UUT by clicking CANCEL on Files to Upload… window, then click on OK.

Remove jumpers from J8 on TAWS CCA

Remove TAWS CCA from extender card.

Remove extender card from UUT.

Install TAWS CCA in UUT.

Rev Ltr	Test No.	Operator limits		Test Description				Work Steps	

Rev Ltr	Test No.	Operator limits	Test Description			Work Steps	
			Test UUT using MTS.			Test the UUT on the MTS using the following steps.	
						MTS: Insert UUT into mount. Connect APM to 9 pin connector attached to ARINC600 connector on MTS tray as shown in Figure 3.	
						MTS: Connect cable to UUT PDL front connector as shown in Figure 3.	
						Make sure Compact Flash card is installed in T2CAS UUT.	
						On the desktop, click on the shortcut icon for the 9000237 software.	
						Log in with employee number and password	
						Go to File, Select, Open	
						Select sequence file 9000237.squ	
						Load bench test software (Product Test Software) using the instructions in Appendix A.	
						Click on Test UUT. Enter UUT information	
						Select UUT Part number from Menu selection (9000000-10001, -20001, or –55001)	
						Select Final as test type	
						Select ATP Revision letter as B	

Rev Ltr	Test No.	Operator limits		Test Description				Work Steps	
								Enter Employee number. Enter the APM Serial Number, enter the APM Hardware Mod, and select the APM part number (9000001-10001). Click on OK. Test will begin to run. Follow operator prompts and enter the appropriate information.	

Rev Ltr	Test No.	Operator limits	Test Description			Work Steps	
	1 thru 38		TCAS tests			TCAS test procedure and limits are as given in document IT7517900 tests 1 through 39.2 except for the test numbers listed below. Test numbers 1.4,through 1.11, 1.13, 3.1, 6.7, 6.8, 6.12, 8.21, and 10.3 are perfomed as described in this document, not in IT7517900. Where EB7517987 is referenced, use the Software Release numbers and CRC's given in table 7-3 instead.	
	1.4 thru 1.11, and 1.13		Test not performed on T2CAS				

Rev Ltr	Test No.	Operator limits	Test Description		Work Steps	
	3.1		Verify that the LEDs are turned on and off according to the following repetitive sequence, approximately 1 second per item: 1. All LEDs on. 2. Only TCAS PASS on. 3. Only TCAS FAIL on. 4. Only TA DISP on. 5. Only RA DISP on. 6. Only RAD ALT on. 7. Only XPDR BUS on. 8. Only TOP ANT on. 9. Only BOT ANT on. All LEDs off.		Verify that the LEDs are turned on and off according to the following repetitive sequence, approximately 1 second per item: 1. All LEDs on. 2. Only TCAS PASS on. 3. Only TCAS FAIL on. 4. Only TA DISP on. 5. Only RA DISP on. 6. Only RAD ALT on. 7. Only XPDR BUS on. 8. Only TOP ANT on. 9. Only BOT ANT on. All LEDs off.	PASS
	6.7	0010 0010 1010 1100	Apply a ground to the following “WORD 3” discrete inputs. P1E-10C P1E-10E P1F-7E P1F-8F P1F-8H P1F-8K P1E-10A Leave the remaining discretes open. Verify the inputs are correctly read by the CAS processor.	**AIU:** AA	The IDW3 shall read:	0010 0010 1010 1100

Rev Ltr	Test No.	Operator limits	Test Description		Work Steps	
	6.8	1101 0001 0101 0011	Apply a ground to the following "WORD 3" discrete inputs: P1E-12A P1E-10D P1E-10F P1F-7F P1F-8G P1F-6D P1F-8J P1E-10B P1E-12C Verify the inputs are correctly read by the CAS processor.	**AIU:** Set P3X to 55	The IDW3 shall read:	1101 0001 0101 0011
	6.12	0101 0101 1010 1000	Apply a ground to the following "WORD 5" discrete inputs: P1E-11C P1E-11A P1E-10J P1E-10G P1E-12K P1E-12H P1E-12D P1E-12F Leave the remaining discretes open. Verify the inputs are correctly read by the CAS processor.	**AIU:** **Set P3X to 55**	The IDW5 shall read:	0101 0101 1010 1000

Rev Ltr	Test No.	Operator limits	Test Description		Work Steps	
	8.21	VVVV	Transmit D5555555 from TA/RA DISP #1 bus (P1E-7C/D) and (P2-33/34) set to high speed operation and verify the data is received by the MAG HDG/ATT bus (P1E-7A/B), ALTITUDE ALERT (P1E-8C/D).	**UUT1:** "AX 2 0360 H AA D5555555"	The PC display shall read:	VVVV
	10.3	123 to 133 uS	Generate a Mode S self-test RF wrap test with the suppression pulse enabled and verify the suppression bus pulse width on P1C-12 is 128 +/- 5 uS	**UUT1:** "RXMSRFS 1000"	PPM: Using a x10 probe connect the oscilloscope channel 3 to AIU J7 (SUPPRESSION) The pulse width shall be as specified.	123 to 133 uS
	49.0		Voice Test		VOICE TEST	
	49.1		TAWS Voice Test Generate voices and verify they are clear and recognizable	AIU PANEL Set Speaker switch to ON Remove 8 Ohm 10W resistor across 8 Ohm output	TAWS VOICE TEST Type on PC: SAY 31 128 Verify that the following phrase is output: "Don't Sink, Don't Sink"	Voice is correct and recognizable.
	49.20	9000229-004	HBIT P/N Test		CRT reads:	9000229-004
	49.21	9000231-003	FPGA I/O P/N test		CRT reads:	9000231-003
	49.23	9000230-002	CPLD P/N test		CRT reads:	900230-002
	49.24	9000001-10001	APM P/N test		CRT reads:	9000001-10001
	49.25		APM S/N test		CRT reads:	Actual APM S/N
	50.0		Discrete Inputs		DISCRETE INPUT TESTS	

Rev Ltr	Test No.	Operator limits	Test Description			Work Steps	
	50.1	0000000000000000000000000000000	TAWS Push to Test Switch			TAWS PUSH TO TEST SWITCH TEST **UUT:**Depress & hold the front panel test switch. Release the switch when CRT shall read:	0000000000000000000000000000000
	50.2	0000000000000000000000000000001	Discrete Input #2			CRT shall read:	0000000000000000000000000000001
	50.3	0000000000000000000000000000010	Discrete Input #3			CRT shall read:	0000000000000000000000000000010
	50.4	0000000000000000000000000000100	Discrete Input #4			CRT shall read:	0000000000000000000000000000100
	50.5	0000000000000000000000000001000	Discrete Input #5			CRT shall read:	0000000000000000000000000001000
	50.6	0000000000000000000000000010000	Discrete Input #6			CRT shall read:	0000000000000000000000000010000
	50.7	0000000000000000000000000100000	Discrete Input #7			CRT shall read:	0000000000000000000000000100000
	50.8	0000000000000000000000001000000	Discrete Input #8			CRT shall read:	0000000000000000000000001000000
	50.9	0000000000000000000000010000000	Discrete Input #9			CRT shall read:	0000000000000000000000010000000
	50.10	0000000000000000000000100000000	Discrete Input #10			CRT shall read:	0000000000000000000000100000000
	50.11	0000000000000000000001000000000	Discrete Input #11			CRT shall read:	0000000000000000000001000000000
	50.12	0001000000000000000000000000000	Discrete Input Rad/Alt 3			CRT shall read:	0001000000000000000000000000000

Rev Ltr	Test No.	Operator limits	Test Description			Work Steps	
	50.13	000000000000 000100000000 00000000	Discrete Input #14			CRT shall read:	000000000000 000100000000 00000000
	50.14	000000000000 001000000000 00000000	Discrete Input #15			CRT shall read:	000000000000 001000000000 00000000
	50.15	000000000000 010000000000 00000000	Discrete Input #16			CRT shall read:	000000000000 010000000000 00000000
	50.16	000000000001 000000000000 00000000	Discrete Input #17			CRT shall read:	000000000001 000000000000 00000000
	50.17	000000000010 000000000000 00000000	Discrete Input #18			CRT shall read:	000000000010 000000000000 00000000
	50.18	000000000100 000000000000 00000000	Discrete Input #19			CRT shall read:	000000000100 000000000000 00000000
	50.19	000000010000 000000000000 00000000	Discrete Input #20			CRT shall read:	000000010000 000000000000 00000000
	50.20	000000100000 000000000000 00000000	Discrete Input RAD #1			CRT shall read:	000000100000 000000000000 00000000
	50.21	000001000000 000000000000 00000000	Discrete Input RAD #2			CRT shall read:	000001000000 000000000000 00000000
	50.22	010000000000 000000000000 00000000	Discrete Input #1			CRT shall read:	010000000000 000000000000 00000000
	50.23	000000000000 000000100000 00000000	Discrete Input #12			CRT shall read:	000000000000 000000100000 00000000
	50.24	000000000000 000001000000 00000000	Discrete Input #13			CRT shall read:	000000000000 000001000000 00000000
	50.25	000000000000 000000000000 00000000	Over current Flag			CRT shall read:	000000000000 000000000000 00000000

Rev Ltr	Test No.	Operator limits	Test Description			Work Steps	
	50.26	1011101011101000100011111111111	ALL Ground/Open Discretes			CRT shall read:	1011101011101000100011111111111
	50.27	0000000000000000000000000000000	GND/Open Discrete Input #1			CRT shall read:	0000000000000000000000000000000
	50.28	0000000000000000000000000000000	GND/Open Discrete Input #2			CRT shall read:	0000000000000000000000000000000
	50.29	0000000000000000000000000000000	GND/Open Discrete Input #3			CRT shall read:	0000000000000000000000000000000
	50.30	0000000000000000000000000000000	GND/Open Discrete Input #4			CRT shall read:	0000000000000000000000000000000
	50.31	0000000000000000000000000000000	GND/Open Discrete Input #5			CRT shall read:	0000000000000000000000000000000
	50.32	0000000000000000000000000000000	GND/Open Discrete Input #6			CRT shall read:	0000000000000000000000000000000
	50.33	0000000000000000000000000000000	GND/Open Discrete Input #7			CRT shall read:	0000000000000000000000000000000
	50.34	0000000000000000000000000000000	GND/Open Discrete Input #8			CRT shall read:	0000000000000000000000000000000
	50.35	0000000000000000000000000000000	GND/Open Discrete Input #9			CRT shall read:	0000000000000000000000000000000
	50.36	0000000000000000000000000000000	GND/Open Discrete Input #10			CRT shall read:	0000000000000000000000000000000
	50.37	0000000000000000000000000000000	GND/Open Discrete Input #11			CRT shall read:	0000000000000000000000000000000
	50.38	0000000000000000000000000000000	GND/Open Discrete Input #12			CRT shall read:	0000000000000000000000000000000

Rev Ltr	Test No.	Operator limits	Test Description			Work Steps	
	50.39	000000000000 000000000000 00000000	GND/Open Discrete Input #13			CRT shall read:	000000000000 000000000000 00000000
	50.40	000000000000 000000000000 00000000	GND/Open Discrete Input #14			CRT shall read:	000000000000 000000000000 00000000
	50.41	000000000000 000000000000 00000000	GND/Open Discrete Input #15			CRT shall read:	000000000000 000000000000 00000000
	50.42	000000000000 000000000000 00000000	GND/Open Discrete Input #16			CRT shall read:	000000000000 000000000000 00000000
	50.43	000000000000 000000000000 00000000	GND/Open Discrete Input #17			CRT shall read:	000000000000 000000000000 00000000
	50.44	000000000000 000000000000 00000000	GND/Open Discrete Input #18			CRT shall read:	000000000000 000000000000 00000000
	50.45	000000000000 000000000000 00000000	GND/Open Discrete Input #19			CRT shall read:	000000000000 000000000000 00000000
	50.46	000000000000 000000000000 00000000	GND/Open Discrete Input #20			CRT shall read:	000000000000 000000000000 00000000
	50.47	000000000000 000000000000 00000000	GND/Open Discrete Input #21			CRT shall read:	000000000000 000000000000 00000000
	50.48	000000000000 000000000000 00000000	GND/Open Discrete Input #22			CRT shall read:	000000000000 000000000000 00000000
	50.49	Removed	GND/Open Discrete Input GPS			CRT shall read:	
	50.50	011000000000 000000000000 10001000	Discretes all OPEN			CRT shall read:	011000000000 000000000000 10001000
	50.52	001000000000 000000000000 00000000	TAWS Switch Normal: Not pressed			TAWS Switch Normal: Not pressed	001000000000 000000000000 00000000

Rev Ltr	Test No.	Operator limits	Test Description			Work Steps	
	50.53	0000000000000000000000000000000	Landing Gear Discrete Input			CRT shall read:	0000000000000000000000000000000
	50.54	0000000000000000000000000000000	Air/Ground Discrete Input			CRT shall read:	0000000000000000000000000000000
	50.55	0000000000000000000000000000100	Air/Ground Discrete Input			CRT shall read:	0000000000000000000000000000100
	50.56	0000000000000000000000000000001	PDL Link A Discrete Input			CRT shall read:	0000000000000000000000000000001
	50.57	0000000000000000000000000000000	PDL Link A Discrete Input			CRT shall read:	0000000000000000000000000000000
	50.58	0000000000000000000000000001000	Landing Gear Discrete Input			CRT shall read:	0000000000000000000000000001000
	51.0		Discrete Outputs	Initial Setup per figure 1		DISCRETE OUTPUTS TESTS	

Rev Ltr	Test No.	Operator limits		Test Description				Work Steps	
	51.1	PASS		TAWS Panel LEDs: Verify that the LEDs are turned on and off according to the following repetitive sequence approximately 1 second per item: All LEDs off Only TAWS P/F Status red Only TAWS P/F Status orange Only TAWS P/F Status green All LEDs off Only TAWS I/O Fail red All LEDs off Only TAWS APM Fail red All LEDs off Only XPER In Process green All LEDs off Only C/F Load Status red Only C/F Load Status orange Only C/F Load Status green All LEDs off			Taws Panel LEDs: Verify that the LEDs are turned on and off according to the following repetitive sequence approximately 1 second per item: All LEDs off Only TAWS P/F Status red Only TAWS P/F Status orange Only TAWS P/F Status green All LEDs off Only TAWS I/O Fail red All LEDs off Only TAWS APM Fail red All LEDs off Only XPER In Process green All LEDs off Only C/F Load Status red Only C/F Load Status orange Only C/F Load Status green All LEDs off	PASS
	51.2	FF3F00XX		Discrete Output ALL				CRT shall read:	FF3F00XX
	51.3	FE3F00XX		Discrete Output #1				CRT shall read:	FE3F00XX
	51.4	FD3F00XX		Discrete Output #2				CRT shall read:	FD3F00XX
	51.5	FB3F00XX		Discrete Output #3				CRT shall read:	FB3F00XX
	51.6	F73F00XX		Discrete Output #4				CRT shall read:	F73F00XX
	51.7	EF3F00XX		Discrete Output #5				CRT shall read:	EF3F00XX

Rev Ltr	Test No.	Operator limits	Test Description		Work Steps	
	51.8	DF3F00XX	Discrete Output #6		CRT shall read:	DF3F00XX
	51.9	BF3F00XX	Discrete Output #7		CRT shall read:	BF3F00XX
	51.10	7F3F00XX	Discrete Output #8		CRT shall read:	7F3F00XX
	51.11	FF3E00XX	Discrete Output #9		CRT shall read:	FF3E00XX
	51.12	FF3D00XX	Discrete Output #10		CRT shall read:	FF3D00XX
	51.13	FF3B00XX	Discrete Output #11		CRT shall read:	FF3B00XX
	51.14	FF3700XX	Discrete Output #12		CRT shall read:	FF3700XX
	51.15	FF2F00XX	Discrete Output #13 L		CRT shall read:	FF2F00XX
	51.16	Removed				
	51.17	Removed	Discrete Output GPS		CRT shall read:	
	51.18	Removed				
	51.19	FF3F00XX	TCAS Installed		CRT shall read:	FF3F00XX
	51.20	002000XX	Discrete out all low		CRT shall read:	002000XX
	51.21	0000 0000 0000 0000 0000 0000 0000 0000	Discrete wrap word 0		CRT shall read:	0000 0000 0000 0000 0000 0000 0000 0000
	51.22	0000 0000 0000 0000 0000 0000 0000 0000	Discrete wrap word 1		CRT shall read:	0000 0000 0000 0000 0000 0000 0000 0000
	51.23	1000 1000 1000 1000 1000 1000 1000 1000	Discrete wrap word 0		CRT shall read:	1000 1000 1000 1000 1000 1000 1000 1000
	51.24	0000 0000 0000 1000 1000 1000 1000 1000	Discrete wrap word 1		CRT shall read:	0000 0000 0000 1000 1000 1000 1000 1000
	52.0		ARINC 429 Receiver Input Busses	Initial Setup per figure 1	ARINC 429 RECEIVER INPUT TESTS	
	52.1	F77777EE E6666666 D55555AA C4444422 B33333CC A2222244	ARINC 429 Receiver #1 Low Speed		CRT shall read:	F77777EE E6666666 D55555AA C4444422 B33333CC A2222244

Rev Ltr	Test No.	Operator limits	Test Description			Work Steps	
	52.2	4CCCCC33 3BBBBBDD 2AAAAA55 19999999 08888811 F77777EE	ARINC 429 Receiver #1 High Speed			CRT shall read:	4CCCCC33 3BBBBBDD 2AAAAA55 19999999 08888811 F77777EE
	52.3	E6666666 D55555AA C4444422 B33333CC A2222244 91111188	ARINC 429 Receiver #2 Low Speed			CRT shall read:	E6666666 D55555AA C4444422 B33333CC A2222244 91111188
	52.4	4CCCCC33 3BBBBBDD 2AAAAA55 19999999 08888811 F77777EE	ARINC 429 Receiver #2 High Speed			CRT shall read:	4CCCCC33 3BBBBBDD 2AAAAA55 19999999 08888811 F77777EE
	52.5	E6666666 D55555AA C4444422 B33333CC A2222244 91111188	ARINC 429 Receiver #3 Low Speed			CRT shall read:	E6666666 D55555AA C4444422 B33333CC A2222244 91111188
	52.6	4CCCCC33 3BBBBBDD 2AAAAA55 19999999 08888811 F77777EE	ARINC 429 Receiver #3 High Speed			CRT shall read:	4CCCCC33 3BBBBBDD 2AAAAA55 19999999 08888811 F77777EE
	52.7	E66655AA D5556666 C44433CC B3334422 A2221188 91112244	ARINC 429 Receiver #4 Low Speed			CRT shall read:	E66655AA D5556666 C44433CC B3334422 A2221188 91112244
	52.8	D5556666 E66655AA B3334422 C44433CC 91112244 A2221188	ARINC 429 Receiver #4 High Speed			CRT shall read:	D5556666 E66655AA B3334422 C44433CC 91112244 A2221188

Rev Ltr	Test No.	Operator limits	Test Description			Work Steps	
	52.9	E6666666 D55555AA C4444422 B33333CC A2222244 91111188	ARINC 429 Receiver #5 Low Speed			CRT shall read:	E6666666 D55555AA C4444422 B33333CC A2222244 91111188
	52.10	4CCCCC33 3BBBBBDD 2AAAAA55 19999999 08888811 F77777EE	ARINC 429 Receiver #5 High Speed			CRT shall read:	4CCCCC33 3BBBBBDD 2AAAAA55 19999999 08888811 F77777EE
	52.11	E66655AA D5556666 C44433CC B3334422 A2221188 91112244	ARINC 429 Receiver #6 Low Speed			CRT shall read:	E66655AA D5556666 C44433CC B3334422 A2221188 91112244
	52.12	D5556666 E66655AA B3334422 C44433CC 91112244 A2221188	ARINC 429 Receiver #6 High Speed			CRT shall read:	D5556666 E66655AA B3334422 C44433CC 91112244 A2221188
	52.13	E6666666 D55555AA C4444422 B33333CC A2222244 91111188	ARINC 429 Receiver #7 Low Speed			CRT shall read:	E6666666 D55555AA C4444422 B33333CC A2222244 91111188
	52.14	4CCCCC33 3BBBBBDD 2AAAAA55 19999999 08888811 F77777EE	ARINC 429 Receiver #7 High Speed			CRT shall read:	4CCCCC33 3BBBBBDD 2AAAAA55 19999999 08888811 F77777EE
	52.15	E66655AA D5556666 C44433CC B3334422 A2221188 91112244	ARINC 429 Receiver #8 Low Speed			CRT shall read:	E66655AA D5556666 C44433CC B3334422 A2221188 91112244

Rev Ltr	Test No.	Operator limits	Test Description			Work Steps	
	52.16	D5556666 E66655AA B3334422 C44433CC 91112244 A2221188	ARINC 429 Receiver #8 High Speed			CRT shall read:	D5556666 E66655AA B3334422 C44433CC 91112244 A2221188
	52.17	E6666666 D55555AA C4444422 B33333CC A2222244 91111188	ARINC 429 Receiver #9 Low Speed			CRT shall read:	E6666666 D55555AA C4444422 B33333CC A2222244 91111188
	52.18	4CCCCC33 3BBBBBDD 2AAAAA55 19999999 08888811 F77777EE	ARINC 429 Receiver #9 High Speed			CRT shall read:	4CCCCC33 3BBBBBDD 2AAAAA55 19999999 08888811 F77777EE
	52.19	E66655AA D5556666 C44433CC B3334422 A2221188 91112244	ARINC 429 Receiver #10 Low Speed			CRT shall read:	E66655AA D5556666 C44433CC B3334422 A2221188 91112244
	52.20	D5556666 E66655AA B3334422 C44433CC 91112244 A2221188	ARINC 429 Receiver #10 High Speed			CRT shall read:	D5556666 E66655AA B3334422 C44433CC 91112244 A2221188
	52.21	E6666666 D55555AA C4444422 B33333CC A2222244 91111188	ARINC 429 Receiver #11 Low Speed			CRT shall read:	E6666666 D55555AA C4444422 B33333CC A2222244 91111188
	52.22	4CCCCC33 3BBBBBDD 2AAAAA55 19999999 08888811 F77777EE	ARINC 429 Receiver #11 High Speed			CRT shall read:	4CCCCC33 3BBBBBDD 2AAAAA55 19999999 08888811 F77777EE

Rev Ltr	Test No.	Operator limits	Test Description			Work Steps	
	52.23	E66655AA D5556666 C44433CC B3334422 A2221188 91112244	ARINC 429 Receiver #12 Low Speed			CRT shall read:	E66655AA D5556666 C44433CC B3334422 A2221188 91112244
	52.24	D5556666 E66655AA B3334422 C44433CC 91112244 A2221188	ARINC 429 Receiver #12 High Speed			CRT shall read:	D5556666 E66655AA B3334422 C44433CC 91112244 A2221188
	52.25	E6666666 D55555AA C4444422 B33333CC A2222244 91111188	ARINC 429 Receiver #13 Low Speed			CRT shall read:	E6666666 D55555AA C4444422 B33333CC A2222244 91111188
	52.26	4CCCCC33 3BBBBBDD 2AAAAA55 19999999 08888811 F77777EE	ARINC 429 Receiver #13 High Speed			CRT shall read:	4CCCCC33 3BBBBBDD 2AAAAA55 19999999 08888811 F77777EE
	52.27	E66655AA D5556666 C44433CC B3334422 A2221188 91112244	ARINC 429 Receiver #14 Low Speed			CRT shall read:	E66655AA D5556666 C44433CC B3334422 A2221188 91112244
	52.28	D5556666 E66655AA B3334422 C44433CC 91112244 A2221188	ARINC 429 Receiver #14 High Speed			CRT shall read:	D5556666 E66655AA B3334422 C44433CC 91112244 A2221188
	52.29	E6666666 D55555AA C4444422 B33333CC A2222244 91111188	ARINC 429 Receiver #15 Low Speed			CRT shall read:	E6666666 D55555AA C4444422 B33333CC A2222244 91111188

Rev Ltr	Test No.	Operator limits	Test Description		Work Steps	
	52.30	4CCCCC33 3BBBBBDD 2AAAAA55 19999999 08888811 F77777EE	ARINC 429 Receiver #15 High Speed		CRT shall read:	4CCCCC33 3BBBBBDD 2AAAAA55 19999999 08888811 F77777EE
	52.31	E66655AA D5556666 C44433CC B3334422 A2221188 91112244	ARINC 429 Receiver #16 Low Speed		CRT shall read:	E66655AA D5556666 C44433CC B3334422 A2221188 91112244
	52.32	D5556666 E66655AA B3334422 C44433CC 91112244 A2221188	ARINC 429 Receiver #16 High Speed		CRT shall read:	D5556666 E66655AA B3334422 C44433CC 91112244 A2221188
	52.33	Pass	ARINC 429 RX internal test		CRT shall read:	PASS
	53.0		ARINC 429 Transmitter Output Busses	Initial Setup per figure 1	ARINC 429 TRANSMITTER OUTPUT TESTS	
	53.1	111111882222 2244333333CC 444444225555 55AA66666666	ARINC 429 Transmitter #1 Low Speed		CRT shall read:	111111882222 2244333333CC 444444225555 55AA66666666
	53.2	777777EE8888 811199999992 AAAAA553BBBB BDD4CCCCC33	ARINC 429 Transmitter #1 High Speed		CRT shall read:	777777EE8888 811199999992 AAAAA553BBBB BDD4CCCCC33
	53.3	111111882222 2244333333CC 444444225555 55AA66666666	ARINC 429 Transmitter #2 Low Speed		CRT shall read:	111111882222 2244333333CC 444444225555 55AA66666666
	53.4	777777EE8888 811199999992 AAAAA553BBBB BDD4CCCCC33	ARINC 429 Transmitter #2 High Speed		CRT shall read:	777777EE8888 811199999992 AAAAA553BBBB BDD4CCCCC33
	53.10	PASS	ARINC 429 TX internal		CRT shall read:	PASS

Rev Ltr	Test No.	Operator limits	Test Description		Work Steps	
	54.0		ARINC 453/708 Transmitter Output Busses	Initial Setup per figure 1	ARINC 453/708 TRANSMITTER OUTPUT TESTS	
	54.1	PASS	ARINC 453 Transmitter #1 Low Speed		CRT shall read:	PASS
	54.2	PASS	ARINC 453 Transmitter #1 High Speed		CRT shall read:	PASS
	57.0		3 Wire Synchro Inputs	Initial Setup per figure 1	3 WIRE SYNCHRO INPUT TESTS	
	57.1	40 to 50 degrees	Synchro #1 45 degrees		CRT shall read:	40 to 50 degrees
	57.2	130 to 140 degrees	Synchro #1 135 degrees		CRT shall read:	130 to 140 degrees
	57.3	220 to 230 degrees	Synchro #1 215 degrees		CRT shall read:	220 to 230 degrees
	57.4	300 to 320 degrees	Synchro #1 315 degrees		CRT shall read:	300 to 320 degrees
	57.5	40 to 50 degrees	Synchro #2 45 degrees		CRT shall read:	40 to 50 degrees
	57.6	130 to 140 degrees	Synchro #2 135 degrees		CRT shall read:	130 to 140 degrees
	57.7	220 to 230 degrees	Synchro #2 215 degrees		CRT shall read:	220 to 230 degrees
	57.8	300 to 320 degrees	Synchro #2 315 degrees		CRT shall read:	300 to 320 degrees
	57.9	40 to 50 degrees	Synchro #3 45 degrees		CRT shall read:	40 to 50 degrees
	57.10	130 to 140 degrees	Synchro #3 135 degrees		CRT shall read:	130 to 140 degrees
	57.11	220 to 230 degrees	Synchro #3 215 degrees		CRT shall read:	220 to 230 degrees
	57.12	300 to 320 degrees	Synchro #3 315 degrees		CRT shall read:	300 to 320 degrees
	57.13	40 to 50 degrees	Synchro #4 45 degrees		CRT shall read:	40 to 50 degrees
	57.14	130 to 140 degrees	Synchro #4 135 degrees		CRT shall read:	130 to 140 degrees

Rev Ltr	Test No.	Operator limits	Test Description			Work Steps	
	57.15	220 to 230 degrees	Synchro #4 215 degrees			CRT shall read:	220 to 230 degrees
	57.16	300 to 320 degrees	Synchro #4 315 degrees			CRT shall read:	300 to 320 degrees
	57.17	40 to 50 degrees	Synchro #5 45 degrees			CRT shall read:	40 to 50 degrees
	57.18	130 to 140 degrees	Synchro #5 135 degrees			CRT shall read:	130 to 140 degrees
	57.19	220 to 230 degrees	Synchro #5 215 degrees			CRT shall read:	220 to 230 degrees
	57.20	300 to 320 degrees	Synchro #5 315 degrees			CRT shall read:	300 to 320 degrees
	57.21	40 to 50 degrees	Synchro #6 45 degrees			CRT shall read:	40 to 50 degrees
	57.22	130 to 140 degrees	Synchro #6 135 degrees			CRT shall read:	130 to 140 degrees
	57.23	220 to 230 degrees	Synchro #6 215 degrees			CRT shall read:	220 to 230 degrees
	57.24	300 to 320 degrees	Synchro #6 315 degrees			CRT shall read:	300 to 320 degrees
	57.25	40 to 50 degrees	Synchro #7 45 degrees			CRT shall read:	40 to 50 degrees
	57.26	130 to 140 degrees	Synchro #7 135 degrees			CRT shall read:	130 to 140 degrees
	57.27	220 to 230 degrees	Synchro #7 215 degrees			CRT shall read:	220 to 230 degrees
	57.28	300 to 320 degrees	Synchro #7 315 degrees			CRT shall read:	300 to 320 degrees
	57.29	40 to 50 degrees	Synchro #8 45 degrees			CRT shall read:	40 to 50 degrees
	57.30	130 to 140 degrees	Synchro #8 135 degrees			CRT shall read:	130 to 140 degrees
	57.31	220 to 230 degrees	Synchro #8 215 degrees			CRT shall read:	220 to 230 degrees
	57.32	300 to 320 degrees	Synchro #8 315 degrees			CRT shall read:	300 to 320 degrees

Rev Ltr	Test No.	Operator limits	Test Description			Work Steps	
	57.33	40 to 50 degrees	Synchro #9 45 degrees			CRT shall read:	40 to 50 degrees
	57.34	130 to 140 degrees	Synchro #9 135 degrees			CRT shall read:	130 to 140 degrees
	57.35	220 to 230 degrees	Synchro #9 215 degrees			CRT shall read:	220 to 230 degrees
	57.36	300 to 320 degrees	Synchro #9 315 degrees			CRT shall read:	300 to 320 degrees
	57.37	40 to 50 degrees	Synchro #10 45 degrees			CRT shall read:	40 to 50 degrees
	57.38	130 to 140 degrees	Synchro #10 135 degrees			CRT shall read:	130 to 140 degrees
	57.39	220 to 230 degrees	Synchro #10 215 degrees			CRT shall read:	220 to 230 degrees
	57.40	300 to 320 degrees	Synchro #10 315 degrees			CRT shall read:	300 to 320 degrees
	57.41	40 to 50 degrees	Synchro #11 45 degrees			CRT shall read:	40 to 50 degrees
	57.42	130 to 140 degrees	Synchro #11 135 degrees			CRT shall read:	130 to 140 degrees
	57.43	220 to 230 degrees	Synchro #11 215 degrees			CRT shall read:	220 to 230 degrees
	57.44	300 to 320 degrees	Synchro #11 315 degrees			CRT shall read:	300 to 320 degrees
	57.45	40 to 50 degrees	Synchro #12 45 degrees			CRT shall read:	40 to 50 degrees
	57.46	130 to 140 degrees	Synchro #12 135 degrees			CRT shall read:	130 to 140 degrees
	57.47	220 to 230 degrees	Synchro #12 215 degrees			CRT shall read:	220 to 230 degrees
	57.48	300 to 320 degrees	Synchro #12 315 degrees			CRT shall read:	300 to 320 degrees
	57.49	40 to 50 degrees	Synchro #13 45 degrees			CRT shall read:	40 to 50 degrees
	57.50	130 to 140 degrees	Synchro #13 135 degrees			CRT shall read:	130 to 140 degrees

Rev Ltr	Test No.	Operator limits	Test Description		Work Steps	
	57.51	220 to 230 degrees	Synchro #13 215 degrees		CRT shall read:	220 to 230 degrees
	57.52	300 to 320 degrees	Synchro #13 315 degrees		CRT shall read:	300 to 320 degrees
	57.53	40 to 50 degrees	Synchro #14 45 degrees		CRT shall read:	40 to 50 degrees
	57.54	130 to 140 degrees	Synchro #14 135 degrees		CRT shall read:	130 to 140 degrees
	57.55	220 to 230 degrees	Synchro #14 215 degrees		CRT shall read:	220 to 230 degrees
	57.56	300 to 320 degrees	Synchro #14 315 degrees		CRT shall read:	300 to 320 degrees
	60.0		2 Wire DC Inputs	Initial Setup per figure 1	2 WIRE DC INPUT TESTS	
	60.1	13 to 17 VDC	2 Wire DC Input #1 15 VDC		CRT shall read:	13 to 17 VDC
	60.2	-17 to -13 VDC	2 Wire DC Input #1 –15 VDC		CRT shall read:	-17 to -13 VDC
	60.3	-1 to 1 VDC	2 Wire DC Input #1 0 VDC		CRT shall read:	-1 to 1 VDC
	60.4	13 to 17 VDC	2 Wire DC Input #2 15 VDC		CRT shall read:	13 to 17 VDC
	60.5	-17 to -13 VDC	2 Wire DC Input #2 –15 VDC		CRT shall read:	-17 to -13 VDC
	60.6	-1 to 1 VDC	2 Wire DC Input #2 0 VDC		CRT shall read:	-1 to 1 VDC
	60.7	13 to 17 VDC	2 Wire DC Input #3 15 VDC		CRT shall read:	13 to 17 VDC
	60.8	-17 to -13 VDC	2 Wire DC Input #3 –15 VDC		CRT shall read:	-17 to -13 VDC
	60.9	-1 to 1 VDC	2 Wire DC Input #3 0 VDC		CRT shall read:	-1 to 1 VDC
	60.10	13 to 17 VDC	2 Wire DC Input #4 15 VDC		CRT shall read:	13 to 17 VDC
	60.11	-17 to -13 VDC	2 Wire DC Input #4 –15 VDC		CRT shall read:	-17 to -13 VDC

Rev Ltr	Test No.	Operator limits	Test Description			Work Steps	
	60.12	-1 to 1 VDC	2 Wire DC Input #4 0 VDC			CRT shall read:	-1 to 1 VDC
	60.13	13 to 17 VDC	2 Wire DC Input #5 15 VDC			CRT shall read:	13 to 17 VDC
	60.14	-17 to -13 VDC	2 Wire DC Input #5 –15 VDC			CRT shall read:	-17 to -13 VDC
	60.15	-1 to 1 VDC	2 Wire DC Input #5 0 VDC			CRT shall read:	-1 to 1 VDC
	60.16	13 to 17 VDC	2 Wire DC Input #6 15 VDC			CRT shall read:	13 to 17 VDC
	60.17	-17 to -13 VDC	2 Wire DC Input #6 –15 VDC			CRT shall read:	-17 to -13 VDC
	60.18	-1 to 1 VDC	2 Wire DC Input #6 0 VDC			CRT shall read:	-1 to 1 VDC
	60.19	13 to 17 VDC	2 Wire DC Input #7 15 VDC			CRT shall read:	13 to 17 VDC
	60.20	-17 to -13 VDC	2 Wire DC Input #7 –15 VDC			CRT shall read:	-17 to -13 VDC
	60.21	-1 to 1 VDC	2 Wire DC Input #7 0 VDC			CRT shall read:	-1 to 1 VDC
	60.22	13 to 17 VDC	2 Wire DC Input #8 15 VDC			CRT shall read:	13 to 17 VDC
	60.23	-17 to -13 VDC	2 Wire DC Input #8 –15 VDC			CRT shall read:	-17 to -13 VDC
	60.24	-1 to 1 VDC	2 Wire DC Input #8 0 VDC			CRT shall read:	-1 to 1 VDC
	60.25	13 to 17 VDC	2 Wire DC Input #9 15 VDC			CRT shall read:	13 to 17 VDC
	60.26	-17 to -13 VDC	2 Wire DC Input #9 –15 VDC			CRT shall read:	-17 to -13 VDC
	60.27	-1 to 1 VDC	2 Wire DC Input #9 0 VDC			CRT shall read:	-1 to 1 VDC
	60.28	13 to 17 VDC	2 Wire DC Input #10 15 VDC			CRT shall read:	13 to 17 VDC
	60.29	-17 to -13 VDC	2 Wire DC Input #10 –15 VDC			CRT shall read:	-17 to -13 VDC

Rev Ltr	Test No.	Operator limits	Test Description			Work Steps	
	60.30	-1 to 1 VDC	2 Wire DC Input #10 0 VDC			CRT shall read:	-1 to 1 VDC
	60.31	13 to 17 VDC	2 Wire DC Input #11 15 VDC			CRT shall read:	13 to 17 VDC
	60.32	-17 to -13 VDC	2 Wire DC Input #11 –15 VDC			CRT shall read:	-17 to -13 VDC
	60.33	-1 to 1 VDC	2 Wire DC Input #11 0 VDC			CRT shall read:	-1 to 1 VDC
	60.34	13 to 17 VDC	2 Wire DC Input #12 15 VDC			CRT shall read:	13 to 17 VDC
	60.35	-17 to -13 VDC	2 Wire DC Input #12 –15 VDC			CRT shall read:	-17 to -13 VDC
	60.36	-1 to 1 VDC	2 Wire DC Input #12 0 VDC			CRT shall read:	-1 to 1 VDC
	60.37	13 to 17 VDC	2 Wire DC Input #13 15 VDC			CRT shall read:	13 to 17 VDC
	60.38	-17 to -13 VDC	2 Wire DC Input #13 –15 VDC			CRT shall read:	-17 to -13 VDC
	60.39	-1 to 1 VDC	2 Wire DC Input #13 0 VDC			CRT shall read:	-1 to 1 VDC
	60.40	13 to 17 VDC	2 Wire DC Input #14 15 VDC			CRT shall read:	13 to 17 VDC
	60.41	-17 to -13 VDC	2 Wire DC Input #14 –15 VDC			CRT shall read:	-17 to -13 VDC
	60.42	-1 to 1 VDC	2 Wire DC Input #14 0 VDC			CRT shall read:	-1 to 1 VDC
	60.43	13 to 17 VDC	2 Wire DC Input #15 15 VDC			CRT shall read:	13 to 17 VDC
	60.44	-17 to -13 VDC	2 Wire DC Input #15 –15 VDC			CRT shall read:	-17 to -13 VDC
	60.45	-1 to 1 VDC	2 Wire DC Input #15 0 VDC			CRT shall read:	-1 to 1 VDC
	60.46	13 to 17 VDC	2 Wire DC Input #16 15 VDC			CRT shall read:	13 to 17 VDC
	60.47	-17 to -13 VDC	2 Wire DC Input #16 –15 VDC			CRT shall read:	-17 to -13 VDC

Rev Ltr	Test No.	Operator limits	Test Description			Work Steps	
	60.48	-1 to 1 VDC	2 Wire DC Input #16 0 VDC			CRT shall read:	-1 to 1 VDC
	60.49	13 to 17 VDC	2 Wire DC Input #17 15 VDC			CRT shall read:	13 to 17 VDC
	60.50	-17 to -13 VDC	2 Wire DC Input #17 –15 VDC			CRT shall read:	-17 to -13 VDC
	60.51	-1 to 1 VDC	2 Wire DC Input #17 0 VDC			CRT shall read:	-1 to 1 VDC
	60.52	13 to 17 VDC	2 Wire DC Input #18 15 VDC			CRT shall read:	13 to 17 VDC
	60.53	-17 to -13 VDC	2 Wire DC Input #18 –15 VDC			CRT shall read:	-17 to -13 VDC
	60.54	-1 to 1 VDC	2 Wire DC Input #18 0 VDC			CRT shall read:	-1 to 1 VDC
	60.55	13 to 17 VDC	2 Wire DC Input RAD ALT 3 15 VDC			CRT shall read:	13 to 17 VDC
	60.56	-17 to -13 VDC	2 Wire DC Input RAD ALT 3 –15 VDC			CRT shall read:	-17 to -13 VDC
	60.57	-1 to 1 VDC	2 Wire DC Input RAD ALT 3 0 VDC			CRT shall read:	-1 to 1 VDC
	60.58	9 to 11 VDC	2 Wire DC Input RAD ALT 2 10 VDC			CRT shall read:	9 to 11 VDC
	60.59	9 to 11 VDC	2 Wire DC Input RAD ALT 1 10 VDC			CRT shall read:	9 to 11 VDC
	60.60	2 to 3 VDC	2 Wire DC Input Localizer #1 15 VDC			CRT shall read:	2 to 3 VDC
	60.61	-3 to –2 VDC	2 Wire DC Input Localizer #1 –15 VDC			CRT shall read:	-3 to –2 VDC
	60.62	-1 to 1 VDC	2 Wire DC Input Localizer #1 0 VDC			CRT shall read:	-1 to 1 VDC
	60.63	2 to 3 VDC	2 Wire DC Input Localizer #2 15 VDC			CRT shall read:	2 to 3 VDC
	60.64	-3 to –2 VDC	2 Wire DC Input Localizer #2 –15 VDC			CRT shall read:	-3 to –2 VDC
	60.65	-1 to 1 VDC	2 Wire DC Input Localizer #2 0 VDC			CRT shall read:	-1 to 1 VDC

Rev Ltr	Test No.	Operator limits	Test Description			Work Steps	
	60.66	2 to 3 VDC	2 Wire DC Input Glide #1 15 VDC			CRT shall read:	2 to 3 VDC
	60.67	-2 to –3 VDC	2 Wire DC Input Glide #1 –15 VDC			CRT shall read:	-2 to –3 VDC
	60.68	-1 to 1 VDC	2 Wire DC Input Glide #1 0 VDC			CRT shall read:	-1 to 1 VDC
	60.69	2 to 3 VDC	2 Wire DC Input Glide #2 15 VDC			CRT shall read:	2 to 3 VDC
	60.70	-2 to –3 VDC	2 Wire DC Input Glide #2 –15 VDC			CRT shall read:	-2 to –3 VDC
	60.71	-1 to 1 VDC	2 Wire DC Input Glide #2 0 VDC			CRT shall read:	-1 to 1 VDC
	60.72	13 to 17 VDC	2 Wire DC Input Altitude Rate 15 VDC			CRT shall read:	13 to 17 VDC
	60.73	-17 to -13 VDC	2 Wire DC Input Altitude Rate -15 VDC			CRT shall read:	-17 to -13 VDC
	60.74	-1 to 1 VDC	2 Wire DC Input Altitude Rate 0 VDC			CRT shall read:	-1 to 1 VDC
	60.75	1.425 to 1.575 VDC	2 Wire 1.5V REF			CRT shall read:	1.425 to 1.575 VDC
	60.76	1.9 to 2.1 VDC	2 Wire +2VDC REF			CRT shall read:	1.9 to 2.1 VDC
	60.77	4.75 to 5.25 VDC	2 Wire +5VDC REF			CRT shall read:	4.75 to 5.25 VDC
	60.78	3.9316 to 4.1116 VDC	2 Wire ADC_REF 4.0			CRT shall read:	3.9316 to 4.1116 VDC
	60.79	-4.1116 to –3.9316 VDC	2 Wire ADC_REF –4.0			CRT shall read:	-4.1116 to –3.9316 VDC
	60.80	4.6 to 5.4 VDC	2 Wire +5V Filtered			CRT shall read:	4.6 to 5.4 VDC
	60.81	-5.5 to –4.5 VDC	2 Wire -5V Filtered			CRT shall read:	-5.5 to –4.5 VDC
	60.83	13.5 to 16.5 VDC	2 Wire +15V Filtered			CRT shall read:	13.5 to 16.5 VDC
	60.84	-16.5 to –13.5 VDC	2 Wire –15V Filtered			CRT shall read:	-16.5 to –13.5 VDC
	60.85	21.6 to 31.2 VDC	2 Wire 24V POS			CRT shall read:	21.6 to 31.2 VDC

Rev Ltr	Test No.	Operator limits	Test Description			Work Steps	
	60.86	-31.2 to –21.6 VDC	2 Wire 24V NEG			CRT shall read:	-31.2 to –21.6 VDC
	60.87	10.8 to 15.6 VDC	2 Wire GPS +12V			CRT shall read:	10.8 to 15.6 VDC
	60.88	-15.6 to –10.8 VDC	2 Wire GPS –12V			CRT shall read:	-15.6 to -10.8 VDC
	60.91	-0.100 to 0.100VDC	2 Wire GND Mux 0			CRT shall read:	-0.100 to 0.100VDC
	60.92	-0.100 to 0.100VDC	2 Wire GND Mux 1			CRT shall read:	-0.100 to 0.100VDC
	60.93	-0.100 to 0.100VDC	2 Wire GND Mux 2			CRT shall read:	-0.100 to 0.100VDC
	60.94	-0.100 to 0.100VDC	2 Wire GND Mux 3			CRT shall read:	-0.100 to 0.100VDC
	60.95	-0.100 to 0.100VDC	2 Wire GND Mux 4			CRT shall read:	-0.100 to 0.100VDC
	60.96	-0.100 to 0.100VDC	2 Wire GND Mux 5			CRT shall read:	-0.100 to 0.100VDC
	60.97	-0.100 to 0.100VDC	2 Wire GND Mux 6			CRT shall read:	-0.100 to 0.100VDC
	60.98	-0.100 to 0.100VDC	2 Wire GND Mux 7			CRT shall read:	-0.100 to 0.100VDC
	62.1	PASS	APM Read/Write Test – Writes AA s to memory and reads back. Writes 55 s to memory and reads back			CRT shall read:	PASS
	62.2	Ok	APM Write Part Number Serial Number Test			CRT shall read:	Ok
	63.1	PASS	Compact Flash Test - Writes AA s to memory and reads back. Writes 55 s to memory and reads back			CRT shall read:	PASS

Rev Ltr	Test No.	Operator limits	Test Description		Work Steps	
	69.1	PASS	Load the operational software according to the UUT part number and modification status		A successful load shall be indicated by the CF LOAD STATUS LED on the UUT being GREEN	PASS
	70.3		TAWS OP SOFTWARE VERIFICATION		TAWS OP SOFTWARE VERIFICATION	
	70.4	See table 7-4 for number based on software part number	Verify the operational software part number shown on the printout obtained by the EDDIT Tool.	OPSYS P1 P/N	Verify the operational software part number shown on the printout obtained by the EDDIT Tool.	See table 7-4 for number based on software part number.
	70.6	See table 7-4 for number based on software part number	Verify the operational software part number shown on the printout obtained by the EDDIT Tool.	OPSYS P2 P/N	Verify the operational software part number shown on the printout obtained by the EDDIT Tool.	See table 7-4 for number based on software part number.
	70.8	See table 7-4 for number based on software part number	Verify the operational software part number shown on the printout obtained by the EDDIT Tool.	BOOT P1 P/N	Verify the operational software part number shown on the printout obtained by the EDDIT Tool.	See table 7-4 for number based on software part number.
	70.10	See table 7-4 for number based on software part number	Verify the operational software part number shown on the printout obtained by the EDDIT Tool.	BOOT P2 P/N	Verify the operational software part number shown on the printout obtained by the EDDIT Tool.	See table 7-4 for number based on software part number.
	70.12	See table 7-4 for number based on software part number	Verify the operational software part number shown on the printout obtained by the EDDIT Tool.	DL P1 P/N	Verify the operational software part number shown on the printout obtained by the EDDIT Tool.	See table 7-4 for number based on software part number.
	70.14	See table 7-4 for number based on software part number	Verify the operational software part number shown on the printout obtained by the EDDIT Tool.	DL P2 P/N	Verify the operational software part number shown on the printout obtained by the EDDIT Tool.	See table 7-4 for number based on software part number.
	70.16	See table 7-4 for number based on software part number	Verify the operational software part number shown on the printout obtained by the EDDIT Tool.	FPGA A P/N	Verify the operational software part number shown on the printout obtained by the EDDIT Tool.	See table 7-4 for number based on software part number.

Rev Ltr	Test No.	Operator limits	Test Description		Work Steps	
	70.18	See table 7-4 for number based on software part number	Verify the operational software part number shown on the printout obtained by the EDDIT Tool.	FPGA B P/N	Verify the operational software part number shown on the printout obtained by the EDDIT Tool.	See table 7-4 for number based on software part number.
	70.20	See table 7-4 for number based on software part number	Verify the operational software part number shown on the printout obtained by the EDDIT Tool.	TAWS DB SW P/N	Verify the operational software part number shown on the printout obtained by the EDDIT Tool.	See table 7-4 for number based on software part number.

APPENDIX A
TT-950/951/952 TCAS SOFTWARE LOADING PROCEDURE

1. The TCAS portion of the T2CAS software shall be loaded as described in document IT7517900 Appendix A. Where TCAS 1500/2000 or TCAS is referenced, for the purposes of this Integrated Test Specification, it shall be read as “T2CAS TCAS processor”.

APPENDIX B
TT-950/951/952 CALIBRATION PROCEDURE
USING A P.C. AND SCRIPT FILES FROM PS7517976

1. INTRODUCTION

The calibration of the TCAS portion of the T2CAS is as described in Appendix B of Document IT7517900. Where TCAS 1500/2000 or TCAS is referenced, for the purposes of this Integrated Test Specification , it shall be read as “T2CAS TCAS portion”.

APPENDIX C
TT-950/951/952 AUTOCALIBRATION PROCEDURE USING THE MTS

1. INTRODUCTION

The autocalibration of the TCAS portion of the T2CAS is as described in Appendix C of Document IT7517900. Where TCAS 1500/2000 or TCAS is referenced, for the purposes of this Integrated Test Specification , it shall be read as “T2CAS TCAS portion”.

APPENDIX D
TT-950/951/952 OPERATION SOFTWARE LOADING PROCEDURE USING THE MTS

1. INTRODUCTION

The Operational Software Loading of T2CAS TAWS portion is as described in this Appendix.

Rev Ltr	Test No.	Operator limits		Test Description				Work Steps	
								Insert CDROM (P/N 9100005-001 (BOOT S/W) into CDROM drive.	
								Delete all files in directory d:\9000237\T2upload.	
								Copy the files to directory d:\9000237\T2upload.	
								Rename files: Cert-1.dl1 to dl_p1.bin Cert-1.dl2 to dl_p2.bin Boot_p2.bp2 to Boot_p2.bin Boot_p1.bp1 to Boot_p1.bin	
								Right-click on each file and select properties. Remove check from read only box and click on OK. Do this for the four files that were renamed.	
								Log in with employee number and password	
								Go to File, Select, Open	
								Select sequence file 9000237-data loader.squ	
								Click on Single Pass. Enter UUT information	
								Select UUT Part number from Menu selection (9000000-10001, -20001, or –55001)	
								Select Final as test type	
								Select ATP Revision letter as B	

Rev Ltr	Test No.	Operator limits		Test Description			Work Steps	
							Enter Employee number. Enter the APM Serial Number, enter the APM Hardware Mod, and select the APM part number (9000001-10001). Click on OK. Test will begin to run. Follow operator prompts and enter the appropriate information.	
							After approximately 15 minutes, message should appear telling operator that UPLOAD is COMPLETE, press RETURN.	
							When instructed to insert Compact Flash Card, install P/N 9100001-001 (OP S/W) and press return. XFER IN PROCESS light should light up GREEN and begin to blink.	
							Message appears telling operator Hit return and wait 15 minutes. Press return.	
							Message appears telling operator to wait for CF upload to complete and look for CF LOAD STATUS light to be GREEN.	
							If CF LOAD LIGHT is GREEN, click on YES. If CF LOAD LIGHT is RED, click on NO.	
							After Test has completed and UUT has powered down, remove the Compact Flash Card (P/N 9100001-001) (OP S/W).	

Rev Ltr	Test No.	Operator limits		Test Description			Work Steps	
							Make sure UUT is powered down. Disconnect P1 of PDL cable W1 (T336259-5) from Data Loader connector of UUT	
							Insert Compact Flash Card (P/N 9100006-001) (GENERIC 3 ASDB)	
							Power up UUT by clicking on DC PWR button.	
							XFER IN PROCESS should light up GREEN and blink.	
							Wait for CF LOAD STATUS to turn GREEN.	
							Power down UUT by clicking on DC PWR button.	
							Insert Compact Flash Card (P/N 9100004-001) (TAWS DATABASE)	
							Power up UUT by clicking on DC PWR button.	
							XFER IN PROCESS should light up GREEN and blink.	
							Wait for CF LOAD STATUS to turn GREEN.	
							Power down UUT by clicking on DC PWR button.	
							Delete all files in directory d:\9000237\T2upload.	
							To Verify the software loaded into the UUT, the following steps are performed:	
							Power up UUT by clicking on DC PWR button.	

Rev Ltr	Test No.	Operator limits		Test Description			Work Steps	
							Wait for all TAWS lights to turn off (lights on left side of UUT front panel).	
							After TAWS lights are off, connect PDL connector P1 of W43 (T336255-88) to Data Loader connector on UUT.	
							Click on EDDIT tool (P/N 9000286-102) Icon. Click on START EDDIT	
							When asked "would you want to connect to the T2CAS, click on YES.	
							When the following message appears, click on OK. Message: Mnemonic Database File For Current OP SW Part Number Not Found at pat d:\Eddit\Data\mnemonic_file_for_9000255-003.bin	
							When the following message appears, click on No Message: Current UART1 Speed is 38400 this is less than Max Speed 115200 CHANGE SPEED MANUALLY?	
							Click on MAINTENANCE on Menu Bar.	
							Select DOWNLOAD DATA FROM T2CAS.	
							Select ALL TAWS PART NUMBERS and CRC's	
							Click on SET UP DOWNLOAD button.	

Rev Ltr	Test No.	Operator limits		Test Description				Work Steps	
								When the following message appears, click on Yes Message: Do you Really Want To Start The DOWNLOAD of TAWSRWS All PART Numbers and CRCs?	
								When the following message appears, click on OK Message: TAWSRWS_DUMP Command Completed With No Errors.	
								Click on VIEW PRINTABLE button	
								Click on CLOSE VIEW.	
								Click on CLOSE in DOWN LOAD DATA FROM T2CAS Window.	
								Click on FILE on MENU BAR.	
								Click on SAVE AS	
								Change directory to D:\9000237\testdata	
								Type in file name as UUT serial number and date and time Ex: UUT S/N is 03010007 and date is 01/20/2003 and time is 15:47 Type: 03010007012020031547 PARTNUMBERCRCDUMP1.log as the file name	
								Click on SAVE.	

Rev Ltr	Test No.	Operator limits		Test Description				Work Steps	
								Close EDDIT Tool window.	
								Turn off Power to UUT by clicking on DC PWR button.	
								Exit from Testexec 9000237	
								Print out log file. Verify the part numbers from this log file and write them on the MTS Test Report in the spaces provided.	
								Disconnect PDL cable P1 of W43 (T336255-88) from UUT DATA LOADER Connector.	