MJS77 TEST CONFIGURATION

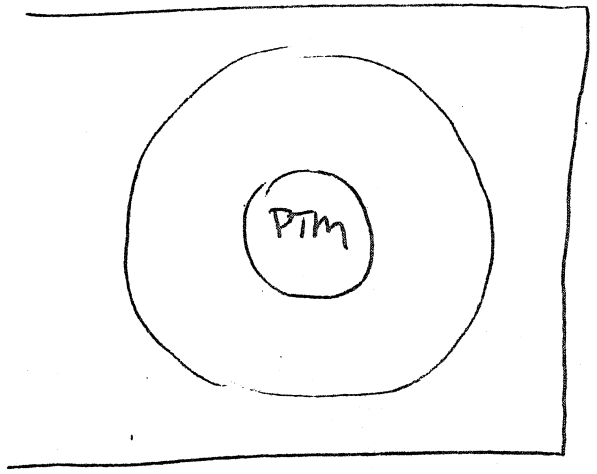
Test title SPACE SIMULATION S/C MJS77- 1 PTM

Test location STV Procedure 302.002A Calendar date 12-8-76

GMT day 344 Start time _____ GMT Stop time _____ GMT RTM off _____

Subsystem (experiment)	Serial No.	Stimulus No.	Stimulus on (√)	Stimulus Off (√)	Subsystem removed (date)	Replaced by serial No.
CRS	1					
PRA	1					
PWS	1					
LCEP	01 PTM					
PPS	1					
PLS	1					
UVS	2					
MAG	1					
ISS	3, 4					
IRIS	102					
Other		Configuration Remarks				
RFS						
MDS						
PWR						
CCS						
FDS						
AACS						
PYRO						
CABL						
PROP						
DSS						
SXA						

SSF
Bldg 150



jpl → OPERATIONS LOG

RTM _____ On Date 12-8-76 Day 344 GMT

Proc MJS77- 302.00A RTM _____ Off S/C MJS77- 1 PTM Page 1893

Time, GMT	Step No.	Command	Test: Thermal Vac	Init:
001115			IRIS SAW A glitch in their inter theometer	
001924			SURFACE +-2 prop ALARM seen Ch. E2-93	
002405		34AE	04 UVS cmd WORD	
003542			FDS turned on their console 6 (UVS Stim + FDS Vis Recorder)	
			NO effect on other equipt.	
004701			FDS Lost Sync (PRA CMD DISABLED) BACK up quickly	
0047—			PPS elect. temp. ALARM seen E-607	
005200			CHAMBER lights have been turned ON	
005746			Lights OUT	
005850		34AE	05 UVS CMD WORD	
010949			TTS is SWAPPING out the NERT SPOOL / A 1530 FAULT DELAYED this	
01 0928			1530 is BACK up	
0113—			IRIS SAW AN EFFECT OF the WORK lights	
[redacted]		34AE	06 UVS CMD WORD [CCS HAS A PROBLEM with this CMD] NOT SENT	
012343			NERT is BACK up	
013645			The 34AE AT 06 or 07 Level will Require A SOFTWARE LOAD	
013645			NA FOT ALARM	
0136—			ALARM FOR PPS at -20°c is NOT VALID AS instrument CAN go	
			DOWN TO -40°c.	

jpl → OPERATIONS LOG

RTM _____ On
RTM _____ Off

Date 12/8/76 Day 344 GMT
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Proc MJS77- _____

Time, GMT	Step No.	Command	Test: Thermal Vac	Init:
0140 –			ISS WANTS to change their limit FOR NA ALARM	
014031		27AF	0000 PPS POS CMD	
014312		FDS BLK	FDS SOFTWARE BLK (FOR SC34AE 06 CMD.) OBFF – FIB7 ADD – DATA	
014340			FDS & UUS Verify CMD. – 34AE 06 –	
014800			ISS –2° now –10° is ALARM	
0148 –			Request to Reduce chamber temp 10° has been made	
			By temp. control.	
015044		25AH	4020 Lecp to step every 6 Sec.	
0154 –			Filter wheel to pos 6 Seen By PPS in Response TO	
			27AF 0000 CMD.	
015707		FDS BLK	OBFF – FIBF UUS TO Level 7 34AE 07	
015829			UUS Verifies Receipt of Level 7 CMD.	
020450		34AE	03	
			CMD NOT Seen in telemitry DTU – Seen on PRinter – NO SWEAT	
020710			UUS Verifies Receipt of CMD – 34AE 03 –	
020926		27AF	0001	
			AGAIN CMD NOT Seen on tel. DTU – Seen on Printer – NO SWEAT	
021055		34AE	00	
021318		34AR	IRIS OFF	

jpl → OPERATIONS LOG

Proc MJS77- 300.02 & 302.00 RTM ____ On RTM ____ Off Date 12/8/76 Day 344 GMT S/C MJS77- 1, Ptm Page 1895

Time, GMT	Step No.	Command	Test: Thermal Vac	Init:
021444		34AR	UVS OFF	
021549		27AR	PPS OFF	
021750		36BR	ISS WA OFF	
021933		36DRP	ISS NA OFF	
			ABOVE PLATFORM ISturments TO BE OFF 1 HR	
022100			ISS VERIFIES WA + NA OFF	
022107			Centrl recorder changing tape	
022259		25AH	5020	
023143			Ctrl Rec. 101 TAPE NOW UP	
025340		32AH	12 PLS MODE CMD	
0253—			PPS ALARM temp TO BE CHANGED FROM -20°C TO -35°C & +35°C	
0256—			temp. Control requests PLATFORM INSTS. to BE OFF a little more	
			than An Hour / they ARE Dropping temp 10°C	
03.27.54			RFS DROP UPLINK	
033912		36B	W/A ON	
034336		25AH	4000	
034410			ISS VERIFIES W/A is on	
034430		36DP	N/A ON	
034622		39A	IRIS ON	

jpl → **OPERATIONS LOG**

Proc MJS77- 300.02 & 302.00

RTM _____ On

RTM _____ Off

Date 12-8-76 Day 344 GMT

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Time, GMT	Step No.	Command	Test: THERMAL VAC	Init:
034715			ISS verifies N/A is ON	
034912			SCi " IRis " "	
042824			telem. on Printers showed BAD DATA /TTS is checking	
050220			CCS SE HAS Stopped will recycle	
0533-			ADC TEST in progress will CAUSE ALARMS TO OCCUR	
054413		27AE	00 PPS CONF.	
054950		27AF	0001 PPS POS.	
055032		34AE	00 UVS CMD.	
055059		27A	PPS ON	
055146		34A	UVS "	
055547			Temp control has vibrators ON	
055711			" " " " OFF	
055743		2FP	Rec 1 Select	
060128		34AE	02	
061046			RFS to CONFig their conjunction BY to 2-WAY	
061710			RFS UPLK XFER to CTA-21-	
062411		34AE	00	
062552		34AR	UVS OFF -2 DN	
062728		34A	UVS ON +1 DN	

jpl → OPERATIONS LOG

RTM _____ On
RTM _____ Off

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Proc MJS77-_____

Time, GMT	Step No.	Command	Test: Thermal Vac	Init:
063041		34AE	02	
063207		10DR	AP Br Heaters off	
063526		10ER	" " 2 " " /-10N+3DN + -4DN + -1DN = -9DN	
063644		10E	" " " " ON + 9DN	
063859		21AR	CRS OFF -4DN on Bus	
064107		21A	" ON +4DN on Bus	
064302		27AR	PPS OFF -1DN " "	
064446		27A	PPS ON +1 " " "	
064603		21CR	CRS Sup Heater off -2 DN Bus	
064722		21C	" " " ON +2 " "	
064855		22AR	PRA OFF -3 DN on 2.4	
065027		22A	" ON	
065134		22AF	0100	
065215		22AF	5547	
065343		23AR	PWS OFF -1 DN 2.4	
065542		23A	" ON +1 DN "	
065656		32AR	PLS OFF -3 DN 2.4	
065834		32A	" ON +3 " "	
070005		39FR	SB Supply A OFF (IRIS) -7 DN (E-72)	

jpl → OPERATIONS LOG

Proc MJS77- 302.00

RTM _____ On

RTM _____ Off

Date 12/8/76 Day 344 GMT

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Time, GMT	Step No.	Command	Test: Thermal Vac.	Init:
070156		39F	SB supply A ON IRIS	
070314		39AR	IRIS OFF −6 DN ON E-72	
070452		39A	" ON +5 DN " "	
070803		35BR	MAG B OFF −2 " " "	
070940		35B	" B ON +1 " " "	
071057		25AH	4237	
071139		2FRP	Rec. 2 Select	
071217		25AR	Lecp OFF −5 DN ON E-72	
071514		25A	" ON +1 DN " "	
071755		25AH	1777 +1 DN	
071846		25AH	2607 +1 DN	
071939		25AH	6137 +1 DN	
072043		25AH	4000 +1 DN	
072345			IRIS Stin −191.0 temp	
072434	600	22AR	PRA OFF	
073330	608	06BB	030090 GS-4	
073359			mDS Lock −350 —	
073406			TTS Lock H+L-R	
073720	610	23AD	0	

jpl → OPERATIONS LOG

RTM _____ On
RTM _____ Off

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Proc MJS77- 302.00

Time, GMT	Step No.	Command	Test: Thermal Vac	Init:
073958	614	23AD	1	
074306	618	23AD	0	
074710	620/622		FDS steps Completed	
074927	626	23AD	1 WFR PWR OFF	
075006	628		FDS ADJ Set on PWS - STS	
075250	630		SC1 verifies	
0754–	634		PWS temp 17.64	
075448	636		FDS Complete	
075612			Reconnect WAVETEK	
075656	638	23AD	5	
075743		36CP	N/A optic HTR. ON up 1-2 ON	
075947		36CRP	" " " OFF	
080351		4B	1812 0A36 181A C60B 1824 8701	
080406			Load BLK Complete	
080427		2AR	S RG. OFF	
080510		DC2NR	X RANGING OFF	
080655		CC7AHRP	SS HTR 1 OFF	
080936		CC7AHP	SS HTR 1 ON	
081036		CC16BR	DSS REPL HTR OFF	

jpl → OPERATIONS LOG

RTM _____ On Date 12/9/76 Day 344 GMT

Proc MJS77-302.00 RTM _____ Off S/C MJS77- 1 Page ~~13~~ 1900

Time, GMT	Step No.	Command	Test:	Init:
0811 —	205, 800		MDS TEST COMB OSC MONITOR TEST	
081220		CC16B	DSS REPL HTR ON	
081635	6608	SC23AD	4	
081728		CC7SHRP	AZ ACT HTR OFF	
082100		CC7SHP		
0822 —			SCI WAVEFORM CHECK COMPLETE	
082326	678	SC06BB	050070 GS-3 CRUISE	
082539	682	SC23AD	1	
082639			MDS LOCK 7.2 K	
082724	680		PWS STS SET PER STEP 606 302.00	
083016	684		COMPLETE (PWS STIMULUS SET TO AUTO, SEQ LOADED) SET UP	
083055	684		INITIATED PWS AUTO SEQ.	
083129	684		PWS SEQ. BEGINS	
083231		SC06BB	050090 GS3 ENCOUNTER	
0836 —			ISS LOST NIA PWR, TEMP, WA	
083812		CC32BR	PLS SUPPLEMENTAL HTR OFF 4 DN	
084035		CC32B	" ON	
084131		CC25ER	LECP SUPP HTR OFF	
084424		CC25E	" ON	

jpl → OPERATIONS LOG

RTM _____ On Date 12/9/76 Day 344 GMT

Proc MJS77- 302.00 RTM _____ Off S/C MJS77- 1 Page 1901

Time, GMT	Step No.	Command	Test:	Init:
084510		CC25DR	LECP TELESCOPE HTR OFF NO CURRENT CHANGE	
084701		CC25D	" ON	
085049		CC36DRP	NA OFF 14 DN	
085400		CC36DP	NA ON	
090008		CC36BR	WA OFF 14 DN	
090313		CC36B	WA ON	
090808			MDS CDU B OSC TEST COMPLETE	
090904		CC7T1RP	CST 1 OFF 1 DN	
090914		CC7ML	06 CST PWR DISABLE 32 42 ← AACS PWR CODES	
091159		CC7H1RP	HYBIC 1 OFF 17 DN	
091249			FILTER #3 ON PWS STIMULUS	
091503		CC7H1P	HYBIC 1 ON 52 73 63 23 32 42 11 21 10 20	
091808		AC7PCG	62 GYRO B OFF 7W 62	
091953		AC7PCG	72 GYRO C OFF 7W 72	
092304		CC7ML	05 CST PWR ENABLE 42 33 ← AACS PWR CODES	
092314		CC7T1P	CST 1 ON	
092347		CC3HP	CDU A SELECT	
			SCAN ACT SUPP HTR IS ON	
			" COIL "	

jpl → OPERATIONS LOG

RTM _____ On Date 12/9/76 Day 344 GMT

Proc MJS77- 302.00 RTM _____ Off S/C MJS77- 1 Page 1902

Time, GMT	Step No.	Command	Test:	Init:
093701		CC8DR	PYRO INST PWR OFF	
094034		CC8D	" " ON	
095353			CST 2 TEMP ALARM	
095844		CC3BRP	TMU OFF 4DN	
			ALL DRIVERS WERE ON	
100100		CC3BP	TMU ON	
100141		DC2P	2-WAY NON COH ON	
100224			PWS STIMULUS FILTER POSITION #6	
100308			CDU A OSC MON TEST COMPLETE	
100345		CC3HRP	CDU B SELECT	
101007		SC21A6	CRS HIGH VOLTAGE ON (CDU A HAS SLIGHTLY	
1015-			TMU FREQ TEST BEGIN HIGHER FREQ THAN CDU B)	
1025-			TEMP CONTROL TO PUT 1W TO CST 2 AS IT IS TOO COLD	
1032-			PWS STIMULUS FILTER POSITION #9 (#10 SOON)	
105241		DC2PR	2-WAY NON-COH OFF	
105302		DC2QR	USO OFF	
113550			PWS SEQ COMPLETE	
113600			SEQ OFF	

jpl → OPERATIONS LOG

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Proc MJS77- 302.00 RTM _____ Off S/C MJS77- 1 Page 1903

Time, GMT	Step No.	Command	Test:	Init:
113612			SEQ STOPS	
113727			MAN, WAVETEK OFF, -40dB → 0dB -119dB, PASSIVE	
			LOW GAIN, COMMON MODE	
114127		SC23AD	0	
114357	6688		PWS AUTO SEQ ~~RE~~ INITIATE	
114411			" " BEGINS	
114935		DC2A	S RANGING ON	
115004		DC2ER	LGA SELECT	
115504			MDS SUBCARRIER LOCK	
			TCAPU BACK UP HTRS MEASURED 9.32 W TODAY, 11.5 AT SAF	
			SO 1 THRUSTER HTR SUSPECTED NOT WORKING	
			CTA-21 TO SEND DC2N & DC2NR USING HEX FROM CCS	
			CCS TO SEND DC2N & DC2NR IN HEX TO MAKE SURE	
			IT IS GIVING CTA-21 PROPER HEX.	
123154		DC2N	IN BINARY X RANGING ON	
			RFS DID NOT RECEIVE	
			TTS DECODED DC2N	
			A PROC B CMD SENT THROUGH PROC A	
123701		DC2N	IN BINARY PROC B X RANGING ON	

jpl → OPERATIONS LOG

RTM _____ On Date 12/9/76 Day 344 GMT

Proc MJS77- 302.00 RTM _____ Off S/C MJS77- 1 Page 1904

Time, GMT	Step No.	Command	Test:	Init:
			RFS DID NOT RECEIVE	
			MDS HAS SUBCARRIER LOCK, CMD WOULDN'T GO THEREFORE	
123852			MDS SUBCARRIER LOCK OUT	
123919		DC2N	BINARY PROC B X RANGING ON	
~~124729~~			RFS PID NOT RECEIVE	
124729		DC2N	BINARY PROC B X RANGING ON NEW SCID BIT	
124922		DC2N	X RANGING ON (THROUGH CMD TRANSLATOR)	
			RFS RECEIVED	
124940		DC2Q	USO ON	
			CM2-1 TEST BEGINS (A CTA-21 TEST)	
130233		CC3HP	CDU A SELECT	
130324		DC2E	HGA SELECT	
130354		CC2FP	RCVR 1 SELECT	
131204		DC2NR	X RANGING OFF	
1315-		-	CTA-21 HAS UPLINK	
1320-			" CMD MOD ON	
132120			" IDLE 2	
132148			MDS BIT SYNC LOCK	
132425			SNR -384	

jpl → OPERATIONS LOG

RTM _____ On Date 12/9/76 Day 344 GMT

Proc MJS77- 302.00 RTM _____ Off S/C MJS77- 1 Page 1905

Time, GMT	Step No.	Command	Test:	Init:
133104			CDU OUT OF LOCK	
134257			CMD MOD OFF CTA-21	
134343		DC2ER	LGA SELECT	
134406		CC3HRP	CDU B SELECT	
134508		CC2FRP	RCVR 2 SELECT	
134814		DC2N	X RANGING ON PROC B PDB BINARY	
			RFS CONFIRMS !	
134950		DC2NR	X RANGING OFF PROC B PDB BINARY	
			RFS CONFIRMS	
1412—			CTA-21 FINISHED FOR THE NIGHT	
141748		CC26RP	X XMTR OFF	
142157		CC2KRP	S TWTA OFF (2)	
142528		CC2MRP	S XITR OFF (2)	
142831		CC2BP	S XITR 1 SELECT	
142850		CC2MP	S XITR 1 ON	
142908		CC2CP	S TWTA 1 SELECT	
142929		CC2KP	S TWTA 1 ON	
143146			S TWTA 1 UP	
143159		CC2JP	X XITR 1 SELECT	

jpl → OPERATIONS LOG

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Proc MJS77- 302.00 RTM _____ Off S/C MJS77- 1 Page 1906

Time, GMT	Step No.	Command	Test:	Init:
143218		CC2GP	X XMTR ON	
143501			ISS RACK ON	
			4572 12 RADIO MODE	
143652			X TWTA UP	
143814		SC22AF	0100	
144105		FDS	LOAD MEMORY PROTECT OVERRIDE 1817 01AA	
144709			PWS SEQ COMPLETE	
144825		CC22A	PRA ON	
144754			PWS SEQ OFF	
144811			PWS SEQ STOP	
144900		SC23AD	1	
145044		SC22AF	5547	
145037			PWS STIMULUS PER STEP 606	
145503		SC36AN	70	
"		SC36AM	70	
145533		CC2CRP	S TWTA 2 SELECT	
1459—			TTS CHANGING SPOOLER	
145929			S TWTA 2 UP	
1508			MAS 7.2 K LOCK OUT	

jpl → OPERATIONS LOG

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Proc MJS77- 302.00 RTM _____ Off S/C MJS77- 1 Page 1907

Time, GMT	Step No.	Command	Test:	Init:
1505—			TTS BEGINS NEW SPOOL	
			AT 343 01 25 21 DCIOE GAVE 11 DN DC CURRENT	
1533—			TTS S&E DUMP IN PROGRESS	
153100			FA COLD	
153446			DUMP COMPLETE TEMP CONTROL	
153656			" " COMPLEX	
153740		SC06BB	160040 LAUNCH 1200	
153856			MDS LOCK	
153901			FDS LOCK	
153903			TTS LOCK	
154433			E DUMP COMPLETE (2ND DUMP)	
154448		SC06BB	160100 TCM 1200	
154517			TTS LOCK	
			LECP IS NOT STEPPING	
155012			E DUMP COMPLETE (3RD DUMP)	
155138		SC06BB	050070 GS-3 CRUISE	
			7.288 DSS BAY TEMP	
			-191.1°C IRIS STIMULUS	
1558.08			LECP Stepping every 24 sec now.	

jpl → OPERATIONS LOG

RTM _____ On Date 12/9/76 Day 344 GMT

Proc MJS77- 302,00 RTM _____ Off S/C MJS77- 1 Page 1908

Time, GMT	Step No.	Command	Test:	Init:
16.08.–			Another dump.	
16.10.20			dumps complete.	
16.12.19		SC06 BB	010090 IM-3, ENG.	
16.13.03			FDS lock.	
16.13.12			MDS lock 115. , TTS lock	
16.13.30			TTS h/r → MDS (DA1 - MDS2) (DA4 - FDS1 EC lock)	
16.14.56		16AP	DSS power ON — at ~1500 TICS PWR normal Δ.	
			RFS : X band EXITR/TWT = 2/2 low pwr	
			S " " " " = 2/2 " "	
			Receiver 2 lo gain, coherent	
16.20.00			CCS TIC RO = 3/61g both ON (1649,0)	
16.22.47		10D	AP BR 1 HTRS ON (G&C baseline = 115-116) PWR +10 DN Δ on dc. bus.	
			To turn on heater block on accellerometers	
16.25.50		10ER	AP BR 2 HTRS OFF PWR -8 D.N. Δ	
			May draw more pwr being turned on cold (AP HTRS)	
16.27.01		CC06AN	4	
16.27.59		CC06AQ	20 } ISS pointers - Block VII M1	
16.28.40		CC06AR	20 }	
16.30.05		CC06AT	1	

jpl → OPERATIONS LOG

RTM _____ On Date 12-9-76 Day 344 GMT

Proc MJS77- 302.00A RTM _____ Off S/C MJS77- 1 PTM Page 1909

Time, GMT	Step No.	Command	Test:	Init:
			ISS proper gain state	
16·34·53		CCS	LOAD BLOCK 5340 - 5352 4 ISS RESET CMDS.	
16·37·14		27AF	0000 PPS Look-up table → verify proper stepping	
16·39·10		XEC	6635 - 534012 ISS RESET START BLOCK VII M1	
16·41·08			ISS begun BL. VII. (06 AU, AV, AY, AZ)	
16·41·57		16C	3715 DSS h/r record forward track 5	
16·51·57		SC27AF	0001 PPS Fixed position	
16·51·48			DSS EOT → record reverse track 6	
16·52·26		SC25AH	4237 LECP STOWED	
		~~SC17AF~~	~~0011 PPS J-MODE~~	
16·55·50			PPS reports low level lights being turned on - off. (IRIS visible stim. off)	
16·57·20			ISS BLOCK VII Complete.	
			ISS calibrate lights were going on - off.	
			(with no cover on) (PPS 2-6 dn → 78 counts.)	
17·01·13			DSS temp = +10.09°C	
17·03·56			DSS Turn around at BOT	
17·04·09		16C	7000 DSS Ready Mode.	
17·04·54		27AF	0011 PPS J-MODE	
17·05·51		TRA	6411 data 0 CCS - DSS TIC RO = 4552_8 = 2410_{10}	

jpl → OPERATIONS LOG

RTM _____ On Date 12-9-76 Day 344 GMT

Proc MJS77- 302.00A RTM _____ Off S/C MJS77- 1 PTM Page 1910

Time, GMT	Step No.	Command	Test:	Init:
17.10.19		SC06BB	050090 GS-3 EC	
17.11.22			MDS lock 7.2 — TTS lock	
17.12.22		Cassette Update	SRT 01B 001b (at 16 bps)	
17.15.12			PRA antenna temp = -14°C ~~+0 +0°C~~ (bracket)	
			= +1.5°C (antenna deployment mechanism)	
17.27.05			FDS : IRIS visible stimulus ON → PPS verifies.	
			current = 1.86 amps	
			CDU osc. monitor moving around in telemetry → channel to be derouted.	
			RFS has uplink at -120	
17.30.00			IRIS verifies good data on radiometer	
17.38.20			CCS expected check sums processors A, B	
17.39.00		2E	HGA	
17.39.34		2FP	Receiver 1	
17.40.21		SC21AF	13005 CRS HG State.	
17.42.00			IRIS Stimulus temp = -199.5°C ? (could be 189.5 - been holding at 190)	
17.43.18		10DR	AP BR 1 HTRS OFF. PWR -10 D.N. Δ (at temp where turned off yesterday)	
			Removing R Can Intensity from commutator position 159.	
			LECP CAL MUX → position 159 (channel E451)	
17.46.01		FDS LOAD	BLOCK 1826 data 4800 → checksum correct increase 47/8	

jpl → OPERATIONS LOG

Proc MJS77- ~~302.00A~~ 301.03 RTM _____ On Date 12-9-76 Day 344 GMT

RTM _____ Off S/C MJS77- 1 PTM Page 1918

Time, GMT	Step No.	Command	Test:	Init:
17.48.41		25AH	6136 LECP CAL mode	
17.51.03	446	21AH	CRS CAL START.	
17.51.53		10E	AP BR 2 HTRS ON PWR +9 D.N. Δ	
17.52.50			IRIS Stimulus temp = -189.2°C	
17.58.13	460		FPS PWS-STS to ON, manual, PRA.	
			(& PRA Stimulus ON)	
			(IRIS & PPS prime Stimulus ON)	
18.00.03	462	P.C.	XEQ 7733 TRA 6614 data 0 PRA Functional	
			7735 - 451202	
18.01.47	464	22AF5547	Start Sequence.	
18.05.47	466	22AF	5557	
18.06.35	468	22AF	5507	
18.06.40				
18.07.23	470	22AF	7557	
18.08.11	472	22AF	4557	
18.08.59	474	22AF	5347	
18.09.44	476		FDS PRA Stimulus OFF	
18.09.47	478	22AF	5407	
18.10.35	480	22AF	1507	

jpl → OPERATIONS LOG

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Proc MJS77- 301.03 RTM _____ Off S/C MJS77- 1 PTM Page 1912

Time, GMT	Step No.	Command	Test: PRA Functional.	Init:
18·12·11	481	22AF	1501	
18·12·59	482	22AF	1502	
18·13·47	483	22AF	7757 . END OF SEQUENCE	
18·13·20			IRIS Stimulus temp oscillating between -189.5 -7 °C	
18·17·35	484	22AF	5547	
			FDS can see LECP MUX, but software problem in verifying MUX.	
			(TTS can't show raw channel data)	
18·19·09	485	SC06BB	0B0090 GS-2 EC	
18·19·31			MDS lock 115	
18·21·31			FDS has summaries from LECP MUX	
	486		PRA commands already in FDS	
18·22·41	487		PRA Stimulus ON.	
18·25·02	489	SC06BB	050070 GS-3 CR	
18·25·58			MDS lock 7.2	
18·27·30			IRIS reports seeing extra housekeeping on recorder.	
18·31·10	606302.00A		PWS-STS to standard quiet mode configuration.	
18·29 —			IRIS another housekeeping glich	
18·31·35			IRIS Stimulus temp = -189.4 °C	
18·32 —			IRIS housekeeping glich. FDS recorder looks normal.	

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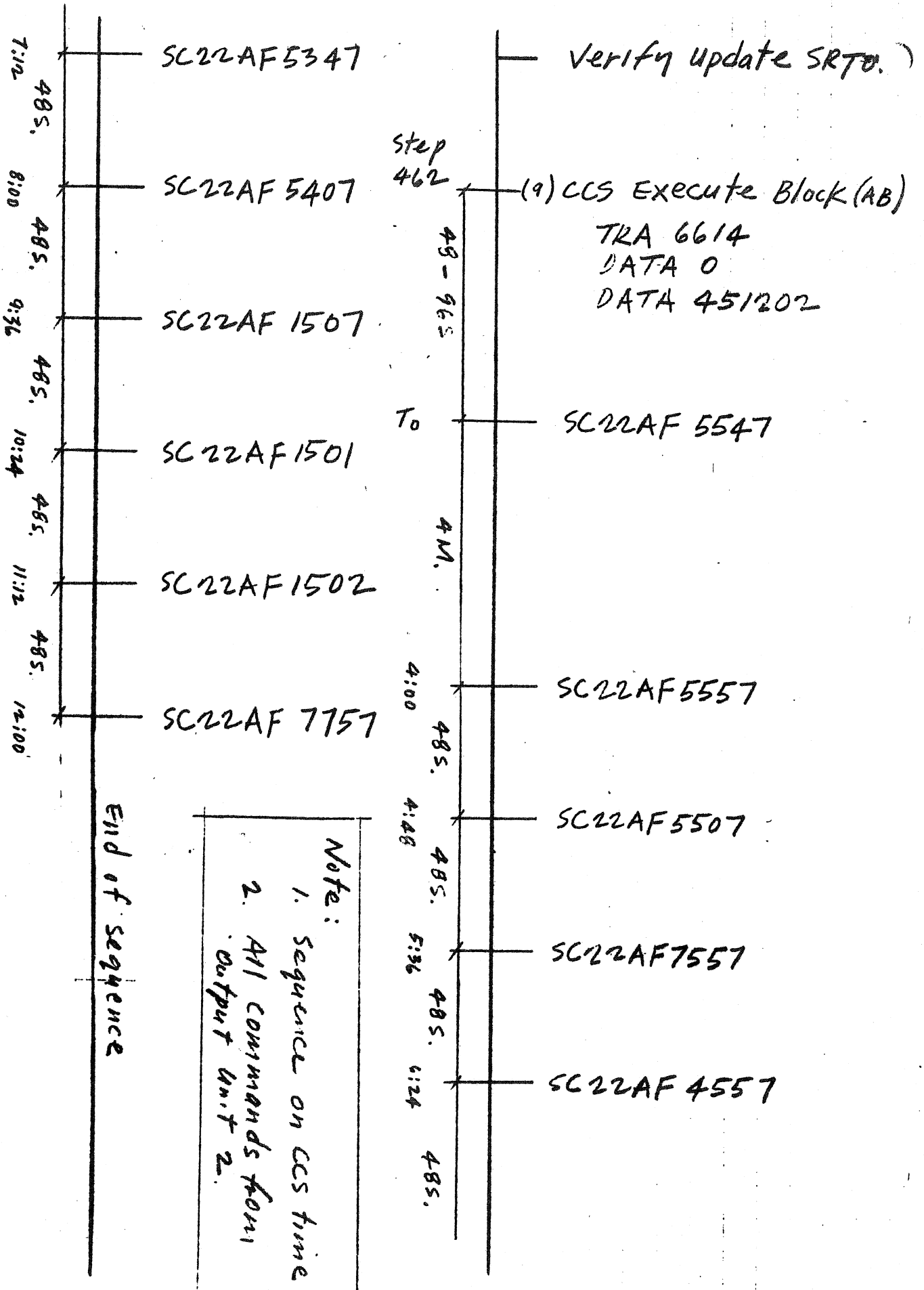

jpl → OPERATIONS LOG

RTM _____ On Date 12-9-76 Day 344 GMT

Proc MJS77- ~~302,00A~~ 301.03 RTM _____ Off S/C MJS77- 1 PTM Page 1913

Time, GMT	Step No.	Command	Test: PLS Functional	Init:
18.35—			Another IRIS glich.	
			At FDS at 183445 IRIS full frame overflow indicated on printer	
			Not able to pump data as fast with new software (maybe SE problem)	
18.37.20			IRIS visible stimulus source OFF	
18.44.20			LECP getting CAL data on printer	
18.46.38		25AH	4200 LECP to stepping	
18.47.47		27AF	0001	
18.48.20			LECP has CAL data	
18.49.07		25AH	6132	
18.50.24	538	SC06BB	0510090 GS-3, LECP Near Encounter, (EC – where LECP MUX is)	
18.53.19	540	25AH	0000 LEPT detectors OFF	
18.54.23	|	25AH	2576 LEMPA " ON	
18.55.26	|	25AH	4000 Reduced motor scan	
18.56.28		25AH	6001 LEMPA mode ON.	
18.57.40	630	SC34AE	05 UVS HV 5	
18.59.13	542	25AH	4200 Full Scan.	
19.03.49	594	P.C.	PLS FUNCTIONAL XEC7733 – TRA6614, 7734-0, 7735-476702.	
19.~~05.00~~ 04.59	596	32AJ	14, AF4, AG08, AH12, AK0	
19.11.23	600	32AJ	07, AF7, AH15, AG09, AK1	

jpl → OPERATIONS LOG

RTM _____ On Date 12-9-76 Day 344 GMT

Proc MJS77- 301,03 RTM _____ Off S/C MJS77- 1 PTM Page 1917

Time, GMT	Step No.	Command	Test: PLS Functional	Init:
19.17.47	604	32AJ	13 DC Return measurement	
19.19.10	add 631	34AE	15 UVS Pulse counting, HV 5	
19.20.47		06BB	050090. GS-3, ENC. LECP Far Encounter.	
19.24.11	608	32AJ	10, AF 5, AG 09, AH 13, AK 1 END OF SEQUENCE	
19.25.23		25AH	6132	
19.26.30		25AH	2607	
19.27.34		25AH	1777	
		32AJ	15	
		32AK	0	
19.31.54		32AF	4 PLS Conditioning cmds.	
		32AG	08	
		32AH	12	
	634, 636		delete	
19.33.32	632	34AE	03 Pulse Height HV 3	
19.36 —			TTS same DRU problem back — no even # requests.	
19.43.53	638	34AE	02 Pulse Height HV2	
19.46.34		35BR	MAGB OFF	
			FDS: MAG I/O B, LECP I/O A, Xducer OFF, CRS I/O A	
			Timing Chain A, both write protects ON.	

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jpl → OPERATIONS LOG

RTM _____ On Date 12-9-76 Day 344 GMT

Proc MJS77- 301.03 RTM _____ Off S/C MJS77- 1 PTM Page 1915

Time, GMT	Step No.	Command	Test: THERMAL VAC	Init:
19.50.20		CC06AE	31112 → l/r out of sync, back in sync.	
			FDS status word 5: MAG I/O A LECP I/O A Xducer OFF	
			CRS I/O B, Timing Chain B, Write protects ON	
			MAG MUX from ID 38 → EC format position 159:	
19.53.08		FDS LOAD	BLOCK PRI/W OVERRIDE 1826 – 3800 MAG MUX in 159	
			1829 - 00CE filter in ID38.	
19.55.05			FDS checksum correct	
19.55.41		35A	MAG A ON	
20.03.18	652		Complete	
20.04.10	656		Complete	
20.05.44	706	35 AI/AO 00	0000 IB/OB COND. SELECT.	
20.08.33	660	35AI/AO	31001 HFMs ON, MAN.Hi, IFC ON, ELEC. FLIP INV., LFMs AUTO, IBLFM PRIME	
20.12.15	662	35AI/AO	30114 LFMs TO MAN. RNG, HFMs TO Hi RNG.	
20.16.09	702	35AR	MAG A PWR off	
20.17.46	704	CC06AE3	0013 – MAG I/O B SEL.	
20.18.59	706	35AI/AO	000000 IB/OB COND. SEL.	
20.20.16	708	35B	MAG B STDBY PWR ON	
20.21.46	714	35AI/AO	131001 HFMs ON, MAN. Hi, IFC ON, ELEC. FLIP INV, LLMs AUTO, IBLFM PRIME	
20.26.06	716	35AI/AO	30114 LFM TO MAN. RNG, HFM TO Hi RNG.	

jpl → OPERATIONS LOG

Proc MJS77- 301.03 | RTM _____ On | RTM _____ Off | Date 12-9-76 | Day 344 GMT | S/C MJS77- 1 (PTM) | Page 1916

Time, GMT	Step No.	Command	Test: THERMAL VAC	Init:
20.28.58	~~223~~ ~~228~~	35AI/AO	030001 LFMs + HFMs TO AUTO MODE	
20.33.41			PPS tape # TVA0063 being loaded	
20.37.10			Cassette update complete. → checksum correct 24113 A side 0 B side.	
20.43.12	559	P.C. TRA	XEC 7733 - TRA · 6614 7734 - 430002 7735 - 0	
20.44.11 ~~12~~	560	27AF	0101 START PPS Functional	
?			0201	
?			0301	
?			1401	
?			0000	
20.46.15		2 QR	USO OFF	
?	562	27AE	20	
	~~562~~			
20.56.23		CCS	EVENT BLOCK 7733-0, 7734-31614 0 DTR → TIC 1649_{10} ($= 3161_8$)	
			(~ start of pictures recorded earlier)	
			DSS h/r slew reverse track 1.	
20.59.51 ~~0 40~~			DSS Ready mode	
			DSS has been stable several hours at +13.59°C (with DTR & DTR Replacement heaters both ON)	

jpl → OPERATIONS LOG

RTM _____ On Date 12-9-76 Day 344 GMT

Proc MJS77- 301.03 RTM _____ Off S/C MJS77- 1 PTM Page 1917

Time, GMT	Step No.	Command	Test:	Init:
21·04·32		16 BR	DSS Replacement heater OFF PWR -5 D.N. Δ (data averaged)	
			→ toggling ~ 8-9 DN. Δ.	
21·10·49		27 AF	0000 → PPS lookup table	
21·13·21		SC06BB	080090 PB-2, EC	
21·13·55			MDS lock 44.1	
			FDS, TTS lock - summary messages routed.	
21·15·18		16C	1415 DSS PB, 33.6, forward, track 5	
21·15·50			TTS in sync on PB-2 extracted data	
			IRIS stimulus being continuously cooled. (now at -191°C)	
			RFS aux osc exciter reads just like other	
21·17·45		2BRP	S band XITR 2	
21·19·06		SC32AJ	11	
			Configuration of SC1 instruments: All are ON	
			LECP - for encounter, stepping every 24 sec. full scan	
			MAG on, IRIS on ...	
21·26·05			RFS → downlink only (from 2 way)	
			PPS in lookup table, stepping	
			PLS cmds:	
21·31·43		32AK	2, AF6, AG10, AH14. (PLS most sensitive mode)	

jpl → OPERATIONS LOG

RTM _____ On Date 12-9-76 Day 344 GMT

Proc MJS77- 301.03 RTM _____ Off S/C MJS77- 1 PTM Page 1918

Time, GMT	Step No.	Command	Test:	Init:
21·34·19		CC06AN	7	
21·35·11		CC06AQ	11 } ISS pointers BLOCK VI	
21·36·13		CC06AR	11	
21·37·56		FDS Software Block Load	OBEE 0040 → PPS J-Mode (while in lookup table)	
			FDS verified checksum	
21·39·30			DSS turnaround – reverse track 6	
21·41·46		CCS Block update	5351 data 0 – deletes AZ cmd from ISS reset block	
21·44·~~41~~ 52		27AE	10 PPS HV OFF (aper. pos 0)	
			Platform slew cmd will wipe out ISS pointers for microphonics test.	
21·49·01		27AE	30 Aperture position 1	
21·50·19		Cassette Update	HARMTA 0064	
21·57·10			IRIS Stimulus temp = -190.9°C steady	
22·06·26			Cassette update complete	
			TTS getting some out-of-syncs on PB data. getting 800 lines of pic. summaries.	
~22·07~			DSS turn around	
22·12·15			CCS checksums 77312 A side, 0 B side.	
			DSS beyond recent record data	
22·12·44		16C	7000 DSS Ready mode.	
22·13·52		SC06BB	010090 IM-3 EC	

jpl → OPERATIONS LOG

RTM _____ On Date 12-9-76 Day 344 GMT

Proc MJS77- 301.03 RTM _____ Off S/C MJS77- 1 PTM Page 1919

Time, GMT	Step No.	Command	Test: ~~CMD ECHO PHONIES~~	Init:
22.16.17			MDS lock 115	
22.15.16			TTS → FDS data source h/r. ~~~ card reader problem →	
			software change not coming through for extracted GS-3.	
22.17.30			Computer problem → reload entire system. (~~1530~~, SIO) all modcomps	
			caused by SIO	
			(ENGR processing still working)	
22.24.24			TTS back up	
22.24.55		27AE	50 in PPS sequence for ⇐	
			PPS PFR : position 4 in wave look-up table sometimes missing data	
22.25.22		32AJ	10 UVS current Calib.	
22.35.39		27AE	70	
22.37.20			RFS completed aux. osc measurements:	
			#1 = 2295.001277 Hz	
			= 9.0°C	
			#2 = 2296.486867 Hz	
			= 8.01°C	
22.42.49		27AE	50	
22.45.16		27AE	30	
22.48.10		27AE	10	

jpl → OPERATIONS LOG

RTM _____ On Date 12-9-76 Day 344 GMT

Proc MJS77- ~~301.03~~ 302.00A RTM _____ Off S/C MJS77- 1 PTM Page 1920

Time, GMT	Step No.	Command	Test: MICROPHONICS	Init:
22.54.35		TRA	7733 data TRA 6614, 7734 data 430002, 7735 data 0	
			Microphonics Test # 1 A1 EL ACTUATORS.	
22.55.24		06AU, V, Y	ISS resets Block VI	
22.56.11			Sequence Start (with roll over)	
			AACS confirm EL slew	
22.56.59			CCS roll over ~~~ ISS shut mode; in sequence. BL VI.	
23.00.22			IRIS Stimulus temp = -184.5°C (between .4-.5)	
23.05.40			" " " = -186.7°C	
23.09.10			ISS Sequence complete.	
23.09.28		06 AN	7	
23.09.41		06 AQ	11 ISS pointers Block VI (again)	
23.09.54		06 AQ	11	
23.11.23		06 AU	, AV, AY ISS Reset Block VI.	
23.12.11			CCS roll over — start of ISS sequence.	
23.13.00			IRIS Stimulus temp = 190.7°C	
23.15.19			End of last scan	
23.19.35			End of sequence	
			Now ISS shuttering & filter stepping without scans.	
23.23.15			IRIS Stimulus temp = -191.1°C	

~~ETE~~ DYNAMICS tape change

jpl → OPERATIONS LOG

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RTM _____ Off

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Proc MJS77- 302.00A

Time, GMT	Step No.	Command	Test: MICROPHONICS	Init:
23.25.22			ISS Sequence complete MICROPHONICS SEQUENCE (#1) COMPLETE	
			~~ETL~~ DYNAMICS tape change AACS back to start	
23.31.02		06 A N	7	
23.31.32		06 A Q	11 ISS pointers BLOCK [redacted] VI	
23.37.19		06 A R	11	
23.40.59		TRA	1B AZ ACTUATORS 7735 - TRA 6614 ; 7734 - 453102 ; 7735 - 0	
23.41.10			cmd executed microphonics test # 1 b.	
23.41.47		06 AU, V, Y	roll over ISS Resets	
			ISS sequence started — DYNAMICS tape ON	
23.42.35			AZ actuator sequence started	
23.44.00			IRIS stimulus temp stable at -191.0°C	
23.48.48			Accelerometer block temp = 8°C (should be 20°C)	
			TEMP CONTROL add heat to acc. block for DYNAMICS.	
23.56.25			ISS Sequence Complete. → DYNAMICS tape change	
23.56.40		06 A N	7	
23.56.57		06 A Q	11 ISS pointers BLOCK VI	
23.57.11		06 A R	11 ~~START DYNAMICS TAPE~~	
23.58.36 23.58.56		06 AU,	AV, AY ISS reset — start BLOCK VI sequence.	