



W. W. Hansen Experimental Physics Laboratory
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STANFORD, CALIFORNIA 94305-4085

Gravity Probe B Relativity Mission

EQUIPMENT TEST PROCEDURE (ETP) FOR GSS APU SIMULATOR POWER SUPPLY

APU Simulator PN 8A00740GSE-501	SN:
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GP-B Procedure P0759 Rev – September 27, 2000

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RE, Gyroscope Suspension System (GSS) Group

Date

Approved by: William Bencze
Payload Electronics Manager.

Date

Approved by: Dorrene Ross
GP-B Quality Assurance

Date

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1.0 Revision History

Rev Level	Comments/notes	Date	Revised By
-	First release of this test procedure	22-Sep-2000	WJ Bencze

2.0 Scope:

This procedure details the steps required to certify the APU Simulator power supply for use flight hardware.

3.0 Reference Documents

- 3.1. Aft Power Unit Simulator Functional Test, CTP-APU-002 (LMCO)
- 3.2. Electrostatic Discharge Control Program for Protection of Electrical and Electronic Parts, Assemblies, and Equipment, MIL-STD-1686

4.0 Test Facilities

HEPL Room 127, Stanford University

5.0 QA Provisions:

- 5.1. This procedure shall be conducted on a formal basis to its latest approved and released version. The QA Program Engineer (D. Ross) and the ONR representative (E. Ingraham) shall be notified 24 hours prior to the start of this procedure. QA may monitor the execution of all or part of this procedure should they elect to do so.

Date/time: _____
GP-B QA (D. Ross)

Date/time: _____
ONR (E. Ingraham)

- 5.2. Upon completion of this procedure, the GSS manager and the GP-B QA manager shall certify her/his concurrence that the procedure was performed and accomplished in accordance with the prescribed instructions by signing and dating his approval at the end of this procedure.

6.0 Test Personnel

This test procedure is to be conducted only by the following personnel:

- 6.1. William Bencze, or his designated representative.

7.0 General Instructions

- 7.1. Redlines can be initiated by the test personnel listed in Section 6.0 and must be approved by QA.
- 7.2. Test operators shall read this procedure in its entirety and resolve any apparent ambiguities prior to beginning this test.
- 7.3. Any nonconformance or test anomaly should be reported by a Discrepancy Report. Refer to the Quality Plan, P0108, for guidance. Do not alter or break test configuration if a test failure occurs; notify quality assurance.
- 7.4. Only the following persons have the authority to exit/terminate this test or perform a retest: test operators listed in Section 6.0 and GP-B QA.

8.0 Hardware Safety Requirements:

- 8.1. This assembly is ESD sensitive; special care shall be exercised per the “Electrostatic Discharge Control Program for Protection of Electrical and Electronic Parts, Assemblies, and Equipment”, MIL-STD-1686
- 8.2. Ensure that power is removed from cable assemblies before connecting or disconnecting cable connectors.
- 8.3. Connector savers are to be used on all flight connector interfaces unless otherwise specified.
- 8.4. Examine all mating connectors before attempting to mate them. Remove any foreign particles. Look for any damaged pins or sockets. Do not force the coupling action if excessive resistance is encountered. Ensure that key-ways are aligned when mating connectors.

9.0 Functional Tests

This test uses the test procedure developed by Lockheed Martin Technical Operation (LMTO) and was supplied with the power supply units.

	P/F	Notes
9.1. Record serial number of APU Simulator (PN 8A00740GSE-501) tested		SN:
9.2. Perform the following tests in CTP-APU-002 based on the GSS unit to be tested:		

Item	Aft Box 26224-101	Fwd Box, 26225-101	P/F
Task 1	X	X	
Task 2	X	X	
Task 3	X		
Task 4		X	
Task 5		X	
Task 6	X	X	

10.0 Completion of procedure:

	P/F	Notes
10.1. Upon successful completion, affix a test certification sticker to the face of the unit.		

I certify that this procedure was performed in whole and that the data recorded above is complete and accurate.

Test Engineer Date

This is to certify that the information obtained under this test procedure is as represented and the documentation is completed and correct.

GSS Representative Date

Quality Assurance Date

	APU Simulator	Stamp:
	Tested on: _____	
	Retest by: _____	
	By: _____ Per P0759 Rev _____	

	APU Simulator	Stamp:
	Tested on: _____	
	Retest by: _____	
	By: _____ Per P0759 Rev _____	

	APU Simulator	Stamp:
	Tested on: _____	
	Retest by: _____	
	By: _____ Per P0759 Rev _____	