CR-1999-209499

Report 11408
24 February 1998

GENCORP
AEROJET

Integrated Advanced Microwave Sounding Unit-A (AMSU-A)

Performance Verification Report

Initial Comprehensive Performance Test Report,

P/N 1331720-2, S/N 105

Contract No. NAS 5-32314
CDRL 208

Submitted to:

National Aeronautics and Space Administration
Goddard Space Flight Center
Greenbelt, Maryland 20771

Submitted by:

Aerojet
1100 West Hollyvale Street
Azusa, California 91702

Aerojet

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. AGENCY USE ONLY *(Leave blank)*	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
	February 1999	Contractor Report

4. TITLE AND SUBTITLE
Integrated Advanced Microwave Sounding Unit–A (AMSU-A), Performance Verification Report

5. FUNDING NUMBERS
NAS5-32314

6. AUTHOR(S)
R. Platt

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS (ES)
Aerojet
1100 W. Hollyvale
Azusa, CA 91702

8. PEFORMING ORGANIZATION REPORT NUMBER
11408
24 February 1999

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS (ES)
National Aeronautics and Space Administration
Washington, DC 20546-0001

10. SPONSORING / MONITORING AGENCY REPORT NUMBER
NASA/CR-1999-209499

11. SUPPLEMENTARY NOTES

12a. DISTRIBUTION / AVAILABILITY STATEMENT
Unclassified–Unlimited
Subject Category:18
Report available from the NASA Center for AeroSpace Information,
7121 Standard Drive, Hanover, MD 21076-1320. (301) 621-0390.

12b. DISTRIBUTION CODE

13. ABSTRACT *(Maximum 200 words)*

This is the Performance Verification Report, Initial Comprehensive Performance Test Report, P/N 1331720-2, S/N 105, for the Integrated Advanced Microwave Sounding Unit–A (AMSU-A).

14. SUBJECT TERMS
EOS, Microwave System

15. NUMBER OF PAGES
275

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
Unclassified	Unclassified	Unclassified	UL

Report 11408
24 February 1998

Integrated Advanced Microwave Sounding Unit-A (AMSU-A)

Performance Verification Report

Initial Comprehensive Performance Test Report,

P/N 1331720-2, S/N 105

Contract No. NAS 5-32314
CDRL 208

Submitted to:

National Aeronautics and Space Administration
Goddard Space Flight Center
Greenbelt, Maryland 20771

Submitted by:

Aerojet
1100 West Hollyvale Street
Azusa, California 91702

Electronic Systems Plant
P.O. Box 296
Azusa, California 91702-0296
CAGE/Facility Ident: 70143

GENCORP
AEROJET

AE-26151/5E
11 February 1999

Superseding
AE-26151/5D
22 September 1998

PROCESS SPECIFICATION

TEST PROCEDURE, ELECTROMAGNETIC INTERFERENCE (EMI)/ ELECTROMAGNETIC RADIATION (EMR) AND ELECTROMAGNETIC COMPATIBILITY (EMC) FOR THE METSAT/METOP ADVANCED MICROWAVE SOUNDING UNIT–A (AMSU-A)

Contract No.: NAS5-32314

Prepared for:

NASA/Goddard Space Flight Center
Greenbelt Road
Greenbelt, MD 20771

GENCORP AEROJET

PO Box 296
Azusa, CA 91702
CAGE Code 70143

ENGINEERING CHANGE NOTICE

ADVANCE REL. INCORPORATE SHEET 1 OF 174

1. PROGRAM	2. ECN NUMBER	3. CONTRACT NUMBER	4. PREPARED BY / DATE / EXT	5. DOCUMENT NUMBER	6. NEW REV.
COMBINED AMSU	CAMSU- 2004	NAS 5-32314	Tom Higgins / 1 DEC '98 / 2965	AE 26156/3A	B

7. CHANGE CLASS	8. MULTIPLE DOCUMENTS AFFECTED	9. CHG TYPE	10. HARDWARE	11. DOCUMENT TITLE
IA (IB) II CCR # ____	YES (NO)	(DOC CHG) HARDWARE SOFTWARE	PART NUMBER(S) / CURR REV (MAND, LTST) / NEW REV (MAND, LTST) / EFFECTIVITY: ☐ END ITEM S/N ☐ PART SERIAL/LOT / DATE	METSAT/KLM/AMSU-A1 SYSTEM COMPREHENSIVE PERFORMANCE TEST & LIMITED PERFORMANCE TEST TEST PROCEDURE

12. DESCRIPTION OF CHANGE
ITEM ZONE

SEE ATTACHED REDLINES

SO# 436613

Prepare as Appvl Dft B - Requires Customer appvl.

___ Urgent ✓ Routine

13. SIGNATURES		DATE
Design Verif., Dwg.	N/A	
Qual Eng	[signature]	12/22/98
PTL (Eng)	[signature]	12/21/98
Mfg Eng	[signature]	1/4/99
Systems	P. R. [signature]	12/21/98
NASA T.O.	See Attached	
Des. Assur.	N/A	
Matls.	N/A	
Design Verif., Specs.	[signature]	1/5/98

14. JUSTIFICATION / REASON FOR CHANGE
Modify the test procedure to reflect test methodology improvements, and provide a more logical testing sequence.

16. REMARKS/SPECIAL INSTRUCTIONS/TECHNICAL EVALUATION
No technical impact

15. DISPOSITION OF MATERIAL	USE AS IS	MODIFY	SCRAP	RETURN TO STORES
ON ORDER				
IN STOCK				
INSTALLED				

20. CONFIGURATION MGR. [signature]

21. DIST. CODE:

22. REL. DATE:

17. NASA CONCURRENCE OF CLASSIFICATIONS [signature]
DATE: 1/7/99

18. CHANGE CODE
II

19. PCCB CHAIRMAN / PMO: RNH 1/20/99
(APPROVE)
DISAPPROVE [signature]
DEFER
DATE: 1/14/99

23. INCORPORATION DATE
Inc. By ....
Design Verif. ....

Electronic Systems Plant
P.O. Box 296
Azusa, California 91702-0296
CAGE/Facility Ident: 70143

GENCORP
AEROJET

AE-26156/3A
28 July 1998

PROCESS SPECIFICATION

METSAT/KLM/AMSU-A1, SYSTEM COMPREHENSIVE AND LIMITED PERFORMANCE TESTS TEST PROCEDURE

REDLINE MASTER COPY
S/O: 436613 OPER: 0810

TE

QE
12/1/98

Contract No.: NAS-32314

ECN 2004

Prepared for:

NASA/Goddard Space Flight Center
Greenbelt Road
Greenbelt, MD 20771

TABLE OF CONTENTS

TABLE OF CONTENTS (CONT)

TABLE OF CONTENTS (CONT)

TABLE OF CONTENTS (CONT)

FIGURES

TABLES

TEST DATA SHEETS

TEST DATA SHEETS (CONT)

1. SCOPE

1.1 ***Scope***. This specification establishes the requirements for the Comprehensive Performance Test (CPT) and Limited Performance Test (LPT) of the Advanced Microwave Sounding Unit-A1 (AMSU-A1), referred to herein as the unit. The unit is defined on Drawing 1331720.

1.2 ***Test procedure sequence***. The sequence in which the several phases of this test procedure shall take place is shown in Figure 1, but the sequence can be in any order.

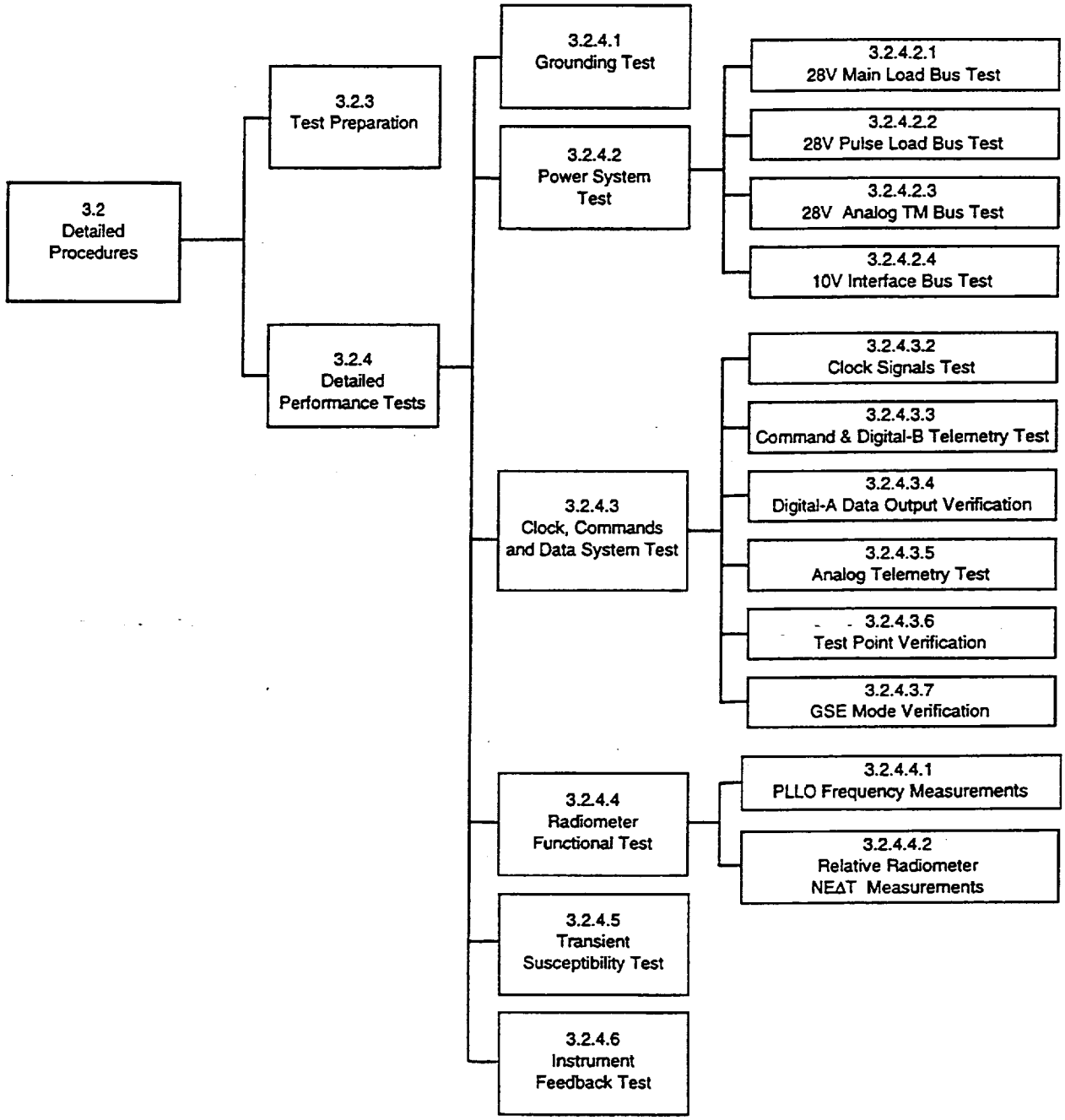


Figure 1. Test Procedure Sequence

This page intentionally left blank.

2. APPLICABLE DOCUMENTS

2.1 *Government documents*. The following documents form a part of this specification to the extent specified. Unless otherwise specified, the issue shown shall apply.

STANDARDS

Military

MIL-STD-45662	Calibration Systems Requirements

OTHER DOCUMENTS

S-480-79	Performance Assurance Requirements for the EOS/METSAT Integrated Programs Advanced Microwave Sounding Unit-A (AMSU-A) (PAR)
S-480-80	Performance and Operation Specification for the EOS/METSAT Integrated Programs Advanced Microwave Sounding Unit-A (AMSU-A) (POS)
IS-2617547	AMSU-A1 Unique Instrument Interface Specification (UIIS)
IS-3267415	ATN-KLM General Instrument Interface Specification (GIIS)

(Copies of government documents should be obtained as indicated in the Department of Defense Index of Specification and Standards.)

2.2 *Non-Government documents*. The following documents form a part of this specification to the extent specified herein. Unless otherwise specified, the issue in effect on the date of testing shall apply.

2.2.1 *Aerojet documents*

SPECIFICATION

AE-26002/1	Test Procedure, Subsystem, Antenna Drive for AMSU-A1
AE-26157	Special Test Equipment (STE), Operation and Maintenance Manual
AE-26357	Transportation Handling Procedure for the AMSU-A System Integrated Program

STANDARD

STD-2454	Requirements for Electrostatic Discharge Control

REPORT

10353	Contamination Control Plan for the Advanced Microwave Sounding Unit-A (AMSU-A)

DRAWINGS

1331720	Advanced Microwave Sounding Unit A1 (AMSU-A1)
1335695	Special Test Equipment
1356655	Console Assembly, METSAT and EOS STE

(Copies of Aerojet documents may be obtained from Gencorp Aerojet, Azusa Operations, CAGE 70143, P.O. Box 296, Azusa, California, 91702-0296).

3. REQUIREMENTS

3.1 *General test requirements*

3.1.1 ***Equipment and test facilities***. The tests described herein shall be performed at Aerojet under laboratory conditions in an EMI shielded chamber for the first and final CPT. Other tests need not be accomplished in the EMI shielded chamber. The test equipment listed in Table I shall be used when performing the tests. If the specified equipment is not available, the equipment substituted shall provide a measurement accuracy equal to or greater than that of the specified equipment. The AMSU-A Special Test Equipment (STE) shall be used for activation and control of the unit and monitoring of its performance.

Table I. Equipment List

Item	Quantity	Item Description	Mfg.	Model
1	1	Dynamic signal analyzer	Hewlett-Packard	3562A
2	1	Signal Generator	Hewlett-Packard	3314A
3	1	Oscilloscope	Tektronix	2225A
4	1	9-pin breakout box	Aerojet	2536-3743/SK1358702-1
5	1	15-pin breakout box	Aerojet	2536-3744/SK1358703-1
6	2	25-pin breakout box	Aerojet	2336-3746/SK1358704-1
7	1	37-pin breakout box	Aerojet	2536-3745/SK1358705-1
8	1	Relay Board	Aerojet	–
9	1	Double Shielded Connector	–	–
10	1	Lab. General Purpose Power Supply	Hewlett-Packard	6114
11	1	Oscilloscope	Tektronix	466A
12	1	Power Supply	Power Designs	3650-S
13	1	WR19 Harmonic Mixer (40-60 GHz)	Hewlett-Packard	HP11970V
14	1	Power Meter	Anritsu	ML83A
15	1	WR19 Feed Horn	TRG	V861
16	1	LN2 Container	Cole	N03726-20
17	1	Spectrum Analyzer	Hewlett-Packard	8566B
18	1	STE Computer	Aerojet	1336695
19	1	STE Interface Cable J1	Aerojet	1335758-1
20	1	STE Interface Cable J2	Aerojet	1335752-1
21	1	STE Interface Cable J3	Aerojet	1335756-1
22	1	STE Interface Cable J4	Aerojet	1335755-1
23	1	STE Interface Cable J5	Aerojet	1335753-1
24	1	STE Interface Cable J6	Aerojet	1335754-1
25	1	STE Interface Cable J7	Aerojet	1335757-1
26	1	Oscilloscope Camera	Tektronix	–
27	1	Current Probe	Tektronix	AM503
28	1	Plotter	Hewlett-Packard	7475A
29	1	Frequency Counter	Hewlett-Packard	5316A
30	1	Multimeter (Digital volt-ohm meter)	Fluke	77

Table I. Equipment List (Continued)

Item	Quantity	Item Description	Mfg.	Model
31	1	Cold Target Stand A1-1	Aerojet	T-1291001-3
32	1	Cold Target Stand A1-2	Aerojet	T-1291001-2
33	2	Cold Target Support	Aerojet	T-1291000-1
34	1	Sweeper	Hewlett-Packard	83623A
35	1	Multiplier	Hewlett-Packard	83557A/83558A

3.1.2 ***Required procedures and operations***. The unit shall be subjected to the examinations and tests specified in 3.2.4 and Table II.

3.1.2.1 ***Limited performance test (LPT)***. The Limited Performance Test shall consist of the test procedures specified in the LPT column of Table II.

Table II. AMSU-A1 Performance Tests

Paragraph	Test Description	1st CPT	LPT	Sub CPT	Final CPT
3.2.4.1	Grounding	X	X	X	X
3.2.4.2.1.1	+28 Main Load Bus (MLB) Turn On Transient	X			X
3.2.4.2.1.2	+28 MLB Operating Power	X	Note 2	Note 3	X
3.2.4.2.2	+28 Pulse Load Bus (PLB) Peak Current	X		Note 4	X
3.2.4.2.3	+28 Analog Telemetry Bus (ATB)	X		X	X
3.2.4.2.4	+10 V Interface Bus	X		X	X
3.2.4.3.2	Clock Signals	X			X
3.2.4.3.3	Commands and Digital-B Telemetry	X	X	X	X
3.2.4.3.4	Digital-A Data Output	X	Note 5	Note 5	X
3.2.4.3.5	Analog Telemetry	X	Note 6	Note 6	X
3.2.4.3.6	Test Points	X		X	X
3.2.4.3.7	GSE Mode	X Note 7			
3.2.4.4	Radiometer Functional	Title			
3.2.4.4.1	PLLO Frequency Measurement	X			X
3.2.4.4.3.4	Relative NEΔT	X	X	X	X
3.2.4.5	Transient Susceptibility Test	X			
3.2.4.6	Instrument Feedback Test	X			
3.2.4.7	Channel Identification Test	X			X

Notes:
1. Test Data Sheets for CPT/LPT located in Appendix A.
2. 3.2.4.2.5 (Power input test for LPT).
3. At 28 V only.
4. 3.2.4.2.2 except 3.2.4.2.2.5.
5. Only full scan.
6. STE only.
7. GSE mode test/verification is not required and is for engineering use only.

3.1.2.2 *Comprehensive performance test (CPT).* Three versions of the Comprehensive Performance Test are identified in Table II. These are applicable for different test stages. The test procedures to be performed for each version are specified in the 1st CPT, Sub CPT, and Final CPT columns of Table II. See 3.1.1 for required location of the first and the final CPT.

3.1.3 *Inspection instructions.* The following shall apply to all inspections performed under this specification.

a. **Personnel familiarization:** All personnel directly concerned with the conduct of the inspection shall become familiar with the entire content of this document before beginning the tests. Each step, including all notes, warnings, and cautions, shall be understood thoroughly before starting.

b. **Referenced documents:** Performance of the tests specified herein may require reference to the documents listed in Section 2. It is recommended that the applicable issues of these documents be available at the time and place of testing.

3.1.4 *Test conditions.* The following paragraphs shall apply to all testing described in this document.

3.1.4.1 *Standard ambient conditions.* Unless otherwise specified in a detailed method paragraph, all handling shall be performed under the following laboratory ambient conditions.

a. Handling in accordance with AE-26357

b. Contamination control in accordance with Report 10353

c. Temperature: +23 ± 10°C

d. Pressure: 610 to 810 torr

e. Humidity: 50 ± 20% (no condensation)

f. The instrument shall be placed in its protective bag (1338427) when not in use.

3.1.4.2 *Test tolerances.* The tolerances allowed on test conditions are intended only to provide for accuracy of such items as instrumentation and controls. Conditions shall be as close as possible to the nominal or center values specified, and in no instance shall they exceed the tolerances specified. Unless otherwise specified, the tolerances shall be within ± 10%.

3.1.4.3 *Read-out accuracy.* Parameters are specified either as limits or as nominal values with plus-or-minus tolerances. These limits and tolerances shall be regarded as absolute, and the inaccuracies of measuring equipment shall not be interpreted as part of measured values in such a way that out-of-limit measurements may appear in-limit.

3.1.5 *Electrostatic Sensitive Device (ESD) handling.* All electronic hardware shall be handled in accordance with Aerojet Standard STD-2454.

3.2 *Detailed Procedures*

3.2.1 *Responsibility for inspection.* All tests specified herein shall be performed under the cognizance of Aerojet Quality Assurance.

3.2.2 *Monitoring procedures for equipment.* Test equipment calibration schedules and procedures shall comply with the requirements of MIL-STD-45662. Before performing examinations and tests in accordance with this procedure, all test equipment to be used shall be verified as being within their current calibration period. Calibration or alignment, necessary for operation of the equipment within the requirements of this document, shall be performed when required.

3.2.3 *Test preparation*

3.2.3.1 ***STE connection.*** The power sources, signal sources, and loads are provided to the unit under test by the AMSU-A Special Test Equipment (STE) (Drawing 1335695 or 1356655), in accordance with paragraph 5.2 of S-480-80. The STE is automated test equipment controlled by a MicroVax computer. The unit shall be connected to the STE in accordance with AE-26157 and the detailed test procedures in 3.2.4.

3.2.3.2 ***Signal sources.*** Signal sources required during the performance test but not provided by the STE are as follows:

a. Cold background at LN_2 temperature at room ambient.

b. +28 ± 1 Vdc, 3 Amps.

3.2.3.3 ***Signal outputs.*** Signal outputs, except for the test signals at J7, shall be monitored by the STE. The signal outputs at J7 are shown in Figure 2.

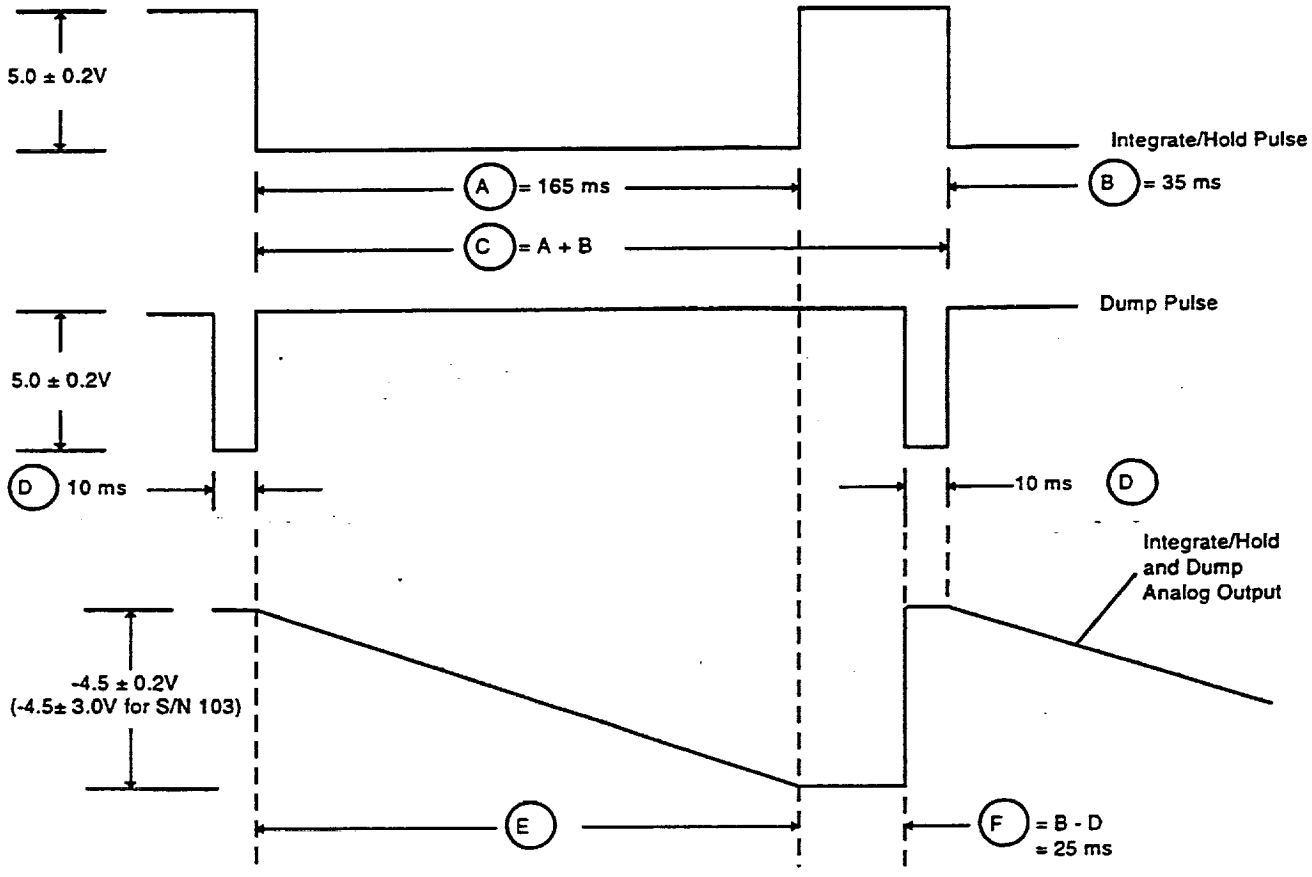


Figure 2. Signal Output at J7

3.2.3.4 ***Test software.*** AMSU-A1 bonded software shall be used to operate the STE. During initialization of the STE, as specified in AE-26157, the A1 software shall be selected. The bonded software is being selected by the STE computer automatically during initialization of the STE.

3.2.3.5 *Initial turn-on.* When called for in the individual test procedures, turn on the unit as follows:

1. Turn on the STE and initialize the STE as specified in AE-26157.
2. Connect breakout box to J1 on the STE +28 V power supply cable J1.
3. Connect DVM to J1-1 (+) and J1-3 (RTN).
4. Verify that the STE power supply POWER switch on the STE +28 V power supply is ON and the power supply is adjusted to +28 ±0.5 Vdc.
5. Verify that the PWR and SW/TM switches on the STE power distribution unit are ON.
6. Enter the serial number (decimal equivalent of the identification number provided in the UIIS) for the unit under test using AE-26157, if necessary. Verify that the Main Menu (AMSU-A1 WHAT TYPE OF TEST?) is displayed on the STE CRT terminal display.
7. On the Main Menu, press the [2] MONITOR ONLY touch area (or type the number). The Monitor Only Menu will be displayed, with Block Monitor Data Select options shown in the middle (window) area of the screen.
8. On the Monitor Only Menu, press [14] COMMANDS. The Commands Menu will be displayed in the window area.
9. On the Commands Menu, press [9] MODULE POWER = CONNECT. Wait at least 18 seconds for command execution. This applies power to the unit.
10. Execute commands as necessary to obtain the following configuration:

COMMANDS

[9]	MODULE POWER =	CONNECT	ANTENNA IN COLD CAL POS =	NO	[15]
[10]	SURVIVAL HTR PWR =	OFF	ANTENNA IN NADIR POS=	NO	[16]
[11]	MODULE TOTALLY OFF =	ON	ANTENNA FULL SCAN MODE =	YES	[17]
[12]	SCANNER A1-1 POWER =	ON	PLL POWER =	PLLO#1	[18]
[13]	SCANNER A1-2 POWER =	ON	COLD CAL POSITION MSB =	ZERO	[19]
[14]	ANTENNA WARM CAL POS =	NO	COLD CAL POSITION LSB =	ZERO	[20]

POWER [4] ON

11. Wait at least 18 seconds and observe the commands are acknowledged by STE.
12. Verify that the STE power supply is adjusted to +28 ±0.5 Vdc (see steps 2 through 4).
13. Verify that all breakout box switches are in the closed position.
14. According to the individual test procedures, execute commands as necessary to obtain the required commands configuration. Several commands can be executed at the same time.

3.2.3.6 *Turn-off methods*. The unit can be turned off immediately by pressing [9] MODULE POWER = DISCONNECT on e Commands Menu. For a phased shutdown, press [11] MODULE TOTALLY OFF = OFF on the Commands Menu or press POWER [4] OFF on any display. When connecting breakout boxes to the unit or STE connectors, verify that the unit power is off and the STE +28 V power supply is manually turned off.

NOTE

If power of the unit is turned off by command [9] MODULE POWER = DISCONNECT or the STE program is interrupted, then perform a phased shutdown after turn-on before starting next step.

3.2.4 *Detailed performance tests*. The comprehensive performance tests for the AMSU-A1 system are to be carried out on the fully assembled and operational unit. The tests to be performed are as follows:

a. Grounding/Isolation system test.

b. Power system test.

c. Clock commands and data system test.

d. Radiometer functional test.

e. Transient susceptibility test.

f. Instrument feedback test.

3.2.4.1 *Grounding test*. This test provides the verification of the unit grounding requirements of GIIS IS-3267415 ragraph 3.1.1 and UIIS IS-2617547 paragraph 3.1.1.

1. Connect breakout boxes to each of the spacecraft interface connectors J1 through J7 as shown in Figure 3. Verify that all connectors are protected with connector savers.

2. Measure and record continuity or isolation between the points shown on Test Data Sheet (TDS) 1.

3.2.4.2 *Power system test*. The purpose of this test is to verify the following dc voltage lines:

a. +28 V Main Load Bus (MLB)

b. +28 V Pulse Load Bus (PLB)

c. +28 V Analog Telemetry Bus (ATB)

d. +10 V Interface Bus

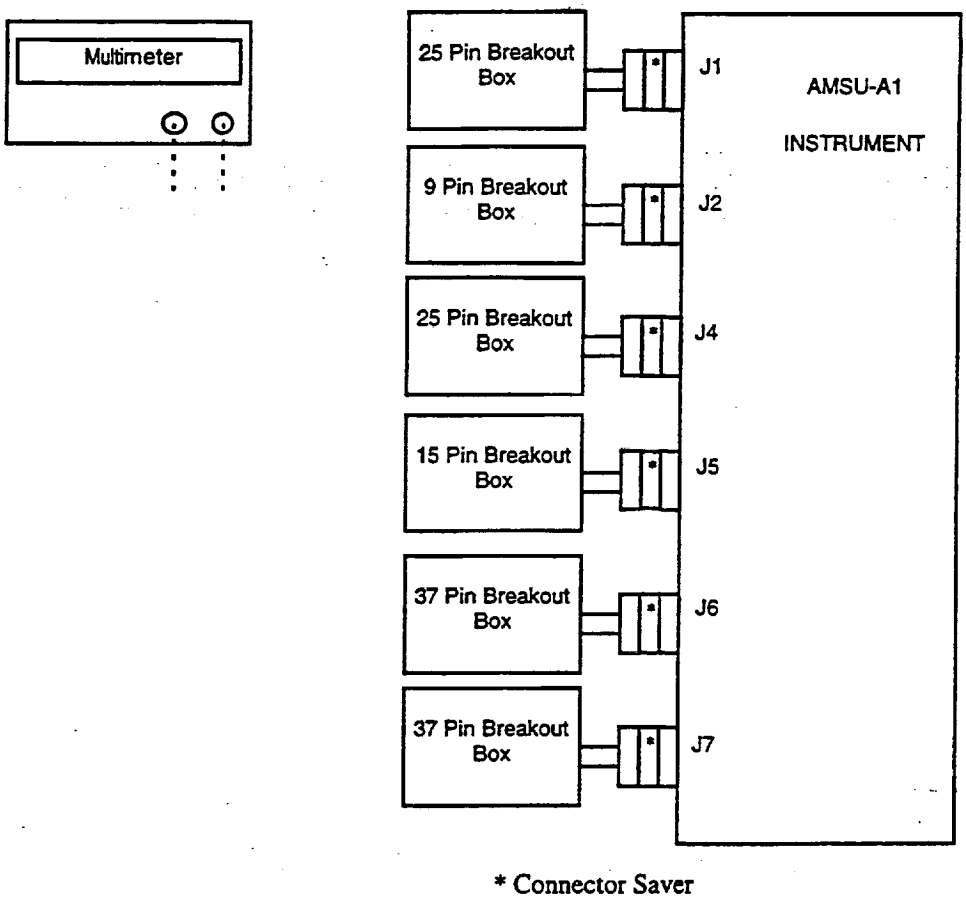


Figure 3. Grounding Test Setup

3.2.4.2.1 *+28 V main load bus test*

3.2.4.2.1.1 *+28 V MLB during turn on transient.* The +28 V MLB (at 28.56 Vdc) during turn on, shall be verified as follows:

1. Configure the unit and test equipment as shown in Figure 4. Verify that switches 1, 2, 14 and 15 of the breakout box are in the OPEN position. Disconnect +28 Vdc external power supply output at J1 and adjust the power supply to read 28.56 ± 0.05 Vdc at voltmeter. Re-connect the power supply output (J1) as shown in Figure 4.

2. Configure the dynamic signal analyzer as follows:

   (a) Time capture mode

   (b) External trigger

   (c) Trigger level = 1 V

   (d) Slope = –

   (e) Time span: zero to 0.2 seconds

(f) Scale: ~~(select at test)~~ Y = 0 to 320 mV ; X = 0 to 80ms

~~(g) Freq.: 100 kHz~~

(g) delay: 0 S

3. Turn the unit ON as described in 3.2.3.5. Execute commands as necessary to obtain the following configuration:

COMMANDS				
[9] MODULE POWER =	CONNECT	ANTENNA IN COLD CAL POS =	NO	[15]
[10] SURVIVAL HTR PWR =	OFF	ANTENNA IN NADIR POS=	NO	[16]
[11] MODULE TOTALLY OFF =	ON	ANTENNA FULL SCAN MODE =	YES	[17]
[12] SCANNER A1-1 POWER =	ON	PLL POWER =	PLLO#1	[18]
[13] SCANNER A1-2 POWER =	ON	COLD CAL POSITION MSB =	ZERO	[19]
[14] ANTENNA WARM CAL POS =	NO	COLD CAL POSITION LSB =	ZERO	[20]
POWER [4] ON				

4. Wait at least 18 seconds until the sending commands are acknowledged by the STE. Verify that the external +28 Vdc power supply is set to read 28.56 ± 0.05 Vdc on voltmeter no. 1. Adjust if necessary.

5. Turn the unit off by executing the following command: [9] MODULE POWER = DISCONNECT.

6. Turn the unit on by executing: [9] MODULE POWER = CONNECT.

NOTE

This test requires complex set-up of dynamic analyzer. This test can be repeated to obtain a proper waveform.

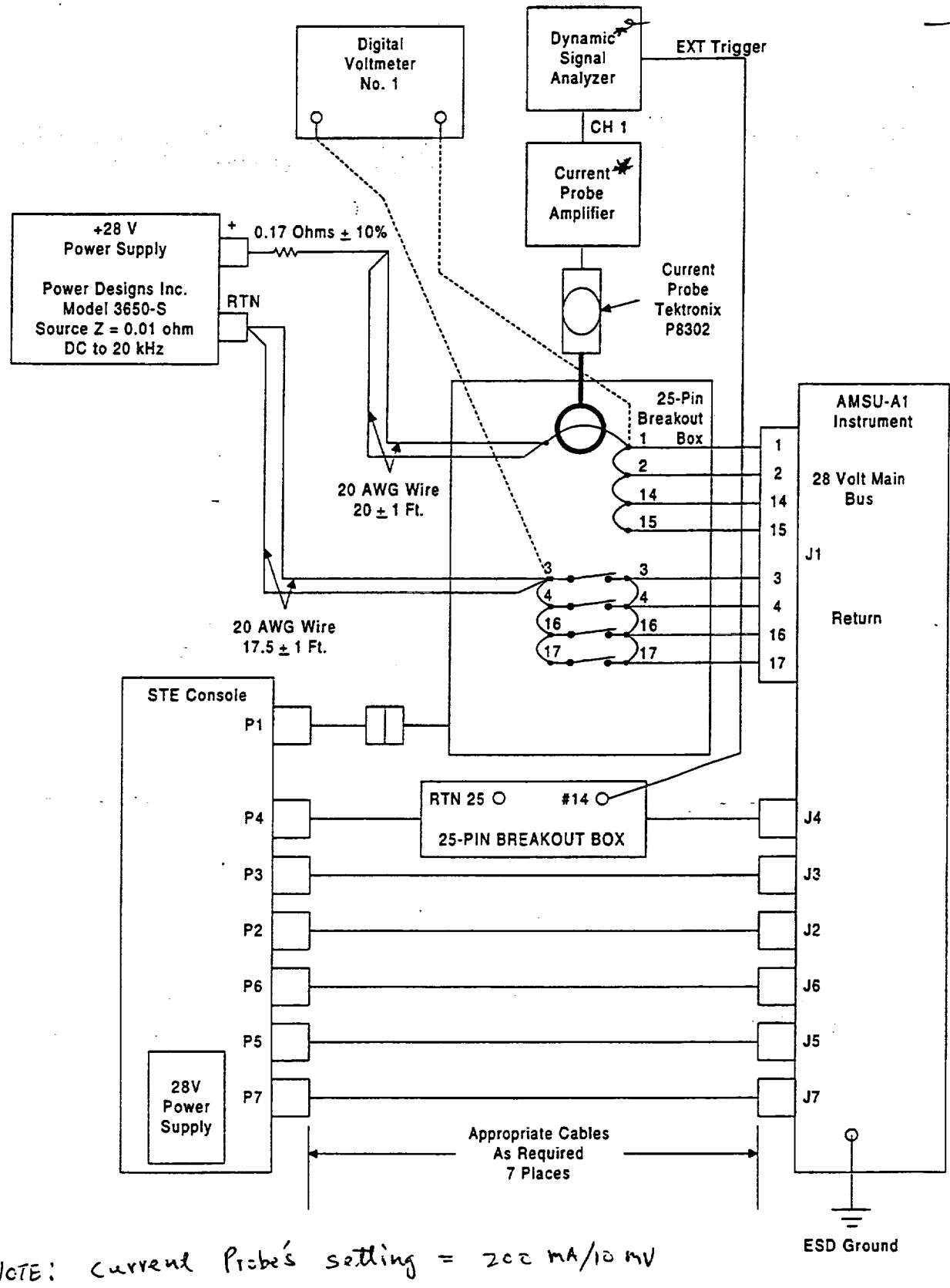
7. Confirm that the waveform has been captured by the analyzer and obtain a hard copy from the dynamic analyzer.

8. From the hard copy obtained in step 7, determine the current amplitude, transient pulse width, and rate of change (dI/dT) described in Figures 5 and 6. Expand the scale, if necessary, to obtain dI/dT (obtain a hard copy of the expanded scale). Record the values on TDS 2.

9. Reset the dynamic analyzer.

10. While monitoring voltmeter no. 1, adjust the external power supply to read 27.44 ± 0.05 Vdc at J1 and repeat steps 2 through 8.

11. Repeat step 10 for 28.00 ±0.05 Vdc.



*NOTE: Current Probe's setting = 200 mA/10 mV

Figure 4. +28 V Main Load Bus Verification Setup

.2.4.2.1.2 *+28 V MLB operating power*

1. Configure the unit and test equipment as shown in Figure 4. Verify that switches 1, 2, 14 and 15 of the breakout box are in the OPEN position.

2. Turn off power supplies. Insert current meter in positive lead of external power supply, turn power supplies on. Place the unit in operating condition as described in 3.2.4.2.1.1, step 3. While monitoring voltmeter No. 1, adjust the external power supply to 27.0 ± 0.1 volts (see Figure 4). Record the voltage displayed on voltmeter No. 1 on TDS 3 (MLB voltage at 27 Vdc).

3. Record the operating current on TDS 3.

4. Compute the operating power (in watts) as explained in TDS 3.

5. Adjust the external power supply to 28.0 ± 0.1 Vdc and record voltage on TDS 3.

6. Record the operating current on TDS 3.

7. Compute the operating power (in watts) as explained in TDS 3.

8. Adjust the external power supply to 29.0 ± 0.1 Vdc and record voltage on TDS 3.

9. Record the operating current on TDS 3.

10. Compute the operating power (in watts) as explained in TDS 3.

11. Adjust the external power supply to 28.0 ± 0.5 Vdc.

12. Turn the unit off by executing [9] MODULE POWER = DISCONNECT.

3.2.4.2.2 *+28 V pulse load bus test*. The PLB shall be verified during the following intervals:

a. First two seconds (3.2.4.2.2.1)

b. From 2 to 4 seconds (3.2.4.2.2.2)

c. From 4 to 6 seconds (3.2.4.2.2.3)

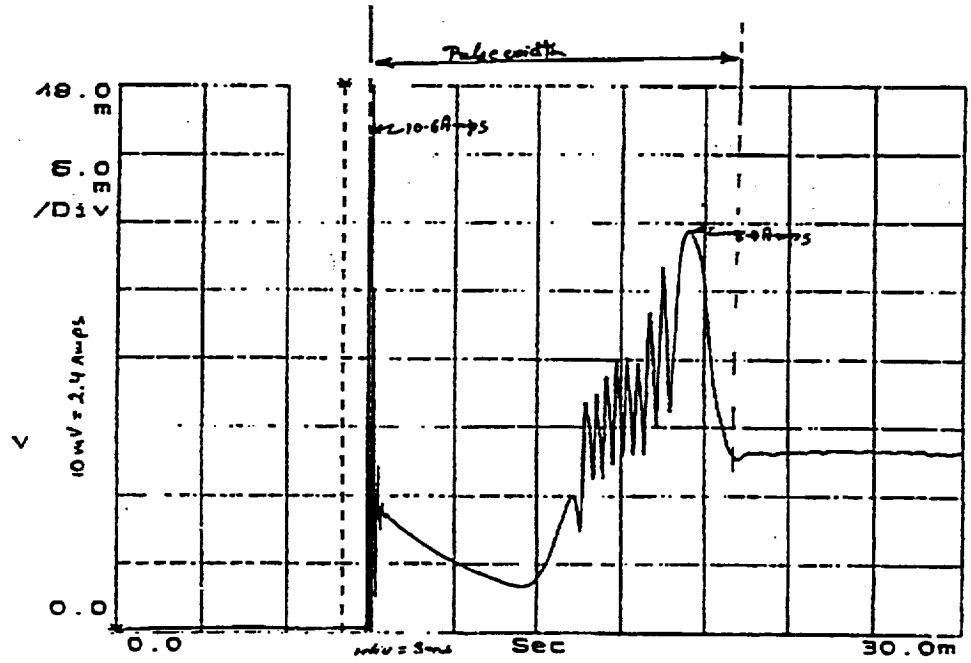
d. From 6 to 8 seconds (3.2.4.2.2.4)

NOTE

This test requires complex set-up of dynamic analyzer. This test can be repeated to obtain a proper waveform.

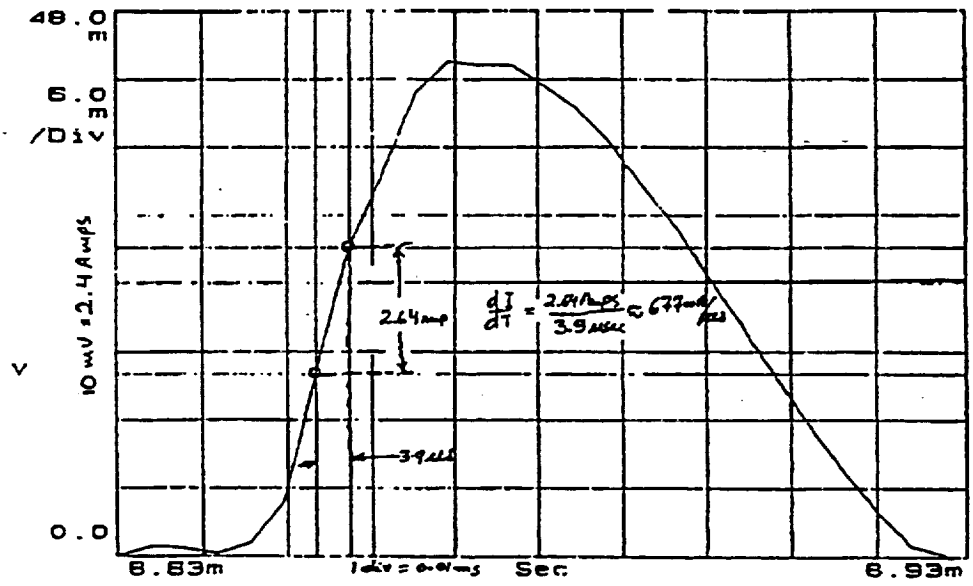
e. Turn-on transient (3.2.4.2.2.5)

f. PLB current in warm cal, cold cal and Nadir mode.



10 mV = 2.4 Amps

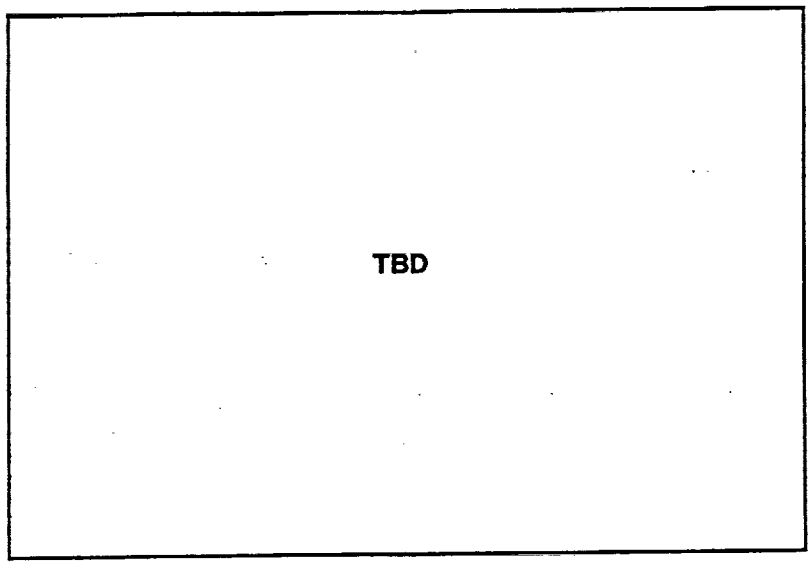
AMSU-A1 (S/N 102) Main Load Bus Worst Case Transient



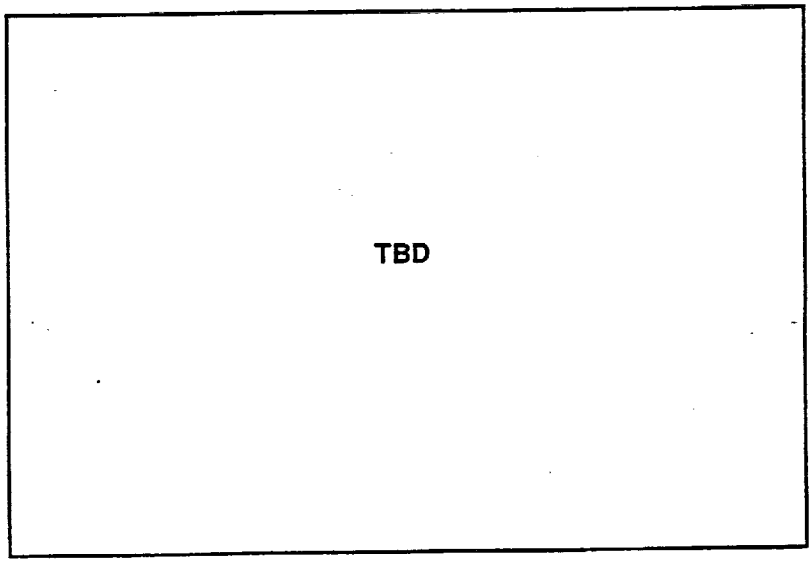
10 mV = 2.4 Amps

AMSU-A1 (S/N 102) Main Load Bus $\frac{dI}{dT}$ at Worst Case Transient

Figure 5. +28 V Main Bus Load Peak Power for KLM (S/N 102, 103 and 104)



AMSU-A1 (S/N 105) Main Load Bus Worst Case Turn-on Transient at 28.56 Vdc



AMSU-A1 (S/N 105) Main Load Bus $\frac{dI}{dT}$ at Worst Case Turn-on Transient at 28.56 Vdc

Figure 6. +28 V Main Bus Load Peak Power for METSAT (S/N 105 and up)

3.2.4.2.2.1 *PLB during the first two seconds*. The PLB operation, during the first two seconds, shall be verified as follows:

1. Configure the unit and test equipment as indicated in Figure 7. Verify that switches 5, 6. 18 and 19 of the breakout box are in the OPEN position.

2. Disconnect +28 Vdc external power supply output and adjust the power supply to read 28.00 ± 0.05 Vdc by using DVM. Re-connect power supply output as shown in Figure 7.

3. Configure the dynamic signal analyzer as follows:

   (a) Time capture mode

   (b) External trigger

   (c) Trigger level = 1 V

   (d) Slope = –

   (e) Time span: zero to two seconds

   (f) Scale: (select at test)

   (g) Pre-trigger delay: –0.1 seconds

4. Turn the unit ON as described in 3.2.3.5. Execute commands as necessary to obtain the following configuration:

COMMANDS

[9]	MODULE POWER =	CONNECT	ANTENNA IN COLD CAL POS =	NO	[15]
[10]	SURVIVAL HTR PWR =	OFF	ANTENNA IN NADIR POS=	NO	[16]
[11]	MODULE TOTALLY OFF =	ON	ANTENNA FULL SCAN MODE =	YES	[17]
[12]	SCANNER A1-1 POWER =	ON	PLL POWER =	PLLO#1	[18]
[13]	SCANNER A1-2 POWER =	ON	COLD CAL POSITION MSB =	ZERO	[19]
[14]	ANTENNA WARM CAL POS =	NO	COLD CAL POSITION LSB =	ZERO	[20]
POWER [4] ON					

5. Wait at least 18 seconds until the sending commands are acknowledged by the STE. Reset the external +28 Vdc power supply to 28.00 ± 0.05 Vdc if necessary.

6. Obtain a hard copy of the signal displayed on the dynamic signal analyzer. Refer to Figure 8 for a typical waveform.

7. From the hard copy obtained in step 6, calculate the peak current. Record the peak current and bus current values during the integrate/hold, dump (I/H, D) time period (refer to Figure 8) on TDS 4.

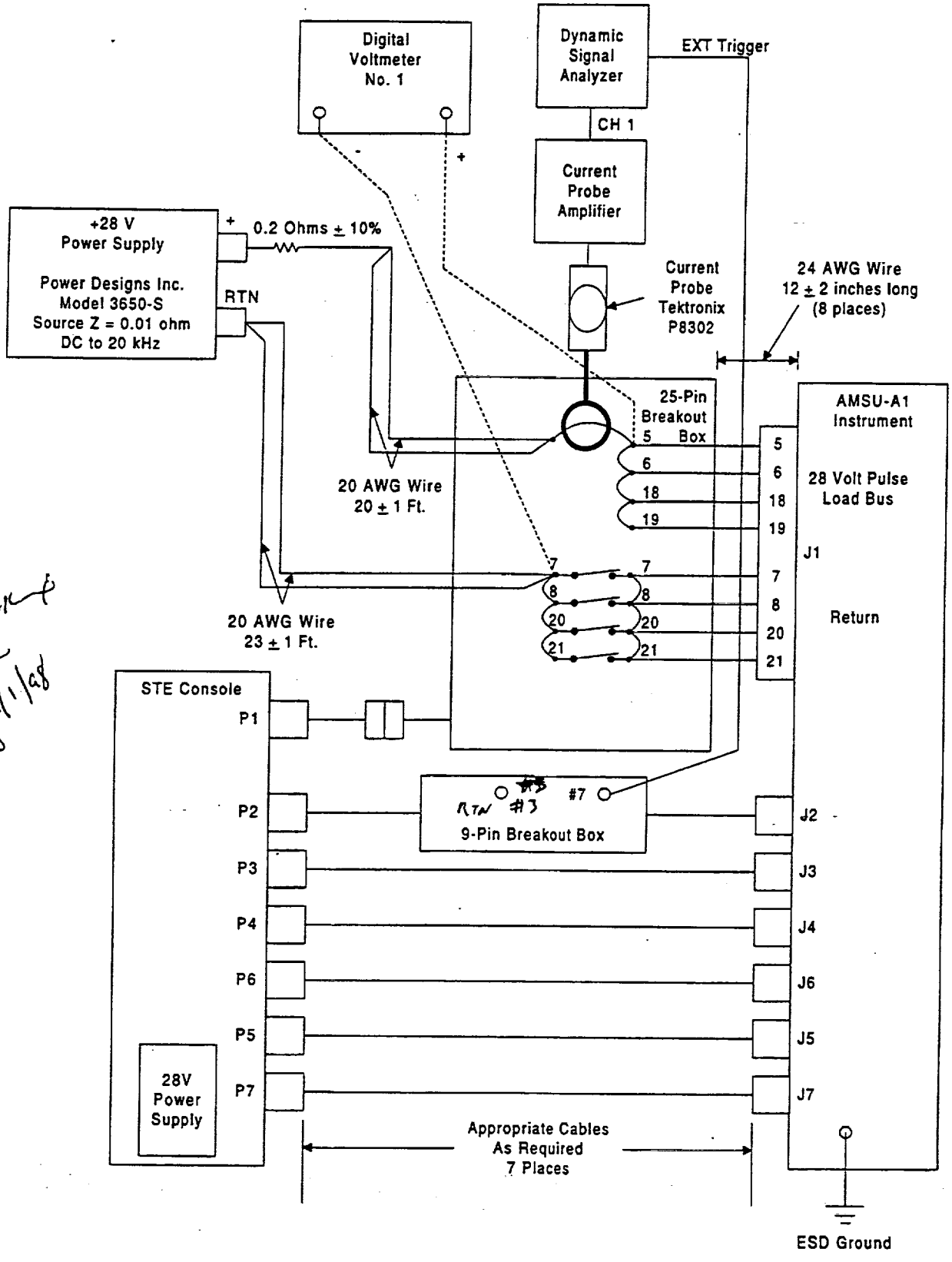


Figure 7. +28 V Pulse Load Verification Setup

3.2.4.2.2.2 ***PLB measured from 2 to 4 seconds.*** The PLB operation, from 2 to 4 seconds, shall be verified as follows:

1. Reset the dynamic analyzer in accordance with 3.2.4.2.2.1(2).
2. Change the PRE-TRIGGER DELAY setting of the dynamic signal analyzer to 1.9 seconds.
3. Obtain a hard copy of the signal displayed on the dynamic signal analyzer (refer to Figure 8 for typical waveform).
4. From the hard copy obtained in step 3, calculate the peak current. Record the peak current and bus current values during the integrate/hold, dump (I/H, D) time period (refer to Figure 8) on TDS 4.

3.2.4.2.2.3 ***PLB measured from 4 to 6 seconds.*** The PLB operation, from 4 to 6 seconds, shall be verified as follows:

1. Reset the dynamic analyzer in accordance with 3.2.4.2.2.1(2).
2. Change the PRE-TRIGGER DELAY setting of the dynamic signal analyzer to 3.9 seconds.
3. Obtain a hard copy of the signal displayed on the dynamic signal analyzer (refer to Figure 8 for typical waveform).
4. From the hard copy obtained in step 3, calculate the peak current. Record the peak current and bus current values during the integrate/hold, dump (I/H, D) time period (refer to Figure 8) on TDS 4.

3.2.4.2.2.4 ***PLB measured from 6 to 8 seconds.*** The PLB shall be measured as follows:

1. Reset the dynamic analyzer in accordance with 3.2.4.2.2.1(2).
2. Change the PRE-TRIGGER DELAY setting of the dynamic signal analyzer to 5.9 seconds.
3. Obtain a hard copy of the signal displayed on the dynamic signal analyzer.
4. From the hard copy obtained in step 3, calculate the peak current. Record the peak current and bus current values during the integrate/hold, dump (I/H, D) time period (refer to Figure 8) on TDS 4.

3.2.4.2.2.5 ***PLB turn-on transient***

1. Configure the unit and test equipment as shown in Figure 7 except route external trigger as shown in Figure 4. Verify that switches 5, 6, 18 and 19 of the breakout box are in the OPEN position.
2. Configure the dynamic signal analyzer as follows:
   (a) Time capture mode
   (b) External trigger
   (c) Trigger level = 1 V
   (d) Slope = –
   (e) Time span: zero to ~~0.2 seconds~~ 8ms

2a Configure the current probe amplifier to 20mA

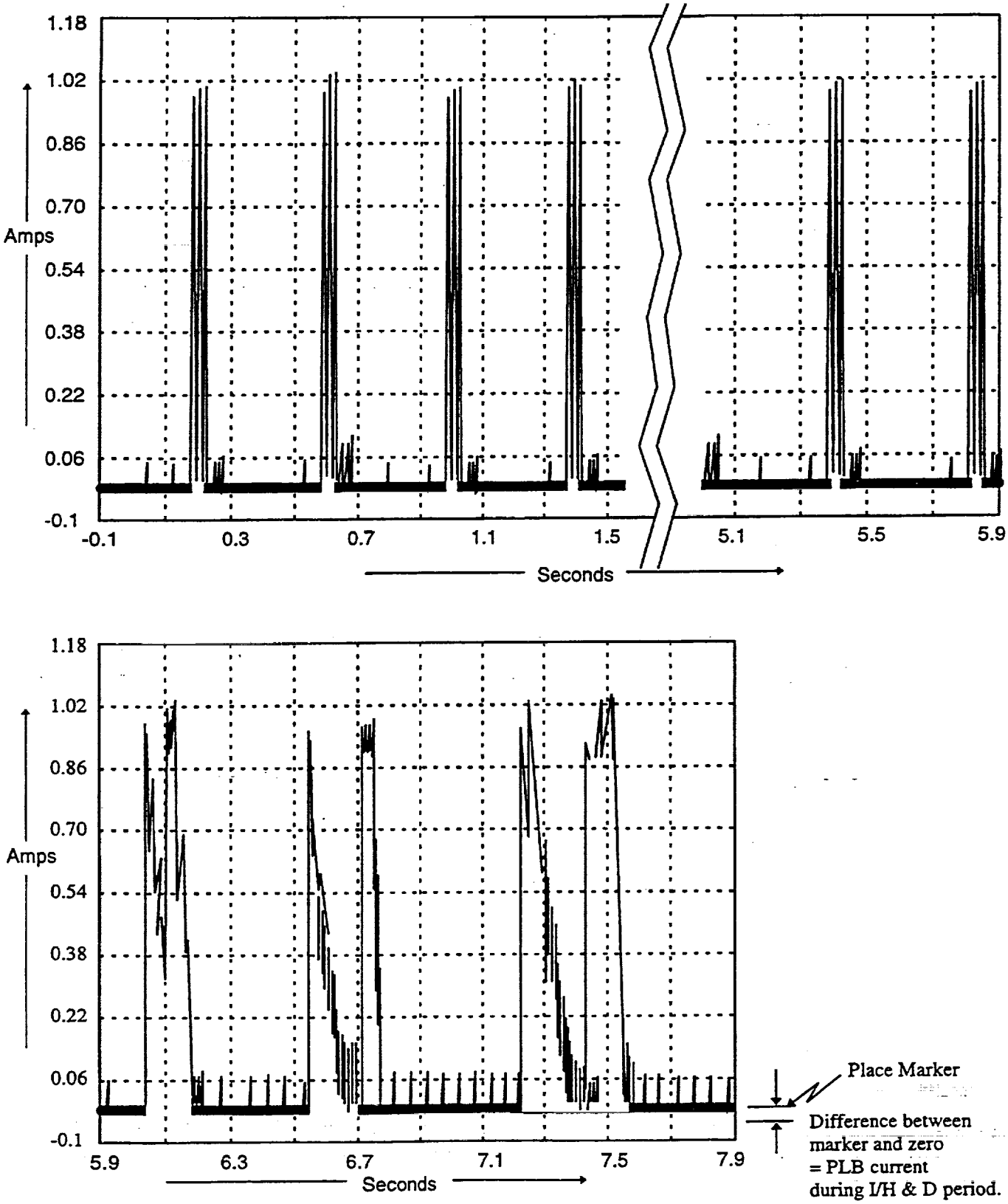


Figure 8. Typical Load Current Waveforms from the +28 V Pulse Load Bus

(f) Scale: (select at test)

(g) Pre-trigger delay: 0.0 seconds

3. Turn the unit on as described in 3.2.3.5. Execute commands as necessary to obtain the following configuration:

COMMANDS				
[9] MODULE POWER =	CONNECT	ANTENNA IN COLD CAL POS =	NO	[15]
[10] SURVIVAL HTR PWR =	OFF	ANTENNA IN NADIR POS=	NO	[16]
[11] MODULE TOTALLY OFF =	ON	ANTENNA FULL SCAN MODE =	YES	[17]
[12] SCANNER A1-1 POWER =	ON	PLL POWER =	PLLO#1	[18]
[13] SCANNER A1-2 POWER =	ON	COLD CAL POSITION MSB =	ZERO	[19]
[14] ANTENNA WARM CAL POS =	NO	COLD CAL POSITION LSB =	ZERO	[20]
POWER [4] ON				

4. Wait at least 18 seconds until the sending commands are acknowledged by the STE.

5. Turn the unit off by executing the following command: [9] MODULE POWER = DISCONNECT.

6. Turn the unit on by executing: [9] MODULE POWER = CONNECT.

7. Obtain a hard copy from the dynamic analyzer.

8. From the hard copy obtained in step 7, determine the current amplitude, transient pulse width, and rate of change (dI/dT) described in Figure 9. Expand the scale to obtain dI/dT. Record the values on TDS 4.

3.2.4.2.2.6 *PLB current in warm cal, cold cal and Nadir mode*

1. Place instrument in warm cal mode.

2. Measure and record PLB steady state current on TDS 4.

3. Repeat step 2 after placing instrument in cold cal mode.

4. Repeat step 2 after placing instrument in Nadir mode.

3.2.4.2.3 *+28 V analog telemetry bus test*. The ATB operation shall be tested as follows:

1. Configure the unit and test equipment as indicated in Figure 10. Verify that switches 9 and 22 are in the OPEN position.

2. Turn on the unit under test.

3. While monitoring voltmeter no. 1, adjust the STE power supply to 28.0 ± 0.5 volts (refer to Figure 10) Record the voltage displayed on voltmeter no. 1 on TDS 5.

4. Measure the +28 V ATB voltage and current. Record on TDS 5.

5. Compute the operating power (watts) as explained on TDS 5.

6. Turn the unit off by executing: [9] MODULE POWER = DISCONNECT.

7. Remove breakout box connected between P1 and J1. Mate P1 directly to J1.

3.2.4.2.4 *+10 volt interface bus test.* Operation of the +10 volt interface bus shall be tested as follows:

1. Configure the unit and test equipment as indicated in Figure 11. Verify that switches 12 and 24 are in the OPEN position.
2. Turn on the unit under test.
3. Measure the +10 V bus voltage and current and record on TDS 6.
4. Compute the operating power as explained in TDS 6.
5. Turn the unit off by executing: [9] MODULE POWER = DISCONNECT and POWER [4] = OFF.
6. Remove the breakout box installed between J4 and P4. Mate J4 directly to P4.

3.2.4.2.5 *Power input test for LPT.* For LPT, test the power input as follows:

1. Configure the unit and test equipment as indicated in Figure 12.
2. Turn the unit ON as described in 3.2.3.5. Set the STE power supply voltage at 28.00 ± 0.05 Vdc using 25-pin breakout box and DVM #1.

NOTE

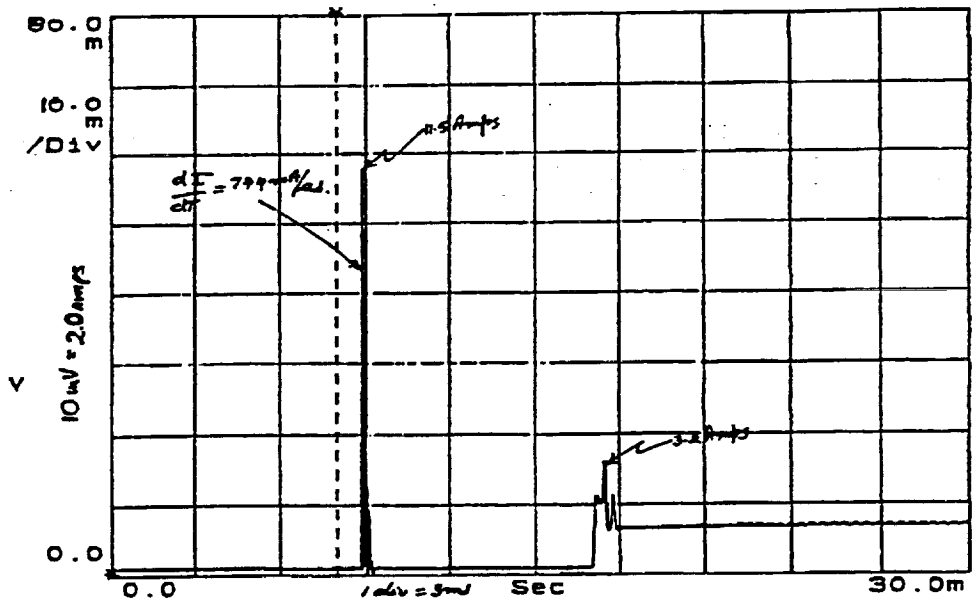
Do not proceed without successful completion of step 2.

3. Record the voltage from DVM #1 and current in Amps from STE current meter on TDS 7.

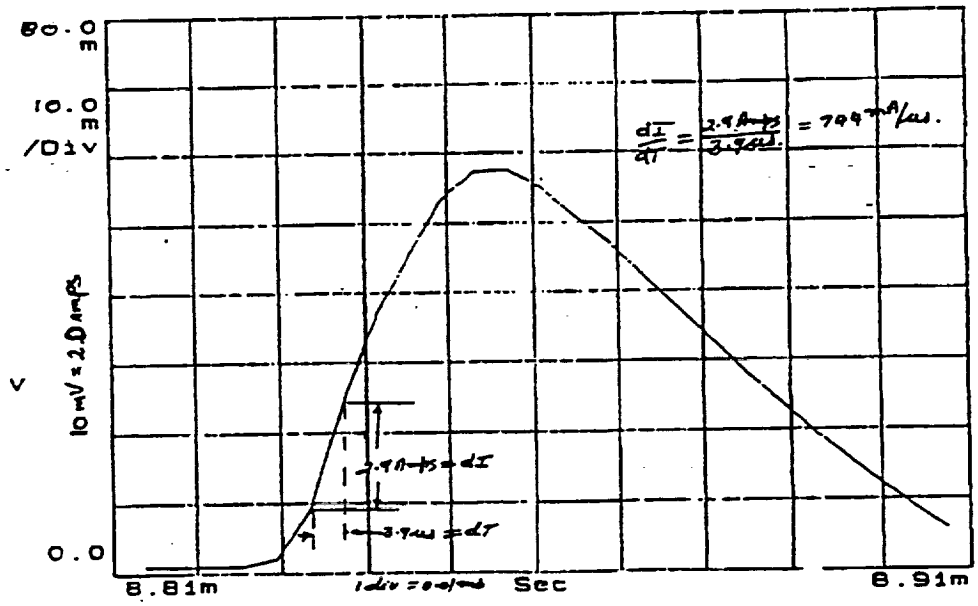
3.2.4.3 *Clock, commands, and data system test.* This procedure verifies the clock signal, the commands, and the data requirements specified in S-480-80, GIIS IS-3267415, and UIIS IS-2617547.

3.2.4.3.1 *Test sequence.* The test sequence shall be as follows:

a. Clock signals verification
b. Commands and Digital-B telemetry verification
c. Data output verification
   (1) Digital-A
   (2) Analog telemetry
   (3) Test points
d. GSE modes.

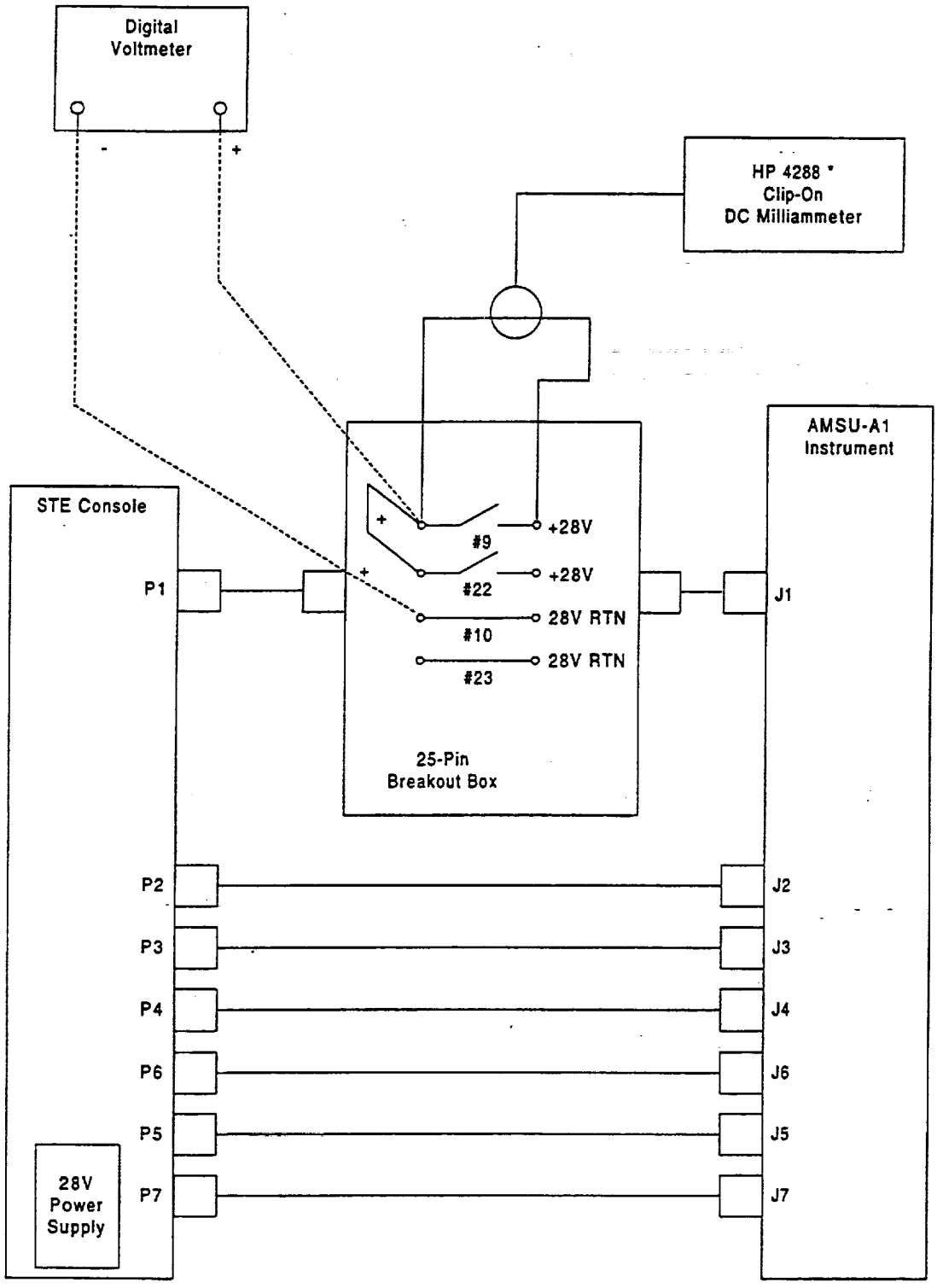


AMSU-A1 PLB Worst Case Transient



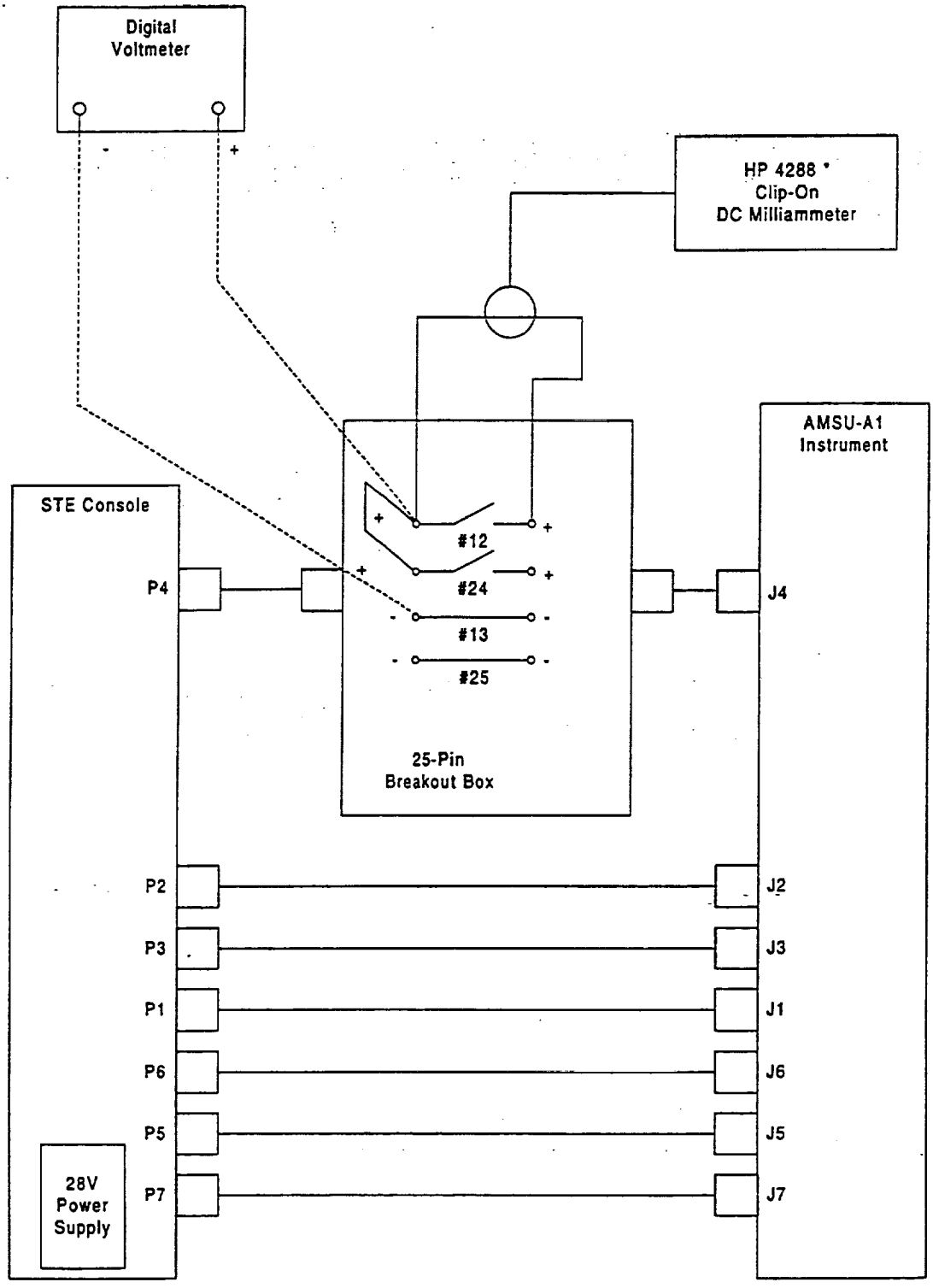
AMSU-A1 PLB $\frac{dI}{dT}$ Worst Case Transient

Figure 9. +28 V Pulse Load Bus Turn-on Transient



* Inline current meter (Fluke 77) can be used.

Figure 10. +28 V Analog Telemetry Bus Test Setup



* Inline current meter (Fluke 77) can be used.

Figure 11. +10 V Interface Bus Test Setup

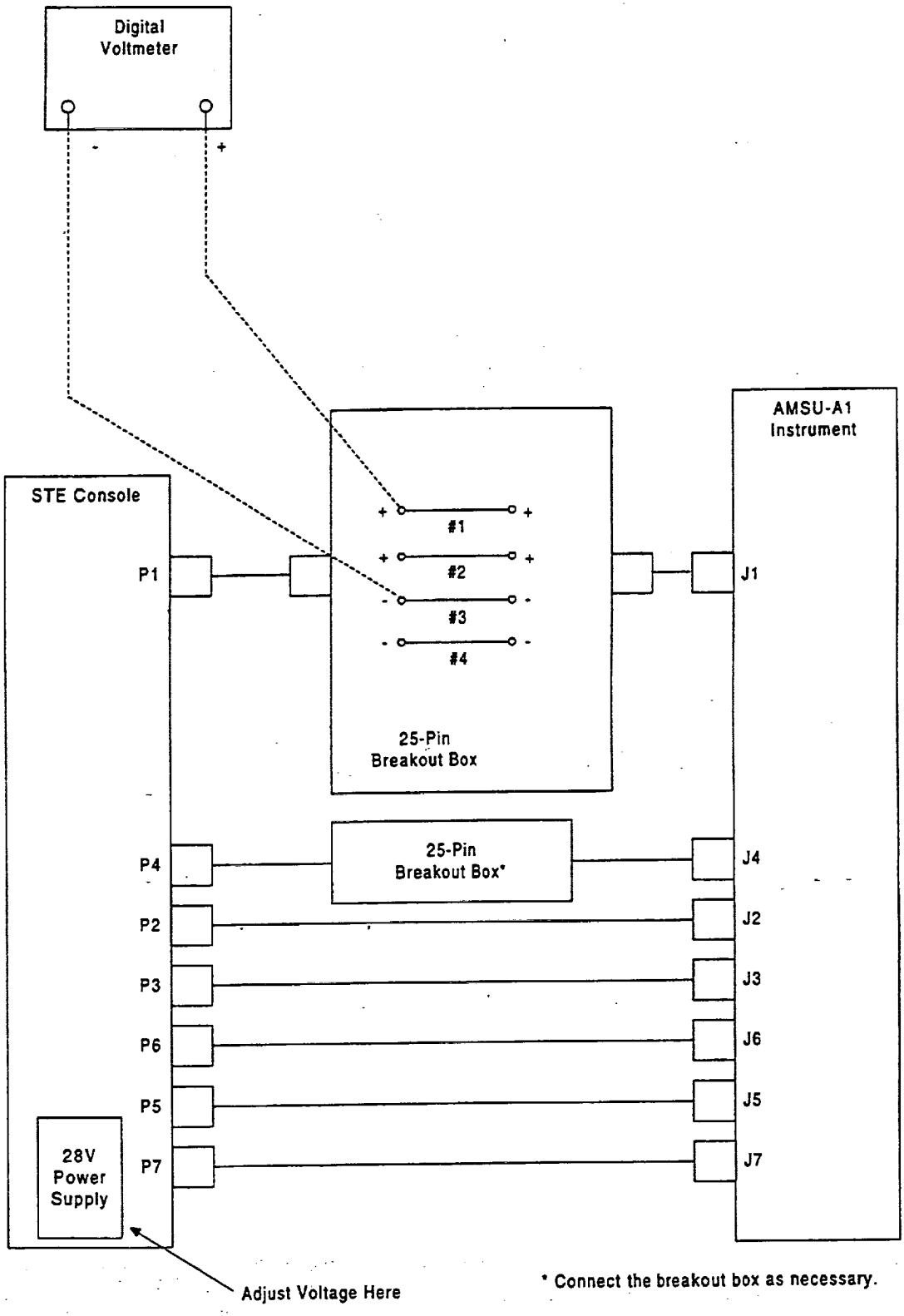


Figure 12. +28 V Main Load Bus Test Setup (For LPT Only)

.2.4.3.2 *Clock signals test.* The following items shall be tested to verify the clock signals. Refer to Figure 13 for graphical

representation of these pulses.

a. 1.248 MHz clock

b. 8 seconds frame pulse

c. A1 select pulse

d. C1 shift pulse

3.2.4.3.2.1 *1.248 MHz synchronization clock.* Perform the following procedures.

1. Configure the unit and the test equipment as indicated in Figure 14.

2. Connect CHANNEL-1 of the oscilloscope to the 1.248 MHz clock signal as shown in Figure 14.

3. Turn the unit ON as described in 3.2.3.5.

NOTE

Do not proceed without successful completion of step 3.

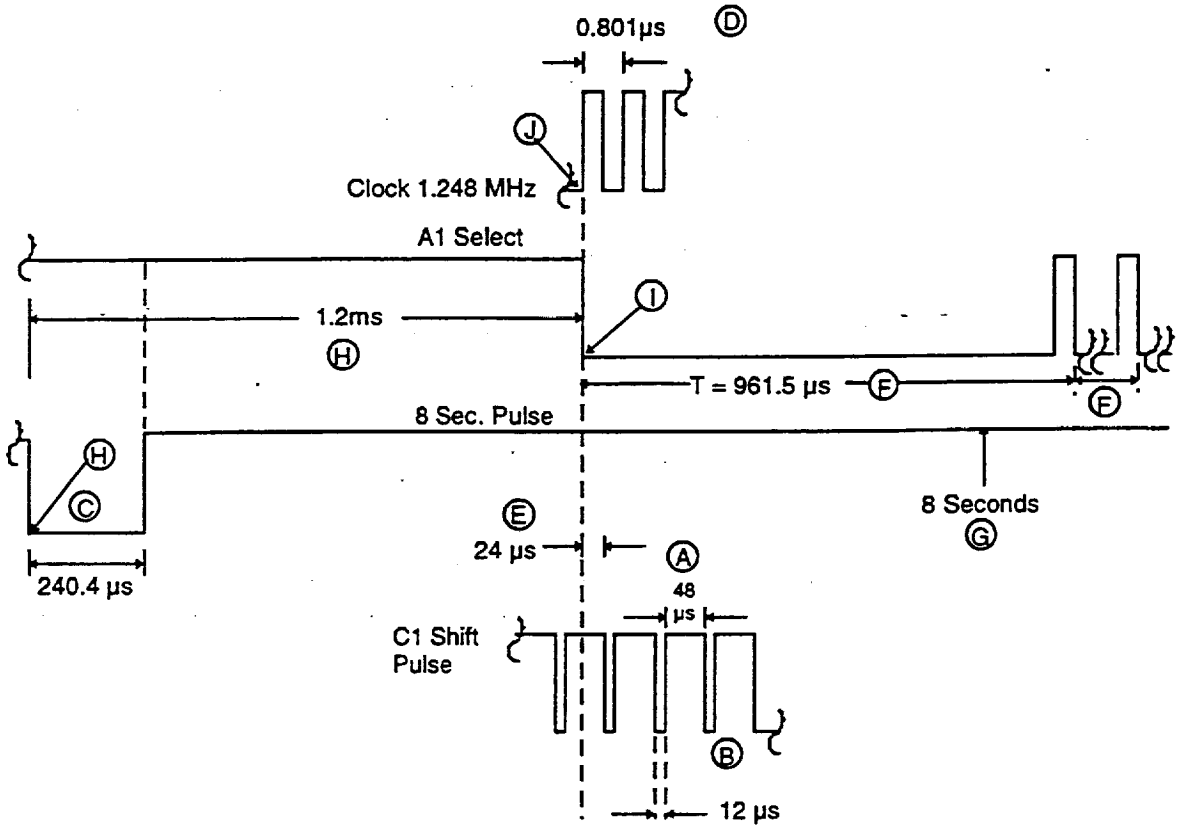


Figure 13. Clock Pulses Timing and Synchronization

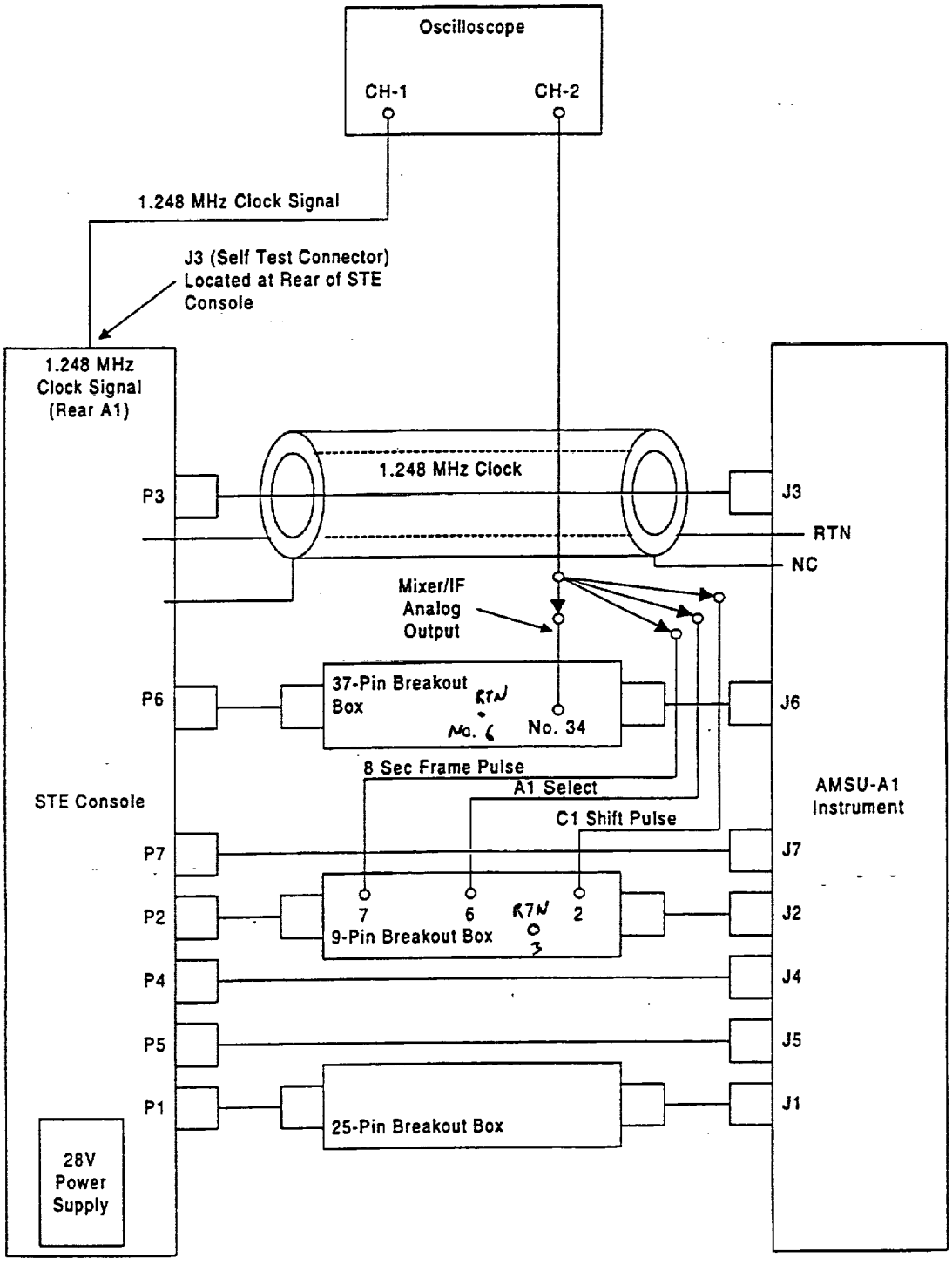


Figure 14. Clock Signals Test Setup

4. Using the oscilloscope, measure the 1.248 MHz clock signal. Record the data and attach the photograph or plot on TDS 8.

3.2.4.3.2.2 *C1 shift pulse verification*. Connect CHANNEL-2 of the oscilloscope to Pin 2 of the 9-pin breakout box (P2-J2). Photograph or plot the oscilloscope display and record the information indicated on TDS 9.

3.2.4.3.2.3 *A1 select pulse verification*. Connect CHANNEL-2 of the oscilloscope to Pin 6 of the 9-pin breakout box (P2-J2). Photograph or plot the oscilloscope display and record the information indicated on TDS 10.

3.2.4.3.2.4 *8-seconds frame sync pulse verification*

1. Connect CHANNEL-2 of the oscilloscope to Pin 7 of the 9-pin breakout box (P2-J2). Photograph or plot the oscilloscope display and record the information indicated on TDS 11. (Record of "C" timing only, is required.)

2. Turn the unit OFF by executing the softkey command [11] MODULE TOTALLY OFF to OFF. Leave both breakout boxes in place.

3.2.4.3.2.5 *Synchronization signal relationship*. The following synchronization signal relationship shall be verified.

a. A1 select pulse and the 8-second frame sync pulse

   1. With the unit off, configure the unit and the test equipment as indicated in Figure 15.

   2. Connect CHANNEL-1 of the oscilloscope to the breakout box, Pin 6 (A1).

   3. Adjust the amplitude and the trigger level of the oscilloscope for best picture.

   4. Photograph or plot the oscilloscope display and attach the photograph or plot in the space provided on TDS 12.

   5. From the photograph or plot, verify the synchronization as described in TDS 12. Record pass or fail.

b. A1 select pulse and C1 shift pulse

   1. Connect CHANNEL-2 of the oscilloscope to the breakout box Pin 2 (C1 shift pulse).

   2. Adjust the amplitude and the trigger level of the oscilloscope for best picture.

   3. Photograph or plot the oscilloscope display and attach the photograph or plot in the space provided on TDS 12, sheet 2.

   4. From the photograph or plot, verify the synchronization as described in TDS 12, sheet 2. Record pass or fail.

c. A1 select pulse and 1.248 MHz clock.

   1. Connect CHANNEL-2 of the oscilloscope to the clock connector located at the rear of the STE.

   2. Adjust the amplitude and the trigger level of the oscilloscope for best picture.

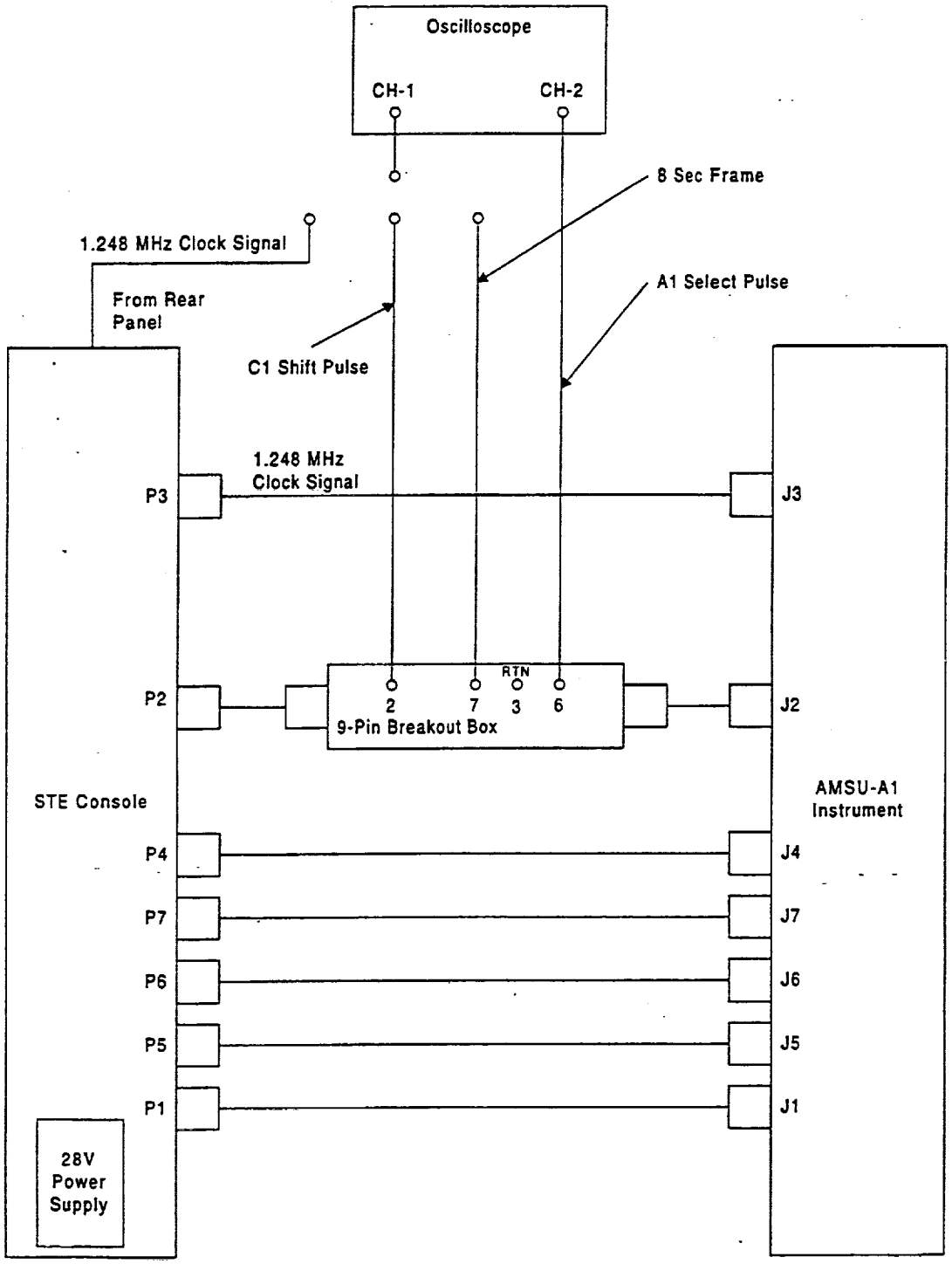


Figure 15. Synchronization Signal Relationships Test Setup

3. Photograph or plot the oscilloscope display and attach the photograph or plot in the space provided on TDS 13.

4. From the photograph or plot, verify the synchronization as described in TDS 13. Record pass or fail.

3.2.4.3.3 ***Commands and digital-B telemetry test.*** Commands and digital-B telemetry shall be verified in accordance with the following paragraphs.

3.2.4.3.3.1 ***Module totally off.*** Commands and digital-B telemetry, with the module totally off, shall be tested as follows:

1. Turn the unit on as follows:

   a. Press [12] POWER ON (from 1st screen).

   b. Press [2] MONITOR ONLY (from 1st screen)

   c. Press [14] COMMANDS (from 2nd screen)

   Verify the screen displays the default parameters below.

```
                                    COMMANDS
 [9]  MODULE POWER =          CONNECT    ANTENNA IN COLD CAL POS =      NO   [15]
[10]  SURVIVAL HTR PWR =      OFF        ANTENNA IN NADIR POS=          NO   [16]
[11]  MODULE TOTALLY OFF =    ON         ANTENNA FULL SCAN MODE =       NO   [17]
[12]  SCANNER A1-1 POWER =    ON         PLL POWER =                 PLLO#1  [18]
[13]  SCANNER A1-2 POWER =    ON         COLD CAL POSITION MSB =       ZERO  [19]
[14]  ANTENNA WARM CAL POS =  YES        COLD CAL POSITION LSB =       ZERO  [20]
POWER [4] ON
```

2. From the Commands Menu, execute command [11] MODULE TOTALLY OFF to OFF mode.

3. Wait at least 18 seconds, then verify that the following events are in effect:

   a. [11] MODULE TOTALLY OFF = OFF

   b. [12] SCANNER A1-1 POWER = OFF.

   c. [13] SCANNER A1-2 POWER = OFF.

   d. [10] SURVIVAL HEATER POWER = OFF

   Antenna reflectors for A1-1 and A1-2 pointing toward the warm load.

4. Record the above observations on TDS 14.

3.2.4.3.3.2 ***Survival heater power ON/OFF command.*** The survival heater power ON/OFF command shall be tested as follows:

1. Execute command [10] SURVIVAL HEATER POWER to ON mode. Wait at least 18 seconds. Verify that the command is in effect. Record observation on TDS 14, sheet 1.

2. Execute command [10] SURVIVAL HEATER to OFF mode. Wait at least 18 seconds. Verify that the command is in effect. Record observation on TDS 14, sheet 1.

3.2.4.3.3.3 *Module power connect command.* The module power connect command shall be tested as follows:

1. Execute command [9] MODULE POWER to CONNECT mode. Wait at least 18 seconds. Verify that the command is in effect. Record observation on TDS 14, sheet 2.

2. Verify that the current at the STE power supply is 0.5 to 4.3 Amperes. Record this information on TDS 14, sheet 2.

3.2.4.3.3.4 *Phase lock loop (PLL) PLLO No. 1 / PLLO No. 2.* The PLL PLLO No. 1/PLLO No. 2 command shall be tested as follows:

1. Execute [18] PLL POWER = PLLO#2
Wait at least 18 seconds. Verify that the command is in effect. Record observation on TDS 14, sheet 2.

2. Execute [18] PLL POWER = PLLO#1
Wait at least 18 seconds. Verify that the command is in effect. Record observation on TDS 14, sheet 2.

3.2.4.3.3.5 *Scanner commands verification.* The scanner commands shall be tested as follows:

1. Execute commands as necessary to obtain the following configuration:

COMMANDS				
[9] MODULE POWER =	CONNECT	ANTENNA IN COLD CAL POS =	NO	[15]
[10] SURVIVAL HTR PWR =	OFF	ANTENNA IN NADIR POS=	NO	[16]
[11] MODULE TOTALLY OFF =	ON	ANTENNA FULL SCAN MODE =	YES	[17]
[12] SCANNER A1-1 POWER =	ON	PLL POWER =	PLLO#1	[18]
[13] SCANNER A1-2 POWER =	ON	COLD CAL POSITION MSB =	ZERO	[19]
[14] ANTENNA WARM CAL POS =	NO	COLD CAL POSITION LSB =	ZERO	[20]
POWER [4] ON				

Wait at least 18 seconds. Verify that the commands are in effect. Record observations on TDS 15.

2. Execute. [12] SCANNER A1-1 POWER = OFF
[13] SCANNER A1-2 POWER = OFF

Wait at least 18 seconds. Verify that the commands are in effect. Record observations on TDS 16.

3. Execute. [12] SCANNER A1-1 POWER = ON
[13] SCANNER A1-2 POWER = ON

Wait at least 18 seconds. Verify that the commands are in effect. Record observations on TDS 17.

3.2.4.3.3.6 *Scanner position commands (A1-1 and A1-2) verification.* Verify scanner position command operation as follows:

NOTE

Verification of the scan position is applicable to both antenna reflectors located at the high and low bays of the instrument (A1-1 and A1-2).

1. Execute: [14] ANTENNA WARM CAL POS = YES
[17] ANTENNA FULL SCAN MODE = NO

Wait at least 18 seconds. Verify that the commands are in effect. Record observation on TDS 18.

2. Execute: [15] ANTENNA IN COLD CAL POS = YES
[14] ANTENNA WARM CAL POS = NO

Execute: [19] COLD CAL POS MSB = zero
[20] COLD CAL POS LSB = one

Wait at least 18 seconds. Verify that the commands are in effect. Record observation on TDS 18.

3. Execute: [19] COLD CAL POSITION MSB = ONE
[20] COLD CAL POSITION LSB = ZERO

Wait at least 18 seconds. Verify that the commands are in effect. Record observation on TDS 18.

4. Execute: [19] COLD CAL POSITION MSB= ONE
[20] COLD CAL POSITION LSB= ONE

Wait at least 18 seconds. Verify that the commands are in effect. Record observation on TDS 18.

5. Execute: [19] COLD CAL POSITION MSB= ZERO
[20] COLD CAL POSITION LSB= ZERO

Wait at least 18 seconds. Verify that the commands are in effect. Record observation on TDS 18.

6. Execute: [16] ANTENNA IN NADIR POSITION = YES
[15] ANTENNA IN COLD CAL POS = NO

Wait at least 18 seconds. Verify that the commands are in effect. Record observation on TDS 18.

7. Execute: [14] ANTENNA WARM CAL POS = YES

Wait at least 18 seconds. Verify that the commands are in effect. Record observation on TDS 18.

3.2.4.3.4 ***Digital-A data output verification***. The following items shall be tested to verify the digital-A data output:

a. Full scan (3.2.4.3.4.1)

b. Warm load (3.2.4.3.4.2)

c. Cold cal (3.2.4.3.4.3)

d. Nadir (3.2.4.3.4.4).

For each of the above scan modes, the following parameters will be subject to pass/fail criterion:

[I] Sync. sequence

[II] Unit I.D. and serial number

[III] Digital-B serial data verification

[IV] Reflector positions

[V] Radiometric data (scene data)

Radiometric data shall be obtained from two channels only, Channels 9 and 3. Channel 9 is physically located at the high bay of the sensor (A1-1 location) and Channel 3 is located at the lower bay of the sensor (A1-2 location).

[VI] Temperature sensors.

For the cold cal mode, reflector position [IV], verify the following:

(a) Cold cal position with MSB=1 and LSB=0

(b) Cold cal position with MSB=0 and LSB=1

(c) Cold cal position with MSB=1 and LSB=1.

NOTE

The calibration data for the selected AMSU-A1 sensor serial number is required prior to the start of this test. Refer to 3.2.4.3.4.1.

3.2.4.3.4.1 ***Full scan mode***. The digital-A data output in full-scan mode shall be tested as follows:

1. Turn the unit on. Execute commands as necessary to obtain the following configuration:

COMMANDS				
[9] MODULE POWER =	CONNECT	ANTENNA IN COLD CAL POS =	NO	[15]
[10] SURVIVAL HTR PWR =	OFF	ANTENNA IN NADIR POS=	NO	[16]
[11] MODULE TOTALLY OFF =	ON	ANTENNA FULL SCAN MODE =	YES	[17]
[12] SCANNER A1-1 POWER =	ON	PLL POWER =	PLLO#1	[18]
[13] SCANNER A1-2 POWER =	ON	COLD CAL POSITION MSB =	ZERO	[19]
[14] ANTENNA WARM CAL POS =	NO	COLD CAL POSITION LSB =	ZERO	[20]
POWER [4] ON				

2. Obtain a full printout (9 pages) of all the parameters ([I] through [VI]) described above, by touching the PRINT [3] FULL touch area. The computer will start printing all 9 pages of data.

3. Label 1st page of 9 pages with the unit serial number and the paragraph number corresponding to this test.

(I), (II), and (III) Sync, Unit ID, and Digital-B Data

4. Using Page 1 of the printout, verify that elements 0001 through 0008 are within the required values specified in TDS 19. Record pass or fail.

[IV] Reflector position

NOTE

To verify the following steps, the operator may print out the individual parameters by using AE-26157 and attach the data to each TDS.

5. Using the individual printout, verify that there is no "E" ERROR Flag (for S/N 102 through 104) on the computer printout. Record pass or fail on TDS 20. For S/N 105 and up, verify that position values are within ±5 10 counts from requirement provided in TDS 6, AE-26002/1.

[V] Radiometric data

6. Using the individual printout, verify that the data are within the values specified on TDS 21. Record pass or fail.

[VI] Temperature sensors

7. Using the individual printout, verify that elements 1090 through 1180 are within the values specified on TDS 22 (sheets 1 and 2). Record pass or fail.

3.2.4.3.4.2 *Warm cal mode*. The digital-A data output, in warm-cal mode shall be tested as follows:

1. Execute commands as necessary to obtain the following configuration:

COMMANDS				
[9] MODULE POWER =	CONNECT	ANTENNA IN COLD CAL POS =	NO	[15]
[10] SURVIVAL HTR PWR =	OFF	ANTENNA IN NADIR POS=	NO	[16]
[11] MODULE TOTALLY OFF =	ON	ANTENNA FULL SCAN MODE =	NO	[17]
[12] SCANNER A1-1 POWER =	ON	PLL POWER =	PLLO#1	[18]
[13] SCANNER A1-2 POWER =	ON	COLD CAL POSITION MSB =	ZERO	[19]
[14] ANTENNA WARM CAL POS =	YES	COLD CAL POSITION LSB =	ZERO	[20]
POWER [4] ON				

[I], [II], and [III] Sync. Unit ID, and Digital-B Data

2. Using Page 1 of the printout, verify that elements 0001 through 0008 are within the required values specified in TDS 23. Record pass or fail.

NOTE

To verify the following steps, the operator may printout the individual parameters by using AE-26157 and attach the data to each TDS.

[IV] Reflector position

3. Using the individual printout, verify that there is no "E" ERROR Flag (for S/N 102 through 104) on the computer printout. Record pass or fail on TDS 24. For S/N 105 and up, verify that position values are within ±5 10 counts from requirement provided in TDS 6, AE-26002/1.

[V] Radiometric data

4. Using the individual printout, verify that the data are within the values specified on TDS 25. Record pass or fail.

[VI] Temperature sensors

5. Using the individual printout, verify that elements 1090 through 1180 are within the values specified on TDS 26 (sheets 1 and 2). Record pass or fail.

3.2.4.3.4.3 *Cold cal mode*. The digital-A data output, in cold-cal mode, shall be tested as follows:

1. Execute commands as necessary to obtain the following configuration:

COMMANDS				
[9] MODULE POWER =	CONNECT	ANTENNA IN COLD CAL POS =	YES	[15]
[10] SURVIVAL HTR PWR =	OFF	ANTENNA IN NADIR POS=	NO	[16]
[11] MODULE TOTALLY OFF =	ON	ANTENNA FULL SCAN MODE =	NO	[17]
[12] SCANNER A1-1 POWER =	ON	PLL POWER =	PLLO#1	[18]
[13] SCANNER A1-2 POWER =	ON	COLD CAL POSITION MSB =	ZERO	[19]
[14] ANTENNA WARM CAL POS =	NO	COLD CAL POSITION LSB =	ZERO	[20]
POWER [4] ON				

[I], [II] and [III] Sync, Unit ID, and Digital "B" data

2. Using Page 1 of the printout, verify that elements 0001 through 0008 are within the required values specified in TDS 27. Record pass or fail.

NOTE

To verify the following steps, the operator may printout the individual parameters by using AE-26157 and attach the data to each TDS.

[IV] Reflector position

3. Using the individual printout, verify that there is no "E" ERROR Flag (for S/N 102 through 104) on the computer printout for steps 4a, 4b, 4c, and 4d. For S/N 105 and up, verify that position values are within ±5 counts from requirement provided in TDS 6, AE-26002/1.

4. To test the cold cal reflector position, perform the following substeps:

   a. Using AE-26157; select reflector position screen, execute PRINT [2] SCREEN ONLY, and attach the data to TDS 28. Verify that there is no "E" ERROR Flag (for S/N 102 through 104) on the computer printout. Record pass or fail on TDS 28. For S/N 105 and up, verify that position values are within ±5 counts from requirement provided in TDS 6, AE-26002/1.

   b. Execute commands [19] COLD CAL POSITION MSB to 0 and [20] COLD CAL POSITION LSB to 1. Repeat substep a. then proceed to substep c.

   c. Execute commands [19] COLD CAL POSITION MSB to 1 and [20] COLD CAL POSITION LSB to 0. Repeat substep a., then proceed to substep d.

   d. Execute commands [19] COLD CAL POSITION MSB to 1 and [20] COLD CAL POSITION LSB to 1. Repeat substep a., then proceed to substep e.

   e. Execute commands [19] COLD CAL POSITION MSB to 0 and [20] COLD CAL POSITION LSB to 0.

[V] Radiometric data

5. Using the individual printout, verify that the data are within the values specified on TDS 29. Record pass or fail.

[VI] Temperature sensors

6. Using the individual printout, verify that elements 1090 through 1180 are within the values specified on TDS 30 (sheets 1 and 2). Record pass or fail.

3.2.4.3.4.4 *Nadir cal mode.* The digital-A data output, in nadir-cal mode, shall be tested as follows:

1. Execute commands as necessary to obtain the following configuration:

COMMANDS				
[9] MODULE POWER =	CONNECT	ANTENNA IN COLD CAL POS =	NO	[15]
[10] SURVIVAL HTR PWR =	OFF	ANTENNA IN NADIR POS=	YES	[16]
[11] MODULE TOTALLY OFF =	ON	ANTENNA FULL SCAN MODE =	NO	[17]
[12] SCANNER A1-1 POWER =	ON	PLL POWER =	PLLO#1	[18]
[13] SCANNER A1-2 POWER =	ON	COLD CAL POSITION MSB =	ZERO	[19]
[14] ANTENNA WARM CAL POS =	NO	COLD CAL POSITION LSB =	ZERO	[20]
POWER [4] ON				

[I], [II] and [III] Sync, Unit ID, and Digital "B" data

2. Using the individual printout, verify that elements 0001 through 0008 are within the required values specified in TDS 31. Record pass or fail.

NOTE

To verify the following steps, the operator may printout the individual parameters by using AE-26157 and attach the data to each TDS.

[IV] Reflector position

3. Using the individual printout, verify that there is no "E" ERROR Flag (for S/N 102 through 104) on the computer printout. Record pass or fail on TDS 24. For S/N 105 and up, verify that position values are within ±5 counts from requirement provided in TDS 6, AE-26002/1

[V] Radiometric data

4. Using the individual printout, verify that the data are within the values specified on TDS 32. Record pass or fail.

[VI] Temperature sensors

5. Using the individual printout, verify that the elements 1090 through 1180 are within the values specified on TDS 33 (sheets 1 and 2). Record pass or fail.

3.2.4.3.5 *Analog telemetry test.* The purpose of this test is to verify that the 26 analog telemetry signals are within requirements. The purpose of the analog telemetry signals is to provide information about the functionality of the subsystems during normal operation of the unit. The analog telemetry signals shall be verified in two ways: (1) by measuring the analog telemetry signals directly at the interfacing connector and (2) by use of the STE.

3.2.4.3.5.1 *Analog TLM signals measurements connector J6.* Measure analog TLM signals at connector J6 as follows:

1. Configure the unit and the STE as indicated in Figure 16. Verify that unit power is off prior to the installation of the breakout boxes. To turn the unit off, select the Commands Menu and execute command [9] MODULE POWER = DISCONNECT and POWER [4] OFF. Manually turn off the STE 28 V power supply located inside the STE console.

2. Turn the unit on as follows:

(a) Turn on the STE 28 V power supply.

(b) On the Commands Menu, execute: POWER [4] ON and [9] MODULE POWER = CONNECT. Verify the display is as follows.

```
                                    COMMANDS
 [9]  MODULE POWER =              CONNECT    ANTENNA IN COLD CAL POS =      NO  [15]
[10]  SURVIVAL HTR PWR =          OFF        ANTENNA IN NADIR POS=          NO  [16]
[11]  MODULE TOTALLY OFF =        ON         ANTENNA FULL SCAN MODE =       YES [17]
[12]  SCANNER A1-1 POWER =        ON         PLL POWER =                    PLLO#1 [18]
[13]  SCANNER A1-2 POWER =        ON         COLD CAL POSITION MSB =        ZERO [19]
[14]  ANTENNA WARM CAL POS =      NO         COLD CAL POSITION LSB =        ZERO [20]
POWER [4] ON
```

3. Using the "28 V Analog Telemetry Bus Return" (J1-10) as a reference ground, measure and record the six temperature sensor voltages in the order specified on TDS 34.

4. Using the "Signal Ground" (J2-03) as a reference ground, measure and record the remaining analog telemetry voltage levels in the order specified on TDS 34.

5. Leave the unit on in preparation for the next test.

3.2.4.3.5.2 ***Analog TLM signal measurements using the STE.*** Analog TLM signal measurements using the STE shall be ken as follows:

1. Using the individual printout, verify that the data matches the values specified on TDS 35. Record pass or fail.

2. Attach computer individual printout to TDS 35.

3.2.4.3.6 ***Test point verification.*** The purpose of this test is to verify the performance of the integrator and its associated clock pulses. Figure 2 shows the integration waveform and the clock signals. Test point verification consists of the following parameters:

a. Integration/Hold and Dump Clock Signals. (3.2.4.3.6.1) (Time and amplitude)

b. Integration Time (Analog Output). (3.2.4.3.6.2) (Time and amplitude for all 13 channels.)

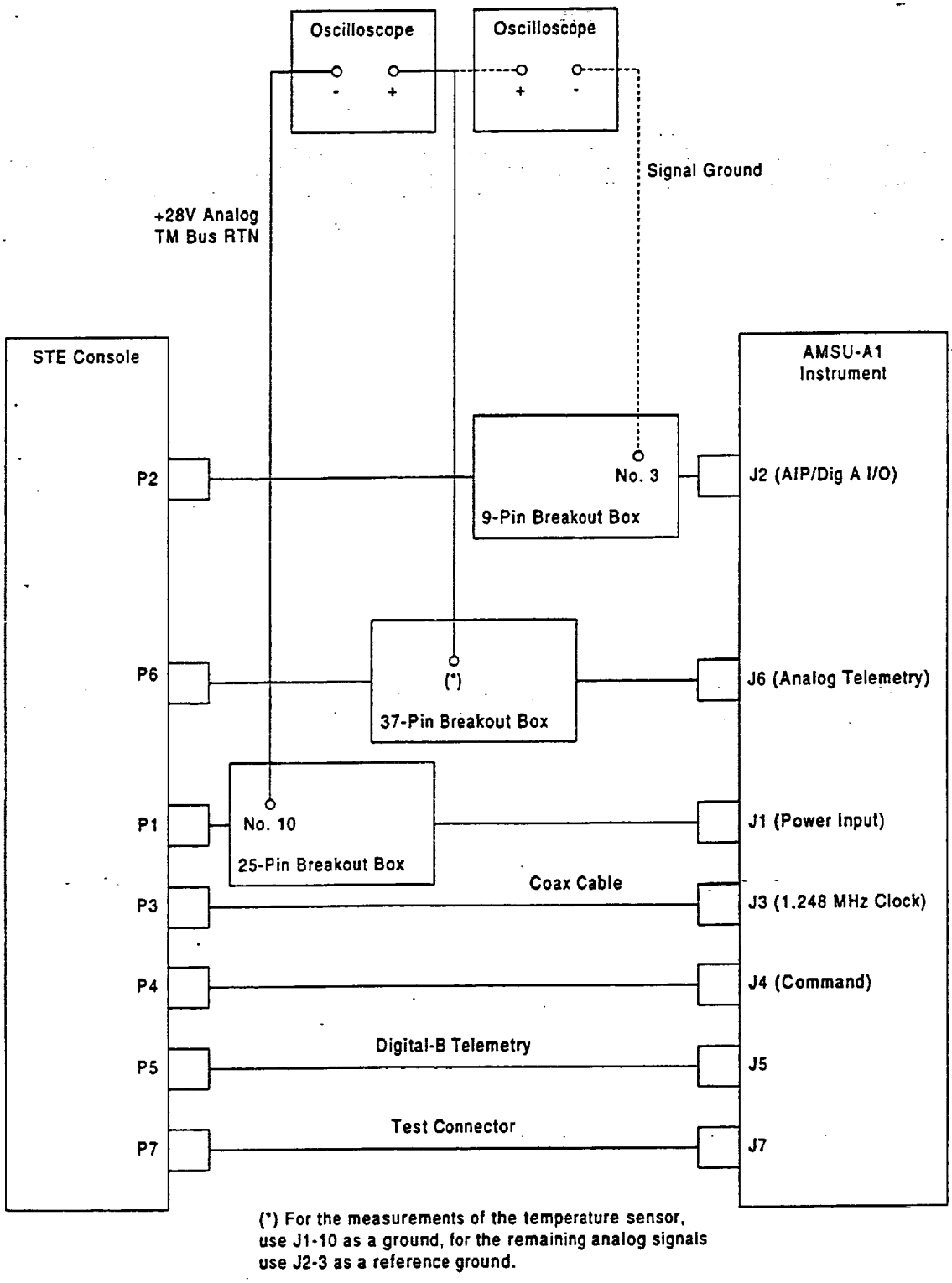


Figure 16. Analog Telemetry Signal Verification Test Setup

3.2.4.3.6.1 *Integration/hold and dump clock signals.* The integration/hold and dump clock signals shall be tested as follows:

1. Referring to Figure 17, configure the oscilloscope as follows:

   (a) Channel-2 to J7-06 integration/hold clock signal.

   (b) Channel-1 to J7-24 dump signal clock.

   (c) Channel-1 (shielded cable) to J7-05 (I/H and Dump RTN).

   (d) Internal trigger mode to channel-1.

   (e) Amplitude and Time optimized for best resolution.

2. Photograph or plot the oscilloscope display and attach the photograph or plot to TDS 36.

3. From the photograph or plot, measure time and amplitude for the integrate/hold and dump clock signals. Verify that the data obtained are within the requirements specified on TDS 36 and Figure 2.

4. Leave the equipment in place and the unit turned on in preparation for the next test.

3.2.4.3.6.2 *Integration time (analog outputs).* The analog outputs integration time shall be tested as follows:

1. Reconfigure the test equipment as indicated in Figure 18.

2. Connect the oscilloscope, channel-2 positive line to J7-XX of the 37-pin breakout box. Where: XX indicates the pinout distribution for all the 13 channels as shown in Table III.

3. Start with the first channel of the above list. Adjust the oscilloscope for best amplitude and time resolution. The displayed signals should look like Figure 2.

4. Photograph or plot the display and attach it to the corresponding TDS (TDSs 37 through 43).

5. From the photograph or plot, measure the integration time and the amplitude. Verify that the data obtained is within the requirements specified in TDSs 37 through 43.

6. Repeat steps 2 through 5 to measure the integration time (analog output) for the remaining channels.

7. Leave the unit turned on and the test equipment in place in preparation for the next test.

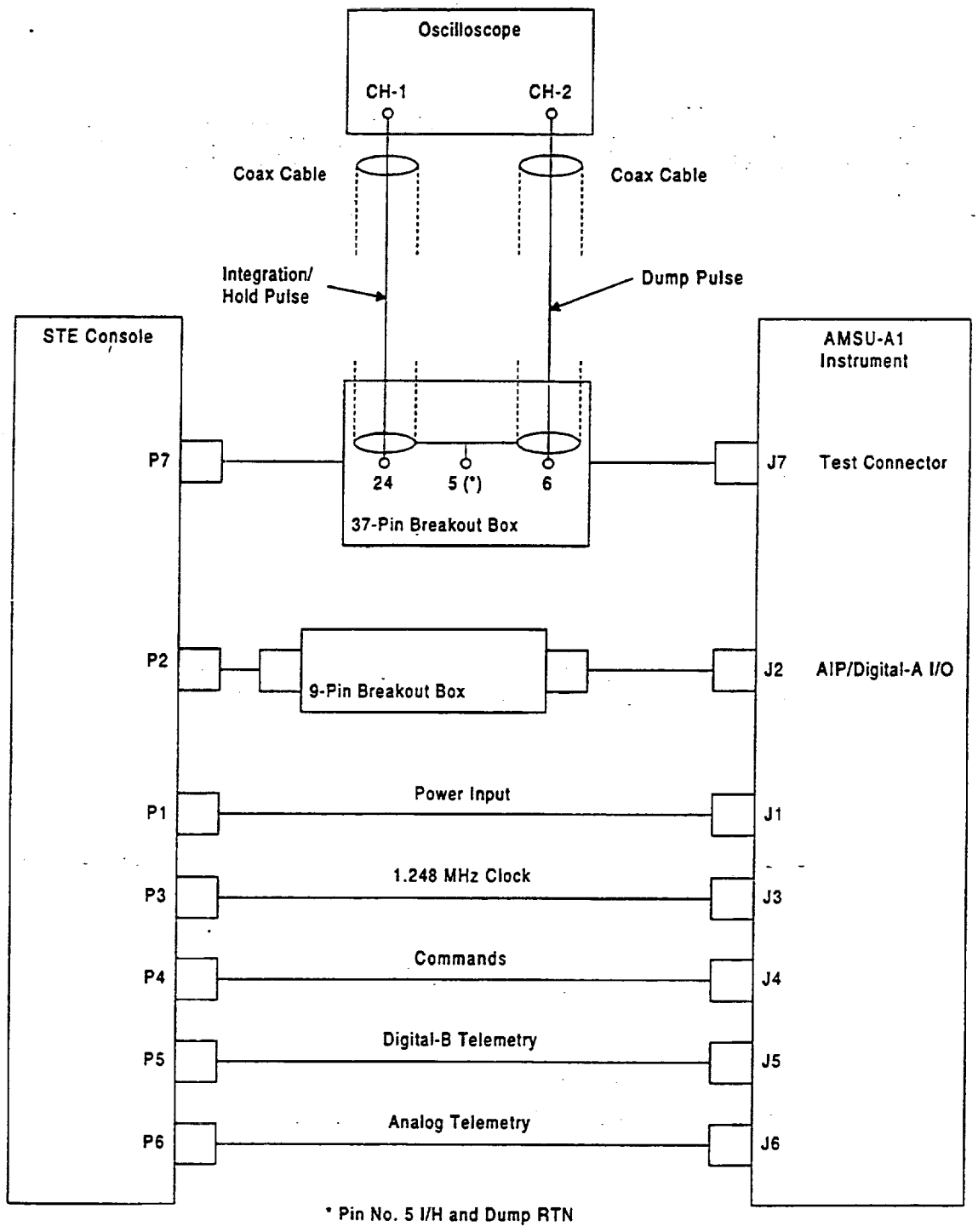


Figure 17. Integration/Hold and Dump Signals Verification Test Setup

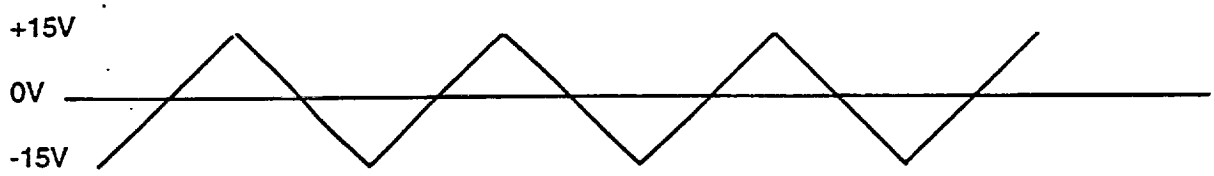
3.2.4.3.6.3 *PLLO No. 1 verification.* The PLLO No. 1 shall be verified as follows:

1. Reconfigure the oscilloscope as indicated in Figure 19. Connect the oscilloscope channel-1 to J7-22 (PLLO No. 1).

2. From the Commands Menu of the STE, verify that the PLLO is selected in PLLO No. 1 as follows:

   PLL POWER = PLLO#1 [18]

3. For S/N 101 - S/N 104, adjust the oscilloscope for best amplitude and time base. If the PLLO is locked properly, the oscilloscope will display a dc-voltage level of -15 to +15 V. Record the voltage level on TDS 44. Record PASS. (Any dc level recorded is considered PASS). If the PLLO is not locked properly, the scope will display a waveform similar to this:



   Record FAIL on TDS 44. Discontinue the test until the deficiency is corrected.

4. For S/N 105 and above, if the PLLO is locked properly, the oscilloscope will display a dc-voltage = 4.0 ±1 V. If the PLLO is not locked, the oscilloscope will display a dc-voltage of +0.61 ±0.30 V. If PLO is OFF, the oscilloscope will display a dc-voltage of 0.0 ±0.2 V. If the PLLO is trying to acquire lock, the oscilloscope will display a various dc level. Record the voltage level on TDS 44.

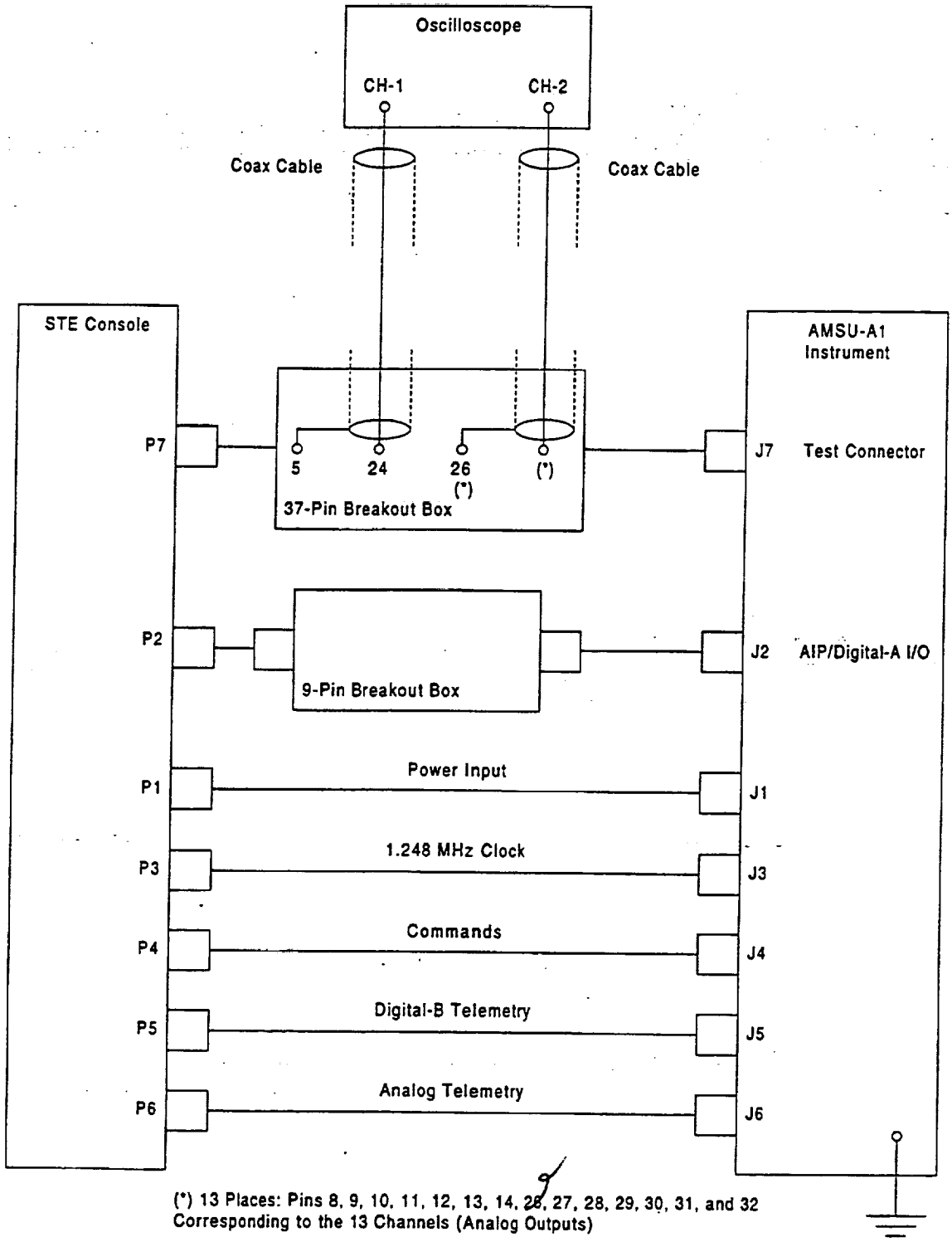


Figure 18. Integration Time (Analog Output) Verification Setup

Table III. Location and Frequency of Channel 3 through 15 Analog Outputs

Breakout Box Pin Location	Channel Distribution	Frequency
J7-08	Channel-03 Analog Output	50.3 GHz
J7-09	Channel-04 Analog Output	52.80 GHz
J7-10	Channel-05 Analog Output	53.596 GHz
J7-11	Channel-06 Analog Output	54.400 GHz
J7-12	Channel-07 Analog Output	54.940 GHz
J7-13	Channel-08 Analog Output	55.500 GHz
J7-14	Channel-09 Analog Output	57.290 GHz PLLO
J7-27	Channel-10 Analog Output	57.290 GHz PLLO
J7-28	Channel-11 Analog Output	57.290 GHz PLLO
J7-29	Channel-12 Analog Output	57.290 GHz PLLO
J7-30	Channel-13 Analog Output	57.290 GHz PLLO
J7-31	Channel-14 Analog Output	57.290 GHz PLLO
J7-32	Channel-15 Analog Output	89.000 GHz

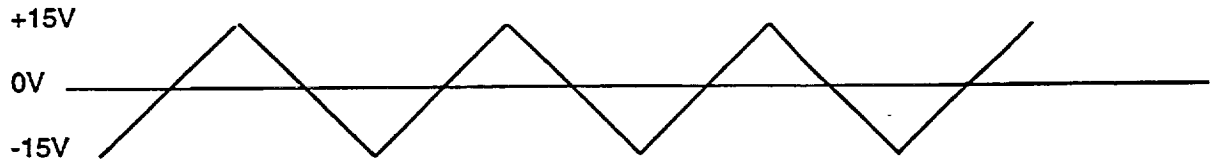
3.2.4.3.6.4 ***PLLO No. 2 verification***. The PLLO No. 2 shall be verified as follows:

1. Reconfigure the oscilloscope as indicated in Figure 19. Connect the oscilloscope channel-1 to J7-03 (PLLO No. 2).

2. Select the PLLO No. 2 unit by executing the following command:

   [18] PLL POWER = PLLO#2

3. For S/N 101 - S/N 104, adjust the oscilloscope for best amplitude and time base. If the PLLO is locked properly, the oscilloscope will display a dc-voltage level of -15 to +15 V. Record the voltage level on TDS 44. Record pass. (Any dc level recorded is considered PASS). If the PLLO is not locked properly, the scope will display a waveform similar to this:



   Record FAIL on TDS 44. Discontinue the test until the deficiency is corrected.

4. For S/N 105 and above, if the PLLO is locked properly, the oscilloscope will display a dc-voltage = 4.0 ±1 V. If the PLLO is not locked, the oscilloscope will display a dc-voltage of +0.61 ±0.30 V. If PLO is OFF, the oscilloscope will display a dc-voltage of 0.0 ±0.2 V. If the PLLO is trying to acquire lock, the oscilloscope will display a various dc level. Record the voltage level on TDS 44.

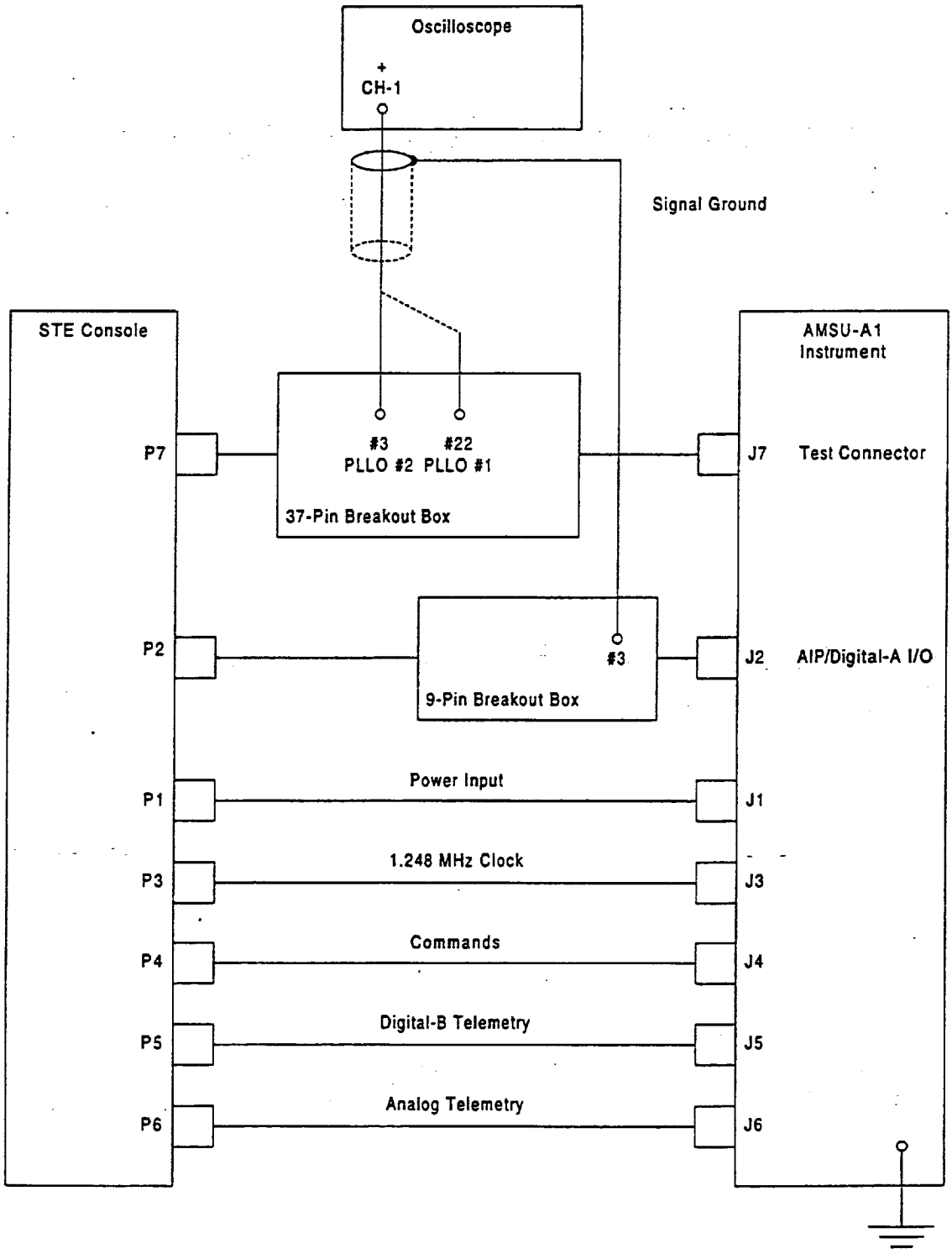


Figure 19. PLLO No. 1/No. 2 Test Setup

5. Return to PLLO No. 1 by executing: PLL POWER = PLLO#1 [18]

6. Leave the unit turned on in preparation for the next test.

3.2.4.3.7 *GSE mode verification*. The purpose of this test is to verify the data obtained from the Ground Support Equipment (GSE), the following modes shall be evaluated. These modes are used for engineering evaluation only.

GSE-1 (Position: 10, 10, 10)

GSE-2 (Position: 1)

GSE-3 (Position: current)

GSE-4 (Position: 30)

GSE-5 (Position: 6)

GSE-7 (Position: required)

For GSE mode-1, the following parameters are subject to pass or fail criterion:

[I] Sync. sequence

[II] Unit ID and serial number

[III] Digital-B serial data verification

[IV] Reflector positions

[V] Radiometric data (Scene data) (Radiometric data will be limited to two channels only, channels 9 and 3. Channel 9 is physically located at the high bay of the sensor (A1-1 location) and channel 3 is located at the lower bay of the sensor (A1-2 location).

[VI] Temperature sensors.

For GSE 2 through 7, only the following parameters are subject to pass or fail criterion:

[IV] Reflector position.

[V] Radiometric data.

NOTE

Verification of GSE modes 2 through 7 are not required for the protoflight and flight instrument sensors since the modes are not used.

3.2.4.3.7.1 ***Equipment preparation and instrument turn-on procedure.*** To place instrument in GSE mode, proceed as follows:

1. Configure the test equipment as indicated in Figure 20.

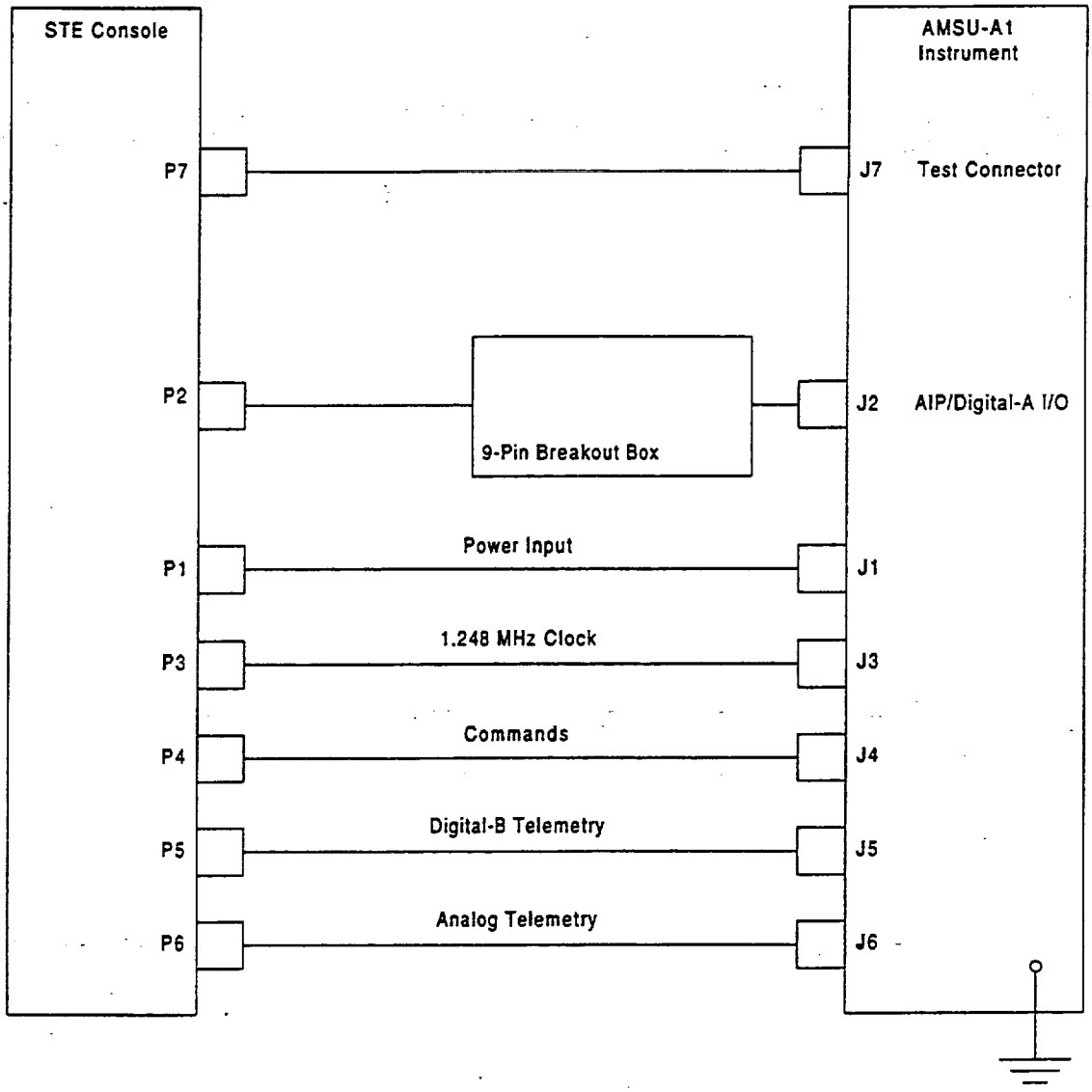


Figure 20. GSE Modes Verification Test

2. Turn the unit on. Execute commands as necessary to obtain the following configuration:

COMMANDS				
[9] MODULE POWER =	CONNECT	ANTENNA IN COLD CAL POS =	NO	[15]
[10] SURVIVAL HTR PWR =	OFF	ANTENNA IN NADIR POS=	NO	[16]
[11] MODULE TOTALLY OFF =	ON	ANTENNA FULL SCAN MODE =	YES ~~NO~~	[17]
[12] SCANNER A1-1 POWER =	ON	PLL POWER =	PLLO#1	[18]
[13] SCANNER A1-2 POWER =	ON	COLD CAL POSITION MSB =	ZERO	[19]
[14] ANTENNA WARM CAL POS =	NO	COLD CAL POSITION LSB =	ZERO	[20]
POWER [4] ON			RETURN	[1]

Wait at least 18 seconds until the sending commands are acknowledged by the STE. At this point, the unit should be in the full scan mode with the STE collecting data.

3. Obtain a printout (9 pages) for all of the parameters ([I] through [VI]) described in 3.2.4.3.7 as follows:

   (a) On Commands Menu, press: RETURN [1].

   (b) On Main Menu, select: [10] SELF TEST.

   (c) On Self Test Menu, select: [7] RUN GSE MODE.
   (The computer will prompt: Enter GSE mode {0 to 15}.)

   (d) Select corresponding GSE mode under test.

   (e) Press PRINT [3] FULL. The computer will start printing all 9 pages.

.2.4.3.7.2 *GSE Mode-1.* The GSE mode-1 shall be tested as follows:

[I], [II], and [III] Sync, Unit ID, and Digital-B

1. Using the printout, verify that elements 1 through 8 are within the values specified on TDS 45. Record pass or fail.

NOTE

To verify the following steps, the operator may printout the individual parameters by using AE-26157 and attach the data to each TDS.

[IV] Reflector Positions

2. Using the individual printout, verify that the reflector positions are within the values specified in AE-26002/1, TDS 5 and 6. Record pass or fail on TDS 46.

[V] Radiometric Data

3. Using the individual printout, verify that the radiometric data are within the values specified on TDS 47.

[VI] Temperature Sensors

4. Using the individual printout, verify that elements 1090 through 1180 are within the values specified on TDS 48 (sheets 1 and 2). Record pass or fail.

3.2.4.3.7.3 *GSE Mode-2.* The GSE Mode-2 shall be tested as follows:

1. Obtain a printout (9 pages) for all of the parameters ([I] through [VI]) described in 3.2.4.3.7 as follows:

   (a) Return to the Main Menu by pressing: RETURN [1].

   (b) On Main Menu, select: [10] SELF TEST.

   (c) On Self Test Menu, select: [7] RUN GSE MODE.
   (The computer will prompt: Enter GSE mode {0 to 15}.)

   (d) Select GSE mode 2 at the prompt.

   (e) Press PRINT [3] FULL. The computer will start printing all 9 pages.

NOTE

To verify the following step, the operator may printout the individual parameters by using AE-26157 and attach the data to each TDS or the 9 full page printout may be used.

[IV] Reflector Positions

2. Using Pages 1 through 6 of the printout, verify that the reflector positions are within the values specified in AE-26002/1, TDS 5 and 6. Record pass or fail on TDS 46.

3.2.4.3.7.4 *GSE Mode-3.* The GSE Mode-3 shall be tested as follows:

1. Obtain a printout (9 pages) for all of the parameters ([I] through [VI]) described in 3.2.4.3.7 as follows:

   (a) Return to the Main Menu by pressing: RETURN [1].

   (b) On Main Menu, select: [10] SELF TEST.

   (c) On Self Test Menu, select: [7] RUN GSE MODE.
   (The computer will prompt: Enter GSE mode {0 to 15}.)

   (d) Select GSE mode 3 at the prompt.

NOTE

To verify the following step, the operator may printout the individual parameters by using AE-26157 and attach the data to each TDS or the 9 full page printout may be used.

[IV] Reflector Positions

2. Verify that both A1-1 and A1-2 reflectors increment one step every eight seconds.

3.2.4.3.7.5 *GSE Mode-4.* The GSE Mode-4 shall be tested as follows:

1. Obtain a printout (9 pages) for all of the parameters ([I] through [VI]) described in 3.2.4.3.7 as follows:

   (a) Return to the Main Menu by pressing: RETURN [1].

(b) On Main Menu, select: [10] SELF TEST.

(c) On Self Test Menu, select: [7] RUN GSE MODE.
(The computer will prompt: Enter GSE mode {0 to 15}.)

(d) Select GSE mode 4 at the prompt.

(e) Press PRINT [3] FULL. The computer will start printing all 9 pages.

NOTE

To verify the following step, the operator may printout the individual parameters by using AE-26157 and attach the data to each TDS or the 9 full page printout may be used.

[IV] Reflector Positions

2. Using pages 1 through 6 of the printout, verify that the reflector positions are within the values specified in AE-26002/1, TDS 5 and 6. Record pass or fail on TDS 46.

3.2.4.3.7.6 *GSE Mode-5.* The GSE Mode-5 shall be tested as follows:

1. Obtain a printout (9 pages) for all of the parameters ([I] through [VI]) described in 3.2.4.3.7 as follows:

(a) Return to the Main Menu by pressing: RETURN [1].

(b) On Main Menu, select: [10] SELF TEST.

(c) On Self Test Menu, select: [7] RUN GSE MODE.
(The computer will prompt: Enter GSE mode {0 to 15}.)

(d) Select GSE mode 5 at the prompt.

(e) Press PRINT [3] FULL. The computer will start printing all 9 pages.

NOTE

To verify the following step, the operator may printout the individual parameters by using AE-26157 and attach the data to each TDS or the 9 full page printout may be used.

[IV] Reflector Positions

2. Using pages 1 through 6 of the printout, verify that the reflector positions are within the values specified in AE-26002/1, TDS 5 and 6. Record pass or fail on TDS 46.

3.2.4.3.7.7 *GSE Mode-7.* The GSE Mode-7 shall be tested as follows:

1. Obtain a printout (9 pages) for all of the parameters ([I] through [VI]) described in 3.2.4.3.7 as follows:

(a) Return to the Main Menu by pressing: RETURN [1].

(b) On Main Menu, select: [10] SELF TEST.

(c) On Self Test Menu, select: [7] RUN GSE MODE.
(The computer will prompt: Enter GSE mode {0 to 15}.)

(d) Select GSE mode 7 at the prompt.

(e) Press PRINT [3] FULL. The computer will start printing all 9 pages.

NOTE

To verify the following steps, the operator may printout the individual parameters by using AE-26157 and attach the data to each TDS or he may use the 9 page full printout.

[IV] Reflector Positions

2. Using pages 1 through 6 of the printout, verify that the reflector positions are within the values specified in AE-26002/1, TDS 5 and 6. Record pass or fail on TDS 46.

3. Set the STE to GSE MODE-0, failure to do so will cause the STE to produce faulty data when in normal mode. To enter GSE-MODE-0 into the computer:

(a) Return to the Main Menu by pressing: RETURN [1].

(b) On Main Menu, select: [10] SELF TEST.

(c) On Self Test Menu, select: [7] RUN GSE MODE.
(The computer will prompt: Enter GSE mode {0 to 15}.)

(d) Select GSE mode 0.

3.2.4.4 ***Radiometer functional test.*** The purpose of the radiometer functional test is to verify the performance of the AMSU-A1 radiometer at the system level. This test shall consist of the following subtests:

a. PLLO frequency measurements 3.2.4.4.1

b. Relative NEΔT measurements 3.2.4.4.2

3.2.4.4.1 ***PLLO frequency measurements.*** Measure the PLLO frequencies as follows:

1. Prepare the unit and the test equipment as indicated in Figure 21. Frequency verification for the receiver shall be performed on the following frequency (see Figure 22 for sample plot):

(A1-1) Ch-9,10,11,12,13 and 14: 57.290344 GHz (PLLO No. 1 and PLLO No. 2)

2. Turn on the unit by using the procedure stated in 3.2.3.5. Allow not less than one hour for the equipment to warm-up and for the unit to stabilize.

On the Commands Menu, execute the following commands:

(a) [14] ANTENNA WARM CAL POS = NO

(b) [15] ANTENNA COLD CAL POS = NO

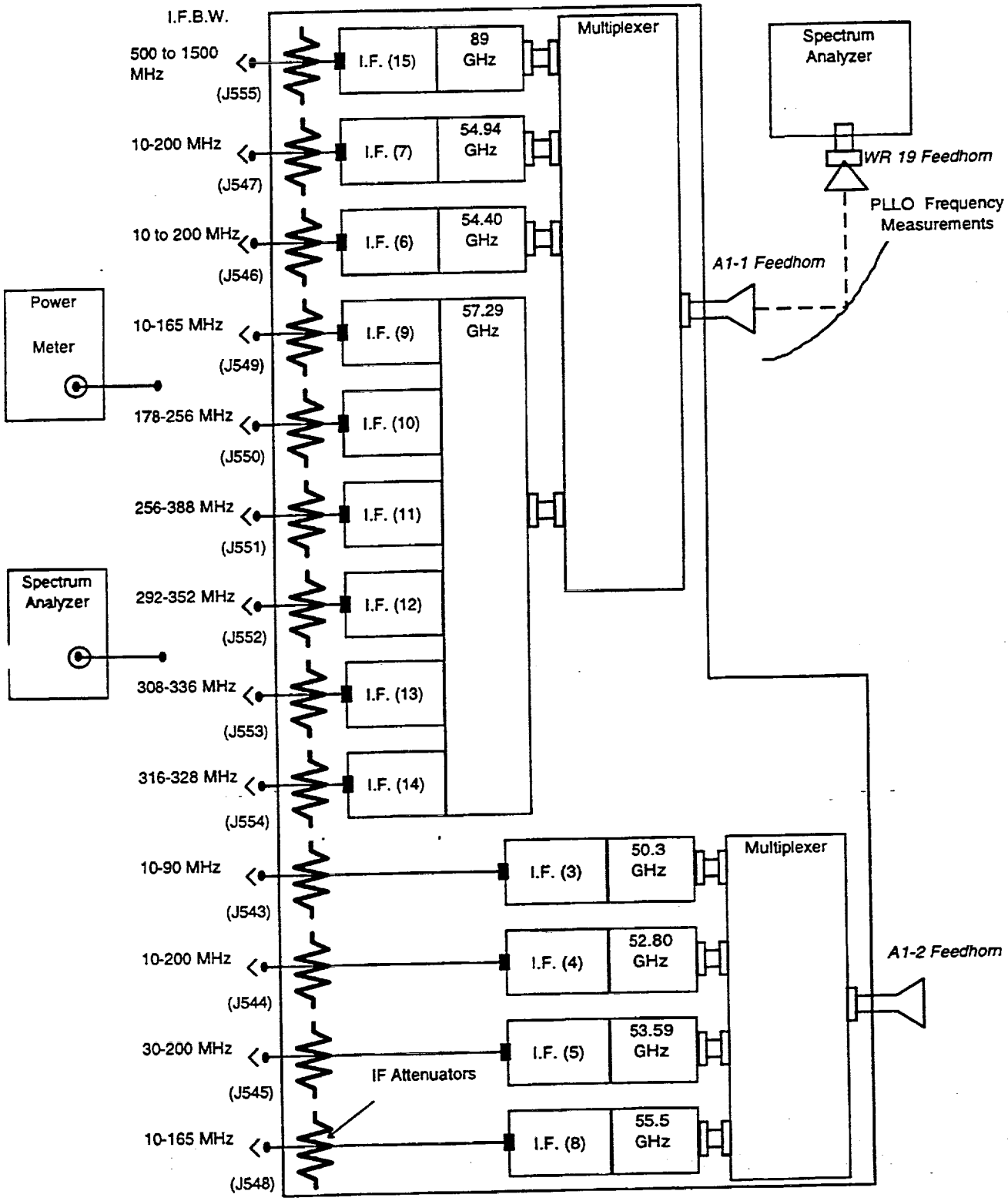


Figure 21. Configuration for RF Measurements

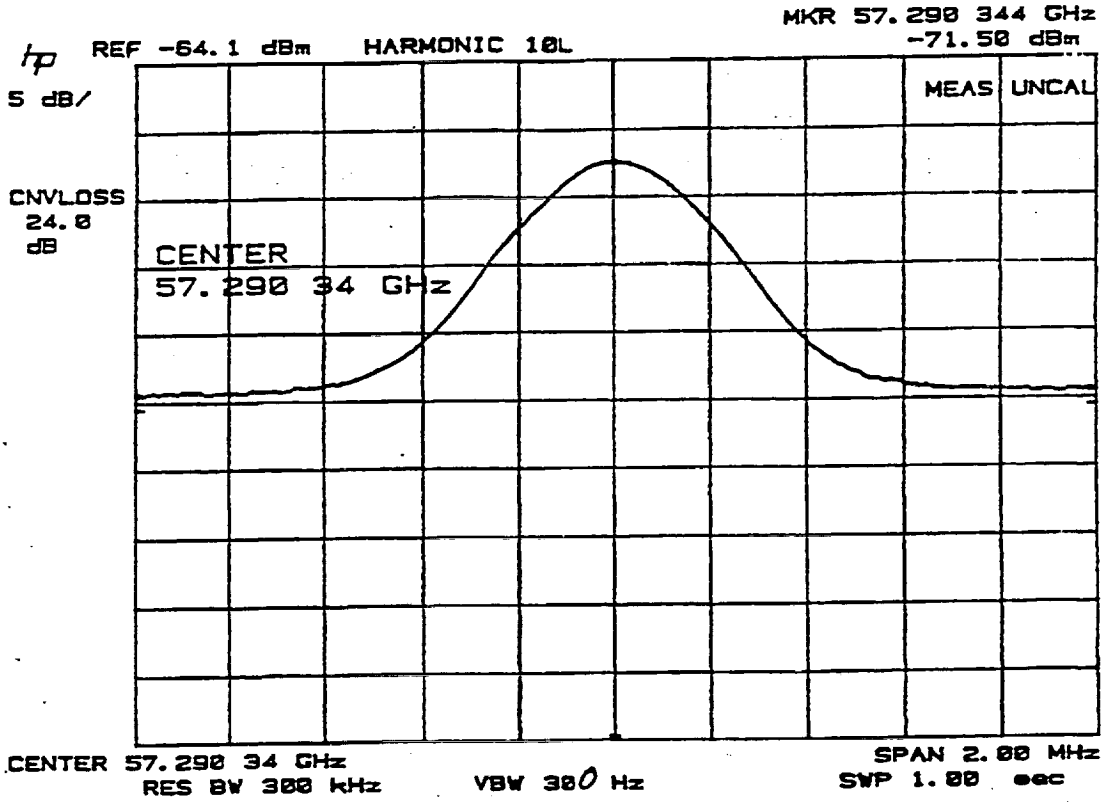


Figure 22. Sample Plot

(c) [16] ANTENNA NADIR POS = YES

(d) [17] ANTENNA FULL SCAN MODE = NO

3. Record the measured frequencies on TDS 49, and plotter data. Repeat step 2 for PLLO No. 2.

4. Remove the test equipment but leave the unit on in preparation for the next test.

3.2.4.4.2 *Relative radiometer NEΔT measurements*. The purpose of this test is to perform a preliminary evaluation of the radiometer NEΔT at a system level. Since the STE is not in the thermal-vacuum configuration, no temperature readings from the cold load are available. To compute the NEΔT for this test, the temperature used for the cold load shall be LN_2 temperature.

The data obtained from this test are considered as relative NEΔT and are to be used as a diagnostic tool to verify proper operation of the A/D converters and the spacecraft interface.

The equation to determine relative NEΔT is as follows:

$$NE\Delta T = \frac{[SD \times (Th - Tc)]}{M - N}$$

where: SD = Standard deviation of 120 samples at hot temperature (warm load)
Th = Standard room temperature = 300. K

Tc = Standard LN_2 temperature = 80 K
M = Average of hot counts (120 samples)
N = Average of cold counts (30 samples)

The sequence of testing shall be as follow:

a. Equipment preparation and setup configuration

b. Warm load radiometric data

c. Cold load radiometric data

d. Relative NEΔT data collection

3.2.4.4.2.1 ***Equipment preparation and setup configuration.*** The equipment shall be setup as follows:

WARNING

The use of liquid nitrogen in a confined poorly ventilated area can cause asphyxiation and death due to a lack of oxygen (oxygen concentration below 20 percent). Accidental contact with liquid nitrogen will cause severe frostbite to the eyes or skin. When handling liquid nitrogen, personnel shall observe the following safety precautions:

a. Ensure that the work area is well ventilated to prevent excessive gas buildup.

b. To protect your eyes always wear a face shield or safety goggles (safety glasses without side shields do not provide adequate protection).

c. To protect exposed skin, always wear an apron when pouring LN2 and whenever exposed to LN2, always wear a lab coat, gloves made for cryogenic work, cuffless trousers (worn outside the boots or shoes), and safety shoes.

d. Do not fill target fuller than 1.0 inch from the top. Fill target at the floor level, away from unit.

e. Do not move filled target without cover in place.

1. Configure the test equipment and the unit as indicated in Figure 23, except for the cold loads.

2. Execute commands as necessary to obtain the following configuration:

COMMANDS				
[9] MODULE POWER =	CONNECT	ANTENNA IN COLD CAL POS =	NO	[15]
[10] SURVIVAL HTR PWR =	OFF	ANTENNA IN NADIR POS=	NO	[16]
[11] MODULE TOTALLY OFF =	ON	ANTENNA FULL SCAN MODE =	NO	[17]
[12] SCANNER A1-1 POWER =	ON	PLL POWER =	PLLO#1	[18]
[13] SCANNER A1-2 POWER =	ON	COLD CAL POSITION MSB =	ZERO	[19]
.14] ANTENNA WARM CAL POS =	YES	COLD CAL POSITION LSB =	ZERO	[20]
POWER [4] ON				

3. Allow 30 minutes for the unit to stabilize.

3.2.4.4.2.2 *Relative NEΔT data collection*

1. Return to the Main Menu by pressing [1] RETURN.

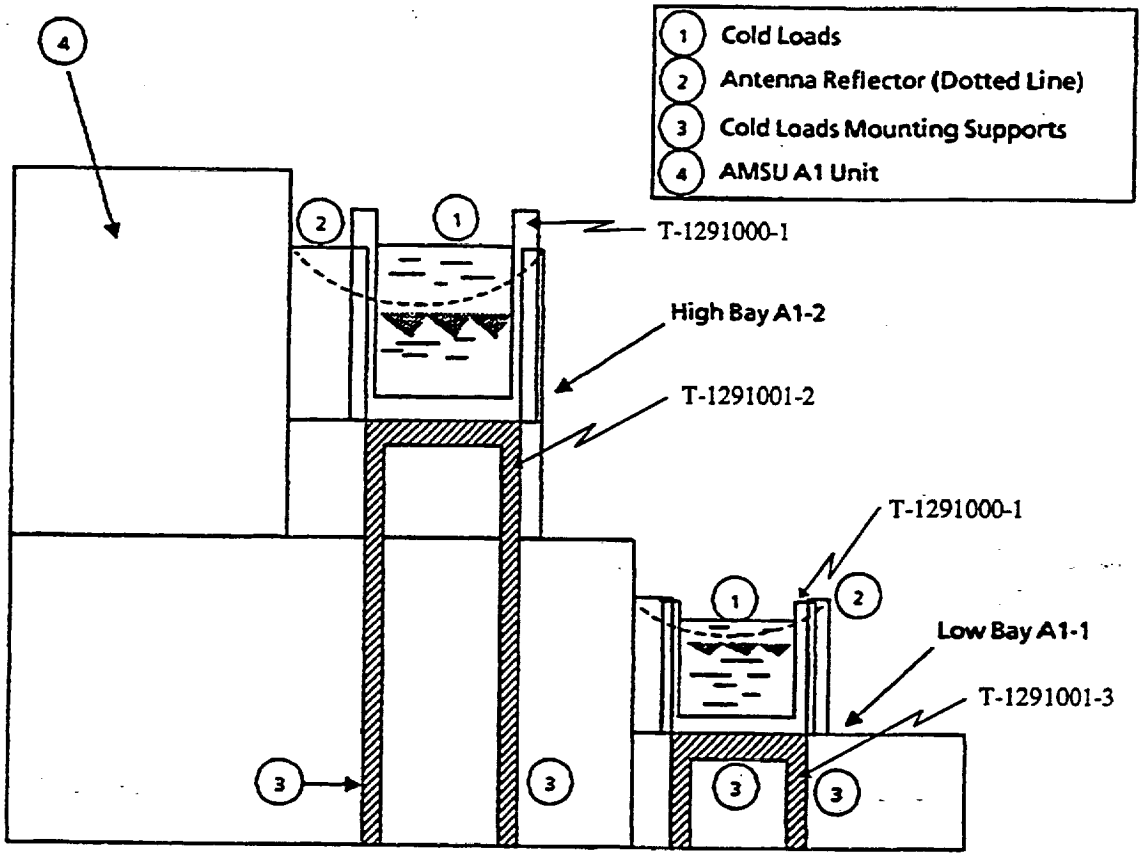


Figure 23. NEΔT Setup Configuration

2. On the Main Menu, select [13] FUNCTIONAL TEST. (The STE will automatically command the unit to position the antenna reflector to the warm and cold loads as it is taking data.)

3. Wait approximately one minute to verify that the NEΔT results are displayed on the screen. Obtain a printout. Repeat step 2 four times and obtain four additional printouts. Average NEΔT from these five data points. Enter the values on TDS 50. Attach the printout to the data sheet.

4. Repeat steps 1, 2, and 3 for the PLLO No. 2. Allow 30 minutes for the unit to stabilize after switching to PLLO No. 2.

5. Remove the cold loads and associated hardware.

3.2.4.5 *Transient susceptibility and power quality tests*

3.2.4.5.1 *Source voltage transient tests.* The tests that follow will be performed on the power lines listed in Table IV. The tests will demonstrate that the AMSU-A1 or A2 instrument can operate within the specified parameters when the transients

described in these tests appear on the power lines.

Table IV. Power Line Source Voltage Transient Test Summary Induced Transient

Power Line	Connector Pin	Low Frequency	High Frequency
+28 Volt Main Bus	AMSU A1 J1-1 AMSU A2 J1-1	X X	X X
+28 Volt Pulse Load Bus	AMSU A1 J1-5 AMSU A2 J1-5	X X	X X
+28 Volt Analog Telemetry Bus	AMSU A1 J1-9 AMSU A2 J1-9	X X	X X

3.2.4.5.1.1 ***Mode of operation.*** Source voltage transient tests will be performed while the instrument is in the In Orbit Scenario mode.

3.2.4.5.1.2 ***Test equipment.*** See Table I for a list of equipment required to conduct this test.

3.2.4.5.2 ***Test limits***

3.2.4.5.2.1 ***+28 volt main bus***

3.2.4.5.2.1.1 ***Low frequency load induced turn-on transient.*** The AMSU instrument shall be capable of normal operation during and after positive and negative transients are injected into the power line at the amplitude and duration specified in Figure 24.

.4.5.2.1.2 ***High frequency load induced transient.*** The AMSU instrument shall be capable of normal operation during and after positive and negative transients are injected into the power line at the amplitude and duration specified in Table V.

Table V. Maximum High Frequency Transient Amplitude and Duration

Peak Transient Amplitude (volts)	Transient Pulse Duration (milliseconds)
0.1	200-500
0.5	150-200
0.75	0-150

3.2.4.5.2.2 ***+28 volt pulse load bus.*** The test limits for the +28 volt pulse bus are specified in the following paragraphs.

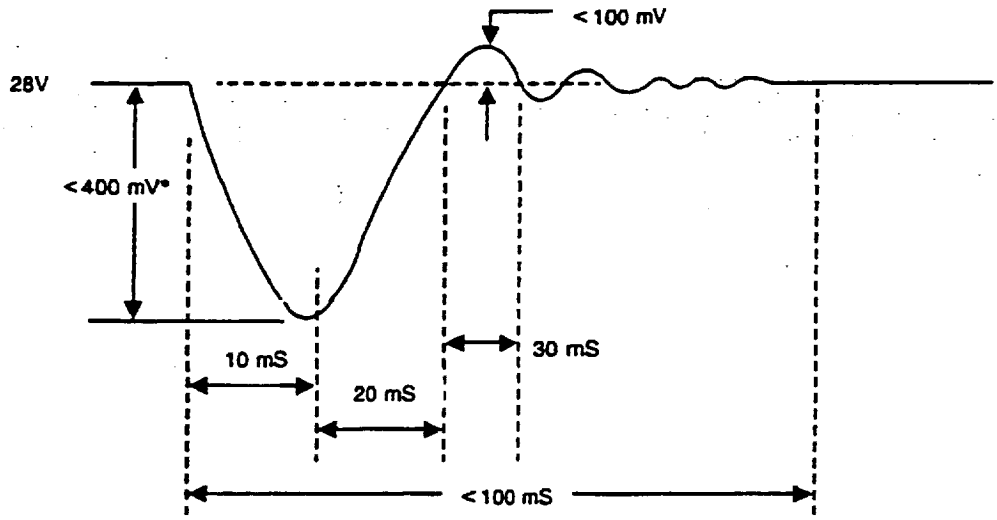
3.2.4.5.2.2.1 ***Low frequency load induced transient.*** The AMSU instrument shall be capable of operation during and after positive and negative transients are injected into the power line at the amplitude and duration specified in Figure 25.

3.2.4.5.2.2.2 ***High frequency load induced transient.*** The high frequency load induced transient present on the power lines shall conform to the amplitude and duration specified in Table V.

3.2.4.5.2.3 ***+28 volt analog telemetry bus***

3.2.4.5.2.3.1 ***Low frequency load induced turn-on transient.*** The low frequency induced turn-on transient injected in the Analog Telemetry Bus shall conform with the requirements stated in 3.2.4.5.2.1.1.

...4.5.2.3.2 ***High frequency load induced transient.*** The high frequency load induced transient shall conform with the requirements in 3.2.4.5.2.1.2 and Table V.



* Typical transients occurring a number of times per orbit are on the order of 200 mV zero-to-peak for a 1.5A load change.

Figure 24. Load Induced Transient

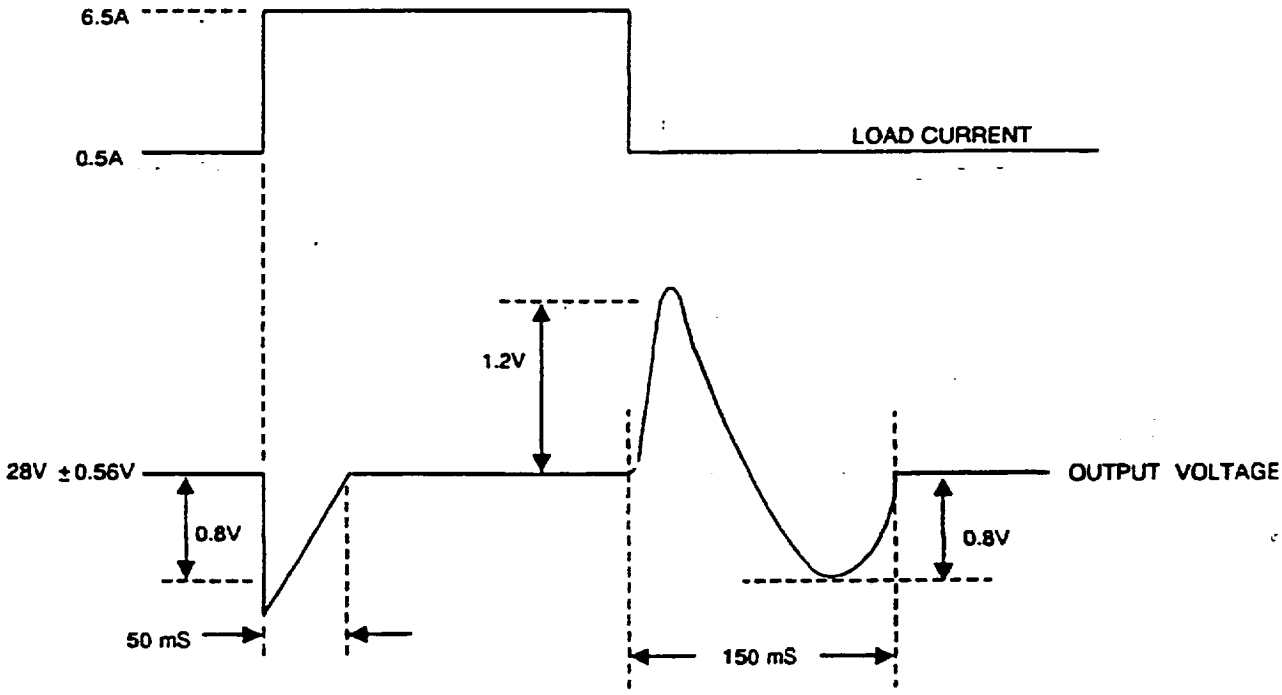


Figure 25. Load Induced Transient (Pulse Load)

3.2.4.5.3 *Test procedure.* The test procedure for the transient susceptibility and power quality tests are specified in the following paragraphs.

3.2.4.5.3.1 *Preparation.* Perform the following procedures.

1. Connect the instrument under test for operation with the STE as shown in Figure 26. Group the power lines and connect the power supply as shown in Figure 26.
2. With the test sample in the off condition, adjust the test equipment to provide a transient pulse as shown in Figures 24, 25 and Table V.
3. Note the adjustments needed to produce the transient pulse.
4. Turn off all the test equipment.
5. Connect the AMSU support equipment.
6. When the unit is stabilized, perform the tests indicated in the subsequent paragraphs.

3.2.4.5.3.2 *+28 volt main and analog telemetry bus source voltage transients tests*

3.2.4.5.3.2.1 *Low frequency load induced turn-on transient test*

1. Turn test equipment on.
2. Record and print one minor frame of all data (digital-A, digital-B, and telemetry) in accordance with 3.2.4.3.4.1.
3. Monitor transient pulse on the Main Bus and ensure that it is in accordance with the requirements of Figure 24. (Make adjustments, if necessary and repeat step 2.)
4. Record and print one minor frame of all data (digital-A, digital-B, and telemetry) in accordance with 3.2.4.3.4.
5. Compare data from step 2 and step 4. Record any deviations in the functional performance of the AMSU instrument on TDS 51.

3.2.4.5.3.2.2 *High frequency load induced transient test*

1. Connect the test equipment necessary to produce the three transient pulses specified in Table V.
2. Record and print one minor frame of all data (digital-A, digital-B, and telemetry) in accordance with 3.2.4.3.4.1.
3. Turn on test equipment and adjust the levels to those recorded in step 3 of 3.2.4.5.3.1.
4. Record and print one minor frame of all data (digital-A, digital-B, and telemetry) in accordance with 3.2.4.3.4.
5. Compare data from step 2 and step 4. Record any deviations in the functional performance of the AMSU instrument on TDS 51.

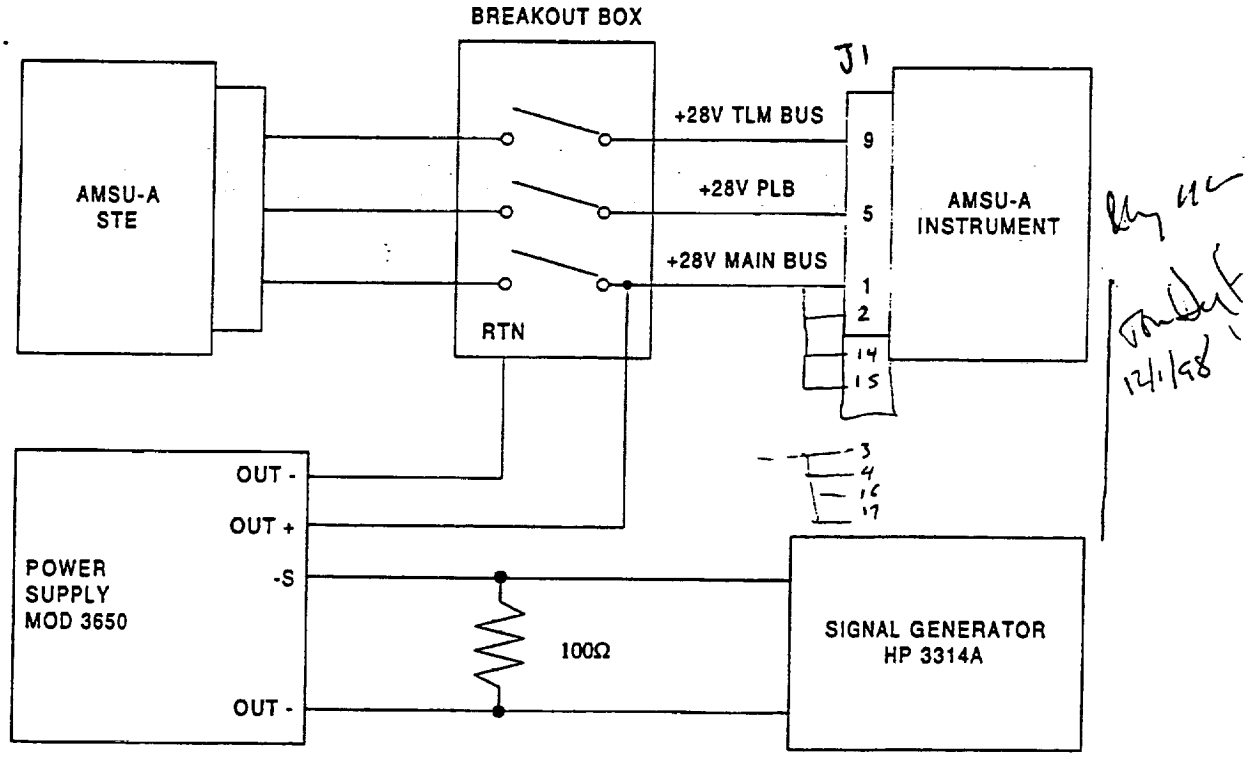


Figure 26. Test Setup for Load Induced Transient (Low or High Frequency)

3.2.4.5.3.3 *+28 volt pulse load source voltage transients tests*

3.2.4.5.3.3.1 *Low frequency load induced transient test*

1. Set up the equipment as shown in Figure 26.
2. Record and print one minor frame of all data (digital-A, digital-B, and telemetry) in accordance with 3.2.4.3.4.1.
3. Turn on test equipment and adjust to the levels recorded in 3.2.4.5.3.1 to produce a transient as shown in Figure 25.
4. Record and print one minor frame of all data (digital-A, digital-B, and telemetry) in accordance with 3.2.4.3.4.
5. Compare data from step 2 and step 4. Record any deviations in the functional performance of the AMSU instrument on TDS 51.

3.2.4.5.3.3.2 ***High frequency load induced transient test.*** Repeat steps 1 through 4 of 3.2.4.5.3.2.2 on the +28 volt pulse load power lines.

3.2.4.5.3.4 *+28 volt analog telemetry source voltage transient tests*

3.2.4.5.3.4.1 ***Low frequency load induced turn-on transient test.*** Repeat steps 1 through 4 of 3.2.4.5.3.2.1 on the +28 volt analog telemetry power lines.

3.2.4.5.3.4.2 ***High frequency load induced transient test.*** Repeat steps 1 through 4 of 3.2.4.5.3.2.2 on the +28 volt analog

telemetry power lines.

3.2.4.6 *Instrument feedback tests*

3.2.4.6.1 *Test equipment.* The following equipment is required for the conduct of this test.

a. Signal Analyzer HP 3562

b. Current Probe, Tektronix A6303 and/or A6302

c. Current Probe Amplifier, Tektronix P6302/AM503

3.2.4.6.2 *Test limits*

3.2.4.6.2.1 *+28 volt main bus*

3.2.4.6.2.1.1 *Load current ripple.* The peak-to-peak measured ripple current drawn by the AMSU-A1 unit shall not exceed 150 mA peak-to-peak. In addition, the frequency of the ripple current shall not exceed 100 kHz and/or be a sub-multiple of the frequency band 121.5 MHz ±15 kHz, instrument in Full Scan Mode.

3.2.4.6.2.2 *+28 volt pulse load bus*

3.2.4.6.2.2.1 *Load current ripple.* The peak-to-peak amplitude of the load current ripple shall not exceed 43 mA peak-to-peak, instrument in warm cal mode, for A1. This ripple current is exclusive of repetitive pulses created by the motor, heaters, etc.

3.2.4.6.2.3 *+28 volt analog telemetry bus*

3.2.4.6.2.3.1 *Load current ripple.* The load current ripple peak-to-peak amplitude shall not exceed 0.29 mA for A1, instrument in Full Scan Mode.

3.2.4.6.2.4 *+10 volts interface power bus*

3.2.4.6.2.4.1 *Load current ripple.* The peak-to-peak measured ripple current generated by the instrument shall not exceed 1 mA peak-to-peak, instrument in Full Scan Mode. In addition, the frequency of the ripple current shall not exceed 2.5 MHz.

3.2.4.6.3 *Test procedure*

3.2.4.6.3.1 *Preparation*

1. Connect the instrument under test as shown in Figure 27.

2. Connect the AMSU and support equipment for a functional check.

3. Perform a functional check (Para. 3.2.4.3.4.1).

4. When the instrument is stabilized perform a peak-to-peak current measurement of the average steady-state operating current. (A steady-state current is any current level which exists for more than 50 milliseconds and is not repetitive in nature.)

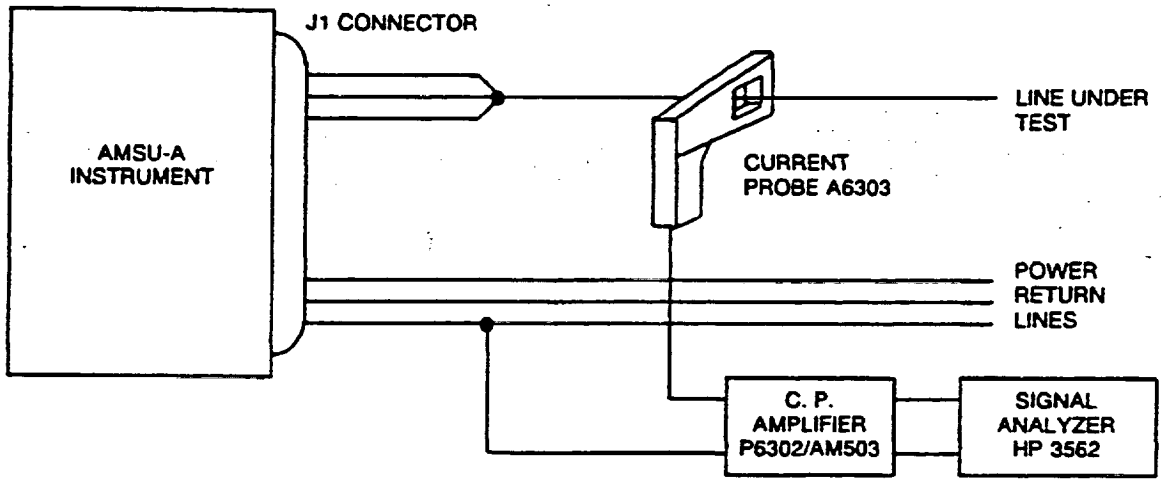


Figure 27. Test Setup for Instrument Feedback Tests

3.2.4.6.3.2 *+28 volt main bus instrument feedback tests*

3.2.4.6.3.2.1 *Load current ripple test*

1. Clamp the current probe around the power lines of the +28 volt main bus.
2. Measure the peak-to-peak amplitude of the load current ripple present on the power lines and record the value in the appropriate location on TDS 52.
3. Verify that the ripple complies with the requirement of 3.2.4.6.2.1.1.

3.2.4.6.3.3 *+28 volt pulse load bus instrument feedback tests*

3.2.4.6.3.3.1 *Load current ripple test*

1. Clamp the current probe around the power lines of the +28 volt pulse load bus.
2. Measure the peak-to-peak amplitude of the load current ripple present on the power lines and record the value on TDS 52.
3. Verify that the ripple complies with the requirement of 3.2.4.6.2.2.1.

3.2.4.6.3.4 *+28 V analog telemetry bus instrument feedback tests*

3.2.4.6.3.4.1 *Load current ripple*

1. Clamp the current probe around the power lines of the +28 V analog telemetry bus.
2. Measure the peak-to-peak amplitude of the load current ripple present on the power lines and record the value on TDS 52.
3. Verify that the ripple complies with the requirement of 3.2.4.6.2.3.1.

3.2.4.6.3.5 *+10 V interface power bus instrument feedback tests*

3.2.4.6.3.5.1 *Load current ripple test*

1. Clamp the current probe around the power lines of the +10 volt interface power bus.

2. Measure the peak-to-peak amplitude of the load current ripple present on the power lines and record the value on TDS 52.

3. Verify that the ripple complies with the requirement of 3.2.4.6.2.4.1.

3.2.4.7 *Channel identification test* The purpose of the channel identification test is to verify the proper final configuration /assembly of each radiometer channel from antenna input to the spacecraft interface.

1. Configure the unit and test equipment as shown in Figures 20 and 30.

2. Connect the STE to instrument using the following STE interface cables.
   a. STE interface cable J1 (1356648-1)
   b. STE interface cable J2 (1356648-2)
   c. STE interface cable J3 (1356648-3)
   d. STE interface cable J4 (1356648-4)

3. Follow the turn-on procedure per para. 3.2.3.5.

4. Enter the STE command "SCANNER A1-1 POWER." Wait 18 seconds before issuing the next command.

5. Enter the STE command "SCANNER A1-2 POWER." Wait 18 seconds before issuing the next command.

6. Enter the STE command "ANTENNA COLD CAL." Wait 18 seconds before issuing the next command. Both reflectors should scan to the cold calibration beam position.

7. Enter the STE command "[1] RETURN" to return to the monitor only screen.

8. Enter the STE command "[10] DIGITAL-A." The STE should now display the digital-A data screen shown in Figure 28. From this screen enter the STE command "[9] BEAM POSITION NN-ALL CHANNELS."

9. The STE then asks "ENTER BEAM POSITION NO (1 TO 30)." Enter "30" to show the radiometric counts data for channels 3-15. The STE should now display the radiometric data screen shown in Figure 29, except with a different set of count data.

10. Allow the instrument to stabilize for approximately 20 minutes. Enter the STE command "[2]" to obtain a screen only printout.

11. Configure the unit and test equipment as shown in Figure 30. Turn ON the sweeper and allow to warm up approximately 10 minutes. Make sure that the RF power is OFF during sweeper warm up.

CAUTION

Extreme care must be used when turning on RF power. When RF power is first applied the multiplier/gain horn should be approximately three to four feet from the unit. The RF power setting should be no greater than -20 dBm.

12. Set the sweeper frequency to 50.35 ±0.01 GHz and set the RF power level to -20 dBm. Position the multiplier/gain horn three to four feet from the instrument so that the A1-2 antenna and gain horn are approximately aligned (see Figure 30). Rotate the gain horn, if needed, to the vertical polarization position.

13. Turn ON the RF power making sure the power level is set to -20 dBm. Allow the multiplier to warm up approximately five minutes.

14. At the STE screen compare the radiometric data counts of channel 3 to the counts printed out at step 10. Enter the STE command "[2]" to obtain a screen only printout.

15. From the printouts obtained in steps 10 and 14, verify that the radiometric data counts for channel 3 have increased significantly, approximately 1000 or more, and that the other channels' data counts have remained relatively unchanged, less than 300 counts.

16. Record the counts difference on TDS 21 of channel 3 from the printouts obtained in steps 10 and 14 and attach printouts to TDS 21.

17. Repeat steps 12 through 16 for the frequencies and polarizations listed on TDS 21.

18. After all A1 channels have been identified, turn OFF the RF power. Return the reflectors to the warm cal position.

19. Turn the STE Q/Main and N/Pulse switches to OFF.

20. Turn the STE power supply panel main power switch OFF.

```
EOS    A1-03 E1.EXE;31  COLD CAL MODE                P15-JUN-98    09:36:59 SCAN NUMBER  34
[ 5 ]  SCIENCE DATA          ELEMENT   0000
[ 6 ]  CONTROL/STATUS        ELEMENT   00
[ 7 ]  ENGINEERING           ELEMENT   00
[ 8 ]  DATA STREAM (64 VALUES)
[ 9 ]  BEAM POSITION NN-ALL CHANNELS
[ 10 ] CHANNEL NN -ALL BEAM POSITIONS
[ 11 ] WARM CALIBRATE
[ 12 ] COLD CALILBRATE
[ 13 ] REFLECTOR POSITIONS
[ 14 ] TEMPERATURE DATA (16 VALUES)
ENGR OK        POWER        ON        CHECKSUM IN 15A1 SA28        34SA29        47
                            SCREEN ONLY [ 2 ]        PRINT [ 3 ]   FULL   [ 1 ] RETURN
SELECT BUTTON 2
```

Figure 28. Digital-A Data Screen

EOS A1-03 E1.EXE;31 COLD CAL MODE P15-JUN-98 09:49:07 SCAN NUMBER 11

[5] SCIENCE DATA ELEMENT 0000

[6] CONTROL/STATUS ELEMENT 00

[7] ENGINEERING ELEMENT 00

RADIOMETRIC DATA

BEAM POSITION

CH	DATA	CH	DATA	CH	DATA
3	15798	8	15414	13	15811
4	16252	9	16176	14	16029
5	15661	10	16010	15	15102
6	16413	11	15639		
7	18044	12	15817		

[21] UP [22] DOWN

ENGR OK POWER ON CHECKSUM IN DF5D CALC DFSD SA28 11 SA29 14

SELECT BUTTON 2

Figure 29. Radiometric Data Screen

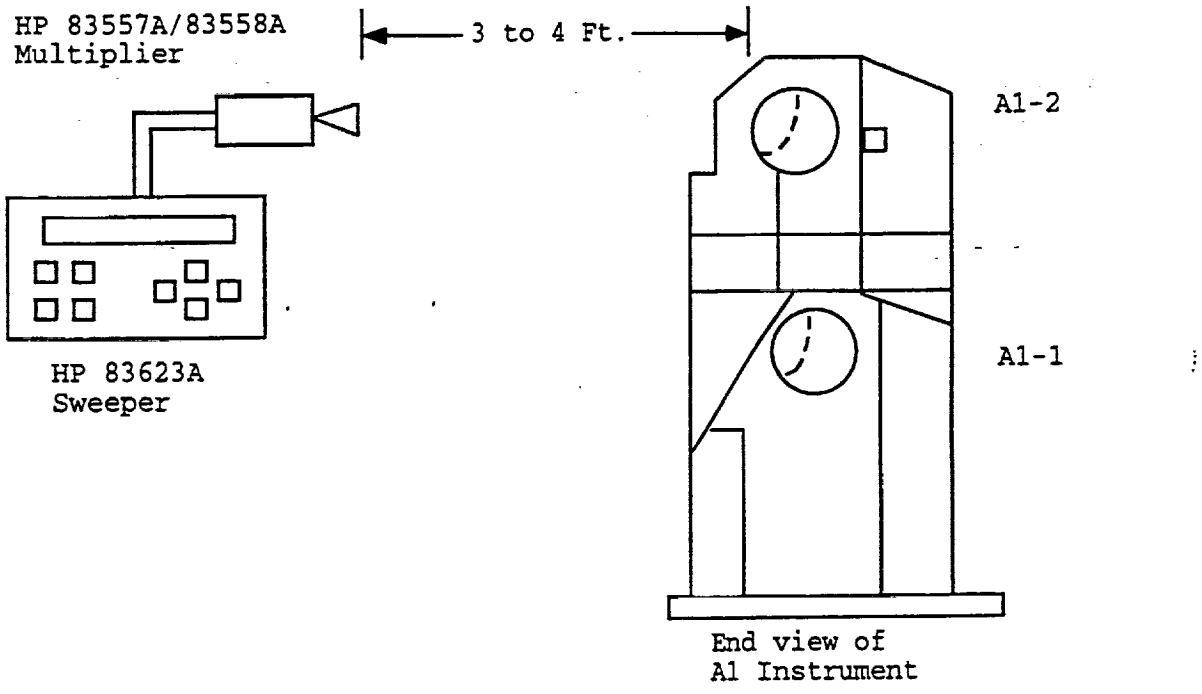


Figure 30. Channel Identification Set Up

4. QUALITY ASSURANCE PROVISIONS

4.1 ***Responsibility for inspection.*** Aerojet Quality Assurance shall inspect in accordance with the requirements of this test procedure and S-480-79 and S-480-80. Quality Control shall verify all test set-ups prior to start of test. Bonded software shall be used for all tests and shall be obtained from Quality Control. Quality Control shall review all test data for conformance to success criteria. The test data shall include test limits. For tests that satisfy requirements from S-480-80 on protoflight and flight units, customer representatives shall be invited to monitor tests and shall be invited to review the data and show approval on the test data sheets.

4.1.1 ***Test facilities.*** Unless otherwise specified, the examinations and tests described herein shall be conducted at GenCorp Aerojet, Azusa Operations, Azusa, CA.

4.1.2 ***Electrostatic Device (ESD) handling.*** All electronic hardware shall be handled in accordance with Aerojet Standard STD-2454.

4.2 ***Monitoring procedures.*** All tests in this procedure shall be monitored by quality control.

4.2.1 ***Test equipment.*** Test equipment calibration procedures shall comply with the requirements of MIL-STD-45662.

4.2.2 ***Software.*** Bonded software shall be used at all times.

4.3 ***Monitoring procedures for materials.*** Not applicable.

4.4 ***Certification.*** Certification for handling ESD-sensitive equipment is required for all personnel working on the assembly and test of the AMSU-A instrument, per STD-2454.

4.5 ***Test methods***

4.5.1 ***Accept-reject criteria.*** The accept-reject criteria for each examination or test shall be as specified in the data sheets included in each phase of the applicable test procedure. The test results shall be recorded on the data sheets to demonstrate compliance with the applicable specification requirements. Methods of analysis shall be appropriate for the parameters being inspected. It shall be the responsibility of Aerojet to review the test data and determine conformance of the unit under test to the performance requirements contained in S-480-80 and this specification.

In the event of a failure during any phase of this test procedure, the test activity shall record the required information on the Test Anomaly Record (TAR) and alert the design assurance and quality engineers. Except for failures which only represent a limited out-of-tolerance condition for a particular parameter and are not expected to interfere with the balance of the testing and which are non-destructive, the testing must be stopped until a complete description of the observed anomaly failure is documented and a Failure Analysis Strategy (FAS) is formulated, documented, and implemented to preclude loss of information or evidence that may facilitate determining the failure cause. The full set of data from the referenced tests is required in order to formulate a plan of action. The cognizant reliability engineer, quality assurance engineer, and the system or responsible test engineer shall jointly develop the FAS which must be approved by Design Assurance and Quality Assurance. Analysis and reporting shall be performed per Aerojet procedures.

4.5.2 ***General.*** All data sheets associated with the tests on the unit plus the data reduction and analysis of specific parameters required by each applicable test procedure obtained from screen printouts and plots, oscilloscope photographs, or magnetic recordings shall be included with the associated shop order. During tests in which a CRT screen is to be printed or plotted and retained as a data sheet, the following annotation shall be applied:

Test/Systems Engineer: _____
(Signature)

Quality Control: _____
(Signature)

Customer Representative _____
(Flight Hardware Only): (Signature)

Date: _____

Test Paragraph No.: _____

Subassembly/Assembly Serial No.: _____

Shop Order No.: _____

4.5.2.1 ***Test data.*** The test data shall be that which was obtained during performance of the tests specified and recorded on the Test Data Sheet(s) (TDS) (see Appendix A) and on printouts and plots and shall be attached to the shop order associated with the test.

APPENDIX A

TEST DATA SHEETS

10.1 *Scope.* This appendix contains the test data sheets for all tests and inspections listed in section 3.

TEST DATA SHEET 1 (Sheet 1 of 9)
Grounding System Test (Paragraph 3.2.4.1)

J1 of Spacecraft Interface				
From Chassis Ground to	Pin Description	Required Resistance (Ohms)	Measured Value (Ohms)	Pass/Fail
J1-1	+28 V MLB	> 100k	>100K	P
J1-2	+28 V MLB	> 100k		
J1-3	+28 V MLB RTN	> 100k		
J1-4	+28 V MLB RTN	> 100k		
J1-5	+28 V PLB	> 100k		
J1-6	+28 V PLB	> 100k		
J1-7	+28 V PLB RTN	> 100k		
J1-8	+28 V PLB RTN	> 100k		
J1-9	+28 V TMB	> 100k		
J1-10	28 V TMB RTN	> 100k		
J1-11	NO CONNECTION	> 100k		
J1-12	NO CONNECTION	> 100k	>100K	
J1-13	CHASSIS GROUND (E1)	< 1	<1	
J1-14	+28 V MLB	> 100k	>100K	
J1-15	+28 V MLB	> 100k		
J1-16	+28 V MLB RTN	> 100k		
J1-17	+28 V MLB RTN	> 100k		
J1-18	+28 V PLB	> 100k		
J1-19	+28 V PLB	> 100k		
J1-20	+28 V PLB RTN	> 100k		
J1-21	+28 V PLB RTN	> 100k		
J1-22	+28 V TMB	> 100k		
J1-23	28 V TMB RTN	> 100k		
J1-24	SAFETY HTR PWR	> 100k		
J1-25	SAFETY HTR RTN	> 100k	>100K	P

TEST DATA SHEET 1 (Sheet 2 of 9)
Grounding Interface Test (Paragraph 3.2.4.1)

J2 of Spacecraft Interface				
From Chassis Ground to	Pin Description	Required Resistance (Ohms)	Measured Value (Ohms)	Pass/Fail
J2-1	Chassis Ground (E2)	< 1	<1	P
J2-2	DATA CLOCK (C1)	> 100k	> 100K	
J2-3	Signal Return	> 100k		
J2-4	No Connection	> 100k		
J2-5	DIGITAL-A DATA OUT	> 100k		
J2-6	DATA ENABLE (A1)	> 100k		
J2-7	8 SEC SYNC PULSE	> 100k		
J2-8	No Connection	> 100k		
J2-9	No Connection	> 100k	>100K	P

J3 of Spacecraft Interface				
From Chassis Ground to	Pin Description	Required Resistance (Ohms)	Measured Value (Ohms)	Pass/Fail
J3-1	1.248 MHz CLK	> 100k	> 100K	P
J3-2	1.248 MHz CLK RTN	> 100k	> 100K	P
J3-3	Chassis GND (E3)	< 1	< 1	P

J5 of Spacecraft Interface				
From Chassis Ground to	Pin Description	Required Resistance (Ohms)	Measured Value (Ohms)	Pass/Fail
J5-1	Chassis Ground (E5)	< 1	<1	P
J5-2	MODULE PWR IND	> 100k	> 100K	
J5-3	COLD CAL POS MSB (OUT)	> 100k		
J5-4	No Connection	> 100k		
J5-5	SCANNER A1-2 ON/OFF	> 100k		
J5-6	ANT IN COLD CAL POS	> 100k		
J5-7	PLL PRI/RED	> 100k		
J5-8	No Connection	> 100k		
J5-9	SURV HTR ON/OFF	> 100k		
J5-10	No Connection	> 100k		
J5-11	COLD CAL POS LSB (OUT)	> 100k		
J5-12	SCANNER A1-1 ON/OFF	> 100k		
J5-13	ANT IN WARM CAL POS	> 100k		
J5-14	ANT IN NADIR POS	> 100k		
J5-15	FULL SCAN MODE	> 100k	>100K	P

TEST DATA SHEET 1 (Sheet 3 of 9)
Grounding System Test (Paragraph 3.2.4.1)

J4 of Spacecraft Interface				
From Chassis Ground to	Pin Description	Required Resistance (Ohms)	Measured Value (Ohms)	Pass/Fail
J4-1	Chassis Ground (E4)	< 1	<1	P
J4-2	MODULE PWR DISCONN	> 100k	>100K	P
J4-3	SURVIVAL HTR ON	> 100k		
J4-4	MODULE TOTALLY OFF	> 100k		
J4-5	SCANNER A1-2 ON/OFF	> 100k		
J4-6	ANT AT COLD CAL POS	> 100k		
J4-7	PLL SELECT	> 100k		
J4-8	ANT AT NADIR POS	> 100k		
J4-9	COLD CAL POS MSB (IN)	> 100k		
J4-10	No Connection	> 100k		
J4-11	No Connection	> 100k		
J4-12	+10 V INTERFACE BUS	> 100k		
J4-13	10 V INTERFACE BUS RTN	> 100k		
J4-14	MODULE PWR CONN	> 100k		
J4-15	SURVIVAL HTR OFF	> 100k		
J4-16	SCANNER A1-1 ON/OFF	> 100k		
J4-17	ANT AT WARM CAL POS	> 100k		
J4-18	FULL SCAN	> 100k		
J4-19	COLD CAL POS LSB (IN)	> 100k		
J4-20	No Connection	> 100k		
J4-21	No Connection	> 100k		
J4-22	No Connection	> 100k		
J4-23	No Connection	> 100k		
J4-24	+10 V INTERFACE BUS	> 100k		
J4-25	10 V INTERFACE BUS RTN	> 100k	>100K	P

TEST DATA SHEET 1 (Sheet 4 of 9)
Grounding System Test (Paragraph 3.2.4.1)

J6 of Spacecraft Interface				
From Chassis Ground to	Pin Description	Required Resistance (Ohms)	Measured Value (Ohms)	Pass/Fail
J6-1	Chassis GND (E6)	< 1	<1	P
J6-2	RF SHELF A1-1 TEMP	> 100k	>100K	
J6-3	A1-1 SCAN. MTR. TEMP	> 100k		
J6-4	WARM LOAD A1-1 TEMP	> 100k		
J6-5	No Connection	> 100k		
J6-6	PLLO RED LOCK DETECT	> 100k		
J6-7	No Connection	> 100k		
J6-8	A1-1 DRIVE MTR CURR	> 100k		
J6-9	+15 V ANT DR MON	> 100k		
J6-10	+5 V ANT DR MON	> 100k		
J6-11	+15 V SIG PROC MON	> 100k		
J6-12	+5 V SIG PROC MON	> 100k		
J6-13	L.O. VOLTAGE CH 3 MON	> 100k		
J6-14	L.O. VOLTAGE CH 5 MON	> 100k		
J6-15	L.O. VOLTAGE CH 7 MON	> 100k		
J6-16	+15 VDC PLL LO MON	> 100k		
J6-17	+10 V MIXER/AMP MON	> 100k		
J6-18	L.O. VOLTAGE CH 15 MON	> 100k		
J6-19	No Connection	> 100k		
J6-20	28 V TMB RTN	> 100k		
J6-21	RF SHELF A1-2 TEMP	> 100k		
J6-22	A1-2 SCAN MTR TEMP	> 100k		
J6-23	WARM LOAD A1-2 TEMP	> 100k		
J6-24	No Connection	> 100k		
J6-25	PLLO PRI LOCK DETECT	> 100k		
J6-26	No Connection	> 100k		
J6-27	A1-2 DRIVE MTR CURR	> 100k		
J6-28	-15 V ANT DR MON	> 100k		
J6-29	-15 V SIG PROC MON	> 100k		
J6-30	L.O. VOLTAGE CH 4 MON	> 100k		
J6-31	L.O. VOLTAGE CH 6 MON	> 100k		
J6-32	L.O. VOLTAGE CH 8 MON	> 100k		
J6-33	-15 VDC PLL LO MON	> 100k		
J6-34	+8 V IF AMP MON	> 100k		
J6-35	No Connection	> 100k		
J6-36	No Connection	> 100k		
J6-37	No Connection	> 100k	>100K	P

TEST DATA SHEET 1 (Sheet 5 of 9)
Grounding System Test (Paragraph 3.2.4.1)

J7 of Spacecraft Interface				
From Chassis Ground to	Pin Description	Required Resistance (Ohms)	Measured Value (Ohms)	Pass/Fail
J7-1	Chassis GND (E7)	< 1	< 1	P
J7-2	No Connection	> 100k	> 100K	
J7-3	REDUN PLO LOCK DET	> 100k		
J7-4	15 V RTN (2/3)	> 100k		
J7-5	15 V RTN (2/3)	> 100k		
J7-6	DUMP TEST POINT	> 100k		
J7-7	No Connection	> 100k		
J7-8	CH3 OUT TEST POINT	> 100k		
J7-9	CH4 OUT TEST POINT	> 100k		
J7-10	CH5 OUT TEST POINT	> 100k		
J7-11	CH6 OUT TEST POINT	> 100k		
J7-12	CH7 OUT TEST POINT	> 100k		
J7-13	CH8 OUT TEST POINT	> 100k		
J7-14	CH9 OUT TEST POINT	> 100k		
J7-15	No Connection	> 100k		
J7-16	No Connection	> 100k		
J7-17	GSE CMD LSB	> 100k		
J7-18	GSE CMD MSB-1	> 100k		
J7-19	+5 V GSE INTERLOCK A	> 100k		
J7-20	No Connection	> 100k		
J7-21	No Connection	> 100k		
J7-22	PRI PLO LOCK DET	> 100k		
J7-23	No Connection	> 100k		
J7-24	I/H TEST POINT	> 100k		
J7-25	No Connection	> 100k		
J7-26	15 V RTN (2/3)	> 100k		
J7-27	CH10 OUT TEST POINT	> 100k		
J7-28	CH11 OUT TEST POINT	> 100k		
J7-29	CH12 OUT TEST POINT	> 100k		
J7-30	CH13 OUT TEST POINT	> 100k		
J7-31	CH14 OUT TEST POINT	> 100k		
J7-32	CH15 OUT TEST POINT	> 100k		
J7-33	No Connection	> 100k		
J7-34	No Connection	> 100k		
J7-35	GSE CMD MSB	> 100k		
J7-36	5 V RTN (1)	> 100k		
J7-37	+5 V GSE INTERLOCK B	> 100k	> 100K	P

TEST DATA SHEET 1 (Sheet 6 of 9)
Grounding Interface Test (Paragraph ~~3.3.2, Step 2)~~ 3.2.4.1

Source Pin	Destination Pin	Source Pin Description	Required Resistance (Ohms)	Measured Value (Ohms)	Pass/Fail
J1-1	J1-2	+28 V MLB	< 1	<1	P
J1-1	J1-14	+28 V MLB	< 1		
J1-1	J1-15	+28 V MLB	< 1		
J1-3	J1-4	28 V MLB RTN	< 1		
J1-3	J1-16	28 V MLB RTN	< 1		
J1-3	J1-17	28 V MLB RTN	< 1		
J1-5	J1-6	+28 V PLB	< 1		
J1-5	J1-18	+28 V PLB	< 1		
J1-5	J1-19	+28 V PLB	< 1		
J1-7	J1-8	28 V PLB RTN	< 1		
J1-7	J1-20	28 V PLB RTN	< 1		
J1-7	J1-21	28 V PLB RTN	< 1		
J1-9	J1-22	+28 V TMB	< 1		
J1-10	J1-23	28 V TMB RTN	< 1		
J1-10	J6-20	28 V TMB RTN	< 1		
J4-12	J4-24	+10 V INTERFACE BUS	< 1		
J4-13	J4-25	10 V INTERFACE BUS RTN	< 1	<1	
J1-1	J1-3	+28 V MLB	> 100k	>100K	
J1-1	J1-5	+28 V MLB	> 100k		
J1-1	J1-7	+28 V MLB	> 100k		
J1-1	J1-9	+28 V MLB	> 100k		
J1-1	J1-10	+28 V MLB	> 100k		
J1-1	J1-24	+28 V MLB	> 100k		
J1-1	J1-25	+28 V MLB	> 100k		
J1-1	J2-3	+28 V MLB	> 100k		
J1-1	J4-12	+28 V MLB	> 100k		
J1-1	J4-13	+28 V MLB	> 100k		
J1-3	J1-5	28 V MLB RTN	> 100k		
J1-3	J1-7	28 V MLB RTN	> 100k		
J1-3	J1-9	28 V MLB RTN	> 100k		
J1-3	J1-10	28 V MLB RTN	> 100k		
J1-3	J1-24	28 V MLB RTN	> 100k		
J1-3	J1-25	28 V MLB RTN	> 100k		
J1-3	J2-3	28 V MLB RTN	> 100k		
J1-3	J4-12	28 V MLB RTN	> 100k		
J1-3	J4-13	28 V MLB RTN	> 100k	>100K	P

TEST DATA SHEET 1 (Sheet 7 of 9)
Grounding Interface Test (Paragraph ~~3.3.2, Step 2)~~ 3.2.4.1

Source Pin	Destination Pin	Source Pin Description	Required Resistance (Ohms)	Measured Value (Ohms)	Pass/Fail
J1-5	J1-7	+28 V PLB	> 100k	>100K	P
J1-5	J1-9	+28 V PLB	> 100k		
J1-5	J1-10	+28 V PLB	> 100k		
J1-5	J1-24	+28 V PLB	> 100k		
J1-5	J1-25	+28 V PLB	> 100k		
J1-5	J2-3	+28 V PLB	> 100k		
J1-5	J4-12	+28 V PLB	> 100k		
J1-5	J4-13	+28 V PLB	> 100k		
J1-7	J1-9	28 V PLB RTN	> 100k		
J1-7	J1-10	28 V PLB RTN	> 100k		
J1-7	J1-24	28 V PLB RTN	> 100k		
J1-7	J1-25	28 V PLB RTN	> 100k		
J1-7	J2-3	28 V PLB RTN	> 100k		
J1-7	J4-12	28 V PLB RTN	> 100k		
J1-7	J4-13	28 V PLB RTN	> 100k		
J1-9	J1-10	+28 V TMB	> 100k		
J1-9	J1-24	+28 V TMB	> 100k		
J1-9	J1-25	+28 V TMB	> 100k		
J1-9	J2-3	+28 V TMB	> 100k		
J1-9	J4-12	+28 V TMB	> 100k		
J1-9	J4-13	+28 V TMB	> 100k		
J1-10	J1-24	28 V TMB RTN	> 100k		
J1-10	J1-25	28 V TMB RTN	> 100k		
J1-10	J2-3	28 V TMB RTN	> 100k		
J1-10	J4-12	28 V TMB RTN	> 100k		
J1-10	J4-13	28 V TMB RTN	> 100k		
J1-24	J1-25	SAFETY HTR PWR	> 100k		
J1-24	J2-3	SAFETY HTR PWR	> 100k		
J1-24	J4-12	SAFETY HTR PWR	> 100k		
J1-24	J4-13	SAFETY HTR PWR	> 100k		
J1-25	J2-3	SAFETY HTR PWR RTN	> 100k		
J1-25	J4-12	SAFETY HTR PWR RTN	> 100k		
J1-25	J4-13	SAFETY HTR PWR RTN	> 100k		
J2-3	J4-12	SIGNAL RTN	> 100k		
J2-3	J4-13	SIGNAL RTN	> 100k		
J4-12	J4-13	+10 V INTERFACE BUS	> 100k	>100K	P

12/16/98

TEST DATA SHEET 1 (Sheet 8 of 9)
Grounding Interface Test (Paragraph ~~3.3.2, Step 2)~~ 3.2.4.1

Source Pin	Destination Pin	Source Pin Description	Required Resistance (Ohms)	Measured Value (Ohms)	Pass/Fail
J2-2	J4-13	DATA CLOCK (C1)	> 2k	>2K	P
J2-5	J4-13	DIGITAL-A DATA OUT	> 2k		
J2-6	J4-13	DATA ENABLE (A1)	> 2k		
J2-7	J4-13	8 SEC SYNC PULSE	> 2k		
J3-1	J4-13	1.248 MHZ CLK	> 2k		
J3-2	J4-13	1.248 MHZ CLK RTN	> 2k		
J4-2	J4-13	MODULE PWR DISCONN	> 2k		
J4-3	J4-13	SURVIVAL HTR ON	> 2k		
J4-4	J4-13	MODULE TOTALLY OFF	> 2k		
J4-5	J4-13	SCANNER A1-2 ON/OFF	> 2k		
J4-6	J4-13	ANT AT COLD CAL POS	> 2k		
J4-7	J4-13	PLL SELECT	> 2k		
J4-8	J4-13	ANT AT NADIR POS	> 2k		
J4-9	J4-13	COLD CAL POS MSB (IN)	> 2k		
J4-14	J4-13	MODULE PWR CONN	> 2k		
J4-15	J4-13	SURVIVAL HTR OFF	> 2k		
J4-16	J4-13	SCANNER A1-1 ON/OFF	> 2k		
J4-17	J4-13	ANT AT WARM CAL POS	> 2k		
J4-18	J4-13	FULL SCAN	> 2k		
J4-19	J4-13	COLD CAL POS LSB (IN)	> 2k		
J5-2	J4-13	MODULE PWR IND	> 2k		
J5-3	J4-13	COLD CAL POS MSB (OUT)	> 2k		
J5-5	J4-13	SCANNER A1-2 ON/OFF	> 2k		
J5-6	J4-13	ANT IN COLD CAL POS	> 2k		
J5-7	J4-13	PLL PRI/RED	> 2k		
J5-9	J4-13	SURV HTR ON/OFF	> 2k		
J5-11	J4-13	COLD CAL POS LSB (OUT)	> 2k		
J5-12	J4-13	SCANNER A1-1 ON/OFF	> 2k		
J5-13	J4-13	ANT IN WARM CAL POS	> 2k		
J5-14	J4-13	ANT IN NADIR POS	> 2k		
J5-15	J4-13	FULL SCAN MODE	> 2k	>2K	P

TEST DATA SHEET 1 (Sheet 9 of 9)
Grounding Interface Test (Paragraph ~~3.3.2, Step 2)~~ 3.2.4.1

Source Pin	Destination Pin	Source Pin Description	Required Resistance (Ohms)	Measured Value (Ohms)	Pass/Fail
J6-2	J1-10	RF SHELF A1-1 TEMP	> 2k	>2k	Pass
J6-3	J1-10	A1-1 SCAN MTR.TEMP	> 2k		
J6-4	J1-10	WARM LOAD A1-1 TEMP	> 2k		
J6-6	J4-13	PLLO RED LOCK DETECT	> 2k		
J6-8	J4-13	A1-1 DRIVE MTR CVR	> 2k		
J6-9	J4-13	+15 VDC ANT DRIVE MON	> 2k		
J6-10	J4-13	+5 VDC ANT DRIVE MON	> 2k		
J6-11	J4-13	+15 VDC SIG PROC MON	> 2k		
J6-12	J4-13	+5VDC SIG PROC MON	> 2k		
J6-13	J4-13	L.O. VOLTAGE CH3 MON	> 2k		
J6-14	J4-13	L.O. VOLTAGE CH5 MON	> 2k		
J6-15	J4-13	L.O. VOLTAGE CH7 MON	> 2k		
J6-16	J4-13	+15 VDC PLL LO MON	> 2k		
J6-17	J4-13	+10 V MIXER/AMP MON	> 2k		
J6-18	J4-13	L.O. VOLTAGE CH15 MON	> 2k		
J6-21	J4-10	RF SHELF A1-2 TEMP	> 2k		
J6-22	J4-10	A1-2 SCAN MTR.TEMP	> 2k		
J6-23	J4-10	WARM LOAD A1-2 TEMP	> 2k		
J6-25	J4-13	PLLO PRI LOCK DETECT	> 2k		
J6-27	J4-13	A1-2 DRIVE MTR CURR	> 2k		
J6-28	J4-13	-15 VDC ANT DRIVE MON	> 2k		
J6-29	J4-13	-15 VDC SIG PROC MON	> 2k		
J6-30	J4-13	L.O. VOLTAGE CH4 MON	> 2k		
J6-31	J4-13	L.O. VOLTAGE CH6 MON	> 2k		
J6-32	J4-13	L.O. VOLTAGE CH8 MON	> 2k		
J6-33	J4-13	-15 VDC PLL LO MON	> 2k		
J6-34	J4-13	IF AMP MON	> 2k	>2k	Pass

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

11/24/98
Test Systems Engineer Date

M. Hui DCMC 12/2/98
Customer Representative (Flight Hardware Only) Date

7A 268
NOV 24 '98
Quality Control Date

TEST DATA SHEET 2

+28 MLB During Turn-on Transient (Paragraph 3.2.4.2.1.1)

At 28.56 Vdc:

Step	Parameter	Measured/ Calculated	Required*	Pass/ Fail
8	Peak Current	4.87 Amps	10.6 Amps	P
8	Pulse Width	74.90 ms	100 ~~20~~ ms max	P
8	Rate of Change (Slope): dI/dT	16.17 mA/μs	677 mA/μs	P

At 27.44 Vdc:

Step	Parameter	Measured/ Calculated	Required*	Pass/ Fail
8	Peak Current	4.73 Amps	10.6 Amps	P
8	Pulse Width	78.52 ms	100 ~~20~~ ms max	P
8	Rate of Change (Slope): dI/dT	15.60 mA/μs	677 mA/μs	P

At 28.00 Vdc:

Step	Parameter	Measured/ Calculated	Required*	Pass/ Fail
8	Peak Current	4.72 Amps	10.6 Amps	P
8	Pulse Width	75.98 ms	100 ~~20~~ ms max	P
8	Rate of Change (Slope): dI/dT	15.13 mA/μs	677 mA/μs	P

* Refer to Figure 5.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer (263) 11/25/98 Date

DEC 1 '98

Customer Representative (Flight Hardware Only) 12/2/98 Date

Quality Control Date

TEST DATA SHEET 3

+28 MLB Operating Power (Paragraph 3.2.4.2.1.2)

Step	+28V MLB at 27 Volts	Measured	Units	Required	Pass/Fail
2	+28 V MLB voltage at 27 V (V_b) (Measured)	27.02 V	Volts	27.0 ± 0.05	P
3	Average Current (I_V)	2.34 A	Amps	N/A	N/A
4	+28 V MLB bus power = I_V x V_b	63.2	Watts	82 W max	P
	+28 V MLB at 28 Volts				
5	+28 V MLB Bus Voltage at 28 V (V_b) (Measured)	28.03 V	Volts	28.0 ± 0.05	P
6	Average Current (I_V)	2.25 A	Amps	N/A	N/A
7	+28 V MLB Operating Power = I_V X V_b	63.1	Watts	82 W max	P
	+28 V MLB at 29 Volts				
8	+28 V MLB voltage at 29 V (V_b) (Measured)	28.99 V	Volts	29.0 ± 0.05	P
9	Average Current (I_V)	2.19 A	Amps	N/A	N/A
10	+28 V MLB operating power = I_V x V_b	63.5	Watts	82 W max	P

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105 11/25/98

Test Systems Engineer Date

12/2/98

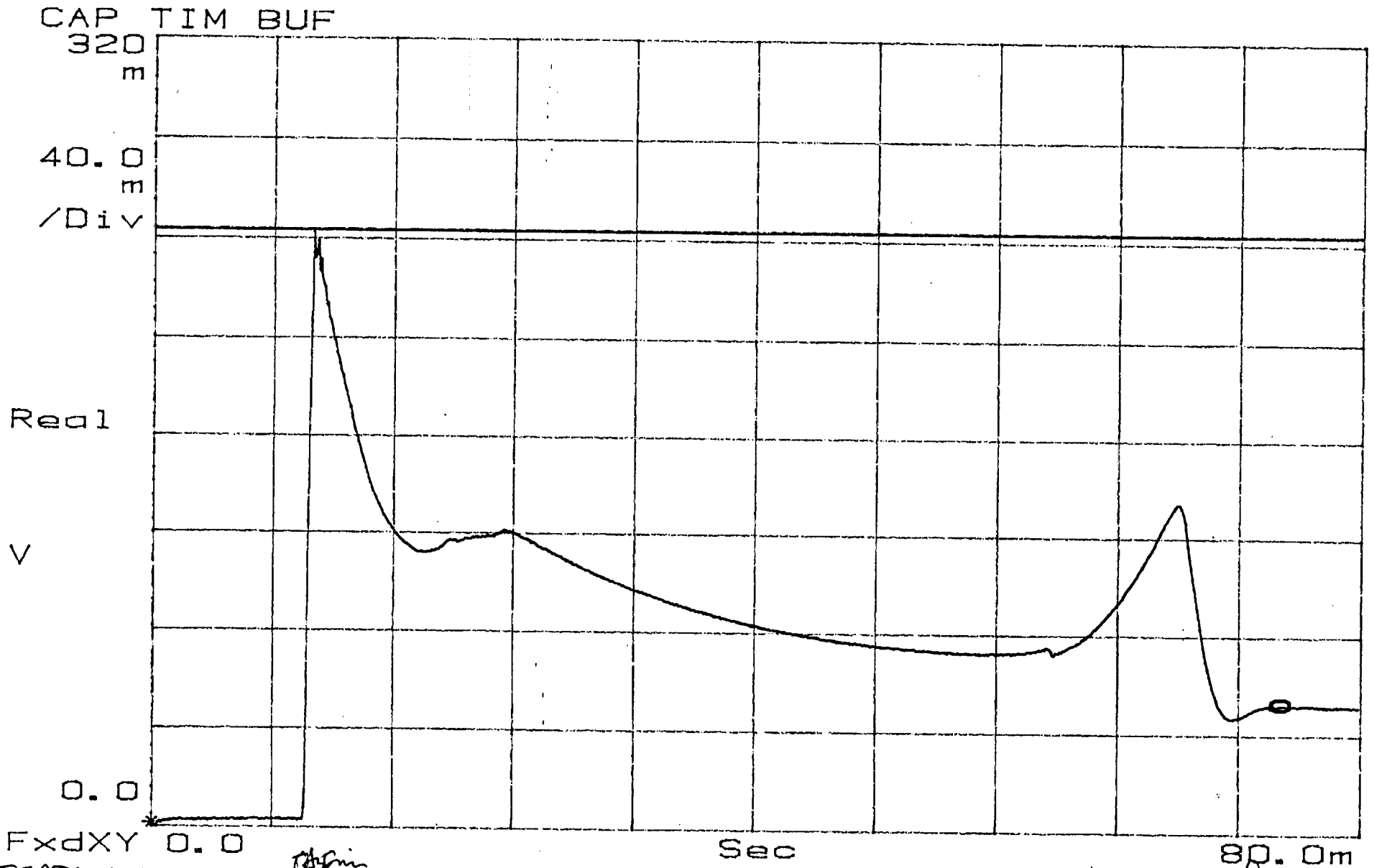
Customer Representative (Flight Hardware Only) Date

Quality Control Date

NOV 30 '98

X=74.9mSec
Ya=52.4151mV

Y=243.394mV



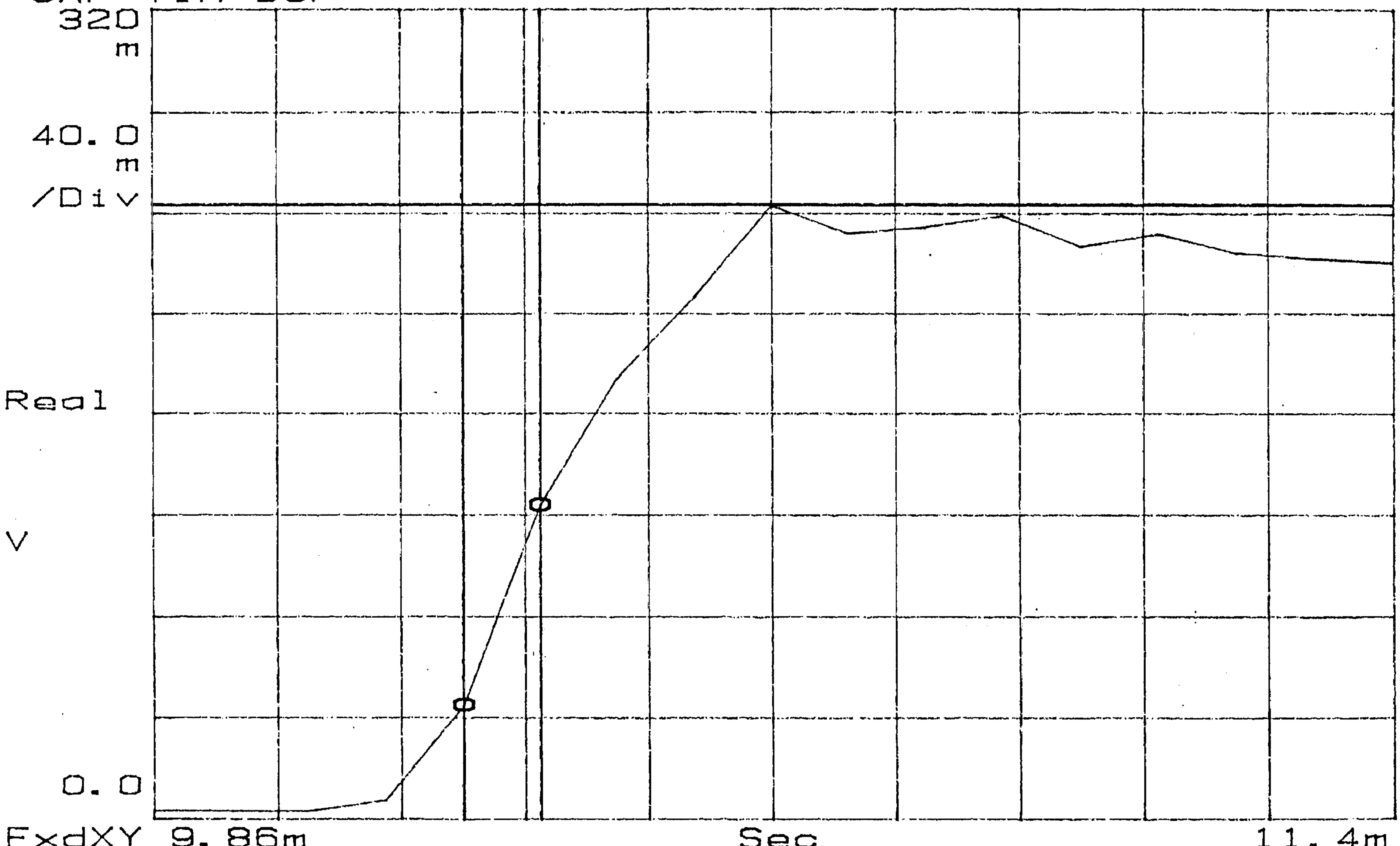
METSAT AMSU-A2 11/25/98
AE26156/3 para 3.2.4.2.1.1

MLB PEAK CURRENT
MLB PULSE WIDTH

TE
11/25/98 DATE

X=10.25mS ΔX=97.66μS Y=243.394mV
Ya=44.9272m ΔYa=78.98mV

CAP TIM BUF



METSAT AMSU-A1

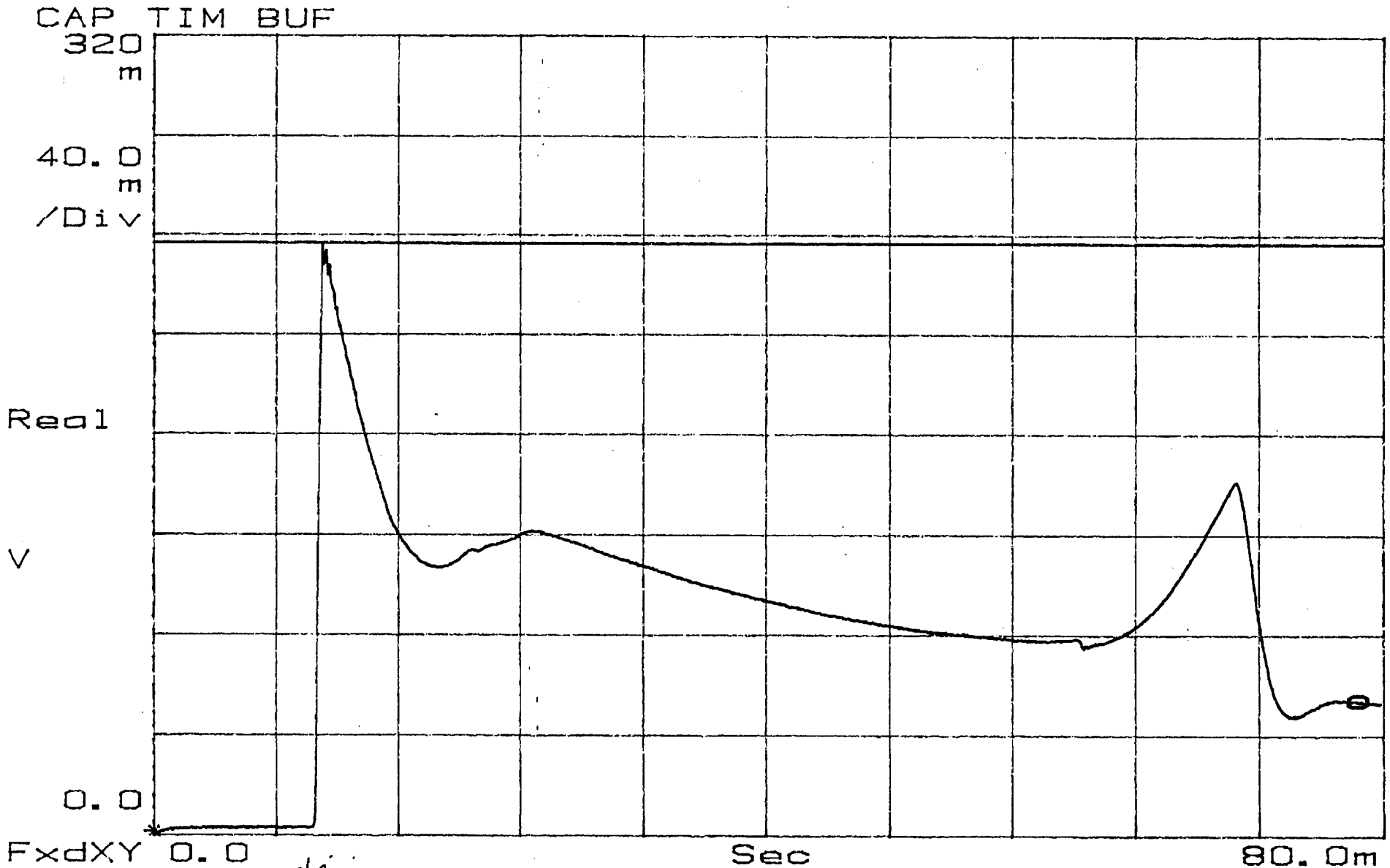
AE 26156/3 para. 3.2.4.2.1.1

MLB di/dt

TE

Date

X=78.52mSec
Y=236.606mV
Ya=53.6972mV

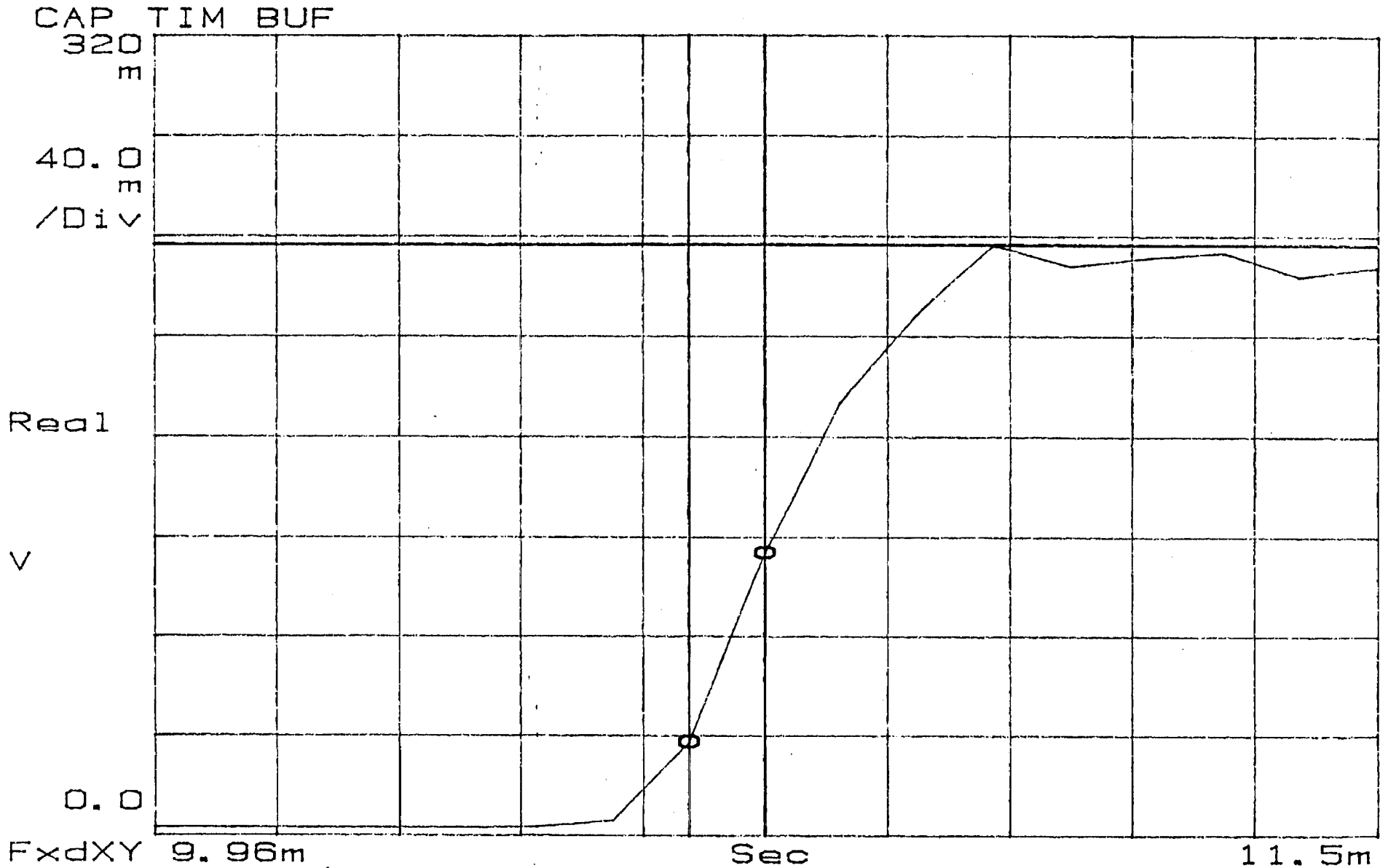


METSAT AMSU-A Z1 TBHoffman 11/25/98
AE26156/3 para 3.2.4.2.1.1

MLB PEAK CURRENT
MLB PULSE WIDTH

TBHoffman TE
11/25/98 DATE

X=10.74mS ΔX=97.66µS Y=236.606mV
Ya=113.6m ΔYa=76.16mV

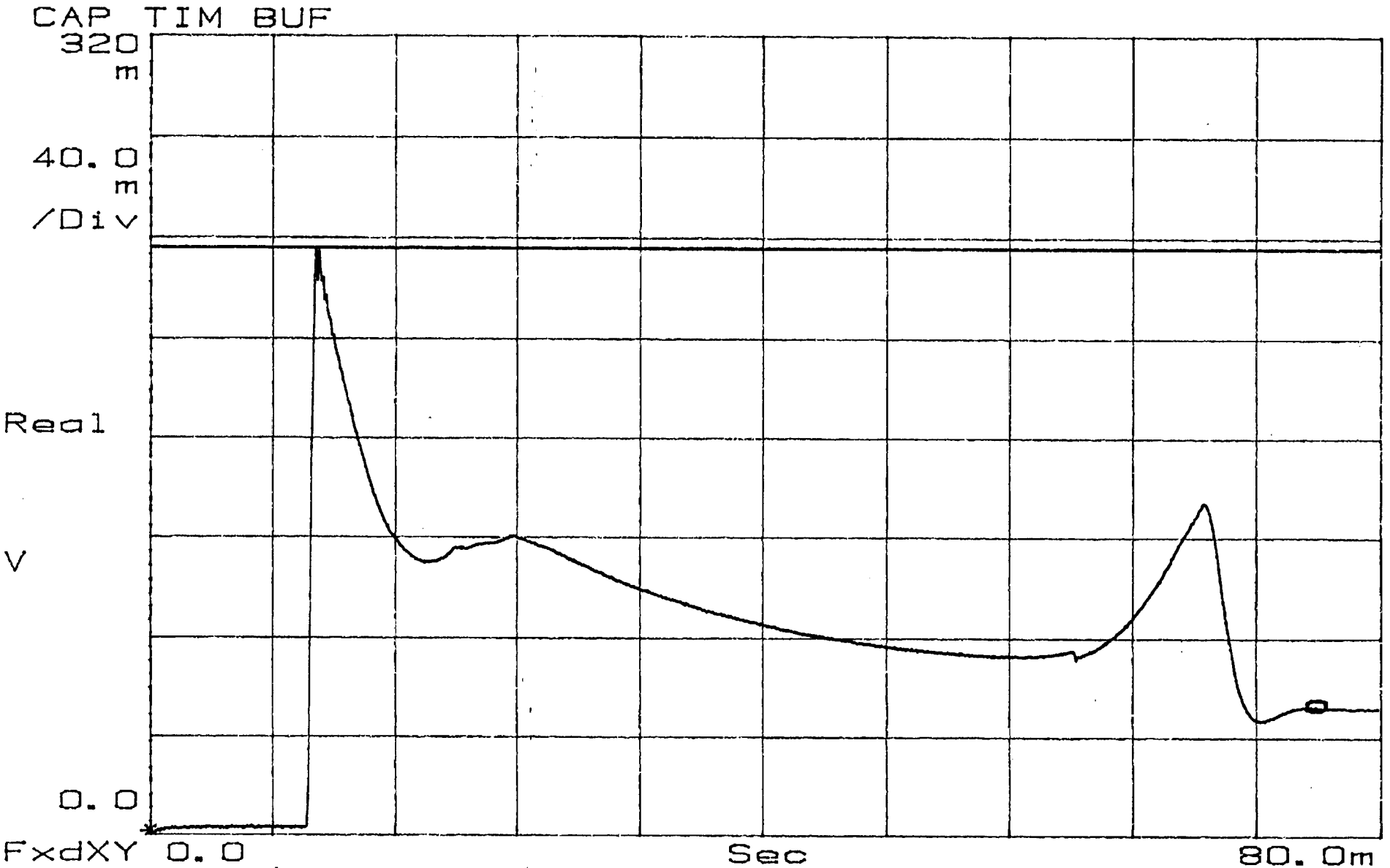


METSAT AMSU-AR1 [signature] 11/25/98
AE26156/3 para. 3.2.4.2.1.1

MLB di/dt

[signature] TE
11/25/98 DATE

X=75.98mSec
Y=235.83mV
Ya=52.7741mV

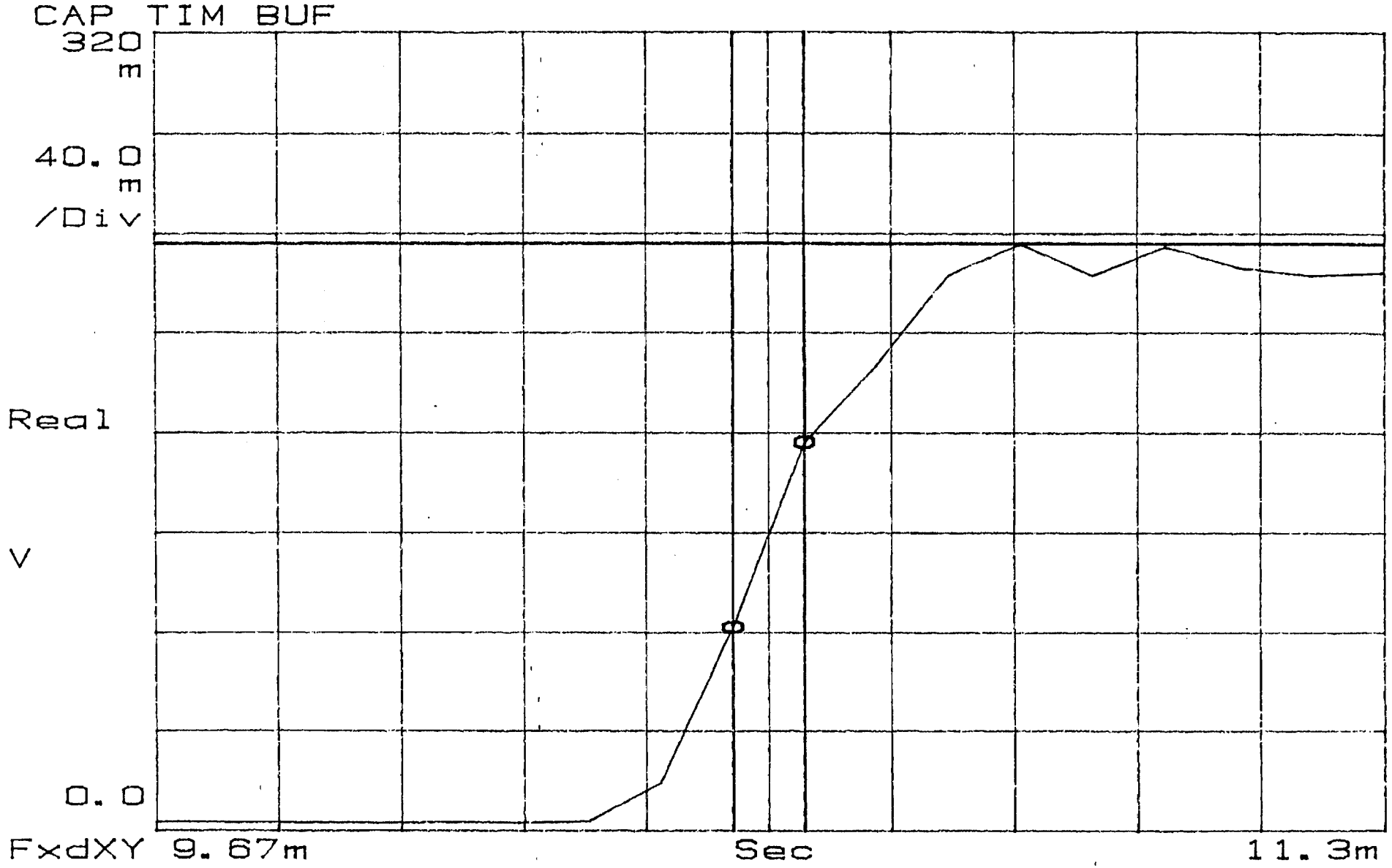


METSAT AMSU-AZ1
AE 26156/3 para 3.2.4.2.1.1
MLB TURN ON TRANSIENT TDC

MLB PEAK CURRENT
MLB PULSE WIDTH

TE
11/25/98 DATE

X=10.55mS ΔX=97.66μS Y=235.83mV
Ya=155.809m ΔYa=73.9mV



METSAT AMSU-A2 1 11/26/98
AE 26156/3 para 3.2.4.2.1.1

MLB di/dt

TE
11/25/98 DATE

TEST DATA SHEET 4 (Sheet 1 of 2)
+28 Pulse Load Bus (Paragraph 3.2.4.2.2.1-3.2.4.2.2.5)

Paragraph	Parameter	Measured or Calculated	Required	Pass/ Fail
3.2.4.2.2.1	From -0.1 to two seconds			
	Peak Current = I_p	1.13 Amps	1.3 amps max	P
3.2.4.2.2.2	From 2 to 4 seconds			
	Peak Current = I_p	1.13 Amps	1.3 amps max	P
3.2.4.2.2.3	From 4 to 6 seconds			
	Peak Current = I_p	1.13 Amps	1.3 amps max	P
3.2.4.2.2.4	From 6 to 8 seconds			
	Peak Current = I_p	1.13 Amps	1.3 amps max	P
3.2.4.2.2.5	Turn-on Transient:			
	dI/dT Peak Current = I_p	684 mA/µs 10.2 Amps	744 mA/µs * 11.5 Amps	P

* Refer to Figure 9.

Bus current during the I/H, D period

Paragraph	Parameter	Measured or Calculated	Pass/ Fail
3.2.4.2.2.1	From -0.1 to 2 secs	31.4 mA	N/A
3.2.4.2.2.2	From 2 to 4 secs	33.4 mA	N/A
3.2.4.2.2.3	From 4 to 6 secs	30.2 mA	N/A
3.2.4.2.2.5	From 6 to 8 secs	23.6 mA	N/A

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer 11/25/98 Date

Customer Representative (Flight Hardware Only) 12/2/98 Date

Quality Control (7A 268) NOV 30 '98 Date

TEST DATA SHEET 4 (Sheet 2 of 2)
+28 Pulse Load Bus (Paragraph 3.2.4.2.2.6)

Bus current during warm cal, cold cal & Nadir

Paragraph	Parameter	Measured or Calculated	Pass/ Fail
3.2.4.2.2.6 (2)	Warm cal	11.22 mA	N/A
3.2.4.2.2.6 (3)	Cold cal	11.90 mA	N/A
3.2.4.2.2.6 (4)	Nadir	21.00 mA	N/A

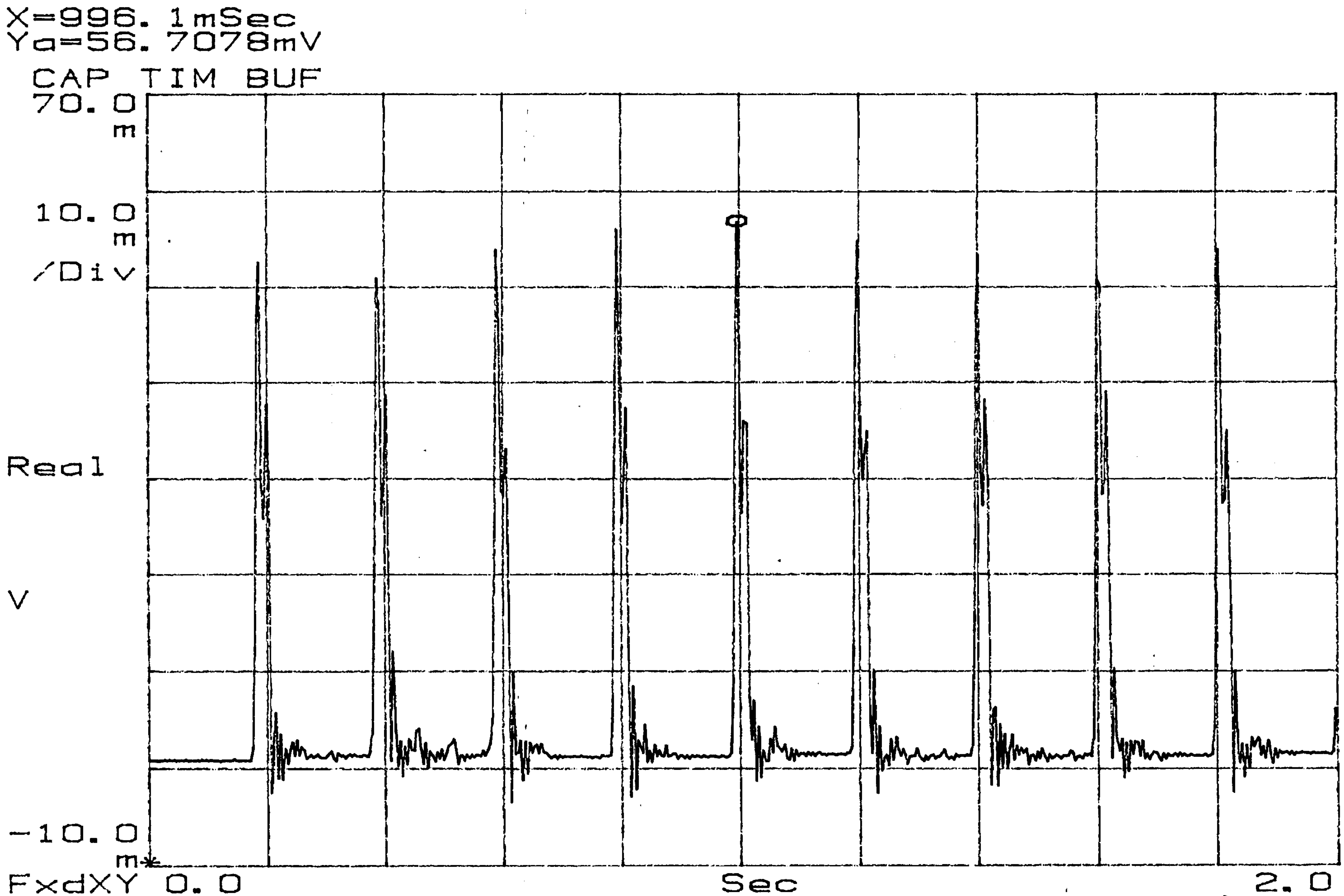
Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer — 11/25/98 Date

N/A DCMC — 12/2/98 Date
Customer Representative
(Flight Hardware Only)

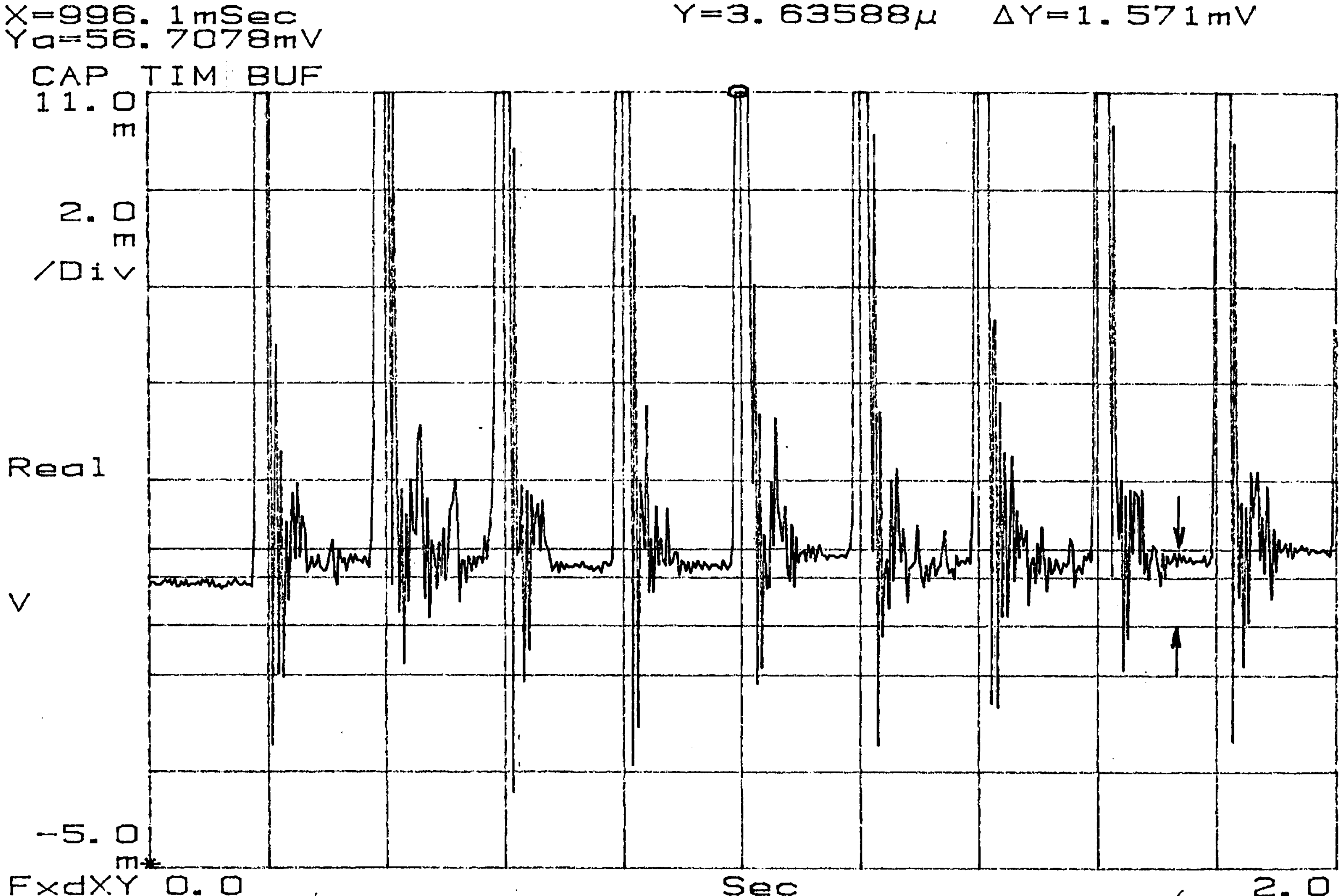
7A 268 — NOV 30 '98 Date
Quality Control



METSAT AMSU-A1 [signature] 11/25/98
AE 26156/3 para 3.24.2.2.1

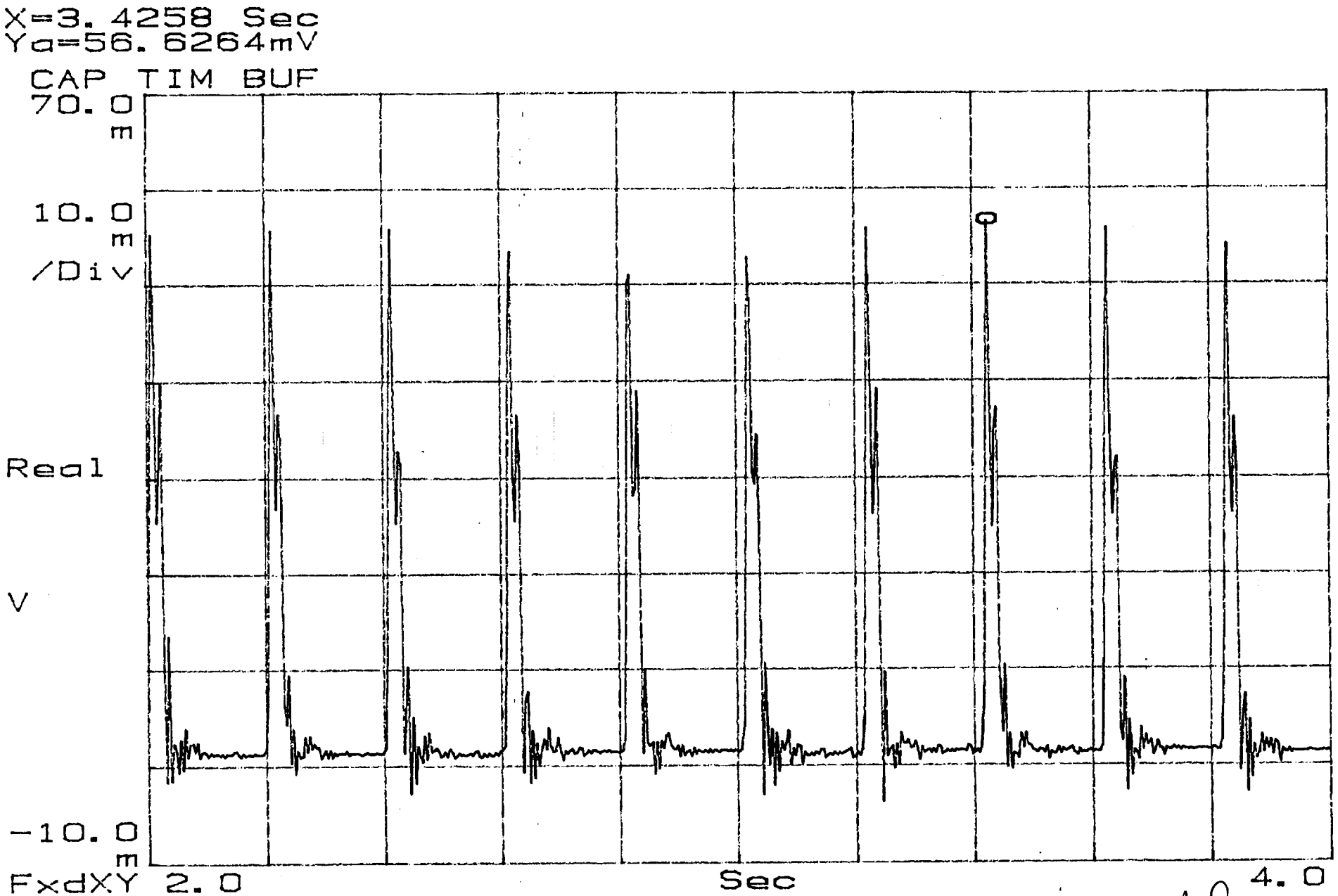
PLB PEAK CURRENT
0-2 SEC

[signature] TE
11/25/98 DATE



METSAT ~~AMSU~~-A2 1 11/25/98
AE 26156/3 para 3.2.4.2.2.1 TDS 4

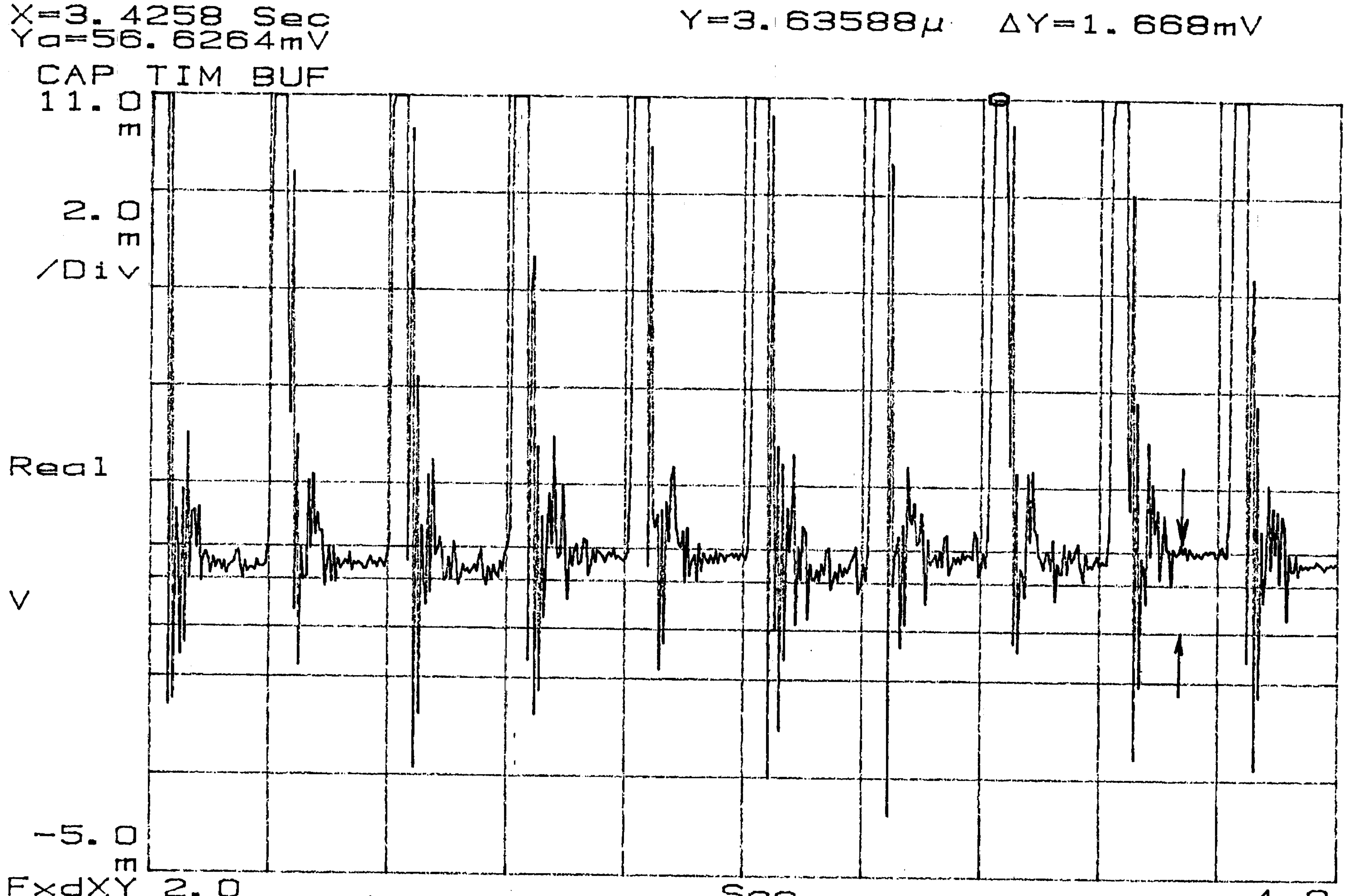
PLB I/H, D CURRENT : TE
11/25/98 : DATE



METSAT AMSU-A2/1 TBrigman 11/25/08
AE26156/3 para 3.2.4.2.2.2 TDS 4

PLB PEAK CURRENT
2-4 SEC

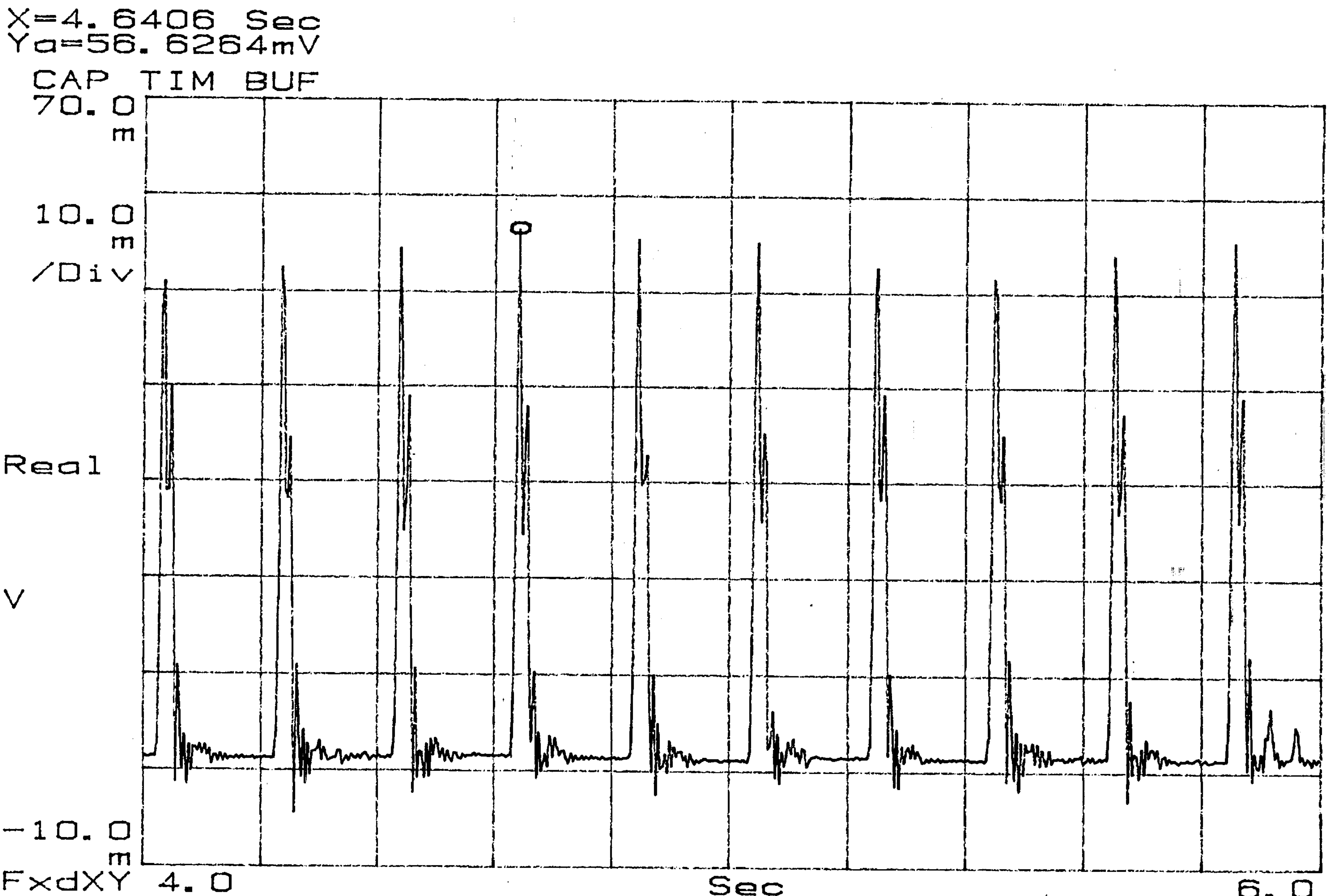
TBrigman TE
11/25/08 DATE



METSAT AMSU-A2 1 T. Hufnim 11/25/98
AE 26156/3 para 3.2.4.2.2.8

PLB I/H, DUMP CURRENT

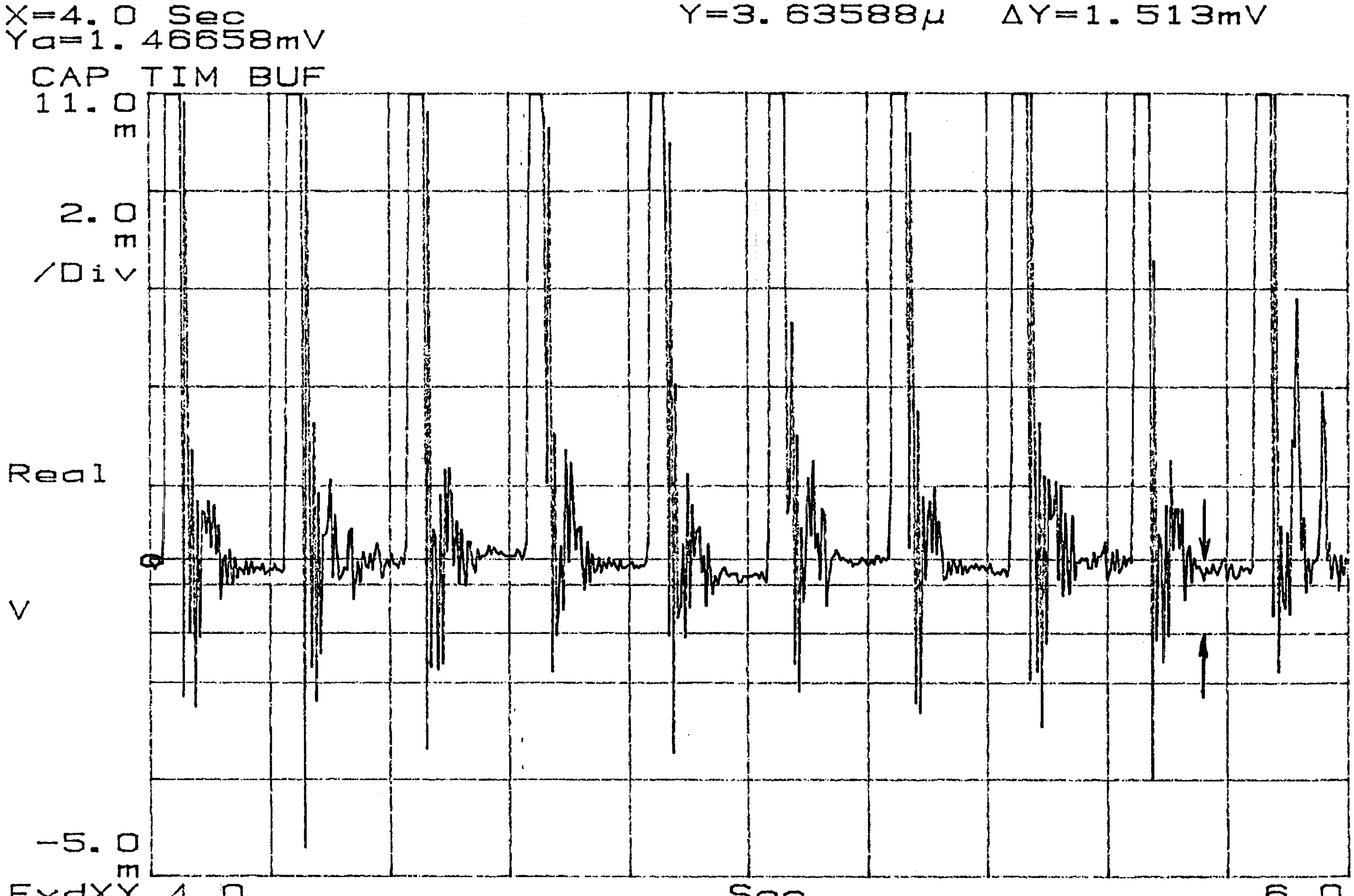
TG DATE 11/25/98



METSAT AMSU-A2 1 11/25/98
AE26156/3 para 3.2.4.2.2.3
PLB PEAK CURRENT TDS4

PLB PEAK CURRENT
4-6 SEC

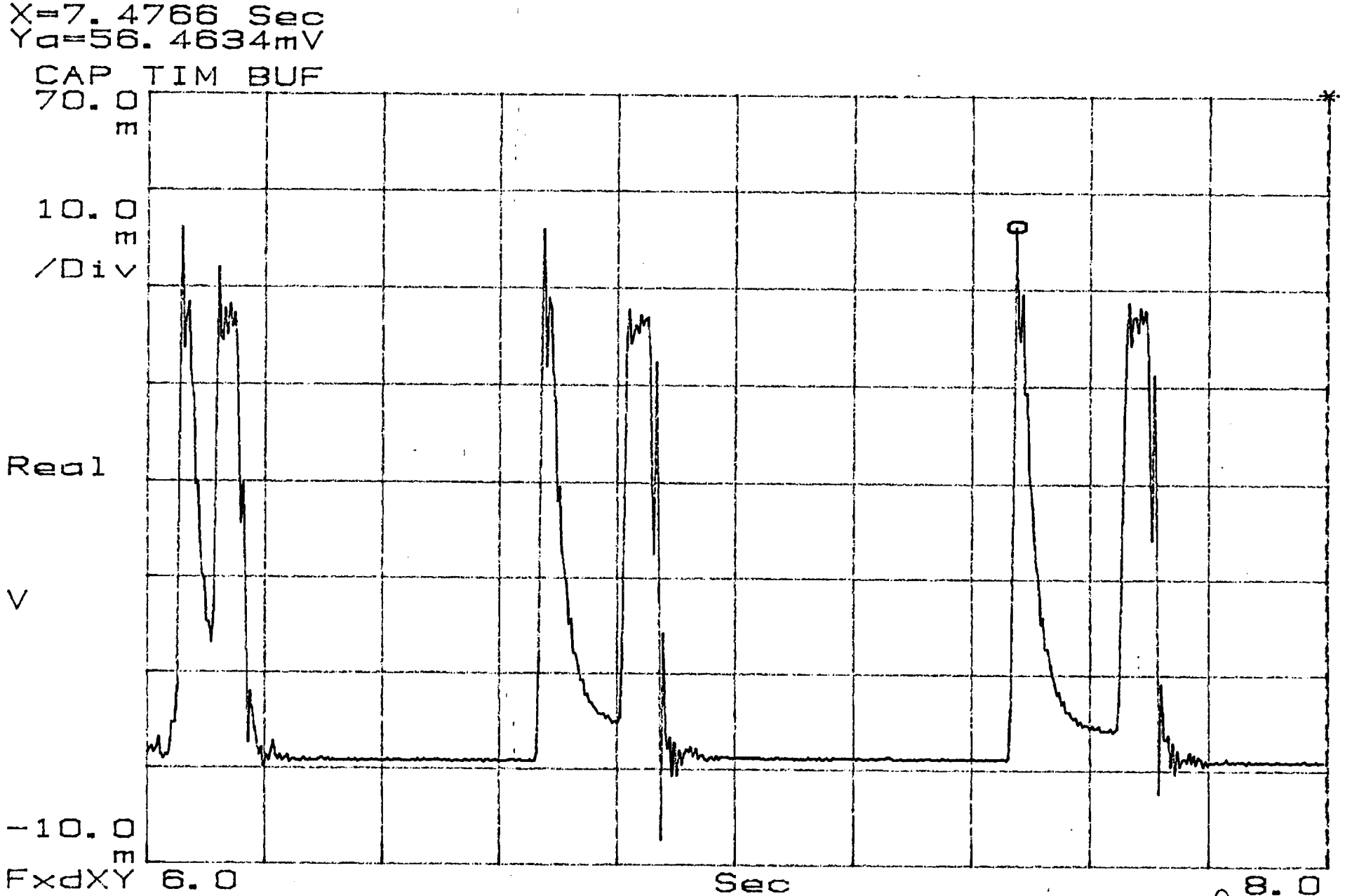
TE
11/25/98 DATE



METSAT AMSU-A2 1 [signature] 11/25/98
AE26156/3 para 3.2.4.2.2.3

PLB I/H, DUMP CURRENT
4-6 SEC

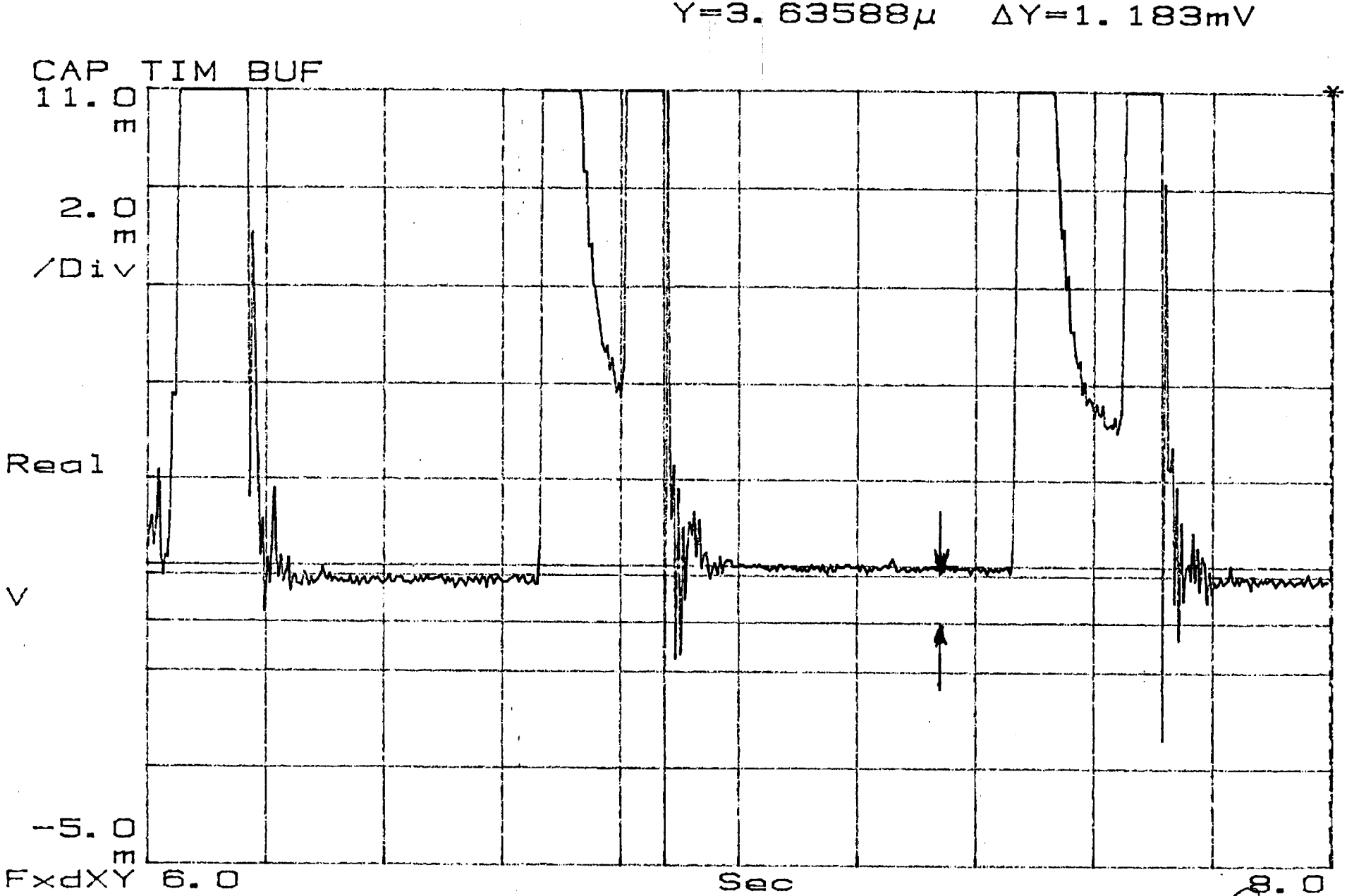
[signature] TE
11/20/98 Date



MET.SAT AMSU-A1
AE26156/B para 3.2.4.2.2.4

PLB PEAK CURRENT
6-8 SEC.

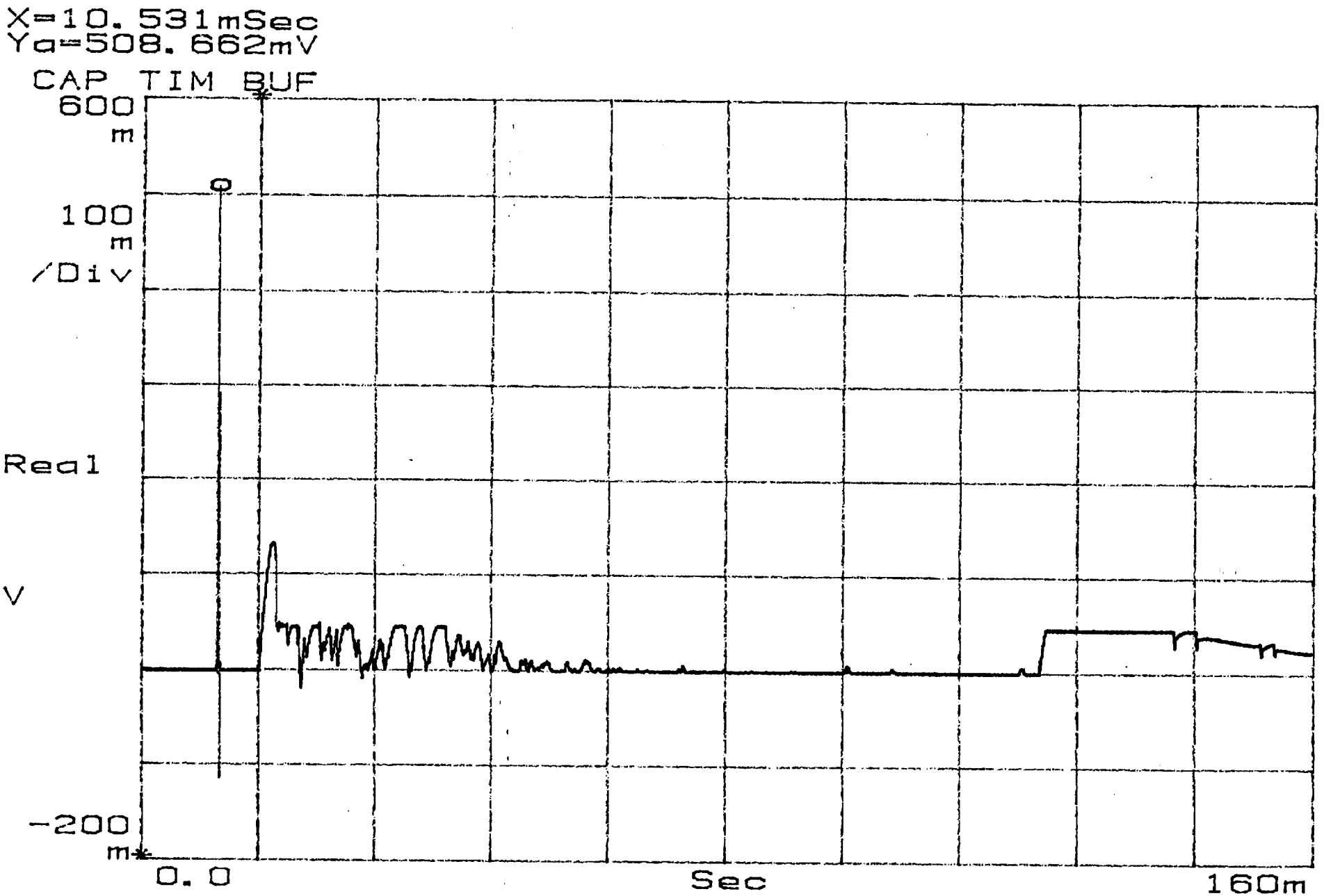
TE
Date



METSAT AMSU-A1
AE 26156/3 para 3.2.4.2.2.4
DIR PEAK CURRENT TMSIL

PLB I/H, Dump CURRENT
6-8 SEC

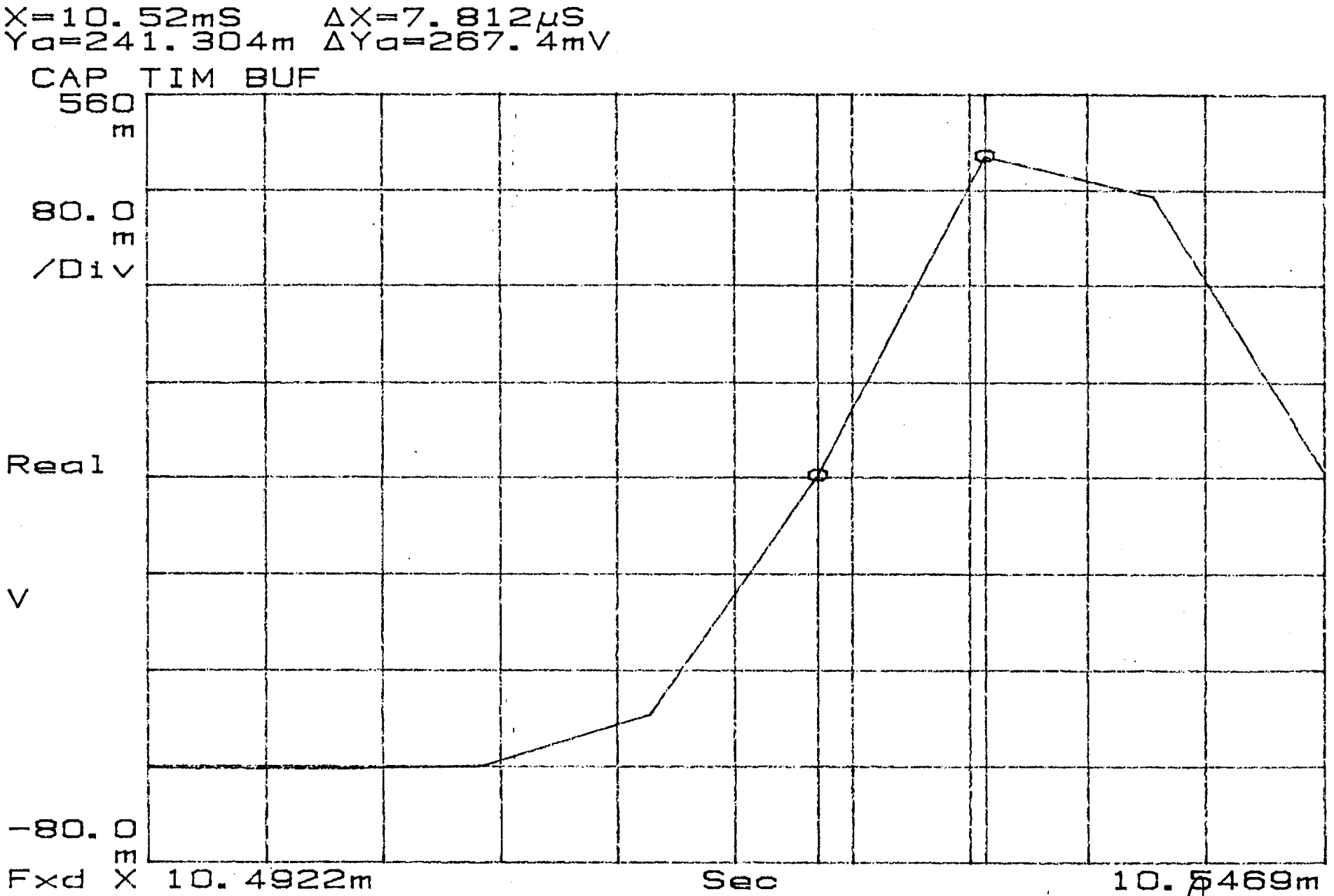
TPM by Jim TG
11/25/96 Date



METSAT AMSU-A1
AE 26156/3 para 3.2.4.2.2.5
PLB TURN ON TRANSIENT

PLB TURN ON TRANSIENT
PEAK CURRENT

TE
11/25/98 DATE



METSAT AMSU-A1
AE 26156/3 para 3.2.4.2.2.5

PLB TURN ON TRANSIENT
di/dt

TE
Date

TEST DATA SHEET 5
+28 V Analog Telemetry Bus (Paragraph 3.2.4.2.3)

Step	Parameter	Measured/ Calculated	Required	Pass/ Fail
3	+28 V ATB Bus Voltage (V_{at}) (Measured)	27.76 Volts	28.0 ±~~0.05~~ .5	Pass
4	Av. Current (I_a)	1.79 mA	7 mA max	Pass
5	+28 V ATB Operating Power = I_a X V_{at}	49.69mW	200 mW max	Pass

QC 229

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer — 11/25/98 Date

Customer Representative (Flight Hardware Only) — 12/2/98 Date

Quality Control (7A 268) — DEC 1 '98 Date

TEST DATA SHEET 6

+10 V Interface Bus Voltage (Paragraph 3.2.4.2.4)

Step	Parameter	Measured/ Calculated	Required	Pass/ Fail
3	Av. Current (I_a)	7.47 mA	10 mA max	P
3	+10 V Interface Bus (V_{ib}) (Measured)	9.06 Volts	9.0 ±1.0 V	P
4	+10 V Interface Bus Power = I_a X V_{ib}	67.68 mW	100 mW max	P

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer — 11/25/98 Date

Customer Representative (Flight Hardware Only) — DCMC 12/2/98 Date

Quality Control — 7A 268 — NOV 30 '98 Date

TEST DATA SHEET 7
Power Input Test for LPT (Paragraph 3.2.4.2.5)

Step	Parameter	Measured	Units	Required	Pass/ Fail
3	+28 V MLB Voltage (Vb) (Measured at connector J1)		Volts	28 ±0.05	
3	Clock Amplitude		Amps	Between 0.5 and 4.3 Amps	

N/A to CPT testing 12/1/98

Circle Test: CPT LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: _____ S/N: _____

_____
Test Systems Engineer Date

_____ _____
Customer Representative Date Quality Control Date
(Flight Hardware Only)

TEST DATA SHEET 8
1.248 MHz Clock Signal Verification (Paragraph 3.2.4.3.2.1)

1.248 CLOCK SIGNAL
ATTACH PHOTOGRAPH OR PLOT HERE

Step	Parameter	Measured/ Calculated	Required	Pass/ Fail
5	Clock Frequency	1.248 MHz	1.248 ±10%	Pass
	Clock Amplitude	9.0 Volts	9.0 ±1.0 V	Pass

Circle Test: (CPT) LPT

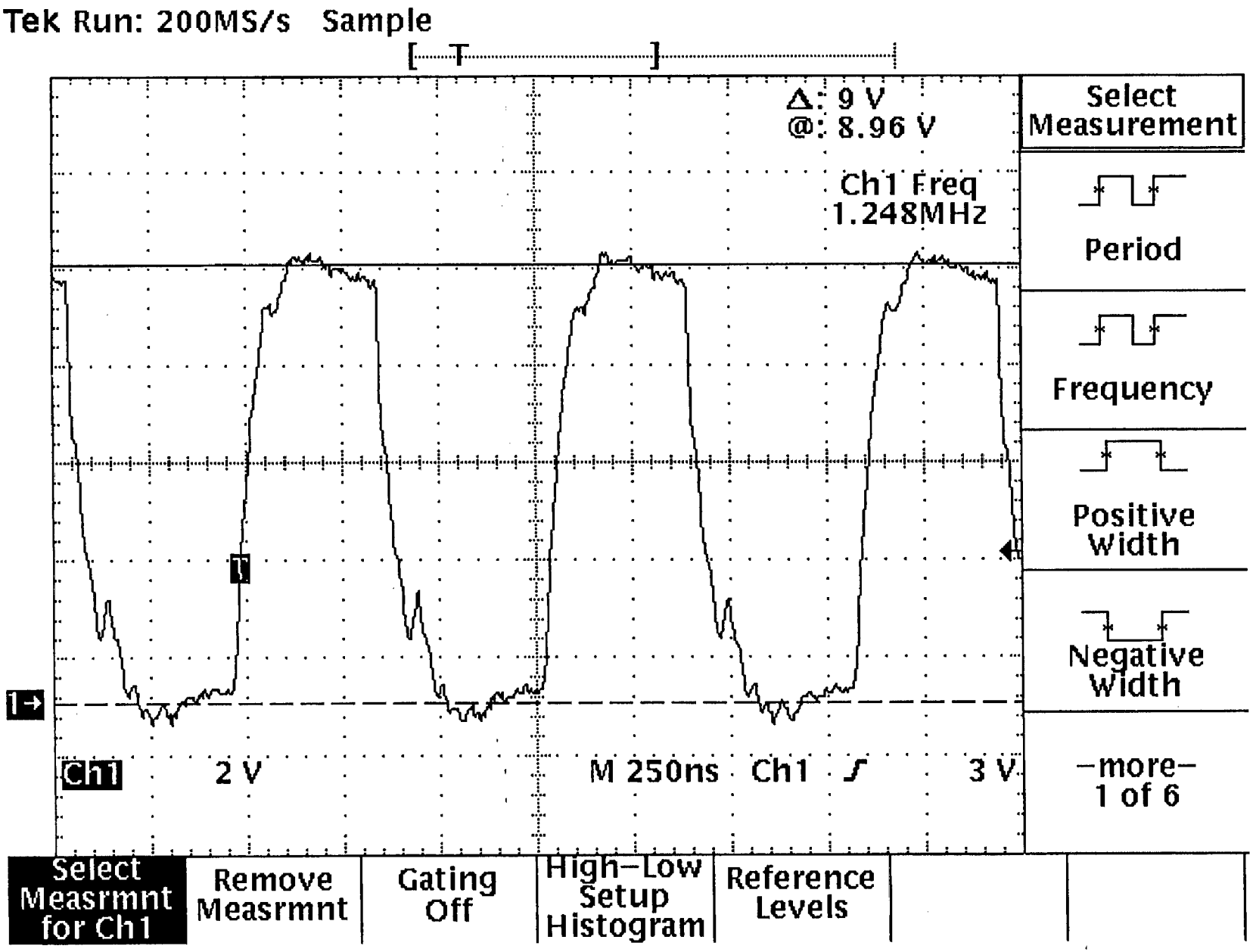
METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer — 11/24/98 Date

Customer Representative (Flight Hardware Only) — 12/2/98 Date

Quality Control — NOV 24 '98 Date

TDS 8


Tek Run: 200MS/s Sample
Δ: 9 V
@: 8.96 V
Ch1 Freq
1.248MHz
Select Measurement
Period
Frequency
Positive Width
Negative Width
–more–
1 of 6
Ch1 2 V
M 250ns Ch1 ∫ 3 V
Select Measrmnt for Ch1
Remove Measrmnt
Gating Off
High–Low Setup Histogram
Reference Levels

TEST DATA SHEET 9
"C1" Shift Pulse Verification (Paragraph 3.2.4.3.2.2)

"C1" SHIFT PULSE
Attach Photograph OR Plot Here

Parameter	Measured/ Calculated	Required	Pass/ Fail
Pulse Timing (A) *	48 µs	48 µs ± 10%	P
Pulse Timing (B) *	12.4 µs	12 µs ± 10%	P
Pulse Amplitude	8.6 Volts	9.0 ± 1.0 V	P

* Refer to Figure 13 for location of the pulse timing A and B.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer 11/24/98 Date

Customer Representative (Flight Hardware Only) DCMC 12/2/98 Date

Quality Control (268) NOV 24 '98 Date

TEST DATA SHEET 10
"A1" Select Pulse Verification (Paragraph 3.2.4.3.2.3)

"A1" SELECT PULSE
Attach Photograph or Plot Here

Parameter	Measured/ Calculated	Required	Pass/ Fail
Select Pulse Timing (F) *	964.4 µs	961.5 µs± 10%	P
Select Pulse Amplitude	8.48 Volts	9.0 ±1.0 V	P

* Refer to Figure 13 for location of the pulse timing F

Circle Test: (CPT) LPT

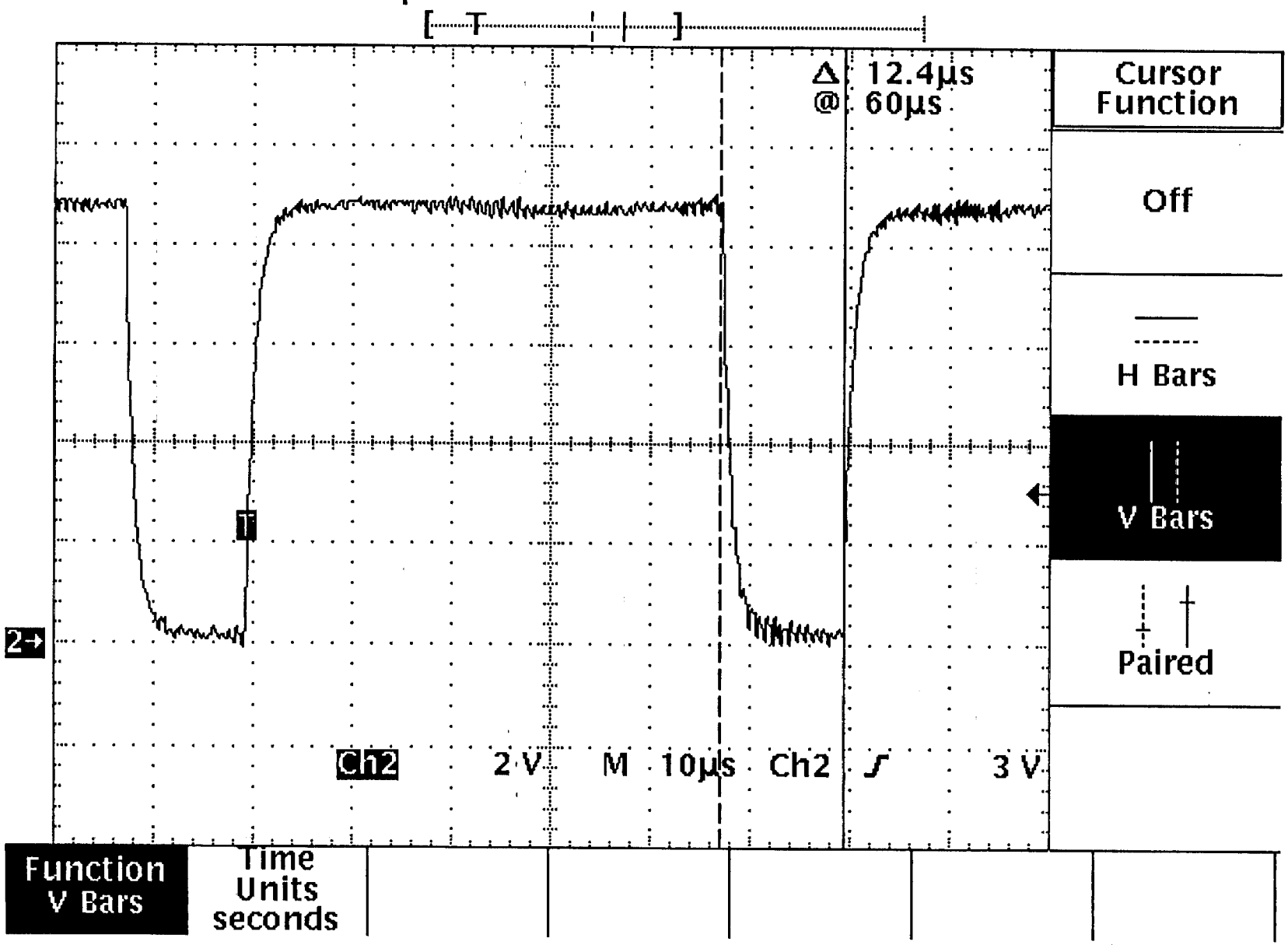
METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 43d613 S/N: 105

Test Systems Engineer 11/24/98
Date

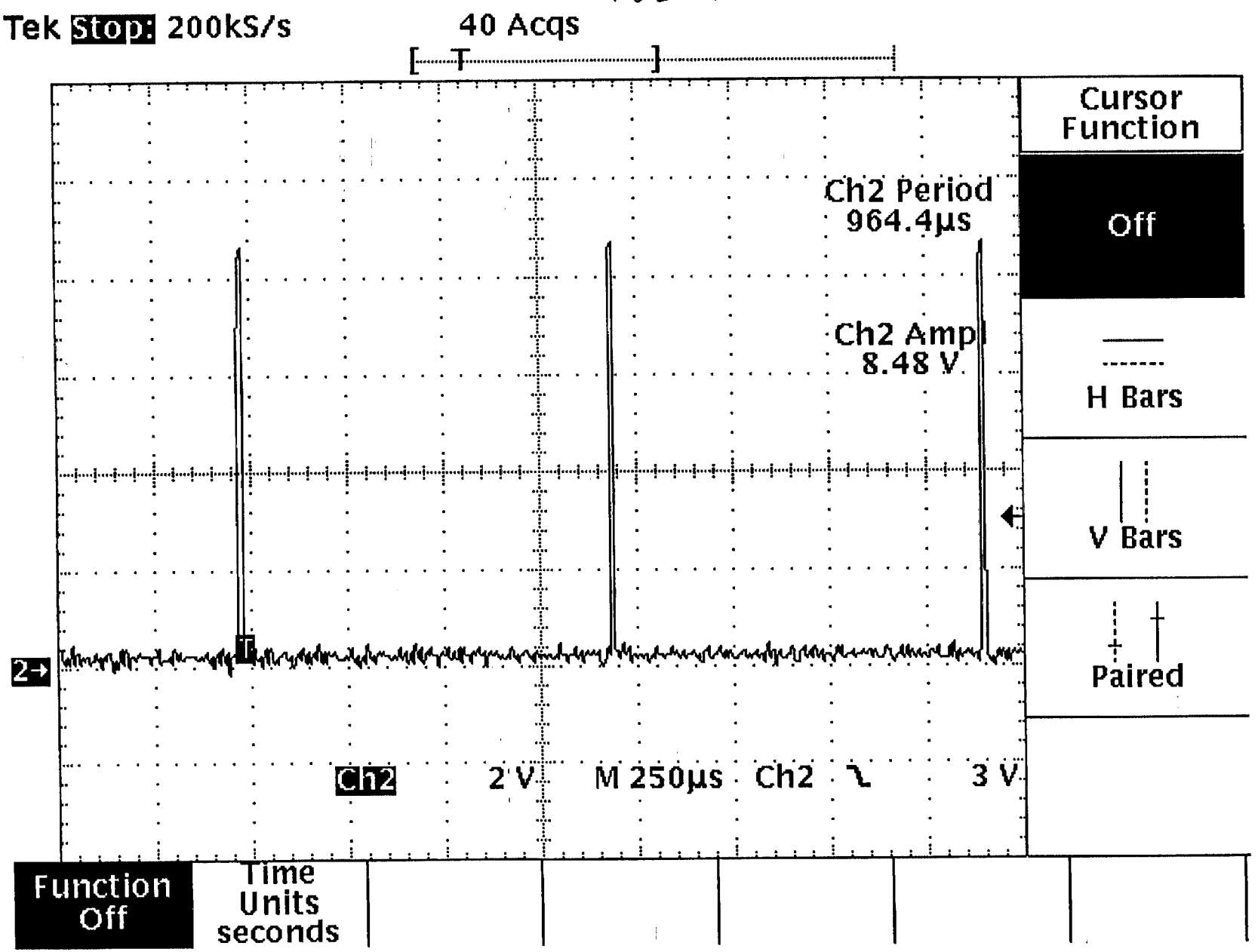
Customer Representative 12/2/98
(Flight Hardware Only) Date

Quality Control NOV 24 '98
Date

TDS 9


Tek Run: 5MS/s Sample
Δ 12.4µs
@ 60µs
Cursor Function
Off
H Bars
V Bars
Paired
Ch2 2 V M 10µs Ch2 ∫ 3 V
Function V Bars
Time Units seconds

TDS 10


Tek Stop: 200kS/s
40 Acqs
Ch2 Period
964.4µs
Ch2 Ampl
8.48 V
Cursor
Function
Off
H Bars
V Bars
Paired
Ch2
2 V
M 250µs
Ch2
3 V
Function
Off
Time
Units
seconds

TEST DATA SHEET 11
"8 Seconds" Frame Sync Pulse (Paragraph 3.2.4.3.2.4)

"8 SECONDS" FRAME SYNC PULSE
Attach Photograph or Plot Here
(Record of "C" timing only is required)

Step	Parameter	Measured/ Calculated	Required	Pass/ Fail
1*	Frame Sync Pulse Timing (G)*	8 Sec	8 Sec ±10%	Pass
	Frame Sync Pulse Timing (C)*	241 µs	240.4 µs ±10%	Pass
	Frame Sync Pulse Amplitude	8.48 Volts	9.0 ±1.0 V	Pass

* Refer to Figure 13 for location of the timing pulses for G and C.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer 11/24/98 Date

Customer Representative (Flight Hardware Only) 12/2/98 Date

Quality Control 268 NOV 24 '98 Date

TEST DATA SHEET 12 (Sheet 1 of 2)
Synchronization Signals Relationship (Paragraph 3.2.4.3.2.5)

A1 Select pulse and the 8 seconds Frame sync pulse.

ATTACH PHOTOGRAPH OR PLOT HERE

Verify that the sync pulse between H and C is as shown in Figure 13.

TIME MEASURED: 1.2ms

TIME REQUIRED: 1.2 ms ±10%

PASS/FAIL P

Circle Test: (CPT) LPT

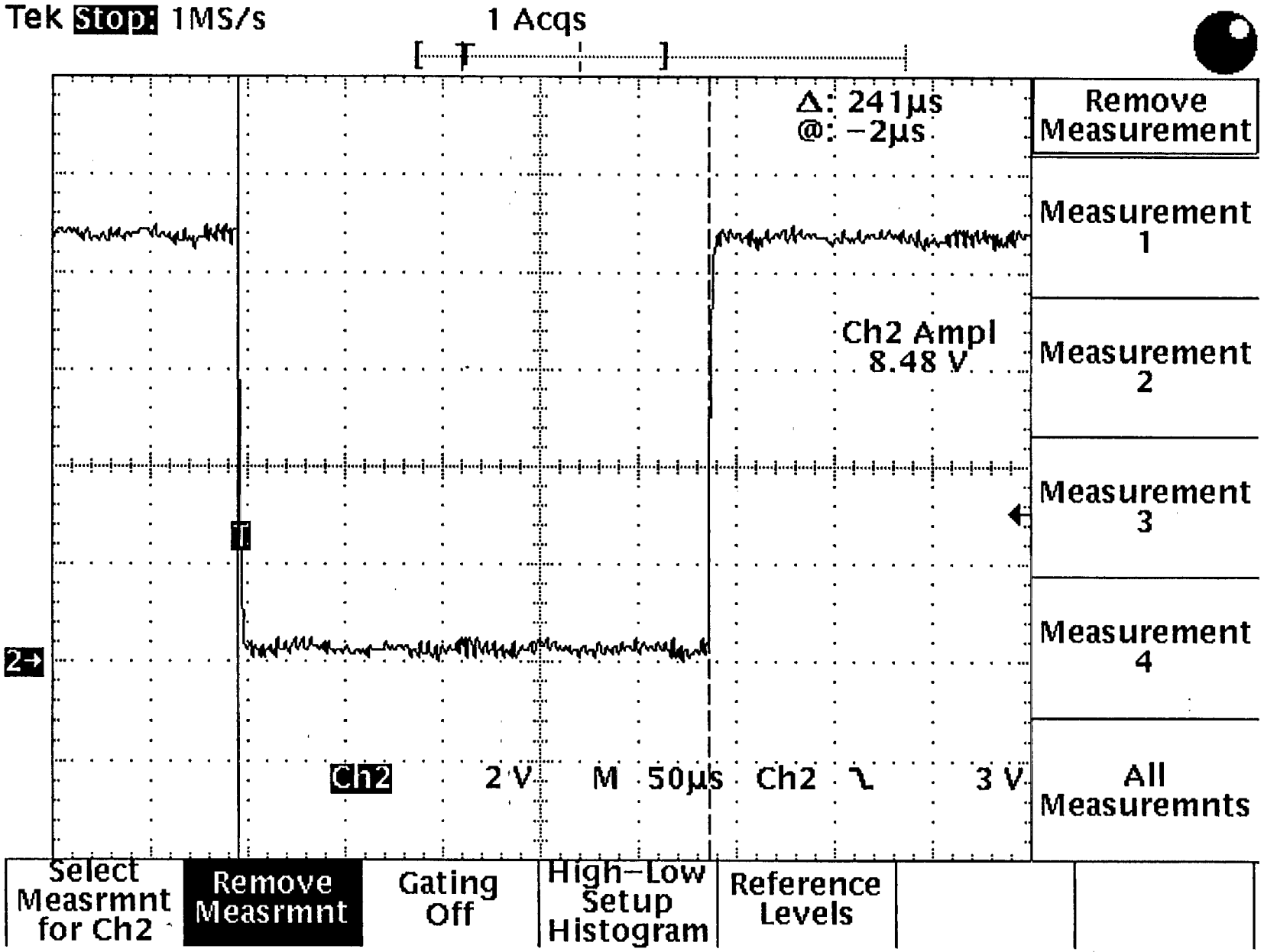
METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer 11/24/98
Date

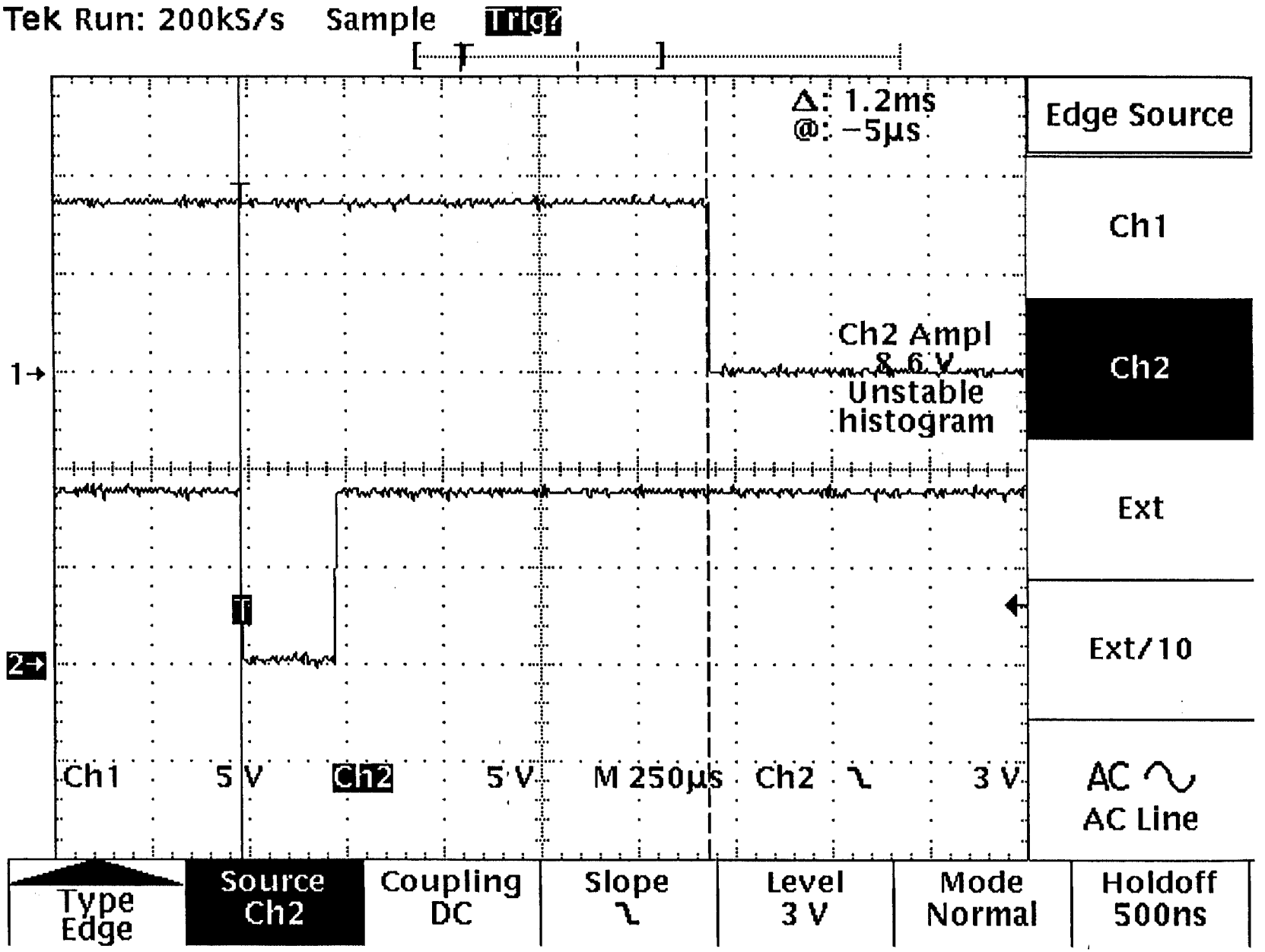
Customer Representative 12/2/98
(Flight Hardware Only) Date

Quality Control NOV 24 '98
Date

TDS11


Tek Stop: 1MS/s
1 Acqs
Δ: 241µs
@: −2µs
Ch2 Ampl
8.48 V
Ch2 2 V M 50µs Ch2 ∖ 3 V
Remove Measurement
Measurement 1
Measurement 2
Measurement 3
Measurement 4
All Measuremnts
Select Measrmnt for Ch2
Remove Measrmnt
Gating Off
High−Low Setup Histogram
Reference Levels

TDS.—
TDS12 sheet1



TEST DATA SHEET 12 (Sheet 2 of 2)
Synchronization Signals Relationship (Paragraph 3.2.4.3.2.5)

A1 Select pulse and the C1 Shift pulse.

ATTACH PHOTOGRAPH OR PLOT HERE

Verify that the sync pulse between I and E is as shown in Figure 13.

TIME MEASURED: 24 µs

TIME REQUIRED: 24 µs ±1 µs

PASS/FAIL PASS

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer 11/24/98
Date

Customer Representative 12/2/98
(Flight Hardware Only) Date

7A
268

Quality Control NOV 24 '98
Date

TEST DATA SHEET 13

Synchronization Signals Relationship (Paragraph 3.2.4.3.2.5)

A1 Select pulse and the 1.248 MHz clock.

ATTACH PHOTOGRAPH OR PLOT HERE

Verify that the sync pulse between I and J is as shown in Figure 13.

PASS/FAIL PASS

Circle Test: (CPT) LPT

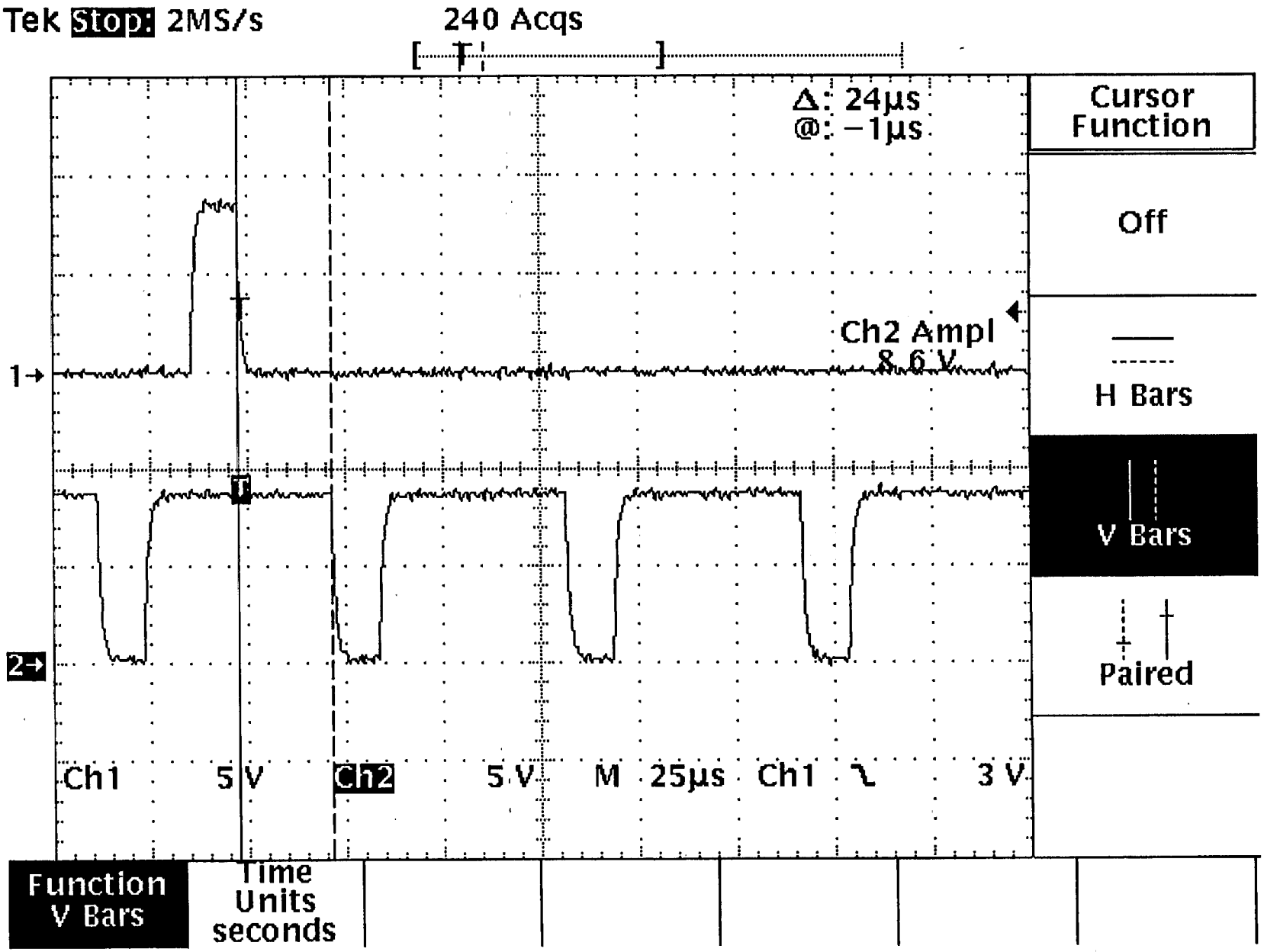
METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer 11/24/98 Date

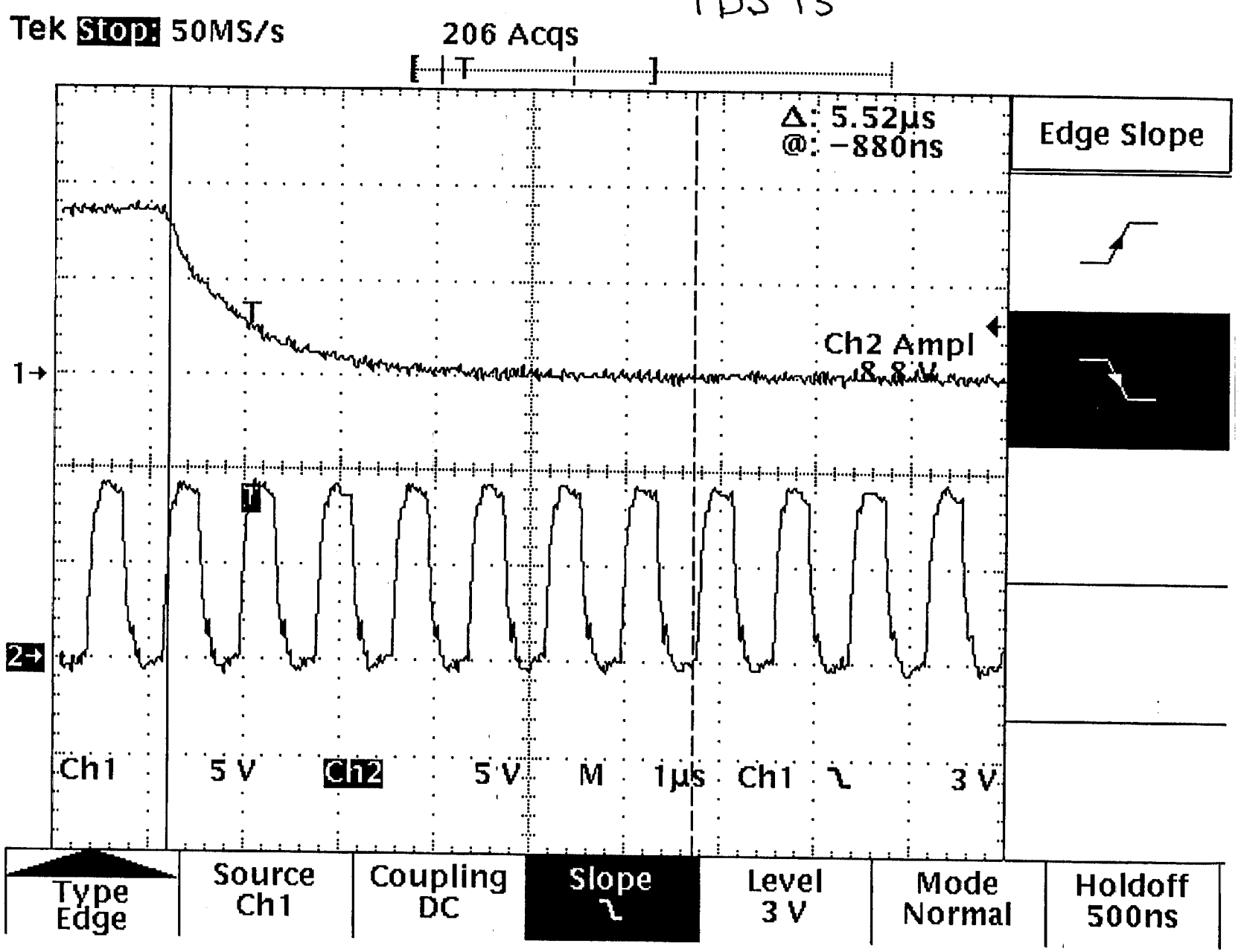
Customer Representative (Flight Hardware Only) DCMC 12/2/98 Date

Quality Control IA 268 NOV 24 '98 Date

TDS 12 sheet2



TDS 13


Tek Stop: 50MS/s
206 Acqs
Δ: 5.52µs
@: −880ns
Edge Slope
Ch2 Ampl
8.8 V
1→
2→
Ch1 5 V Ch2 5 V M 1µs Ch1 ↘ 3 V
Type Edge
Source Ch1
Coupling DC
Slope ↘
Level 3 V
Mode Normal
Holdoff 500ns

TEST DATA SHEET 14

Commands and Digital-B Telemetry Verification (Paragraphs 3.2.4.3.3.1, 3.2.4.3.3.2, 3.2.4.3.3.3, and 3.2.4.3.3.4)

Test	Digital-B Commands Verification Via STE			Visual Inspection		Pass/Fail
	Command	Observed	Required	Observed	Required	
3.2.4.3.3.1 Module Totally Off	Scanner A1-1	OFF	OFF	POINTING TO WARM LOAD	Antenna pointing to warm load.	Pass
	Scanner A1-2	OFF	OFF	Pointing to WARM LOAD	Antenna pointing to warm load.	Pass
	Module Power	DISCONNECT	Disconnect	N/A	N/A	Pass
	Survival Htr. Power.	OFF	OFF	ØA	28 V supply current=0	Pass
3.2.4.3.3.2 Survival Heater Power	Survival Heater ON	ON	ON	N/A	N/A	Pass
	Survival Heater OFF	OFF	OFF	N/A	N/A	Pass
3.2.4.3.3.3 Module Power Connect	Module Power	Connect	Connect	2.5A	+28 V DC current is between 0.5 and 3.2 amps.	Pass
3.2.4.3.3.4 PLL Power	PLLO#2	PLLO #2	PLLO#2	N/A	N/A	Pass
	PLLO#1	PLLO#1	PLLO#1	N/A	N/A	Pass

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 43dd3 S/N: 105

Test Systems Engineer 11/24/98 Date

Customer Representative (Flight Hardware Only) 12/2/98 Date

Quality Control (268 7A) NOV 24 '98 Date

TEST DATA SHEET 15

Scanner Commands Verification (Paragraph 3.2.4.3.3.5, Step 1)

Test	Digital "B" Verification			Pass/Fail
	Command	Observed	Required	
Full Scan	1 Module Power	Connect	CONNECT	Pass
	2 Survival Heater	OFF	OFF	
	3 Scanner A1 Power	ON	ON	
	4 Scanner A2 Power	ON	ON	
	5 Antenna Warm Cal Pos.	NO	NO	
	6 Antenna Cold Cal Pos.	NO	NO	
	7 Antenna NADIR Position	NO	NO	
	8 Antenna Full Scan	YES	YES	
	9 PLL Power	PLL#1	PLL#1	
	10 Cold MSB	0	0	
	11 Cold LSB	0	0	Pass

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer 11/24/98 Date

Customer Representative DCMC 12/2/98 Date
(Flight Hardware Only)

7A 268

Quality Control NOV 24 '98 Date

TEST DATA SHEET 16

Scanner Commands Verification (Paragraph 3.2.4.3.3.5, Step 2)

Test	Digital "B" Verification			Pass/Fail
	Command	Observed	Required	
Full Scan	1 Module Power	Connect	CONNECT	Pass
	2 Survival Heater	OFF	OFF	
	3 Scanner A1 Power	OFF	OFF	
	4 Scanner A2 Power	OFF	OFF	
	5 Antenna Warm Cal Pos.	NO	NO	
	6 Antenna Cold Cal Pos.	NO	NO	
	7 Antenna NADIR Position	NO	NO	
	8 Antenna Full Scan	YES	YES	
	9 PLL Power	PLLO#1	PLLO#1	
	10 Cold MSB	0	0	
	11 Cold LSB	0	0	Pass

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer 11/24/98 Date

Customer Representative DCMC 12/2/98 Date
(Flight Hardware Only)

Quality Control (7A 268) NOV 24 '98 Date

TEST DATA SHEET 17

Scanner Commands Verification (Paragraph 3.2.4.3.3.5, Step 3)

Test	Digital "B" Verification			Pass/Fail
	Command	Observed	Required	
Full Scan	1 Module Power	CONNECT	CONNECT	Pass
	2 Survival Heater	OFF	OFF	
	3 Scanner A1 Power	ON	ON	
	4 Scanner A2 Power	ON	ON	
	5 Antenna Warm Cal Pos.	NO	NO	
	6 Antenna Cold Cal Pos.	NO	NO	
	7 Antenna NADIR Position	NO	NO	
	8 Antenna Full Scan	YES	YES	
	9 PLL Power	PLO#1	PLLO#1	
	10 Cold MSB	0	0	
	11 Cold LSB	0	0	Pass

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer — Date 11/24/98

Customer Representative (Flight Hardware Only) — Date 12/2/98 DCMC

Quality Control — Date NOV 24 '98

TEST DATA SHEET 18

Scanner Positions Commands (Paragraph 3.2.4.3.3.6)

Test	Digital "B" Verification				Pass/Fail
	Step/Description		Observed	Required	
Scanner Position Commands	1-Warm Cal.		YES	YES	Pass
	2-Cold Cal. Pos.	MSB	0	0	
		LSB	1	1	
	3-Cold Cal. Pos.	MSB	1	1	
		LSB	0	0	
	4-Cold Cal. Pos.	MSB	1	1	
		LSB	1	1	
	5-Cold Cal. Pos.	MSB	0	0	
		LSB	0	0	
	6-NADIR		YES	YES	
	7-Warm Cal		YES	YES	Pass

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 4366612 S/N: 105

Test Systems Engineer 11/24/98 Date

7A 268

NOV 24 '98

Customer Representative 12/2/98 Date
(Flight Hardware Only)

Quality Control Date

TEST DATA SHEET 19

Digital-A Data Output Full Scan Mode Synch Sequence,
Unit I.D./Serial Number and Digital-B Serial Data Verification
Sections [I], [II], and [III] (Paragraph 3.2.4.3.4.1)

Step	Element (For Ref)	Description	Recorded Value	Required Value	Pass/Fail
[I]	0001	Sync Sequence Byte 1	255	255	Pass
	0002	Sync Sequence Byte 2	255	255	↑
	0003	Sync Sequence Byte 3	255	255	
[II]	0004	Unit I.D. and Serial N	17	*	
[III]	0005	Digital-B Data Byte 1	2	2	
	0006	Digital-B Data Byte 2	14	14	
	0007	Digital-B Data Byte 3	0	0	↓
	0008	Digital-B Data Byte 4	0	0	Pass

* AMSU A1 Identification Words (data entered in decimal system)

	Binary	Decimal
AMSU-A1 S/N 101	00000001	1
AMSU-A1 S/N 102	00000101	5
AMSU-A1 S/N 103	00001001	9
AMSU-A1 S/N 104	00001101	13
AMSU-A1 S/N 105	00010001	17
AMSU-A1 S/N 106	00010101	21
AMSU-A1 S/N 107	00011001	25
AMSU-A1 S/N 108	00011101	29
AMSU-A1 S/N 109	00100001	33

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 43613 S/N: 105

[signature] 11/24/98
Test Systems Engineer Date

[signature] DCMC 12/2/98
Customer Representative (Flight Hardware Only) Date

(QC stamp: 7A 268) NOV 24 '98
Quality Control Date

```
AMSU  A1-17 A1.EXE     FULL SCAN MODE     P1 24-NOV-93 10:44:19  SCAN NUMBER   40
[ 5 ] DIGITAL A DATA   ELEMENT 0000

[ 6 ] DIGITAL B DATA   ELEMENT   00

[ 7 ] ANALOG DATA      ELEMENT   00

                                   COMMANDS
[ 9 ]  MODULE POWER =        CONNECT      ANTENNA IN COLD CAL POSIT = NO   [ 15 ]

[ 10 ] SURVIVAL HEATER POWER =     OFF    ANTENNA IN NADIR POSITION = NO   [ 16 ]

[ 11 ] MODULE TOTALLY OFF =        ON     ANTENNA IN FULL SCAN MODE = YES  [ 17 ]

[ 12 ] SCANNER A1 - 1 POWER =      ON     PLL POWER =              PLLO # 1 [ 18 ]

[ 13 ] SCANNER A1 - 2 POWER =      ON     COLD CAL POSITION MSB =    ZERO   [ 19 ]

[ 14 ] ANTENNA IN WARM CAL POSIT = NO     COLD CAL POSITION LSB =    ZERO   [ 20 ]

          POWER [ 4 ]  ON
                       SCREEN ONLY [ 2 ]  PRINT  [ 3 ] FULL       [ 1 ] RETURN
 SELECT TOUCHSCREEN BUTTON 3
```

TDS 19
TDS 22

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
1	SYNC SEQUENCE BYTE 1	11111111	572	SCENE DATA BP 17 CH 8	16360
2	SYNC SEQUENCE BYTE 2	11111111	574	CH 9	17211
3	SYNC SEQUENCE BYTE 3	11111111	576	CH 10	16418
4	UNIT ID AND SERIAL NO	00010001	578	CH 11	16184
5	DIGITAL B DATA BYTE 1	00000010	580	CH 12	16581
6	DIGITAL B DATA BYTE 2	00001110	582	CH 13	16303
7	DIGITAL B DATA BYTE 3	00000000	584	CH 14	16821
8	DIGITAL B DATA BYTE 4	00000000	586	CH 15	16551
10	REFLECTOR 1 POSITION 1	27	588	REFLECTOR 1 POSITION 18	2609
12	REFLECTOR 2 POSITION 1	16212	590	REFLECTOR 2 POSITION 18	2410
14	REFL 1 POS 1 2ND LOOK	27	592	REFL 1 POS 18 2ND LOOK	2603
16	REFL 2 POS 1 2ND LOOK	16212	594	REFL 2 POS 18 2ND LOOK	2405
18	SCENE DATA BP 1 CH 3	15741	596	SCENE DATA BP 18 CH 3	15713
20	CH 4	16541	598	CH 4	16518
22	CH 5	16827	600	CH 5	16823
24	CH 6	17079	602	CH 6	17123
26	CH 7	16111	604	CH 7	16128
28	CH 8	16367	606	CH 8	16375
30	CH 9	17178	608	CH 9	17211
32	CH 10	16397	610	CH 10	16423
34	CH 11	16175	612	CH 11	16204
36	CH 12	16511	614	CH 12	16522
38	CH 13	16231	616	CH 13	16240
40	CH 14	16710	618	CH 14	16744
42	CH 15	16532	620	CH 15	165
44	REFLECTOR 1 POSITION 2	179	622	REFLECTOR 1 POSITION 19	27
46	REFLECTOR 2 POSITION 2	16365	624	REFLECTOR 2 POSITION 19	2558
48	REFL 1 POS 2 2ND LOOK	177	626	REFL 1 POS 19 2ND LOOK	2755
50	REFL 2 POS 2 2ND LOOK	16361	628	REFL 2 POS 19 2ND LOOK	2556
52	SCENE DATA BP 2 CH 3	15710	630	SCENE DATA BP 19 CH 3	15710
54	CH 4	16522	632	CH 4	16512
56	CH 5	16806	634	CH 5	16804
58	CH 6	17091	636	CH 6	17097
60	CH 7	16109	638	CH 7	16112
62	CH 8	16351	640	CH 8	16352
64	CH 9	17179	642	CH 9	17177
66	CH 10	16394	644	CH 10	16399
68	CH 11	16177	646	CH 11	16179
70	CH 12	16508	648	CH 12	16512
72	CH 13	16234	650	CH 13	16229
74	CH 14	16735	652	CH 14	16730
76	CH 15	16534	654	CH 15	16533
78	REFLECTOR 1 POSITION 3	335	656	REFLECTOR 1 POSITION 20	2910
80	REFLECTOR 2 POSITION 3	131	658	REFLECTOR 2 POSITION 20	2712
82	REFL 1 POS 3 2ND LOOK	329	660	REFL 1 POS 20 2ND LOOK	2907
84	REFL 2 POS 3 2ND LOOK	130	662	REFL 2 POS 20 2ND LOOK	2708
86	SCENE DATA BP 3 CH 3	15705	664	SCENE DATA BP 20 CH 3	15709
88	CH 4	16513	666	CH 4	16512
90	CH 5	16803	668	CH 5	16798
92	CH 6	17079	670	CH 6	17093

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	16116	672	CH 7	16108
96	CH 8	16334	674	CH 8	16339
98	CH 9	17189	676	CH 9	17181
100	CH 10	16399	678	CH 10	16396
102	CH 11	16190	680	CH 11	16184
104	CH 12	16521	682	CH 12	16514
106	CH 13	16226	684	CH 13	16235
108	CH 14	16726	686	CH 14	16710
110	CH 15	16537	688	CH 15	16534
112	REFLECTOR 1 POSITION 4	483	690	REFLECTOR 1 POSITION 21	3064
114	REFLECTOR 2 POSITION 4	285	692	REFLECTOR 2 POSITION 21	2865
116	REFL 1 POS 4 2ND LOOK	480	694	REFL 1 POS 21 2ND LOOK	3059
118	REFL 2 POS 4 2ND LOOK	281	696	REFL 2 POS 21 2ND LOOK	2860
120	SCENE DATA BP 4 CH 3	15702	698	SCENE DATA BP 21 CH 3	15706
122	CH 4	16512	700	CH 4	16512
124	CH 5	16797	702	CH 5	16800
126	CH 6	17095	704	CH 6	17093
128	CH 7	16117	706	CH 7	16111
130	CH 8	16375	708	CH 8	16334
132	CH 9	17197	710	CH 9	17178
134	CH 10	16426	712	CH 10	16399
136	CH 11	16219	714	CH 11	16179
138	CH 12	16508	716	CH 12	16516
140	CH 13	16213	718	CH 13	16238
12	CH 14	16688	720	CH 14	16714
144	CH 15	16548	722	CH 15	16534
146	REFLECTOR 1 POSITION 5	635	724	REFLECTOR 1 POSITION 22	3211
148	REFLECTOR 2 POSITION 5	436	726	REFLECTOR 2 POSITION 22	3014
150	REFL 1 POS 5 2ND LOOK	633	728	REFL 1 POS 22 2ND LOOK	3210
152	REFL 2 POS 5 2ND LOOK	433	730	REFL 2 POS 22 2ND LOOK	3011
154	SCENE DATA BP 5 CH 3	15703	732	SCENE DATA BP 22 CH 3	15707
156	CH 4	16512	734	CH 4	16512
158	CH 5	16800	736	CH 5	16804
160	CH 6	17102	738	CH 6	17091
162	CH 7	16138	740	CH 7	16114
164	CH 8	16359	742	CH 8	16346
166	CH 9	17202	744	CH 9	17179
168	CH 10	16390	746	CH 10	16394
170	CH 11	16201	748	CH 11	16185
172	CH 12	16530	750	CH 12	16515
174	CH 13	16242	752	CH 13	16235
176	CH 14	16729	754	CH 14	16703
178	CH 15	16544	756	CH 15	16533
180	REFLECTOR 1 POSITION 6	789	758	REFLECTOR 1 POSITION 23	3365
182	REFLECTOR 2 POSITION 6	589	760	REFLECTOR 2 POSITION 23	3167
184	REFL 1 POS 6 2ND LOOK	784	762	REFL 1 POS 23 2ND LOOK	3361
186	REFL 2 POS 6 2ND LOOK	585	764	REFL 2 POS 23 2ND LOOK	3163
188	SCENE DATA BP 6 CH 3	15705	766	SCENE DATA BP 23 CH 3	15707
190	CH 4	16509	768	CH 4	16513
92	CH 5	16798	770	CH 5	16802

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
194	CH 6	17104	772	CH 6	17087
196	CH 7	16144	774	CH 7	16106
198	CH 8	16336	776	CH 8	16337
200	CH 9	17208	778	CH 9	17179
202	CH 10	16398	780	CH 10	16395
204	CH 11	16205	782	CH 11	16177
206	CH 12	16576	784	CH 12	16505
208	CH 13	16298	786	CH 13	16237
210	CH 14	16785	788	CH 14	16708
212	CH 15	16554	790	CH 15	16531
214	REFLECTOR 1 POSITION 7	939	792	REFLECTOR 1 POSITION 24	3519
216	REFLECTOR 2 POSITION 7	739	794	REFLECTOR 2 POSITION 24	3321
218	REFL 1 POS 7 2ND LOOK	935	796	REFL 1 POS 24 2ND LOOK	3514
220	REFL 2 POS 7 2ND LOOK	736	798	REFL 2 POS 24 2ND LOOK	3315
222	SCENE DATA BP 7 CH 3	15702	800	SCENE DATA BP 24 CH 3	15704
224	CH 4	16511	802	CH 4	16511
226	CH 5	16795	804	CH 5	16803
228	CH 6	17092	806	CH 6	17090
230	CH 7	16115	808	CH 7	16109
232	CH 8	16342	810	CH 8	16339
234	CH 9	17180	812	CH 9	17178
236	CH 10	16393	814	CH 10	16390
238	CH 11	16181	816	CH 11	16173
240	CH 12	16529	818	CH 12	16522
12	CH 13	16239	820	CH 13	162
244	CH 14	16728	822	CH 14	167
246	CH 15	16534	824	CH 15	16532
248	REFLECTOR 1 POSITION 8	1091	826	REFLECTOR 1 POSITION 25	3667
250	REFLECTOR 2 POSITION 8	892	828	REFLECTOR 2 POSITION 25	3469
252	REFL 1 POS 8 2ND LOOK	1087	830	REFL 1 POS 25 2ND LOOK	3665
254	REFL 2 POS 8 2ND LOOK	888	832	REFL 2 POS 25 2ND LOOK	3466
256	SCENE DATA BP 8 CH 3	15710	834	SCENE DATA BP 25 CH 3	15710
258	CH 4	16509	836	CH 4	16513
260	CH 5	16801	838	CH 5	16801
262	CH 6	17090	840	CH 6	17090
264	CH 7	16111	842	CH 7	16113
266	CH 8	16360	844	CH 8	16338
268	CH 9	17181	846	CH 9	17177
270	CH 10	16389	848	CH 10	16392
272	CH 11	16183	850	CH 11	16177
274	CH 12	16530	852	CH 12	16509
276	CH 13	16242	854	CH 13	16237
278	CH 14	16748	856	CH 14	16720
280	CH 15	16534	858	CH 15	16532
282	REFLECTOR 1 POSITION 9	1245	860	REFLECTOR 1 POSITION 26	3821
284	REFLECTOR 2 POSITION 9	1044	862	REFLECTOR 2 POSITION 26	3623
286	REFL 1 POS 9 2ND LOOK	1239	864	REFL 1 POS 26 2ND LOOK	3817
288	REFL 2 POS 9 2ND LOOK	1040	866	REFL 2 POS 26 2ND LOOK	3618
290	SCENE DATA BP 9 CH 3	15711	868	SCENE DATA BP 26 CH 3	15708
92	CH 4	16520	870	CH 4	16512

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	16803	872	CH 5	16802
296	CH 6	17090	874	CH 6	17092
298	CH 7	16113	876	CH 7	16111
300	CH 8	16344	878	CH 8	16349
302	CH 9	17180	880	CH 9	17177
304	CH 10	16394	882	CH 10	16390
306	CH 11	16188	884	CH 11	16183
308	CH 12	16516	886	CH 12	16519
310	CH 13	16221	888	CH 13	16235
312	CH 14	16706	890	CH 14	16709
314	CH 15	16532	892	CH 15	16533
316	REFLECTOR 1 POSITION 10	1395	894	REFLECTOR 1 POSITION 27	3974
318	REFLECTOR 2 POSITION 10	1194	896	REFLECTOR 2 POSITION 27	3774
320	REFL 1 POS 10 2ND LOOK	1390	898	REFL 1 POS 27 2ND LOOK	3968
322	REFL 2 POS 10 2ND LOOK	1192	900	REFL 2 POS 27 2ND LOOK	3770
324	SCENE DATA BP 10 CH 3	15716	902	SCENE DATA BP 27 CH 3	15716
326	CH 4	16519	904	CH 4	16519
328	CH 5	16808	906	CH 5	16807
330	CH 6	17091	908	CH 6	17092
332	CH 7	16108	910	CH 7	16111
334	CH 8	16340	912	CH 8	16344
336	CH 9	17178	914	CH 9	17176
338	CH 10	16395	916	CH 10	16392
340	CH 11	16182	918	CH 11	16181
342	CH 12	16510	920	CH 12	16513
344	CH 13	16233	922	CH 13	16234
346	CH 14	16704	924	CH 14	16719
348	CH 15	16532	926	CH 15	16530
350	REFLECTOR 1 POSITION 11	1545	928	REFLECTOR 1 POSITION 28	4124
352	REFLECTOR 2 POSITION 11	1347	930	REFLECTOR 2 POSITION 28	3925
354	REFL 1 POS 11 2ND LOOK	1542	932	REFL 1 POS 28 2ND LOOK	4120
356	REFL 2 POS 11 2ND LOOK	1343	934	REFL 2 POS 28 2ND LOOK	3921
358	SCENE DATA BP 11 CH 3	15708	936	SCENE DATA BP 28 CH 3	15716
360	CH 4	16516	938	CH 4	16537
362	CH 5	16803	940	CH 5	16817
364	CH 6	17095	942	CH 6	17094
366	CH 7	16114	944	CH 7	16105
368	CH 8	16350	946	CH 8	16371
370	CH 9	17181	948	CH 9	17179
372	CH 10	16398	950	CH 10	16392
374	CH 11	16175	952	CH 11	16181
376	CH 12	16519	954	CH 12	16514
378	CH 13	16240	956	CH 13	16229
380	CH 14	16708	958	CH 14	16694
382	CH 15	16534	960	CH 15	16533
384	REFLECTOR 1 POSITION 12	1698	962	REFLECTOR 1 POSITION 29	4275
386	REFLECTOR 2 POSITION 12	1500	964	REFLECTOR 2 POSITION 29	4076
388	REFL 1 POS 12 2ND LOOK	1694	966	REFL 1 POS 29 2ND LOOK	4272
390	REFL 2 POS 12 2ND LOOK	1495	968	REFL 2 POS 29 2ND LOOK	4073
392	SCENE DATA BP 12 CH 3	15713	970	SCENE DATA BP 29 CH 3	15762

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VA
394	CH 4	16514	972	CH 4	16581
396	CH 5	16800	974	CH 5	16870
398	CH 6	17095	976	CH 6	17089
400	CH 7	16111	978	CH 7	16113
402	CH 8	16363	980	CH 8	16404
404	CH 9	17176	982	CH 9	17175
406	CH 10	16396	984	CH 10	16395
408	CH 11	16185	986	CH 11	16179
410	CH 12	16509	988	CH 12	16509
412	CH 13	16212	990	CH 13	16233
414	CH 14	16720	992	CH 14	16707
416	CH 15	16535	994	CH 15	16532
418	REFLECTOR 1 POSITION 13	1847	996	REFLECTOR 1 POSITION 30	4429
420	REFLECTOR 2 POSITION 13	1650	998	REFLECTOR 2 POSITION 30	4226
422	REFL 1 POS 13 2ND LOOK	1845	1000	REFL 1 POS 30 2ND LOOK	4424
424	REFL 2 POS 13 2ND LOOK	1646	1002	REFL 2 POS 30 2ND LOOK	4225
426	SCENE DATA BP 13 CH 3	15723	1004	SCENE DATA BP 30 CH 3	15718
428	CH 4	16535	1006	CH 4	16531
430	CH 5	16806	1008	CH 5	16811
432	CH 6	17125	1010	CH 6	17088
434	CH 7	16133	1012	CH 7	16108
436	CH 8	16359	1014	CH 8	16358
438	CH 9	17202	1016	CH 9	17180
440	CH 10	16408	1018	CH 10	16399
12	CH 11	16196	1020	CH 11	161
44	CH 12	16547	1022	CH 12	165
446	CH 13	16261	1024	CH 13	16222
448	CH 14	16738	1026	CH 14	16719
450	CH 15	16550	1028	CH 15	16533
452	REFLECTOR 1 POSITION 14	2001	1030	REFLECTOR 1 COLD CAL POS	6021
454	REFLECTOR 2 POSITION 14	1801	1032	REFLECTOR 2 COLD CAL POS	5820
456	REFL 1 POS 14 2ND LOOK	1997	1034	REFL 1 COLD CAL 2ND LOOK	6021
458	REFL 2 POS 14 2ND LOOK	1798	1036	REFL 2 COLD CAL 2ND LOOK	5819
460	SCENE DATA BP 14 CH 3	15715	1038	COLD CAL DATA 1 CH 3	15721
462	CH 4	16531	1040	CH 4	16535
464	CH 5	16820	1042	CH 5	16809
466	CH 6	17112	1044	CH 6	17085
468	CH 7	16120	1046	CH 7	16112
470	CH 8	16358	1048	CH 8	16351
472	CH 9	17204	1050	CH 9	17177
474	CH 10	16412	1052	CH 10	16391
476	CH 11	16179	1054	CH 11	16184
478	CH 12	16562	1056	CH 12	16507
480	CH 13	16293	1058	CH 13	16228
482	CH 14	16782	1060	CH 14	16709
484	CH 15	16548	1062	CH 15	16534
486	REFLECTOR 1 POSITION 15	2154	1064	COLD CAL DATA 2 CH 3	15725
488	REFLECTOR 2 POSITION 15	1955	1066	CH 4	16536
490	REFL 1 POS 15 2ND LOOK	2149	1068	CH 5	16806
92	REFL 2 POS 15 2ND LOOK	1950	1070	CH 6	17089

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	SCENE DATA BP 15 CH 3	15720	1072	CH 7	16113
496	CH 4	16532	1074	CH 8	16349
498	CH 5	16821	1076	CH 9	17181
500	CH 6	17119	1078	CH 10	16391
502	CH 7	16138	1080	CH 11	16182
504	CH 8	16351	1082	CH 12	16508
506	CH 9	17212	1084	CH 13	16226
508	CH 10	16400	1086	CH 14	16730
510	CH 11	16214	1088	CH 15	16532
512	CH 12	16539	1182	REFLECTOR 1 WARM CAL POS	10419
514	CH 13	16230	1184	REFLECTOR 2 WARM CAL POS	10220
516	CH 14	16702	1186	REFL 1 WARM CAL 2ND LOOK	10419
518	CH 15	16545	1188	REFL 2 WARM CAL 2ND LOOK	10220
520	REFLECTOR 1 POSITION 16	2302	1190	WARM CAL DATA 1 CH 3	15710
522	REFLECTOR 2 POSITION 16	2105	1192	CH 4	16516
524	REFL 1 POS 16 2ND LOOK	2303	1194	CH 5	16802
526	REFL 2 POS 16 2ND LOOK	2101	1196	CH 6	17075
528	SCENE DATA BP 16 CH 3	15747	1198	CH 7	16104
530	CH 4	16558	1200	CH 8	16345
532	CH 5	16853	1202	CH 9	17169
534	CH 6	17098	1204	CH 10	16393
536	CH 7	16153	1206	CH 11	16175
538	CH 8	16384	1208	CH 12	16514
540	CH 9	17212	1210	CH 13	16212
12	CH 10	16397	1212	CH 14	16709
44	CH 11	16205	1214	CH 15	16529
546	CH 12	16541	1216	WARM CAL DATA 2 CH 3	15707
548	CH 13	16267	1218	CH 4	16512
550	CH 14	16737	1220	CH 5	16804
552	CH 15	16550	1222	CH 6	17084
554	REFLECTOR 1 POSITION 17	2455	1224	CH 7	16103
556	REFLECTOR 2 POSITION 17	2258	1226	CH 8	16345
558	REFL 1 POS 17 2ND LOOK	2452	1228	CH 9	17170
560	REFL 2 POS 17 2ND LOOK	2253	1230	CH 10	16389
562	SCENE DATA BP 17 CH 3	15715	1232	CH 11	16180
564	CH 4	16528	1234	CH 12	16507
566	CH 5	16814	1236	CH 13	16214
568	CH 6	17111	1238	CH 14	16722
570	CH 7	16125	1240	CH 15	16529

AMSU A1_17 A1.EXE DIGITAL A DATA 24-NOV-93 10:44:24 PAGE 7
FULL SCAN MODE

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	17879	23.15
1092	SCAN MOTOR A1-2	18452	23.84
1094	FEEDHORN A1-1	19734	25.96
1096	FEEDHORN A1-2	20873	26.72
1098	RF MUX A1-1	20616	28.20
1100	RF MUX A1-2	21384	29.95
1102	LOCAL OSCILLATOR CHANNEL 3	22521	31.94
1104	LOCAL OSCILLATOR CHANNEL 4	22678	32.17
1106	LOCAL OSCILLATOR CHANNEL 5	22177	30.94
1108	LOCAL OSCILLATOR CHANNEL 6	20566	28.22
1110	LOCAL OSCILLATOR CHANNEL 7	21188	29.31
1112	LOCAL OSCILLATOR CHANNEL 8	22135	31.56
1114	LOCAL OSCILLATOR CHANNEL 15	21499	30.93
1116	PLL LO #2 CHANNELS 9 THROUGH 14	20427	28.56
1118	PLL LO #1 CHANNELS 9 THROUGH 14	22596	32.54
1120	SPARE (NOT USED)	32767	52.86
1122	MIXER/IF AMPLIFIER CHANNEL 3	21988	30.60
1124	MIXER/IF AMPLIFIER CHANNEL 4	21605	30.60
1126	MIXER/IF AMPLIFIER CHANNEL 5	21509	30.15
1128	MIXER/IF AMPLIFIER CHANNEL 6	20946	28.80
1130	MIXER/IF AMPLIFIER CHANNEL 7	21172	29.32
1132	MIXER/IF AMPLIFIER CHANNEL 8	21563	30.72
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	20380	28.44
1136	MIXER/IF AMPLIFIER CHANNEL 15	21601	30.64
38	IF AMPLIFIER CHANNEL 11 THRU 14	21441	30.18
1140	IF AMPLIFIER CHANNEL 9	21880	30.19
1142	IF AMPLIFIER CHANNEL 10	21478	30.36
1144	IF AMPLIFIER CHANNEL 11	20824	28.55
1146	DC/DC CONVERTER	22118	30.92
1148	IF AMPLIFIER CHANNEL 13	20935	28.49
1150	IF AMPLIFIER CHANNEL 14	20598	28.47
1152	IF AMPLIFIER CHANNEL 12	20589	28.44
1154	RF SHELF A1-1	21186	29.30
1156	RF SHELF A1-2	21374	29.85
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	19990	26.69
1160	A1-1 WARM LOAD 1	22968	23.38
1162	A1-1 WARM LOAD 2	23168	23.42
1164	A1-1 WARM LOAD 3	23236	23.48
1166	A1-1 WARM LOAD 4	22920	23.43
1168	A1-1 WARM LOAD CENTER	23101	23.47
1170	A1-2 WARM LOAD 1	23926	24.74
1172	A1-2 WARM LOAD 2	23762	24.72
1174	A1-2 WARM LOAD 3	23797	24.78
1176	A1-2 WARM LOAD 4	23716	24.76
1178	A1-2 WARM LOAD CENTER	23587	24.64
1180	TEMP SENSOR REFERENCE VOLTAGE	24884	

FULL SCAN MODE

DESCRIPTION	STATUS	STATUS	STATUS
SCANNER A1-1 POWER	ON	ON	ON
SCANNER A1-2 POWER	ON	ON	ON
PLL POWER	PLLO # 1	PLLO # 1	PLLO # 1
ANTENNA IN WARM CAL POSITION MODE	NO	NO	NO
ANTENNA IN COLD CAL POSITION MODE	NO	NO	NO
ANTENNA IN NADIR POSITION MODE	NO	NO	NO
ANTENNA IN FULL SCAN MODE	YES	YES	YES
SURVIVAL HEATER POWER	OFF	OFF	OFF
MODULE POWER	CONNECT	CONNECT	CONNECT
COLD CAL POSITION MSB	ZERO	ZERO	ZERO
COLD CAL POSITION LSB	ZERO	ZERO	ZERO

ANALOG DATA

DESCRIPTION	VALUE	DEG C	VALUE	DEG C	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	217	22.1	217	22.1	217	22.1
A1-2 SCANNER MOTOR TEMPERATURE	219	24.8	219	24.8	219	24.8
A1-1 RF SHELF TEMPERATURE	220	26.2	220	26.2	220	26.2
A1-2 RF SHELF TEMPERATURE	222	28.9	222	28.9	222	28.9
A1-1 WARM LOAD TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-2 WARM LOAD TEMPERATURE	219	24.8	219	24.8	219	24.8

DESCRIPTION	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS
A1-1 ANTENNA DRIVE MOTOR CURRENT (AVRG)	106	49.40	106	49.40	106	49.40
A1-2 ANTENNA DRIVE MOTOR CURRENT (AVRG)	98	45.67	98	45.67	98	45.67
SIGNAL PROCESSING +15 VDC	173	14.93	173	14.93	173	14.93
ANTENNA DRIVE +15 VDC	176	15.19	175	15.10	176	15.19
SIGNAL PROCESSING -15 VDC	151	-15.00	151	-15.00	151	-15.00
ANTENNA DRIVE -15 VDC	153	-14.90	152	-14.95	153	-14.90
RECEIVER AMPLIFIER +8 VDC	159	7.95	159	7.95	159	7.95
SIGNAL PROCESSOR +5 VDC	148	4.93	148	4.93	148	4.93
ANTENNA DRIVE +5 VDC	150	5.00	149	4.97	150	5.00
RECEIVER MIXER/IF +10 VDC	172	9.94	172	9.94	172	9.94
PHASE LOCK LOOP (CHANNEL 9/14) +15 VDC	172	14.84	172	14.84	172	14.84
PHASE LOCK LOOP (CHANNEL 9/14) -15 VDC	146	-15.25	146	-15.25	146	-15.25
L.O. VOLTAGE (CHANNEL 8) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 7) VDC	173	9.90	173	9.90	173	9.90
L.O. VOLTAGE (CHANNEL 6) VDC	175	10.01	175	10.01	175	10.01
L.O. VOLTAGE (CHANNEL 3) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 4) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 5) VDC	173	9.90	172	9.84	173	9.90
PLLO # 2 LOCK DETECT	5	0.10	5	0.10	5	0.10
PLLO # 1 LOCK DETECT	221	4.42	221	4.42	222	4.44
L.O. VOLTAGE (CHANNEL 15) VDC	172	14.84	172	14.84	172	14.84

PRT TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
VARIABLE TARGET	615	42.00	601	14.00
	616	43.00	602	15.00
	617	44.00	603	16.00
	618	45.00	604	17.00
	619	46.00	605	18.00
	620	47.00	606	19.00
	621	48.00	607	20.00
FIXED TARGET	622	49.00	608	21.00
	623	50.00	609	22.00
	624	51.00	610	23.00
	625	52.00	611	24.00
	626	53.00	612	25.00
	627	67.00	613	69.00
	628	68.00	614	70.00
BASEPLATE	629	71.00	630	72.00
	631	26.00	632	27.00

THERMOCOUPLE TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
FIXED TARGET SHROUD	558	5.00	537	34.00
	559	6.00	538	35.00
VARIABLE TARGET SHROUD	550	7.00	524	36.00
	551	8.00	525	37.00
FIXED TARGET N2	506	57.00	502	30.00
	507	58.00	503	31.00
VARIABLE TARGET N2	516	59.00	511	32.00
	517	60.00	512	33.00
HEATER N2	514	1.00	509	38.00
	515	2.00	510	39.00
FIXED TARGET FLOW METER	508	63.00	504	61.00
VARIABLE TARGET FLOW METER	518	64.00	513	62.00
BASEPLATE HEATER N2	519	3.00	520	4.00
BASEPLATE N2	521	9.00	522	10.00
BASEPLATE FLOW METER	523	65.00		
ADJUNCT RADIATORS	575	73.00	577	74.00
	579	75.00	581	76.00

TEST DATA SHEET 20

Reflector Positions Section [IV] (Paragraph 3.2.4.3.4.1)

BP	A1-1 Reflector				A1-2 Reflector			
	Element (For Ref)	Measured*	Required**	Pass/Fail	Element (For Ref)	Measured*	Required**	Pass/Fail
01	0014			P	0016			P
02	0048				0050			
03	0082				0084			
04	0116				0118			
05	0150				0152			
06	0184				0186			
07	0218				0220			
08	0252				0254			
09	0286				0288			
10	0320				0322			
11	0354				0356			
12	0388				0390			
13	0422				0424			
14	0456				0458			
15	0490				0492			
16	0524				0526			
17	0558				0560			
18	0592				0594			
19	0626				0628			
20	0660				0662			
21	0694				0696			
22	0728				0730			
23	0762				0764			
24	0796				0798			
25	0830				0832			
26	0864				0866			
27	0890				0900			
28	0932				0934			
29	0966				0968			
30	1000				1002			
~~WL~~ WC	1034				1036			P
~~CL~~ CC	1186			P	1188			P

* Actual counts from computer printout. Rewriting counts on this data sheet is optional.

** Required range for instrument serial number from TDS 6 of AE-26002/1 ~~15~~ 10 counts. Rewriting range on this data sheet is optional.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer — 11/24/98 — Date

Customer Representative (Flight Hardware Only) — 12/2/98 — Date

Quality Control — NOV 30 '98 — Date

11/30/98

TEST DATA SHEET 21

Digital-A Data Output Radiometer Data Section [V] (Paragraph 3.2.4.3.4.1)

BP	A1-2 Channel-3 (50.3 GHz)				A1-1 Channel-9 (57.290344 GHz)			
	Element (For Ref)	Position*	Required**	Pass/Fail	Element (For Ref)	Position*	Required**	Pass/Fail
01	0018			P	0030			P
02	0052				0064			
03	0086				0098			
04	0120				0132			
05	0154				0166			
06	0188				0200			
07	0222				0234			
08	0256				0268			
09	0290				0302			
10	0324				0336			
11	0356				0370			
12	0392				0404			
13	0426				0438			
14	0460				0472			
15	0494				0506			
16	0528				0540			
17	0562				0574			
18	0596				0608			
19	0630				0642			
20	0664				0676			
21	0698				0710			
22	0732				0744			
23	0766				0778			
24	0800				0812			
25	0834				0846			
26	0868				0880			
27	0902				0914			
28	0936				0948			
29	0970				0982			
30	1004				1016			
CCWC	1038				1050			P
WL	1190			P	1202			P

* Actual counts from computer printout. Rewriting counts on this data sheet is optional.

** Required = 16,500 ± 4000 counts.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer — Date 11/24/98

Customer Representative (Flight Hardware Only) — Date 11/24/98

(QA 268) Quality Control — Date NOV 24 '98

AMSU A1-17 A1.EXE FULL SCAN MODE P1 24-NOV-93 10:46:55 SCAN NUMBER 42
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

REFLECTOR POSITIONS 1

BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2
1	27	27	9	1245	1239	17	2455	2452	25	3668	3665
2	179	177	10	1394	1390	18	2609	2603	26	3822	3817
3	334	329	11	1545	1542	19	2760	2755	27	3975	3968
4	482	480	12	1698	1694	20	2910	2907	28	4124	4120
5	635	632	13	1847	1845	21	3064	3059	29	4274	4272
6	789	785	14	2002	1997	22	3211	3210	30	4429	4424
7	939	935	15	2154	2149	23	3365	3361	CC	6021	6021
8	1091	1087	16	2302	2306	24	3519	3514	WC	10419	10419

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

TDS20

AMSU A1-17 A1.EXE FULL SCAN MODE P1 24-NOV-93 10:47:27 SCAN NUMBER 42
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

REFLECTOR POSITIONS 2

BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2
1	16212	16212	9	1045	1040	17	2258	2253	25	3469	3466
2	16365	16361	10	1195	1192	18	2410	2405	26	3621	3619
3	130	128	11	1347	1343	19	2559	2556	27	3775	3770
4	285	281	12	1500	1495	20	2713	2709	28	3925	3921
5	437	432	13	1650	1646	21	2864	2860	29	4076	4073
6	589	585	14	1802	1799	22	3015	3011	30	4226	4225
7	740	736	15	1956	1950	23	3167	3163	CC	5820	5820
8	893	888	16	2105	2101	24	3321	3315	WC	10220	10220

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

AMSU A1-17 A1.EXE FULL SCAN MODE P1 24-NOV-93 11:21:18 SCAN NUMBER 67?

[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

RADIOMETRIC DATA
CHANNEL 3

BP	DATA	BP	DATA	BP	DATA	BP	DATA
1	15691	9	15656	17	15667	25	15660
2	15667	10	15663	18	15667	26	15657
3	15654	11	15661	19	15660	27	15676
4	15656	12	15662	20	15655	28	15673
5	15655	13	15676	21	15658	29	15718
6	15657	14	15667	22	15662	30	15665
7	15655	15	15671	23	15658	CC	15679
8	15655	16	15700	24	15653	WC	15660

[21] UP [22] DOWN

POWER [4] ON

SCREEN ONLY [2] PRINT [3] FULL [1] RETURN

SELECT TOUCHSCREEN BUTTON 2

TPS 21

AMSU A1-17 A1.EXE FULL SCAN MODE P1 24-NOV-93 11:21:43 SCAN NUMBER 68
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

RADIOMETRIC DATA
CHANNEL 9

BP	DATA	BP	DATA	BP	DATA	BP	DATA
1	17102	9	17101	17	17142	25	17108
2	17107	10	17102	18	17140	26	17104
3	17112	11	17106	19	17109	27	17103
4	17126	12	17104	20	17103	28	17104
5	17134	13	17130	21	17103	29	17102
6	17137	14	17135	22	17103	30	17101
7	17106	15	17138	23	17103	CC	17102
8	17103	16	17147	24	17102	WC	17100

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

TEST DATA SHEET 22 (Sheet 1 of 2)
Full Scan Mode Temperature Sensors Section [VI] (Paragraph 3.2.4.3.4.1)

Thermistor Sensors		Recorded Value* (deg. C)	Required Value (deg. C)	Pass/ Fail
Element	Description			
1090	A1-1 Warm Load 1		25 ± 15	P
1092	A1-1 Warm Load 2		25 ± 15	
1094	A1-1 Warm Load 3		25 ± 15	
1096	A1-1 Warm Load 4		25 ± 15	
1098	A1-1 Warm Load Center		25 ± 15	
1100	A1-2 Warm Load 1		25 ± 15	
1102	A1-2 Warm Load 2		25 ± 15	
1104	A1-2 Warm Load 3		25 ± 15	
1106	A1-2 Warm Load 4		25 ± 15	
1108	A1-2 Warm Load Center		25 ± 15	
1110	Local Oscillator Channel 7		25 ± 15	
1112	Local Oscillator Channel 8		25 ± 15	
1114	Local Oscillator Channel 15		25 ± 15	
1116	PLL LO #2 Channels 9-14		25 ± 15	
1118	PLL LO #1 Channels 9-14		25 ± 15	
1120	PLLO (Reference Oscillator)**		25 ± 15	
1122	Mixer I.F. Amp. Channel 3		25 ± 15	
1124	Mixer I.F. Amp. Channel 4		25 ± 15	
1126	Mixer I.F. Amp. Channel 5		25 ± 15	
1128	Mixer I.F. Amp. Channel 6		25 ± 15	
1130	Mixer I.F. Amp. Channel 7		25 ± 15	
1132	Mixer I.F. Amp. Channel 8		25 ± 15	
1134	Mixer I.F. Amp. Channels 9-14		25 ± 15	
1136	Mixer I.F. Amp. Channel 15		25 ± 15	P

* Value is from the STE printout sheets. Copying data to this sheet is optional.
** Not used on S/N 105 and above.

(Continued on Sheet 2)

TEST DATA SHEET 22 (Sheet 2 of 2)
Full Scan Mode Temperature Sensors Section [VI (Paragraph 3.2.4.3.4.1)

Thermistor Sensors		Recorded Value* (deg. C)	Required Value (deg. C)	Pass/ Fail
Element	Description			
1138	I.F. Amp. Channel 11-14		25 ± 15	P
1140	I.F. Amp. Channel 9		25 ± 15	
1142	I.F. Amp. Channel 10		25 ± 15	
1144	I.F. Amp. Channel 11		25 ± 15	
1146	DC/DC Converter		25 ± 15	
1148	I.F. Amp. Channel 13		25 ± 15	
1150	I.F. Amp. Channel 14		25 ± 15	
1152	I.F. Amp. Channel 12		25 ± 15	
1154	RF Shelf A1-1		25 ± 15	
1156	RF Shelf A1-2		25 ± 15	
1158	Detector Preamp Assy.		25 ± 15	
1160	Scan Motor A1-1		25 ± 15	
1162	Scan Motor A1-2		25 ± 15	
1164	Feed Horn A1-1		25 ± 15	
1166	Feed Horn A1-2		25 ± 15	
1168	R.F. Mux A1-1		25 ± 15	
1170	R.F. Mux A1-2		25 ± 15	
1172	Local Oscillator Channel 3		25 ± 15	
1174	Local Oscillator Channel 4		25 ± 15	
1176	Local Oscillator Channel 5		25 ± 15	
1178	Local Oscillator Channel 6		25 ± 15	
1180	Temp Sensor Ref Voltage Count	24884	**	P

* Value is from the STE printout sheets. Copying data to this sheet is optional.
** = Count of 24,552 +1765,-1308.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer 11/24/98 Date

Customer Representative 12/2/98 Date
(Flight Hardware Only)

7A 268 NOV 24 '98

Quality Control Date

TEST DATA SHEET 23

Digital-A Data Output Warm Cal Mode Synch Sequence,
Unit I.D./Serial Number and Digital-B Serial Data Verification
Sections [I], [II], and [III] (Paragraph 3.2.4.3.4.2)

Step	Element (For Ref)	Description	Recorded Value	Required Value	Pass/Fail
[I]	0001	Sync Sequence Byte 1	255	255	P
	0002	Sync Sequence Byte 2	255	255	
	0003	Sync Sequence Byte 3	255	255	
[II]	0004	Unit I.D. and Serial N	17	*	
[III]	0005	Digital-B Data Byte 1	4	4	
	0006	Digital-B Data Byte 2	14	14	
	0007	Digital-B Data Byte 3	0	0	
	0008	Digital-B Data Byte 4	0	0	P

*	AMSU A1 Identification Words (data entered in decimal system)	Binary	Decimal
	AMSU-A1 S/N 101	00000001	1
	AMSU-A1 S/N 102	00000101	5
	AMSU-A1 S/N 103	00001001	9
	AMSU-A1 S/N 104	00001101	13
	AMSU-A1 S/N 105	00010001	17
	AMSU-A1 S/N 106	00010101	21
	AMSU-A1 S/N 107	00011001	25
	AMSU-A1 S/N 108	00011101	29
	AMSU-A1 S/N 109	00100001	33

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer 11/24/98 Date

Customer Representative (Flight Hardware Only) DCMC 12/2/98 Date

Quality Control (7A 268) NOV 24 '98 Date

TEST DATA SHEET 24

Reflector Position Warm Cal Mode Section [IV] and Reflector Position Nadir Mode Section [IV] (Paragraphs 3.2.4.3.4.2 and 3.2.4.3.4.4)

BP	A1-1 Reflector			
	Para No.	Position*	Required**	Pass/Fail
WL	3.2.4.3.4.2	10416	10448	P
15	3.2.4.3.4.4	2156	2150	P

WL = Warm Load
15 = Nadir Position

BP	A1-2 Reflector			
	Para No.	Position*	Required**	Pass/Fail
WL	3.2.4.3.4.2	10214	10219	P
15	3.2.4.3.4.4	1957	1951	P

WL = Warm Load
15 = Nadir Position

* Actual counts from computer printout. Rewriting counts on this data sheet is optional.
** Required range for instrument serial number from TDS 6 of AE-26002/1 ±5 counts. Rewriting range on this data sheet is optional.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 4316613 S/N: 105

Test Systems Engineer 11/24/98 Date

Customer Representative (Flight Hardware Only) 12/2/98 Date

Quality Control NOV 24 '98 Date

```
AMSU  A1-17 A1.EXE     WARM CAL MODE      P1 25-NOV-93 12:51:40  SCAN NUMBER     1
[ 5 ] DIGITAL A DATA   ELEMENT 0000

[ 6 ] DIGITAL B DATA   ELEMENT   00

[ 7 ] ANALOG DATA      ELEMENT   00

                                        COMMANDS
[ 9 ]  MODULE POWER =          CONNECT      ANTENNA IN COLD CAL POSIT = NO   [ 15

[ 10 ] SURVIVAL HEATER POWER =      OFF     ANTENNA IN NADIR POSITION = NO   [ 16

[ 11 ] MODULE TOTALLY OFF =         ON      ANTENNA IN FULL SCAN MODE = NO   [ 17

[ 12 ] SCANNER A1 - 1 POWER =       ON      PLL POWER =              PLLO # 1 [ 18

[ 13 ] SCANNER A1 - 2 POWER =       ON      COLD CAL POSITION MSB =    ZERO  [ 19

[ 14 ] ANTENNA IN WARM CAL POSIT = YES      COLD CAL POSITION LSB =    ZERO  [ 20

          POWER [ 4 ]  ON
                       SCREEN ONLY [ 2 ]  PRINT  [ 3 ] FULL        [ 1 ] RETURN
SELECT TOUCHSCREEN BUTTON 3
```

TDS 23 & TDS 26

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
1	SYNC SEQUENCE BYTE 1	11111111	572	WARM CAL SAMPLE 17 CH 8	16472
2	SYNC SEQUENCE BYTE 2	11111111	574	CH 9	17330
3	SYNC SEQUENCE BYTE 3	11111111	576	CH 10	16546
4	UNIT ID AND SERIAL NO	00010001	578	CH 11	16434
5	DIGITAL B DATA BYTE 1	00000100	580	CH 12	16793
6	DIGITAL B DATA BYTE 2	00001110	582	CH 13	16507
7	DIGITAL B DATA BYTE 3	00000000	584	CH 14	16986
8	DIGITAL B DATA BYTE 4	00000000	586	CH 15	16665
10	REFLECTOR 1 POSITION 1	10417	588	REFLECTOR 1 POSITION 18	10417
12	REFLECTOR 2 POSITION 1	10214	590	REFLECTOR 2 POSITION 18	10214
14	REFL 1 POS 1 2ND LOOK	10417	592	REFL 1 POS 18 2ND LOOK	10417
16	REFL 2 POS 1 2ND LOOK	10214	594	REFL 2 POS 18 2ND LOOK	10214
18	WARM CAL SAMPLE 1 CH 3	15867	596	WARM CAL SAMPLE 18 CH 3	15867
20	CH 4	16669	598	CH 4	16669
22	CH 5	16915	600	CH 5	16915
24	CH 6	17196	602	CH 6	17204
26	CH 7	16269	604	CH 7	16270
28	CH 8	16471	606	CH 8	16472
30	CH 9	17335	608	CH 9	17329
32	CH 10	16551	610	CH 10	16550
34	CH 11	16434	612	CH 11	16436
36	CH 12	16795	614	CH 12	16796
38	CH 13	16497	616	CH 13	16503
40	CH 14	16979	618	CH 14	16974
42	CH 15	16667	620	CH 15	166
44	REFLECTOR 1 POSITION 2	10417	622	REFLECTOR 1 POSITION 19	104
46	REFLECTOR 2 POSITION 2	10214	624	REFLECTOR 2 POSITION 19	10214
48	REFL 1 POS 2 2ND LOOK	10417	626	REFL 1 POS 19 2ND LOOK	10417
50	REFL 2 POS 2 2ND LOOK	10214	628	REFL 2 POS 19 2ND LOOK	10214
52	WARM CAL SAMPLE 2 CH 3	15868	630	WARM CAL SAMPLE 19 CH 3	15863
54	CH 4	16667	632	CH 4	16668
56	CH 5	16915	634	CH 5	16918
58	CH 6	17212	636	CH 6	17208
60	CH 7	16265	638	CH 7	16269
62	CH 8	16471	640	CH 8	16472
64	CH 9	17331	642	CH 9	17330
66	CH 10	16552	644	CH 10	16554
68	CH 11	16432	646	CH 11	16430
70	CH 12	16795	648	CH 12	16786
72	CH 13	16499	650	CH 13	16506
74	CH 14	16985	652	CH 14	16971
76	CH 15	16665	654	CH 15	16665
78	REFLECTOR 1 POSITION 3	10417	656	REFLECTOR 1 POSITION 20	10417
80	REFLECTOR 2 POSITION 3	10214	658	REFLECTOR 2 POSITION 20	10214
82	REFL 1 POS 3 2ND LOOK	10417	660	REFL 1 POS 20 2ND LOOK	10417
84	REFL 2 POS 3 2ND LOOK	10214	662	REFL 2 POS 20 2ND LOOK	10214
86	WARM CAL SAMPLE 3 CH 3	15867	664	WARM CAL SAMPLE 20 CH 3	15863
88	CH 4	16665	666	CH 4	16663
90	CH 5	16913	668	CH 5	16913
92	CH 6	17209	670	CH 6	17208

WARM CAL MODE

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	16266	672	CH 7	16267
96	CH 8	16474	674	CH 8	16475
98	CH 9	17332	676	CH 9	17331
100	CH 10	16547	678	CH 10	16548
102	CH 11	16434	680	CH 11	16430
104	CH 12	16794	682	CH 12	16792
106	CH 13	16492	684	CH 13	16496
108	CH 14	16997	686	CH 14	16994
110	CH 15	16665	688	CH 15	16663
112	REFLECTOR 1 POSITION 4	10417	690	REFLECTOR 1 POSITION 21	10417
114	REFLECTOR 2 POSITION 4	10214	692	REFLECTOR 2 POSITION 21	10214
116	REFL 1 POS 4 2ND LOOK	10417	694	REFL 1 POS 21 2ND LOOK	10417
118	REFL 2 POS 4 2ND LOOK	10214	696	REFL 2 POS 21 2ND LOOK	10214
120	WARM CAL SAMPLE 4 CH 3	15867	698	WARM CAL SAMPLE 21 CH 3	15870
122	CH 4	16666	700	CH 4	16663
124	CH 5	16912	702	CH 5	16918
126	CH 6	17211	704	CH 6	17207
128	CH 7	16268	706	CH 7	16269
130	CH 8	16470	708	CH 8	16473
132	CH 9	17334	710	CH 9	17331
134	CH 10	16550	712	CH 10	16551
136	CH 11	16431	714	CH 11	16429
138	CH 12	16793	716	CH 12	16793
140	CH 13	16487	718	CH 13	16497
142	CH 14	16979	720	CH 14	16968
144	CH 15	16666	722	CH 15	16666
146	REFLECTOR 1 POSITION 5	10417	724	REFLECTOR 1 POSITION 22	10417
148	REFLECTOR 2 POSITION 5	10214	726	REFLECTOR 2 POSITION 22	10214
150	REFL 1 POS 5 2ND LOOK	10417	728	REFL 1 POS 22 2ND LOOK	10417
152	REFL 2 POS 5 2ND LOOK	10214	730	REFL 2 POS 22 2ND LOOK	10214
154	WARM CAL SAMPLE 5 CH 3	15865	732	WARM CAL SAMPLE 22 CH 3	15866
156	CH 4	16666	734	CH 4	16666
158	CH 5	16917	736	CH 5	16914
160	CH 6	17205	738	CH 6	17208
162	CH 7	16269	740	CH 7	16265
164	CH 8	16472	742	CH 8	16474
166	CH 9	17334	744	CH 9	17331
168	CH 10	16556	746	CH 10	16550
170	CH 11	16430	748	CH 11	16434
172	CH 12	16787	750	CH 12	16798
174	CH 13	16493	752	CH 13	16497
176	CH 14	16989	754	CH 14	16983
178	CH 15	16665	756	CH 15	16664
180	REFLECTOR 1 POSITION 6	10417	758	REFLECTOR 1 POSITION 23	10417
182	REFLECTOR 2 POSITION 6	10214	760	REFLECTOR 2 POSITION 23	10214
184	REFL 1 POS 6 2ND LOOK	10417	762	REFL 1 POS 23 2ND LOOK	10417
186	REFL 2 POS 6 2ND LOOK	10214	764	REFL 2 POS 23 2ND LOOK	10214
188	WARM CAL SAMPLE 6 CH 3	15862	766	WARM CAL SAMPLE 23 CH 3	15866
190	CH 4	16665	768	CH 4	16665
192	CH 5	16915	770	CH 5	16915

WARM CAL MODE

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
194	CH 6	17209	772	CH 6	17207
196	CH 7	16267	774	CH 7	16265
198	CH 8	16474	776	CH 8	16472
200	CH 9	17331	778	CH 9	17331
202	CH 10	16549	780	CH 10	16552
204	CH 11	16428	782	CH 11	16434
206	CH 12	16793	784	CH 12	16796
208	CH 13	16493	786	CH 13	16497
210	CH 14	16968	788	CH 14	16970
212	CH 15	16666	790	CH 15	16666
214	REFLECTOR 1 POSITION 7	10417	792	REFLECTOR 1 POSITION 24	10417
216	REFLECTOR 2 POSITION 7	10214	794	REFLECTOR 2 POSITION 24	10214
218	REFL 1 POS 7 2ND LOOK	10417	796	REFL 1 POS 24 2ND LOOK	10417
220	REFL 2 POS 7 2ND LOOK	10214	798	REFL 2 POS 24 2ND LOOK	10214
222	WARM CAL SAMPLE 7 CH 3	15864	800	WARM CAL SAMPLE 24 CH 3	15866
224	CH 4	16664	802	CH 4	16667
226	CH 5	16915	804	CH 5	16912
228	CH 6	17206	806	CH 6	17206
230	CH 7	16266	808	CH 7	16264
232	CH 8	16473	810	CH 8	16470
234	CH 9	17334	812	CH 9	17332
236	CH 10	16550	814	CH 10	16546
238	CH 11	16436	816	CH 11	16434
240	CH 12	16794	818	CH 12	16801
242	CH 13	16510	820	CH 13	164
244	CH 14	16982	822	CH 14	1698
246	CH 15	16665	824	CH 15	16667
248	REFLECTOR 1 POSITION 8	10417	826	REFLECTOR 1 POSITION 25	10417
250	REFLECTOR 2 POSITION 8	10214	828	REFLECTOR 2 POSITION 25	10214
252	REFL 1 POS 8 2ND LOOK	10417	830	REFL 1 POS 25 2ND LOOK	10417
254	REFL 2 POS 8 2ND LOOK	10214	832	REFL 2 POS 25 2ND LOOK	10214
256	WARM CAL SAMPLE 8 CH 3	15868	834	WARM CAL SAMPLE 25 CH 3	15861
258	CH 4	16666	836	CH 4	16667
260	CH 5	16912	838	CH 5	16914
262	CH 6	17211	840	CH 6	17210
264	CH 7	16270	842	CH 7	16270
266	CH 8	16473	844	CH 8	16473
268	CH 9	17333	846	CH 9	17334
270	CH 10	16550	848	CH 10	16552
272	CH 11	16439	850	CH 11	16433
274	CH 12	16792	852	CH 12	16788
276	CH 13	16497	854	CH 13	16495
278	CH 14	16989	856	CH 14	16948
280	CH 15	16664	858	CH 15	16664
282	REFLECTOR 1 POSITION 9	10417	860	REFLECTOR 1 POSITION 26	10417
284	REFLECTOR 2 POSITION 9	10214	862	REFLECTOR 2 POSITION 26	10214
286	REFL 1 POS 9 2ND LOOK	10417	864	REFL 1 POS 26 2ND LOOK	10417
288	REFL 2 POS 9 2ND LOOK	10214	866	REFL 2 POS 26 2ND LOOK	10214
290	WARM CAL SAMPLE 9 CH 3	15870	868	WARM CAL SAMPLE 26 CH 3	15864
292	CH 4	16664	870	CH 4	16666

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	16915	872	CH 5	16914
296	CH 6	17212	874	CH 6	17207
298	CH 7	16269	876	CH 7	16268
300	CH 8	16468	878	CH 8	16467
302	CH 9	17333	880	CH 9	17334
304	CH 10	16551	882	CH 10	16545
306	CH 11	16429	884	CH 11	16435
308	CH 12	16788	886	CH 12	16789
310	CH 13	16486	888	CH 13	16484
312	CH 14	16984	890	CH 14	16986
314	CH 15	16665	892	CH 15	16663
316	REFLECTOR 1 POSITION 10	10417	894	REFLECTOR 1 POSITION 27	10417
318	REFLECTOR 2 POSITION 10	10214	896	REFLECTOR 2 POSITION 27	10214
320	REFL 1 POS 10 2ND LOOK	10417	898	REFL 1 POS 27 2ND LOOK	10417
322	REFL 2 POS 10 2ND LOOK	10214	900	REFL 2 POS 27 2ND LOOK	10214
324	WARM CAL SAMPLE 10 CH 3	15864	902	WARM CAL SAMPLE 27 CH 3	15862
326	CH 4	16664	904	CH 4	16669
328	CH 5	16915	906	CH 5	16915
330	CH 6	17212	908	CH 6	17208
332	CH 7	16274	910	CH 7	16265
334	CH 8	16472	912	CH 8	16470
336	CH 9	17333	914	CH 9	17332
338	CH 10	16551	916	CH 10	16548
340	CH 11	16433	918	CH 11	16435
342	CH 12	16789	920	CH 12	16792
344	CH 13	16493	922	CH 13	16494
346	CH 14	16983	924	CH 14	16983
348	CH 15	16666	926	CH 15	16665
350	REFLECTOR 1 POSITION 11	10417	928	REFLECTOR 1 POSITION 28	10417
352	REFLECTOR 2 POSITION 11	10214	930	REFLECTOR 2 POSITION 28	10214
354	REFL 1 POS 11 2ND LOOK	10417	932	REFL 1 POS 28 2ND LOOK	10417
356	REFL 2 POS 11 2ND LOOK	10214	934	REFL 2 POS 28 2ND LOOK	10214
358	WARM CAL SAMPLE 11 CH 3	15866	936	WARM CAL SAMPLE 28 CH 3	15863
360	CH 4	16665	938	CH 4	16667
362	CH 5	16915	940	CH 5	16916
364	CH 6	17207	942	CH 6	17205
366	CH 7	16266	944	CH 7	16270
368	CH 8	16468	946	CH 8	16475
370	CH 9	17333	948	CH 9	17334
372	CH 10	16551	950	CH 10	16548
374	CH 11	16431	952	CH 11	16431
376	CH 12	16791	954	CH 12	16791
378	CH 13	16501	956	CH 13	16492
380	CH 14	16976	958	CH 14	16974
382	CH 15	16666	960	CH 15	16664
384	REFLECTOR 1 POSITION 12	10417	962	REFLECTOR 1 POSITION 29	10417
386	REFLECTOR 2 POSITION 12	10214	964	REFLECTOR 2 POSITION 29	10214
388	REFL 1 POS 12 2ND LOOK	10417	966	REFL 1 POS 29 2ND LOOK	10417
390	REFL 2 POS 12 2ND LOOK	10214	968	REFL 2 POS 29 2ND LOOK	10214
392	WARM CAL SAMPLE 12 CH 3	15867	970	WARM CAL SAMPLE 29 CH 3	15867

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
394	CH 4	16667	972	CH 4	16666
396	CH 5	16911	974	CH 5	16913
398	CH 6	17207	976	CH 6	17205
400	CH 7	16268	978	CH 7	16268
402	CH 8	16473	980	CH 8	16471
404	CH 9	17333	982	CH 9	17334
406	CH 10	16553	984	CH 10	16553
408	CH 11	16428	986	CH 11	16431
410	CH 12	16792	988	CH 12	16785
412	CH 13	16489	990	CH 13	16496
414	CH 14	16972	992	CH 14	16954
416	CH 15	16666	994	CH 15	16666
418	REFLECTOR 1 POSITION 13	10417	996	REFLECTOR 1 POSITION 30	10417
420	REFLECTOR 2 POSITION 13	10214	998	REFLECTOR 2 POSITION 30	10214
422	REFL 1 POS 13 2ND LOOK	10417	1000	REFL 1 POS 30 2ND LOOK	10417
424	REFL 2 POS 13 2ND LOOK	10214	1002	REFL 2 POS 30 2ND LOOK	10214
426	WARM CAL SAMPLE 13 CH 3	15865	1004	WARM CAL SAMPLE 30 CH 3	15864
428	CH 4	16666	1006	CH 4	16662
430	CH 5	16913	1008	CH 5	16915
432	CH 6	17209	1010	CH 6	17208
434	CH 7	16269	1012	CH 7	16269
436	CH 8	16473	1014	CH 8	16469
438	CH 9	17333	1016	CH 9	17332
440	CH 10	16550	1018	CH 10	16552
442	CH 11	16435	1020	CH 11	164
444	CH 12	16793	1022	CH 12	167
446	CH 13	16498	1024	CH 13	16485
448	CH 14	16992	1026	CH 14	16981
450	CH 15	16665	1028	CH 15	16665
452	REFLECTOR 1 POSITION 14	10417	1030	REFLECTOR 1 COLD CAL POS	0E
454	REFLECTOR 2 POSITION 14	10214	1032	REFLECTOR 2 COLD CAL POS	0E
456	REFL 1 POS 14 2ND LOOK	10417	1034	REFL 1 COLD CAL 2ND LOOK	0E
458	REFL 2 POS 14 2ND LOOK	10214	1036	REFL 2 COLD CAL 2ND LOOK	0E
460	WARM CAL SAMPLE 14 CH 3	15861	1038	COLD CAL DATA 1 CH 3	0
462	CH 4	16667	1040	CH 4	0
464	CH 5	16912	1042	CH 5	0
466	CH 6	17210	1044	CH 6	0
468	CH 7	16267	1046	CH 7	0
470	CH 8	16477	1048	CH 8	0
472	CH 9	17333	1050	CH 9	0
474	CH 10	16550	1052	CH 10	0
476	CH 11	16428	1054	CH 11	0
478	CH 12	16789	1056	CH 12	0
480	CH 13	16486	1058	CH 13	0
482	CH 14	16993	1060	CH 14	0
484	CH 15	16665	1062	CH 15	0
486	REFLECTOR 1 POSITION 15	10417	1064	COLD CAL DATA 2 CH 3	0
488	REFLECTOR 2 POSITION 15	10214	1066	CH 4	0
490	REFL 1 POS 15 2ND LOOK	10417	1068	CH 5	0
492	REFL 2 POS 15 2ND LOOK	10214	1070	CH 6	0

ELEMENT	DESCRIPTION		VALUE	ELEMENT	DESCRIPTION		VALUE
494	WARM CAL SAMPLE 15	CH 3	15867	1072		CH 7	0
496		CH 4	16666	1074		CH 8	0
498		CH 5	16913	1076		CH 9	0
500		CH 6	17206	1078		CH 10	0
502		CH 7	16269	1080		CH 11	0
504		CH 8	16473	1082		CH 12	0
506		CH 9	17336	1084		CH 13	0
508		CH 10	16552	1086		CH 14	0
510		CH 11	16430	1088		CH 15	0
512		CH 12	16791	1182	REFLECTOR 1 WARM CAL POS		0E
514		CH 13	16499	1184	REFLECTOR 2 WARM CAL POS		0E
516		CH 14	17004	1186	REFL 1 WARM CAL 2ND LOOK		0E
518		CH 15	16664	1188	REFL 2 WARM CAL 2ND LOOK		0E
520	REFLECTOR 1 POSITION 16		10417	1190	WARM CAL DATA 1	CH 3	0
522	REFLECTOR 2 POSITION 16		10214	1192		CH 4	0
524	REFL 1 POS 16 2ND LOOK		10417	1194		CH 5	0
526	REFL 2 POS 16 2ND LOOK		10214	1196		CH 6	0
528	WARM CAL SAMPLE 16	CH 3	15866	1198		CH 7	0
530		CH 4	16668	1200		CH 8	0
532		CH 5	16915	1202		CH 9	0
534		CH 6	17207	1204		CH 10	0
536		CH 7	16269	1206		CH 11	0
538		CH 8	16473	1208		CH 12	0
540		CH 9	17334	1210		CH 13	0
42		CH 10	16550	1212		CH 14	0
544		CH 11	16437	1214		CH 15	0
546		CH 12	16795	1216	WARM CAL DATA 2	CH 3	0
548		CH 13	16492	1218		CH 4	0
550		CH 14	16988	1220		CH 5	0
552		CH 15	16665	1222		CH 6	0
554	REFLECTOR 1 POSITION 17		10417	1224		CH 7	0
556	REFLECTOR 2 POSITION 17		10214	1226		CH 8	0
558	REFL 1 POS 17 2ND LOOK		10417	1228		CH 9	0
560	REFL 2 POS 17 2ND LOOK		10214	1230		CH 10	0
562	WARM CAL SAMPLE 17	CH 3	15864	1232		CH 11	0
564		CH 4	16667	1234		CH 12	0
566		CH 5	16915	1236		CH 13	0
568		CH 6	17207	1238		CH 14	0
570		CH 7	16274	1240		CH 15	0

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	17737	22.88
1092	SCAN MOTOR A1-2	18163	23.29
1094	FEEDHORN A1-1	19159	24.85
1096	FEEDHORN A1-2	19947	24.94
1098	RF MUX A1-1	19538	26.12
1100	RF MUX A1-2	19936	27.15
1102	LOCAL OSCILLATOR CHANNEL 3	20855	28.69
1104	LOCAL OSCILLATOR CHANNEL 4	20967	28.83
1106	LOCAL OSCILLATOR CHANNEL 5	20685	28.04
1108	LOCAL OSCILLATOR CHANNEL 6	19685	26.51
1110	LOCAL OSCILLATOR CHANNEL 7	19994	27.00
1112	LOCAL OSCILLATOR CHANNEL 8	20551	28.47
1114	LOCAL OSCILLATOR CHANNEL 15	20045	28.11
1116	PLL LO #2 CHANNELS 9 THROUGH 14	19139	26.08
1118	PLL LO #1 CHANNELS 9 THROUGH 14	20774	28.99
1120	SPARE (NOT USED)	32767	52.86
1122	MIXER/IF AMPLIFIER CHANNEL 3	20526	27.75
1124	MIXER/IF AMPLIFIER CHANNEL 4	20101	27.68
1126	MIXER/IF AMPLIFIER CHANNEL 5	20061	27.34
1128	MIXER/IF AMPLIFIER CHANNEL 6	19864	26.70
1130	MIXER/IF AMPLIFIER CHANNEL 7	19977	27.01
1132	MIXER/IF AMPLIFIER CHANNEL 8	20025	27.74
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	19418	26.58
1136	MIXER/IF AMPLIFIER CHANNEL 15	20233	27.99
38	IF AMPLIFIER CHANNEL 11 THRU 14	19993	27.36
40	IF AMPLIFIER CHANNEL 9	20414	27.34
1142	IF AMPLIFIER CHANNEL 10	20005	27.51
1144	IF AMPLIFIER CHANNEL 11	19886	26.74
1146	DC/DC CONVERTER	20184	27.16
1148	IF AMPLIFIER CHANNEL 13	20002	26.69
1150	IF AMPLIFIER CHANNEL 14	19668	26.68
1152	IF AMPLIFIER CHANNEL 12	19655	26.64
1154	RF SHELF A1-1	19857	26.73
1156	RF SHELF A1-2	19934	27.06
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	19289	25.34
1160	A1-1 WARM LOAD 1	23022	23.49
1162	A1-1 WARM LOAD 2	23219	23.52
1164	A1-1 WARM LOAD 3	23290	23.58
1166	A1-1 WARM LOAD 4	22977	23.54
1168	A1-1 WARM LOAD CENTER	23158	23.58
1170	A1-2 WARM LOAD 1	23763	24.41
1172	A1-2 WARM LOAD 2	23594	24.39
1174	A1-2 WARM LOAD 3	23625	24.44
1176	A1-2 WARM LOAD 4	23553	24.43
1178	A1-2 WARM LOAD CENTER	23423	24.31
1180	TEMP SENSOR REFERENCE VOLTAGE	24882	

WARM CAL MODE

DESCRIPTION	STATUS	STATUS	STATUS
SCANNER A1-1 POWER	ON	ON	ON
SCANNER A1-2 POWER	ON	ON	ON
PLL POWER	PLLO # 1	PLLO # 1	PLLO # 1
ANTENNA IN WARM CAL POSITION MODE	YES	YES	YES
ANTENNA IN COLD CAL POSITION MODE	NO	NO	NO
ANTENNA IN NADIR POSITION MODE	NO	NO	NO
ANTENNA IN FULL SCAN MODE	NO	NO	NO
SURVIVAL HEATER POWER	OFF	OFF	OFF
MODULE POWER	CONNECT	CONNECT	CONNECT
COLD CAL POSITION MSB	ZERO	ZERO	ZERO
COLD CAL POSITION LSB	ZERO	ZERO	ZERO

ANALOG DATA

DESCRIPTION	VALUE	DEG C	VALUE	DEG C	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	217	22.1	217	22.1	217	22.1
A1-2 SCANNER MOTOR TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-1 RF SHELF TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-2 RF SHELF TEMPERATURE	220	26.2	220	26.2	220	26.2
A1-1 WARM LOAD TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-2 WARM LOAD TEMPERATURE	219	24.8	219	24.8	219	24.8

DESCRIPTION	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS
A1-1 ANTENNA DRIVE MOTOR CURRENT (AVRG)	5	2.33	5	2.33	5	2.33
A1-2 ANTENNA DRIVE MOTOR CURRENT (AVRG)	5	2.33	5	2.33	5	2.33
SIGNAL PROCESSING +15 VDC	173	14.93	173	14.93	173	14.93
ANTENNA DRIVE +15 VDC	172	14.84	172	14.84	172	14.84
SIGNAL PROCESSING -15 VDC	151	-15.00	151	-15.00	151	-15.00
ANTENNA DRIVE -15 VDC	151	-15.00	151	-15.00	151	-15.00
RECEIVER AMPLIFIER +8 VDC	159	7.95	159	7.95	159	7.95
SIGNAL PROCESSOR +5 VDC	148	4.93	148	4.93	148	4.93
ANTENNA DRIVE +5 VDC	147	4.90	147	4.90	147	4.90
RECEIVER MIXER/IF +10 VDC	172	9.94	172	9.94	172	9.94
PHASE LOCK LOOP (CHANNEL 9/14) +15 VDC	171	14.76	171	14.76	171	14.76
PHASE LOCK LOOP (CHANNEL 9/14) -15 VDC	146	-15.25	146	-15.25	147	-15.20
L.O. VOLTAGE (CHANNEL 8) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 7) VDC	173	9.90	173	9.90	173	9.90
L.O. VOLTAGE (CHANNEL 6) VDC	175	10.01	175	10.01	175	10.01
L.O. VOLTAGE (CHANNEL 3) VDC	175	10.01	175	10.01	175	10.01
L.O. VOLTAGE (CHANNEL 4) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 5) VDC	173	9.90	173	9.90	173	9.90
PLLO # 2 LOCK DETECT	5	0.10	5	0.10	5	0.10
PLLO # 1 LOCK DETECT	222	4.44	222	4.44	222	4.44
L.O. VOLTAGE (CHANNEL 15) VDC	172	14.84	172	14.84	172	14.84

PRT TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
VARIABLE TARGET	615	42.00	601	14.00
	616	43.00	602	15.00
	617	44.00	603	16.00
	618	45.00	604	17.00
	619	46.00	605	18.00
	620	47.00	606	19.00
	621	48.00	607	20.00
FIXED TARGET	622	49.00	608	21.00
	623	50.00	609	22.00
	624	51.00	610	23.00
	625	52.00	611	24.00
	626	53.00	612	25.00
	627	67.00	613	69.00
	628	68.00	614	70.00
BASEPLATE	629	71.00	630	72.00
	631	26.00	632	27.00

THERMOCOUPLE TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
FIXED TARGET SHROUD	558	5.00	537	34.00
	559	6.00	538	35.00
VARIABLE TARGET SHROUD	550	7.00	524	36.00
	551	8.00	525	37.00
FIXED TARGET N2	506	57.00	502	30.00
	507	58.00	503	31.00
VARIABLE TARGET N2	516	59.00	511	32.00
	517	60.00	512	33.00
HEATER N2	514	1.00	509	38.00
	515	2.00	510	39.00
FIXED TARGET FLOW METER	508	63.00	504	61.00
VARIABLE TARGET FLOW METER	518	64.00	513	62.00
BASEPLATE HEATER N2	519	3.00	520	4.00
BASEPLATE N2	521	9.00	522	10.00
BASEPLATE FLOW METER	523	65.00		
ADJUNCT RADIATORS	575	73.00	577	74.00
	579	75.00	581	76.00

AMSU A1-17 A1.EXE WARM CAL MODE P1 24-NOV-93 11:32:06 SCAN NUMBER 75
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

REFLECTOR POSITIONS 1

BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2
1	10416	10416	9	10416	10416	17	10416	10416	25	10416	10416
2	10416	10416	10	10416	10416	18	10416	10416	26	10416	10416
3	10416	10416	11	10416	10416	19	10416	10416	27	10416	10416
4	10416	10416	12	10416	10416	20	10416	10416	28	10416	10416
5	10416	10416	13	10416	10416	21	10416	10416	29	10416	10416
6	10416	10416	14	10416	10416	22	10416	10416	30	10416	10416
7	10416	10416	15	10416	10416	23	10416	10416	CC	0	0
8	10416	10416	16	10416	10416	24	10416	10416	WC	0	0

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

TDS 24

WARM LOAD
AND NADIR POSITIONS

AMSU A1-17 A1.EXE WARM CAL MODE P1 24-NOV-93 11:32:17 SCAN NUMBER 76
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

REFLECTOR POSITIONS 2

BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2
1	10214	10214	9	10214	10214	17	10214	10214	25	10214	10214
2	10214	10214	10	10214	10214	18	10214	10214	26	10214	10214
3	10214	10214	11	10214	10214	19	10214	10214	27	10214	10214
4	10214	10214	12	10214	10214	20	10214	10214	28	10214	10214
5	10214	10214	13	10214	10214	21	10214	10214	29	10214	10214
6	10214	10214	14	10214	10214	22	10214	10214	30	10214	10214
7	10214	10214	15	10214	10214	23	10214	10214	CC	0	0
8	10214	10214	16	10214	10214	24	10214	10214	WC	0	0

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

AMSU A1-17 A1.EXE NADIR MODE P1 24-NOV-93 11:33:27 SCAN NUMBER 76
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

REFLECTOR POSITIONS 1

BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2
1	2156	2156	9	2156	2156	17	2156	2156	25	2156	2156
2	2156	2156	10	2156	2156	18	2156	2156	26	2156	2156
3	2156	2156	11	2156	2156	19	2156	2156	27	2156	2156
4	2156	2156	12	2156	2156	20	2156	2156	28	2156	2156
5	2156	2156	13	2156	2156	21	2156	2156	29	2156	2156
6	2156	2156	14	2156	2156	22	2156	2156	30	2156	2156
7	2156	2156	15	2156	2156	23	2156	2156	CC	0	0
8	2156	2156	16	2156	2156	24	2156	2156	WC	0	0

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

AMSU A1-17 A1.EXE NADIR MODE P1 24-NOV-93 11:33:42 SCAN NUMBER 77
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

REFLECTOR POSITIONS 2

BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2
1	1957	1957	9	1957	1957	17	1957	1957	25	1957	1957
2	1957	1957	10	1957	1957	18	1957	1957	26	1957	1957
3	1957	1957	11	1957	1957	19	1957	1957	27	1957	1957
4	1957	1957	12	1957	1957	20	1957	1957	28	1957	1957
5	1957	1957	13	1957	1957	21	1957	1957	29	1957	1957
6	1957	1957	14	1957	1957	22	1957	1957	30	1957	1957
7	1957	1957	15	1957	1957	23	1957	1957	CC	0	0
8	1957	1957	16	1957	1957	24	1957	1957	WC	0	0

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

AMSU A1-17 A1.EXE WARM CAL MODE P1 24-NOV-93 11:44:20 SCAN NUMBER 85
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

RADIOMETRIC DATA
CHANNEL 3

BP	DATA	BP	DATA	BP	DATA	BP	DATA
1	15649	9	15651	17	15651	25	15644
2	15646	10	15645	18	15647	26	15648
3	15653	11	15646	19	15652	27	15648
4	15649	12	15647	20	15649	28	15645
5	15650	13	15643	21	15648	29	15651
6	15644	14	15647	22	15646	30	15652
7	15646	15	15649	23	15653	CC	0
8	15650	16	15643	24	15649	WC	0

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

AMSU A1-17 A1.EXE WARM CAL MODE P1 24-NOV-93 11:44:36 SCAN NUMBER 85
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

RADIOMETRIC DATA
CHANNEL 9

BP	DATA	BP	DATA	BP	DATA	BP	DATA
1	17086	9	17085	17	17086	25	17082
2	17083	10	17084	18	17087	26	17087
3	17088	11	17080	19	17083	27	17085
4	17089	12	17085	20	17089	28	17085
5	17086	13	17087	21	17084	29	17086
6	17084	14	17090	22	17086	30	17085
7	17084	15	17088	23	17087	CC	0
8	17087	16	17087	24	17085	WC	0

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

TEST DATA SHEET 25

Digital-A Data Output Warm Cal Mode Radiometer Data Section [V] (Paragraph 3.2.4.3.4.2)

BP	A1-2 Channel-3 (50.3 GHz)				A1-1 Channel-9 (57.290344 GHz)			
	Element (For Ref)	Measured*	Required**	Pass/Fail	Element (For Ref)	Measured*	Required**	Pass/Fail
01	0018			P	0030			P
02	0052				0064			
03	0086				0098			
04	0120				0132			
05	0154				0166			
06	0188				0200			
07	0222				0234			
08	0256				0268			
09	0290				0302			
10	0324				0336			
11	0356				0370			
12	0392				0404			
13	0426				0438			
14	0460				0472			
15	0494				0506			
16	0528				0540			
17	0562				0574			
18	0596				0608			
19	0630				0642			
20	0664				0676			
21	0698				0710			
22	0732				0744			
23	0766				0778			
24	0800				0812			
25	0834				0846			
26	0868				0880			
27	0902				0914			
28	0936				0948			
29	0970				0982			
30	1004				1016			
CC	1038		0		1050		0	
~~WL~~	1190		0	P	1202		0	P

* Actual counts from computer printout. Rewriting counts on this data sheet is optional.

** Required = 16,500 ± 4000 counts.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer 11/24/98 Date

QA 268 NOV 24 '98

Customer Representative (Flight Hardware Only) 12/2/98 Date

Quality Control Date

11/25/98 WC

TEST DATA SHEET 26 (Sheet 1 of 2)
Warm Cal Mode Temperature Sensors Section [VI] (Paragraph 3.2.4.3.4.2)

Thermistor Sensors		Recorded Value* (deg. C)	Required Value (deg. C)	Pass/ Fail
Element	Description			
1090	A1-1 Warm Load 1		25 ± 15	P
1092	A1-1 Warm Load 2		25 ± 15	
1094	A1-1 Warm Load 3		25 ± 15	
1096	A1-1 Warm Load 4		25 ± 15	
1098	A1-1 Warm Load Center		25 ± 15	
1100	A1-2 Warm Load 1		25 ± 15	
1102	A1-2 Warm Load 2		25 ± 15	
1104	A1-2 Warm Load 3		25 ± 15	
1106	A1-2 Warm Load 4		25 ± 15	
1108	A1-2 Warm Load Center		25 ± 15	
1110	Local Oscillator Channel 7		25 ± 15	
1112	Local Oscillator Channel 8		25 ± 15	
1114	Local Oscillator Channel 15		25 ± 15	
1116	PLL LO #2 Channels 9-14		25 ± 15	
1118	PLL LO #1 Channels 9-14		25 ± 15	
~~1120~~	~~PLLO (Reference Oscillator)**~~ NOT USED		~~25 ± 15~~	
1122	Mixer I.F. Amp. Channel 3		25 ± 15	
1124	Mixer I.F. Amp. Channel 4		25 ± 15	
1126	Mixer I.F. Amp. Channel 5		25 ± 15	
1128	Mixer I.F. Amp. Channel 6		25 ± 15	
1130	Mixer I.F. Amp. Channel 7		25 ± 15	
1132	Mixer I.F. Amp. Channel 8		25 ± 15	
1134	Mixer I.F. Amp. Channels 9-14		25 ± 15	
1136	Mixer I.F. Amp. Channel 15		25 ± 15	P

* Value is from the STE printout sheets. Copying data to this sheet is optional.
** Not used on S/N 105 and above.

(Continued on Sheet 2)

NOT USED
11/25/98

TEST DATA SHEET 26 (Sheet 2 of 2)
Warm Cal Mode Temperature Sensors Section [VI] (Paragraph 3.2.4.3.4.2)

Thermistor Sensors		Recorded Value* (deg. C)	Required Value (deg. C)	Pass/ Fail
Element	Description			
1138	I.F. Amp. Channel 11-14		25 ± 15	P
1140	I.F. Amp. Channel 9		25 ± 15	
1142	I.F. Amp. Channel 10		25 ± 15	
1144	I.F. Amp. Channel 11		25 ± 15	
1146	DC/DC Converter		25 ± 15	
1148	I.F. Amp. Channel 13		25 ± 15	
1150	I.F. Amp. Channel 14		25 ± 15	
1152	I.F. Amp. Channel 12		25 ± 15	
1154	RF Shelf A1-1		25 ± 15	
1156	RF Shelf A1-2		25 ± 15	
1158	Detector Preamp Assy.		25 ± 15	
1160	Scan Motor A1-1		25 ± 15	
1162	Scan Motor A1-2		25 ± 15	
1164	Feed Horn A1-1		25 ± 15	
1166	Feed Horn A1-2		25 ± 15	
1168	R.F. Mux A1-1		25 ± 15	
1170	R.F. Mux A1-2		25 ± 15	
1172	Local Oscillator Channel 3		25 ± 15	
1174	Local Oscillator Channel 4		25 ± 15	
1176	Local Oscillator Channel 5		25 ± 15	
1178	Local Oscillator Channel 6		25 ± 15	
1180	Temp Sensor Ref Voltage Count	24885	**	P

* Value is from the STE printout sheets. Copying data to this sheet is optional.
** = Count of 24,552 +1765,-1308.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436013 S/N: 105

Test Systems Engineer 11/24/98 Date

Customer Representative (Flight Hardware Only) 12/2/98 Date

Quality Control NOV 25 '98 Date

TEST DATA SHEET 27

Digital-A Data Output Cold Cal Mode Synch Sequence,
Unit I.D./Serial Number and Digital-B Serial Data Verification
Sections [I], [II], and [III] (Paragraph 3.2.4.3.4.3)

Step	Element (For Ref)	Description	Recorded Value	Required Value	Pass/Fail
[I]	0001	Sync Sequence Byte 1	255	255	P
	0002	Sync Sequence Byte 2	255	255	
	0003	Sync Sequence Byte 3	255	255	
[II]	0004	Unit I.D. and Serial N	17	*	
[III]	0005	Digital-B Data Byte 1	8	8	
	0006	Digital-B Data Byte 2	14	14	
	0007	Digital-B Data Byte 3	0	0	
	0008	Digital-B Data Byte 4	0	0	P

* AMSU A1 Identification Words (data entered in decimal system)

	Binary	Decimal
AMSU-A1 S/N 101	00000001	1
AMSU-A1 S/N 102	00000101	5
AMSU-A1 S/N 103	00001001	9
AMSU-A1 S/N 104	00001101	13
AMSU-A1 S/N 105	00010001	17
AMSU-A1 S/N 106	00010101	21
AMSU-A1 S/N 107	00011001	25
AMSU-A1 S/N 108	00011101	29
AMSU-A1 S/N 109	00100001	33

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer — Date: 11/24/98

Customer Representative (Flight Hardware Only) — Date: 12/2/98

Quality Control (7A 268) — Date: NOV 25 '98

```
AMSU  A1-17 A1.EXE      COLD CAL MODE       P1 24-NOV-93 11:04:51  SCAN NUMBER   55
[ 5 ] DIGITAL A DATA    ELEMENT 0000

  6 ] DIGITAL B DATA    ELEMENT   00

[ 7 ] ANALOG DATA       ELEMENT   00


                                   COMMANDS
[ 9 ]  MODULE POWER =          CONNECT      ANTENNA IN COLD CAL POSIT = YES [ 15 ]

[ 10 ] SURVIVAL HEATER POWER =     OFF      ANTENNA IN NADIR POSITION = NO  [ 16 ]

[ 11 ] MODULE TOTALLY OFF =         ON      ANTENNA IN FULL SCAN MODE = NO  [ 17 ]

[ 12 ] SCANNER A1 - 1 POWER =       ON      PLL POWER =              PLLO # 1 [ 18 ]

[ 13 ] SCANNER A1 - 2 POWER =       ON      COLD CAL POSITION MSB =    ZERO  [ 19 ]

[ 14 ] ANTENNA IN WARM CAL POSIT = NO       COLD CAL POSITION LSB =    ZERO  [ 20 ]

          POWER [ 4 ]  ON
                       SCREEN ONLY [ 2 ]  PRINT  [ 3 ] FULL       [ 1 ] RETURN
SELECT TOUCHSCREEN BUTTON 3
```

TDS-27
&
TDS-30

AMSU A1_17 A1.EXE DIGITAL A DATA 24-NOV-93 11:04:56 PAGE 1
COLD CAL MODE

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
1	SYNC SEQUENCE BYTE 1	11111111	572	COLD CAL SAMPLE 17 CH 8	16315
2	SYNC SEQUENCE BYTE 2	11111111	574	CH 9	17121
3	SYNC SEQUENCE BYTE 3	11111111	576	CH 10	16339
4	UNIT ID AND SERIAL NO	00010001	578	CH 11	16102
5	DIGITAL B DATA BYTE 1	00001000	580	CH 12	16424
6	DIGITAL B DATA BYTE 2	00001110	582	CH 13	16138
7	DIGITAL B DATA BYTE 3	00000000	584	CH 14	16630
8	DIGITAL B DATA BYTE 4	00000000	586	CH 15	16500
10	REFLECTOR 1 POSITION 1	6013	588	REFLECTOR 1 POSITION 18	6013
12	REFLECTOR 2 POSITION 1	5812	590	REFLECTOR 2 POSITION 18	5812
14	REFL 1 POS 1 2ND LOOK	6013	592	REFL 1 POS 18 2ND LOOK	6013
16	REFL 2 POS 1 2ND LOOK	5812	594	REFL 2 POS 18 2ND LOOK	5812
18	COLD CAL SAMPLE 1 CH 3	15694	596	COLD CAL SAMPLE 18 CH 3	15693
20	CH 4	16502	598	CH 4	16502
22	CH 5	16774	600	CH 5	16773
24	CH 6	17049	602	CH 6	17063
26	CH 7	16080	604	CH 7	16078
28	CH 8	16313	606	CH 8	16312
30	CH 9	17126	608	CH 9	17120
32	CH 10	16342	610	CH 10	16344
34	CH 11	16107	612	CH 11	16101
36	CH 12	16430	614	CH 12	16431
38	CH 13	16137	616	CH 13	16149
40	CH 14	16632	618	CH 14	16617
42	CH 15	16501	620	CH 15	164
44	REFLECTOR 1 POSITION 2	6013	622	REFLECTOR 1 POSITION 19	601
46	REFLECTOR 2 POSITION 2	5812	624	REFLECTOR 2 POSITION 19	5812
48	REFL 1 POS 2 2ND LOOK	6013	626	REFL 1 POS 19 2ND LOOK	6013
50	REFL 2 POS 2 2ND LOOK	5812	628	REFL 2 POS 19 2ND LOOK	5812
52	COLD CAL SAMPLE 2 CH 3	15697	630	COLD CAL SAMPLE 19 CH 3	15693
54	CH 4	16501	632	CH 4	16502
56	CH 5	16771	634	CH 5	16770
58	CH 6	17060	636	CH 6	17063
60	CH 7	16080	638	CH 7	16076
62	CH 8	16316	640	CH 8	16313
64	CH 9	17123	642	CH 9	17123
66	CH 10	16342	644	CH 10	16341
68	CH 11	16101	646	CH 11	16105
70	CH 12	16431	648	CH 12	16429
72	CH 13	16150	650	CH 13	16143
74	CH 14	16630	652	CH 14	16593
76	CH 15	16499	654	CH 15	16499
78	REFLECTOR 1 POSITION 3	6013	656	REFLECTOR 1 POSITION 20	6013
80	REFLECTOR 2 POSITION 3	5812	658	REFLECTOR 2 POSITION 20	5812
82	REFL 1 POS 3 2ND LOOK	6013	660	REFL 1 POS 20 2ND LOOK	6013
84	REFL 2 POS 3 2ND LOOK	5812	662	REFL 2 POS 20 2ND LOOK	5812
86	COLD CAL SAMPLE 3 CH 3	15696	664	COLD CAL SAMPLE 20 CH 3	15694
88	CH 4	16503	666	CH 4	16502
90	CH 5	16772	668	CH 5	16774
92	CH 6	17064	670	CH 6	17061

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	16081	672	CH 7	16079
96	CH 8	16315	674	CH 8	16311
98	CH 9	17125	676	CH 9	17124
100	CH 10	16346	678	CH 10	16341
102	CH 11	16105	680	CH 11	16106
104	CH 12	16427	682	CH 12	16439
106	CH 13	16138	684	CH 13	16135
108	CH 14	16629	686	CH 14	16642
110	CH 15	16502	688	CH 15	16502
112	REFLECTOR 1 POSITION 4	6013	690	REFLECTOR 1 POSITION 21	6013
114	REFLECTOR 2 POSITION 4	5812	692	REFLECTOR 2 POSITION 21	5812
116	REFL 1 POS 4 2ND LOOK	6013	694	REFL 1 POS 21 2ND LOOK	6013
118	REFL 2 POS 4 2ND LOOK	5812	696	REFL 2 POS 21 2ND LOOK	5812
120	COLD CAL SAMPLE 4 CH 3	15695	698	COLD CAL SAMPLE 21 CH 3	15697
122	CH 4	16503	700	CH 4	16501
124	CH 5	16772	702	CH 5	16771
126	CH 6	17065	704	CH 6	17063
128	CH 7	16079	706	CH 7	16079
130	CH 8	16316	708	CH 8	16311
132	CH 9	17121	710	CH 9	17123
134	CH 10	16342	712	CH 10	16345
136	CH 11	16102	714	CH 11	16100
138	CH 12	16419	716	CH 12	16425
140	CH 13	16146	718	CH 13	16137
142	CH 14	16622	720	CH 14	16614
144	CH 15	16501	722	CH 15	16500
146	REFLECTOR 1 POSITION 5	6013	724	REFLECTOR 1 POSITION 22	6013
148	REFLECTOR 2 POSITION 5	5812	726	REFLECTOR 2 POSITION 22	5812
150	REFL 1 POS 5 2ND LOOK	6013	728	REFL 1 POS 22 2ND LOOK	6013
152	REFL 2 POS 5 2ND LOOK	5812	730	REFL 2 POS 22 2ND LOOK	5812
154	COLD CAL SAMPLE 5 CH 3	15692	732	COLD CAL SAMPLE 22 CH 3	15695
156	CH 4	16503	734	CH 4	16504
158	CH 5	16775	736	CH 5	16773
160	CH 6	17063	738	CH 6	17063
162	CH 7	16076	740	CH 7	16079
164	CH 8	16315	742	CH 8	16314
166	CH 9	17122	744	CH 9	17124
168	CH 10	16345	746	CH 10	16346
170	CH 11	16108	748	CH 11	16100
172	CH 12	16429	750	CH 12	16428
174	CH 13	16143	752	CH 13	16134
176	CH 14	16633	754	CH 14	16635
178	CH 15	16500	756	CH 15	16499
180	REFLECTOR 1 POSITION 6	6013	758	REFLECTOR 1 POSITION 23	6013
182	REFLECTOR 2 POSITION 6	5812	760	REFLECTOR 2 POSITION 23	5812
184	REFL 1 POS 6 2ND LOOK	6013	762	REFL 1 POS 23 2ND LOOK	6013
186	REFL 2 POS 6 2ND LOOK	5812	764	REFL 2 POS 23 2ND LOOK	5812
188	COLD CAL SAMPLE 6 CH 3	15696	766	COLD CAL SAMPLE 23 CH 3	15693
190	CH 4	16500	768	CH 4	16505
192	CH 5	16773	770	CH 5	16773

ELEMENT	DESCRIPTION		VALUE	ELEMENT	DESCRIPTION		VAL
194		CH 6	17064	772		CH 6	17065
196		CH 7	16078	774		CH 7	16080
198		CH 8	16313	776		CH 8	16313
200		CH 9	17126	778		CH 9	17123
202		CH 10	16340	780		CH 10	16341
204		CH 11	16109	782		CH 11	16106
206		CH 12	16431	784		CH 12	16416
208		CH 13	16141	786		CH 13	16143
210		CH 14	16628	788		CH 14	16634
212		CH 15	16498	790		CH 15	16499
214	REFLECTOR 1 POSITION 7		6013	792	REFLECTOR 1 POSITION 24		6013
216	REFLECTOR 2 POSITION 7		5812	794	REFLECTOR 2 POSITION 24		5812
218	REFL 1 POS 7 2ND LOOK		6013	796	REFL 1 POS 24 2ND LOOK		6013
220	REFL 2 POS 7 2ND LOOK		5812	798	REFL 2 POS 24 2ND LOOK		5812
222	COLD CAL SAMPLE 7	CH 3	15699	800	COLD CAL SAMPLE 24	CH 3	15694
224		CH 4	16501	802		CH 4	16505
226		CH 5	16772	804		CH 5	16775
228		CH 6	17062	806		CH 6	17062
230		CH 7	16080	808		CH 7	16074
232		CH 8	16312	810		CH 8	16316
234		CH 9	17124	812		CH 9	17123
236		CH 10	16347	814		CH 10	16345
238		CH 11	16105	816		CH 11	16103
240		CH 12	16437	818		CH 12	1643
12		CH 13	16136	820		CH 13	161
244		CH 14	16619	822		CH 14	1662
246		CH 15	16500	824		CH 15	16500
248	REFLECTOR 1 POSITION 8		6013	826	REFLECTOR 1 POSITION 25		6013
250	REFLECTOR 2 POSITION 8		5812	828	REFLECTOR 2 POSITION 25		5812
252	REFL 1 POS 8 2ND LOOK		6013	830	REFL 1 POS 25 2ND LOOK		6013
254	REFL 2 POS 8 2ND LOOK		5812	832	REFL 2 POS 25 2ND LOOK		5812
256	COLD CAL SAMPLE 8	CH 3	15690	834	COLD CAL SAMPLE 25	CH 3	15694
258		CH 4	16499	836		CH 4	16505
260		CH 5	16773	838		CH 5	16774
262		CH 6	17062	840		CH 6	17064
264		CH 7	16081	842		CH 7	16078
266		CH 8	16316	844		CH 8	16310
268		CH 9	17125	846		CH 9	17125
270		CH 10	16341	848		CH 10	16348
272		CH 11	16105	850		CH 11	16100
274		CH 12	16430	852		CH 12	16431
276		CH 13	16145	854		CH 13	16143
278		CH 14	16653	856		CH 14	16633
280		CH 15	16500	858		CH 15	16498
282	REFLECTOR 1 POSITION 9		6013	860	REFLECTOR 1 POSITION 26		6013
284	REFLECTOR 2 POSITION 9		5812	862	REFLECTOR 2 POSITION 26		5812
286	REFL 1 POS 9 2ND LOOK		6013	864	REFL 1 POS 26 2ND LOOK		6013
288	REFL 2 POS 9 2ND LOOK		5812	866	REFL 2 POS 26 2ND LOOK		5812
290	COLD CAL SAMPLE 9	CH 3	15694	868	COLD CAL SAMPLE 26	CH 3	15693
92		CH 4	16504	870		CH 4	16506

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	16772	872	CH 5	16770
296	CH 6	17065	874	CH 6	17066
298	CH 7	16078	876	CH 7	16077
300	CH 8	16314	878	CH 8	16314
302	CH 9	17125	880	CH 9	17118
304	CH 10	16343	882	CH 10	16341
306	CH 11	16101	884	CH 11	16108
308	CH 12	16433	886	CH 12	16423
310	CH 13	16148	888	CH 13	16140
312	CH 14	16640	890	CH 14	16618
314	CH 15	16500	892	CH 15	16498
316	REFLECTOR 1 POSITION 10	6013	894	REFLECTOR 1 POSITION 27	6013
318	REFLECTOR 2 POSITION 10	5812	896	REFLECTOR 2 POSITION 27	5812
320	REFL 1 POS 10 2ND LOOK	6013	898	REFL 1 POS 27 2ND LOOK	6013
322	REFL 2 POS 10 2ND LOOK	5812	900	REFL 2 POS 27 2ND LOOK	5812
324	COLD CAL SAMPLE 10 CH 3	15693	902	COLD CAL SAMPLE 27 CH 3	15693
326	CH 4	16501	904	CH 4	16500
328	CH 5	16773	906	CH 5	16769
330	CH 6	17061	908	CH 6	17063
332	CH 7	16077	910	CH 7	16079
334	CH 8	16313	912	CH 8	16314
336	CH 9	17122	914	CH 9	17124
338	CH 10	16342	916	CH 10	16343
340	CH 11	16103	918	CH 11	16108
12	CH 12	16426	920	CH 12	16433
344	CH 13	16138	922	CH 13	16143
346	CH 14	16613	924	CH 14	16617
348	CH 15	16502	926	CH 15	16500
350	REFLECTOR 1 POSITION 11	6013	928	REFLECTOR 1 POSITION 28	6013
352	REFLECTOR 2 POSITION 11	5812	930	REFLECTOR 2 POSITION 28	5812
354	REFL 1 POS 11 2ND LOOK	6013	932	REFL 1 POS 28 2ND LOOK	6013
356	REFL 2 POS 11 2ND LOOK	5812	934	REFL 2 POS 28 2ND LOOK	5812
358	COLD CAL SAMPLE 11 CH 3	15695	936	COLD CAL SAMPLE 28 CH 3	15699
360	CH 4	16500	938	CH 4	16505
362	CH 5	16774	940	CH 5	16775
364	CH 6	17064	942	CH 6	17064
366	CH 7	16080	944	CH 7	16080
368	CH 8	16313	946	CH 8	16312
370	CH 9	17123	948	CH 9	17123
372	CH 10	16346	950	CH 10	16342
374	CH 11	16107	952	CH 11	16100
376	CH 12	16427	954	CH 12	16425
378	CH 13	16153	956	CH 13	16145
380	CH 14	16625	958	CH 14	16624
382	CH 15	16498	960	CH 15	16500
384	REFLECTOR 1 POSITION 12	6013	962	REFLECTOR 1 POSITION 29	6013
386	REFLECTOR 2 POSITION 12	5812	964	REFLECTOR 2 POSITION 29	5812
388	REFL 1 POS 12 2ND LOOK	6013	966	REFL 1 POS 29 2ND LOOK	6013
390	REFL 2 POS 12 2ND LOOK	5812	968	REFL 2 POS 29 2ND LOOK	5812
92	COLD CAL SAMPLE 12 CH 3	15694	970	COLD CAL SAMPLE 29 CH 3	15694

ELEMENT	DESCRIPTION		VALUE	ELEMENT	DESCRIPTION		VAL
394		CH 4	16504	972		CH 4	16502
396		CH 5	16774	974		CH 5	16775
398		CH 6	17062	976		CH 6	17063
400		CH 7	16079	978		CH 7	16080
402		CH 8	16314	980		CH 8	16312
404		CH 9	17121	982		CH 9	17121
406		CH 10	16344	984		CH 10	16348
408		CH 11	16108	986		CH 11	16108
410		CH 12	16427	988		CH 12	16433
412		CH 13	16142	990		CH 13	16146
414		CH 14	16626	992		CH 14	16626
416		CH 15	16497	994		CH 15	16499
418	REFLECTOR 1 POSITION 13		6013	996	REFLECTOR 1 POSITION 30		6013
420	REFLECTOR 2 POSITION 13		5812	998	REFLECTOR 2 POSITION 30		5812
422	REFL 1 POS 13 2ND LOOK		6013	1000	REFL 1 POS 30 2ND LOOK		6013
424	REFL 2 POS 13 2ND LOOK		5812	1002	REFL 2 POS 30 2ND LOOK		5812
426	COLD CAL SAMPLE 13	CH 3	15692	1004	COLD CAL SAMPLE 30	CH 3	15695
428		CH 4	16500	1006		CH 4	16503
430		CH 5	16771	1008		CH 5	16768
432		CH 6	17063	1010		CH 6	17062
434		CH 7	16074	1012		CH 7	16078
436		CH 8	16315	1014		CH 8	16314
438		CH 9	17123	1016		CH 9	17124
440		CH 10	16348	1018		CH 10	1634
12		CH 11	16107	1020		CH 11	161
44		CH 12	16427	1022		CH 12	1642
446		CH 13	16132	1024		CH 13	16137
448		CH 14	16636	1026		CH 14	16642
450		CH 15	16502	1028		CH 15	16501
452	REFLECTOR 1 POSITION 14		6013	1030	REFLECTOR 1 COLD CAL POS		0
454	REFLECTOR 2 POSITION 14		5812	1032	REFLECTOR 2 COLD CAL POS		0
456	REFL 1 POS 14 2ND LOOK		6013	1034	REFL 1 COLD CAL 2ND LOOK		0
458	REFL 2 POS 14 2ND LOOK		5812	1036	REFL 2 COLD CAL 2ND LOOK		0
460	COLD CAL SAMPLE 14	CH 3	15692	1038	COLD CAL DATA 1	CH 3	0
462		CH 4	16502	1040		CH 4	0
464		CH 5	16772	1042		CH 5	0
466		CH 6	17063	1044		CH 6	0
468		CH 7	16076	1046		CH 7	0
470		CH 8	16311	1048		CH 8	0
472		CH 9	17126	1050		CH 9	0
474		CH 10	16342	1052		CH 10	0
476		CH 11	16106	1054		CH 11	0
478		CH 12	16434	1056		CH 12	0
480		CH 13	16144	1058		CH 13	0
482		CH 14	16634	1060		CH 14	0
484		CH 15	16500	1062		CH 15	0
486	REFLECTOR 1 POSITION 15		6013	1064	COLD CAL DATA 2	CH 3	0
488	REFLECTOR 2 POSITION 15		5812	1066		CH 4	0
490	REFL 1 POS 15 2ND LOOK		6013	1068		CH 5	0
92	REFL 2 POS 15 2ND LOOK		5812	1070		CH 6	0

ELEMENT	DESCRIPTION		VALUE	ELEMENT	DESCRIPTION		VALUE
494	COLD CAL SAMPLE 15	CH 3	15692	1072		CH 7	0
496		CH 4	16504	1074		CH 8	0
498		CH 5	16774	1076		CH 9	0
500		CH 6	17063	1078		CH 10	0
502		CH 7	16083	1080		CH 11	0
504		CH 8	16315	1082		CH 12	0
506		CH 9	17124	1084		CH 13	0
508		CH 10	16339	1086		CH 14	0
510		CH 11	16102	1088		CH 15	0
512		CH 12	16434	1182	REFLECTOR 1 WARM CAL POS		0E
514		CH 13	16150	1184	REFLECTOR 2 WARM CAL POS		0E
516		CH 14	16615	1186	REFL 1 WARM CAL 2ND LOOK		0E
518		CH 15	16499	1188	REFL 2 WARM CAL 2ND LOOK		0E
520	REFLECTOR 1 POSITION 16		6013	1190	WARM CAL DATA 1	CH 3	0
522	REFLECTOR 2 POSITION 16		5812	1192		CH 4	0
524	REFL 1 POS 16 2ND LOOK		6013	1194		CH 5	0
526	REFL 2 POS 16 2ND LOOK		5812	1196		CH 6	0
528	COLD CAL SAMPLE 16	CH 3	15697	1198		CH 7	0
530		CH 4	16499	1200		CH 8	0
532		CH 5	16769	1202		CH 9	0
534		CH 6	17061	1204		CH 10	0
536		CH 7	16079	1206		CH 11	0
538		CH 8	16316	1208		CH 12	0
540		CH 9	17121	1210		CH 13	0
42		CH 10	16344	1212		CH 14	0
544		CH 11	16102	1214		CH 15	0
546		CH 12	16428	1216	WARM CAL DATA 2	CH 3	0
548		CH 13	16145	1218		CH 4	0
550		CH 14	16615	1220		CH 5	0
552		CH 15	16502	1222		CH 6	0
554	REFLECTOR 1 POSITION 17		6013	1224		CH 7	0
556	REFLECTOR 2 POSITION 17		5812	1226		CH 8	0
558	REFL 1 POS 17 2ND LOOK		6013	1228		CH 9	0
560	REFL 2 POS 17 2ND LOOK		5812	1230		CH 10	0
562	COLD CAL SAMPLE 17	CH 3	15693	1232		CH 11	0
564		CH 4	16502	1234		CH 12	0
566		CH 5	16771	1236		CH 13	0
568		CH 6	17064	1238		CH 14	0
570		CH 7	16076	1240		CH 15	0

EMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	17862	23.12
1092	SCAN MOTOR A1-2	18448	23.83
1094	FEEDHORN A1-1	19895	26.27
1096	FEEDHORN A1-2	21080	27.12
1098	RF MUX A1-1	20907	28.76
1100	RF MUX A1-2	21715	30.60
1102	LOCAL OSCILLATOR CHANNEL 3	22923	32.72
1104	LOCAL OSCILLATOR CHANNEL 4	23087	32.97
1106	LOCAL OSCILLATOR CHANNEL 5	22522	31.61
1108	LOCAL OSCILLATOR CHANNEL 6	20783	28.64
1110	LOCAL OSCILLATOR CHANNEL 7	21434	29.79
1112	LOCAL OSCILLATOR CHANNEL 8	22513	32.30
1114	LOCAL OSCILLATOR CHANNEL 15	21965	31.84
1116	PLL LO #2 CHANNELS 9 THROUGH 14	20440	28.59
1118	PLL LO #1 CHANNELS 9 THROUGH 14	23476	34.26
1120	SPARE (NOT USED)	32767	52.86
1122	MIXER/IF AMPLIFIER CHANNEL 3	22315	31.24
1124	MIXER/IF AMPLIFIER CHANNEL 4	21952	31.28
1126	MIXER/IF AMPLIFIER CHANNEL 5	21841	30.80
1128	MIXER/IF AMPLIFIER CHANNEL 6	21210	29.31
1130	MIXER/IF AMPLIFIER CHANNEL 7	21486	29.94
1132	MIXER/IF AMPLIFIER CHANNEL 8	21917	31.41
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	20650	28.96
1136	MIXER/IF AMPLIFIER CHANNEL 15	21974	31.37
38	IF AMPLIFIER CHANNEL 11 THRU 14	21946	31.18
1140	IF AMPLIFIER CHANNEL 9	22392	31.18
1142	IF AMPLIFIER CHANNEL 10	21994	31.37
1144	IF AMPLIFIER CHANNEL 11	21097	29.08
1146	DC/DC CONVERTER	22649	31.96
1148	IF AMPLIFIER CHANNEL 13	21207	29.02
1150	IF AMPLIFIER CHANNEL 14	20869	29.00
1152	IF AMPLIFIER CHANNEL 12	20862	28.97
1154	RF SHELF A1-1	21510	29.93
1156	RF SHELF A1-2	21709	30.51
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	20217	27.13
1160	A1-1 WARM LOAD 1	23043	23.53
1162	A1-1 WARM LOAD 2	23244	23.57
1164	A1-1 WARM LOAD 3	23316	23.64
1166	A1-1 WARM LOAD 4	22996	23.58
1168	A1-1 WARM LOAD CENTER	23183	23.63
1170	A1-2 WARM LOAD 1	24006	24.90
1172	A1-2 WARM LOAD 2	23842	24.88
1174	A1-2 WARM LOAD 3	23881	24.95
1176	A1-2 WARM LOAD 4	23800	24.93
1178	A1-2 WARM LOAD CENTER	23667	24.80
1180	TEMP SENSOR REFERENCE VOLTAGE	24884	

COLD CAL MODE

DESCRIPTION	STATUS	STATUS	STATUS
SCANNER A1-1 POWER	ON	ON	ON
SCANNER A1-2 POWER	ON	ON	ON
PLL POWER	PLLO # 1	PLLO # 1	PLLO # 1
ANTENNA IN WARM CAL POSITION MODE	NO	NO	NO
ANTENNA IN COLD CAL POSITION MODE	YES	YES	YES
ANTENNA IN NADIR POSITION MODE	NO	NO	NO
ANTENNA IN FULL SCAN MODE	NO	NO	NO
SURVIVAL HEATER POWER	OFF	OFF	OFF
MODULE POWER	CONNECT	CONNECT	CONNECT
COLD CAL POSITION MSB	ZERO	ZERO	ZERO
COLD CAL POSITION LSB	ZERO	ZERO	ZERO

ANALOG DATA

DESCRIPTION	VALUE	DEG C	VALUE	DEG C	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	217	22.1	217	22.1	217	22.1
A1-2 SCANNER MOTOR TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-1 RF SHELF TEMPERATURE	220	26.2	220	26.2	220	26.2
A1-2 RF SHELF TEMPERATURE	222	28.9	222	28.9	222	28.9
A1-1 WARM LOAD TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-2 WARM LOAD TEMPERATURE	219	24.8	219	24.8	219	24.8

DESCRIPTION	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS
A1-1 ANTENNA DRIVE MOTOR CURRENT (AVRG)	5	2.33	5	2.33	5	2.33
A1-2 ANTENNA DRIVE MOTOR CURRENT (AVRG)	5	2.33	5	2.33	5	2.33
SIGNAL PROCESSING +15 VDC	172	14.84	172	14.84	172	14.84
ANTENNA DRIVE +15 VDC	173	14.93	173	14.93	173	14.93
SIGNAL PROCESSING -15 VDC	151	-15.00	151	-15.00	151	-15.00
ANTENNA DRIVE -15 VDC	150	-15.05	150	-15.05	150	-15.05
RECEIVER AMPLIFIER +8 VDC	159	7.95	159	7.95	159	7.95
SIGNAL PROCESSOR +5 VDC	148	4.93	148	4.93	148	4.93
ANTENNA DRIVE +5 VDC	147	4.90	147	4.90	147	4.90
RECEIVER MIXER/IF +10 VDC	172	9.94	172	9.94	172	9.94
PHASE LOCK LOOP (CHANNEL 9/14) +15 VDC	172	14.84	172	14.84	172	14.84
PHASE LOCK LOOP (CHANNEL 9/14) -15 VDC	146	-15.25	146	-15.25	146	-15.25
L.O. VOLTAGE (CHANNEL 8) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 7) VDC	173	9.90	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 6) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 3) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 4) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 5) VDC	173	9.90	173	9.90	173	9.90
PLLO # 2 LOCK DETECT	5	0.10	5	0.10	5	0.10
PLLO # 1 LOCK DETECT	222	4.44	222	4.44	222	4.44
L.O. VOLTAGE (CHANNEL 15) VDC	172	14.84	172	14.84	172	14.84

PRT TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
VARIABLE TARGET	615	42.00	601	14.00
	616	43.00	602	15.00
	617	44.00	603	16.00
	618	45.00	604	17.00
	619	46.00	605	18.00
	620	47.00	606	19.00
	621	48.00	607	20.00
FIXED TARGET	622	49.00	608	21.00
	623	50.00	609	22.00
	624	51.00	610	23.00
	625	52.00	611	24.00
	626	53.00	612	25.00
	627	67.00	613	69.00
	628	68.00	614	70.00
BASEPLATE	629	71.00	630	72.00
	631	26.00	632	27.00

THERMOCOUPLE TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
FIXED TARGET SHROUD	558	5.00	537	34.00
	559	6.00	538	35.00
VARIABLE TARGET SHROUD	550	7.00	524	36.00
	551	8.00	525	37.00
FIXED TARGET N2	506	57.00	502	30.00
	507	58.00	503	31.00
VARIABLE TARGET N2	516	59.00	511	32.00
	517	60.00	512	33.00
HEATER N2	514	1.00	509	38.00
	515	2.00	510	39.00
FIXED TARGET FLOW METER	508	63.00	504	61.00
VARIABLE TARGET FLOW METER	518	64.00	513	62.00
BASEPLATE HEATER N2	519	3.00	520	4.00
BASEPLATE N2	521	9.00	522	10.00
BASEPLATE FLOW METER	523	65.00		
ADJUNCT RADIATORS	575	73.00	577	74.00
	579	75.00	581	76.00

AMSU A1-17 A1.EXE COLD CAL MODE P1 24-NOV-93 11:58:46 SCAN NUMBER 95
[5] DIGITAL A DATA ELEMENT 0000

6] DIGITAL B DATA ELEMENT 00

] ANALOG DATA ELEMENT 00

REFLECTOR POSITIONS 1

BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2
1	6013	6013	9	6013	6013	17	6013	6013	25	6013	6013
2	6013	6013	10	6013	6013	18	6013	6013	26	6013	6013
3	6013	6013	11	6013	6013	19	6013	6013	27	6013	6013
4	6013	6013	12	6013	6013	20	6013	6013	28	6013	6013
5	6013	6013	13	6013	6013	21	6013	6013	29	6013	6013
6	6013	6013	14	6013	6013	22	6013	6013	30	6013	6013
7	6013	6013	15	6013	6013	23	6013	6013	CC	0	0
8	6013	6013	16	6013	6013	24	6013	6013	WC	0	0

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

TDS 28

MSB 0
LSB 0

AMSU A1-17 A1.EXE COLD CAL MODE P1 24-NOV-93 12:00:38 SCAN NUMBER 97
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

REFLECTOR POSITIONS 1

BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2
1	5944	5944	9	5944	5944	17	5944	5944	25	5944	5944
2	5944	5944	10	5944	5944	18	5944	5944	26	5944	5944
3	5944	5944	11	5944	5944	19	5944	5944	27	5944	5944
4	5944	5944	12	5944	5944	20	5944	5944	28	5944	5944
5	5944	5944	13	5944	5944	21	5944	5944	29	5944	5944
6	5944	5944	14	5944	5944	22	5944	5944	30	5944	5944
7	5944	5944	15	5944	5944	23	5944	5944	CC	0	0
8	5944	5944	16	5944	5944	24	5944	5944	WC	0	0

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

MSB 0
LSB 1

AMSU A1-17 A1.EXE COLD CAL MODE P1 24-NOV-93 12:03:01 SCAN NUMBER 99
[5] DIGITAL A DATA ELEMENT 0000

6] DIGITAL B DATA ELEMENT 00

/] ANALOG DATA ELEMENT 00

REFLECTOR POSITIONS 1

BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2
1	5860	5860	9	5860	5860	17	5860	5860	25	5860	5860
2	5860	5860	10	5860	5860	18	5860	5860	26	5860	5860
3	5860	5860	11	5860	5860	19	5860	5860	27	5860	5860
4	5860	5860	12	5860	5860	20	5860	5860	28	5860	5860
5	5860	5860	13	5860	5860	21	5860	5860	29	5860	5860
6	5860	5860	14	5860	5860	22	5860	5860	30	5860	5860
7	5860	5860	15	5860	5860	23	5860	5860	CC	0	0
8	5860	5860	16	5860	5860	24	5860	5860	WC	0	0

[21] UP [22] DOWN

POWER [4] ON

SCREEN ONLY [2] PRINT [3] FULL [1] RETURN

SELECT TOUCHSCREEN BUTTON 2

MSB 1
LSB 0

AMSU A1-17 A1.EXE COLD CAL MODE P1 24-NOV-93 12:01:49 SCAN NUMBER 98
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[,] ANALOG DATA ELEMENT 00

REFLECTOR POSITIONS 1

BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2
1	5717	5717	9	5717	5717	17	5717	5717	25	5717	5717
2	5717	5717	10	5717	5717	18	5717	5717	26	5717	5717
3	5717	5717	11	5717	5717	19	5717	5717	27	5717	5717
4	5717	5717	12	5717	5717	20	5717	5717	28	5717	5717
5	5717	5717	13	5717	5717	21	5717	5717	29	5717	5717
6	5717	5717	14	5717	5717	22	5717	5717	30	5717	5717
7	5717	5717	15	5717	5717	23	5717	5717	CC	0	0
8	5717	5717	16	5717	5717	24	5717	5717	WC	0	0

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

MSB 1
LSB 1

TEST DATA SHEET 28 (Sheet 1 of 2)
Reflector Position Warm Cal Mode Section [IV], Reflector Position Cold Cal Mode Section [IV], and Reflector Position Nadir Mode Section [IV] (Paragraphs 3.2.4.3.4.2, 3.2.4.3.4.3, and 3.2.4.3.4.4)

BP	A1-1 Reflector			
	Para No.	Position*	Required**	Pass/Fail
CL	3.2.4.3.4.3, Step 4			
	a.	6013	6019	P
	b.	5944	5943	P
	c.	5860	5867	P
	d.	5717	5716	P

CL = Cold Load

* Actual counts from computer printout. Rewriting counts on this data sheet is optional.

** Required range for instrument serial number from TDS 6 of AE-26002/1 ±~~5~~ 10 counts. Rewriting range on this data sheet is optional.

11/25/98

3.2.4.3.4.3, Step 4 Substep	MSB	LSB
a.	0	0
b.	0	1
c.	1	0
d.	1	1

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

11/24/98
Test Systems Engineer Date

12/2/98
Customer Representative (Flight Hardware Only) Date

7A 268
NOV 24 '98
Quality Control Date

TEST DATA SHEET 28 (Sheet 2 of 2)

Reflector Position Warm Cal Mode Section [IV], Reflector Position Cold Cal Mode Section [IV], and Reflector Position Nadir Mode Section [IV (Paragraphs 3.2.4.3.4.2, 3.2.4.3.4.3, and 3.2.4.3.4.4)

BP	A1-2 Reflector			
	Para No.	Position*	Required**	Pass/Fail
~~CT~~ CC	3.2.4.3.4.3, Step 4			
	a.	5812	5820	P
	b.	5746	5744	P
	c.	5660	5668	P
	d.	5519	5517	P

~~CT~~ CC = Cold ~~Load~~ Cal

* Actual counts from computer printout. Rewriting counts on this data sheet is optional.

** Required range for instrument serial number from TDS 6 of AE-26002/1 ±~~4~~ 10 counts. Rewriting range on this data sheet is optional.

3.2.4.3.4.3, Step 4 Substep	MSB	LSB
a.	0	0
b.	0	1
c.	1	0
d.	1	1

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer 11/24/98 Date

Customer Representative (Flight Hardware Only) 12/2/98 Date

Quality Control NOV 30 '98 Date

AMSU A1-17 A1.EXE COLD CAL MODE P1 24-NOV-93 11:59:18 SCAN NUMBER 96
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

REFLECTOR POSITIONS 2

BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2
1	5812	5812	9	5812	5812	17	5812	5812	25	5812	5812
2	5812	5812	10	5812	5812	18	5812	5812	26	5812	5812
3	5812	5812	11	5812	5812	19	5812	5812	27	5812	5812
4	5812	5812	12	5812	5812	20	5812	5812	28	5812	5812
5	5812	5812	13	5812	5812	21	5812	5812	29	5812	5812
6	5812	5812	14	5812	5812	22	5812	5812	30	5812	5812
7	5812	5812	15	5812	5812	23	5812	5812	CC	0	0
8	5812	5812	16	5812	5812	24	5812	5812	WC	0	0

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

MSB 0
LSB 0

AMSU A1-17 A1.EXE COLD CAL MODE P1 24-NOV-93 12:00:49 SCAN NUMBER 97
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

REFLECTOR POSITIONS 2

BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2
1	5746	5746	9	5746	5746	17	5746	5746	25	5746	5746
2	5746	5746	10	5746	5746	18	5746	5746	26	5746	5746
3	5746	5746	11	5746	5746	19	5746	5746	27	5746	5746
4	5746	5746	12	5746	5746	20	5746	5746	28	5746	5746
5	5746	5746	13	5746	5746	21	5746	5746	29	5746	5746
6	5746	5746	14	5746	5746	22	5746	5746	30	5746	5746
7	5746	5746	15	5746	5746	23	5746	5746	CC	0	0
8	5746	5746	16	5746	5746	24	5746	5746	WC	0	0

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

MSB 0
LSB 1

AMSU A1-17 A1.EXE COLD CAL MODE P1 24-NOV-93 12:03:11 SCAN NUMBER 9

[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

REFLECTOR POSITIONS 2

BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2
1	5660	5660	9	5660	5660	17	5660	5660	25	5660	5660
2	5660	5660	10	5660	5660	18	5660	5660	26	5660	5660
3	5660	5660	11	5660	5660	19	5660	5660	27	5660	5660
4	5660	5660	12	5660	5660	20	5660	5660	28	5660	5660
5	5660	5660	13	5660	5660	21	5660	5660	29	5660	5660
6	5660	5660	14	5660	5660	22	5660	5660	30	5660	5660
7	5660	5660	15	5660	5660	23	5660	5660	CC	0	0
8	5660	5660	16	5660	5660	24	5660	5660	WC	0	0

[21] UP [22] DOWN

POWER [4] ON

SCREEN ONLY [2] PRINT [3] FULL [1] RETURN

SELECT TOUCHSCREEN BUTTON 2

MSB 1
LSB 0

AMSU A1-17 A1.EXE COLD CAL MODE P1 24-NOV-93 12:01:58 SCAN NUMBER 9
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

REFLECTOR POSITIONS 2

BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2
1	5519	5519	9	5519	5519	17	5519	5519	25	5519	5519
2	5519	5519	10	5519	5519	18	5519	5519	26	5519	5519
3	5519	5519	11	5519	5519	19	5519	5519	27	5519	5519
4	5519	5519	12	5519	5519	20	5519	5519	28	5519	5519
5	5519	5519	13	5519	5519	21	5519	5519	29	5519	5519
6	5519	5519	14	5519	5519	22	5519	5519	30	5519	5519
7	5519	5519	15	5519	5519	23	5519	5519	CC	0	0
8	5519	5519	16	5519	5519	24	5519	5519	WC	0	0

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

MSB 1
LSB 1

AMSU A1-17 A1.EXE COLD CAL MODE P1 24-NOV-93 12:10:28 SCAN NUMBER 104
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

RADIOMETRIC DATA
CHANNEL 3

BP	DATA	BP	DATA	BP	DATA	BP	DATA
1	15635	9	15637	17	15630	25	15636
2	15638	10	15632	18	15635	26	15638
3	15634	11	15632	19	15628	27	15633
4	15630	12	15633	20	15633	28	15636
5	15628	13	15633	21	15636	29	15635
6	15637	14	15633	22	15631	30	15630
7	15632	15	15635	23	15631	CC	0
8	15630	16	15633	24	15630	WC	0

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

TOS 29

AMSU A1-17 A1.EXE COLD CAL MODE P1 24-NOV-93 12:10:44 SCAN NUMBER 104
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

RADIOMETRIC DATA
CHANNEL 9

BP	DATA	BP	DATA	BP	DATA	BP	DATA
1	17081	9	17085	17	17084	25	17077
2	17084	10	17085	18	17086	26	17084
3	17086	11	17086	19	17083	27	17086
4	17084	12	17088	20	17087	28	17086
5	17084	13	17084	21	17084	29	17087
6	17087	14	17084	22	17086	30	17083
7	17086	15	17086	23	17087	CC	0
8	17084	16	17084	24	17085	WC	0

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

TEST DATA SHEET 29

Digital-A Data Output Cold Cal Mode Radiometer Data Section [V] (Paragraph 3.2.4.3.4.3)
Condition: Cold Cal Position MSB=0 and Cold Cal Position LSB=0

BP	A1-2 Channel-3 (50.3 GHz)				A1-1 Channel-9 (57.290344 GHz)			
	Element (For Ref)	Measured*	Required**	Pass/Fail	Element (For Ref)	Measured*	Required**	Pass/Fail
01	0018			P	0030			P
02	0052				0064			
03	0086				0098			
04	0120				0132			
05	0154				0166			
06	0188				0200			
07	0222				0234			
08	0256				0268			
09	0290				0302			
10	0324				0336			
11	0356				0370			
12	0392				0404			
13	0426				0438			
14	0460				0472			
15	0494				0506			
16	0528				0540			
17	0562				0574			
18	0596				0608			
19	0630				0642			
20	0664				0676			
21	0698				0710			
22	0732				0744			
23	0766				0778			
24	0800				0812			
25	0834				0846			
26	0868				0880			
27	0902				0914			
28	0936				0948			
29	0970				0982			
30	1004				1016			
~~CC~~	1038				1050			
~~WL~~ WC	1190			P	1202			P

11/30/98

11/25/98

* Actual counts from computer printout. Rewriting counts on this data sheet is optional.
** Required = 16,500 ± 4000 counts.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer — Date: 11/24/98

Customer Representative (Flight Hardware Only) — DCMC — Date: 12/2/98

Quality Control — 7A 268 — Date: NOV 24 '98

TEST DATA SHEET 30 (Sheet 1 of 2)
Cold Cal Mode Temperature Sensors Section [VI] (Paragraph 3.2.4.3.4.3)

Thermistor Sensors		Recorded Value* (deg. C)	Required Value (deg. C)	Pass/ Fail
Element	Description			
1090	A1-1 Warm Load 1		25 ± 15	P
1092	A1-1 Warm Load 2		25 ± 15	
1094	A1-1 Warm Load 3		25 ± 15	
1096	A1-1 Warm Load 4		25 ± 15	
1098	A1-1 Warm Load Center		25 ± 15	
1100	A1-2 Warm Load 1		25 ± 15	
1102	A1-2 Warm Load 2		25 ± 15	
1104	A1-2 Warm Load 3		25 ± 15	
1106	A1-2 Warm Load 4		25 ± 15	
1108	A1-2 Warm Load Center		25 ± 15	
1110	Local Oscillator Channel 7		25 ± 15	
1112	Local Oscillator Channel 8		25 ± 15	
1114	Local Oscillator Channel 15		25 ± 15	
1116	PLL LO #2 Channels 9-14		25 ± 15	
1118	PLL LO #1 Channels 9-14		25 ± 15	
~~1120~~	~~PLLO (Reference Oscillator)**~~		~~25 ± 15~~	
1122	Mixer I.F. Amp. Channel 3		25 ± 15	
1124	Mixer I.F. Amp. Channel 4		25 ± 15	
1126	Mixer I.F. Amp. Channel 5		25 ± 15	
1128	Mixer I.F. Amp. Channel 6		25 ± 15	
1130	Mixer I.F. Amp. Channel 7		25 ± 15	
1132	Mixer I.F. Amp. Channel 8		25 ± 15	
1134	Mixer I.F. Amp. Channels 9-14		25 ± 15	
1136	Mixer I.F. Amp. Channel 15		25 ± 15	P

NOT USED

* Value is from the STE printout sheets. Copying data to this sheet is optional.
** Not used on S/N 105 and above.

(Continued on Sheet 2)

TEST DATA SHEET 30 (Sheet 2 of 2)
Cold Cal Mode Temperature Sensors Section [VI] (Paragraph 3.2.4.3.4.3)

Thermistor Sensors		Recorded Value* (deg. C)	Required Value (deg. C)	Pass/ Fail
Element	Description			
1138	I.F. Amp. Channel 11-14		25 ± 15	P
1140	I.F. Amp. Channel 9		25 ± 15	
1142	I.F. Amp. Channel 10		25 ± 15	
1144	I.F. Amp. Channel 11		25 ± 15	
1146	DC/DC Converter		25 ± 15	
1148	I.F. Amp. Channel 13		25 ± 15	
1150	I.F. Amp. Channel 14		25 ± 15	
1152	I.F. Amp. Channel 12		25 ± 15	
1154	RF Shelf A1-1		25 ± 15	
1156	RF Shelf A1-2		25 ± 15	
1158	Detector Preamp Assy.		25 ± 15	
1160	Scan Motor A1-1		25 ± 15	
1162	Scan Motor A1-2		25 ± 15	
1164	Feed Horn A1-1		25 ± 15	
1166	Feed Horn A1-2		25 ± 15	
1168	R.F. Mux A1-1		25 ± 15	
1170	R.F. Mux A1-2		25 ± 15	
1172	Local Oscillator Channel 3		25 ± 15	
1174	Local Oscillator Channel 4		25 ± 15	
1176	Local Oscillator Channel 5		25 ± 15	
1178	Local Oscillator Channel 6		25 ± 15	P
1180	Temp Sensor Ref Voltage Count	24884	**	P

* Value is from the STE printout sheets. Copying data to this sheet is optional.
** = Count of 24,552 +1765,-1308.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

[signature] 11/24/98
Test Systems Engineer Date

7A
268

[signature] DCMC 12/2/98
Customer Representative Date
(Flight Hardware Only)

NOV 30 '98
Quality Control Date

TEST DATA SHEET 31

Digital-A Data Output Nadir Mode Synch Sequence,
Unit I.D./Serial Number and Digital-B Serial Data Verification
Sections [I], [II], and [III] (Paragraph 3.2.4.3.4.4)

Step	Element (For Ref)	Description	Recorded Value	Required Value	Pass/Fail
[I]	0001	Sync Sequence Byte 1	255	255	P
	0002	Sync Sequence Byte 2	255	255	
	0003	Sync Sequence Byte 3	255	255	
[II]	0004	Unit I.D. and Serial N	17	*	
[III]	0005	Digital-B Data Byte 1	16	16	
	0006	Digital-B Data Byte 2	14	14	
	0007	Digital-B Data Byte 3	0	0	
	0008	Digital-B Data Byte 4	0	0	P

* AMSU A1 Identification Words (data entered in decimal system)

	Binary	Decimal
AMSU-A1 S/N 101	00000001	1
AMSU-A1 S/N 102	00000101	5
AMSU-A1 S/N 103	00001001	9
AMSU-A1 S/N 104	00001101	13
AMSU-A1 S/N 105	00010001	17
AMSU-A1 S/N 106	00010101	21
AMSU-A1 S/N 107	00011001	25
AMSU-A1 S/N 108	00011101	29
AMSU-A1 S/N 109	00100001	33

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer — 11/24/98 Date

Customer Representative (Flight Hardware Only) — 12/2/98 Date

7A 268 — NOV 05 '98

Quality Control — Date

```
AMSU  A1-17 A1.EXE     NADIR MODE          P1 24-NOV-93 12:31:25  SCAN NUMBER  120
[ 5 ] DIGITAL A DATA   ELEMENT 0000

  6 ] DIGITAL B DATA   ELEMENT   00

[ 7 ] ANALOG DATA      ELEMENT   00


                                   COMMANDS
[ 9 ]  MODULE POWER =          CONNECT      ANTENNA IN COLD CAL POSIT = NO   [ 15
[ 10 ] SURVIVAL HEATER POWER =     OFF      ANTENNA IN NADIR POSITION = YES  [ 16
[ 11 ] MODULE TOTALLY OFF =         ON      ANTENNA IN FULL SCAN MODE = NO   [ 17
[ 12 ] SCANNER A1 - 1 POWER =       ON      PLL POWER =              PLLO # 1 [ 18
[ 13 ] SCANNER A1 - 2 POWER =       ON      COLD CAL POSITION MSB =     ZERO  [ 19
[ 14 ] ANTENNA IN WARM CAL POSIT = NO       COLD CAL POSITION LSB =     ZERO  [ 20

          POWER [ 4 ]  ON
                       SCREEN ONLY [ 2 ]  PRINT  [ 3 ] FULL       [ 1 ] RETURN
SELECT TOUCHSCREEN BUTTON 3
```

TDS 31
AND
TDS 33
AND
TDS 32

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
1	SYNC SEQUENCE BYTE 1	11111111	572	NADIR SAMPLE 17 CH 8	16264
2	SYNC SEQUENCE BYTE 2	11111111	574	CH 9	17106
3	SYNC SEQUENCE BYTE 3	11111111	576	CH 10	16288
4	UNIT ID AND SERIAL NO	00010001	578	CH 11	16002
5	DIGITAL B DATA BYTE 1	00010000	580	CH 12	16305
6	DIGITAL B DATA BYTE 2	00001110	582	CH 13	16009
7	DIGITAL B DATA BYTE 3	00000000	584	CH 14	16483
8	DIGITAL B DATA BYTE 4	00000000	586	CH 15	16473
10	REFLECTOR 1 POSITION 1	2149	588	REFLECTOR 1 POSITION 18	2149
12	REFLECTOR 2 POSITION 1	1951	590	REFLECTOR 2 POSITION 18	1951
14	REFL 1 POS 1 2ND LOOK	2149	592	REFL 1 POS 18 2ND LOOK	2149
16	REFL 2 POS 1 2ND LOOK	1951	594	REFL 2 POS 18 2ND LOOK	1950
18	NADIR SAMPLE 1 CH 3	15646	596	NADIR SAMPLE 18 CH 3	15641
20	CH 4	16458	598	CH 4	16459
22	CH 5	16769	600	CH 5	16768
24	CH 6	17055	602	CH 6	17070
26	CH 7	16075	604	CH 7	16077
28	CH 8	16263	606	CH 8	16262
30	CH 9	17109	608	CH 9	17111
32	CH 10	16289	610	CH 10	16283
34	CH 11	15998	612	CH 11	16002
36	CH 12	16314	614	CH 12	16310
38	CH 13	16013	616	CH 13	16006
40	CH 14	16479	618	CH 14	16482
42	CH 15	16472	620	CH 15	164
44	REFLECTOR 1 POSITION 2	2149	622	REFLECTOR 1 POSITION 19	214
46	REFLECTOR 2 POSITION 2	1950	624	REFLECTOR 2 POSITION 19	1951
48	REFL 1 POS 2 2ND LOOK	2149	626	REFL 1 POS 19 2ND LOOK	2149
50	REFL 2 POS 2 2ND LOOK	1951	628	REFL 2 POS 19 2ND LOOK	1951
52	NADIR SAMPLE 2 CH 3	15641	630	NADIR SAMPLE 19 CH 3	15644
54	CH 4	16459	632	CH 4	16455
56	CH 5	16768	634	CH 5	16769
58	CH 6	17070	636	CH 6	17071
60	CH 7	16076	638	CH 7	16076
62	CH 8	16262	640	CH 8	16262
64	CH 9	17103	642	CH 9	17109
66	CH 10	16289	644	CH 10	16286
68	CH 11	16001	646	CH 11	16000
70	CH 12	16303	648	CH 12	16312
72	CH 13	16006	650	CH 13	16015
74	CH 14	16464	652	CH 14	16480
76	CH 15	16474	654	CH 15	16472
78	REFLECTOR 1 POSITION 3	2149	656	REFLECTOR 1 POSITION 20	2149
80	REFLECTOR 2 POSITION 3	1951	658	REFLECTOR 2 POSITION 20	1950
82	REFL 1 POS 3 2ND LOOK	2149	660	REFL 1 POS 20 2ND LOOK	2149
84	REFL 2 POS 3 2ND LOOK	1950	662	REFL 2 POS 20 2ND LOOK	1951
86	NADIR SAMPLE 3 CH 3	15641	664	NADIR SAMPLE 20 CH 3	15640
88	CH 4	16460	666	CH 4	16461
90	CH 5	16767	668	CH 5	16769
92	CH 6	17071	670	CH 6	17071

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	16074	672	CH 7	16077
96	CH 8	16262	674	CH 8	16265
98	CH 9	17108	676	CH 9	17108
100	CH 10	16284	678	CH 10	16290
102	CH 11	16000	680	CH 11	16002
104	CH 12	16310	682	CH 12	16312
106	CH 13	16006	684	CH 13	15998
108	CH 14	16495	686	CH 14	16478
110	CH 15	16473	688	CH 15	16475
112	REFLECTOR 1 POSITION 4	2149	690	REFLECTOR 1 POSITION 21	2149
114	REFLECTOR 2 POSITION 4	1951	692	REFLECTOR 2 POSITION 21	1951
116	REFL 1 POS 4 2ND LOOK	2149	694	REFL 1 POS 21 2ND LOOK	2149
118	REFL 2 POS 4 2ND LOOK	1951	696	REFL 2 POS 21 2ND LOOK	1951
120	NADIR SAMPLE 4 CH 3	15644	698	NADIR SAMPLE 21 CH 3	15640
122	CH 4	16455	700	CH 4	16462
124	CH 5	16769	702	CH 5	16768
126	CH 6	17072	704	CH 6	17074
128	CH 7	16077	706	CH 7	16076
130	CH 8	16265	708	CH 8	16261
132	CH 9	17108	710	CH 9	17110
134	CH 10	16284	712	CH 10	16289
136	CH 11	15999	714	CH 11	16005
138	CH 12	16314	716	CH 12	16309
140	CH 13	16015	718	CH 13	16004
142	CH 14	16484	720	CH 14	16485
144	CH 15	16472	722	CH 15	16472
146	REFLECTOR 1 POSITION 5	2149	724	REFLECTOR 1 POSITION 22	2149
148	REFLECTOR 2 POSITION 5	1951	726	REFLECTOR 2 POSITION 22	1951
150	REFL 1 POS 5 2ND LOOK	2149	728	REFL 1 POS 22 2ND LOOK	2149
152	REFL 2 POS 5 2ND LOOK	1951	730	REFL 2 POS 22 2ND LOOK	1951
154	NADIR SAMPLE 5 CH 3	15641	732	NADIR SAMPLE 22 CH 3	15648
156	CH 4	16459	734	CH 4	16459
158	CH 5	16770	736	CH 5	16767
160	CH 6	17069	738	CH 6	17071
162	CH 7	16075	740	CH 7	16077
164	CH 8	16262	742	CH 8	16263
166	CH 9	17108	744	CH 9	17108
168	CH 10	16290	746	CH 10	16289
170	CH 11	15999	748	CH 11	16005
172	CH 12	16305	750	CH 12	16316
174	CH 13	16004	752	CH 13	16018
176	CH 14	16474	754	CH 14	16481
178	CH 15	16473	756	CH 15	16474
180	REFLECTOR 1 POSITION 6	2149	758	REFLECTOR 1 POSITION 23	2149
182	REFLECTOR 2 POSITION 6	1951	760	REFLECTOR 2 POSITION 23	1950
184	REFL 1 POS 6 2ND LOOK	2149	762	REFL 1 POS 23 2ND LOOK	2149
186	REFL 2 POS 6 2ND LOOK	1950	764	REFL 2 POS 23 2ND LOOK	1950
188	NADIR SAMPLE 6 CH 3	15643	766	NADIR SAMPLE 23 CH 3	15642
190	CH 4	16458	768	CH 4	16460
192	CH 5	16772	770	CH 5	16771

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
194	CH 6	17070	772	CH 6	17072
196	CH 7	16076	774	CH 7	16076
198	CH 8	16265	776	CH 8	16264
200	CH 9	17107	778	CH 9	17107
202	CH 10	16286	780	CH 10	16289
204	CH 11	16004	782	CH 11	15999
206	CH 12	16303	784	CH 12	16313
208	CH 13	16009	786	CH 13	16009
210	CH 14	16478	788	CH 14	16492
212	CH 15	16472	790	CH 15	16472
214	REFLECTOR 1 POSITION 7	2149	792	REFLECTOR 1 POSITION 24	2149
216	REFLECTOR 2 POSITION 7	1951	794	REFLECTOR 2 POSITION 24	1951
218	REFL 1 POS 7 2ND LOOK	2149	796	REFL 1 POS 24 2ND LOOK	2149
220	REFL 2 POS 7 2ND LOOK	1951	798	REFL 2 POS 24 2ND LOOK	1951
222	NADIR SAMPLE 7 CH 3	15644	800	NADIR SAMPLE 24 CH 3	15642
224	CH 4	16460	802	CH 4	16459
226	CH 5	16769	804	CH 5	16771
228	CH 6	17070	806	CH 6	17065
230	CH 7	16078	808	CH 7	16078
232	CH 8	16264	810	CH 8	16263
234	CH 9	17109	812	CH 9	17107
236	CH 10	16288	814	CH 10	16286
238	CH 11	16004	816	CH 11	16004
240	CH 12	16312	818	CH 12	16310
42	CH 13	15991	820	CH 13	160
244	CH 14	16490	822	CH 14	1649
246	CH 15	16472	824	CH 15	16475
248	REFLECTOR 1 POSITION 8	2149	826	REFLECTOR 1 POSITION 25	2149
250	REFLECTOR 2 POSITION 8	1951	828	REFLECTOR 2 POSITION 25	1951
252	REFL 1 POS 8 2ND LOOK	2149	830	REFL 1 POS 25 2ND LOOK	2149
254	REFL 2 POS 8 2ND LOOK	1951	832	REFL 2 POS 25 2ND LOOK	1951
256	NADIR SAMPLE 8 CH 3	15643	834	NADIR SAMPLE 25 CH 3	15643
258	CH 4	16457	836	CH 4	16456
260	CH 5	16768	838	CH 5	16769
262	CH 6	17072	840	CH 6	17072
264	CH 7	16078	842	CH 7	16075
266	CH 8	16266	844	CH 8	16264
268	CH 9	17106	846	CH 9	17109
270	CH 10	16287	848	CH 10	16284
272	CH 11	16000	850	CH 11	15999
274	CH 12	16315	852	CH 12	16314
276	CH 13	16006	854	CH 13	16012
278	CH 14	16467	856	CH 14	16492
280	CH 15	16474	858	CH 15	16473
282	REFLECTOR 1 POSITION 9	2149	860	REFLECTOR 1 POSITION 26	2149
284	REFLECTOR 2 POSITION 9	1951	862	REFLECTOR 2 POSITION 26	1950
286	REFL 1 POS 9 2ND LOOK	2149	864	REFL 1 POS 26 2ND LOOK	2149
288	REFL 2 POS 9 2ND LOOK	1951	866	REFL 2 POS 26 2ND LOOK	1951
90	NADIR SAMPLE 9 CH 3	15644	868	NADIR SAMPLE 26 CH 3	15640
92	CH 4	16458	870	CH 4	16460

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	16768	872	CH 5	16768
296	CH 6	17070	874	CH 6	17073
298	CH 7	16078	876	CH 7	16076
300	CH 8	16265	878	CH 8	16264
302	CH 9	17107-	880	CH 9	17105-
304	CH 10	16283	882	CH 10	16290
306	CH 11	16004	884	CH 11	15998
308	CH 12	16308	886	CH 12	16309
310	CH 13	16014	888	CH 13	16008
312	CH 14	16477	890	CH 14	16483
314	CH 15	16474	892	CH 15	16472
316	REFLECTOR 1 POSITION 10	2149	894	REFLECTOR 1 POSITION 27	2149
318	REFLECTOR 2 POSITION 10	1951	896	REFLECTOR 2 POSITION 27	1951
320	REFL 1 POS 10 2ND LOOK	2149	898	REFL 1 POS 27 2ND LOOK	2149
322	REFL 2 POS 10 2ND LOOK	1951	900	REFL 2 POS 27 2ND LOOK	1951
324	NADIR SAMPLE 10 CH 3	15641-	902	NADIR SAMPLE 27 CH 3	15641-
326	CH 4	16459	904	CH 4	16457
328	CH 5	16770	906	CH 5	16767
330	CH 6	17073	908	CH 6	17072
332	CH 7	16076	910	CH 7	16076
334	CH 8	16264	912	CH 8	16264
336	CH 9	17107-	914	CH 9	17107-
338	CH 10	16290	916	CH 10	16286
340	CH 11	15996	918	CH 11	16000
12	CH 12	16304	920	CH 12	16322
344	CH 13	16014	922	CH 13	16008
346	CH 14	16482	924	CH 14	16488
348	CH 15	16473	926	CH 15	16473
350	REFLECTOR 1 POSITION 11	2149	928	REFLECTOR 1 POSITION 28	2149
352	REFLECTOR 2 POSITION 11	1951	930	REFLECTOR 2 POSITION 28	1951
354	REFL 1 POS 11 2ND LOOK	2149	932	REFL 1 POS 28 2ND LOOK	2149
356	REFL 2 POS 11 2ND LOOK	1951	934	REFL 2 POS 28 2ND LOOK	1951
358	NADIR SAMPLE 11 CH 3	15643-	936	NADIR SAMPLE 28 CH 3	15642-
360	CH 4	16459	938	CH 4	16460
362	CH 5	16771	940	CH 5	16771
364	CH 6	17068	942	CH 6	17069
366	CH 7	16074	944	CH 7	16074
368	CH 8	16264	946	CH 8	16264
370	CH 9	17105-	948	CH 9	17107-
372	CH 10	16287	950	CH 10	16290
374	CH 11	15997	952	CH 11	16000
376	CH 12	16317	954	CH 12	16308
378	CH 13	16016	956	CH 13	16003
380	CH 14	16475	958	CH 14	16488
382	CH 15	16475	960	CH 15	16473
384	REFLECTOR 1 POSITION 12	2149	962	REFLECTOR 1 POSITION 29	2149
386	REFLECTOR 2 POSITION 12	1951	964	REFLECTOR 2 POSITION 29	1950
388	REFL 1 POS 12 2ND LOOK	2149	966	REFL 1 POS 29 2ND LOOK	2149
90	REFL 2 POS 12 2ND LOOK	1950	968	REFL 2 POS 29 2ND LOOK	1951
92	NADIR SAMPLE 12 CH 3	15644-	970	NADIR SAMPLE 29 CH 3	15641-

ELEMENT	DESCRIPTION		VALUE	ELEMENT	DESCRIPTION		VAL
394		CH 4	16460	972		CH 4	16457
396		CH 5	16771	974		CH 5	16770
398		CH 6	17070	976		CH 6	17069
400		CH 7	16076	978		CH 7	16078
402		CH 8	16264	980		CH 8	16262
404		CH 9	17106	982		CH 9	17108
406		CH 10	16290	984		CH 10	16283
408		CH 11	16005	986		CH 11	16000
410		CH 12	16307	988		CH 12	16307
412		CH 13	16009	990		CH 13	16012
414		CH 14	16492	992		CH 14	16476
416		CH 15	16473	994		CH 15	16472
418	REFLECTOR 1 POSITION 13		2149	996	REFLECTOR 1 POSITION 30		2149
420	REFLECTOR 2 POSITION 13		1951	998	REFLECTOR 2 POSITION 30		1951
422	REFL 1 POS 13 2ND LOOK		2149	1000	REFL 1 POS 30 2ND LOOK		2149
424	REFL 2 POS 13 2ND LOOK		1951	1002	REFL 2 POS 30 2ND LOOK		1951
426	NADIR SAMPLE 13	CH 3	15637	1004	NADIR SAMPLE 30	CH 3	15641
428		CH 4	16458	1006		CH 4	16458
430		CH 5	16771	1008		CH 5	16770
432		CH 6	17066	1010		CH 6	17071
434		CH 7	16076	1012		CH 7	16077
436		CH 8	16264	1014		CH 8	16262
438		CH 9	17108	1016		CH 9	17110
440		CH 10	16288	1018		CH 10	16290
42		CH 11	16004	1020		CH 11	16(
444		CH 12	16311	1022		CH 12	163
446		CH 13	16017	1024		CH 13	16009
448		CH 14	16472	1026		CH 14	16503
450		CH 15	16474	1028		CH 15	16475
452	REFLECTOR 1 POSITION 14		2149	1030	REFLECTOR 1 COLD CAL POS		0E
454	REFLECTOR 2 POSITION 14		1951	1032	REFLECTOR 2 COLD CAL POS		0E
456	REFL 1 POS 14 2ND LOOK		2149	1034	REFL 1 COLD CAL 2ND LOOK		0E
458	REFL 2 POS 14 2ND LOOK		1951	1036	REFL 2 COLD CAL 2ND LOOK		0E
460	NADIR SAMPLE 14	CH 3	15639	1038	COLD CAL DATA 1	CH 3	0
462		CH 4	16459	1040		CH 4	0
464		CH 5	16773	1042		CH 5	0
466		CH 6	17065	1044		CH 6	0
468		CH 7	16078	1046		CH 7	0
470		CH 8	16265	1048		CH 8	0
472		CH 9	17108	1050		CH 9	0
474		CH 10	16284	1052		CH 10	0
476		CH 11	16000	1054		CH 11	0
478		CH 12	16310	1056		CH 12	0
480		CH 13	16013	1058		CH 13	0
482		CH 14	16476	1060		CH 14	0
484		CH 15	16473	1062		CH 15	0
486	REFLECTOR 1 POSITION 15		2149	1064	COLD CAL DATA 2	CH 3	0
488	REFLECTOR 2 POSITION 15		1951	1066		CH 4	0
190	REFL 1 POS 15 2ND LOOK		2149	1068		CH 5	0
192	REFL 2 POS 15 2ND LOOK		1950	1070		CH 6	0

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	NADIR SAMPLE 15 CH 3	15639	1072	CH 7	0
496	CH 4	16461	1074	CH 8	0
498	CH 5	16771	1076	CH 9	0
500	CH 6	17071	1078	CH 10	0
502	CH 7	16075	1080	CH 11	0
504	CH 8	16262	1082	CH 12	0
506	CH 9	17109	1084	CH 13	0
508	CH 10	16291	1086	CH 14	0
510	CH 11	15998	1088	CH 15	0
512	CH 12	16304	1182	REFLECTOR 1 WARM CAL POS	0E
514	CH 13	16020	1184	REFLECTOR 2 WARM CAL POS	0E
516	CH 14	16482	1186	REFL 1 WARM CAL 2ND LOOK	0E
518	CH 15	16474	1188	REFL 2 WARM CAL 2ND LOOK	0E
520	REFLECTOR 1 POSITION 16	2149	1190	WARM CAL DATA 1 CH 3	0
522	REFLECTOR 2 POSITION 16	1951	1192	CH 4	0
524	REFL 1 POS 16 2ND LOOK	2149	1194	CH 5	0
526	REFL 2 POS 16 2ND LOOK	1951	1196	CH 6	0
528	NADIR SAMPLE 16 CH 3	15647	1198	CH 7	0
530	CH 4	16457	1200	CH 8	0
532	CH 5	16770	1202	CH 9	0
534	CH 6	17071	1204	CH 10	0
536	CH 7	16073	1206	CH 11	0
538	CH 8	16263	1208	CH 12	0
540	CH 9	17108	1210	CH 13	0
12	CH 10	16288	1212	CH 14	0
544	CH 11	16003	1214	CH 15	0
546	CH 12	16318	1216	WARM CAL DATA 2 CH 3	0
548	CH 13	16011	1218	CH 4	0
550	CH 14	16481	1220	CH 5	0
552	CH 15	16472	1222	CH 6	0
554	REFLECTOR 1 POSITION 17	2149	1224	CH 7	0
556	REFLECTOR 2 POSITION 17	1950	1226	CH 8	0
558	REFL 1 POS 17 2ND LOOK	2149	1228	CH 9	0
560	REFL 2 POS 17 2ND LOOK	1951	1230	CH 10	0
562	NADIR SAMPLE 17 CH 3	15647	1232	CH 11	0
564	CH 4	16457	1234	CH 12	0
566	CH 5	16769	1236	CH 13	0
568	CH 6	17068	1238	CH 14	0
570	CH 7	16076	1240	CH 15	0

EMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	17870	23.13
1092	SCAN MOTOR A1-2	18501	23.93
1094	FEEDHORN A1-1	20256	26.97
1096	FEEDHORN A1-2	21467	27.87
1098	RF MUX A1-1	21468	29.85
1100	RF MUX A1-2	22322	31.78
1102	LOCAL OSCILLATOR CHANNEL 3	23541	33.93
1104	LOCAL OSCILLATOR CHANNEL 4	23721	34.21
1106	LOCAL OSCILLATOR CHANNEL 5	23096	32.73
1108	LOCAL OSCILLATOR CHANNEL 6	21198	29.45
1110	LOCAL OSCILLATOR CHANNEL 7	21997	30.89
1112	LOCAL OSCILLATOR CHANNEL 8	23107	33.46
1114	LOCAL OSCILLATOR CHANNEL 15	22585	33.06
1116	PLL LO #2 CHANNELS 9 THROUGH 14	20980	29.64
1118	PLL LO #1 CHANNELS 9 THROUGH 14	24112	35.51
1120	SPARE (NOT USED)	32767	52.86
1122	MIXER/IF AMPLIFIER CHANNEL 3	22944	32.47
1124	MIXER/IF AMPLIFIER CHANNEL 4	22570	32.49
1126	MIXER/IF AMPLIFIER CHANNEL 5	22423	31.93
1128	MIXER/IF AMPLIFIER CHANNEL 6	21761	30.40
1130	MIXER/IF AMPLIFIER CHANNEL 7	22085	31.11
1132	MIXER/IF AMPLIFIER CHANNEL 8	22539	32.62
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	21230	30.08
1136	MIXER/IF AMPLIFIER CHANNEL 15	22583	32.56
38	IF AMPLIFIER CHANNEL 11 THRU 14	22568	32.40
1140	IF AMPLIFIER CHANNEL 9	23021	32.41
1142	IF AMPLIFIER CHANNEL 10	22627	32.61
1144	IF AMPLIFIER CHANNEL 11	21696	30.25
1146	DC/DC CONVERTER	23050	32.74
1148	IF AMPLIFIER CHANNEL 13	21800	30.18
1150	IF AMPLIFIER CHANNEL 14	21462	30.16
1152	IF AMPLIFIER CHANNEL 12	21458	30.13
1154	RF SHELF A1-1	22081	31.05
1156	RF SHELF A1-2	22282	31.63
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	20701	28.07
1160	A1-1 WARM LOAD 1	23233	23.91
1162	A1-1 WARM LOAD 2	23433	23.95
1164	A1-1 WARM LOAD 3	23506	24.02
1166	A1-1 WARM LOAD 4	23189	23.97
1168	A1-1 WARM LOAD CENTER	23371	24.01
1170	A1-2 WARM LOAD 1	24248	25.39
1172	A1-2 WARM LOAD 2	24079	25.36
1174	A1-2 WARM LOAD 3	24116	25.42
1176	A1-2 WARM LOAD 4	24031	25.39
1178	A1-2 WARM LOAD CENTER	23904	25.28
1180	TEMP SENSOR REFERENCE VOLTAGE	24886	

NADIR MODE

DESCRIPTION	STATUS	STATUS	STATUS
SCANNER A1-1 POWER	ON	ON	ON
SCANNER A1-2 POWER	ON	ON	ON
PLL POWER	PLLO # 1	PLLO # 1	PLLO # 1
ANTENNA IN WARM CAL POSITION MODE	NO	NO	NO
ANTENNA IN COLD CAL POSITION MODE	NO	NO	NO
ANTENNA IN NADIR POSITION MODE	YES	YES	YES
ANTENNA IN FULL SCAN MODE	NO	NO	NO
SURVIVAL HEATER POWER	OFF	OFF	OFF
MODULE POWER	CONNECT	CONNECT	CONNECT
COLD CAL POSITION MSB	ZERO	ZERO	ZERO
COLD CAL POSITION LSB	ZERO	ZERO	ZERO

ANALOG DATA

DESCRIPTION	VALUE	DEG C	VALUE	DEG C	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	217	22.1	217	22.1	217	22.1
A1-2 SCANNER MOTOR TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-1 RF SHELF TEMPERATURE	221	27.5	221	27.5	221	27.5
A1-2 RF SHELF TEMPERATURE	224	31.6	224	31.6	224	31.6
A1-1 WARM LOAD TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-2 WARM LOAD TEMPERATURE	220	26.2	220	26.2	220	26.2

DESCRIPTION	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS
A1-1 ANTENNA DRIVE MOTOR CURRENT (AVRG)	5	2.33	5	2.33	5	2.33
A1-2 ANTENNA DRIVE MOTOR CURRENT (AVRG)	5	2.33	5	2.33	5	2.33
SIGNAL PROCESSING +15 VDC	173	14.93	173	14.93	173	14.93
ANTENNA DRIVE +15 VDC	172	14.84	172	14.84	172	14.84
SIGNAL PROCESSING -15 VDC	151	-15.00	151	-15.00	151	-15.00
ANTENNA DRIVE -15 VDC	150	-15.05	150	-15.05	150	-15.05
RECEIVER AMPLIFIER +8 VDC	158	7.90	158	7.90	158	7.90
SIGNAL PROCESSOR +5 VDC	147	4.90	147	4.90	147	4.90
ANTENNA DRIVE +5 VDC	147	4.90	147	4.90	147	4.90
RECEIVER MIXER/IF +10 VDC	172	9.94	172	9.94	172	9.94
PHASE LOCK LOOP (CHANNEL 9/14) +15 VDC	172	14.84	172	14.84	172	14.84
PHASE LOCK LOOP (CHANNEL 9/14) -15 VDC	147	-15.20	147	-15.20	147	-15.20
L.O. VOLTAGE (CHANNEL 8) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 7) VDC	174	9.96	174	9.96	173	9.90
L.O. VOLTAGE (CHANNEL 6) VDC	175	10.01	175	10.01	175	10.01
L.O. VOLTAGE (CHANNEL 3) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 4) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 5) VDC	173	9.90	173	9.90	173	9.90
PLLO # 2 LOCK DETECT	5	0.10	5	0.10	5	0.10
PLLO # 1 LOCK DETECT	222	4.44	222	4.44	222	4.44
L.O. VOLTAGE (CHANNEL 15) VDC	172	14.84	172	14.84	172	14.84

PRT TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
VARIABLE TARGET	615	42.00	601	14.00
	616	43.00	602	15.00
	617	44.00	603	16.00
	618	45.00	604	17.00
	619	46.00	605	18.00
	620	47.00	606	19.00
	621	48.00	607	20.00
FIXED TARGET	622	49.00	608	21.00
	623	50.00	609	22.00
	624	51.00	610	23.00
	625	52.00	611	24.00
	626	53.00	612	25.00
	627	67.00	613	69.00
	628	68.00	614	70.00
BASEPLATE	629	71.00	630	72.00
	631	26.00	632	27.00

THERMOCOUPLE TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
FIXED TARGET SHROUD	558	5.00	537	34.00
	559	6.00	538	35.00
VARIABLE TARGET SHROUD	550	7.00	524	36.00
	551	8.00	525	37.00
FIXED TARGET N2	506	57.00	502	30.00
	507	58.00	503	31.00
VARIABLE TARGET N2	516	59.00	511	32.00
	517	60.00	512	33.00
HEATER N2	514	1.00	509	38.00
	515	2.00	510	39.00
FIXED TARGET FLOW METER	508	63.00	504	61.00
VARIABLE TARGET FLOW METER	518	64.00	513	62.00
BASEPLATE HEATER N2	519	3.00	520	4.00
BASEPLATE N2	521	9.00	522	10.00
BASEPLATE FLOW METER	523	65.00		
ADJUNCT RADIATORS	575	73.00	577	74.00
	579	75.00	581	76.00

AMSU A1-17 A1.EXE NADIR MODE P1 24-NOV-93 12:33:48 SCAN NUMBER 122
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

RADIOMETRIC DATA

BEAM POSITION 3

CH	DATA	CH	DATA	CH	DATA
3	15638	8	16264	13	16009
4	16456	9	17107	14	16481
5	16769	10	16286	15	16472
6	17067	11	15999		
7	16074	12	16300		

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

TOS 32

AMSU A1-17 A1.EXE NADIR MODE P1 24-NOV-93 12:34:12 SCAN NUMBER 12?

[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

RADIOMETRIC DATA

BEAM POSITION 9

CH	DATA	CH	DATA	CH	DATA
3	15643	8	16260	13	16006
4	16459	9	17104	14	16508
5	16770	10	16283	15	16473
6	17067	11	16001		
7	16077	12	16307		

[21] UP [22] DOWN

POWER [4] ON

SCREEN ONLY [2] PRINT [3] FULL [1] RETURN

SELECT TOUCHSCREEN BUTTON 2

TEST DATA SHEET 32

Digital-A Data Output Nadir Mode Radiometer Data Section [V] (Paragraph 3.2.4.3.4.4)

BP	A1-2 Channel-3 (50.3 GHz)				A1-1 Channel-9 (57.290344 GHz)			
	Element (For Ref)	Position*	Required**	Pass/Fail	Element (For Ref)	Position*	Required**	Pass/Fail
01	0018			P	0030			P
02	0052				0064			
03	0086				0098			
04	0120				0132			
05	0154				0166			
06	0188				0200			
07	0222				0234			
08	0256				0268			
09	0290				0302			
10	0324				0336			
11	0356				0370			
12	0392				0404			
13	0426				0438			
14	0460				0472			
15	0494				0506			
16	0528				0540			
17	0562				0574			
18	0596				0608			
19	0630				0642			
20	0664				0676			
21	0698				0710			
22	0732				0744			
23	0766				0778			
24	0800				0812			
25	0834				0846			
26	0868				0880			
27	0902				0914			
28	0936				0948			
29	0970				0982			
30	1004				1016			
CC	1038		0		1050		0	
WL	1190		0	P	1202		0	P

* Actual counts from computer printout. Rewriting counts on this data sheet is optional.

** Required = 16,500 ± 4000 counts (Unless otherwise indicated).

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer — Date: 11/24/98

Customer Representative (Flight Hardware Only) — Date: 12/2/98

Quality Control — Date: DEC 1 '98

TEST DATA SHEET 33 (Sheet 1 of 2)
Nadir Mode Temperature Sensors Section [VI] (Paragraph 3.2.4.3.4.4)

Thermistor Sensors		Recorded Value* (deg. C)	Required Value (deg. C)	Pass/ Fail
Element	Description			
1090	A1-1 Warm Load 1		25 ± 15	P
1092	A1-1 Warm Load 2		25 ± 15	
1094	A1-1 Warm Load 3		25 ± 15	
1096	A1-1 Warm Load 4		25 ± 15	
1098	A1-1 Warm Load Center		25 ± 15	
1100	A1-2 Warm Load 1		25 ± 15	
1102	A1-2 Warm Load 2		25 ± 15	
1104	A1-2 Warm Load 3		25 ± 15	
1106	A1-2 Warm Load 4		25 ± 15	
1108	A1-2 Warm Load Center		25 ± 15	
1110	Local Oscillator Channel 7		25 ± 15	
1112	Local Oscillator Channel 8		25 ± 15	
1114	Local Oscillator Channel 15		25 ± 15	
1116	PLL LO #2 Channels 9-14		25 ± 15	
1118	PLL LO #1 Channels 9-14		25 ± 15	
1120	PLLO (Reference Oscillator)**		25 ± 15	
1122	Mixer I.F. Amp. Channel 3		25 ± 15	
1124	Mixer I.F. Amp. Channel 4		25 ± 15	
1126	Mixer I.F. Amp. Channel 5		25 ± 15	
1128	Mixer I.F. Amp. Channel 6		25 ± 15	
1130	Mixer I.F. Amp. Channel 7		25 ± 15	
1132	Mixer I.F. Amp. Channel 8		25 ± 15	
1134	Mixer I.F. Amp. Channels 9-14		25 ± 15	
1136	Mixer I.F. Amp. Channel 15		25 ± 15	P

* Value is from the STE printout sheets. Copying data to this sheet is optional.
** Not used on S/N 105 and above.

(Continued on Sheet 2)

TEST DATA SHEET 33 (Sheet 2 of 2)
Nadir Mode Temperature Sensors Section [VI] (Paragraph 3.2.4.3.4.4)

Thermistor Sensors		Recorded Value* (deg. C)	Required Value (deg. C)	Pass/ Fail
Element	Description			
1138	I.F. Amp. Channel 11-14		25 ± 15	P
1140	I.F. Amp. Channel 9		25 ± 15	
1142	I.F. Amp. Channel 10		25 ± 15	
1144	I.F. Amp. Channel 11		25 ± 15	
1146	DC/DC Converter		25 ± 15	
1148	I.F. Amp. Channel 13		25 ± 15	
1150	I.F. Amp. Channel 14		25 ± 15	
1152	I.F. Amp. Channel 12		25 ± 15	
1154	RF Shelf A1-1		25 ± 15	
1156	RF Shelf A1-2		25 ± 15	
1158	Detector Preamp Assy.		25 ± 15	
1160	Scan Motor A1-1		25 ± 15	
1162	Scan Motor A1-2		25 ± 15	
1164	Feed Horn A1-1		25 ± 15	
1166	Feed Horn A1-2		25 ± 15	
1168	R.F. Mux A1-1		25 ± 15	
1170	R.F. Mux A1-2		25 ± 15	
1172	Local Oscillator Channel 3		25 ± 15	
1174	Local Oscillator Channel 4		25 ± 15	
1176	Local Oscillator Channel 5		25 ± 15	
1178	Local Oscillator Channel 6		25 ± 15	
1180	Temp Sensor Ref Voltage Count		**	P

* Value is from the STE printout sheets. Copying data to this sheet is optional.
** = Count of 24,552 +1765,-1308.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer — 11/24/98 Date

Customer Representative (Flight Hardware Only) — DCMC — 12/2/98 Date

Quality Control — 7A 268 — NOV 30 '98 Date

TEST DATA SHEET 34

Analog Telemetry Verification by Way of Connector J6 (Paragraph 3.2.4.3.5.1)

	From	Description	To	Measured (volts)	Required (volts)	Pass/Fail
03	J6-02	RF Shelf A1-1 Temp.	J1-10	4.41	3.5 ± 2 V	P
01	J6-03	A1-1 Scan Motor Temp.	J1-10	4.35	3.5 ± 2 V	
05	J6-04	Warm Load A1-1 Temp.	J1-10	4.36	3.5 ± 2 V	
04	J6-21	RF Shelf A1-2 Temp.	J1-10	4.44	3.5 ± 2 V	
02	J6-22	A1-2 Scan Motor Temp.	J1-10	4.36	3.5 ± 2 V	
06	J6-23	Warm Load A1-2 Temp.	J1-10	4.38	3.5 ± 2 V	
25	J6-06	PLLO No. 2 Lock detect	J2-03	4.45	***	
07	J6-08	A1-1 Drive Motor Curr.	J2-03	2.10	3.5 ± 2 V	
10	J6-09	+15 V Antenna Drive	J2-03	3.50	3.5 ± 2 V	
15	J6-10	+5 V Antenna Drive	J2-03	2.99	3.5 ± 2 V	
09	J6-11	+15 V Signal Processing	J2-03	3.47	3.5 ± 2 V	
14	J6-12	+5 V Signal Processing	J2-03	2.96	3.5 ± 2 V	
22	J6-13	L.O. Voltage Channel 3	J2-03	3.51	3.5 ± 2 V	
24	J6-14	L.O. Voltage Channel 5	J2-03	3.50	3.5 ± 2 V	
20	J6-15	L.O. Voltage Channel 7	J2-03	3.48	3.5 ± 2 V	
16	J6-16	+15 V PLL LO Ch 9-14	J2-03	3.45	3.5 ± 2 V	
17	J6-17	*	J2-03	3.45	3.5 ± 2 V	
27	J6-18	L.O. Voltage Channel 15	J2-03	3.46	3.5 ± 2 V	
26	J6-25	PLLO No. 1 Lock detect	J2-03	4.45	***	
08	J6-27	A1-2 Drive Motor Curr.	J2-03	2.01	3.5 ± 2 V	
12	J6-28	-15 V Antenna Drive	J2-03	3.04	3.5 ± 2 V	
11	J6-29	-15 V Signal Processing	J2-03	3.04	3.5 ± 2 V	
23	J6-30	L.O. Voltage Channel 4	J2-03	3.51	3.5 ± 2 V	
21	J6-31	L.O. Voltage Channel 6	J2-03	3.48	3.5 ± 2 V	
19	J6-32	L.O. Voltage Channel 8	J2-03	3.49	3.5 ± 2 V	
18	J6-33	-15 V PLL LO Ch 9-14	J2-03	2.94	3.5 ± 2 V	
13	J6-34	**	J2-03	3.19	3.5 ± 2 V	P

* +8.5 V PLL LO Ch 9-14 for S/N 101-104, +10V Mixer Amp for S/N 105 and above.
** +8 V Receiver for S/N 101-104, +8 V IF Amp for S/N 105 and above.
*** 4.5 ±0.5 when locked, 0.5 ±0.5 when unlocked or OFF. One must be locked.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer 11/24/98 Date

Customer Representative (Flight Hardware Only) 12/2/98 Date

7A 268 NOV 24 '98

Quality Control Date

TEST DATA SHEET 35 (Sheet 1 of 2)
Analog Telemetry Signals by Way of the STE (Paragraph 3.2.4.3.5.2)

	Description	(*)	Measured (Deg. C)	Required (Deg. C)	Pass/Fail
01	A1-1 Scanner Motor	Temp	22.64	25 ± 15	P
02	A1-2 Scanner Motor	Temp	24.39	25 ± 15	
03	A1-1 RF Shelf	Temp	27.38	25 ± 15	
04	A1-2 RF Shelf	Temp	30.23	25 ± 15	
05	A1-1 Warm Load	Temp	24.44	25 ± 15	
06	A1-2 Warm Load	Temp	25.04	25 ± 15	P
			(mAmps)	(mAmps)	
07	Ant A1-1 Drv Motor Current		50.03	125 mA (Max)	P
08	Ant A1-2 Drv Motor Current		46.94	125 mA (Max)	P

(*) Data from the printout sheet. Rewriting data on this space is optional.

(Continued on sheet 2)

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer Date 11/24/98

Customer Representative (Flight Hardware Only) Date 12/2/98 DCMC

Quality Control Date NOV 25 '98

7A 268

TEST DATA SHEET 35 (Sheet 2 of 2)
Analog Telemetry Signals by Way of the STE (Paragraph 3.2.4.3.5.2)

	Description	(*)	Measured (volts)	Required (volts)	Pass/ Fail
09	Signal Processing	+15 V	14.93	15.0 ± 0.5 V	P
10	Antenna Drive	+15 V	15.15	15.0 ± 0.5 V	
11	Signal Processing	-15 V	-15.00	-15.0 ± 0.5 V	
12	Antenna Drive	-15 V	-14.91	-15.0 ± 0.5 V	
13	Receiver	+8 V	7.95	8.0 ± 0.5 V	
14	Sig Processing	+5 V	4.95	5.0 ± 0.5 V	
15	Antenna Drive	+5 V	5.00	5.0 ± 0.5 V	
16	~~Phase Lock Loop Ch 9-14~~ RECEIVER MIXER/IF	~~+10~~ V ~~+8.5~~ V	9.95	10.0 ~~8.5~~ ± 0.5 V	
17	Phase Lock Loop Ch 9-14	+15 V	14.85	15.0 ± 0.5 V	
18	Phase Lock Loop Ch 9-14	-15 V	-15.20	-15.0 ± 0.5 V	
19	L.O. #8	Ch-8	10.00	(**)__ ± 0.5 V	
20	L.O. #7	Ch-7	9.93	(**)__ ± 0.5 V	
21	L.O. #6	Ch-6	10.02	(**)__ ± 0.5 V	
22	L.O. #3	Ch-3	9.98	(**)__ ± 0.5 V	
23	L.O. #4	Ch-4	10.01	(**)__ ± 0.5 V	
24	L.O. #5	Ch-5	9.92	(**)__ ± 0.5 V	
25	PLLO No. 2 Lock Detect		.11	(***)	
26	PLLO No. 1 Lock Detect		4.42	(***)	P
27	L.O. #15	Ch-15	14.93	(**)__ ± 0.5 V	P

(*) Data from the printout sheet. Rewriting data on this space is optional.
(**) GDO voltages from the manufacturer data sheet for S/N 101-104; DRO CH3-8 10V, GDO CH15 15V for S/N 105 and above.
(***) Locked PLO voltage 0 to +15 V, other PLO voltage ±15.0 V; one must be locked for S/N 101-104. Locked PLO voltage 4.0 ±1.0 V, other PLO voltage 0.0 ±0.2 V, one must be locked for S/N 105 and above.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer 11/24/98 Date

Customer Representative (Flight Hardware Only) 12/2/98 Date

Quality Control NOV 30 '98 Date

```
AMSU  A1-17 A1.EXE     FULL SCAN MODE     P1 24-NOV-93 10:26:10  SCAN NUMBER   29
[ 5 ] DIGITAL A DATA   ELEMENT 0000

[ 6 ] DIGITAL B DATA   ELEMENT   00

[ 7 ] ANALOG DATA      ELEMENT   00

                              ANALOG DATA  1 TO 18

 1 A1-1 SCANR MOTOR    217    22.64 DEG C 10 ANTENNA DRIVE            15VDC  15.15
 2 A1-2 SCANR MOTOR    218    24.39 DEG C 11 SIGNAL PROCESSING       -15VDC -15.00
 3 A1-1 RF SHELF       220    27.38 DEG C 12 ANTENNA DRIVE           -15VDC -14.91
 4 A1-2 RF SHELF       222    30.23 DEG C 13 RECEIVER AMPLIFIER        8VDC   7.95
 5 A1-1 WARM LOAD      218    24.44 DEG C 14 SIGNAL PROCESSOR          5 VDC  4.95
 6 A1-2 WARM LOAD      219    25.04 DEG C 15 ANTENNA DRIVE             5 VDC  5.00
 7 ANT A1-1 DRIVE MOTOR CURRENT    50.03 16 RECEIVER MIXER/IF          10VDC  9.95
 8 ANT A1-2 DRIVE MOTOR CURRENT    46.94 17 PHASE LOCK LOOP CH9/14     15VDC 14.85
 9 SIGNAL PROCESSING      +15VDC   14.93 18 PHASE LOCK LOOP CH9/14    -15VDC -15.20
[ 21 ] UP                    [ 22 ] DOWN

          POWER [ 4 ]  ON
                       SCREEN ONLY [ 2 ]  PRINT  [ 3 ] FULL        [ 1 ] RETURN
 SELECT TOUCHSCREEN BUTTON 2
```

TDS 35

AMSU A1-17 A1.EXE FULL SCAN MODE P1 24-NOV-93 10:26:30 SCAN NUMBER 30
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

ANALOG DATA 10 TO 27

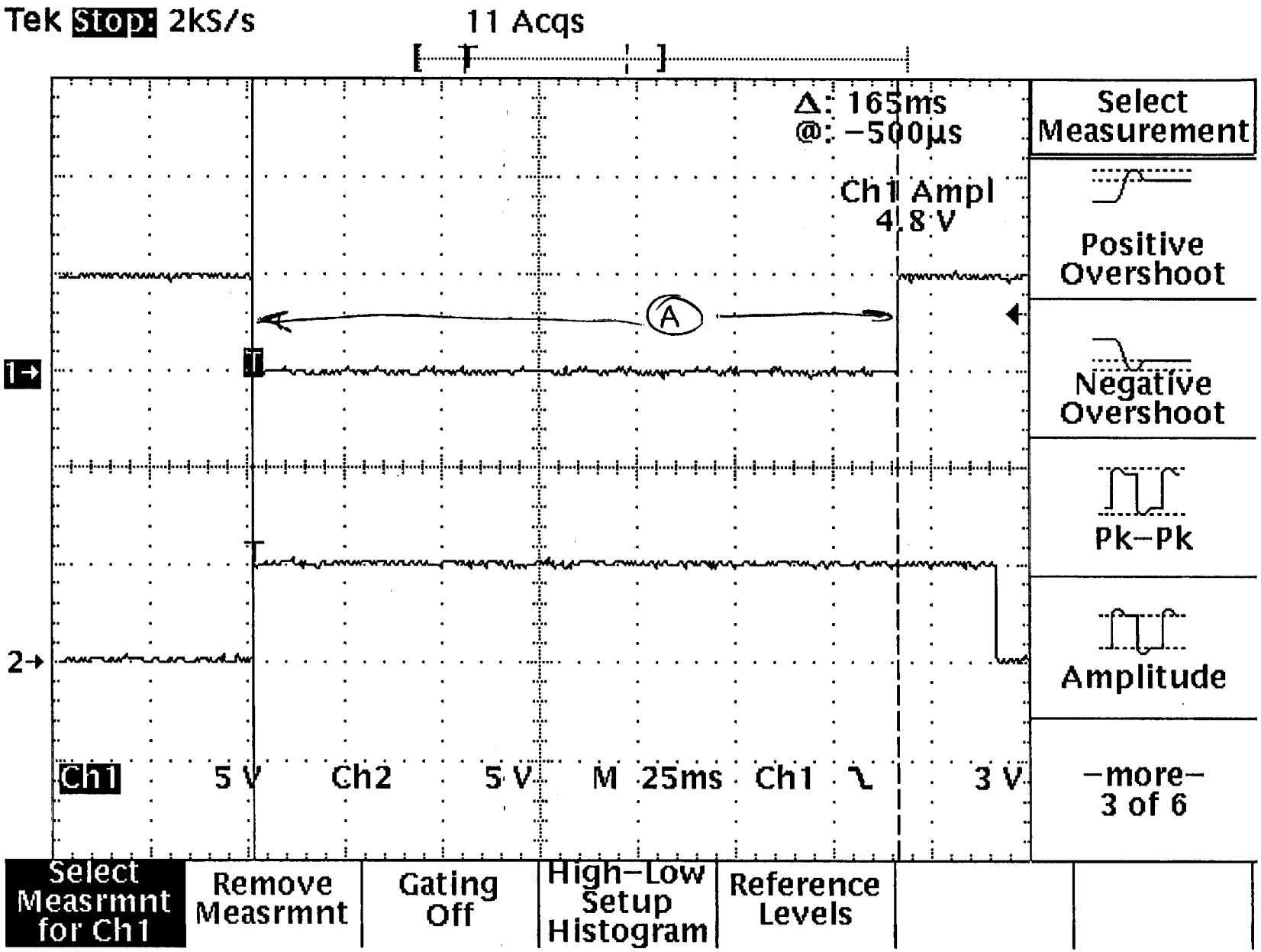
10	ANTENNA DRIVE	15VDC	15.17	19	L.O. VOLTAGE	CH 8	10.00
11	SIGNAL PROCESSING	-15VDC	-14.98	20	L.O. VOLTAGE	CH 7	9.93
12	ANTENNA DRIVE	-15VDC	-14.90	21	L.O. VOLTAGE	CH 6	10.02
13	RECEIVER AMPLIFIER	8VDC	7.94	22	L.O. VOLTAGE	4 CH 3	9.98
14	SIGNAL PROCESSOR	5 VDC	4.92	23	L.O. VOLTAGE	5 CH 4	10.01
15	ANTENNA DRIVE	5 VDC	4.99	24	L.O. VOLTAGE	6 CH 5	9.92
16	RECEIVER MIXER/IF	10VDC	9.95	25	PLLO # 2 LOCK DETECT		0.11
17	PHASE LOCK LOOP CH9/14	15VDC	14.83	26	PLLO # 1 LOCK DETECT		4.42
18	PHASE LOCK LOOP CH9/14	-15VDC	-15.21	27	L.O. VOLTAGE	CH15	14.93

[21] UP [22] DOWN

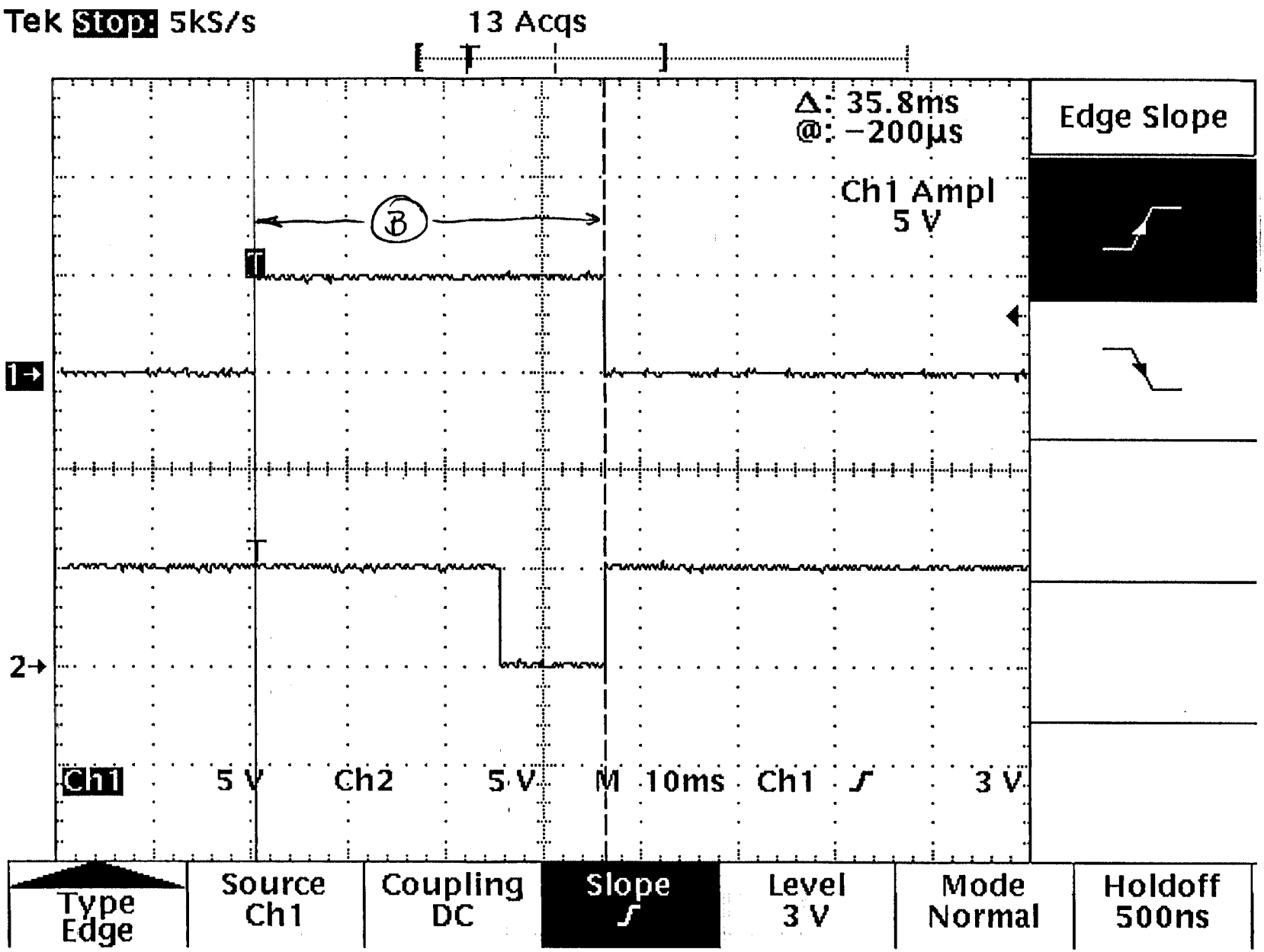
POWER [4] ON

SCREEN ONLY [2] PRINT [3] FULL [1] RETURN

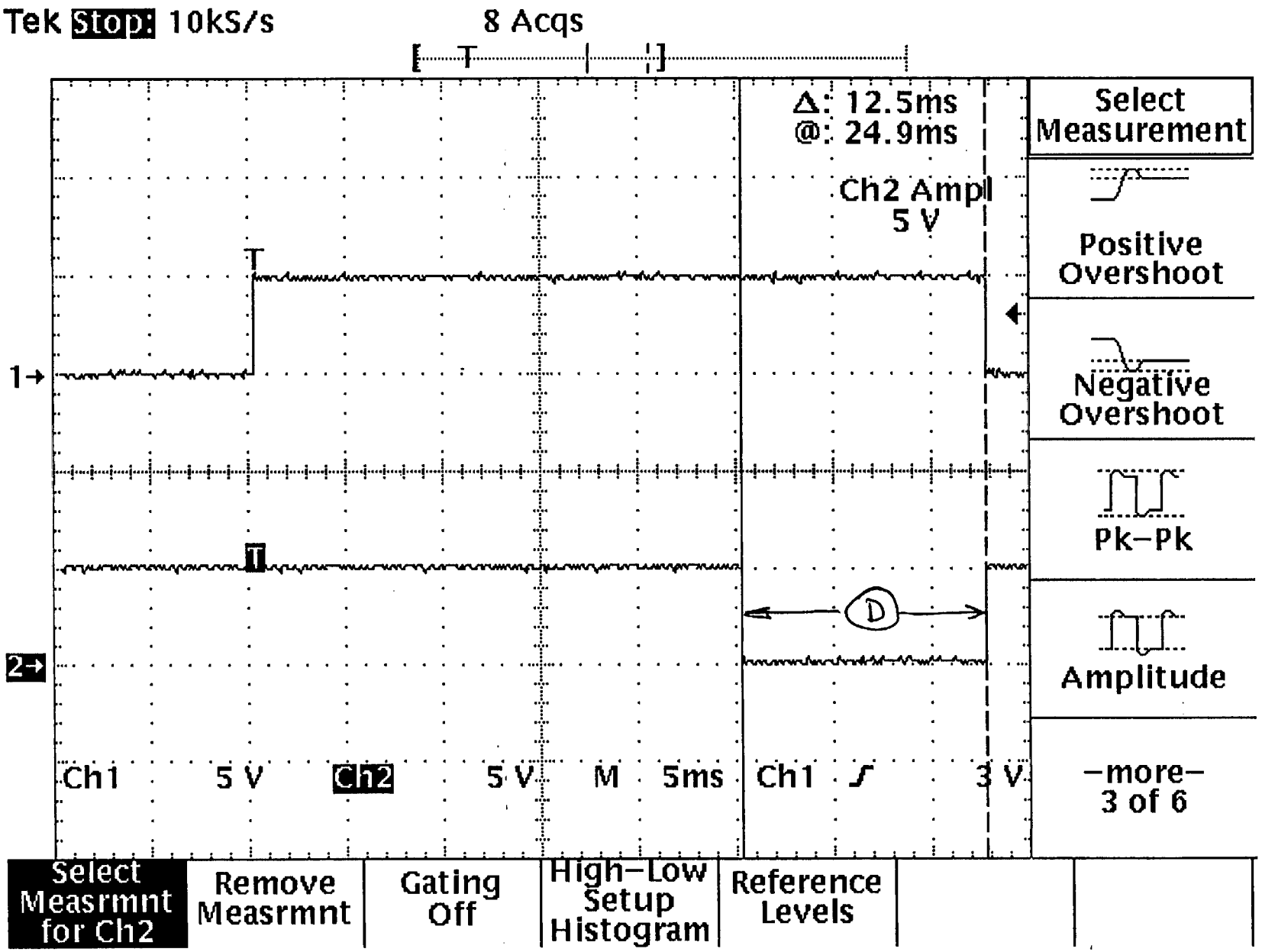
SELECT TOUCHSCREEN BUTTON 2


Tek Stop: 2kS/s
11 Acqs
Δ: 165ms
@: −500µs
Ch1 Ampl
4.8 V
A
Select Measurement
Positive Overshoot
Negative Overshoot
Pk−Pk
Amplitude
−more−
3 of 6
Ch1 5 V
Ch2 5 V
M 25ms
Ch1 3 V
Select Measrmnt for Ch1
Remove Measrmnt
Gating Off
High−Low Setup Histogram
Reference Levels

TDR 31


Tek Stop: 5kS/s
13 Acqs
Δ: 35.8ms
@: −200µs
Edge Slope
Ch1 Ampl
5 V
B
1→
2→
Ch1 5 V Ch2 5 V M 10ms Ch1 ƒ 3 V
Type Edge
Source Ch1
Coupling DC
Slope ƒ
Level 3 V
Mode Normal
Holdoff 500ns

TBC 36


Tek Stop: 10kS/s
8 Acqs
Δ: 12.5ms
@: 24.9ms
Ch2 Ampl
5 V
Select Measurement
Positive Overshoot
Negative Overshoot
Pk–Pk
Amplitude
–more–
3 of 6
1→
2→
Ch1 5 V
Ch2 5 V
M 5ms
Ch1 3 V
Select Measrmnt for Ch2
Remove Measrmnt
Gating Off
High–Low Setup Histogram
Reference Levels

Meas.

TEST DATA SHEET 36
Integrate/Hold and Dump Signal Verification (Paragraph 3.2.4.3.6.1)

ATTACH PHOTOGRAPH OR PLOT HERE

Parameter	Measured	Required	Pass/ Fail
Scope Channel-1: Integration/Hold			
Time Measured (A)*	165 ms	165 ms ± 10%	P
Time Measured (B)*	35.8 ms	35 ms ± 10%	P
Amplitude Measured	4.8 V	5.0 ± 0.2 V	P
Scope Channel-2: Dump Signal			
Time Measured (D)*	12.5 ms	9 ms to 15 ms	P
Amplitude Measured	4.8 ms	5.0 ± 0.2 V	P

* Refer to Figure 2 for waveform configuration.

Circle Test: CPT LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

11/24/98
Test Systems Engineer Date

12/2/98
Customer Representative Date
(Flight Hardware Only)

7A 268
NOV 25 '98
Quality Control Date

TEST DATA SHEET 37

Integration Time (Analog Output) Verification (Paragraph 3.2.4.3.6.2)

ATTACH PHOTOGRAPH OR PLOT HERE

Channel 03
Frequency: 50.3 GHz

INTEGRATION (X) *
Measured 165 ms
Required 165 ms ± 10%
Pass/Fail P

HOLD (B-D) *
Measured 25 ms
Required 25 ms ± 10%
Pass/Fail P

DUMP (D) *
Measured 12.5 ms
Required 9 ms to 15 ms
Pass/Fail ~~12.5~~ P

ATTACH PHOTOGRAPH OR PLOT HERE

Channel 04
Frequency: 52.8 GHz

INTEGRATION (X) *
Measured 165 ms
Required 165 ms ± 10%
Pass/Fail P

HOLD (B-D) *
Measured 25 ms
Required 25 ms ± 10%
Pass/Fail P

DUMP (D) *
Measured 12.5 ms
Required 9 ms to 15 ms
Pass/Fail P

* Refer to Figure 2 for waveform configuration.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer 11/24/98 Date

Customer Representative (Flight Hardware Only) 12/2/98 Date

Quality Control Date

NOV 30 '98

TEST DATA SHEET 38

Integration Time (Analog Output) Verification (Paragraph 3.2.4.3.6.2)

ATTACH PHOTOGRAPH OR PLOT HERE

Channel 05
Frequency: 53.596 GHz

INTEGRATION (X) *
Measured 165 ms
Required 165 ms ± 10%
Pass/Fail P

HOLD (B-D) *
Measured 25 ms
Required 25 ms ± 10%
Pass/Fail P

DUMP (D) *
Measured 12.5 ms
Required 9 ms to 15 ms
Pass/Fail P

ATTACH PHOTOGRAPH OR PLOT HERE

Channel 06
Frequency: 54.4 GHz

INTEGRATION (X) *
Measured 165 ms
Required 165 ms ± 10%
Pass/Fail P

HOLD (B-D) *
Measured 25 ms
Required 25 ms ± 10%
Pass/Fail P

DUMP (D) *
Measured 12.5 ms
Required 9 ms to 15 ms
Pass/Fail P

* Refer to Figure 2 for waveform configuration.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer 11/24/98
Date

Customer Representative 12/2/98
(Flight Hardware Only) Date

Quality Control NOV 30 '98
Date

TEST DATA SHEET 39

Integration Time (Analog Output) Verification (Paragraph 3.2.4.3.6.2)

ATTACH PHOTOGRAPH OR PLOT HERE

Channel 07
Frequency: 54.94 GHz

INTEGRATION (X) *
Measured 165 ms
Required 165 ms ± 10%
Pass/Fail P

HOLD (B-D) *
Measured 25 ms
Required 25 ms ± 10%
Pass/Fail P

DUMP (D) *
Measured 12.5 ms
Required 9 ms to 15 ms
Pass/Fail P

ATTACH PHOTOGRAPH OR PLOT HERE

Channel 08
Frequency: 55.5 GHz

INTEGRATION (X) *
Measured 165 ms
Required 165 ms ± 10%
Pass/Fail P

HOLD (B-D) *
Measured 25 ms
Required 25 ms ± 10%
Pass/Fail P

DUMP (D) *
Measured 12.5 ms
Required 9 ms to 15 ms
Pass/Fail P

* Refer to Figure 2 for waveform configuration.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 4366613 S/N 105

Test Systems Engineer 11/24/98 Date

Customer Representative (Flight Hardware Only) 12/2/98 Date

QA 268 NOV 30 '98

Quality Control Date

TEST DATA SHEET 40
Integration Time (Analog Output) Verification (Paragraph 3.2.4.3.6.2)

ATTACH PHOTOGRAPH OR PLOT HERE

Channel 09
Frequency: 57.2903 GHz

INTEGRATION (X) *
Measured 165 ms
Required 165 ms ± 10%
Pass/Fail P

HOLD (B-D) *
Measured 25 ms
Required 25 ms ± 10%
Pass/Fail P

DUMP (D) *
Measured 12.5 ms
Required 9 ms to 15 ms
Pass/Fail P

ATTACH PHOTOGRAPH OR PLOT HERE

Channel 10
Frequency: 57.2903 GHz

INTEGRATION (X) *
Measured 165 ms
Required 165 ms ± 10%
Pass/Fail P

HOLD (B-D) *
Measured 25 ms
Required 25 ms ± 10%
Pass/Fail P

DUMP (D) *
Measured 12.5 ms
Required 9 ms to 15 ms
Pass/Fail P

* Refer to Figure 2 for waveform configuration.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer 11/24/98 Date

Customer Representative DCMC 12/2/98 Date
(Flight Hardware Only)

QA 268 NOV 30 '98
Quality Control Date

TEST DATA SHEET 41

Integration Time (Analog Output) Verification (Paragraph 3.2.4.3.6.2)

ATTACH PHOTOGRAPH OR PLOT HERE

Channel 11
Frequency: 57.3903 GHz

INTEGRATION (X) *
Measured 165 ms
Required 165 ms ± 10%
Pass/Fail P

HOLD (B-D) *
Measured 25 ms
Required 25 ms ± 10%
Pass/Fail P

DUMP (D) *
Measured 12.5 ms
Required 9 ms to 15 ms
Pass/Fail P

ATTACH PHOTOGRAPH OR PLOT HERE

Channel 12
Frequency: 57.3903 GHz

INTEGRATION (X) *
Measured 165 ms
Required 165 ms ± 10%
Pass/Fail P

HOLD (B-D) *
Measured 25 ms
Required 25 ms ± 10%
Pass/Fail P

DUMP (D) *
Measured 12.5 ms
Required 9 ms to 15 ms
Pass/Fail P

* Refer to Figure 2 for waveform configuration.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 43d013 S/N: 105

Test Systems Engineer 11/24/98 Date

Customer Representative 12/2/98 Date
(Flight Hardware Only)

Quality Control NOV 30 '98 Date

TEST DATA SHEET 42
Integration Time (Analog Output) Verification (Paragraph 3.2.4.3.6.2)

ATTACH PHOTOGRAPH OR PLOT HERE

Channel 13
Frequency: 57.3903 GHz

INTEGRATION (X) *
Measured 165 ms
Required 165 ms ± 10%
Pass/Fail P

HOLD (B-D) *
Measured 25 ms
Required 25 ms ± 10%
Pass/Fail P

DUMP (D) *
Measured 12.5 ms
Required 9 ms to 15 ms
Pass/Fail P

ATTACH PHOTOGRAPH OR PLOT HERE

Channel 14
Frequency: 57.3903 GHz

INTEGRATION (X) *
Measured 165 ms
Required 165 ms ± 10%
Pass/Fail P

HOLD (B-D) *
Measured 25 ms
Required 25 ms ± 10%
Pass/Fail P

DUMP (D) *
Measured 12.5 ms
Required 9 ms to 15 ms
Pass/Fail P

* Refer to Figure 2 for waveform configuration.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

11/24/98
Test Systems Engineer Date

DCMC 12/2/98
Customer Representative (Flight Hardware Only) Date

ZA 268
NOV 30 '98
Quality Control Date

TEST DATA SHEET 43

Integration Time (Analog Output) Verification (Paragraph 3.2.4.3.6.2)

ATTACH PHOTOGRAPH OR PLOT HERE

Channel 15
Frequency: 89 GHz

INTEGRATION (X) *
Measured 165 ms
Required 165 ms ± 10%
Pass/Fail P

HOLD (B-D) *
Measured 25 ms
Required 25 ms ± 10%
Pass/Fail P

DUMP (D) *
Measured 12.5 ms
Required 9 ms to 15 ms
Pass/Fail P

* Refer to Figure 2 for waveform configuration.

Circle Test: (CPT) LPT

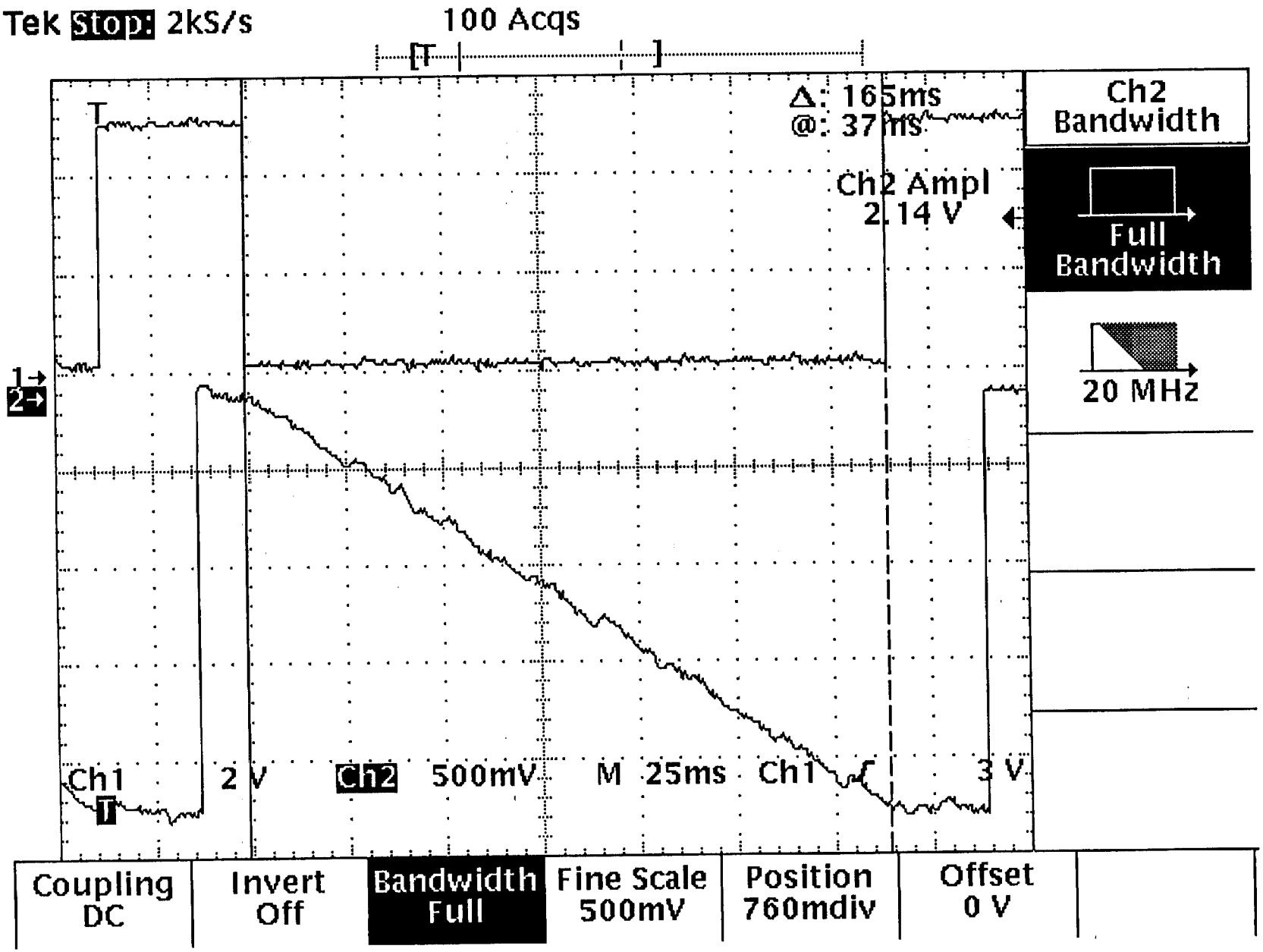
METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer 11/24/98 Date

Customer Representative (Flight Hardware Only) 12/2/98 Date

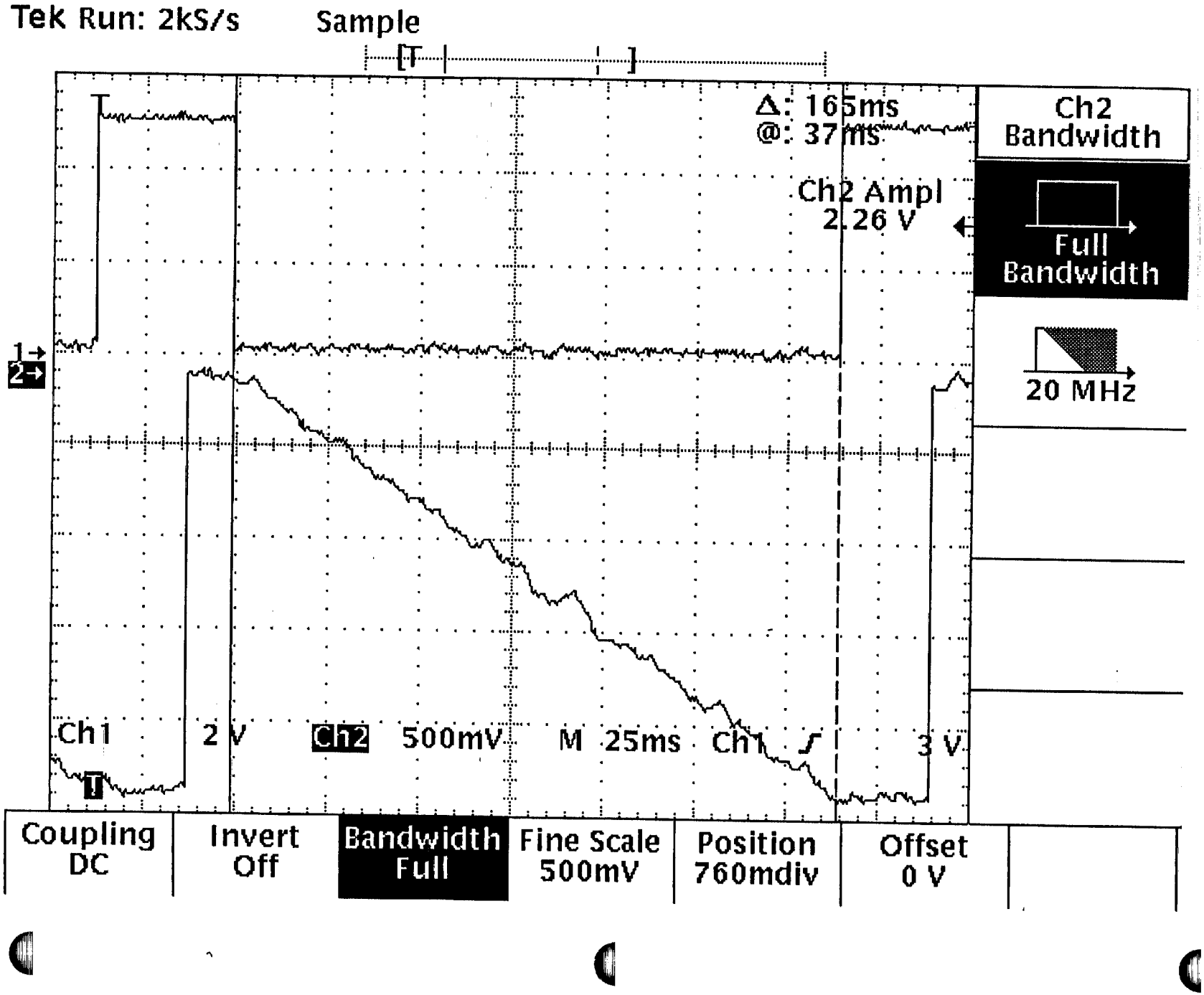
Quality Control 7A 268 NOV 30 '98 Date

CH3

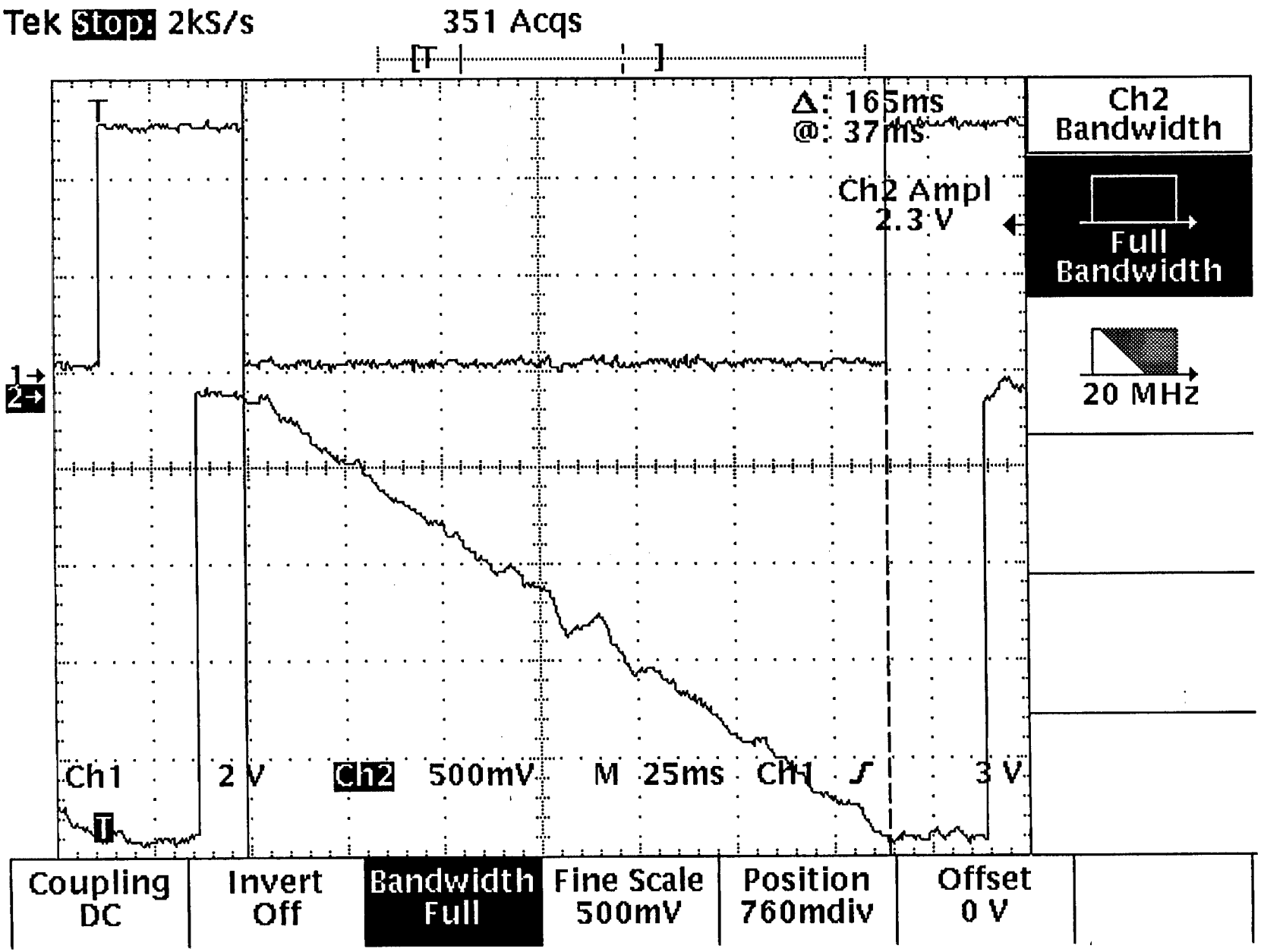


TEST DATA SHEET PACKAGE FOR TDS 37-43

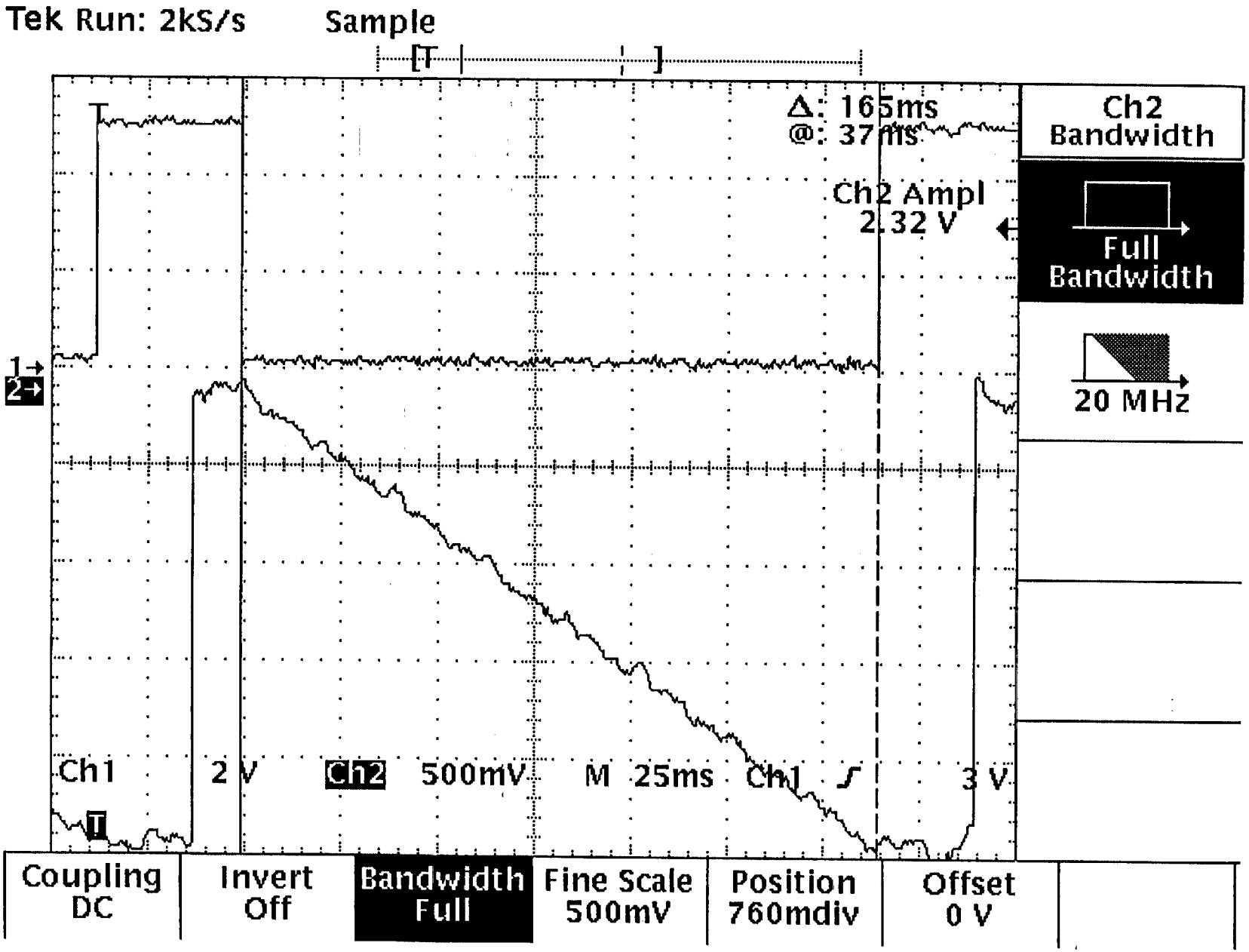
CH4


Tek Run: 2kS/s Sample
Δ: 165ms
@: 37ms
Ch2 Ampl
2.26 V
Ch2
Bandwidth
Full
Bandwidth
20 MHz
1→
2→
Ch1 2 V
Ch2 500mV
M 25ms Ch1 3 V
Coupling
DC
Invert
Off
Bandwidth
Full
Fine Scale
500mV
Position
760mdiv
Offset
0 V

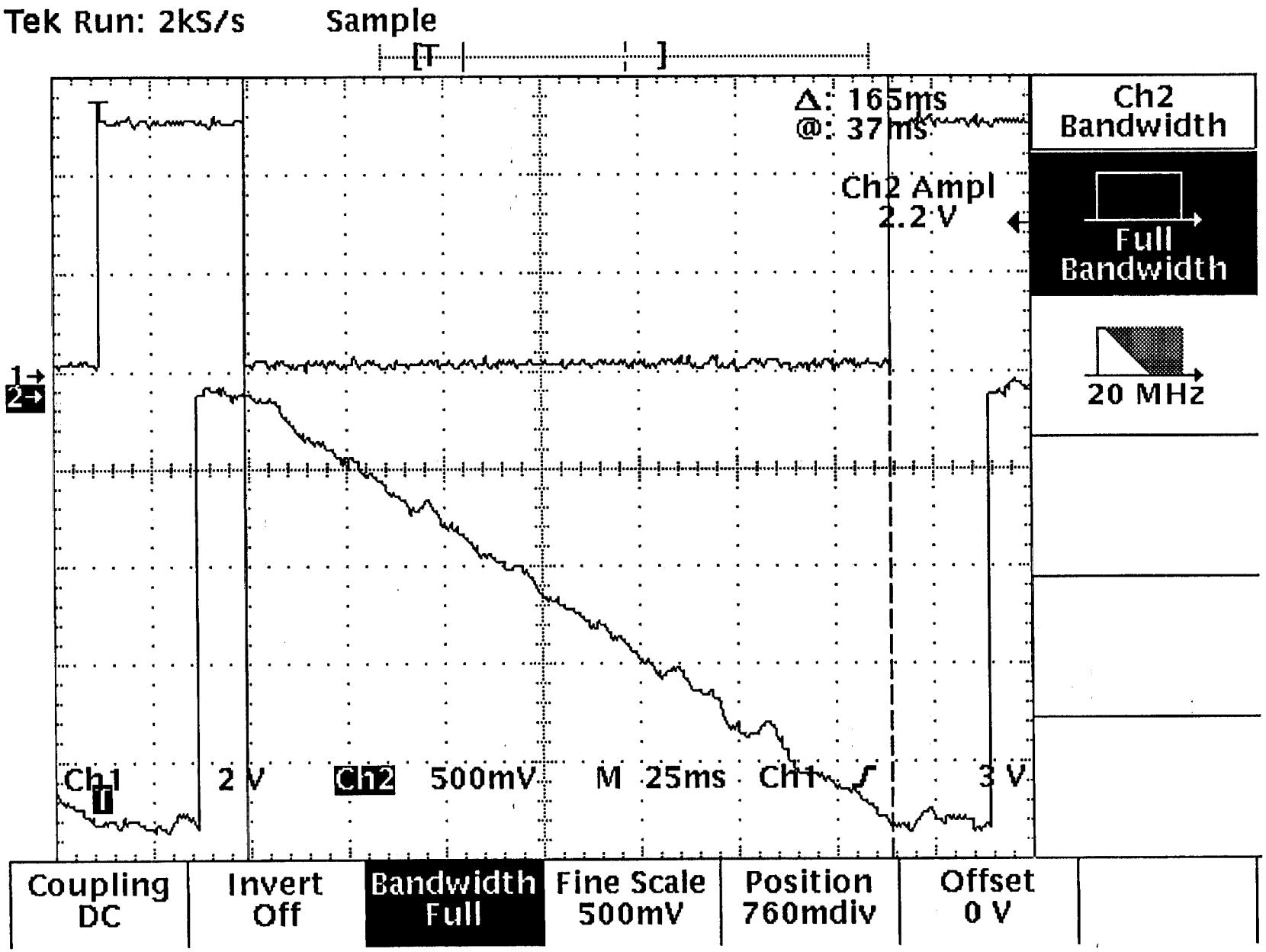
CH 5


Tek Stop: 2kS/s
351 Acqs
Δ: 165ms
@: 37ms
Ch2 Ampl
2.3 V
Ch2
Bandwidth
Full
Bandwidth
20 MHz
Ch1 2 V
Ch2 500mV
M 25ms
Ch1 ∫ 3 V
Coupling
DC
Invert
Off
Bandwidth
Full
Fine Scale
500mV
Position
760mdiv
Offset
0 V

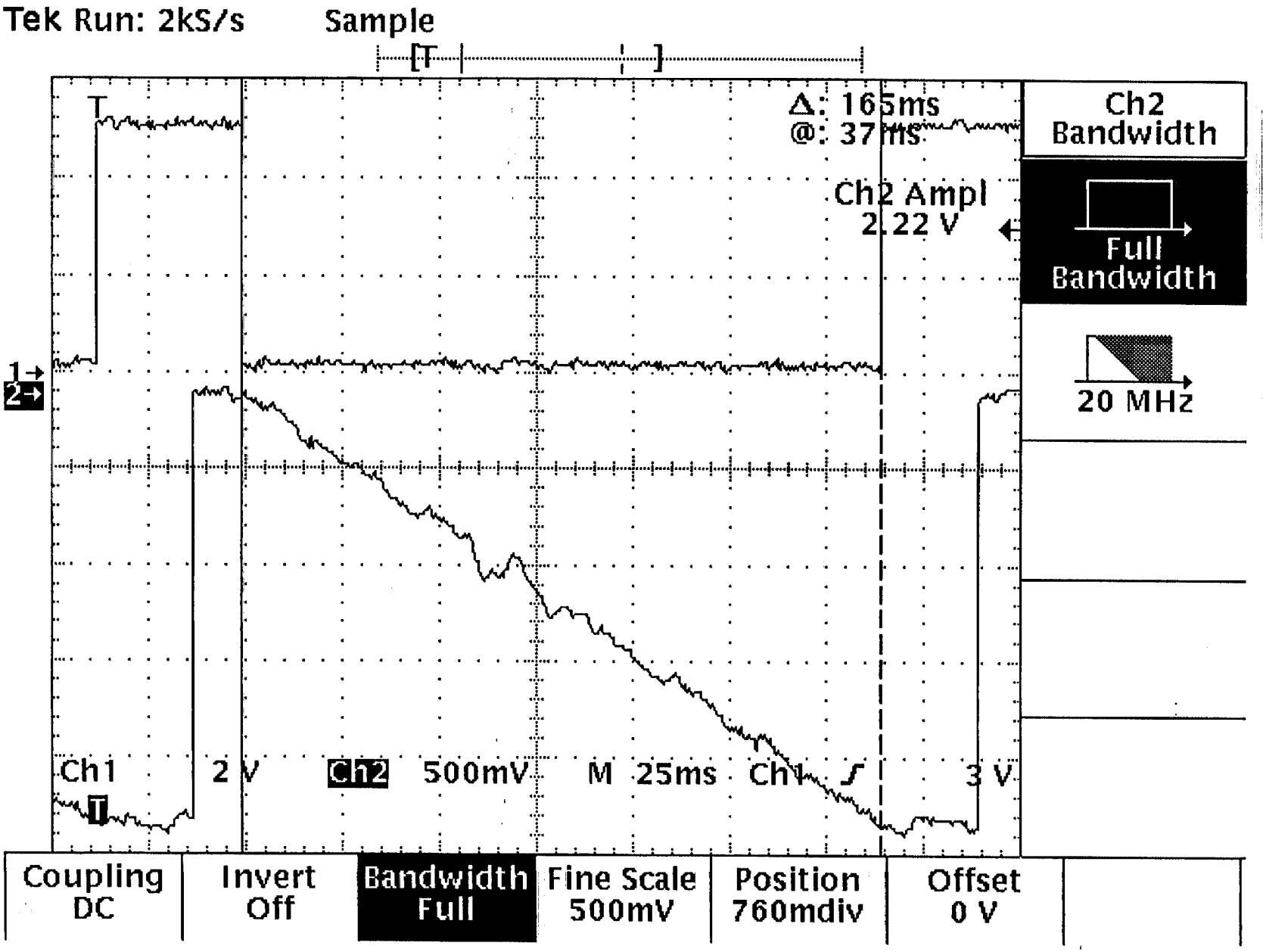
CH 6


Tek Run: 2kS/s Sample
Δ: 165ms
@: 37ms
Ch2 Ampl
2.32 V
Ch2
Bandwidth
Full
Bandwidth
20 MHz
1→
2→
Ch1 2 V
Ch2 500mV
M 25ms Ch1 ∫ 3 V
Coupling
DC
Invert
Off
Bandwidth
Full
Fine Scale
500mV
Position
760mdiv
Offset
0 V

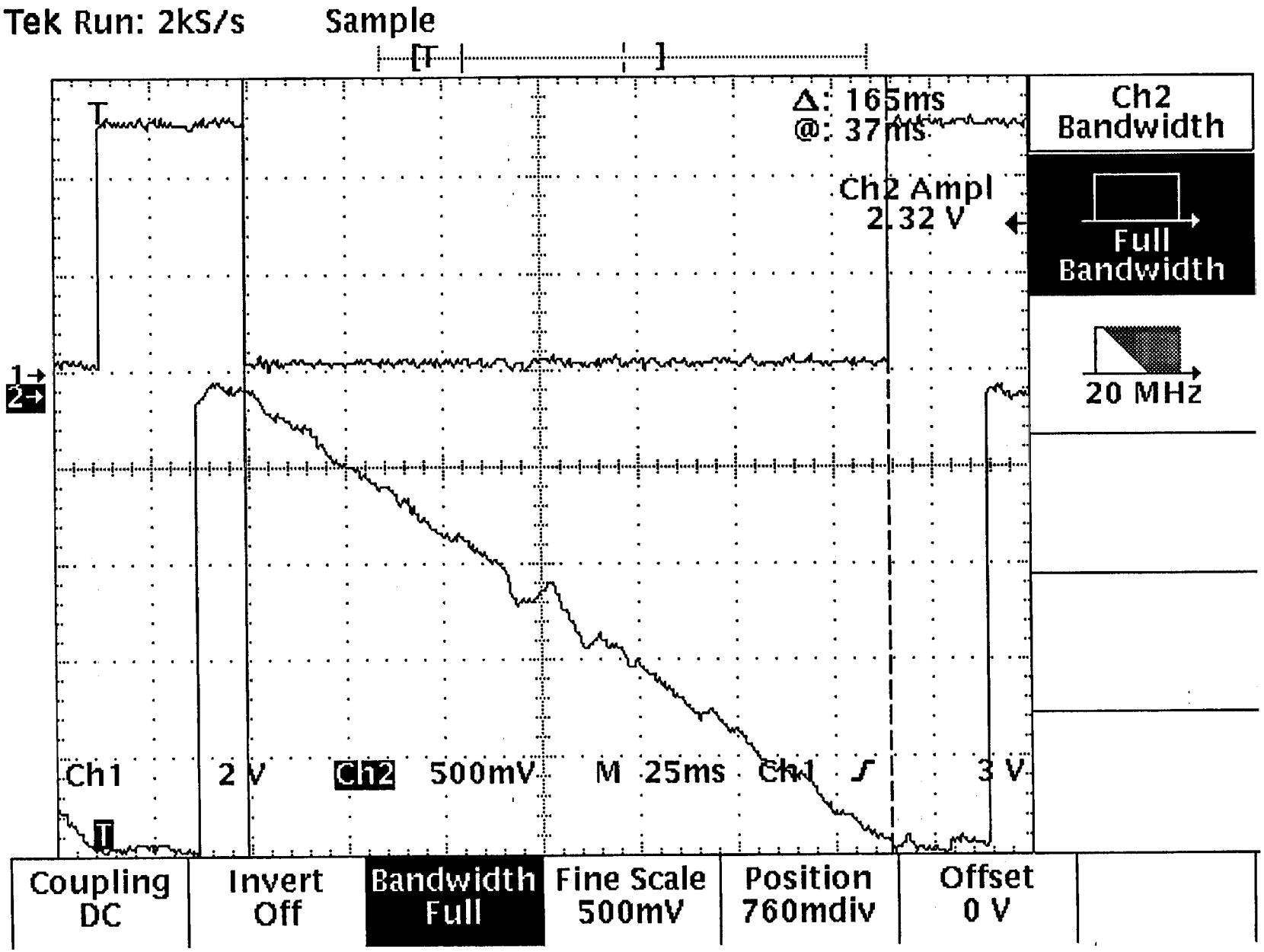
CH7


Tek Run: 2kS/s Sample
Δ: 165ms
@: 37ms
Ch2 Ampl
2.2 V
Ch2
Bandwidth
Full
Bandwidth
20 MHz
Ch1 2 V
Ch2 500mV
M 25ms Ch1 3 V
Coupling
DC
Invert
Off
Bandwidth
Full
Fine Scale
500mV
Position
760mdiv
Offset
0 V

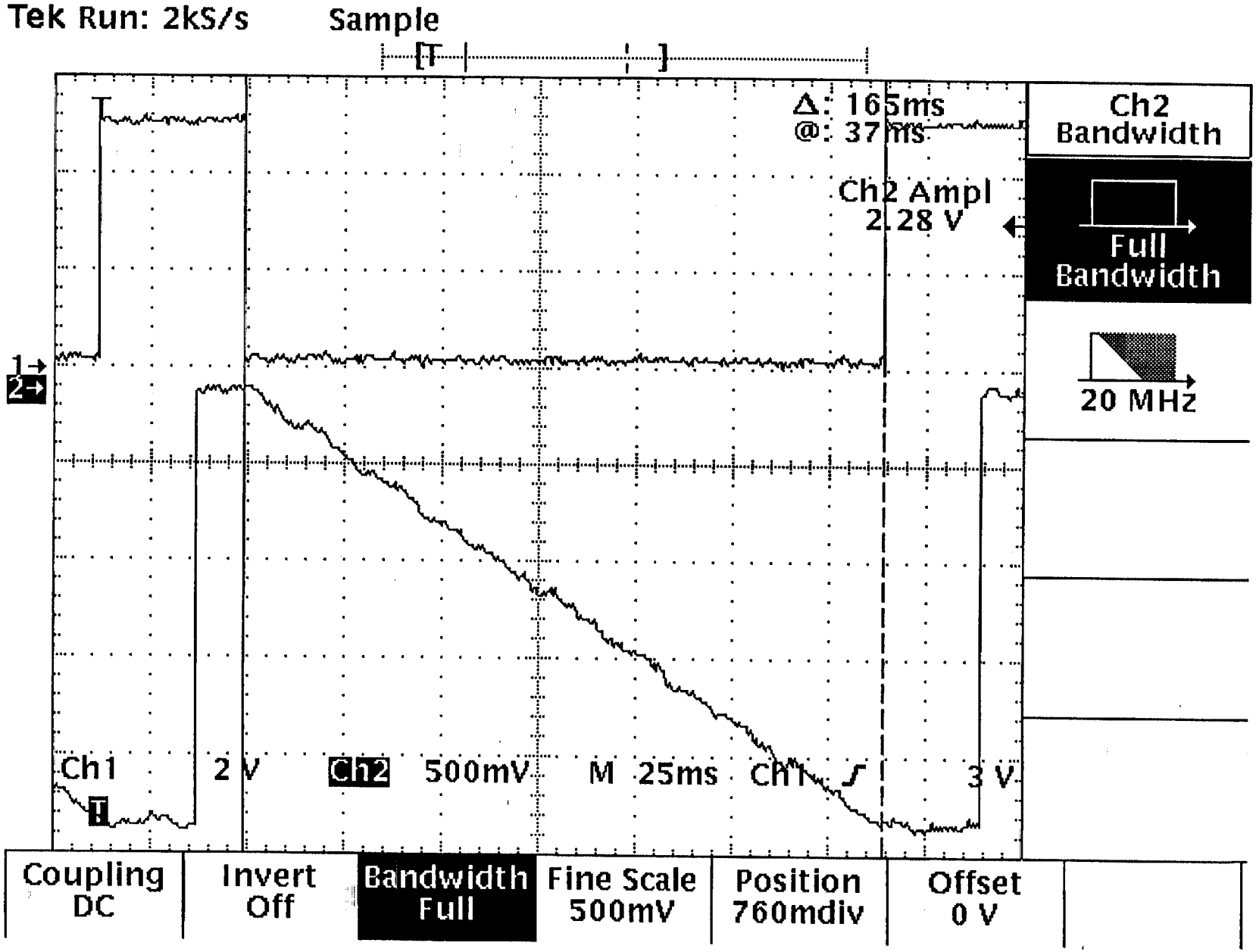
CH B


Tek Run: 2kS/s Sample
Δ: 165ms
@: 37ms
Ch2 Ampl
2.22 V
Ch2
Bandwidth
Full
Bandwidth
20 MHz
1→
2→
Ch1 2 V
Ch2 500mV
M 25ms
Ch1 ∫ 3 V
Coupling
DC
Invert
Off
Bandwidth
Full
Fine Scale
500mV
Position
760mdiv
Offset
0 V

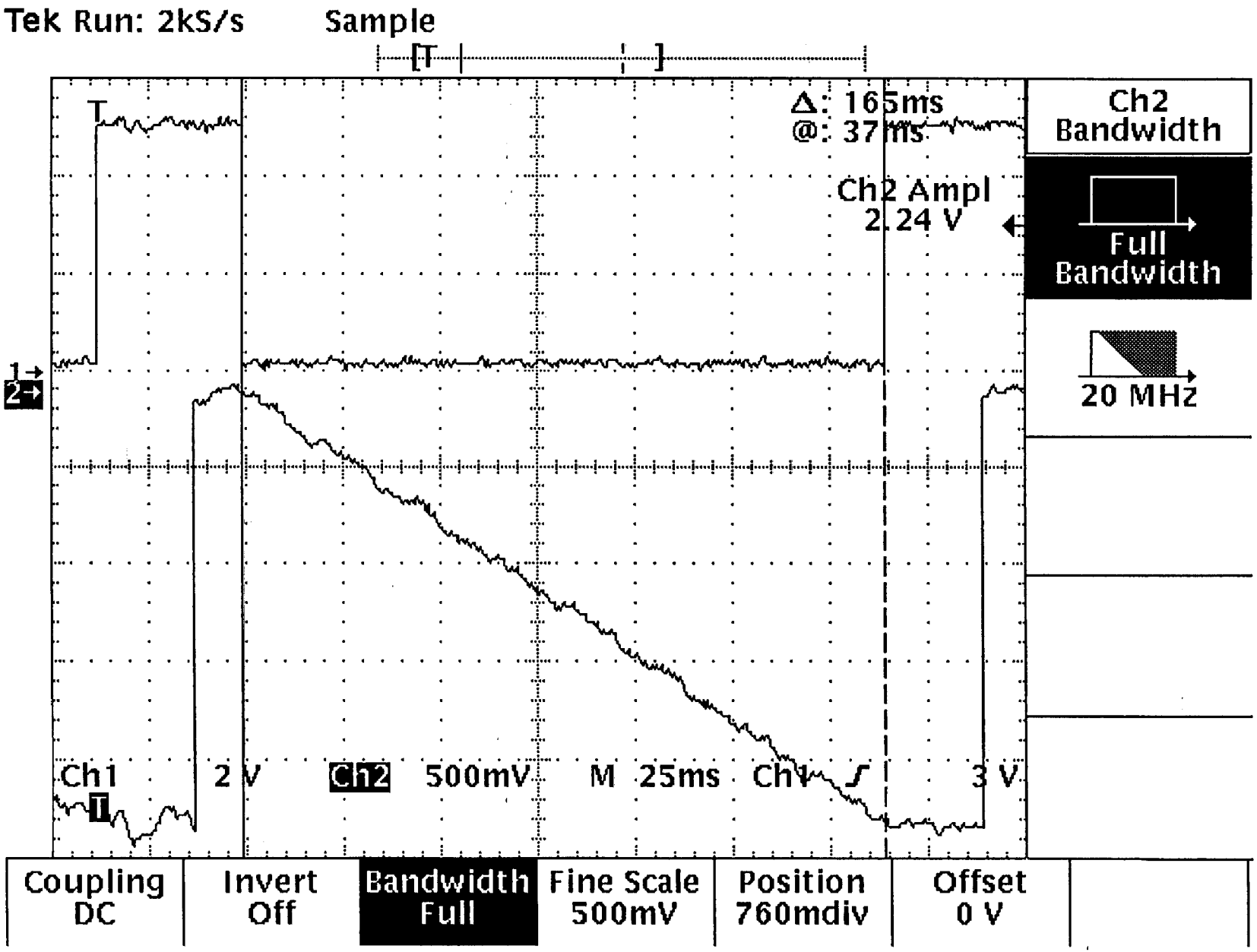
CH9


Tek Run: 2kS/s Sample
Δ: 165ms
@: 37ms
Ch2 Ampl
2.32 V
Ch2 Bandwidth
Full Bandwidth
20 MHz
Ch1 2 V
Ch2 500mV
M 25ms
Ch1 3 V
Coupling DC
Invert Off
Bandwidth Full
Fine Scale 500mV
Position 760mdiv
Offset 0 V

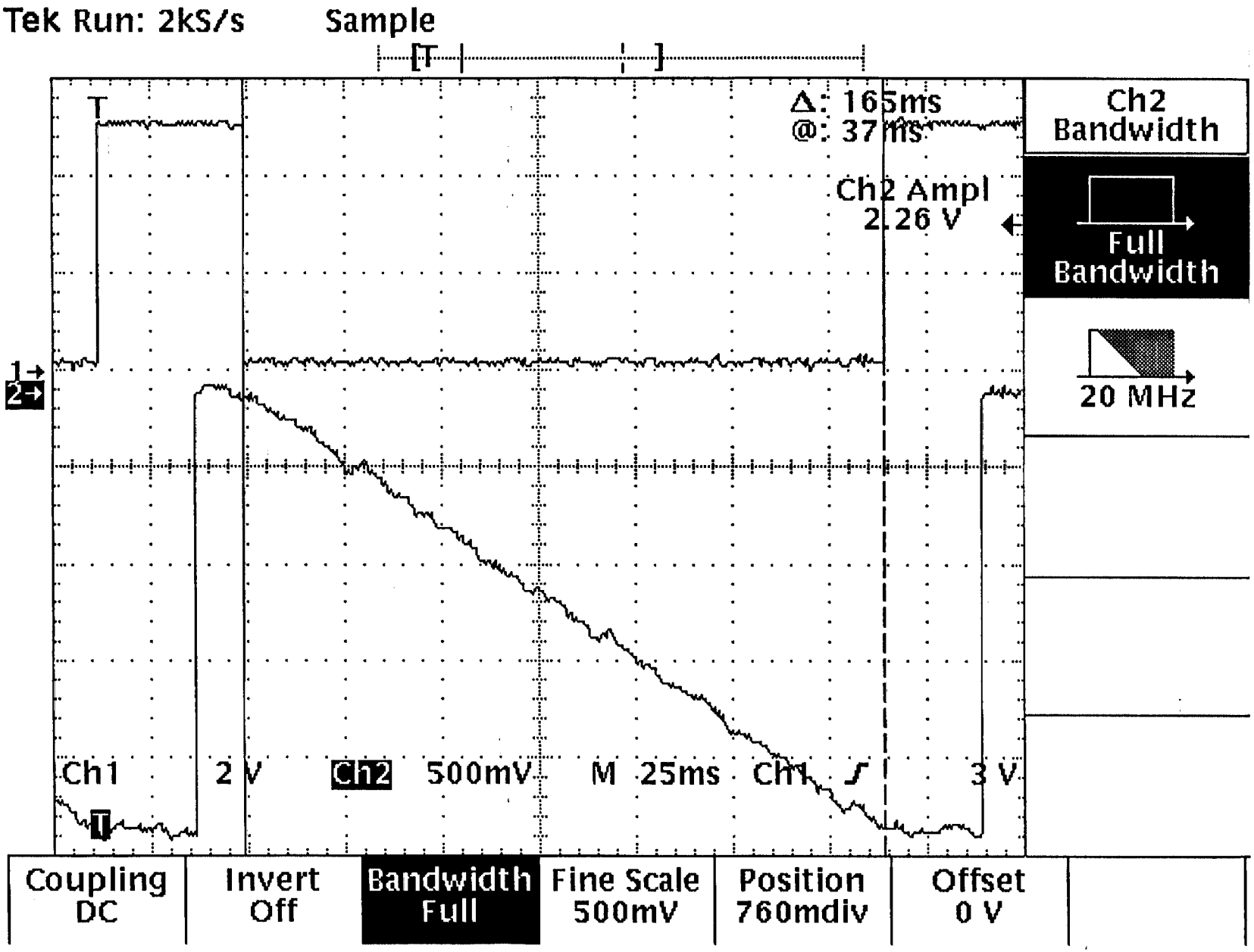
CH 10


Tek Run: 2kS/s Sample
Δ: 165ms
@: 37ms
Ch2 Ampl
2.28 V
Ch2
Bandwidth
Full
Bandwidth
20 MHz
1→
2→
Ch1 2 V
Ch2 500mV
M 25ms Ch1 ∫ 3 V
Coupling
DC
Invert
Off
Bandwidth
Full
Fine Scale
500mV
Position
760mdiv
Offset
0 V

CH1

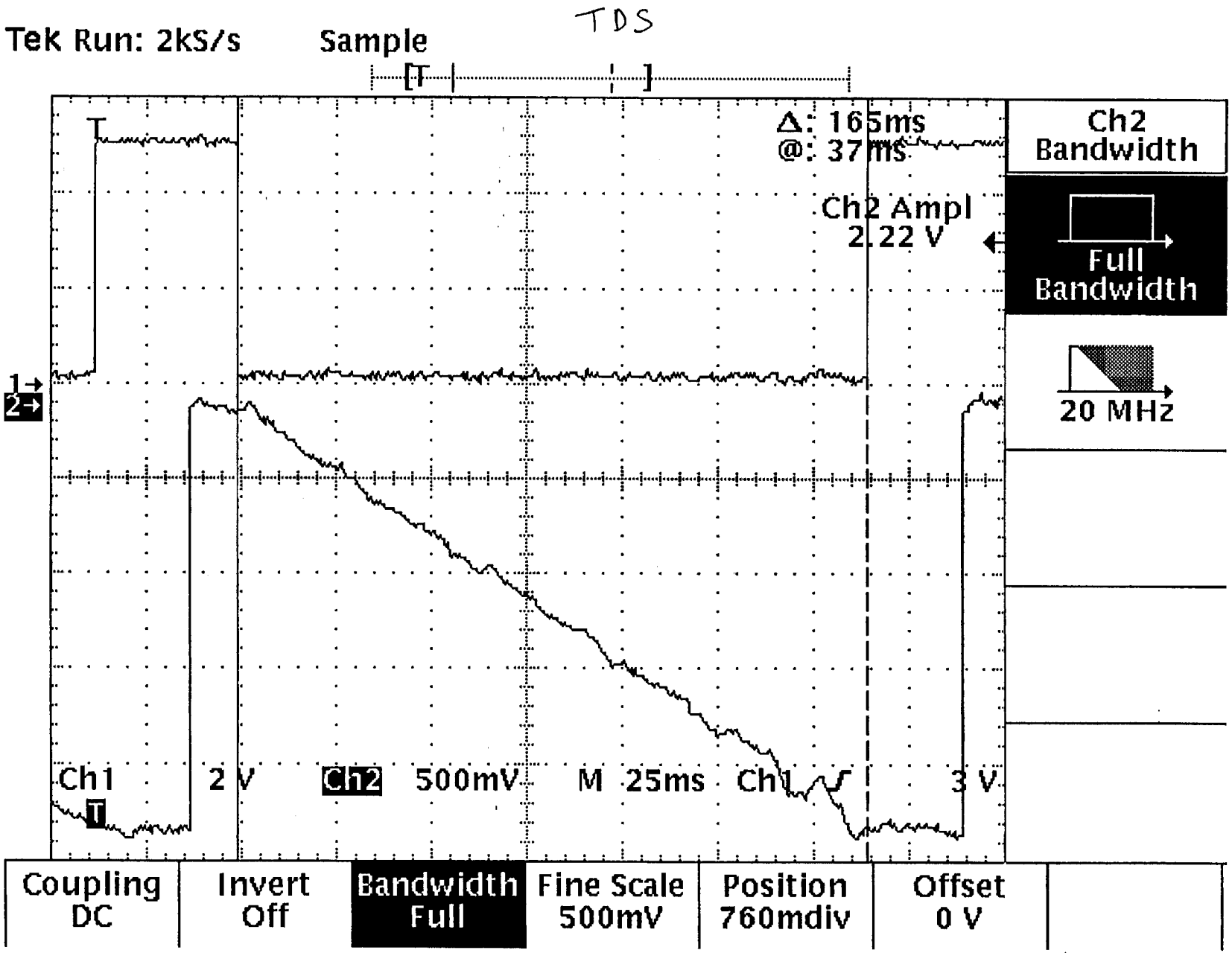

Tek Run: 2kS/s Sample
Δ: 165ms
@: 37ms
Ch2 Ampl
2.24 V
Ch2
Bandwidth
Full
Bandwidth
20 MHz
Ch1 2 V
Ch2 500mV
M 25ms
Ch1 3 V
Coupling
DC
Invert
Off
Bandwidth
Full
Fine Scale
500mV
Position
760mdiv
Offset
0 V

CH2

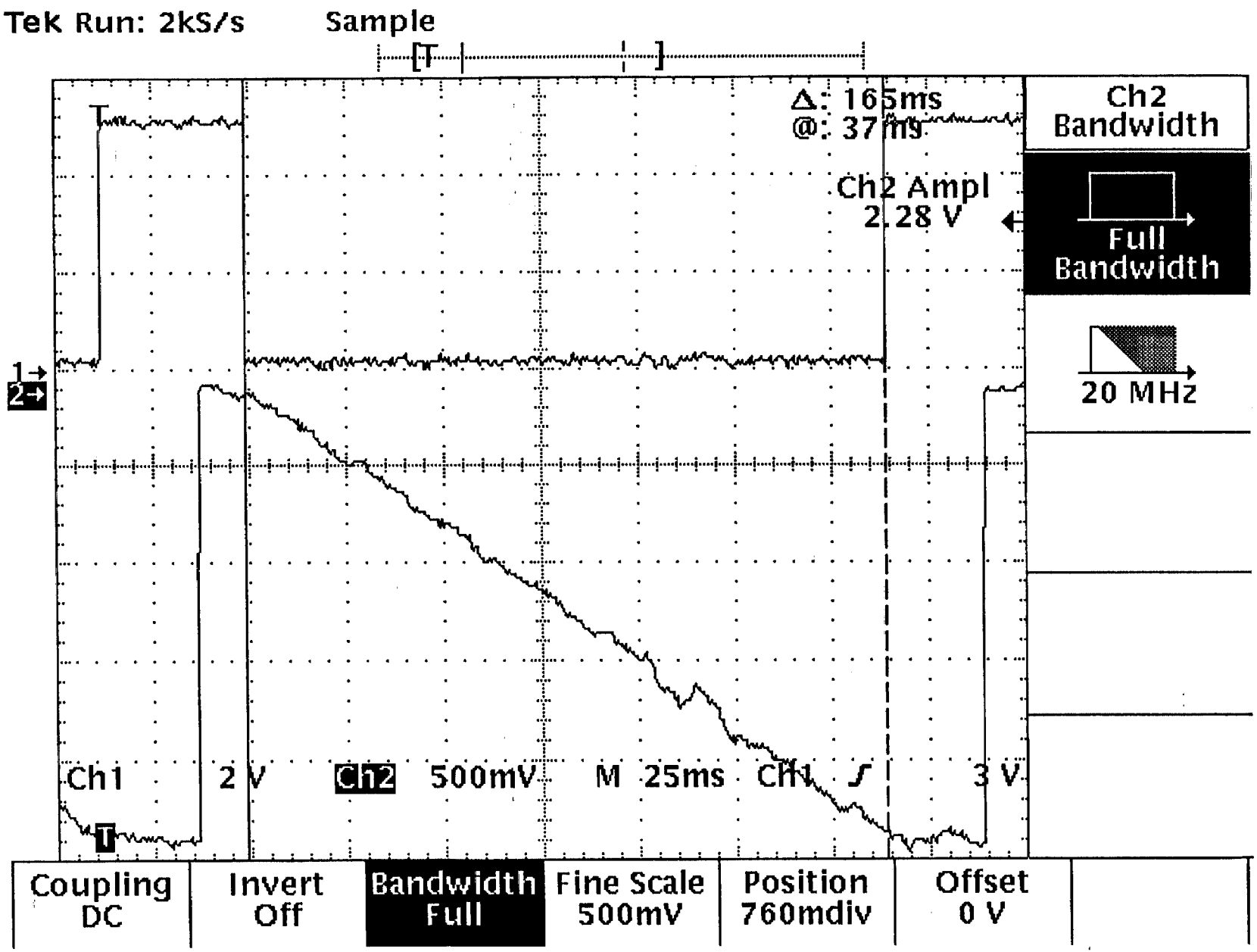

Tek Run: 2kS/s Sample
Δ: 165ms
@: 37ms
Ch2 Ampl
2.26 V
Ch2
Bandwidth
Full
Bandwidth
20 MHz
Ch1 2 V
Ch2 500mV
M 25ms
Ch1 3 V
Coupling
DC
Invert
Off
Bandwidth
Full
Fine Scale
500mV
Position
760mdiv
Offset
0 V

TDS

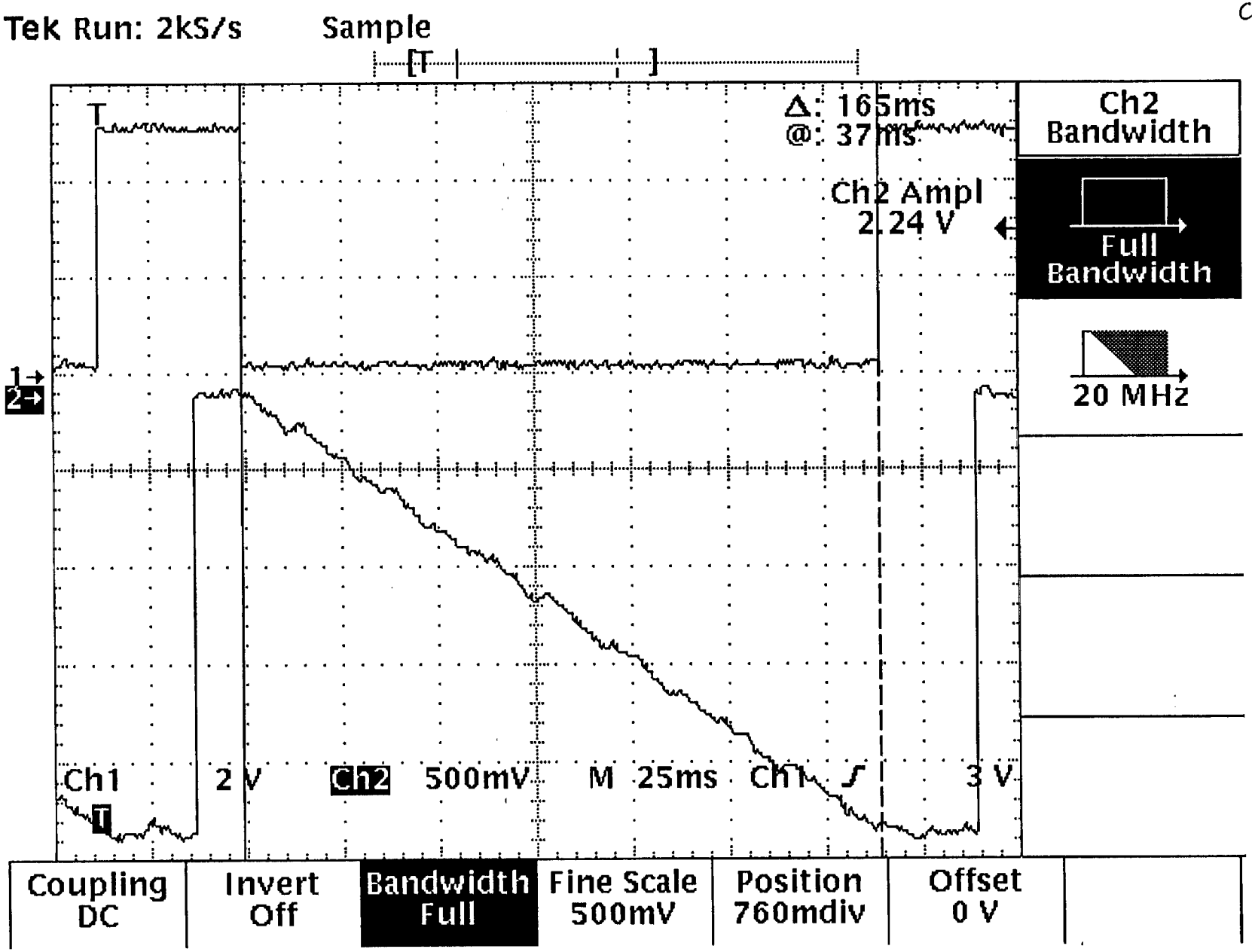
CH 13


Tek Run: 2kS/s Sample
Δ: 165ms
@: 37ms
Ch2 Ampl
2.22 V
Ch2
Bandwidth
Full
Bandwidth
20 MHz
1→
2→
Ch1 2 V
Ch2 500mV
M 25ms
Ch1 3 V
Coupling
DC
Invert
Off
Bandwidth
Full
Fine Scale
500mV
Position
760mdiv
Offset
0 V

CH 14


Tek Run: 2kS/s Sample
Δ: 165ms
@: 37ms
Ch2 Ampl
2.28 V
Ch2
Bandwidth
Full
Bandwidth
20 MHz
1→
2→
Ch1 2 V
Ch2 500mV
M 25ms
Ch1 ∫ 3 V
Coupling
DC
Invert
Off
Bandwidth
Full
Fine Scale
500mV
Position
760mdiv
Offset
0 V

CH 15


Tek Run: 2kS/s Sample
Δ: 165ms
@: 37ms
Ch2 Ampl
2.24 V
Ch2
Bandwidth
Full
Bandwidth
20 MHz
Ch1 2 V
Ch2 500mV
M 25ms
Ch1 3 V
Coupling
DC
Invert
Off
Bandwidth
Full
Fine Scale
500mV
Position
760mdiv
Offset
0 V

TEST DATA SHEET 44
PLLO No. 1 Verification (Paragraph 3.2.4.3.6.3)
PLLO No. 2 Verification (Paragraph 3.2.4.3.6.4)

PLLO NO. 1

PLLO No. 1 dc Level 4.6 Required: * Pass/Fail P

PLLO NO. 2

PLLO No. 2 dc Level 4.6 Required: * Pass/Fail P

* -15 to +15 V dc level for S/N 101 - S/N 104, 4.0 ±1.0 V for S/N 105 and above.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 43613 S/N: 105

Test Systems Engineer 11/24/98
Date

Customer Representative 12/2/98
(Flight Hardware Only) Date

Quality Control NOV 30 '98
Date

TEST DATA SHEET 45

Digital-A/GSE Mode-1 Synch Sequence,
Unit I.D./Serial Number and Digital-B Serial Data Verification
Sections [I], [II], and [III] (Paragraph 3.2.4.3.7.2)

Step	Element (For Ref)	Description	Recorded Value	Required Value	Pass/Fail
[I]	0001	Sync Sequence Byte 1	255	255	P
	0002	Sync Sequence Byte 2	255	255	
	0003	Sync Sequence Byte 3	255	255	
[II]	0004	Unit I.D. and Serial N	17	*	
[III]	0005	Digital-B Data Byte 1	Ø	0	
	0006	Digital-B Data Byte 2	14	14	
	0007	Digital-B Data Byte 3	ø	0	
	0008	Digital-B Data Byte 4	ø	0	P

*	AMSU A1 Identification Words (data entered in decimal system)	Binary	Decimal
	AMSU-A1 S/N 101	00000001	1
	AMSU-A1 S/N 102	00000101	5
	AMSU-A1 S/N 103	00001001	9
	AMSU-A1 S/N 104	00001101	13
	AMSU-A1 S/N 105	00010001	17
	AMSU-A1 S/N 106	00010101	21
	AMSU-A1 S/N 107	00011001	25
	AMSU-A1 S/N 108	00011101	29
	AMSU-A1 S/N 109	00100001	33

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

11/24/98
Test Systems Engineer Date

12/2/98
Customer Representative (Flight Hardware Only) Date

7A 268
MAY 30 '98
Quality Control Date

```
AMSU  A1-17 A1.EXE     GSE MODE 4 BP 30   P1 24-NOV-93 14:17:30   SCAN NUMBER
[ 5 ] DIGITAL A DATA   ELEMENT 0000

[ 6 ] DIGITAL B DATA   ELEMENT   00

[ 7 ] ANALOG DATA      ELEMENT   00


                                        COMMANDS
[ 9 ]  MODULE POWER =          CONNECT        ANTENNA IN COLD CAL POSIT = NO   [ 15

[ 10 ] SURVIVAL HEATER POWER =      OFF       ANTENNA IN NADIR POSITION = NO   [ 16

[ 11 ] MODULE TOTALLY OFF =         ON        ANTENNA IN FULL SCAN MODE = NO   [ 17

[ 12 ] SCANNER A1 - 1 POWER =       ON        PLL POWER =                PLLO # 1   [ 18

[ 13 ] SCANNER A1 - 2 POWER =       ON        COLD CAL POSITION MSB =      ZERO [ 19

[ 14 ] ANTENNA IN WARM CAL POSIT = NO         COLD CAL POSITION LSB =      ZERO [ 20

          POWER [ 4 ]  ON
                       SCREEN ONLY [ 2 ]  PRINT  [ 3 ] FUL[  1 ]   [ 1 ] RETURN
SELECT TOUCHSCREEN BUTTON 3
```

TDS46

```
AMSU  A1-17 A1.EXE     10-10-10 CAL MODE P1 24-NOV-93 13:20:38  SCAN NUMBER
[ 5 ] DIGITAL A DATA   ELEMENT 0000

[ 6 ] DIGITAL B DATA   ELEMENT   00

[ 7 ] ANALOG DATA      ELEMENT   00

                                   COMMANDS
[ 9 ]  MODULE POWER =        CONNECT      ANTENNA IN COLD CAL POSIT = NO   [ 15

[ 10 ] SURVIVAL HEATER POWER =     OFF    ANTENNA IN NADIR POSITION = NO   [ 16

[ 11 ] MODULE TOTALLY OFF =        ON     ANTENNA IN FULL SCAN MODE = NO   [ 17

[ 12 ] SCANNER A1 - 1 POWER =      ON     PLL POWER =              PLLO # 1 [ 18

[ 13 ] SCANNER A1 - 2 POWER =      ON     COLD CAL POSITION MSB =    ZERO  [ 19

[ 14 ] ANTENNA IN WARM CAL POSIT = NO     COLD CAL POSITION LSB =    ZERO  [ 20

          POWER [ 4 ]  ON
                       SCREEN ONLY [ 2 ]  PRINT  [ 3 ] FULL       [ 1 ] RETURN
SELECT TOUCHSCREEN BUTTON 3
```

TDS 45
TDS 46
TDS 47
TDS 48

10-10-10 CAL MODE

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	SYNC SEQUENCE BYTE 1	11111111	572	COLD CAL SAMPLE 7 CH 8	16266
2	SYNC SEQUENCE BYTE 2	11111111	574	CH 9	17059
3	SYNC SEQUENCE BYTE 3	11111111	576	CH 10	16276
4	UNIT ID AND SERIAL NO	00010001	578	CH 11	15946
5	DIGITAL B DATA BYTE 1	00000000	580	CH 12	16261
6	DIGITAL B DATA BYTE 2	00001110	582	CH 13	15975
7	DIGITAL B DATA BYTE 3	00000000	584	CH 14	16469
8	DIGITAL B DATA BYTE 4	00000000	586	CH 15	16454
10	REFLECTOR 1 POSITION 1	792	588	REFLECTOR 1 POSITION 18	6021
12	REFLECTOR 2 POSITION 1	592	590	REFLECTOR 2 POSITION 18	5820
14	REFL 1 POS 1 2ND LOOK	792	592	REFL 1 POS 18 2ND LOOK	6021
16	REFL 2 POS 1 2ND LOOK	592	594	REFL 2 POS 18 2ND LOOK	5820
18	POS #6 SAMPLE 1 CH 3	15627	596	COLD CAL SAMPLE 8 CH 3	15657
20	CH 4	16427	598	CH 4	16459
22	CH 5	16746	600	CH 5	16754
24	CH 6	17036	602	CH 6	17038
26	CH 7	16082	604	CH 7	16043
28	CH 8	16241	606	CH 8	16267
30	CH 9	17094	608	CH 9	17058
32	CH 10	16278	610	CH 10	16270
34	CH 11	15976	612	CH 11	15948
36	CH 12	16325	614	CH 12	16257
38	CH 13	16060	616	CH 13	15976
40	CH 14	16537	618	CH 14	16456
42	CH 15	16478	620	CH 15	16454
44	REFLECTOR 1 POSITION 2	792	622	REFLECTOR 1 POSITION 19	6021
46	REFLECTOR 2 POSITION 2	592	624	REFLECTOR 2 POSITION 19	5820
48	REFL 1 POS 2 2ND LOOK	792	626	REFL 1 POS 19 2ND LOOK	6021
50	REFL 2 POS 2 2ND LOOK	592	628	REFL 2 POS 19 2ND LOOK	5820
52	POS #6 SAMPLE 2 CH 3	15627	630	COLD CAL SAMPLE 9 CH 3	15650
54	CH 4	16432	632	CH 4	16459
56	CH 5	16746	634	CH 5	16754
58	CH 6	17051	636	CH 6	17038
60	CH 7	16083	638	CH 7	16042
62	CH 8	16240	640	CH 8	16266
64	CH 9	17094	642	CH 9	17062
66	CH 10	16284	644	CH 10	16270
68	CH 11	15971	646	CH 11	15945
70	CH 12	16330	648	CH 12	16256
72	CH 13	16057	650	CH 13	15973
74	CH 14	16541	652	CH 14	16453
76	CH 15	16478	654	CH 15	16453
78	REFLECTOR 1 POSITION 3	792	656	REFLECTOR 1 POSITION 20	6021
80	REFLECTOR 2 POSITION 3	592	658	REFLECTOR 2 POSITION 20	5820
82	REFL 1 POS 3 2ND LOOK	792	660	REFL 1 POS 20 2ND LOOK	6021
84	REFL 2 POS 3 2ND LOOK	592	662	REFL 2 POS 20 2ND LOOK	5820
86	POS #6 SAMPLE 3 CH 3	15626	664	COLD CAL SAMPLE 10 CH 3	15647
88	CH 4	16427	666	CH 4	16458
90	CH 5	16747	668	CH 5	16754
92	CH 6	17052	670	CH 6	17036

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
94	CH 7	16083	672	CH 7	16041
96	CH 8	16240	674	CH 8	16268
98	CH 9	17098	676	CH 9	17061
100	CH 10	16286	678	CH 10	16270
102	CH 11	15977	680	CH 11	15947
104	CH 12	16335	682	CH 12	16252
106	CH 13	16048	684	CH 13	15972
108	CH 14	16535	686	CH 14	16461
110	CH 15	16479	688	CH 15	16453
112	REFLECTOR 1 POSITION 4	792	690	REFLECTOR 1 POSITION 21	10419
114	REFLECTOR 2 POSITION 4	592	692	REFLECTOR 2 POSITION 21	10220
116	REFL 1 POS 4 2ND LOOK	792	694	REFL 1 POS 21 2ND LOOK	10419
118	REFL 2 POS 4 2ND LOOK	592	696	REFL 2 POS 21 2ND LOOK	10220
120	POS #6 SAMPLE 4 CH 3	15623	698	WARM CAL SAMPLE 1 CH 3	15630
122	CH 4	16425	700	CH 4	16435
124	CH 5	16745	702	CH 5	16755
126	CH 6	17050	704	CH 6	17022
128	CH 7	16079	706	CH 7	16040
130	CH 8	16240	708	CH 8	16260
132	CH 9	17091	710	CH 9	17055
134	CH 10	16282	712	CH 10	16270
136	CH 11	15977	714	CH 11	15939
138	CH 12	16327	716	CH 12	16267
140	CH 13	16060	718	CH 13	15968
12	CH 14	16531	720	CH 14	164
44	CH 15	16479	722	CH 15	164
146	REFLECTOR 1 POSITION 5	792	724	REFLECTOR 1 POSITION 22	10419
148	REFLECTOR 2 POSITION 5	592	726	REFLECTOR 2 POSITION 22	10220
150	REFL 1 POS 5 2ND LOOK	792	728	REFL 1 POS 22 2ND LOOK	10419
152	REFL 2 POS 5 2ND LOOK	592	730	REFL 2 POS 22 2ND LOOK	10220
154	POS #6 SAMPLE 5 CH 3	15626	732	WARM CAL SAMPLE 2 CH 3	15634
156	CH 4	16427	734	CH 4	16436
158	CH 5	16748	736	CH 5	16755
160	CH 6	17056	738	CH 6	17036
162	CH 7	16082	740	CH 7	16041
164	CH 8	16242	742	CH 8	16262
166	CH 9	17098	744	CH 9	17060
168	CH 10	16277	746	CH 10	16270
170	CH 11	15978	748	CH 11	15941
172	CH 12	16333	750	CH 12	16251
174	CH 13	16054	752	CH 13	15962
176	CH 14	16539	754	CH 14	16449
178	CH 15	16478	756	CH 15	16454
180	REFLECTOR 1 POSITION 6	792	758	REFLECTOR 1 POSITION 23	10419
182	REFLECTOR 2 POSITION 6	592	760	REFLECTOR 2 POSITION 23	10220
184	REFL 1 POS 6 2ND LOOK	792	762	REFL 1 POS 23 2ND LOOK	10419
186	REFL 2 POS 6 2ND LOOK	592	764	REFL 2 POS 23 2ND LOOK	10220
188	POS #6 SAMPLE 6 CH 3	15625	766	WARM CAL SAMPLE 3 CH 3	15626
190	CH 4	16427	768	CH 4	16434
92	CH 5	16750	770	CH 5	16755

ELEMENT	DESCRIPTION		VALUE	ELEMENT	DESCRIPTION		VALUE
194		CH 6	17050	772		CH 6	17032
196		CH 7	16080	774		CH 7	16038
198		CH 8	16241	776		CH 8	16260
200		CH 9	17094	778		CH 9	17058
202		CH 10	16286	780		CH 10	16271
204		CH 11	15973	782		CH 11	15948
206		CH 12	16334	784		CH 12	16261
208		CH 13	16054	786		CH 13	15971
210		CH 14	16547	788		CH 14	16451
212		CH 15	16478	790		CH 15	16454
214	REFLECTOR 1 POSITION 7		792	792	REFLECTOR 1 POSITION 24		10419
216	REFLECTOR 2 POSITION 7		592	794	REFLECTOR 2 POSITION 24		10220
218	REFL 1 POS 7 2ND LOOK		792	796	REFL 1 POS 24 2ND LOOK		10419
220	REFL 2 POS 7 2ND LOOK		592	798	REFL 2 POS 24 2ND LOOK		10220
222	POS #6 SAMPLE 7	CH 3	15626	800	WARM CAL SAMPLE 4	CH 3	15630
224		CH 4	16427	802		CH 4	16437
226		CH 5	16747	804		CH 5	16758
228		CH 6	17052	806		CH 6	17033
230		CH 7	16080	808		CH 7	16040
232		CH 8	16245	810		CH 8	16257
234		CH 9	17093	812		CH 9	17060
236		CH 10	16280	814		CH 10	16271
238		CH 11	15975	816		CH 11	15939
240		CH 12	16327	818		CH 12	16252
2		CH 13	16046	820		CH 13	15978
44		CH 14	16547	822		CH 14	16449
246		CH 15	16479	824		CH 15	16453
248	REFLECTOR 1 POSITION 8		792	826	REFLECTOR 1 POSITION 25		10419
250	REFLECTOR 2 POSITION 8		592	828	REFLECTOR 2 POSITION 25		10220
252	REFL 1 POS 8 2ND LOOK		792	830	REFL 1 POS 25 2ND LOOK		10419
254	REFL 2 POS 8 2ND LOOK		592	832	REFL 2 POS 25 2ND LOOK		10220
256	POS #6 SAMPLE 8	CH 3	15623	834	WARM CAL SAMPLE 5	CH 3	15635
258		CH 4	16428	836		CH 4	16438
260		CH 5	16746	838		CH 5	16758
262		CH 6	17050	840		CH 6	17033
264		CH 7	16081	842		CH 7	16045
266		CH 8	16242	844		CH 8	16259
268		CH 9	17093	846		CH 9	17061
270		CH 10	16280	848		CH 10	16268
272		CH 11	15973	850		CH 11	15938
274		CH 12	16322	852		CH 12	16259
276		CH 13	16060	854		CH 13	15982
278		CH 14	16545	856		CH 14	16453
280		CH 15	16480	858		CH 15	16454
282	REFLECTOR 1 POSITION 9		792	860	REFLECTOR 1 POSITION 26		10419
284	REFLECTOR 2 POSITION 9		592	862	REFLECTOR 2 POSITION 26		10220
286	REFL 1 POS 9 2ND LOOK		792	864	REFL 1 POS 26 2ND LOOK		10419
288	REFL 2 POS 9 2ND LOOK		592	866	REFL 2 POS 26 2ND LOOK		10220
290	POS #6 SAMPLE 9	CH 3	15625	868	WARM CAL SAMPLE 6	CH 3	15632
2		CH 4	16428	870		CH 4	16438

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VA
294	CH 5	16747	872	CH 5	16755
296	CH 6	17049	874	CH 6	17036
298	CH 7	16083	876	CH 7	16036
300	CH 8	16241	878	CH 8	16254
302	CH 9	17095	880	CH 9	17059
304	CH 10	16282	882	CH 10	16273
306	CH 11	15979	884	CH 11	15942
308	CH 12	16323	886	CH 12	16252
310	CH 13	16047	888	CH 13	15967
312	CH 14	16533	890	CH 14	16457
314	CH 15	16479	892	CH 15	16454
316	REFLECTOR 1 POSITION 10	792	894	REFLECTOR 1 POSITION 27	10419
318	REFLECTOR 2 POSITION 10	592	896	REFLECTOR 2 POSITION 27	10220
320	REFL 1 POS 10 2ND LOOK	792	898	REFL 1 POS 27 2ND LOOK	10419
322	REFL 2 POS 10 2ND LOOK	592	900	REFL 2 POS 27 2ND LOOK	10220
324	POS #6 SAMPLE 10 CH 3	15622	902	WARM CAL SAMPLE 7 CH 3	15634
326	CH 4	16429	904	CH 4	16437
328	CH 5	16748	906	CH 5	16757
330	CH 6	17054	908	CH 6	17034
332	CH 7	16083	910	CH 7	16039
334	CH 8	16239	912	CH 8	16261
336	CH 9	17096	914	CH 9	17057
338	CH 10	16281	916	CH 10	16271
340	CH 11	15972	918	CH 11	15940
12	CH 12	16327	920	CH 12	16
44	CH 13	16054	922	CH 13	159
346	CH 14	16537	924	CH 14	16458
348	CH 15	16479	926	CH 15	16454
350	REFLECTOR 1 POSITION 11	6021	928	REFLECTOR 1 POSITION 28	10419
352	REFLECTOR 2 POSITION 11	5820	930	REFLECTOR 2 POSITION 28	10220
354	REFL 1 POS 11 2ND LOOK	6021	932	REFL 1 POS 28 2ND LOOK	10419
356	REFL 2 POS 11 2ND LOOK	5820	934	REFL 2 POS 28 2ND LOOK	10220
358	COLD CAL SAMPLE 1 CH 3	15655	936	WARM CAL SAMPLE 8 CH 3	15632
360	CH 4	16458	938	CH 4	16436
362	CH 5	16758	940	CH 5	16758
364	CH 6	17021	942	CH 6	17035
366	CH 7	16044	944	CH 7	16040
368	CH 8	16267	946	CH 8	16259
370	CH 9	17060	948	CH 9	17059
372	CH 10	16270	950	CH 10	16268
374	CH 11	15941	952	CH 11	15941
376	CH 12	16256	954	CH 12	16255
378	CH 13	15971	956	CH 13	15973
380	CH 14	16465	958	CH 14	16454
382	CH 15	16454	960	CH 15	16454
384	REFLECTOR 1 POSITION 12	6021	962	REFLECTOR 1 POSITION 29	10419
386	REFLECTOR 2 POSITION 12	5820	964	REFLECTOR 2 POSITION 29	10220
388	REFL 1 POS 12 2ND LOOK	6021	966	REFL 1 POS 29 2ND LOOK	10419
390	REFL 2 POS 12 2ND LOOK	5820	968	REFL 2 POS 29 2ND LOOK	10220
92	COLD CAL SAMPLE 2 CH 3	15654	970	WARM CAL SAMPLE 9 CH 3	15630

ELEMENT	DESCRIPTION		VALUE	ELEMENT	DESCRIPTION		VALUE
394		CH 4	16457	972		CH 4	16437
396		CH 5	16756	974		CH 5	16755
398		CH 6	17035	976		CH 6	17037
400		CH 7	16044	978		CH 7	16039
402		CH 8	16264	980		CH 8	16259
404		CH 9	17062	982		CH 9	17060
406		CH 10	16268	984		CH 10	16267
408		CH 11	15947	986		CH 11	15942
410		CH 12	16261	988		CH 12	16252
412		CH 13	15972	990		CH 13	15984
414		CH 14	16441	992		CH 14	16461
416		CH 15	16455	994		CH 15	16453
418	REFLECTOR 1 POSITION 13		6021	996	REFLECTOR 1 POSITION 30		10419
420	REFLECTOR 2 POSITION 13		5820	998	REFLECTOR 2 POSITION 30		10220
422	REFL 1 POS 13 2ND LOOK		6021	1000	REFL 1 POS 30 2ND LOOK		10419
424	REFL 2 POS 13 2ND LOOK		5820	1002	REFL 2 POS 30 2ND LOOK		10220
426	COLD CAL SAMPLE 3	CH 3	15650	1004	WARM CAL SAMPLE 10	CH 3	15630
428		CH 4	16458	1006		CH 4	16434
430		CH 5	16754	1008		CH 5	16753
432		CH 6	17037	1010		CH 6	17033
434		CH 7	16047	1012		CH 7	16040
436		CH 8	16265	1014		CH 8	16259
438		CH 9	17061	1016		CH 9	17060
440		CH 10	16269	1018		CH 10	16271
2		CH 11	15943	1020		CH 11	15947
44		CH 12	16263	1022		CH 12	16259
446		CH 13	15972	1024		CH 13	15977
448		CH 14	16443	1026		CH 14	16446
450		CH 15	16454	1028		CH 15	16454
452	REFLECTOR 1 POSITION 14		6021	1030	REFLECTOR 1 COLD CAL POS		0E
454	REFLECTOR 2 POSITION 14		5820	1032	REFLECTOR 2 COLD CAL POS		0E
456	REFL 1 POS 14 2ND LOOK		6021	1034	REFL 1 COLD CAL 2ND LOOK		0E
458	REFL 2 POS 14 2ND LOOK		5820	1036	REFL 2 COLD CAL 2ND LOOK		0E
460	COLD CAL SAMPLE 4	CH 3	15651	1038	COLD CAL DATA 1	CH 3	0
462		CH 4	16458	1040		CH 4	0
464		CH 5	16754	1042		CH 5	0
466		CH 6	17034	1044		CH 6	0
468		CH 7	16044	1046		CH 7	0
470		CH 8	16262	1048		CH 8	0
472		CH 9	17058	1050		CH 9	0
474		CH 10	16270	1052		CH 10	0
476		CH 11	15949	1054		CH 11	0
478		CH 12	16250	1056		CH 12	0
480		CH 13	15974	1058		CH 13	0
482		CH 14	16440	1060		CH 14	0
484		CH 15	16454	1062		CH 15	0
486	REFLECTOR 1 POSITION 15		6021	1064	COLD CAL DATA 2	CH 3	0
488	REFLECTOR 2 POSITION 15		5820	1066		CH 4	0
490	REFL 1 POS 15 2ND LOOK		6021	1068		CH 5	0
2	REFL 2 POS 15 2ND LOOK		5820	1070		CH 6	0

ELEMENT	DESCRIPTION		VALUE	ELEMENT	DESCRIPTION		VAL
494	COLD CAL SAMPLE 5	CH 3	15649	1072		CH 7	0
496		CH 4	16460	1074		CH 8	0
498		CH 5	16753	1076		CH 9	0
500		CH 6	17036	1078		CH 10	0
502		CH 7	16047	1080		CH 11	0
504		CH 8	16266	1082		CH 12	0
506		CH 9	17062	1084		CH 13	0
508		CH 10	16272	1086		CH 14	0
510		CH 11	15946	1088		CH 15	0
512		CH 12	16251	1182	REFLECTOR 1 WARM CAL POS		0E
514		CH 13	15976	1184	REFLECTOR 2 WARM CAL POS		0E
516		CH 14	16471	1186	REFL 1 WARM CAL 2ND LOOK		0E
518		CH 15	16454	1188	REFL 2 WARM CAL 2ND LOOK		0E
520	REFLECTOR 1 POSITION 16		6021	1190	WARM CAL DATA 1	CH 3	0
522	REFLECTOR 2 POSITION 16		5820	1192		CH 4	0
524	REFL 1 POS 16 2ND LOOK		6021	1194		CH 5	0
526	REFL 2 POS 16 2ND LOOK		5820	1196		CH 6	0
528	COLD CAL SAMPLE 6	CH 3	15651	1198		CH 7	0
530		CH 4	16462	1200		CH 8	0
532		CH 5	16755	1202		CH 9	0
534		CH 6	17040	1204		CH 10	0
536		CH 7	16040	1206		CH 11	0
538		CH 8	16266	1208		CH 12	0
540		CH 9	17059	1210		CH 13	0
542		CH 10	16268	1212		CH 14	
544		CH 11	15948	1214		CH 15	0
546		CH 12	16261	1216	WARM CAL DATA 2	CH 3	0
548		CH 13	15965	1218		CH 4	0
550		CH 14	16464	1220		CH 5	0
552		CH 15	16456	1222		CH 6	0
554	REFLECTOR 1 POSITION 17		6021	1224		CH 7	0
556	REFLECTOR 2 POSITION 17		5820	1226		CH 8	0
558	REFL 1 POS 17 2ND LOOK		6021	1228		CH 9	0
560	REFL 2 POS 17 2ND LOOK		5820	1230		CH 10	0
562	COLD CAL SAMPLE 7	CH 3	15651	1232		CH 11	0
564		CH 4	16460	1234		CH 12	0
566		CH 5	16758	1236		CH 13	0
568		CH 6	17038	1238		CH 14	0
570		CH 7	16044	1240		CH 15	0

EMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	17917	23.22
1092	SCAN MOTOR A1-2	18559	24.05
1094	FEEDHORN A1-1	20340	27.13
1096	FEEDHORN A1-2	21553	28.04
1098	RF MUX A1-1	21573	30.06
1100	RF MUX A1-2	22416	31.96
1102	LOCAL OSCILLATOR CHANNEL 3	23642	34.13
1104	LOCAL OSCILLATOR CHANNEL 4	23822	34.41
1106	LOCAL OSCILLATOR CHANNEL 5	23186	32.91
1108	LOCAL OSCILLATOR CHANNEL 6	21285	29.62
1110	LOCAL OSCILLATOR CHANNEL 7	22103	31.09
1112	LOCAL OSCILLATOR CHANNEL 8	23201	33.65
1114	LOCAL OSCILLATOR CHANNEL 15	22689	33.26
1116	PLL LO #2 CHANNELS 9 THROUGH 14	21072	29.82
1118	PLL LO #1 CHANNELS 9 THROUGH 14	24212	35.71
1120	SPARE (NOT USED)	32767	52.86
1122	MIXER/IF AMPLIFIER CHANNEL 3	23041	32.66
1124	MIXER/IF AMPLIFIER CHANNEL 4	22665	32.67
1126	MIXER/IF AMPLIFIER CHANNEL 5	22513	32.11
1128	MIXER/IF AMPLIFIER CHANNEL 6	21863	30.60
1130	MIXER/IF AMPLIFIER CHANNEL 7	22193	31.32
1132	MIXER/IF AMPLIFIER CHANNEL 8	22635	32.81
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	21339	30.30
1136	MIXER/IF AMPLIFIER CHANNEL 15	22689	32.76
`8	IF AMPLIFIER CHANNEL 11 THRU 14	22673	32.61
1140	IF AMPLIFIER CHANNEL 9	23127	32.62
1142	IF AMPLIFIER CHANNEL 10	22732	32.81
1144	IF AMPLIFIER CHANNEL 11	21814	30.48
1146	DC/DC CONVERTER	23109	32.86
1148	IF AMPLIFIER CHANNEL 13	21917	30.41
1150	IF AMPLIFIER CHANNEL 14	21578	30.38
1152	IF AMPLIFIER CHANNEL 12	21575	30.36
1154	RF SHELF A1-1	22178	31.24
1156	RF SHELF A1-2	22373	31.81
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	20799	28.26
1160	A1-1 WARM LOAD 1	23293	24.03
1162	A1-1 WARM LOAD 2	23492	24.06
1164	A1-1 WARM LOAD 3	23572	24.15
1166	A1-1 WARM LOAD 4	23249	24.09
1168	A1-1 WARM LOAD CENTER	23433	24.13
1170	A1-2 WARM LOAD 1	24320	25.53
1172	A1-2 WARM LOAD 2	24153	25.51
1174	A1-2 WARM LOAD 3	24193	25.58
1176	A1-2 WARM LOAD 4	24107	25.55
1178	A1-2 WARM LOAD CENTER	23975	25.42
1180	TEMP SENSOR REFERENCE VOLTAGE	24885	

10-10-10 CAL MODE

DESCRIPTION	STATUS	STATUS	STATUS
SCANNER A1-1 POWER	ON	ON	ON
SCANNER A1-2 POWER	ON	ON	ON
PLL POWER	PLLO # 1	PLLO # 1	PLLO # 1
ANTENNA IN WARM CAL POSITION MODE	NO	NO	NO
ANTENNA IN COLD CAL POSITION MODE	NO	NO	NO
ANTENNA IN NADIR POSITION MODE	NO	NO	NO
ANTENNA IN FULL SCAN MODE	NO	NO	NO
SURVIVAL HEATER POWER	OFF	OFF	OFF
MODULE POWER	CONNECT	CONNECT	CONNECT
COLD CAL POSITION MSB	ZERO	ZERO	ZERO
COLD CAL POSITION LSB	ZERO	ZERO	ZERO

ANALOG DATA

DESCRIPTION	VALUE	DEG C	VALUE	DEG C	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-2 SCANNER MOTOR TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-1 RF SHELF TEMPERATURE	221	27.5	221	27.5	221	27.5
A1-2 RF SHELF TEMPERATURE	224	31.6	224	31.6	224	31.6
A1-1 WARM LOAD TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-2 WARM LOAD TEMPERATURE	220	26.2	220	26.2	220	26.2

DESCRIPTION	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VO
A1-1 ANTENNA DRIVE MOTOR CURRENT (AVRG)	32	14.91	32	14.91	35	16.31
A1-2 ANTENNA DRIVE MOTOR CURRENT (AVRG)	25	11.65	25	11.65	28	13.05
SIGNAL PROCESSING +15 VDC	172	14.84	172	14.84	172	14.84
ANTENNA DRIVE +15 VDC	174	15.02	174	15.02	175	15.10
SIGNAL PROCESSING -15 VDC	151	-15.00	151	-15.00	151	-15.00
ANTENNA DRIVE -15 VDC	151	-15.00	151	-15.00	152	-14.95
RECEIVER AMPLIFIER +8 VDC	158	7.90	158	7.90	158	7.90
SIGNAL PROCESSOR +5 VDC	148	4.93	148	4.93	148	4.93
ANTENNA DRIVE +5 VDC	148	4.93	148	4.93	149	4.97
RECEIVER MIXER/IF +10 VDC	172	9.94	172	9.94	172	9.94
PHASE LOCK LOOP (CHANNEL 9/14) +15 VDC	171	14.76	171	14.76	171	14.76
PHASE LOCK LOOP (CHANNEL 9/14) -15 VDC	146	-15.25	146	-15.25	146	-15.25
L.O. VOLTAGE (CHANNEL 8) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 7) VDC	173	9.90	173	9.90	173	9.90
L.O. VOLTAGE (CHANNEL 6) VDC	175	10.01	175	10.01	175	10.01
L.O. VOLTAGE (CHANNEL 3) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 4) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 5) VDC	173	9.90	173	9.90	173	9.90
PLLO # 2 LOCK DETECT	5	0.10	5	0.10	5	0.10
PLLO # 1 LOCK DETECT	222	4.44	222	4.44	222	4.44
L.O. VOLTAGE (CHANNEL 15) VDC	172	14.84	172	14.84	172	14.84

PRT TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
VARIABLE TARGET	615	42.00	601	14.00
	616	43.00	602	15.00
	617	44.00	603	16.00
	618	45.00	604	17.00
	619	46.00	605	18.00
	620	47.00	606	19.00
	621	48.00	607	20.00
FIXED TARGET	622	49.00	608	21.00
	623	50.00	609	22.00
	624	51.00	610	23.00
	625	52.00	611	24.00
	626	53.00	612	25.00
	627	67.00	613	69.00
	628	68.00	614	70.00
BASEPLATE	629	71.00	630	72.00
	631	26.00	632	27.00

THERMOCOUPLE TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
FIXED TARGET SHROUD	558	5.00	537	34.00
	559	6.00	538	35.00
VARIABLE TARGET SHROUD	550	7.00	524	36.00
	551	8.00	525	37.00
FIXED TARGET N2	506	57.00	502	30.00
	507	58.00	503	31.00
VARIABLE TARGET N2	516	59.00	511	32.00
	517	60.00	512	33.00
HEATER N2	514	1.00	509	38.00
	515	2.00	510	39.00
FIXED TARGET FLOW METER	508	63.00	504	61.00
VARIABLE TARGET FLOW METER	518	64.00	513	62.00
BASEPLATE HEATER N2	519	3.00	520	4.00
BASEPLATE N2	521	9.00	522	10.00
BASEPLATE FLOW METER	523	65.00		
ADJUNCT RADIATORS	575	73.00	577	74.00
	579	75.00	581	76.00

AMSU A1-17 A1.EXE GSE MODE 2 BP 1 P1 24-NOV-93 13:16:51 SCAN NUMBER 7
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

COMMANDS

[9] MODULE POWER =	CONNECT	ANTENNA IN COLD CAL POSIT = NO	[15
[10] SURVIVAL HEATER POWER =	OFF	ANTENNA IN NADIR POSITION = NO	[16
[11] MODULE TOTALLY OFF =	ON	ANTENNA IN FULL SCAN MODE = NO	[17
[12] SCANNER A1 - 1 POWER =	ON	PLL POWER = PLLO # 1	[18
[13] SCANNER A1 - 2 POWER =	ON	COLD CAL POSITION MSB = ZERO	[19
[14] ANTENNA IN WARM CAL POSIT =	NO	COLD CAL POSITION LSB = ZERO	[20

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 3

TPS 46

GSE MODE 2 BP 1

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	SYNC SEQUENCE BYTE 1	11111111	572	GSE #2 SAMPLE 17 CH 8	16284
2	SYNC SEQUENCE BYTE 2	11111111	574	CH 9	17064
3	SYNC SEQUENCE BYTE 3	11111111	576	CH 10	16274
4	UNIT ID AND SERIAL NO	00010001	578	CH 11	15941
5	DIGITAL B DATA BYTE 1	00000000	580	CH 12	16267
6	DIGITAL B DATA BYTE 2	00001110	582	CH 13	15988
7	DIGITAL B DATA BYTE 3	00000000	584	CH 14	16471
8	DIGITAL B DATA BYTE 4	00000000	586	CH 15	16455
10	REFLECTOR 1 POSITION 1	21	588	REFLECTOR 1 POSITION 18	21
12	REFLECTOR 2 POSITION 1	16204	590	REFLECTOR 2 POSITION 18	16204
14	REFL 1 POS 1 2ND LOOK	21	592	REFL 1 POS 18 2ND LOOK	21
16	REFL 2 POS 1 2ND LOOK	16204	594	REFL 2 POS 18 2ND LOOK	16204
18	GSE #2 SAMPLE 1 CH 3	15659	596	GSE #2 SAMPLE 18 CH 3	15660
20	CH 4	16468	598	CH 4	16465
22	CH 5	16780	600	CH 5	16779
24	CH 6	17022	602	CH 6	17031
26	CH 7	16040	604	CH 7	16038
28	CH 8	16279	606	CH 8	16286
30	CH 9	17063	608	CH 9	17063
32	CH 10	16274	610	CH 10	16269
34	CH 11	15948	612	CH 11	15945
36	CH 12	16269	614	CH 12	16267
38	CH 13	15985	616	CH 13	15984
40	CH 14	16460	618	CH 14	16454
42	CH 15	16453	620	CH 15	16456
44	REFLECTOR 1 POSITION 2	21	622	REFLECTOR 1 POSITION 19	21
46	REFLECTOR 2 POSITION 2	16204	624	REFLECTOR 2 POSITION 19	16204
48	REFL 1 POS 2 2ND LOOK	21	626	REFL 1 POS 19 2ND LOOK	21
50	REFL 2 POS 2 2ND LOOK	16204	628	REFL 2 POS 19 2ND LOOK	16204
52	GSE #2 SAMPLE 2 CH 3	15660	630	GSE #2 SAMPLE 19 CH 3	15667
54	CH 4	16471	632	CH 4	16468
56	CH 5	16779	634	CH 5	16780
58	CH 6	17033	636	CH 6	17035
60	CH 7	16045	638	CH 7	16040
62	CH 8	16283	640	CH 8	16284
64	CH 9	17060	642	CH 9	17063
66	CH 10	16269	644	CH 10	16274
68	CH 11	15940	646	CH 11	15952
70	CH 12	16260	648	CH 12	16260
72	CH 13	15979	650	CH 13	15966
74	CH 14	16466	652	CH 14	16475
76	CH 15	16454	654	CH 15	16456
78	REFLECTOR 1 POSITION 3	21	656	REFLECTOR 1 POSITION 20	21
80	REFLECTOR 2 POSITION 3	16204	658	REFLECTOR 2 POSITION 20	16204
82	REFL 1 POS 3 2ND LOOK	21	660	REFL 1 POS 20 2ND LOOK	21
84	REFL 2 POS 3 2ND LOOK	16204	662	REFL 2 POS 20 2ND LOOK	16204
86	GSE #2 SAMPLE 3 CH 3	15660	664	GSE #2 SAMPLE 20 CH 3	15660
88	CH 4	16467	666	CH 4	16468
90	CH 5	16778	668	CH 5	16778
92	CH 6	17031	670	CH 6	17033

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
94	CH 7	16041	672	CH 7	16040
96	CH 8	16285	674	CH 8	16285
98	CH 9	17063	676	CH 9	17060
100	CH 10	16271	678	CH 10	16273
102	CH 11	15943	680	CH 11	15946
104	CH 12	16266	682	CH 12	16264
106	CH 13	15968	684	CH 13	15978
108	CH 14	16467	686	CH 14	16465
110	CH 15	16453	688	CH 15	16453
112	REFLECTOR 1 POSITION 4	21	690	REFLECTOR 1 POSITION 21	21
114	REFLECTOR 2 POSITION 4	16204	692	REFLECTOR 2 POSITION 21	16204
116	REFL 1 POS 4 2ND LOOK	21	694	REFL 1 POS 21 2ND LOOK	21
118	REFL 2 POS 4 2ND LOOK	16204	696	REFL 2 POS 21 2ND LOOK	16204
120	GSE #2 SAMPLE 4 CH 3	15662	698	GSE #2 SAMPLE 21 CH 3	15663
122	CH 4	16468	700	CH 4	16465
124	CH 5	16778	702	CH 5	16781
126	CH 6	17035	704	CH 6	17032
128	CH 7	16043	706	CH 7	16043
130	CH 8	16285	708	CH 8	16286
132	CH 9	17063	710	CH 9	17062
134	CH 10	16269	712	CH 10	16276
136	CH 11	15943	714	CH 11	15942
138	CH 12	16263	716	CH 12	16265
140	CH 13	15971	718	CH 13	15988
12	CH 14	16467	720	CH 14	164
44	CH 15	16454	722	CH 15	1645
146	REFLECTOR 1 POSITION 5	21	724	REFLECTOR 1 POSITION 22	21
148	REFLECTOR 2 POSITION 5	16204	726	REFLECTOR 2 POSITION 22	16204
150	REFL 1 POS 5 2ND LOOK	21	728	REFL 1 POS 22 2ND LOOK	21
152	REFL 2 POS 5 2ND LOOK	16204	730	REFL 2 POS 22 2ND LOOK	16204
154	GSE #2 SAMPLE 5 CH 3	15657	732	GSE #2 SAMPLE 22 CH 3	15661
156	CH 4	16471	734	CH 4	16467
158	CH 5	16778	736	CH 5	16778
160	CH 6	17035	738	CH 6	17033
162	CH 7	16043	740	CH 7	16041
164	CH 8	16285	742	CH 8	16282
166	CH 9	17062	744	CH 9	17064
168	CH 10	16275	746	CH 10	16266
170	CH 11	15940	748	CH 11	15946
172	CH 12	16262	750	CH 12	16264
174	CH 13	15976	752	CH 13	15977
176	CH 14	16454	754	CH 14	16464
178	CH 15	16455	756	CH 15	16455
180	REFLECTOR 1 POSITION 6	21	758	REFLECTOR 1 POSITION 23	21
182	REFLECTOR 2 POSITION 6	16204	760	REFLECTOR 2 POSITION 23	16204
184	REFL 1 POS 6 2ND LOOK	21	762	REFL 1 POS 23 2ND LOOK	21
186	REFL 2 POS 6 2ND LOOK	16204	764	REFL 2 POS 23 2ND LOOK	16204
188	GSE #2 SAMPLE 6 CH 3	15657	766	GSE #2 SAMPLE 23 CH 3	15657
190	CH 4	16466	768	CH 4	16469
92	CH 5	16780	770	CH 5	16780

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17033	772	CH 6	17036
196	CH 7	16043	774	CH 7	16041
198	CH 8	16287	776	CH 8	16287
200	CH 9	17061	778	CH 9	17063
202	CH 10	16273	780	CH 10	16272
204	CH 11	15944	782	CH 11	15942
206	CH 12	16265	784	CH 12	16262
208	CH 13	15984	786	CH 13	15985
210	CH 14	16459	788	CH 14	16460
212	CH 15	16455	790	CH 15	16454
214	REFLECTOR 1 POSITION 7	21	792	REFLECTOR 1 POSITION 24	21
216	REFLECTOR 2 POSITION 7	16204	794	REFLECTOR 2 POSITION 24	16204
218	REFL 1 POS 7 2ND LOOK	21	796	REFL 1 POS 24 2ND LOOK	21
220	REFL 2 POS 7 2ND LOOK	16204	798	REFL 2 POS 24 2ND LOOK	16204
222	GSE #2 SAMPLE 7 CH 3	15665	800	GSE #2 SAMPLE 24 CH 3	15663
224	CH 4	16469	802	CH 4	16468
226	CH 5	16778	804	CH 5	16780
228	CH 6	17032	806	CH 6	17031
230	CH 7	16041	808	CH 7	16040
232	CH 8	16283	810	CH 8	16290
234	CH 9	17058	812	CH 9	17062
236	CH 10	16275	814	CH 10	16272
238	CH 11	15947	816	CH 11	15951
240	CH 12	16264	818	CH 12	16267
242	CH 13	15970	820	CH 13	15980
244	CH 14	16477	822	CH 14	16461
246	CH 15	16454	824	CH 15	16454
248	REFLECTOR 1 POSITION 8	21	826	REFLECTOR 1 POSITION 25	21
250	REFLECTOR 2 POSITION 8	16204	828	REFLECTOR 2 POSITION 25	16204
252	REFL 1 POS 8 2ND LOOK	21	830	REFL 1 POS 25 2ND LOOK	21
254	REFL 2 POS 8 2ND LOOK	16204	832	REFL 2 POS 25 2ND LOOK	16204
256	GSE #2 SAMPLE 8 CH 3	15659	834	GSE #2 SAMPLE 25 CH 3	15660
258	CH 4	16470	836	CH 4	16470
260	CH 5	16780	838	CH 5	16778
262	CH 6	17033	840	CH 6	17032
264	CH 7	16036	842	CH 7	16042
266	CH 8	16286	844	CH 8	16285
268	CH 9	17063	846	CH 9	17062
270	CH 10	16274	848	CH 10	16271
272	CH 11	15940	850	CH 11	15948
274	CH 12	16269	852	CH 12	16264
276	CH 13	15979	854	CH 13	15977
278	CH 14	16455	856	CH 14	16470
280	CH 15	16455	858	CH 15	16454
282	REFLECTOR 1 POSITION 9	21	860	REFLECTOR 1 POSITION 26	21
284	REFLECTOR 2 POSITION 9	16204	862	REFLECTOR 2 POSITION 26	16204
286	REFL 1 POS 9 2ND LOOK	21	864	REFL 1 POS 26 2ND LOOK	21
288	REFL 2 POS 9 2ND LOOK	16204	866	REFL 2 POS 26 2ND LOOK	16204
290	GSE #2 SAMPLE 9 CH 3	15660	868	GSE #2 SAMPLE 26 CH 3	15662
292	CH 4	16468	870	CH 4	16468

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
294	CH 5	16779	872	CH 5	16778
296	CH 6	17033	874	CH 6	17032
298	CH 7	16040	876	CH 7	16042
300	CH 8	16280	878	CH 8	16283
302	CH 9	17062	880	CH 9	17063
304	CH 10	16270	882	CH 10	16271
306	CH 11	15949	884	CH 11	15942
308	CH 12	16265	886	CH 12	16267
310	CH 13	15979	888	CH 13	15982
312	CH 14	16461	890	CH 14	16466
314	CH 15	16455	892	CH 15	16456
316	REFLECTOR 1 POSITION 10	21	894	REFLECTOR 1 POSITION 27	21
318	REFLECTOR 2 POSITION 10	16204	896	REFLECTOR 2 POSITION 27	16204
320	REFL 1 POS 10 2ND LOOK	21	898	REFL 1 POS 27 2ND LOOK	21
322	REFL 2 POS 10 2ND LOOK	16204	900	REFL 2 POS 27 2ND LOOK	16204
324	GSE #2 SAMPLE 10 CH 3	15658	902	GSE #2 SAMPLE 27 CH 3	15662
326	CH 4	16467	904	CH 4	16467
328	CH 5	16779	906	CH 5	16780
330	CH 6	17034	908	CH 6	17034
332	CH 7	16042	910	CH 7	16038
334	CH 8	16287	912	CH 8	16289
336	CH 9	17063	914	CH 9	17061
338	CH 10	16275	916	CH 10	16274
340	CH 11	15941	918	CH 11	15945
342	CH 12	16272	920	CH 12	162
344	CH 13	15980	922	CH 13	1598
346	CH 14	16458	924	CH 14	16441
348	CH 15	16455	926	CH 15	16456
350	REFLECTOR 1 POSITION 11	21	928	REFLECTOR 1 POSITION 28	21
352	REFLECTOR 2 POSITION 11	16204	930	REFLECTOR 2 POSITION 28	16204
354	REFL 1 POS 11 2ND LOOK	21	932	REFL 1 POS 28 2ND LOOK	21
356	REFL 2 POS 11 2ND LOOK	16204	934	REFL 2 POS 28 2ND LOOK	16204
358	GSE #2 SAMPLE 11 CH 3	15663	936	GSE #2 SAMPLE 28 CH 3	15660
360	CH 4	16471	938	CH 4	16466
362	CH 5	16774	940	CH 5	16778
364	CH 6	17033	942	CH 6	17031
366	CH 7	16041	944	CH 7	16043
368	CH 8	16282	946	CH 8	16282
370	CH 9	17064	948	CH 9	17060
372	CH 10	16270	950	CH 10	16273
374	CH 11	15943	952	CH 11	15947
376	CH 12	16262	954	CH 12	16275
378	CH 13	15975	956	CH 13	15975
380	CH 14	16467	958	CH 14	16460
382	CH 15	16455	960	CH 15	16454
384	REFLECTOR 1 POSITION 12	21	962	REFLECTOR 1 POSITION 29	21
386	REFLECTOR 2 POSITION 12	16204	964	REFLECTOR 2 POSITION 29	16204
388	REFL 1 POS 12 2ND LOOK	21	966	REFL 1 POS 29 2ND LOOK	21
390	REFL 2 POS 12 2ND LOOK	16204	968	REFL 2 POS 29 2ND LOOK	16204
392	GSE #2 SAMPLE 12 CH 3	15662	970	GSE #2 SAMPLE 29 CH 3	15666

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16470	972	CH 4	16466
396	CH 5	16778	974	CH 5	16781
398	CH 6	17034	976	CH 6	17032
400	CH 7	16042	978	CH 7	16043
402	CH 8	16285	980	CH 8	16285
404	CH 9	17065	982	CH 9	17065
406	CH 10	16273	984	CH 10	16270
408	CH 11	15941	986	CH 11	15945
410	CH 12	16260	988	CH 12	16269
412	CH 13	15985	990	CH 13	15968
414	CH 14	16465	992	CH 14	16464
416	CH 15	16454	994	CH 15	16455
418	REFLECTOR 1 POSITION 13	21	996	REFLECTOR 1 POSITION 30	21
420	REFLECTOR 2 POSITION 13	16204	998	REFLECTOR 2 POSITION 30	16204
422	REFL 1 POS 13 2ND LOOK	21	1000	REFL 1 POS 30 2ND LOOK	21
424	REFL 2 POS 13 2ND LOOK	16204	1002	REFL 2 POS 30 2ND LOOK	16204
426	GSE #2 SAMPLE 13 CH 3	15662	1004	GSE #2 SAMPLE 30 CH 3	15662
428	CH 4	16467	1006	CH 4	16470
430	CH 5	16777	1008	CH 5	16781
432	CH 6	17034	1010	CH 6	17027
434	CH 7	16040	1012	CH 7	16040
436	CH 8	16286	1014	CH 8	16286
438	CH 9	17063	1016	CH 9	17063
440	CH 10	16272	1018	CH 10	16278
42	CH 11	15949	1020	CH 11	15952
44	CH 12	16257	1022	CH 12	16263
446	CH 13	15975	1024	CH 13	15981
448	CH 14	16456	1026	CH 14	16471
450	CH 15	16454	1028	CH 15	16455
452	REFLECTOR 1 POSITION 14	21	1030	REFLECTOR 1 COLD CAL POS	0E
454	REFLECTOR 2 POSITION 14	16204	1032	REFLECTOR 2 COLD CAL POS	0E
456	REFL 1 POS 14 2ND LOOK	21	1034	REFL 1 COLD CAL 2ND LOOK	0E
458	REFL 2 POS 14 2ND LOOK	16204	1036	REFL 2 COLD CAL 2ND LOOK	0E
460	GSE #2 SAMPLE 14 CH 3	15659	1038	COLD CAL DATA 1 CH 3	0
462	CH 4	16470	1040	CH 4	0
464	CH 5	16778	1042	CH 5	0
466	CH 6	17035	1044	CH 6	0
468	CH 7	16039	1046	CH 7	0
470	CH 8	16287	1048	CH 8	0
472	CH 9	17062	1050	CH 9	0
474	CH 10	16268	1052	CH 10	0
476	CH 11	15942	1054	CH 11	0
478	CH 12	16270	1056	CH 12	0
480	CH 13	15970	1058	CH 13	0
482	CH 14	16455	1060	CH 14	0
484	CH 15	16454	1062	CH 15	0
486	REFLECTOR 1 POSITION 15	21	1064	COLD CAL DATA 2 CH 3	0
488	REFLECTOR 2 POSITION 15	16204	1066	CH 4	0
490	REFL 1 POS 15 2ND LOOK	21	1068	CH 5	0
92	REFL 2 POS 15 2ND LOOK	16204	1070	CH 6	0

ELEMENT	DESCRIPTION		VALUE	ELEMENT	DESCRIPTION		VAL
494	GSE #2 SAMPLE 15	CH 3	15663	1072		CH 7	0
496		CH 4	16468	1074		CH 8	0
498		CH 5	16778	1076		CH 9	0
500		CH 6	17034	1078		CH 10	0
502		CH 7	16040	1080		CH 11	0
504		CH 8	16285	1082		CH 12	0
506		CH 9	17062	1084		CH 13	0
508		CH 10	16273	1086		CH 14	0
510		CH 11	15947	1088		CH 15	0
512		CH 12	16258	1182	REFLECTOR 1 WARM CAL POS		0E
514		CH 13	15985	1184	REFLECTOR 2 WARM CAL POS		0E
516		CH 14	16448	1186	REFL 1 WARM CAL 2ND LOOK		0E
518		CH 15	16455	1188	REFL 2 WARM CAL 2ND LOOK		0E
520	REFLECTOR 1 POSITION 16		21	1190	WARM CAL DATA 1	CH 3	0
522	REFLECTOR 2 POSITION 16		16204	1192		CH 4	0
524	REFL 1 POS 16 2ND LOOK		21	1194		CH 5	0
526	REFL 2 POS 16 2ND LOOK		16204	1196		CH 6	0
528	GSE #2 SAMPLE 16	CH 3	15657	1198		CH 7	0
530		CH 4	16466	1200		CH 8	0
532		CH 5	16778	1202		CH 9	0
534		CH 6	17036	1204		CH 10	0
536		CH 7	16039	1206		CH 11	0
538		CH 8	16286	1208		CH 12	0
540		CH 9	17060	1210		CH 13	0
2		CH 10	16271	1212		CH 14	
544		CH 11	15950	1214		CH 15	
546		CH 12	16259	1216	WARM CAL DATA 2	CH 3	0
548		CH 13	15974	1218		CH 4	0
550		CH 14	16467	1220		CH 5	0
552		CH 15	16456	1222		CH 6	0
554	REFLECTOR 1 POSITION 17		21	1224		CH 7	0
556	REFLECTOR 2 POSITION 17		16204	1226		CH 8	0
558	REFL 1 POS 17 2ND LOOK		21	1228		CH 9	0
560	REFL 2 POS 17 2ND LOOK		16204	1230		CH 10	0
562	GSE #2 SAMPLE 17	CH 3	15662	1232		CH 11	0
564		CH 4	16469	1234		CH 12	0
566		CH 5	16779	1236		CH 13	0
568		CH 6	17033	1238		CH 14	0
570		CH 7	16041	1240		CH 15	0

EMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	17915	23.22
1092	SCAN MOTOR A1-2	18560	24.05
1094	FEEDHORN A1-1	20332	27.12
1096	FEEDHORN A1-2	21551	28.03
1098	RF MUX A1-1	21567	30.05
1100	RF MUX A1-2	22411	31.95
1102	LOCAL OSCILLATOR CHANNEL 3	23637	34.12
1104	LOCAL OSCILLATOR CHANNEL 4	23815	34.40
1106	LOCAL OSCILLATOR CHANNEL 5	23183	32.90
1108	LOCAL OSCILLATOR CHANNEL 6	21282	29.61
1110	LOCAL OSCILLATOR CHANNEL 7	22095	31.08
1112	LOCAL OSCILLATOR CHANNEL 8	23198	33.64
1114	LOCAL OSCILLATOR CHANNEL 15	22684	33.25
1116	PLL LO #2 CHANNELS 9 THROUGH 14	21069	29.81
1118	PLL LO #1 CHANNELS 9 THROUGH 14	24208	35.70
1120	SPARE (NOT USED)	32767	52.86
1122	MIXER/IF AMPLIFIER CHANNEL 3	23036	32.65
1124	MIXER/IF AMPLIFIER CHANNEL 4	22661	32.66
1126	MIXER/IF AMPLIFIER CHANNEL 5	22508	32.10
1128	MIXER/IF AMPLIFIER CHANNEL 6	21857	30.58
1130	MIXER/IF AMPLIFIER CHANNEL 7	22188	31.31
1132	MIXER/IF AMPLIFIER CHANNEL 8	22629	32.80
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	21334	30.29
1136	MIXER/IF AMPLIFIER CHANNEL 15	22685	32.76
`8	IF AMPLIFIER CHANNEL 11 THRU 14	22667	32.60
1140	IF AMPLIFIER CHANNEL 9	23122	32.61
1142	IF AMPLIFIER CHANNEL 10	22728	32.80
1144	IF AMPLIFIER CHANNEL 11	21807	30.47
1146	DC/DC CONVERTER	23107	32.85
1148	IF AMPLIFIER CHANNEL 13	21911	30.39
1150	IF AMPLIFIER CHANNEL 14	21574	30.38
1152	IF AMPLIFIER CHANNEL 12	21568	30.35
1154	RF SHELF A1-1	22171	31.22
1156	RF SHELF A1-2	22368	31.80
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	20793	28.24
1160	A1-1 WARM LOAD 1	23287	24.02
1162	A1-1 WARM LOAD 2	23489	24.06
1164	A1-1 WARM LOAD 3	23568	24.14
1166	A1-1 WARM LOAD 4	23247	24.08
1168	A1-1 WARM LOAD CENTER	23430	24.12
1170	A1-2 WARM LOAD 1	24319	25.53
1172	A1-2 WARM LOAD 2	24148	25.50
1174	A1-2 WARM LOAD 3	24185	25.56
1176	A1-2 WARM LOAD 4	24102	25.54
1178	A1-2 WARM LOAD CENTER	23973	25.42
1180	TEMP SENSOR REFERENCE VOLTAGE	24886	

GSE MODE 2 BP 1

DESCRIPTION	STATUS	STATUS	STATUS
SCANNER A1-1 POWER	ON	ON	ON
SCANNER A1-2 POWER	ON	ON	ON
PLL POWER	PLLO # 1	PLLO # 1	PLLO # 1
ANTENNA IN WARM CAL POSITION MODE	NO	NO	NO
ANTENNA IN COLD CAL POSITION MODE	NO	NO	NO
ANTENNA IN NADIR POSITION MODE	NO	NO	NO
ANTENNA IN FULL SCAN MODE	NO	NO	NO
SURVIVAL HEATER POWER	OFF	OFF	OFF
MODULE POWER	CONNECT	CONNECT	CONNECT
COLD CAL POSITION MSB	ZERO	ZERO	ZERO
COLD CAL POSITION LSB	ZERO	ZERO	ZERO

ANALOG DATA

DESCRIPTION	VALUE	DEG C	VALUE	DEG C	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	217	22.1	217	22.1	217	22.1
A1-2 SCANNER MOTOR TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-1 RF SHELF TEMPERATURE	221	27.5	221	27.5	221	27.5
A1-2 RF SHELF TEMPERATURE	224	31.6	224	31.6	224	31.6
A1-1 WARM LOAD TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-2 WARM LOAD TEMPERATURE	220	26.2	220	26.2	220	26.2

DESCRIPTION	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS
A1-1 ANTENNA DRIVE MOTOR CURRENT (AVRG)	5	2.33	5	2.33	5	2.33
A1-2 ANTENNA DRIVE MOTOR CURRENT (AVRG)	5	2.33	5	2.33	5	2.33
SIGNAL PROCESSING +15 VDC	173	14.93	173	14.93	173	14.93
ANTENNA DRIVE +15 VDC	173	14.93	173	14.93	173	14.93
SIGNAL PROCESSING -15 VDC	151	-15.00	151	-15.00	151	-15.00
ANTENNA DRIVE -15 VDC	150	-15.05	150	-15.05	150	-15.05
RECEIVER AMPLIFIER +8 VDC	159	7.95	159	7.95	159	7.95
SIGNAL PROCESSOR +5 VDC	147	4.90	147	4.90	148	4.93
ANTENNA DRIVE +5 VDC	147	4.90	147	4.90	147	4.90
RECEIVER MIXER/IF +10 VDC	172	9.94	172	9.94	172	9.94
PHASE LOCK LOOP (CHANNEL 9/14) +15 VDC	171	14.76	171	14.76	171	14.76
PHASE LOCK LOOP (CHANNEL 9/14) -15 VDC	146	-15.25	146	-15.25	146	-15.25
L.O. VOLTAGE (CHANNEL 8) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 7) VDC	173	9.90	173	9.90	173	9.90
L.O. VOLTAGE (CHANNEL 6) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 3) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 4) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 5) VDC	173	9.90	173	9.90	173	9.90
PLLO # 2 LOCK DETECT	5	0.10	5	0.10	5	0.10
PLLO # 1 LOCK DETECT	221	4.42	222	4.44	222	4.44
L.O. VOLTAGE (CHANNEL 15) VDC	172	14.84	172	14.84	172	14.84

PRT TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
VARIABLE TARGET	615	42.00	601	14.00
	616	43.00	602	15.00
	617	44.00	603	16.00
	618	45.00	604	17.00
	619	46.00	605	18.00
	620	47.00	606	19.00
	621	48.00	607	20.00
FIXED TARGET	622	49.00	608	21.00
	623	50.00	609	22.00
	624	51.00	610	23.00
	625	52.00	611	24.00
	626	53.00	612	25.00
	627	67.00	613	69.00
	628	68.00	614	70.00
BASEPLATE	629	71.00	630	72.00
	631	26.00	632	27.00

THERMOCOUPLE TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
FIXED TARGET SHROUD	558	5.00	537	34.00
	559	6.00	538	35.00
VARIABLE TARGET SHROUD	550	7.00	524	36.00
	551	8.00	525	37.00
FIXED TARGET N2	506	57.00	502	30.00
	507	58.00	503	31.00
VARIABLE TARGET N2	516	59.00	511	32.00
	517	60.00	512	33.00
HEATER N2	514	1.00	509	38.00
	515	2.00	510	39.00
FIXED TARGET FLOW METER	508	63.00	504	61.00
VARIABLE TARGET FLOW METER	518	64.00	513	62.00
BASEPLATE HEATER N2	519	3.00	520	4.00
BASEPLATE N2	521	9.00	522	10.00
BASEPLATE FLOW METER	523	65.00		
ADJUNCT RADIATORS	575	73.00	577	74.00
	579	75.00	581	76.00

AMSU A1-17 A1.EXE GSE MODE 3 P1 24-NOV-93 13:30:40 SCAN NUMBER 2

[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

COMMANDS

[9] MODULE POWER =	CONNECT	ANTENNA IN COLD CAL POSIT = NO	[15
[10] SURVIVAL HEATER POWER =	OFF	ANTENNA IN NADIR POSITION = NO	[16
[11] MODULE TOTALLY OFF =	ON	ANTENNA IN FULL SCAN MODE = NO	[17
[12] SCANNER A1 - 1 POWER =	ON	PLL POWER = PLLO # 1	[18
[13] SCANNER A1 - 2 POWER =	ON	COLD CAL POSITION MSB = ZERO	[19
[14] ANTENNA IN WARM CAL POSIT =	NO	COLD CAL POSITION LSB = ZERO	[20

POWER [4] ON

SCREEN ONLY [2] PRINT [3] FULL [1] RETURN

SELECT TOUCHSCREEN BUTTON 3

TDS 46

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	SYNC SEQUENCE BYTE 1	11111111	572	GSE #3 SAMPLE 17 CH 8	16242
2	SYNC SEQUENCE BYTE 2	11111111	574	CH 9	17060
3	SYNC SEQUENCE BYTE 3	11111111	576	CH 10	16270
4	UNIT ID AND SERIAL NO	00010001	578	CH 11	15943
5	DIGITAL B DATA BYTE 1	00000000	580	CH 12	16257
6	DIGITAL B DATA BYTE 2	00001110	582	CH 13	15978
7	DIGITAL B DATA BYTE 3	00000000	584	CH 14	16467
8	DIGITAL B DATA BYTE 4	00000000	586	CH 15	16455
10	REFLECTOR 1 POSITION 1	3059	588	REFLECTOR 1 POSITION 18	3059
12	REFLECTOR 2 POSITION 1	2860	590	REFLECTOR 2 POSITION 18	2860
14	REFL 1 POS 1 2ND LOOK	3059	592	REFL 1 POS 18 2ND LOOK	3059
16	REFL 2 POS 1 2ND LOOK	2860	594	REFL 2 POS 18 2ND LOOK	2860
18	GSE #3 SAMPLE 1 CH 3	15628	596	GSE #3 SAMPLE 18 CH 3	15623
20	CH 4	16429	598	CH 4	16431
22	CH 5	16749	600	CH 5	16743
24	CH 6	17020	602	CH 6	17037
26	CH 7	16041	604	CH 7	16038
28	CH 8	16241	606	CH 8	16242
30	CH 9	17056	608	CH 9	17056
32	CH 10	16270	610	CH 10	16274
34	CH 11	15941	612	CH 11	15941
36	CH 12	16258	614	CH 12	16251
38	CH 13	15973	616	CH 13	15974
40	CH 14	16450	618	CH 14	16456
42	CH 15	16453	620	CH 15	16453
44	REFLECTOR 1 POSITION 2	3059	622	REFLECTOR 1 POSITION 19	3059
46	REFLECTOR 2 POSITION 2	2860	624	REFLECTOR 2 POSITION 19	2860
48	REFL 1 POS 2 2ND LOOK	3059	626	REFL 1 POS 19 2ND LOOK	3059
50	REFL 2 POS 2 2ND LOOK	2860	628	REFL 2 POS 19 2ND LOOK	2860
52	GSE #3 SAMPLE 2 CH 3	15622	630	GSE #3 SAMPLE 19 CH 3	15619
54	CH 4	16425	632	CH 4	16427
56	CH 5	16746	634	CH 5	16749
58	CH 6	17037	636	CH 6	17037
60	CH 7	16037	638	CH 7	16040
62	CH 8	16242	640	CH 8	16245
64	CH 9	17056	642	CH 9	17057
66	CH 10	16267	644	CH 10	16270
68	CH 11	15937	646	CH 11	15939
70	CH 12	16263	648	CH 12	16259
72	CH 13	15970	650	CH 13	15983
74	CH 14	16437	652	CH 14	16448
76	CH 15	16454	654	CH 15	16452
78	REFLECTOR 1 POSITION 3	3059	656	REFLECTOR 1 POSITION 20	3059
80	REFLECTOR 2 POSITION 3	2860	658	REFLECTOR 2 POSITION 20	2860
82	REFL 1 POS 3 2ND LOOK	3059	660	REFL 1 POS 20 2ND LOOK	3059
84	REFL 2 POS 3 2ND LOOK	2860	662	REFL 2 POS 20 2ND LOOK	2860
86	GSE #3 SAMPLE 3 CH 3	15619	664	GSE #3 SAMPLE 20 CH 3	15619
88	CH 4	16427	666	CH 4	16428
90	CH 5	16749	668	CH 5	16749
92	CH 6	17038	670	CH 6	17034

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VA
94	CH 7	16038	672	CH 7	16039
96	CH 8	16245	674	CH 8	16242
98	CH 9	17057	676	CH 9	17055
100	CH 10	16265	678	CH 10	16269
102	CH 11	15938	680	CH 11	15939
104	CH 12	16249	682	CH 12	16256
106	CH 13	15963	684	CH 13	15975
108	CH 14	16447	686	CH 14	16454
110	CH 15	16454	688	CH 15	16455
112	REFLECTOR 1 POSITION 4	3059	690	REFLECTOR 1 POSITION 21	3059
114	REFLECTOR 2 POSITION 4	2860	692	REFLECTOR 2 POSITION 21	2860
116	REFL 1 POS 4 2ND LOOK	3059	694	REFL 1 POS 21 2ND LOOK	3059
118	REFL 2 POS 4 2ND LOOK	2860	696	REFL 2 POS 21 2ND LOOK	2860
120	GSE #3 SAMPLE 4 CH 3	15622	698	GSE #3 SAMPLE 21 CH 3	15625
122	CH 4	16427	700	CH 4	16429
124	CH 5	16750	702	CH 5	16749
126	CH 6	17035	704	CH 6	17037
128	CH 7	16043	706	CH 7	16039
130	CH 8	16245	708	CH 8	16243
132	CH 9	17055	710	CH 9	17058
134	CH 10	16275	712	CH 10	16262
136	CH 11	15939	714	CH 11	15940
138	CH 12	16254	716	CH 12	16258
140	CH 13	15976	718	CH 13	15966
12	CH 14	16473	720	CH 14	16
44	CH 15	16454	722	CH 15	164
146	REFLECTOR 1 POSITION 5	3059	724	REFLECTOR 1 POSITION 22	3059
148	REFLECTOR 2 POSITION 5	2860	726	REFLECTOR 2 POSITION 22	2860
150	REFL 1 POS 5 2ND LOOK	3059	728	REFL 1 POS 22 2ND LOOK	3059
152	REFL 2 POS 5 2ND LOOK	2860	730	REFL 2 POS 22 2ND LOOK	2860
154	GSE #3 SAMPLE 5 CH 3	15624	732	GSE #3 SAMPLE 22 CH 3	15625
156	CH 4	16425	734	CH 4	16428
158	CH 5	16745	736	CH 5	16747
160	CH 6	17037	738	CH 6	17035
162	CH 7	16040	740	CH 7	16040
164	CH 8	16245	742	CH 8	16248
166	CH 9	17058	744	CH 9	17058
168	CH 10	16270	746	CH 10	16269
170	CH 11	15940	748	CH 11	15940
172	CH 12	16257	750	CH 12	16247
174	CH 13	15980	752	CH 13	15977
176	CH 14	16455	754	CH 14	16444
178	CH 15	16453	756	CH 15	16453
180	REFLECTOR 1 POSITION 6	3059	758	REFLECTOR 1 POSITION 23	3059
182	REFLECTOR 2 POSITION 6	2860	760	REFLECTOR 2 POSITION 23	2860
184	REFL 1 POS 6 2ND LOOK	3059	762	REFL 1 POS 23 2ND LOOK	3059
186	REFL 2 POS 6 2ND LOOK	2860	764	REFL 2 POS 23 2ND LOOK	2860
188	GSE #3 SAMPLE 6 CH 3	15622	766	GSE #3 SAMPLE 23 CH 3	15621
190	CH 4	16426	768	CH 4	16430
92	CH 5	16748	770	CH 5	16746

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17039	772	CH 6	17034
196	CH 7	16037	774	CH 7	16039
198	CH 8	16240	776	CH 8	16245
200	CH 9	17059	778	CH 9	17056
202	CH 10	16268	780	CH 10	16263
204	CH 11	15938	782	CH 11	15936
206	CH 12	16255	784	CH 12	16250
208	CH 13	15976	786	CH 13	15967
210	CH 14	16460	788	CH 14	16454
212	CH 15	16453	790	CH 15	16451
214	REFLECTOR 1 POSITION 7	3059	792	REFLECTOR 1 POSITION 24	3059
216	REFLECTOR 2 POSITION 7	2860	794	REFLECTOR 2 POSITION 24	2860
218	REFL 1 POS 7 2ND LOOK	3059	796	REFL 1 POS 24 2ND LOOK	3059
220	REFL 2 POS 7 2ND LOOK	2860	798	REFL 2 POS 24 2ND LOOK	2860
222	GSE #3 SAMPLE 7 CH 3	15626	800	GSE #3 SAMPLE 24 CH 3	15621
224	CH 4	16428	802	CH 4	16427
226	CH 5	16750	804	CH 5	16752
228	CH 6	17036	806	CH 6	17036
230	CH 7	16039	808	CH 7	16040
232	CH 8	16245	810	CH 8	16247
234	CH 9	17058	812	CH 9	17059
236	CH 10	16271	814	CH 10	16271
238	CH 11	15942	816	CH 11	15937
240	CH 12	16259	818	CH 12	16251
2	CH 13	15977	820	CH 13	15979
44	CH 14	16467	822	CH 14	16434
246	CH 15	16453	824	CH 15	16452
248	REFLECTOR 1 POSITION 8	3059	826	REFLECTOR 1 POSITION 25	3059
250	REFLECTOR 2 POSITION 8	2860	828	REFLECTOR 2 POSITION 25	2860
252	REFL 1 POS 8 2ND LOOK	3059	830	REFL 1 POS 25 2ND LOOK	3059
254	REFL 2 POS 8 2ND LOOK	2860	832	REFL 2 POS 25 2ND LOOK	2860
256	GSE #3 SAMPLE 8 CH 3	15622	834	GSE #3 SAMPLE 25 CH 3	15623
258	CH 4	16426	836	CH 4	16426
260	CH 5	16748	838	CH 5	16749
262	CH 6	17034	840	CH 6	17039
264	CH 7	16040	842	CH 7	16043
266	CH 8	16245	844	CH 8	16243
268	CH 9	17059	846	CH 9	17058
270	CH 10	16269	848	CH 10	16273
272	CH 11	15938	850	CH 11	15943
274	CH 12	16256	852	CH 12	16263
276	CH 13	15964	854	CH 13	15968
278	CH 14	16450	856	CH 14	16447
280	CH 15	16454	858	CH 15	16454
282	REFLECTOR 1 POSITION 9	3059	860	REFLECTOR 1 POSITION 26	3059
284	REFLECTOR 2 POSITION 9	2860	862	REFLECTOR 2 POSITION 26	2860
286	REFL 1 POS 9 2ND LOOK	3059	864	REFL 1 POS 26 2ND LOOK	3059
288	REFL 2 POS 9 2ND LOOK	2860	866	REFL 2 POS 26 2ND LOOK	2860
290	GSE #3 SAMPLE 9 CH 3	15623	868	GSE #3 SAMPLE 26 CH 3	15624
2	CH 4	16426	870	CH 4	16426

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
294	CH 5	16747	872	CH 5	16747
296	CH 6	17034	874	CH 6	17038
298	CH 7	16041	876	CH 7	16036
300	CH 8	16246	878	CH 8	16242
302	CH 9	17055	880	CH 9	17056
304	CH 10	16267	882	CH 10	16274
306	CH 11	15943	884	CH 11	15942
308	CH 12	16267	886	CH 12	16264
310	CH 13	15965	888	CH 13	15965
312	CH 14	16451	890	CH 14	16455
314	CH 15	16452	892	CH 15	16453
316	REFLECTOR 1 POSITION 10	3059	894	REFLECTOR 1 POSITION 27	3059
318	REFLECTOR 2 POSITION 10	2860	896	REFLECTOR 2 POSITION 27	2860
320	REFL 1 POS 10 2ND LOOK	3059	898	REFL 1 POS 27 2ND LOOK	3059
322	REFL 2 POS 10 2ND LOOK	2860	900	REFL 2 POS 27 2ND LOOK	2860
324	GSE #3 SAMPLE 10 CH 3	15620	902	GSE #3 SAMPLE 27 CH 3	15621
326	CH 4	16423	904	CH 4	16429
328	CH 5	16743	906	CH 5	16751
330	CH 6	17037	908	CH 6	17037
332	CH 7	16038	910	CH 7	16038
334	CH 8	16247	912	CH 8	16243
336	CH 9	17058	914	CH 9	17056
338	CH 10	16269	916	CH 10	16271
340	CH 11	15937	918	CH 11	15936
42	CH 12	16256	920	CH 12	162
44	CH 13	15962	922	CH 13	1598
346	CH 14	16449	924	CH 14	16461
348	CH 15	16455	926	CH 15	16452
350	REFLECTOR 1 POSITION 11	3059	928	REFLECTOR 1 POSITION 28	3059
352	REFLECTOR 2 POSITION 11	2860	930	REFLECTOR 2 POSITION 28	2860
354	REFL 1 POS 11 2ND LOOK	3059	932	REFL 1 POS 28 2ND LOOK	3059
356	REFL 2 POS 11 2ND LOOK	2860	934	REFL 2 POS 28 2ND LOOK	2860
358	GSE #3 SAMPLE 11 CH 3	15623	936	GSE #3 SAMPLE 28 CH 3	15623
360	CH 4	16429	938	CH 4	16429
362	CH 5	16748	940	CH 5	16746
364	CH 6	17036	942	CH 6	17037
366	CH 7	16041	944	CH 7	16039
368	CH 8	16242	946	CH 8	16243
370	CH 9	17059	948	CH 9	17054
372	CH 10	16267	950	CH 10	16271
374	CH 11	15942	952	CH 11	15939
376	CH 12	16266	954	CH 12	16253
378	CH 13	15972	956	CH 13	15966
380	CH 14	16460	958	CH 14	16450
382	CH 15	16453	960	CH 15	16454
384	REFLECTOR 1 POSITION 12	3059	962	REFLECTOR 1 POSITION 29	3059
386	REFLECTOR 2 POSITION 12	2860	964	REFLECTOR 2 POSITION 29	2860
388	REFL 1 POS 12 2ND LOOK	3059	966	REFL 1 POS 29 2ND LOOK	3059
390	REFL 2 POS 12 2ND LOOK	2860	968	REFL 2 POS 29 2ND LOOK	2860
92	GSE #3 SAMPLE 12 CH 3	15623	970	GSE #3 SAMPLE 29 CH 3	15624

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16429	972	CH 4	16427
396	CH 5	16751	974	CH 5	16745
398	CH 6	17039	976	CH 6	17035
400	CH 7	16038	978	CH 7	16040
402	CH 8	16245	980	CH 8	16243
404	CH 9	17054	982	CH 9	17058
406	CH 10	16270	984	CH 10	16268
408	CH 11	15940	986	CH 11	15939
410	CH 12	16258	988	CH 12	16263
412	CH 13	15973	990	CH 13	15969
414	CH 14	16478	992	CH 14	16455
416	CH 15	16452	994	CH 15	16453
418	REFLECTOR 1 POSITION 13	3059	996	REFLECTOR 1 POSITION 30	3059
420	REFLECTOR 2 POSITION 13	2860	998	REFLECTOR 2 POSITION 30	2860
422	REFL 1 POS 13 2ND LOOK	3059	1000	REFL 1 POS 30 2ND LOOK	3059
424	REFL 2 POS 13 2ND LOOK	2860	1002	REFL 2 POS 30 2ND LOOK	2860
426	GSE #3 SAMPLE 13 CH 3	15626	1004	GSE #3 SAMPLE 30 CH 3	15623
428	CH 4	16430	1006	CH 4	16427
430	CH 5	16748	1008	CH 5	16750
432	CH 6	17038	1010	CH 6	17034
434	CH 7	16042	1012	CH 7	16040
436	CH 8	16245	1014	CH 8	16242
438	CH 9	17056	1016	CH 9	17057
440	CH 10	16268	1018	CH 10	16265
42	CH 11	15947	1020	CH 11	15938
44	CH 12	16260	1022	CH 12	16264
446	CH 13	15973	1024	CH 13	15977
448	CH 14	16451	1026	CH 14	16444
450	CH 15	16452	1028	CH 15	16451
452	REFLECTOR 1 POSITION 14	3059	1030	REFLECTOR 1 COLD CAL POS	0E
454	REFLECTOR 2 POSITION 14	2860	1032	REFLECTOR 2 COLD CAL POS	0E
456	REFL 1 POS 14 2ND LOOK	3059	1034	REFL 1 COLD CAL 2ND LOOK	0E
458	REFL 2 POS 14 2ND LOOK	2860	1036	REFL 2 COLD CAL 2ND LOOK	0E
460	GSE #3 SAMPLE 14 CH 3	15626	1038	COLD CAL DATA 1 CH 3	0
462	CH 4	16430	1040	CH 4	0
464	CH 5	16750	1042	CH 5	0
466	CH 6	17036	1044	CH 6	0
468	CH 7	16042	1046	CH 7	0
470	CH 8	16242	1048	CH 8	0
472	CH 9	17057	1050	CH 9	0
474	CH 10	16269	1052	CH 10	0
476	CH 11	15937	1054	CH 11	0
478	CH 12	16250	1056	CH 12	0
480	CH 13	15978	1058	CH 13	0
482	CH 14	16454	1060	CH 14	0
484	CH 15	16452	1062	CH 15	0
486	REFLECTOR 1 POSITION 15	3059	1064	COLD CAL DATA 2 CH 3	0
488	REFLECTOR 2 POSITION 15	2860	1066	CH 4	0
490	REFL 1 POS 15 2ND LOOK	3059	1068	CH 5	0
92	REFL 2 POS 15 2ND LOOK	2860	1070	CH 6	0

ELEMENT	DESCRIPTION		VALUE	ELEMENT	DESCRIPTION		VAL
494	GSE #3 SAMPLE 15	CH 3	15620	1072		CH 7	0
496		CH 4	16429	1074		CH 8	0
498		CH 5	16743	1076		CH 9	0
500		CH 6	17037	1078		CH 10	0
502		CH 7	16039	1080		CH 11	0
504		CH 8	16242	1082		CH 12	0
506		CH 9	17055	1084		CH 13	0
508		CH 10	16270	1086		CH 14	0
510		CH 11	15936	1088		CH 15	0
512		CH 12	16255	1182	REFLECTOR 1 WARM CAL POS		0E
514		CH 13	15965	1184	REFLECTOR 2 WARM CAL POS		0E
516		CH 14	16458	1186	REFL 1 WARM CAL 2ND LOOK		0E
518		CH 15	16453	1188	REFL 2 WARM CAL 2ND LOOK		0E
520	REFLECTOR 1 POSITION 16		3059	1190	WARM CAL DATA 1	CH 3	0
522	REFLECTOR 2 POSITION 16		2860	1192		CH 4	0
524	REFL 1 POS 16 2ND LOOK		3059	1194		CH 5	0
526	REFL 2 POS 16 2ND LOOK		2860	1196		CH 6	0
528	GSE #3 SAMPLE 16	CH 3	15620	1198		CH 7	0
530		CH 4	16428	1200		CH 8	0
532		CH 5	16745	1202		CH 9	0
534		CH 6	17035	1204		CH 10	0
536		CH 7	16038	1206		CH 11	0
538		CH 8	16241	1208		CH 12	0
540		CH 9	17055	1210		CH 13	0
42		CH 10	16268	1212		CH 14	
544		CH 11	15935	1214		CH 15	0
546		CH 12	16260	1216	WARM CAL DATA 2	CH 3	0
548		CH 13	15979	1218		CH 4	0
550		CH 14	16463	1220		CH 5	0
552		CH 15	16452	1222		CH 6	0
554	REFLECTOR 1 POSITION 17		3059	1224		CH 7	0
556	REFLECTOR 2 POSITION 17		2860	1226		CH 8	0
558	REFL 1 POS 17 2ND LOOK		3059	1228		CH 9	0
560	REFL 2 POS 17 2ND LOOK		2860	1230		CH 10	0
562	GSE #3 SAMPLE 17	CH 3	15623	1232		CH 11	0
564		CH 4	16427	1234		CH 12	0
566		CH 5	16747	1236		CH 13	0
568		CH 6	17033	1238		CH 14	0
570		CH 7	16040	1240		CH 15	0

EMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	17944	23.27
1092	SCAN MOTOR A1-2	18585	24.10
1094	FEEDHORN A1-1	20340	27.13
1096	FEEDHORN A1-2	21555	28.04
1098	RF MUX A1-1	21585	30.08
1100	RF MUX A1-2	22427	31.98
1102	LOCAL OSCILLATOR CHANNEL 3	23656	34.16
1104	LOCAL OSCILLATOR CHANNEL 4	23832	34.43
1106	LOCAL OSCILLATOR CHANNEL 5	23199	32.93
1108	LOCAL OSCILLATOR CHANNEL 6	21295	29.64
1110	LOCAL OSCILLATOR CHANNEL 7	22112	31.11
1112	LOCAL OSCILLATOR CHANNEL 8	23208	33.66
1114	LOCAL OSCILLATOR CHANNEL 15	22699	33.28
1116	PLL LO #2 CHANNELS 9 THROUGH 14	21082	29.84
1118	PLL LO #1 CHANNELS 9 THROUGH 14	24224	35.73
1120	SPARE (NOT USED)	32767	52.86
1122	MIXER/IF AMPLIFIER CHANNEL 3	23053	32.68
1124	MIXER/IF AMPLIFIER CHANNEL 4	22677	32.69
1126	MIXER/IF AMPLIFIER CHANNEL 5	22524	32.13
1128	MIXER/IF AMPLIFIER CHANNEL 6	21876	30.62
1130	MIXER/IF AMPLIFIER CHANNEL 7	22207	31.34
1132	MIXER/IF AMPLIFIER CHANNEL 8	22645	32.83
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	21353	30.32
1136	MIXER/IF AMPLIFIER CHANNEL 15	22703	32.79
[illegible]8	IF AMPLIFIER CHANNEL 11 THRU 14	22685	32.63
[illegible]40	IF AMPLIFIER CHANNEL 9	23139	32.64
1142	IF AMPLIFIER CHANNEL 10	22745	32.84
1144	IF AMPLIFIER CHANNEL 11	21828	30.51
1146	DC/DC CONVERTER	23104	32.85
1148	IF AMPLIFIER CHANNEL 13	21933	30.44
1150	IF AMPLIFIER CHANNEL 14	21594	30.42
1152	IF AMPLIFIER CHANNEL 12	21589	30.39
1154	RF SHELF A1-1	22187	31.25
1156	RF SHELF A1-2	22382	31.83
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	20811	28.28
1160	A1-1 WARM LOAD 1	23307	24.06
1162	A1-1 WARM LOAD 2	23505	24.09
1164	A1-1 WARM LOAD 3	23582	24.17
1166	A1-1 WARM LOAD 4	23262	24.11
1168	A1-1 WARM LOAD CENTER	23447	24.16
1170	A1-2 WARM LOAD 1	24330	25.55
1172	A1-2 WARM LOAD 2	24164	25.53
1174	A1-2 WARM LOAD 3	24202	25.60
1176	A1-2 WARM LOAD 4	24119	25.57
1178	A1-2 WARM LOAD CENTER	23987	25.45
1180	TEMP SENSOR REFERENCE VOLTAGE	24886	

GSE MODE 3

DESCRIPTION	STATUS	STATUS	STATUS
SCANNER A1-1 POWER	ON	ON	ON
SCANNER A1-2 POWER	ON	ON	ON
PLL POWER	PLLO # 1	PLLO # 1	PLLO # 1
ANTENNA IN WARM CAL POSITION MODE	NO	NO	NO
ANTENNA IN COLD CAL POSITION MODE	NO	NO	NO
ANTENNA IN NADIR POSITION MODE	NO	NO	NO
ANTENNA IN FULL SCAN MODE	NO	NO	NO
SURVIVAL HEATER POWER	OFF	OFF	OFF
MODULE POWER	CONNECT	CONNECT	CONNECT
COLD CAL POSITION MSB	ZERO	ZERO	ZERO
COLD CAL POSITION LSB	ZERO	ZERO	ZERO

ANALOG DATA

DESCRIPTION	VALUE	DEG C	VALUE	DEG C	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-2 SCANNER MOTOR TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-1 RF SHELF TEMPERATURE	221	27.5	221	27.5	221	27.5
A1-2 RF SHELF TEMPERATURE	224	31.6	224	31.6	224	31.6
A1-1 WARM LOAD TEMPERATURE	219	24.8	219	24.8	219	24.8
A1-2 WARM LOAD TEMPERATURE	220	26.2	220	26.2	220	26.2

DESCRIPTION	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS
A1-1 ANTENNA DRIVE MOTOR CURRENT (AVRG)	5	2.33	5	2.33	5	2.33
A1-2 ANTENNA DRIVE MOTOR CURRENT (AVRG)	5	2.33	5	2.33	5	2.33
SIGNAL PROCESSING +15 VDC	172	14.84	172	14.84	172	14.84
ANTENNA DRIVE +15 VDC	173	14.93	173	14.93	173	14.93
SIGNAL PROCESSING -15 VDC	151	-15.00	151	-15.00	151	-15.00
ANTENNA DRIVE -15 VDC	150	-15.05	150	-15.05	150	-15.05
RECEIVER AMPLIFIER +8 VDC	159	7.95	159	7.95	159	7.95
SIGNAL PROCESSOR +5 VDC	148	4.93	148	4.93	147	4.90
ANTENNA DRIVE +5 VDC	147	4.90	147	4.90	147	4.90
RECEIVER MIXER/IF +10 VDC	172	9.94	172	9.94	172	9.94
PHASE LOCK LOOP (CHANNEL 9/14) +15 VDC	171	14.76	172	14.84	171	14.76
PHASE LOCK LOOP (CHANNEL 9/14) -15 VDC	146	-15.25	146	-15.25	146	-15.25
L.O. VOLTAGE (CHANNEL 8) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 7) VDC	173	9.90	173	9.90	173	9.90
L.O. VOLTAGE (CHANNEL 6) VDC	175	10.01	175	10.01	175	10.01
L.O. VOLTAGE (CHANNEL 3) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 4) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 5) VDC	173	9.90	173	9.90	173	9.90
PLLO # 2 LOCK DETECT	5	0.10	5	0.10	5	0.10
PLLO # 1 LOCK DETECT	222	4.44	222	4.44	222	4.44
L.O. VOLTAGE (CHANNEL 15) VDC	172	14.84	172	14.84	172	14.84

PRT TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
VARIABLE TARGET	615	42.00	601	14.00
	616	43.00	602	15.00
	617	44.00	603	16.00
	618	45.00	604	17.00
	619	46.00	605	18.00
	620	47.00	606	19.00
	621	48.00	607	20.00
FIXED TARGET	622	49.00	608	21.00
	623	50.00	609	22.00
	624	51.00	610	23.00
	625	52.00	611	24.00
	626	53.00	612	25.00
	627	67.00	613	69.00
	628	68.00	614	70.00
BASEPLATE	629	71.00	630	72.00
	631	26.00	632	27.00

THERMOCOUPLE TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
FIXED TARGET SHROUD	558	5.00	537	34.00
	559	6.00	538	35.00
VARIABLE TARGET SHROUD	550	7.00	524	36.00
	551	8.00	525	37.00
FIXED TARGET N2	506	57.00	502	30.00
	507	58.00	503	31.00
VARIABLE TARGET N2	516	59.00	511	32.00
	517	60.00	512	33.00
HEATER N2	514	1.00	509	38.00
	515	2.00	510	39.00
FIXED TARGET FLOW METER	508	63.00	504	61.00
VARIABLE TARGET FLOW METER	518	64.00	513	62.00
BASEPLATE HEATER N2	519	3.00	520	4.00
BASEPLATE N2	521	9.00	522	10.00
BASEPLATE FLOW METER	523	65.00		
ADJUNCT RADIATORS	575	73.00	577	74.00
	579	75.00	581	76.00

AMSU A1_17 A1.EXE DIGITAL A DATA 24-NOV-93 14:17:35 PAGE 1
GSE MODE 4 BP 30

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
1	SYNC SEQUENCE BYTE 1	11111111	572	GSE #4 SAMPLE 17 CH 8	16267
2	SYNC SEQUENCE BYTE 2	11111111	574	CH 9	17057
3	SYNC SEQUENCE BYTE 3	11111111	576	CH 10	16261
4	UNIT ID AND SERIAL NO	00010001	578	CH 11	15936
5	DIGITAL B DATA BYTE 1	00000000	580	CH 12	16250
6	DIGITAL B DATA BYTE 2	00001110	582	CH 13	15962
7	DIGITAL B DATA BYTE 3	00000000	584	CH 14	16442
8	DIGITAL B DATA BYTE 4	00000000	586	CH 15	16451
10	REFLECTOR 1 POSITION 1	4428	588	REFLECTOR 1 POSITION 18	4428
12	REFLECTOR 2 POSITION 1	4229	590	REFLECTOR 2 POSITION 18	4229
14	REFL 1 POS 1 2ND LOOK	4428	592	REFL 1 POS 18 2ND LOOK	4428
16	REFL 2 POS 1 2ND LOOK	4229	594	REFL 2 POS 18 2ND LOOK	4229
18	GSE #4 SAMPLE 1 CH 3	15647	596	GSE #4 SAMPLE 18 CH 3	15639
20	CH 4	16448	598	CH 4	16449
22	CH 5	16762	600	CH 5	16762
24	CH 6	17024	602	CH 6	17035
26	CH 7	16045	604	CH 7	16044
28	CH 8	16265	606	CH 8	16263
30	CH 9	17058	608	CH 9	17059
32	CH 10	16264	610	CH 10	16264
34	CH 11	15933	612	CH 11	15937
36	CH 12	16242	614	CH 12	16249
38	CH 13	15960	616	CH 13	15961
40	CH 14	16434	618	CH 14	16421
42	CH 15	16451	620	CH 15	164
44	REFLECTOR 1 POSITION 2	4428	622	REFLECTOR 1 POSITION 19	44
46	REFLECTOR 2 POSITION 2	4229	624	REFLECTOR 2 POSITION 19	4229
48	REFL 1 POS 2 2ND LOOK	4428	626	REFL 1 POS 19 2ND LOOK	4428
50	REFL 2 POS 2 2ND LOOK	4229	628	REFL 2 POS 19 2ND LOOK	4229
52	GSE #4 SAMPLE 2 CH 3	15642	630	GSE #4 SAMPLE 19 CH 3	15641
54	CH 4	16449	632	CH 4	16449
56	CH 5	16763	634	CH 5	16758
58	CH 6	17036	636	CH 6	17038
60	CH 7	16043	638	CH 7	16043
62	CH 8	16261	640	CH 8	16265
64	CH 9	17057	642	CH 9	17055
66	CH 10	16266	644	CH 10	16271
68	CH 11	15927	646	CH 11	15934
70	CH 12	16248	648	CH 12	16252
72	CH 13	15957	650	CH 13	15967
74	CH 14	16437	652	CH 14	16441
76	CH 15	16451	654	CH 15	16453
78	REFLECTOR 1 POSITION 3	4428	656	REFLECTOR 1 POSITION 20	4428
80	REFLECTOR 2 POSITION 3	4229	658	REFLECTOR 2 POSITION 20	4229
82	REFL 1 POS 3 2ND LOOK	4428	660	REFL 1 POS 20 2ND LOOK	4428
84	REFL 2 POS 3 2ND LOOK	4229	662	REFL 2 POS 20 2ND LOOK	4229
86	GSE #4 SAMPLE 3 CH 3	15645	664	GSE #4 SAMPLE 20 CH 3	15641
88	CH 4	16451	666	CH 4	16450
90	CH 5	16762	668	CH 5	16760
92	CH 6	17040	670	CH 6	17040

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	16047	672	CH 7	16044
96	CH 8	16261	674	CH 8	16263
98	CH 9	17059	676	CH 9	17056
100	CH 10	16266	678	CH 10	16265
102	CH 11	15935	680	CH 11	15931
104	CH 12	16251	682	CH 12	16246
106	CH 13	15955	684	CH 13	15961
108	CH 14	16445	686	CH 14	16449
110	CH 15	16450	688	CH 15	16452
112	REFLECTOR 1 POSITION 4	4428	690	REFLECTOR 1 POSITION 21	4428
114	REFLECTOR 2 POSITION 4	4229	692	REFLECTOR 2 POSITION 21	4229
116	REFL 1 POS 4 2ND LOOK	4428	694	REFL 1 POS 21 2ND LOOK	4428
118	REFL 2 POS 4 2ND LOOK	4229	696	REFL 2 POS 21 2ND LOOK	4229
120	GSE #4 SAMPLE 4 CH 3	15641	698	GSE #4 SAMPLE 21 CH 3	15639
122	CH 4	16449	700	CH 4	16450
124	CH 5	16759	702	CH 5	16760
126	CH 6	17034	704	CH 6	17041
128	CH 7	16045	706	CH 7	16041
130	CH 8	16262	708	CH 8	16267
132	CH 9	17055	710	CH 9	17062
134	CH 10	16268	712	CH 10	16262
136	CH 11	15931	714	CH 11	15933
138	CH 12	16249	716	CH 12	16253
140	CH 13	15960	718	CH 13	15958
142	CH 14	16437	720	CH 14	16457
144	CH 15	16452	722	CH 15	16449
146	REFLECTOR 1 POSITION 5	4428	724	REFLECTOR 1 POSITION 22	4428
148	REFLECTOR 2 POSITION 5	4229	726	REFLECTOR 2 POSITION 22	4229
150	REFL 1 POS 5 2ND LOOK	4428	728	REFL 1 POS 22 2ND LOOK	4428
152	REFL 2 POS 5 2ND LOOK	4229	730	REFL 2 POS 22 2ND LOOK	4229
154	GSE #4 SAMPLE 5 CH 3	15642	732	GSE #4 SAMPLE 22 CH 3	15638
156	CH 4	16449	734	CH 4	16450
158	CH 5	16764	736	CH 5	16763
160	CH 6	17036	738	CH 6	17036
162	CH 7	16042	740	CH 7	16043
164	CH 8	16262	742	CH 8	16266
166	CH 9	17054	744	CH 9	17055
168	CH 10	16271	746	CH 10	16260
170	CH 11	15928	748	CH 11	15935
172	CH 12	16242	750	CH 12	16250
174	CH 13	15957	752	CH 13	15967
176	CH 14	16442	754	CH 14	16461
178	CH 15	16451	756	CH 15	16452
180	REFLECTOR 1 POSITION 6	4428	758	REFLECTOR 1 POSITION 23	4428
182	REFLECTOR 2 POSITION 6	4229	760	REFLECTOR 2 POSITION 23	4229
184	REFL 1 POS 6 2ND LOOK	4428	762	REFL 1 POS 23 2ND LOOK	4428
186	REFL 2 POS 6 2ND LOOK	4229	764	REFL 2 POS 23 2ND LOOK	4229
188	GSE #4 SAMPLE 6 CH 3	15643	766	GSE #4 SAMPLE 23 CH 3	15643
190	CH 4	16453	768	CH 4	16450
192	CH 5	16758	770	CH 5	16760

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
194	CH 6	17040	772	CH 6	17038
196	CH 7	16043	774	CH 7	16042
198	CH 8	16262	776	CH 8	16264
200	CH 9	17060	778	CH 9	17059
202	CH 10	16265	780	CH 10	16269
204	CH 11	15931	782	CH 11	15931
206	CH 12	16252	784	CH 12	16255
208	CH 13	15954	786	CH 13	15956
210	CH 14	16427	788	CH 14	16412
212	CH 15	16454	790	CH 15	16451
214	REFLECTOR 1 POSITION 7	4428	792	REFLECTOR 1 POSITION 24	4428
216	REFLECTOR 2 POSITION 7	4229	794	REFLECTOR 2 POSITION 24	4229
218	REFL 1 POS 7 2ND LOOK	4428	796	REFL 1 POS 24 2ND LOOK	4428
220	REFL 2 POS 7 2ND LOOK	4229	798	REFL 2 POS 24 2ND LOOK	4229
222	GSE #4 SAMPLE 7 CH 3	15642	800	GSE #4 SAMPLE 24 CH 3	15639
224	CH 4	16450	802	CH 4	16452
226	CH 5	16759	804	CH 5	16762
228	CH 6	17039	806	CH 6	17038
230	CH 7	16041	808	CH 7	16044
232	CH 8	16265	810	CH 8	16262
234	CH 9	17056	812	CH 9	17056
236	CH 10	16261	814	CH 10	16266
238	CH 11	15933	816	CH 11	15934
240	CH 12	16251	818	CH 12	16253
12	CH 13	15956	820	CH 13	159
4	CH 14	16443	822	CH 14	1645
246	CH 15	16449	824	CH 15	16451
248	REFLECTOR 1 POSITION 8	4428	826	REFLECTOR 1 POSITION 25	4428
250	REFLECTOR 2 POSITION 8	4229	828	REFLECTOR 2 POSITION 25	4229
252	REFL 1 POS 8 2ND LOOK	4428	830	REFL 1 POS 25 2ND LOOK	4428
254	REFL 2 POS 8 2ND LOOK	4229	832	REFL 2 POS 25 2ND LOOK	4229
256	GSE #4 SAMPLE 8 CH 3	15643	834	GSE #4 SAMPLE 25 CH 3	15643
258	CH 4	16450	836	CH 4	16449
260	CH 5	16762	838	CH 5	16758
262	CH 6	17037	840	CH 6	17038
264	CH 7	16041	842	CH 7	16044
266	CH 8	16266	844	CH 8	16266
268	CH 9	17054	846	CH 9	17060
270	CH 10	16264	848	CH 10	16265
272	CH 11	15935	850	CH 11	15934
274	CH 12	16252	852	CH 12	16251
276	CH 13	15969	854	CH 13	15967
278	CH 14	16440	856	CH 14	16442
280	CH 15	16451	858	CH 15	16451
282	REFLECTOR 1 POSITION 9	4428	860	REFLECTOR 1 POSITION 26	4428
284	REFLECTOR 2 POSITION 9	4229	862	REFLECTOR 2 POSITION 26	4229
286	REFL 1 POS 9 2ND LOOK	4428	864	REFL 1 POS 26 2ND LOOK	4428
288	REFL 2 POS 9 2ND LOOK	4229	866	REFL 2 POS 26 2ND LOOK	4229
290	GSE #4 SAMPLE 9 CH 3	15641	868	GSE #4 SAMPLE 26 CH 3	15643
92	CH 4	16453	870	CH 4	16450

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	16761	872	CH 5	16759
296	CH 6	17040	874	CH 6	17038
298	CH 7	16043	876	CH 7	16041
300	CH 8	16263	878	CH 8	16268
302	CH 9	17058	880	CH 9	17052
304	CH 10	16263	882	CH 10	16264
306	CH 11	15928	884	CH 11	15929
308	CH 12	16242	886	CH 12	16253
310	CH 13	15964	888	CH 13	15956
312	CH 14	16445	890	CH 14	16431
314	CH 15	16452	892	CH 15	16450
316	REFLECTOR 1 POSITION 10	4428	894	REFLECTOR 1 POSITION 27	4428
318	REFLECTOR 2 POSITION 10	4229	896	REFLECTOR 2 POSITION 27	4229
320	REFL 1 POS 10 2ND LOOK	4428	898	REFL 1 POS 27 2ND LOOK	4428
322	REFL 2 POS 10 2ND LOOK	4229	900	REFL 2 POS 27 2ND LOOK	4229
324	GSE #4 SAMPLE 10 CH 3	15642	902	GSE #4 SAMPLE 27 CH 3	15641
326	CH 4	16449	904	CH 4	16454
328	CH 5	16765	906	CH 5	16759
330	CH 6	17032	908	CH 6	17036
332	CH 7	16043	910	CH 7	16040
334	CH 8	16270	912	CH 8	16267
336	CH 9	17055	914	CH 9	17055
338	CH 10	16269	916	CH 10	16267
340	CH 11	15929	918	CH 11	15939
342	CH 12	16253	920	CH 12	16251
344	CH 13	15967	922	CH 13	15958
346	CH 14	16435	924	CH 14	16447
348	CH 15	16449	926	CH 15	16452
350	REFLECTOR 1 POSITION 11	4428	928	REFLECTOR 1 POSITION 28	4428
352	REFLECTOR 2 POSITION 11	4229	930	REFLECTOR 2 POSITION 28	4229
354	REFL 1 POS 11 2ND LOOK	4428	932	REFL 1 POS 28 2ND LOOK	4428
356	REFL 2 POS 11 2ND LOOK	4229	934	REFL 2 POS 28 2ND LOOK	4229
358	GSE #4 SAMPLE 11 CH 3	15644	936	GSE #4 SAMPLE 28 CH 3	15641
360	CH 4	16447	938	CH 4	16451
362	CH 5	16760	940	CH 5	16763
364	CH 6	17038	942	CH 6	17042
366	CH 7	16041	944	CH 7	16041
368	CH 8	16264	946	CH 8	16266
370	CH 9	17059	948	CH 9	17058
372	CH 10	16267	950	CH 10	16263
374	CH 11	15929	952	CH 11	15935
376	CH 12	16257	954	CH 12	16250
378	CH 13	15959	956	CH 13	15959
380	CH 14	16442	958	CH 14	16419
382	CH 15	16451	960	CH 15	16451
384	REFLECTOR 1 POSITION 12	4428	962	REFLECTOR 1 POSITION 29	4428
386	REFLECTOR 2 POSITION 12	4229	964	REFLECTOR 2 POSITION 29	4229
388	REFL 1 POS 12 2ND LOOK	4428	966	REFL 1 POS 29 2ND LOOK	4428
390	REFL 2 POS 12 2ND LOOK	4229	968	REFL 2 POS 29 2ND LOOK	4229
392	GSE #4 SAMPLE 12 CH 3	15637	970	GSE #4 SAMPLE 29 CH 3	15641

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
394	CH 4	16450	972	CH 4	16450
396	CH 5	16761	974	CH 5	16762
398	CH 6	17043	976	CH 6	17042
400	CH 7	16044	978	CH 7	16040
402	CH 8	16265	980	CH 8	16266
404	CH 9	17059	982	CH 9	17053
406	CH 10	16262	984	CH 10	16273
408	CH 11	15932	986	CH 11	15935
410	CH 12	16245	988	CH 12	16252
412	CH 13	15969	990	CH 13	15962
414	CH 14	16431	992	CH 14	16438
416	CH 15	16451	994	CH 15	16454
418	REFLECTOR 1 POSITION 13	4428	996	REFLECTOR 1 POSITION 30	4428
420	REFLECTOR 2 POSITION 13	4229	998	REFLECTOR 2 POSITION 30	4229
422	REFL 1 POS 13 2ND LOOK	4428	1000	REFL 1 POS 30 2ND LOOK	4428
424	REFL 2 POS 13 2ND LOOK	4229	1002	REFL 2 POS 30 2ND LOOK	4229
426	GSE #4 SAMPLE 13 CH 3	15645	1004	GSE #4 SAMPLE 30 CH 3	15643
428	CH 4	16454	1006	CH 4	16451
430	CH 5	16758	1008	CH 5	16763
432	CH 6	17039	1010	CH 6	17035
434	CH 7	16044	1012	CH 7	16044
436	CH 8	16266	1014	CH 8	16264
438	CH 9	17058	1016	CH 9	17057
440	CH 10	16263	1018	CH 10	1626
42	CH 11	15929	1020	CH 11	159
44	CH 12	16253	1022	CH 12	1625
446	CH 13	15960	1024	CH 13	15966
448	CH 14	16434	1026	CH 14	16437
450	CH 15	16452	1028	CH 15	16452
452	REFLECTOR 1 POSITION 14	4428	1030	REFLECTOR 1 COLD CAL POS	0E
454	REFLECTOR 2 POSITION 14	4229	1032	REFLECTOR 2 COLD CAL POS	0E
456	REFL 1 POS 14 2ND LOOK	4428	1034	REFL 1 COLD CAL 2ND LOOK	0E
458	REFL 2 POS 14 2ND LOOK	4229	1036	REFL 2 COLD CAL 2ND LOOK	0E
460	GSE #4 SAMPLE 14 CH 3	15640	1038	COLD CAL DATA 1 CH 3	0
462	CH 4	16451	1040	CH 4	0
464	CH 5	16761	1042	CH 5	0
466	CH 6	17040	1044	CH 6	0
468	CH 7	16045	1046	CH 7	0
470	CH 8	16263	1048	CH 8	0
472	CH 9	17055	1050	CH 9	0
474	CH 10	16267	1052	CH 10	0
476	CH 11	15933	1054	CH 11	0
478	CH 12	16247	1056	CH 12	0
480	CH 13	15963	1058	CH 13	0
482	CH 14	16434	1060	CH 14	0
484	CH 15	16451	1062	CH 15	0
486	REFLECTOR 1 POSITION 15	4428	1064	COLD CAL DATA 2 CH 3	0
488	REFLECTOR 2 POSITION 15	4229	1066	CH 4	0
490	REFL 1 POS 15 2ND LOOK	4428	1068	CH 5	0
92	REFL 2 POS 15 2ND LOOK	4229	1070	CH 6	0

GSE MODE 4 BP 30

ELEMENT	DESCRIPTION		VALUE	ELEMENT	DESCRIPTION		VALUE
494	GSE #4 SAMPLE 15	CH 3	15640	1072		CH 7	0
496		CH 4	16451	1074		CH 8	0
498		CH 5	16762	1076		CH 9	0
500		CH 6	17042	1078		CH 10	0
502		CH 7	16040	1080		CH 11	0
504		CH 8	16263	1082		CH 12	0
506		CH 9	17058	1084		CH 13	0
508		CH 10	16265	1086		CH 14	0
510		CH 11	15936	1088		CH 15	0
512		CH 12	16254	1182	REFLECTOR 1 WARM CAL POS		0E
514		CH 13	15977	1184	REFLECTOR 2 WARM CAL POS		0E
516		CH 14	16428	1186	REFL 1 WARM CAL 2ND LOOK		0E
518		CH 15	16450	1188	REFL 2 WARM CAL 2ND LOOK		0E
520	REFLECTOR 1 POSITION 16		4428	1190	WARM CAL DATA 1	CH 3	0
522	REFLECTOR 2 POSITION 16		4229	1192		CH 4	0
524	REFL 1 POS 16 2ND LOOK		4428	1194		CH 5	0
526	REFL 2 POS 16 2ND LOOK		4229	1196		CH 6	0
528	GSE #4 SAMPLE 16	CH 3	15641	1198		CH 7	0
530		CH 4	16453	1200		CH 8	0
532		CH 5	16763	1202		CH 9	0
534		CH 6	17040	1204		CH 10	0
536		CH 7	16044	1206		CH 11	0
538		CH 8	16261	1208		CH 12	0
540		CH 9	17062	1210		CH 13	0
542		CH 10	16265	1212		CH 14	0
544		CH 11	15929	1214		CH 15	0
546		CH 12	16251	1216	WARM CAL DATA 2	CH 3	0
548		CH 13	15955	1218		CH 4	0
550		CH 14	16441	1220		CH 5	0
552		CH 15	16451	1222		CH 6	0
554	REFLECTOR 1 POSITION 17		4428	1224		CH 7	0
556	REFLECTOR 2 POSITION 17		4229	1226		CH 8	0
558	REFL 1 POS 17 2ND LOOK		4428	1228		CH 9	0
560	REFL 2 POS 17 2ND LOOK		4229	1230		CH 10	0
562	GSE #4 SAMPLE 17	CH 3	15644	1232		CH 11	0
564		CH 4	16449	1234		CH 12	0
566		CH 5	16761	1236		CH 13	0
568		CH 6	17040	1238		CH 14	0
570		CH 7	16042	1240		CH 15	0

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	17968	23.32
1092	SCAN MOTOR A1-2	18599	24.12
1094	FEEDHORN A1-1	20385	27.22
1096	FEEDHORN A1-2	21583	28.09
1098	RF MUX A1-1	21629	30.17
1100	RF MUX A1-2	22459	32.05
1102	LOCAL OSCILLATOR CHANNEL 3	23689	34.22
1104	LOCAL OSCILLATOR CHANNEL 4	23870	34.50
1106	LOCAL OSCILLATOR CHANNEL 5	23231	33.00
1108	LOCAL OSCILLATOR CHANNEL 6	21337	29.72
1110	LOCAL OSCILLATOR CHANNEL 7	22154	31.19
1112	LOCAL OSCILLATOR CHANNEL 8	23246	33.74
1114	LOCAL OSCILLATOR CHANNEL 15	22742	33.36
1116	PLL LO #2 CHANNELS 9 THROUGH 14	21122	29.91
1118	PLL LO #1 CHANNELS 9 THROUGH 14	24262	35.81
1120	SPARE (NOT USED)	32767	52.86
1122	MIXER/IF AMPLIFIER CHANNEL 3	23087	32.75
1124	MIXER/IF AMPLIFIER CHANNEL 4	22711	32.76
1126	MIXER/IF AMPLIFIER CHANNEL 5	22557	32.19
1128	MIXER/IF AMPLIFIER CHANNEL 6	21918	30.70
1130	MIXER/IF AMPLIFIER CHANNEL 7	22250	31.43
1132	MIXER/IF AMPLIFIER CHANNEL 8	22681	32.90
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	21397	30.41
1136	MIXER/IF AMPLIFIER CHANNEL 15	22744	32.87
1138	IF AMPLIFIER CHANNEL 11 THRU 14	22725	32.71
1140	IF AMPLIFIER CHANNEL 9	23181	32.72
1142	IF AMPLIFIER CHANNEL 10	22786	32.92
1144	IF AMPLIFIER CHANNEL 11	21876	30.60
1146	DC/DC CONVERTER	23141	32.92
1148	IF AMPLIFIER CHANNEL 13	21979	30.53
1150	IF AMPLIFIER CHANNEL 14	21641	30.51
1152	IF AMPLIFIER CHANNEL 12	21636	30.48
1154	RF SHELF A1-1	22228	31.34
1156	RF SHELF A1-2	22417	31.89
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	20862	28.38
1160	A1-1 WARM LOAD 1	23349	24.14
1162	A1-1 WARM LOAD 2	23544	24.17
1164	A1-1 WARM LOAD 3	23627	24.26
1166	A1-1 WARM LOAD 4	23302	24.19
1168	A1-1 WARM LOAD CENTER	23491	24.25
1170	A1-2 WARM LOAD 1	24369	25.63
1172	A1-2 WARM LOAD 2	24205	25.61
1174	A1-2 WARM LOAD 3	24243	25.68
1176	A1-2 WARM LOAD 4	24155	25.64
1178	A1-2 WARM LOAD CENTER	24024	25.52
1180	TEMP SENSOR REFERENCE VOLTAGE	24886	

GSE MODE 4 BP 30

DESCRIPTION	STATUS	STATUS	STATUS
SCANNER A1-1 POWER	ON	ON	ON
SCANNER A1-2 POWER	ON	ON	ON
PLL POWER	PLLO # 1	PLLO # 1	PLLO # 1
ANTENNA IN WARM CAL POSITION MODE	NO	NO	NO
ANTENNA IN COLD CAL POSITION MODE	NO	NO	NO
ANTENNA IN NADIR POSITION MODE	NO	NO	NO
ANTENNA IN FULL SCAN MODE	NO	NO	NO
SURVIVAL HEATER POWER	OFF	OFF	OFF
MODULE POWER	CONNECT	CONNECT	CONNECT
COLD CAL POSITION MSB	ZERO	ZERO	ZERO
COLD CAL POSITION LSB	ZERO	ZERO	ZERO

ANALOG DATA

DESCRIPTION	VALUE	DEG C	VALUE	DEG C	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	217	22.1	217	22.1	217	22.1
A1-2 SCANNER MOTOR TEMPERATURE	219	24.8	219	24.8	219	24.8
A1-1 RF SHELF TEMPERATURE	221	27.5	221	27.5	221	27.5
A1-2 RF SHELF TEMPERATURE	224	31.6	224	31.6	224	31.6
A1-1 WARM LOAD TEMPERATURE	219	24.8	219	24.8	219	24.8
A1-2 WARM LOAD TEMPERATURE	220	26.2	220	26.2	220	26.2

DESCRIPTION	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS
-1 ANTENNA DRIVE MOTOR CURRENT (AVRG)	5	2.33	5	2.33	5	2.33
A1-2 ANTENNA DRIVE MOTOR CURRENT (AVRG)	5	2.33	5	2.33	5	2.33
SIGNAL PROCESSING +15 VDC	172	14.84	172	14.84	172	14.84
ANTENNA DRIVE +15 VDC	172	14.84	172	14.84	172	14.84
SIGNAL PROCESSING -15 VDC	150	-15.05	150	-15.05	150	-15.05
ANTENNA DRIVE -15 VDC	150	-15.05	150	-15.05	150	-15.05
RECEIVER AMPLIFIER +8 VDC	159	7.95	159	7.95	159	7.95
SIGNAL PROCESSOR +5 VDC	147	4.90	147	4.90	147	4.90
ANTENNA DRIVE +5 VDC	148	4.93	148	4.93	147	4.90
RECEIVER MIXER/IF +10 VDC	172	9.94	172	9.94	172	9.94
PHASE LOCK LOOP (CHANNEL 9/14) +15 VDC	172	14.84	171	14.76	172	14.84
PHASE LOCK LOOP (CHANNEL 9/14) -15 VDC	146	-15.25	146	-15.25	146	-15.25
L.O. VOLTAGE (CHANNEL 8) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 7) VDC	173	9.90	173	9.90	173	9.90
L.O. VOLTAGE (CHANNEL 6) VDC	175	10.01	175	10.01	175	10.01
L.O. VOLTAGE (CHANNEL 3) VDC	174	9.96	175	10.01	175	10.01
L.O. VOLTAGE (CHANNEL 4) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 5) VDC	173	9.90	173	9.90	173	9.90
PLLO # 2 LOCK DETECT	5	0.10	5	0.10	5	0.10
PLLO # 1 LOCK DETECT	222	4.44	221	4.42	222	4.44
L.O. VOLTAGE (CHANNEL 15) VDC	172	14.84	172	14.84	172	14.84

PRT TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
VARIABLE TARGET	615	42.00	601	14.00
	616	43.00	602	15.00
	617	44.00	603	16.00
	618	45.00	604	17.00
	619	46.00	605	18.00
	620	47.00	606	19.00
	621	48.00	607	20.00
FIXED TARGET	622	49.00	608	21.00
	623	50.00	609	22.00
	624	51.00	610	23.00
	625	52.00	611	24.00
	626	53.00	612	25.00
	627	67.00	613	69.00
	628	68.00	614	70.00
BASEPLATE	629	71.00	630	72.00
	631	26.00	632	27.00

THERMOCOUPLE TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
FIXED TARGET SHROUD	558	5.00	537	34.00
	559	6.00	538	35.00
VARIABLE TARGET SHROUD	550	7.00	524	36.00
	551	8.00	525	37.00
FIXED TARGET N2	506	57.00	502	30.00
	507	58.00	503	31.00
VARIABLE TARGET N2	516	59.00	511	32.00
	517	60.00	512	33.00
HEATER N2	514	1.00	509	38.00
	515	2.00	510	39.00
FIXED TARGET FLOW METER	508	63.00	504	61.00
VARIABLE TARGET FLOW METER	518	64.00	513	62.00
BASEPLATE HEATER N2	519	3.00	520	4.00
BASEPLATE N2	521	9.00	522	10.00
BASEPLATE FLOW METER	523	65.00		
ADJUNCT RADIATORS	575	73.00	577	74.00
	579	75.00	581	76.00

AMSU A1-17 A1.EXE GSE MODE 5 BP 6 P1 24-NOV-93 14:21:33 SCAN NUMBER
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

COMMANDS

[9]	MODULE POWER =	CONNECT	ANTENNA IN COLD CAL POSIT = NO	[15
[10]	SURVIVAL HEATER POWER =	OFF	ANTENNA IN NADIR POSITION = NO	[16
[11]	MODULE TOTALLY OFF =	ON	ANTENNA IN FULL SCAN MODE = NO	[17
[12]	SCANNER A1 - 1 POWER =	ON	PLL POWER = PLLO # 1	[18
[13]	SCANNER A1 - 2 POWER =	ON	COLD CAL POSITION MSB = ZERO	[19
[14]	ANTENNA IN WARM CAL POSIT = NO		COLD CAL POSITION LSB = ZERO	[20

POWER [4] ON

SCREEN ONLY [2] PRINT [3] FUL[1] [1] RETURN

SELECT TOUCHSCREEN BUTTON 3

TDS 46

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
1	SYNC SEQUENCE BYTE 1	11111111	572	GSE #5 SAMPLE 17 CH 8	16087
2	SYNC SEQUENCE BYTE 2	11111111	574	CH 9	16242
3	SYNC SEQUENCE BYTE 3	11111111	576	CH 10	17094
4	UNIT ID AND SERIAL NO	00010001	578	CH 11	16279
5	DIGITAL B DATA BYTE 1	00000000	580	CH 12	15960
6	DIGITAL B DATA BYTE 2	00001110	582	CH 13	16310
7	DIGITAL B DATA BYTE 3	00000000	584	CH 14	16045
8	DIGITAL B DATA BYTE 4	00000000	586	CH 15	16526
10	REFLECTOR 1 POSITION 1	785	588	REFLECTOR 1 POSITION 18	8238
12	REFLECTOR 2 POSITION 1	585	590	REFLECTOR 2 POSITION 18	7814
14	REFL 1 POS 1 2ND LOOK	785	592	REFL 1 POS 18 2ND LOOK	8212
16	REFL 2 POS 1 2ND LOOK	586	594	REFL 2 POS 18 2ND LOOK	8374
18	GSE #5 SAMPLE 1 CH 3	15632	596	GSE #5 SAMPLE 18 CH 3	17056
20	CH 4	16425	598	CH 4	16089
22	CH 5	16750	600	CH 5	16244
24	CH 6	17047	602	CH 6	17094
26	CH 7	16091	604	CH 7	16278
28	CH 8	16240	606	CH 8	15969
30	CH 9	17093	608	CH 9	16316
32	CH 10	16281	610	CH 10	16046
34	CH 11	15966	612	CH 11	16525
36	CH 12	16319	614	CH 12	16477
38	CH 13	16039	616	CH 13	15631
40	CH 14	16536	618	CH 14	16426
42	CH 15	16477	620	CH 15	167
44	REFLECTOR 1 POSITION 2	7813E	622	REFLECTOR 1 POSITION 19	85
46	REFLECTOR 2 POSITION 2	8214E	624	REFLECTOR 2 POSITION 19	8045E
48	REFL 1 POS 2 2ND LOOK	8374E	626	REFL 1 POS 19 2ND LOOK	8121E
50	REFL 2 POS 2 2ND LOOK	8529E	628	REFL 2 POS 19 2ND LOOK	8546E
52	GSE #5 SAMPLE 2 CH 3	16091	630	GSE #5 SAMPLE 19 CH 3	16279
54	CH 4	16243	632	CH 4	15969
56	CH 5	17092	634	CH 5	16322
58	CH 6	16282	636	CH 6	16054
60	CH 7	15960	638	CH 7	16528
62	CH 8	16322	640	CH 8	16478
64	CH 9	16046	642	CH 9	15635
66	CH 10	16515	644	CH 10	16429
68	CH 11	16477	646	CH 11	16747
70	CH 12	15632	648	CH 12	17054
72	CH 13	16427	650	CH 13	16088
74	CH 14	16749	652	CH 14	16242
76	CH 15	17057	654	CH 15	17091
78	REFLECTOR 1 POSITION 3	8043	656	REFLECTOR 1 POSITION 20	8138
80	REFLECTOR 2 POSITION 3	8119	658	REFLECTOR 2 POSITION 20	7987E
82	REFL 1 POS 3 2ND LOOK	8546E	660	REFL 1 POS 20 2ND LOOK	8161E
84	REFL 2 POS 3 2ND LOOK	8137	662	REFL 2 POS 20 2ND LOOK	8015
86	GSE #5 SAMPLE 3 CH 3	15961	664	GSE #5 SAMPLE 20 CH 3	16526
88	CH 4	16320	666	CH 4	16477
90	CH 5	16035	668	CH 5	15628
92	CH 6	16511	670	CH 6	16427

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	16479	672	CH 7	16751
96	CH 8	15628	674	CH 8	17052
98	CH 9	16430	676	CH 9	16091
100	CH 10	16746	678	CH 10	16240
102	CH 11	17058	680	CH 11	17086
104	CH 12	16090	682	CH 12	16278
106	CH 13	16244	684	CH 13	15966
108	CH 14	17094	686	CH 14	16323
110	CH 15	16278	688	CH 15	16031
112	REFLECTOR 1 POSITION 4	7983	690	REFLECTOR 1 POSITION 21	8265
114	REFLECTOR 2 POSITION 4	8161	692	REFLECTOR 2 POSITION 21	8239
116	REFL 1 POS 4 2ND LOOK	8021	694	REFL 1 POS 21 2ND LOOK	7813E
118	REFL 2 POS 4 2ND LOOK	8258E	696	REFL 2 POS 21 2ND LOOK	8212
120	GSE #5 SAMPLE 4 CH 3	16480	698	GSE #5 SAMPLE 21 CH 3	16748
122	CH 4	15631	700	CH 4	17053
124	CH 5	16427	702	CH 5	16087
126	CH 6	16751	704	CH 6	16241
128	CH 7	17058	706	CH 7	17092
130	CH 8	16091	708	CH 8	16280
132	CH 9	16243	710	CH 9	15965
134	CH 10	17094	712	CH 10	16309
136	CH 11	16276	714	CH 11	16040
138	CH 12	15966	716	CH 12	16529
140	CH 13	16325	718	CH 13	16476
12	CH 14	16038	720	CH 14	15632
44	CH 15	16536	722	CH 15	16426
146	REFLECTOR 1 POSITION 5	8238	724	REFLECTOR 1 POSITION 22	8373E
148	REFLECTOR 2 POSITION 5	7816E	726	REFLECTOR 2 POSITION 22	8527E
150	REFL 1 POS 5 2ND LOOK	8213	728	REFL 1 POS 22 2ND LOOK	8043
152	REFL 2 POS 5 2ND LOOK	8373	730	REFL 2 POS 22 2ND LOOK	8120E
154	GSE #5 SAMPLE 5 CH 3	17055	732	GSE #5 SAMPLE 22 CH 3	17093
156	CH 4	16089	734	CH 4	16278
158	CH 5	16242	736	CH 5	15964
160	CH 6	17094	738	CH 6	16319
162	CH 7	16278	740	CH 7	16041
164	CH 8	15971	742	CH 8	16519
166	CH 9	16318	744	CH 9	16477
168	CH 10	16038	746	CH 10	15628
170	CH 11	16547	748	CH 11	16426
172	CH 12	16477	750	CH 12	16748
174	CH 13	15624	752	CH 13	17052
176	CH 14	16426	754	CH 14	16088
178	CH 15	16748	756	CH 15	16241
180	REFLECTOR 1 POSITION 6	8528E	758	REFLECTOR 1 POSITION 23	8546E
182	REFLECTOR 2 POSITION 6	8043	760	REFLECTOR 2 POSITION 23	8138E
184	REFL 1 POS 6 2ND LOOK	8119	762	REFL 1 POS 23 2ND LOOK	7980E
186	REFL 2 POS 6 2ND LOOK	8546E	764	REFL 2 POS 23 2ND LOOK	8159E
188	GSE #5 SAMPLE 6 CH 3	16274	766	GSE #5 SAMPLE 23 CH 3	16033
190	CH 4	15967	768	CH 4	16520
92	CH 5	16323	770	CH 5	16478

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VA
194	CH 6	16040	772	CH 6	15627
196	CH 7	16522	774	CH 7	16427
198	CH 8	16478	776	CH 8	16748
200	CH 9	15625	778	CH 9	17058
202	CH 10	16427	780	CH 10	16086
204	CH 11	16746	782	CH 11	16241
206	CH 12	17053	784	CH 12	17090
208	CH 13	16089	786	CH 13	16284
210	CH 14	16238	788	CH 14	15967
212	CH 15	17092	790	CH 15	16316
214	REFLECTOR 1 POSITION 7	8139E	792	REFLECTOR 1 POSITION 24	8018
216	REFLECTOR 2 POSITION 7	7984	794	REFLECTOR 2 POSITION 24	8263
218	REFL 1 POS 7 2ND LOOK	8161	796	REFL 1 POS 24 2ND LOOK	8239
220	REFL 2 POS 7 2ND LOOK	8024E	798	REFL 2 POS 24 2ND LOOK	7816
222	GSE #5 SAMPLE 7 CH 3	16528	800	GSE #5 SAMPLE 24 CH 3	16430
224	CH 4	16477	802	CH 4	16749
226	CH 5	15624	804	CH 5	17054
228	CH 6	16429	806	CH 6	16084
230	CH 7	16753	808	CH 7	16241
232	CH 8	17054	810	CH 8	17091
234	CH 9	16089	812	CH 9	16274
236	CH 10	16239	814	CH 10	15967
238	CH 11	17092	816	CH 11	16319
240	CH 12	16276	818	CH 12	16030
12	CH 13	15970	820	CH 13	16
4	CH 14	16325	822	CH 14	164
246	CH 15	16037	824	CH 15	15631
248	REFLECTOR 1 POSITION 8	8266	826	REFLECTOR 1 POSITION 25	8211E
250	REFLECTOR 2 POSITION 8	8239E	828	REFLECTOR 2 POSITION 25	8372
252	REFL 1 POS 8 2ND LOOK	7813	830	REFL 1 POS 25 2ND LOOK	8527
254	REFL 2 POS 8 2ND LOOK	8213E	832	REFL 2 POS 25 2ND LOOK	8044
256	GSE #5 SAMPLE 8 CH 3	16749	834	GSE #5 SAMPLE 25 CH 3	16241
258	CH 4	17056	836	CH 4	17093
260	CH 5	16089	838	CH 5	16277
262	CH 6	16240	840	CH 6	15967
264	CH 7	17093	842	CH 7	16316
266	CH 8	16278	844	CH 8	16039
268	CH 9	15967	846	CH 9	16522
270	CH 10	16317	848	CH 10	16478
272	CH 11	16035	850	CH 11	15629
274	CH 12	16551	852	CH 12	16426
276	CH 13	16478	854	CH 13	16747
278	CH 14	15628	856	CH 14	17058
280	CH 15	16430	858	CH 15	16090
282	REFLECTOR 1 POSITION 9	8374	860	REFLECTOR 1 POSITION 26	8120E
284	REFLECTOR 2 POSITION 9	8527E	862	REFLECTOR 2 POSITION 26	8546
286	REFL 1 POS 9 2ND LOOK	8044E	864	REFL 1 POS 26 2ND LOOK	8138E
288	REFL 2 POS 9 2ND LOOK	8120E	866	REFL 2 POS 26 2ND LOOK	7982
290	GSE #5 SAMPLE 9 CH 3	17091	868	GSE #5 SAMPLE 26 CH 3	16325
92	CH 4	16279	870	CH 4	16045

GSE MODE 5 BP 6

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15961	872	CH 5	16537
296	CH 6	16322	874	CH 6	16478
298	CH 7	16027	876	CH 7	15630
300	CH 8	16519	878	CH 8	16427
302	CH 9	16476	880	CH 9	16747
304	CH 10	15634	882	CH 10	17054
306	CH 11	16430	884	CH 11	16085
308	CH 12	16748	886	CH 12	16241
310	CH 13	17060	888	CH 13	17091
312	CH 14	16091	890	CH 14	16274
314	CH 15	16240	892	CH 15	15966
316	REFLECTOR 1 POSITION 10	8544	894	REFLECTOR 1 POSITION 27	8164E
318	REFLECTOR 2 POSITION 10	8138	896	REFLECTOR 2 POSITION 27	8026
320	REFL 1 POS 10 2ND LOOK	7984E	898	REFL 1 POS 27 2ND LOOK	8262
322	REFL 2 POS 10 2ND LOOK	8161	900	REFL 2 POS 27 2ND LOOK	8238
324	GSE #5 SAMPLE 10 CH 3	16052	902	GSE #5 SAMPLE 27 CH 3	15632
326	CH 4	16530	904	CH 4	16429
328	CH 5	16477	906	CH 5	16748
330	CH 6	15630	908	CH 6	17057
332	CH 7	16427	910	CH 7	16088
334	CH 8	16749	912	CH 8	16239
336	CH 9	17057	914	CH 9	17090
338	CH 10	16091	916	CH 10	16279
340	CH 11	16244	918	CH 11	15965
342	CH 12	17090	920	CH 12	16319
344	CH 13	16273	922	CH 13	16042
346	CH 14	15966	924	CH 14	16534
348	CH 15	16322	926	CH 15	16478
350	REFLECTOR 1 POSITION 11	8020E	928	REFLECTOR 1 POSITION 28	7813E
352	REFLECTOR 2 POSITION 11	8265E	930	REFLECTOR 2 POSITION 28	8213E
354	REFL 1 POS 11 2ND LOOK	8239	932	REFL 1 POS 28 2ND LOOK	8375
356	REFL 2 POS 11 2ND LOOK	7814	934	REFL 2 POS 28 2ND LOOK	8528
358	GSE #5 SAMPLE 11 CH 3	16427	936	GSE #5 SAMPLE 28 CH 3	16090
360	CH 4	16752	938	CH 4	16241
362	CH 5	17055	940	CH 5	17090
364	CH 6	16090	942	CH 6	16276
366	CH 7	16238	944	CH 7	15970
368	CH 8	17089	946	CH 8	16315
370	CH 9	16280	948	CH 9	16045
372	CH 10	15966	950	CH 10	16512
374	CH 11	16318	952	CH 11	16478
376	CH 12	16044	954	CH 12	15630
378	CH 13	16529	956	CH 13	16426
380	CH 14	16480	958	CH 14	16749
382	CH 15	15631	960	CH 15	17058
384	REFLECTOR 1 POSITION 12	8214E	962	REFLECTOR 1 POSITION 29	8045
386	REFLECTOR 2 POSITION 12	8375	964	REFLECTOR 2 POSITION 29	8119
388	REFL 1 POS 12 2ND LOOK	8528E	966	REFL 1 POS 29 2ND LOOK	8546
390	REFL 2 POS 12 2ND LOOK	8045	968	REFL 2 POS 29 2ND LOOK	8138
392	GSE #5 SAMPLE 12 CH 3	16239	970	GSE #5 SAMPLE 29 CH 3	15967

ELEMENT	DESCRIPTION		VALUE	ELEMENT	DESCRIPTION		VAL
394		CH 4	17092	972		CH 4	16326
396		CH 5	16279	974		CH 5	16031
398		CH 6	15962	976		CH 6	16518
400		CH 7	16322	978		CH 7	16476
402		CH 8	16042	980		CH 8	15625
404		CH 9	16536	982		CH 9	16430
406		CH 10	16477	984		CH 10	16748
408		CH 11	15633	986		CH 11	17056
410		CH 12	16428	988		CH 12	16088
412		CH 13	16748	990		CH 13	16242
414		CH 14	17054	992		CH 14	17093
416		CH 15	16090	994		CH 15	16280
418	REFLECTOR 1 POSITION 13		8120E	996	REFLECTOR 1 POSITION 30		7983E
420	REFLECTOR 2 POSITION 13		8545	998	REFLECTOR 2 POSITION 30		8165E
422	REFL 1 POS 13 2ND LOOK		8140E	1000	REFL 1 POS 30 2ND LOOK		8017E
424	REFL 2 POS 13 2ND LOOK		7982	1002	REFL 2 POS 30 2ND LOOK		8259E
426	GSE #5 SAMPLE 13	CH 3	16321	1004	GSE #5 SAMPLE 30	CH 3	16477
428		CH 4	16037	1006		CH 4	15628
430		CH 5	16528	1008		CH 5	16426
432		CH 6	16478	1010		CH 6	16749
434		CH 7	15627	1012		CH 7	17058
436		CH 8	16428	1014		CH 8	16089
438		CH 9	16750	1016		CH 9	16240
440		CH 10	17056	1018		CH 10	17094
442		CH 11	16091	1020		CH 11	162
44		CH 12	16241	1022		CH 12	159
446		CH 13	17090	1024		CH 13	16323
448		CH 14	16279	1026		CH 14	16047
450		CH 15	15963	1028		CH 15	16536
452	REFLECTOR 1 POSITION 14		8159	1030	REFLECTOR 1 COLD CAL POS		8240E
454	REFLECTOR 2 POSITION 14		8018	1032	REFLECTOR 2 COLD CAL POS		8989
456	REFL 1 POS 14 2ND LOOK		8256E	1034	REFL 1 COLD CAL 2ND LOOK		9296E
458	REFL 2 POS 14 2ND LOOK		8238	1036	REFL 2 COLD CAL 2ND LOOK		10197
460	GSE #5 SAMPLE 14	CH 3	15631	1038	COLD CAL DATA 1	CH 3	21588
462		CH 4	16430	1040		CH 4	21633
464		CH 5	16748	1042		CH 5	22465
466		CH 6	17059	1044		CH 6	23692
468		CH 7	16090	1046		CH 7	23873
470		CH 8	16243	1048		CH 8	23234
472		CH 9	17091	1050		CH 9	21341
474		CH 10	16281	1052		CH 10	22158
476		CH 11	15967	1054		CH 11	23249
478		CH 12	16319	1056		CH 12	22745
480		CH 13	16036	1058		CH 13	21125
482		CH 14	16532	1060		CH 14	24264
484		CH 15	16477	1062		CH 15	32767
486	REFLECTOR 1 POSITION 15		7813E	1064	COLD CAL DATA 2	CH 3	23090
488	REFLECTOR 2 POSITION 15		8212	1066		CH 4	22715
490	REFL 1 POS 15 2ND LOOK		8374	1068		CH 5	22561
492	REFL 2 POS 15 2ND LOOK		8527	1070		CH 6	21923

ELEMENT	DESCRIPTION		VALUE	ELEMENT	DESCRIPTION		VALUE
494	GSE #5 SAMPLE 15	CH 3	16092	1072		CH 7	22253
496		CH 4	16241	1074		CH 8	22684
498		CH 5	17093	1076		CH 9	21401
500		CH 6	16280	1078		CH 10	22748
502		CH 7	15962	1080		CH 11	22730
504		CH 8	16320	1082		CH 12	23183
506		CH 9	16037	1084		CH 13	22790
508		CH 10	16523	1086		CH 14	21881
510		CH 11	16478	1088		CH 15	23148
512		CH 12	15628	1182	REFLECTOR 1 WARM CAL POS		8129
514		CH 13	16424	1184	REFLECTOR 2 WARM CAL POS		8527
516		CH 14	16751	1186	REFL 1 WARM CAL 2ND LOOK		8132
518		CH 15	17053	1188	REFL 2 WARM CAL 2ND LOOK		7963
520	REFLECTOR 1 POSITION 16		8042	1190	WARM CAL DATA 1	CH 3	16257
522	REFLECTOR 2 POSITION 16		8121	1192		CH 4	15969
524	REFL 1 POS 16 2ND LOOK		8545E	1194		CH 5	16450
526	REFL 2 POS 16 2ND LOOK		8140	1196		CH 6	16451
528	GSE #5 SAMPLE 16	CH 3	15962	1198		CH 7	20825
530		CH 4	16325	1200		CH 8	20425
532		CH 5	16044	1202		CH 9	20825
534		CH 6	16523	1204		CH 10	20425
536		CH 7	16480	1206		CH 11	15636
538		CH 8	15625	1208		CH 12	16434
540		CH 9	16427	1210		CH 13	16758
542		CH 10	16749	1212		CH 14	17034
544		CH 11	17055	1214		CH 15	16041
546		CH 12	16089	1216	WARM CAL DATA 2	CH 3	16262
548		CH 13	16240	1218		CH 4	17056
550		CH 14	17089	1220		CH 5	16270
552		CH 15	16282	1222		CH 6	15932
554	REFLECTOR 1 POSITION 17		7984E	1224		CH 7	16247
556	REFLECTOR 2 POSITION 17		8160E	1226		CH 8	15973
558	REFL 1 POS 17 2ND LOOK		8022E	1228		CH 9	16431
560	REFL 2 POS 17 2ND LOOK		8266E	1230		CH 10	16450
562	GSE #5 SAMPLE 17	CH 3	16479	1232		CH 11	20825
564		CH 4	15629	1234		CH 12	20425
566		CH 5	16427	1236		CH 13	20825
568		CH 6	16750	1238		CH 14	20425
570		CH 7	17058	1240		CH 15	15642

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	21985	31.08
1092	SCAN MOTOR A1-2	21645	30.02
1094	FEEDHORN A1-1	21642	29.66
1096	FEEDHORN A1-2	22230	29.35
1098	RF MUX A1-1	22421	31.72
1100	RF MUX A1-2	20866	28.95
1102	LOCAL OSCILLATOR CHANNEL 3	23348	33.55
1104	LOCAL OSCILLATOR CHANNEL 4	23554	33.88
1106	LOCAL OSCILLATOR CHANNEL 5	23627	33.77
1108	LOCAL OSCILLATOR CHANNEL 6	23307	33.58
1110	LOCAL OSCILLATOR CHANNEL 7	23491	33.81
1112	LOCAL OSCILLATOR CHANNEL 8	24377	35.98
1114	LOCAL OSCILLATOR CHANNEL 15	24209	36.25
1116	PLL LO #2 CHANNELS 9 THROUGH 14	24246	36.04
1118	PLL LO #1 CHANNELS 9 THROUGH 14	24162	35.61
1120	SPARE (NOT USED)	24032	35.35
1122	MIXER/IF AMPLIFIER CHANNEL 3	24886	36.30
1124	MIXER/IF AMPLIFIER CHANNEL 4	32648	52.64
1126	MIXER/IF AMPLIFIER CHANNEL 5	7	-9.82
1128	MIXER/IF AMPLIFIER CHANNEL 6	0	-10.29
1130	MIXER/IF AMPLIFIER CHANNEL 7	20825	28.65
1132	MIXER/IF AMPLIFIER CHANNEL 8	20425	28.51
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	20825	29.29
1136	MIXER/IF AMPLIFIER CHANNEL 15	20425	28.36
1138	IF AMPLIFIER CHANNEL 11 THRU 14	15638	18.96
1140	IF AMPLIFIER CHANNEL 9	16439	19.74
1142	IF AMPLIFIER CHANNEL 10	16756	21.28
1144	IF AMPLIFIER CHANNEL 11	17023	21.25
1146	DC/DC CONVERTER	16043	19.23
1148	IF AMPLIFIER CHANNEL 13	16258	19.52
1150	IF AMPLIFIER CHANNEL 14	17056	21.66
1152	IF AMPLIFIER CHANNEL 12	16270	20.15
1154	RF SHELF A1-1	15933	19.21
1156	RF SHELF A1-2	16248	19.98
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	15965	18.98
1160	A1-1 WARM LOAD 1	16441	10.68
1162	A1-1 WARM LOAD 2	16449	10.34
1164	A1-1 WARM LOAD 3	20825	18.70
1166	A1-1 WARM LOAD 4	20425	18.51
1168	A1-1 WARM LOAD CENTER	20825	18.97
1170	A1-2 WARM LOAD 1	20425	17.81
1172	A1-2 WARM LOAD 2	15635	8.90
1174	A1-2 WARM LOAD 3	16434	10.47
1176	A1-2 WARM LOAD 4	16759	11.20
1178	A1-2 WARM LOAD CENTER	17033	11.83
1180	TEMP SENSOR REFERENCE VOLTAGE	16039	

GSE MODE 5 BP 6

DESCRIPTION	STATUS	STATUS	STATUS
SCANNER A1-1 POWER	ON	ON	ON
SCANNER A1-2 POWER	ON	ON	ON
PLL POWER	PLLO # 1	PLLO # 1	PLLO # 1
ANTENNA IN WARM CAL POSITION MODE	NO	NO	NO
ANTENNA IN COLD CAL POSITION MODE	NO	NO	NO
ANTENNA IN NADIR POSITION MODE	NO	NO	NO
ANTENNA IN FULL SCAN MODE	NO	NO	NO
SURVIVAL HEATER POWER	OFF	OFF	OFF
MODULE POWER	CONNECT	CONNECT	CONNECT
COLD CAL POSITION MSB	ZERO	ZERO	ZERO
COLD CAL POSITION LSB	ZERO	ZERO	ZERO

ANALOG DATA

DESCRIPTION	VALUE	DEG C	VALUE	DEG C	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	217	22.1	217	22.1	217	22.1
A1-2 SCANNER MOTOR TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-1 RF SHELF TEMPERATURE	221	27.5	221	27.5	221	27.5
A1-2 RF SHELF TEMPERATURE	224	31.6	224	31.6	224	31.6
A1-1 WARM LOAD TEMPERATURE	219	24.8	219	24.8	219	24.8
A1-2 WARM LOAD TEMPERATURE	220	26.2	220	26.2	220	26.2

DESCRIPTION	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS
A1-1 ANTENNA DRIVE MOTOR CURRENT (AVRG)	5	2.33	5	2.33	5	2.33
A1-2 ANTENNA DRIVE MOTOR CURRENT (AVRG)	5	2.33	5	2.33	5	2.33
SIGNAL PROCESSING +15 VDC	173	14.93	173	14.93	173	14.93
ANTENNA DRIVE +15 VDC	172	14.84	172	14.84	172	14.84
SIGNAL PROCESSING -15 VDC	150	-15.05	150	-15.05	150	-15.05
ANTENNA DRIVE -15 VDC	150	-15.05	150	-15.05	150	-15.05
RECEIVER AMPLIFIER +8 VDC	159	7.95	159	7.95	159	7.95
SIGNAL PROCESSOR +5 VDC	147	4.90	147	4.90	147	4.90
ANTENNA DRIVE +5 VDC	147	4.90	147	4.90	148	4.93
RECEIVER MIXER/IF +10 VDC	172	9.94	172	9.94	172	9.94
PHASE LOCK LOOP (CHANNEL 9/14) +15 VDC	172	14.84	172	14.84	172	14.84
PHASE LOCK LOOP (CHANNEL 9/14) -15 VDC	146	-15.25	146	-15.25	146	-15.25
L.O. VOLTAGE (CHANNEL 8) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 7) VDC	173	9.90	173	9.90	173	9.90
L.O. VOLTAGE (CHANNEL 6) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 3) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 4) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 5) VDC	173	9.90	174	9.96	174	9.96
PLLO # 2 LOCK DETECT	5	0.10	5	0.10	5	0.10
PLLO # 1 LOCK DETECT	221	4.42	221	4.42	222	4.44
L.O. VOLTAGE (CHANNEL 15) VDC	173	14.93	173	14.93	173	14.93

PRT TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
VARIABLE TARGET	615	42.00	601	14.00
	616	43.00	602	15.00
	617	44.00	603	16.00
	618	45.00	604	17.00
	619	46.00	605	18.00
	620	47.00	606	19.00
	621	48.00	607	20.00
FIXED TARGET	622	49.00	608	21.00
	623	50.00	609	22.00
	624	51.00	610	23.00
	625	52.00	611	24.00
	626	53.00	612	25.00
	627	67.00	613	69.00
	628	68.00	614	70.00
BASEPLATE	629	71.00	630	72.00
	631	26.00	632	27.00

THERMOCOUPLE TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
FIXED TARGET SHROUD	558	5.00	537	34.00
	559	6.00	538	35.00
VARIABLE TARGET SHROUD	550	7.00	524	36.00
	551	8.00	525	37.00
FIXED TARGET N2	506	57.00	502	30.00
	507	58.00	503	31.00
VARIABLE TARGET N2	516	59.00	511	32.00
	517	60.00	512	33.00
HEATER N2	514	1.00	509	38.00
	515	2.00	510	39.00
FIXED TARGET FLOW METER	508	63.00	504	61.00
VARIABLE TARGET FLOW METER	518	64.00	513	62.00
BASEPLATE HEATER N2	519	3.00	520	4.00
BASEPLATE N2	521	9.00	522	10.00
BASEPLATE FLOW METER	523	65.00		
ADJUNCT RADIATORS	575	73.00	577	74.00
	579	75.00	581	76.00

AMSU A1-17 A1.EXE GSE MODE 5 BP 6 P1 24-NOV-93 14:22:00 SCAN NUMBER
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

REFLECTOR POSITIONS 1

BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2
1	785	785	9	785	785	17	785	785	25	785	785
2	785	785	10	785	785	18	785	785	26	785	785
3	785	785	11	785	785	19	785	785	27	785	785
4	785	785	12	785	785	20	785	785	28	785	785
5	785	785	13	785	785	21	785	785	29	785	785
6	785	785	14	785	785	22	785	785	30	785	785
7	785	785	15	785	785	23	785	785	CC	0	0
8	785	785	16	785	785	24	785	785	WC	0	0

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FUL[1] [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

AMSU A1-17 A1.EXE GSE MODE 5 BP 6 P1 24-NOV-93 14:22:24 SCAN NUMBER
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

REFLECTOR POSITIONS 2

BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2	BP	LOOK 1	LOOK 2
1	586	586	9	586	586	17	586	586	25	586	586
2	586	586	10	586	586	18	586	586	26	586	586
3	586	586	11	586	586	19	586	586	27	586	586
4	586	586	12	586	586	20	586	586	28	586	586
5	586	586	13	586	586	21	586	586	29	586	586
6	586	586	14	586	586	22	586	586	30	586	586
7	586	586	15	586	586	23	586	586	CC	0	0
8	586	586	16	586	586	24	586	586	WC	0	0

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FUL[1] [1] RETURN
SELECT TOUCHSCREEN BUTTON 1

AMSU A1-17 A1.EXE GSE MODE 5 BP 6 P1 24-NOV-93 14:22:54 SCAN NUMBER 1
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

RADIOMETRIC DATA

BEAM POSITION 3

CH	DATA	CH	DATA	CH	DATA
3	15631	8	16244	13	16040
4	16427	9	17093	14	16508
5	16749	10	16279	15	16479
6	17056	11	15968		
7	16088	12	16321		

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FUL[1] [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

AMSU A1-17 A1.EXE GSE MODE 5 BP 6 P1 24-NOV-93 14:23:10 SCAN NUMBER
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

RADIOMETRIC DATA

BEAM POSITION 9

CH	DATA	CH	DATA	CH	DATA
3	15629	8	16240	13	16030
4	16428	9	17090	14	16525
5	16750	10	16282	15	16478
6	17054	11	15963		
7	16089	12	16318		

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FUL[1] [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

```
AMSU  A1-17 A1.EXE     GSE MODE 7          P1 24-NOV-93 14:24:49  SCAN NUMBER
[ 5 ] DIGITAL A DATA   ELEMENT 0000

  6 ] DIGITAL B DATA   ELEMENT   00

[ 7 ] ANALOG DATA      ELEMENT   00


                                        COMMANDS
[ 9 ]  MODULE POWER =          CONNECT      ANTENNA IN COLD CAL POSIT = NO   [ 15
[ 10 ] SURVIVAL HEATER POWER =      OFF     ANTENNA IN NADIR POSITION = NO   [ 16
[ 11 ] MODULE TOTALLY OFF =         ON      ANTENNA IN FULL SCAN MODE = NO   [ 17
[ 12 ] SCANNER A1 - 1 POWER =       ON      PLL POWER =              PLLO # 1 [ 18
[ 13 ] SCANNER A1 - 2 POWER =       ON      COLD CAL POSITION MSB =     ZERO [ 19
[ 14 ] ANTENNA IN WARM CAL POSIT = NO       COLD CAL POSITION LSB =     ZERO [ 20

          POWER [ 4 ]  ON
                       SCREEN ONLY [ 2 ]  PRINT  [ 3 ] FUL[  1 ]  [ 1 ] RETURN
 SELECT TOUCHSCREEN BUTTON 3
```

TDS 46

AMSU A1_17 A1.EXE DIGITAL A DATA 24-NOV-93 14:24:53 PAGE 1
GSE MODE 7

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	SYNC SEQUENCE BYTE 1	11111111	572	GSE #7 SAMPLE 17 CH 8	16243
2	SYNC SEQUENCE BYTE 2	11111111	574	CH 9	17095
3	SYNC SEQUENCE BYTE 3	11111111	576	CH 10	16279
4	UNIT ID AND SERIAL NO	00010001	578	CH 11	15963
5	DIGITAL B DATA BYTE 1	00000000	580	CH 12	16323
6	DIGITAL B DATA BYTE 2	00001110	582	CH 13	16037
7	DIGITAL B DATA BYTE 3	00000000	584	CH 14	16509
8	DIGITAL B DATA BYTE 4	00000000	586	CH 15	16477
10	REFLECTOR 1 POSITION 1	785	588	REFLECTOR 1 POSITION 18	785
12	REFLECTOR 2 POSITION 1	586	590	REFLECTOR 2 POSITION 18	586
14	REFL 1 POS 1 2ND LOOK	785	592	REFL 1 POS 18 2ND LOOK	785
16	REFL 2 POS 1 2ND LOOK	585	594	REFL 2 POS 18 2ND LOOK	585
18	GSE #7 SAMPLE 1 CH 3	15629	596	GSE #7 SAMPLE 18 CH 3	15634
20	CH 4	16427	598	CH 4	16428
22	CH 5	16747	600	CH 5	16752
24	CH 6	17044	602	CH 6	17055
26	CH 7	16089	604	CH 7	16080
28	CH 8	16242	606	CH 8	16243
30	CH 9	17094	608	CH 9	17094
32	CH 10	16275	610	CH 10	16276
34	CH 11	15969	612	CH 11	15967
36	CH 12	16316	614	CH 12	16321
38	CH 13	16036	616	CH 13	16038
40	CH 14	16531	618	CH 14	16542
42	CH 15	16478	620	CH 15	16478
44	REFLECTOR 1 POSITION 2	785	622	REFLECTOR 1 POSITION 19	785
46	REFLECTOR 2 POSITION 2	586	624	REFLECTOR 2 POSITION 19	586
48	REFL 1 POS 2 2ND LOOK	785	626	REFL 1 POS 19 2ND LOOK	785
50	REFL 2 POS 2 2ND LOOK	586	628	REFL 2 POS 19 2ND LOOK	586
52	GSE #7 SAMPLE 2 CH 3	15627	630	GSE #7 SAMPLE 19 CH 3	15628
54	CH 4	16426	632	CH 4	16430
56	CH 5	16748	634	CH 5	16749
58	CH 6	17058	636	CH 6	17055
60	CH 7	16084	638	CH 7	16086
62	CH 8	16242	640	CH 8	16243
64	CH 9	17090	642	CH 9	17091
66	CH 10	16280	644	CH 10	16280
68	CH 11	15965	646	CH 11	15967
70	CH 12	16323	648	CH 12	16311
72	CH 13	16024	650	CH 13	16037
74	CH 14	16513	652	CH 14	16536
76	CH 15	16478	654	CH 15	16478
78	REFLECTOR 1 POSITION 3	785	656	REFLECTOR 1 POSITION 20	785
80	REFLECTOR 2 POSITION 3	585	658	REFLECTOR 2 POSITION 20	585
82	REFL 1 POS 3 2ND LOOK	785	660	REFL 1 POS 20 2ND LOOK	785
84	REFL 2 POS 3 2ND LOOK	586	662	REFL 2 POS 20 2ND LOOK	586
86	GSE #7 SAMPLE 3 CH 3	15629	664	GSE #7 SAMPLE 20 CH 3	15627
88	CH 4	16426	666	CH 4	16428
90	CH 5	16749	668	CH 5	16749
92	CH 6	17060	670	CH 6	17058

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	16087	672	CH 7	16086
96	CH 8	16243	674	CH 8	16242
98	CH 9	17094	676	CH 9	17096
100	CH 10	16273	678	CH 10	16277
102	CH 11	15972	680	CH 11	15968
104	CH 12	16316	682	CH 12	16316
106	CH 13	16027	684	CH 13	16040
108	CH 14	16524	686	CH 14	16524
110	CH 15	16480	688	CH 15	16479
112	REFLECTOR 1 POSITION 4	785	690	REFLECTOR 1 POSITION 21	785
114	REFLECTOR 2 POSITION 4	585	692	REFLECTOR 2 POSITION 21	585
116	REFL 1 POS 4 2ND LOOK	785	694	REFL 1 POS 21 2ND LOOK	785
118	REFL 2 POS 4 2ND LOOK	585	696	REFL 2 POS 21 2ND LOOK	585
120	GSE #7 SAMPLE 4 CH 3	15629	698	GSE #7 SAMPLE 21 CH 3	15629
122	CH 4	16425	700	CH 4	16428
124	CH 5	16750	702	CH 5	16750
126	CH 6	17057	704	CH 6	17055
128	CH 7	16087	706	CH 7	16088
130	CH 8	16247	708	CH 8	16246
132	CH 9	17095	710	CH 9	17094
134	CH 10	16285	712	CH 10	16278
136	CH 11	15965	714	CH 11	15970
138	CH 12	16314	716	CH 12	16318
140	CH 13	16044	718	CH 13	16031
12	CH 14	16535	720	CH 14	16522
44	CH 15	16477	722	CH 15	16479
146	REFLECTOR 1 POSITION 5	785	724	REFLECTOR 1 POSITION 22	785
148	REFLECTOR 2 POSITION 5	586	726	REFLECTOR 2 POSITION 22	586
150	REFL 1 POS 5 2ND LOOK	785	728	REFL 1 POS 22 2ND LOOK	785
152	REFL 2 POS 5 2ND LOOK	585	730	REFL 2 POS 22 2ND LOOK	585
154	GSE #7 SAMPLE 5 CH 3	15625	732	GSE #7 SAMPLE 22 CH 3	15629
156	CH 4	16428	734	CH 4	16425
158	CH 5	16748	736	CH 5	16750
160	CH 6	17058	738	CH 6	17052
162	CH 7	16084	740	CH 7	16086
164	CH 8	16245	742	CH 8	16249
166	CH 9	17095	744	CH 9	17094
168	CH 10	16280	746	CH 10	16282
170	CH 11	15971	748	CH 11	15963
172	CH 12	16325	750	CH 12	16320
174	CH 13	16037	752	CH 13	16041
176	CH 14	16528	754	CH 14	16522
178	CH 15	16476	756	CH 15	16479
180	REFLECTOR 1 POSITION 6	785	758	REFLECTOR 1 POSITION 23	785
182	REFLECTOR 2 POSITION 6	586	760	REFLECTOR 2 POSITION 23	586
184	REFL 1 POS 6 2ND LOOK	785	762	REFL 1 POS 23 2ND LOOK	785
186	REFL 2 POS 6 2ND LOOK	586	764	REFL 2 POS 23 2ND LOOK	586
188	GSE #7 SAMPLE 6 CH 3	15627	766	GSE #7 SAMPLE 23 CH 3	15628
190	CH 4	16428	768	CH 4	16427
92	CH 5	16748	770	CH 5	16749

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VA
194	CH 6	17055	772	CH 6	17055
196	CH 7	16085	774	CH 7	16085
198	CH 8	16242	776	CH 8	16248
200	CH 9	17092	778	CH 9	17093
202	CH 10	16280	780	CH 10	16280
204	CH 11	15971	782	CH 11	15968
206	CH 12	16321	784	CH 12	16322
208	CH 13	16039	786	CH 13	16035
210	CH 14	16531	788	CH 14	16522
212	CH 15	16478	790	CH 15	16480
214	REFLECTOR 1 POSITION 7	785	792	REFLECTOR 1 POSITION 24	785
216	REFLECTOR 2 POSITION 7	586	794	REFLECTOR 2 POSITION 24	585
218	REFL 1 POS 7 2ND LOOK	785	796	REFL 1 POS 24 2ND LOOK	785
220	REFL 2 POS 7 2ND LOOK	586	798	REFL 2 POS 24 2ND LOOK	586
222	GSE #7 SAMPLE 7 CH 3	15631	800	GSE #7 SAMPLE 24 CH 3	15627
224	CH 4	16426	802	CH 4	16426
226	CH 5	16752	804	CH 5	16748
228	CH 6	17057	806	CH 6	17057
230	CH 7	16086	808	CH 7	16085
232	CH 8	16244	810	CH 8	16246
234	CH 9	17091	812	CH 9	17095
236	CH 10	16275	814	CH 10	16279
238	CH 11	15966	816	CH 11	15970
240	CH 12	16316	818	CH 12	16312
12	CH 13	16030	820	CH 13	16
4	CH 14	16526	822	CH 14	164
246	CH 15	16477	824	CH 15	16478
248	REFLECTOR 1 POSITION 8	785	826	REFLECTOR 1 POSITION 25	785
250	REFLECTOR 2 POSITION 8	585	828	REFLECTOR 2 POSITION 25	585
252	REFL 1 POS 8 2ND LOOK	785	830	REFL 1 POS 25 2ND LOOK	785
254	REFL 2 POS 8 2ND LOOK	586	832	REFL 2 POS 25 2ND LOOK	585
256	GSE #7 SAMPLE 8 CH 3	15629	834	GSE #7 SAMPLE 25 CH 3	15630
258	CH 4	16427	836	CH 4	16425
260	CH 5	16751	838	CH 5	16748
262	CH 6	17055	840	CH 6	17057
264	CH 7	16090	842	CH 7	16085
266	CH 8	16245	844	CH 8	16248
268	CH 9	17097	846	CH 9	17095
270	CH 10	16283	848	CH 10	16280
272	CH 11	15968	850	CH 11	15966
274	CH 12	16315	852	CH 12	16319
276	CH 13	16049	854	CH 13	16043
278	CH 14	16516	856	CH 14	16518
280	CH 15	16477	858	CH 15	16477
282	REFLECTOR 1 POSITION 9	785	860	REFLECTOR 1 POSITION 26	785
284	REFLECTOR 2 POSITION 9	585	862	REFLECTOR 2 POSITION 26	585
286	REFL 1 POS 9 2ND LOOK	785	864	REFL 1 POS 26 2ND LOOK	785
288	REFL 2 POS 9 2ND LOOK	586	866	REFL 2 POS 26 2ND LOOK	585
290	GSE #7 SAMPLE 9 CH 3	15630	868	GSE #7 SAMPLE 26 CH 3	15626
92	CH 4	16426	870	CH 4	16427

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	16747	872	CH 5	16750
296	CH 6	17060	874	CH 6	17054
298	CH 7	16090	876	CH 7	16083
300	CH 8	16246	878	CH 8	16244
302	CH 9	17091	880	CH 9	17094
304	CH 10	16274	882	CH 10	16281
306	CH 11	15966	884	CH 11	15968
308	CH 12	16314	886	CH 12	16310
310	CH 13	16041	888	CH 13	16036
312	CH 14	16526	890	CH 14	16507
314	CH 15	16479	892	CH 15	16479
316	REFLECTOR 1 POSITION 10	785	894	REFLECTOR 1 POSITION 27	785
318	REFLECTOR 2 POSITION 10	586	896	REFLECTOR 2 POSITION 27	586
320	REFL 1 POS 10 2ND LOOK	785	898	REFL 1 POS 27 2ND LOOK	785
322	REFL 2 POS 10 2ND LOOK	585	900	REFL 2 POS 27 2ND LOOK	585
324	GSE #7 SAMPLE 10 CH 3	15632	902	GSE #7 SAMPLE 27 CH 3	15631
326	CH 4	16426	904	CH 4	16427
328	CH 5	16747	906	CH 5	16748
330	CH 6	17060	908	CH 6	17055
332	CH 7	16088	910	CH 7	16083
334	CH 8	16247	912	CH 8	16243
336	CH 9	17095	914	CH 9	17095
338	CH 10	16278	916	CH 10	16279
340	CH 11	15969	918	CH 11	15970
12	CH 12	16327	920	CH 12	16317
4	CH 13	16047	922	CH 13	16034
346	CH 14	16547	924	CH 14	16522
348	CH 15	16480	926	CH 15	16479
350	REFLECTOR 1 POSITION 11	785	928	REFLECTOR 1 POSITION 28	785
352	REFLECTOR 2 POSITION 11	586	930	REFLECTOR 2 POSITION 28	586
354	REFL 1 POS 11 2ND LOOK	785	932	REFL 1 POS 28 2ND LOOK	785
356	REFL 2 POS 11 2ND LOOK	586	934	REFL 2 POS 28 2ND LOOK	586
358	GSE #7 SAMPLE 11 CH 3	15625	936	GSE #7 SAMPLE 28 CH 3	15625
360	CH 4	16424	938	CH 4	16428
362	CH 5	16743	940	CH 5	16749
364	CH 6	17057	942	CH 6	17054
366	CH 7	16087	944	CH 7	16085
368	CH 8	16240	946	CH 8	16246
370	CH 9	17095	948	CH 9	17094
372	CH 10	16283	950	CH 10	16278
374	CH 11	15966	952	CH 11	15966
376	CH 12	16323	954	CH 12	16324
378	CH 13	16038	956	CH 13	16036
380	CH 14	16510	958	CH 14	16557
382	CH 15	16479	960	CH 15	16477
384	REFLECTOR 1 POSITION 12	785	962	REFLECTOR 1 POSITION 29	785
386	REFLECTOR 2 POSITION 12	585	964	REFLECTOR 2 POSITION 29	585
388	REFL 1 POS 12 2ND LOOK	785	966	REFL 1 POS 29 2ND LOOK	785
390	REFL 2 POS 12 2ND LOOK	586	968	REFL 2 POS 29 2ND LOOK	586
92	GSE #7 SAMPLE 12 CH 3	15626	970	GSE #7 SAMPLE 29 CH 3	15626

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
394	CH 4	16425	972	CH 4	16424
396	CH 5	16748	974	CH 5	16746
398	CH 6	17055	976	CH 6	17055
400	CH 7	16087	978	CH 7	16085
402	CH 8	16243	980	CH 8	16247
404	CH 9	17097	982	CH 9	17092
406	CH 10	16278	984	CH 10	16280
408	CH 11	15965	986	CH 11	15968
410	CH 12	16316	988	CH 12	16316
412	CH 13	16032	990	CH 13	16037
414	CH 14	16513	992	CH 14	16534
416	CH 15	16478	994	CH 15	16477
418	REFLECTOR 1 POSITION 13	785	996	REFLECTOR 1 POSITION 30	785
420	REFLECTOR 2 POSITION 13	585	998	REFLECTOR 2 POSITION 30	585
422	REFL 1 POS 13 2ND LOOK	785	1000	REFL 1 POS 30 2ND LOOK	785
424	REFL 2 POS 13 2ND LOOK	586	1002	REFL 2 POS 30 2ND LOOK	586
426	GSE #7 SAMPLE 13 CH 3	15626	1004	GSE #7 SAMPLE 30 CH 3	15629
428	CH 4	16429	1006	CH 4	16427
430	CH 5	16749	1008	CH 5	16746
432	CH 6	17057	1010	CH 6	17055
434	CH 7	16087	1012	CH 7	16086
436	CH 8	16239	1014	CH 8	16247
438	CH 9	17091	1016	CH 9	17092
440	CH 10	16277	1018	CH 10	16278
12	CH 11	15970	1020	CH 11	159
4	CH 12	16317	1022	CH 12	1631
446	CH 13	16037	1024	CH 13	16034
448	CH 14	16532	1026	CH 14	16530
450	CH 15	16478	1028	CH 15	16478
452	REFLECTOR 1 POSITION 14	785	1030	REFLECTOR 1 COLD CAL POS	0E
454	REFLECTOR 2 POSITION 14	585	1032	REFLECTOR 2 COLD CAL POS	0E
456	REFL 1 POS 14 2ND LOOK	785	1034	REFL 1 COLD CAL 2ND LOOK	0E
458	REFL 2 POS 14 2ND LOOK	586	1036	REFL 2 COLD CAL 2ND LOOK	0E
460	GSE #7 SAMPLE 14 CH 3	15627	1038	COLD CAL DATA 1 CH 3	0
462	CH 4	16428	1040	CH 4	0
464	CH 5	16745	1042	CH 5	0
466	CH 6	17054	1044	CH 6	0
468	CH 7	16088	1046	CH 7	0
470	CH 8	16244	1048	CH 8	0
472	CH 9	17093	1050	CH 9	0
474	CH 10	16274	1052	CH 10	0
476	CH 11	15968	1054	CH 11	0
478	CH 12	16314	1056	CH 12	0
480	CH 13	16038	1058	CH 13	0
482	CH 14	16519	1060	CH 14	0
484	CH 15	16478	1062	CH 15	0
486	REFLECTOR 1 POSITION 15	785	1064	COLD CAL DATA 2 CH 3	0
488	REFLECTOR 2 POSITION 15	585	1066	CH 4	0
490	REFL 1 POS 15 2ND LOOK	785	1068	CH 5	0
92	REFL 2 POS 15 2ND LOOK	586	1070	CH 6	0

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	GSE #7 SAMPLE 15 CH 3	15620	1072	CH 7	0
496	CH 4	16429	1074	CH 8	0
498	CH 5	16748	1076	CH 9	0
500	CH 6	17056	1078	CH 10	0
502	CH 7	16088	1080	CH 11	0
504	CH 8	16242	1082	CH 12	0
506	CH 9	17096	1084	CH 13	0
508	CH 10	16281	1086	CH 14	0
510	CH 11	15963	1088	CH 15	0
512	CH 12	16312	1182	REFLECTOR 1 WARM CAL POS	0E
514	CH 13	16037	1184	REFLECTOR 2 WARM CAL POS	0E
516	CH 14	16531	1186	REFL 1 WARM CAL 2ND LOOK	0E
518	CH 15	16479	1188	REFL 2 WARM CAL 2ND LOOK	0E
520	REFLECTOR 1 POSITION 16	785	1190	WARM CAL DATA 1 CH 3	0
522	REFLECTOR 2 POSITION 16	586	1192	CH 4	0
524	REFL 1 POS 16 2ND LOOK	785	1194	CH 5	0
526	REFL 2 POS 16 2ND LOOK	585	1196	CH 6	0
528	GSE #7 SAMPLE 16 CH 3	15628	1198	CH 7	0
530	CH 4	16428	1200	CH 8	0
532	CH 5	16750	1202	CH 9	0
534	CH 6	17052	1204	CH 10	0
536	CH 7	16089	1206	CH 11	0
538	CH 8	16244	1208	CH 12	0
540	CH 9	17096	1210	CH 13	0
12	CH 10	16282	1212	CH 14	0
44	CH 11	15968	1214	CH 15	0
546	CH 12	16320	1216	WARM CAL DATA 2 CH 3	0
548	CH 13	16041	1218	CH 4	0
550	CH 14	16520	1220	CH 5	0
552	CH 15	16477	1222	CH 6	0
554	REFLECTOR 1 POSITION 17	785	1224	CH 7	0
556	REFLECTOR 2 POSITION 17	586	1226	CH 8	0
558	REFL 1 POS 17 2ND LOOK	785	1228	CH 9	0
560	REFL 2 POS 17 2ND LOOK	585	1230	CH 10	0
562	GSE #7 SAMPLE 17 CH 3	15627	1232	CH 11	0
564	CH 4	16427	1234	CH 12	0
566	CH 5	16745	1236	CH 13	0
568	CH 6	17061	1238	CH 14	0
570	CH 7	16084	1240	CH 15	0

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	17971	23.33
1092	SCAN MOTOR A1-2	18588	24.10
1094	FEEDHORN A1-1	20394	27.23
1096	FEEDHORN A1-2	21591	28.11
1098	RF MUX A1-1	21635	30.18
1100	RF MUX A1-2	22468	32.06
1102	LOCAL OSCILLATOR CHANNEL 3	23698	34.24
1104	LOCAL OSCILLATOR CHANNEL 4	23874	34.51
1106	LOCAL OSCILLATOR CHANNEL 5	23236	33.01
1108	LOCAL OSCILLATOR CHANNEL 6	21343	29.73
1110	LOCAL OSCILLATOR CHANNEL 7	22159	31.20
1112	LOCAL OSCILLATOR CHANNEL 8	23247	33.74
1114	LOCAL OSCILLATOR CHANNEL 15	22749	33.38
1116	PLL LO #2 CHANNELS 9 THROUGH 14	21126	29.92
1118	PLL LO #1 CHANNELS 9 THROUGH 14	24265	35.81
1120	SPARE (NOT USED)	32767	52.86
1122	MIXER/IF AMPLIFIER CHANNEL 3	23092	32.76
1124	MIXER/IF AMPLIFIER CHANNEL 4	22717	32.77
1126	MIXER/IF AMPLIFIER CHANNEL 5	22564	32.21
1128	MIXER/IF AMPLIFIER CHANNEL 6	21924	30.72
1130	MIXER/IF AMPLIFIER CHANNEL 7	22256	31.44
1132	MIXER/IF AMPLIFIER CHANNEL 8	22686	32.91
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	21405	30.42
1136	MIXER/IF AMPLIFIER CHANNEL 15	22751	32.89
1138	IF AMPLIFIER CHANNEL 11 THRU 14	22732	32.72
1140	IF AMPLIFIER CHANNEL 9	23187	32.73
1142	IF AMPLIFIER CHANNEL 10	22793	32.93
1144	IF AMPLIFIER CHANNEL 11	21882	30.62
1146	DC/DC CONVERTER	23152	32.94
1148	IF AMPLIFIER CHANNEL 13	21987	30.54
1150	IF AMPLIFIER CHANNEL 14	21647	30.52
1152	IF AMPLIFIER CHANNEL 12	21642	30.49
1154	RF SHELF A1-1	22230	31.34
1156	RF SHELF A1-2	22423	31.91
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	20869	28.39
1160	A1-1 WARM LOAD 1	23356	24.16
1162	A1-1 WARM LOAD 2	23555	24.19
1164	A1-1 WARM LOAD 3	23632	24.27
1166	A1-1 WARM LOAD 4	23307	24.20
1168	A1-1 WARM LOAD CENTER	23494	24.25
1170	A1-2 WARM LOAD 1	24377	25.65
1172	A1-2 WARM LOAD 2	24213	25.63
1174	A1-2 WARM LOAD 3	24250	25.69
1176	A1-2 WARM LOAD 4	24166	25.66
1178	A1-2 WARM LOAD CENTER	24036	25.55
1180	TEMP SENSOR REFERENCE VOLTAGE	24886	

GSE MODE 7

DESCRIPTION	STATUS	STATUS	STATUS
SCANNER A1-1 POWER	ON	ON	ON
SCANNER A1-2 POWER	ON	ON	ON
PLL POWER	PLLO # 1	PLLO # 1	PLLO # 1
ANTENNA IN WARM CAL POSITION MODE	NO	NO	NO
ANTENNA IN COLD CAL POSITION MODE	NO	NO	NO
ANTENNA IN NADIR POSITION MODE	NO	NO	NO
ANTENNA IN FULL SCAN MODE	NO	NO	NO
SURVIVAL HEATER POWER	OFF	OFF	OFF
MODULE POWER	CONNECT	CONNECT	CONNECT
COLD CAL POSITION MSB	ZERO	ZERO	ZERO
COLD CAL POSITION LSB	ZERO	ZERO	ZERO

ANALOG DATA

DESCRIPTION	VALUE	DEG C	VALUE	DEG C	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	217	22.1	217	22.1	218	23.4
A1-2 SCANNER MOTOR TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-1 RF SHELF TEMPERATURE	221	27.5	221	27.5	221	27.5
A1-2 RF SHELF TEMPERATURE	224	31.6	224	31.6	224	31.6
A1-1 WARM LOAD TEMPERATURE	219	24.8	219	24.8	219	24.8
A1-2 WARM LOAD TEMPERATURE	220	26.2	220	26.2	220	26.2

DESCRIPTION	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS
-1 ANTENNA DRIVE MOTOR CURRENT (AVRG)	5	2.33	5	2.33	5	2.33
A1-2 ANTENNA DRIVE MOTOR CURRENT (AVRG)	5	2.33	5	2.33	5	2.33
SIGNAL PROCESSING +15 VDC	172	14.84	172	14.84	172	14.84
ANTENNA DRIVE +15 VDC	173	14.93	173	14.93	173	14.93
SIGNAL PROCESSING -15 VDC	151	-15.00	151	-15.00	151	-15.00
ANTENNA DRIVE -15 VDC	150	-15.05	150	-15.05	150	-15.05
RECEIVER AMPLIFIER +8 VDC	159	7.95	159	7.95	159	7.95
SIGNAL PROCESSOR +5 VDC	147	4.90	147	4.90	147	4.90
ANTENNA DRIVE +5 VDC	148	4.93	148	4.93	148	4.93
RECEIVER MIXER/IF +10 VDC	172	9.94	172	9.94	172	9.94
PHASE LOCK LOOP (CHANNEL 9/14) +15 VDC	171	14.76	171	14.76	171	14.76
PHASE LOCK LOOP (CHANNEL 9/14) -15 VDC	146	-15.25	146	-15.25	146	-15.25
L.O. VOLTAGE (CHANNEL 8) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 7) VDC	172	9.84	172	9.84	172	9.84
L.O. VOLTAGE (CHANNEL 6) VDC	175	10.01	175	10.01	175	10.01
L.O. VOLTAGE (CHANNEL 3) VDC	175	10.01	175	10.01	175	10.01
L.O. VOLTAGE (CHANNEL 4) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 5) VDC	173	9.90	173	9.90	173	9.90
PLLO # 2 LOCK DETECT	5	0.10	5	0.10	5	0.10
PLLO # 1 LOCK DETECT	222	4.44	222	4.44	222	4.44
L.O. VOLTAGE (CHANNEL 15) VDC	172	14.84	172	14.84	172	14.84

PRT TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
VARIABLE TARGET	615	42.00	601	14.00
	616	43.00	602	15.00
	617	44.00	603	16.00
	618	45.00	604	17.00
	619	46.00	605	18.00
	620	47.00	606	19.00
	621	48.00	607	20.00
FIXED TARGET	622	49.00	608	21.00
	623	50.00	609	22.00
	624	51.00	610	23.00
	625	52.00	611	24.00
	626	53.00	612	25.00
	627	67.00	613	69.00
	628	68.00	614	70.00
BASEPLATE	629	71.00	630	72.00
	631	26.00	632	27.00

THERMOCOUPLE TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
FIXED TARGET SHROUD	558	5.00	537	34.00
	559	6.00	538	35.00
VARIABLE TARGET SHROUD	550	7.00	524	36.00
	551	8.00	525	37.00
FIXED TARGET N2	506	57.00	502	30.00
	507	58.00	503	31.00
VARIABLE TARGET N2	516	59.00	511	32.00
	517	60.00	512	33.00
HEATER N2	514	1.00	509	38.00
	515	2.00	510	39.00
FIXED TARGET FLOW METER	508	63.00	504	61.00
VARIABLE TARGET FLOW METER	518	64.00	513	62.00
BASEPLATE HEATER N2	519	3.00	520	4.00
BASEPLATE N2	521	9.00	522	10.00
BASEPLATE FLOW METER	523	65.00		
ADJUNCT RADIATORS	575	73.00	577	74.00
	579	75.00	581	76.00

TEST DATA SHEET 46 (Sheet 1 of 2)
Reflector Position (Paragraphs 3.2.4.3.7.2 - 3.2.4.3.7.7)

3.2.4.3.7.2 Digital-A/GSE Mode-1 Reflector Position Section [IV] ***

BP	A1-1 Reflector				A1-2 Reflector			
	Element (For Ref)	Position*	Required**	Pass/Fail	Element (For Ref)	Position*	Required**	Pass/Fail
06	0184	792	785	P	0186	592	586	P
~~WC~~ CC	~~1034~~ 354	6021	6019	P	~~1036~~ 356	5820	5820	P
~~CC~~ WC	~~1186~~ 694	10419	10418	P	~~1188~~ 696	10220	10220	P

3.2.4.3.7.3 Digital-A/GSE Mode-2 Reflector Position Section [IV] ***

BP	A1-1 Reflector				A1-2 Reflector			
	Element (For Ref)	Position*	Required**	Pass/Fail	Element (For Ref)	Position*	Required**	Pass/Fail
01	0014	21	26	P	0016	16204	16211	P

3.2.4.3.7.4 Digital-A/GSE Mode-3 Reflector Position Section [IV] ***

A1-1 Reflector			A1-2 Reflector		
Observed?	Required**	Pass/Fail	Observed?	Required**	Pass/Fail
YES	****	P	YES	****	P

* Actual counts from computer printout. Rewriting counts on this data sheet is optional.

** Required range for instrument serial number from TDS 6 of AE-26002/1 ~~±5~~ ±10 counts. Rewriting range on this data sheet is optional.

*** GSE Modes do not require verification or testing for PFM & FM modules

**** Observe that both A1-1 and A1-2 reflectors increment one step every 8 seconds.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer 11/24/98 Date

Customer Representative (Flight Hardware Only) 12/6/98 Date

Quality Control NOV 30 '98 Date

TEST DATA SHEET 46 (Sheet 2 of 2)

Reflector Position (Paragraphs 3.2.4.3.7.2 - 3.2.4.3.7.7)

3.2.4.3.7.5 Digital-A/GSE Mode-4 Reflector Position Section [IV] ***

BP	A1-1 Reflector				A1-2 Reflector			
	Element (For Ref)	Position*	Required**	Pass/Fail	Element (For Ref)	Position*	Required**	Pass/Fail
30	1000	4428	4425	P	1002	4229	4226	P

3.2.4.3.7.6 Digital-A/GSE Mode-5 Reflector Position Section [IV] ***

BP	A1-1 Reflector				A1-2 Reflector			
	Element (For Ref)	Position*	Required**	Pass/Fail	Element (For Ref)	Position*	Required**	Pass/Fail
06	0184	785	785	P	0186	586	586	P

3.2.4.3.7.7 Digital-A/GSE Mode-7 Reflector Position Section [IV] ***

BP	A1-1 Reflector				A1-2 Reflector			
	Element (For Ref)	Position*	Required**	Pass/Fail	Element (For Ref)	Position*	Required**	Pass/Fail
06	0184	785	785	P	0186	586	586	P

12/1/98

* Actual counts from computer printout. Rewriting counts on this data sheet is optional.

** Required range for instrument serial number from TDS 6 of AE-26002/1 ±5 (10) counts. Rewriting range on this data sheet is optional.

*** GSE Modes do not require verification or testing for PFM & FM modules

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 SIN: 105

Tom Nguyen 11/24/98

Test Systems Engineer Date

7A 268

Customer Representative (Flight Hardware Only) 12/2/98 Date

NOV 30 '98

Quality Control Date

TEST DATA SHEET 47

Digital-A/GSE Mode-1 Radiometer Data Section [V] (Paragraph 3.2.4.3.7.2)

BP	A1-1 Reflector			A1-2 Reflector		
	Channel-3*	Required**	Pass/Fail	Channel-9*	Required**	Pass/Fail
01			P			P
02						
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30			P			P

* Actual counts from computer printout. Rewriting counts on this data sheet is optional.

** Required = 16,500 ± 4000 counts.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

DCMC 12/2/98

Customer Representative (Flight Hardware Only) Date

Test Systems Engineer Date

QA 268

Quality Control Date

NOV 30 '98

TEST DATA SHEET 48 (Sheet 1 of 2)
Digital-A/GSE Mode-1 Temperature Sensors Section [VI] (Paragraph 3.2.4.3.7.2)

Thermistor Sensors		Recorded Value* (deg. C)	Required Value (deg. C)	Pass/ Fail
Element	Description			
1090	A1-1 Warm Load 1		25 ± 15	P
1092	A1-1 Warm Load 2		25 ± 15	
1094	A1-1 Warm Load 3		25 ± 15	
1096	A1-1 Warm Load 4		25 ± 15	
1098	A1-1 Warm Load Center		25 ± 15	
1100	A1-2 Warm Load 1		25 ± 15	
1102	A1-2 Warm Load 2		25 ± 15	
1104	A1-2 Warm Load 3		25 ± 15	
1106	A1-2 Warm Load 4		25 ± 15	
1108	A1-2 Warm Load Center		25 ± 15	
1110	Local Oscillator Channel 7		25 ± 15	
1112	Local Oscillator Channel 8		25 ± 15	
1114	Local Oscillator Channel 15		25 ± 15	
1116	PLL LO #2 Channels 9-14		25 ± 15	
1118	PLL LO #1 Channels 9-14		25 ± 15	
~~1120~~	~~PLLO (Reference Oscillator)**~~		~~25 ± 15~~	
1122	Mixer I.F. Amp. Channel 3		25 ± 15	
1124	Mixer I.F. Amp. Channel 4		25 ± 15	
1126	Mixer I.F. Amp. Channel 5		25 ± 15	
1128	Mixer I.F. Amp. Channel 6		25 ± 15	
1130	Mixer I.F. Amp. Channel 7		25 ± 15	
1132	Mixer I.F. Amp. Channel 8		25 ± 15	
1134	Mixer I.F. Amp. Channels 9-14		25 ± 15	P
1136	Mixer I.F. Amp. Channel 15		25 ± 15	P

Tom Lee 11/24/98 NOT USED

* Value is from the STE printout sheets. Copying data to this sheet is optional.
** Not used on S/N 105 and above.

(Continued on Sheet 2)

TEST DATA SHEET 48 (Sheet 2 of 2)
Digital-A/GSE Mode-1 Temperature Sensors Section [VI] (Paragraph 3.2.4.3.7.2)

Thermistor Sensors		Recorded Value* (deg. C)	Required Value (deg. C)	Pass/ Fail
Element	Description			
1138	I.F. Amp. Channel 11-14		25 ± 15	P
1140	I.F. Amp. Channel 9		25 ± 15	
1142	I.F. Amp. Channel 10		25 ± 15	
1144	I.F. Amp. Channel 11		25 ± 15	
1146	DC/DC Converter		25 ± 15	
1148	I.F. Amp. Channel 13		25 ± 15	
1150	I.F. Amp. Channel 14		25 ± 15	
1152	I.F. Amp. Channel 12		25 ± 15	
1154	RF Shelf A1-1		25 ± 15	
1156	RF Shelf A1-2		25 ± 15	
1158	Detector Preamp Assy.		25 ± 15	
1160	Scan Motor A1-1		25 ± 15	
1162	Scan Motor A1-2		25 ± 15	
1164	Feed Horn A1-1		25 ± 15	
1166	Feed Horn A1-2		25 ± 15	
1168	R.F. Mux A1-1		25 ± 15	
1170	R.F. Mux A1-2		25 ± 15	
1172	Local Oscillator Channel 3		25 ± 15	
1174	Local Oscillator Channel 4		25 ± 15	
1176	Local Oscillator Channel 5		25 ± 15	
1178	Local Oscillator Channel 6		25 ± 15	P
1180	Temp Sensor Ref Voltage Count	24885	**	P

* Value is from the STE printout sheets. Copying data to this sheet is optional.
** = Count of 24,552 +1765,-1308.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

[signature] 11/24/98
Test Systems Engineer Date

7A 268

[signature] DCMC 12/2/98
Customer Representative (Flight Hardware Only) Date

NOV 30 '98
Quality Control Date

TEST DATA SHEET 49

Receiver Input Signals (Paragraph 3.2.4.4.1)

CH 9 through 14 PLLO	PRT Temp (°C)		Measured * Frequency	Requirements **	Pass/ Fail
PLLO No. 1	PLO No. 1	Xtal *** Osc.			
			57.290304	57290.334 MHz ± 50 kHz	PASS
PLLO No. 2	PLO No. 2	Xtal *** Osc.			
			57.290304	57290.334 MHz ± 50 kHz	PASS

* Attach spectrum analyzer plots.
** = At 18°C
*** PRT not connected on S/N 105 and above.

Circle Test: (CPT) LPT

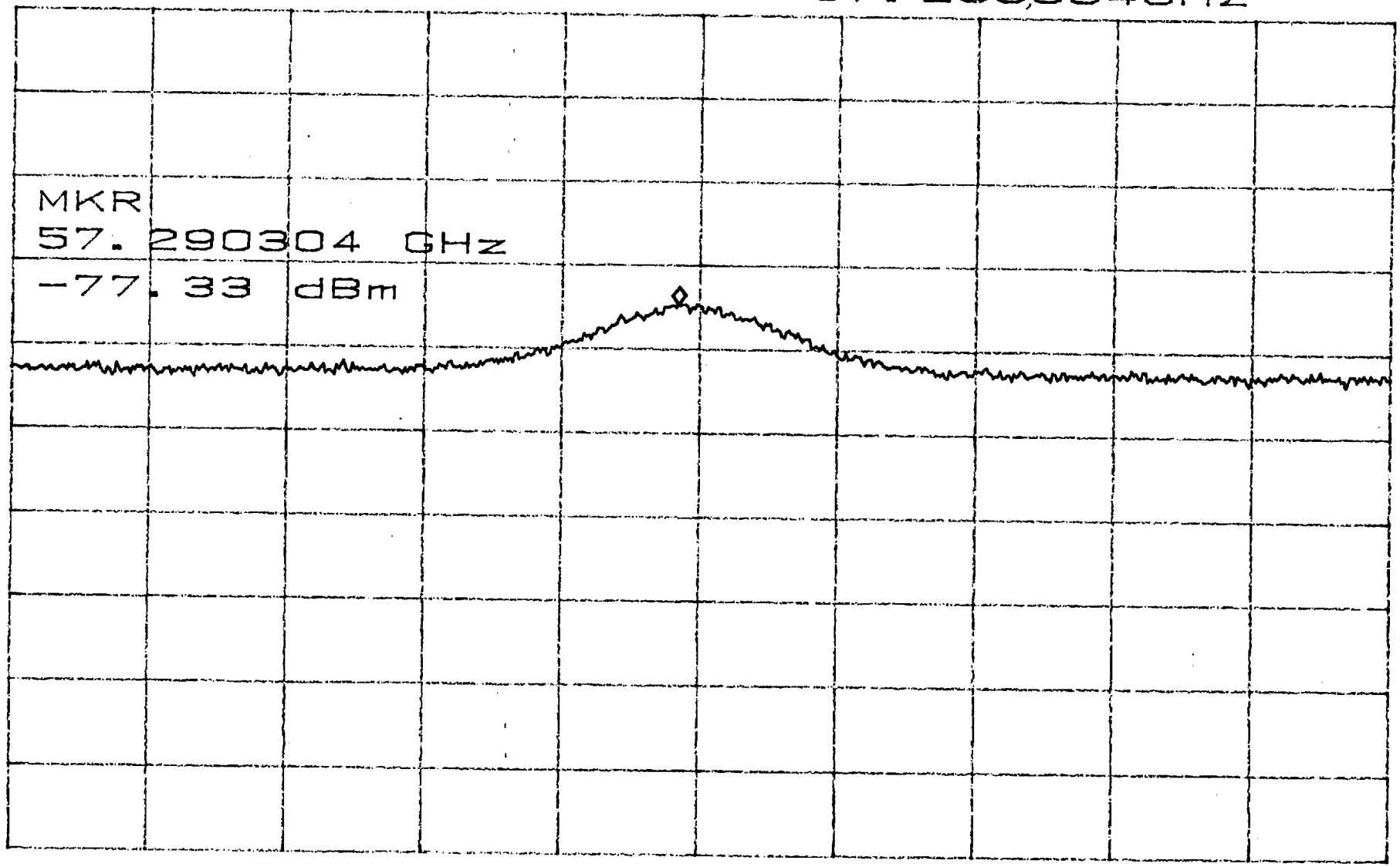
METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer 11/25/98 Date

Customer Representative (Flight Hardware Only) DCMC 12/2/98 Date

Quality Control NOV 30 '98 Date

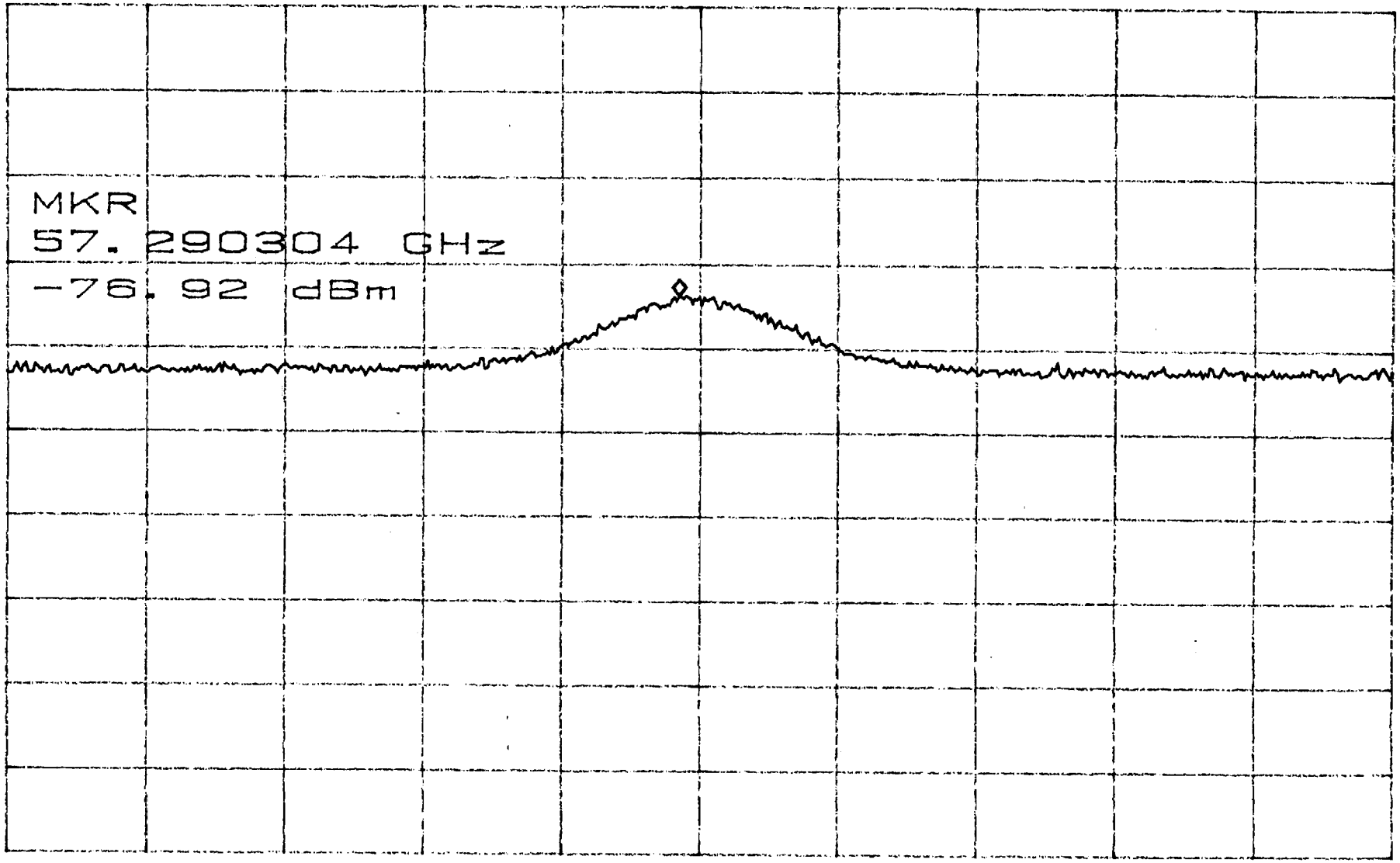
CL 30.0dB
RL -60.0dBm 5dB/
MKR -77.33dBm
57.290304GHz



CENTER 57.290334GHz
SPAN 2.000MHz
*RBW 300kHz *VBW 300Hz *SWP 1.01sec
METSAT AMSU-A1
AE261561/3 para 3.2.4.4.1
PLLO#2 SELECT
TE
11/22/96 DATE

CL 30.0dB MKR −76.92dBm

RL −60.0dBm 5dB/ 57.290304GHz



CENTER 57.290334GHz SPAN 2.000MHz

*RBW 300kHz *VBW 300Hz *SWP 1.01sec

METSAT AMSU-A1
AE260156/3 Para 3.2.4.4.1

PLOT #1 SELECT

TE

A1 FUNCTIONAL TEST RESULTS

A1.EXE 24-NOV-93 15:17:06

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN	DELTA T
3	298.94	15638.0	12928.0	0.081	0.220
4	298.94	16436.0	13531.0	0.075	0.139
5	298.94	16758.0	13926.0	0.077	0.152
6	297.48	17040.0	17039.0	1.000	3.029
7	297.48	16046.0	16049.0	1.000	1.824
8	298.94	16254.0	13423.0	0.077	0.178
9	297.48	17053.0	17052.0	1.000	2.158
10	297.48	16261.0	16260.0	1.000	2.738
11	297.48	15918.0	15923.0	1.000	3.349
12	297.48	16234.0	16231.0	1.000	4.735
13	297.48	15947.0	15941.0	1.000	5.382
14	297.48	16426.0	16422.0	1.000	9.157
15	297.48	16446.0	16447.0	1.000	1.335

[2] PRINT SCREEN [3] PRINT RAW DATA [4] PRINT HISTOGRAM

[5] PRINT DISTRIBUTION GRAPH RETURN [1]

SELECT TOUCHSCREEN BUTTON 2

A1-2 shelf NEAT DATA

A1 FUNCTIONAL TEST RESULTS

A1.EXE 24-NOV-93 15:18:10

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN	DELTA T
3	298.92	15638.0	12936.0	0.081	0.226
4	298.92	16435.0	13540.0	0.076	0.130
5	298.92	16758.0	13936.0	0.078	0.152
6	297.48	17040.0	17037.0	1.000	2.913
7	297.48	16046.0	16046.0	1.000	2.110
8	298.92	16253.0	13430.0	0.078	0.174
9	297.48	17053.0	17050.0	1.000	2.126
10	297.48	16260.0	16259.0	1.000	2.594
11	297.48	15918.0	15920.0	1.000	3.132
12	297.48	16233.0	16228.0	1.000	4.701
13	297.48	15947.0	15938.0	1.000	5.226
14	297.48	16427.0	16417.0	1.000	9.318
15	297.48	16446.0	16445.0	1.000	1.322

[2] PRINT SCREEN [3] PRINT RAW DATA [4] PRINT HISTOGRAM

[5] PRINT DISTRIBUTION GRAPH RETURN [1]

SELECT TOUCHSCREEN BUTTON 2

A1 FUNCTIONAL TEST RESULTS

A1.EXE 24-NOV-93 15:20:58

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN	DELTA T
3	298.85	15637.0	12938.0	0.081	0.272
4	298.85	16434.0	13544.0	0.076	0.130
5	298.85	16758.0	13937.0	0.078	0.144
6	297.49	17040.0	17038.0	1.000	2.515
7	297.49	16045.0	16045.0	1.000	1.847
8	298.85	16253.0	13436.0	0.078	0.190
9	297.49	17053.0	17051.0	1.000	1.827
10	297.49	16260.0	16259.0	1.000	2.790
11	297.49	15919.0	15922.0	1.000	3.236
12	297.49	16233.0	16230.0	1.000	4.634
13	297.49	15946.0	15941.0	1.000	5.787
14	297.49	16426.0	16419.0	1.000	9.563
15	297.49	16447.0	16446.0	1.000	1.138

[2] PRINT SCREEN [3] PRINT RAW DATA [4] PRINT HISTOGRAM

[5] PRINT DISTRIBUTION GRAPH RETURN [1]

SELECT TOUCHSCREEN BUTTON 2

5

A1 FUNCTIONAL TEST RESULTS

A1.EXE 24-NOV-93 15:22:34

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN	DELTA T
3	298.80	15634.0	12959.0	0.082	0.231
4	298.80	16434.0	13574.0	0.077	0.139
5	298.80	16759.0	13967.0	0.078	0.158
6	297.50	17040.0	17037.0	1.000	3.149
7	297.50	16046.0	16047.0	1.000	2.242
8	298.80	16254.0	13457.0	0.078	0.168
9	297.50	17054.0	17051.0	1.000	2.114
10	297.50	16261.0	16260.0	1.000	2.800
11	297.50	15919.0	15921.0	1.000	3.308
12	297.50	16233.0	16230.0	1.000	4.422
13	297.50	15946.0	15940.0	1.000	6.005
14	297.50	16426.0	16419.0	1.000	9.341
15	297.50	16447.0	16446.0	1.000	1.065

[2] PRINT SCREEN [3] PRINT RAW DATA [4] PRINT HISTOGRAM

[5] PRINT DISTRIBUTION GRAPH RETURN [1]

SELECT TOUCHSCREEN BUTTON 2

A1 FUNCTIONAL TEST RESULTS

A1.EXE 24-NOV-93 15:23:30

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN	DELTA T
3	298.77	15634.0	12969.0	0.082	0.219
4	298.77	16433.0	13589.0	0.077	0.121
5	298.77	16758.0	13981.0	0.079	0.156
6	297.50	17040.0	17038.0	1.000	3.150
7	297.50	16045.0	16046.0	1.000	1.892
8	298.77	16252.0	13470.0	0.079	0.154
9	297.50	17054.0	17050.0	1.000	1.964
10	297.50	16260.0	16259.0	1.000	2.537
11	297.50	15919.0	15921.0	1.000	3.028
12	297.50	16233.0	16231.0	1.000	4.433
13	297.50	15947.0	15939.0	1.000	6.047
14	297.50	16427.0	16419.0	1.000	9.539
15	297.50	16447.0	16446.0	1.000	1.134

[2] PRINT SCREEN [3] PRINT RAW DATA [4] PRINT HISTOGRAM

[5] PRINT DISTRIBUTION GRAPH RETURN [1]

SELECT TOUCHSCREEN BUTTON 2

A1 FUNCTIONAL TEST RESULTS

A1.EXE 24-NOV-93 15:27:46

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN	DELTA T
3	298.68	15640.0	15644.0	1.000	2.842
4	298.68	16437.0	16445.0	1.000	1.885
5	298.68	16763.0	16750.0	1.000	2.078
6	297.51	17039.0	14147.0	0.075	0.223
7	297.51	16045.0	13252.0	0.078	0.152
8	298.68	16257.0	16236.0	1.000	2.204
9	297.51	17053.0	14068.0	0.073	0.143
10	297.51	16261.0	13267.0	0.073	0.215
11	297.51	15920.0	13097.0	0.077	0.213
12	297.51	16233.0	13322.0	0.075	0.377
13	297.51	15947.0	13158.0	0.078	0.426
14	297.51	16428.0	13566.0	0.076	0.656
15	297.51	16447.0	14670.0	0.122	0.118

[2] PRINT SCREEN [3] PRINT RAW DATA [4] PRINT HISTOGRAM

[5] PRINT DISTRIBUTION GRAPH RETURN [1]

SELECT TOUCHSCREEN BUTTON 2

PLOT #1

A1-1 shelf NEAT DATA

A1 FUNCTIONAL TEST RESULTS

A1.EXE 24-NOV-93 15:28:50

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN	DELTA T
3	298.67	15639.0	15647.0	1.000	3.029
4	298.67	16437.0	16444.0	1.000	1.885
5	298.67	16763.0	16752.0	1.000	2.076
6	297.50	17039.0	14147.0	0.075	0.222
7	297.50	16045.0	13252.0	0.078	0.147
8	298.67	16257.0	16236.0	1.000	1.874
9	297.50	17054.0	14069.0	0.073	0.149
10	297.50	16261.0	13267.0	0.073	0.205
11	297.50	15923.0	13100.0	0.077	0.212
12	297.50	16237.0	13323.0	0.075	0.314
13	297.50	15949.0	13159.0	0.078	0.479
14	297.50	16430.0	13565.0	0.076	0.750
15	297.50	16447.0	14667.0	0.122	0.137

[2] PRINT SCREEN [3] PRINT RAW DATA [4] PRINT HISTOGRAM

[5] PRINT DISTRIBUTION GRAPH RETURN [1]

SELECT TOUCHSCREEN BUTTON 2

PLO #1

A1 FUNCTIONAL TEST RESULTS

A1.EXE 24-NOV-93 15:31:06

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN	DELTA T
3	298.66	15642.0	15649.0	1.000	2.609
4	298.66	16438.0	16446.0	1.000	1.722
5	298.66	16763.0	16753.0	1.000	2.104
6	297.47	17040.0	14166.0	0.076	0.214
7	297.47	16048.0	13269.0	0.078	0.144
8	298.66	16258.0	16239.0	1.000	2.401
9	297.47	17058.0	14092.0	0.073	0.140
10	297.47	16264.0	13290.0	0.073	0.210
11	297.47	15929.0	13123.0	0.078	0.234
12	297.47	16243.0	13348.0	0.075	0.319
13	297.47	15954.0	13182.0	0.078	0.450
14	297.47	16435.0	13590.0	0.076	0.778
15	297.47	16448.0	14682.0	0.123	0.171

[2] PRINT SCREEN [3] PRINT RAW DATA [4] PRINT HISTOGRAM

[5] PRINT DISTRIBUTION GRAPH RETURN [1]

SELECT TOUCHSCREEN BUTTON 2

PLO #1

A1 FUNCTIONAL TEST RESULTS

A1.EXE 24-NOV-93 15:32:10

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN	DELTA T
3	298.65	15641.0	15648.0	1.000	2.819
4	298.65	16438.0	16447.0	1.000	1.838
5	298.65	16764.0	16754.0	1.000	2.191
6	297.45	17040.0	14157.0	0.075	0.220
7	297.45	16048.0	13261.0	0.078	0.151
8	298.65	16258.0	16239.0	1.000	2.223
9	297.45	17059.0	14081.0	0.073	0.159
10	297.45	16266.0	13279.0	0.073	0.201
11	297.45	15930.0	13114.0	0.077	0.226
12	297.45	16245.0	13339.0	0.075	0.308
13	297.45	15958.0	13173.0	0.078	0.468
14	297.45	16438.0	13579.0	0.076	0.761
15	297.45	16449.0	14679.0	0.123	0.138

[2] PRINT SCREEN [3] PRINT RAW DATA [4] PRINT HISTOGRAM

[5] PRINT DISTRIBUTION GRAPH RETURN [1]

SELECT TOUCHSCREEN BUTTON 2

Plot #1

A1 FUNCTIONAL TEST RESULTS

A1.EXE 24-NOV-93 15:34:42

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN	DELTA T
3	298.64	15641.0	15650.0	1.000	2.900
4	298.64	16439.0	16449.0	1.000	1.987
5	298.64	16765.0	16756.0	1.000	1.912
6	297.40	17042.0	14171.0	0.076	0.225
7	297.40	16049.0	13274.0	0.078	0.164
8	298.64	16262.0	16244.0	1.000	2.181
9	297.40	17061.0	14096.0	0.073	0.140
10	297.40	16268.0	13294.0	0.073	0.209
11	297.40	15936.0	13131.0	0.078	0.208
12	297.40	16253.0	13357.0	0.075	0.361
13	297.40	15964.0	13191.0	0.078	0.462
14	297.40	16444.0	13596.0	0.076	0.735
15	297.40	16449.0	14687.0	0.123	0.168

[2] PRINT SCREEN [3] PRINT RAW DATA [4] PRINT HISTOGRAM

[5] PRINT DISTRIBUTION GRAPH RETURN [1]

SELECT TOUCHSCREEN BUTTON 2

PLOT #1

A1 FUNCTIONAL TEST RESULTS

A1.EXE 24-NOV-93 15:45:38

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN	DELTA T
3	298.61	15645.0	15654.0	1.000	2.586
4	298.61	16442.0	16453.0	1.000	2.183
5	298.61	16768.0	16759.0	1.000	1.987
6	297.12	17044.0	14197.0	0.076	0.225
7	297.12	16049.0	13296.0	0.079	0.137
8	298.61	16264.0	16246.0	1.000	1.865
9	297.12	17066.0	14122.0	0.074	0.155
10	297.12	16282.0	13328.0	0.074	0.203
11	297.12	15963.0	13174.0	0.078	0.221
12	297.12	16282.0	13404.0	0.075	0.328
13	297.12	15995.0	13237.0	0.079	0.435
14	297.12	16475.0	13644.0	0.077	0.717
15	297.12	16451.0	14706.0	0.124	0.163

[2] PRINT SCREEN [3] PRINT RAW DATA [4] PRINT HISTOGRAM

[5] PRINT DISTRIBUTION GRAPH RETURN [1]

SELECT TOUCHSCREEN BUTTON 2

(PLO #7)

A1-1 shelf NEAT DATA

A1 FUNCTIONAL TEST RESULTS

A1.EXE 24-NOV-93 15:40:34

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN	DELTA T
3	298.62	15644.0	15654.0	1.000	2.791
4	298.62	16442.0	16452.0	1.000	1.843
5	298.62	16767.0	16759.0	1.000	2.098
6	297.26	17044.0	14196.0	0.076	0.216
7	297.26	16051.0	13297.0	0.079	0.152
8	298.62	16265.0	16248.0	1.000	1.989
9	297.26	17106.0	14151.0	0.074	0.208
10	297.26	16310.0	13348.0	0.073	0.233
11	297.26	15976.0	13181.0	0.078	0.236
12	297.26	16294.0	13410.0	0.075	0.340
13	297.26	16005.0	13244.0	0.079	0.470
14	297.26	16484.0	13651.0	0.077	0.749
15	297.26	16451.0	14705.0	0.124	0.167

[2] PRINT SCREEN [3] PRINT RAW DATA [4] PRINT HISTOGRAM

[5] PRINT DISTRIBUTION GRAPH RETURN [1]

SELECT TOUCHSCREEN BUTTON 2

PLO #2

A1 FUNCTIONAL TEST RESULTS

A1.EXE 24-NOV-93 15:42:10

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN	DELTA T
3	298.62	15644.0	15653.0	1.000	2.873
4	298.62	16443.0	16453.0	1.000	1.865
5	298.62	16767.0	16759.0	1.000	2.132
6	297.21	17044.0	14199.0	0.076	0.211
7	297.21	16049.0	13299.0	0.079	0.153
8	298.62	16265.0	16248.0	1.000	2.110
9	297.21	17087.0	14139.0	0.074	0.181
10	297.21	16297.0	13341.0	0.073	0.230
11	297.21	15968.0	13178.0	0.078	0.240
12	297.21	16288.0	13407.0	0.075	0.327
13	297.21	15999.0	13240.0	0.079	0.486
14	297.21	16479.0	13648.0	0.077	0.779
15	297.21	16451.0	14702.0	0.124	0.163

[2] PRINT SCREEN [3] PRINT RAW DATA [4] PRINT HISTOGRAM

[5] PRINT DISTRIBUTION GRAPH RETURN [1]

SELECT TOUCHSCREEN BUTTON 2

PLOT #2

A1 FUNCTIONAL TEST RESULTS

A1.EXE 24-NOV-93 15:43:14

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN	DELTA T
3	298.62	15644.0	15654.0	1.000	2.925
4	298.62	16442.0	16452.0	1.000	1.856
5	298.62	16768.0	16759.0	1.000	1.925
6	297.18	17043.0	14200.0	0.076	0.207
7	297.18	16049.0	13299.0	0.079	0.157
8	298.62	16264.0	16246.0	1.000	2.396
9	297.18	17078.0	14135.0	0.074	0.192
10	297.18	16291.0	13338.0	0.074	0.213
11	297.18	15966.0	13177.0	0.078	0.239
12	297.18	16285.0	13407.0	0.075	0.358
13	297.18	15995.0	13240.0	0.079	0.498
14	297.18	16478.0	13649.0	0.077	0.789
15	297.18	16451.0	14707.0	0.125	0.145

[2] PRINT SCREEN [3] PRINT RAW DATA [4] PRINT HISTOGRAM

[5] PRINT DISTRIBUTION GRAPH RETURN [1]

SELECT TOUCHSCREEN BUTTON 2

PLO #2

A1 FUNCTIONAL TEST RESULTS

A1.EXE 24-NOV-93 15:44:26

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN	DELTA T
3	298.61	15645.0	15653.0	1.000	3.133
4	298.61	16443.0	16453.0	1.000	1.754
5	298.61	16768.0	16760.0	1.000	2.023
6	297.15	17043.0	14190.0	0.076	0.238
7	297.15	16049.0	13288.0	0.079	0.141
8	298.61	16264.0	16246.0	1.000	2.303
9	297.15	17071.0	14117.0	0.074	0.178
10	297.15	16286.0	13321.0	0.073	0.226
11	297.15	15965.0	13165.0	0.078	0.224
12	297.15	16283.0	13395.0	0.075	0.322
13	297.15	15995.0	13225.0	0.078	0.432
14	297.15	16478.0	13635.0	0.076	0.793
15	297.15	16451.0	14694.0	0.124	0.150

[2] PRINT SCREEN [3] PRINT RAW DATA [4] PRINT HISTOGRAM

[5] PRINT DISTRIBUTION GRAPH RETURN [1]

SELECT TOUCHSCREEN BUTTON 2

PLOT #2

TEST DATA SHEET 50 (Sheet 1 of 2)
Radiometer "Relative" NEΔT Verification* (Paragraph 3.2.4.4.2.2)

Channels 3, 4, 5, 6, 7, 8, and 15. PLLO No. 1 (Channels 9 through 14)

Channel Number>	3	4	5	6
NEΔT (Average of 5 data)	.234	.132	.152	.221
Pass/Fail	P	P	P	P
NEΔT (Specified) K **	0.40	0.25	0.25	0.25
Channel Number>	7	8	9	10
NEΔT (Average of 5 data)	.152	.173	.146	.208
Pass/Fail	P	P	P	P
NEΔT (Specified) K **	0.25	0.25	0.25	0.40
Channel Number>	11	12	13	14
NEΔT (Average of 5 data)	.219	.336	.457	.736
Pass/Fail	P	P	P	P
NEΔT (Specified) K **	0.40	0.60	0.80	1.20
Channel Number>	15	N/A	N/A	N/A
NEΔT (Average of 5 data)	.146			
Pass/Fail	P			
NEΔT (Specified) K **	0.50			

* Baseline data for acceptance tests. Use first CPT or first LPT data along with specification value for pass/fail criteria

** For reference only

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer — Date 11/24/98

Customer Representative (Flight Hardware Only) — Date 12/2/98

Quality Control — Date NOV 30 '98

TEST DATA SHEET 50 (Sheet 2 of 2)

Radiometer "Relative" NEΔT Verification* (Paragraph 3.2.4.4.2.2)

PLLO No. 2 (Channels 9 through 14)

Channel Number>	9	10	11	12
NEΔT (Average of 5 data)	.183	.221	.232	.335
Pass/Fail	P	P	P	P
NEΔT (Specified) K **	0.25	0.40	0.40	0.60
Channel Number>	13	14		
NEΔT (Average of 5 data)	.464	.765		
Pass/Fail	P	P		
NEΔT (Specified) K **	0.80	1.20		

* Baseline data for acceptance tests. Use first CPT or first LPT data along with specification value for pass/fail criteria

** For reference only

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer 11/24/98 Date

Customer Representative (Flight Hardware Only) 12/2/98 Date

Quality Control 74 268 NOV 30 '98 Date

TEST DATA SHEET 51 (Sheet 1 of 2)
Transient Susceptibility Test (Paragraph 3.2.4.5)

Test Setup Verified: _____
Signature

3.2.4.5.3.2: +28V Main Bus Load-Induced Transient Test

Subpara	Step	Load Induced Transient	Functional Performance Results/Deviations	Comments/ Observations
3.2.4.5.3.2.1	4	Low frequency in accordance with Figure 22	NO DISCERNABLE DEGRADATION	PASS
3.2.4.5.3.2.2	4	High frequency in accordance with Table V	NO DISCERNABLE DEGRADATION	PASS

NOTE: Attach all backup data generated during the test (photos, printouts, plots, test logs, additional comments or observations, etc.) to this data sheet.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

_____ 11/25/98
Test Systems Engineer Date

_____ 12/2/98
Customer Representative (Flight Hardware Only) Date

7A 268

_____ MAY 30 '98
Quality Control Date

TEST DATA SHEET 51 (Sheet 2 of 2)
Transient Susceptibility Test (Paragraph 3.2.4.5)

Test Setup Verified: _____
Signature

3.2.4.5.3.3: +28V Pulse Load Bus Load-Induced Transient Test

Subpara	Step	Load Induced Transient	Functional Performance Results/Deviations	Comments/ Observations
3.2.4.5.3.3.1	4	Low frequency in accordance with Figure 23	NO DISCERNABLE DEGRADATION	PASS
3.2.4.5.3.3.2	4	High frequency in accordance with Table V	NO DISCERNABLE DEGRADATION	PASS

3.2.4.5.3.4: +28V Analog Telemetry Bus Load-Induced Transient Test

Subpara	Step	Load Induced Transient	Functional Performance Results/Deviations	Comments/ Observations
3.2.4.5.3.4.1	4	Low frequency in accordance with Figure 22	NO DISCERNABLE DEGRADATION	Pass
3.2.4.5.3.4.2	4	High frequency in accordance with Table V	NO DISCERNABLE DEGRADATION	Pass

Circle Test: (CPT) LPT

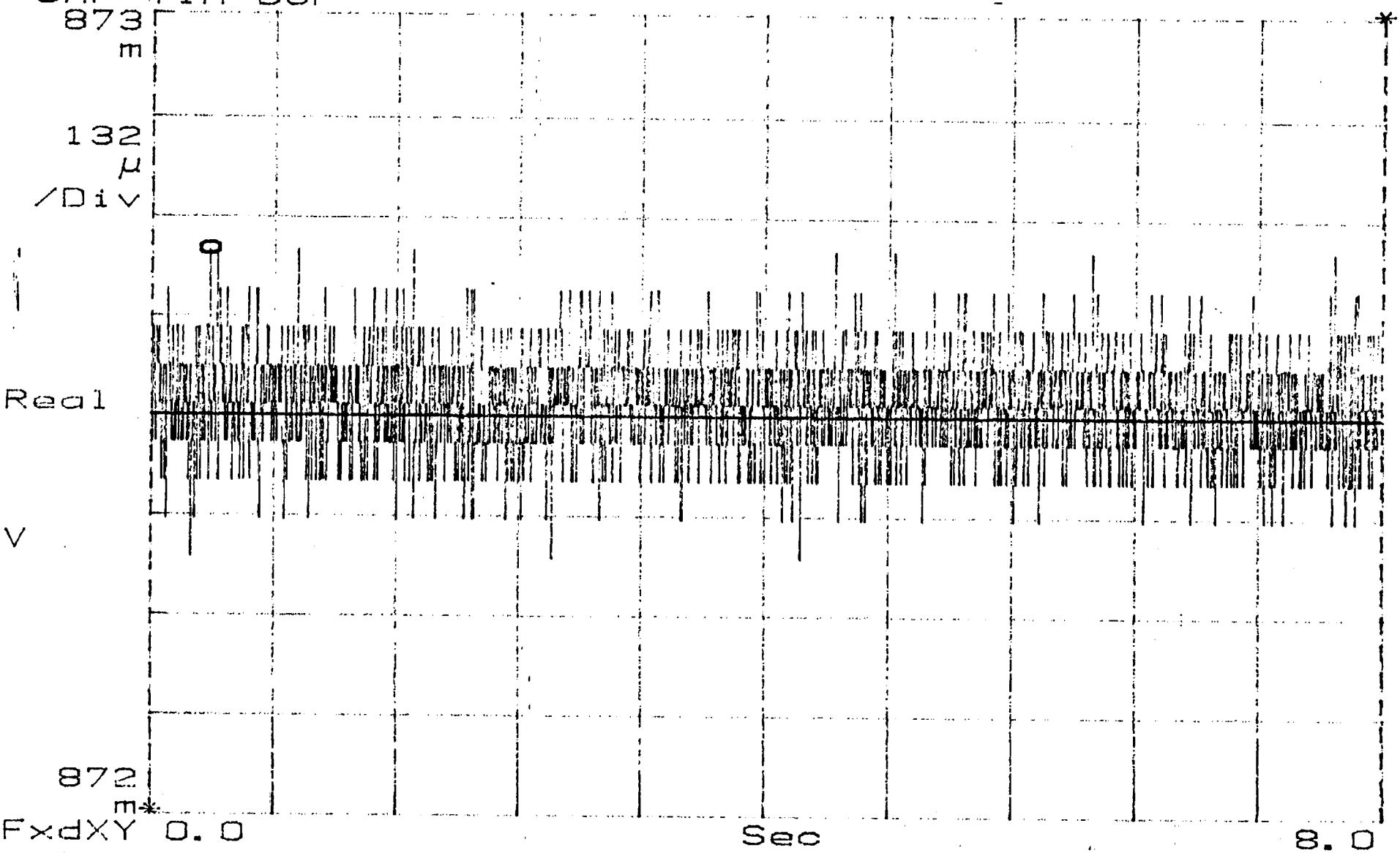
METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 43 C613 S/N: 105

_____ 11/24/98
Test Systems Engineer Date

_____ 12/2/98
Customer Representative Date
(Flight Hardware Only)

_____ NOV 30 '98
Quality Control Date

X=382.81mSec
Y=872.833mV
Ya=873.054mV

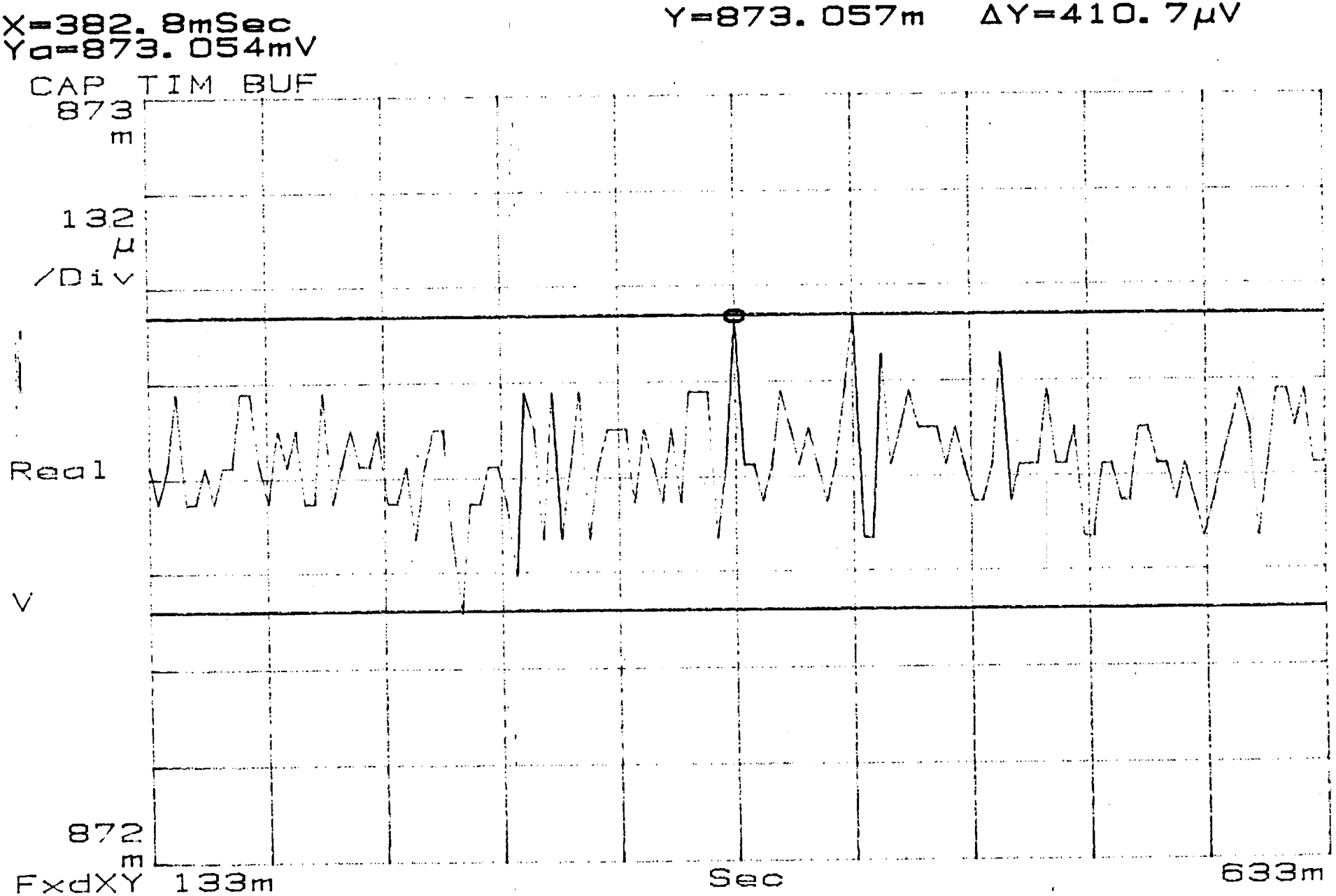


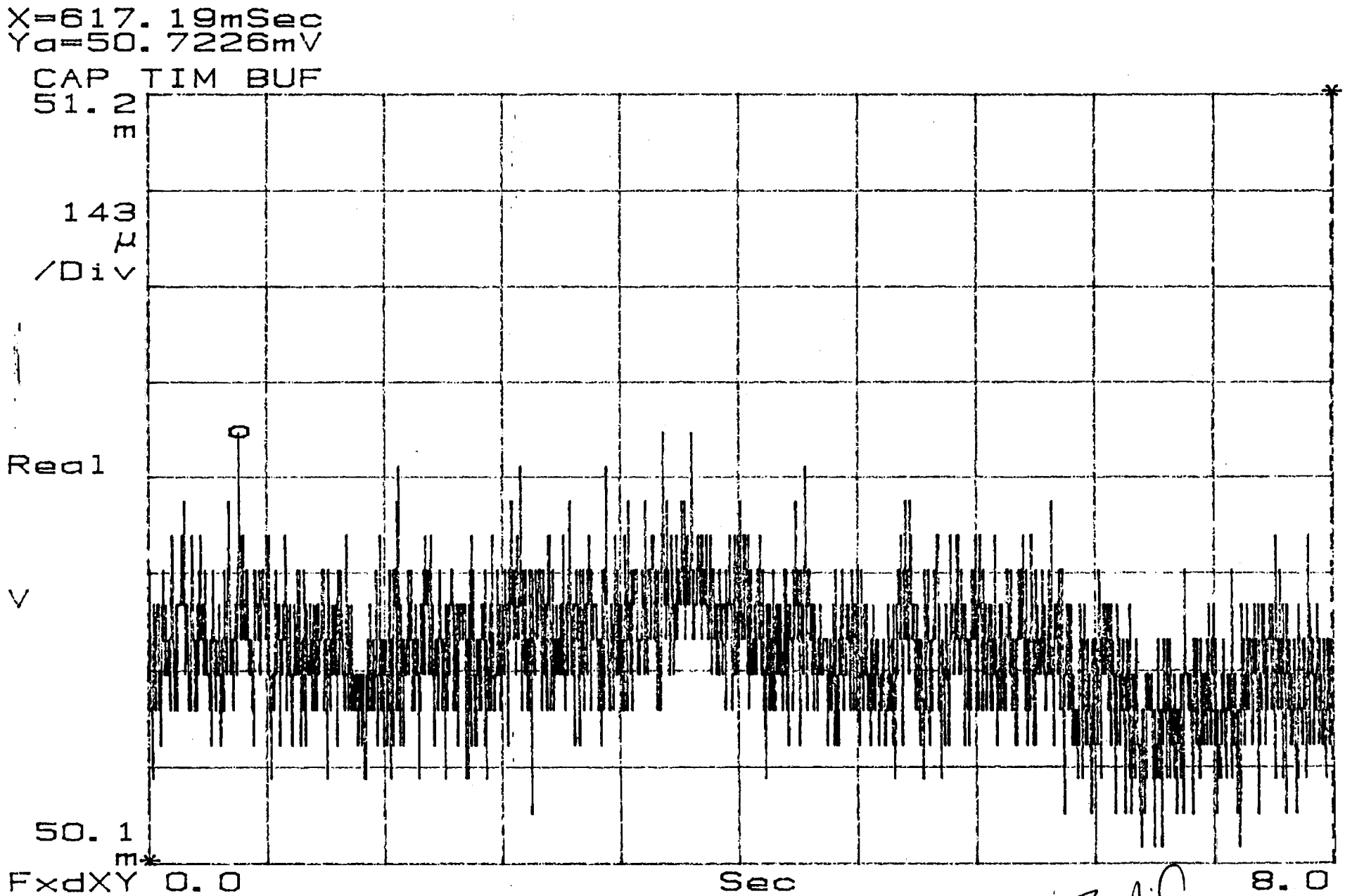
METSAT AMSU-A2
AE26156/3 para 3.2.4.6

MLB RIPPLE CURRENT

TE

DATE

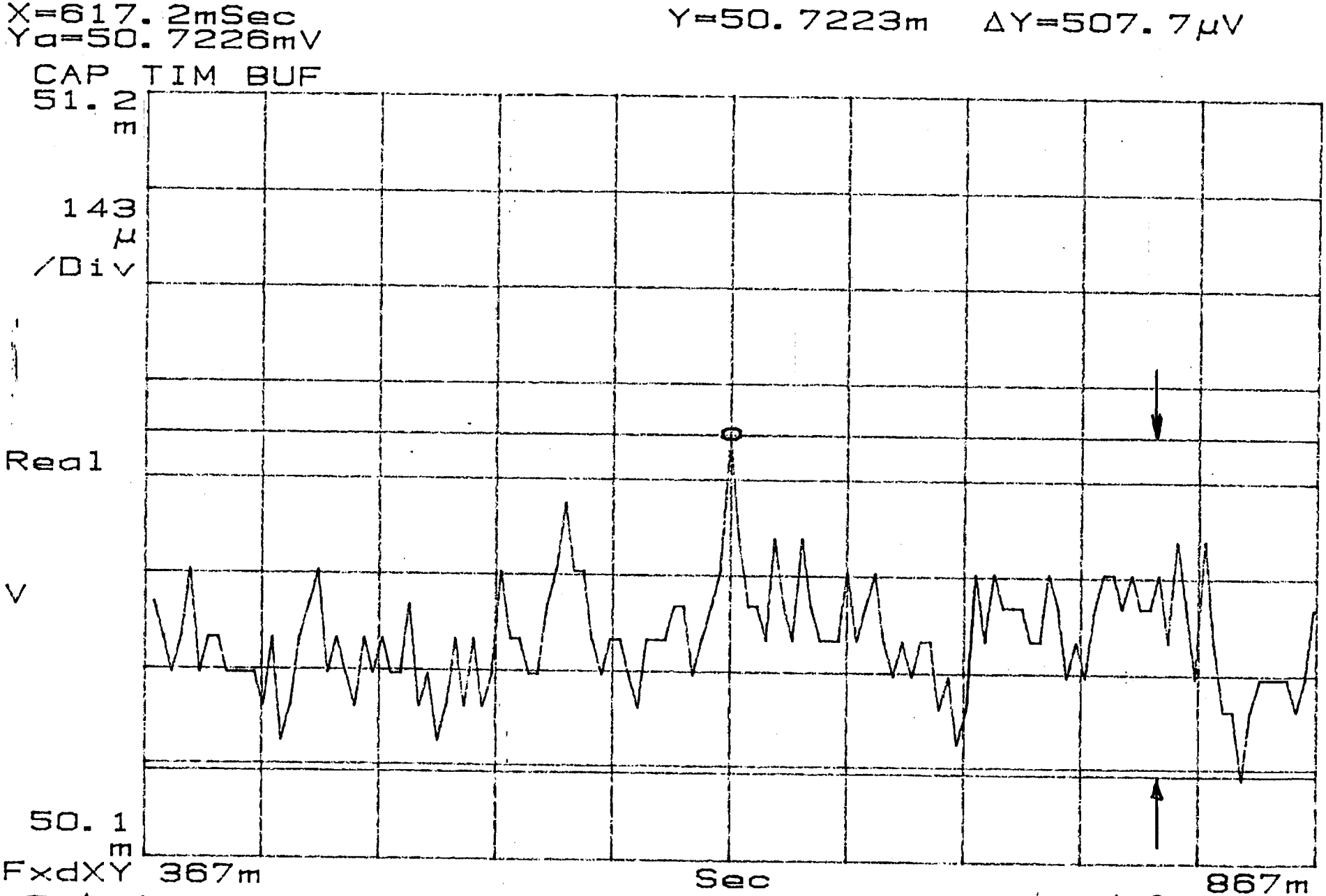

X=382.8mSec
Ya=873.054mV
Y=873.057m ΔY=410.7μV
CAP TIM BUF
873
m
132
μ
/Div
Real
V
872
m
FxdXY 133m
Sec
633m



METSAT AMSU-A1
AE 26156/3 para 3.2.4.6.3.3.1
PLB RIPPLE CURRENT

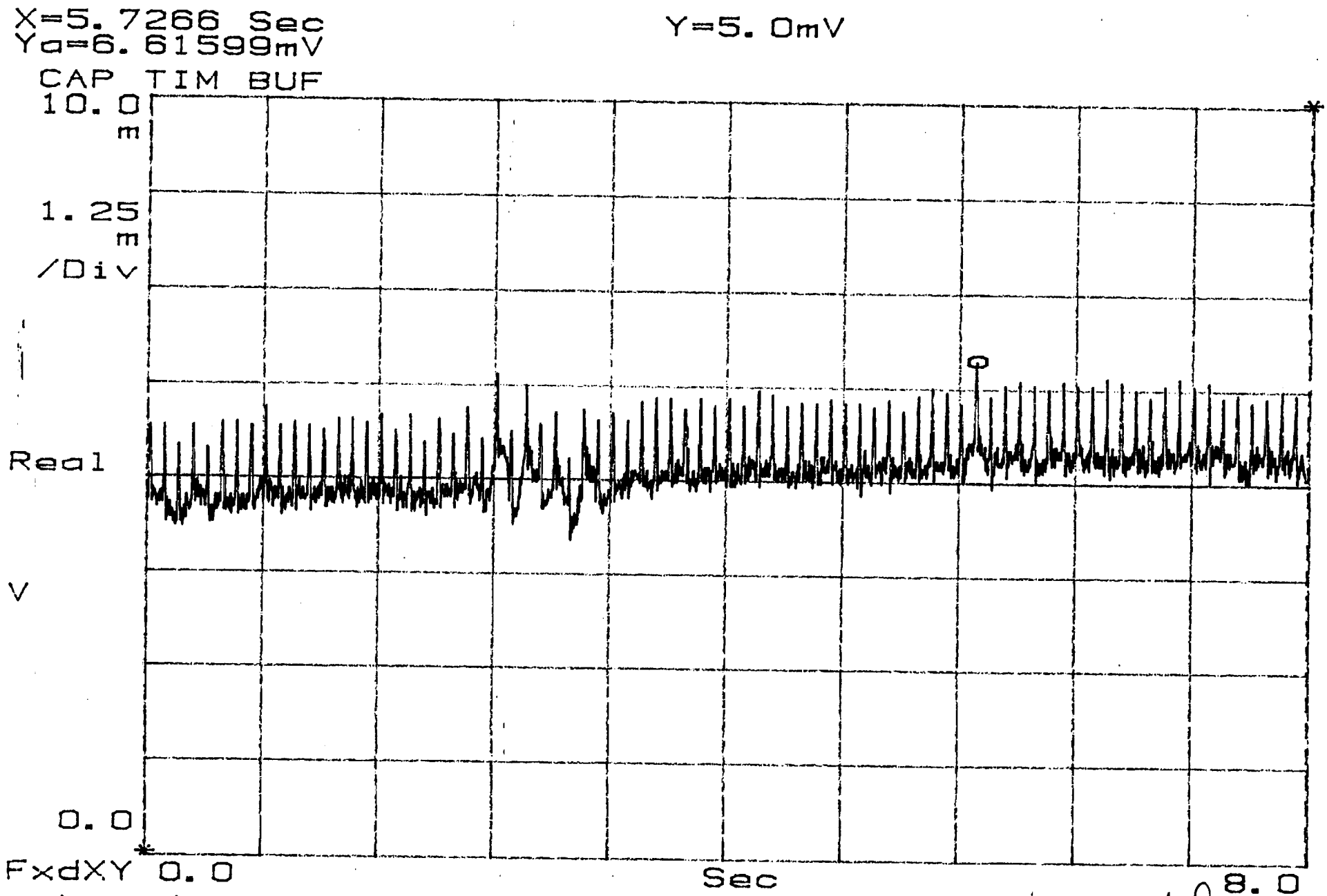
TE

11/25/98 DATE



METSAT AMSU-A1
AE26156/3 para 3.2.4.6.3.3.1
PLB RIPPLE CURRENT

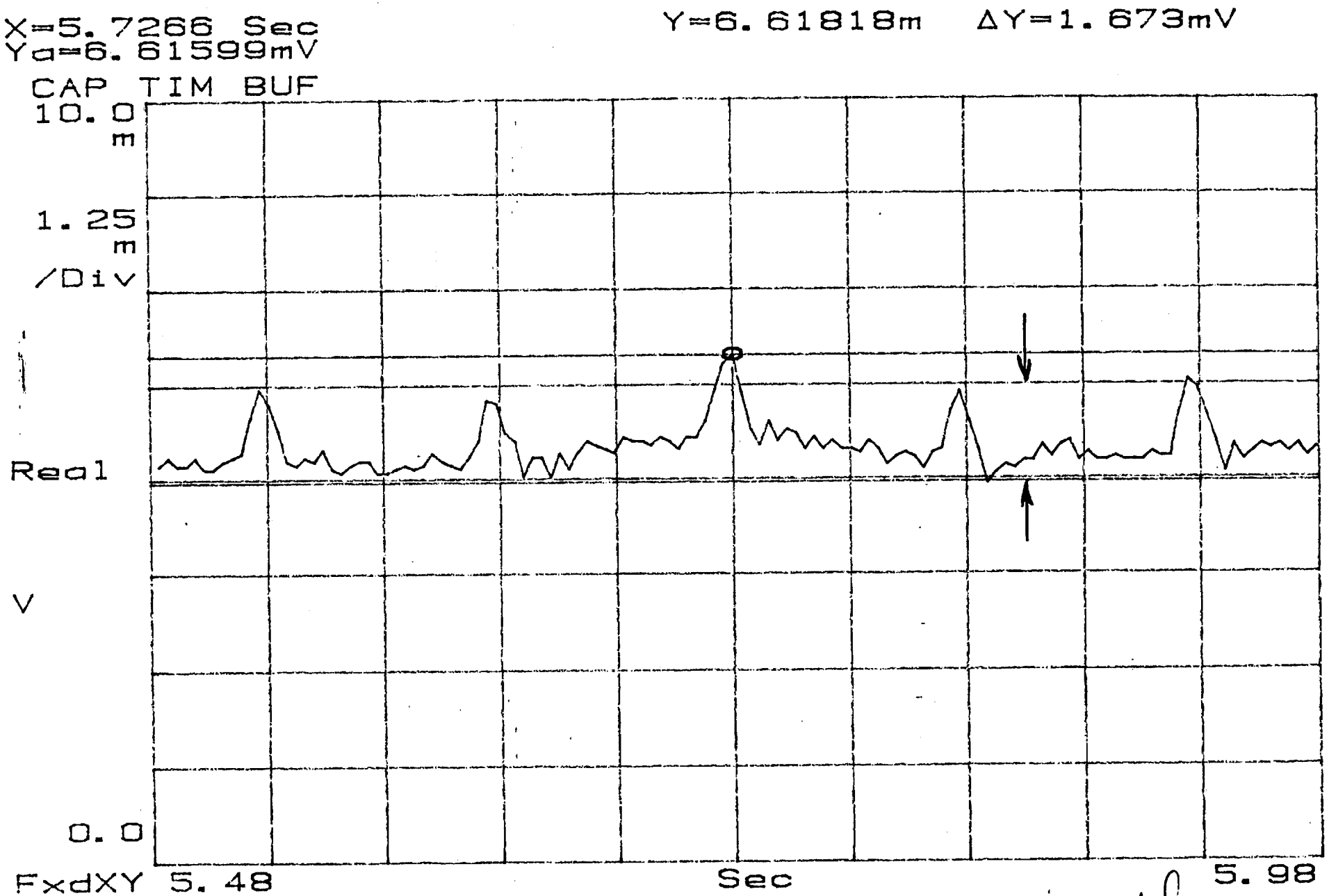
TE
11/25/98 DATE



METSAT AMSU-A1
AE26156/3 para 3.2.4.6.3.5.1
[illegible] TDS 52

+10V INTERFACE RIPPLE CURRENT

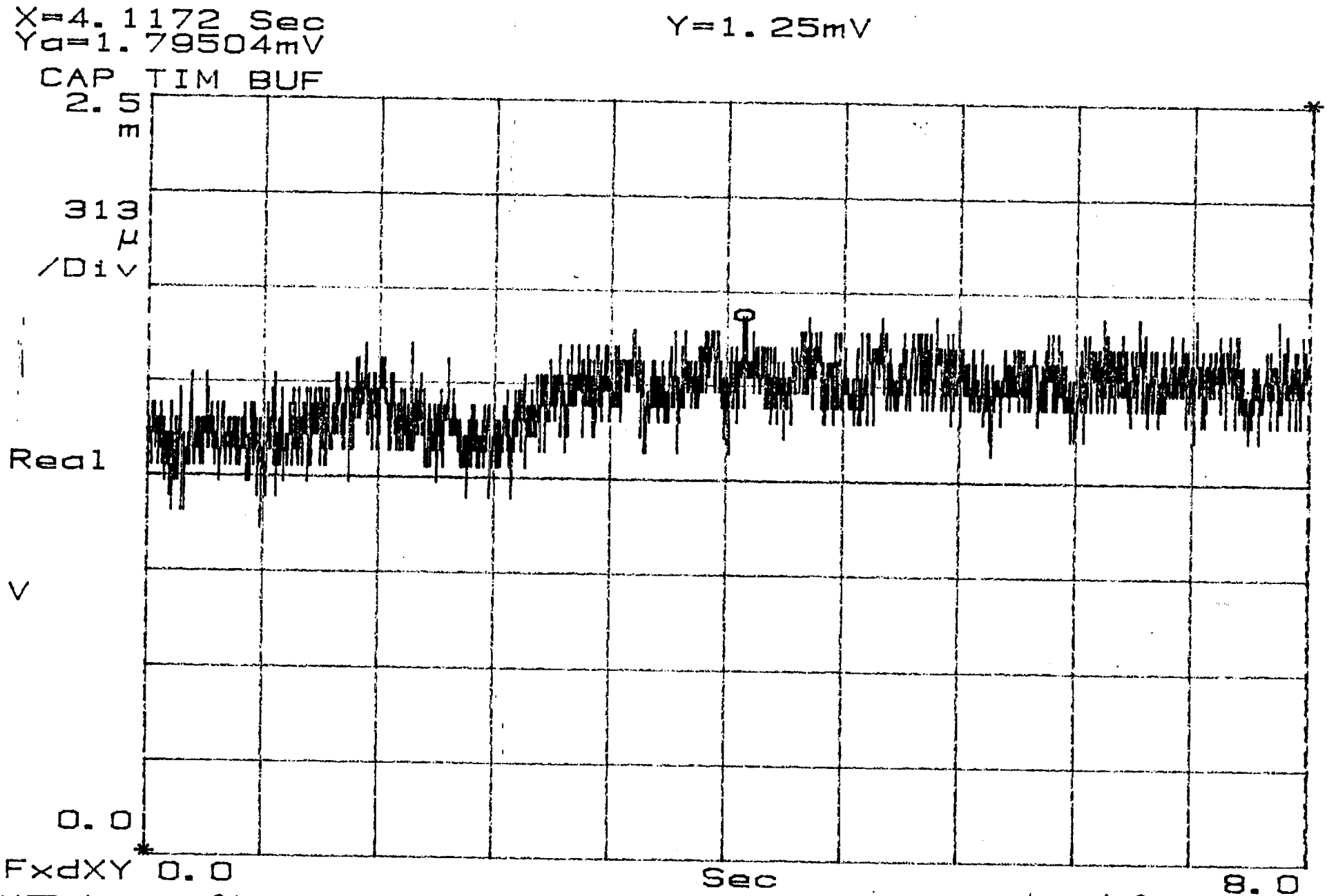
TE
11/25/98
DATE



METSAT AMSU-A1
AE 26156/3 para 3.2.4.6.3.5.1
+10V INTERFACE BUS FEEDBACK TEST

+10V INTERFACE BUS
RIPPLE CURRENT

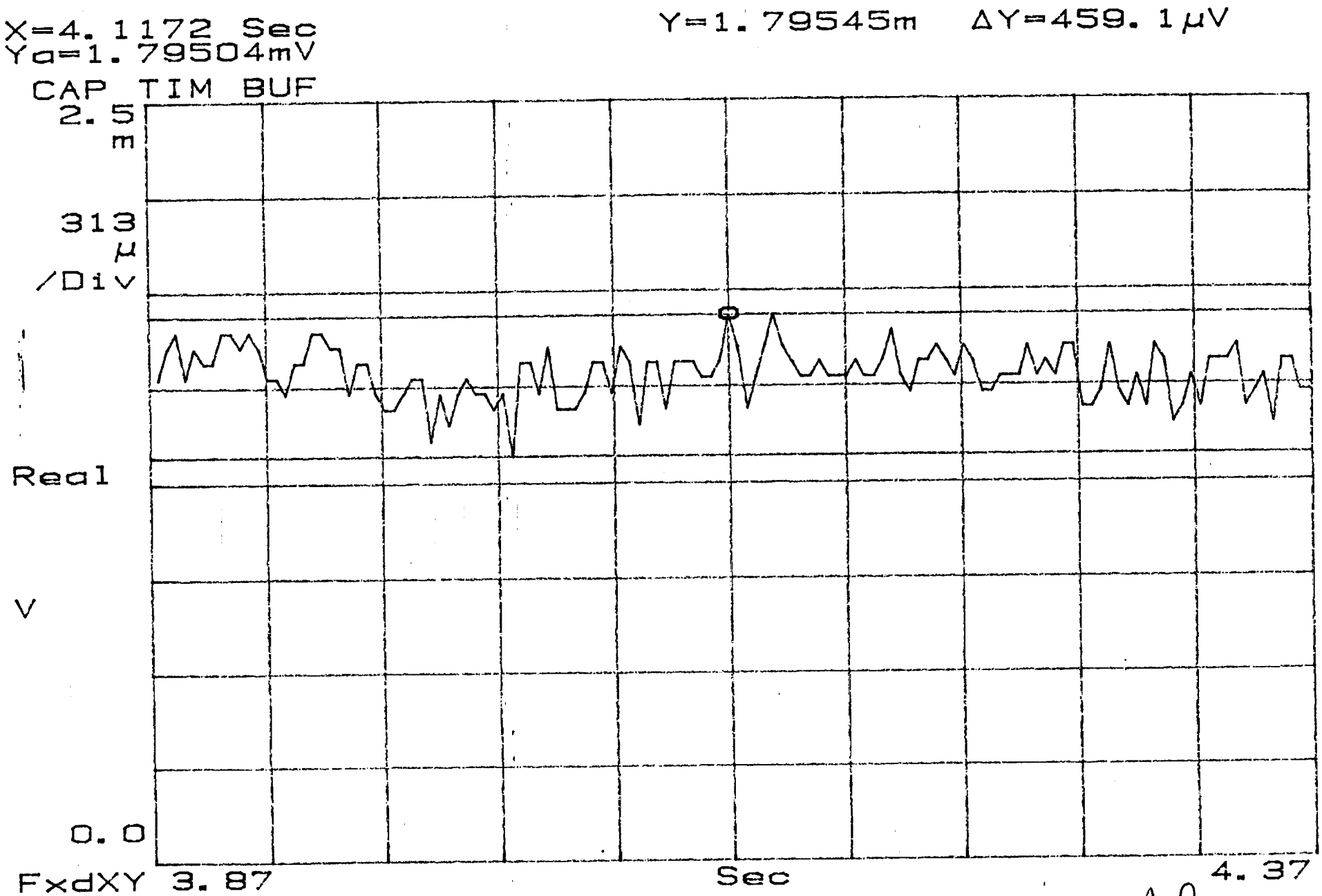
TE
11/25/98 DATE



METSAT AMSU-A1
AE 26156/3 para 3.2.4.6.3.4.1
[illegible] RIPPLE FREQUENCY TEST

ANALOG TELEMETRY Bus
RIPPLE CURRENT

TE
11/25/98 DATE



METSAT AMSU-A1
AE 26156/3 para 3.2.4.6.3.4.1
ANALOG TELEMETRY BUS
RIPPLE CURRENT

TE
11/25/98 DATE

TEST DATA SHEET 52 (Sheet 1 of 2)
Instrument Feedback Tests (Paragraph 3.2.4.6)

3.2.4.6.3.2: +28V Main Bus Instrument Feedback Tests

Subpara	Step	Test Type	Required	Measured Ripple (Peak-to-Peak) In mA	Pass/Fail
3.2.4.6.3.2.1	2	Load current ripple	See 3.2.4.6.2.1.1	Value: .08	PASS

NOTE: Attach all backup data generated during the test (photos, printouts, plots, test logs, additional comments or observations, etc.) to this data sheet.

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer 11/25/98 Date

Customer Representative 12/2/98 Date
(Flight Hardware Only)

QA 268

Quality Control NOV 30 '98 Date

TEST DATA SHEET 52 (Sheet 2 of 2)
Instrument Feedback Tests (Paragraph 3.2.4.6)

3.2.4.6.3.3: +28V Pulse Load Bus Instrument Feedback Tests

Subpara	Step	Test Type	Required	Measured Ripple (Peak-to-Peak) In mA	Pass/Fail
3.2.4.6.3.3.1	2	Load current ripple	See 3.2.4.6.2.2.1	Value: .10ma	P

3.2.4.6.3.4: +28V Analog Telemetry Bus Instr. Feedback Tests

Subpara	Step	Test Type	Required	Measured Ripple (Peak-to-Peak) In mA	Pass/Fail
3.2.4.6.3.4.1	2	Load current ripple	See 3.2.4.6.2.3.1	Value: .09	P

3.2.4.6.3.5: +10V Interface Bus Instrument Feedback Tests

Subpara	Step	Test Type	Required	Measured Ripple (Peak-to-Peak) In mA	Pass/Fail
3.2.4.6.3.5.1	2	Load current ripple	See 3.2.4.6.2.4.1	Value: .33	PASS

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436d013 S/N: 105

Test Systems Engineer Date

Customer Representative (Flight Hardware Only) 12/2/98 Date

Quality Control Date

TDS 53

AMSU A1-17 A1.EXE COLD CAL MODE P2 25-NOV-93 16:11:51 SCAN NUMBER 111
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

RADIOMETRIC DATA

BEAM POSITION 1

CH	DATA	CH	DATA	CH	DATA
3	15646	8	16240	13	16104
4	16444	9	17053	14	16599
5	16744	10	16288	15	16477
6	17033	11	16063		
7	16043	12	16390		

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

BASELINE

AMSU A1-17 A1.EXE COLD CAL MODE P2 25-NOV-93 16:14:20 SCAN NUMBER 113
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

RADIOMETRIC DATA

BEAM POSITION 1

CH	DATA	CH	DATA	CH	DATA
3	20550	8	16240	13	16091
4	16446	9	17045	14	16579
5	16739	10	16290	15	16474
6	17030	11	16059		
7	16043	12	16382		

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

AMSU A1-17 A1.EXE COLD CAL MODE P2 25-NOV-93 16:17:04 SCAN NUMBER 115
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

RADIOMETRIC DATA

BEAM POSITION 1

CH	DATA	CH	DATA	CH	DATA
3	15636	8	16235	13	16090
4	22403	9	17045	14	16567
5	16740	10	16278	15	16472
6	17030	11	16049		
7	16038	12	16377		

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

AMSU A1-17 A1.EXE COLD CAL MODE P2 25-NOV-93 16:25:04 SCAN NUMBER 121
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

RADIOMETRIC DATA

BEAM POSITION 1

CH	DATA	CH	DATA	CH	DATA
3	15628	8	16228	13	16066
4	16429	9	17035	14	16550
5	20836	10	16270	15	16464
6	17025	11	16028		
7	16030	12	16359		

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

AMSU A1-17 A1.EXE COLD CAL MODE P2 25-NOV-93 16:26:01 SCAN NUMBER 122
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

RADIOMETRIC DATA

BEAM POSITION 1

CH	DATA	CH	DATA	CH	DATA
3	15630	8	16229	13	16075
4	16426	9	17030	14	16549
5	16734	10	16276	15	16463
6	23290	11	16028		
7	16035	12	16360		

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

AMSU A1-17 A1.EXE COLD CAL MODE P2 25-NOV-93 16:28:16 SCAN NUMBER 124
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

RADIOMETRIC DATA

BEAM POSITION 1

CH	DATA	CH	DATA	CH	DATA
3	15631	8	16230	13	16062
4	16423	9	17032	14	16534
5	16735	10	16265	15	16461
6	17021	11	16028		
7	23597	12	16349		

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

AMSU A1-17 A1.EXE COLD CAL MODE P2 25-NOV-93 16:28:48 SCAN NUMBER 124
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

RADIOMETRIC DATA

BEAM POSITION 1

CH	DATA	CH	DATA	CH	DATA
3	15627	8	27088	13	16053
4	16425	9	17032	14	16550
5	16732	10	16268	15	16461
6	17025	11	16022		
7	16031	12	16350		

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

AMSU A1-17 A1.EXE COLD CAL MODE P2 25-NOV-93 16:29:29 SCAN NUMBER 124
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

RADIOMETRIC DATA

BEAM POSITION 1

CH	DATA	CH	DATA	CH	DATA
3	15635	8	16228	13	16054
4	16426	9	25816	14	16548
5	16733	10	16264	15	16461
6	17024	11	16021		
7	16024	12	16345		

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

AMSU A1-17 A1.EXE COLD CAL MODE P2 25-NOV-93 16:30:15 SCAN NUMBER 125

[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

RADIOMETRIC DATA

BEAM POSITION 1

CH	DATA	CH	DATA	CH	DATA
3	15621	8	16224	13	16048
4	16427	9	17029	14	16540
5	16735	10	20348	15	16460
6	17019	11	16021		
7	16025	12	16339		

[21] UP [22] DOWN

POWER [4] ON

SCREEN ONLY [2] PRINT [3] FULL [1] RETURN

SELECT TOUCHSCREEN BUTTON 2

AMSU A1-17 A1.EXE COLD CAL MODE P2 25-NOV-93 16:31:28 SCAN NUMBER 126
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

RADIOMETRIC DATA

BEAM POSITION 1

CH	DATA	CH	DATA	CH	DATA
3	15626	8	16224	13	16055
4	16428	9	17025	14	16548
5	16733	10	16259	15	16457
6	17019	11	22722		
7	16023	12	16340		

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

AMSU A1-17 A1.EXE COLD CAL MODE P2 25-NOV-93 16:32:07 SCAN NUMBER 126
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

RADIOMETRIC DATA

BEAM POSITION 1

CH	DATA	CH	DATA	CH	DATA
3	15625	8	16224	13	16067
4	16426	9	17028	14	16557
5	16736	10	16264	15	16459
6	17017	11	16017		
7	16027	12	28675		

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

AMSU A1-17 A1.EXE COLD CAL MODE P2 25-NOV-93 16:33:36 SCAN NUMBER 128
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

RADIOMETRIC DATA

BEAM POSITION 1

CH	DATA	CH	DATA	CH	DATA
3	15626	8	16227	13	21166
4	16423	9	17024	14	16530
5	16733	10	16263	15	16457
6	17019	11	16020		
7	16027	12	16336		

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

AMSU A1-17 A1.EXE COLD CAL MODE P2 25-NOV-93 16:34:43 SCAN NUMBER 128
[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

RADIOMETRIC DATA

BEAM POSITION 1

CH	DATA	CH	DATA	CH	DATA
3	15624	8	16224	13	16050
4	16422	9	17025	14	29196
5	16729	10	16260	15	16460
6	17017	11	16021		
7	16025	12	16331		

[21] UP [22] DOWN

POWER [4] ON
SCREEN ONLY [2] PRINT [3] FULL [1] RETURN
SELECT TOUCHSCREEN BUTTON 2

TEST DATA SHEET 53
Channel Identification Test (Paragraph 3.2.4.7)

Channel Number	Antenna Location	Sweeper Freq. Setting (GHz)	Polarization (H/V)	Radiometric Data Counts Δ Counts	Channel Verified (Yes/No)
3	A1-2	50.35	V	4904	YES
				5	
4	A1-2	52.85	V	5959	YES
5	A1-2	53.70	H	4092	YES
6	A1-1	54.45	H	6257	YES
7	A1-1	54.99	V	7554	YES
8	A1-2	55.55	H	10848	YES
9	A1-1	57.34	H	8763	YES
10	A1-1	57.50	H	4060	YES
11	A1-1	57.564	H	6659	YES
12	A1-1	57.59	H	12285	YES
13	A1-1	57.602	H	5062	YES
14	A1-1	57.608	H	12597	YES
15	A1-1	89.55	V	N/A	YES

Circle Test: (CPT) LPT

METSAT/AMSU-A1 System P/N IS-1331720 Shop Order: 436613 S/N: 105

Test Systems Engineer 11/25/98 Date

Customer Representative (Flight Hardware Only) 12/2/98 Date

Quality Control (7A 268) NOV 30 '98 Date

DOCUMENT APPROVAL SHEET

GENCORP AEROJET

TITLE	DOCUMENT NO.
Process Specification METSAT/KLM/AMSU-A1, System Comprehensive and Limited Performance Tests Test Procedure	AE-26156/3A 28 July 1998

INPUT FROM: DATE	CDRL:	SPECIFICATION ENGINEER: DATE
A. Nieto	409	98-07-29

CHECKED BY: DATE	JOB NUMBER: DATE
7-29-98	

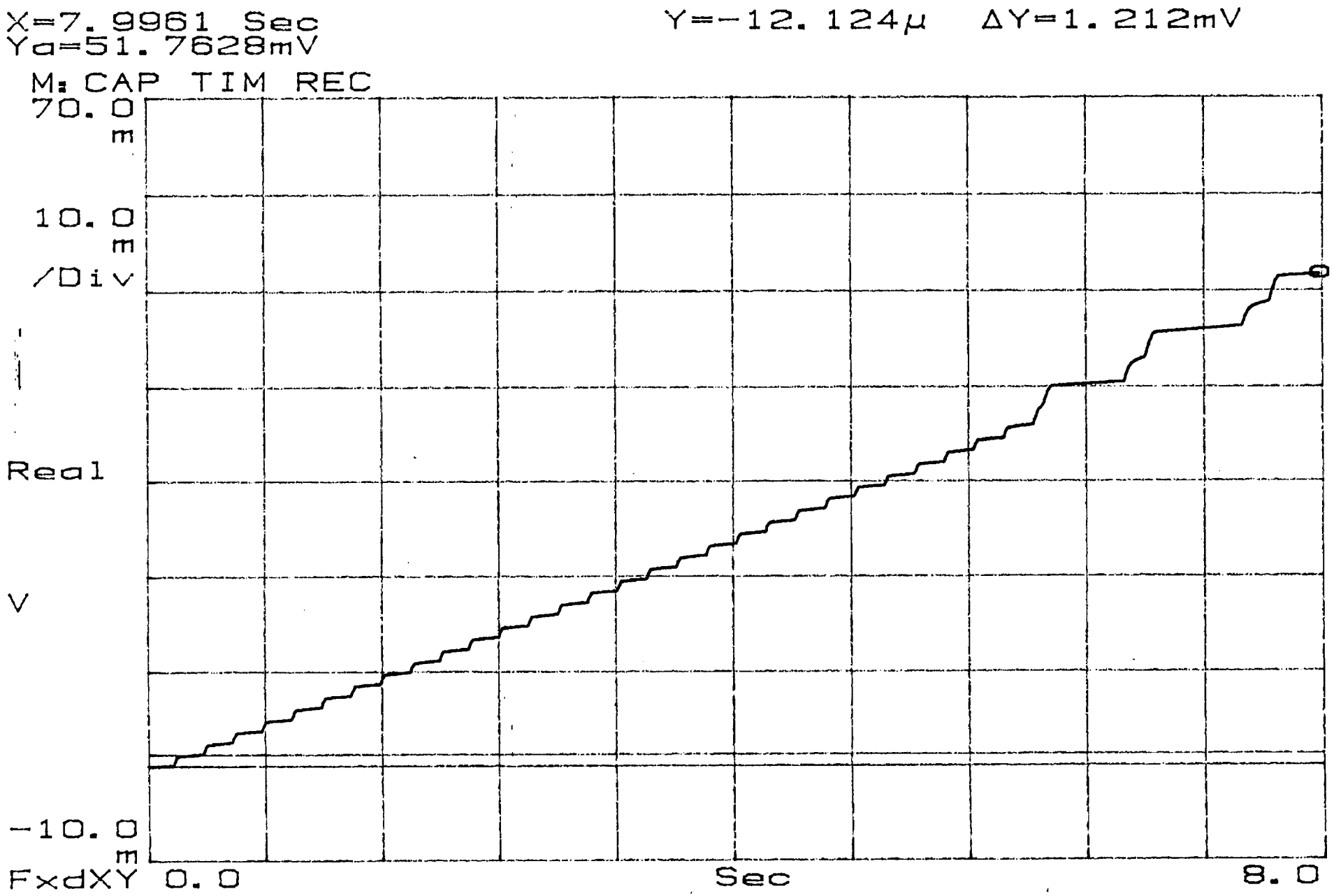
APPROVED SIGNATURES	DEPT. NO.	DATE
Specifications Engineering (J. Grime)	8631	7-29-98
Product Team Leader (A. Nieto)	8341	7/29/98
Safety (W. Neighbors)	8331	7/30/98
Systems Engineer (R. Platt)	8311	7/29/98
Design Assurance (E. Lorenz)	8331	7/29/98
Quality Assurance (R. Taylor) FOR	7831	7/29/98
Technical Director/PMO (R. Hauerwaas)	4001	8/3/98
Configuration Management (J. Cavanaugh)	8361	8/3/98

This Revision incorporated approved Master Mark-Ups dated 14 July 1998 (ECNs CAMSU-1705 and 1875)

By my signature, I certify the above document has been reviewed by me and concurs with the technical requirements related to my area of responsibility.

RELEASE (Data Center) FINAL

8-4-98



METSAT AMSU-A1
AE26156/3 para.

```
AMSU  A1-17 A1.EXE     FULL SCAN MODE     P1 25-NOV-93 08:58:42  SCAN NUMBER
[ 5 ] DIGITAL A DATA   ELEMENT 0000

[ 6 ] DIGITAL B DATA   ELEMENT   00

[ 7 ] ANALOG DATA      ELEMENT   00


                                   COMMANDS
[ 9 ]  MODULE POWER =          CONNECT      ANTENNA IN COLD CAL POSIT = NO   [ 15

[ 10 ] SURVIVAL HEATER POWER =     OFF      ANTENNA IN NADIR POSITION = NO   [ 16

[ 11 ] MODULE TOTALLY OFF =         ON      ANTENNA IN FULL SCAN MODE = YES  [ 17

[ 12 ] SCANNER A1 - 1 POWER =       ON      PLL POWER =              PLLO # 1 [ 18

[ 13 ] SCANNER A1 - 2 POWER =       ON      COLD CAL POSITION MSB =     ZERO [ 19

[ 14 ] ANTENNA IN WARM CAL POSIT = NO       COLD CAL POSITION LSB =     ZERO [ 20

          POWER [ 4 ]  ON
                       SCREEN ONLY [ 2 ]  PRINT  [ 3 ] FULL       [ 1 ] RETURN
 SELECT TOUCHSCREEN BUTTON 3
```

TDS 51

PRE TRANSIENT
HLB LOW FREQ

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
1	SYNC SEQUENCE BYTE 1	11111111	572	SCENE DATA BP 17 CH 8	16489
2	SYNC SEQUENCE BYTE 2	11111111	574	CH 9	17400
3	SYNC SEQUENCE BYTE 3	11111111	576	CH 10	16624
4	UNIT ID AND SERIAL NO	00010001	578	CH 11	16517
5	DIGITAL B DATA BYTE 1	00000010	580	CH 12	16869
6	DIGITAL B DATA BYTE 2	00001110	582	CH 13	16561
7	DIGITAL B DATA BYTE 3	00000000	584	CH 14	16998
8	DIGITAL B DATA BYTE 4	00000000	586	CH 15	16737
10	REFLECTOR 1 POSITION 1	27	588	REFLECTOR 1 POSITION 18	2609
12	REFLECTOR 2 POSITION 1	16212	590	REFLECTOR 2 POSITION 18	2410
14	REFL 1 POS 1 2ND LOOK	27	592	REFL 1 POS 18 2ND LOOK	2604
16	REFL 2 POS 1 2ND LOOK	16212	594	REFL 2 POS 18 2ND LOOK	2405
18	SCENE DATA BP 1 CH 3	15880	596	SCENE DATA BP 18 CH 3	15867
20	CH 4	16694	598	CH 4	16677
22	CH 5	16939	600	CH 5	16925
24	CH 6	17235	602	CH 6	17236
26	CH 7	16319	604	CH 7	16335
28	CH 8	16509	606	CH 8	16492
30	CH 9	17381	608	CH 9	17404
32	CH 10	16612	610	CH 10	16620
34	CH 11	16488	612	CH 11	16487
36	CH 12	16868	614	CH 12	16905
38	CH 13	16581	616	CH 13	16635
40	CH 14	17013	618	CH 14	17066
42	CH 15	16727	620	CH 15	167
44	REFLECTOR 1 POSITION 2	180	622	REFLECTOR 1 POSITION 19	275
46	REFLECTOR 2 POSITION 2	16365	624	REFLECTOR 2 POSITION 19	2559
48	REFL 1 POS 2 2ND LOOK	177	626	REFL 1 POS 19 2ND LOOK	2756
50	REFL 2 POS 2 2ND LOOK	16361	628	REFL 2 POS 19 2ND LOOK	2557
52	SCENE DATA BP 2 CH 3	15870	630	SCENE DATA BP 19 CH 3	15865
54	CH 4	16676	632	CH 4	16673
56	CH 5	16925	634	CH 5	16919
58	CH 6	17243	636	CH 6	17250
60	CH 7	16316	638	CH 7	16316
62	CH 8	16485	640	CH 8	16477
64	CH 9	17386	642	CH 9	17383
66	CH 10	16602	644	CH 10	16607
68	CH 11	16494	646	CH 11	16493
70	CH 12	16864	648	CH 12	16869
72	CH 13	16576	650	CH 13	16573
74	CH 14	17010	652	CH 14	17029
76	CH 15	16726	654	CH 15	16726
78	REFLECTOR 1 POSITION 3	335	656	REFLECTOR 1 POSITION 20	2911
80	REFLECTOR 2 POSITION 3	131	658	REFLECTOR 2 POSITION 20	2712
82	REFL 1 POS 3 2ND LOOK	329	660	REFL 1 POS 20 2ND LOOK	2908
84	REFL 2 POS 3 2ND LOOK	130	662	REFL 2 POS 20 2ND LOOK	2708
86	SCENE DATA BP 3 CH 3	15861	664	SCENE DATA BP 20 CH 3	15861
88	CH 4	16670	666	CH 4	16670
90	CH 5	16921	668	CH 5	16916
92	CH 6	17233	670	CH 6	17240

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	16317	672	CH 7	16315
96	CH 8	16483	674	CH 8	16480
98	CH 9	17390	676	CH 9	17382
100	CH 10	16609	678	CH 10	16607
102	CH 11	16496	680	CH 11	16484
104	CH 12	16882	682	CH 12	16871
106	CH 13	16585	684	CH 13	16582
108	CH 14	17041	686	CH 14	17042
110	CH 15	16730	688	CH 15	16724
112	REFLECTOR 1 POSITION 4	484	690	REFLECTOR 1 POSITION 21	3065
114	REFLECTOR 2 POSITION 4	284	692	REFLECTOR 2 POSITION 21	2863
116	REFL 1 POS 4 2ND LOOK	481	694	REFL 1 POS 21 2ND LOOK	3059
118	REFL 2 POS 4 2ND LOOK	281	696	REFL 2 POS 21 2ND LOOK	2860
120	SCENE DATA BP 4 CH 3	15866	698	SCENE DATA BP 21 CH 3	15860
122	CH 4	16669	700	CH 4	16666
124	CH 5	16921	702	CH 5	16919
126	CH 6	17243	704	CH 6	17240
128	CH 7	16317	706	CH 7	16315
130	CH 8	16481	708	CH 8	16478
132	CH 9	17396	710	CH 9	17383
134	CH 10	16614	712	CH 10	16604
136	CH 11	16493	714	CH 11	16496
138	CH 12	16899	716	CH 12	16855
140	CH 13	16615	718	CH 13	16572
142	CH 14	17040	720	CH 14	17022
144	CH 15	16735	722	CH 15	16725
146	REFLECTOR 1 POSITION 5	636	724	REFLECTOR 1 POSITION 22	3211
148	REFLECTOR 2 POSITION 5	436	726	REFLECTOR 2 POSITION 22	3015
150	REFL 1 POS 5 2ND LOOK	633	728	REFL 1 POS 22 2ND LOOK	3210
152	REFL 2 POS 5 2ND LOOK	433	730	REFL 2 POS 22 2ND LOOK	3011
154	SCENE DATA BP 5 CH 3	15864	732	SCENE DATA BP 22 CH 3	15860
156	CH 4	16671	734	CH 4	16666
158	CH 5	16913	736	CH 5	16915
160	CH 6	17252	738	CH 6	17244
162	CH 7	16316	740	CH 7	16314
164	CH 8	16485	742	CH 8	16481
166	CH 9	17393	744	CH 9	17383
168	CH 10	16632	746	CH 10	16603
170	CH 11	16520	748	CH 11	16486
172	CH 12	16858	750	CH 12	16875
174	CH 13	16542	752	CH 13	16582
176	CH 14	16992	754	CH 14	17028
178	CH 15	16734	756	CH 15	16724
180	REFLECTOR 1 POSITION 6	790	758	REFLECTOR 1 POSITION 23	3365
182	REFLECTOR 2 POSITION 6	589	760	REFLECTOR 2 POSITION 23	3168
184	REFL 1 POS 6 2ND LOOK	785	762	REFL 1 POS 23 2ND LOOK	3362
186	REFL 2 POS 6 2ND LOOK	585	764	REFL 2 POS 23 2ND LOOK	3163
188	SCENE DATA BP 6 CH 3	15861	766	SCENE DATA BP 23 CH 3	15857
190	CH 4	16671	768	CH 4	16668
192	CH 5	16917	770	CH 5	16920

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
194	CH 6	17275	772	CH 6	17241
196	CH 7	16337	774	CH 7	16317
198	CH 8	16485	776	CH 8	16482
200	CH 9	17396	778	CH 9	17384
202	CH 10	16622	780	CH 10	16604
204	CH 11	16508	782	CH 11	16489
206	CH 12	16888	784	CH 12	16865
208	CH 13	16597	786	CH 13	16579
210	CH 14	17050	788	CH 14	17022
212	CH 15	16738	790	CH 15	16724
214	REFLECTOR 1 POSITION 7	940	792	REFLECTOR 1 POSITION 24	3520
216	REFLECTOR 2 POSITION 7	739	794	REFLECTOR 2 POSITION 24	3320
218	REFL 1 POS 7 2ND LOOK	936	796	REFL 1 POS 24 2ND LOOK	3514
220	REFL 2 POS 7 2ND LOOK	736	798	REFL 2 POS 24 2ND LOOK	3315
222	SCENE DATA BP 7 CH 3	15860	800	SCENE DATA BP 24 CH 3	15861
224	CH 4	16671	802	CH 4	16670
226	CH 5	16919	804	CH 5	16918
228	CH 6	17245	806	CH 6	17245
230	CH 7	16323	808	CH 7	16312
232	CH 8	16482	810	CH 8	16478
234	CH 9	17385	812	CH 9	17384
236	CH 10	16609	814	CH 10	16596
238	CH 11	16493	816	CH 11	16485
240	CH 12	16871	818	CH 12	16872
242	CH 13	16577	820	CH 13	165
244	CH 14	17025	822	CH 14	1702
246	CH 15	16727	824	CH 15	16724
248	REFLECTOR 1 POSITION 8	1091	826	REFLECTOR 1 POSITION 25	3668
250	REFLECTOR 2 POSITION 8	893	828	REFLECTOR 2 POSITION 25	3470
252	REFL 1 POS 8 2ND LOOK	1087	830	REFL 1 POS 25 2ND LOOK	3665
254	REFL 2 POS 8 2ND LOOK	888	832	REFL 2 POS 25 2ND LOOK	3466
256	SCENE DATA BP 8 CH 3	15857	834	SCENE DATA BP 25 CH 3	15859
258	CH 4	16675	836	CH 4	16672
260	CH 5	16919	838	CH 5	16920
262	CH 6	17242	840	CH 6	17244
264	CH 7	16321	842	CH 7	16315
266	CH 8	16479	844	CH 8	16477
268	CH 9	17387	846	CH 9	17381
270	CH 10	16613	848	CH 10	16604
272	CH 11	16491	850	CH 11	16486
274	CH 12	16873	852	CH 12	16880
276	CH 13	16573	854	CH 13	16589
278	CH 14	17022	856	CH 14	17028
280	CH 15	16730	858	CH 15	16723
282	REFLECTOR 1 POSITION 9	1246	860	REFLECTOR 1 POSITION 26	3822
284	REFLECTOR 2 POSITION 9	1043	862	REFLECTOR 2 POSITION 26	3623
286	REFL 1 POS 9 2ND LOOK	1240	864	REFL 1 POS 26 2ND LOOK	3817
288	REFL 2 POS 9 2ND LOOK	1040	866	REFL 2 POS 26 2ND LOOK	3618
290	SCENE DATA BP 9 CH 3	15863	868	SCENE DATA BP 26 CH 3	15861
292	CH 4	16675	870	CH 4	16668

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	16923	872	CH 5	16918
296	CH 6	17240	874	CH 6	17244
298	CH 7	16316	876	CH 7	16316
300	CH 8	16483	878	CH 8	16481
302	CH 9	17389	880	CH 9	17382
304	CH 10	16603	882	CH 10	16603
306	CH 11	16489	884	CH 11	16488
308	CH 12	16867	886	CH 12	16874
310	CH 13	16586	888	CH 13	16576
312	CH 14	17017	890	CH 14	17039
314	CH 15	16727	892	CH 15	16724
316	REFLECTOR 1 POSITION 10	1395	894	REFLECTOR 1 POSITION 27	3975
318	REFLECTOR 2 POSITION 10	1194	896	REFLECTOR 2 POSITION 27	3774
320	REFL 1 POS 10 2ND LOOK	1391	898	REFL 1 POS 27 2ND LOOK	3968
322	REFL 2 POS 10 2ND LOOK	1192	900	REFL 2 POS 27 2ND LOOK	3770
324	SCENE DATA BP 10 CH 3	15865	902	SCENE DATA BP 27 CH 3	15865
326	CH 4	16670	904	CH 4	16673
328	CH 5	16920	906	CH 5	16924
330	CH 6	17241	908	CH 6	17244
332	CH 7	16316	910	CH 7	16315
334	CH 8	16484	912	CH 8	16483
336	CH 9	17385	914	CH 9	17381
338	CH 10	16604	916	CH 10	16608
340	CH 11	16486	918	CH 11	16490
342	CH 12	16873	920	CH 12	16871
344	CH 13	16579	922	CH 13	16587
346	CH 14	17026	924	CH 14	17022
348	CH 15	16726	926	CH 15	16724
350	REFLECTOR 1 POSITION 11	1545	928	REFLECTOR 1 POSITION 28	4126
352	REFLECTOR 2 POSITION 11	1346	930	REFLECTOR 2 POSITION 28	3925
354	REFL 1 POS 11 2ND LOOK	1543	932	REFL 1 POS 28 2ND LOOK	4120
356	REFL 2 POS 11 2ND LOOK	1343	934	REFL 2 POS 28 2ND LOOK	3921
358	SCENE DATA BP 11 CH 3	15864	936	SCENE DATA BP 28 CH 3	15872
360	CH 4	16676	938	CH 4	16682
362	CH 5	16923	940	CH 5	16929
364	CH 6	17245	942	CH 6	17243
366	CH 7	16315	944	CH 7	16312
368	CH 8	16485	946	CH 8	16495
370	CH 9	17379	948	CH 9	17382
372	CH 10	16604	950	CH 10	16606
374	CH 11	16498	952	CH 11	16486
376	CH 12	16855	954	CH 12	16863
378	CH 13	16566	956	CH 13	16576
380	CH 14	17004	958	CH 14	17041
382	CH 15	16726	960	CH 15	16723
384	REFLECTOR 1 POSITION 12	1698	962	REFLECTOR 1 POSITION 29	4276
386	REFLECTOR 2 POSITION 12	1499	964	REFLECTOR 2 POSITION 29	4076
388	REFL 1 POS 12 2ND LOOK	1694	966	REFL 1 POS 29 2ND LOOK	4273
390	REFL 2 POS 12 2ND LOOK	1495	968	REFL 2 POS 29 2ND LOOK	4073
392	SCENE DATA BP 12 CH 3	15864	970	SCENE DATA BP 29 CH 3	15892

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
394	CH 4	16671	972	CH 4	16703
396	CH 5	16920	974	CH 5	16965
398	CH 6	17251	976	CH 6	17241
400	CH 7	16321	978	CH 7	16310
402	CH 8	16484	980	CH 8	16511
404	CH 9	17383	982	CH 9	17382
406	CH 10	16600	984	CH 10	16604
408	CH 11	16488	986	CH 11	16491
410	CH 12	16872	988	CH 12	16862
412	CH 13	16588	990	CH 13	16568
414	CH 14	17041	992	CH 14	17021
416	CH 15	16725	994	CH 15	16722
418	REFLECTOR 1 POSITION 13	1849	996	REFLECTOR 1 POSITION 30	4430
420	REFLECTOR 2 POSITION 13	1650	998	REFLECTOR 2 POSITION 30	4226
422	REFL 1 POS 13 2ND LOOK	1845	1000	REFL 1 POS 30 2ND LOOK	4425
424	REFL 2 POS 13 2ND LOOK	1646	1002	REFL 2 POS 30 2ND LOOK	4224
426	SCENE DATA BP 13 CH 3	15871	1004	SCENE DATA BP 30 CH 3	15867
428	CH 4	16689	1006	CH 4	16681
430	CH 5	16923	1008	CH 5	16926
432	CH 6	17238	1010	CH 6	17249
434	CH 7	16334	1012	CH 7	16314
436	CH 8	16483	1014	CH 8	16487
438	CH 9	17387	1016	CH 9	17382
440	CH 10	16610	1018	CH 10	16605
442	CH 11	16490	1020	CH 11	164[illegible]
444	CH 12	16871	1022	CH 12	1687[illegible]
446	CH 13	16584	1024	CH 13	16582
448	CH 14	17040	1026	CH 14	17031
450	CH 15	16734	1028	CH 15	16724
452	REFLECTOR 1 POSITION 14	2002	1030	REFLECTOR 1 COLD CAL POS	6021
454	REFLECTOR 2 POSITION 14	1801	1032	REFLECTOR 2 COLD CAL POS	5819
456	REFL 1 POS 14 2ND LOOK	1998	1034	REFL 1 COLD CAL 2ND LOOK	6021
458	REFL 2 POS 14 2ND LOOK	1799	1036	REFL 2 COLD CAL 2ND LOOK	5819
460	SCENE DATA BP 14 CH 3	15868	1038	COLD CAL DATA 1 CH 3	15869
462	CH 4	16683	1040	CH 4	16676
464	CH 5	16929	1042	CH 5	16922
466	CH 6	17258	1044	CH 6	17238
468	CH 7	16328	1046	CH 7	16315
470	CH 8	16490	1048	CH 8	16484
472	CH 9	17401	1050	CH 9	17380
474	CH 10	16620	1052	CH 10	16599
476	CH 11	16511	1054	CH 11	16495
478	CH 12	16851	1056	CH 12	16864
480	CH 13	16555	1058	CH 13	16568
482	CH 14	17015	1060	CH 14	17018
484	CH 15	16732	1062	CH 15	16720
486	REFLECTOR 1 POSITION 15	2155	1064	COLD CAL DATA 2 CH 3	15872
488	REFLECTOR 2 POSITION 15	1956	1066	CH 4	16682
490	REFL 1 POS 15 2ND LOOK	2149	1068	CH 5	16919
492	REFL 2 POS 15 2ND LOOK	1950	1070	CH 6	17244

ELEMENT	DESCRIPTION		VALUE	ELEMENT	DESCRIPTION		VALUE
494	SCENE DATA BP 15	CH 3	15869	1072		CH 7	16316
496		CH 4	16681	1074		CH 8	16481
498		CH 5	16929	1076		CH 9	17383
500		CH 6	17253	1078		CH 10	16606
502		CH 7	16317	1080		CH 11	16492
504		CH 8	16490	1082		CH 12	16866
506		CH 9	17394	1084		CH 13	16577
508		CH 10	16610	1086		CH 14	17016
510		CH 11	16491	1088		CH 15	16724
512		CH 12	16916	1182	REFLECTOR 1 WARM CAL POS		10420
514		CH 13	16634	1184	REFLECTOR 2 WARM CAL POS		10220
516		CH 14	17072	1186	REFL 1 WARM CAL 2ND LOOK		10420
518		CH 15	16729	1188	REFL 2 WARM CAL 2ND LOOK		10220
520	REFLECTOR 1 POSITION 16		2302	1190	WARM CAL DATA 1	CH 3	15864
522	REFLECTOR 2 POSITION 16		2105	1192		CH 4	16664
524	REFL 1 POS 16 2ND LOOK		2305	1194		CH 5	16915
526	REFL 2 POS 16 2ND LOOK		2101	1196		CH 6	17224
528	SCENE DATA BP 16	CH 3	15882	1198		CH 7	16306
530		CH 4	16698	1200		CH 8	16478
532		CH 5	16958	1202		CH 9	17375
534		CH 6	17282	1204		CH 10	16596
536		CH 7	16338	1206		CH 11	16481
538		CH 8	16508	1208		CH 12	16858
540		CH 9	17410	1210		CH 13	16567
542		CH 10	16605	1212		CH 14	17032
544		CH 11	16498	1214		CH 15	16719
546		CH 12	16939	1216	WARM CAL DATA 2	CH 3	15854
548		CH 13	16657	1218		CH 4	16666
550		CH 14	17112	1220		CH 5	16916
552		CH 15	16739	1222		CH 6	17237
554	REFLECTOR 1 POSITION 17		2455	1224		CH 7	16309
556	REFLECTOR 2 POSITION 17		2257	1226		CH 8	16476
558	REFL 1 POS 17 2ND LOOK		2452	1228		CH 9	17377
560	REFL 2 POS 17 2ND LOOK		2253	1230		CH 10	16595
562	SCENE DATA BP 17	CH 3	15867	1232		CH 11	16476
564		CH 4	16677	1234		CH 12	16857
566		CH 5	16919	1236		CH 13	16565
568		CH 6	17249	1238		CH 14	17020
570		CH 7	16334	1240		CH 15	16718

FULL SCAN MODE

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	17536	22.50
1092	SCAN MOTOR A1-2	18003	22.98
1094	FEEDHORN A1-1	18876	24.31
1096	FEEDHORN A1-2	19838	24.73
1098	RF MUX A1-1	19165	25.40
1100	RF MUX A1-2	19758	26.81
1102	LOCAL OSCILLATOR CHANNEL 3	20364	27.74
1104	LOCAL OSCILLATOR CHANNEL 4	20463	27.86
1106	LOCAL OSCILLATOR CHANNEL 5	20271	27.24
1108	LOCAL OSCILLATOR CHANNEL 6	19094	25.37
1110	LOCAL OSCILLATOR CHANNEL 7	19474	26.00
1112	LOCAL OSCILLATOR CHANNEL 8	20061	27.52
1114	LOCAL OSCILLATOR CHANNEL 15	19482	27.02
1116	PLL LO #2 CHANNELS 9 THROUGH 14	18994	25.80
1118	PLL LO #1 CHANNELS 9 THROUGH 14	20002	27.50
1120	SPARE (NOT USED)	32767	52.86
1122	MIXER/IF AMPLIFIER CHANNEL 3	20282	27.28
1124	MIXER/IF AMPLIFIER CHANNEL 4	19873	27.24
1126	MIXER/IF AMPLIFIER CHANNEL 5	19857	26.95
1128	MIXER/IF AMPLIFIER CHANNEL 6	19443	25.88
1130	MIXER/IF AMPLIFIER CHANNEL 7	19570	26.22
1132	MIXER/IF AMPLIFIER CHANNEL 8	19776	27.27
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	19031	25.84
1136	MIXER/IF AMPLIFIER CHANNEL 15	19654	26.87
1138	IF AMPLIFIER CHANNEL 11 THRU 14	19533	26.46
1140	IF AMPLIFIER CHANNEL 9	19948	26.45
1142	IF AMPLIFIER CHANNEL 10	19538	26.61
1144	IF AMPLIFIER CHANNEL 11	19354	25.72
1146	DC/DC CONVERTER	19808	26.44
1148	IF AMPLIFIER CHANNEL 13	19478	25.68
1150	IF AMPLIFIER CHANNEL 14	19152	25.68
1152	IF AMPLIFIER CHANNEL 12	19136	25.64
1154	RF SHELF A1-1	19502	26.04
1156	RF SHELF A1-2	19715	26.63
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	18895	24.58
1160	A1-1 WARM LOAD 1	22505	22.46
1162	A1-1 WARM LOAD 2	22707	22.49
1164	A1-1 WARM LOAD 3	22763	22.53
1166	A1-1 WARM LOAD 4	22454	22.50
1168	A1-1 WARM LOAD CENTER	22644	22.56
1170	A1-2 WARM LOAD 1	23218	23.32
1172	A1-2 WARM LOAD 2	23053	23.31
1174	A1-2 WARM LOAD 3	23076	23.34
1176	A1-2 WARM LOAD 4	23003	23.34
1178	A1-2 WARM LOAD CENTER	22879	23.23
1180	TEMP SENSOR REFERENCE VOLTAGE	24880	

FULL SCAN MODE

DESCRIPTION	STATUS	STATUS	STATUS
SCANNER A1-1 POWER	ON	ON	ON
SCANNER A1-2 POWER	ON	ON	ON
PLL POWER	PLLO # 1	PLLO # 1	PLLO # 1
ANTENNA IN WARM CAL POSITION MODE	NO	NO	NO
ANTENNA IN COLD CAL POSITION MODE	NO	NO	NO
ANTENNA IN NADIR POSITION MODE	NO	NO	NO
ANTENNA IN FULL SCAN MODE	YES	YES	YES
SURVIVAL HEATER POWER	OFF	OFF	OFF
MODULE POWER	CONNECT	CONNECT	CONNECT
COLD CAL POSITION MSB	ZERO	ZERO	ZERO
COLD CAL POSITION LSB	ZERO	ZERO	ZERO

ANALOG DATA

DESCRIPTION	VALUE	DEG C	VALUE	DEG C	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	216	20.7	216	20.7	216	20.7
A1-2 SCANNER MOTOR TEMPERATURE	218	23.4	217	22.1	218	23.4
A1-1 RF SHELF TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-2 RF SHELF TEMPERATURE	220	26.2	220	26.2	220	26.2
A1-1 WARM LOAD TEMPERATURE	217	22.1	217	22.1	217	22.1
A1-2 WARM LOAD TEMPERATURE	218	23.4	218	23.4	218	23.4

DESCRIPTION	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS
A1-1 ANTENNA DRIVE MOTOR CURRENT (AVRG)	101	47.07	101	47.07	102	47.53
A1-2 ANTENNA DRIVE MOTOR CURRENT (AVRG)	96	44.74	96	44.74	96	44.74
SIGNAL PROCESSING +15 VDC	172	14.84	172	14.84	172	14.84
ANTENNA DRIVE +15 VDC	173	14.93	174	15.02	173	14.93
SIGNAL PROCESSING -15 VDC	151	-15.00	151	-15.00	151	-15.00
ANTENNA DRIVE -15 VDC	150	-15.05	150	-15.05	150	-15.05
RECEIVER AMPLIFIER +8 VDC	158	7.90	159	7.95	159	7.95
SIGNAL PROCESSOR +5 VDC	148	4.93	148	4.93	148	4.93
ANTENNA DRIVE +5 VDC	148	4.93	148	4.93	148	4.93
RECEIVER MIXER/IF +10 VDC	172	9.94	171	9.88	172	9.94
PHASE LOCK LOOP (CHANNEL 9/14) +15 VDC	171	14.76	171	14.76	171	14.76
PHASE LOCK LOOP (CHANNEL 9/14) -15 VDC	146	-15.25	146	-15.25	146	-15.25
L.O. VOLTAGE (CHANNEL 8) VDC	173	9.90	173	9.90	174	9.96
L.O. VOLTAGE (CHANNEL 7) VDC	173	9.90	173	9.90	173	9.90
L.O. VOLTAGE (CHANNEL 6) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 3) VDC	174	9.96	175	10.01	175	10.01
L.O. VOLTAGE (CHANNEL 4) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 5) VDC	172	9.84	172	9.84	172	9.84
PLLO # 2 LOCK DETECT	5	0.10	5	0.10	5	0.10
PLLO # 1 LOCK DETECT	221	4.42	221	4.42	221	4.42
L.O. VOLTAGE (CHANNEL 15) VDC	172	14.84	172	14.84	172	14.84

PRT TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
VARIABLE TARGET	615	42.00	601	14.00
	616	43.00	602	15.00
	617	44.00	603	16.00
	618	45.00	604	17.00
	619	46.00	605	18.00
	620	47.00	606	19.00
	621	48.00	607	20.00
FIXED TARGET	622	49.00	608	21.00
	623	50.00	609	22.00
	624	51.00	610	23.00
	625	52.00	611	24.00
	626	53.00	612	25.00
	627	67.00	613	69.00
	628	68.00	614	70.00
BASEPLATE	629	71.00	630	72.00
	631	26.00	632	27.00

THERMOCOUPLE TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
FIXED TARGET SHROUD	558	5.00	537	34.00
	559	6.00	538	35.00
VARIABLE TARGET SHROUD	550	7.00	524	36.00
	551	8.00	525	37.00
FIXED TARGET N2	506	57.00	502	30.00
	507	58.00	503	31.00
VARIABLE TARGET N2	516	59.00	511	32.00
	517	60.00	512	33.00
HEATER N2	514	1.00	509	38.00
	515	2.00	510	39.00
FIXED TARGET FLOW METER	508	63.00	504	61.00
VARIABLE TARGET FLOW METER	518	64.00	513	62.00
BASEPLATE HEATER N2	519	3.00	520	4.00
BASEPLATE N2	521	9.00	522	10.00
BASEPLATE FLOW METER	523	65.00		
ADJUNCT RADIATORS	575	73.00	577	74.00
	579	75.00	581	76.00

```
AMSU  A1-17 A1.EXE     FULL SCAN MODE     P1 25-NOV-93 09:02:17  SCAN NUMBER     3
[ 5 ] DIGITAL A DATA   ELEMENT 0000

[ 6 ] DIGITAL B DATA   ELEMENT   00

[ 7 ] ANALOG DATA      ELEMENT   00

                                        COMMANDS
[ 9 ]  MODULE POWER =          CONNECT        ANTENNA IN COLD CAL POSIT = NO   [ 15
[ 10 ] SURVIVAL HEATER POWER =      OFF       ANTENNA IN NADIR POSITION = NO   [ 16
[ 11 ] MODULE TOTALLY OFF =         ON        ANTENNA IN FULL SCAN MODE = YES  [ 17
[ 12 ] SCANNER A1 - 1 POWER =       ON        PLL POWER =              PLLO # 1 [ 18
[ 13 ] SCANNER A1 - 2 POWER =       ON        COLD CAL POSITION MSB =    ZERO  [ 19
[ 14 ] ANTENNA IN WARM CAL POSIT = NO         COLD CAL POSITION LSB =    ZERO  [ 20

          POWER [ 4 ]  ON
                       SCREEN ONLY [ 2 ]  PRINT  [ 3 ] FULL        [ 1 ] RETURN
SELECT TOUCHSCREEN BUTTON 3
```

TDS 51

~~Post~~ ~~PRE~~ TRANSIENT

MLB LOW FREQ

AND

PRE TRANSIENT

MLB HIGH FREQ

1.43HZ

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
1	SYNC SEQUENCE BYTE 1	11111111	572	SCENE DATA BP 17 CH 8	16460
2	SYNC SEQUENCE BYTE 2	11111111	574	CH 9	17347
3	SYNC SEQUENCE BYTE 3	11111111	576	CH 10	16583
4	UNIT ID AND SERIAL NO	00010001	578	CH 11	16512
5	DIGITAL B DATA BYTE 1	00000010	580	CH 12	16853
6	DIGITAL B DATA BYTE 2	00001110	582	CH 13	16535
7	DIGITAL B DATA BYTE 3	00000000	584	CH 14	17018
8	DIGITAL B DATA BYTE 4	00000000	586	CH 15	16680
10	REFLECTOR 1 POSITION 1	27	588	REFLECTOR 1 POSITION 18	2609
12	REFLECTOR 2 POSITION 1	16212	590	REFLECTOR 2 POSITION 18	2410
14	REFL 1 POS 1 2ND LOOK	27	592	REFL 1 POS 18 2ND LOOK	2603
16	REFL 2 POS 1 2ND LOOK	16212	594	REFL 2 POS 18 2ND LOOK	2405
18	SCENE DATA BP 1 CH 3	15850	596	SCENE DATA BP 18 CH 3	15836
20	CH 4	16653	598	CH 4	16642
22	CH 5	16906	600	CH 5	16898
24	CH 6	17199	602	CH 6	17204
26	CH 7	16271	604	CH 7	16291
28	CH 8	16479	606	CH 8	16468
30	CH 9	17333	608	CH 9	17348
32	CH 10	16566	610	CH 10	16577
34	CH 11	16492	612	CH 11	16491
36	CH 12	16860	614	CH 12	16891
38	CH 13	16563	616	CH 13	16611
40	CH 14	17049	618	CH 14	17101
42	CH 15	16668	620	CH 15	166
44	REFLECTOR 1 POSITION 2	180	622	REFLECTOR 1 POSITION 19	27
46	REFLECTOR 2 POSITION 2	16364	624	REFLECTOR 2 POSITION 19	2559
48	REFL 1 POS 2 2ND LOOK	177	626	REFL 1 POS 19 2ND LOOK	2755
50	REFL 2 POS 2 2ND LOOK	16361	628	REFL 2 POS 19 2ND LOOK	2556
52	SCENE DATA BP 2 CH 3	15834	630	SCENE DATA BP 19 CH 3	15832
54	CH 4	16638	632	CH 4	16631
56	CH 5	16892	634	CH 5	16883
58	CH 6	17205	636	CH 6	17218
60	CH 7	16269	638	CH 7	16272
62	CH 8	16456	640	CH 8	16454
64	CH 9	17333	642	CH 9	17335
66	CH 10	16564	644	CH 10	16565
68	CH 11	16489	646	CH 11	16491
70	CH 12	16854	648	CH 12	16841
72	CH 13	16556	650	CH 13	16545
74	CH 14	17041	652	CH 14	17059
76	CH 15	16669	654	CH 15	16672
78	REFLECTOR 1 POSITION 3	334	656	REFLECTOR 1 POSITION 20	2909
80	REFLECTOR 2 POSITION 3	130	658	REFLECTOR 2 POSITION 20	2711
82	REFL 1 POS 3 2ND LOOK	329	660	REFL 1 POS 20 2ND LOOK	2907
84	REFL 2 POS 3 2ND LOOK	130	662	REFL 2 POS 20 2ND LOOK	2708
86	SCENE DATA BP 3 CH 3	15831	664	SCENE DATA BP 20 CH 3	15827
88	CH 4	16630	666	CH 4	16637
90	CH 5	16890	668	CH 5	16883
92	CH 6	17199	670	CH 6	17204

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	16275	672	CH 7	16273
96	CH 8	16452	674	CH 8	16454
98	CH 9	17337	676	CH 9	17328
100	CH 10	16566	678	CH 10	16565
102	CH 11	16487	680	CH 11	16487
104	CH 12	16862	682	CH 12	16853
106	CH 13	16572	684	CH 13	16563
108	CH 14	17055	686	CH 14	17054
110	CH 15	16672	688	CH 15	16670
112	REFLECTOR 1 POSITION 4	483	690	REFLECTOR 1 POSITION 21	3064
114	REFLECTOR 2 POSITION 4	284	692	REFLECTOR 2 POSITION 21	2863
116	REFL 1 POS 4 2ND LOOK	480	694	REFL 1 POS 21 2ND LOOK	3059
118	REFL 2 POS 4 2ND LOOK	280	696	REFL 2 POS 21 2ND LOOK	2860
120	SCENE DATA BP 4 CH 3	15827	698	SCENE DATA BP 21 CH 3	15833
122	CH 4	16636	700	CH 4	16632
124	CH 5	16885	702	CH 5	16886
126	CH 6	17213	704	CH 6	17202
128	CH 7	16276	706	CH 7	16272
130	CH 8	16451	708	CH 8	16448
132	CH 9	17342	710	CH 9	17328
134	CH 10	16575	712	CH 10	16563
136	CH 11	16494	714	CH 11	16489
138	CH 12	16879	716	CH 12	16852
140	CH 13	16586	718	CH 13	16551
12	CH 14	17063	720	CH 14	17044
-44	CH 15	16678	722	CH 15	16668
146	REFLECTOR 1 POSITION 5	635	724	REFLECTOR 1 POSITION 22	3211
148	REFLECTOR 2 POSITION 5	436	726	REFLECTOR 2 POSITION 22	3015
150	REFL 1 POS 5 2ND LOOK	632	728	REFL 1 POS 22 2ND LOOK	3210
152	REFL 2 POS 5 2ND LOOK	432	730	REFL 2 POS 22 2ND LOOK	3010
154	SCENE DATA BP 5 CH 3	15831	732	SCENE DATA BP 22 CH 3	15827
156	CH 4	16637	734	CH 4	16632
158	CH 5	16889	736	CH 5	16888
160	CH 6	17221	738	CH 6	17209
162	CH 7	16273	740	CH 7	16274
164	CH 8	16450	742	CH 8	16451
166	CH 9	17337	744	CH 9	17325
168	CH 10	16590	746	CH 10	16562
170	CH 11	16526	748	CH 11	16490
172	CH 12	16848	750	CH 12	16858
174	CH 13	16529	752	CH 13	16553
176	CH 14	17017	754	CH 14	17055
178	CH 15	16676	756	CH 15	16668
180	REFLECTOR 1 POSITION 6	789	758	REFLECTOR 1 POSITION 23	3365
182	REFLECTOR 2 POSITION 6	589	760	REFLECTOR 2 POSITION 23	3167
184	REFL 1 POS 6 2ND LOOK	785	762	REFL 1 POS 23 2ND LOOK	3362
186	REFL 2 POS 6 2ND LOOK	585	764	REFL 2 POS 23 2ND LOOK	3163
188	SCENE DATA BP 6 CH 3	15831	766	SCENE DATA BP 23 CH 3	15834
190	CH 4	16631	768	CH 4	16633
192	CH 5	16884	770	CH 5	16885

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
194	CH 6	17242	772	CH 6	17207
196	CH 7	16294	774	CH 7	16274
198	CH 8	16452	776	CH 8	16448
200	CH 9	17348	778	CH 9	17330
202	CH 10	16584	780	CH 10	16563
204	CH 11	16505	782	CH 11	16488
206	CH 12	16862	784	CH 12	16848
208	CH 13	16571	786	CH 13	16550
210	CH 14	17052	788	CH 14	17039
212	CH 15	16682	790	CH 15	16666
214	REFLECTOR 1 POSITION 7	939	792	REFLECTOR 1 POSITION 24	3519
216	REFLECTOR 2 POSITION 7	739	794	REFLECTOR 2 POSITION 24	3320
218	REFL 1 POS 7 2ND LOOK	936	796	REFL 1 POS 24 2ND LOOK	3514
220	REFL 2 POS 7 2ND LOOK	736	798	REFL 2 POS 24 2ND LOOK	3315
222	SCENE DATA BP 7 CH 3	15828	800	SCENE DATA BP 24 CH 3	15827
224	CH 4	16630	802	CH 4	16632
226	CH 5	16884	804	CH 5	16884
228	CH 6	17208	806	CH 6	17212
230	CH 7	16281	808	CH 7	16271
232	CH 8	16451	810	CH 8	16449
234	CH 9	17333	812	CH 9	17332
236	CH 10	16568	814	CH 10	16563
238	CH 11	16493	816	CH 11	16478
240	CH 12	16852	818	CH 12	16850
42	CH 13	16563	820	CH 13	165
44	CH 14	17033	822	CH 14	170
246	CH 15	16670	824	CH 15	16668
248	REFLECTOR 1 POSITION 8	1091	826	REFLECTOR 1 POSITION 25	3668
250	REFLECTOR 2 POSITION 8	892	828	REFLECTOR 2 POSITION 25	3469
252	REFL 1 POS 8 2ND LOOK	1087	830	REFL 1 POS 25 2ND LOOK	3665
254	REFL 2 POS 8 2ND LOOK	887	832	REFL 2 POS 25 2ND LOOK	3466
256	SCENE DATA BP 8 CH 3	15839	834	SCENE DATA BP 25 CH 3	15831
258	CH 4	16631	836	CH 4	16634
260	CH 5	16885	838	CH 5	16884
262	CH 6	17206	840	CH 6	17210
264	CH 7	16278	842	CH 7	16276
266	CH 8	16448	844	CH 8	16447
268	CH 9	17332	846	CH 9	17332
270	CH 10	16566	848	CH 10	16563
272	CH 11	16490	850	CH 11	16487
274	CH 12	16853	852	CH 12	16862
276	CH 13	16559	854	CH 13	16569
278	CH 14	17036	856	CH 14	17051
280	CH 15	16670	858	CH 15	16668
282	REFLECTOR 1 POSITION 9	1245	860	REFLECTOR 1 POSITION 26	3821
284	REFLECTOR 2 POSITION 9	1044	862	REFLECTOR 2 POSITION 26	3622
286	REFL 1 POS 9 2ND LOOK	1239	864	REFL 1 POS 26 2ND LOOK	3817
288	REFL 2 POS 9 2ND LOOK	1040	866	REFL 2 POS 26 2ND LOOK	3618
290	SCENE DATA BP 9 CH 3	15833	868	SCENE DATA BP 26 CH 3	15832
292	CH 4	16638	870	CH 4	16633

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	16886	872	CH 5	16885
296	CH 6	17206	874	CH 6	17208
298	CH 7	16275	876	CH 7	16272
300	CH 8	16451	878	CH 8	16448
302	CH 9	17333	880	CH 9	17330
304	CH 10	16563	882	CH 10	16559
306	CH 11	16486	884	CH 11	16489
308	CH 12	16846	886	CH 12	16857
310	CH 13	16562	888	CH 13	16561
312	CH 14	17029	890	CH 14	17041
314	CH 15	16669	892	CH 15	16668
316	REFLECTOR 1 POSITION 10	1395	894	REFLECTOR 1 POSITION 27	3975
318	REFLECTOR 2 POSITION 10	1195	896	REFLECTOR 2 POSITION 27	3774
320	REFL 1 POS 10 2ND LOOK	1390	898	REFL 1 POS 27 2ND LOOK	3968
322	REFL 2 POS 10 2ND LOOK	1191	900	REFL 2 POS 27 2ND LOOK	3770
324	SCENE DATA BP 10 CH 3	15841	902	SCENE DATA BP 27 CH 3	15829
326	CH 4	16633	904	CH 4	16638
328	CH 5	16889	906	CH 5	16893
330	CH 6	17210	908	CH 6	17204
332	CH 7	16277	910	CH 7	16272
334	CH 8	16454	912	CH 8	16458
336	CH 9	17332	914	CH 9	17331
338	CH 10	16561	916	CH 10	16564
340	CH 11	16486	918	CH 11	16490
342	CH 12	16854	920	CH 12	16858
344	CH 13	16560	922	CH 13	16558
346	CH 14	17057	924	CH 14	17047
348	CH 15	16670	926	CH 15	16668
350	REFLECTOR 1 POSITION 11	1545	928	REFLECTOR 1 POSITION 28	4125
352	REFLECTOR 2 POSITION 11	1346	930	REFLECTOR 2 POSITION 28	3925
354	REFL 1 POS 11 2ND LOOK	1542	932	REFL 1 POS 28 2ND LOOK	4120
356	REFL 2 POS 11 2ND LOOK	1342	934	REFL 2 POS 28 2ND LOOK	3921
358	SCENE DATA BP 11 CH 3	15835	936	SCENE DATA BP 28 CH 3	15837
360	CH 4	16639	938	CH 4	16649
362	CH 5	16888	940	CH 5	16895
364	CH 6	17210	942	CH 6	17209
366	CH 7	16269	944	CH 7	16274
368	CH 8	16456	946	CH 8	16461
370	CH 9	17334	948	CH 9	17328
372	CH 10	16570	950	CH 10	16563
374	CH 11	16493	952	CH 11	16489
376	CH 12	16847	954	CH 12	16853
378	CH 13	16554	956	CH 13	16562
380	CH 14	17016	958	CH 14	17052
382	CH 15	16669	960	CH 15	16667
384	REFLECTOR 1 POSITION 12	1698	962	REFLECTOR 1 POSITION 29	4275
386	REFLECTOR 2 POSITION 12	1499	964	REFLECTOR 2 POSITION 29	4076
388	REFL 1 POS 12 2ND LOOK	1694	966	REFL 1 POS 29 2ND LOOK	4272
390	REFL 2 POS 12 2ND LOOK	1495	968	REFL 2 POS 29 2ND LOOK	4073
392	SCENE DATA BP 12 CH 3	15834	970	SCENE DATA BP 29 CH 3	15861

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
394	CH 4	16634	972	CH 4	16671
396	CH 5	16888	974	CH 5	16935
398	CH 6	17217	976	CH 6	17206
400	CH 7	16275	978	CH 7	16270
402	CH 8	16451	980	CH 8	16481
404	CH 9	17333	982	CH 9	17329
406	CH 10	16567	984	CH 10	16568
408	CH 11	16492	986	CH 11	16488
410	CH 12	16856	988	CH 12	16845
412	CH 13	16560	990	CH 13	16549
414	CH 14	17063	992	CH 14	17033
416	CH 15	16670	994	CH 15	16668
418	REFLECTOR 1 POSITION 13	1848	996	REFLECTOR 1 POSITION 30	4429
420	REFLECTOR 2 POSITION 13	1649	998	REFLECTOR 2 POSITION 30	4227
422	REFL 1 POS 13 2ND LOOK	1845	1000	REFL 1 POS 30 2ND LOOK	4424
424	REFL 2 POS 13 2ND LOOK	1646	1002	REFL 2 POS 30 2ND LOOK	4225
426	SCENE DATA BP 13 CH 3	15841	1004	SCENE DATA BP 30 CH 3	15841
428	CH 4	16648	1006	CH 4	16642
430	CH 5	16891	1008	CH 5	16894
432	CH 6	17209	1010	CH 6	17210
434	CH 7	16293	1012	CH 7	16274
436	CH 8	16459	1014	CH 8	16458
438	CH 9	17336	1016	CH 9	17332
440	CH 10	16573	1018	CH 10	16563
12	CH 11	16497	1020	CH 11	164
44	CH 12	16851	1022	CH 12	168
446	CH 13	16568	1024	CH 13	16560
448	CH 14	17047	1026	CH 14	17048
450	CH 15	16677	1028	CH 15	16668
452	REFLECTOR 1 POSITION 14	2001	1030	REFLECTOR 1 COLD CAL POS	6021
454	REFLECTOR 2 POSITION 14	1801	1032	REFLECTOR 2 COLD CAL POS	5819
456	REFL 1 POS 14 2ND LOOK	1997	1034	REFL 1 COLD CAL 2ND LOOK	6021
458	REFL 2 POS 14 2ND LOOK	1798	1036	REFL 2 COLD CAL 2ND LOOK	5819
460	SCENE DATA BP 14 CH 3	15836	1038	COLD CAL DATA 1 CH 3	15842
462	CH 4	16644	1040	CH 4	16643
464	CH 5	16898	1042	CH 5	16888
466	CH 6	17227	1044	CH 6	17206
468	CH 7	16286	1046	CH 7	16278
470	CH 8	16460	1048	CH 8	16452
472	CH 9	17350	1050	CH 9	17328
474	CH 10	16582	1052	CH 10	16563
476	CH 11	16507	1054	CH 11	16496
478	CH 12	16833	1056	CH 12	16860
480	CH 13	16541	1058	CH 13	16558
482	CH 14	17007	1060	CH 14	17024
484	CH 15	16679	1062	CH 15	16667
486	REFLECTOR 1 POSITION 15	2154	1064	COLD CAL DATA 2 CH 3	15841
488	REFLECTOR 2 POSITION 15	1955	1066	CH 4	16643
490	REFL 1 POS 15 2ND LOOK	2149	1068	CH 5	16889
492	REFL 2 POS 15 2ND LOOK	1950	1070	CH 6	17211

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	SCENE DATA BP 15 CH 3	15839	1072	CH 7	16272
496	CH 4	16647	1074	CH 8	16451
498	CH 5	16894	1076	CH 9	17329
500	CH 6	17221	1078	CH 10	16563
502	CH 7	16274	1080	CH 11	16495
504	CH 8	16459	1082	CH 12	16867
506	CH 9	17341	1084	CH 13	16568
508	CH 10	16561	1086	CH 14	17043
510	CH 11	16483	1088	CH 15	16668
512	CH 12	16897	1182	REFLECTOR 1 WARM CAL POS	10420
514	CH 13	16621	1184	REFLECTOR 2 WARM CAL POS	10220
516	CH 14	17087	1186	REFL 1 WARM CAL 2ND LOOK	10420
518	CH 15	16673	1188	REFL 2 WARM CAL 2ND LOOK	10219
520	REFLECTOR 1 POSITION 16	2303	1190	WARM CAL DATA 1 CH 3	15829
522	REFLECTOR 2 POSITION 16	2104	1192	CH 4	16630
524	REFL 1 POS 16 2ND LOOK	2302	1194	CH 5	16883
526	REFL 2 POS 16 2ND LOOK	2101	1196	CH 6	17193
528	SCENE DATA BP 16 CH 3	15855	1198	CH 7	16266
530	CH 4	16665	1200	CH 8	16448
532	CH 5	16931	1202	CH 9	17319
534	CH 6	17250	1204	CH 10	16560
536	CH 7	16299	1206	CH 11	16475
538	CH 8	16481	1208	CH 12	16843
540	CH 9	17358	1210	CH 13	16553
12	CH 10	16561	1212	CH 14	17050
544	CH 11	16499	1214	CH 15	16663
546	CH 12	16936	1216	WARM CAL DATA 2 CH 3	15828
548	CH 13	16644	1218	CH 4	16630
550	CH 14	17133	1220	CH 5	16882
552	CH 15	16684	1222	CH 6	17198
554	REFLECTOR 1 POSITION 17	2455	1224	CH 7	16264
556	REFLECTOR 2 POSITION 17	2256	1226	CH 8	16450
558	REFL 1 POS 17 2ND LOOK	2452	1228	CH 9	17328
560	REFL 2 POS 17 2ND LOOK	2253	1230	CH 10	16561
562	SCENE DATA BP 17 CH 3	15836	1232	CH 11	16478
564	CH 4	16642	1234	CH 12	16843
566	CH 5	16893	1236	CH 13	16555
568	CH 6	17216	1238	CH 14	17023
570	CH 7	16297	1240	CH 15	16666

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	17581	22.58
1092	SCAN MOTOR A1-2	18055	23.08
1094	FEEDHORN A1-1	18878	24.31
1096	FEEDHORN A1-2	19834	24.72
1098	RF MUX A1-1	19253	25.57
1100	RF MUX A1-2	19818	26.93
1102	LOCAL OSCILLATOR CHANNEL 3	20711	28.41
1104	LOCAL OSCILLATOR CHANNEL 4	20823	28.55
1106	LOCAL OSCILLATOR CHANNEL 5	20593	27.86
1108	LOCAL OSCILLATOR CHANNEL 6	19416	25.99
1110	LOCAL OSCILLATOR CHANNEL 7	19731	26.49
1112	LOCAL OSCILLATOR CHANNEL 8	20417	28.21
1114	LOCAL OSCILLATOR CHANNEL 15	19856	27.74
1116	PLL LO #2 CHANNELS 9 THROUGH 14	18940	25.69
1118	PLL LO #1 CHANNELS 9 THROUGH 14	20737	28.91
1120	SPARE (NOT USED)	32767	52.86
1122	MIXER/IF AMPLIFIER CHANNEL 3	20398	27.50
1124	MIXER/IF AMPLIFIER CHANNEL 4	19990	27.47
1126	MIXER/IF AMPLIFIER CHANNEL 5	19975	27.17
1128	MIXER/IF AMPLIFIER CHANNEL 6	19585	26.16
1130	MIXER/IF AMPLIFIER CHANNEL 7	19704	26.48
1132	MIXER/IF AMPLIFIER CHANNEL 8	19907	27.52
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	19089	25.95
1136	MIXER/IF AMPLIFIER CHANNEL 15	20004	27.55
1138	IF AMPLIFIER CHANNEL 11 THRU 14	19804	26.99
1140	IF AMPLIFIER CHANNEL 9	20226	26.98
1142	IF AMPLIFIER CHANNEL 10	19817	27.15
1144	IF AMPLIFIER CHANNEL 11	19492	25.98
1146	DC/DC CONVERTER	20396	27.57
1148	IF AMPLIFIER CHANNEL 13	19612	25.94
1150	IF AMPLIFIER CHANNEL 14	19279	25.92
1152	IF AMPLIFIER CHANNEL 12	19265	25.88
1154	RF SHELF A1-1	19676	26.38
1156	RF SHELF A1-2	19836	26.87
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	18903	24.59
1160	A1-1 WARM LOAD 1	22524	22.50
1162	A1-1 WARM LOAD 2	22727	22.53
1164	A1-1 WARM LOAD 3	22788	22.58
1166	A1-1 WARM LOAD 4	22474	22.54
1168	A1-1 WARM LOAD CENTER	22659	22.59
1170	A1-2 WARM LOAD 1	23243	23.37
1172	A1-2 WARM LOAD 2	23078	23.36
1174	A1-2 WARM LOAD 3	23102	23.40
1176	A1-2 WARM LOAD 4	23032	23.39
1178	A1-2 WARM LOAD CENTER	22904	23.28
1180	TEMP SENSOR REFERENCE VOLTAGE	24881	

FULL SCAN MODE

DESCRIPTION	STATUS	STATUS	STATUS
SCANNER A1-1 POWER	ON	ON	ON
SCANNER A1-2 POWER	ON	ON	ON
PLL POWER	PLLO # 1	PLLO # 1	PLLO # 1
ANTENNA IN WARM CAL POSITION MODE	NO	NO	NO
ANTENNA IN COLD CAL POSITION MODE	NO	NO	NO
ANTENNA IN NADIR POSITION MODE	NO	NO	NO
ANTENNA IN FULL SCAN MODE	YES	YES	YES
SURVIVAL HEATER POWER	OFF	OFF	OFF
MODULE POWER	CONNECT	CONNECT	CONNECT
COLD CAL POSITION MSB	ZERO	ZERO	ZERO
COLD CAL POSITION LSB	ZERO	ZERO	ZERO

ANALOG DATA

DESCRIPTION	VALUE	DEG C	VALUE	DEG C	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	217	22.1	217	22.1	217	22.1
A1-2 SCANNER MOTOR TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-1 RF SHELF TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-2 RF SHELF TEMPERATURE	220	26.2	220	26.2	220	26.2
A1-1 WARM LOAD TEMPERATURE	217	22.1	217	22.1	217	22.1
A1-2 WARM LOAD TEMPERATURE	218	23.4	218	23.4	218	23.4

DESCRIPTION	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS
A1-1 ANTENNA DRIVE MOTOR CURRENT (AVRG)	103	48.00	103	48.00	103	48.00
A1-2 ANTENNA DRIVE MOTOR CURRENT (AVRG)	98	45.67	98	45.67	98	45.67
SIGNAL PROCESSING +15 VDC	173	14.93	173	14.93	173	14.93
ANTENNA DRIVE +15 VDC	173	14.93	173	14.93	173	14.93
SIGNAL PROCESSING -15 VDC	151	-15.00	151	-15.00	151	-15.00
ANTENNA DRIVE -15 VDC	151	-15.00	151	-15.00	151	-15.00
RECEIVER AMPLIFIER +8 VDC	158	7.90	158	7.90	158	7.90
SIGNAL PROCESSOR +5 VDC	148	4.93	148	4.93	148	4.93
ANTENNA DRIVE +5 VDC	148	4.93	148	4.93	148	4.93
RECEIVER MIXER/IF +10 VDC	172	9.94	172	9.94	172	9.94
PHASE LOCK LOOP (CHANNEL 9/14) +15 VDC	172	14.84	171	14.76	172	14.84
PHASE LOCK LOOP (CHANNEL 9/14) -15 VDC	146	-15.25	146	-15.25	146	-15.25
L.O. VOLTAGE (CHANNEL 8) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 7) VDC	173	9.90	173	9.90	173	9.90
L.O. VOLTAGE (CHANNEL 6) VDC	175	10.01	175	10.01	175	10.01
L.O. VOLTAGE (CHANNEL 3) VDC	175	10.01	175	10.01	175	10.01
L.O. VOLTAGE (CHANNEL 4) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 5) VDC	172	9.84	173	9.90	173	9.90
PLLO # 2 LOCK DETECT	5	0.10	5	0.10	5	0.10
PLLO # 1 LOCK DETECT	221	4.42	221	4.42	222	4.44
L.O. VOLTAGE (CHANNEL 15) VDC	172	14.84	172	14.84	172	14.84

PRT TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
VARIABLE TARGET	615	42.00	601	14.00
	616	43.00	602	15.00
	617	44.00	603	16.00
	618	45.00	604	17.00
	619	46.00	605	18.00
	620	47.00	606	19.00
	621	48.00	607	20.00
FIXED TARGET	622	49.00	608	21.00
	623	50.00	609	22.00
	624	51.00	610	23.00
	625	52.00	611	24.00
	626	53.00	612	25.00
	627	67.00	613	69.00
	628	68.00	614	70.00
BASEPLATE	629	71.00	630	72.00
	631	26.00	632	27.00

THERMOCOUPLE TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
FIXED TARGET SHROUD	558	5.00	537	34.00
	559	6.00	538	35.00
VARIABLE TARGET SHROUD	550	7.00	524	36.00
	551	8.00	525	37.00
FIXED TARGET N2	506	57.00	502	30.00
	507	58.00	503	31.00
VARIABLE TARGET N2	516	59.00	511	32.00
	517	60.00	512	33.00
HEATER N2	514	1.00	509	38.00
	515	2.00	510	39.00
FIXED TARGET FLOW METER	508	63.00	504	61.00
VARIABLE TARGET FLOW METER	518	64.00	513	62.00
BASEPLATE HEATER N2	519	3.00	520	4.00
BASEPLATE N2	521	9.00	522	10.00
BASEPLATE FLOW METER	523	65.00		
ADJUNCT RADIATORS	575	73.00	577	74.00
	579	75.00	581	76.00

```
AMSU  A1-17 A1.EXE     FULL SCAN MODE     P1 25-NOV-93 09:19:36  SCAN NUMBER     5
[ 5 ] DIGITAL A DATA   ELEMENT 0000

[ 6 ] DIGITAL B DATA   ELEMENT   00

[ 7 ] ANALOG DATA      ELEMENT   00

                                   COMMANDS
[ 9 ]  MODULE POWER =          CONNECT      ANTENNA IN COLD CAL POSIT = NO   [ 15

[ 10 ] SURVIVAL HEATER POWER =     OFF      ANTENNA IN NADIR POSITION = NO   [ 16

[ 11 ] MODULE TOTALLY OFF =         ON      ANTENNA IN FULL SCAN MODE = YES  [ 17

[ 12 ] SCANNER A1 - 1 POWER =       ON      PLL POWER =              PLLO # 1 [ 18

[ 13 ] SCANNER A1 - 2 POWER =       ON      COLD CAL POSITION MSB =    ZERO  [ 19

[ 14 ] ANTENNA IN WARM CAL POSIT = NO       COLD CAL POSITION LSB =    ZERO  [ 20

          POWER [ 4 ]  ON
                       SCREEN ONLY [ 2 ]  PRINT  [ 3 ] FULL        [ 1 ] RETURN
SELECT TOUCHSCREEN BUTTON 3
```

POST TRANSIENT
MLB HIGH FREQ
1.43 Hz

AND

PRE TRANSIENT
MLB HIGH FREQ
2.86 Hz

AMSU A1_17 A1.EXE DIGITAL A DATA 25-NOV-93 09:19:39 PAGE 1
FULL SCAN MODE

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
1	SYNC SEQUENCE BYTE 1	11111111	572	SCENE DATA BP 17 CH 8	16525
2	SYNC SEQUENCE BYTE 2	11111111	574	CH 9	17409
3	SYNC SEQUENCE BYTE 3	11111111	576	CH 10	16638
4	UNIT ID AND SERIAL NO	00010001	578	CH 11	16540
5	DIGITAL B DATA BYTE 1	00000010	580	CH 12	16888
6	DIGITAL B DATA BYTE 2	00001110	582	CH 13	16583
7	DIGITAL B DATA BYTE 3	00000000	584	CH 14	17031
8	DIGITAL B DATA BYTE 4	00000000	586	CH 15	16745
10	REFLECTOR 1 POSITION 1	27	588	REFLECTOR 1 POSITION 18	2609
12	REFLECTOR 2 POSITION 1	16212	590	REFLECTOR 2 POSITION 18	2410
14	REFL 1 POS 1 2ND LOOK	27	592	REFL 1 POS 18 2ND LOOK	2604
16	REFL 2 POS 1 2ND LOOK	16212	594	REFL 2 POS 18 2ND LOOK	2405
18	SCENE DATA BP 1 CH 3	15940	596	SCENE DATA BP 18 CH 3	15937
20	CH 4	16715	598	CH 4	16709
22	CH 5	16946	600	CH 5	16942
24	CH 6	17240	602	CH 6	17243
26	CH 7	16312	604	CH 7	16333
28	CH 8	16541	606	CH 8	16531
30	CH 9	17393	608	CH 9	17406
32	CH 10	16627	610	CH 10	16632
34	CH 11	16516	612	CH 11	16518
36	CH 12	16900	614	CH 12	16934
38	CH 13	16610	616	CH 13	16657
40	CH 14	17040	618	CH 14	17101
42	CH 15	16737	620	CH 15	167
44	REFLECTOR 1 POSITION 2	180	622	REFLECTOR 1 POSITION 19	2759
46	REFLECTOR 2 POSITION 2	16365	624	REFLECTOR 2 POSITION 19	2559
48	REFL 1 POS 2 2ND LOOK	177	626	REFL 1 POS 19 2ND LOOK	2756
50	REFL 2 POS 2 2ND LOOK	16361	628	REFL 2 POS 19 2ND LOOK	2557
52	SCENE DATA BP 2 CH 3	15928	630	SCENE DATA BP 19 CH 3	15926
54	CH 4	16700	632	CH 4	16698
56	CH 5	16936	634	CH 5	16931
58	CH 6	17255	636	CH 6	17256
60	CH 7	16310	638	CH 7	16309
62	CH 8	16520	640	CH 8	16519
64	CH 9	17392	642	CH 9	17395
66	CH 10	16622	644	CH 10	16622
68	CH 11	16521	646	CH 11	16517
70	CH 12	16896	648	CH 12	16891
72	CH 13	16605	650	CH 13	16600
74	CH 14	17054	652	CH 14	17056
76	CH 15	16738	654	CH 15	16740
78	REFLECTOR 1 POSITION 3	335	656	REFLECTOR 1 POSITION 20	2910
80	REFLECTOR 2 POSITION 3	130	658	REFLECTOR 2 POSITION 20	2711
82	REFL 1 POS 3 2ND LOOK	329	660	REFL 1 POS 20 2ND LOOK	2908
84	REFL 2 POS 3 2ND LOOK	128	662	REFL 2 POS 20 2ND LOOK	2708
86	SCENE DATA BP 3 CH 3	15926	664	SCENE DATA BP 20 CH 3	15924
88	CH 4	16698	666	CH 4	16700
90	CH 5	16932	668	CH 5	16929
92	CH 6	17241	670	CH 6	17246

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	16309	672	CH 7	16311
96	CH 8	16520	674	CH 8	16514
98	CH 9	17400	676	CH 9	17391
100	CH 10	16627	678	CH 10	16623
102	CH 11	16517	680	CH 11	16520
104	CH 12	16908	682	CH 12	16897
106	CH 13	16624	684	CH 13	16609
108	CH 14	17086	686	CH 14	17042
110	CH 15	16739	688	CH 15	16735
112	REFLECTOR 1 POSITION 4	484	690	REFLECTOR 1 POSITION 21	3065
114	REFLECTOR 2 POSITION 4	285	692	REFLECTOR 2 POSITION 21	2864
116	REFL 1 POS 4 2ND LOOK	481	694	REFL 1 POS 21 2ND LOOK	3059
118	REFL 2 POS 4 2ND LOOK	281	696	REFL 2 POS 21 2ND LOOK	2860
120	SCENE DATA BP 4 CH 3	15930	698	SCENE DATA BP 21 CH 3	15928
122	CH 4	16701	700	CH 4	16695
124	CH 5	16931	702	CH 5	16934
126	CH 6	17254	704	CH 6	17246
128	CH 7	16310	706	CH 7	16310
130	CH 8	16518	708	CH 8	16514
132	CH 9	17403	710	CH 9	17392
134	CH 10	16625	712	CH 10	16624
136	CH 11	16525	714	CH 11	16520
138	CH 12	16917	716	CH 12	16890
140	CH 13	16636	718	CH 13	16587
142	CH 14	17110	720	CH 14	17051
144	CH 15	16746	722	CH 15	16738
146	REFLECTOR 1 POSITION 5	636	724	REFLECTOR 1 POSITION 22	3212
148	REFLECTOR 2 POSITION 5	436	726	REFLECTOR 2 POSITION 22	3015
150	REFL 1 POS 5 2ND LOOK	633	728	REFL 1 POS 22 2ND LOOK	3210
152	REFL 2 POS 5 2ND LOOK	433	730	REFL 2 POS 22 2ND LOOK	3010
154	SCENE DATA BP 5 CH 3	15922	732	SCENE DATA BP 22 CH 3	15922
156	CH 4	16697	734	CH 4	16697
158	CH 5	16929	736	CH 5	16930
160	CH 6	17260	738	CH 6	17250
162	CH 7	16309	740	CH 7	16306
164	CH 8	16523	742	CH 8	16521
166	CH 9	17399	744	CH 9	17394
168	CH 10	16642	746	CH 10	16620
170	CH 11	16548	748	CH 11	16512
172	CH 12	16883	750	CH 12	16902
174	CH 13	16583	752	CH 13	16620
176	CH 14	17038	754	CH 14	17049
178	CH 15	16744	756	CH 15	16737
180	REFLECTOR 1 POSITION 6	789	758	REFLECTOR 1 POSITION 23	3366
182	REFLECTOR 2 POSITION 6	588	760	REFLECTOR 2 POSITION 23	3167
184	REFL 1 POS 6 2ND LOOK	785	762	REFL 1 POS 23 2ND LOOK	3362
186	REFL 2 POS 6 2ND LOOK	585	764	REFL 2 POS 23 2ND LOOK	3164
188	SCENE DATA BP 6 CH 3	15923	766	SCENE DATA BP 23 CH 3	15924
190	CH 4	16700	768	CH 4	16694
192	CH 5	16927	770	CH 5	16929

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
194	CH 6	17280	772	CH 6	17247
196	CH 7	16331	774	CH 7	16308
198	CH 8	16519	776	CH 8	16519
200	CH 9	17408	778	CH 9	17389
202	CH 10	16638	780	CH 10	16621
204	CH 11	16532	782	CH 11	16521
206	CH 12	16904	784	CH 12	16895
208	CH 13	16617	786	CH 13	16601
210	CH 14	17067	788	CH 14	17062
212	CH 15	16745	790	CH 15	16738
214	REFLECTOR 1 POSITION 7	940	792	REFLECTOR 1 POSITION 24	3519
216	REFLECTOR 2 POSITION 7	740	794	REFLECTOR 2 POSITION 24	3321
218	REFL 1 POS 7 2ND LOOK	936	796	REFL 1 POS 24 2ND LOOK	3514
220	REFL 2 POS 7 2ND LOOK	736	798	REFL 2 POS 24 2ND LOOK	3315
222	SCENE DATA BP 7 CH 3	15928	800	SCENE DATA BP 24 CH 3	15927
224	CH 4	16700	802	CH 4	16700
226	CH 5	16930	804	CH 5	16928
228	CH 6	17253	806	CH 6	17251
230	CH 7	16320	808	CH 7	16309
232	CH 8	16522	810	CH 8	16518
234	CH 9	17397	812	CH 9	17390
236	CH 10	16623	814	CH 10	16619
238	CH 11	16526	816	CH 11	16517
240	CH 12	16897	818	CH 12	16900
242	CH 13	16614	820	CH 13	166
244	CH 14	17052	822	CH 14	170
246	CH 15	16738	824	CH 15	16738
248	REFLECTOR 1 POSITION 8	1091	826	REFLECTOR 1 POSITION 25	3668
250	REFLECTOR 2 POSITION 8	892	828	REFLECTOR 2 POSITION 25	3470
252	REFL 1 POS 8 2ND LOOK	1087	830	REFL 1 POS 25 2ND LOOK	3665
254	REFL 2 POS 8 2ND LOOK	888	832	REFL 2 POS 25 2ND LOOK	3466
256	SCENE DATA BP 8 CH 3	15927	834	SCENE DATA BP 25 CH 3	15923
258	CH 4	16701	836	CH 4	16698
260	CH 5	16934	838	CH 5	16929
262	CH 6	17244	840	CH 6	17253
264	CH 7	16316	842	CH 7	16310
266	CH 8	16521	844	CH 8	16514
268	CH 9	17395	846	CH 9	17394
270	CH 10	16626	848	CH 10	16617
272	CH 11	16519	850	CH 11	16511
274	CH 12	16897	852	CH 12	16900
276	CH 13	16603	854	CH 13	16611
278	CH 14	17032	856	CH 14	17056
280	CH 15	16740	858	CH 15	16737
282	REFLECTOR 1 POSITION 9	1246	860	REFLECTOR 1 POSITION 26	3821
284	REFLECTOR 2 POSITION 9	1043	862	REFLECTOR 2 POSITION 26	3623
286	REFL 1 POS 9 2ND LOOK	1240	864	REFL 1 POS 26 2ND LOOK	3817
288	REFL 2 POS 9 2ND LOOK	1040	866	REFL 2 POS 26 2ND LOOK	3618
290	SCENE DATA BP 9 CH 3	15930	868	SCENE DATA BP 26 CH 3	15929
292	CH 4	16706	870	CH 4	16696

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	16935	872	CH 5	16928
296	CH 6	17251	874	CH 6	17250
298	CH 7	16313	876	CH 7	16309
300	CH 8	16519	878	CH 8	16515
302	CH 9	17394	880	CH 9	17391
304	CH 10	16621	882	CH 10	16621
306	CH 11	16520	884	CH 11	16517
308	CH 12	16901	886	CH 12	16901
310	CH 13	16607	888	CH 13	16605
312	CH 14	17072	890	CH 14	17047
314	CH 15	16741	892	CH 15	16736
316	REFLECTOR 1 POSITION 10	1395	894	REFLECTOR 1 POSITION 27	3975
318	REFLECTOR 2 POSITION 10	1195	896	REFLECTOR 2 POSITION 27	3775
320	REFL 1 POS 10 2ND LOOK	1391	898	REFL 1 POS 27 2ND LOOK	3968
322	REFL 2 POS 10 2ND LOOK	1192	900	REFL 2 POS 27 2ND LOOK	3770
324	SCENE DATA BP 10 CH 3	15929	902	SCENE DATA BP 27 CH 3	15931
326	CH 4	16700	904	CH 4	16701
328	CH 5	16930	906	CH 5	16939
330	CH 6	17250	908	CH 6	17246
332	CH 7	16311	910	CH 7	16310
334	CH 8	16520	912	CH 8	16522
336	CH 9	17397	914	CH 9	17391
338	CH 10	16622	916	CH 10	16621
340	CH 11	16523	918	CH 11	16518
342	CH 12	16902	920	CH 12	16900
344	CH 13	16614	922	CH 13	16599
346	CH 14	17067	924	CH 14	17065
348	CH 15	16738	926	CH 15	16736
350	REFLECTOR 1 POSITION 11	1545	928	REFLECTOR 1 POSITION 28	4126
352	REFLECTOR 2 POSITION 11	1347	930	REFLECTOR 2 POSITION 28	3925
354	REFL 1 POS 11 2ND LOOK	1543	932	REFL 1 POS 28 2ND LOOK	4120
356	REFL 2 POS 11 2ND LOOK	1343	934	REFL 2 POS 28 2ND LOOK	3921
358	SCENE DATA BP 11 CH 3	15932	936	SCENE DATA BP 28 CH 3	15930
360	CH 4	16699	938	CH 4	16710
362	CH 5	16933	940	CH 5	16943
364	CH 6	17251	942	CH 6	17250
366	CH 7	16315	944	CH 7	16309
368	CH 8	16519	946	CH 8	16526
370	CH 9	17393	948	CH 9	17392
372	CH 10	16627	950	CH 10	16620
374	CH 11	16528	952	CH 11	16515
376	CH 12	16900	954	CH 12	16890
378	CH 13	16599	956	CH 13	16610
380	CH 14	17037	958	CH 14	17036
382	CH 15	16740	960	CH 15	16736
384	REFLECTOR 1 POSITION 12	1698	962	REFLECTOR 1 POSITION 29	4275
386	REFLECTOR 2 POSITION 12	1499	964	REFLECTOR 2 POSITION 29	4076
388	REFL 1 POS 12 2ND LOOK	1694	966	REFL 1 POS 29 2ND LOOK	4272
390	REFL 2 POS 12 2ND LOOK	1495	968	REFL 2 POS 29 2ND LOOK	4073
392	SCENE DATA BP 12 CH 3	15931	970	SCENE DATA BP 29 CH 3	15955

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
394	CH 4	16699	972	CH 4	16732
396	CH 5	16928	974	CH 5	16974
398	CH 6	17257	976	CH 6	17247
400	CH 7	16315	978	CH 7	16308
402	CH 8	16521	980	CH 8	16541
404	CH 9	17395	982	CH 9	17389
406	CH 10	16630	984	CH 10	16620
408	CH 11	16523	986	CH 11	16521
410	CH 12	16909	988	CH 12	16893
412	CH 13	16614	990	CH 13	16592
414	CH 14	17056	992	CH 14	17034
416	CH 15	16739	994	CH 15	16733
418	REFLECTOR 1 POSITION 13	1848	996	REFLECTOR 1 POSITION 30	4430
420	REFLECTOR 2 POSITION 13	1650	998	REFLECTOR 2 POSITION 30	4226
422	REFL 1 POS 13 2ND LOOK	1845	1000	REFL 1 POS 30 2ND LOOK	4424
424	REFL 2 POS 13 2ND LOOK	1646	1002	REFL 2 POS 30 2ND LOOK	4224
426	SCENE DATA BP 13 CH 3	15934	1004	SCENE DATA BP 30 CH 3	15931
428	CH 4	16709	1006	CH 4	16704
430	CH 5	16936	1008	CH 5	16935
432	CH 6	17250	1010	CH 6	17252
434	CH 7	16327	1012	CH 7	16305
436	CH 8	16523	1014	CH 8	16523
438	CH 9	17400	1016	CH 9	17394
440	CH 10	16628	1018	CH 10	16616
442	CH 11	16526	1020	CH 11	165
444	CH 12	16903	1022	CH 12	1690
446	CH 13	16611	1024	CH 13	16602
448	CH 14	17060	1026	CH 14	17055
450	CH 15	16743	1028	CH 15	16734
452	REFLECTOR 1 POSITION 14	2002	1030	REFLECTOR 1 COLD CAL POS	6021
454	REFLECTOR 2 POSITION 14	1802	1032	REFLECTOR 2 COLD CAL POS	5820
456	REFL 1 POS 14 2ND LOOK	1998	1034	REFL 1 COLD CAL 2ND LOOK	6021
458	REFL 2 POS 14 2ND LOOK	1798	1036	REFL 2 COLD CAL 2ND LOOK	5820
460	SCENE DATA BP 14 CH 3	15931	1038	COLD CAL DATA 1 CH 3	15934
462	CH 4	16707	1040	CH 4	16703
464	CH 5	16936	1042	CH 5	16934
466	CH 6	17267	1044	CH 6	17247
468	CH 7	16327	1046	CH 7	16306
470	CH 8	16527	1048	CH 8	16518
472	CH 9	17408	1050	CH 9	17391
474	CH 10	16630	1052	CH 10	16619
476	CH 11	16540	1054	CH 11	16519
478	CH 12	16902	1056	CH 12	16895
480	CH 13	16585	1058	CH 13	16598
482	CH 14	17028	1060	CH 14	17041
484	CH 15	16746	1062	CH 15	16734
486	REFLECTOR 1 POSITION 15	2154	1064	COLD CAL DATA 2 CH 3	15936
488	REFLECTOR 2 POSITION 15	1956	1066	CH 4	16703
490	REFL 1 POS 15 2ND LOOK	2149	1068	CH 5	16932
492	REFL 2 POS 15 2ND LOOK	1950	1070	CH 6	17250

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	SCENE DATA BP 15 CH 3	15933	1072	CH 7	16308
496	CH 4	16706	1074	CH 8	16522
498	CH 5	16942	1076	CH 9	17388
500	CH 6	17263	1078	CH 10	16613
502	CH 7	16312	1080	CH 11	16523
504	CH 8	16527	1082	CH 12	16894
506	CH 9	17404	1084	CH 13	16600
508	CH 10	16618	1086	CH 14	17054
510	CH 11	16523	1088	CH 15	16735
512	CH 12	16947	1182	REFLECTOR 1 WARM CAL POS	10420
514	CH 13	16667	1184	REFLECTOR 2 WARM CAL POS	10220
516	CH 14	17120	1186	REFL 1 WARM CAL 2ND LOOK	10420
518	CH 15	16741	1188	REFL 2 WARM CAL 2ND LOOK	10220
520	REFLECTOR 1 POSITION 16	2303	1190	WARM CAL DATA 1 CH 3	15930
522	REFLECTOR 2 POSITION 16	2105	1192	CH 4	16696
524	REFL 1 POS 16 2ND LOOK	2300	1194	CH 5	16930
526	REFL 2 POS 16 2ND LOOK	2102	1196	CH 6	17237
528	SCENE DATA BP 16 CH 3	15946	1198	CH 7	16301
530	CH 4	16726	1200	CH 8	16514
532	CH 5	16965	1202	CH 9	17384
534	CH 6	17289	1204	CH 10	16613
536	CH 7	16332	1206	CH 11	16508
538	CH 8	16541	1208	CH 12	16895
540	CH 9	17418	1210	CH 13	16596
542	CH 10	16618	1212	CH 14	17055
544	CH 11	16532	1214	CH 15	16730
546	CH 12	16975	1216	WARM CAL DATA 2 CH 3	15925
548	CH 13	16694	1218	CH 4	16697
550	CH 14	17156	1220	CH 5	16931
552	CH 15	16751	1222	CH 6	17242
554	REFLECTOR 1 POSITION 17	2455	1224	CH 7	16303
556	REFLECTOR 2 POSITION 17	2257	1226	CH 8	16517
558	REFL 1 POS 17 2ND LOOK	2452	1228	CH 9	17383
560	REFL 2 POS 17 2ND LOOK	2253	1230	CH 10	16614
562	SCENE DATA BP 17 CH 3	15928	1232	CH 11	16514
564	CH 4	16703	1234	CH 12	16892
566	CH 5	16937	1236	CH 13	16607
568	CH 6	17255	1238	CH 14	17046
570	CH 7	16330	1240	CH 15	16732

FULL SCAN MODE

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	17586	22.59
1092	SCAN MOTOR A1-2	18042	23.06
1094	FEEDHORN A1-1	18846	24.25
1096	FEEDHORN A1-2	19737	24.53
1098	RF MUX A1-1	19054	25.19
1100	RF MUX A1-2	19574	26.46
1102	LOCAL OSCILLATOR CHANNEL 3	20189	27.40
1104	LOCAL OSCILLATOR CHANNEL 4	20281	27.50
1106	LOCAL OSCILLATOR CHANNEL 5	20094	26.89
1108	LOCAL OSCILLATOR CHANNEL 6	19039	25.26
1110	LOCAL OSCILLATOR CHANNEL 7	19348	25.75
1112	LOCAL OSCILLATOR CHANNEL 8	19896	27.20
1114	LOCAL OSCILLATOR CHANNEL 15	19323	26.71
1116	PLL LO #2 CHANNELS 9 THROUGH 14	18865	25.55
1118	PLL LO #1 CHANNELS 9 THROUGH 14	19761	27.03
1120	SPARE (NOT USED)	32767	52.86
1122	MIXER/IF AMPLIFIER CHANNEL 3	20097	26.92
1124	MIXER/IF AMPLIFIER CHANNEL 4	19685	26.88
1126	MIXER/IF AMPLIFIER CHANNEL 5	19673	26.59
1128	MIXER/IF AMPLIFIER CHANNEL 6	19334	25.67
1130	MIXER/IF AMPLIFIER CHANNEL 7	19437	25.97
1132	MIXER/IF AMPLIFIER CHANNEL 8	19590	26.91
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	18937	25.66
1136	MIXER/IF AMPLIFIER CHANNEL 15	19509	26.59
1138	IF AMPLIFIER CHANNEL 11 THRU 14	19370	26.15
1140	IF AMPLIFIER CHANNEL 9	19785	26.13
1142	IF AMPLIFIER CHANNEL 10	19373	26.29
1144	IF AMPLIFIER CHANNEL 11	19290	25.59
1146	DC/DC CONVERTER	19582	26.00
1148	IF AMPLIFIER CHANNEL 13	19416	25.56
1150	IF AMPLIFIER CHANNEL 14	19087	25.55
1152	IF AMPLIFIER CHANNEL 12	19072	25.51
1154	RF SHELF A1-1	19353	25.76
1156	RF SHELF A1-2	19538	26.29
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	18851	24.49
1160	A1-1 WARM LOAD 1	22598	22.64
1162	A1-1 WARM LOAD 2	22797	22.67
1164	A1-1 WARM LOAD 3	22863	22.73
1166	A1-1 WARM LOAD 4	22554	22.70
1168	A1-1 WARM LOAD CENTER	22736	22.74
1170	A1-2 WARM LOAD 1	23329	23.54
1172	A1-2 WARM LOAD 2	23166	23.53
1174	A1-2 WARM LOAD 3	23190	23.57
1176	A1-2 WARM LOAD 4	23117	23.56
1178	A1-2 WARM LOAD CENTER	22987	23.44
1180	TEMP SENSOR REFERENCE VOLTAGE	24880	

FULL SCAN MODE

DESCRIPTION	STATUS	STATUS	STATUS
SCANNER A1-1 POWER	ON	ON	ON
SCANNER A1-2 POWER	ON	ON	ON
PLL POWER	PLLO # 1	PLLO # 1	PLLO # 1
ANTENNA IN WARM CAL POSITION MODE	NO	NO	NO
ANTENNA IN COLD CAL POSITION MODE	NO	NO	NO
ANTENNA IN NADIR POSITION MODE	NO	NO	NO
ANTENNA IN FULL SCAN MODE	YES	YES	YES
SURVIVAL HEATER POWER	OFF	OFF	OFF
MODULE POWER	CONNECT	CONNECT	CONNECT
COLD CAL POSITION MSB	ZERO	ZERO	ZERO
COLD CAL POSITION LSB	ZERO	ZERO	ZERO

ANALOG DATA

DESCRIPTION	VALUE	DEG C	VALUE	DEG C	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	218	23.4	217	22.1	218	23.4
A1-2 SCANNER MOTOR TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-1 RF SHELF TEMPERATURE	219	24.8	219	24.8	219	24.8
A1-2 RF SHELF TEMPERATURE	220	26.2	220	26.2	220	26.2
A1-1 WARM LOAD TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-2 WARM LOAD TEMPERATURE	218	23.4	218	23.4	218	23.4

DESCRIPTION	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS
A1-1 ANTENNA DRIVE MOTOR CURRENT (AVRG)	92	42.87	94	43.80	96	44.74
A1-2 ANTENNA DRIVE MOTOR CURRENT (AVRG)	86	40.08	88	41.01	90	41.94
SIGNAL PROCESSING +15 VDC	172	14.84	172	14.84	172	14.84
ANTENNA DRIVE +15 VDC	175	15.10	174	15.02	175	15.10
SIGNAL PROCESSING -15 VDC	150	-15.05	150	-15.05	150	-15.05
ANTENNA DRIVE -15 VDC	151	-15.00	151	-15.00	151	-15.00
RECEIVER AMPLIFIER +8 VDC	158	7.90	158	7.90	158	7.90
SIGNAL PROCESSOR +5 VDC	147	4.90	148	4.93	148	4.93
ANTENNA DRIVE +5 VDC	149	4.97	149	4.97	149	4.97
RECEIVER MIXER/IF +10 VDC	171	9.88	171	9.88	171	9.88
PHASE LOCK LOOP (CHANNEL 9/14) +15 VDC	171	14.76	171	14.76	171	14.76
PHASE LOCK LOOP (CHANNEL 9/14) -15 VDC	146	-15.25	146	-15.25	146	-15.25
L.O. VOLTAGE (CHANNEL 8) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 7) VDC	173	9.90	173	9.90	173	9.90
L.O. VOLTAGE (CHANNEL 6) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 3) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 4) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 5) VDC	173	9.90	173	9.90	173	9.90
PLLO # 2 LOCK DETECT	5	0.10	5	0.10	5	0.10
PLLO # 1 LOCK DETECT	221	4.42	221	4.42	221	4.42
L.O. VOLTAGE (CHANNEL 15) VDC	172	14.84	172	14.84	172	14.84

PRT TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
VARIABLE TARGET	615	42.00	601	14.00
	616	43.00	602	15.00
	617	44.00	603	16.00
	618	45.00	604	17.00
	619	46.00	605	18.00
	620	47.00	606	19.00
	621	48.00	607	20.00
FIXED TARGET	622	49.00	608	21.00
	623	50.00	609	22.00
	624	51.00	610	23.00
	625	52.00	611	24.00
	626	53.00	612	25.00
	627	67.00	613	69.00
	628	68.00	614	70.00
BASEPLATE	629	71.00	630	72.00
	631	26.00	632	27.00

THERMOCOUPLE TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
FIXED TARGET SHROUD	558	5.00	537	34.00
	559	6.00	538	35.00
VARIABLE TARGET SHROUD	550	7.00	524	36.00
	551	8.00	525	37.00
FIXED TARGET N2	506	57.00	502	30.00
	507	58.00	503	31.00
VARIABLE TARGET N2	516	59.00	511	32.00
	517	60.00	512	33.00
HEATER N2	514	1.00	509	38.00
	515	2.00	510	39.00
FIXED TARGET FLOW METER	508	63.00	504	61.00
VARIABLE TARGET FLOW METER	518	64.00	513	62.00
BASEPLATE HEATER N2	519	3.00	520	4.00
BASEPLATE N2	521	9.00	522	10.00
BASEPLATE FLOW METER	523	65.00		
ADJUNCT RADIATORS	575	73.00	577	74.00
	579	75.00	581	76.00

```
AMSU  A1-17 A1.EXE     FULL SCAN MODE     P1 25-NOV-93 09:25:45  SCAN NUMBER
[ 5 ] DIGITAL A DATA   ELEMENT 0000

  6 ] DIGITAL B DATA   ELEMENT   00

[ 7 ] ANALOG DATA      ELEMENT   00


                                   COMMANDS
[ 9 ]  MODULE POWER =          CONNECT      ANTENNA IN COLD CAL POSIT = NO   [ 15
[ 10 ] SURVIVAL HEATER POWER =     OFF      ANTENNA IN NADIR POSITION = NO   [ 16
[ 11 ] MODULE TOTALLY OFF =         ON      ANTENNA IN FULL SCAN MODE = YES  [ 17
[ 12 ] SCANNER A1 - 1 POWER =       ON      PLL POWER =              PLLO # 1 [ 18
[ 13 ] SCANNER A1 - 2 POWER =       ON      COLD CAL POSITION MSB =    ZERO   [ 19
[ 14 ] ANTENNA IN WARM CAL POSIT = NO       COLD CAL POSITION LSB =    ZERO   [ 20

          POWER [ 4 ]  ON
                       SCREEN ONLY [ 2 ]  PRINT  [ 3 ] FULL       [ 1 ] RETURN
 SELECT TOUCHSCREEN BUTTON 3
```

POST TRANSIENT
MLB HIGH FREQ
2.86 Hz

AND

PRE TRANSIENT
MLB HIGH FREQ
6.67 Hz

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
1	SYNC SEQUENCE BYTE 1	11111111	572	SCENE DATA BP 17 CH 8	16499
2	SYNC SEQUENCE BYTE 2	11111111	574	CH 9	17410
3	SYNC SEQUENCE BYTE 3	11111111	576	CH 10	16634
4	UNIT ID AND SERIAL NO	00010001	578	CH 11	16549
5	DIGITAL B DATA BYTE 1	00000010	580	CH 12	16888
6	DIGITAL B DATA BYTE 2	00001110	582	CH 13	16576
7	DIGITAL B DATA BYTE 3	00000000	584	CH 14	17040
8	DIGITAL B DATA BYTE 4	00000000	586	CH 15	16745
10	REFLECTOR 1 POSITION 1	27	588	REFLECTOR 1 POSITION 18	2608
12	REFLECTOR 2 POSITION 1	16212	590	REFLECTOR 2 POSITION 18	2410
14	REFL 1 POS 1 2ND LOOK	27	592	REFL 1 POS 18 2ND LOOK	2604
16	REFL 2 POS 1 2ND LOOK	16212	594	REFL 2 POS 18 2ND LOOK	2405
18	SCENE DATA BP 1 CH 3	15885	596	SCENE DATA BP 18 CH 3	15876
20	CH 4	16704	598	CH 4	16694
22	CH 5	16949	600	CH 5	16939
24	CH 6	17240	602	CH 6	17243
26	CH 7	16300	604	CH 7	16318
28	CH 8	16516	606	CH 8	16505
30	CH 9	17393	608	CH 9	17408
32	CH 10	16621	610	CH 10	16635
34	CH 11	16513	612	CH 11	16518
36	CH 12	16896	614	CH 12	16925
38	CH 13	16614	616	CH 13	16658
40	CH 14	17029	618	CH 14	17102
42	CH 15	16735	620	CH 15	167
44	REFLECTOR 1 POSITION 2	180	622	REFLECTOR 1 POSITION 19	275
46	REFLECTOR 2 POSITION 2	16365	624	REFLECTOR 2 POSITION 19	2559
48	REFL 1 POS 2 2ND LOOK	177	626	REFL 1 POS 19 2ND LOOK	2756
50	REFL 2 POS 2 2ND LOOK	16361	628	REFL 2 POS 19 2ND LOOK	2556
52	SCENE DATA BP 2 CH 3	15876	630	SCENE DATA BP 19 CH 3	15874
54	CH 4	16689	632	CH 4	16691
56	CH 5	16934	634	CH 5	16928
58	CH 6	17253	636	CH 6	17260
60	CH 7	16303	638	CH 7	16299
62	CH 8	16501	640	CH 8	16495
64	CH 9	17398	642	CH 9	17396
66	CH 10	16624	644	CH 10	16620
68	CH 11	16511	646	CH 11	16516
70	CH 12	16889	648	CH 12	16891
72	CH 13	16610	650	CH 13	16605
74	CH 14	17033	652	CH 14	17053
76	CH 15	16734	654	CH 15	16736
78	REFLECTOR 1 POSITION 3	335	656	REFLECTOR 1 POSITION 20	2910
80	REFLECTOR 2 POSITION 3	130	658	REFLECTOR 2 POSITION 20	2710
82	REFL 1 POS 3 2ND LOOK	329	660	REFL 1 POS 20 2ND LOOK	2908
84	REFL 2 POS 3 2ND LOOK	131	662	REFL 2 POS 20 2ND LOOK	2708
86	SCENE DATA BP 3 CH 3	15875	664	SCENE DATA BP 20 CH 3	15872
88	CH 4	16687	666	CH 4	16686
90	CH 5	16934	668	CH 5	16929
92	CH 6	17239	670	CH 6	17247

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	16306	672	CH 7	16301
96	CH 8	16495	674	CH 8	16496
98	CH 9	17399	676	CH 9	17398
100	CH 10	16621	678	CH 10	16622
102	CH 11	16521	680	CH 11	16519
104	CH 12	16902	682	CH 12	16902
106	CH 13	16622	684	CH 13	16617
108	CH 14	17050	686	CH 14	17063
110	CH 15	16737	688	CH 15	16736
112	REFLECTOR 1 POSITION 4	484	690	REFLECTOR 1 POSITION 21	3065
114	REFLECTOR 2 POSITION 4	284	692	REFLECTOR 2 POSITION 21	2864
116	REFL 1 POS 4 2ND LOOK	481	694	REFL 1 POS 21 2ND LOOK	3059
118	REFL 2 POS 4 2ND LOOK	281	696	REFL 2 POS 21 2ND LOOK	2860
120	SCENE DATA BP 4 CH 3	15873	698	SCENE DATA BP 21 CH 3	15873
122	CH 4	16687	700	CH 4	16687
124	CH 5	16933	702	CH 5	16930
126	CH 6	17255	704	CH 6	17247
128	CH 7	16308	706	CH 7	16298
130	CH 8	16495	708	CH 8	16493
132	CH 9	17404	710	CH 9	17397
134	CH 10	16627	712	CH 10	16622
136	CH 11	16514	714	CH 11	16521
138	CH 12	16916	716	CH 12	16896
140	CH 13	16642	718	CH 13	16611
142	CH 14	17086	720	CH 14	17044
144	CH 15	16744	722	CH 15	16734
146	REFLECTOR 1 POSITION 5	636	724	REFLECTOR 1 POSITION 22	3212
148	REFLECTOR 2 POSITION 5	437	726	REFLECTOR 2 POSITION 22	3014
150	REFL 1 POS 5 2ND LOOK	633	728	REFL 1 POS 22 2ND LOOK	3210
152	REFL 2 POS 5 2ND LOOK	432	730	REFL 2 POS 22 2ND LOOK	3011
154	SCENE DATA BP 5 CH 3	15869	732	SCENE DATA BP 22 CH 3	15871
156	CH 4	16690	734	CH 4	16686
158	CH 5	16933	736	CH 5	16930
160	CH 6	17255	738	CH 6	17255
162	CH 7	16302	740	CH 7	16298
164	CH 8	16496	742	CH 8	16491
166	CH 9	17404	744	CH 9	17397
168	CH 10	16643	746	CH 10	16617
170	CH 11	16548	748	CH 11	16514
172	CH 12	16879	750	CH 12	16901
174	CH 13	16566	752	CH 13	16620
176	CH 14	17010	754	CH 14	17052
178	CH 15	16742	756	CH 15	16734
180	REFLECTOR 1 POSITION 6	789	758	REFLECTOR 1 POSITION 23	3366
182	REFLECTOR 2 POSITION 6	589	760	REFLECTOR 2 POSITION 23	3167
184	REFL 1 POS 6 2ND LOOK	785	762	REFL 1 POS 23 2ND LOOK	3362
186	REFL 2 POS 6 2ND LOOK	585	764	REFL 2 POS 23 2ND LOOK	3163
188	SCENE DATA BP 6 CH 3	15872	766	SCENE DATA BP 23 CH 3	15867
190	CH 4	16687	768	CH 4	16687
192	CH 5	16931	770	CH 5	16926

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
194	CH 6	17278	772	CH 6	17251
196	CH 7	16325	774	CH 7	16302
198	CH 8	16491	776	CH 8	16496
200	CH 9	17409	778	CH 9	17396
202	CH 10	16636	780	CH 10	16622
204	CH 11	16535	782	CH 11	16518
206	CH 12	16902	784	CH 12	16907
208	CH 13	16630	786	CH 13	16603
210	CH 14	17064	788	CH 14	17071
212	CH 15	16746	790	CH 15	16734
214	REFLECTOR 1 POSITION 7	940	792	REFLECTOR 1 POSITION 24	3519
216	REFLECTOR 2 POSITION 7	740	794	REFLECTOR 2 POSITION 24	3321
218	REFL 1 POS 7 2ND LOOK	936	796	REFL 1 POS 24 2ND LOOK	3514
220	REFL 2 POS 7 2ND LOOK	736	798	REFL 2 POS 24 2ND LOOK	3315
222	SCENE DATA BP 7 CH 3	15875	800	SCENE DATA BP 24 CH 3	15869
224	CH 4	16686	802	CH 4	16685
226	CH 5	16929	804	CH 5	16930
228	CH 6	17252	806	CH 6	17256
230	CH 7	16308	808	CH 7	16299
232	CH 8	16497	810	CH 8	16496
234	CH 9	17396	812	CH 9	17394
236	CH 10	16626	814	CH 10	16620
238	CH 11	16517	816	CH 11	16511
240	CH 12	16892	818	CH 12	16894
242	CH 13	16605	820	CH 13	166
244	CH 14	17064	822	CH 14	170
246	CH 15	16736	824	CH 15	16732
248	REFLECTOR 1 POSITION 8	1091	826	REFLECTOR 1 POSITION 25	3668
250	REFLECTOR 2 POSITION 8	892	828	REFLECTOR 2 POSITION 25	3469
252	REFL 1 POS 8 2ND LOOK	1087	830	REFL 1 POS 25 2ND LOOK	3665
254	REFL 2 POS 8 2ND LOOK	888	832	REFL 2 POS 25 2ND LOOK	3466
256	SCENE DATA BP 8 CH 3	15875	834	SCENE DATA BP 25 CH 3	15868
258	CH 4	16685	836	CH 4	16687
260	CH 5	16934	838	CH 5	16929
262	CH 6	17247	840	CH 6	17255
264	CH 7	16308	842	CH 7	16303
266	CH 8	16497	844	CH 8	16494
268	CH 9	17398	846	CH 9	17395
270	CH 10	16628	848	CH 10	16618
272	CH 11	16516	850	CH 11	16517
274	CH 12	16893	852	CH 12	16898
276	CH 13	16614	854	CH 13	16607
278	CH 14	17039	856	CH 14	17033
280	CH 15	16737	858	CH 15	16735
282	REFLECTOR 1 POSITION 9	1246	860	REFLECTOR 1 POSITION 26	3822
284	REFLECTOR 2 POSITION 9	1043	862	REFLECTOR 2 POSITION 26	3622
286	REFL 1 POS 9 2ND LOOK	1240	864	REFL 1 POS 26 2ND LOOK	3817
288	REFL 2 POS 9 2ND LOOK	1040	866	REFL 2 POS 26 2ND LOOK	3618
290	SCENE DATA BP 9 CH 3	15875	868	SCENE DATA BP 26 CH 3	15872
292	CH 4	16696	870	CH 4	16686

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	16932	872	CH 5	16936
296	CH 6	17246	874	CH 6	17252
298	CH 7	16304	876	CH 7	16297
300	CH 8	16493	878	CH 8	16491
302	CH 9	17395	880	CH 9	17394
304	CH 10	16618	882	CH 10	16624
306	CH 11	16510	884	CH 11	16514
308	CH 12	16883	886	CH 12	16889
310	CH 13	16601	888	CH 13	16606
312	CH 14	17044	890	CH 14	17055
314	CH 15	16735	892	CH 15	16733
316	REFLECTOR 1 POSITION 10	1396	894	REFLECTOR 1 POSITION 27	3975
318	REFLECTOR 2 POSITION 10	1194	896	REFLECTOR 2 POSITION 27	3775
320	REFL 1 POS 10 2ND LOOK	1391	898	REFL 1 POS 27 2ND LOOK	3969
322	REFL 2 POS 10 2ND LOOK	1192	900	REFL 2 POS 27 2ND LOOK	3770
324	SCENE DATA BP 10 CH 3	15880	902	SCENE DATA BP 27 CH 3	15872
326	CH 4	16690	904	CH 4	16690
328	CH 5	16934	906	CH 5	16935
330	CH 6	17252	908	CH 6	17246
332	CH 7	16300	910	CH 7	16301
334	CH 8	16495	912	CH 8	16502
336	CH 9	17395	914	CH 9	17394
338	CH 10	16618	916	CH 10	16621
340	CH 11	16518	918	CH 11	16518
342	CH 12	16896	920	CH 12	16896
344	CH 13	16596	922	CH 13	16612
346	CH 14	17059	924	CH 14	17058
348	CH 15	16736	926	CH 15	16734
350	REFLECTOR 1 POSITION 11	1545	928	REFLECTOR 1 POSITION 28	4126
352	REFLECTOR 2 POSITION 11	1346	930	REFLECTOR 2 POSITION 28	3926
354	REFL 1 POS 11 2ND LOOK	1542	932	REFL 1 POS 28 2ND LOOK	4120
356	REFL 2 POS 11 2ND LOOK	1343	934	REFL 2 POS 28 2ND LOOK	3920
358	SCENE DATA BP 11 CH 3	15872	936	SCENE DATA BP 28 CH 3	15873
360	CH 4	16691	938	CH 4	16702
362	CH 5	16935	940	CH 5	16938
364	CH 6	17252	942	CH 6	17249
366	CH 7	16301	944	CH 7	16296
368	CH 8	16497	946	CH 8	16499
370	CH 9	17396	948	CH 9	17393
372	CH 10	16626	950	CH 10	16625
374	CH 11	16525	952	CH 11	16514
376	CH 12	16892	954	CH 12	16890
378	CH 13	16594	956	CH 13	16613
380	CH 14	17021	958	CH 14	17060
382	CH 15	16734	960	CH 15	16733
384	REFLECTOR 1 POSITION 12	1698	962	REFLECTOR 1 POSITION 29	4275
386	REFLECTOR 2 POSITION 12	1499	964	REFLECTOR 2 POSITION 29	4077
388	REFL 1 POS 12 2ND LOOK	1694	966	REFL 1 POS 29 2ND LOOK	4273
390	REFL 2 POS 12 2ND LOOK	1495	968	REFL 2 POS 29 2ND LOOK	4073
392	SCENE DATA BP 12 CH 3	15871	970	SCENE DATA BP 29 CH 3	15898

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALU
394	CH 4	16689	972	CH 4	16718
396	CH 5	16930	974	CH 5	16974
398	CH 6	17254	976	CH 6	17246
400	CH 7	16303	978	CH 7	16300
402	CH 8	16497	980	CH 8	16519
404	CH 9	17395	982	CH 9	17389
406	CH 10	16619	984	CH 10	16619
408	CH 11	16513	986	CH 11	16519
410	CH 12	16895	988	CH 12	16889
412	CH 13	16608	990	CH 13	16598
414	CH 14	17078	992	CH 14	17048
416	CH 15	16735	994	CH 15	16734
418	REFLECTOR 1 POSITION 13	1848	996	REFLECTOR 1 POSITION 30	4430
420	REFLECTOR 2 POSITION 13	1650	998	REFLECTOR 2 POSITION 30	4226
422	REFL 1 POS 13 2ND LOOK	1845	1000	REFL 1 POS 30 2ND LOOK	4424
424	REFL 2 POS 13 2ND LOOK	1646	1002	REFL 2 POS 30 2ND LOOK	4226
426	SCENE DATA BP 13 CH 3	15877	1004	SCENE DATA BP 30 CH 3	15877
428	CH 4	16699	1006	CH 4	16695
430	CH 5	16931	1008	CH 5	16940
432	CH 6	17249	1010	CH 6	17253
434	CH 7	16318	1012	CH 7	16297
436	CH 8	16499	1014	CH 8	16504
438	CH 9	17397	1016	CH 9	17396
440	CH 10	16626	1018	CH 10	16625
442	CH 11	16528	1020	CH 11	165
444	CH 12	16895	1022	CH 12	168
446	CH 13	16614	1024	CH 13	16614
448	CH 14	17045	1026	CH 14	17064
450	CH 15	16741	1028	CH 15	16733
452	REFLECTOR 1 POSITION 14	2002	1030	REFLECTOR 1 COLD CAL POS	6021
454	REFLECTOR 2 POSITION 14	1800	1032	REFLECTOR 2 COLD CAL POS	5820
456	REFL 1 POS 14 2ND LOOK	1998	1034	REFL 1 COLD CAL 2ND LOOK	6021
458	REFL 2 POS 14 2ND LOOK	1798	1036	REFL 2 COLD CAL 2ND LOOK	5820
460	SCENE DATA BP 14 CH 3	15873	1038	COLD CAL DATA 1 CH 3	15874
462	CH 4	16698	1040	CH 4	16694
464	CH 5	16937	1042	CH 5	16931
466	CH 6	17266	1044	CH 6	17245
468	CH 7	16312	1046	CH 7	16300
470	CH 8	16508	1048	CH 8	16494
472	CH 9	17405	1050	CH 9	17390
474	CH 10	16634	1052	CH 10	16620
476	CH 11	16534	1054	CH 11	16523
478	CH 12	16876	1056	CH 12	16899
480	CH 13	16583	1058	CH 13	16601
482	CH 14	17026	1060	CH 14	17061
484	CH 15	16743	1062	CH 15	16733
486	REFLECTOR 1 POSITION 15	2153	1064	COLD CAL DATA 2 CH 3	15878
488	REFLECTOR 2 POSITION 15	1955	1066	CH 4	16695
490	REFL 1 POS 15 2ND LOOK	2149	1068	CH 5	16932
492	REFL 2 POS 15 2ND LOOK	1950	1070	CH 6	17248

LEMENT	DESCRIPTION		VALUE	ELEMENT	DESCRIPTION		VALUE
494	SCENE DATA BP 15	CH 3	15874	1072		CH 7	16299
496		CH 4	16697	1074		CH 8	16493
498		CH 5	16941	1076		CH 9	17398
500		CH 6	17265	1078		CH 10	16621
502		CH 7	16300	1080		CH 11	16518
504		CH 8	16501	1082		CH 12	16904
506		CH 9	17402	1084		CH 13	16610
508		CH 10	16615	1086		CH 14	17045
510		CH 11	16515	1088		CH 15	16733
512		CH 12	16929	1182	REFLECTOR 1 WARM CAL POS		10420
514		CH 13	16669	1184	REFLECTOR 2 WARM CAL POS		10220
516		CH 14	17121	1186	REFL 1 WARM CAL 2ND LOOK		10420
518		CH 15	16739	1188	REFL 2 WARM CAL 2ND LOOK		10220
520	REFLECTOR 1 POSITION 16		2302	1190	WARM CAL DATA 1	CH 3	15871
522	REFLECTOR 2 POSITION 16		2105	1192		CH 4	16689
524	REFL 1 POS 16 2ND LOOK		2300	1194		CH 5	16930
526	REFL 2 POS 16 2ND LOOK		2101	1196		CH 6	17237
528	SCENE DATA BP 16	CH 3	15890	1198		CH 7	16294
530		CH 4	16716	1200		CH 8	16495
532		CH 5	16968	1202		CH 9	17388
534		CH 6	17286	1204		CH 10	16612
536		CH 7	16323	1206		CH 11	16514
538		CH 8	16521	1208		CH 12	16885
540		CH 9	17421	1210		CH 13	16610
542		CH 10	16612	1212		CH 14	17049
544		CH 11	16519	1214		CH 15	16728
546		CH 12	16965	1216	WARM CAL DATA 2	CH 3	15868
548		CH 13	16703	1218		CH 4	16688
550		CH 14	17152	1220		CH 5	16933
552		CH 15	16748	1222		CH 6	17245
554	REFLECTOR 1 POSITION 17		2455	1224		CH 7	16292
556	REFLECTOR 2 POSITION 17		2258	1226		CH 8	16495
558	REFL 1 POS 17 2ND LOOK		2452	1228		CH 9	17388
560	REFL 2 POS 17 2ND LOOK		2253	1230		CH 10	16614
562	SCENE DATA BP 17	CH 3	15871	1232		CH 11	16507
564		CH 4	16694	1234		CH 12	16889
566		CH 5	16933	1236		CH 13	16592
568		CH 6	17258	1238		CH 14	17050
570		CH 7	16323	1240		CH 15	16730

FULL SCAN MODE

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	17605	22.63
1092	SCAN MOTOR A1-2	18053	23.08
1094	FEEDHORN A1-1	18827	24.21
1096	FEEDHORN A1-2	19697	24.45
1098	RF MUX A1-1	19049	25.18
1100	RF MUX A1-2	19535	26.38
1102	LOCAL OSCILLATOR CHANNEL 3	20199	27.42
1104	LOCAL OSCILLATOR CHANNEL 4	20298	27.54
1106	LOCAL OSCILLATOR CHANNEL 5	20096	26.90
1108	LOCAL OSCILLATOR CHANNEL 6	19076	25.33
1110	LOCAL OSCILLATOR CHANNEL 7	19357	25.77
1112	LOCAL OSCILLATOR CHANNEL 8	19910	27.23
1114	LOCAL OSCILLATOR CHANNEL 15	19336	26.74
1116	PLL LO #2 CHANNELS 9 THROUGH 14	18823	25.47
1118	PLL LO #1 CHANNELS 9 THROUGH 14	19861	27.22
1120	SPARE (NOT USED)	32767	52.86
1122	MIXER/IF AMPLIFIER CHANNEL 3	20051	26.83
1124	MIXER/IF AMPLIFIER CHANNEL 4	19636	26.79
1126	MIXER/IF AMPLIFIER CHANNEL 5	19630	26.51
1128	MIXER/IF AMPLIFIER CHANNEL 6	19322	25.65
1130	MIXER/IF AMPLIFIER CHANNEL 7	19422	25.94
1132	MIXER/IF AMPLIFIER CHANNEL 8	19548	26.83
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	18901	25.59
1136	MIXER/IF AMPLIFIER CHANNEL 15	19515	26.60
1138	IF AMPLIFIER CHANNEL 11 THRU 14	19387	26.18
1140	IF AMPLIFIER CHANNEL 9	19802	26.17
1142	IF AMPLIFIER CHANNEL 10	19389	26.32
1144	IF AMPLIFIER CHANNEL 11	19279	25.57
1146	DC/DC CONVERTER	19677	26.18
1148	IF AMPLIFIER CHANNEL 13	19402	25.53
1150	IF AMPLIFIER CHANNEL 14	19075	25.53
1152	IF AMPLIFIER CHANNEL 12	19059	25.49
1154	RF SHELF A1-1	19354	25.76
1156	RF SHELF A1-2	19516	26.25
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	18830	24.45
1160	A1-1 WARM LOAD 1	22622	22.69
1162	A1-1 WARM LOAD 2	22825	22.73
1164	A1-1 WARM LOAD 3	22888	22.78
1166	A1-1 WARM LOAD 4	22576	22.75
1168	A1-1 WARM LOAD CENTER	22765	22.80
1170	A1-2 WARM LOAD 1	23349	23.58
1172	A1-2 WARM LOAD 2	23183	23.57
1174	A1-2 WARM LOAD 3	23208	23.61
1176	A1-2 WARM LOAD 4	23135	23.60
1178	A1-2 WARM LOAD CENTER	23006	23.48
1180	TEMP SENSOR REFERENCE VOLTAGE	24880	

FULL SCAN MODE

DESCRIPTION	STATUS	STATUS	STATUS
SCANNER A1-1 POWER	ON	ON	ON
SCANNER A1-2 POWER	ON	ON	ON
PLL POWER	PLLO # 1	PLLO # 1	PLLO # 1
ANTENNA IN WARM CAL POSITION MODE	NO	NO	NO
ANTENNA IN COLD CAL POSITION MODE	NO	NO	NO
ANTENNA IN NADIR POSITION MODE	NO	NO	NO
ANTENNA IN FULL SCAN MODE	YES	YES	YES
SURVIVAL HEATER POWER	OFF	OFF	OFF
MODULE POWER	CONNECT	CONNECT	CONNECT
COLD CAL POSITION MSB	ZERO	ZERO	ZERO
COLD CAL POSITION LSB	ZERO	ZERO	ZERO

ANALOG DATA

DESCRIPTION	VALUE	DEG C	VALUE	DEG C	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	216	20.7	216	20.7	216	20.7
A1-2 SCANNER MOTOR TEMPERATURE	218	23.4	217	22.1	218	23.4
A1-1 RF SHELF TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-2 RF SHELF TEMPERATURE	220	26.2	220	26.2	220	26.2
A1-1 WARM LOAD TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-2 WARM LOAD TEMPERATURE	218	23.4	218	23.4	218	23.4

DESCRIPTION	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS
A1-1 ANTENNA DRIVE MOTOR CURRENT (AVRG)	101	47.07	101	47.07	102	47.53
A1-2 ANTENNA DRIVE MOTOR CURRENT (AVRG)	94	43.80	94	43.80	95	44.27
SIGNAL PROCESSING +15 VDC	172	14.84	172	14.84	172	14.84
ANTENNA DRIVE +15 VDC	174	15.02	174	15.02	173	14.93
SIGNAL PROCESSING -15 VDC	150	-15.05	151	-15.00	151	-15.00
ANTENNA DRIVE -15 VDC	150	-15.05	150	-15.05	150	-15.05
RECEIVER AMPLIFIER +8 VDC	158	7.90	158	7.90	158	7.90
SIGNAL PROCESSOR +5 VDC	147	4.90	147	4.90	147	4.90
ANTENNA DRIVE +5 VDC	148	4.93	148	4.93	148	4.93
RECEIVER MIXER/IF +10 VDC	171	9.88	171	9.88	171	9.88
PHASE LOCK LOOP (CHANNEL 9/14) +15 VDC	171	14.76	171	14.76	171	14.76
PHASE LOCK LOOP (CHANNEL 9/14) -15 VDC	146	-15.25	146	-15.25	146	-15.25
L.O. VOLTAGE (CHANNEL 8) VDC	173	9.90	173	9.90	174	9.96
L.O. VOLTAGE (CHANNEL 7) VDC	173	9.90	173	9.90	173	9.90
L.O. VOLTAGE (CHANNEL 6) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 3) VDC	173	9.90	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 4) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 5) VDC	173	9.90	173	9.90	173	9.90
PLLO # 2 LOCK DETECT	5	0.10	5	0.10	5	0.10
PLLO # 1 LOCK DETECT	220	4.40	220	4.40	220	4.40
L.O. VOLTAGE (CHANNEL 15) VDC	172	14.84	172	14.84	172	14.84

PRT TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
VARIABLE TARGET	615	42.00	601	14.00
	616	43.00	602	15.00
	617	44.00	603	16.00
	618	45.00	604	17.00
	619	46.00	605	18.00
	620	47.00	606	19.00
	621	48.00	607	20.00
FIXED TARGET	622	49.00	608	21.00
	623	50.00	609	22.00
	624	51.00	610	23.00
	625	52.00	611	24.00
	626	53.00	612	25.00
	627	67.00	613	69.00
	628	68.00	614	70.00
BASEPLATE	629	71.00	630	72.00
	631	26.00	632	27.00

THERMOCOUPLE TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
FIXED TARGET SHROUD	558	5.00	537	34.00
	559	6.00	538	35.00
VARIABLE TARGET SHROUD	550	7.00	524	36.00
	551	8.00	525	37.00
FIXED TARGET N2	506	57.00	502	30.00
	507	58.00	503	31.00
VARIABLE TARGET N2	516	59.00	511	32.00
	517	60.00	512	33.00
HEATER N2	514	1.00	509	38.00
	515	2.00	510	39.00
FIXED TARGET FLOW METER	508	63.00	504	61.00
VARIABLE TARGET FLOW METER	518	64.00	513	62.00
BASEPLATE HEATER N2	519	3.00	520	4.00
BASEPLATE N2	521	9.00	522	10.00
BASEPLATE FLOW METER	523	65.00		
ADJUNCT RADIATORS	575	73.00	577	74.00
	579	75.00	581	76.00

```
AMSU  A1-17 A1.EXE     FULL SCAN MODE     P1 25-NOV-93 09:32:59  SCAN NUMBER   11
[ 5 ] DIGITAL A DATA   ELEMENT 0000

[ 6 ] DIGITAL B DATA   ELEMENT   00

[ 7 ] ANALOG DATA      ELEMENT   00


                                   COMMANDS
[ 9 ]  MODULE POWER =          CONNECT      ANTENNA IN COLD CAL POSIT = NO   [ 15

[ 10 ] SURVIVAL HEATER POWER =     OFF      ANTENNA IN NADIR POSITION = NO   [ 16

[ 11 ] MODULE TOTALLY OFF =         ON      ANTENNA IN FULL SCAN MODE = YES  [ 17

[ 12 ] SCANNER A1 - 1 POWER =       ON      PLL POWER =              PLLO # 1 [ 18

[ 13 ] SCANNER A1 - 2 POWER =       ON      COLD CAL POSITION MSB =    ZERO  [ 19

[ 14 ] ANTENNA IN WARM CAL POSIT = NO       COLD CAL POSITION LSB =    ZERO  [ 20

          POWER [ 4 ]  ON
                       SCREEN ONLY [ 2 ]  PRINT  [ 3 ] FULL        [ 1 ] RETURN
SELECT TOUCHSCREEN BUTTON 3
```

Post TRANSIENT

MLB HIGH FREQ

6.67Hz

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
1	SYNC SEQUENCE BYTE 1	11111111	572	SCENE DATA BP 17 CH 8	16494
2	SYNC SEQUENCE BYTE 2	11111111	574	CH 9	17377
3	SYNC SEQUENCE BYTE 3	11111111	576	CH 10	16620
4	UNIT ID AND SERIAL NO	00010001	578	CH 11	16519
5	DIGITAL B DATA BYTE 1	00000010	580	CH 12	16860
6	DIGITAL B DATA BYTE 2	00001110	582	CH 13	16571
7	DIGITAL B DATA BYTE 3	00000000	584	CH 14	17000
8	DIGITAL B DATA BYTE 4	00000000	586	CH 15	16725
10	REFLECTOR 1 POSITION 1	27	588	REFLECTOR 1 POSITION 18	2610
12	REFLECTOR 2 POSITION 1	16212	590	REFLECTOR 2 POSITION 18	2410
14	REFL 1 POS 1 2ND LOOK	27	592	REFL 1 POS 18 2ND LOOK	2604
16	REFL 2 POS 1 2ND LOOK	16212	594	REFL 2 POS 18 2ND LOOK	2405
18	SCENE DATA BP 1 CH 3	15879	596	SCENE DATA BP 18 CH 3	15870
20	CH 4	16698	598	CH 4	16681
22	CH 5	16945	600	CH 5	16932
24	CH 6	17230	602	CH 6	17230
26	CH 7	16290	604	CH 7	16306
28	CH 8	16514	606	CH 8	16499
30	CH 9	17366	608	CH 9	17383
32	CH 10	16604	610	CH 10	16617
34	CH 11	16493	612	CH 11	16495
36	CH 12	16870	614	CH 12	16900
38	CH 13	16598	616	CH 13	16646
40	CH 14	17014	618	CH 14	17066
42	CH 15	16717	620	CH 15	167
44	REFLECTOR 1 POSITION 2	181	622	REFLECTOR 1 POSITION 19	27
46	REFLECTOR 2 POSITION 2	16365	624	REFLECTOR 2 POSITION 19	2559
48	REFL 1 POS 2 2ND LOOK	177	626	REFL 1 POS 19 2ND LOOK	2755
50	REFL 2 POS 2 2ND LOOK	16361	628	REFL 2 POS 19 2ND LOOK	2556
52	SCENE DATA BP 2 CH 3	15870	630	SCENE DATA BP 19 CH 3	15866
54	CH 4	16679	632	CH 4	16676
56	CH 5	16925	634	CH 5	16924
58	CH 6	17236	636	CH 6	17244
60	CH 7	16285	638	CH 7	16286
62	CH 8	16493	640	CH 8	16488
64	CH 9	17366	642	CH 9	17365
66	CH 10	16606	644	CH 10	16605
68	CH 11	16491	646	CH 11	16496
70	CH 12	16863	648	CH 12	16863
72	CH 13	16584	650	CH 13	16558
74	CH 14	17026	652	CH 14	17019
76	CH 15	16716	654	CH 15	16716
78	REFLECTOR 1 POSITION 3	335	656	REFLECTOR 1 POSITION 20	2909
80	REFLECTOR 2 POSITION 3	130	658	REFLECTOR 2 POSITION 20	2711
82	REFL 1 POS 3 2ND LOOK	329	660	REFL 1 POS 20 2ND LOOK	2907
84	REFL 2 POS 3 2ND LOOK	131	662	REFL 2 POS 20 2ND LOOK	2708
86	SCENE DATA BP 3 CH 3	15869	664	SCENE DATA BP 20 CH 3	15865
88	CH 4	16677	666	CH 4	16678
90	CH 5	16925	668	CH 5	16923
92	CH 6	17230	670	CH 6	17232

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	16287	672	CH 7	16287
96	CH 8	16492	674	CH 8	16488
98	CH 9	17369	676	CH 9	17364
100	CH 10	16607	678	CH 10	16598
102	CH 11	16490	680	CH 11	16494
104	CH 12	16874	682	CH 12	16866
106	CH 13	16588	684	CH 13	16575
108	CH 14	17021	686	CH 14	17021
110	CH 15	16718	688	CH 15	16713
112	REFLECTOR 1 POSITION 4	483	690	REFLECTOR 1 POSITION 21	3064
114	REFLECTOR 2 POSITION 4	284	692	REFLECTOR 2 POSITION 21	2865
116	REFL 1 POS 4 2ND LOOK	480	694	REFL 1 POS 21 2ND LOOK	3059
118	REFL 2 POS 4 2ND LOOK	281	696	REFL 2 POS 21 2ND LOOK	2860
120	SCENE DATA BP 4 CH 3	15867	698	SCENE DATA BP 21 CH 3	15864
122	CH 4	16677	700	CH 4	16675
124	CH 5	16923	702	CH 5	16925
126	CH 6	17246	704	CH 6	17233
128	CH 7	16290	706	CH 7	16284
130	CH 8	16486	708	CH 8	16486
132	CH 9	17379	710	CH 9	17365
134	CH 10	16612	712	CH 10	16608
136	CH 11	16492	714	CH 11	16498
138	CH 12	16889	716	CH 12	16852
140	CH 13	16615	718	CH 13	16580
142	CH 14	17058	720	CH 14	17023
144	CH 15	16725	722	CH 15	16714
146	REFLECTOR 1 POSITION 5	636	724	REFLECTOR 1 POSITION 22	3212
148	REFLECTOR 2 POSITION 5	436	726	REFLECTOR 2 POSITION 22	3014
150	REFL 1 POS 5 2ND LOOK	633	728	REFL 1 POS 22 2ND LOOK	3210
152	REFL 2 POS 5 2ND LOOK	432	730	REFL 2 POS 22 2ND LOOK	3010
154	SCENE DATA BP 5 CH 3	15866	732	SCENE DATA BP 22 CH 3	15864
156	CH 4	16679	734	CH 4	16677
158	CH 5	16922	736	CH 5	16923
160	CH 6	17247	738	CH 6	17233
162	CH 7	16287	740	CH 7	16285
164	CH 8	16493	742	CH 8	16485
166	CH 9	17369	744	CH 9	17364
168	CH 10	16628	746	CH 10	16604
170	CH 11	16528	748	CH 11	16494
172	CH 12	16850	750	CH 12	16860
174	CH 13	16547	752	CH 13	16584
176	CH 14	16982	754	CH 14	17030
178	CH 15	16723	756	CH 15	16714
180	REFLECTOR 1 POSITION 6	789	758	REFLECTOR 1 POSITION 23	3366
182	REFLECTOR 2 POSITION 6	589	760	REFLECTOR 2 POSITION 23	3168
184	REFL 1 POS 6 2ND LOOK	785	762	REFL 1 POS 23 2ND LOOK	3362
186	REFL 2 POS 6 2ND LOOK	585	764	REFL 2 POS 23 2ND LOOK	3163
188	SCENE DATA BP 6 CH 3	15870	766	SCENE DATA BP 23 CH 3	15866
190	CH 4	16676	768	CH 4	16677
192	CH 5	16920	770	CH 5	16925

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
194	CH 6	17270	772	CH 6	17235
196	CH 7	16308	774	CH 7	16286
198	CH 8	16490	776	CH 8	16484
200	CH 9	17378	778	CH 9	17362
202	CH 10	16622	780	CH 10	16602
204	CH 11	16515	782	CH 11	16494
206	CH 12	16867	784	CH 12	16873
208	CH 13	16591	786	CH 13	16585
210	CH 14	17043	788	CH 14	17019
212	CH 15	16727	790	CH 15	16715
214	REFLECTOR 1 POSITION 7	940	792	REFLECTOR 1 POSITION 24	3519
216	REFLECTOR 2 POSITION 7	740	794	REFLECTOR 2 POSITION 24	3321
218	REFL 1 POS 7 2ND LOOK	936	796	REFL 1 POS 24 2ND LOOK	3514
220	REFL 2 POS 7 2ND LOOK	736	798	REFL 2 POS 24 2ND LOOK	3315
222	SCENE DATA BP 7 CH 3	15867	800	SCENE DATA BP 24 CH 3	15867
224	CH 4	16675	802	CH 4	16676
226	CH 5	16924	804	CH 5	16923
228	CH 6	17237	806	CH 6	17238
230	CH 7	16293	808	CH 7	16286
232	CH 8	16488	810	CH 8	16485
234	CH 9	17370	812	CH 9	17364
236	CH 10	16610	814	CH 10	16604
238	CH 11	16498	816	CH 11	16494
240	CH 12	16863	818	CH 12	16871
242	CH 13	16591	820	CH 13	165
244	CH 14	17026	822	CH 14	170
246	CH 15	16716	824	CH 15	16714
248	REFLECTOR 1 POSITION 8	1091	826	REFLECTOR 1 POSITION 25	3668
250	REFLECTOR 2 POSITION 8	893	828	REFLECTOR 2 POSITION 25	3469
252	REFL 1 POS 8 2ND LOOK	1087	830	REFL 1 POS 25 2ND LOOK	3666
254	REFL 2 POS 8 2ND LOOK	887	832	REFL 2 POS 25 2ND LOOK	3466
256	SCENE DATA BP 8 CH 3	15870	834	SCENE DATA BP 25 CH 3	15861
258	CH 4	16678	836	CH 4	16672
260	CH 5	16926	838	CH 5	16927
262	CH 6	17235	840	CH 6	17237
264	CH 7	16292	842	CH 7	16288
266	CH 8	16487	844	CH 8	16485
268	CH 9	17369	846	CH 9	17366
270	CH 10	16609	848	CH 10	16603
272	CH 11	16492	850	CH 11	16489
274	CH 12	16857	852	CH 12	16873
276	CH 13	16581	854	CH 13	16584
278	CH 14	17022	856	CH 14	17045
280	CH 15	16717	858	CH 15	16713
282	REFLECTOR 1 POSITION 9	1246	860	REFLECTOR 1 POSITION 26	3821
284	REFLECTOR 2 POSITION 9	1044	862	REFLECTOR 2 POSITION 26	3622
286	REFL 1 POS 9 2ND LOOK	1240	864	REFL 1 POS 26 2ND LOOK	3817
288	REFL 2 POS 9 2ND LOOK	1040	866	REFL 2 POS 26 2ND LOOK	3619
290	SCENE DATA BP 9 CH 3	15864	868	SCENE DATA BP 26 CH 3	15866
292	CH 4	16683	870	CH 4	16671

LEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	16927	872	CH 5	16921
296	CH 6	17236	874	CH 6	17232
298	CH 7	16291	876	CH 7	16285
300	CH 8	16489	878	CH 8	16485
302	CH 9	17366	880	CH 9	17362
304	CH 10	16606	882	CH 10	16604
306	CH 11	16496	884	CH 11	16487
308	CH 12	16866	886	CH 12	16863
310	CH 13	16574	888	CH 13	16584
312	CH 14	17037	890	CH 14	17038
314	CH 15	16716	892	CH 15	16713
316	REFLECTOR 1 POSITION 10	1395	894	REFLECTOR 1 POSITION 27	3975
318	REFLECTOR 2 POSITION 10	1195	896	REFLECTOR 2 POSITION 27	3774
320	REFL 1 POS 10 2ND LOOK	1390	898	REFL 1 POS 27 2ND LOOK	3968
322	REFL 2 POS 10 2ND LOOK	1192	900	REFL 2 POS 27 2ND LOOK	3770
324	SCENE DATA BP 10 CH 3	15872	902	SCENE DATA BP 27 CH 3	15870
326	CH 4	16681	904	CH 4	16675
328	CH 5	16927	906	CH 5	16933
330	CH 6	17237	908	CH 6	17231
332	CH 7	16286	910	CH 7	16283
334	CH 8	16493	912	CH 8	16490
336	CH 9	17365	914	CH 9	17361
338	CH 10	16602	916	CH 10	16607
340	CH 11	16496	918	CH 11	16494
342	CH 12	16861	920	CH 12	16866
344	CH 13	16582	922	CH 13	16583
346	CH 14	17011	924	CH 14	17025
348	CH 15	16715	926	CH 15	16714
350	REFLECTOR 1 POSITION 11	1545	928	REFLECTOR 1 POSITION 28	4126
352	REFLECTOR 2 POSITION 11	1346	930	REFLECTOR 2 POSITION 28	3925
354	REFL 1 POS 11 2ND LOOK	1542	932	REFL 1 POS 28 2ND LOOK	4121
356	REFL 2 POS 11 2ND LOOK	1343	934	REFL 2 POS 28 2ND LOOK	3920
358	SCENE DATA BP 11 CH 3	15871	936	SCENE DATA BP 28 CH 3	15871
360	CH 4	16680	938	CH 4	16685
362	CH 5	16928	940	CH 5	16931
364	CH 6	17239	942	CH 6	17236
366	CH 7	16289	944	CH 7	16283
368	CH 8	16490	946	CH 8	16502
370	CH 9	17366	948	CH 9	17366
372	CH 10	16614	950	CH 10	16605
374	CH 11	16508	952	CH 11	16495
376	CH 12	16848	954	CH 12	16856
378	CH 13	16567	956	CH 13	16585
380	CH 14	17008	958	CH 14	17026
382	CH 15	16717	960	CH 15	16713
384	REFLECTOR 1 POSITION 12	1698	962	REFLECTOR 1 POSITION 29	4276
386	REFLECTOR 2 POSITION 12	1499	964	REFLECTOR 2 POSITION 29	4076
388	REFL 1 POS 12 2ND LOOK	1694	966	REFL 1 POS 29 2ND LOOK	4272
390	REFL 2 POS 12 2ND LOOK	1495	968	REFL 2 POS 29 2ND LOOK	4073
392	SCENE DATA BP 12 CH 3	15868	970	SCENE DATA BP 29 CH 3	15890

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
394	CH 4	16679	972	CH 4	16706
396	CH 5	16927	974	CH 5	16962
398	CH 6	17245	976	CH 6	17235
400	CH 7	16290	978	CH 7	16283
402	CH 8	16488	980	CH 8	16514
404	CH 9	17367	982	CH 9	17362
406	CH 10	16605	984	CH 10	16604
408	CH 11	16490	986	CH 11	16494
410	CH 12	16869	988	CH 12	16863
412	CH 13	16606	990	CH 13	16576
414	CH 14	17046	992	CH 14	17010
416	CH 15	16716	994	CH 15	16716
418	REFLECTOR 1 POSITION 13	1848	996	REFLECTOR 1 POSITION 30	4429
420	REFLECTOR 2 POSITION 13	1649	998	REFLECTOR 2 POSITION 30	4226
422	REFL 1 POS 13 2ND LOOK	1845	1000	REFL 1 POS 30 2ND LOOK	4424
424	REFL 2 POS 13 2ND LOOK	1646	1002	REFL 2 POS 30 2ND LOOK	4222
426	SCENE DATA BP 13 CH 3	15879	1004	SCENE DATA BP 30 CH 3	15873
428	CH 4	16688	1006	CH 4	16681
430	CH 5	16931	1008	CH 5	16926
432	CH 6	17233	1010	CH 6	17239
434	CH 7	16307	1012	CH 7	16286
436	CH 8	16494	1014	CH 8	16493
438	CH 9	17367	1016	CH 9	17363
440	CH 10	16610	1018	CH 10	16598
442	CH 11	16503	1020	CH 11	164
444	CH 12	16861	1022	CH 12	168
446	CH 13	16584	1024	CH 13	16583
448	CH 14	17039	1026	CH 14	17026
450	CH 15	16722	1028	CH 15	16710
452	REFLECTOR 1 POSITION 14	2002	1030	REFLECTOR 1 COLD CAL POS	6021
454	REFLECTOR 2 POSITION 14	1803	1032	REFLECTOR 2 COLD CAL POS	5820
456	REFL 1 POS 14 2ND LOOK	1998	1034	REFL 1 COLD CAL 2ND LOOK	6021
458	REFL 2 POS 14 2ND LOOK	1798	1036	REFL 2 COLD CAL 2ND LOOK	5820
460	SCENE DATA BP 14 CH 3	15877	1038	COLD CAL DATA 1 CH 3	15870
462	CH 4	16685	1040	CH 4	16681
464	CH 5	16928	1042	CH 5	16920
466	CH 6	17251	1044	CH 6	17233
468	CH 7	16303	1046	CH 7	16287
470	CH 8	16499	1048	CH 8	16484
472	CH 9	17378	1050	CH 9	17364
474	CH 10	16619	1052	CH 10	16603
476	CH 11	16515	1054	CH 11	16493
478	CH 12	16848	1056	CH 12	16863
480	CH 13	16560	1058	CH 13	16585
482	CH 14	16991	1060	CH 14	17026
484	CH 15	16721	1062	CH 15	16711
486	REFLECTOR 1 POSITION 15	2154	1064	COLD CAL DATA 2 CH 3	15873
488	REFLECTOR 2 POSITION 15	1955	1066	CH 4	16681
490	REFL 1 POS 15 2ND LOOK	2149	1068	CH 5	16926
492	REFL 2 POS 15 2ND LOOK	1950	1070	CH 6	17238

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	SCENE DATA BP 15 CH 3	15869	1072	CH 7	16287
496	CH 4	16683	1074	CH 8	16488
498	CH 5	16933	1076	CH 9	17360
500	CH 6	17249	1078	CH 10	16601
502	CH 7	16290	1080	CH 11	16498
504	CH 8	16495	1082	CH 12	16866
506	CH 9	17375	1084	CH 13	16579
508	CH 10	16598	1086	CH 14	17023
510	CH 11	16493	1088	CH 15	16711
512	CH 12	16905	1182	REFLECTOR 1 WARM CAL POS	10420
514	CH 13	16628	1184	REFLECTOR 2 WARM CAL POS	10220
516	CH 14	17069	1186	REFL 1 WARM CAL 2ND LOOK	10420
518	CH 15	16721	1188	REFL 2 WARM CAL 2ND LOOK	10220
520	REFLECTOR 1 POSITION 16	2303	1190	WARM CAL DATA 1 CH 3	15875
522	REFLECTOR 2 POSITION 16	2105	1192	CH 4	16671
524	REFL 1 POS 16 2ND LOOK	2306	1194	CH 5	16920
526	REFL 2 POS 16 2ND LOOK	2101	1196	CH 6	17219
528	SCENE DATA BP 16 CH 3	15893	1198	CH 7	16279
530	CH 4	16702	1200	CH 8	16483
532	CH 5	16961	1202	CH 9	17354
534	CH 6	17276	1204	CH 10	16594
536	CH 7	16309	1206	CH 11	16489
538	CH 8	16516	1208	CH 12	16854
540	CH 9	17388	1210	CH 13	16569
542	CH 10	16597	1212	CH 14	17019
544	CH 11	16501	1214	CH 15	16708
546	CH 12	16939	1216	WARM CAL DATA 2 CH 3	15865
548	CH 13	16674	1218	CH 4	16674
550	CH 14	17112	1220	CH 5	16920
552	CH 15	16728	1222	CH 6	17229
554	REFLECTOR 1 POSITION 17	2456	1224	CH 7	16279
556	REFLECTOR 2 POSITION 17	2258	1226	CH 8	16482
558	REFL 1 POS 17 2ND LOOK	2452	1228	CH 9	17356
560	REFL 2 POS 17 2ND LOOK	2253	1230	CH 10	16599
562	SCENE DATA BP 17 CH 3	15872	1232	CH 11	16490
564	CH 4	16685	1234	CH 12	16861
566	CH 5	16929	1236	CH 13	16575
568	CH 6	17242	1238	CH 14	17036
570	CH 7	16307	1240	CH 15	16708

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	17638	22.69
1092	SCAN MOTOR A1-2	18075	23.12
1094	FEEDHORN A1-1	18848	24.25
1096	FEEDHORN A1-2	19727	24.51
1098	RF MUX A1-1	19158	25.39
1100	RF MUX A1-2	19628	26.56
1102	LOCAL OSCILLATOR CHANNEL 3	20411	27.83
1104	LOCAL OSCILLATOR CHANNEL 4	20518	27.96
1106	LOCAL OSCILLATOR CHANNEL 5	20260	27.22
1108	LOCAL OSCILLATOR CHANNEL 6	19226	25.63
1110	LOCAL OSCILLATOR CHANNEL 7	19499	26.04
1112	LOCAL OSCILLATOR CHANNEL 8	20112	27.62
1114	LOCAL OSCILLATOR CHANNEL 15	19559	27.17
1116	PLL LO #2 CHANNELS 9 THROUGH 14	18859	25.54
1118	PLL LO #1 CHANNELS 9 THROUGH 14	20335	28.14
1120	SPARE (NOT USED)	32767	52.86
1122	MIXER/IF AMPLIFIER CHANNEL 3	20138	27.00
1124	MIXER/IF AMPLIFIER CHANNEL 4	19734	26.98
1126	MIXER/IF AMPLIFIER CHANNEL 5	19731	26.70
1128	MIXER/IF AMPLIFIER CHANNEL 6	19426	25.85
1130	MIXER/IF AMPLIFIER CHANNEL 7	19536	26.16
1132	MIXER/IF AMPLIFIER CHANNEL 8	19661	27.04
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	18955	25.69
1136	MIXER/IF AMPLIFIER CHANNEL 15	19700	26.96
1138	IF AMPLIFIER CHANNEL 11 THRU 14	19621	26.63
1140	IF AMPLIFIER CHANNEL 9	20035	26.61
1142	IF AMPLIFIER CHANNEL 10	19623	26.77
1144	IF AMPLIFIER CHANNEL 11	19363	25.73
1146	DC/DC CONVERTER	20124	27.05
1148	IF AMPLIFIER CHANNEL 13	19483	25.69
1150	IF AMPLIFIER CHANNEL 14	19156	25.69
1152	IF AMPLIFIER CHANNEL 12	19140	25.64
1154	RF SHELF A1-1	19521	26.08
1156	RF SHELF A1-2	19644	26.50
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	18880	24.55
1160	A1-1 WARM LOAD 1	22647	22.74
1162	A1-1 WARM LOAD 2	22843	22.77
1164	A1-1 WARM LOAD 3	22912	22.83
1166	A1-1 WARM LOAD 4	22600	22.79
1168	A1-1 WARM LOAD CENTER	22785	22.84
1170	A1-2 WARM LOAD 1	23367	23.62
1172	A1-2 WARM LOAD 2	23199	23.60
1174	A1-2 WARM LOAD 3	23226	23.64
1176	A1-2 WARM LOAD 4	23150	23.63
1178	A1-2 WARM LOAD CENTER	23021	23.51
1180	TEMP SENSOR REFERENCE VOLTAGE	24881	

FULL SCAN MODE

DESCRIPTION	STATUS	STATUS	STATUS
SCANNER A1-1 POWER	ON	ON	ON
SCANNER A1-2 POWER	ON	ON	ON
PLL POWER	PLLO # 1	PLLO # 1	PLLO # 1
ANTENNA IN WARM CAL POSITION MODE	NO	NO	NO
ANTENNA IN COLD CAL POSITION MODE	NO	NO	NO
ANTENNA IN NADIR POSITION MODE	NO	NO	NO
ANTENNA IN FULL SCAN MODE	YES	YES	YES
SURVIVAL HEATER POWER	OFF	OFF	OFF
MODULE POWER	CONNECT	CONNECT	CONNECT
COLD CAL POSITION MSB	ZERO	ZERO	ZERO
COLD CAL POSITION LSB	ZERO	ZERO	ZERO

ANALOG DATA

DESCRIPTION	VALUE	DEG C	VALUE	DEG C	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	216	20.7	216	20.7	216	20.7
A1-2 SCANNER MOTOR TEMPERATURE	217	22.1	217	22.1	217	22.1
A1-1 RF SHELF TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-2 RF SHELF TEMPERATURE	220	26.2	220	26.2	220	26.2
A1-1 WARM LOAD TEMPERATURE	217	22.1	217	22.1	217	22.1
A1-2 WARM LOAD TEMPERATURE	218	23.4	218	23.4	218	23.4

DESCRIPTION	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS
A1-1 ANTENNA DRIVE MOTOR CURRENT (AVRG)	101	47.07	101	47.07	101	47.07
A1-2 ANTENNA DRIVE MOTOR CURRENT (AVRG)	95	44.27	96	44.74	96	44.74
SIGNAL PROCESSING +15 VDC	172	14.84	172	14.84	172	14.84
ANTENNA DRIVE +15 VDC	173	14.93	173	14.93	173	14.93
SIGNAL PROCESSING -15 VDC	150	-15.05	150	-15.05	150	-15.05
ANTENNA DRIVE -15 VDC	150	-15.05	150	-15.05	150	-15.05
RECEIVER AMPLIFIER +8 VDC	158	7.90	158	7.90	158	7.90
SIGNAL PROCESSOR +5 VDC	147	4.90	148	4.93	147	4.90
ANTENNA DRIVE +5 VDC	147	4.90	147	4.90	148	4.93
RECEIVER MIXER/IF +10 VDC	171	9.88	171	9.88	171	9.88
PHASE LOCK LOOP (CHANNEL 9/14) +15 VDC	171	14.76	171	14.76	171	14.76
PHASE LOCK LOOP (CHANNEL 9/14) -15 VDC	146	-15.25	146	-15.25	146	-15.25
L.O. VOLTAGE (CHANNEL 8) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 7) VDC	172	9.84	172	9.84	172	9.84
L.O. VOLTAGE (CHANNEL 6) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 3) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 4) VDC	173	9.90	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 5) VDC	172	9.84	172	9.84	173	9.90
PLLO # 2 LOCK DETECT	5	0.10	5	0.10	5	0.10
PLLO # 1 LOCK DETECT	220	4.40	220	4.40	221	4.41
L.O. VOLTAGE (CHANNEL 15) VDC	172	14.84	172	14.84	172	14.84

PRT TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
VARIABLE TARGET	615	42.00	601	14.00
	616	43.00	602	15.00
	617	44.00	603	16.00
	618	45.00	604	17.00
	619	46.00	605	18.00
	620	47.00	606	19.00
	621	48.00	607	20.00
FIXED TARGET	622	49.00	608	21.00
	623	50.00	609	22.00
	624	51.00	610	23.00
	625	52.00	611	24.00
	626	53.00	612	25.00
	627	67.00	613	69.00
	628	68.00	614	70.00
BASEPLATE	629	71.00	630	72.00
	631	26.00	632	27.00

THERMOCOUPLE TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
FIXED TARGET SHROUD	558	5.00	537	34.00
	559	6.00	538	35.00
VARIABLE TARGET SHROUD	550	7.00	524	36.00
	551	8.00	525	37.00
FIXED TARGET N2	506	57.00	502	30.00
	507	58.00	503	31.00
VARIABLE TARGET N2	516	59.00	511	32.00
	517	60.00	512	33.00
HEATER N2	514	1.00	509	38.00
	515	2.00	510	39.00
FIXED TARGET FLOW METER	508	63.00	504	61.00
VARIABLE TARGET FLOW METER	518	64.00	513	62.00
BASEPLATE HEATER N2	519	3.00	520	4.00
BASEPLATE N2	521	9.00	522	10.00
BASEPLATE FLOW METER	523	65.00		
ADJUNCT RADIATORS	575	73.00	577	74.00
	579	75.00	581	76.00

AMSU A1-17 A1.EXE FULL SCAN MODE P1 25-NOV-93 13:44:43 SCAN NUMBER 34

[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

COMMANDS

[9]	MODULE POWER =	CONNECT	ANTENNA IN COLD CAL POSIT = NO	[15
[10]	SURVIVAL HEATER POWER =	OFF	ANTENNA IN NADIR POSITION = NO	[16
[11]	MODULE TOTALLY OFF =	ON	ANTENNA IN FULL SCAN MODE = YES	[17
[12]	SCANNER A1 - 1 POWER =	ON	PLL POWER = PLLO # 1	[18
[13]	SCANNER A1 - 2 POWER =	ON	COLD CAL POSITION MSB = ZERO	[19
[14]	ANTENNA IN WARM CAL POSIT = NO		COLD CAL POSITION LSB = ZERO	[20

POWER [4] ON

SCREEN ONLY [2] PRINT [3] FULL [1] RETURN

SELECT TOUCHSCREEN BUTTON 3

PRE - LOW FREQ LOAD INDUCED

PRE TRANSIENT
PLB LOW FREQ

AMSU A1_17 A1.EXE DIGITAL A DATA 25-NOV-93 13:44:48 PAGE 1
FULL SCAN MODE

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
1	SYNC SEQUENCE BYTE 1	11111111	572	SCENE DATA BP 17 CH 8	16391
2	SYNC SEQUENCE BYTE 2	11111111	574	CH 9	17283
3	SYNC SEQUENCE BYTE 3	11111111	576	CH 10	16496
4	UNIT ID AND SERIAL NO	00010001	578	CH 11	16256
5	DIGITAL B DATA BYTE 1	00000010	580	CH 12	16586
6	DIGITAL B DATA BYTE 2	00001110	582	CH 13	16273
7	DIGITAL B DATA BYTE 3	00000000	584	CH 14	16713
8	DIGITAL B DATA BYTE 4	00000000	586	CH 15	16635
10	REFLECTOR 1 POSITION 1	27	588	REFLECTOR 1 POSITION 18	2609
12	REFLECTOR 2 POSITION 1	16212	590	REFLECTOR 2 POSITION 18	2410
14	REFL 1 POS 1 2ND LOOK	27	592	REFL 1 POS 18 2ND LOOK	2604
16	REFL 2 POS 1 2ND LOOK	16212	594	REFL 2 POS 18 2ND LOOK	2405
18	SCENE DATA BP 1 CH 3	15816	596	SCENE DATA BP 18 CH 3	15790
20	CH 4	16626	598	CH 4	16603
22	CH 5	16902	600	CH 5	16889
24	CH 6	17158	602	CH 6	17165
26	CH 7	16207	604	CH 7	16229
28	CH 8	16425	606	CH 8	16408
30	CH 9	17261	608	CH 9	17285
32	CH 10	16466	610	CH 10	16488
34	CH 11	16221	612	CH 11	16231
36	CH 12	16591	614	CH 12	16621
38	CH 13	16289	616	CH 13	16351
40	CH 14	16708	618	CH 14	16789
42	CH 15	16616	620	CH 15	166
44	REFLECTOR 1 POSITION 2	180	622	REFLECTOR 1 POSITION 19	275
46	REFLECTOR 2 POSITION 2	16365	624	REFLECTOR 2 POSITION 19	2559
48	REFL 1 POS 2 2ND LOOK	177	626	REFL 1 POS 19 2ND LOOK	2756
50	REFL 2 POS 2 2ND LOOK	16362	628	REFL 2 POS 19 2ND LOOK	2557
52	SCENE DATA BP 2 CH 3	15792	630	SCENE DATA BP 19 CH 3	15783
54	CH 4	16599	632	CH 4	16594
56	CH 5	16879	634	CH 5	16872
58	CH 6	17163	636	CH 6	17172
60	CH 7	16207	638	CH 7	16203
62	CH 8	16392	640	CH 8	16422
64	CH 9	17265	642	CH 9	17264
66	CH 10	16469	644	CH 10	16462
68	CH 11	16229	646	CH 11	16230
70	CH 12	16577	648	CH 12	16579
72	CH 13	16280	650	CH 13	16286
74	CH 14	16722	652	CH 14	16718
76	CH 15	16617	654	CH 15	16619
78	REFLECTOR 1 POSITION 3	335	656	REFLECTOR 1 POSITION 20	2910
80	REFLECTOR 2 POSITION 3	130	658	REFLECTOR 2 POSITION 20	2711
82	REFL 1 POS 3 2ND LOOK	329	660	REFL 1 POS 20 2ND LOOK	2908
84	REFL 2 POS 3 2ND LOOK	128	662	REFL 2 POS 20 2ND LOOK	2708
86	SCENE DATA BP 3 CH 3	15785	664	SCENE DATA BP 20 CH 3	15791
88	CH 4	16593	666	CH 4	16595
90	CH 5	16876	668	CH 5	16874
92	CH 6	17164	670	CH 6	17161

FULL SCAN MODE

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	16205	672	CH 7	16206
96	CH 8	16383	674	CH 8	16398
98	CH 9	17263	676	CH 9	17258
100	CH 10	16465	678	CH 10	16461
102	CH 11	16228	680	CH 11	16224
104	CH 12	16596	682	CH 12	16581
106	CH 13	16310	684	CH 13	16287
108	CH 14	16779	686	CH 14	16743
110	CH 15	16622	688	CH 15	16617
112	REFLECTOR 1 POSITION 4	483	690	REFLECTOR 1 POSITION 21	3064
114	REFLECTOR 2 POSITION 4	284	692	REFLECTOR 2 POSITION 21	2865
116	REFL 1 POS 4 2ND LOOK	480	694	REFL 1 POS 21 2ND LOOK	3059
118	REFL 2 POS 4 2ND LOOK	281	696	REFL 2 POS 21 2ND LOOK	2860
120	SCENE DATA BP 4 CH 3	15784	698	SCENE DATA BP 21 CH 3	15788
122	CH 4	16597	700	CH 4	16590
124	CH 5	16872	702	CH 5	16868
126	CH 6	17177	704	CH 6	17160
128	CH 7	16210	706	CH 7	16201
130	CH 8	16406	708	CH 8	16395
132	CH 9	17278	710	CH 9	17258
134	CH 10	16476	712	CH 10	16464
136	CH 11	16231	714	CH 11	16226
138	CH 12	16609	716	CH 12	16585
140	CH 13	16319	718	CH 13	16282
142	CH 14	16780	720	CH 14	16738
144	CH 15	16632	722	CH 15	16617
146	REFLECTOR 1 POSITION 5	636	724	REFLECTOR 1 POSITION 22	3211
148	REFLECTOR 2 POSITION 5	437	726	REFLECTOR 2 POSITION 22	3014
150	REFL 1 POS 5 2ND LOOK	632	728	REFL 1 POS 22 2ND LOOK	3210
152	REFL 2 POS 5 2ND LOOK	433	730	REFL 2 POS 22 2ND LOOK	3011
154	SCENE DATA BP 5 CH 3	15789	732	SCENE DATA BP 22 CH 3	15782
156	CH 4	16593	734	CH 4	16593
158	CH 5	16870	736	CH 5	16870
160	CH 6	17183	738	CH 6	17163
162	CH 7	16209	740	CH 7	16202
164	CH 8	16383	742	CH 8	16385
166	CH 9	17271	744	CH 9	17263
168	CH 10	16501	746	CH 10	16457
170	CH 11	16264	748	CH 11	16222
172	CH 12	16576	750	CH 12	16583
174	CH 13	16266	752	CH 13	16294
176	CH 14	16715	754	CH 14	16732
178	CH 15	16630	756	CH 15	16616
180	REFLECTOR 1 POSITION 6	789	758	REFLECTOR 1 POSITION 23	3366
182	REFLECTOR 2 POSITION 6	590	760	REFLECTOR 2 POSITION 23	3167
184	REFL 1 POS 6 2ND LOOK	785	762	REFL 1 POS 23 2ND LOOK	3362
186	REFL 2 POS 6 2ND LOOK	585	764	REFL 2 POS 23 2ND LOOK	3164
188	SCENE DATA BP 6 CH 3	15787	766	SCENE DATA BP 23 CH 3	15785
190	CH 4	16593	768	CH 4	16592
192	CH 5	16872	770	CH 5	16873

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
194	CH 6	17208	772	CH 6	17163
196	CH 7	16234	774	CH 7	16204
198	CH 8	16402	776	CH 8	16383
200	CH 9	17285	778	CH 9	17263
202	CH 10	16494	780	CH 10	16465
204	CH 11	16247	782	CH 11	16225
206	CH 12	16598	784	CH 12	16568
208	CH 13	16314	786	CH 13	16279
210	CH 14	16749	788	CH 14	16719
212	CH 15	16636	790	CH 15	16616
214	REFLECTOR 1 POSITION 7	939	792	REFLECTOR 1 POSITION 24	3519
216	REFLECTOR 2 POSITION 7	739	794	REFLECTOR 2 POSITION 24	3321
218	REFL 1 POS 7 2ND LOOK	936	796	REFL 1 POS 24 2ND LOOK	3514
220	REFL 2 POS 7 2ND LOOK	736	798	REFL 2 POS 24 2ND LOOK	3315
222	SCENE DATA BP 7 CH 3	15788	800	SCENE DATA BP 24 CH 3	15789
224	CH 4	16592	802	CH 4	16590
226	CH 5	16872	804	CH 5	16870
228	CH 6	17166	806	CH 6	17170
230	CH 7	16212	808	CH 7	16201
232	CH 8	16382	810	CH 8	16422
234	CH 9	17260	812	CH 9	17260
236	CH 10	16466	814	CH 10	16464
238	CH 11	16228	816	CH 11	16227
240	CH 12	16582	818	CH 12	16583
242	CH 13	16290	820	CH 13	162
244	CH 14	16742	822	CH 14	167
246	CH 15	16617	824	CH 15	16615
248	REFLECTOR 1 POSITION 8	1091	826	REFLECTOR 1 POSITION 25	3668
250	REFLECTOR 2 POSITION 8	893	828	REFLECTOR 2 POSITION 25	3470
252	REFL 1 POS 8 2ND LOOK	1087	830	REFL 1 POS 25 2ND LOOK	3665
254	REFL 2 POS 8 2ND LOOK	888	832	REFL 2 POS 25 2ND LOOK	3466
256	SCENE DATA BP 8 CH 3	15790	834	SCENE DATA BP 25 CH 3	15786
258	CH 4	16594	836	CH 4	16593
260	CH 5	16874	838	CH 5	16870
262	CH 6	17163	840	CH 6	17168
264	CH 7	16204	842	CH 7	16205
266	CH 8	16390	844	CH 8	16379
268	CH 9	17263	846	CH 9	17260
270	CH 10	16467	848	CH 10	16462
272	CH 11	16222	850	CH 11	16218
274	CH 12	16569	852	CH 12	16585
276	CH 13	16285	854	CH 13	16298
278	CH 14	16752	856	CH 14	16751
280	CH 15	16619	858	CH 15	16617
282	REFLECTOR 1 POSITION 9	1245	860	REFLECTOR 1 POSITION 26	3821
284	REFLECTOR 2 POSITION 9	1043	862	REFLECTOR 2 POSITION 26	3623
286	REFL 1 POS 9 2ND LOOK	1240	864	REFL 1 POS 26 2ND LOOK	3817
288	REFL 2 POS 9 2ND LOOK	1040	866	REFL 2 POS 26 2ND LOOK	3619
290	SCENE DATA BP 9 CH 3	15791	868	SCENE DATA BP 26 CH 3	15785
292	CH 4	16602	870	CH 4	16596

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	16872	872	CH 5	16876
296	CH 6	17167	874	CH 6	17167
298	CH 7	16207	876	CH 7	16202
300	CH 8	16422	878	CH 8	16382
302	CH 9	17258	880	CH 9	17259
304	CH 10	16470	882	CH 10	16463
306	CH 11	16224	884	CH 11	16228
308	CH 12	16580	886	CH 12	16579
310	CH 13	16278	888	CH 13	16283
312	CH 14	16727	890	CH 14	16728
314	CH 15	16616	892	CH 15	16616
316	REFLECTOR 1 POSITION 10	1395	894	REFLECTOR 1 POSITION 27	3975
318	REFLECTOR 2 POSITION 10	1192	896	REFLECTOR 2 POSITION 27	3775
320	REFL 1 POS 10 2ND LOOK	1390	898	REFL 1 POS 27 2ND LOOK	3968
322	REFL 2 POS 10 2ND LOOK	1192	900	REFL 2 POS 27 2ND LOOK	3770
324	SCENE DATA BP 10 CH 3	15795	902	SCENE DATA BP 27 CH 3	15792
326	CH 4	16594	904	CH 4	16599
328	CH 5	16873	906	CH 5	16884
330	CH 6	17168	908	CH 6	17164
332	CH 7	16205	910	CH 7	16203
334	CH 8	16392	912	CH 8	16387
336	CH 9	17261	914	CH 9	17259
338	CH 10	16462	916	CH 10	16462
340	CH 11	16229	918	CH 11	16232
342	CH 12	16587	920	CH 12	16582
344	CH 13	16294	922	CH 13	16297
346	CH 14	16748	924	CH 14	16736
348	CH 15	16616	926	CH 15	16619
350	REFLECTOR 1 POSITION 11	1546	928	REFLECTOR 1 POSITION 28	4125
352	REFLECTOR 2 POSITION 11	1346	930	REFLECTOR 2 POSITION 28	3925
354	REFL 1 POS 11 2ND LOOK	1542	932	REFL 1 POS 28 2ND LOOK	4121
356	REFL 2 POS 11 2ND LOOK	1343	934	REFL 2 POS 28 2ND LOOK	3921
358	SCENE DATA BP 11 CH 3	15788	936	SCENE DATA BP 28 CH 3	15799
360	CH 4	16597	938	CH 4	16613
362	CH 5	16877	940	CH 5	16885
364	CH 6	17164	942	CH 6	17165
366	CH 7	16202	944	CH 7	16207
368	CH 8	16436	946	CH 8	16412
370	CH 9	17261	948	CH 9	17258
372	CH 10	16468	950	CH 10	16463
374	CH 11	16234	952	CH 11	16228
376	CH 12	16581	954	CH 12	16579
378	CH 13	16284	956	CH 13	16297
380	CH 14	16730	958	CH 14	16756
382	CH 15	16616	960	CH 15	16617
384	REFLECTOR 1 POSITION 12	1698	962	REFLECTOR 1 POSITION 29	4275
386	REFLECTOR 2 POSITION 12	1500	964	REFLECTOR 2 POSITION 29	4076
388	REFL 1 POS 12 2ND LOOK	1694	966	REFL 1 POS 29 2ND LOOK	4272
390	REFL 2 POS 12 2ND LOOK	1495	968	REFL 2 POS 29 2ND LOOK	4073
392	SCENE DATA BP 12 CH 3	15790	970	SCENE DATA BP 29 CH 3	15827

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
394	CH 4	16598	972	CH 4	16649
396	CH 5	16870	974	CH 5	16936
398	CH 6	17178	976	CH 6	17165
400	CH 7	16205	978	CH 7	16206
402	CH 8	16384	980	CH 8	16430
404	CH 9	17263	982	CH 9	17262
406	CH 10	16457	984	CH 10	16462
408	CH 11	16225	986	CH 11	16226
410	CH 12	16585	988	CH 12	16570
412	CH 13	16294	990	CH 13	16287
414	CH 14	16736	992	CH 14	16744
416	CH 15	16617	994	CH 15	16617
418	REFLECTOR 1 POSITION 13	1848	996	REFLECTOR 1 POSITION 30	4429
420	REFLECTOR 2 POSITION 13	1649	998	REFLECTOR 2 POSITION 30	4224
422	REFL 1 POS 13 2ND LOOK	1845	1000	REFL 1 POS 30 2ND LOOK	4424
424	REFL 2 POS 13 2ND LOOK	1646	1002	REFL 2 POS 30 2ND LOOK	4222
426	SCENE DATA BP 13 CH 3	15799	1004	SCENE DATA BP 30 CH 3	15789
428	CH 4	16612	1006	CH 4	16609
430	CH 5	16880	1008	CH 5	16885
432	CH 6	17171	1010	CH 6	17167
434	CH 7	16227	1012	CH 7	16201
436	CH 8	16393	1014	CH 8	16415
438	CH 9	17269	1016	CH 9	17260
440	CH 10	16480	1018	CH 10	16466
442	CH 11	16237	1020	CH 11	162
444	CH 12	16582	1022	CH 12	165
446	CH 13	16295	1024	CH 13	16288
448	CH 14	16732	1026	CH 14	16744
450	CH 15	16630	1028	CH 15	16616
452	REFLECTOR 1 POSITION 14	2002	1030	REFLECTOR 1 COLD CAL POS	6021
454	REFLECTOR 2 POSITION 14	1801	1032	REFLECTOR 2 COLD CAL POS	5820
456	REFL 1 POS 14 2ND LOOK	1998	1034	REFL 1 COLD CAL 2ND LOOK	6021
458	REFL 2 POS 14 2ND LOOK	1799	1036	REFL 2 COLD CAL 2ND LOOK	5820
460	SCENE DATA BP 14 CH 3	15798	1038	COLD CAL DATA 1 CH 3	15802
462	CH 4	16606	1040	CH 4	16609
464	CH 5	16885	1042	CH 5	16876
466	CH 6	17194	1044	CH 6	17162
468	CH 7	16227	1046	CH 7	16206
470	CH 8	16403	1048	CH 8	16391
472	CH 9	17283	1050	CH 9	17260
474	CH 10	16474	1052	CH 10	16460
476	CH 11	16252	1054	CH 11	16223
478	CH 12	16579	1056	CH 12	16588
480	CH 13	16285	1058	CH 13	16282
482	CH 14	16732	1060	CH 14	16736
484	CH 15	16631	1062	CH 15	16615
486	REFLECTOR 1 POSITION 15	2153	1064	COLD CAL DATA 2 CH 3	15797
488	REFLECTOR 2 POSITION 15	1955	1066	CH 4	16605
490	REFL 1 POS 15 2ND LOOK	2149	1068	CH 5	16875
492	REFL 2 POS 15 2ND LOOK	1950	1070	CH 6	17164

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	SCENE DATA BP 15 CH 3	15798	1072	CH 7	16204
496	CH 4	16612	1074	CH 8	16395
498	CH 5	16887	1076	CH 9	17260
500	CH 6	17183	1078	CH 10	16460
502	CH 7	16209	1080	CH 11	16227
504	CH 8	16398	1082	CH 12	16582
506	CH 9	17275	1084	CH 13	16278
508	CH 10	16469	1086	CH 14	16745
510	CH 11	16232	1088	CH 15	16616
512	CH 12	16628	1182	REFLECTOR 1 WARM CAL POS	10419
514	CH 13	16353	1184	REFLECTOR 2 WARM CAL POS	10220
516	CH 14	16802	1186	REFL 1 WARM CAL 2ND LOOK	10419
518	CH 15	16622	1188	REFL 2 WARM CAL 2ND LOOK	10220
520	REFLECTOR 1 POSITION 16	2302	1190	WARM CAL DATA 1 CH 3	15792
522	REFLECTOR 2 POSITION 16	2105	1192	CH 4	16594
524	REFL 1 POS 16 2ND LOOK	2300	1194	CH 5	16872
526	REFL 2 POS 16 2ND LOOK	2102	1196	CH 6	17152
528	SCENE DATA BP 16 CH 3	15819	1198	CH 7	16204
530	CH 4	16643	1200	CH 8	16384
532	CH 5	16929	1202	CH 9	17259
534	CH 6	17218	1204	CH 10	16458
536	CH 7	16241	1206	CH 11	16222
538	CH 8	16427	1208	CH 12	16580
540	CH 9	17302	1210	CH 13	16278
542	CH 10	16474	1212	CH 14	16734
544	CH 11	16249	1214	CH 15	16614
546	CH 12	16661	1216	WARM CAL DATA 2 CH 3	15790
548	CH 13	16389	1218	CH 4	16596
550	CH 14	16839	1220	CH 5	16869
552	CH 15	16643	1222	CH 6	17168
554	REFLECTOR 1 POSITION 17	2454	1224	CH 7	16201
556	REFLECTOR 2 POSITION 17	2257	1226	CH 8	16388
558	REFL 1 POS 17 2ND LOOK	2452	1228	CH 9	17258
560	REFL 2 POS 17 2ND LOOK	2253	1230	CH 10	16457
562	SCENE DATA BP 17 CH 3	15794	1232	CH 11	16222
564	CH 4	16605	1234	CH 12	16577
566	CH 5	16881	1236	CH 13	16287
568	CH 6	17182	1238	CH 14	16764
570	CH 7	16235	1240	CH 15	16614

FULL SCAN MODE

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	17890	23.17
1092	SCAN MOTOR A1-2	18301	23.55
1094	FEEDHORN A1-1	19672	25.84
1096	FEEDHORN A1-2	20684	26.36
1098	RF MUX A1-1	20370	27.72
1100	RF MUX A1-2	21018	29.24
1102	LOCAL OSCILLATOR CHANNEL 3	21783	30.50
1104	LOCAL OSCILLATOR CHANNEL 4	21914	30.68
1106	LOCAL OSCILLATOR CHANNEL 5	21536	29.69
1108	LOCAL OSCILLATOR CHANNEL 6	20066	27.25
1110	LOCAL OSCILLATOR CHANNEL 7	20702	28.36
1112	LOCAL OSCILLATOR CHANNEL 8	21406	30.14
1114	LOCAL OSCILLATOR CHANNEL 15	20972	29.90
1116	PLL LO #2 CHANNELS 9 THROUGH 14	20161	28.05
1118	PLL LO #1 CHANNELS 9 THROUGH 14	21775	30.94
1120	SPARE (NOT USED)	32767	52.86
1122	MIXER/IF AMPLIFIER CHANNEL 3	21564	29.77
1124	MIXER/IF AMPLIFIER CHANNEL 4	21186	29.79
1126	MIXER/IF AMPLIFIER CHANNEL 5	21109	29.37
1128	MIXER/IF AMPLIFIER CHANNEL 6	20629	28.18
1130	MIXER/IF AMPLIFIER CHANNEL 7	20866	28.73
1132	MIXER/IF AMPLIFIER CHANNEL 8	21110	29.84
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	20213	28.11
1136	MIXER/IF AMPLIFIER CHANNEL 15	21066	29.60
1138	IF AMPLIFIER CHANNEL 11 THRU 14	21028	29.37
1140	IF AMPLIFIER CHANNEL 9	21462	29.37
1142	IF AMPLIFIER CHANNEL 10	21060	29.55
1144	IF AMPLIFIER CHANNEL 11	20550	28.02
1146	DC/DC CONVERTER	21226	29.18
1148	IF AMPLIFIER CHANNEL 13	20666	27.97
1150	IF AMPLIFIER CHANNEL 14	20337	27.97
1152	IF AMPLIFIER CHANNEL 12	20326	27.93
1154	RF SHELF A1-1	20823	28.60
1156	RF SHELF A1-2	20948	29.02
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	19951	26.62
1160	A1-1 WARM LOAD 1	23071	23.59
1162	A1-1 WARM LOAD 2	23273	23.63
1164	A1-1 WARM LOAD 3	23344	23.69
1166	A1-1 WARM LOAD 4	23029	23.65
1168	A1-1 WARM LOAD CENTER	23211	23.69
1170	A1-2 WARM LOAD 1	23825	24.54
1172	A1-2 WARM LOAD 2	23655	24.51
1174	A1-2 WARM LOAD 3	23694	24.58
1176	A1-2 WARM LOAD 4	23606	24.54
1178	A1-2 WARM LOAD CENTER	23482	24.43
1180	TEMP SENSOR REFERENCE VOLTAGE	24882	

FULL SCAN MODE

DESCRIPTION	STATUS	STATUS	STATUS
SCANNER A1-1 POWER	ON	ON	ON
SCANNER A1-2 POWER	ON	ON	ON
PLL POWER	PLLO # 1	PLLO # 1	PLLO # 1
ANTENNA IN WARM CAL POSITION MODE	NO	NO	NO
ANTENNA IN COLD CAL POSITION MODE	NO	NO	NO
ANTENNA IN NADIR POSITION MODE	NO	NO	NO
ANTENNA IN FULL SCAN MODE	YES	YES	YES
SURVIVAL HEATER POWER	OFF	OFF	OFF
MODULE POWER	CONNECT	CONNECT	CONNECT
COLD CAL POSITION MSB	ZERO	ZERO	ZERO
COLD CAL POSITION LSB	ZERO	ZERO	ZERO

ANALOG DATA

DESCRIPTION	VALUE	DEG C	VALUE	DEG C	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	217	22.1	217	22.1	217	22.1
A1-2 SCANNER MOTOR TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-1 RF SHELF TEMPERATURE	220	26.2	220	26.2	219	24.8
A1-2 RF SHELF TEMPERATURE	222	28.9	222	28.9	222	28.9
A1-1 WARM LOAD TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-2 WARM LOAD TEMPERATURE	219	24.8	219	24.8	219	24.8

DESCRIPTION	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS
A1-1 ANTENNA DRIVE MOTOR CURRENT (AVRG)	106	49.40	106	49.40	105	48.93
A1-2 ANTENNA DRIVE MOTOR CURRENT (AVRG)	98	45.67	98	45.67	98	45.67
SIGNAL PROCESSING +15 VDC	172	14.84	172	14.84	172	14.84
ANTENNA DRIVE +15 VDC	173	14.93	173	14.93	173	14.93
SIGNAL PROCESSING -15 VDC	151	-15.00	151	-15.00	151	-15.00
ANTENNA DRIVE -15 VDC	151	-15.00	151	-15.00	150	-15.05
RECEIVER AMPLIFIER +8 VDC	158	7.90	158	7.90	158	7.90
SIGNAL PROCESSOR +5 VDC	147	4.90	147	4.90	147	4.90
ANTENNA DRIVE +5 VDC	147	4.90	147	4.90	147	4.90
RECEIVER MIXER/IF +10 VDC	171	9.88	171	9.88	171	9.88
PHASE LOCK LOOP (CHANNEL 9/14) +15 VDC	171	14.76	171	14.76	171	14.76
PHASE LOCK LOOP (CHANNEL 9/14) -15 VDC	146	-15.25	146	-15.25	146	-15.25
L.O. VOLTAGE (CHANNEL 8) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 7) VDC	173	9.90	173	9.90	173	9.90
L.O. VOLTAGE (CHANNEL 6) VDC	174	9.96	174	9.96	175	10.01
L.O. VOLTAGE (CHANNEL 3) VDC	175	10.01	175	10.01	175	10.01
L.O. VOLTAGE (CHANNEL 4) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 5) VDC	173	9.90	173	9.90	173	9.90
PLLO # 2 LOCK DETECT	5	0.10	5	0.10	5	0.10
PLLO # 1 LOCK DETECT	222	4.44	222	4.44	222	4.44
L.O. VOLTAGE (CHANNEL 15) VDC	172	14.84	172	14.84	172	14.84

PRT TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
VARIABLE TARGET	615	42.00	601	14.00
	616	43.00	602	15.00
	617	44.00	603	16.00
	618	45.00	604	17.00
	619	46.00	605	18.00
	620	47.00	606	19.00
	621	48.00	607	20.00
FIXED TARGET	622	49.00	608	21.00
	623	50.00	609	22.00
	624	51.00	610	23.00
	625	52.00	611	24.00
	626	53.00	612	25.00
	627	67.00	613	69.00
	628	68.00	614	70.00
BASEPLATE	629	71.00	630	72.00
	631	26.00	632	27.00

THERMOCOUPLE TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
FIXED TARGET SHROUD	558	5.00	537	34.00
	559	6.00	538	35.00
VARIABLE TARGET SHROUD	550	7.00	524	36.00
	551	8.00	525	37.00
FIXED TARGET N2	506	57.00	502	30.00
	507	58.00	503	31.00
VARIABLE TARGET N2	516	59.00	511	32.00
	517	60.00	512	33.00
HEATER N2	514	1.00	509	38.00
	515	2.00	510	39.00
FIXED TARGET FLOW METER	508	63.00	504	61.00
VARIABLE TARGET FLOW METER	518	64.00	513	62.00
BASEPLATE HEATER N2	519	3.00	520	4.00
BASEPLATE N2	521	9.00	522	10.00
BASEPLATE FLOW METER	523	65.00		
ADJUNCT RADIATORS	575	73.00	577	74.00
	579	75.00	581	76.00

```
AMSU  A1-17 A1.EXE     FULL SCAN MODE     P1 25-NOV-93 13:56:48  SCAN NUMBER   37
[ 5 ] DIGITAL A DATA   ELEMENT 0000

[ 6 ] DIGITAL B DATA   ELEMENT   00

[ 7 ] ANALOG DATA      ELEMENT   00

                                   COMMANDS
[ 9 ]  MODULE POWER =          CONNECT      ANTENNA IN COLD CAL POSIT = NO   [ 15
[ 10 ] SURVIVAL HEATER POWER =    OFF       ANTENNA IN NADIR POSITION = NO   [ 16
[ 11 ] MODULE TOTALLY OFF =       ON        ANTENNA IN FULL SCAN MODE = YES  [ 17
[ 12 ] SCANNER A1 - 1 POWER =     ON        PLL POWER =              PLLO # 1 [ 18
[ 13 ] SCANNER A1 - 2 POWER =     ON        COLD CAL POSITION MSB =    ZERO   [ 19
[ 14 ] ANTENNA IN WARM CAL POSIT = NO       COLD CAL POSITION LSB =    ZERO   [ 20

          POWER [ 4 ]  ON
                       SCREEN ONLY [ 2 ]  PRINT  [ 3 ] FULL        [ 1 ] RETURN
SELECT TOUCHSCREEN BUTTON 3
```

POST TRANSIENT
PLB LOW FREQ

PRE TRANSIENT
PLB HIGH FREQ
1.43Hz

AMSU A1_17 A1.EXE DIGITAL A DATA 25-NOV-93 13:56:52 PAGE 1
FULL SCAN MODE

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
1	SYNC SEQUENCE BYTE 1	11111111	572	SCENE DATA BP 17 CH 8	16427
2	SYNC SEQUENCE BYTE 2	11111111	574	CH 9	17325
3	SYNC SEQUENCE BYTE 3	11111111	576	CH 10	16530
4	UNIT ID AND SERIAL NO	00010001	578	CH 11	16318
5	DIGITAL B DATA BYTE 1	00000010	580	CH 12	16645
6	DIGITAL B DATA BYTE 2	00001110	582	CH 13	16337
7	DIGITAL B DATA BYTE 3	00000000	584	CH 14	16778
8	DIGITAL B DATA BYTE 4	00000000	586	CH 15	16666
10	REFLECTOR 1 POSITION 1	27	588	REFLECTOR 1 POSITION 18	2609
12	REFLECTOR 2 POSITION 1	16212	590	REFLECTOR 2 POSITION 18	2410
14	REFL 1 POS 1 2ND LOOK	27	592	REFL 1 POS 18 2ND LOOK	2604
16	REFL 2 POS 1 2ND LOOK	16212	594	REFL 2 POS 18 2ND LOOK	2405
18	SCENE DATA BP 1 CH 3	15851	596	SCENE DATA BP 18 CH 3	15830
20	CH 4	16660	598	CH 4	16637
22	CH 5	16927	600	CH 5	16915
24	CH 6	17184	602	CH 6	17187
26	CH 7	16244	604	CH 7	16262
28	CH 8	16462	606	CH 8	16445
30	CH 9	17303	608	CH 9	17329
32	CH 10	16497	610	CH 10	16522
34	CH 11	16289	612	CH 11	16298
36	CH 12	16642	614	CH 12	16686
38	CH 13	16352	616	CH 13	16400
40	CH 14	16806	618	CH 14	16850
42	CH 15	16652	620	CH 15	166
44	REFLECTOR 1 POSITION 2	179	622	REFLECTOR 1 POSITION 19	275
46	REFLECTOR 2 POSITION 2	16364	624	REFLECTOR 2 POSITION 19	2559
48	REFL 1 POS 2 2ND LOOK	178	626	REFL 1 POS 19 2ND LOOK	2756
50	REFL 2 POS 2 2ND LOOK	16361	628	REFL 2 POS 19 2ND LOOK	2556
52	SCENE DATA BP 2 CH 3	15823	630	SCENE DATA BP 19 CH 3	15823
54	CH 4	16635	632	CH 4	16632
56	CH 5	16908	634	CH 5	16896
58	CH 6	17191	636	CH 6	17197
60	CH 7	16243	638	CH 7	16239
62	CH 8	16429	640	CH 8	16451
64	CH 9	17304	642	CH 9	17307
66	CH 10	16503	644	CH 10	16497
68	CH 11	16286	646	CH 11	16285
70	CH 12	16644	648	CH 12	16640
72	CH 13	16344	650	CH 13	16347
74	CH 14	16786	652	CH 14	16787
76	CH 15	16652	654	CH 15	16653
78	REFLECTOR 1 POSITION 3	335	656	REFLECTOR 1 POSITION 20	2910
80	REFLECTOR 2 POSITION 3	129	658	REFLECTOR 2 POSITION 20	2711
82	REFL 1 POS 3 2ND LOOK	329	660	REFL 1 POS 20 2ND LOOK	2908
84	REFL 2 POS 3 2ND LOOK	129	662	REFL 2 POS 20 2ND LOOK	2708
86	SCENE DATA BP 3 CH 3	15824	664	SCENE DATA BP 20 CH 3	15823
88	CH 4	16632	666	CH 4	16631
90	CH 5	16904	668	CH 5	16895
92	CH 6	17185	670	CH 6	17189

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	16241	672	CH 7	16240
96	CH 8	16421	674	CH 8	16438
98	CH 9	17313	676	CH 9	17300
100	CH 10	16510	678	CH 10	16498
102	CH 11	16288	680	CH 11	16281
104	CH 12	16655	682	CH 12	16648
106	CH 13	16364	684	CH 13	16352
108	CH 14	16821	686	CH 14	16804
110	CH 15	16657	688	CH 15	16652
112	REFLECTOR 1 POSITION 4	482	690	REFLECTOR 1 POSITION 21	3064
114	REFLECTOR 2 POSITION 4	285	692	REFLECTOR 2 POSITION 21	2865
116	REFL 1 POS 4 2ND LOOK	480	694	REFL 1 POS 21 2ND LOOK	3059
118	REFL 2 POS 4 2ND LOOK	281	696	REFL 2 POS 21 2ND LOOK	2860
120	SCENE DATA BP 4 CH 3	15819	698	SCENE DATA BP 21 CH 3	15823
122	CH 4	16628	700	CH 4	16630
124	CH 5	16897	702	CH 5	16902
126	CH 6	17200	704	CH 6	17186
128	CH 7	16244	706	CH 7	16234
130	CH 8	16436	708	CH 8	16428
132	CH 9	17321	710	CH 9	17301
134	CH 10	16521	712	CH 10	16499
136	CH 11	16291	714	CH 11	16283
138	CH 12	16671	716	CH 12	16640
140	CH 13	16392	718	CH 13	16355
142	CH 14	16832	720	CH 14	16807
144	CH 15	16666	722	CH 15	16649
146	REFLECTOR 1 POSITION 5	636	724	REFLECTOR 1 POSITION 22	3212
148	REFLECTOR 2 POSITION 5	435	726	REFLECTOR 2 POSITION 22	3015
150	REFL 1 POS 5 2ND LOOK	633	728	REFL 1 POS 22 2ND LOOK	3210
152	REFL 2 POS 5 2ND LOOK	432	730	REFL 2 POS 22 2ND LOOK	3010
154	SCENE DATA BP 5 CH 3	15819	732	SCENE DATA BP 22 CH 3	15819
156	CH 4	16631	734	CH 4	16631
158	CH 5	16902	736	CH 5	16900
160	CH 6	17208	738	CH 6	17191
162	CH 7	16240	740	CH 7	16238
164	CH 8	16420	742	CH 8	16423
166	CH 9	17313	744	CH 9	17303
168	CH 10	16537	746	CH 10	16499
170	CH 11	16329	748	CH 11	16281
172	CH 12	16641	750	CH 12	16643
174	CH 13	16322	752	CH 13	16345
176	CH 14	16758	754	CH 14	16826
178	CH 15	16663	756	CH 15	16652
180	REFLECTOR 1 POSITION 6	789	758	REFLECTOR 1 POSITION 23	3365
182	REFLECTOR 2 POSITION 6	589	760	REFLECTOR 2 POSITION 23	3167
184	REFL 1 POS 6 2ND LOOK	785	762	REFL 1 POS 23 2ND LOOK	3362
186	REFL 2 POS 6 2ND LOOK	585	764	REFL 2 POS 23 2ND LOOK	3163
188	SCENE DATA BP 6 CH 3	15820	766	SCENE DATA BP 23 CH 3	15822
190	CH 4	16632	768	CH 4	16629
192	CH 5	16901	770	CH 5	16898

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
194	CH 6	17230	772	CH 6	17189
196	CH 7	16268	774	CH 7	16241
198	CH 8	16434	776	CH 8	16426
200	CH 9	17328	778	CH 9	17304
202	CH 10	16533	780	CH 10	16505
204	CH 11	16311	782	CH 11	16284
206	CH 12	16658	784	CH 12	16635
208	CH 13	16371	786	CH 13	16352
210	CH 14	16811	788	CH 14	16798
212	CH 15	16667	790	CH 15	16652
214	REFLECTOR 1 POSITION 7	939	792	REFLECTOR 1 POSITION 24	3519
216	REFLECTOR 2 POSITION 7	740	794	REFLECTOR 2 POSITION 24	3321
218	REFL 1 POS 7 2ND LOOK	936	796	REFL 1 POS 24 2ND LOOK	3514
220	REFL 2 POS 7 2ND LOOK	736	798	REFL 2 POS 24 2ND LOOK	3315
222	SCENE DATA BP 7 CH 3	15825	800	SCENE DATA BP 24 CH 3	15818
224	CH 4	16630	802	CH 4	16631
226	CH 5	16896	804	CH 5	16901
228	CH 6	17188	806	CH 6	17192
230	CH 7	16244	808	CH 7	16240
232	CH 8	16418	810	CH 8	16449
234	CH 9	17308	812	CH 9	17302
236	CH 10	16505	814	CH 10	16499
238	CH 11	16283	816	CH 11	16286
240	CH 12	16645	818	CH 12	16648
242	CH 13	16350	820	CH 13	163
244	CH 14	16815	822	CH 14	1680
246	CH 15	16653	824	CH 15	16651
248	REFLECTOR 1 POSITION 8	1091	826	REFLECTOR 1 POSITION 25	3668
250	REFLECTOR 2 POSITION 8	893	828	REFLECTOR 2 POSITION 25	3470
252	REFL 1 POS 8 2ND LOOK	1087	830	REFL 1 POS 25 2ND LOOK	3665
254	REFL 2 POS 8 2ND LOOK	888	832	REFL 2 POS 25 2ND LOOK	3466
256	SCENE DATA BP 8 CH 3	15824	834	SCENE DATA BP 25 CH 3	15817
258	CH 4	16631	836	CH 4	16628
260	CH 5	16903	838	CH 5	16896
262	CH 6	17190	840	CH 6	17191
264	CH 7	16243	842	CH 7	16239
266	CH 8	16428	844	CH 8	16419
268	CH 9	17308	846	CH 9	17308
270	CH 10	16504	848	CH 10	16498
272	CH 11	16275	850	CH 11	16285
274	CH 12	16639	852	CH 12	16653
276	CH 13	16339	854	CH 13	16359
278	CH 14	16779	856	CH 14	16791
280	CH 15	16651	858	CH 15	16650
282	REFLECTOR 1 POSITION 9	1246	860	REFLECTOR 1 POSITION 26	3821
284	REFLECTOR 2 POSITION 9	1043	862	REFLECTOR 2 POSITION 26	3623
286	REFL 1 POS 9 2ND LOOK	1240	864	REFL 1 POS 26 2ND LOOK	3817
288	REFL 2 POS 9 2ND LOOK	1040	866	REFL 2 POS 26 2ND LOOK	3618
290	SCENE DATA BP 9 CH 3	15824	868	SCENE DATA BP 26 CH 3	15819
292	CH 4	16637	870	CH 4	16630

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	16904	872	CH 5	16900
296	CH 6	17186	874	CH 6	17188
298	CH 7	16242	876	CH 7	16239
300	CH 8	16452	878	CH 8	16418
302	CH 9	17307	880	CH 9	17305
304	CH 10	16503	882	CH 10	16505
306	CH 11	16291	884	CH 11	16284
308	CH 12	16641	886	CH 12	16647
310	CH 13	16350	888	CH 13	16348
312	CH 14	16817	890	CH 14	16801
314	CH 15	16651	892	CH 15	16650
316	REFLECTOR 1 POSITION 10	1395	894	REFLECTOR 1 POSITION 27	3974
318	REFLECTOR 2 POSITION 10	1195	896	REFLECTOR 2 POSITION 27	3775
320	REFL 1 POS 10 2ND LOOK	1390	898	REFL 1 POS 27 2ND LOOK	3968
322	REFL 2 POS 10 2ND LOOK	1192	900	REFL 2 POS 27 2ND LOOK	3770
324	SCENE DATA BP 10 CH 3	15828	902	SCENE DATA BP 27 CH 3	15828
326	CH 4	16632	904	CH 4	16634
328	CH 5	16905	906	CH 5	16909
330	CH 6	17194	908	CH 6	17189
332	CH 7	16241	910	CH 7	16240
334	CH 8	16428	912	CH 8	16426
336	CH 9	17306	914	CH 9	17304
338	CH 10	16498	916	CH 10	16503
340	CH 11	16290	918	CH 11	16286
342	CH 12	16651	920	CH 12	16651
344	CH 13	16358	922	CH 13	16350
346	CH 14	16793	924	CH 14	16790
348	CH 15	16653	926	CH 15	16649
350	REFLECTOR 1 POSITION 11	1545	928	REFLECTOR 1 POSITION 28	4125
352	REFLECTOR 2 POSITION 11	1346	930	REFLECTOR 2 POSITION 28	3925
354	REFL 1 POS 11 2ND LOOK	1542	932	REFL 1 POS 28 2ND LOOK	4121
356	REFL 2 POS 11 2ND LOOK	1343	934	REFL 2 POS 28 2ND LOOK	3921
358	SCENE DATA BP 11 CH 3	15826	936	SCENE DATA BP 28 CH 3	15834
360	CH 4	16634	938	CH 4	16647
362	CH 5	16905	940	CH 5	16913
364	CH 6	17191	942	CH 6	17188
366	CH 7	16239	944	CH 7	16239
368	CH 8	16462	946	CH 8	16440
370	CH 9	17308	948	CH 9	17306
372	CH 10	16505	950	CH 10	16499
374	CH 11	16293	952	CH 11	16283
376	CH 12	16635	954	CH 12	16645
378	CH 13	16341	956	CH 13	16363
380	CH 14	16782	958	CH 14	16788
382	CH 15	16650	960	CH 15	16650
384	REFLECTOR 1 POSITION 12	1698	962	REFLECTOR 1 POSITION 29	4275
386	REFLECTOR 2 POSITION 12	1499	964	REFLECTOR 2 POSITION 29	4076
388	REFL 1 POS 12 2ND LOOK	1694	966	REFL 1 POS 29 2ND LOOK	4272
390	REFL 2 POS 12 2ND LOOK	1495	968	REFL 2 POS 29 2ND LOOK	4073
392	SCENE DATA BP 12 CH 3	15827	970	SCENE DATA BP 29 CH 3	15867

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
394	CH 4	16631	972	CH 4	16678
396	CH 5	16901	974	CH 5	16957
398	CH 6	17199	976	CH 6	17186
400	CH 7	16241	978	CH 7	16239
402	CH 8	16426	980	CH 8	16462
404	CH 9	17306	982	CH 9	17304
406	CH 10	16504	984	CH 10	16499
408	CH 11	16291	986	CH 11	16286
410	CH 12	16647	988	CH 12	16648
412	CH 13	16363	990	CH 13	16337
414	CH 14	16807	992	CH 14	16808
416	CH 15	16655	994	CH 15	16650
418	REFLECTOR 1 POSITION 13	1848	996	REFLECTOR 1 POSITION 30	4430
420	REFLECTOR 2 POSITION 13	1649	998	REFLECTOR 2 POSITION 30	4228
422	REFL 1 POS 13 2ND LOOK	1845	1000	REFL 1 POS 30 2ND LOOK	4425
424	REFL 2 POS 13 2ND LOOK	1646	1002	REFL 2 POS 30 2ND LOOK	4224
426	SCENE DATA BP 13 CH 3	15832	1004	SCENE DATA BP 30 CH 3	15828
428	CH 4	16647	1006	CH 4	16646
430	CH 5	16906	1008	CH 5	16912
432	CH 6	17193	1010	CH 6	17190
434	CH 7	16261	1012	CH 7	16240
436	CH 8	16428	1014	CH 8	16442
438	CH 9	17311	1016	CH 9	17302
440	CH 10	16514	1018	CH 10	16498
442	CH 11	16298	1020	CH 11	162
444	CH 12	16642	1022	CH 12	1664
446	CH 13	16357	1024	CH 13	16357
448	CH 14	16797	1026	CH 14	16799
450	CH 15	16661	1028	CH 15	16651
452	REFLECTOR 1 POSITION 14	2002	1030	REFLECTOR 1 COLD CAL POS	6021
454	REFLECTOR 2 POSITION 14	1801	1032	REFLECTOR 2 COLD CAL POS	5820
456	REFL 1 POS 14 2ND LOOK	1998	1034	REFL 1 COLD CAL 2ND LOOK	6021
458	REFL 2 POS 14 2ND LOOK	1798	1036	REFL 2 COLD CAL 2ND LOOK	5820
460	SCENE DATA BP 14 CH 3	15836	1038	COLD CAL DATA 1 CH 3	15836
462	CH 4	16641	1040	CH 4	16641
464	CH 5	16911	1042	CH 5	16901
466	CH 6	17209	1044	CH 6	17184
468	CH 7	16256	1046	CH 7	16240
470	CH 8	16435	1048	CH 8	16424
472	CH 9	17329	1050	CH 9	17305
474	CH 10	16514	1052	CH 10	16501
476	CH 11	16303	1054	CH 11	16288
478	CH 12	16642	1056	CH 12	16644
480	CH 13	16339	1058	CH 13	16347
482	CH 14	16789	1060	CH 14	16798
484	CH 15	16663	1062	CH 15	16650
486	REFLECTOR 1 POSITION 15	2154	1064	COLD CAL DATA 2 CH 3	15832
488	REFLECTOR 2 POSITION 15	1955	1066	CH 4	16641
490	REFL 1 POS 15 2ND LOOK	2149	1068	CH 5	16905
492	REFL 2 POS 15 2ND LOOK	1950	1070	CH 6	17192

ELEMENT	DESCRIPTION		VALUE	ELEMENT	DESCRIPTION		VALUE
494	SCENE DATA BP 15	CH 3	15829	1072		CH 7	16240
496		CH 4	16646	1074		CH 8	16426
498		CH 5	16914	1076		CH 9	17303
500		CH 6	17206	1078		CH 10	16506
502		CH 7	16247	1080		CH 11	16292
504		CH 8	16437	1082		CH 12	16650
506		CH 9	17320	1084		CH 13	16356
508		CH 10	16503	1086		CH 14	16781
510		CH 11	16295	1088		CH 15	16650
512		CH 12	16680	1182	REFLECTOR 1 WARM CAL POS		10420
514		CH 13	16400	1184	REFLECTOR 2 WARM CAL POS		10220
516		CH 14	16859	1186	REFL 1 WARM CAL 2ND LOOK		10420
518		CH 15	16658	1188	REFL 2 WARM CAL 2ND LOOK		10220
520	REFLECTOR 1 POSITION 16		2302	1190	WARM CAL DATA 1	CH 3	15828
522	REFLECTOR 2 POSITION 16		2105	1192		CH 4	16636
524	REFL 1 POS 16 2ND LOOK		2300	1194		CH 5	16906
526	REFL 2 POS 16 2ND LOOK		2101	1196		CH 6	17182
528	SCENE DATA BP 16	CH 3	15853	1198		CH 7	16237
530		CH 4	16674	1200		CH 8	16427
532		CH 5	16953	1202		CH 9	17305
534		CH 6	17239	1204		CH 10	16504
536		CH 7	16273	1206		CH 11	16280
538		CH 8	16459	1208		CH 12	16643
540		CH 9	17344	1210		CH 13	16350
542		CH 10	16511	1212		CH 14	16814
544		CH 11	16306	1214		CH 15	16647
546		CH 12	16722	1216	WARM CAL DATA 2	CH 3	15825
548		CH 13	16456	1218		CH 4	16634
550		CH 14	16914	1220		CH 5	16901
552		CH 15	16672	1222		CH 6	17192
554	REFLECTOR 1 POSITION 17		2455	1224		CH 7	16240
556	REFLECTOR 2 POSITION 17		2258	1226		CH 8	16427
558	REFL 1 POS 17 2ND LOOK		2452	1228		CH 9	17302
560	REFL 2 POS 17 2ND LOOK		2253	1230		CH 10	16505
562	SCENE DATA BP 17	CH 3	15828	1232		CH 11	16286
564		CH 4	16643	1234		CH 12	16646
566		CH 5	16905	1236		CH 13	16353
568		CH 6	17205	1238		CH 14	16805
570		CH 7	16265	1240		CH 15	16649

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	17941	23.27
1092	SCAN MOTOR A1-2	18362	23.67
1094	FEEDHORN A1-1	19573	25.65
1096	FEEDHORN A1-2	20513	26.03
1098	RF MUX A1-1	20131	27.26
1100	RF MUX A1-2	20721	28.66
1102	LOCAL OSCILLATOR CHANNEL 3	21436	29.82
1104	LOCAL OSCILLATOR CHANNEL 4	21556	29.98
1106	LOCAL OSCILLATOR CHANNEL 5	21232	29.09
1108	LOCAL OSCILLATOR CHANNEL 6	19904	26.94
1110	LOCAL OSCILLATOR CHANNEL 7	20456	27.89
1112	LOCAL OSCILLATOR CHANNEL 8	21078	29.49
1114	LOCAL OSCILLATOR CHANNEL 15	20575	29.13
1116	PLL LO #2 CHANNELS 9 THROUGH 14	19892	27.53
1118	PLL LO #1 CHANNELS 9 THROUGH 14	21174	29.76
1120	SPARE (NOT USED)	32767	52.86
1122	MIXER/IF AMPLIFIER CHANNEL 3	21276	29.21
1124	MIXER/IF AMPLIFIER CHANNEL 4	20869	29.17
1126	MIXER/IF AMPLIFIER CHANNEL 5	20795	28.76
1128	MIXER/IF AMPLIFIER CHANNEL 6	20398	27.73
1130	MIXER/IF AMPLIFIER CHANNEL 7	20595	28.20
1132	MIXER/IF AMPLIFIER CHANNEL 8	20786	29.21
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	20013	27.73
1136	MIXER/IF AMPLIFIER CHANNEL 15	20732	28.95
1138	IF AMPLIFIER CHANNEL 11 THRU 14	20617	28.57
1140	IF AMPLIFIER CHANNEL 9	21045	28.56
1142	IF AMPLIFIER CHANNEL 10	20639	28.73
1144	IF AMPLIFIER CHANNEL 11	20376	27.69
1146	DC/DC CONVERTER	20600	27.96
1148	IF AMPLIFIER CHANNEL 13	20496	27.64
1150	IF AMPLIFIER CHANNEL 14	20165	27.63
1152	IF AMPLIFIER CHANNEL 12	20155	27.60
1154	RF SHELF A1-1	20477	27.93
1156	RF SHELF A1-2	20643	28.43
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	19786	26.30
1160	A1-1 WARM LOAD 1	23094	23.63
1162	A1-1 WARM LOAD 2	23291	23.66
1164	A1-1 WARM LOAD 3	23362	23.73
1166	A1-1 WARM LOAD 4	23048	23.69
1168	A1-1 WARM LOAD CENTER	23231	23.73
1170	A1-2 WARM LOAD 1	23856	24.60
1172	A1-2 WARM LOAD 2	23688	24.58
1174	A1-2 WARM LOAD 3	23721	24.63
1176	A1-2 WARM LOAD 4	23645	24.62
1178	A1-2 WARM LOAD CENTER	23517	24.50
1180	TEMP SENSOR REFERENCE VOLTAGE	24882	

FULL SCAN MODE

DESCRIPTION	STATUS	STATUS	STATUS
SCANNER A1-1 POWER	ON	ON	ON
SCANNER A1-2 POWER	ON	ON	ON
PLL POWER	PLLO # 1	PLLO # 1	PLLO # 1
ANTENNA IN WARM CAL POSITION MODE	NO	NO	NO
ANTENNA IN COLD CAL POSITION MODE	NO	NO	NO
ANTENNA IN NADIR POSITION MODE	NO	NO	NO
ANTENNA IN FULL SCAN MODE	YES	YES	YES
SURVIVAL HEATER POWER	OFF	OFF	OFF
MODULE POWER	CONNECT	CONNECT	CONNECT
COLD CAL POSITION MSB	ZERO	ZERO	ZERO
COLD CAL POSITION LSB	ZERO	ZERO	ZERO

ANALOG DATA

DESCRIPTION	VALUE	DEG C	VALUE	DEG C	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	217	22.1	217	22.1	218	23.4
A1-2 SCANNER MOTOR TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-1 RF SHELF TEMPERATURE	219	24.8	219	24.8	219	24.8
A1-2 RF SHELF TEMPERATURE	220	26.2	221	27.5	221	27.5
A1-1 WARM LOAD TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-2 WARM LOAD TEMPERATURE	219	24.8	219	24.8	219	24.8

DESCRIPTION	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS
A1-1 ANTENNA DRIVE MOTOR CURRENT (AVRG)	105	48.93	105	48.93	105	48.93
A1-2 ANTENNA DRIVE MOTOR CURRENT (AVRG)	98	45.67	98	45.67	99	46.13
SIGNAL PROCESSING +15 VDC	172	14.84	172	14.84	172	14.84
ANTENNA DRIVE +15 VDC	173	14.93	173	14.93	173	14.93
SIGNAL PROCESSING -15 VDC	151	-15.00	151	-15.00	151	-15.00
ANTENNA DRIVE -15 VDC	150	-15.05	150	-15.05	150	-15.05
RECEIVER AMPLIFIER +8 VDC	158	7.90	158	7.90	158	7.90
SIGNAL PROCESSOR +5 VDC	148	4.93	148	4.93	148	4.93
ANTENNA DRIVE +5 VDC	147	4.90	147	4.90	147	4.90
RECEIVER MIXER/IF +10 VDC	171	9.88	171	9.88	171	9.88
PHASE LOCK LOOP (CHANNEL 9/14) +15 VDC	171	14.76	172	14.84	171	14.76
PHASE LOCK LOOP (CHANNEL 9/14) -15 VDC	146	-15.25	146	-15.25	146	-15.25
L.O. VOLTAGE (CHANNEL 8) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 7) VDC	173	9.90	173	9.90	173	9.90
L.O. VOLTAGE (CHANNEL 6) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 3) VDC	175	10.01	175	10.01	175	10.01
L.O. VOLTAGE (CHANNEL 4) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 5) VDC	173	9.90	173	9.90	173	9.90
PLLO # 2 LOCK DETECT	5	0.10	5	0.10	5	0.10
PLLO # 1 LOCK DETECT	221	4.42	221	4.42	221	4.42
L.O. VOLTAGE (CHANNEL 15) VDC	172	14.84	172	14.84	172	14.84

PRT TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
VARIABLE TARGET	615	42.00	601	14.00
	616	43.00	602	15.00
	617	44.00	603	16.00
	618	45.00	604	17.00
	619	46.00	605	18.00
	620	47.00	606	19.00
	621	48.00	607	20.00
FIXED TARGET	622	49.00	608	21.00
	623	50.00	609	22.00
	624	51.00	610	23.00
	625	52.00	611	24.00
	626	53.00	612	25.00
	627	67.00	613	69.00
	628	68.00	614	70.00
BASEPLATE	629	71.00	630	72.00
	631	26.00	632	27.00

THERMOCOUPLE TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
FIXED TARGET SHROUD	558	5.00	537	34.00
	559	6.00	538	35.00
VARIABLE TARGET SHROUD	550	7.00	524	36.00
	551	8.00	525	37.00
FIXED TARGET N2	506	57.00	502	30.00
	507	58.00	503	31.00
VARIABLE TARGET N2	516	59.00	511	32.00
	517	60.00	512	33.00
HEATER N2	514	1.00	509	38.00
	515	2.00	510	39.00
FIXED TARGET FLOW METER	508	63.00	504	61.00
VARIABLE TARGET FLOW METER	518	64.00	513	62.00
BASEPLATE HEATER N2	519	3.00	520	4.00
BASEPLATE N2	521	9.00	522	10.00
BASEPLATE FLOW METER	523	65.00		
ADJUNCT RADIATORS	575	73.00	577	74.00
	579	75.00	581	76.00

```
AMSU  A1-17 A1.EXE     FULL SCAN MODE     P1 25-NOV-93 14:02:07  SCAN NUMBER   40
[ 5 ] DIGITAL A DATA   ELEMENT 0000

[ 6 ] DIGITAL B DATA   ELEMENT   00

[ 7 ] ANALOG DATA      ELEMENT   00

                                        COMMANDS
[ 9 ]  MODULE POWER =          CONNECT        ANTENNA IN COLD CAL POSIT = NO   [ 15

[ 10 ] SURVIVAL HEATER POWER =      OFF       ANTENNA IN NADIR POSITION = NO   [ 16

[ 11 ] MODULE TOTALLY OFF =         ON        ANTENNA IN FULL SCAN MODE = YES  [ 17

[ 12 ] SCANNER A1 - 1 POWER =       ON        PLL POWER =                PLLO # 1  [ 18

[ 13 ] SCANNER A1 - 2 POWER =       ON        COLD CAL POSITION MSB =      ZERO  [ 19

[ 14 ] ANTENNA IN WARM CAL POSIT = NO         COLD CAL POSITION LSB =      ZERO  [ 20

          POWER [ 4 ]  ON
                       SCREEN ONLY [ 2 ]  PRINT  [ 3 ] FULL        [ 1 ] RETURN
SELECT TOUCHSCREEN BUTTON 3
```

Post of 1.43 Hz

POST TRANSIENT
PLB HIGH FREQ
1.43 HZ

PRE-TRANSIENT
PLB HIGH FREQ
2.86HZ

FULL SCAN MODE

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
1	SYNC SEQUENCE BYTE 1	11111111	572	SCENE DATA BP 17 CH 8	16415
2	SYNC SEQUENCE BYTE 2	11111111	574	CH 9	17310
3	SYNC SEQUENCE BYTE 3	11111111	576	CH 10	16524
4	UNIT ID AND SERIAL NO	00010001	578	CH 11	16319
5	DIGITAL B DATA BYTE 1	00000010	580	CH 12	16644
6	DIGITAL B DATA BYTE 2	00001110	582	CH 13	16333
7	DIGITAL B DATA BYTE 3	00000000	584	CH 14	16790
8	DIGITAL B DATA BYTE 4	00000000	586	CH 15	16655
10	REFLECTOR 1 POSITION 1	27	588	REFLECTOR 1 POSITION 18	2609
12	REFLECTOR 2 POSITION 1	16212	590	REFLECTOR 2 POSITION 18	2410
14	REFL 1 POS 1 2ND LOOK	27	592	REFL 1 POS 18 2ND LOOK	2604
16	REFL 2 POS 1 2ND LOOK	16212	594	REFL 2 POS 18 2ND LOOK	2405
18	SCENE DATA BP 1 CH 3	15808	596	SCENE DATA BP 18 CH 3	15796
20	CH 4	16650	598	CH 4	16621
22	CH 5	16918	600	CH 5	16908
24	CH 6	17179	602	CH 6	17184
26	CH 7	16230	604	CH 7	16251
28	CH 8	16443	606	CH 8	16436
30	CH 9	17287	608	CH 9	17310
32	CH 10	16501	610	CH 10	16524
34	CH 11	16281	612	CH 11	16290
36	CH 12	16644	614	CH 12	16676
38	CH 13	16350	616	CH 13	16405
40	CH 14	16806	618	CH 14	16865
42	CH 15	16638	620	CH 15	166
44	REFLECTOR 1 POSITION 2	180	622	REFLECTOR 1 POSITION 19	27
46	REFLECTOR 2 POSITION 2	16365	624	REFLECTOR 2 POSITION 19	2559
48	REFL 1 POS 2 2ND LOOK	177	626	REFL 1 POS 19 2ND LOOK	2755
50	REFL 2 POS 2 2ND LOOK	16361	628	REFL 2 POS 19 2ND LOOK	2556
52	SCENE DATA BP 2 CH 3	15790	630	SCENE DATA BP 19 CH 3	15789
54	CH 4	16625	632	CH 4	16623
56	CH 5	16899	634	CH 5	16894
58	CH 6	17188	636	CH 6	17193
60	CH 7	16234	638	CH 7	16230
62	CH 8	16415	640	CH 8	16438
64	CH 9	17287	642	CH 9	17290
66	CH 10	16501	644	CH 10	16501
68	CH 11	16282	646	CH 11	16289
70	CH 12	16633	648	CH 12	16635
72	CH 13	16358	650	CH 13	16347
74	CH 14	16812	652	CH 14	16782
76	CH 15	16640	654	CH 15	16642
78	REFLECTOR 1 POSITION 3	335	656	REFLECTOR 1 POSITION 20	2910
80	REFLECTOR 2 POSITION 3	130	658	REFLECTOR 2 POSITION 20	2711
82	REFL 1 POS 3 2ND LOOK	329	660	REFL 1 POS 20 2ND LOOK	2907
84	REFL 2 POS 3 2ND LOOK	130	662	REFL 2 POS 20 2ND LOOK	2708
86	SCENE DATA BP 3 CH 3	15789	664	SCENE DATA BP 20 CH 3	15785
88	CH 4	16621	666	CH 4	16622
90	CH 5	16899	668	CH 5	16893
92	CH 6	17180	670	CH 6	17181

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	16239	672	CH 7	16231
96	CH 8	16409	674	CH 8	16420
98	CH 9	17294	676	CH 9	17286
100	CH 10	16506	678	CH 10	16500
102	CH 11	16285	680	CH 11	16282
104	CH 12	16652	682	CH 12	16638
106	CH 13	16370	684	CH 13	16344
108	CH 14	16818	686	CH 14	16815
110	CH 15	16645	688	CH 15	16640
112	REFLECTOR 1 POSITION 4	483	690	REFLECTOR 1 POSITION 21	3063
114	REFLECTOR 2 POSITION 4	285	692	REFLECTOR 2 POSITION 21	2864
116	REFL 1 POS 4 2ND LOOK	480	694	REFL 1 POS 21 2ND LOOK	3059
118	REFL 2 POS 4 2ND LOOK	280	696	REFL 2 POS 21 2ND LOOK	2860
120	SCENE DATA BP 4 CH 3	15787	698	SCENE DATA BP 21 CH 3	15784
122	CH 4	16620	700	CH 4	16617
124	CH 5	16896	702	CH 5	16894
126	CH 6	17193	704	CH 6	17183
128	CH 7	16239	706	CH 7	16232
130	CH 8	16424	708	CH 8	16415
132	CH 9	17304	710	CH 9	17286
134	CH 10	16515	712	CH 10	16501
136	CH 11	16291	714	CH 11	16287
138	CH 12	16668	716	CH 12	16642
140	CH 13	16387	718	CH 13	16343
142	CH 14	16844	720	CH 14	16786
144	CH 15	16652	722	CH 15	16640
146	REFLECTOR 1 POSITION 5	636	724	REFLECTOR 1 POSITION 22	3212
148	REFLECTOR 2 POSITION 5	436	726	REFLECTOR 2 POSITION 22	3014
150	REFL 1 POS 5 2ND LOOK	632	728	REFL 1 POS 22 2ND LOOK	3210
152	REFL 2 POS 5 2ND LOOK	432	730	REFL 2 POS 22 2ND LOOK	3011
154	SCENE DATA BP 5 CH 3	15791	732	SCENE DATA BP 22 CH 3	15785
156	CH 4	16623	734	CH 4	16621
158	CH 5	16891	736	CH 5	16894
160	CH 6	17199	738	CH 6	17186
162	CH 7	16237	740	CH 7	16227
164	CH 8	16408	742	CH 8	16414
166	CH 9	17298	744	CH 9	17284
168	CH 10	16531	746	CH 10	16503
170	CH 11	16323	748	CH 11	16288
172	CH 12	16627	750	CH 12	16642
174	CH 13	16330	752	CH 13	16357
176	CH 14	16792	754	CH 14	16815
178	CH 15	16649	756	CH 15	16638
180	REFLECTOR 1 POSITION 6	789	758	REFLECTOR 1 POSITION 23	3365
182	REFLECTOR 2 POSITION 6	589	760	REFLECTOR 2 POSITION 23	3167
184	REFL 1 POS 6 2ND LOOK	784	762	REFL 1 POS 23 2ND LOOK	3362
186	REFL 2 POS 6 2ND LOOK	585	764	REFL 2 POS 23 2ND LOOK	3163
188	SCENE DATA BP 6 CH 3	15787	766	SCENE DATA BP 23 CH 3	15790
190	CH 4	16622	768	CH 4	16621
192	CH 5	16892	770	CH 5	16895

ELEMENT	DESCRIPTION		VALUE	ELEMENT	DESCRIPTION		VAL
194		CH 6	17222	772		CH 6	17188
196		CH 7	16258	774		CH 7	16230
198		CH 8	16423	776		CH 8	16412
200		CH 9	17309	778		CH 9	17287
202		CH 10	16529	780		CH 10	16499
204		CH 11	16316	782		CH 11	16282
206		CH 12	16653	784		CH 12	16636
208		CH 13	16370	786		CH 13	16347
210		CH 14	16815	788		CH 14	16814
212		CH 15	16657	790		CH 15	16638
214	REFLECTOR 1 POSITION 7		939	792	REFLECTOR 1 POSITION 24		3521
216	REFLECTOR 2 POSITION 7		739	794	REFLECTOR 2 POSITION 24		3321
218	REFL 1 POS 7 2ND LOOK		936	796	REFL 1 POS 24 2ND LOOK		3514
220	REFL 2 POS 7 2ND LOOK		736	798	REFL 2 POS 24 2ND LOOK		3315
222	SCENE DATA BP 7	CH 3	15785	800	SCENE DATA BP 24	CH 3	15788
224		CH 4	16625	802		CH 4	16620
226		CH 5	16896	804		CH 5	16890
228		CH 6	17188	806		CH 6	17188
230		CH 7	16237	808		CH 7	16232
232		CH 8	16403	810		CH 8	16440
234		CH 9	17289	812		CH 9	17287
236		CH 10	16498	814		CH 10	16500
238		CH 11	16287	816		CH 11	16276
240		CH 12	16643	818		CH 12	16636
242		CH 13	16351	820		CH 13	163
244		CH 14	16814	822		CH 14	167
246		CH 15	16642	824		CH 15	16638
248	REFLECTOR 1 POSITION 8		1091	826	REFLECTOR 1 POSITION 25		3668
250	REFLECTOR 2 POSITION 8		893	828	REFLECTOR 2 POSITION 25		3469
252	REFL 1 POS 8 2ND LOOK		1087	830	REFL 1 POS 25 2ND LOOK		3665
254	REFL 2 POS 8 2ND LOOK		887	832	REFL 2 POS 25 2ND LOOK		3466
256	SCENE DATA BP 8	CH 3	15794	834	SCENE DATA BP 25	CH 3	15789
258		CH 4	16615	836		CH 4	16618
260		CH 5	16895	838		CH 5	16893
262		CH 6	17182	840		CH 6	17187
264		CH 7	16233	842		CH 7	16230
266		CH 8	16415	844		CH 8	16406
268		CH 9	17291	846		CH 9	17292
270		CH 10	16505	848		CH 10	16500
272		CH 11	16286	850		CH 11	16280
274		CH 12	16631	852		CH 12	16643
276		CH 13	16350	854		CH 13	16362
278		CH 14	16796	856		CH 14	16803
280		CH 15	16643	858		CH 15	16639
282	REFLECTOR 1 POSITION 9		1246	860	REFLECTOR 1 POSITION 26		3821
284	REFLECTOR 2 POSITION 9		1044	862	REFLECTOR 2 POSITION 26		3623
286	REFL 1 POS 9 2ND LOOK		1240	864	REFL 1 POS 26 2ND LOOK		3817
288	REFL 2 POS 9 2ND LOOK		1040	866	REFL 2 POS 26 2ND LOOK		3618
290	SCENE DATA BP 9	CH 3	15791	868	SCENE DATA BP 26	CH 3	15782
292		CH 4	16630	870		CH 4	16617

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	16896	872	CH 5	16896
296	CH 6	17182	874	CH 6	17186
298	CH 7	16234	876	CH 7	16234
300	CH 8	16440	878	CH 8	16408
302	CH 9	17291	880	CH 9	17290
304	CH 10	16497	882	CH 10	16498
306	CH 11	16284	884	CH 11	16289
308	CH 12	16641	886	CH 12	16639
310	CH 13	16351	888	CH 13	16345
312	CH 14	16820	890	CH 14	16805
314	CH 15	16639	892	CH 15	16639
316	REFLECTOR 1 POSITION 10	1395	894	REFLECTOR 1 POSITION 27	3975
318	REFLECTOR 2 POSITION 10	1193	896	REFLECTOR 2 POSITION 27	3775
320	REFL 1 POS 10 2ND LOOK	1390	898	REFL 1 POS 27 2ND LOOK	3968
322	REFL 2 POS 10 2ND LOOK	1192	900	REFL 2 POS 27 2ND LOOK	3770
324	SCENE DATA BP 10 CH 3	15796	902	SCENE DATA BP 27 CH 3	15792
326	CH 4	16623	904	CH 4	16624
328	CH 5	16895	906	CH 5	16905
330	CH 6	17188	908	CH 6	17186
332	CH 7	16232	910	CH 7	16234
334	CH 8	16417	912	CH 8	16412
336	CH 9	17291	914	CH 9	17287
338	CH 10	16495	916	CH 10	16503
340	CH 11	16287	918	CH 11	16281
342	CH 12	16641	920	CH 12	16651
344	CH 13	16345	922	CH 13	16351
346	CH 14	16786	924	CH 14	16788
348	CH 15	16640	926	CH 15	16639
350	REFLECTOR 1 POSITION 11	1545	928	REFLECTOR 1 POSITION 28	4125
352	REFLECTOR 2 POSITION 11	1346	930	REFLECTOR 2 POSITION 28	3925
354	REFL 1 POS 11 2ND LOOK	1542	932	REFL 1 POS 28 2ND LOOK	4120
356	REFL 2 POS 11 2ND LOOK	1343	934	REFL 2 POS 28 2ND LOOK	3920
358	SCENE DATA BP 11 CH 3	15791	936	SCENE DATA BP 28 CH 3	15794
360	CH 4	16623	938	CH 4	16634
362	CH 5	16900	940	CH 5	16905
364	CH 6	17188	942	CH 6	17188
366	CH 7	16233	944	CH 7	16231
368	CH 8	16451	946	CH 8	16431
370	CH 9	17292	948	CH 9	17286
372	CH 10	16502	950	CH 10	16496
374	CH 11	16294	952	CH 11	16282
376	CH 12	16634	954	CH 12	16640
378	CH 13	16335	956	CH 13	16364
380	CH 14	16799	958	CH 14	16803
382	CH 15	16640	960	CH 15	16639
384	REFLECTOR 1 POSITION 12	1698	962	REFLECTOR 1 POSITION 29	4275
386	REFLECTOR 2 POSITION 12	1500	964	REFLECTOR 2 POSITION 29	4076
388	REFL 1 POS 12 2ND LOOK	1694	966	REFL 1 POS 29 2ND LOOK	4272
390	REFL 2 POS 12 2ND LOOK	1495	968	REFL 2 POS 29 2ND LOOK	4073
392	SCENE DATA BP 12 CH 3	15792	970	SCENE DATA BP 29 CH 3	15826

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
394	CH 4	16623	972	CH 4	16666
396	CH 5	16898	974	CH 5	16954
398	CH 6	17194	976	CH 6	17185
400	CH 7	16234	978	CH 7	16231
402	CH 8	16411	980	CH 8	16448
404	CH 9	17287	982	CH 9	17285
406	CH 10	16502	984	CH 10	16499
408	CH 11	16282	986	CH 11	16289
410	CH 12	16642	988	CH 12	16636
412	CH 13	16354	990	CH 13	16354
414	CH 14	16824	992	CH 14	16795
416	CH 15	16639	994	CH 15	16638
418	REFLECTOR 1 POSITION 13	1848	996	REFLECTOR 1 POSITION 30	4429
420	REFLECTOR 2 POSITION 13	1649	998	REFLECTOR 2 POSITION 30	4225
422	REFL 1 POS 13 2ND LOOK	1845	1000	REFL 1 POS 30 2ND LOOK	4424
424	REFL 2 POS 13 2ND LOOK	1646	1002	REFL 2 POS 30 2ND LOOK	4226
426	SCENE DATA BP 13 CH 3	15800	1004	SCENE DATA BP 30 CH 3	15800
428	CH 4	16638	1006	CH 4	16629
430	CH 5	16899	1008	CH 5	16905
432	CH 6	17185	1010	CH 6	17187
434	CH 7	16255	1012	CH 7	16226
436	CH 8	16410	1014	CH 8	16432
438	CH 9	17293	1016	CH 9	17289
440	CH 10	16510	1018	CH 10	16502
442	CH 11	16298	1020	CH 11	162
444	CH 12	16644	1022	CH 12	166
446	CH 13	16356	1024	CH 13	16352
448	CH 14	16830	1026	CH 14	16789
450	CH 15	16652	1028	CH 15	16638
452	REFLECTOR 1 POSITION 14	2002	1030	REFLECTOR 1 COLD CAL POS	6018
454	REFLECTOR 2 POSITION 14	1801	1032	REFLECTOR 2 COLD CAL POS	5820
456	REFL 1 POS 14 2ND LOOK	1997	1034	REFL 1 COLD CAL 2ND LOOK	6018
458	REFL 2 POS 14 2ND LOOK	1798	1036	REFL 2 COLD CAL 2ND LOOK	5819
460	SCENE DATA BP 14 CH 3	15794	1038	COLD CAL DATA 1 CH 3	15802
462	CH 4	16628	1040	CH 4	16630
464	CH 5	16905	1042	CH 5	16900
466	CH 6	17206	1044	CH 6	17182
468	CH 7	16251	1046	CH 7	16229
470	CH 8	16420	1048	CH 8	16414
472	CH 9	17309	1050	CH 9	17288
474	CH 10	16520	1052	CH 10	16496
476	CH 11	16311	1054	CH 11	16289
478	CH 12	16634	1056	CH 12	16641
480	CH 13	16346	1058	CH 13	16354
482	CH 14	16782	1060	CH 14	16787
484	CH 15	16651	1062	CH 15	16640
486	REFLECTOR 1 POSITION 15	2154	1064	COLD CAL DATA 2 CH 3	15799
488	REFLECTOR 2 POSITION 15	1955	1066	CH 4	16629
490	REFL 1 POS 15 2ND LOOK	2149	1068	CH 5	16898
492	REFL 2 POS 15 2ND LOOK	1950	1070	CH 6	17186

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	SCENE DATA BP 15 CH 3	15799	1072	CH 7	16229
496	CH 4	16634	1074	CH 8	16415
498	CH 5	16910	1076	CH 9	17288
500	CH 6	17201	1078	CH 10	16500
502	CH 7	16238	1080	CH 11	16282
504	CH 8	16421	1082	CH 12	16641
506	CH 9	17305	1084	CH 13	16361
508	CH 10	16496	1086	CH 14	16791
510	CH 11	16286	1088	CH 15	16639
512	CH 12	16681	1182	REFLECTOR 1 WARM CAL POS	10420
514	CH 13	16407	1184	REFLECTOR 2 WARM CAL POS	10220
516	CH 14	16846	1186	REFL 1 WARM CAL 2ND LOOK	10420
518	CH 15	16644	1188	REFL 2 WARM CAL 2ND LOOK	10220
520	REFLECTOR 1 POSITION 16	2302	1190	WARM CAL DATA 1 CH 3	15792
522	REFLECTOR 2 POSITION 16	2105	1192	CH 4	16625
524	REFL 1 POS 16 2ND LOOK	2307	1194	CH 5	16900
526	REFL 2 POS 16 2ND LOOK	2101	1196	CH 6	17174
528	SCENE DATA BP 16 CH 3	15821	1198	CH 7	16229
530	CH 4	16658	1200	CH 8	16414
532	CH 5	16948	1202	CH 9	17284
534	CH 6	17235	1204	CH 10	16497
536	CH 7	16259	1206	CH 11	16283
538	CH 8	16445	1208	CH 12	16637
540	CH 9	17325	1210	CH 13	16347
542	CH 10	16504	1212	CH 14	16800
544	CH 11	16299	1214	CH 15	16637
546	CH 12	16709	1216	WARM CAL DATA 2 CH 3	15787
548	CH 13	16439	1218	CH 4	16626
550	CH 14	16905	1220	CH 5	16901
552	CH 15	16658	1222	CH 6	17181
554	REFLECTOR 1 POSITION 17	2455	1224	CH 7	16230
556	REFLECTOR 2 POSITION 17	2258	1226	CH 8	16412
558	REFL 1 POS 17 2ND LOOK	2452	1228	CH 9	17286
560	REFL 2 POS 17 2ND LOOK	2253	1230	CH 10	16499
562	SCENE DATA BP 17 CH 3	15793	1232	CH 11	16282
564	CH 4	16632	1234	CH 12	16634
566	CH 5	16902	1236	CH 13	16352
568	CH 6	17199	1238	CH 14	16809
570	CH 7	16256	1240	CH 15	16638

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	18007	23.39
1092	SCAN MOTOR A1-2	18396	23.73
1094	FEEDHORN A1-1	19544	25.60
1096	FEEDHORN A1-2	20466	25.94
1098	RF MUX A1-1	20116	27.23
1100	RF MUX A1-2	20671	28.57
1102	LOCAL OSCILLATOR CHANNEL 3	21495	29.94
1104	LOCAL OSCILLATOR CHANNEL 4	21619	30.10
1106	LOCAL OSCILLATOR CHANNEL 5	21278	29.18
1108	LOCAL OSCILLATOR CHANNEL 6	19994	27.11
1110	LOCAL OSCILLATOR CHANNEL 7	20491	27.96
1112	LOCAL OSCILLATOR CHANNEL 8	21142	29.62
1114	LOCAL OSCILLATOR CHANNEL 15	20630	29.24
1116	PLL LO #2 CHANNELS 9 THROUGH 14	19764	27.28
1118	PLL LO #1 CHANNELS 9 THROUGH 14	21419	30.24
1120	SPARE (NOT USED)	32767	52.86
1122	MIXER/IF AMPLIFIER CHANNEL 3	21232	29.12
1124	MIXER/IF AMPLIFIER CHANNEL 4	20820	29.07
1126	MIXER/IF AMPLIFIER CHANNEL 5	20752	28.67
1128	MIXER/IF AMPLIFIER CHANNEL 6	20389	27.72
1130	MIXER/IF AMPLIFIER CHANNEL 7	20574	28.16
1132	MIXER/IF AMPLIFIER CHANNEL 8	20749	29.14
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	19963	27.63
1136	MIXER/IF AMPLIFIER CHANNEL 15	20777	29.03
1138	IF AMPLIFIER CHANNEL 11 THRU 14	20655	28.64
1140	IF AMPLIFIER CHANNEL 9	21080	28.63
1142	IF AMPLIFIER CHANNEL 10	20673	28.80
1144	IF AMPLIFIER CHANNEL 11	20372	27.68
1146	DC/DC CONVERTER	20774	28.30
1148	IF AMPLIFIER CHANNEL 13	20488	27.63
1150	IF AMPLIFIER CHANNEL 14	20157	27.62
1152	IF AMPLIFIER CHANNEL 12	20149	27.59
1154	RF SHELF A1-1	20476	27.93
1156	RF SHELF A1-2	20621	28.38
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	19739	26.21
1160	A1-1 WARM LOAD 1	23097	23.64
1162	A1-1 WARM LOAD 2	23304	23.69
1164	A1-1 WARM LOAD 3	23369	23.74
1166	A1-1 WARM LOAD 4	23056	23.70
1168	A1-1 WARM LOAD CENTER	23241	23.75
1170	A1-2 WARM LOAD 1	23867	24.62
1172	A1-2 WARM LOAD 2	23700	24.60
1174	A1-2 WARM LOAD 3	23729	24.65
1176	A1-2 WARM LOAD 4	23653	24.63
1178	A1-2 WARM LOAD CENTER	23523	24.52
1180	TEMP SENSOR REFERENCE VOLTAGE	24882	

FULL SCAN MODE

DESCRIPTION	STATUS	STATUS	STATUS
SCANNER A1-1 POWER	ON	ON	ON
SCANNER A1-2 POWER	ON	ON	ON
PLL POWER	PLLO # 1	PLLO # 1	PLLO # 1
ANTENNA IN WARM CAL POSITION MODE	NO	NO	NO
ANTENNA IN COLD CAL POSITION MODE	NO	NO	NO
ANTENNA IN NADIR POSITION MODE	NO	NO	NO
ANTENNA IN FULL SCAN MODE	YES	YES	YES
SURVIVAL HEATER POWER	OFF	OFF	OFF
MODULE POWER	CONNECT	CONNECT	CONNECT
COLD CAL POSITION MSB	ZERO	ZERO	ZERO
COLD CAL POSITION LSB	ZERO	ZERO	ZERO

ANALOG DATA

DESCRIPTION	VALUE	DEG C	VALUE	DEG C	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	217	22.1	217	22.1	217	22.1
A1-2 SCANNER MOTOR TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-1 RF SHELF TEMPERATURE	218	23.4	219	24.8	219	24.8
A1-2 RF SHELF TEMPERATURE	221	27.5	221	27.5	221	27.5
A1-1 WARM LOAD TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-2 WARM LOAD TEMPERATURE	219	24.8	219	24.8	219	24.8

DESCRIPTION	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS
A1-1 ANTENNA DRIVE MOTOR CURRENT (AVRG)	104	48.46	104	48.46	104	48.46
A1-2 ANTENNA DRIVE MOTOR CURRENT (AVRG)	98	45.67	98	45.67	98	45.67
SIGNAL PROCESSING +15 VDC	172	14.84	173	14.93	173	14.93
ANTENNA DRIVE +15 VDC	172	14.84	173	14.93	173	14.93
SIGNAL PROCESSING -15 VDC	151	-15.00	151	-15.00	151	-15.00
ANTENNA DRIVE -15 VDC	150	-15.05	150	-15.05	150	-15.05
RECEIVER AMPLIFIER +8 VDC	158	7.90	158	7.90	158	7.90
SIGNAL PROCESSOR +5 VDC	147	4.90	147	4.90	147	4.90
ANTENNA DRIVE +5 VDC	147	4.90	147	4.90	147	4.90
RECEIVER MIXER/IF +10 VDC	171	9.88	171	9.88	171	9.88
PHASE LOCK LOOP (CHANNEL 9/14) +15 VDC	171	14.76	172	14.84	172	14.84
PHASE LOCK LOOP (CHANNEL 9/14) -15 VDC	146	-15.25	146	-15.25	146	-15.25
L.O. VOLTAGE (CHANNEL 8) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 7) VDC	173	9.90	173	9.90	173	9.90
L.O. VOLTAGE (CHANNEL 6) VDC	175	10.01	175	10.01	175	10.01
L.O. VOLTAGE (CHANNEL 3) VDC	175	10.01	175	10.01	175	10.01
L.O. VOLTAGE (CHANNEL 4) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 5) VDC	173	9.90	173	9.90	173	9.90
PLLO # 2 LOCK DETECT	5	0.10	5	0.10	5	0.10
PLLO # 1 LOCK DETECT	222	4.44	222	4.44	222	4.44
L.O. VOLTAGE (CHANNEL 15) VDC	172	14.84	172	14.84	172	14.84

PRT TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
VARIABLE TARGET	615	42.00	601	14.00
	616	43.00	602	15.00
	617	44.00	603	16.00
	618	45.00	604	17.00
	619	46.00	605	18.00
	620	47.00	606	19.00
	621	48.00	607	20.00
FIXED TARGET	622	49.00	608	21.00
	623	50.00	609	22.00
	624	51.00	610	23.00
	625	52.00	611	24.00
	626	53.00	612	25.00
	627	67.00	613	69.00
	628	68.00	614	70.00
BASEPLATE	629	71.00	630	72.00
	631	26.00	632	27.00

THERMOCOUPLE TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
FIXED TARGET SHROUD	558	5.00	537	34.00
	559	6.00	538	35.00
VARIABLE TARGET SHROUD	550	7.00	524	36.00
	551	8.00	525	37.00
FIXED TARGET N2	506	57.00	502	30.00
	507	58.00	503	31.00
VARIABLE TARGET N2	516	59.00	511	32.00
	517	60.00	512	33.00
HEATER N2	514	1.00	509	38.00
	515	2.00	510	39.00
FIXED TARGET FLOW METER	508	63.00	504	61.00
VARIABLE TARGET FLOW METER	518	64.00	513	62.00
BASEPLATE HEATER N2	519	3.00	520	4.00
BASEPLATE N2	521	9.00	522	10.00
BASEPLATE FLOW METER	523	65.00		
ADJUNCT RADIATORS	575	73.00	577	74.00
	579	75.00	581	76.00

```
AMSU  A1-17 A1.EXE     FULL SCAN MODE     P1 25-NOV-93 14:11:43  SCAN NUMBER   43(
[ 5 ] DIGITAL A DATA   ELEMENT 0000

[ 6 ] DIGITAL B DATA   ELEMENT   00

[ 7 ] ANALOG DATA      ELEMENT   00

                                        COMMANDS
[ 9 ]  MODULE POWER =          CONNECT      ANTENNA IN COLD CAL POSIT = NO   [ 15 ]

[ 10 ] SURVIVAL HEATER POWER =     OFF      ANTENNA IN NADIR POSITION = NO   [ 16 ]

[ 11 ] MODULE TOTALLY OFF =         ON      ANTENNA IN FULL SCAN MODE = YES  [ 17 ]

[ 12 ] SCANNER A1 - 1 POWER =       ON      PLL POWER =              PLLO # 1  [ 18 ]

[ 13 ] SCANNER A1 - 2 POWER =       ON      COLD CAL POSITION MSB =    ZERO   [ 19 ]

[ 14 ] ANTENNA IN WARM CAL POSIT = NO       COLD CAL POSITION LSB =    ZERO   [ 20 ]

          POWER [ 4 ]  ON
                       SCREEN ONLY [ 2 ]  PRINT  [ 3 ] FULL        [ 1 ] RETURN
 SELECT TOUCHSCREEN BUTTON 3
```

Post TRANSIENT
PLB HIGH FREQ
2.86Hz

PRETRANSIENT
PLB HIGH FREQ
6.67 Hz

AMSU A1_17 A1.EXE DIGITAL A DATA 25-NOV-93 14:11:48 PAGE 1
FULL SCAN MODE

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
1	SYNC SEQUENCE BYTE 1	11111111	572	SCENE DATA BP 17 CH 8	16441
2	SYNC SEQUENCE BYTE 2	11111111	574	CH 9	17320
3	SYNC SEQUENCE BYTE 3	11111111	576	CH 10	16542
4	UNIT ID AND SERIAL NO	00010001	578	CH 11	16343
5	DIGITAL B DATA BYTE 1	00000010	580	CH 12	16659
6	DIGITAL B DATA BYTE 2	00001110	582	CH 13	16361
7	DIGITAL B DATA BYTE 3	00000000	584	CH 14	16804
8	DIGITAL B DATA BYTE 4	00000000	586	CH 15	16668
10	REFLECTOR 1 POSITION 1	27	588	REFLECTOR 1 POSITION 18	2609
12	REFLECTOR 2 POSITION 1	16212	590	REFLECTOR 2 POSITION 18	2410
14	REFL 1 POS 1 2ND LOOK	27	592	REFL 1 POS 18 2ND LOOK	2604
16	REFL 2 POS 1 2ND LOOK	16212	594	REFL 2 POS 18 2ND LOOK	2405
18	SCENE DATA BP 1 CH 3	15857	596	SCENE DATA BP 18 CH 3	15836
20	CH 4	16668	598	CH 4	16647
22	CH 5	16930	600	CH 5	16919
24	CH 6	17188	602	CH 6	17195
26	CH 7	16253	604	CH 7	16276
28	CH 8	16463	606	CH 8	16458
30	CH 9	17304	608	CH 9	17326
32	CH 10	16521	610	CH 10	16544
34	CH 11	16299	612	CH 11	16305
36	CH 12	16664	614	CH 12	16712
38	CH 13	16385	616	CH 13	16437
40	CH 14	16821	618	CH 14	16869
42	CH 15	16656	620	CH 15	166
44	REFLECTOR 1 POSITION 2	179	622	REFLECTOR 1 POSITION 19	276
46	REFLECTOR 2 POSITION 2	16364	624	REFLECTOR 2 POSITION 19	2559
48	REFL 1 POS 2 2ND LOOK	177	626	REFL 1 POS 19 2ND LOOK	2755
50	REFL 2 POS 2 2ND LOOK	16361	628	REFL 2 POS 19 2ND LOOK	2556
52	SCENE DATA BP 2 CH 3	15840	630	SCENE DATA BP 19 CH 3	15832
54	CH 4	16643	632	CH 4	16646
56	CH 5	16914	634	CH 5	16909
58	CH 6	17197	636	CH 6	17208
60	CH 7	16253	638	CH 7	16252
62	CH 8	16438	640	CH 8	16458
64	CH 9	17305	642	CH 9	17303
66	CH 10	16526	644	CH 10	16517
68	CH 11	16309	646	CH 11	16310
70	CH 12	16663	648	CH 12	16661
72	CH 13	16377	650	CH 13	16378
74	CH 14	16816	652	CH 14	16814
76	CH 15	16658	654	CH 15	16656
78	REFLECTOR 1 POSITION 3	335	656	REFLECTOR 1 POSITION 20	2910
80	REFLECTOR 2 POSITION 3	131	658	REFLECTOR 2 POSITION 20	2711
82	REFL 1 POS 3 2ND LOOK	329	660	REFL 1 POS 20 2ND LOOK	2907
84	REFL 2 POS 3 2ND LOOK	129	662	REFL 2 POS 20 2ND LOOK	2708
86	SCENE DATA BP 3 CH 3	15837	664	SCENE DATA BP 20 CH 3	15829
88	CH 4	16643	666	CH 4	16643
90	CH 5	16911	668	CH 5	16906
92	CH 6	17193	670	CH 6	17197

LEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	16257	672	CH 7	16253
96	CH 8	16433	674	CH 8	16445
98	CH 9	17309	676	CH 9	17305
100	CH 10	16528	678	CH 10	16513
102	CH 11	16306	680	CH 11	16304
104	CH 12	16668	682	CH 12	16667
106	CH 13	16390	684	CH 13	16380
108	CH 14	16829	686	CH 14	16824
110	CH 15	16661	688	CH 15	16655
112	REFLECTOR 1 POSITION 4	483	690	REFLECTOR 1 POSITION 21	3064
114	REFLECTOR 2 POSITION 4	284	692	REFLECTOR 2 POSITION 21	2863
116	REFL 1 POS 4 2ND LOOK	480	694	REFL 1 POS 21 2ND LOOK	3059
118	REFL 2 POS 4 2ND LOOK	281	696	REFL 2 POS 21 2ND LOOK	2860
120	SCENE DATA BP 4 CH 3	15831	698	SCENE DATA BP 21 CH 3	15832
122	CH 4	16644	700	CH 4	16642
124	CH 5	16910	702	CH 5	16912
126	CH 6	17208	704	CH 6	17192
128	CH 7	16257	706	CH 7	16251
130	CH 8	16448	708	CH 8	16436
132	CH 9	17314	710	CH 9	17303
134	CH 10	16532	712	CH 10	16523
136	CH 11	16311	714	CH 11	16306
138	CH 12	16689	716	CH 12	16657
140	CH 13	16402	718	CH 13	16377
142	CH 14	16854	720	CH 14	16824
144	CH 15	16668	722	CH 15	16655
146	REFLECTOR 1 POSITION 5	636	724	REFLECTOR 1 POSITION 22	3210
148	REFLECTOR 2 POSITION 5	436	726	REFLECTOR 2 POSITION 22	3014
150	REFL 1 POS 5 2ND LOOK	633	728	REFL 1 POS 22 2ND LOOK	3210
152	REFL 2 POS 5 2ND LOOK	432	730	REFL 2 POS 22 2ND LOOK	3011
154	SCENE DATA BP 5 CH 3	15830	732	SCENE DATA BP 22 CH 3	15829
156	CH 4	16643	734	CH 4	16640
158	CH 5	16908	736	CH 5	16908
160	CH 6	17212	738	CH 6	17200
162	CH 7	16255	740	CH 7	16254
164	CH 8	16430	742	CH 8	16430
166	CH 9	17305	744	CH 9	17298
168	CH 10	16554	746	CH 10	16522
170	CH 11	16345	748	CH 11	16297
172	CH 12	16652	750	CH 12	16668
174	CH 13	16350	752	CH 13	16381
176	CH 14	16787	754	CH 14	16822
178	CH 15	16665	756	CH 15	16656
180	REFLECTOR 1 POSITION 6	789	758	REFLECTOR 1 POSITION 23	3365
182	REFLECTOR 2 POSITION 6	589	760	REFLECTOR 2 POSITION 23	3168
184	REFL 1 POS 6 2ND LOOK	785	762	REFL 1 POS 23 2ND LOOK	3362
186	REFL 2 POS 6 2ND LOOK	585	764	REFL 2 POS 23 2ND LOOK	3163
188	SCENE DATA BP 6 CH 3	15828	766	SCENE DATA BP 23 CH 3	15834
190	CH 4	16643	768	CH 4	16642
192	CH 5	16906	770	CH 5	16907

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
194	CH 6	17235	772	CH 6	17193
196	CH 7	16278	774	CH 7	16247
198	CH 8	16440	776	CH 8	16438
200	CH 9	17322	778	CH 9	17297
202	CH 10	16550	780	CH 10	16523
204	CH 11	16328	782	CH 11	16308
206	CH 12	16683	784	CH 12	16659
208	CH 13	16410	786	CH 13	16372
210	CH 14	16851	788	CH 14	16811
212	CH 15	16670	790	CH 15	16656
214	REFLECTOR 1 POSITION 7	939	792	REFLECTOR 1 POSITION 24	3518
216	REFLECTOR 2 POSITION 7	739	794	REFLECTOR 2 POSITION 24	3320
218	REFL 1 POS 7 2ND LOOK	936	796	REFL 1 POS 24 2ND LOOK	3514
220	REFL 2 POS 7 2ND LOOK	736	798	REFL 2 POS 24 2ND LOOK	3315
222	SCENE DATA BP 7 CH 3	15833	800	SCENE DATA BP 24 CH 3	15827
224	CH 4	16645	802	CH 4	16645
226	CH 5	16909	804	CH 5	16913
228	CH 6	17197	806	CH 6	17202
230	CH 7	16257	808	CH 7	16253
232	CH 8	16424	810	CH 8	16459
234	CH 9	17302	812	CH 9	17301
236	CH 10	16522	814	CH 10	16516
238	CH 11	16312	816	CH 11	16298
240	CH 12	16664	818	CH 12	16661
242	CH 13	16389	820	CH 13	163
244	CH 14	16827	822	CH 14	168
246	CH 15	16657	824	CH 15	16655
248	REFLECTOR 1 POSITION 8	1091	826	REFLECTOR 1 POSITION 25	3668
250	REFLECTOR 2 POSITION 8	893	828	REFLECTOR 2 POSITION 25	3470
252	REFL 1 POS 8 2ND LOOK	1087	830	REFL 1 POS 25 2ND LOOK	3665
254	REFL 2 POS 8 2ND LOOK	888	832	REFL 2 POS 25 2ND LOOK	3466
256	SCENE DATA BP 8 CH 3	15835	834	SCENE DATA BP 25 CH 3	15827
258	CH 4	16643	836	CH 4	16638
260	CH 5	16910	838	CH 5	16910
262	CH 6	17194	840	CH 6	17198
264	CH 7	16256	842	CH 7	16254
266	CH 8	16438	844	CH 8	16428
268	CH 9	17307	846	CH 9	17301
270	CH 10	16530	848	CH 10	16516
272	CH 11	16302	850	CH 11	16303
274	CH 12	16665	852	CH 12	16667
276	CH 13	16386	854	CH 13	16391
278	CH 14	16822	856	CH 14	16812
280	CH 15	16658	858	CH 15	16654
282	REFLECTOR 1 POSITION 9	1246	860	REFLECTOR 1 POSITION 26	3822
284	REFLECTOR 2 POSITION 9	1043	862	REFLECTOR 2 POSITION 26	3622
286	REFL 1 POS 9 2ND LOOK	1240	864	REFL 1 POS 26 2ND LOOK	3817
288	REFL 2 POS 9 2ND LOOK	1040	866	REFL 2 POS 26 2ND LOOK	3619
290	SCENE DATA BP 9 CH 3	15834	868	SCENE DATA BP 26 CH 3	15836
292	CH 4	16650	870	CH 4	16641

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	16910	872	CH 5	16909
296	CH 6	17197	874	CH 6	17197
298	CH 7	16254	876	CH 7	16252
300	CH 8	16457	878	CH 8	16429
302	CH 9	17301	880	CH 9	17301
304	CH 10	16521	882	CH 10	16520
306	CH 11	16301	884	CH 11	16303
308	CH 12	16655	886	CH 12	16660
310	CH 13	16365	888	CH 13	16393
312	CH 14	16826	890	CH 14	16828
314	CH 15	16658	892	CH 15	16656
316	REFLECTOR 1 POSITION 10	1395	894	REFLECTOR 1 POSITION 27	3975
318	REFLECTOR 2 POSITION 10	1195	896	REFLECTOR 2 POSITION 27	3774
320	REFL 1 POS 10 2ND LOOK	1390	898	REFL 1 POS 27 2ND LOOK	3968
322	REFL 2 POS 10 2ND LOOK	1192	900	REFL 2 POS 27 2ND LOOK	3770
324	SCENE DATA BP 10 CH 3	15839	902	SCENE DATA BP 27 CH 3	15836
326	CH 4	16645	904	CH 4	16647
328	CH 5	16912	906	CH 5	16914
330	CH 6	17197	908	CH 6	17196
332	CH 7	16254	910	CH 7	16250
334	CH 8	16440	912	CH 8	16431
336	CH 9	17303	914	CH 9	17300
338	CH 10	16520	916	CH 10	16519
340	CH 11	16302	918	CH 11	16307
342	CH 12	16660	920	CH 12	16670
344	CH 13	16388	922	CH 13	16378
346	CH 14	16821	924	CH 14	16831
348	CH 15	16655	926	CH 15	16654
350	REFLECTOR 1 POSITION 11	1544	928	REFLECTOR 1 POSITION 28	4125
352	REFLECTOR 2 POSITION 11	1346	930	REFLECTOR 2 POSITION 28	3925
354	REFL 1 POS 11 2ND LOOK	1542	932	REFL 1 POS 28 2ND LOOK	4120
356	REFL 2 POS 11 2ND LOOK	1343	934	REFL 2 POS 28 2ND LOOK	3921
358	SCENE DATA BP 11 CH 3	15836	936	SCENE DATA BP 28 CH 3	15838
360	CH 4	16647	938	CH 4	16659
362	CH 5	16912	940	CH 5	16923
364	CH 6	17199	942	CH 6	17196
366	CH 7	16252	944	CH 7	16250
368	CH 8	16470	946	CH 8	16448
370	CH 9	17302	948	CH 9	17298
372	CH 10	16530	950	CH 10	16524
374	CH 11	16313	952	CH 11	16298
376	CH 12	16659	954	CH 12	16666
378	CH 13	16363	956	CH 13	16381
380	CH 14	16780	958	CH 14	16805
382	CH 15	16656	960	CH 15	16655
384	REFLECTOR 1 POSITION 12	1698	962	REFLECTOR 1 POSITION 29	4275
386	REFLECTOR 2 POSITION 12	1499	964	REFLECTOR 2 POSITION 29	4077
388	REFL 1 POS 12 2ND LOOK	1694	966	REFL 1 POS 29 2ND LOOK	4272
390	REFL 2 POS 12 2ND LOOK	1495	968	REFL 2 POS 29 2ND LOOK	4073
392	SCENE DATA BP 12 CH 3	15835	970	SCENE DATA BP 29 CH 3	15866

ELEMENT	DESCRIPTION		VALUE	ELEMENT	DESCRIPTION		VAL
394		CH 4	16645	972		CH 4	16685
396		CH 5	16914	974		CH 5	16964
398		CH 6	17208	976		CH 6	17197
400		CH 7	16253	978		CH 7	16249
402		CH 8	16434	980		CH 8	16469
404		CH 9	17300	982		CH 9	17297
406		CH 10	16526	984		CH 10	16520
408		CH 11	16300	986		CH 11	16305
410		CH 12	16680	988		CH 12	16654
412		CH 13	16390	990		CH 13	16368
414		CH 14	16838	992		CH 14	16821
416		CH 15	16656	994		CH 15	16654
418	REFLECTOR 1 POSITION 13		1848	996	REFLECTOR 1 POSITION 30		4429
420	REFLECTOR 2 POSITION 13		1650	998	REFLECTOR 2 POSITION 30		4226
422	REFL 1 POS 13 2ND LOOK		1845	1000	REFL 1 POS 30 2ND LOOK		4424
424	REFL 2 POS 13 2ND LOOK		1645	1002	REFL 2 POS 30 2ND LOOK		4223
426	SCENE DATA BP 13	CH 3	15838	1004	SCENE DATA BP 30	CH 3	15841
428		CH 4	16659	1006		CH 4	16654
430		CH 5	16914	1008		CH 5	16916
432		CH 6	17198	1010		CH 6	17197
434		CH 7	16272	1012		CH 7	16248
436		CH 8	16437	1014		CH 8	16448
438		CH 9	17306	1016		CH 9	17296
440		CH 10	16530	1018		CH 10	16519
442		CH 11	16311	1020		CH 11	162
444		CH 12	16661	1022		CH 12	166
446		CH 13	16383	1024		CH 13	16392
448		CH 14	16827	1026		CH 14	16822
450		CH 15	16666	1028		CH 15	16654
452	REFLECTOR 1 POSITION 14		2002	1030	REFLECTOR 1 COLD CAL POS		6019
454	REFLECTOR 2 POSITION 14		1801	1032	REFLECTOR 2 COLD CAL POS		5820
456	REFL 1 POS 14 2ND LOOK		1997	1034	REFL 1 COLD CAL 2ND LOOK		6019
458	REFL 2 POS 14 2ND LOOK		1798	1036	REFL 2 COLD CAL 2ND LOOK		5819
460	SCENE DATA BP 14	CH 3	15835	1038	COLD CAL DATA 1	CH 3	15836
462		CH 4	16651	1040		CH 4	16652
464		CH 5	16923	1042		CH 5	16911
466		CH 6	17219	1044		CH 6	17193
468		CH 7	16268	1046		CH 7	16250
470		CH 8	16444	1048		CH 8	16435
472		CH 9	17318	1050		CH 9	17300
474		CH 10	16538	1052		CH 10	16518
476		CH 11	16327	1054		CH 11	16305
478		CH 12	16656	1056		CH 12	16666
480		CH 13	16370	1058		CH 13	16372
482		CH 14	16817	1060		CH 14	16833
484		CH 15	16667	1062		CH 15	16653
486	REFLECTOR 1 POSITION 15		2154	1064	COLD CAL DATA 2	CH 3	15840
488	REFLECTOR 2 POSITION 15		1955	1066		CH 4	16653
490	REFL 1 POS 15 2ND LOOK		2149	1068		CH 5	16911
492	REFL 2 POS 15 2ND LOOK		1950	1070		CH 6	17200

ELEMENT	DESCRIPTION		VALUE	ELEMENT	DESCRIPTION		VALUE
494	SCENE DATA BP 15	CH 3	15841	1072		CH 7	16253
496		CH 4	16656	1074		CH 8	16433
498		CH 5	16924	1076		CH 9	17303
500		CH 6	17214	1078		CH 10	16524
502		CH 7	16257	1080		CH 11	16317
504		CH 8	16443	1082		CH 12	16661
506		CH 9	17316	1084		CH 13	16379
508		CH 10	16529	1086		CH 14	16814
510		CH 11	16312	1088		CH 15	16653
512		CH 12	16708	1182	REFLECTOR 1 WARM CAL POS		10420
514		CH 13	16448	1184	REFLECTOR 2 WARM CAL POS		10220
516		CH 14	16877	1186	REFL 1 WARM CAL 2ND LOOK		10420
518		CH 15	16664	1188	REFL 2 WARM CAL 2ND LOOK		10220
520	REFLECTOR 1 POSITION 16		2303	1190	WARM CAL DATA 1	CH 3	15831
522	REFLECTOR 2 POSITION 16		2105	1192		CH 4	16647
524	REFL 1 POS 16 2ND LOOK		2300	1194		CH 5	16916
526	REFL 2 POS 16 2ND LOOK		2101	1196		CH 6	17187
528	SCENE DATA BP 16	CH 3	15862	1198		CH 7	16251
530		CH 4	16680	1200		CH 8	16438
532		CH 5	16959	1202		CH 9	17299
534		CH 6	17245	1204		CH 10	16517
536		CH 7	16285	1206		CH 11	16306
538		CH 8	16462	1208		CH 12	16662
540		CH 9	17339	1210		CH 13	16385
542		CH 10	16520	1212		CH 14	16819
544		CH 11	16324	1214		CH 15	16652
546		CH 12	16734	1216	WARM CAL DATA 2	CH 3	15838
548		CH 13	16476	1218		CH 4	16644
550		CH 14	16927	1220		CH 5	16914
552		CH 15	16676	1222		CH 6	17195
554	REFLECTOR 1 POSITION 17		2454	1224		CH 7	16247
556	REFLECTOR 2 POSITION 17		2258	1226		CH 8	16436
558	REFL 1 POS 17 2ND LOOK		2452	1228		CH 9	17302
560	REFL 2 POS 17 2ND LOOK		2253	1230		CH 10	16516
562	SCENE DATA BP 17	CH 3	15839	1232		CH 11	16299
564		CH 4	16653	1234		CH 12	16651
566		CH 5	16918	1236		CH 13	16379
568		CH 6	17211	1238		CH 14	16819
570		CH 7	16278	1240		CH 15	16654

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	18030	23.44
1092	SCAN MOTOR A1-2	18395	23.73
1094	FEEDHORN A1-1	19489	25.49
1096	FEEDHORN A1-2	20377	25.77
1098	RF MUX A1-1	20013	27.04
1100	RF MUX A1-2	20530	28.30
1102	LOCAL OSCILLATOR CHANNEL 3	21349	29.65
1104	LOCAL OSCILLATOR CHANNEL 4	21470	29.81
1106	LOCAL OSCILLATOR CHANNEL 5	21128	28.89
1108	LOCAL OSCILLATOR CHANNEL 6	19918	26.96
1110	LOCAL OSCILLATOR CHANNEL 7	20370	27.72
1112	LOCAL OSCILLATOR CHANNEL 8	21006	29.35
1114	LOCAL OSCILLATOR CHANNEL 15	20484	28.95
1116	PLL LO #2 CHANNELS 9 THROUGH 14	19661	27.08
1118	PLL LO #1 CHANNELS 9 THROUGH 14	21249	29.91
1120	SPARE (NOT USED)	32767	52.86
1122	MIXER/IF AMPLIFIER CHANNEL 3	21079	28.82
1124	MIXER/IF AMPLIFIER CHANNEL 4	20666	28.78
1126	MIXER/IF AMPLIFIER CHANNEL 5	20609	28.40
1128	MIXER/IF AMPLIFIER CHANNEL 6	20279	27.50
1130	MIXER/IF AMPLIFIER CHANNEL 7	20449	27.92
1132	MIXER/IF AMPLIFIER CHANNEL 8	20601	28.85
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	19853	27.42
1136	MIXER/IF AMPLIFIER CHANNEL 15	20634	28.76
1138	IF AMPLIFIER CHANNEL 11 THRU 14	20522	28.38
1140	IF AMPLIFIER CHANNEL 9	20947	28.37
1142	IF AMPLIFIER CHANNEL 10	20538	28.54
1144	IF AMPLIFIER CHANNEL 11	20276	27.50
1146	DC/DC CONVERTER	20656	28.07
1148	IF AMPLIFIER CHANNEL 13	20393	27.44
1150	IF AMPLIFIER CHANNEL 14	20060	27.43
1152	IF AMPLIFIER CHANNEL 12	20051	27.40
1154	RF SHELF A1-1	20357	27.70
1156	RF SHELF A1-2	20490	28.13
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	19665	26.06
1160	A1-1 WARM LOAD 1	23117	23.68
1162	A1-1 WARM LOAD 2	23313	23.71
1164	A1-1 WARM LOAD 3	23386	23.78
1166	A1-1 WARM LOAD 4	23070	23.73
1168	A1-1 WARM LOAD CENTER	23256	23.78
1170	A1-2 WARM LOAD 1	23874	24.63
1172	A1-2 WARM LOAD 2	23706	24.61
1174	A1-2 WARM LOAD 3	23738	24.67
1176	A1-2 WARM LOAD 4	23655	24.64
1178	A1-2 WARM LOAD CENTER	23534	24.54
1180	TEMP SENSOR REFERENCE VOLTAGE	24881	

FULL SCAN MODE

DESCRIPTION	STATUS	STATUS	STATUS
SCANNER A1-1 POWER	ON	ON	ON
SCANNER A1-2 POWER	ON	ON	ON
PLL POWER	PLLO #-1	PLLO # 1	PLLO # 1
ANTENNA IN WARM CAL POSITION MODE	NO	NO	NO
ANTENNA IN COLD CAL POSITION MODE	NO	NO	NO
ANTENNA IN NADIR POSITION MODE	NO	NO	NO
ANTENNA IN FULL SCAN MODE	YES	YES	YES
SURVIVAL HEATER POWER	OFF	OFF	OFF
MODULE POWER	CONNECT	CONNECT	CONNECT
COLD CAL POSITION MSB	ZERO	ZERO	ZERO
COLD CAL POSITION LSB	ZERO	ZERO	ZERO

ANALOG DATA

DESCRIPTION	VALUE	DEG C	VALUE	DEG C	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	216	20.7	216	20.7	216	20.7
A1-2 SCANNER MOTOR TEMPERATURE	217	22.1	217	22.1	217	22.1
A1-1 RF SHELF TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-2 RF SHELF TEMPERATURE	220	26.2	220	26.2	220	26.2
A1-1 WARM LOAD TEMPERATURE	217	22.1	217	22.1	218	23.4
A1-2 WARM LOAD TEMPERATURE	217	22.1	217	22.1	218	23.4

DESCRIPTION	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS
A1-1 ANTENNA DRIVE MOTOR CURRENT (AVRG)	101	47.07	100	46.60	101	47.07
A1-2 ANTENNA DRIVE MOTOR CURRENT (AVRG)	95	44.27	95	44.27	96	44.74
SIGNAL PROCESSING +15 VDC	171	14.76	172	14.84	172	14.84
ANTENNA DRIVE +15 VDC	171	14.76	172	14.84	172	14.84
SIGNAL PROCESSING -15 VDC	150	-15.05	150	-15.05	150	-15.05
ANTENNA DRIVE -15 VDC	149	-15.10	149	-15.10	149	-15.10
RECEIVER AMPLIFIER +8 VDC	158	7.90	158	7.90	158	7.90
SIGNAL PROCESSOR +5 VDC	147	4.90	147	4.90	147	4.90
ANTENNA DRIVE +5 VDC	146	4.87	147	4.90	147	4.90
RECEIVER MIXER/IF +10 VDC	170	9.82	170	9.82	171	9.88
PHASE LOCK LOOP (CHANNEL 9/14) +15 VDC	171	14.76	171	14.76	171	14.76
PHASE LOCK LOOP (CHANNEL 9/14) -15 VDC	145	-15.30	146	-15.25	146	-15.25
L.O. VOLTAGE (CHANNEL 8) VDC	173	9.90	173	9.90	173	9.90
L.O. VOLTAGE (CHANNEL 7) VDC	172	9.84	172	9.84	173	9.90
L.O. VOLTAGE (CHANNEL 6) VDC	173	9.90	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 3) VDC	173	9.90	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 4) VDC	173	9.90	173	9.90	174	9.96
L.O. VOLTAGE (CHANNEL 5) VDC	172	9.84	172	9.84	172	9.84
PLLO # 2 LOCK DETECT	5	0.10	5	0.10	5	0.10
PLLO # 1 LOCK DETECT	220	4.40	220	4.40	221	4.42
L.O. VOLTAGE (CHANNEL 15) VDC	171	14.76	171	14.76	172	14.84

PRT TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
VARIABLE TARGET	615	42.00	601	14.00
	616	43.00	602	15.00
	617	44.00	603	16.00
	618	45.00	604	17.00
	619	46.00	605	18.00
	620	47.00	606	19.00
	621	48.00	607	20.00
FIXED TARGET	622	49.00	608	21.00
	623	50.00	609	22.00
	624	51.00	610	23.00
	625	52.00	611	24.00
	626	53.00	612	25.00
	627	67.00	613	69.00
	628	68.00	614	70.00
BASEPLATE	629	71.00	630	72.00
	631	26.00	632	27.00

THERMOCOUPLE TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
FIXED TARGET SHROUD	558	5.00	537	34.00
	559	6.00	538	35.00
VARIABLE TARGET SHROUD	550	7.00	524	36.00
	551	8.00	525	37.00
FIXED TARGET N2	506	57.00	502	30.00
	507	58.00	503	31.00
VARIABLE TARGET N2	516	59.00	511	32.00
	517	60.00	512	33.00
HEATER N2	514	1.00	509	38.00
	515	2.00	510	39.00
FIXED TARGET FLOW METER	508	63.00	504	61.00
VARIABLE TARGET FLOW METER	518	64.00	513	62.00
BASEPLATE HEATER N2	519	3.00	520	4.00
BASEPLATE N2	521	9.00	522	10.00
BASEPLATE FLOW METER	523	65.00		
ADJUNCT RADIATORS	575	73.00	577	74.00
	579	75.00	581	76.00

AMSU A1-17 A1.EXE FULL SCAN MODE P1 25-NOV-93 14:13:16 SCAN NUMBER 44

[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

COMMANDS

[9] MODULE POWER =	CONNECT	ANTENNA IN COLD CAL POSIT = NO	[15
[10] SURVIVAL HEATER POWER =	OFF	ANTENNA IN NADIR POSITION = NO	[16
[11] MODULE TOTALLY OFF =	ON	ANTENNA IN FULL SCAN MODE = YES	[17
[12] SCANNER A1 - 1 POWER =	ON	PLL POWER = PLLO # 1	[18
[13] SCANNER A1 - 2 POWER =	ON	COLD CAL POSITION MSB = ZERO	[19
[14] ANTENNA IN WARM CAL POSIT =	NO	COLD CAL POSITION LSB = ZERO	[20

POWER [4] ON

SCREEN ONLY [2] PRINT [3] FULL [1] RETURN

SELECT TOUCHSCREEN BUTTON 3

POST TRANSIENT
PLB HIGH FREQ
6.67 HZ

AMSU A1_17 A1.EXE DIGITAL A DATA 25-NOV-93 14:13:19 PAGE 1
FULL SCAN MODE

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
1	SYNC SEQUENCE BYTE 1	11111111	572	SCENE DATA BP 17 CH 8	16417
2	SYNC SEQUENCE BYTE 2	11111111	574	CH 9	17299
3	SYNC SEQUENCE BYTE 3	11111111	576	CH 10	16527
4	UNIT ID AND SERIAL NO	00010001	578	CH 11	16340
5	DIGITAL B DATA BYTE 1	00000010	580	CH 12	16665
6	DIGITAL B DATA BYTE 2	00001110	582	CH 13	16365
7	DIGITAL B DATA BYTE 3	00000000	584	CH 14	16824
8	DIGITAL B DATA BYTE 4	00000000	586	CH 15	16645
10	REFLECTOR 1 POSITION 1	26	588	REFLECTOR 1 POSITION 18	2609
12	REFLECTOR 2 POSITION 1	16212	590	REFLECTOR 2 POSITION 18	2410
14	REFL 1 POS 1 2ND LOOK	26	592	REFL 1 POS 18 2ND LOOK	2603
16	REFL 2 POS 1 2ND LOOK	16212	594	REFL 2 POS 18 2ND LOOK	2405
18	SCENE DATA BP 1 CH 3	15842	596	SCENE DATA BP 18 CH 3	15823
20	CH 4	16648	598	CH 4	16631
22	CH 5	16914	600	CH 5	16904
24	CH 6	17172	602	CH 6	17175
26	CH 7	16229	604	CH 7	16256
28	CH 8	16443	606	CH 8	16436
30	CH 9	17280	608	CH 9	17301
32	CH 10	16502	610	CH 10	16525
34	CH 11	16306	612	CH 11	16315
36	CH 12	16668	614	CH 12	16701
38	CH 13	16374	616	CH 13	16431
40	CH 14	16841	618	CH 14	16893
42	CH 15	16631	620	CH 15	166
44	REFLECTOR 1 POSITION 2	179	622	REFLECTOR 1 POSITION 19	27
46	REFLECTOR 2 POSITION 2	16365	624	REFLECTOR 2 POSITION 19	2560
48	REFL 1 POS 2 2ND LOOK	177	626	REFL 1 POS 19 2ND LOOK	2755
50	REFL 2 POS 2 2ND LOOK	16361	628	REFL 2 POS 19 2ND LOOK	2556
52	SCENE DATA BP 2 CH 3	15821	630	SCENE DATA BP 19 CH 3	15818
54	CH 4	16625	632	CH 4	16626
56	CH 5	16897	634	CH 5	16887
58	CH 6	17179	636	CH 6	17185
60	CH 7	16236	638	CH 7	16232
62	CH 8	16414	640	CH 8	16440
64	CH 9	17282	642	CH 9	17282
66	CH 10	16510	644	CH 10	16499
68	CH 11	16308	646	CH 11	16312
70	CH 12	16660	648	CH 12	16675
72	CH 13	16386	650	CH 13	16371
74	CH 14	16840	652	CH 14	16842
76	CH 15	16632	654	CH 15	16632
78	REFLECTOR 1 POSITION 3	335	656	REFLECTOR 1 POSITION 20	2910
80	REFLECTOR 2 POSITION 3	129	658	REFLECTOR 2 POSITION 20	2711
82	REFL 1 POS 3 2ND LOOK	329	660	REFL 1 POS 20 2ND LOOK	2907
84	REFL 2 POS 3 2ND LOOK	123	662	REFL 2 POS 20 2ND LOOK	2708
86	SCENE DATA BP 3 CH 3	15815	664	SCENE DATA BP 20 CH 3	15815
88	CH 4	16624	666	CH 4	16626
90	CH 5	16888	668	CH 5	16890
92	CH 6	17169	670	CH 6	17171

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	16234	672	CH 7	16235
96	CH 8	16414	674	CH 8	16423
98	CH 9	17286	676	CH 9	17281
100	CH 10	16512	678	CH 10	16502
102	CH 11	16309	680	CH 11	16307
104	CH 12	16673	682	CH 12	16668
106	CH 13	16388	684	CH 13	16369
108	CH 14	16869	686	CH 14	16850
110	CH 15	16635	688	CH 15	16632
112	REFLECTOR 1 POSITION 4	483	690	REFLECTOR 1 POSITION 21	3064
114	REFLECTOR 2 POSITION 4	285	692	REFLECTOR 2 POSITION 21	2865
116	REFL 1 POS 4 2ND LOOK	480	694	REFL 1 POS 21 2ND LOOK	3059
118	REFL 2 POS 4 2ND LOOK	281	696	REFL 2 POS 21 2ND LOOK	2860
120	SCENE DATA BP 4 CH 3	15818	698	SCENE DATA BP 21 CH 3	15811
122	CH 4	16623	700	CH 4	16621
124	CH 5	16890	702	CH 5	16888
126	CH 6	17184	704	CH 6	17172
128	CH 7	16237	706	CH 7	16233
130	CH 8	16425	708	CH 8	16416
132	CH 9	17295	710	CH 9	17281
134	CH 10	16514	712	CH 10	16501
136	CH 11	16318	714	CH 11	16317
138	CH 12	16683	716	CH 12	16652
140	CH 13	16402	718	CH 13	16374
142	CH 14	16872	720	CH 14	16844
144	CH 15	16641	722	CH 15	16630
146	REFLECTOR 1 POSITION 5	636	724	REFLECTOR 1 POSITION 22	3210
148	REFLECTOR 2 POSITION 5	437	726	REFLECTOR 2 POSITION 22	3015
150	REFL 1 POS 5 2ND LOOK	632	728	REFL 1 POS 22 2ND LOOK	3210
152	REFL 2 POS 5 2ND LOOK	432	730	REFL 2 POS 22 2ND LOOK	3011
154	SCENE DATA BP 5 CH 3	15815	732	SCENE DATA BP 22 CH 3	15816
156	CH 4	16623	734	CH 4	16618
158	CH 5	16885	736	CH 5	16892
160	CH 6	17192	738	CH 6	17178
162	CH 7	16230	740	CH 7	16228
164	CH 8	16409	742	CH 8	16412
166	CH 9	17292	744	CH 9	17281
168	CH 10	16528	746	CH 10	16504
170	CH 11	16350	748	CH 11	16309
172	CH 12	16658	750	CH 12	16667
174	CH 13	16353	752	CH 13	16385
176	CH 14	16822	754	CH 14	16860
178	CH 15	16640	756	CH 15	16631
180	REFLECTOR 1 POSITION 6	789	758	REFLECTOR 1 POSITION 23	3365
182	REFLECTOR 2 POSITION 6	589	760	REFLECTOR 2 POSITION 23	3167
184	REFL 1 POS 6 2ND LOOK	785	762	REFL 1 POS 23 2ND LOOK	3362
186	REFL 2 POS 6 2ND LOOK	585	764	REFL 2 POS 23 2ND LOOK	3163
188	SCENE DATA BP 6 CH 3	15816	766	SCENE DATA BP 23 CH 3	15815
190	CH 4	16622	768	CH 4	16623
192	CH 5	16887	770	CH 5	16887

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
194	CH 6	17216	772	CH 6	17177
196	CH 7	16260	774	CH 7	16227
198	CH 8	16422	776	CH 8	16416
200	CH 9	17302	778	CH 9	17279
202	CH 10	16526	780	CH 10	16505
204	CH 11	16329	782	CH 11	16308
206	CH 12	16682	784	CH 12	16662
208	CH 13	16391	786	CH 13	16377
210	CH 14	16872	788	CH 14	16830
212	CH 15	16646	790	CH 15	16629
214	REFLECTOR 1 POSITION 7	939	792	REFLECTOR 1 POSITION 24	3519
216	REFLECTOR 2 POSITION 7	740	794	REFLECTOR 2 POSITION 24	3321
218	REFL 1 POS 7 2ND LOOK	936	796	REFL 1 POS 24 2ND LOOK	3514
220	REFL 2 POS 7 2ND LOOK	736	798	REFL 2 POS 24 2ND LOOK	3315
222	SCENE DATA BP 7 CH 3	15814	800	SCENE DATA BP 24 CH 3	15814
224	CH 4	16621	802	CH 4	16622
226	CH 5	16889	804	CH 5	16889
228	CH 6	17178	806	CH 6	17183
230	CH 7	16236	808	CH 7	16229
232	CH 8	16408	810	CH 8	16441
234	CH 9	17279	812	CH 9	17283
236	CH 10	16504	814	CH 10	16502
238	CH 11	16315	816	CH 11	16302
240	CH 12	16662	818	CH 12	16673
242	CH 13	16376	820	CH 13	163
244	CH 14	16840	822	CH 14	1683
246	CH 15	16632	824	CH 15	16630
248	REFLECTOR 1 POSITION 8	1091	826	REFLECTOR 1 POSITION 25	3668
250	REFLECTOR 2 POSITION 8	893	828	REFLECTOR 2 POSITION 25	3470
252	REFL 1 POS 8 2ND LOOK	1087	830	REFL 1 POS 25 2ND LOOK	3665
254	REFL 2 POS 8 2ND LOOK	887	832	REFL 2 POS 25 2ND LOOK	3466
256	SCENE DATA BP 8 CH 3	15822	834	SCENE DATA BP 25 CH 3	15820
258	CH 4	16623	836	CH 4	16620
260	CH 5	16890	838	CH 5	16883
262	CH 6	17177	840	CH 6	17180
264	CH 7	16232	842	CH 7	16230
266	CH 8	16418	844	CH 8	16410
268	CH 9	17284	846	CH 9	17280
270	CH 10	16503	848	CH 10	16498
272	CH 11	16311	850	CH 11	16307
274	CH 12	16655	852	CH 12	16671
276	CH 13	16358	854	CH 13	16379
278	CH 14	16837	856	CH 14	16858
280	CH 15	16632	858	CH 15	16630
282	REFLECTOR 1 POSITION 9	1245	860	REFLECTOR 1 POSITION 26	3822
284	REFLECTOR 2 POSITION 9	1043	862	REFLECTOR 2 POSITION 26	3622
286	REFL 1 POS 9 2ND LOOK	1240	864	REFL 1 POS 26 2ND LOOK	3817
288	REFL 2 POS 9 2ND LOOK	1040	866	REFL 2 POS 26 2ND LOOK	3618
290	SCENE DATA BP 9 CH 3	15821	868	SCENE DATA BP 26 CH 3	15816
292	CH 4	16632	870	CH 4	16622

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	16891	872	CH 5	16888
296	CH 6	17174	874	CH 6	17180
298	CH 7	16232	876	CH 7	16228
300	CH 8	16440	878	CH 8	16411
302	CH 9	17279	880	CH 9	17278
304	CH 10	16504	882	CH 10	16506
306	CH 11	16309	884	CH 11	16311
308	CH 12	16659	886	CH 12	16664
310	CH 13	16374	888	CH 13	16372
312	CH 14	16837	890	CH 14	16828
314	CH 15	16630	892	CH 15	16631
316	REFLECTOR 1 POSITION 10	1395	894	REFLECTOR 1 POSITION 27	3975
318	REFLECTOR 2 POSITION 10	1193	896	REFLECTOR 2 POSITION 27	3774
320	REFL 1 POS 10 2ND LOOK	1390	898	REFL 1 POS 27 2ND LOOK	3968
322	REFL 2 POS 10 2ND LOOK	1191	900	REFL 2 POS 27 2ND LOOK	3770
324	SCENE DATA BP 10 CH 3	15821	902	SCENE DATA BP 27 CH 3	15817
326	CH 4	16625	904	CH 4	16625
328	CH 5	16891	906	CH 5	16901
330	CH 6	17179	908	CH 6	17176
332	CH 7	16234	910	CH 7	16233
334	CH 8	16419	912	CH 8	16414
336	CH 9	17279	914	CH 9	17279
338	CH 10	16502	916	CH 10	16496
340	CH 11	16309	918	CH 11	16307
342	CH 12	16660	920	CH 12	16668
344	CH 13	16381	922	CH 13	16391
346	CH 14	16838	924	CH 14	16834
348	CH 15	16630	926	CH 15	16630
350	REFLECTOR 1 POSITION 11	1546	928	REFLECTOR 1 POSITION 28	4124
352	REFLECTOR 2 POSITION 11	1346	930	REFLECTOR 2 POSITION 28	3925
354	REFL 1 POS 11 2ND LOOK	1542	932	REFL 1 POS 28 2ND LOOK	4120
356	REFL 2 POS 11 2ND LOOK	1343	934	REFL 2 POS 28 2ND LOOK	3920
358	SCENE DATA BP 11 CH 3	15816	936	SCENE DATA BP 28 CH 3	15824
360	CH 4	16625	938	CH 4	16637
362	CH 5	16889	940	CH 5	16908
364	CH 6	17179	942	CH 6	17178
366	CH 7	16231	944	CH 7	16229
368	CH 8	16447	946	CH 8	16433
370	CH 9	17282	948	CH 9	17278
372	CH 10	16511	950	CH 10	16504
374	CH 11	16313	952	CH 11	16309
376	CH 12	16653	954	CH 12	16667
378	CH 13	16363	956	CH 13	16382
380	CH 14	16819	958	CH 14	16832
382	CH 15	16630	960	CH 15	16629
384	REFLECTOR 1 POSITION 12	1698	962	REFLECTOR 1 POSITION 29	4275
386	REFLECTOR 2 POSITION 12	1499	964	REFLECTOR 2 POSITION 29	4076
388	REFL 1 POS 12 2ND LOOK	1694	966	REFL 1 POS 29 2ND LOOK	4272
390	REFL 2 POS 12 2ND LOOK	1495	968	REFL 2 POS 29 2ND LOOK	4073
392	SCENE DATA BP 12 CH 3	15814	970	SCENE DATA BP 29 CH 3	15853

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
394	CH 4	16623	972	CH 4	16669
396	CH 5	16888	974	CH 5	16946
398	CH 6	17187	976	CH 6	17177
400	CH 7	16231	978	CH 7	16230
402	CH 8	16411	980	CH 8	16456
404	CH 9	17281	982	CH 9	17280
406	CH 10	16500	984	CH 10	16499
408	CH 11	16309	986	CH 11	16313
410	CH 12	16667	988	CH 12	16657
412	CH 13	16394	990	CH 13	16364
414	CH 14	16858	992	CH 14	16833
416	CH 15	16630	994	CH 15	16629
418	REFLECTOR 1 POSITION 13	1848	996	REFLECTOR 1 POSITION 30	4429
420	REFLECTOR 2 POSITION 13	1649	998	REFLECTOR 2 POSITION 30	4226
422	REFL 1 POS 13 2ND LOOK	1845	1000	REFL 1 POS 30 2ND LOOK	4424
424	REFL 2 POS 13 2ND LOOK	1646	1002	REFL 2 POS 30 2ND LOOK	4221
426	SCENE DATA BP 13 CH 3	15822	1004	SCENE DATA BP 30 CH 3	15820
428	CH 4	16641	1006	CH 4	16633
430	CH 5	16895	1008	CH 5	16901
432	CH 6	17180	1010	CH 6	17177
434	CH 7	16253	1012	CH 7	16231
436	CH 8	16413	1014	CH 8	16432
438	CH 9	17285	1016	CH 9	17280
440	CH 10	16510	1018	CH 10	1650
442	CH 11	16321	1020	CH 11	163
444	CH 12	16665	1022	CH 12	1666
446	CH 13	16380	1024	CH 13	16375
448	CH 14	16843	1026	CH 14	16834
450	CH 15	16641	1028	CH 15	16630
452	REFLECTOR 1 POSITION 14	2002	1030	REFLECTOR 1 COLD CAL POS	6019
454	REFLECTOR 2 POSITION 14	1802	1032	REFLECTOR 2 COLD CAL POS	5819
456	REFL 1 POS 14 2ND LOOK	1997	1034	REFL 1 COLD CAL 2ND LOOK	6018
458	REFL 2 POS 14 2ND LOOK	1798	1036	REFL 2 COLD CAL 2ND LOOK	5819
460	SCENE DATA BP 14 CH 3	15820	1038	COLD CAL DATA 1 CH 3	15826
462	CH 4	16629	1040	CH 4	16635
464	CH 5	16901	1042	CH 5	16896
466	CH 6	17197	1044	CH 6	17172
468	CH 7	16248	1046	CH 7	16229
470	CH 8	16423	1048	CH 8	16415
472	CH 9	17295	1050	CH 9	17275
474	CH 10	16519	1052	CH 10	16503
476	CH 11	16331	1054	CH 11	16316
478	CH 12	16647	1056	CH 12	16669
480	CH 13	16365	1058	CH 13	16377
482	CH 14	16831	1060	CH 14	16850
484	CH 15	16641	1062	CH 15	16629
486	REFLECTOR 1 POSITION 15	2154	1064	COLD CAL DATA 2 CH 3	15830
488	REFLECTOR 2 POSITION 15	1955	1066	CH 4	16633
490	REFL 1 POS 15 2ND LOOK	2148	1068	CH 5	16892
492	REFL 2 POS 15 2ND LOOK	1950	1070	CH 6	17182

ELEMENT	DESCRIPTION		VALUE	ELEMENT	DESCRIPTION		VALUE
494	SCENE DATA BP 15	CH 3	15819	1072		CH 7	16233
496		CH 4	16636	1074		CH 8	16419
498		CH 5	16900	1076		CH 9	17281
500		CH 6	17194	1078		CH 10	16498
502		CH 7	16233	1080		CH 11	16319
504		CH 8	16425	1082		CH 12	16665
506		CH 9	17297	1084		CH 13	16383
508		CH 10	16501	1086		CH 14	16806
510		CH 11	16306	1088		CH 15	16629
512		CH 12	16701	1182	REFLECTOR 1 WARM CAL POS		10420
514		CH 13	16431	1184	REFLECTOR 2 WARM CAL POS		10220
516		CH 14	16893	1186	REFL 1 WARM CAL 2ND LOOK		10420
518		CH 15	16637	1188	REFL 2 WARM CAL 2ND LOOK		10220
520	REFLECTOR 1 POSITION 16		2302	1190	WARM CAL DATA 1	CH 3	15820
522	REFLECTOR 2 POSITION 16		2104	1192		CH 4	16628
524	REFL 1 POS 16 2ND LOOK		2300	1194		CH 5	16892
526	REFL 2 POS 16 2ND LOOK		2101	1196		CH 6	17166
528	SCENE DATA BP 16	CH 3	15846	1198		CH 7	16229
530		CH 4	16658	1200		CH 8	16418
532		CH 5	16938	1202		CH 9	17277
534		CH 6	17223	1204		CH 10	16501
536		CH 7	16265	1206		CH 11	16309
538		CH 8	16442	1208		CH 12	16665
540		CH 9	17311	1210		CH 13	16380
542		CH 10	16511	1212		CH 14	16839
544		CH 11	16330	1214		CH 15	16629
546		CH 12	16748	1216	WARM CAL DATA 2	CH 3	15817
548		CH 13	16471	1218		CH 4	16629
550		CH 14	16956	1220		CH 5	16893
552		CH 15	16649	1222		CH 6	17179
554	REFLECTOR 1 POSITION 17		2456	1224		CH 7	16230
556	REFLECTOR 2 POSITION 17		2257	1226		CH 8	16417
558	REFL 1 POS 17 2ND LOOK		2452	1228		CH 9	17276
560	REFL 2 POS 17 2ND LOOK		2253	1230		CH 10	16504
562	SCENE DATA BP 17	CH 3	15824	1232		CH 11	16302
564		CH 4	16632	1234		CH 12	16658
566		CH 5	16899	1236		CH 13	16368
568		CH 6	17192	1238		CH 14	16823
570		CH 7	16255	1240		CH 15	16630

FULL SCAN MODE

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	18065	23.51
1092	SCAN MOTOR A1-2	18418	23.78
1094	FEEDHORN A1-1	19486	25.48
1096	FEEDHORN A1-2	20371	25.75
1098	RF MUX A1-1	20022	27.05
1100	RF MUX A1-2	20538	28.31
1102	LOCAL OSCILLATOR CHANNEL 3	21450	29.85
1104	LOCAL OSCILLATOR CHANNEL 4	21579	30.02
1106	LOCAL OSCILLATOR CHANNEL 5	21234	29.10
1108	LOCAL OSCILLATOR CHANNEL 6	20018	27.16
1110	LOCAL OSCILLATOR CHANNEL 7	20445	27.87
1112	LOCAL OSCILLATOR CHANNEL 8	21111	29.56
1114	LOCAL OSCILLATOR CHANNEL 15	20610	29.20
1116	PLL LO #2 CHANNELS 9 THROUGH 14	19641	27.05
1118	PLL LO #1 CHANNELS 9 THROUGH 14	21466	30.33
1120	SPARE (NOT USED)	32767	52.86
1122	MIXER/IF AMPLIFIER CHANNEL 3	21118	28.90
1124	MIXER/IF AMPLIFIER CHANNEL 4	20711	28.86
1126	MIXER/IF AMPLIFIER CHANNEL 5	20651	28.48
1128	MIXER/IF AMPLIFIER CHANNEL 6	20323	27.59
1130	MIXER/IF AMPLIFIER CHANNEL 7	20492	28.00
1132	MIXER/IF AMPLIFIER CHANNEL 8	20644	28.93
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	19875	27.46
1136	MIXER/IF AMPLIFIER CHANNEL 15	20752	28.99
1138	IF AMPLIFIER CHANNEL 11 THRU 14	20597	28.53
1140	IF AMPLIFIER CHANNEL 9	21025	28.52
1142	IF AMPLIFIER CHANNEL 10	20618	28.69
1144	IF AMPLIFIER CHANNEL 11	20314	27.57
1146	DC/DC CONVERTER	20838	28.42
1148	IF AMPLIFIER CHANNEL 13	20431	27.52
1150	IF AMPLIFIER CHANNEL 14	20096	27.50
1152	IF AMPLIFIER CHANNEL 12	20086	27.47
1154	RF SHELF A1-1	20400	27.78
1156	RF SHELF A1-2	20518	28.18
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	19662	26.06
1160	A1-1 WARM LOAD 1	23116	23.68
1162	A1-1 WARM LOAD 2	23313	23.71
1164	A1-1 WARM LOAD 3	23388	23.78
1166	A1-1 WARM LOAD 4	23076	23.74
1168	A1-1 WARM LOAD CENTER	23256	23.78
1170	A1-2 WARM LOAD 1	23873	24.63
1172	A1-2 WARM LOAD 2	23703	24.61
1174	A1-2 WARM LOAD 3	23732	24.65
1176	A1-2 WARM LOAD 4	23659	24.65
1178	A1-2 WARM LOAD CENTER	23534	24.54
1180	TEMP SENSOR REFERENCE VOLTAGE	24882	

FULL SCAN MODE

DESCRIPTION	STATUS	STATUS	STATUS
SCANNER A1-1 POWER	ON	ON	ON
SCANNER A1-2 POWER	ON	ON	ON
PLL POWER	PLLO # 1	PLLO # 1	PLLO # 1
ANTENNA IN WARM CAL POSITION MODE	NO	NO	NO
ANTENNA IN COLD CAL POSITION MODE	NO	NO	NO
ANTENNA IN NADIR POSITION MODE	NO	NO	NO
ANTENNA IN FULL SCAN MODE	YES	YES	YES
SURVIVAL HEATER POWER	OFF	OFF	OFF
MODULE POWER	CONNECT	CONNECT	CONNECT
COLD CAL POSITION MSB	ZERO	ZERO	ZERO
COLD CAL POSITION LSB	ZERO	ZERO	ZERO

ANALOG DATA

DESCRIPTION	VALUE	DEG C	VALUE	DEG C	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	218	23.4	217	22.1	218	23.4
A1-2 SCANNER MOTOR TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-1 RF SHELF TEMPERATURE	219	24.8	219	24.8	219	24.8
A1-2 RF SHELF TEMPERATURE	221	27.5	221	27.5	221	27.5
A1-1 WARM LOAD TEMPERATURE	219	24.8	219	24.8	219	24.8
A1-2 WARM LOAD TEMPERATURE	219	24.8	219	24.8	219	24.8

DESCRIPTION	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS
A1-1 ANTENNA DRIVE MOTOR CURRENT (AVRG)	104	48.46	105	48.93	105	48.93
A1-2 ANTENNA DRIVE MOTOR CURRENT (AVRG)	98	45.67	98	45.67	98	45.67
SIGNAL PROCESSING +15 VDC	172	14.84	172	14.84	172	14.84
ANTENNA DRIVE +15 VDC	173	14.93	173	14.93	173	14.93
SIGNAL PROCESSING -15 VDC	151	-15.00	151	-15.00	151	-15.00
ANTENNA DRIVE -15 VDC	150	-15.05	150	-15.05	150	-15.05
RECEIVER AMPLIFIER +8 VDC	159	7.95	159	7.95	159	7.95
SIGNAL PROCESSOR +5 VDC	147	4.90	147	4.90	147	4.90
ANTENNA DRIVE +5 VDC	148	4.93	148	4.93	148	4.93
RECEIVER MIXER/IF +10 VDC	172	9.94	172	9.94	172	9.94
PHASE LOCK LOOP (CHANNEL 9/14) +15 VDC	171	14.76	171	14.76	171	14.76
PHASE LOCK LOOP (CHANNEL 9/14) -15 VDC	146	-15.25	146	-15.25	146	-15.25
L.O. VOLTAGE (CHANNEL 8) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 7) VDC	173	9.90	173	9.90	173	9.90
L.O. VOLTAGE (CHANNEL 6) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 3) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 4) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 5) VDC	173	9.90	173	9.90	173	9.90
PLLO # 2 LOCK DETECT	5	0.10	5	0.10	5	0.10
PLLO # 1 LOCK DETECT	222	4.44	222	4.44	222	4.44
L.O. VOLTAGE (CHANNEL 15) VDC	172	14.84	172	14.84	172	14.84

PRT TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
VARIABLE TARGET	615	42.00	601	14.00
	616	43.00	602	15.00
	617	44.00	603	16.00
	618	45.00	604	17.00
	619	46.00	605	18.00
	620	47.00	606	19.00
	621	48.00	607	20.00
FIXED TARGET	622	49.00	608	21.00
	623	50.00	609	22.00
	624	51.00	610	23.00
	625	52.00	611	24.00
	626	53.00	612	25.00
	627	67.00	613	69.00
	628	68.00	614	70.00
BASEPLATE	629	71.00	630	72.00
	631	26.00	632	27.00

THERMOCOUPLE TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
FIXED TARGET SHROUD	558	5.00	537	34.00
	559	6.00	538	35.00
VARIABLE TARGET SHROUD	550	7.00	524	36.00
	551	8.00	525	37.00
FIXED TARGET N2	506	57.00	502	30.00
	507	58.00	503	31.00
VARIABLE TARGET N2	516	59.00	511	32.00
	517	60.00	512	33.00
HEATER N2	514	1.00	509	38.00
	515	2.00	510	39.00
FIXED TARGET FLOW METER	508	63.00	504	61.00
VARIABLE TARGET FLOW METER	518	64.00	513	62.00
BASEPLATE HEATER N2	519	3.00	520	4.00
BASEPLATE N2	521	9.00	522	10.00
BASEPLATE FLOW METER	523	65.00		
ADJUNCT RADIATORS	575	73.00	577	74.00
	579	75.00	581	76.00

```
AMSU  A1-17 A1.EXE     FULL SCAN MODE     P1 25-NOV-93 15:17:26  SCAN NUMBER   73
[ 5 ] DIGITAL A DATA   ELEMENT 0000

  6 ] DIGITAL B DATA   ELEMENT   00

[ 7 ] ANALOG DATA      ELEMENT   00


                                        COMMANDS
[ 9 ]  MODULE POWER =          CONNECT        ANTENNA IN COLD CAL POSIT = NO   [ 15

[ 10 ] SURVIVAL HEATER POWER =      OFF       ANTENNA IN NADIR POSITION = NO   [ 16

[ 11 ] MODULE TOTALLY OFF =         ON        ANTENNA IN FULL SCAN MODE = YES  [ 17

[ 12 ] SCANNER A1 - 1 POWER =       ON        PLL POWER =              PLLO # 1  [ 18

[ 13 ] SCANNER A1 - 2 POWER =       ON        COLD CAL POSITION MSB =    ZERO   [ 19

[ 14 ] ANTENNA IN WARM CAL POSIT = NO         COLD CAL POSITION LSB =    ZERO   [ 20

          POWER [ 4 ]  ON
                       SCREEN ONLY [ 2 ]  PRINT  [ 3 ] FULL        [ 1 ] RETURN
SELECT TOUCHSCREEN BUTTON 3
```

PRE TRANSIENT

TDS 51

ANAL TEL. LOW FREQ

AMSU A1_17 A1.EXE DIGITAL A DATA 25-NOV-93 15:17:30 PAGE 1
FULL SCAN MODE

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
1	SYNC SEQUENCE BYTE 1	11111111	572	SCENE DATA BP 17 CH 8	16429
2	SYNC SEQUENCE BYTE 2	11111111	574	CH 9	17280
3	SYNC SEQUENCE BYTE 3	11111111	576	CH 10	16486
4	UNIT ID AND SERIAL NO	00010001	578	CH 11	16273
5	DIGITAL B DATA BYTE 1	00000010	580	CH 12	16624
6	DIGITAL B DATA BYTE 2	00001110	582	CH 13	16338
7	DIGITAL B DATA BYTE 3	00000000	584	CH 14	16783
8	DIGITAL B DATA BYTE 4	00000000	586	CH 15	16641
10	REFLECTOR 1 POSITION 1	27	588	REFLECTOR 1 POSITION 18	2609
12	REFLECTOR 2 POSITION 1	16211	590	REFLECTOR 2 POSITION 18	2410
14	REFL 1 POS 1 2ND LOOK	27	592	REFL 1 POS 18 2ND LOOK	2604
16	REFL 2 POS 1 2ND LOOK	16211	594	REFL 2 POS 18 2ND LOOK	2405
18	SCENE DATA BP 1 CH 3	15847	596	SCENE DATA BP 18 CH 3	15829
20	CH 4	16660	598	CH 4	16638
22	CH 5	16926	600	CH 5	16915
24	CH 6	17175	602	CH 6	17170
26	CH 7	16235	604	CH 7	16225
28	CH 8	16459	606	CH 8	16453
30	CH 9	17289	608	CH 9	17280
32	CH 10	16490	610	CH 10	16475
34	CH 11	16276	612	CH 11	16258
36	CH 12	16634	614	CH 12	16619
38	CH 13	16345	616	CH 13	16344
40	CH 14	16811	618	CH 14	16778
42	CH 15	16643	620	CH 15	166
44	REFLECTOR 1 POSITION 2	180	622	REFLECTOR 1 POSITION 19	27
46	REFLECTOR 2 POSITION 2	16365	624	REFLECTOR 2 POSITION 19	2560
48	REFL 1 POS 2 2ND LOOK	177	626	REFL 1 POS 19 2ND LOOK	2756
50	REFL 2 POS 2 2ND LOOK	16362	628	REFL 2 POS 19 2ND LOOK	2557
52	SCENE DATA BP 2 CH 3	15822	630	SCENE DATA BP 19 CH 3	15823
54	CH 4	16636	632	CH 4	16630
56	CH 5	16907	634	CH 5	16899
58	CH 6	17178	636	CH 6	17169
60	CH 7	16232	638	CH 7	16225
62	CH 8	16425	640	CH 8	16455
64	CH 9	17284	642	CH 9	17281
66	CH 10	16485	644	CH 10	16481
68	CH 11	16266	646	CH 11	16264
70	CH 12	16625	648	CH 12	16621
72	CH 13	16341	650	CH 13	16339
74	CH 14	16784	652	CH 14	16796
76	CH 15	16642	654	CH 15	16638
78	REFLECTOR 1 POSITION 3	335	656	REFLECTOR 1 POSITION 20	2911
80	REFLECTOR 2 POSITION 3	130	658	REFLECTOR 2 POSITION 20	2711
82	REFL 1 POS 3 2ND LOOK	329	660	REFL 1 POS 20 2ND LOOK	2908
84	REFL 2 POS 3 2ND LOOK	128	662	REFL 2 POS 20 2ND LOOK	2708
86	SCENE DATA BP 3 CH 3	15823	664	SCENE DATA BP 20 CH 3	15818
88	CH 4	16628	666	CH 4	16630
90	CH 5	16901	668	CH 5	16900
92	CH 6	17184	670	CH 6	17163

LEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	16237	672	CH 7	16220
96	CH 8	16420	674	CH 8	16443
98	CH 9	17287	676	CH 9	17272
100	CH 10	16492	678	CH 10	16475
102	CH 11	16266	680	CH 11	16258
104	CH 12	16633	682	CH 12	16620
106	CH 13	16345	684	CH 13	16331
108	CH 14	16797	686	CH 14	16778
110	CH 15	16641	688	CH 15	16633
112	REFLECTOR 1 POSITION 4	483	690	REFLECTOR 1 POSITION 21	3065
114	REFLECTOR 2 POSITION 4	285	692	REFLECTOR 2 POSITION 21	2865
116	REFL 1 POS 4 2ND LOOK	481	694	REFL 1 POS 21 2ND LOOK	3059
118	REFL 2 POS 4 2ND LOOK	281	696	REFL 2 POS 21 2ND LOOK	2860
120	SCENE DATA BP 4 CH 3	15819	698	SCENE DATA BP 21 CH 3	15820
122	CH 4	16632	700	CH 4	16630
124	CH 5	16902	702	CH 5	16901
126	CH 6	17176	704	CH 6	17173
128	CH 7	16225	706	CH 7	16225
130	CH 8	16439	708	CH 8	16434
132	CH 9	17284	710	CH 9	17277
134	CH 10	16482	712	CH 10	16481
136	CH 11	16258	714	CH 11	16265
138	CH 12	16625	716	CH 12	16617
140	CH 13	16332	718	CH 13	16348
142	CH 14	16793	720	CH 14	16765
144	CH 15	16638	722	CH 15	16637
146	REFLECTOR 1 POSITION 5	635	724	REFLECTOR 1 POSITION 22	3211
148	REFLECTOR 2 POSITION 5	436	726	REFLECTOR 2 POSITION 22	3015
150	REFL 1 POS 5 2ND LOOK	632	728	REFL 1 POS 22 2ND LOOK	3210
152	REFL 2 POS 5 2ND LOOK	433	730	REFL 2 POS 22 2ND LOOK	3011
154	SCENE DATA BP 5 CH 3	15830	732	SCENE DATA BP 22 CH 3	15820
156	CH 4	16631	734	CH 4	16633
158	CH 5	16898	736	CH 5	16898
160	CH 6	17168	738	CH 6	17177
162	CH 7	16219	740	CH 7	16228
164	CH 8	16423	742	CH 8	16422
166	CH 9	17279	744	CH 9	17285
168	CH 10	16476	746	CH 10	16488
170	CH 11	16260	748	CH 11	16267
172	CH 12	16625	750	CH 12	16624
174	CH 13	16334	752	CH 13	16346
176	CH 14	16782	754	CH 14	16783
178	CH 15	16636	756	CH 15	16641
180	REFLECTOR 1 POSITION 6	789	758	REFLECTOR 1 POSITION 23	3365
182	REFLECTOR 2 POSITION 6	589	760	REFLECTOR 2 POSITION 23	3168
184	REFL 1 POS 6 2ND LOOK	785	762	REFL 1 POS 23 2ND LOOK	3362
186	REFL 2 POS 6 2ND LOOK	585	764	REFL 2 POS 23 2ND LOOK	3164
188	SCENE DATA BP 6 CH 3	15819	766	SCENE DATA BP 23 CH 3	15821
190	CH 4	16632	768	CH 4	16629
192	CH 5	16902	770	CH 5	16898

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
194	CH 6	17166	772	CH 6	17182
196	CH 7	16220	774	CH 7	16232
198	CH 8	16433	776	CH 8	16431
200	CH 9	17273	778	CH 9	17292
202	CH 10	16475	780	CH 10	16494
204	CH 11	16255	782	CH 11	16281
206	CH 12	16617	784	CH 12	16638
208	CH 13	16316	786	CH 13	16347
210	CH 14	16778	788	CH 14	16807
212	CH 15	16637	790	CH 15	16642
214	REFLECTOR 1 POSITION 7	940	792	REFLECTOR 1 POSITION 24	3519
216	REFLECTOR 2 POSITION 7	740	794	REFLECTOR 2 POSITION 24	3320
218	REFL 1 POS 7 2ND LOOK	936	796	REFL 1 POS 24 2ND LOOK	3514
220	REFL 2 POS 7 2ND LOOK	736	798	REFL 2 POS 24 2ND LOOK	3315
222	SCENE DATA BP 7 CH 3	15823	800	SCENE DATA BP 24 CH 3	15821
224	CH 4	16630	802	CH 4	16631
226	CH 5	16898	804	CH 5	16901
228	CH 6	17168	806	CH 6	17183
230	CH 7	16218	808	CH 7	16231
232	CH 8	16421	810	CH 8	16460
234	CH 9	17273	812	CH 9	17303
236	CH 10	16474	814	CH 10	16497
238	CH 11	16258	816	CH 11	16282
240	CH 12	16618	818	CH 12	16642
242	CH 13	16325	820	CH 13	163'
244	CH 14	16791	822	CH 14	167
246	CH 15	16636	824	CH 15	16643
248	REFLECTOR 1 POSITION 8	1091	826	REFLECTOR 1 POSITION 25	3669
250	REFLECTOR 2 POSITION 8	893	828	REFLECTOR 2 POSITION 25	3471
252	REFL 1 POS 8 2ND LOOK	1087	830	REFL 1 POS 25 2ND LOOK	3665
254	REFL 2 POS 8 2ND LOOK	888	832	REFL 2 POS 25 2ND LOOK	3466
256	SCENE DATA BP 8 CH 3	15824	834	SCENE DATA BP 25 CH 3	15824
258	CH 4	16635	836	CH 4	16631
260	CH 5	16903	838	CH 5	16903
262	CH 6	17167	840	CH 6	17185
264	CH 7	16217	842	CH 7	16237
266	CH 8	16430	844	CH 8	16419
268	CH 9	17276	846	CH 9	17293
270	CH 10	16477	848	CH 10	16496
272	CH 11	16256	850	CH 11	16276
274	CH 12	16618	852	CH 12	16640
276	CH 13	16324	854	CH 13	16353
278	CH 14	16778	856	CH 14	16794
280	CH 15	16635	858	CH 15	16644
282	REFLECTOR 1 POSITION 9	1246	860	REFLECTOR 1 POSITION 26	3822
284	REFLECTOR 2 POSITION 9	1043	862	REFLECTOR 2 POSITION 26	3623
286	REFL 1 POS 9 2ND LOOK	1240	864	REFL 1 POS 26 2ND LOOK	3817
288	REFL 2 POS 9 2ND LOOK	1040	866	REFL 2 POS 26 2ND LOOK	3619
290	SCENE DATA BP 9 CH 3	15823	868	SCENE DATA BP 26 CH 3	15822
292	CH 4	16636	870	CH 4	16633

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	16902	872	CH 5	16900
296	CH 6	17170	874	CH 6	17186
298	CH 7	16225	876	CH 7	16238
300	CH 8	16453	878	CH 8	16428
302	CH 9	17279	880	CH 9	17293
304	CH 10	16482	882	CH 10	16491
306	CH 11	16264	884	CH 11	16282
308	CH 12	16615	886	CH 12	16631
310	CH 13	16335	888	CH 13	16347
312	CH 14	16764	890	CH 14	16794
314	CH 15	16640	892	CH 15	16645
316	REFLECTOR 1 POSITION 10	1395	894	REFLECTOR 1 POSITION 27	3975
318	REFLECTOR 2 POSITION 10	1195	896	REFLECTOR 2 POSITION 27	3775
320	REFL 1 POS 10 2ND LOOK	1390	898	REFL 1 POS 27 2ND LOOK	3968
322	REFL 2 POS 10 2ND LOOK	1192	900	REFL 2 POS 27 2ND LOOK	3770
324	SCENE DATA BP 10 CH 3	15831	902	SCENE DATA BP 27 CH 3	15826
326	CH 4	16634	904	CH 4	16635
328	CH 5	16905	906	CH 5	16909
330	CH 6	17175	908	CH 6	17207
332	CH 7	16225	910	CH 7	16256
334	CH 8	16434	912	CH 8	16422
336	CH 9	17277	914	CH 9	17312
338	CH 10	16485	916	CH 10	16521
340	CH 11	16266	918	CH 11	16299
342	CH 12	16626	920	CH 12	16661
344	CH 13	16341	922	CH 13	16359
346	CH 14	16771	924	CH 14	16789
348	CH 15	16636	926	CH 15	16652
350	REFLECTOR 1 POSITION 11	1545	928	REFLECTOR 1 POSITION 28	4126
352	REFLECTOR 2 POSITION 11	1346	930	REFLECTOR 2 POSITION 28	3925
354	REFL 1 POS 11 2ND LOOK	1543	932	REFL 1 POS 28 2ND LOOK	4121
356	REFL 2 POS 11 2ND LOOK	1343	934	REFL 2 POS 28 2ND LOOK	3921
358	SCENE DATA BP 11 CH 3	15823	936	SCENE DATA BP 28 CH 3	15829
360	CH 4	16635	938	CH 4	16648
362	CH 5	16905	940	CH 5	16914
364	CH 6	17170	942	CH 6	17175
366	CH 7	16222	944	CH 7	16227
368	CH 8	16471	946	CH 8	16444
370	CH 9	17280	948	CH 9	17277
372	CH 10	16483	950	CH 10	16472
374	CH 11	16265	952	CH 11	16262
376	CH 12	16620	954	CH 12	16619
378	CH 13	16334	956	CH 13	16339
380	CH 14	16788	958	CH 14	16786
382	CH 15	16638	960	CH 15	16633
384	REFLECTOR 1 POSITION 12	1697	962	REFLECTOR 1 POSITION 29	4275
386	REFLECTOR 2 POSITION 12	1500	964	REFLECTOR 2 POSITION 29	4077
388	REFL 1 POS 12 2ND LOOK	1694	966	REFL 1 POS 29 2ND LOOK	4272
390	REFL 2 POS 12 2ND LOOK	1495	968	REFL 2 POS 29 2ND LOOK	4073
392	SCENE DATA BP 12 CH 3	15823	970	SCENE DATA BP 29 CH 3	15857

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
394	CH 4	16632	972	CH 4	16676
396	CH 5	16902	974	CH 5	16959
398	CH 6	17169	976	CH 6	17162
400	CH 7	16219	978	CH 7	16215
402	CH 8	16430	980	CH 8	16463
404	CH 9	17271	982	CH 9	17267
406	CH 10	16476	984	CH 10	16474
408	CH 11	16256	986	CH 11	16257
410	CH 12	16613	988	CH 12	16613
412	CH 13	16331	990	CH 13	16333
414	CH 14	16782	992	CH 14	16755
416	CH 15	16634	994	CH 15	16631
418	REFLECTOR 1 POSITION 13	1848	996	REFLECTOR 1 POSITION 30	4430
420	REFLECTOR 2 POSITION 13	1649	998	REFLECTOR 2 POSITION 30	4226
422	REFL 1 POS 13 2ND LOOK	1845	1000	REFL 1 POS 30 2ND LOOK	4424
424	REFL 2 POS 13 2ND LOOK	1646	1002	REFL 2 POS 30 2ND LOOK	4224
426	SCENE DATA BP 13 CH 3	15834	1004	SCENE DATA BP 30 CH 3	15827
428	CH 4	16652	1006	CH 4	16644
430	CH 5	16911	1008	CH 5	16911
432	CH 6	17161	1010	CH 6	17156
434	CH 7	16216	1012	CH 7	16211
436	CH 8	16426	1014	CH 8	16440
438	CH 9	17268	1016	CH 9	17262
440	CH 10	16473	1018	CH 10	16462
442	CH 11	16252	1020	CH 11	162
444	CH 12	16615	1022	CH 12	1661
446	CH 13	16317	1024	CH 13	16322
448	CH 14	16774	1026	CH 14	16770
450	CH 15	16633	1028	CH 15	16629
452	REFLECTOR 1 POSITION 14	2002	1030	REFLECTOR 1 COLD CAL POS	6021
454	REFLECTOR 2 POSITION 14	1802	1032	REFLECTOR 2 COLD CAL POS	5820
456	REFL 1 POS 14 2ND LOOK	1998	1034	REFL 1 COLD CAL 2ND LOOK	6021
458	REFL 2 POS 14 2ND LOOK	1799	1036	REFL 2 COLD CAL 2ND LOOK	5820
460	SCENE DATA BP 14 CH 3	15829	1038	COLD CAL DATA 1 CH 3	15829
462	CH 4	16639	1040	CH 4	16640
464	CH 5	16913	1042	CH 5	16907
466	CH 6	17165	1044	CH 6	17154
468	CH 7	16218	1046	CH 7	16203
470	CH 8	16433	1048	CH 8	16425
472	CH 9	17270	1050	CH 9	17263
474	CH 10	16471	1052	CH 10	16468
476	CH 11	16255	1054	CH 11	16244
478	CH 12	16614	1056	CH 12	16609
480	CH 13	16329	1058	CH 13	16317
482	CH 14	16781	1060	CH 14	16776
484	CH 15	16633	1062	CH 15	16625
486	REFLECTOR 1 POSITION 15	2154	1064	COLD CAL DATA 2 CH 3	15834
488	REFLECTOR 2 POSITION 15	1956	1066	CH 4	16641
490	REFL 1 POS 15 2ND LOOK	2149	1068	CH 5	16903
492	REFL 2 POS 15 2ND LOOK	1950	1070	CH 6	17157

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	SCENE DATA BP 15 CH 3	15833	1072	CH 7	16211
496	CH 4	16645	1074	CH 8	16431
498	CH 5	16913	1076	CH 9	17265
500	CH 6	17168	1078	CH 10	16464
502	CH 7	16222	1080	CH 11	16252
504	CH 8	16437	1082	CH 12	16610
506	CH 9	17278	1084	CH 13	16320
508	CH 10	16483	1086	CH 14	16784
510	CH 11	16255	1088	CH 15	16626
512	CH 12	16623	1182	REFLECTOR 1 WARM CAL POS	10420
514	CH 13	16329	1184	REFLECTOR 2 WARM CAL POS	10220
516	CH 14	16782	1186	REFL 1 WARM CAL 2ND LOOK	10420
518	CH 15	16637	1188	REFL 2 WARM CAL 2ND LOOK	10220
520	REFLECTOR 1 POSITION 16	2303	1190	WARM CAL DATA 1 CH 3	15823
522	REFLECTOR 2 POSITION 16	2105	1192	CH 4	16631
524	REFL 1 POS 16 2ND LOOK	2306	1194	CH 5	16903
526	REFL 2 POS 16 2ND LOOK	2101	1196	CH 6	17185
528	SCENE DATA BP 16 CH 3	15853	1198	CH 7	16245
530	CH 4	16672	1200	CH 8	16427
532	CH 5	16951	1202	CH 9	17298
534	CH 6	17179	1204	CH 10	16496
536	CH 7	16231	1206	CH 11	16289
538	CH 8	16457	1208	CH 12	16641
540	CH 9	17289	1210	CH 13	16348
542	CH 10	16489	1212	CH 14	16801
544	CH 11	16271	1214	CH 15	16648
546	CH 12	16634	1216	WARM CAL DATA 2 CH 3	15822
548	CH 13	16347	1218	CH 4	16636
550	CH 14	16798	1220	CH 5	16902
552	CH 15	16642	1222	CH 6	17190
554	REFLECTOR 1 POSITION 17	2456	1224	CH 7	16240
556	REFLECTOR 2 POSITION 17	2257	1226	CH 8	16423
558	REFL 1 POS 17 2ND LOOK	2452	1228	CH 9	17301
560	REFL 2 POS 17 2ND LOOK	2253	1230	CH 10	16503
562	SCENE DATA BP 17 CH 3	15832	1232	CH 11	16283
564	CH 4	16641	1234	CH 12	16644
566	CH 5	16911	1236	CH 13	16357
568	CH 6	17178	1238	CH 14	16808
570	CH 7	16234	1240	CH 15	16647

FULL SCAN MODE

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	17883	23.16
1092	SCAN MOTOR A1-2	18327	23.60
1094	FEEDHORN A1-1	19520	25.55
1096	FEEDHORN A1-2	20478	25.96
1098	RF MUX A1-1	20112	27.23
1100	RF MUX A1-2	20679	28.58
1102	LOCAL OSCILLATOR CHANNEL 3	21403	29.76
1104	LOCAL OSCILLATOR CHANNEL 4	21524	29.92
1106	LOCAL OSCILLATOR CHANNEL 5	21175	28.98
1108	LOCAL OSCILLATOR CHANNEL 6	19833	26.80
1110	LOCAL OSCILLATOR CHANNEL 7	20402	27.79
1112	LOCAL OSCILLATOR CHANNEL 8	21041	29.42
1114	LOCAL OSCILLATOR CHANNEL 15	20615	29.21
1116	PLL LO #2 CHANNELS 9 THROUGH 14	19874	27.50
1118	PLL LO #1 CHANNELS 9 THROUGH 14	21365	30.14
1120	SPARE (NOT USED)	32767	52.86
1122	MIXER/IF AMPLIFIER CHANNEL 3	21202	29.06
1124	MIXER/IF AMPLIFIER CHANNEL 4	20822	29.08
1126	MIXER/IF AMPLIFIER CHANNEL 5	20763	28.69
1128	MIXER/IF AMPLIFIER CHANNEL 6	20355	27.65
1130	MIXER/IF AMPLIFIER CHANNEL 7	20568	28.15
1132	MIXER/IF AMPLIFIER CHANNEL 8	20746	29.13
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	19955	27.62
1136	MIXER/IF AMPLIFIER CHANNEL 15	20716	28.92
1138	IF AMPLIFIER CHANNEL 11 THRU 14	20696	28.72
1140	IF AMPLIFIER CHANNEL 9	21125	28.71
1142	IF AMPLIFIER CHANNEL 10	20722	28.89
1144	IF AMPLIFIER CHANNEL 11	20304	27.55
1146	DC/DC CONVERTER	20892	28.53
1148	IF AMPLIFIER CHANNEL 13	20425	27.51
1150	IF AMPLIFIER CHANNEL 14	20095	27.50
1152	IF AMPLIFIER CHANNEL 12	20084	27.46
1154	RF SHELF A1-1	20517	28.00
1156	RF SHELF A1-2	20622	28.39
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	19775	26.28
1160	A1-1 WARM LOAD 1	23095	23.64
1162	A1-1 WARM LOAD 2	23295	23.67
1164	A1-1 WARM LOAD 3	23366	23.74
1166	A1-1 WARM LOAD 4	23048	23.69
1168	A1-1 WARM LOAD CENTER	23239	23.74
1170	A1-2 WARM LOAD 1	23845	24.58
1172	A1-2 WARM LOAD 2	23676	24.55
1174	A1-2 WARM LOAD 3	23710	24.61
1176	A1-2 WARM LOAD 4	23634	24.60
1178	A1-2 WARM LOAD CENTER	23501	24.47
1180	TEMP SENSOR REFERENCE VOLTAGE	24882	

FULL SCAN MODE

DESCRIPTION	STATUS	STATUS	STATUS
SCANNER A1-1 POWER	ON	ON	ON
SCANNER A1-2 POWER	ON	ON	ON
PLL POWER	PLLO # 1	PLLO # 1	PLLO # 1
ANTENNA IN WARM CAL POSITION MODE	NO	NO	NO
ANTENNA IN COLD CAL POSITION MODE	NO	NO	NO
ANTENNA IN NADIR POSITION MODE	NO	NO	NO
ANTENNA IN FULL SCAN MODE	YES	YES	YES
SURVIVAL HEATER POWER	OFF	OFF	OFF
MODULE POWER	CONNECT	CONNECT	CONNECT
COLD CAL POSITION MSB	ZERO	ZERO	ZERO
COLD CAL POSITION LSB	ZERO	ZERO	ZERO

ANALOG DATA

DESCRIPTION	VALUE	DEG C	VALUE	DEG C	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	216	20.7	217	22.1	217	22.1
A1-2 SCANNER MOTOR TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-1 RF SHELF TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-2 RF SHELF TEMPERATURE	221	27.5	221	27.5	221	27.5
A1-1 WARM LOAD TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-2 WARM LOAD TEMPERATURE	219	24.8	219	24.8	219	24.8

DESCRIPTION	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS
A1-1 ANTENNA DRIVE MOTOR CURRENT (AVRG)	102	47.53	103	48.00	103	48.00
A1-2 ANTENNA DRIVE MOTOR CURRENT (AVRG)	96	44.74	96	44.74	96	44.74
SIGNAL PROCESSING +15 VDC	172	14.84	172	14.84	172	14.84
ANTENNA DRIVE +15 VDC	174	15.02	174	15.02	174	15.02
SIGNAL PROCESSING -15 VDC	150	-15.05	150	-15.05	150	-15.05
ANTENNA DRIVE -15 VDC	151	-15.00	151	-15.00	151	-15.00
RECEIVER AMPLIFIER +8 VDC	158	7.90	158	7.90	158	7.90
SIGNAL PROCESSOR +5 VDC	147	4.90	147	4.90	147	4.90
ANTENNA DRIVE +5 VDC	149	4.97	149	4.97	148	4.93
RECEIVER MIXER/IF +10 VDC	171	9.88	171	9.88	171	9.88
PHASE LOCK LOOP (CHANNEL 9/14) +15 VDC	170	14.67	171	14.76	171	14.76
PHASE LOCK LOOP (CHANNEL 9/14) -15 VDC	146	-15.25	146	-15.25	146	-15.25
L.O. VOLTAGE (CHANNEL 8) VDC	173	9.90	173	9.90	173	9.90
L.O. VOLTAGE (CHANNEL 7) VDC	172	9.84	173	9.90	173	9.90
L.O. VOLTAGE (CHANNEL 6) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 3) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 4) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 5) VDC	172	9.84	173	9.90	173	9.90
PLLO # 2 LOCK DETECT	5	0.10	5	0.10	5	0.10
PLLO # 1 LOCK DETECT	221	4.42	221	4.42	221	4.42
L.O. VOLTAGE (CHANNEL 15) VDC	172	14.84	172	14.84	172	14.84

PRT TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
VARIABLE TARGET	615	42.00	601	14.00
	616	43.00	602	15.00
	617	44.00	603	16.00
	618	45.00	604	17.00
	619	46.00	605	18.00
	620	47.00	606	19.00
	621	48.00	607	20.00
FIXED TARGET	622	49.00	608	21.00
	623	50.00	609	22.00
	624	51.00	610	23.00
	625	52.00	611	24.00
	626	53.00	612	25.00
	627	67.00	613	69.00
	628	68.00	614	70.00
BASEPLATE	629	71.00	630	72.00
	631	26.00	632	27.00

THERMOCOUPLE TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
FIXED TARGET SHROUD	558	5.00	537	34.00
	559	6.00	538	35.00
VARIABLE TARGET SHROUD	550	7.00	524	36.00
	551	8.00	525	37.00
FIXED TARGET N2	506	57.00	502	30.00
	507	58.00	503	31.00
VARIABLE TARGET N2	516	59.00	511	32.00
	517	60.00	512	33.00
HEATER N2	514	1.00	509	38.00
	515	2.00	510	39.00
FIXED TARGET FLOW METER	508	63.00	504	61.00
VARIABLE TARGET FLOW METER	518	64.00	513	62.00
BASEPLATE HEATER N2	519	3.00	520	4.00
BASEPLATE N2	521	9.00	522	10.00
BASEPLATE FLOW METER	523	65.00		
ADJUNCT RADIATORS	575	73.00	577	74.00
	579	75.00	581	76.00

```
AMSU  A1-17 A1.EXE     FULL SCAN MODE     P1 25-NOV-93 15:24:12  SCAN NUMBER   76
[ 5 ] DIGITAL A DATA   ELEMENT 0000

[ 6 ] DIGITAL B DATA   ELEMENT   00

[ 7 ] ANALOG DATA      ELEMENT   00

                                        COMMANDS
[ 9 ]  MODULE POWER =          CONNECT      ANTENNA IN COLD CAL POSIT = NO   [ 15

[ 10 ] SURVIVAL HEATER POWER =      OFF     ANTENNA IN NADIR POSITION = NO   [ 16

[ 11 ] MODULE TOTALLY OFF =         ON      ANTENNA IN FULL SCAN MODE = YES  [ 17

[ 12 ] SCANNER A1 - 1 POWER =       ON      PLL POWER =              PLLO # 1 [ 18

[ 13 ] SCANNER A1 - 2 POWER =       ON      COLD CAL POSITION MSB =     ZERO [ 19

[ 14 ] ANTENNA IN WARM CAL POSIT = NO       COLD CAL POSITION LSB =     ZERO [ 20

          POWER [ 4 ]  ON
                       SCREEN ONLY [ 2 ]  PRINT  [ 3 ] FULL        [ 1 ] RETURN
SELECT TOUCHSCREEN BUTTON 3
```

Post TRANSIENT
ANAL. TELEMETRY
LOW FREQ

PRE TRANSIENT
ANAL. TEL.
HIGH FREQ
1.43 Hz

AMSU A1_17 A1.EXE DIGITAL A DATA 25-NOV-93 15:24:15 PAGE 1
FULL SCAN MODE

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
1	SYNC SEQUENCE BYTE 1	11111111	572	SCENE DATA BP 17 CH 8	16417
2	SYNC SEQUENCE BYTE 2	11111111	574	CH 9	17280
3	SYNC SEQUENCE BYTE 3	11111111	576	CH 10	16494
4	UNIT ID AND SERIAL NO	00010001	578	CH 11	16282
5	DIGITAL B DATA BYTE 1	00000010	580	CH 12	16642
6	DIGITAL B DATA BYTE 2	00001110	582	CH 13	16356
7	DIGITAL B DATA BYTE 3	00000000	584	CH 14	16817
8	DIGITAL B DATA BYTE 4	00000000	586	CH 15	16636
10	REFLECTOR 1 POSITION 1	27	588	REFLECTOR 1 POSITION 18	2609
12	REFLECTOR 2 POSITION 1	16212	590	REFLECTOR 2 POSITION 18	2409
14	REFL 1 POS 1 2ND LOOK	27	592	REFL 1 POS 18 2ND LOOK	2604
16	REFL 2 POS 1 2ND LOOK	16212	594	REFL 2 POS 18 2ND LOOK	2405
18	SCENE DATA BP 1 CH 3	15808	596	SCENE DATA BP 18 CH 3	15787
20	CH 4	16648	598	CH 4	16628
22	CH 5	16919	600	CH 5	16910
24	CH 6	17169	602	CH 6	17164
26	CH 7	16224	604	CH 7	16213
28	CH 8	16442	606	CH 8	16439
30	CH 9	17280	608	CH 9	17272
32	CH 10	16494	610	CH 10	16489
34	CH 11	16289	612	CH 11	16276
36	CH 12	16651	614	CH 12	16646
38	CH 13	16366	616	CH 13	16351
40	CH 14	16814	618	CH 14	16819
42	CH 15	16636	620	CH 15	166
44	REFLECTOR 1 POSITION 2	179	622	REFLECTOR 1 POSITION 19	27
46	REFLECTOR 2 POSITION 2	16365	624	REFLECTOR 2 POSITION 19	2559
48	REFL 1 POS 2 2ND LOOK	177	626	REFL 1 POS 19 2ND LOOK	2756
50	REFL 2 POS 2 2ND LOOK	16361	628	REFL 2 POS 19 2ND LOOK	2556
52	SCENE DATA BP 2 CH 3	15786	630	SCENE DATA BP 19 CH 3	15782
54	CH 4	16626	632	CH 4	16622
56	CH 5	16901	634	CH 5	16897
58	CH 6	17171	636	CH 6	17187
60	CH 7	16221	638	CH 7	16233
62	CH 8	16414	640	CH 8	16440
64	CH 9	17277	642	CH 9	17300
66	CH 10	16489	644	CH 10	16508
68	CH 11	16285	646	CH 11	16302
70	CH 12	16651	648	CH 12	16670
72	CH 13	16348	650	CH 13	16373
74	CH 14	16802	652	CH 14	16844
76	CH 15	16633	654	CH 15	16649
78	REFLECTOR 1 POSITION 3	335	656	REFLECTOR 1 POSITION 20	2910
80	REFLECTOR 2 POSITION 3	130	658	REFLECTOR 2 POSITION 20	2713
82	REFL 1 POS 3 2ND LOOK	329	660	REFL 1 POS 20 2ND LOOK	2908
84	REFL 2 POS 3 2ND LOOK	130	662	REFL 2 POS 20 2ND LOOK	2708
86	SCENE DATA BP 3 CH 3	15784	664	SCENE DATA BP 20 CH 3	15778
88	CH 4	16619	666	CH 4	16621
90	CH 5	16897	668	CH 5	16892
92	CH 6	17176	670	CH 6	17209

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	16223	672	CH 7	16254
96	CH 8	16408	674	CH 8	16430
98	CH 9	17285	676	CH 9	17315
100	CH 10	16497	678	CH 10	16528
102	CH 11	16288	680	CH 11	16322
104	CH 12	16650	682	CH 12	16673
106	CH 13	16355	684	CH 13	16388
108	CH 14	16807	686	CH 14	16835
110	CH 15	16634	688	CH 15	16651
112	REFLECTOR 1 POSITION 4	483	690	REFLECTOR 1 POSITION 21	3064
114	REFLECTOR 2 POSITION 4	285	692	REFLECTOR 2 POSITION 21	2864
116	REFL 1 POS 4 2ND LOOK	480	694	REFL 1 POS 21 2ND LOOK	3059
118	REFL 2 POS 4 2ND LOOK	281	696	REFL 2 POS 21 2ND LOOK	2860
120	SCENE DATA BP 4 CH 3	15783	698	SCENE DATA BP 21 CH 3	15782
122	CH 4	16619	700	CH 4	16619
124	CH 5	16898	702	CH 5	16896
126	CH 6	17170	704	CH 6	17181
128	CH 7	16217	706	CH 7	16234
130	CH 8	16426	708	CH 8	16421
132	CH 9	17277	710	CH 9	17289
134	CH 10	16484	712	CH 10	16500
136	CH 11	16284	714	CH 11	16301
138	CH 12	16643	716	CH 12	16659
140	CH 13	16350	718	CH 13	16374
142	CH 14	16800	720	CH 14	16824
144	CH 15	16632	722	CH 15	16640
146	REFLECTOR 1 POSITION 5	636	724	REFLECTOR 1 POSITION 22	3210
148	REFLECTOR 2 POSITION 5	436	726	REFLECTOR 2 POSITION 22	3015
150	REFL 1 POS 5 2ND LOOK	633	728	REFL 1 POS 22 2ND LOOK	3210
152	REFL 2 POS 5 2ND LOOK	432	730	REFL 2 POS 22 2ND LOOK	3011
154	SCENE DATA BP 5 CH 3	15781	732	SCENE DATA BP 22 CH 3	15783
156	CH 4	16618	734	CH 4	16622
158	CH 5	16891	736	CH 5	16898
160	CH 6	17163	738	CH 6	17175
162	CH 7	16212	740	CH 7	16224
164	CH 8	16407	742	CH 8	16410
166	CH 9	17273	744	CH 9	17282
168	CH 10	16480	746	CH 10	16498
170	CH 11	16277	748	CH 11	16287
172	CH 12	16641	750	CH 12	16651
174	CH 13	16347	752	CH 13	16373
176	CH 14	16781	754	CH 14	16806
178	CH 15	16628	756	CH 15	16636
180	REFLECTOR 1 POSITION 6	789	758	REFLECTOR 1 POSITION 23	3365
182	REFLECTOR 2 POSITION 6	589	760	REFLECTOR 2 POSITION 23	3167
184	REFL 1 POS 6 2ND LOOK	785	762	REFL 1 POS 23 2ND LOOK	3362
186	REFL 2 POS 6 2ND LOOK	585	764	REFL 2 POS 23 2ND LOOK	3163
188	SCENE DATA BP 6 CH 3	15780	766	SCENE DATA BP 23 CH 3	15783
190	CH 4	16620	768	CH 4	16617
192	CH 5	16894	770	CH 5	16895

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
194	CH 6	17161	772	CH 6	17178
196	CH 7	16213	774	CH 7	16225
198	CH 8	16420	776	CH 8	16416
200	CH 9	17266	778	CH 9	17283
202	CH 10	16481	780	CH 10	16501
204	CH 11	16275	782	CH 11	16295
206	CH 12	16637	784	CH 12	16658
208	CH 13	16346	786	CH 13	16374
210	CH 14	16807	788	CH 14	16810
212	CH 15	16628	790	CH 15	16634
214	REFLECTOR 1 POSITION 7	940	792	REFLECTOR 1 POSITION 24	3520
216	REFLECTOR 2 POSITION 7	739	794	REFLECTOR 2 POSITION 24	3321
218	REFL 1 POS 7 2ND LOOK	936	796	REFL 1 POS 24 2ND LOOK	3514
220	REFL 2 POS 7 2ND LOOK	736	798	REFL 2 POS 24 2ND LOOK	3315
222	SCENE DATA BP 7 CH 3	15786	800	SCENE DATA BP 24 CH 3	15780
224	CH 4	16620	802	CH 4	16619
226	CH 5	16896	804	CH 5	16896
228	CH 6	17160	806	CH 6	17174
230	CH 7	16211	808	CH 7	16223
232	CH 8	16408	810	CH 8	16445
234	CH 9	17266	812	CH 9	17294
236	CH 10	16474	814	CH 10	16507
238	CH 11	16273	816	CH 11	16300
240	CH 12	16635	818	CH 12	16650
242	CH 13	16344	820	CH 13	163
244	CH 14	16791	822	CH 14	168
246	CH 15	16629	824	CH 15	16637
248	REFLECTOR 1 POSITION 8	1091	826	REFLECTOR 1 POSITION 25	3668
250	REFLECTOR 2 POSITION 8	893	828	REFLECTOR 2 POSITION 25	3468
252	REFL 1 POS 8 2ND LOOK	1087	830	REFL 1 POS 25 2ND LOOK	3665
254	REFL 2 POS 8 2ND LOOK	888	832	REFL 2 POS 25 2ND LOOK	3466
256	SCENE DATA BP 8 CH 3	15782	834	SCENE DATA BP 25 CH 3	15778
258	CH 4	16620	836	CH 4	16619
260	CH 5	16892	838	CH 5	16897
262	CH 6	17158	840	CH 6	17175
264	CH 7	16208	842	CH 7	16223
266	CH 8	16418	844	CH 8	16406
268	CH 9	17269	846	CH 9	17288
270	CH 10	16481	848	CH 10	16503
272	CH 11	16277	850	CH 11	16292
274	CH 12	16632	852	CH 12	16660
276	CH 13	16347	854	CH 13	16373
278	CH 14	16809	856	CH 14	16823
280	CH 15	16627	858	CH 15	16635
282	REFLECTOR 1 POSITION 9	1245	860	REFLECTOR 1 POSITION 26	3821
284	REFLECTOR 2 POSITION 9	1044	862	REFLECTOR 2 POSITION 26	3623
286	REFL 1 POS 9 2ND LOOK	1240	864	REFL 1 POS 26 2ND LOOK	3817
288	REFL 2 POS 9 2ND LOOK	1040	866	REFL 2 POS 26 2ND LOOK	3618
290	SCENE DATA BP 9 CH 3	15782	868	SCENE DATA BP 26 CH 3	15785
292	CH 4	16630	870	CH 4	16620

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	16897	872	CH 5	16896
296	CH 6	17167	874	CH 6	17180
298	CH 7	16217	876	CH 7	16227
300	CH 8	16441	878	CH 8	16409
302	CH 9	17275	880	CH 9	17285
304	CH 10	16483	882	CH 10	16500
306	CH 11	16285	884	CH 11	16298
308	CH 12	16639	886	CH 12	16654
310	CH 13	16349	888	CH 13	16369
312	CH 14	16810	890	CH 14	16815
314	CH 15	16630	892	CH 15	16640
316	REFLECTOR 1 POSITION 10	1395	894	REFLECTOR 1 POSITION 27	3975
318	REFLECTOR 2 POSITION 10	1194	896	REFLECTOR 2 POSITION 27	3775
320	REFL 1 POS 10 2ND LOOK	1390	898	REFL 1 POS 27 2ND LOOK	3968
322	REFL 2 POS 10 2ND LOOK	1192	900	REFL 2 POS 27 2ND LOOK	3770
324	SCENE DATA BP 10 CH 3	15791	902	SCENE DATA BP 27 CH 3	15783
326	CH 4	16622	904	CH 4	16623
328	CH 5	16900	906	CH 5	16904
330	CH 6	17169	908	CH 6	17198
332	CH 7	16217	910	CH 7	16244
334	CH 8	16422	912	CH 8	16410
336	CH 9	17270	914	CH 9	17302
338	CH 10	16486	916	CH 10	16517
340	CH 11	16282	918	CH 11	16320
342	CH 12	16641	920	CH 12	16672
344	CH 13	16361	922	CH 13	16376
346	CH 14	16829	924	CH 14	16841
348	CH 15	16631	926	CH 15	16646
350	REFLECTOR 1 POSITION 11	1545	928	REFLECTOR 1 POSITION 28	4125
352	REFLECTOR 2 POSITION 11	1347	930	REFLECTOR 2 POSITION 28	3925
354	REFL 1 POS 11 2ND LOOK	1542	932	REFL 1 POS 28 2ND LOOK	4120
356	REFL 2 POS 11 2ND LOOK	1343	934	REFL 2 POS 28 2ND LOOK	3921
358	SCENE DATA BP 11 CH 3	15784	936	SCENE DATA BP 28 CH 3	15788
360	CH 4	16628	938	CH 4	16636
362	CH 5	16902	940	CH 5	16910
364	CH 6	17164	942	CH 6	17168
366	CH 7	16219	944	CH 7	16218
368	CH 8	16450	946	CH 8	16434
370	CH 9	17272	948	CH 9	17272
372	CH 10	16487	950	CH 10	16484
374	CH 11	16281	952	CH 11	16281
376	CH 12	16625	954	CH 12	16628
378	CH 13	16344	956	CH 13	16349
380	CH 14	16800	958	CH 14	16791
382	CH 15	16630	960	CH 15	16626
384	REFLECTOR 1 POSITION 12	1698	962	REFLECTOR 1 POSITION 29	4275
386	REFLECTOR 2 POSITION 12	1500	964	REFLECTOR 2 POSITION 29	4076
388	REFL 1 POS 12 2ND LOOK	1694	966	REFL 1 POS 29 2ND LOOK	4272
390	REFL 2 POS 12 2ND LOOK	1495	968	REFL 2 POS 29 2ND LOOK	4073
392	SCENE DATA BP 12 CH 3	15785	970	SCENE DATA BP 29 CH 3	15814

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
394	CH 4	16621	972	CH 4	16665
396	CH 5	16897	974	CH 5	16953
398	CH 6	17159	976	CH 6	17159
400	CH 7	16211	978	CH 7	16207
402	CH 8	16417	980	CH 8	16456
404	CH 9	17270	982	CH 9	17265
406	CH 10	16480	984	CH 10	16473
408	CH 11	16276	986	CH 11	16270
410	CH 12	16634	988	CH 12	16628
412	CH 13	16352	990	CH 13	16343
414	CH 14	16808	992	CH 14	16809
416	CH 15	16627	994	CH 15	16624
418	REFLECTOR 1 POSITION 13	1848	996	REFLECTOR 1 POSITION 30	4430
420	REFLECTOR 2 POSITION 13	1649	998	REFLECTOR 2 POSITION 30	4226
422	REFL 1 POS 13 2ND LOOK	1845	1000	REFL 1 POS 30 2ND LOOK	4424
424	REFL 2 POS 13 2ND LOOK	1646	1002	REFL 2 POS 30 2ND LOOK	4226
426	SCENE DATA BP 13 CH 3	15792	1004	SCENE DATA BP 30 CH 3	15790
428	CH 4	16639	1006	CH 4	16632
430	CH 5	16901	1008	CH 5	16908
432	CH 6	17159	1010	CH 6	17154
434	CH 7	16207	1012	CH 7	16207
436	CH 8	16414	1014	CH 8	16431
438	CH 9	17267	1016	CH 9	17261
440	CH 10	16477	1018	CH 10	16474
442	CH 11	16275	1020	CH 11	162
444	CH 12	16624	1022	CH 12	166
446	CH 13	16341	1024	CH 13	16329
448	CH 14	16807	1026	CH 14	16786
450	CH 15	16626	1028	CH 15	16623
452	REFLECTOR 1 POSITION 14	2002	1030	REFLECTOR 1 COLD CAL POS	6021
454	REFLECTOR 2 POSITION 14	1801	1032	REFLECTOR 2 COLD CAL POS	5820
456	REFL 1 POS 14 2ND LOOK	1998	1034	REFL 1 COLD CAL 2ND LOOK	6021
458	REFL 2 POS 14 2ND LOOK	1799	1036	REFL 2 COLD CAL 2ND LOOK	5820
460	SCENE DATA BP 14 CH 3	15790	1038	COLD CAL DATA 1 CH 3	15790
462	CH 4	16634	1040	CH 4	16632
464	CH 5	16906	1042	CH 5	16898
466	CH 6	17155	1044	CH 6	17144
468	CH 7	16211	1046	CH 7	16194
470	CH 8	16423	1048	CH 8	16414
472	CH 9	17268	1050	CH 9	17259
474	CH 10	16473	1052	CH 10	16476
476	CH 11	16273	1054	CH 11	16269
478	CH 12	16639	1056	CH 12	16621
480	CH 13	16342	1058	CH 13	16338
482	CH 14	16793	1060	CH 14	16786
484	CH 15	16627	1062	CH 15	16620
486	REFLECTOR 1 POSITION 15	2153	1064	COLD CAL DATA 2 CH 3	15795
488	REFLECTOR 2 POSITION 15	1955	1066	CH 4	16628
490	REFL 1 POS 15 2ND LOOK	2149	1068	CH 5	16899
492	REFL 2 POS 15 2ND LOOK	1950	1070	CH 6	17153

LEMENT	DESCRIPTION		VALUE	ELEMENT	DESCRIPTION		VALUE
494	SCENE DATA BP 15	CH 3	15789	1072		CH 7	16193
496		CH 4	16632	1074		CH 8	16413
498		CH 5	16909	1076		CH 9	17259
500		CH 6	17160	1078		CH 10	16469
502		CH 7	16214	1080		CH 11	16268
504		CH 8	16424	1082		CH 12	16632
506		CH 9	17271	1084		CH 13	16327
508		CH 10	16486	1086		CH 14	16795
510		CH 11	16278	1088		CH 15	16619
512		CH 12	16637	1182	REFLECTOR 1 WARM CAL POS		10420
514		CH 13	16358	1184	REFLECTOR 2 WARM CAL POS		10220
516		CH 14	16808	1186	REFL 1 WARM CAL 2ND LOOK		10420
518		CH 15	16630	1188	REFL 2 WARM CAL 2ND LOOK		10220
520	REFLECTOR 1 POSITION 16		2303	1190	WARM CAL DATA 1	CH 3	15788
522	REFLECTOR 2 POSITION 16		2105	1192		CH 4	16623
524	REFL 1 POS 16 2ND LOOK		2304	1194		CH 5	16900
526	REFL 2 POS 16 2ND LOOK		2101	1196		CH 6	17178
528	SCENE DATA BP 16	CH 3	15818	1198		CH 7	16233
530		CH 4	16659	1200		CH 8	16412
532		CH 5	16945	1202		CH 9	17295
534		CH 6	17174	1204		CH 10	16510
536		CH 7	16226	1206		CH 11	16305
538		CH 8	16443	1208		CH 12	16663
540		CH 9	17282	1210		CH 13	16365
542		CH 10	16497	1212		CH 14	16810
544		CH 11	16290	1214		CH 15	16643
546		CH 12	16641	1216	WARM CAL DATA 2	CH 3	15782
548		CH 13	16358	1218		CH 4	16619
550		CH 14	16809	1220		CH 5	16900
552		CH 15	16634	1222		CH 6	17185
554	REFLECTOR 1 POSITION 17		2455	1224		CH 7	16233
556	REFLECTOR 2 POSITION 17		2256	1226		CH 8	16413
558	REFL 1 POS 17 2ND LOOK		2452	1228		CH 9	17293
560	REFL 2 POS 17 2ND LOOK		2253	1230		CH 10	16507
562	SCENE DATA BP 17	CH 3	15788	1232		CH 11	16300
564		CH 4	16632	1234		CH 12	16655
566		CH 5	16905	1236		CH 13	16374
568		CH 6	17173	1238		CH 14	16830
570		CH 7	16221	1240		CH 15	16643

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	17889	23.17
1092	SCAN MOTOR A1-2	18338	23.62
1094	FEEDHORN A1-1	19455	25.42
1096	FEEDHORN A1-2	20410	25.83
1098	RF MUX A1-1	20045	27.10
1100	RF MUX A1-2	20592	28.41
1102	LOCAL OSCILLATOR CHANNEL 3	21375	29.70
1104	LOCAL OSCILLATOR CHANNEL 4	21501	29.87
1106	LOCAL OSCILLATOR CHANNEL 5	21170	28.97
1108	LOCAL OSCILLATOR CHANNEL 6	19875	26.88
1110	LOCAL OSCILLATOR CHANNEL 7	20402	27.79
1112	LOCAL OSCILLATOR CHANNEL 8	21025	29.39
1114	LOCAL OSCILLATOR CHANNEL 15	20578	29.14
1116	PLL LO #2 CHANNELS 9 THROUGH 14	19798	27.35
1118	PLL LO #1 CHANNELS 9 THROUGH 14	21311	30.03
1120	SPARE (NOT USED)	32767	52.86
1122	MIXER/IF AMPLIFIER CHANNEL 3	21143	28.95
1124	MIXER/IF AMPLIFIER CHANNEL 4	20749	28.94
1126	MIXER/IF AMPLIFIER CHANNEL 5	20691	28.55
1128	MIXER/IF AMPLIFIER CHANNEL 6	20317	27.58
1130	MIXER/IF AMPLIFIER CHANNEL 7	20510	28.03
1132	MIXER/IF AMPLIFIER CHANNEL 8	20670	28.99
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	19901	27.51
1136	MIXER/IF AMPLIFIER CHANNEL 15	20707	28.90
1138	IF AMPLIFIER CHANNEL 11 THRU 14	20608	28.55
1140	IF AMPLIFIER CHANNEL 9	21039	28.55
1142	IF AMPLIFIER CHANNEL 10	20631	28.72
1144	IF AMPLIFIER CHANNEL 11	20284	27.51
1146	DC/DC CONVERTER	20806	28.36
1148	IF AMPLIFIER CHANNEL 13	20400	27.46
1150	IF AMPLIFIER CHANNEL 14	20070	27.45
1152	IF AMPLIFIER CHANNEL 12	20060	27.42
1154	RF SHELF A1-1	20444	27.86
1156	RF SHELF A1-2	20548	28.24
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	19713	26.16
1160	A1-1 WARM LOAD 1	23089	23.62
1162	A1-1 WARM LOAD 2	23286	23.65
1164	A1-1 WARM LOAD 3	23361	23.73
1166	A1-1 WARM LOAD 4	23042	23.67
1168	A1-1 WARM LOAD CENTER	23224	23.71
1170	A1-2 WARM LOAD 1	23845	24.58
1172	A1-2 WARM LOAD 2	23680	24.56
1174	A1-2 WARM LOAD 3	23715	24.62
1176	A1-2 WARM LOAD 4	23634	24.60
1178	A1-2 WARM LOAD CENTER	23504	24.48
1180	TEMP SENSOR REFERENCE VOLTAGE	24882	

FULL SCAN MODE

DESCRIPTION	STATUS	STATUS	STATUS
SCANNER A1-1 POWER	ON	ON	ON
SCANNER A1-2 POWER	ON	ON	ON
PLL POWER	PLLO # 1	PLLO # 1	PLLO # 1
ANTENNA IN WARM CAL POSITION MODE	NO	NO	NO
ANTENNA IN COLD CAL POSITION MODE	NO	NO	NO
ANTENNA IN NADIR POSITION MODE	NO	NO	NO
ANTENNA IN FULL SCAN MODE	YES	YES	YES
SURVIVAL HEATER POWER	OFF	OFF	OFF
MODULE POWER	CONNECT	CONNECT	CONNECT
COLD CAL POSITION MSB	ZERO	ZERO	ZERO
COLD CAL POSITION LSB	ZERO	ZERO	ZERO

ANALOG DATA

DESCRIPTION	VALUE	DEG C	VALUE	DEG C	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	217	22.1	217	22.1	217	22.1
A1-2 SCANNER MOTOR TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-1 RF SHELF TEMPERATURE	219	24.8	219	24.8	219	24.8
A1-2 RF SHELF TEMPERATURE	221	27.5	221	27.5	221	27.5
A1-1 WARM LOAD TEMPERATURE	218	23.4	219	24.8	219	24.8
A1-2 WARM LOAD TEMPERATURE	219	24.8	219	24.8	219	24.8

DESCRIPTION	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS
A1-1 ANTENNA DRIVE MOTOR CURRENT (AVRG)	105	48.93	105	48.93	106	49.40
A1-2 ANTENNA DRIVE MOTOR CURRENT (AVRG)	98	45.67	98	45.67	99	46.13
SIGNAL PROCESSING +15 VDC	172	14.84	172	14.84	172	14.84
ANTENNA DRIVE +15 VDC	175	15.10	175	15.10	176	15.19
SIGNAL PROCESSING -15 VDC	151	-15.00	151	-15.00	151	-15.00
ANTENNA DRIVE -15 VDC	152	-14.95	152	-14.95	152	-14.95
RECEIVER AMPLIFIER +8 VDC	159	7.95	159	7.95	159	7.95
SIGNAL PROCESSOR +5 VDC	147	4.90	147	4.90	148	4.93
ANTENNA DRIVE +5 VDC	149	4.97	149	4.97	150	5.00
RECEIVER MIXER/IF +10 VDC	171	9.88	171	9.88	171	9.88
PHASE LOCK LOOP (CHANNEL 9/14) +15 VDC	171	14.76	171	14.76	171	14.76
PHASE LOCK LOOP (CHANNEL 9/14) -15 VDC	146	-15.25	146	-15.25	146	-15.25
L.O. VOLTAGE (CHANNEL 8) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 7) VDC	173	9.90	173	9.90	173	9.90
L.O. VOLTAGE (CHANNEL 6) VDC	175	10.01	175	10.01	175	10.01
L.O. VOLTAGE (CHANNEL 3) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 4) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 5) VDC	173	9.90	173	9.90	173	9.90
PLLO # 2 LOCK DETECT	5	0.10	5	0.10	5	0.10
PLLO # 1 LOCK DETECT	221	4.42	221	4.42	222	4.44
L.O. VOLTAGE (CHANNEL 15) VDC	173	14.93	173	14.93	173	14.93

PRT TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
VARIABLE TARGET	615	42.00	601	14.00
	616	43.00	602	15.00
	617	44.00	603	16.00
	618	45.00	604	17.00
	619	46.00	605	18.00
	620	47.00	606	19.00
	621	48.00	607	20.00
FIXED TARGET	622	49.00	608	21.00
	623	50.00	609	22.00
	624	51.00	610	23.00
	625	52.00	611	24.00
	626	53.00	612	25.00
	627	67.00	613	69.00
	628	68.00	614	70.00
BASEPLATE	629	71.00	630	72.00
	631	26.00	632	27.00

THERMOCOUPLE TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
FIXED TARGET SHROUD	558	5.00	537	34.00
	559	6.00	538	35.00
VARIABLE TARGET SHROUD	550	7.00	524	36.00
	551	8.00	525	37.00
FIXED TARGET N2	506	57.00	502	30.00
	507	58.00	503	31.00
VARIABLE TARGET N2	516	59.00	511	32.00
	517	60.00	512	33.00
HEATER N2	514	1.00	509	38.00
	515	2.00	510	39.00
FIXED TARGET FLOW METER	508	63.00	504	61.00
VARIABLE TARGET FLOW METER	518	64.00	513	62.00
BASEPLATE HEATER N2	519	3.00	520	4.00
BASEPLATE N2	521	9.00	522	10.00
BASEPLATE FLOW METER	523	65.00		
ADJUNCT RADIATORS	575	73.00	577	74.00
	579	75.00	581	76.00

AMSU A1-17 A1.EXE FULL SCAN MODE P1 25-NOV-93 15:26:14 SCAN NUMBER 77

[5] DIGITAL A DATA ELEMENT 0000

[6] DIGITAL B DATA ELEMENT 00

[7] ANALOG DATA ELEMENT 00

COMMANDS

[9]	MODULE POWER =	CONNECT	ANTENNA IN COLD CAL POSIT = NO	[15
[10]	SURVIVAL HEATER POWER =	OFF	ANTENNA IN NADIR POSITION = NO	[16
[11]	MODULE TOTALLY OFF =	ON	ANTENNA IN FULL SCAN MODE = YES	[17
[12]	SCANNER A1 - 1 POWER =	ON	PLL POWER = PLLO # 1	[18
[13]	SCANNER A1 - 2 POWER =	ON	COLD CAL POSITION MSB = ZERO	[19
[14]	ANTENNA IN WARM CAL POSIT = NO		COLD CAL POSITION LSB = ZERO	[20

POWER [4] ON

SCREEN ONLY [2] PRINT [3] FULL [1] RETURN

SELECT TOUCHSCREEN BUTTON 3

POST TRANSIENT
ANAL TELEM.
HIGH FREQ
1.43 Hz

PRE TRANSIENT
ANAL. TELEM.
HIGH FREQ
2.86 Hz

AMSU A1_17 A1.EXE DIGITAL A DATA 25-NOV-93 15:26:17 PAGE 1
FULL SCAN MODE

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
1	SYNC SEQUENCE BYTE 1	11111111	572	SCENE DATA BP 17 CH 8	16410
2	SYNC SEQUENCE BYTE 2	11111111	574	CH 9	17260
3	SYNC SEQUENCE BYTE 3	11111111	576	CH 10	16470
4	UNIT ID AND SERIAL NO	00010001	578	CH 11	16293
5	DIGITAL B DATA BYTE 1	00000010	580	CH 12	16639
6	DIGITAL B DATA BYTE 2	00001110	582	CH 13	16341
7	DIGITAL B DATA BYTE 3	00000000	584	CH 14	16813
8	DIGITAL B DATA BYTE 4	00000000	586	CH 15	16606
10	REFLECTOR 1 POSITION 1	27	588	REFLECTOR 1 POSITION 18	2609
12	REFLECTOR 2 POSITION 1	16212	590	REFLECTOR 2 POSITION 18	2410
14	REFL 1 POS 1 2ND LOOK	27	592	REFL 1 POS 18 2ND LOOK	2603
16	REFL 2 POS 1 2ND LOOK	16212	594	REFL 2 POS 18 2ND LOOK	2405
18	SCENE DATA BP 1 CH 3	15825	596	SCENE DATA BP 18 CH 3	15809
20	CH 4	16637	598	CH 4	16614
22	CH 5	16902	600	CH 5	16893
24	CH 6	17149	602	CH 6	17150
26	CH 7	16210	604	CH 7	16196
28	CH 8	16438	606	CH 8	16435
30	CH 9	17262	608	CH 9	17253
32	CH 10	16476	610	CH 10	16463
34	CH 11	16298	612	CH 11	16286
36	CH 12	16649	614	CH 12	16648
38	CH 13	16364	616	CH 13	16351
40	CH 14	16826	618	CH 14	16812
42	CH 15	16609	620	CH 15	166
44	REFLECTOR 1 POSITION 2	179	622	REFLECTOR 1 POSITION 19	275
46	REFLECTOR 2 POSITION 2	16365	624	REFLECTOR 2 POSITION 19	2561
48	REFL 1 POS 2 2ND LOOK	177	626	REFL 1 POS 19 2ND LOOK	2755
50	REFL 2 POS 2 2ND LOOK	16361	628	REFL 2 POS 19 2ND LOOK	2556
52	SCENE DATA BP 2 CH 3	15805	630	SCENE DATA BP 19 CH 3	15802
54	CH 4	16614	632	CH 4	16613
56	CH 5	16884	634	CH 5	16878
58	CH 6	17154	636	CH 6	17150
60	CH 7	16202	638	CH 7	16201
62	CH 8	16407	640	CH 8	16437
64	CH 9	17259	642	CH 9	17259
66	CH 10	16470	644	CH 10	16469
68	CH 11	16290	646	CH 11	16293
70	CH 12	16640	648	CH 12	16634
72	CH 13	16354	650	CH 13	16352
74	CH 14	16839	652	CH 14	16815
76	CH 15	16604	654	CH 15	16607
78	REFLECTOR 1 POSITION 3	334	656	REFLECTOR 1 POSITION 20	2911
80	REFLECTOR 2 POSITION 3	130	658	REFLECTOR 2 POSITION 20	2711
82	REFL 1 POS 3 2ND LOOK	329	660	REFL 1 POS 20 2ND LOOK	2907
84	REFL 2 POS 3 2ND LOOK	128	662	REFL 2 POS 20 2ND LOOK	2708
86	SCENE DATA BP 3 CH 3	15803	664	SCENE DATA BP 20 CH 3	15804
88	CH 4	16605	666	CH 4	16612
90	CH 5	16878	668	CH 5	16877
92	CH 6	17158	670	CH 6	17148

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	16205	672	CH 7	16196
96	CH 8	16398	674	CH 8	16419
98	CH 9	17264	676	CH 9	17252
100	CH 10	16477	678	CH 10	16456
102	CH 11	16301	680	CH 11	16286
104	CH 12	16651	682	CH 12	16637
106	CH 13	16357	684	CH 13	16351
108	CH 14	16864	686	CH 14	16836
110	CH 15	16604	688	CH 15	16601
112	REFLECTOR 1 POSITION 4	483	690	REFLECTOR 1 POSITION 21	3063
114	REFLECTOR 2 POSITION 4	284	692	REFLECTOR 2 POSITION 21	2864
116	REFL 1 POS 4 2ND LOOK	480	694	REFL 1 POS 21 2ND LOOK	3059
118	REFL 2 POS 4 2ND LOOK	281	696	REFL 2 POS 21 2ND LOOK	2860
120	SCENE DATA BP 4 CH 3	15805	698	SCENE DATA BP 21 CH 3	15804
122	CH 4	16609	700	CH 4	16610
124	CH 5	16879	702	CH 5	16881
126	CH 6	17154	704	CH 6	17149
128	CH 7	16201	706	CH 7	16197
130	CH 8	16420	708	CH 8	16414
132	CH 9	17258	710	CH 9	17255
134	CH 10	16464	712	CH 10	16466
136	CH 11	16292	714	CH 11	16284
138	CH 12	16654	716	CH 12	16637
140	CH 13	16344	718	CH 13	16345
142	CH 14	16834	720	CH 14	16827
144	CH 15	16602	722	CH 15	16603
146	REFLECTOR 1 POSITION 5	636	724	REFLECTOR 1 POSITION 22	3211
148	REFLECTOR 2 POSITION 5	436	726	REFLECTOR 2 POSITION 22	3015
150	REFL 1 POS 5 2ND LOOK	633	728	REFL 1 POS 22 2ND LOOK	3210
152	REFL 2 POS 5 2ND LOOK	432	730	REFL 2 POS 22 2ND LOOK	3011
154	SCENE DATA BP 5 CH 3	15806	732	SCENE DATA BP 22 CH 3	15805
156	CH 4	16609	734	CH 4	16609
158	CH 5	16876	736	CH 5	16880
160	CH 6	17147	738	CH 6	17153
162	CH 7	16198	740	CH 7	16203
164	CH 8	16399	742	CH 8	16400
166	CH 9	17252	744	CH 9	17260
168	CH 10	16463	746	CH 10	16474
170	CH 11	16287	748	CH 11	16295
172	CH 12	16641	750	CH 12	16650
174	CH 13	16347	752	CH 13	16362
176	CH 14	16843	754	CH 14	16846
178	CH 15	16600	756	CH 15	16607
180	REFLECTOR 1 POSITION 6	789	758	REFLECTOR 1 POSITION 23	3365
182	REFLECTOR 2 POSITION 6	589	760	REFLECTOR 2 POSITION 23	3167
184	REFL 1 POS 6 2ND LOOK	784	762	REFL 1 POS 23 2ND LOOK	3361
186	REFL 2 POS 6 2ND LOOK	585	764	REFL 2 POS 23 2ND LOOK	3163
188	SCENE DATA BP 6 CH 3	15797	766	SCENE DATA BP 23 CH 3	15807
190	CH 4	16610	768	CH 4	16610
192	CH 5	16880	770	CH 5	16875

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
194	CH 6	17148	772	CH 6	17164
196	CH 7	16199	774	CH 7	16209
198	CH 8	16413	776	CH 8	16408
200	CH 9	17253	778	CH 9	17271
202	CH 10	16461	780	CH 10	16485
204	CH 11	16280	782	CH 11	16304
206	CH 12	16631	784	CH 12	16658
208	CH 13	16337	786	CH 13	16344
210	CH 14	16810	788	CH 14	16845
212	CH 15	16600	790	CH 15	16607
214	REFLECTOR 1 POSITION 7	939	792	REFLECTOR 1 POSITION 24	3519
216	REFLECTOR 2 POSITION 7	740	794	REFLECTOR 2 POSITION 24	3320
218	REFL 1 POS 7 2ND LOOK	935	796	REFL 1 POS 24 2ND LOOK	3514
220	REFL 2 POS 7 2ND LOOK	736	798	REFL 2 POS 24 2ND LOOK	3315
222	SCENE DATA BP 7 CH 3	15807	800	SCENE DATA BP 24 CH 3	15797
224	CH 4	16608	802	CH 4	16611
226	CH 5	16879	804	CH 5	16876
228	CH 6	17145	806	CH 6	17164
230	CH 7	16193	808	CH 7	16211
232	CH 8	16401	810	CH 8	16440
234	CH 9	17249	812	CH 9	17278
236	CH 10	16456	814	CH 10	16487
238	CH 11	16284	816	CH 11	16313
240	CH 12	16636	818	CH 12	16666
242	CH 13	16350	820	CH 13	163
244	CH 14	16796	822	CH 14	1684
246	CH 15	16600	824	CH 15	16608
248	REFLECTOR 1 POSITION 8	1091	826	REFLECTOR 1 POSITION 25	3668
250	REFLECTOR 2 POSITION 8	892	828	REFLECTOR 2 POSITION 25	3469
252	REFL 1 POS 8 2ND LOOK	1087	830	REFL 1 POS 25 2ND LOOK	3665
254	REFL 2 POS 8 2ND LOOK	887	832	REFL 2 POS 25 2ND LOOK	3466
256	SCENE DATA BP 8 CH 3	15804	834	SCENE DATA BP 25 CH 3	15796
258	CH 4	16611	836	CH 4	16608
260	CH 5	16876	838	CH 5	16879
262	CH 6	17145	840	CH 6	17166
264	CH 7	16192	842	CH 7	16210
266	CH 8	16410	844	CH 8	16399
268	CH 9	17248	846	CH 9	17272
270	CH 10	16463	848	CH 10	16488
272	CH 11	16285	850	CH 11	16302
274	CH 12	16634	852	CH 12	16657
276	CH 13	16338	854	CH 13	16363
278	CH 14	16810	856	CH 14	16833
280	CH 15	16599	858	CH 15	16609
282	REFLECTOR 1 POSITION 9	1246	860	REFLECTOR 1 POSITION 26	3822
284	REFLECTOR 2 POSITION 9	1044	862	REFLECTOR 2 POSITION 26	3623
286	REFL 1 POS 9 2ND LOOK	1239	864	REFL 1 POS 26 2ND LOOK	3817
288	REFL 2 POS 9 2ND LOOK	1040	866	REFL 2 POS 26 2ND LOOK	3618
290	SCENE DATA BP 9 CH 3	15809	868	SCENE DATA BP 26 CH 3	15806
292	CH 4	16616	870	CH 4	16610

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	16881	872	CH 5	16877
296	CH 6	17152	874	CH 6	17166
298	CH 7	16201	876	CH 7	16211
300	CH 8	16432	878	CH 8	16406
302	CH 9	17259	880	CH 9	17268
304	CH 10	16465	882	CH 10	16484
306	CH 11	16289	884	CH 11	16299
308	CH 12	16646	886	CH 12	16659
310	CH 13	16347	888	CH 13	16370
312	CH 14	16848	890	CH 14	16836
314	CH 15	16601	892	CH 15	16611
316	REFLECTOR 1 POSITION 10	1395	894	REFLECTOR 1 POSITION 27	3975
318	REFLECTOR 2 POSITION 10	1194	896	REFLECTOR 2 POSITION 27	3774
320	REFL 1 POS 10 2ND LOOK	1390	898	REFL 1 POS 27 2ND LOOK	3968
322	REFL 2 POS 10 2ND LOOK	1191	900	REFL 2 POS 27 2ND LOOK	3770
324	SCENE DATA BP 10 CH 3	15812	902	SCENE DATA BP 27 CH 3	15805
326	CH 4	16614	904	CH 4	16616
328	CH 5	16880	906	CH 5	16890
330	CH 6	17151	908	CH 6	17182
332	CH 7	16202	910	CH 7	16231
334	CH 8	16412	912	CH 8	16402
336	CH 9	17261	914	CH 9	17289
338	CH 10	16470	916	CH 10	16504
340	CH 11	16285	918	CH 11	16322
342	CH 12	16636	920	CH 12	16673
344	CH 13	16349	922	CH 13	16379
346	CH 14	16815	924	CH 14	16830
348	CH 15	16605	926	CH 15	16617
350	REFLECTOR 1 POSITION 11	1545	928	REFLECTOR 1 POSITION 28	4125
352	REFLECTOR 2 POSITION 11	1346	930	REFLECTOR 2 POSITION 28	3925
354	REFL 1 POS 11 2ND LOOK	1542	932	REFL 1 POS 28 2ND LOOK	4120
356	REFL 2 POS 11 2ND LOOK	1343	934	REFL 2 POS 28 2ND LOOK	3921
358	SCENE DATA BP 11 CH 3	15807	936	SCENE DATA BP 28 CH 3	15809
360	CH 4	16612	938	CH 4	16627
362	CH 5	16886	940	CH 5	16893
364	CH 6	17153	942	CH 6	17156
366	CH 7	16198	944	CH 7	16201
368	CH 8	16453	946	CH 8	16426
370	CH 9	17256	948	CH 9	17258
372	CH 10	16464	950	CH 10	16467
374	CH 11	16281	952	CH 11	16286
376	CH 12	16643	954	CH 12	16638
378	CH 13	16340	956	CH 13	16348
380	CH 14	16834	958	CH 14	16815
382	CH 15	16602	960	CH 15	16599
384	REFLECTOR 1 POSITION 12	1697	962	REFLECTOR 1 POSITION 29	4274
386	REFLECTOR 2 POSITION 12	1499	964	REFLECTOR 2 POSITION 29	4077
388	REFL 1 POS 12 2ND LOOK	1694	966	REFL 1 POS 29 2ND LOOK	4272
390	REFL 2 POS 12 2ND LOOK	1495	968	REFL 2 POS 29 2ND LOOK	4073
392	SCENE DATA BP 12 CH 3	15804	970	SCENE DATA BP 29 CH 3	15839

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
394	CH 4	16611	972	CH 4	16658
396	CH 5	16881	974	CH 5	16933
398	CH 6	17146	976	CH 6	17143
400	CH 7	16193	978	CH 7	16188
402	CH 8	16408	980	CH 8	16445
404	CH 9	17251	982	CH 9	17248
406	CH 10	16463	984	CH 10	16456
408	CH 11	16279	986	CH 11	16275
410	CH 12	16639	988	CH 12	16638
412	CH 13	16343	990	CH 13	16334
414	CH 14	16826	992	CH 14	16827
416	CH 15	16599	994	CH 15	16596
418	REFLECTOR 1 POSITION 13	1847	996	REFLECTOR 1 POSITION 30	4429
420	REFLECTOR 2 POSITION 13	1649	998	REFLECTOR 2 POSITION 30	4226
422	REFL 1 POS 13 2ND LOOK	1845	1000	REFL 1 POS 30 2ND LOOK	4424
424	REFL 2 POS 13 2ND LOOK	1645	1002	REFL 2 POS 30 2ND LOOK	4226
426	SCENE DATA BP 13 CH 3	15812	1004	SCENE DATA BP 30 CH 3	15810
428	CH 4	16627	1006	CH 4	16623
430	CH 5	16885	1008	CH 5	16891
432	CH 6	17143	1010	CH 6	17140
434	CH 7	16191	1012	CH 7	16190
436	CH 8	16406	1014	CH 8	16419
438	CH 9	17249	1016	CH 9	17242
440	CH 10	16464	1018	CH 10	16452
442	CH 11	16285	1020	CH 11	162
444	CH 12	16635	1022	CH 12	1662
446	CH 13	16339	1024	CH 13	16335
448	CH 14	16805	1026	CH 14	16806
450	CH 15	16599	1028	CH 15	16594
452	REFLECTOR 1 POSITION 14	2002	1030	REFLECTOR 1 COLD CAL POS	6021
454	REFLECTOR 2 POSITION 14	1801	1032	REFLECTOR 2 COLD CAL POS	5819
456	REFL 1 POS 14 2ND LOOK	1997	1034	REFL 1 COLD CAL 2ND LOOK	6021
458	REFL 2 POS 14 2ND LOOK	1798	1036	REFL 2 COLD CAL 2ND LOOK	5819
460	SCENE DATA BP 14 CH 3	15805	1038	COLD CAL DATA 1 CH 3	15813
462	CH 4	16623	1040	CH 4	16620
464	CH 5	16891	1042	CH 5	16882
466	CH 6	17144	1044	CH 6	17131
468	CH 7	16193	1046	CH 7	16180
470	CH 8	16414	1048	CH 8	16413
472	CH 9	17253	1050	CH 9	17239
474	CH 10	16463	1052	CH 10	16453
476	CH 11	16284	1054	CH 11	16272
478	CH 12	16631	1056	CH 12	16631
480	CH 13	16335	1058	CH 13	16334
482	CH 14	16815	1060	CH 14	16818
484	CH 15	16598	1062	CH 15	16592
486	REFLECTOR 1 POSITION 15	2154	1064	COLD CAL DATA 2 CH 3	15809
488	REFLECTOR 2 POSITION 15	1955	1066	CH 4	16625
490	REFL 1 POS 15 2ND LOOK	2149	1068	CH 5	16883
492	REFL 2 POS 15 2ND LOOK	1950	1070	CH 6	17134

LEMENT	DESCRIPTION		VALUE	ELEMENT	DESCRIPTION		VALUE
494	SCENE DATA BP 15	CH 3	15812	1072		CH 7	16176
496		CH 4	16625	1074		CH 8	16410
498		CH 5	16891	1076		CH 9	17241
500		CH 6	17148	1078		CH 10	16456
502		CH 7	16199	1080		CH 11	16282
504		CH 8	16418	1082		CH 12	16630
506		CH 9	17256	1084		CH 13	16341
508		CH 10	16469	1086		CH 14	16804
510		CH 11	16295	1088		CH 15	16591
512		CH 12	16640	1182	REFLECTOR 1 WARM CAL POS		10419
514		CH 13	16348	1184	REFLECTOR 2 WARM CAL POS		10219
516		CH 14	16831	1186	REFL 1 WARM CAL 2ND LOOK		10419
518		CH 15	16600	1188	REFL 2 WARM CAL 2ND LOOK		10220
520	REFLECTOR 1 POSITION 16		2302	1190	WARM CAL DATA 1	CH 3	15811
522	REFLECTOR 2 POSITION 16		2105	1192		CH 4	16615
524	REFL 1 POS 16 2ND LOOK		2301	1194		CH 5	16882
526	REFL 2 POS 16 2ND LOOK		2101	1196		CH 6	17160
528	SCENE DATA BP 16	CH 3	15829	1198		CH 7	16218
530		CH 4	16650	1200		CH 8	16408
532		CH 5	16930	1202		CH 9	17278
534		CH 6	17156	1204		CH 10	16490
536		CH 7	16205	1206		CH 11	16308
538		CH 8	16433	1208		CH 12	16662
540		CH 9	17263	1210		CH 13	16376
542		CH 10	16476	1212		CH 14	16848
544		CH 11	16290	1214		CH 15	16614
546		CH 12	16650	1216	WARM CAL DATA 2	CH 3	15803
548		CH 13	16357	1218		CH 4	16620
550		CH 14	16829	1220		CH 5	16881
552		CH 15	16604	1222		CH 6	17175
554	REFLECTOR 1 POSITION 17		2455	1224		CH 7	16218
556	REFLECTOR 2 POSITION 17		2258	1226		CH 8	16409
558	REFL 1 POS 17 2ND LOOK		2452	1228		CH 9	17276
560	REFL 2 POS 17 2ND LOOK		2253	1230		CH 10	16494
562	SCENE DATA BP 17	CH 3	15804	1232		CH 11	16315
564		CH 4	16620	1234		CH 12	16663
566		CH 5	16887	1236		CH 13	16367
568		CH 6	17154	1238		CH 14	16868
570		CH 7	16200	1240		CH 15	16614

FULL SCAN MODE

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	17910	23.21
1092	SCAN MOTOR A1-2	18369	23.68
1094	FEEDHORN A1-1	19447	25.41
1096	FEEDHORN A1-2	20403	25.82
1098	RF MUX A1-1	20073	27.15
1100	RF MUX A1-2	20611	28.45
1102	LOCAL OSCILLATOR CHANNEL 3	21538	30.02
1104	LOCAL OSCILLATOR CHANNEL 4	21670	30.20
1106	LOCAL OSCILLATOR CHANNEL 5	21324	29.27
1108	LOCAL OSCILLATOR CHANNEL 6	20030	27.18
1110	LOCAL OSCILLATOR CHANNEL 7	20528	28.03
1112	LOCAL OSCILLATOR CHANNEL 8	21194	29.72
1114	LOCAL OSCILLATOR CHANNEL 15	20750	29.47
1116	PLL LO #2 CHANNELS 9 THROUGH 14	19754	27.26
1118	PLL LO #1 CHANNELS 9 THROUGH 14	21661	30.71
1120	SPARE (NOT USED)	32767	52.86
1122	MIXER/IF AMPLIFIER CHANNEL 3	21196	29.05
1124	MIXER/IF AMPLIFIER CHANNEL 4	20801	29.04
1126	MIXER/IF AMPLIFIER CHANNEL 5	20745	28.66
1128	MIXER/IF AMPLIFIER CHANNEL 6	20380	27.70
1130	MIXER/IF AMPLIFIER CHANNEL 7	20568	28.15
1132	MIXER/IF AMPLIFIER CHANNEL 8	20728	29.10
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	19923	27.56
1136	MIXER/IF AMPLIFIER CHANNEL 15	20875	29.23
1138	IF AMPLIFIER CHANNEL 11 THRU 14	20723	28.77
1140	IF AMPLIFIER CHANNEL 9	21154	28.77
1142	IF AMPLIFIER CHANNEL 10	20751	28.95
1144	IF AMPLIFIER CHANNEL 11	20344	27.63
1146	DC/DC CONVERTER	21068	28.87
1148	IF AMPLIFIER CHANNEL 13	20459	27.57
1150	IF AMPLIFIER CHANNEL 14	20129	27.57
1152	IF AMPLIFIER CHANNEL 12	20115	27.52
1154	RF SHELF A1-1	20515	28.00
1156	RF SHELF A1-2	20598	28.34
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	19704	26.14
1160	A1-1 WARM LOAD 1	23083	23.61
1162	A1-1 WARM LOAD 2	23286	23.65
1164	A1-1 WARM LOAD 3	23357	23.72
1166	A1-1 WARM LOAD 4	23043	23.68
1168	A1-1 WARM LOAD CENTER	23228	23.72
1170	A1-2 WARM LOAD 1	23848	24.58
1172	A1-2 WARM LOAD 2	23686	24.57
1174	A1-2 WARM LOAD 3	23713	24.62
1176	A1-2 WARM LOAD 4	23631	24.59
1178	A1-2 WARM LOAD CENTER	23509	24.49
1180	TEMP SENSOR REFERENCE VOLTAGE	24883	

FULL SCAN MODE

DESCRIPTION	STATUS	STATUS	STATUS
SCANNER A1-1 POWER	ON	ON	ON
SCANNER A1-2 POWER	ON	ON	ON
PLL POWER	PLLO # 1	PLLO # 1	PLLO # 1
ANTENNA IN WARM CAL POSITION MODE	NO	NO	NO
ANTENNA IN COLD CAL POSITION MODE	NO	NO	NO
ANTENNA IN NADIR POSITION MODE	NO	NO	NO
ANTENNA IN FULL SCAN MODE	YES	YES	YES
SURVIVAL HEATER POWER	OFF	OFF	OFF
MODULE POWER	CONNECT	CONNECT	CONNECT
COLD CAL POSITION MSB	ZERO	ZERO	ZERO
COLD CAL POSITION LSB	ZERO	ZERO	ZERO

ANALOG DATA

DESCRIPTION	VALUE	DEG C	VALUE	DEG C	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	217	22.1	217	22.1	217	22.1
A1-2 SCANNER MOTOR TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-1 RF SHELF TEMPERATURE	218	23.4	218	23.4	219	24.8
A1-2 RF SHELF TEMPERATURE	221	27.5	221	27.5	221	27.5
A1-1 WARM LOAD TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-2 WARM LOAD TEMPERATURE	219	24.8	219	24.8	219	24.8

DESCRIPTION	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS
A1-1 ANTENNA DRIVE MOTOR CURRENT (AVRG)	105	48.93	105	48.93	105	48.93
A1-2 ANTENNA DRIVE MOTOR CURRENT (AVRG)	99	46.13	99	46.13	98	45.67
SIGNAL PROCESSING +15 VDC	173	14.93	173	14.93	173	14.93
ANTENNA DRIVE +15 VDC	175	15.10	175	15.10	174	15.02
SIGNAL PROCESSING -15 VDC	151	-15.00	151	-15.00	151	-15.00
ANTENNA DRIVE -15 VDC	152	-14.95	152	-14.95	152	-14.95
RECEIVER AMPLIFIER +8 VDC	159	7.95	159	7.95	159	7.95
SIGNAL PROCESSOR +5 VDC	148	4.93	148	4.93	148	4.93
ANTENNA DRIVE +5 VDC	149	4.97	149	4.97	149	4.97
RECEIVER MIXER/IF +10 VDC	171	9.88	171	9.88	171	9.88
PHASE LOCK LOOP (CHANNEL 9/14) +15 VDC	172	14.84	172	14.84	172	14.84
PHASE LOCK LOOP (CHANNEL 9/14) -15 VDC	146	-15.25	146	-15.25	146	-15.25
L.O. VOLTAGE (CHANNEL 8) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 7) VDC	173	9.90	173	9.90	174	9.96
L.O. VOLTAGE (CHANNEL 6) VDC	175	10.01	175	10.01	175	10.01
L.O. VOLTAGE (CHANNEL 3) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 4) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 5) VDC	173	9.90	173	9.90	173	9.90
PLLO # 2 LOCK DETECT	5	0.10	5	0.10	5	0.10
PLLO # 1 LOCK DETECT	222	4.44	222	4.44	222	4.44
L.O. VOLTAGE (CHANNEL 15) VDC	172	14.84	172	14.84	172	14.84

PRT TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
VARIABLE TARGET	615	42.00	601	14.00
	616	43.00	602	15.00
	617	44.00	603	16.00
	618	45.00	604	17.00
	619	46.00	605	18.00
	620	47.00	606	19.00
	621	48.00	607	20.00
FIXED TARGET	622	49.00	608	21.00
	623	50.00	609	22.00
	624	51.00	610	23.00
	625	52.00	611	24.00
	626	53.00	612	25.00
	627	67.00	613	69.00
	628	68.00	614	70.00
BASEPLATE	629	71.00	630	72.00
	631	26.00	632	27.00

THERMOCOUPLE TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
FIXED TARGET SHROUD	558	5.00	537	34.00
	559	6.00	538	35.00
VARIABLE TARGET SHROUD	550	7.00	524	36.00
	551	8.00	525	37.00
FIXED TARGET N2	506	57.00	502	30.00
	507	58.00	503	31.00
VARIABLE TARGET N2	516	59.00	511	32.00
	517	60.00	512	33.00
HEATER N2	514	1.00	509	38.00
	515	2.00	510	39.00
FIXED TARGET FLOW METER	508	63.00	504	61.00
VARIABLE TARGET FLOW METER	518	64.00	513	62.00
BASEPLATE HEATER N2	519	3.00	520	4.00
BASEPLATE N2	521	9.00	522	10.00
BASEPLATE FLOW METER	523	65.00		
ADJUNCT RADIATORS	575	73.00	577	74.00
	579	75.00	581	76.00

```
AMSU  A1-17 A1.EXE     FULL SCAN MODE     P1 25-NOV-93 15:29:03  SCAN NUMBER   8C
[ 5 ] DIGITAL A DATA   ELEMENT 0000

[ 6 ] DIGITAL B DATA   ELEMENT   00

[ 7 ] ANALOG DATA      ELEMENT   00

                                        COMMANDS
[ 9 ]  MODULE POWER =          CONNECT      ANTENNA IN COLD CAL POSIT = NO   [ 15

[ 10 ] SURVIVAL HEATER POWER =      OFF     ANTENNA IN NADIR POSITION = NO   [ 16

[ 11 ] MODULE TOTALLY OFF =         ON      ANTENNA IN FULL SCAN MODE = YES  [ 17

[ 12 ] SCANNER A1 - 1 POWER =       ON      PLL POWER =                PLLO # 1  [ 18

[ 13 ] SCANNER A1 - 2 POWER =       ON      COLD CAL POSITION MSB =      ZERO  [ 19

[ 14 ] ANTENNA IN WARM CAL POSIT = NO       COLD CAL POSITION LSB =      ZERO  [ 20

          POWER [ 4 ]  ON
                       SCREEN ONLY [ 2 ]  PRINT  [ 3 ] FULL        [ 1 ] RETURN
SELECT TOUCHSCREEN BUTTON 3
```

Post TRANSIENT
ANAL. TELEM.
HIGH FREQ
2.86Hz

PRE TRANSIENT
ANAL. TELEM.
HIGH FREQ
6.67Hz

AMSU A1_17 A1.EXE DIGITAL A DATA 25-NOV-93 15:29:06 PAGE 1
FULL SCAN MODE

ELEMENT	DESCRIPTION		VALUE	ELEMENT	DESCRIPTION		VAL
1	SYNC SEQUENCE BYTE 1		11111111	572	SCENE DATA BP 17	CH 8	16390
2	SYNC SEQUENCE BYTE 2		11111111	574		CH 9	17244
3	SYNC SEQUENCE BYTE 3		11111111	576		CH 10	16457
4	UNIT ID AND SERIAL NO		00010001	578		CH 11	16293
5	DIGITAL B DATA BYTE 1		00000010	580		CH 12	16633
6	DIGITAL B DATA BYTE 2		00001110	582		CH 13	16364
7	DIGITAL B DATA BYTE 3		00000000	584		CH 14	16842
8	DIGITAL B DATA BYTE 4		00000000	586		CH 15	16586
10	REFLECTOR 1 POSITION 1		27	588	REFLECTOR 1 POSITION 18		2609
12	REFLECTOR 2 POSITION 1		16211	590	REFLECTOR 2 POSITION 18		2410
14	REFL 1 POS 1 2ND LOOK		27	592	REFL 1 POS 18 2ND LOOK		2603
16	REFL 2 POS 1 2ND LOOK		16211	594	REFL 2 POS 18 2ND LOOK		2405
18	SCENE DATA BP 1	CH 3	15810	596	SCENE DATA BP 18	CH 3	15792
20		CH 4	16624	598		CH 4	16606
22		CH 5	16890	600		CH 5	16880
24		CH 6	17139	602		CH 6	17143
26		CH 7	16193	604		CH 7	16189
28		CH 8	16426	606		CH 8	16417
30		CH 9	17243	608		CH 9	17245
32		CH 10	16460	610		CH 10	16458
34		CH 11	16300	612		CH 11	16296
36		CH 12	16647	614		CH 12	16638
38		CH 13	16347	616		CH 13	16340
40		CH 14	16849	618		CH 14	16832
42		CH 15	16587	620		CH 15	165
44	REFLECTOR 1 POSITION 2		179	622	REFLECTOR 1 POSITION 19		275
46	REFLECTOR 2 POSITION 2		16365	624	REFLECTOR 2 POSITION 19		2559
48	REFL 1 POS 2 2ND LOOK		177	626	REFL 1 POS 19 2ND LOOK		2755
50	REFL 2 POS 2 2ND LOOK		16361	628	REFL 2 POS 19 2ND LOOK		2556
52	SCENE DATA BP 2	CH 3	15790	630	SCENE DATA BP 19	CH 3	15789
54		CH 4	16601	632		CH 4	16598
56		CH 5	16872	634		CH 5	16865
58		CH 6	17140	636		CH 6	17138
60		CH 7	16188	638		CH 7	16178
62		CH 8	16388	640		CH 8	16426
64		CH 9	17238	642		CH 9	17237
66		CH 10	16455	644		CH 10	16451
68		CH 11	16289	646		CH 11	16284
70		CH 12	16639	648		CH 12	16639
72		CH 13	16336	650		CH 13	16341
74		CH 14	16835	652		CH 14	16825
76		CH 15	16584	654		CH 15	16584
78	REFLECTOR 1 POSITION 3		334	656	REFLECTOR 1 POSITION 20		2910
80	REFLECTOR 2 POSITION 3		129	658	REFLECTOR 2 POSITION 20		2712
82	REFL 1 POS 3 2ND LOOK		329	660	REFL 1 POS 20 2ND LOOK		2907
84	REFL 2 POS 3 2ND LOOK		129	662	REFL 2 POS 20 2ND LOOK		2708
86	SCENE DATA BP 3	CH 3	15784	664	SCENE DATA BP 20	CH 3	15786
88		CH 4	16597	666		CH 4	16597
90		CH 5	16869	668		CH 5	16867
92		CH 6	17151	670		CH 6	17132

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	16190	672	CH 7	16175
96	CH 8	16384	674	CH 8	16406
98	CH 9	17246	676	CH 9	17231
100	CH 10	16462	678	CH 10	16449
102	CH 11	16300	680	CH 11	16278
104	CH 12	16636	682	CH 12	16619
106	CH 13	16360	684	CH 13	16330
108	CH 14	16855	686	CH 14	16832
110	CH 15	16584	688	CH 15	16578
112	REFLECTOR 1 POSITION 4	483	690	REFLECTOR 1 POSITION 21	3064
114	REFLECTOR 2 POSITION 4	284	692	REFLECTOR 2 POSITION 21	2864
116	REFL 1 POS 4 2ND LOOK	480	694	REFL 1 POS 21 2ND LOOK	3059
118	REFL 2 POS 4 2ND LOOK	281	696	REFL 2 POS 21 2ND LOOK	2860
120	SCENE DATA BP 4 CH 3	15783	698	SCENE DATA BP 21 CH 3	15787
122	CH 4	16597	700	CH 4	16597
124	CH 5	16865	702	CH 5	16866
126	CH 6	17139	704	CH 6	17138
128	CH 7	16185	706	CH 7	16186
130	CH 8	16408	708	CH 8	16402
132	CH 9	17240	710	CH 9	17233
134	CH 10	16454	712	CH 10	16449
136	CH 11	16292	714	CH 11	16286
138	CH 12	16625	716	CH 12	16629
140	CH 13	16340	718	CH 13	16342
142	CH 14	16831	720	CH 14	16837
144	CH 15	16580	722	CH 15	16583
146	REFLECTOR 1 POSITION 5	636	724	REFLECTOR 1 POSITION 22	3211
148	REFLECTOR 2 POSITION 5	436	726	REFLECTOR 2 POSITION 22	3014
150	REFL 1 POS 5 2ND LOOK	632	728	REFL 1 POS 22 2ND LOOK	3210
152	REFL 2 POS 5 2ND LOOK	432	730	REFL 2 POS 22 2ND LOOK	3011
154	SCENE DATA BP 5 CH 3	15788	732	SCENE DATA BP 22 CH 3	15782
156	CH 4	16597	734	CH 4	16596
158	CH 5	16865	736	CH 5	16867
160	CH 6	17136	738	CH 6	17146
162	CH 7	16175	740	CH 7	16190
164	CH 8	16389	742	CH 8	16385
166	CH 9	17230	744	CH 9	17247
168	CH 10	16449	746	CH 10	16466
170	CH 11	16283	748	CH 11	16296
172	CH 12	16623	750	CH 12	16637
174	CH 13	16335	752	CH 13	16347
176	CH 14	16823	754	CH 14	16828
178	CH 15	16581	756	CH 15	16585
180	REFLECTOR 1 POSITION 6	789	758	REFLECTOR 1 POSITION 23	3365
182	REFLECTOR 2 POSITION 6	589	760	REFLECTOR 2 POSITION 23	3168
184	REFL 1 POS 6 2ND LOOK	784	762	REFL 1 POS 23 2ND LOOK	3361
186	REFL 2 POS 6 2ND LOOK	585	764	REFL 2 POS 23 2ND LOOK	3163
188	SCENE DATA BP 6 CH 3	15778	766	SCENE DATA BP 23 CH 3	15789
190	CH 4	16595	768	CH 4	16596
192	CH 5	16866	770	CH 5	16867

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALU
194	CH 6	17137	772	CH 6	17155
196	CH 7	16178	774	CH 7	16192
198	CH 8	16400	776	CH 8	16395
200	CH 9	17232	778	CH 9	17254
202	CH 10	16448	780	CH 10	16469
204	CH 11	16286	782	CH 11	16302
206	CH 12	16634	784	CH 12	16647
208	CH 13	16343	786	CH 13	16344
210	CH 14	16824	788	CH 14	16844
212	CH 15	16580	790	CH 15	16587
214	REFLECTOR 1 POSITION 7	938	792	REFLECTOR 1 POSITION 24	3519
216	REFLECTOR 2 POSITION 7	739	794	REFLECTOR 2 POSITION 24	3321
218	REFL 1 POS 7 2ND LOOK	935	796	REFL 1 POS 24 2ND LOOK	3513
220	REFL 2 POS 7 2ND LOOK	736	798	REFL 2 POS 24 2ND LOOK	3315
222	SCENE DATA BP 7 CH 3	15786	800	SCENE DATA BP 24 CH 3	15785
224	CH 4	16597	802	CH 4	16597
226	CH 5	16864	804	CH 5	16863
228	CH 6	17136	806	CH 6	17152
230	CH 7	16175	808	CH 7	16191
232	CH 8	16383	810	CH 8	16430
234	CH 9	17229	812	CH 9	17258
236	CH 10	16440	814	CH 10	16480
238	CH 11	16280	816	CH 11	16306
240	CH 12	16626	818	CH 12	16657
242	CH 13	16337	820	CH 13	163(
244	CH 14	16811	822	CH 14	168
246	CH 15	16579	824	CH 15	16587
248	REFLECTOR 1 POSITION 8	1091	826	REFLECTOR 1 POSITION 25	3668
250	REFLECTOR 2 POSITION 8	892	828	REFLECTOR 2 POSITION 25	3470
252	REFL 1 POS 8 2ND LOOK	1087	830	REFL 1 POS 25 2ND LOOK	3665
254	REFL 2 POS 8 2ND LOOK	887	832	REFL 2 POS 25 2ND LOOK	3466
256	SCENE DATA BP 8 CH 3	15787	834	SCENE DATA BP 25 CH 3	15788
258	CH 4	16596	836	CH 4	16597
260	CH 5	16866	838	CH 5	16863
262	CH 6	17132	840	CH 6	17151
264	CH 7	16175	842	CH 7	16194
266	CH 8	16391	844	CH 8	16384
268	CH 9	17227	846	CH 9	17250
270	CH 10	16445	848	CH 10	16464
272	CH 11	16281	850	CH 11	16303
274	CH 12	16624	852	CH 12	16647
276	CH 13	16326	854	CH 13	16356
278	CH 14	16810	856	CH 14	16848
280	CH 15	16581	858	CH 15	16589
282	REFLECTOR 1 POSITION 9	1245	860	REFLECTOR 1 POSITION 26	3821
284	REFLECTOR 2 POSITION 9	1044	862	REFLECTOR 2 POSITION 26	3622
286	REFL 1 POS 9 2ND LOOK	1239	864	REFL 1 POS 26 2ND LOOK	3817
288	REFL 2 POS 9 2ND LOOK	1040	866	REFL 2 POS 26 2ND LOOK	3618
290	SCENE DATA BP 9 CH 3	15788	868	SCENE DATA BP 26 CH 3	15788
292	CH 4	16606	870	CH 4	16599

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	16867	872	CH 5	16869
296	CH 6	17138	874	CH 6	17153
298	CH 7	16182	876	CH 7	16195
300	CH 8	16421	878	CH 8	16389
302	CH 9	17235	880	CH 9	17249
304	CH 10	16451	882	CH 10	16467
306	CH 11	16291	884	CH 11	16308
308	CH 12	16632	886	CH 12	16643
310	CH 13	16334	888	CH 13	16347
312	CH 14	16832	890	CH 14	16859
314	CH 15	16581	892	CH 15	16589
316	REFLECTOR 1 POSITION 10	1395	894	REFLECTOR 1 POSITION 27	3975
318	REFLECTOR 2 POSITION 10	1195	896	REFLECTOR 2 POSITION 27	3774
320	REFL 1 POS 10 2ND LOOK	1390	898	REFL 1 POS 27 2ND LOOK	3968
322	REFL 2 POS 10 2ND LOOK	1192	900	REFL 2 POS 27 2ND LOOK	3770
324	SCENE DATA BP 10 CH 3	15792	902	SCENE DATA BP 27 CH 3	15791
326	CH 4	16600	904	CH 4	16604
328	CH 5	16869	906	CH 5	16877
330	CH 6	17138	908	CH 6	17171
332	CH 7	16186	910	CH 7	16218
334	CH 8	16394	912	CH 8	16386
336	CH 9	17238	914	CH 9	17270
338	CH 10	16458	916	CH 10	16492
340	CH 11	16292	918	CH 11	16321
342	CH 12	16643	920	CH 12	16673
344	CH 13	16334	922	CH 13	16367
346	CH 14	16835	924	CH 14	16855
348	CH 15	16583	926	CH 15	16598
350	REFLECTOR 1 POSITION 11	1545	928	REFLECTOR 1 POSITION 28	4124
352	REFLECTOR 2 POSITION 11	1347	930	REFLECTOR 2 POSITION 28	3925
354	REFL 1 POS 11 2ND LOOK	1542	932	REFL 1 POS 28 2ND LOOK	4120
356	REFL 2 POS 11 2ND LOOK	1343	934	REFL 2 POS 28 2ND LOOK	3921
358	SCENE DATA BP 11 CH 3	15791	936	SCENE DATA BP 28 CH 3	15797
360	CH 4	16601	938	CH 4	16614
362	CH 5	16874	940	CH 5	16882
364	CH 6	17138	942	CH 6	17143
366	CH 7	16178	944	CH 7	16181
368	CH 8	16438	946	CH 8	16408
370	CH 9	17240	948	CH 9	17235
372	CH 10	16452	950	CH 10	16455
374	CH 11	16286	952	CH 11	16288
376	CH 12	16634	954	CH 12	16628
378	CH 13	16336	956	CH 13	16336
380	CH 14	16819	958	CH 14	16822
382	CH 15	16581	960	CH 15	16580
384	REFLECTOR 1 POSITION 12	1697	962	REFLECTOR 1 POSITION 29	4274
386	REFLECTOR 2 POSITION 12	1499	964	REFLECTOR 2 POSITION 29	4076
388	REFL 1 POS 12 2ND LOOK	1694	966	REFL 1 POS 29 2ND LOOK	4272
390	REFL 2 POS 12 2ND LOOK	1495	968	REFL 2 POS 29 2ND LOOK	4073
392	SCENE DATA BP 12 CH 3	15789	970	SCENE DATA BP 29 CH 3	15824

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
394	CH 4	16601	972	CH 4	16647
396	CH 5	16865	974	CH 5	16926
398	CH 6	17132	976	CH 6	17133
400	CH 7	16177	978	CH 7	16174
402	CH 8	16388	980	CH 8	16431
404	CH 9	17229	982	CH 9	17228
406	CH 10	16450	984	CH 10	16443
408	CH 11	16284	986	CH 11	16275
410	CH 12	16625	988	CH 12	16619
412	CH 13	16329	990	CH 13	16324
414	CH 14	16837	992	CH 14	16828
416	CH 15	16579	994	CH 15	16578
418	REFLECTOR 1 POSITION 13	1848	996	REFLECTOR 1 POSITION 30	4429
420	REFLECTOR 2 POSITION 13	1649	998	REFLECTOR 2 POSITION 30	4226
422	REFL 1 POS 13 2ND LOOK	1845	1000	REFL 1 POS 30 2ND LOOK	4424
424	REFL 2 POS 13 2ND LOOK	1646	1002	REFL 2 POS 30 2ND LOOK	4223
426	SCENE DATA BP 13 CH 3	15791	1004	SCENE DATA BP 30 CH 3	15796
428	CH 4	16613	1006	CH 4	16607
430	CH 5	16873	1008	CH 5	16879
432	CH 6	17132	1010	CH 6	17127
434	CH 7	16174	1012	CH 7	16172
436	CH 8	16389	1014	CH 8	16406
438	CH 9	17230	1016	CH 9	17231
440	CH 10	16444	1018	CH 10	16442
442	CH 11	16279	1020	CH 11	162
444	CH 12	16619	1022	CH 12	166
446	CH 13	16328	1024	CH 13	16332
448	CH 14	16838	1026	CH 14	16830
450	CH 15	16580	1028	CH 15	16574
452	REFLECTOR 1 POSITION 14	2002	1030	REFLECTOR 1 COLD CAL POS	6021
454	REFLECTOR 2 POSITION 14	1801	1032	REFLECTOR 2 COLD CAL POS	5820
456	REFL 1 POS 14 2ND LOOK	1997	1034	REFL 1 COLD CAL 2ND LOOK	6021
458	REFL 2 POS 14 2ND LOOK	1798	1036	REFL 2 COLD CAL 2ND LOOK	5820
460	SCENE DATA BP 14 CH 3	15791	1038	COLD CAL DATA 1 CH 3	15797
462	CH 4	16605	1040	CH 4	16608
464	CH 5	16880	1042	CH 5	16873
466	CH 6	17131	1044	CH 6	17118
468	CH 7	16175	1046	CH 7	16160
470	CH 8	16400	1048	CH 8	16398
472	CH 9	17234	1050	CH 9	17221
474	CH 10	16446	1052	CH 10	16442
476	CH 11	16279	1054	CH 11	16271
478	CH 12	16634	1056	CH 12	16606
480	CH 13	16337	1058	CH 13	16324
482	CH 14	16820	1060	CH 14	16811
484	CH 15	16578	1062	CH 15	16570
486	REFLECTOR 1 POSITION 15	2154	1064	COLD CAL DATA 2 CH 3	15797
488	REFLECTOR 2 POSITION 15	1955	1066	CH 4	16609
490	REFL 1 POS 15 2ND LOOK	2149	1068	CH 5	16872
492	REFL 2 POS 15 2ND LOOK	1950	1070	CH 6	17126

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	SCENE DATA BP 15 CH 3	15792	1072	CH 7	16164
496	CH 4	16609	1074	CH 8	16391
498	CH 5	16880	1076	CH 9	17221
500	CH 6	17133	1078	CH 10	16442
502	CH 7	16180	1080	CH 11	16275
504	CH 8	16403	1082	CH 12	16619
506	CH 9	17235	1084	CH 13	16311
508	CH 10	16448	1086	CH 14	16833
510	CH 11	16288	1088	CH 15	16571
512	CH 12	16641	1182	REFLECTOR 1 WARM CAL POS	10419
514	CH 13	16343	1184	REFLECTOR 2 WARM CAL POS	10220
516	CH 14	16811	1186	REFL 1 WARM CAL 2ND LOOK	10419
518	CH 15	16581	1188	REFL 2 WARM CAL 2ND LOOK	10220
520	REFLECTOR 1 POSITION 16	2302	1190	WARM CAL DATA 1 CH 3	15793
522	REFLECTOR 2 POSITION 16	2104	1192	CH 4	16600
524	REFL 1 POS 16 2ND LOOK	2305	1194	CH 5	16865
526	REFL 2 POS 16 2ND LOOK	2101	1196	CH 6	17152
528	SCENE DATA BP 16 CH 3	15822	1198	CH 7	16200
530	CH 4	16638	1200	CH 8	16394
532	CH 5	16915	1202	CH 9	17260
534	CH 6	17149	1204	CH 10	16473
536	CH 7	16189	1206	CH 11	16304
538	CH 8	16419	1208	CH 12	16651
540	CH 9	17247	1210	CH 13	16354
542	CH 10	16462	1212	CH 14	16857
544	CH 11	16295	1214	CH 15	16596
546	CH 12	16640	1216	WARM CAL DATA 2 CH 3	15787
548	CH 13	16339	1218	CH 4	16599
550	CH 14	16829	1220	CH 5	16870
552	CH 15	16587	1222	CH 6	17159
554	REFLECTOR 1 POSITION 17	2455	1224	CH 7	16199
556	REFLECTOR 2 POSITION 17	2258	1226	CH 8	16390
558	REFL 1 POS 17 2ND LOOK	2452	1228	CH 9	17257
560	REFL 2 POS 17 2ND LOOK	2253	1230	CH 10	16478
562	SCENE DATA BP 17 CH 3	15795	1232	CH 11	16308
564	CH 4	16607	1234	CH 12	16659
566	CH 5	16871	1236	CH 13	16351
568	CH 6	17142	1238	CH 14	16841
570	CH 7	16187	1240	CH 15	16594

FULL SCAN MODE

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	17923	23.23
1092	SCAN MOTOR A1-2	18387	23.72
1094	FEEDHORN A1-1	19454	25.42
1096	FEEDHORN A1-2	20416	25.84
1098	RF MUX A1-1	20133	27.27
1100	RF MUX A1-2	20664	28.55
1102	LOCAL OSCILLATOR CHANNEL 3	21694	30.32
1104	LOCAL OSCILLATOR CHANNEL 4	21835	30.52
1106	LOCAL OSCILLATOR CHANNEL 5	21463	29.54
1108	LOCAL OSCILLATOR CHANNEL 6	20162	27.44
1110	LOCAL OSCILLATOR CHANNEL 7	20638	28.24
1112	LOCAL OSCILLATOR CHANNEL 8	21357	30.04
1114	LOCAL OSCILLATOR CHANNEL 15	20910	29.78
1116	PLL LO #2 CHANNELS 9 THROUGH 14	19734	27.23
1118	PLL LO #1 CHANNELS 9 THROUGH 14	22014	31.40
1120	SPARE (NOT USED)	32767	52.86
1122	MIXER/IF AMPLIFIER CHANNEL 3	21258	29.17
1124	MIXER/IF AMPLIFIER CHANNEL 4	20864	29.16
1126	MIXER/IF AMPLIFIER CHANNEL 5	20808	28.78
1128	MIXER/IF AMPLIFIER CHANNEL 6	20446	27.83
1130	MIXER/IF AMPLIFIER CHANNEL 7	20637	28.28
1132	MIXER/IF AMPLIFIER CHANNEL 8	20802	29.24
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	19953	27.61
1136	MIXER/IF AMPLIFIER CHANNEL 15	21015	29.50
1138	IF AMPLIFIER CHANNEL 11 THRU 14	20867	29.06
1140	IF AMPLIFIER CHANNEL 9	21300	29.06
1142	IF AMPLIFIER CHANNEL 10	20896	29.23
1144	IF AMPLIFIER CHANNEL 11	20404	27.74
1146	DC/DC CONVERTER	21351	29.43
1148	IF AMPLIFIER CHANNEL 13	20519	27.69
1150	IF AMPLIFIER CHANNEL 14	20183	27.67
1152	IF AMPLIFIER CHANNEL 12	20172	27.63
1154	RF SHELF A1-1	20608	28.18
1156	RF SHELF A1-2	20673	28.48
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	19714	26.16
1160	A1-1 WARM LOAD 1	23087	23.62
1162	A1-1 WARM LOAD 2	23280	23.64
1164	A1-1 WARM LOAD 3	23353	23.71
1166	A1-1 WARM LOAD 4	23035	23.66
1168	A1-1 WARM LOAD CENTER	23223	23.71
1170	A1-2 WARM LOAD 1	23854	24.59
1172	A1-2 WARM LOAD 2	23687	24.57
1174	A1-2 WARM LOAD 3	23719	24.63
1176	A1-2 WARM LOAD 4	23634	24.60
1178	A1-2 WARM LOAD CENTER	23512	24.49
1180	TEMP SENSOR REFERENCE VOLTAGE	24883	

FULL SCAN MODE

DESCRIPTION	STATUS	STATUS	STATUS
SCANNER A1-1 POWER	ON	ON	ON
SCANNER A1-2 POWER	ON	ON	ON
PLL POWER	PLLO # 1	PLLO # 1	PLLO # 1
ANTENNA IN WARM CAL POSITION MODE	NO	NO	NO
ANTENNA IN COLD CAL POSITION MODE	NO	NO	NO
ANTENNA IN NADIR POSITION MODE	NO	NO	NO
ANTENNA IN FULL SCAN MODE	YES	YES	YES
SURVIVAL HEATER POWER	OFF	OFF	OFF
MODULE POWER	CONNECT	CONNECT	CONNECT
COLD CAL POSITION MSB	ZERO	ZERO	ZERO
COLD CAL POSITION LSB	ZERO	ZERO	ZERO

ANALOG DATA

DESCRIPTION	VALUE	DEG C	VALUE	DEG C	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	217	22.1	217	22.1	217	22.
A1-2 SCANNER MOTOR TEMPERATURE	218	23.4	218	23.4	218	23.
A1-1 RF SHELF TEMPERATURE	219	24.8	219	24.8	219	24.
A1-2 RF SHELF TEMPERATURE	221	27.5	221	27.5	221	27.
A1-1 WARM LOAD TEMPERATURE	218	23.4	217	22.1	218	23.
A1-2 WARM LOAD TEMPERATURE	219	24.8	219	24.8	219	24.

DESCRIPTION	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS
A1-1 ANTENNA DRIVE MOTOR CURRENT (AVRG)	105	48.93	106	49.40	105	48.9
A1-2 ANTENNA DRIVE MOTOR CURRENT (AVRG)	99	46.13	100	46.60	99	46.1
SIGNAL PROCESSING +15 VDC	173	14.93	173	14.93	173	14.9
ANTENNA DRIVE +15 VDC	175	15.10	176	15.19	175	15.1
SIGNAL PROCESSING -15 VDC	151	-15.00	151	-15.00	151	-15.0
ANTENNA DRIVE -15 VDC	152	-14.95	153	-14.90	153	-14.9
RECEIVER AMPLIFIER +8 VDC	159	7.95	159	7.95	159	7.9
SIGNAL PROCESSOR +5 VDC	148	4.93	147	4.90	148	4.9
ANTENNA DRIVE +5 VDC	150	5.00	150	5.00	150	5.0
RECEIVER MIXER/IF +10 VDC	172	9.94	171	9.88	171	9.8
PHASE LOCK LOOP (CHANNEL 9/14) +15 VDC	172	14.84	172	14.84	172	14.8
PHASE LOCK LOOP (CHANNEL 9/14) -15 VDC	146	-15.25	146	-15.25	146	-15.2
L.O. VOLTAGE (CHANNEL 8) VDC	174	9.96	174	9.96	174	9.9
L.O. VOLTAGE (CHANNEL 7) VDC	174	9.96	174	9.96	174	9.9
L.O. VOLTAGE (CHANNEL 6) VDC	175	10.01	175	10.01	175	10.0
L.O. VOLTAGE (CHANNEL 3) VDC	174	9.96	174	9.96	174	9.9
L.O. VOLTAGE (CHANNEL 4) VDC	174	9.96	174	9.96	174	9.9
L.O. VOLTAGE (CHANNEL 5) VDC	173	9.90	173	9.90	173	9.9
PLLO # 2 LOCK DETECT	5	0.10	5	0.10	5	0.1
PLLO # 1 LOCK DETECT	222	4.44	222	4.44	222	4.4
L.O. VOLTAGE (CHANNEL 15) VDC	172	14.84	172	14.84	172	14.8

PRT TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
VARIABLE TARGET	615	42.00	601	14.00
	616	43.00	602	15.00
	617	44.00	603	16.00
	618	45.00	604	17.00
	619	46.00	605	18.00
	620	47.00	606	19.00
	621	48.00	607	20.00
FIXED TARGET	622	49.00	608	21.00
	623	50.00	609	22.00
	624	51.00	610	23.00
	625	52.00	611	24.00
	626	53.00	612	25.00
	627	67.00	613	69.00
	628	68.00	614	70.00
BASEPLATE	629	71.00	630	72.00
	631	26.00	632	27.00

THERMOCOUPLE TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
FIXED TARGET SHROUD	558	5.00	537	34.00
	559	6.00	538	35.00
VARIABLE TARGET SHROUD	550	7.00	524	36.00
	551	8.00	525	37.00
FIXED TARGET N2	506	57.00	502	30.00
	507	58.00	503	31.00
VARIABLE TARGET N2	516	59.00	511	32.00
	517	60.00	512	33.00
HEATER N2	514	1.00	509	38.00
	515	2.00	510	39.00
FIXED TARGET FLOW METER	508	63.00	504	61.00
VARIABLE TARGET FLOW METER	518	64.00	513	62.00
BASEPLATE HEATER N2	519	3.00	520	4.00
BASEPLATE N2	521	9.00	522	10.00
BASEPLATE FLOW METER	523	65.00		
ADJUNCT RADIATORS	575	73.00	577	74.00
	579	75.00	581	76.00

```
AMSU  A1-17 A1.EXE     FULL SCAN MODE     P1 25-NOV-93 15:31:24  SCAN NUMBER   81
[ 5 ] DIGITAL A DATA   ELEMENT 0000

  6 ] DIGITAL B DATA   ELEMENT   00

[ 7 ] ANALOG DATA      ELEMENT   00


                                        COMMANDS
[ 9 ]  MODULE POWER =          CONNECT      ANTENNA IN COLD CAL POSIT = NO   [ 15

[ 10 ] SURVIVAL HEATER POWER =     OFF      ANTENNA IN NADIR POSITION = NO   [ 16

[ 11 ] MODULE TOTALLY OFF =         ON      ANTENNA IN FULL SCAN MODE = YES  [ 17

[ 12 ] SCANNER A1 - 1 POWER =       ON      PLL POWER =              PLLO # 1  [ 18

[ 13 ] SCANNER A1 - 2 POWER =       ON      COLD CAL POSITION MSB =     ZERO  [ 19

[ 14 ] ANTENNA IN WARM CAL POSIT = NO       COLD CAL POSITION LSB =     ZERO  [ 20

          POWER [ 4 ]  ON
                       SCREEN ONLY [ 2 ]  PRINT  [ 3 ] FULL       [ 1 ] RETURN
SELECT TOUCHSCREEN BUTTON 3
```

Post TRANSIENT
ANAL TELEM.
HIGH FREQ
6.67 Hz

AMSU A1_17 A1.EXE DIGITAL A DATA 25-NOV-93 15:31:29 PAGE 1
FULL SCAN MODE

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VAL
1	SYNC SEQUENCE BYTE 1	11111111	572	SCENE DATA BP 17 CH 8	16379
2	SYNC SEQUENCE BYTE 2	11111111	574	CH 9	17227
3	SYNC SEQUENCE BYTE 3	11111111	576	CH 10	16446
4	UNIT ID AND SERIAL NO	00010001	578	CH 11	16283
5	DIGITAL B DATA BYTE 1	00000010	580	CH 12	16617
6	DIGITAL B DATA BYTE 2	00001110	582	CH 13	16334
7	DIGITAL B DATA BYTE 3	00000000	584	CH 14	16847
8	DIGITAL B DATA BYTE 4	00000000	586	CH 15	16573
10	REFLECTOR 1 POSITION 1	27	588	REFLECTOR 1 POSITION 18	2609
12	REFLECTOR 2 POSITION 1	16212	590	REFLECTOR 2 POSITION 18	2410
14	REFL 1 POS 1 2ND LOOK	27	592	REFL 1 POS 18 2ND LOOK	2603
16	REFL 2 POS 1 2ND LOOK	16212	594	REFL 2 POS 18 2ND LOOK	2405
18	SCENE DATA BP 1 CH 3	15799	596	SCENE DATA BP 18 CH 3	15782
20	CH 4	16615	598	CH 4	16593
22	CH 5	16885	600	CH 5	16872
24	CH 6	17127	602	CH 6	17134
26	CH 7	16180	604	CH 7	16177
28	CH 8	16413	606	CH 8	16412
30	CH 9	17230	608	CH 9	17227
32	CH 10	16455	610	CH 10	16452
34	CH 11	16285	612	CH 11	16288
36	CH 12	16631	614	CH 12	16617
38	CH 13	16341	616	CH 13	16339
40	CH 14	16831	618	CH 14	16833
42	CH 15	16574	620	CH 15	165
44	REFLECTOR 1 POSITION 2	180	622	REFLECTOR 1 POSITION 19	275
46	REFLECTOR 2 POSITION 2	16365	624	REFLECTOR 2 POSITION 19	2559
48	REFL 1 POS 2 2ND LOOK	177	626	REFL 1 POS 19 2ND LOOK	2755
50	REFL 2 POS 2 2ND LOOK	16361	628	REFL 2 POS 19 2ND LOOK	2557
52	SCENE DATA BP 2 CH 3	15780	630	SCENE DATA BP 19 CH 3	15774
54	CH 4	16588	632	CH 4	16587
56	CH 5	16864	634	CH 5	16856
58	CH 6	17131	636	CH 6	17127
60	CH 7	16175	638	CH 7	16164
62	CH 8	16379	640	CH 8	16412
64	CH 9	17224	642	CH 9	17217
66	CH 10	16447	644	CH 10	16443
68	CH 11	16284	646	CH 11	16271
70	CH 12	16631	648	CH 12	16614
72	CH 13	16321	650	CH 13	16322
74	CH 14	16810	652	CH 14	16816
76	CH 15	16570	654	CH 15	16570
78	REFLECTOR 1 POSITION 3	334	656	REFLECTOR 1 POSITION 20	2909
80	REFLECTOR 2 POSITION 3	129	658	REFLECTOR 2 POSITION 20	2711
82	REFL 1 POS 3 2ND LOOK	329	660	REFL 1 POS 20 2ND LOOK	2907
84	REFL 2 POS 3 2ND LOOK	128	662	REFL 2 POS 20 2ND LOOK	2708
86	SCENE DATA BP 3 CH 3	15772	664	SCENE DATA BP 20 CH 3	15771
88	CH 4	16586	666	CH 4	16587
90	CH 5	16862	668	CH 5	16854
92	CH 6	17133	670	CH 6	17122

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	16177	672	CH 7	16164
96	CH 8	16378	674	CH 8	16398
98	CH 9	17232	676	CH 9	17217
100	CH 10	16445	678	CH 10	16435
102	CH 11	16282	680	CH 11	16275
104	CH 12	16632	682	CH 12	16610
106	CH 13	16342	684	CH 13	16319
108	CH 14	16840	686	CH 14	16806
110	CH 15	16572	688	CH 15	16565
112	REFLECTOR 1 POSITION 4	482	690	REFLECTOR 1 POSITION 21	3064
114	REFLECTOR 2 POSITION 4	285	692	REFLECTOR 2 POSITION 21	2863
116	REFL 1 POS 4 2ND LOOK	480	694	REFL 1 POS 21 2ND LOOK	3059
118	REFL 2 POS 4 2ND LOOK	281	696	REFL 2 POS 21 2ND LOOK	2860
120	SCENE DATA BP 4 CH 3	15772	698	SCENE DATA BP 21 CH 3	15777
122	CH 4	16586	700	CH 4	16585
124	CH 5	16854	702	CH 5	16860
126	CH 6	17128	704	CH 6	17129
128	CH 7	16173	706	CH 7	16169
130	CH 8	16396	708	CH 8	16391
132	CH 9	17221	710	CH 9	17221
134	CH 10	16445	712	CH 10	16441
136	CH 11	16281	714	CH 11	16279
138	CH 12	16627	716	CH 12	16620
140	CH 13	16333	718	CH 13	16334
142	CH 14	16822	720	CH 14	16820
144	CH 15	16569	722	CH 15	16570
146	REFLECTOR 1 POSITION 5	635	724	REFLECTOR 1 POSITION 22	3210
148	REFLECTOR 2 POSITION 5	436	726	REFLECTOR 2 POSITION 22	3015
150	REFL 1 POS 5 2ND LOOK	632	728	REFL 1 POS 22 2ND LOOK	3209
152	REFL 2 POS 5 2ND LOOK	432	730	REFL 2 POS 22 2ND LOOK	3010
154	SCENE DATA BP 5 CH 3	15774	732	SCENE DATA BP 22 CH 3	15778
156	CH 4	16586	734	CH 4	16585
158	CH 5	16858	736	CH 5	16855
160	CH 6	17126	738	CH 6	17134
162	CH 7	16170	740	CH 7	16181
164	CH 8	16375	742	CH 8	16377
166	CH 9	17221	744	CH 9	17234
168	CH 10	16439	746	CH 10	16453
170	CH 11	16282	748	CH 11	16288
172	CH 12	16613	750	CH 12	16621
174	CH 13	16323	752	CH 13	16337
176	CH 14	16827	754	CH 14	16825
178	CH 15	16568	756	CH 15	16574
180	REFLECTOR 1 POSITION 6	789	758	REFLECTOR 1 POSITION 23	3365
182	REFLECTOR 2 POSITION 6	590	760	REFLECTOR 2 POSITION 23	3168
184	REFL 1 POS 6 2ND LOOK	784	762	REFL 1 POS 23 2ND LOOK	3361
186	REFL 2 POS 6 2ND LOOK	585	764	REFL 2 POS 23 2ND LOOK	3163
188	SCENE DATA BP 6 CH 3	15776	766	SCENE DATA BP 23 CH 3	15779
190	CH 4	16585	768	CH 4	16586
192	CH 5	16857	770	CH 5	16856

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17122	772	CH 6	17144
196	CH 7	16164	774	CH 7	16182
198	CH 8	16388	776	CH 8	16380
200	CH 9	17217	778	CH 9	17240
202	CH 10	16435	780	CH 10	16458
204	CH 11	16270	782	CH 11	16291
206	CH 12	16605	784	CH 12	16630
208	CH 13	16327	786	CH 13	16337
210	CH 14	16835	788	CH 14	16826
212	CH 15	16566	790	CH 15	16574
214	REFLECTOR 1 POSITION 7	939	792	REFLECTOR 1 POSITION 24	3519
216	REFLECTOR 2 POSITION 7	739	794	REFLECTOR 2 POSITION 24	3321
218	REFL 1 POS 7 2ND LOOK	935	796	REFL 1 POS 24 2ND LOOK	3513
220	REFL 2 POS 7 2ND LOOK	736	798	REFL 2 POS 24 2ND LOOK	3315
222	SCENE DATA BP 7 CH 3	15778	800	SCENE DATA BP 24 CH 3	15774
224	CH 4	16588	802	CH 4	16586
226	CH 5	16856	804	CH 5	16861
228	CH 6	17122	806	CH 6	17140
230	CH 7	16164	808	CH 7	16179
232	CH 8	16374	810	CH 8	16421
234	CH 9	17215	812	CH 9	17243
236	CH 10	16435	814	CH 10	16461
238	CH 11	16268	816	CH 11	16301
240	CH 12	16615	818	CH 12	16639
242	CH 13	16319	820	CH 13	163[illegible]
244	CH 14	16825	822	CH 14	168[illegible]
246	CH 15	16567	824	CH 15	16575
248	REFLECTOR 1 POSITION 8	1090	826	REFLECTOR 1 POSITION 25	3668
250	REFLECTOR 2 POSITION 8	893	828	REFLECTOR 2 POSITION 25	3469
252	REFL 1 POS 8 2ND LOOK	1087	830	REFL 1 POS 25 2ND LOOK	3665
254	REFL 2 POS 8 2ND LOOK	887	832	REFL 2 POS 25 2ND LOOK	3466
256	SCENE DATA BP 8 CH 3	15777	834	SCENE DATA BP 25 CH 3	15774
258	CH 4	16586	836	CH 4	16584
260	CH 5	16859	838	CH 5	16861
262	CH 6	17120	840	CH 6	17143
264	CH 7	16164	842	CH 7	16185
266	CH 8	16385	844	CH 8	16370
268	CH 9	17214	846	CH 9	17236
270	CH 10	16432	848	CH 10	16458
272	CH 11	16271	850	CH 11	16296
274	CH 12	16620	852	CH 12	16641
276	CH 13	16324	854	CH 13	16343
278	CH 14	16811	856	CH 14	16835
280	CH 15	16567	858	CH 15	16576
282	REFLECTOR 1 POSITION 9	1245	860	REFLECTOR 1 POSITION 26	3821
284	REFLECTOR 2 POSITION 9	1043	862	REFLECTOR 2 POSITION 26	3623
286	REFL 1 POS 9 2ND LOOK	1239	864	REFL 1 POS 26 2ND LOOK	3817
288	REFL 2 POS 9 2ND LOOK	1040	866	REFL 2 POS 26 2ND LOOK	3618
290	SCENE DATA BP 9 CH 3	15778	868	SCENE DATA BP 26 CH 3	15772
292	CH 4	16595	870	CH 4	16586

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	16860	872	CH 5	16858
296	CH 6	17126	874	CH 6	17141
298	CH 7	16168	876	CH 7	16185
300	CH 8	16411	878	CH 8	16377
302	CH 9	17225	880	CH 9	17236
304	CH 10	16442	882	CH 10	16458
306	CH 11	16278	884	CH 11	16293
308	CH 12	16611	886	CH 12	16630
310	CH 13	16318	888	CH 13	16349
312	CH 14	16829	890	CH 14	16843
314	CH 15	16569	892	CH 15	16577
316	REFLECTOR 1 POSITION 10	1395	894	REFLECTOR 1 POSITION 27	3975
318	REFLECTOR 2 POSITION 10	1193	896	REFLECTOR 2 POSITION 27	3774
320	REFL 1 POS 10 2ND LOOK	1390	898	REFL 1 POS 27 2ND LOOK	3968
322	REFL 2 POS 10 2ND LOOK	1191	900	REFL 2 POS 27 2ND LOOK	3770
324	SCENE DATA BP 10 CH 3	15782	902	SCENE DATA BP 27 CH 3	15778
326	CH 4	16592	904	CH 4	16591
328	CH 5	16864	906	CH 5	16870
330	CH 6	17129	908	CH 6	17164
332	CH 7	16176	910	CH 7	16207
334	CH 8	16387	912	CH 8	16375
336	CH 9	17227	914	CH 9	17256
338	CH 10	16442	916	CH 10	16476
340	CH 11	16277	918	CH 11	16310
342	CH 12	16622	920	CH 12	16651
344	CH 13	16332	922	CH 13	16349
346	CH 14	16829	924	CH 14	16855
348	CH 15	16572	926	CH 15	16583
350	REFLECTOR 1 POSITION 11	1544	928	REFLECTOR 1 POSITION 28	4125
352	REFLECTOR 2 POSITION 11	1346	930	REFLECTOR 2 POSITION 28	3925
354	REFL 1 POS 11 2ND LOOK	1542	932	REFL 1 POS 28 2ND LOOK	4120
356	REFL 2 POS 11 2ND LOOK	1343	934	REFL 2 POS 28 2ND LOOK	3920
358	SCENE DATA BP 11 CH 3	15775	936	SCENE DATA BP 28 CH 3	15785
360	CH 4	16589	938	CH 4	16602
362	CH 5	16857	940	CH 5	16872
364	CH 6	17128	942	CH 6	17130
366	CH 7	16171	944	CH 7	16171
368	CH 8	16435	946	CH 8	16402
370	CH 9	17221	948	CH 9	17221
372	CH 10	16439	950	CH 10	16439
374	CH 11	16285	952	CH 11	16279
376	CH 12	16618	954	CH 12	16617
378	CH 13	16332	956	CH 13	16323
380	CH 14	16808	958	CH 14	16832
382	CH 15	16569	960	CH 15	16567
384	REFLECTOR 1 POSITION 12	1698	962	REFLECTOR 1 POSITION 29	4274
386	REFLECTOR 2 POSITION 12	1500	964	REFLECTOR 2 POSITION 29	4076
388	REFL 1 POS 12 2ND LOOK	1694	966	REFL 1 POS 29 2ND LOOK	4272
390	REFL 2 POS 12 2ND LOOK	1495	968	REFL 2 POS 29 2ND LOOK	4073
392	SCENE DATA BP 12 CH 3	15773	970	SCENE DATA BP 29 CH 3	15811

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALU
394	CH 4	16588	972	CH 4	16632
396	CH 5	16857	974	CH 5	16919
398	CH 6	17125	976	CH 6	17121
400	CH 7	16164	978	CH 7	16162
402	CH 8	16379	980	CH 8	16425
404	CH 9	17216	982	CH 9	17211
406	CH 10	16435	984	CH 10	16430
408	CH 11	16278	986	CH 11	16269
410	CH 12	16618	988	CH 12	16614
412	CH 13	16314	990	CH 13	16313
414	CH 14	16812	992	CH 14	16805
416	CH 15	16565	994	CH 15	16565
418	REFLECTOR 1 POSITION 13	1847	996	REFLECTOR 1 POSITION 30	4429
420	REFLECTOR 2 POSITION 13	1649	998	REFLECTOR 2 POSITION 30	4228
422	REFL 1 POS 13 2ND LOOK	1845	1000	REFL 1 POS 30 2ND LOOK	4424
424	REFL 2 POS 13 2ND LOOK	1646	1002	REFL 2 POS 30 2ND LOOK	4222
426	SCENE DATA BP 13 CH 3	15784	1004	SCENE DATA BP 30 CH 3	15781
428	CH 4	16604	1006	CH 4	16601
430	CH 5	16859	1008	CH 5	16868
432	CH 6	17124	1010	CH 6	17120
434	CH 7	16161	1012	CH 7	16158
436	CH 8	16381	1014	CH 8	16395
438	CH 9	17214	1016	CH 9	17211
440	CH 10	16435	1018	CH 10	16433
442	CH 11	16274	1020	CH 11	162
444	CH 12	16620	1022	CH 12	166
446	CH 13	16321	1024	CH 13	16308
448	CH 14	16817	1026	CH 14	16822
450	CH 15	16565	1028	CH 15	16562
452	REFLECTOR 1 POSITION 14	2002	1030	REFLECTOR 1 COLD CAL POS	6021
454	REFLECTOR 2 POSITION 14	1801	1032	REFLECTOR 2 COLD CAL POS	5820
456	REFL 1 POS 14 2ND LOOK	1997	1034	REFL 1 COLD CAL 2ND LOOK	6021
458	REFL 2 POS 14 2ND LOOK	1798	1036	REFL 2 COLD CAL 2ND LOOK	5819
460	SCENE DATA BP 14 CH 3	15780	1038	COLD CAL DATA 1 CH 3	15783
462	CH 4	16598	1040	CH 4	16599
464	CH 5	16869	1042	CH 5	16862
466	CH 6	17123	1044	CH 6	17110
468	CH 7	16167	1046	CH 7	16151
470	CH 8	16389	1048	CH 8	16383
472	CH 9	17217	1050	CH 9	17211
474	CH 10	16432	1052	CH 10	16428
476	CH 11	16274	1054	CH 11	16265
478	CH 12	16609	1056	CH 12	16606
480	CH 13	16317	1058	CH 13	16315
482	CH 14	16809	1060	CH 14	16817
484	CH 15	16565	1062	CH 15	16558
486	REFLECTOR 1 POSITION 15	2154	1064	COLD CAL DATA 2 CH 3	15785
488	REFLECTOR 2 POSITION 15	1955	1066	CH 4	16599
490	REFL 1 POS 15 2ND LOOK	2148	1068	CH 5	16864
492	REFL 2 POS 15 2ND LOOK	1950	1070	CH 6	17118

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	SCENE DATA BP 15 CH 3	15787	1072	CH 7	16150
496	CH 4	16601	1074	CH 8	16387
498	CH 5	16873	1076	CH 9	17209
500	CH 6	17128	1078	CH 10	16429
502	CH 7	16170	1080	CH 11	16264
504	CH 8	16392	1082	CH 12	16608
506	CH 9	17218	1084	CH 13	16317
508	CH 10	16439	1086	CH 14	16801
510	CH 11	16281	1088	CH 15	16559
512	CH 12	16620	1182	REFLECTOR 1 WARM CAL POS	10419
514	CH 13	16331	1184	REFLECTOR 2 WARM CAL POS	10220
516	CH 14	16822	1186	REFL 1 WARM CAL 2ND LOOK	10419
518	CH 15	16568	1188	REFL 2 WARM CAL 2ND LOOK	10220
520	REFLECTOR 1 POSITION 16	2302	1190	WARM CAL DATA 1 CH 3	15778
522	REFLECTOR 2 POSITION 16	2104	1192	CH 4	16592
524	REFL 1 POS 16 2ND LOOK	2301	1194	CH 5	16863
526	REFL 2 POS 16 2ND LOOK	2101	1196	CH 6	17140
528	SCENE DATA BP 16 CH 3	15807	1198	CH 7	16193
530	CH 4	16626	1200	CH 8	16380
532	CH 5	16912	1202	CH 9	17244
534	CH 6	17136	1204	CH 10	16461
536	CH 7	16176	1206	CH 11	16305
538	CH 8	16411	1208	CH 12	16647
540	CH 9	17231	1210	CH 13	16351
542	CH 10	16446	1212	CH 14	16853
544	CH 11	16286	1214	CH 15	16581
546	CH 12	16624	1216	WARM CAL DATA 2 CH 3	15777
548	CH 13	16331	1218	CH 4	16588
550	CH 14	16821	1220	CH 5	16864
552	CH 15	16573	1222	CH 6	17151
554	REFLECTOR 1 POSITION 17	2454	1224	CH 7	16194
556	REFLECTOR 2 POSITION 17	2258	1226	CH 8	16381
558	REFL 1 POS 17 2ND LOOK	2452	1228	CH 9	17250
560	REFL 2 POS 17 2ND LOOK	2253	1230	CH 10	16466
562	SCENE DATA BP 17 CH 3	15778	1232	CH 11	16305
564	CH 4	16598	1234	CH 12	16649
566	CH 5	16864	1236	CH 13	16346
568	CH 6	17132	1238	CH 14	16856
570	CH 7	16174	1240	CH 15	16582

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	17930	23.25
1092	SCAN MOTOR A1-2	18395	23.73
1094	FEEDHORN A1-1	19472	25.46
1096	FEEDHORN A1-2	20441	25.89
1098	RF MUX A1-1	20187	27.37
1100	RF MUX A1-2	20718	28.66
1102	LOCAL OSCILLATOR CHANNEL 3	21806	30.54
1104	LOCAL OSCILLATOR CHANNEL 4	21951	30.75
1106	LOCAL OSCILLATOR CHANNEL 5	21551	29.72
1108	LOCAL OSCILLATOR CHANNEL 6	20236	27.58
1110	LOCAL OSCILLATOR CHANNEL 7	20707	28.37
1112	LOCAL OSCILLATOR CHANNEL 8	21460	30.24
1114	LOCAL OSCILLATOR CHANNEL 15	21023	30.00
1116	PLL LO #2 CHANNELS 9 THROUGH 14	19745	27.25
1118	PLL LO #1 CHANNELS 9 THROUGH 14	22245	31.85
1120	SPARE (NOT USED)	32767	52.86
1122	MIXER/IF AMPLIFIER CHANNEL 3	21310	29.27
1124	MIXER/IF AMPLIFIER CHANNEL 4	20924	29.27
1126	MIXER/IF AMPLIFIER CHANNEL 5	20869	28.90
1128	MIXER/IF AMPLIFIER CHANNEL 6	20501	27.93
1130	MIXER/IF AMPLIFIER CHANNEL 7	20696	28.39
1132	MIXER/IF AMPLIFIER CHANNEL 8	20869	29.37
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	19987	27.68
1136	MIXER/IF AMPLIFIER CHANNEL 15	21107	29.68
1138	IF AMPLIFIER CHANNEL 11 THRU 14	20980	29.28
1140	IF AMPLIFIER CHANNEL 9	21414	29.28
1142	IF AMPLIFIER CHANNEL 10	21011	29.45
1144	IF AMPLIFIER CHANNEL 11	20450	27.83
1146	DC/DC CONVERTER	21546	29.81
1148	IF AMPLIFIER CHANNEL 13	20562	27.77
1150	IF AMPLIFIER CHANNEL 14	20228	27.76
1152	IF AMPLIFIER CHANNEL 12	20218	27.72
1154	RF SHELF A1-1	20685	28.33
1156	RF SHELF A1-2	20744	28.62
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	19737	26.20
1160	A1-1 WARM LOAD 1	23076	23.60
1162	A1-1 WARM LOAD 2	23278	23.64
1164	A1-1 WARM LOAD 3	23350	23.70
1166	A1-1 WARM LOAD 4	23038	23.67
1168	A1-1 WARM LOAD CENTER	23220	23.70
1170	A1-2 WARM LOAD 1	23852	24.59
1172	A1-2 WARM LOAD 2	23691	24.58
1174	A1-2 WARM LOAD 3	23718	24.63
1176	A1-2 WARM LOAD 4	23635	24.60
1178	A1-2 WARM LOAD CENTER	23510	24.49
1180	TEMP SENSOR REFERENCE VOLTAGE	24883	

FULL SCAN MODE

DESCRIPTION	STATUS	STATUS	STATUS
SCANNER A1-1 POWER	ON	ON	ON
SCANNER A1-2 POWER	ON	ON	ON
PLL POWER	PLLO # 1	PLLO # 1	PLLO # 1
ANTENNA IN WARM CAL POSITION MODE	NO	NO	NO
ANTENNA IN COLD CAL POSITION MODE	NO	NO	NO
ANTENNA IN NADIR POSITION MODE	NO	NO	NO
ANTENNA IN FULL SCAN MODE	YES	YES	YES
SURVIVAL HEATER POWER	OFF	OFF	OFF
MODULE POWER	CONNECT	CONNECT	CONNECT
COLD CAL POSITION MSB	ZERO	ZERO	ZERO
COLD CAL POSITION LSB	ZERO	ZERO	ZERO

ANALOG DATA

DESCRIPTION	VALUE	DEG C	VALUE	DEG C	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	217	22.1	217	22.1	217	22.1
A1-2 SCANNER MOTOR TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-1 RF SHELF TEMPERATURE	219	24.8	219	24.8	220	26.2
A1-2 RF SHELF TEMPERATURE	221	27.5	221	27.5	221	27.5
A1-1 WARM LOAD TEMPERATURE	218	23.4	218	23.4	218	23.4
A1-2 WARM LOAD TEMPERATURE	219	24.8	219	24.8	219	24.8

DESCRIPTION	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS	VALUE	AMPS/ VOLTS
A1-1 ANTENNA DRIVE MOTOR CURRENT (AVRG)	106	49.40	107	49.86	107	49.86
A1-2 ANTENNA DRIVE MOTOR CURRENT (AVRG)	99	46.13	100	46.60	100	46.60
SIGNAL PROCESSING +15 VDC	172	14.84	172	14.84	172	14.84
ANTENNA DRIVE +15 VDC	173	14.93	174	15.02	174	15.02
SIGNAL PROCESSING -15 VDC	151	-15.00	151	-15.00	151	-15.00
ANTENNA DRIVE -15 VDC	151	-15.00	151	-15.00	151	-15.00
RECEIVER AMPLIFIER +8 VDC	158	7.90	158	7.90	158	7.90
SIGNAL PROCESSOR +5 VDC	147	4.90	148	4.93	147	4.90
ANTENNA DRIVE +5 VDC	148	4.93	148	4.93	148	4.93
RECEIVER MIXER/IF +10 VDC	171	9.88	171	9.88	171	9.88
PHASE LOCK LOOP (CHANNEL 9/14) +15 VDC	172	14.84	172	14.84	172	14.84
PHASE LOCK LOOP (CHANNEL 9/14) -15 VDC	146	-15.25	146	-15.25	146	-15.25
L.O. VOLTAGE (CHANNEL 8) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 7) VDC	173	9.90	173	9.90	173	9.90
L.O. VOLTAGE (CHANNEL 6) VDC	175	10.01	175	10.01	175	10.01
L.O. VOLTAGE (CHANNEL 3) VDC	175	10.01	175	10.01	175	10.01
L.O. VOLTAGE (CHANNEL 4) VDC	174	9.96	174	9.96	174	9.96
L.O. VOLTAGE (CHANNEL 5) VDC	173	9.90	173	9.90	173	9.90
PLLO # 2 LOCK DETECT	5	0.10	5	0.10	5	0.10
PLLO # 1 LOCK DETECT	222	4.44	222	4.44	222	4.44
L.O. VOLTAGE (CHANNEL 15) VDC	172	14.84	172	14.84	172	14.84

PRT TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
VARIABLE TARGET	615	42.00	601	14.00
	616	43.00	602	15.00
	617	44.00	603	16.00
	618	45.00	604	17.00
	619	46.00	605	18.00
	620	47.00	606	19.00
	621	48.00	607	20.00
FIXED TARGET	622	49.00	608	21.00
	623	50.00	609	22.00
	624	51.00	610	23.00
	625	52.00	611	24.00
	626	53.00	612	25.00
	627	67.00	613	69.00
	628	68.00	614	70.00
BASEPLATE	629	71.00	630	72.00
	631	26.00	632	27.00

THERMOCOUPLE TEMPERATURES	A1-1 NO.	A1-1 DEG K	A1-2 NO.	A1-2 DEG K
FIXED TARGET SHROUD	558	5.00	537	34.00
	559	6.00	538	35.00
VARIABLE TARGET SHROUD	550	7.00	524	36.00
	551	8.00	525	37.00
FIXED TARGET N2	506	57.00	502	30.00
	507	58.00	503	31.00
VARIABLE TARGET N2	516	59.00	511	32.00
	517	60.00	512	33.00
HEATER N2	514	1.00	509	38.00
	515	2.00	510	39.00
FIXED TARGET FLOW METER	508	63.00	504	61.00
VARIABLE TARGET FLOW METER	518	64.00	513	62.00
BASEPLATE HEATER N2	519	3.00	520	4.00
BASEPLATE N2	521	9.00	522	10.00
BASEPLATE FLOW METER	523	65.00		
ADJUNCT RADIATORS	575	73.00	577	74.00
	579	75.00	581	76.00

GENCORP AEROJET

DOCUMENT APPROVAL SHEET

TITLE	DOCUMENT NO.
Performance Verification Report Initial Comprehensive Performance Test Report, P/N 1331720-2, S/N 105	Report 11408 24 February 1999

INPUT FROM:	CDRL:	SPECIFICATION ENGINEER:	DATE
R. Platt	208	N/A	

CHECKED BY:	DATE	JOB NUMBER:	DATE
N/A		N/A	

APPROVED SIGNATURES	DEPT. NO.	DATE
Product Team Leader (A. Nieto)	7888	2/25/99
Systems Engineer (R. Platt)	8341	2/23/99
Design Assurance (E. Lorenz)	8331	3/1/99
Quality Assurance (R. Taylor) for	7831	3/1/99
PMO/Technical (P. Patel)	8341	2/24/99
Released: Configuration Management (J. Cavanaugh)	8361	3/1/99

By my signature, I certify the above document has been reviewed by me and concurs with the technical requirements related to my area of responsibility.

(Data Center) FINAL

Please return this sheet and the reproducible master to Jim Kirk (Bldg. 1/Dept. 8631), ext. 2081.

PREPARATION OF THE REPORT DOCUMENTATION PAGE

The last page of a report facing the third cover is the Report Documentation Page, RDP. Information presented on this page is used in announcing and cataloging reports as well as preparing the cover and title page. Thus, it is important that the information be correct. Instructions for filing in each block of the form are as follows:

Block 1. Report No. NASA report series number, if preassigned.

Block 2. Government Accession No. Leave blank.

Block 3. Recipient's Catalog No.. Reserved for use by each report recipient.

Block 4. Title and Subtitle. Typed in caps and lower case with dash or period separating subtitle from title.

Block 5. Report Date. Approximate month and year the report will be published.

Block 6. Performing Organization Code . Leave blank.

Block 7. Authors. Provide full names exactly as they are to appear on the title page. If applicable, the word editor should follow a name.

Block 8. Performing Organization Report No. NASA installation report control number and, if desired, the non-NASA performing organization report control number.

Block 9. Performing Organization Name and Address. Provide affiliation (NASA program office, NASA installation, or contractor name) of authors.

Block 10. Work Unit No. Provide Research and Technology Objectives and Plants (RTOP) number.

Block 11. Contract or Grant No. Provide when applicable.

Block 12. Sponsoring Agency Name and Address. National Aeronautics and Space Administration, Washington, D.C. 20546-0001. If contractor report, add NASA installation or HQ program office.

Block 13. Type of Report and Period Covered. NASA formal report series; for Contractor Report also list type (interim, final) and period covered when applicable.

Block 14. Sponsoring Agency Code. Leave blank.

Block 15. Supplementary Notes. Information not included elsewhere: affiliation of authors if additional space is required for Block 9, notice of work sponsored by another agency, monitor of contract, information about supplements (file, data tapes, etc.) meeting site and date for presented papers, journal to which an article has been submitted, note of a report made from a thesis, appendix by author other than shown in Block 7.

Block 16. Abstract. The abstract should be informative rather than descriptive and should state the objectives of the investigation, the methods employed (e.g., simulation, experiment, or remote sensing), the results obtained, and the conclusions reached.

Block 17. Key Words. Identifying words or phrases to be used in cataloging the report.

Block 18. Distribution Statement. Indicate whether report is available to public or not. If not to be controlled, use "Unclassified-Unlimited." If controlled availability is required, list the category approved on the Document Availability Authorization Form (see NHB 2200.2, Form FF427). Also specify subject category (see "Table of Contents" in a current issue of STAR) in which report is to be distributed.

Block 19. Security Classification (of the report). Self-explanatory.

Block 20. Security Classification - (of this page). Self-explanatory.

Block 21. No. of Pages. Count front matter pages beginning with iii, text pages including internal blank pages, and the RDP, but not the title page or the back of the title page.

Block 22. Price Code. If Block 18 shows "Unclassified-Unlimited," provide the NTIS price code (see "NTIS Price Schedules" in a current issue of STAR) and at the bottom of the form add either "For sale by the National Technical Information Service, Springfield, VA 22161-2171" or "For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402-0001," whichever is appropriate.

NASA
National Aeronautics and Space Administration

Report Documentation Page

1. Report No.	2. Government Accession No.	3. Recipient's Catalog No.
---	---	---

4. Title and Subtitle	5. Report Date
Integrated Advanced Microwave Sounding Unit-A (AMSU-A), Performance Verification Report	24 February 1999
	6. Performing Organization Code: ---
7. Author(s): R. Platt	8. Performing Organization Report No.: 11408
	10. Work Unit No.: ---
9. Performing Organization Name and Address: Aerojet, 1100 W. Hollyvale, Azusa, CA 91702	11. Contract or Grant No.: NAS 5-32314
12. Sponsoring Agency Name and Address: NASA, Goddard Space Flight Center, Greenbelt, Maryland 20771	13. Type of Report and Period Covered: Final
	14. Sponsoring Agency Code: ---

15. Supplementary Notes: ---

16. ABSTRACT (*Maximum 200 words*)

This is the Performance Verification Report, Initial Comprehensive Performance Test Report, P/N 1331720-2, S/N 105, for the Integrated Advanced Microwave Sounding Unit-A (AMSU-A).

17. Key Words (Suggested by Author(s))	18. Distribution Statement
EOS Microwave System	Unclassified --- Unlimited

19. Security Classif. (of this report)	20. Security Classif. (of this page)	21. No. of pages	22. Price
Unclassified	Unclassified		---

NASA FORM 1626 OCT 86

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. AGENCY USE ONLY *(Leave blank)*

2. REPORT DATE
April 1999

3. REPORT TYPE AND DATES COVERED
Contractor Report

4. TITLE AND SUBTITLE
Integrated Advanced Microwave Sounding Unit–A (AMSU-A), Monthly Report for November 1997

5. FUNDING NUMBERS
NAS5-32314

6. AUTHOR(S)
A. Nieto

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS (ES)
Aerojet
1100 W. Hollyvale
Azusa, CA 91702

8. PEFORMING ORGANIZATION REPORT NUMBER
10300-67
March 1999

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS (ES)
National Aeronautics and Space Administration
Washington, DC 20546-0001

10. SPONSORING / MONITORING AGENCY REPORT NUMBER
NASA/CR-1999-209508

11. SUPPLEMENTARY NOTES

12a. DISTRIBUTION / AVAILABILITY STATEMENT
Unclassified–Unlimited
Subject Category:19
Report available from the NASA Center for AeroSpace Information,
7121 Standard Drive, Hanover, MD 21076-1320. (301) 621-0390.

12b. DISTRIBUTION CODE

13. ABSTRACT *(Maximum 200 words)*

This is the Monthly Report for the Integrated Advanced Microwave Sounding Unit–A (AMSU-A).

14. SUBJECT TERMS
EOS, Microwave System

15. NUMBER OF PAGES
180

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
Unclassified	Unclassified	Unclassified	UL