

SPACE VEHICLE SCRUB TURNAROUND APOLLO/SATURN
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PAGE
TEST NO.
VEHICLE

109
SV-40300
APOLLO 16

PART III

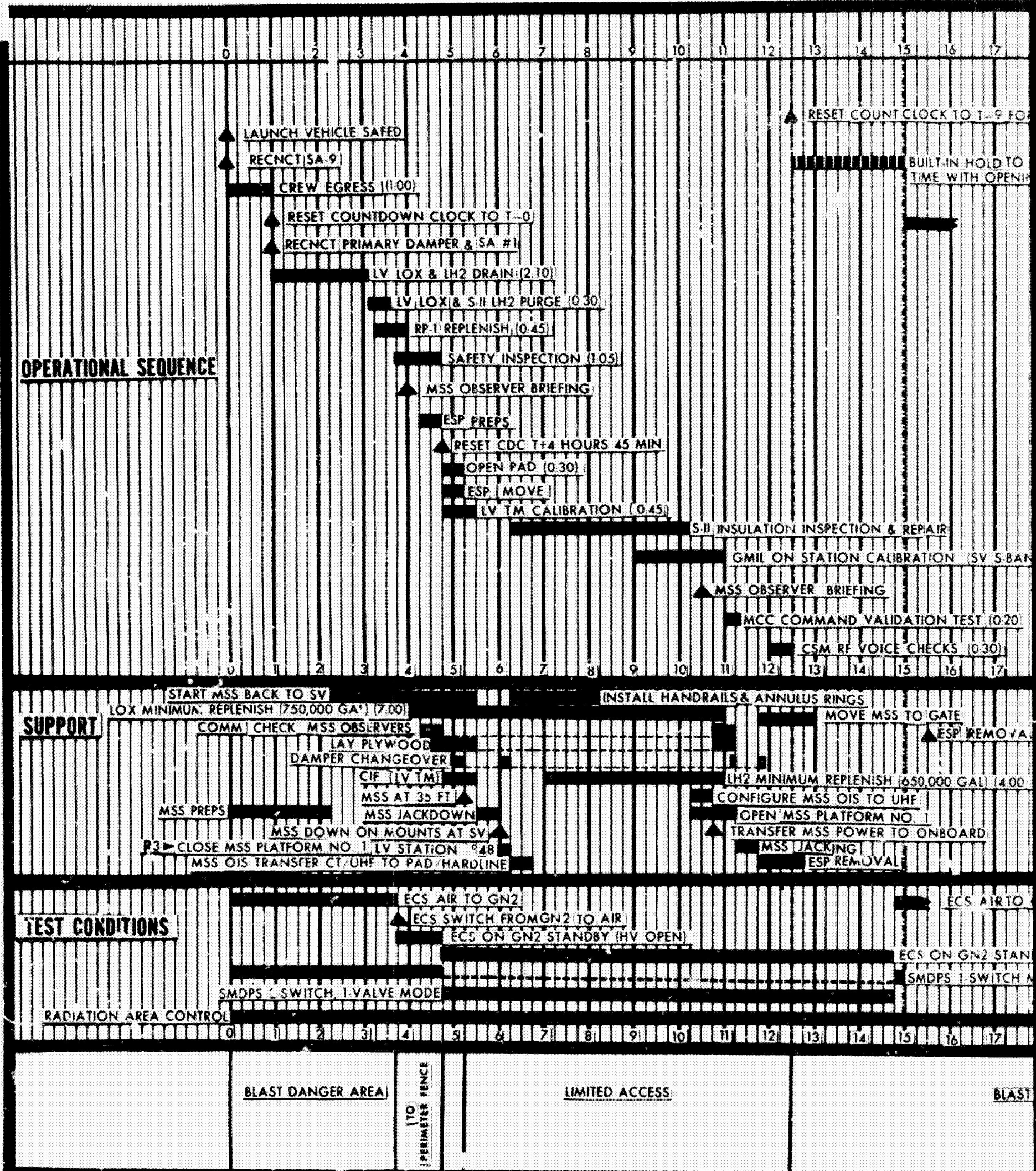
SCRUB/TURNAROUND OPERATIONS TO A NEXT DAY LAUNCH

T+4 HOURS, 45' 0" TO T+12 HOURS, 30' 0"

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FOLDOUT FRAME

SPACE VEHICLE SCRUB TURNAROUND 24 HOUR A/S V SCRUB/TURNAROUND AT POST-
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 OPERATIONS INTERFACE CONTROL



FOLDOUT FRAME 2

ND AT POST-LV CRYOGENIC LOADING FACE CONTROL CHART

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111/112
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15 16 17 18 19 20 21 22 23 24

COUNT CLOCK TO T-9 FOR COUNTDOWN

BUILT-IN HOLD TO SYNCHRONIZE CD PICKUP
TIME WITH OPENING OF LAUNCH WINDOW

COUNTDOWN

T-0

DATE: 2/28/72 LA-PLN
EFFECTIVITY: AS-511 & SUBS
REVISION: 3

CONCURRENCE:

A. Goldenberg LS
J. H. Slogar LV
R. E. Woods SF-OPN

APPROVAL:

R. E. Moser DLO

LEGEND

D H M S
T-0 00 00 00 * USED WHEN APPLICABLE

ON & REPAIR

CALIBRATION (SV S-BAND/VHF AM) (2:00)

NG

VALIDATION TEST (0:20)

VOICE CHECKS (0:30)

15 16 17 18 19 20 21 22 23 24

MSS TO GATE

ESP REMOVAL MUST BE COMPLETE

FINISH (50,000 GAL) (4:00)

TO Unf

RM NO

VER TO ONBOARD

OVAL

ECS AIR TO GN2

ECS ON GN2 STANDBY (HV CLOSED)

SMDPS 1 SWITCH MODE

15 16 17 18 19 20 21 22 23 24

NOTE

THE CT WILL REMAIN PARKED UNDER THE MSS

BLAST DANGER AREA

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TIME	COMM. CH.	SEQUENCE	COMMAND STA.	RESPONSE STA.	DESCRIPTION	REMARKS
+4 HRS 45' 0"	188 (PA)	1		CVTS	THE CONTROL AREA IS NOW OPEN FOR NORMAL WORK. RADIATION AREA CONTROL REMAINS IN EFFECT.	
	111	2	CVTS	MSTC	THE CONTROL AREA IS OPEN FOR NORMAL WORK.	
	111	3	MSTC	CVTS	CHANGE SMDPS FROM 1-SWITCH MODE TO 2-SWITCH, 1-VALVE MODE AND VERIFY.	
	111	4	CVTS	CLTC	CHANGE SMDPS FROM 1-SWITCH MODE TO 2-SWITCH, 1-VALVE MODE. REPORT WHEN COMPLETE.	
	111	5	CVTS	CPSS	SMDPS IS GOING FROM 1-SWITCH MODE TO 2-SWITCH, 1-VALVE MODE.	
	111		CVTS	MSTC	SMDPS IS IN 2-SWITCH, 1-VALVE MODE.	
NOTE ----- ESP MOVE IS SCHEDULED FROM T+4 HOURS, 45' 0" TO T+5 HOURS, 15' 0".						
+5 HRS 0' 0"	111	1	CVTS	CTSC	REPORT PREVAILING WIND DATA. (REFERENCE LMR ITEM 1-401).	
	111	2	CLTC	CVTS	VERIFY PREVAILING WINDS DO NOT EXCEED REDLINE VALUES FOR FREE STANDING SV (REFERENCE LMR).	
	111	3	CTSC	CVTS	MSS IS APPROXIMATELY 15 MINUTES FROM THE 35 FT MARK.	
	111	4	CVTS	CLTC	CLEAR TO DISCONNECT AND RETRACT PRIMARY DAMPER.	
	111	5	CVTS	MSTC	PRIMARY DAMPER WILL BE DISCONNECTED.	

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TIME	COMM. CH.	SEQUENCE	COMMAND STA.	RESPONSE STA.	DESCRIPTION	REMARKS
+5 HRS 30' 0"	111	1	CTSC	CVTS	MSS IS IN MATE POSITION. MEASUREMENTS ARE COMPLETE. READY TO JACK DOWN.	
	111	2	CVTS	CLTC	MSS IS OVER MOUNTS. REPORT WHEN TSM 3 - 4 TOWER IS ERECTED AND MSS CAN BE LOWERED.	
	111	3	CLTC	CVTS	TSM 3 - 4 TOWER ERECTED AND CLEAR FOR LOWERING MSS ON MOUNTS. NOTIFY CLTC IF MSS MUST BE REPOSITIONED PRIOR TO LOWERING.	
	111	4	CVTS	CPSS	VERIFY CLEARANCE TO LOWER MSS ON MOUNTS.	
	111	5	CVTS	CTSC	TSM 3 - 4 TOWER ERECTED. CLEAR TO LOWER MSS ON MOUNTS. REPORT IF REPOSITIONING IS NECESSARY.	H
	111	6	CLTC	CVTS	RANGE CLEARANCE FOR S-II TM IS NO LONGER REQUIRED.	
	111	7	CVTS	SRO	LV S-II TM LINKS BF-1 AND BF-2 ARE OFF.	
+5 HRS 55' 0"	111	1	CVTS	GMIL	VERIFY READY TO SUPPORT CSM WITH G&N UPLINK ENABLE.	
	111	2	MSTC	CVTS	VERIFY GMIL SUPPORT FOR G&N UPLINK ENABLE.	
+6 HRS 0' 0"	111	1	CTSC	CVTS	MSS IS ON MOUNTS.	
	111	2	CVTS	CLTC	MSS IS ON MOUNTS. READY FOR AUXILIARY DAMPER CONNECTION.	
	111	3	CVTS	MSTC	AUXILIARY DAMPER WILL BE CONNECTED.	
	111	4	CLTC	CVTS	REQUEST MSS PLATFORM NO. 1 BE POSITIONED AT LV STA 1848 FOR S-II INSULATION INSPECTION.	

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TIME	COMM. CH.	SEQUENCE	COMMAND STA.	RESPONSE STA.	DESCRIPTION	REMARKS
+6 HRS 0' 0"	CONTINUED					
	111	5	CVTS	CTSC	CLOS MSS PLATFORM NO. 1 AT LV STATION 1848 FOR S-II INSULATION INSPECTION.	II
	111	6	CPSS	CVTS	SNIFFER CHECK IN S-IC FWD AREA IS COMPLETE. PERSONNEL MAY ACCESS THROUGH SA NO. 2.	
	111	7	CVTS	CLTC	CPSS HAS APPROVED LV ACCESS THROUGH S-IC FWD DOOR (SA NO. 2).	
	111	8	CTSC	CVTS	CONNECTING AND PRESSURIZING MSS/PAD 3000 PSI GN2 HAZARD PURGE SUPPLY LINE.	
+6 HRS 10' 0"	111	1	CPSS	CVTS	SNIFFER CHECK IN S-II AFT AREA IS COMPLETE. PERSONNEL MAY ACCESS THROUGH SA NO. 3 DOOR.	
	111	2	CVTS	CLTC	CPSS HAS APPROVED LV ACCESS THROUGH S-II AFT DOOR (SA NO. 3).	
+6 HRS 15' 0"	111	1	MSTC	CVTS	CSM RF IS OFF. CSM COMMAND DECODER IS OFF. GMIL SUPPORT NO LONGER REQUIRED.	
	111	2	CVTS	GMIL	BRING DOWN CSM S-BAND CARRIER AND VERIFY. CSM COMMAND DECODER IS OFF. GMIL SUPPORT NO LONGER REQUIRED.	
	111	3	CVTS	SRO	CSM S-BAND AND VHF ARE OFF.	
	111	4	CVTS	HFLT	CSM S-BAND CARRIER IS OFF. CSM COMMAND DECODER IS OFF.	

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TIME	COMM CH	SEQUENCE	COMMAND STA.	RESPONSE STA.	DESCRIPTION	REMARKS
+6 HRS 15' 0"	CONTINUED					
	111	5	CLTC	CVTS	AUXILIARY DAMPER IS CONNECTED.	
	111	6	CVTS	CTSC	AUXILIARY DAMPER IS CONNECTED.	
	111	7	CTSC	CVTS	CONNECTING MSS/PAD COMM AND INSTRUMENTATION CABLES AND CONFIGURING OIS TO HARDLINE PRIOR TO MSS TRANSFER TO PAD POWER.	
	111	8	CVTS	MSTC KSTC CLTC	STANDBY FOR OIS TRANSFER FROM CT TO PAD.	
	111	9	CTSC	CVTS	MSS PLATFORM NO. 1 IS AVAILABLE FOR JOINT ACCESS.	
	111	10	CVTS	CLTC	MSS PLATFORM NO. 1 IS AVAILABLE FOR JOINT ACCESS.	
					NOTE ----- JOINT PLATFORM USAGE IS REQUIRED UNTIL INSTALLATION OF ANNULUS RINGS ARE COMPLETE AT T+8 HOURS, 15' 0". NOTE ----- S-II INSULATION INSPECTION IS SCHEDULED TO BEGIN AT THIS TIME.	

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+6 HRS 30' 0"	111	1	CTSC	CVTS	MSS TRANSFER TO PAD POWER WILL OCCUR IN 15 MINUTES.	
					NOTE ----- MSS HI-RISE ELEVATORS, HVAC AND FACILITY AIR COMPRESSORS WILL BE POWERED DOWN FOR MSS POWER TRANSFER AND POWERED UP AFTER MSS POWER TRANSFER.	
	111	2	CTSC	CVTS	MSS/PAD COMM AND INSTRUMENTATION CABLES CONNECTED AND MSS OIS-RF CONFIGURED TO HARDLINE.	
+6 HRS 45' 0"	111	3	CVTS	MSTC KSTC CLTC	MSS OIS IS CONNECTED TO PAD.	
	111	1	CTSC	CVTS	VERIFY READY FOR MSS POWER TRANSFER TO PAD POWER.	
	111	2	CTSC	CVTS	MSS TRANSFER TO PAD POWER COMPLETE.	
+7 HRS 0' 0"	111	1	CVTS	CPSS	VERIFY CLEARANCE FOR LH2 STORAGE TANK REPLENISH.	
	111	2	CVTS	CTSC	CLEAR TO PROCEED WITH LH2 STORAGE TANK REPLENISH.	H

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+7 HRS 0' 0"	CONTINUED					
					NOTE ----- LH2 STORAGE TANK REPLENISHMENT TO 650,000 GALLONS IS SCHEDULED FROM T+7 HOURS, 0' 0" TO T+11 HOURS, 0' 0".	
+8 HRS 55' 0"	111	1	CVTS	MSTC KSTC CLTC	GMIL BRINGING UP SPACE VEHICLE S-BAND AND VHF CARRIERS FOR ON-STATION CALIBRATION FOLLOWED BY MCC COMMAND VALIDATION AND AIR/GROUND VALIDATION TESTING. VERIFY COMMAND DECODERS ARE OFF.	
	111	2	CVTS	SRO	VERIFY RADIATION CLEARANCE FOR GMIL ON-STATION CALIBRATION (2101.8, 2106.4, 2272.5, 2282.5, 2287.5, 245.3, 258.5, 259.7, AND 296.8 MHZ).	
+9 HRS 0' 0"	111	1	GMIL	CVTS	VERIFY RADIATION CLEARANCE FOR ON-STATION CALIBRATION.	
+9 HRS 45' 0"	111	1	CTSC	CVTS	ALERT ALL SCO AND LVO OBSERVERS TO BE ON STATION IN 60 MINUTES FOR CUMM CHECK IN SUPPORT OF MSS MOVE.	

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+9 HRS 45' 0"	CONTINUED					
	111	2	CVTS	MSTC KSTC CLTC	MSS PLATFORM OBSERVERS ARE TO REPORT TO PPTS AT BASE OF THE MSS LOW RISE ELEVATOR FOR OBSERVER BRIEFING IN 45 MINUTES.	
					NOTE ----- MSS OBSERVERS WILL REPORT ON STATION TO BE BRIEFED PER APOLLO/SATURN V LC-39 LAUNCH OPERATIONS INSTRUCTIONS, 655-26-0001.	
+10 HRS 15' 0"	111	1	CLTC	CVTS	MSS PLATFORM NO. 1 IS AVAILABLE FOR OPENING.	
	111	2	CVTS	CTSC	OPEN AND SECURE MSS PLATFORM NO. 1.	H
					NOTE ----- PLATFORM PREPARATION WORK IS TO BE ACCOMPLISHED ON A NON-INTERFERENCE BASIS WITH THE MSS PLATFORM CREW.	
	111	3	CTSC	CVTS	DISCONNECTING THE PAD/MSS CUMM AND INSTRUMENTATION CABLES. CONFIGURING MSS OIS-RF TO UHF.	
	111	4	CVTS	MSTC KSTC CLTC	STARTING MSS OIS TRANSFER-PAD HARDLINE TO CT UHF. CT OIS CHANNEL ASSIGNMENTS ARE IN EFFECT.	

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TIME	COMM CH.	SEQUENCE	COMMAND STA.	RESPONSE STA.	DESCRIPTION	REMARKS
+10 HRS 25' 0"	111	1	CVTS	SRO	STANDBY ON CH. 137 TO SUPPORT LV DRSCS PREPS PER V-38000.	
					NOTE ----- LV DRSCS PREPS ARE FOR DRSCS TEST AT T-4 HOURS, 40' 0" (COUNTDOWN TIME).	
+10 HRS 30' 0"	111	1	CLTC	CVTS	REQUEST RANGE SUPPORT DRSCS PREPS ON CH. 137 PER V-38000.	
					NOTE ----- A BUILT-IN HOLD TO SYNCHRONIZE COUNTDOWN PICKUP TIME WITH OPENING OF THE LAUNCH WINDOW WILL OCCUR AT T+12 HOURS, 30' 0".	
	111	2	CVTS	SRO GMIL HFLT MSTC KSTC CLTC CPSS CTSC	A HOLD OF HOUR(S) MINUTE(S) ----- WILL START AT T+12 HOURS, 30' 0" WITH THE CLOCK RESET AND HOLDING AT T-9 HOURS, 0' 0".	

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TIME	COMM CH	SEQUENCE	COMMAND STA.	RESPONSE STA.	DESCRIPTION	REMARKS
10 FRS 30' 0"	CONTINUED					
					NOTE ----- HFLT MAY NOT BE ON THE OIS NET AT THIS TIME. IF NO RESPONSE, USE BLACK PHONE: 713-HU3- 6336.	
					NOTE ----- CVTS WILL NOTIFY TEST CONDUCTORS OF CHANGES IN HOLD TIME IN EXCESS OF 15 MINUTES DURATION.	
	111	3	CVTS	MSTC CLTC CTSC	REQUEST PURGE BOX VALIDATION STATUS.	
					NOTE ----- PURGE BOX FINAL VALIDATIONS ARE TO OCCUR NO LATER THAN 30 MINUTES BEFORE PICKING UP THE COUNT AT T-9 HOURS, 0' 0" OR AT T+12 HOURS, 0' 0"	
	111	4	CTSC	CVTS	MSS OIS TRANSFER - PAD TO CT IS COMPLETE. MSS IS A BRANCH OF CT UHF.	
	111	5	CVTS	MSTC KSTC CLTC	MSS OIS TRANSFER - PAD TO CT IS COMPLETE.	

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TIME	COMM CH.	SEQUENCE	COMMAND STA.	RESPONSE STA.	DESCRIPTION	REMARKS
+10 HRS 30' 0"	CONTINUED					
	111	6	CLTC	CVTS	KSC SYSTEMS SAFETY SUPPORT WILL BE REQUIRED IN 30 MINUTES ON ML LEVEL 240 FOR GH2 SNIFFER CHECKS.	
	111	7	CVTS	CPSS	SUPPORT FOR LV WILL BE REQUIRED IN 30 MINUTES ON ML LEVEL 240 FOR GH2 SNIFFER CHECKS OF THE S-IVB HEAT EXCHANGER UNIT 438A.	
	111	8	CLTC	CVTS	KSC SYSTEMS SAFETY SUPPORT WILL BE REQUIRED IN 30 MINUTES ON ML LEVEL 180 FOR GH2 SNIFFER CHECKS OF S7-41 "D" UNIT.	
	111	9	CVTS	CPSS	SUPPORT WILL BE REQUIRED IN 30 MINUTES ON ML LEVEL 180 FOR GH2 SNIFFER CHECKS OF THE S7-41 "D" UNIT.	
	111	10	CTSC	CVTS	MSS TRANSFER TO ONBOARD POWER WILL OCCUR IN 15 MINUTES.	
					NOTE ----- MSS HI-RISE ELEVATORS, HVAC AND FACILITY AIR COMPRESSORS WILL BE POWERED DOWN FOR MSS POWER TRANSFER AND WILL BE POWERED UP AFTER MSS POWER TRANSFER.	
+10 HRS 45' 0"	111	1	CVTS	CLTC	VERIFY READY FOR MSS POWER TRANSFER FROM PAD TO CT.	
	111	2	CVTS	MSTC	MSS POWER TRANSFER IS TO OCCUR AT THIS TIME.	
	111	3	CVTS	CTSC	READY TO TRANSFER MSS POWER TO ON-BOARD.	H

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TIME	COMM. CH	SEQUENCE	COMMAND STA	RESPONSE STA	DESCRIPTION	REMARKS
+10 HRS 45' C"	CONTINUED					
	111	4	CTSC	CVTS	MSS TRANSFER TO ONBOARD POWER COMPLETE.	
+11 HRS C' C"	111	1	GMIL	CVTS	ON STATION CALIBRATION IS COMPLETE. GMIL RF IS OFF. READY FOR MCC COMMAND VALIDATION TEST AND MCC AIR/GROUND VALIDATION TEST.	
	111	2	CVTS	SRO	GMIL ON-STATION CALIBRATION IS COMPLETE. VERIFY RADIATION CLEARANCE FOR MCC COMMAND VALIDATION TEST. (2106.4 AND 2101.8 MHZ UPLINK FREQUENCIES). VERIFY RADIATION CLEARANCE FOR MCC AIR/GROUND VALIDATION TEST. (296.8, 259.7, AND 2106.4 MHZ).	
	111	3	HFLT	CVTS	VERIFY ALL SV COMMAND DECODERS ARE OFF. BRING UP GMIL CSM, LM AND CCS S-BAND CARRIERS FOR THE MCC COMMAND VALIDATION TEST. BRING UP GMIL CSM VHF AND S-BAND FOR MCC AIR/GROUND VALIDATION TEST.	
	111	4	CVTS	GMIL	BRING UP GMIL CSM, LM AND CCS S-BAND CARRIERS AND VERIFY. BRING UP CSM VHF AND S-BAND FOR MCC AIR/GROUND VALIDATION TEST.	
	111	5	CVTS	HFLT	GMIL CSM, LM AND CCS S-BAND CARRIERS ARE ON FOR THE MCC COMMAND VALIDATION TEST. GMIL STANDING BY WITH CSM-VHF AND S-BAND FOR MCC AIR/GROUND VALIDATION TEST.	
	111	6	CVTS	CTSC	REPORT PREVAILING WIND DATA. (REFERENCE LMR ITEM 1-401).	

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TIME	COMM CH	SEQUENCE	COMMAND STA	RESPONSE STA	DESCRIPTION	REMARKS
+11 FRS 5' 0"	111	1	CVTS	MSTC	VERIFY READY FOR AUXILIARY DAMPER DISCONNECT.	
	111	2	CLTC	CVTS	VERIFY PREVAILING WINDS DO NOT EXCEED REDLINE VALUES FOR FREE STANDING SV (REFERENCE LMR).	
	111	3	CVTS	CLTC	CLEAR TO DISCONNECT AUXILIARY DAMPER.	
+11 FRS 15' 0"	111	1	CTSC	CVTS	MSS PLATFORM NO. 1 IS OPEN AND SECURE.	
	111	2	CVTS	CLTC	MSS PLATFORM NO. 1 IS OPEN AND SECURE.	
	111	3	CLTC	CVTS	LV-QAL INSPECTION OF MSS PLATFORMS NO. 1 AND NO. 2 PER LV QAL QCP-11 (MSS) IS COMPLETE.	
					AUXILIARY DAMPER DISCONNECTED AND LV READY FOR MSS JACKING, BUT NOT FOR MOVE.	
	111	4	CVTS	CTSC	AUXILIARY DAMPER IS DISCONNECTED.	
	111	5	CVTS	KSTC MSTC	VERIFY ALL MSS PREPARATIONS FOR MOVE ARE COMPLETE AND OBSERVERS ARE ON STATION.	
	111	6	CTSC	CVTS	REQUEST CLEARANCE TO JACK MSS TO CLEARANCE HEIGHT.	
	111	7	CVTS	CPSS	VERIFY CLEAR FOR MSS JACKING OPERATIONS.	
	111	8	CVTS	CTSC	JACK MSS TO CLEARANCE HEIGHT.	H

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TIME	COMM. CH.	SEQUENCE	COMMAND STA.	RESPONSE STA.	DESCRIPTION	REMARKS
+11 HRS 20' 0"	111	1	HFLT	CVTS	MCC COMMAND VALIDATION TEST IS COMPLETE. MCC AIR/GROUND VALIDATION TEST IS COMPLETE. BRING DOWN CSM, LM, AND CCS S-BAND CARRIERS. GMIL CSM-VHF NO LONGER REQUIRED.	
	111	2	CVTS	GMIL	BRING DOWN GMIL CSM, LM, AND CCS S-BAND CARRIERS AND VERIFY. CSM VHF NO LONGER REQUIRED.	
	111	3	CVTS	SRO	MCC COMMAND VALIDATION AND AIR/GROUND VALIDATION TESTING IS COMPLETE. RF CLEARANCE NO LONGER REQUIRED.	
	111	4	CVTS	MSTC KSTC CLTC	GMIL ON-STATION, MCC COMMAND VALIDATION AND AIR/GROUND TESTING IS COMPLETE. GMIL S-BAND AND VHF CARRIERS ARE OFF.	
+11 HRS 45' 0"	111	1	CTSC	CVTS	MSS IS JACKED TO CLEARANCE HEIGHT. REQUEST CLEARANCE TO PROPEL MSS TO PARKSITE.	
	111	2	CVTS	CLTC	MSS JACKING IS COMPLETE.	
	111	3	CLTC	CVTS	LV CLEAR FOR MSS MOVE.	
	111	4	CVTS	CPSS	VERIFY CLEARANCE TO PROPEL MSS TO PARKSITE.	
	111	5	CVTS	CTSC	PROPEL MSS CLEAR OF SUPPORT COLUMNS AND PROCEED WITH TRANSFER OPERATIONS. REPORT PROGRESS ENROUTE.	H
	111	6	CTSC	CVTS	MSS FIRST MOTION.	
	111	7	CVTS	MSTC CLTC	MSS FIRST MOTION	
	111	8	CVTS	CLTC	HAVE SA NO. 9 PERSONNEL REPORT TO SA NO. 9 IN 15 MINUTES FOR CO2 SYSTEM VERIFICATION.	

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+11 HRS 45' 0"	CONTINUED					
	111	9	CVTS	CTSC	PERSONNEL WILL BE REQUIRED ON SA NO. 9 IN 15 MINUTES TO SUPPORT CO2 SYSTEM VERIFICATION.	
+11 HRS 50' 0"	111	1	CTSC	CVTS	MSS IS AT 35 FT. POSITION.	
	111	2	CVTS	CLTC	READY FOR PRIMARY DAMPER CONNECTION.	
	111	3	CVTS	MSTC	PRIMARY DAMPER BEING CONNECTED.	
+11 HRS 55' 0"	111	1	CLTC	CVTS	PRIMARY DAMPER ARM CONNECTION COMPLETE.	
	111	2	CVTS	SRO	VERIFY CLEARANCE FOR CSM S-BAND AND VHF-AM.	
+12 HRS 0' 0"	111	1	MSTC	CVTS	VERIFY CLEARANCE FOR CSM RF: S-BAND VHF-AM CSM COMMAND DECODER IS OFF. HAVE GMIL AND HFLT PROVIDE SUPPORT ON CH. 212. CSM VERIFIES CCS NOT ENABLED (BLOCKED).	

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+12 HRS C' 0"	CONTINUED					
	111	2	CVTS	HFLT	CSM S-BAND CARRIER IS COMING ON. CSM COMMAND DECODER IS OFF. STANDBY ON CH. 212 TO SUPPORT CSM RF VOICE CHECKS.	
	111	3	CVTS	GMIL	STANDBY ON CH. 212 TO SUPPORT RF VOICE CHECKS. CLEAR TO BRING UP CSM S-BAND CARRIER. KEEP CVTS ADVISED OF CARRIER STATUS.	
	111	4	CVTS	CLTC	CSM CCS SWITCH IN BLOCK POSITION FOR FT-47 AT T-7 HOURS, 13' 0". (CSM CCS NOT ENABLED) (COUNTDOWN TIME)	
+12 HRS 30' 0"	111	1	CLTC	CVTS	LV HAS COMPLETED TURNAROUND OPERATIONS, RESET COUNTCLOCK TO T-9 HOURS, C' 0" AND HOLD AS REQUIRED TO SYNCHRONIZE COUNTCLOCK WITH LAUNCH WINDOW.	
	111	2	CLTC	CVTS	SA NO. 9 CO2 SYSTEM VERIFICATION IS COMPLETE.	

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TIME	COMM. CH.	SEQUENCE	COMMAND STA.	RESPONSE STA.	DESCRIPTION	REMARKS
HOLDING - 9 HRS 0' 0"						
					NOTE ----- THE FOLLOWING SEQUENCES ARE SCHEDULED TO OCCUR DURING THE BU-T-IN HOLD AT T-9 HOURS, 0' 0". IF NO HOLD, SEQUENCES WILL OCCUR AT THE TCP TIMES INDICATED IN THE REMARKS COLUMN. PERSONNEL WILL POSSES T-9 HOURS HAZARDOUS BADGES IN THE EVENT THAT THE OPERATIONS OCCUR AFTER BLAST DANGER AREA CLEARING FOR LV PROPELLANT LOADING.	
					--2 HOURS, 45' 0" AFTER START OF HOLD-- *****	-6 HRS 45' 0"
	111	1	CTSC	CVTS	MSS IN MATE POSITION. MEASUREMENTS COMPLETE. REQUEST CLEARANCE TO JACK DOWN.	
	111	2	CVTS	CPSS	VERIFY CLEARANCE TO LOWER MSS ON SUPPORT COLUMNS.	
	111	3	CVTS	CTSC	LOWER MSS ON SUPPORT COLUMNS.	H
					--3 HOURS, 15' 0" AFTER START OF HOLD-- *****	-6 HRS 15' 0"
	111	1	CTSC	CVTS	MSS/PARKSITE GHE AND GN2 LINES ARE BEING CONNECTED AND WILL BE PRESSURIZED IN APPROXIMATELY 1 HOUR.	

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TIME	COMM. CH.	SEQUENCE	COMMAND STA.	RESPONSE STA.	DESCRIPTION	REMARKS
HOLDING - 9 HRS 0' 0"	CONTINUED					
					--4 HOURS, 15' 0" AFTER START OF HOLD-- *****	-5 HRS 15' 0"
	111	1	CTSC	CVTS	MSS/PARKSITE GHE AND GN2 SYSTEMS PRESSURIZED.	
	111	2	CVTS	MSTC	MSS/PARKSITE GHE AND GN2 SYSTEMS PRESSURIZED.	
					--2 HOURS, 40' 0" PRIOR TO RESUMING COUNT-- *****	+9 HRS 50' 0"
	111	1	CTSC	CVTS	ML NON-CRITICAL POWER WILL BE SECURED IN 10 MINUTES.	
					--1 HOUR, 30' 0" PRIOR TO RESUMING COUNT-- *****	+11 HRS 0' 0"
	111	1	CTSC	CVTS	ML ELEVATORS ARE BEING CONFIGURED FOR LAUNCH.	

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 VEHICLE APOLLO 16

TIME	COMM. CH.	SEQUENCE	COMMAND STA.	RESPONSE STA.	DESCRIPTION	REMARKS
HOLDING - 9 HRS 0' 0"	CONTINUED					
					--1 HOUR, 0' 0" PRIOR TO RESUMING COUNT-- *****	+11 HRS 30' 0"
	188 (PA)	1	CLTC		TAIL SERVICE MAST SAFETY CABLES WILL BE REMOVED AT THIS TIME. PERSONNEL USE EXTREME CAUTION IN AREA OF HOLDDOWN ARMS AND TAIL SERVICE MASTS.	
	111	2	CTSC	CVTS	STARTING ML PRESSURIZATION TASK. PRESSURIZATION WILL OCCUR IN APPROXIMATELY 1 HOUR.	
	111	3	CVTS	CLTC MSTC KSTC CPSS	STARTING ML PRESSURIZATION TASK. PRESSURIZATION WILL OCCUR IN APPROXIMATELY 1 HOUR.	
					NOTE ----	
					LOCAL PAGES WILL BE MADE 15, 10, AND 5 MINUTES PRIOR TO PRESSURIZING THE ML.	
	111	4	CVTS	CTSC	FIRE PROTECTION PERSONNEL ARE REQUIRED ON STATION IN 60 MINUTES IN SUPPORT OF LV PROPELLANT LOADING.	
	111	5	MSTC	CVTS	STANDBY FOR RF COMM CHECKS WITH SPAD USING EFAP.	
	111	6	CTSC	CVTS	UNSECURED FIRE EXTINGUISHERS WILL BE REMOVED FROM THE ML AT THIS TIME.	

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TIME	COMM CH	SEQUENCE	COMMAND STA.	RESPONSE STA.	DESCRIPTION	REMARKS
HOLDING - 9 FRS 0° 0"	CONTINUED					
					--45° 0" PRIOR TO RESUMING COUNT-- *****	+11 HRS 45° 0"
	111	1	CLTC	CVTS	ALL LV COMPARTMENTS CLOSED OUT AND READY TO SWITCH ECS FROM AIR TO GN2.	
	111	2	CVTS	CPSS	ALL LV COMPARTMENTS ARE CLOSED OUT.	
					--30° 0" PRIOR OT RESUMING COUNT-- *****	+12 HRS 0° 0"
	111	1	CTSC	CVTS	PERFORMING ELEVATOR FUNCTIONAL TEST IN EGRESS MODE ON ML ELEVATORS AND CONFIGURING ELEVATORS FOR LAUNCH.	
	111	2	CVTS	MSTC CLTC CTSC	VERIFY FINAL PURGE BOX VALIDATION.	
	111	3	CVTS	CPSS	VERIFY READY TO SWITCH ECS TO GN2.	
	111	4	CLTC	CVTS	REQUEST CPSS VERIFY CLEARANCE TO SWITCH ECS TO GN2.	H
					NOTE ----	
					SWITCHING OF ECS TO GN2 IS SCHEDULED TO OCCUR 10 MINUTES AFTER CLEARANCE IS GRANTED.	
	111	5	CVTS	CTSC	CONFIGURE SAFETY SIGNAL LIGHTS TO STEADY RED. CLOSE AND DOG THE PAD SURFACE PTCR BLAST DOORS. PLACE SLIDEWIRE CAB IN READINESS CONFIGURATION.	

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TIME	COMM. CH.	SEQUENCE	COMMAND STA.	RESPONSE STA.	DESCRIPTION	REMARKS
HOLDING - 9 HRS 0' 0"		CONTINUED				
					--15' 0" PRIOR TO RESUME COUNT-- *****	+12 HRS 15' 0"
	111	1	MSTC	CVTS	CHANGE SMDPS FROM 2-SWITCH, 1-VALVE MODE TO 1-SWITCH MODE AND VERIFY.	
	111	2	CVTS	CPSS	VERIFY CLEARANCE TO CHANGE SMDPS FROM 2-SWITCH, 1-VALVE MODE TO 1-SWITCH, MODE.	
	111	3	CVTS	CLTC	CHANGE SMDPS FROM 2-SWITCH, 1-VALVE MODE TO 1-SWITCH MODE. REPORT WHEN COMPLETE.	
	111	4	CLTC	CVTS	SMDPS IS IN A 1-SWITCH MODE.	
	111	5	CVTS	MSTC	SMDPS IS IN A 1-SWITCH MODE.	
					NOTE ----	
					FROM THIS POINT, THE COUNTDOWN WILL BE RESUMED USING APPLICABLE COUNTDOWN TCPS. FOR SPACE VEHICLE OPERATIONS, REFERENCE TCP V-40300, VOLUME 1 AND PROCEED WITH CALLS AT T-9 HOURS, 0' 0".	
					END OF 24 HOUR SCRUB TURNAROUND OPERATING STEPS.	
					END OF TEST PROCEDURE SV-40300, VOLUME II	