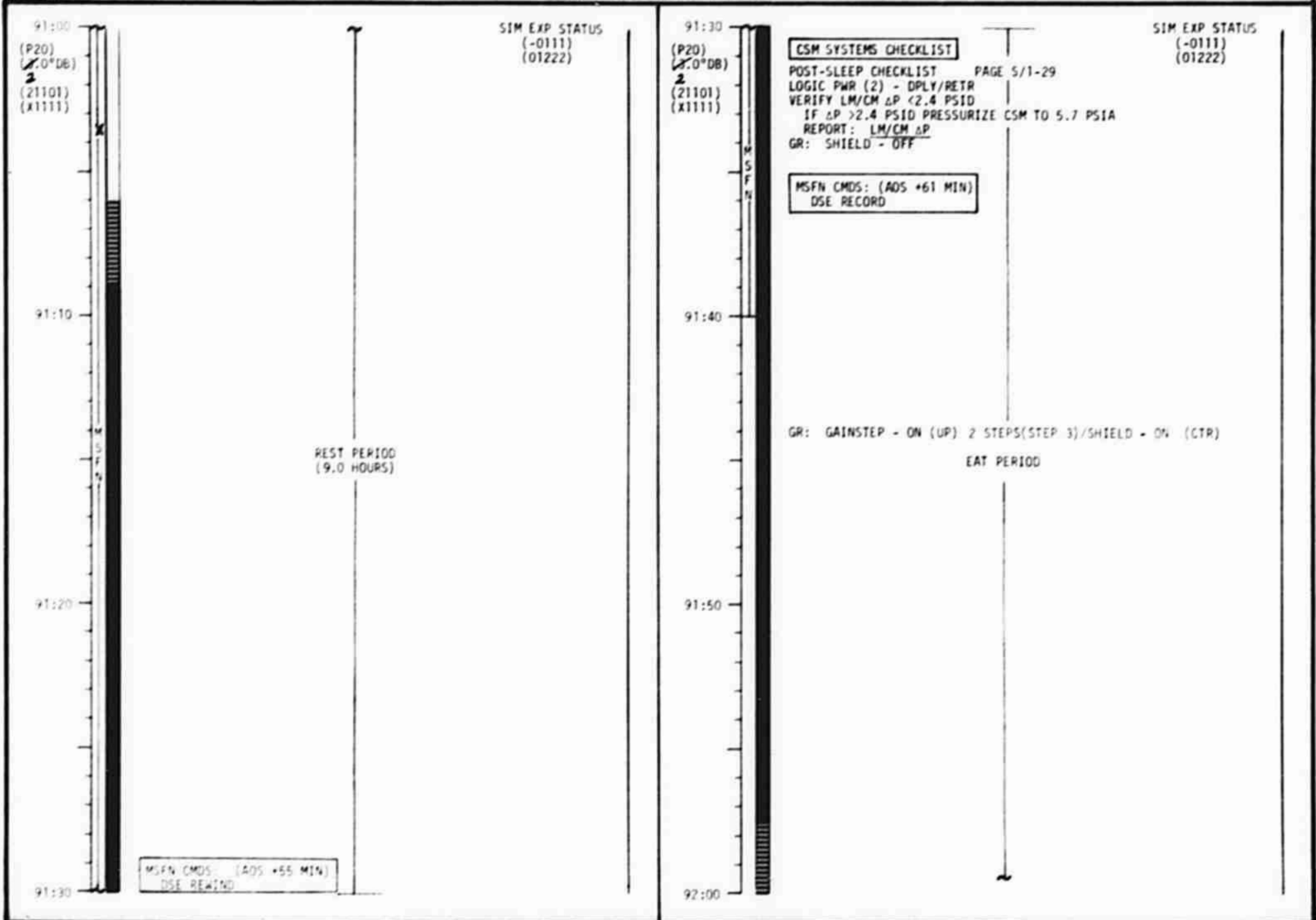


0654 CST

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 16	CHANGE A 4/16 (4/16)	3/27/72 3/6/72	3-91

CSM FLIGHT PLAN

92:00
 (P20)
 (210°DB)
 2
 (21101)
 (X1111)

REV 10

92:10

MS: ION SOURCE - OFF EAT PERIOD
 EXP - STBY
 CAUTION: WAIT 5 MIN BEFORE RETRACTING BOOM
 XR - STBY
 AP/XR COVER - CLOSE

92:20

MS - RETR
 GR - RETR

LOGIC PWR (2) - OFF
 ENABLE ALL JETS (BEFORE AOS)

CONFIGURE DSE (STOP/CMD RESET/REWIND) (AOS -3 MIN)

ACQ MSFN HGA: MAN, WIDE P D, Y 170
 S-BD ANT IND > 1/2 SCALE HGA: REACQ, NARROW

92:30

SIM EXP STATUS
 (-0111)
 (01222)

MISSION	EDITION	DATE	PAGE
APOLLO 16	CHANGE A FINAL (4/16)	3/27/72 3/16/72	3-92

CSM FLIGHT PLAN

0824 CST

92:30
(P20)
(2.0°DB)
92:40
92:50
93:00

LMP: FILL DRINK BAG - EVAC, INSTALL
INSTALL FOOD STICK

MSFN CUE: (AOS +4 MIN)
HGA AUTO

MSFN CMDS: (AOS +5 MIN)
DSE PLAYBACK

MSFN UPLINK:
CSM S.V. AND V66

MSFN UPDATE:
TRAJECTORY STATUS
FLIGHT PLAN

CDR: FILL DRINK BAG - EVAC, INSTALL

PREPARE COUCHES: CDR -0°, CMP -0°, LMP -180°
REMOVE PROBE STRAPS (RS)
TUNNEL LIGHTS - ON(UP)
VERIFY LM/CM ΔP < 0.2 PSID
IF ΔP > 0.2 PSID PERFORM CM/LM PRESSURE EQUALIZATION (DECAL)
TUNNEL HATCH REMOVAL (DECAL); STOW HATCH
PROBE REMOVAL (DECAL); STOW PROBE
DROGUE REMOVAL (DECAL); STOW DROGUE
REPORT: DOCKING TUNNEL INDEX ANGLE

LMP DON LCG AND PGA WITHOUT HELMET AND GLOVES

SIM EXP STATUS
(-0000)
(01214)

CSM TO LM TRANSFER LIST		
CSM LOCATION	ITEM	LM LOCATION
A2	JETTISON BAG (1)	TEMP STWG
ON CREW	BIO INSTRUMENTATION (2)	ON CREW
PGA BAG	UCTA (2)	ON CREW
A2	FCS (2)	ON CREW
U1	LCG (2)	ON CREW
TEMP STWG	DRINK BAG (2)	ON PGA
TEMP STWG	FOOD STICK (1)	ON PGA
PGA BAG	SUIT ITSLA-EV (2)	ON CREW
ICG	SUNGLASSES IN POUCH (2)	PGA POCKET
ON CREW	WATCH/WRIST MIRROR/WATCHBAND (2)	ON PGA
ON CREW	PEN (2)	PGA POCKET
ON CREW	PEN - FELT TIP (2)	PGA POCKET
ON CREW	PENCIL (2)	PGA POCKET
ON CREW	POCKET, C/L & SCISSOR (2)	ON PGA
ON CREW	POCKET, DATA (2)	ON PGA
ON CREW	SCISSOR	ON CREW
ON CREW	PEN LIGHT (2)	PGA POCKET
ON CREW	EAR PLUG (2 PR)	PGA POCKET
ON CREW	DOSIMETER - PERSONAL (2)	PGA POCKET
	PASSIVE (6)	
ON CREW	COMM CARRIER (2)	ON CREW
HELMET ACC BAG	IV GLOVES (2 PR) - CDR TRANSFER	TEMP STWG
HELMET BAG	HELMET (2) - CDR TRANSFER	TEMP STWG
R8	CWG ELECT ADPTR CAP (2)	ON CWG ADPTR
CCU CABLE	CWG ELECT ADPTR (2)	LHSSC
IN JETT BAG	LCG PLUG (2)	PURSE
ON PGA	GAS CONNECTOR PLUGS (4)	ON PGA
ON PGA	PGA ELECT CONN CAP (2)	PURSE
R3	LM XFER DATA CARD KIT	DATA FILE
	LM TIMELINE BOOK	
	LM DATA CARD BOOK	
	LM LUNAR SURFACE C/L	
	ORBIT MONITOR CHART (LM)	
	ASCENT MONITOR CHART	
	LM STAR CHARTS (3)	
	LM ACT C/L (1)	
	(RETURN JETTISON BAG TO CSM)	

LM FLIGHT PLAN

MCC-H

0854 CST

CDR

LMP

NOTES

93:00
:10
:20
93:30
:40
:50
94:00

M
S
F
N

LM ACTIVATION CHECKLIST PAGE 3-1

IVT TO LM
TRANSFER HELMETS &
GLOVES

ZIP LMP SUIT
ATTACH RESTRAINTS

IVT TO LM
OPEN HATCH
VERIFY DOCKING ANGLE
TRANSFER POWER
LIGHTS ON
DES O₂ AND H₂O - OPEN

ZIP CDR SUIT
ATTACH RESTRAINTS

-2:30

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	93:00 - 94:00	5/10	3-94

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

93:00 (21111) (X1111) V48 (21111) (X1111) SIM EXP STATUS (-0000) (01214)
 V45 (RESET LUNAR SURFACE FLAG) P00
 P52 (OPTION 3) (LDG SITE ORIENT)

REPORT: GYRO TORQUING ANGLES
 GDC ALIGN

93:10 CDR DON BIOMED HARNESS, LCG AND PGA WITHOUT HELMET AND GLOVES

P52 IMU REALIGN

N71: _____

N05: _____

N93: _____

X _____

Y _____

Z _____

GET _____

MSFN CMDS:
 DATA SYS - OFF

93:20 V49 MNVR TO UNDOCK ATT (93:35) (000,104,000) SET HGA P -63, Y 159 FOR AOS ACQ

CMP DON BIOMED HARNESS, PGA WITHOUT HELMET AND GLOVES

LYOH CANISTER CHANGE (10 INTO B, STOW 8 IN B6)

93:30

93:30 (21111) (X1111) SIM EXP STATUS (*0000) (01214)

MSFN

VERIFY DSE TAPE MOTION (LBR/RCD/FWD/CMD RESET)

CONFIGURE CAMERA: (UNDOCKING PHOTOS) CM2/DAC/18/CEX-BRKT,MIR (T8,1/250,7) 12 fps (100% MAG)

MAG (CC) _____ MAG # _____
 UTILITY PWR - ON

93:40 CONFIGURE CAMERA: (TERMINATOR PHOTOS) CM3/EL/250/VH BW (f11,1/250,-)6 FR

MAG (SS) _____ FR # _____

CDR & LMP IVT TO LM

O₂ HEATERS 1 & 2 - OFF
 O₂ HEATERS 3 - AUTO

93:50 AT LMP REQUEST:
 LM PWR - RESET/OFF GET _____ : _____ : _____ (RECORD)
 SYS TEST - 7D
 SYS TEST ind - 0 volts

94:00

LM FLIGHT PLAN

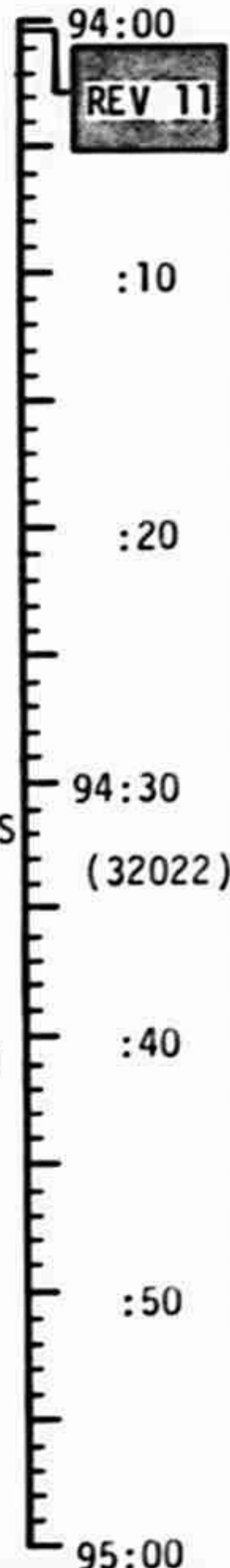
MCC-H

0954 CST

CDR

LMP

NOTES



UPDATE TO LM
AGS ABORT CONSTANTS

UPLINK TO LM
L/S REFSMMAT
LM S.V. & V66
LGC ABORT CONSTANT
LGC AT CLOCK
SYNC (IF REQD)

MISSION TIMER ACTIVATION	EPS ACTIVATION CONNECT TO LM COMM CONFIGURE S-BAND
CONNECT TO LM ECS CB ACTIVATION ACTIVATE RCS HEATERS	PRIMARY GLYCOL LOOP ACT CAUTION/WARNING CHECKOUT ECS ACTIVATION & CHECKOUT CONNECT TO LM ECS CB ACTIVATION TB VERIFICATION
PGNS TURN ON AND SELF TEST	VHF CHECKOUT RECORDER - ON
LGC/CMC CLOCK SYNC T EPHEM UPDATE	PRIM S-BAND VOICE CHECK SEC S-BAND VOICE CHECK STEERABLE ANTENNA ACTIVATION BIOMED - RIGHT
V48 (32022) E-MEMORY DUMP DEPLOY LDG GEAR	SUIT FAN/H ₂ O SEP CHECK GLYCOL PUMP CHECK
DOCKED IMU COARSE ALIGN	ASCENT BATTERY ACTIVATION AND CHECKOUT
V06 N20	

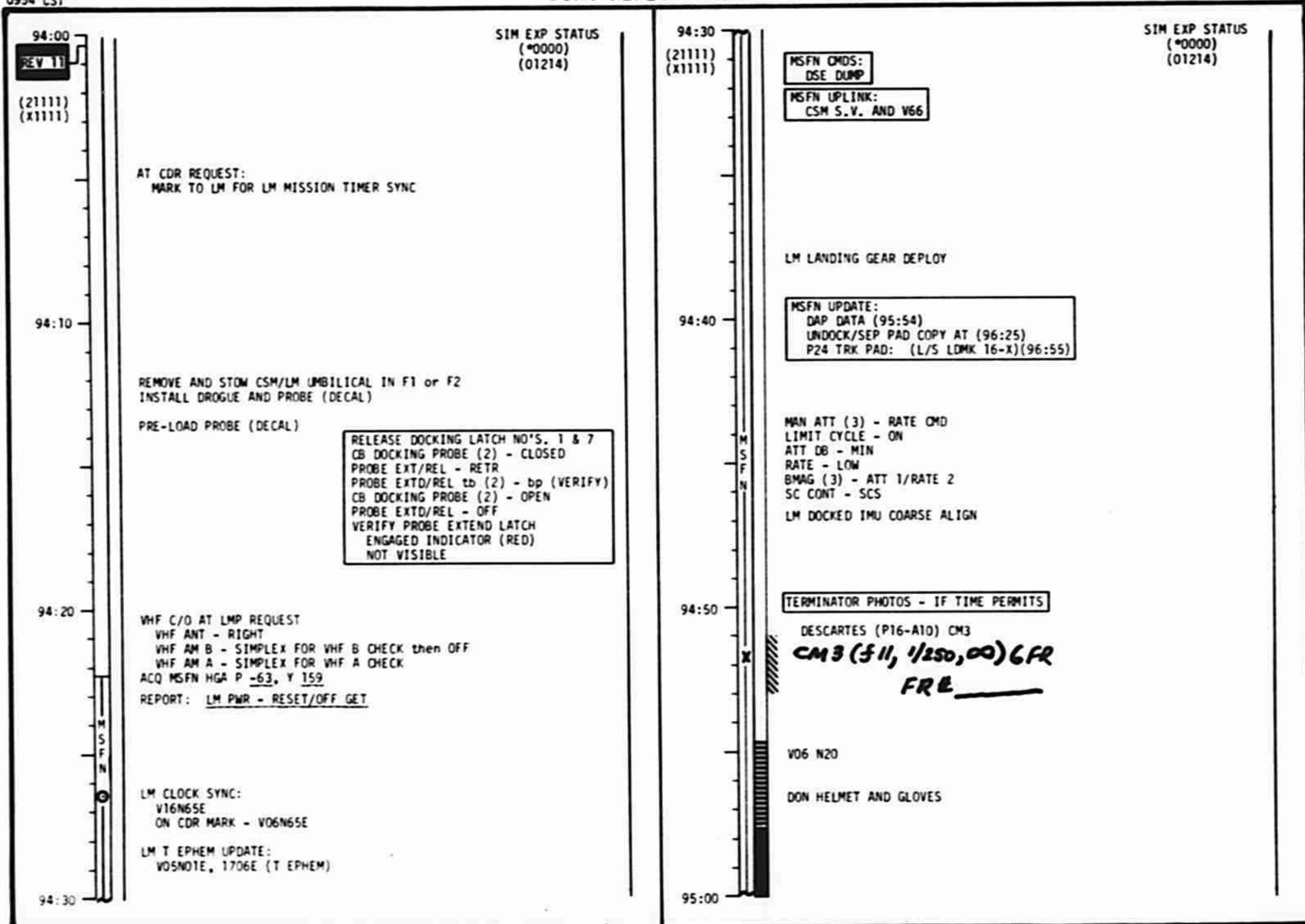
-2:00

-1:30

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	94:00 - 95:00	5/10-11	3-96

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

MCC-H

1054 CST

CDR

LMP

NOTES

UPDATE TO LM
PIPA BIAS (IF REQD)

GO/NO-GO FOR
UNDOCKING AND
SEPARATION



M
S
F
N

P52 IMU REALIGN
OPTION 3, REFSMMAT
LDG SITE ORIENT
(CURSOR/SPIRAL TECHNIQUE)
V06 N20

RCS PRESSURIZATION & CHECKOUT

RR ACTIVATION & SELF TEST

VERIFY PROBE & DROGUE
INSTALLATION
CLOSE & SECURE HATCH
VHF B XMTR-DATA
PCM-LO

DON HELMETS & GLOVES

ARS/PGA INTEGRITY CHECK
CABIN REGULATOR CHECK

RATE GYRO TEST

UNDOCKING PREPARATION
CONFIGURE CB'S FOR UNDOCKING MOUNT CAMERA ON WINDOW BAR

-1:00

-0:30

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	95:00 - 96:00	5/11-12	3-98

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

95:00
(21111)
(X1111)

PGA Interconnects - AB

SUIT CKT INTEGRITY CHECK (DECAL)

SIM EXP STATUS
(*0000)
(01214)

95:10

VO6 N20
ON LM CUE:
SC CONT - CMC
ATT DB - MAX
BMAG (3) - RATE 2
AT CD'R'S REQUEST DURING RCS CHECKOUT
CMC MODE - FREE FOR RCS HOT FIRE

PANEL 10
MODE - VOX
VOX SENS SW - 5
S-BD - OFF
INTERCOM - OFF
VHF AM T/R - T/R (VERIFY)

95:20

AFTER LM RCS CHECKOUT
CMC MODE - AUTO
LM RR SELF TEST
RNDZ XPNDR - OFF (VERIFY)
AUTO RCS SEL B3 - OFF
ROLL (B) - OFF UNTIL LM/CM $\Delta P > 3.5$ PSID
DOCKING LATCH RELEASE (DECAL)
HATCH INSTALLATION (DECAL)

MSGN CMDS:
DSE RECORD

MSGN UPDATE:
GO/NO-GO FOR UNDOCK/SEP

HATCH INTEGRITY CHECK (DECAL)
VERIFY DSE TAPE MOTION (LBR/RCD/FWD/CMD RESET)

95:30

95:30
(21111)
(X1111)

VHF ANT - RIGHT (VERIFY)
VHF RCV ONLY - B DATA
VHF AM A - SIMPLEX
VHF AM B - OFF

SIM EXP STATUS
(*0000)
(01214)

WHEN LM RR SELF - TEST COMPLETE:
AUTO RCS SEL B3 - ON
DOFF HELMET, GLOVES

95:40

RR XPNDR ACTIVATION AND SELF-TEST (DECAL)
RR XPNDR - HTR
CONFIGURE CAMERA: (UNDOCKING PHOTOS)
CM2/EL/BD/CEX (f8,1/250,FOCUS) 10 FR
MAG (NV) _____, FR # _____

113 VALUES
A~2.8
B~2.2 SELF TEST
C~0.3 UNLOCKED
~4.9 LOCKED

VERIFY:
CM2/DAC/18/CEX-BRKT, MIR (T8,1/250,7) 12 fps
UTILITY PWR - ON

95:50
(21101)
(X1111)

TUNNEL LIGHTS - OFF
ROLL (4) - ON
CYCLE CMC MODE - FREE/AUTO
V48 (21101)
(X1111)
LOAD N47 & N48
V49 TRIM MNVR TO CSM SEP PAD ATT (95:56)

REV 12

P30; LOAD CSM SEP
SET DET COUNTING UP TO UNDOCK/SEP
LOAD ΔV IN EMS TO -100.0
CHECK NULL BIAS
VERIFY EMS -100.0/ ΔV /STBY

+					WT	N47
	0	0			P TRIM	N48
	0	0			Y TRIM	

GDC ALIGN
VERIFY ORDEAL
ALT SET = 40 NM

96:00

MISSION	EDITION	DATE	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	3-99

MCC-H

1154 CST

LM FLIGHT PLAN

CDR

LMP

NOTES

LM TIMELINE BOOK



VERIFY UNDOCKING ATTITUDE

V48 (22012)
V06N20

P47 THRUST MONITOR

CSM/LM UNDOCKING AND SEPARATION

96:13:31

YAW LEFT 60°, PITCH UP 90°

DOFF HELMET & GLOVES
REPORT: V06N20 ANGLES & GET

DPS THROTTLE CHECK

DPS PRESS & CHECKOUT

SEPARATION PHOTOGRAPHY
LM3/DAC & DC
DOFF HELMET & GLOVES
VHF B XMTR-OFF, BIOMED-LEFT
PCM-HI

CONFIGURE CAMERAS FOR
CABIN PHOTOS
LM/DAC & DC

LM CABIN PHOTOS
AGS ACTIVATION

LOAD AGS ABORT CONSTANTS

M
S
F
N

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	96:00 - 96:30	5/12	3-100

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

96:00
(21101)
(X1111)

PERFORM UNDOCKING SWITCH CONFIGURATION

SIM EXP STATUS
(*0000)
(01214)

UNDOCKING SWITCH CONFIGURATION

ATT DB - MIN
RATE - LOW
RHC PWR NORM - AC/DC
RHC PWR DIR - MNA/MNB
AUTO RCS (12) - MNA/MNB
CB DOCKING PROBE (2) - CLOSED
DSE (HBR/RCD/FWD/CMD RESET)

VO6N20E (AT LM REQUEST)
P41 (TRIM)
BMAG (3) - ATT 1/RATE 2
SC CONT - SCS
V48 (11101)
(X1111)
RHC & THC - ARMED

NOTE: UNDOCKING MAY OCCUR:
1. FROM 45 MIN EARLY TO 8 MIN LATE ON THE NOMINAL INERTIAL (IMU) ATTITUDE
2. FROM TIG TO 8 MIN LATE ON THE NOMINAL INERTIAL (IMU) ATTITUDE OR THE NOMINAL LOCAL VERTICAL (ORDEAL) ATTITUDE
3. FROM 8 MIN LATE TO 40 MIN LATE ON THE NOMINAL LOCAL VERTICAL (ORDEAL) ATTITUDE

UNDOCKING CHECKLIST

UNDOCK/SEPARATION (000,090/104,000)	TIG: 96:13:30.8
	BT: 3.4 SEC
	ΔVT: 1.0 FPS
	ULLAGE: N/A
	ORBIT: 60.5 x 8.9

DAC - OFF
RECORD MAG # _____ FR # _____
ACQ MSFN HGA F-63, Y 159

MSFN CMDS:
DSE DUMP

NOTE: WILL LOSE LOCK UNTIL MNRV IS COMPLETED

V49 MNRV TO LOW ALT LDMK TRX PAD ATT (96:34)
OMNI C

MONITOR S-BAND

MSFN UPDATE:
P24 T2 TIME (IF RECD)

CONFIGURE CAMERA: (LDMK TRX)
CM/DAC/SXT/CEX (EXP-PAD) 1 fps (31 MAG)

MAG (BB) _____, MAG # _____
UTILITY PWR - ON

(11101)
(X1111)
96:10

96:20

96:30

UNDOCKING CHECKLIST

DAC - ON
59:30 EMS MODE - NORM
THC PWR - ON

00:00 PROBE EXT/REL - EXT/REL (MDM)
VERIFY PROBE EXTENDED, LM ATTACHED
ALLOW MOTION TO DAMP (5 SEC)
PROBE EXT/REL - EXT/REL (HOLD) (< 20 SEC)
AFTER 2 SEC XLATE (4 JET) AFT
FOR ~ 3 SEC (VGX to + 2.0)
AFTER PROBE/DROGUE DISENGAGED,
PROBE EXT/REL - OFF
CB DOCKING PROBE (2) - OPEN
THC & RHC - LOCKED
THC PWR - OFF
POO
SC CONT - CMC
ATT DB - MAX
ΔV CG - CSM
BMAG (3) - RATE 2
RHC PWR DIR - OFF
EMS FUNC - ΔV SET/VHF RNG
EMS MODE - VHF RNG
AT ADS:
VHF ANT - LEFT
VHF AM A - OFF
VHF AM B - DUPLEX
VHF RNG - RNG (DSE VOICE USE MARGINAL)
VHF AM RCV ONLY - OFF

P30 MANEUVER

SET STARS	C	S	M	S	E	P	PURPOSE
	R	C	S	G	&	N	PROP/GUID
	+			N	/	A	MT N47
P ALIGN		0	0	N	/	A	P TRIM N48
P ALIGN		0	0	N	/	A	Y TRIM
Y ALIGN	+	0	0				HRS GETI
	+	0	0	0			MIN N33
	+	0					SEC
ULLAGE	+	0	0	0	0	0	ΔV _X N81
	+	0	0	0	0	0	ΔV _Y
	-	0	0	0	1	0	ΔV _Z
	X	X	X				R (000)
	X	X	X				P (104)
	X	X	X				Y (000)

LM FLIGHT PLAN

MCC-H

1224 CST

CDR

LMP

NOTES

UPDATE TO LM
AGS K-FACTOR
REV 12 LS TCA

96:30
(22012)

:35

LANDING RADAR CHECKOUT

V47 AGS INITIALIZATION
ALIGN AGS TO PGNS

MNVR TO RR CHECK ATT

AGS CONTROL CHECK

:40

CONFIGURE CAMERAS FOR TCA
LM3/DAC
LM/DC

M
S
F
N

96:45

PHOTOGRAPH LDG SITE

X

UPDATE TO LM
CSM CIRC PAD
NO PDI+12 ABORT PAD
PDI PAD
PDI EARLY ABORT PAD
PDI LATE ABORT PAD
T2 ABORT PAD
T3 TIG

:50

RENDEZVOUS RADAR CHECKOUT
VHF/RR RNG COMPARE

:55

P52 IMU REALIGN
OPTION 3, REFSMMAT
(LDG SITE ORIENT)

97:00

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	96:30 - 97:00	5/12	3-102

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

SIM EXP STATUS
(*0000)
(01214)

96:30
(11101)
(X1111)

(11102)
(X1111)

(P20)
(-2.000)
(0.5°DB)
96:40

(11102)
(X1111)

96:50

97:00

RR XPNDR - PWR

V48 (11102)
(X1111)

P20 OPT 2 (LOW ALT LDMK TRK)
N78 (+090.00)
(LOAD LDMK PAD ROLL ANGLE)
N79 (-2.0000)
(+000.50)
N34 (LOAD T2 TIME)
PRO

MSFN OMS:
DSE RECORD

P24 (L/S LDMK 16-X)
OPT ZERO - OFF
OPT MODE - CMD
OPT TEL TRUN - SLAVE TO SXT
OPT COUPLING - RSLV
OPT SPEED - HI
0:00 - T1 (HORIZON) DET - RESET/START
DAC - ON

1:38 - T2 (AUTO PITCH RATE BEGINS) OPT MODE - MAN, TAKE MARKS
2:08 - TCA
2:30 - T3 (LDMK LOSS) DAC - OFF

STOP PITCH RATE AT P ~~000~~ 002
VHF RNG - RESET, COMPARE RR AND VHF RANGE
ACQ MSFN HGA P -66, Y 216 92
RECORD MAG : _____, REMOVE & STOW DAC

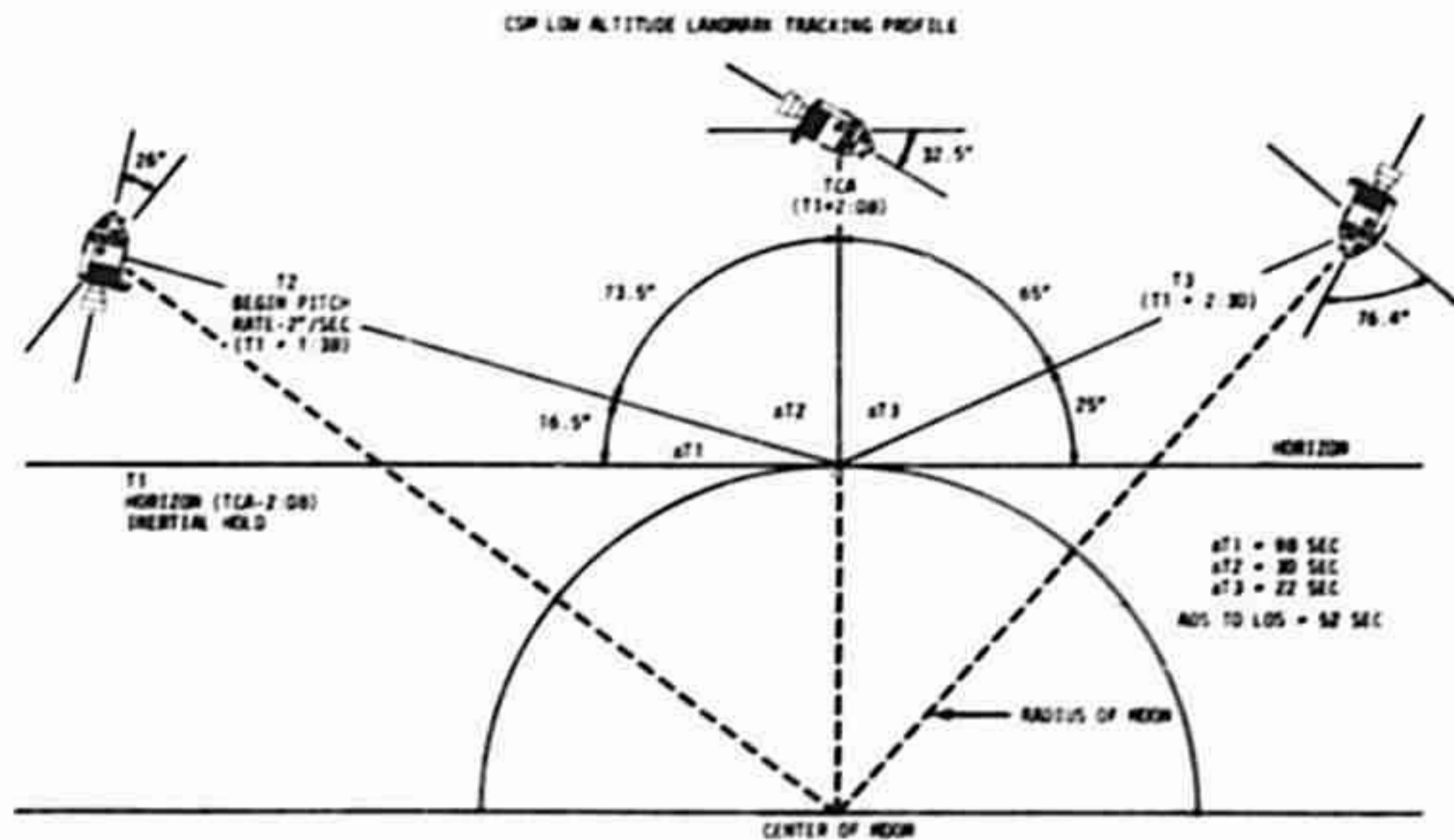
MSFN OMS:
DSE DUMP

P00
P52 (OPTION 3)
(LDG SITE ORIENT) **BACKUP STARS 45 E 44**
REPORT: GYRO TORQUING ANGLES

GDC ALIGN
V49 MNVR TO COAS CALIB ATT (97:01)
(060,251,354) HGA P 37, Y 257

P52 IMU REALIGN

N71:	_____	_____	_____
N05:	_____	_____	_____
N93:	_____	_____	_____
X	_____	_____	_____
Y	_____	_____	_____
Z	_____	_____	_____
GET	_____	_____	_____



P24 LDMK TRACKING (1/60)

TOT: _____

T1 _____

T2 _____ (96:45:15.7)

TCA _____

T3 _____

P _____ °P _____ °Y _____ °(T2 ACQ)
(015) (296) (000)

N or S N° / SA TA (T2 ACQ)

NOR	16-1	16-2	16-3	16-4	16-5	16-6
LAT	-08.859	-08.936	-09.000	-09.056	-09.122	-09.181
LONG/2	+07.741	+07.747	+07.745	+07.650	+07.821	+07.838
ALT	-000.09	-000.11	-000.14	-000.20	+000.06	+000.03

LM FLIGHT PLAN

MCC-H

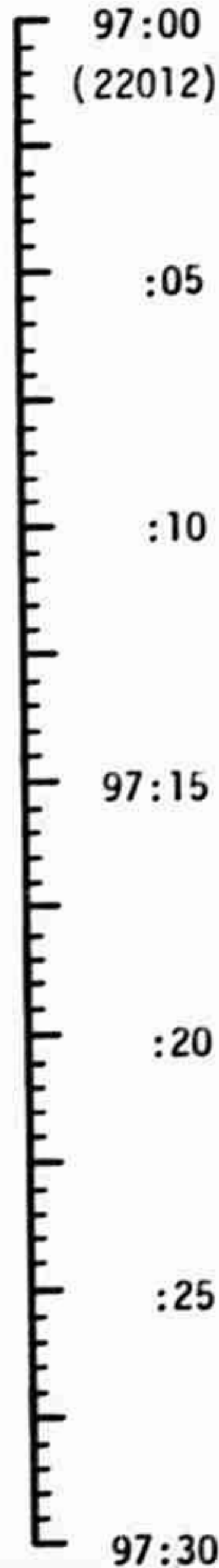
1254 CST

CDR

LMP

NOTES

UPLINK TO LM
CSM & LM S.V.
(CIRC - 10)
E-MEMORY
DES TARGETING



M
S
F
N

COAS CALIBRATION

LPD CALIBRATION

V47 AGS INITIALIZATION
ALIGN AGS TO PGNS

UPDATE TO LM
GYRO DRIFT COMP
(IF REQD)
PIPA BIAS

MNVR TO AGS CAL ATT

VHF B XMTR-DATA, PCM-LO

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	97:00 - 97:30	5/12	3-104

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

97:00
(11102)
(X1111)

MSFN

97:10

(10101)
(X1111)

(P40)
(0.5°DB)

97:20

97:30

P52 (COAS CALIB)
USE 26 (SPICA)

SIM EXP STATUS
(*0000)
(01214)

COAS CALIB - N92

SHAFT: --- ● ---

TRUN: --- ● ---

MSFN UPDATE:
CIRC PAD
PADS E-N (98:15)
PIPA BIAS (IF REQD)

MSFN UPLINK:
CSM S.V. (CIRC-10)
CIRC TARGET LOAD

P30; VERIFY CIRC TIG AND ΔV 'S
V49 MNVR TO CIRC BURN PAD ATT (97:17)
HGA P -29, Y 171

GDC ALIGN
VERIFY ORDEAL
ALT SET = 50 NM

PRE-SPS BURN SIM PREP (CUE CARD)
V48 (10101)
(X1111)
SET DET COUNTING UP TO CIRC

P40 (TRIM)

MSFN UPDATE:
GO/NO-GO FOR CIRC

VHF AM B - OFF
VHF AM A - SIMPLEX
VHF RCV ONLY - B DATA
VHF RANGING - OFF

MSFN CMDS:
DSE RECORD

VERIFY DSE TAPE MOTION (LBR/RCO/FWD/CMO RESET)

P30 MANEUVER

SET STARS	C	I	R	C	PURPOSE
	S	P	S	G & N	
	•				WT N47
R ALIGN		0	0	•	P TRIM N48
P ALIGN		0	0	•	Y TRIM
Y ALIGN	•	0	0		HRS GETI
	•	0	0	0	MIN N33
	•	0		•	SEC
ULLAGE				•	ΔV_x N81
				•	ΔV_y
				•	ΔV_z
	X	X	X		R (000)
	X	X	X		P (141)
	X	X	X		Y (358)
	•			•	H _A N44
				•	H _P
	•			•	ΔVT
HORIZON/WINDOW	X	X	X	•	BT
	X			•	ΔVC
	X	X	X	X	SXTS
	•			•	0 SFT
	•			•	0 TRN
	X	X	X		BSS
	X	X		•	SPA
	X	X	X	•	SXP

LM FLIGHT PLAN

MCC-H

1324 CST

CDR

LMP

NOTES

97:30
(22012)

:35

:40

97:45

REV 13

:50

:55
(22112)

98:00



AGS CALIBRATION

P76 UPDATE CSM S.V.

V47 INITIALIZE AGS

CSM CIRC 97:42

P63 IGNITION ALGORITHM
TEST
MNVR TO PDI ATT

CHECK ECS, RCS, EPS, APS

V48 (22112)

CAMERA PREP FOR PDI
LM3/DAC
CAMERA PREP FOR EARTHRISE
LM/DC

PRE-PDI ECS CHECK

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	97:30 - 98:00	5/12-13	3-106

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

97:30
(P40)
(0.5°DB)

(10101)
(X1111)

97:40

(10101)
(X1111)

REV 13

97:50

98:00

SIM EXP STATUS
(*0000)
(31000)

MANUAL START CIRC BURN TABLE **RESTART WITH $\Delta V_{60} > 20 \text{ FPS}$**

P OR Y RATES	ATT DEVIATION	SHUTDOWN TIME	RESIDUALS
10°/SEC TERMINATE	+10° TERMINATE	BT +1 SEC	IF X,Y,&Z ARE <5 FPS TRIM TO <0.2 FPS DO NOT TRIM IF ANY RESIDUAL >5 FPS

*If (-) Vgy or (+) Vgz,
ROLL is USE - 2
Thrusters*

CSM CIRCULARIZATION (000,047/141,358)

TIG: 97:41:44.5
BT: 5.9 SEC
 ΔV_T : 99.6 FPS
ULLAGE: 2 JET, 16 SEC
ORBIT: 68.2 x 51.8

POO VOICE P76 BURN DATA TO LM
V82

V49 MNVR TO LDMX TRX ATT EXCEPT IN ROLL (98:00)
(060,276,000)
SET HGA P 39, Y 288 FOR ADS ACQ

UNSTOW CSM RESCUE BOOK

POST SPS BURN SIM PREP (CUE CARD)

CIRC REQUIRES - CAC

- ISS
- 0-DAC
- 4 SERVO LOOPS
- 1 DSKY
- 2 BANKS
- 7 of 8 ROLL THRUSTERS
- 3 of 4 P_Y THRUSTERS

X	X				ATIG
X	X				BT
					Vgx
TRIM					
X	X	X			R
X	X	X			P
X	X	X			Y
					Vgx
					Vgy
					Vgz
					ΔV_C
X					FUEL
X					OX
X					UNBAL

LM FLIGHT PLAN

MCC-H

1354 CST

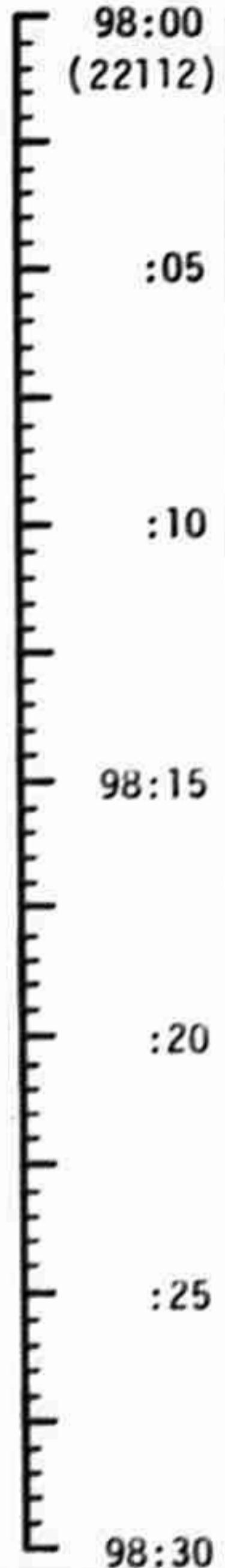
CDR

LMP

NOTES

UPLINK TO LM
LM S.V. (PDI - 10)
RLS-2
UPDATE TO LM
AGS RLS
LPD BIAS

UPDATE TO LM
N69 BACKUP RLS



DON HELMET & GLOVES
PRE-PDI SWITCH CHECK

DON HELMET & GLOVES
PRE-PDI SWITCH CHECK

BATS 5 & 6 NORM FEED-ON

REPORT: AGS CAL NO.
ED BAT VOLTS
ASC BATS ON TIME

PCM-HI
VHF B XMTR - OFF
VHF A XMTR - VOICE/RNG

P63 POWERED DESCENT
INITIATION

V47 AGS INITIALIZATION
TARGET AGS FOR ABORT

AUDIO MODE - VOX

LDG RDR ON
FINAL TRIM

ALIGN AGS TO PGNS

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	98:00 - 98:30	5/13	3-108

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

1354 CST

SIM EXP STATUS
(*0000)
(01214)

98:00
(10101)
(X1111)

CONFIGURE CAMERA: (LDMK TRK)
CM/DAC/SXT/CEX (EXP-PAD) 1 fps (3.8x MAG)

MAG (BB) _____ MAG : _____
UTILITY POWER - ON

GDC ALIGN
VERIFY ORDEAL
ALT SET = 60 NM
ACQ MSFN HGA P 39, Y 288

98:10

MSFN CMDS:
DSE DUMP

REPORT: BURN STATUS

MSFN UPDATE:
P24 LDMK TRACK (98:50)

MSFN UPLINK:
CSM S.V. (P24 T2 ACQ)
LM S.V. (PDI-10)

98:20

P20 OPT 5 (LDMK TRK ATT) (98:34)

N78 (+000.00)
(-068.00)
(+000.00)

N79 (+000.50)
(000.338/276.000) OMNI D

(P20)
(0.5°DB)

98:30

MSFN UPDATE:
GO/NO-GO FOR PDI

PURPOSE		NO PDI ₁ +12 ABORT			
E	GETI N33	HRS	+ 0 0		
		MIN	+ 0 0 0		
		SEC	+ 0		
F	N84 LOCAL VERT	ΔVX			
		ΔVY			
		ΔVZ			
G	GETI CSI N11	HRS	+ 0 0		
		MIN	+ 0 0 0		
		SEC	+ 0		
H	GETI TPI N37	HRS	+ 0 0		
		MIN	+ 0 0 0		
		SEC	+ 0		

PURPOSE		PDI ₁ ABORT LATE PAD			
K	GETI TPI N37	HRS	+ 0 0		
		MIN	+ 0 0 0		
		SEC	+ 0		

PURPOSE		T 2-1 ABORT PAD			
L	GETI T2	HRS	+ 0 0		
		MIN	+ 0 0 0		
		SEC	+ 0		
M	GETI TPI N37	HRS	+ 0 0		
		MIN	+ 0 0 0		
		SEC	+ 0		

PURPOSE		PDI ₁ PAD			
I	GETI PDI N33	HRS	+ 0 0		
		MIN	+ 0 0 0		
		SEC	+ 0		

PURPOSE		T3 ABORT PAD			
N	GETI T3	HRS	+ 0 0		
		MIN	+ 0 0 0		
		SEC	+ 0		

PURPOSE		PDI ₁ ABORT EARLY PAD			
J	GETI TPI N37	HRS	+ 0 0		
		MIN	+ 0 0 0		
		SEC	+ 0		

LM FLIGHT PLAN

MCC-H

1424 CST

CDR

LMP

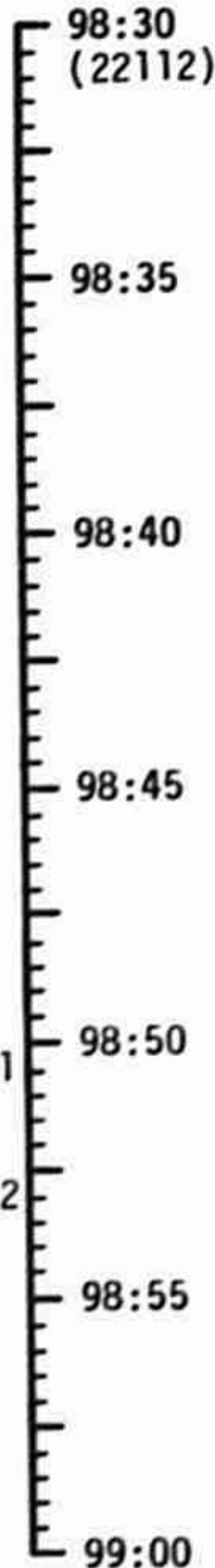
NOTES

GO/NO-GO FOR PDI

UPDATE TO LM
N69 NOMINAL
N69 DOWN TRACK &
CROSS TRACK
N69 RADIAL

STAY/NO-STAY FOR T1

STAY/NO-STAY FOR T2
& GO/NO-GO FOR
DPS VENT



M S F N

MASTER ARM-ON
ENGINE ARM-DES

VHF COMM CHECK WITH CSM

PDI

MASTER ARM - OFF
V21N69
YAW TO FACE UP

V24N69

V23N69
PITCH OVER AT P64

AGS ALT UPDATE @ 14K FEET
DAC ON FOR LANDING

P66

LM LUNAR TOUCHDOWN

ENG STOP, ENG ARM-OFF

DAC-OFF
STORE AGS LUNAR AZIMUTH
UPDATE & ALIGN AGS

T1 STAY/NO-STAY
P12 POWERED ASCENT

T2 STAY/NO-STAY & GO/NO-GO
FOR DPS VENT

TAPE RECORDER-OFF

LUNAR SURFACE CHECKLIST PAGE 1-1

VENT DPS PROPELLENTS

BATS 5 & 6 - OFF/RESET
INVERTER - 2

TIG: 98:34:41
BT: 12 MIN 1.5 SEC
ΔV: 6696.28 FPS
ULLAGE: 4JET,7.5SEC

98:46:42

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	98:30 - 99:00	5/13	3-110

FLIGHT PLANNING BRANCH

1424 CST

CSM FLIGHT PLAN

98:30
 (P20)
 (0.5°DB)

(10101)
 (X1111)

98:40

(10111)
 (X1111)

98:50

99:00

HGA REQUIRED for MSFN to LM VIA CSM RELAY

SIM EXP STATUS
 (*0000)
 (01214)

VHF COMM CHECK WITH LM

P24 (L/S LDMK 16-3)
 OPT ZERO - OFF
 OPT MODE - CMC

LM POI (98:34:41)

_____	_____	_____	_____
-------	-------	-------	-------

0:00 - T1 (HORIZON) DET - RESET/START

MSFN CMDS:
 DSE RECORD

3:50 - DAC - ON

4:50 - T2 (LDMK ACQ) OPT MODE - MAN,
 TAKE MARKS 10 SEC APART

6:30 - TCA
 7:18 - T3 (LDMK LOSS) DAC - OFF

POO
 V48 (10111)
 (X1111)
 V49 MNVR TO P52 ATT (98:58)
 (140,296,000) HGA P -31, Y 310

LM TOUCHDOWN (98:46:42)

_____	_____	_____	_____
-------	-------	-------	-------

CONFIRM STAY/NO STAY FOR T1

VHF AM A - OFF (CTR)
 VHF RCV ONLY - OFF
 CONFIRM STAY/NO STAY FOR T2
 RNDZ XPNDR - OFF
 V44 (SET LUNAR SURFACE FLAG)

MSFN CMDS:
 DSE DUMP

P52 (OPTION 3)
 (LDG SITE ORIENT)

P52 IMU REALIGN

N71: _____

N05: _____

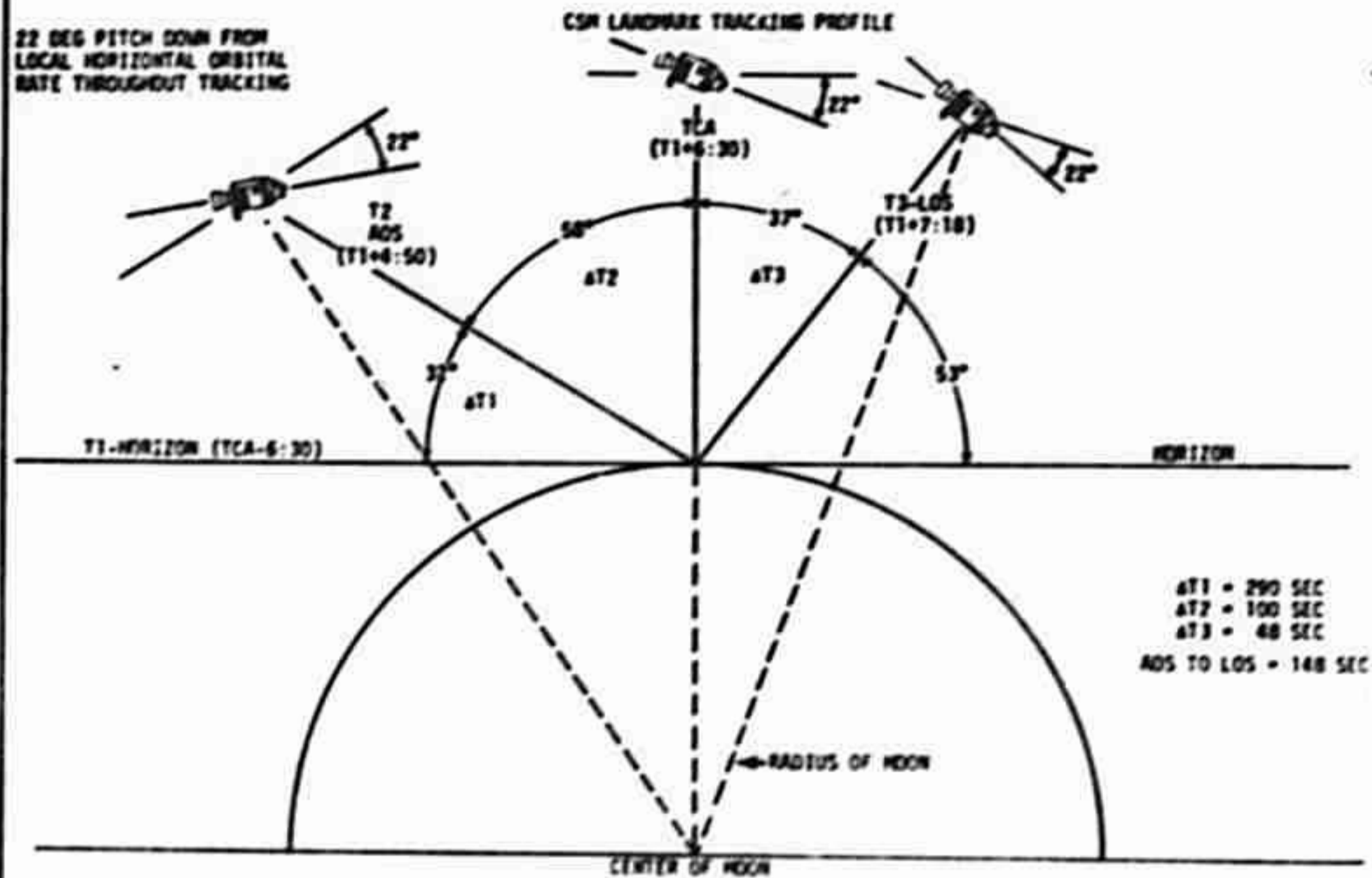
N93: _____

X _____

Y _____

Z _____

GET _____



P24 LDMK TRACKING

TGT: 16 - 3 (1/60)

T1	— — — — —	.	.	— — — — —
T2	— — — — —	.	.	— — — — —
TCA	— — — — —	.	.	— — — — —
T3	— — — — —	.	.	— — — — —
R	— — — — —	*P	*Y	— — — — —
		(T2 ACQ)		
N or S NH	— — — — —	/ SA	— — — — —	TA — — — — — (T2 ACQ)
N89				
LAT	-09.000			
LONG/2	+07.745			
ALT	-000.14			

LM FLIGHT PLAN

MCC-H

1454 CST

NOTES

99:00
(22112)
:10
:20
99:30
:40
:50
100:00

M
S
F
N

CDR
DOFF HELMET, GLOVES & RESTRAINTS
CLOSE WINDOW SHADES
P57 - LUNAR SURFACE ALIGN
OPTION 3, REFSMMAT
A/T-3, GRAVITY & ONE
CELESTIAL BODY
(LANDING SITE ORIENT)
PARK IMU PLATFORM

LMP
DOFF HELMET, GLOVES & RESTRAINTS
REPORT: DEDA 047, 053
544, 545, 546
AGS LUNAR SURFACE GYRO
CALIBRATION

LM POWER DOWN
PARK RR ANTENNA FOR STAY
LGC STANDBY, IMU OFF
OPEN WINDOW SHADES
CONFIGURE FOR POWERDOWN

ALIGN AGS TO PGNS
STORE AGS LUNAR AZIMUTH
BATS 2,1 - OFF/RESET
BAT L (LMP) - ON
CHECK BUS VOLTS
BIOMED - RIGHT

CABIN CONFIGURATION FOR LUNAR STAY
STOW ARMRESTS, COAS, LEVA BAGS
UNSTOW PLSS ON FLOOR
STOW SLEEP RESTRAINTS
TRANSFER RCU'S TO LCG BAG
DEPLOY LM EVA ANTENNA
DEPLOY ONE JETT BAG, STOW THREE

STAY/NO-STAY FOR T3

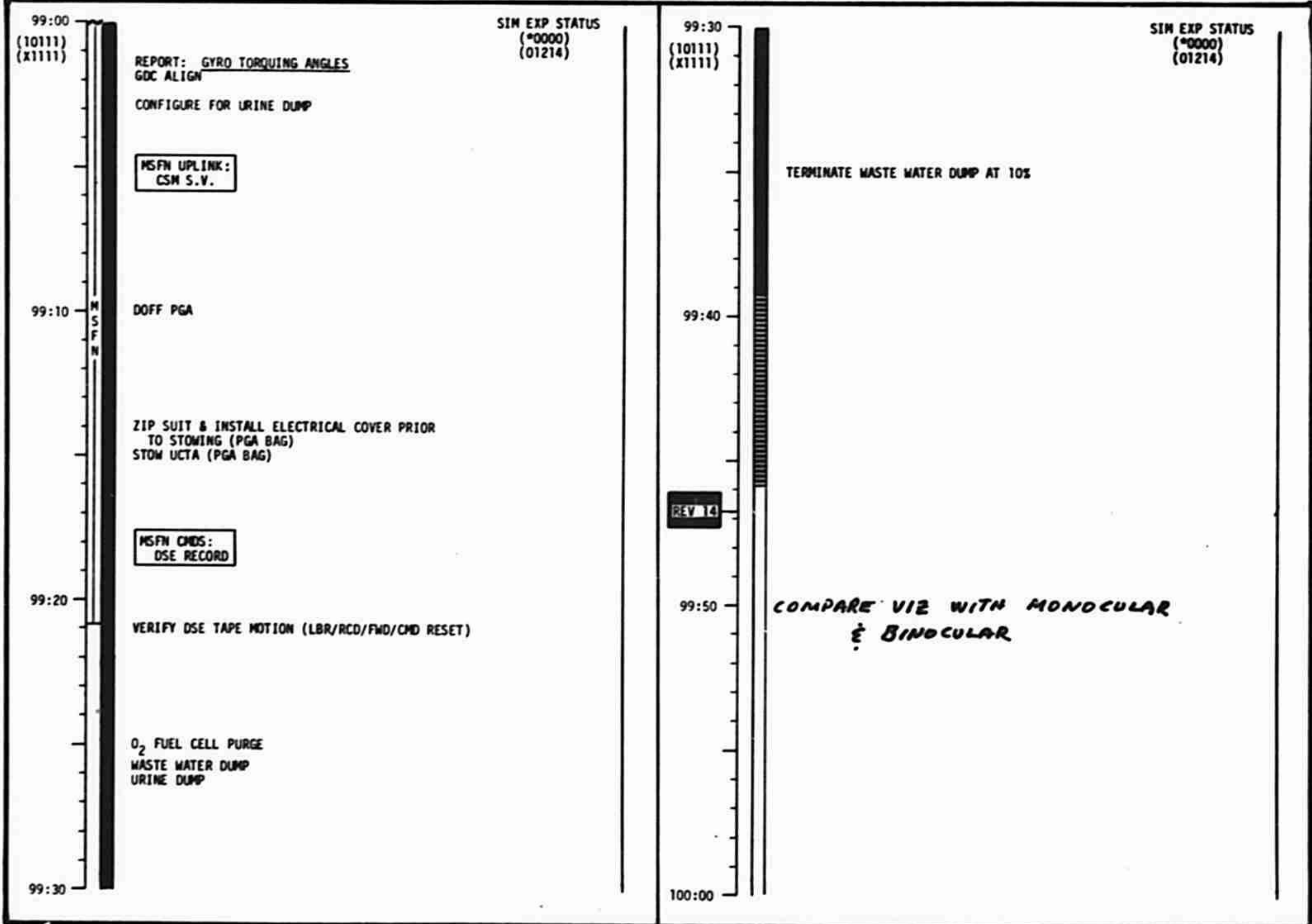
UPDATE TO LM
L/O TIMES FOR
REVS 15 - 19

CSM REV 14

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	99:00 - 100:00	5/13-14	3-112

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



99:00
(10111)
(X1111)

99:10

99:20

99:30

REPORT: GYRO TORQUING ANGLES
GDC ALIGN

CONFIGURE FOR URINE DUMP

MSFN UPLINK:
CSM S.V.

DOFF PGA

ZIP SUIT & INSTALL ELECTRICAL COVER PRIOR
TO STOWING (PGA BAG)
STOW UCTA (PGA BAG)

MSFN CMDS:
DSE RECORD

VERIFY DSE TAPE MOTION (LBR/RCD/FWD/CMD RESET)

O₂ FUEL CELL PURGE
WASTE WATER DUMP
URINE DUMP

SIM EXP STATUS
(*0000)
(01214)

99:30
(10111)
(X1111)

99:40

REV 14

99:50

100:00

TERMINATE WASTE WATER DUMP AT 10%

COMPARE VIZ WITH MONOCULAR
& BINOCULAR

SIM EXP STATUS
(*0000)
(01214)

MISSION	EDITION	DATE	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	3-113

LM FLIGHT PLAN

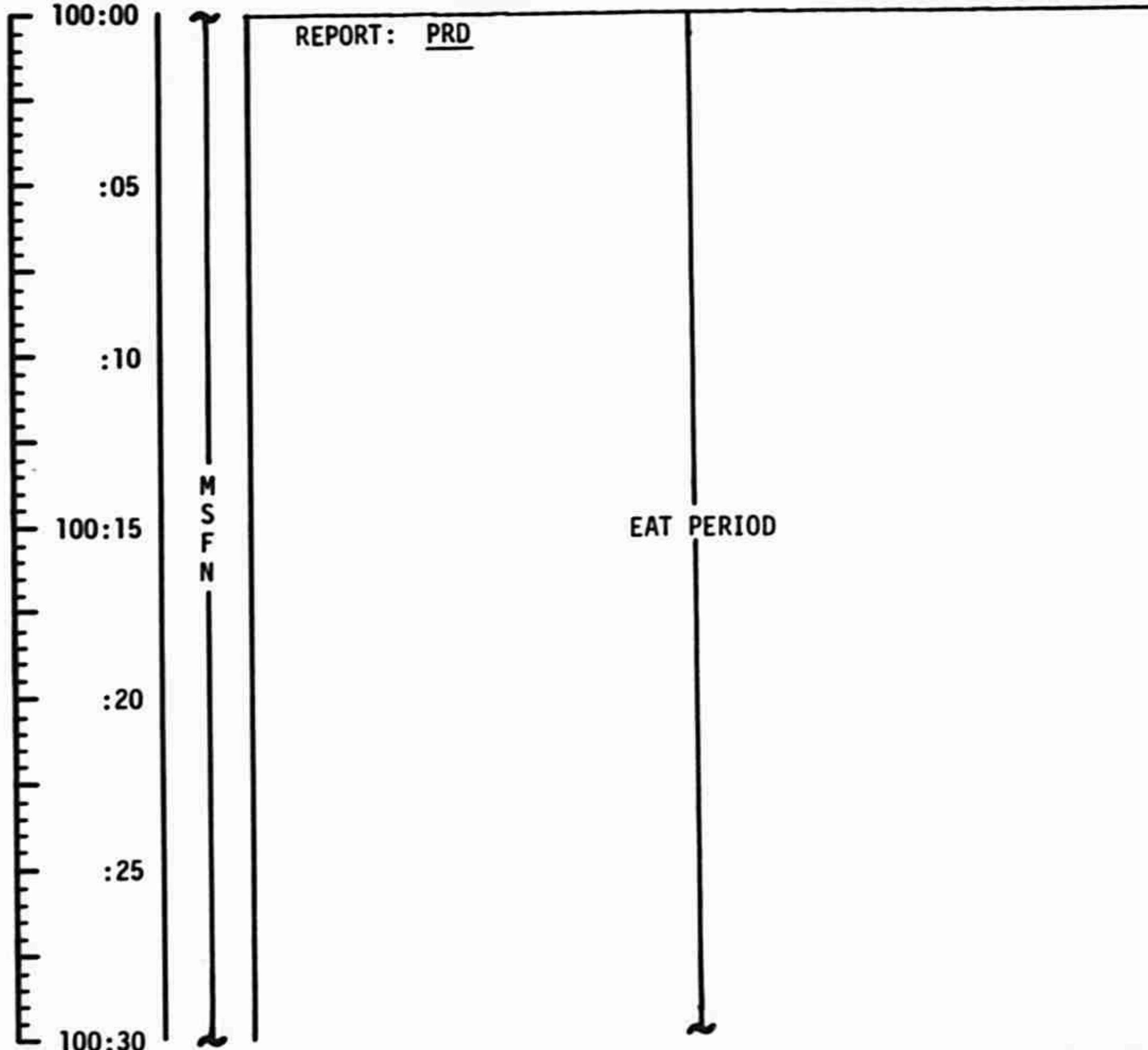
MCC-H

1554 CST

CDR

LMP

NOTES

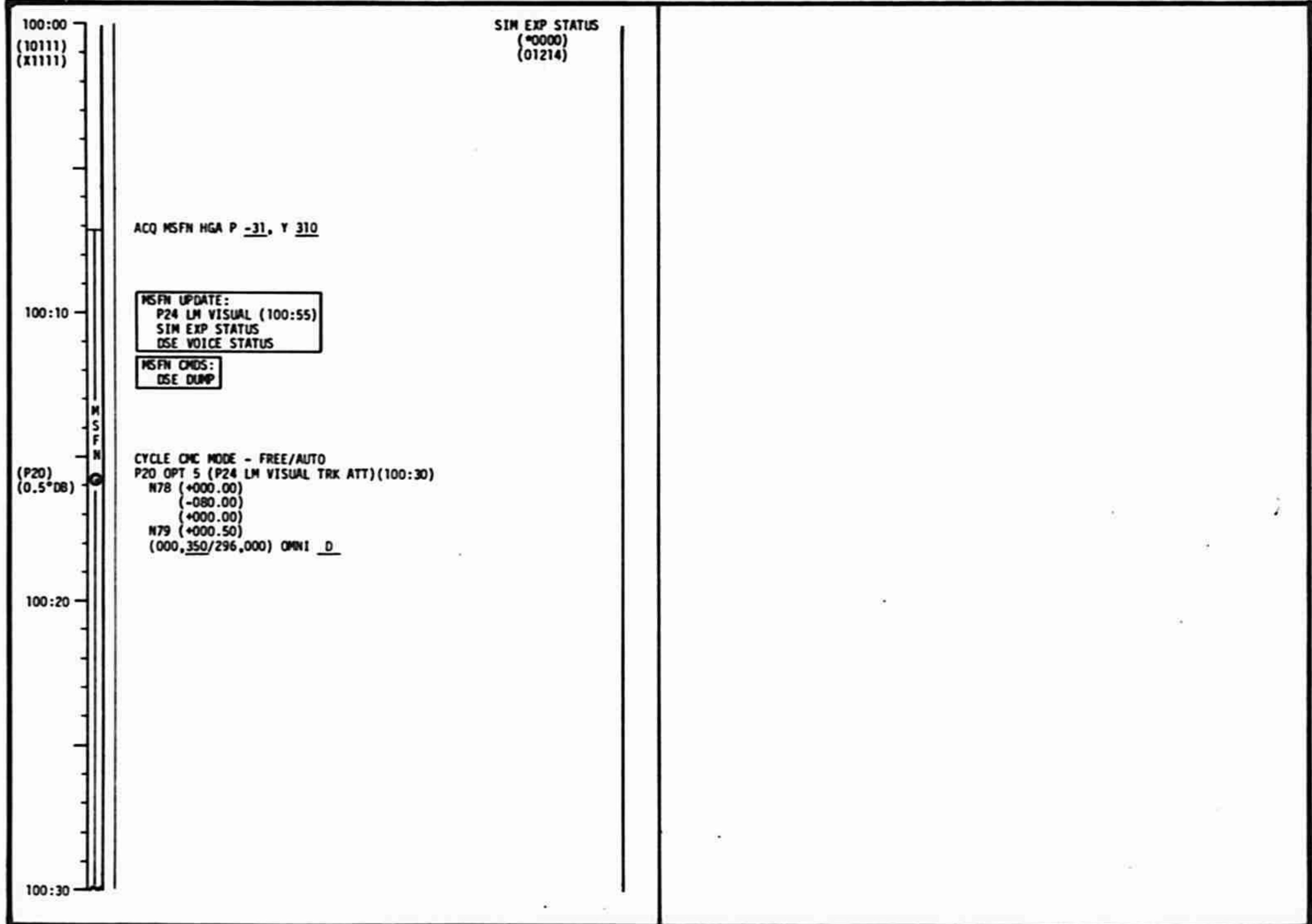


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	100:00 - 100:30	5/14	3-114

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

1554 CST



MISSION	EDITION	DATE	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	3-115

LM FLIGHT PLAN

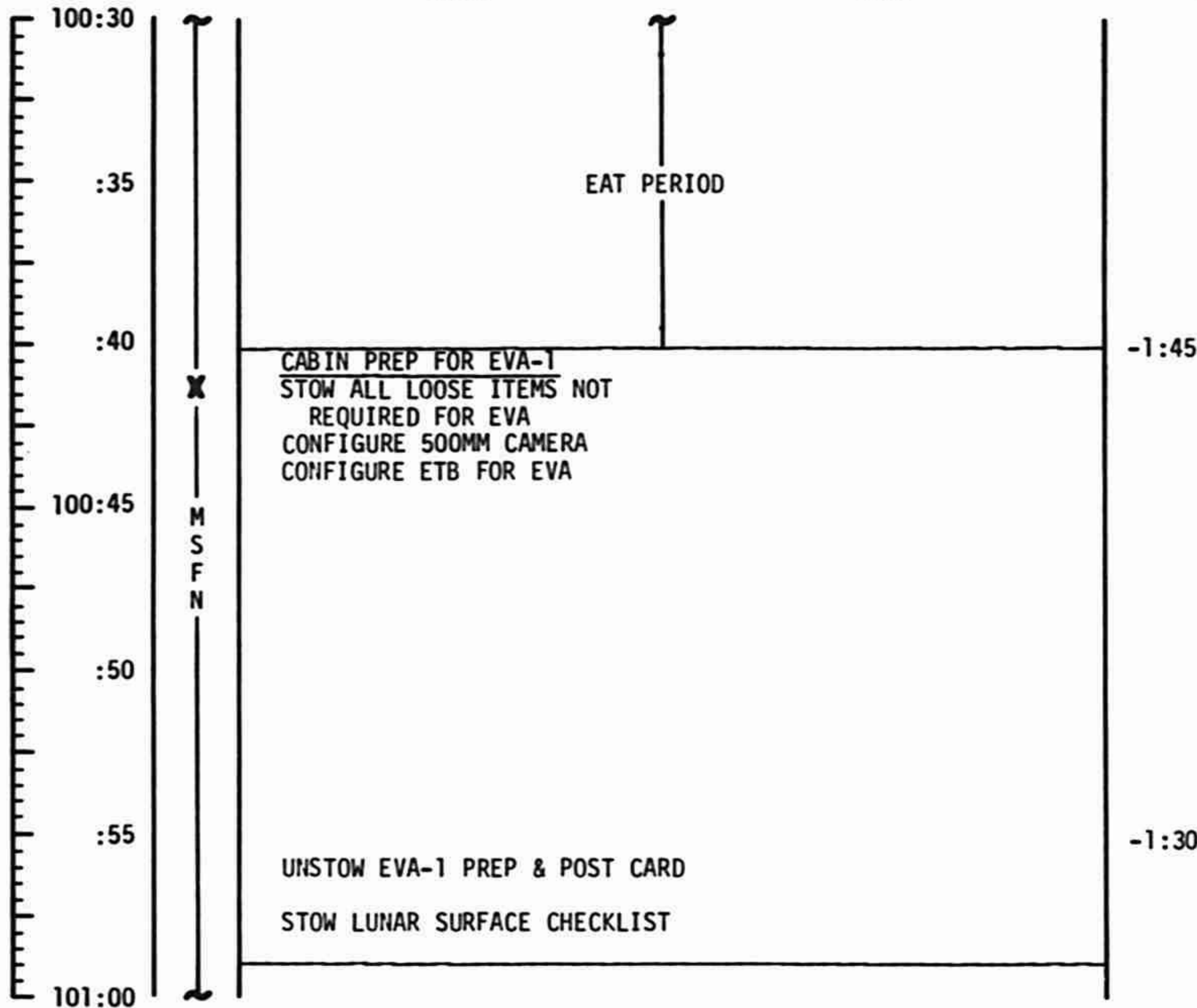
MCC-H

1624 CST

CDR

LMP

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	100:30 - 101:00	5/14	3-116

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

SIM EXP STATUS
(*0000)
(01214)

P24 (LM VISUAL TRACK)
 OPT ZERO - OFF
 OPT MODE - CMC

0:00 - T1 (HORIZON) DET - RESET/START

MSFN CMDS:
 DSE RECORD

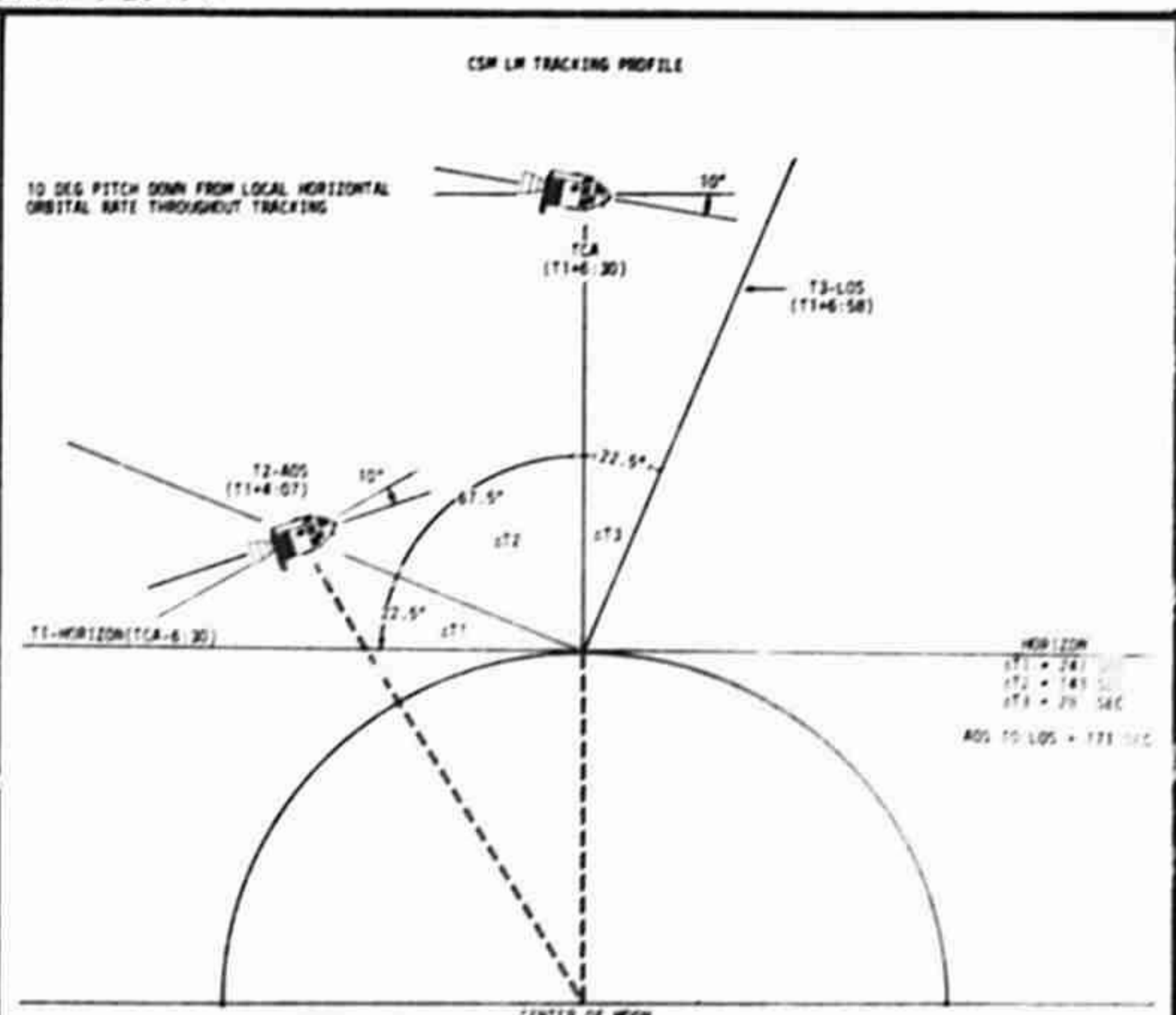
4:07 - T2 (LM ACQ) OPT MODE - MAN, TAKE MARKS 10 SEC APART

6:30 - TCA
6:58 - T3 (LM LOSS)

P20 OPT 5 (-X FWD SIM ATT)(100:59)
 N79 (+002.50)
 HGA P -41, Y 337
 REPORT: INITIATION OF 2.5°DB TEST

SIM BASIC CONFIG (CUE CARD)

MSFN CMDS:
 DSE DUMP
 DATA SYS - ON



P24 LDMK TRACKING

TGT: LM VISUAL

T ₁	---	●	---	●	
T ₂	---	●	---	●	
TCA	---	●	---	●	
T ₃	---	●	---	●	
R	---	*p	---	*y	---

N or S NM ___ / SA ___ TA ___ (T2 ACQ)

N89

LAT -09.000

LONG/Z +07.758

ALT -000.14

MCC-H

1654 CST

LM FLIGHT PLAN

CDR

LMP

NOTES

101:00
:10
:20
101:30
:40
:50
102:00

M
S
F
N

EQUIPMENT PREP FOR EVA-1
EMPTY UCTA'S
CHECK PGA ZIPPERS
CDR, THEN LMP DON BOOTS

-1:20

CHECK & RESTOW OPS

INSTALL ISS

-1:10

APPLY ANTI-FOG TO LEVA'S

STOW HELMET BAG

STOW ETB
UNLOCK FWD HATCH HANDLE

-1:00

PLSS DONNING
CONFIGURE LMP PLSS
ATTACH OPS TO PLSS
LMP DON PLSS/OPS
CONNECT RCU

-0:50

CDR REPEAT PLSS DONNING

-0:40 CSM REV 15

PLSS COMM CHECK
VERIFY POWERDOWN CB CONFIGURATION
CONFIGURE COMM FOR EVA, BIOMED - OFF, RECORDER - ON
COMM & TM CHECK, REPORT: PLSS O₂ QUANTITY

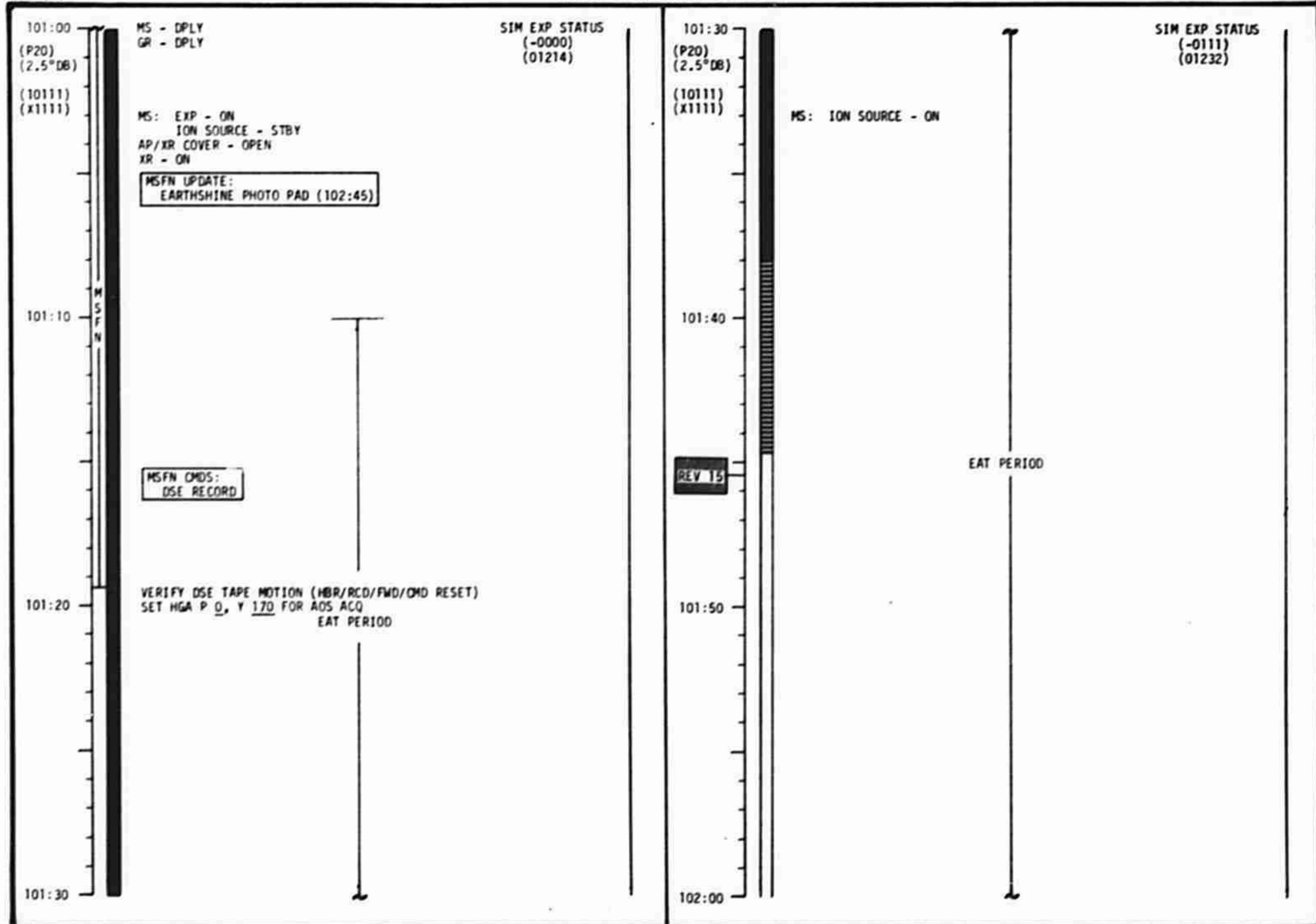
-0:30

FINAL SYSTEMS PREP

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	101:00 - 102:00	5/14-15	3-118

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	3-119

LM FLIGHT PLAN

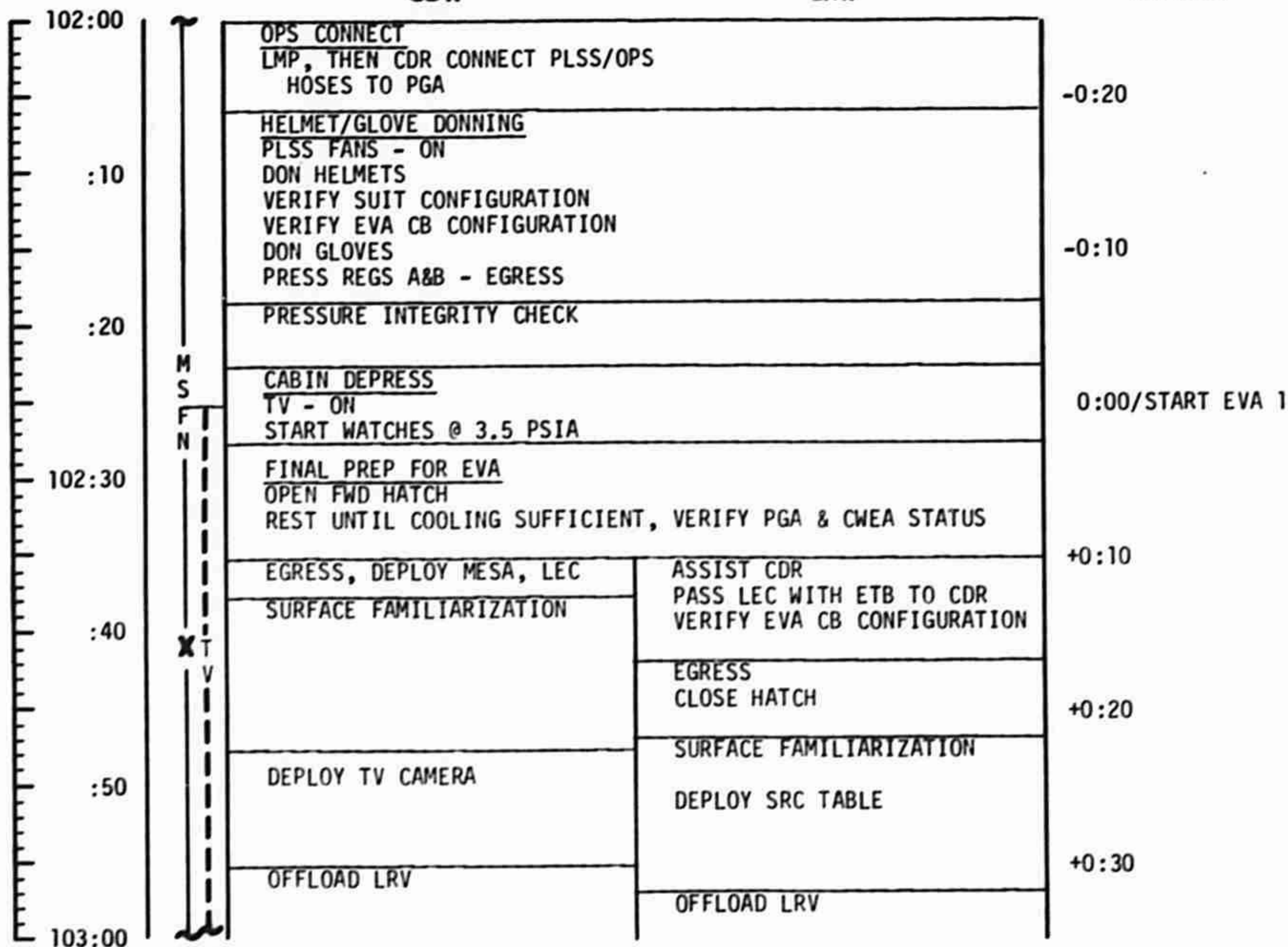
MCC-H

1754 CST

CDR

LMP

NOTES



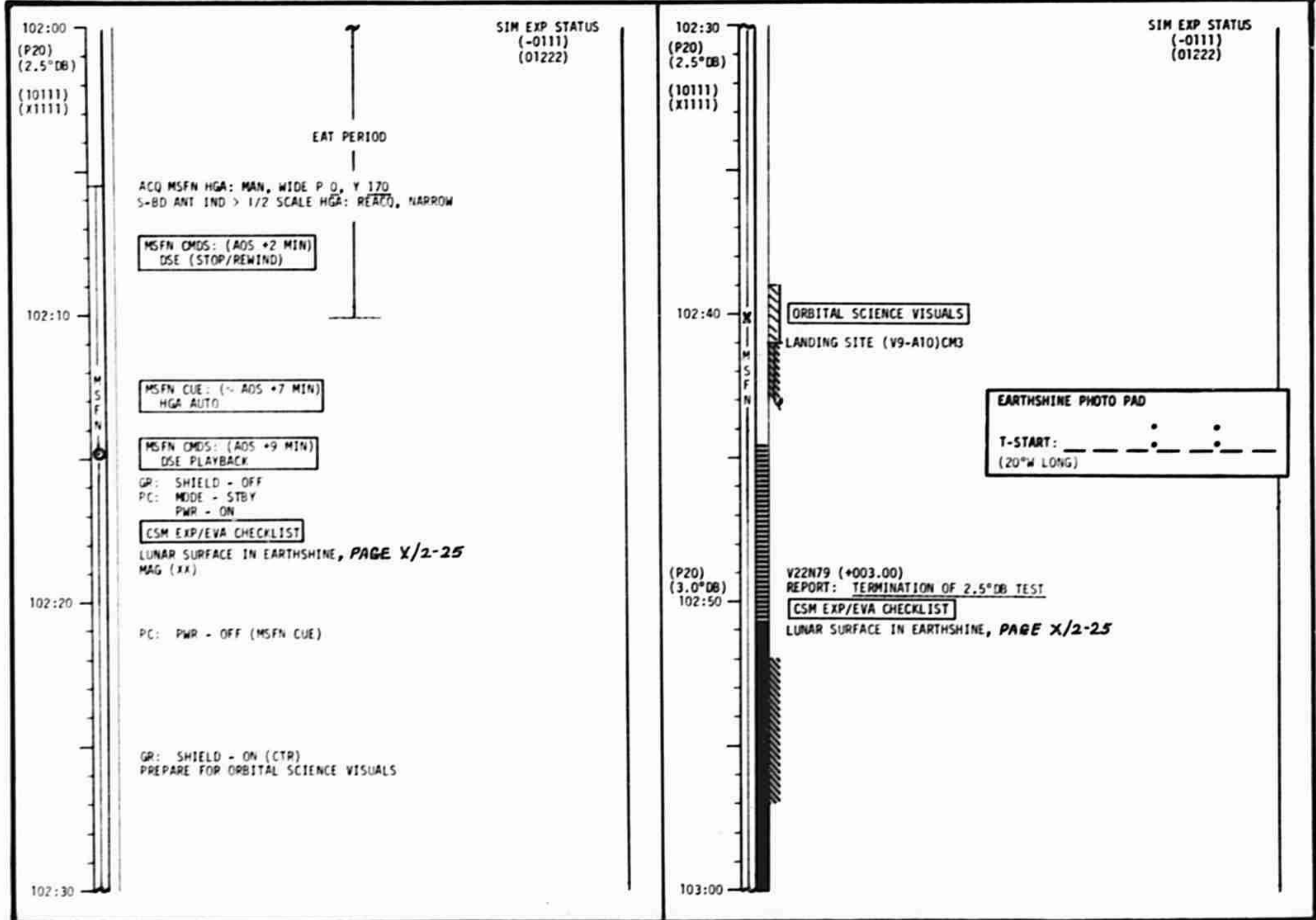
GO/NO-GO FOR
CABIN DEPRESS

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	102:00 - 103:00	5/15	3-120

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

1754 CST



MISSION	EDITION	DATE	PAGE
APOLLO 16	CHANGE A FINAL (4/16)	8/27/72 316172	3-121

MCC-H

1854 CST

LM FLIGHT PLAN

CDR

LMP

NOTES

103:00	TV	SET UP LRV	SET UP LRV	+0:40
:10		CHECK OUT LRV	LM INSPECTION & PANS	
:20	M S F N	OFFLOAD FAR UV CAMERA DEPLOY & INITIALIZE CAMERA	LOAD LRV	+0:50
103:30		LOAD LRV	MOVE TV TO LRV	+1:00
:40	TV	CONNECT LCRU	INGRESS LM SWITCH TO LOW POWER EGRESS LM CLOSE HATCH	CSM REV 16 +1:20
:50		DEPLOY FLAG	DEPLOY FLAG	
104:00		ALSEP PREP	ALSEP PREP	+1:30

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	103:00 - 104:00	5/15-16	3-122

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

SIM EXP STATUS
(-0111)
(01222)

103:00
(P20)
(3.0°DB)

(10111)
(X1111)

M
S
F
N

MSFN CMDS: (AOS +61 MIN)
DSE REWIND

CONFIGURE CAMERA: (ORBITAL SCIENCE)
CM3/EL/250/CEX-IVL(f5.6,1/125,-) 85 FR

MAG (NN) _____ FR # _____

103:10 **MS - RETR TO 8.4 FEET (2 MIN 01 SEC)**

MSFN UPDATE:
MAP CAMERA PHOTO PADS (103:34)
PAN CAMERA PHOTO PAD (104:13)

MSFN CMDS: (AOS +68 MIN)
DSE RECORD

MANUALLY ROLL CW 40°

VERIFY DSE TAPE MOTION (HBR/RCD/FWD/CMD RESET)

V48 (10101)(X1111)
P20 OPT 5 (+X FWD SIM ATT)(103:35)
N79 (+000.50)
SET HGA P 10, Y 0 FOR AOS ACQ

MS: ION SOURCE - STBY (BEGIN 4 HOUR OUTGASSING)
~~MS - RETR TO 8.4 FEET (2 MIN 01 SEC)~~

MC/LA COVER - OPEN

103:30 **COMPLIMENT PAN CAMERA TO THE NORTH**

SIM EXP STATUS
(+2121)
(01232)

103:30
(P20)
(0.5°DB)

(10101)
(X1111)

MC - EXT D

MAP CAMERA PHOTO PAD

T-START: _____ : _____ : _____

T-STOP: _____ : _____ : _____

(165.0°W TO 2.6°W) (1-1/2 REVS)

LA - ON
IMAGE MTN - ON
MC - ON (T START)
IMAGE MTN - INCR (BP +4 STEPS)/ON

103:40

ORBITAL SCIENCE PHOTOS

SHARONOV (P1-A1,A2)
CM3(f5.6,1/125,-) 63 FR

REV 16

CHANGE SHUTTER TO 1/250

103:50

CHANGE f-STOP TO f8

IMAGE MTN - INCR (BP +3 STEPS)/ON

MENDELEEV (P7-A3,A4)
CM5(f11,1/250,-) 22 FR

104:00

LM FLIGHT PLAN

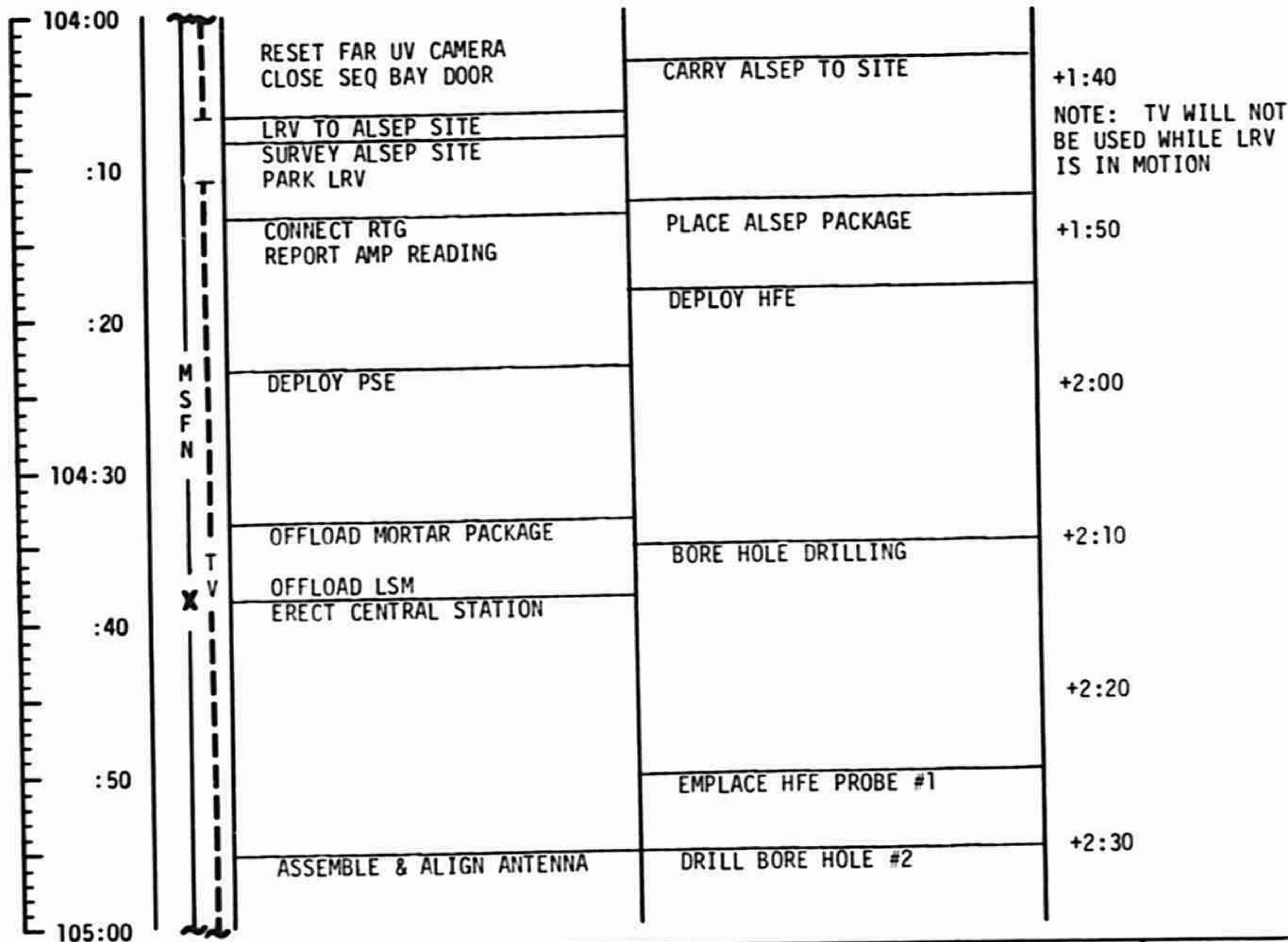
MCC-H

1954 CST

CDR

LMP

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	104:00 - 105:00	5/16	3-124

FLIGHT PLANNING BRANCH

LM FLIGHT PLAN

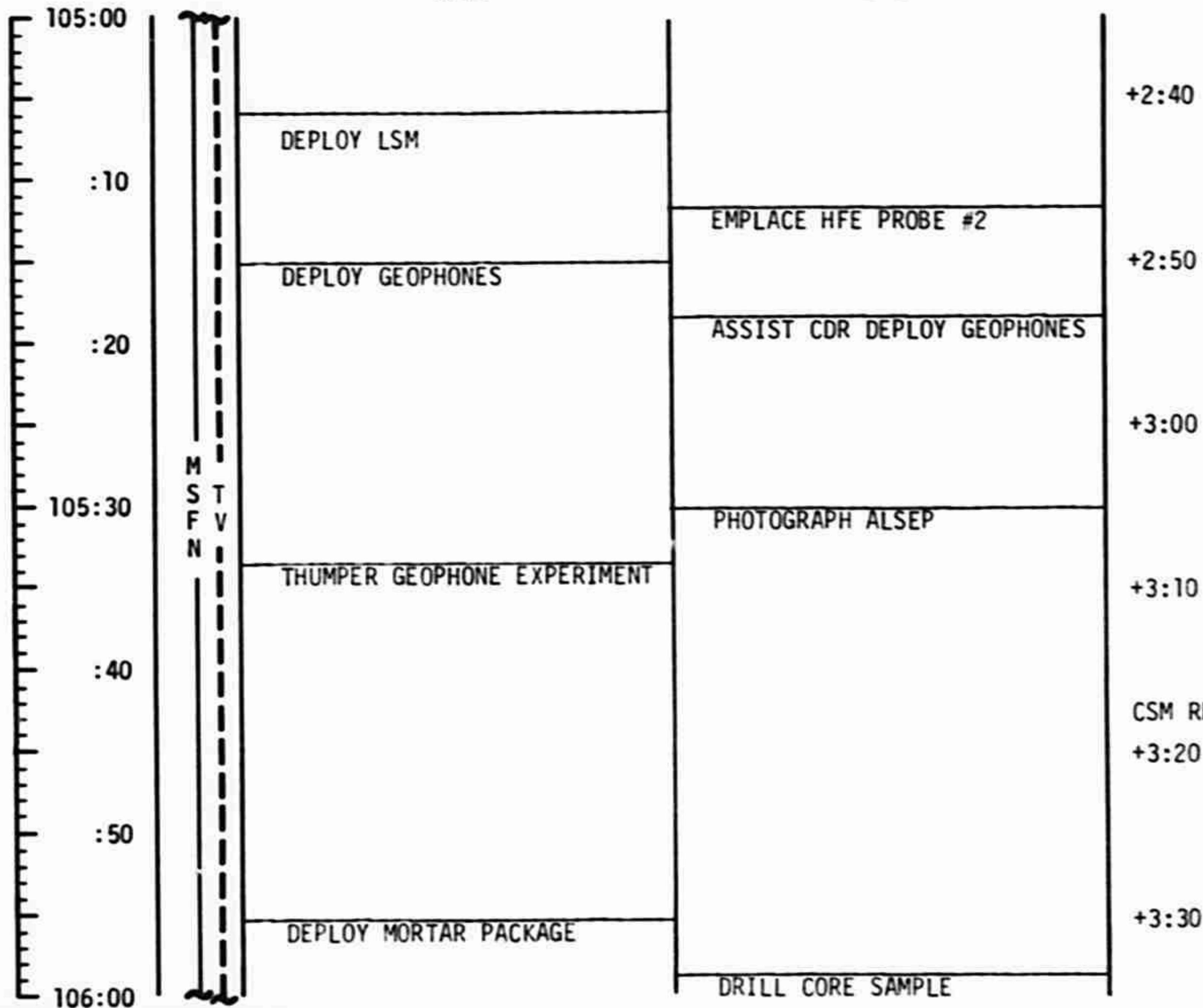
MCC-H

2054 CST

CDR

LMP

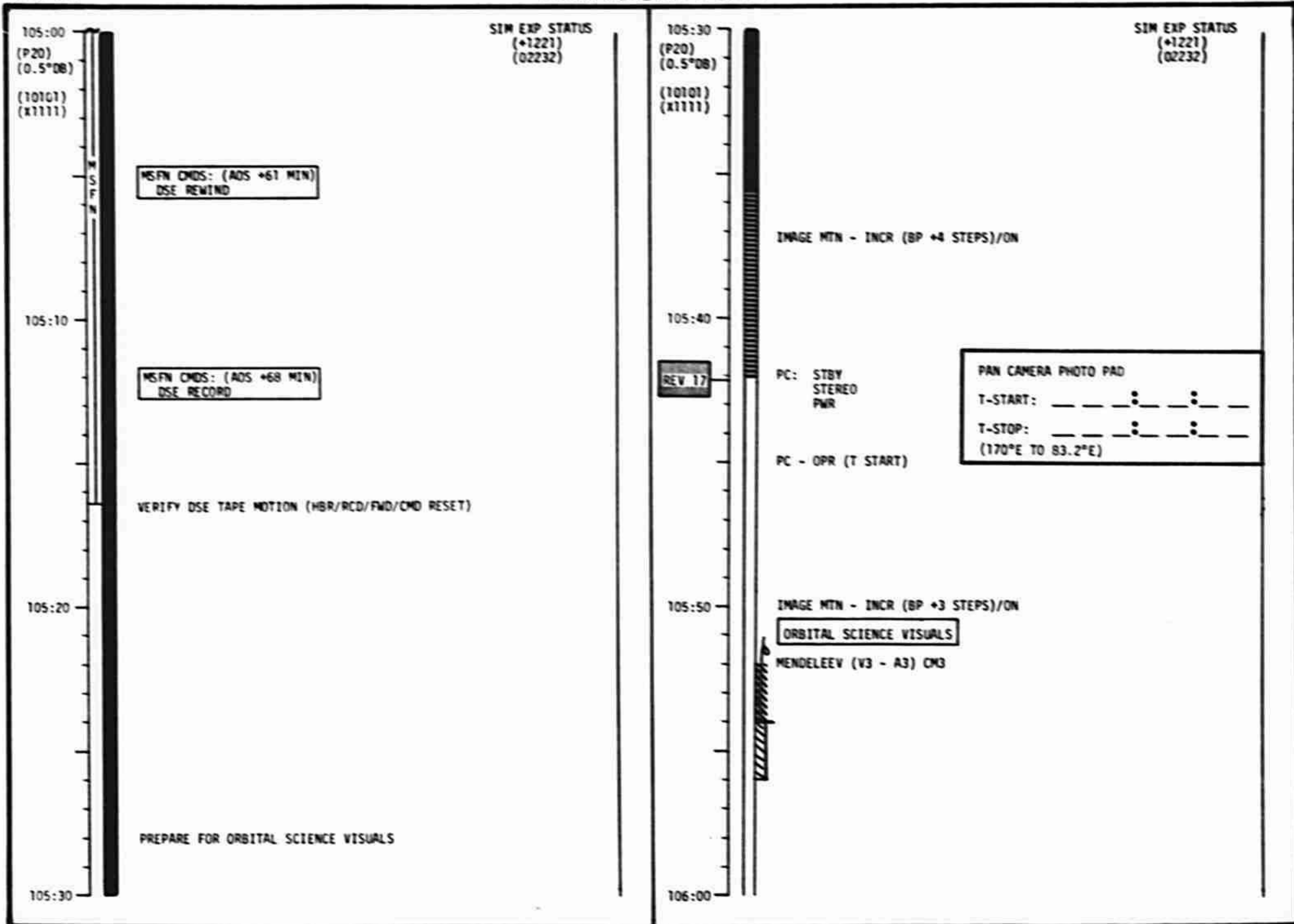
NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	105:00 - 106:00	5/16-17	3-126

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 16	CHANGE FINAL (4/16)	3/27/72 216+72	3-127

LM FLIGHT PLAN

MCC-H

2154 CST

CDR

LMP

NOTES

106:00				
:10	T V	ASSIST LMP RECOVER CORE	RECOVER DRILL CORE	+3:40
:20	M S F L	CONFIGURE FOR GEOLOGY TRAVERSE	CONFIGURE FOR GEOLOGY TRAVERSE	+3:50
106:30	N	TRAVERSE TO STATION #1		+4:00
:40	X	STATION #1 SITE DESCRIPTION RAKE/SOIL SAMPLE	PANORAMA SITE DESCRIPTION RAKE/SOIL SAMPLE	+4:10
:50	T V	SAMPLING		+4:20
107:00				+4:30

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	106:00 - 107:00	5/17	3-128

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

2154 CST

SIM EXP STATUS
(+1221)
(22232)

106:00
(P20)
(0.5°DB)

(10101)
(X1111)

106:10

106:20

106:30

ACQ MSFN HGA: MAN, WIDE P 10, Y 0
S-BD ANT IND > 1/2 SCALE HGA: REACQ, NARROW

MSFN CMDS: (AOS +2 MIN)
DSE (STOP/REWIND)

MSFN CUE: (-AOS +7 MIN)
HGA AUTO

MSFN CMDS: (AOS +9 MIN)
DSE PLAYBACK

PC - STBY (T STOP)

PC - OFF (MSFN CUE)
GR - DPLY
MS - DPLY

CONFIGURE CAMERA: (ORBITAL SCIENCE)
CMS/EL/250/CEX-IVL (f8,1/250,-) 53 FR

MAG (PP) ___ FR # ___

IMAGE MTN - INCR (BP +4 STEPS)/ON

ORBITAL SCIENCE PHOTOS

CROZIER (P12 - A8,A9)
CMS (f8,1/250,-) 33 FR

SIM EXP STATUS
(+1111)
(02232)

106:30
(P20)
(0.5°DB)

(10101)
(X1111)

106:40

106:50

107:00

IMAGE MTN - INCR (BP)/ON

DESCARTES (P14 - A10)
CMS (f5.6,1/125,-) 20 FR

RECORD FR # _____

MC - OFF (T STOP)
WAIT 30 SEC
MC - STBY
IMAGE MTN - OFF

V48, LOAD DAP: INITIAL CSM WT. (104:43)
REPORT: TERMINATION OF P20 WITH REDUCED DAP WT.

GR: SHIELD - OFF

CMC MODE - FREE
P52 (OPTION 3)
(LDG SITE ORIENT)

REPORT GYRO TORQUING ANGLES

P20, CMC MODE - AUTO
GDC ALIGN

P52 IMU REALIGN

N71: ___ - - - - -

N05: ___ - - - - -

N93: ___ - - - - -

X ___ - - - - -

Y ___ - - - - -

Z ___ - - - - -

GET ___ - - - - -

LM FLIGHT PLAN

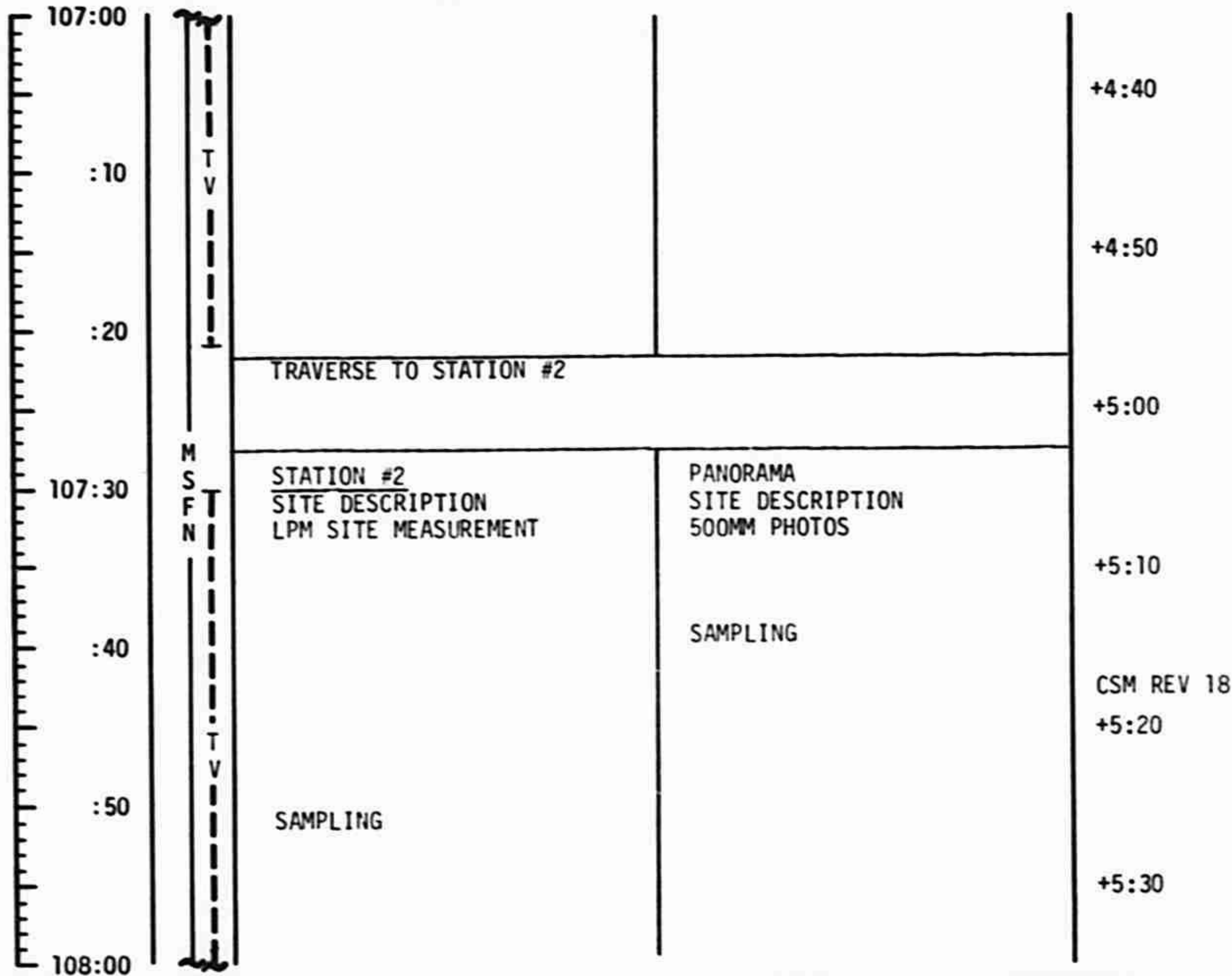
MCC-H

2254 CST

CDR

LMP

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	107:00 - 108:00	5/17-18	3-130

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

107:00
(P20)
(0.5°DB)

(10101)
(X1111)

MS: ION SOURCE - ON (TERMINATES 4 HOURS OUTGASSING)

SIM EXP STATUS
(+1111)
(03232)

MSFN CMDS: (AOS +61 MIN)
DSE REWIND

GR: SHIELD - ON (CTR)

MSFN UPDATE:
MAP CAMERA PHOTO PAD (107:48)

107:10

MSFN CMDS: (AOS +68 MIN)
DSE RECORD

VERIFY DSE TAPE MOTION (HBR/RCD/FWD/CMD RESET)

107:20

O₂ HEATERS 1&2 - AUTO
O₂ HEATERS 3 - OFF

107:30

107:30
(P20)
(0.5°DB)

(10101)
(X1111)

P20 OPT 5 (40° S OBLIQUE PHOTO ATT)(107:40)
N78 (+270.00)
(+087.75)
(+180.00)
N79 (+000.50)
(182,000/082,000)
SET HGA P 10, Y 350 FOR AOS ACQ

SIM EXP STATUS
(+1111)
(03222)

107:40

REV 18

LA - OFF
IMAGE MTN - ON
MC - ON (T START)
IMAGE MTN - INCR (BP +3 STEPS)/ON

EAT PERIOD

MAP CAMERA PHOTO PAD

T-START: _____ : _____ : _____
T-STOP: _____ : _____ : _____
(178.9°E TO 1.6°W)

107:50

108:00

LM FLIGHT PLAN

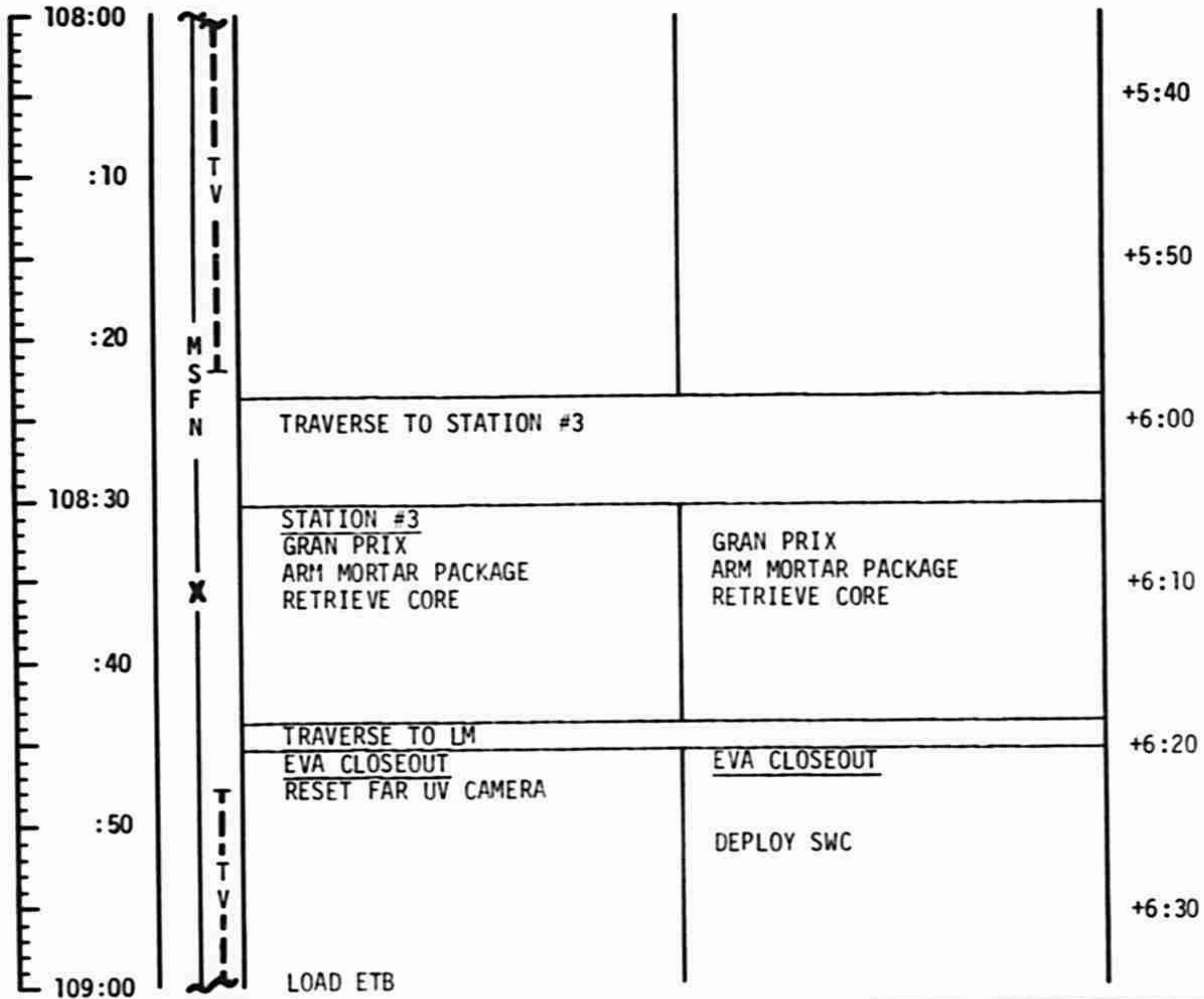
MCC-H

2354 CST

CDR

LMP

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	108:00 - 109:00	5/18	3-132

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

108:00
(P20)
(0.5°DB)
(10101)
(x1111)

ACQ MSFN HGA: MAN, WIDE P 10, Y 350
S-BD ANT IND > 1/2 SCALE HGA: REACQ, NARROW

SIM EXP STATUS
(•1111)
(04222)

MSFN CMDS: (AOS +2 MIN)
DSE (STOP/REWIND)

MSFN CUE: (~AOS +7 MIN)
HGA AUTO

MSFN CMDS: (AOS +9 MIN)
DSE PLAYBACK

EAT PERIOD

MSFN

108:10

108:20

108:30

108:30
(P20)
(0.5°DB)
(10101)
(x1111)

CONFIGURE CAMERA: (TERMINATOR PHOTOS)
CM3/EL/250/VHBM (#5.6,1/250,-) 6 FR
MAG (SS) _____, FR # _____

SIM EXP STATUS
(•1111)
(04222)

PLAN TO GET FLOOR & RIM, NOT SHADOW

TERMINATOR PHOTOS
PTOLEMAEUS (P18-A11) CM3

MC - OFF (T STOP)
WAIT 30 SEC
MC - STBY
IMAGE MTN - OFF
MC - RETR

MC/LA COVER - CLOSE

108:40

108:50
(P20)
(3.0°DB)

P20 OPT 5 (-X FWD SIM ATT)(109:05)
N79 (+003.00)
HGA P 5, Y 170
SET HGA P 0, Y 170 FOR AOS ACQ

CSM SYSTEMS CHECKLIST
PRE-SLEEP CHECKLIST PAGE 5/1-29
LOGIC PWR (2) - OFF
VHF AM T/R - RCY (PNL 9)
VHF AM A - DUPLEX

MSFN UPDATE:
TEI 26

MSFN UPLINK:
JET-ON MONITOR LOADS

109:00

ONBOARD READOUT	
BAT C	_____
PYRO BAT A	_____
PYRO BAT B	_____
RCS A	_____
B	_____
C	_____
D	_____
DC IND SEL - MNA OR B	

MCC-H

0054 CST

LM FLIGHT PLAN

CDR

LMP

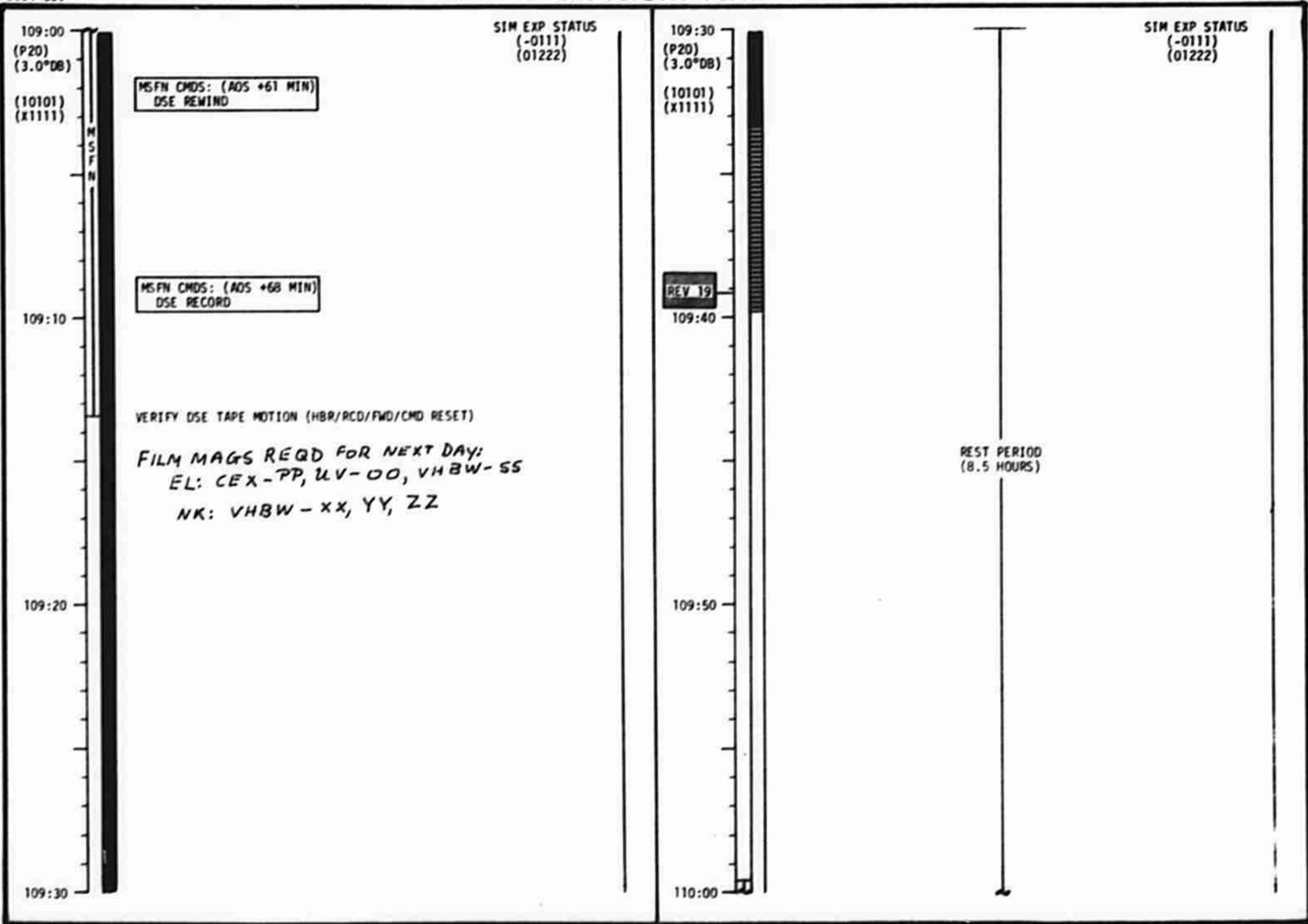
NOTES

109:00	I V I M S F N	PHOTOGRAPH FAR UV CAMERA		+6:40
:10		PACK ETB	CLEAN EMU'S	
		PASS ETB TO LMP RESET FAR UV CAMERA	INGRESS LM	+6:50
:20		INGRESS LM		
		CLOSE HATCH, REPRESSURIZE CABIN POST EVA-1 SYSTEMS CONFIGURATION VERIFY EVA CB CONFIGURATION DOFF GLOVES, DOFF HELMETS AND STOW IN BAGS		+7:00/END EVA-1
109:30		TRANSFER TO LM ECS HOSES		
		CONFIGURE AND CONNECT TO LM COMM BIOMED-LEFT		CSM REV 19
:40		PLSS O ₂ INITIAL RECHARGE CONNECT LM O ₂ HOSE TO LMP PLSS AND FILL		
		CONNECT LM O ₂ HOSE TO CDR PLSS AND FILL		
:50		DISCONNECT & STOW LM O ₂ HOSE		
110:00		PLSS/OPS DOFFING DISCONNECT OPS & RCU FROM PLSS		

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	109:00 - 110:00	5/18-19	3-134

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 16	Chg. B. 4/16	216772 4/7/72	3-135

MCC-H

0154 CST

LM FLIGHT PLAN

CDR

LMP

NOTES

110:00
:10
:20
110:30
:40
:50
111:00

M
S
F
N

X

LMP, THEN CDR DOFF PLSS/OPS
REPORT: OPS PRESSURE

CHANGE PLSS LiOH CARTRIDGES & BATTERIES

STOW OPS'S & PLSS'S

POST-EVA CABIN CONFIGURATION	BATS 1&2 - ON
UNSTOW LUNAR SURFACE CHECKLIST	BAT L(LMP)-OFF, (CDR)-ON
STOW EVA-1 PREP & POST CARDS	BATS 3&4 - OFF/RESET
STOW ETB	CHECK BUS VOLTS

WEIGH SRC & COLLECTION BAGS, REPORT: WEIGHTS
STOW SCALE, SRC &
COLLECTION BAGS
VERIFY POWERDOWN CB
CONFIGURATION

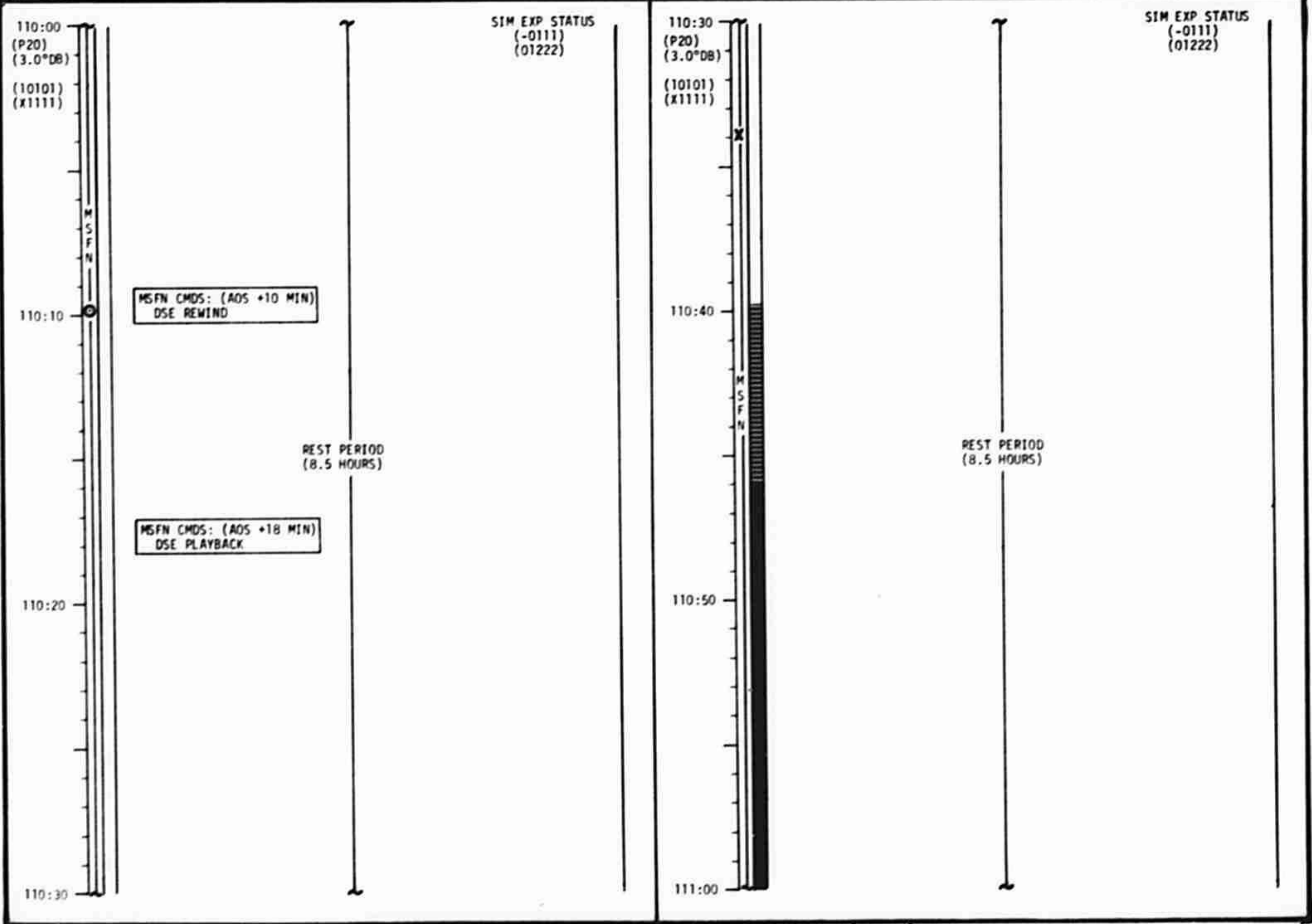
DOFF SUITS
CDR, THEN LMP DOFF PGA, BIOMED - OFF
DON ICG

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	110:00 - 111:00	5/19	3-136

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

0154 CST



MISSION	EDITION	DATE	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	3-137

MCC-H

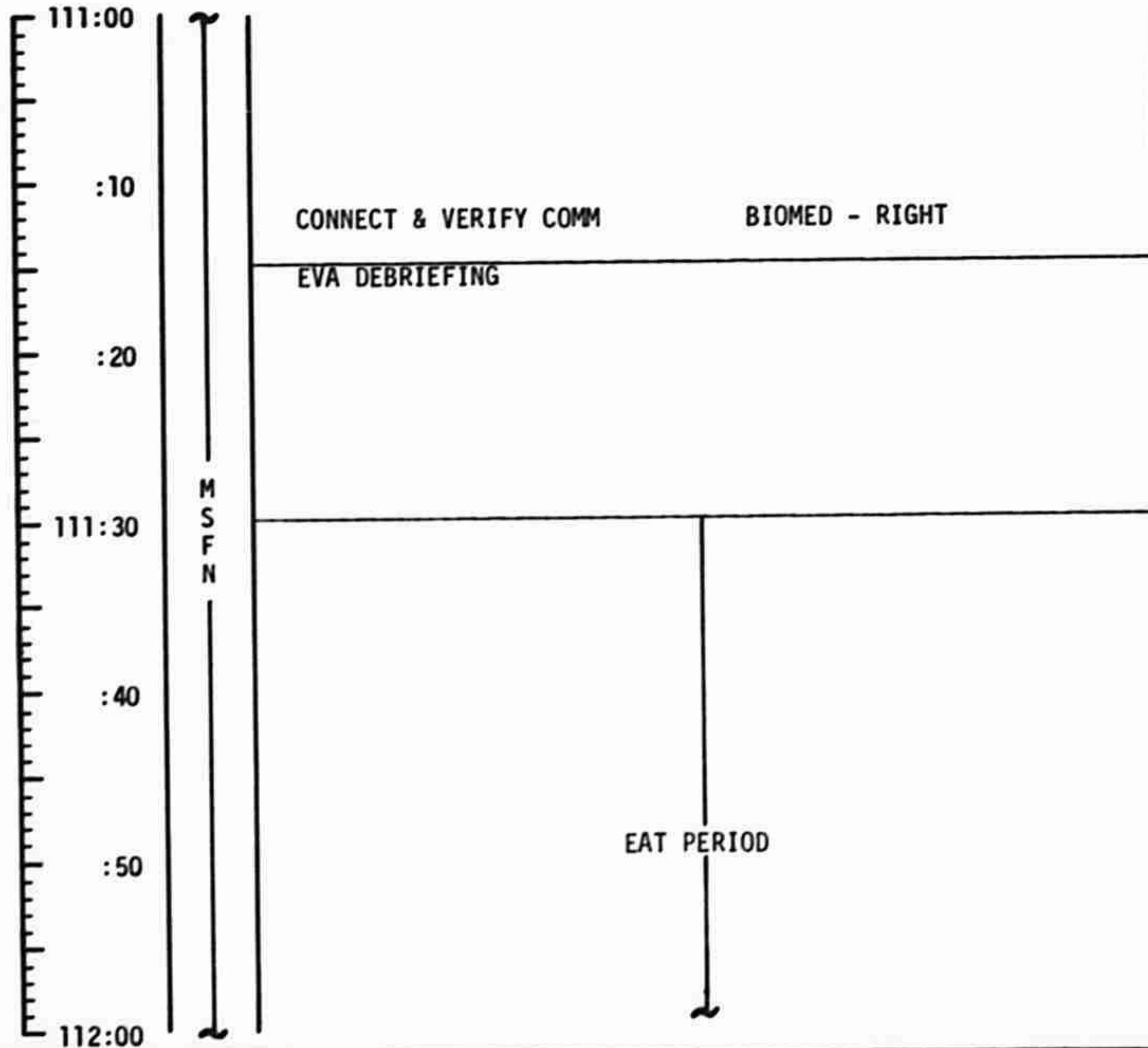
0254 CST

LM FLIGHT PLAN

CDR

LMP

NOTES



GDS 210 LOS

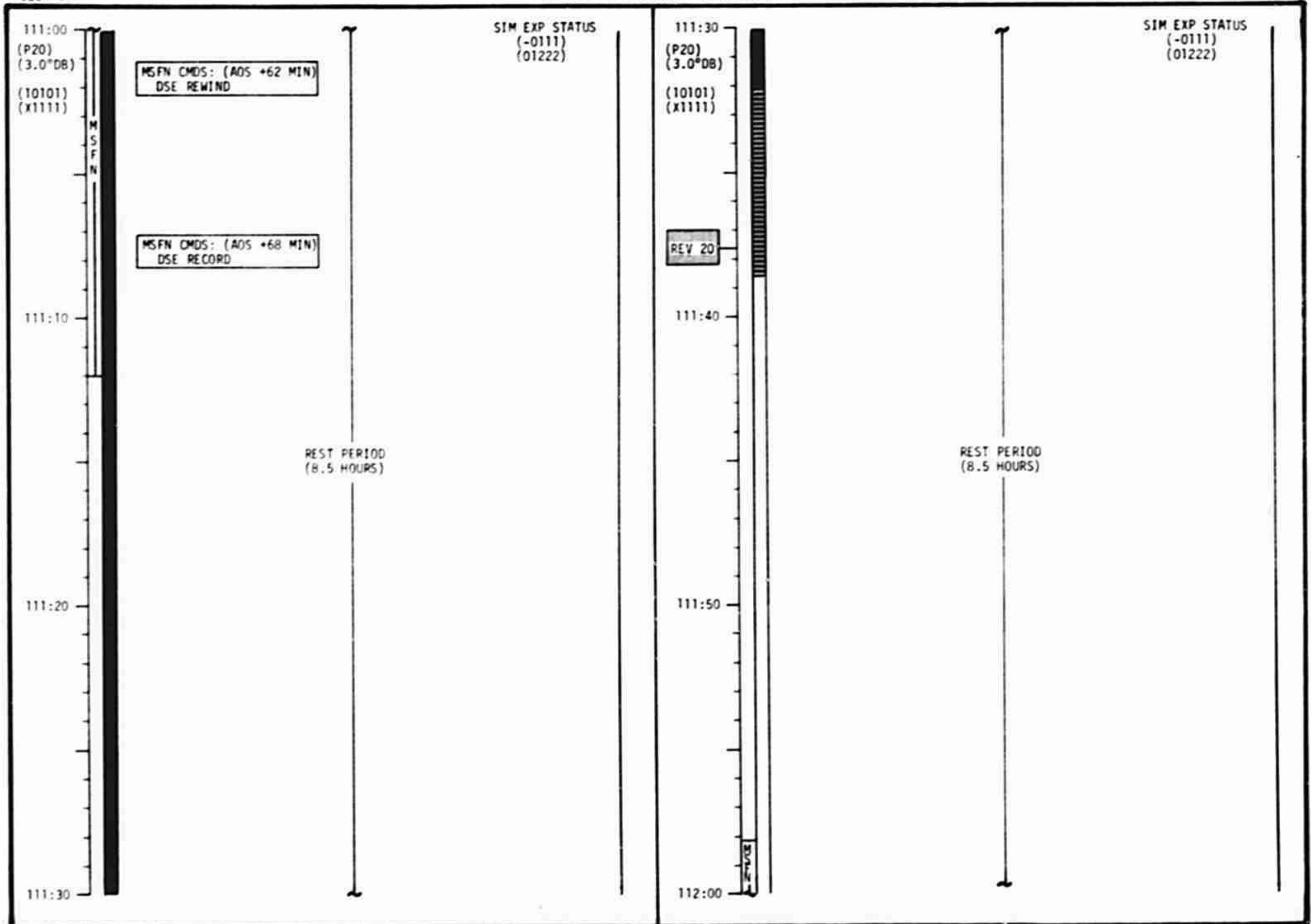
UPDATE TO LM
LIFT-OFF TIMES FOR
REVS 20-24

CSM REV 20

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	111:00 - 112:00	5/19-20	3-138

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	3-139

MCC-H

0354 CST

LM FLIGHT PLAN

CDR

LMP

NOTES

112:00
:10
:20
112:30
:40
:50
113:00

M
S
F
N

X

EAT PERIOD

PLSS RECHARGE
CONNECT LM O₂ HOSE TO CDR PLSS AND FILL

CONNECT LM H₂O HOSE TO CDR PLSS AND FILL

DISCONNECT & STOW CDR PLSS
CONNECT LM O₂ HOSE TO LMP PLSS AND FILL

CONNECT LM H₂O HOSE TO LMP PLSS AND FILL
DISCONNECT & STOW LMP PLSS
OPEN LM DES H₂O VALVE

PRE-SLEEP
CONFIGURE ECS FOR SLEEP

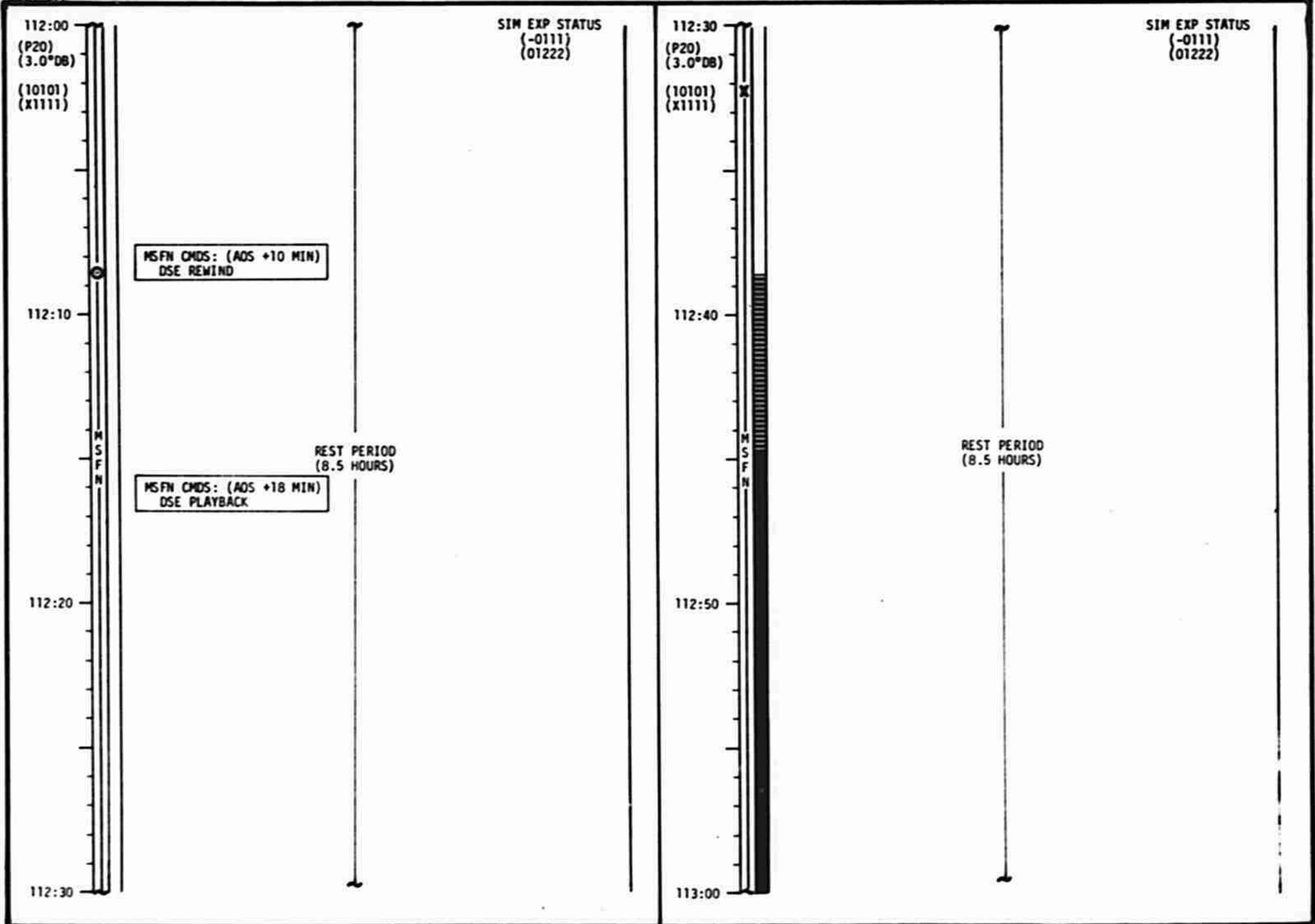
CONFIGURE SLEEP STATIONS FOR SLEEP

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	112:00 - 113:00	5/20	3-140

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

0354 CST



SIM EXP STATUS
(-0111)
(01222)

SIM EXP STATUS
(-0111)
(01222)

MSFN CMDS: (AOS +10 MIN)
DSE REMIND

MSFN CMDS: (AOS +18 MIN)
DSE PLAYBACK

REST PERIOD
(8.5 HOURS)

MISSION	EDITION	DATE	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	3-141

LM FLIGHT PLAN

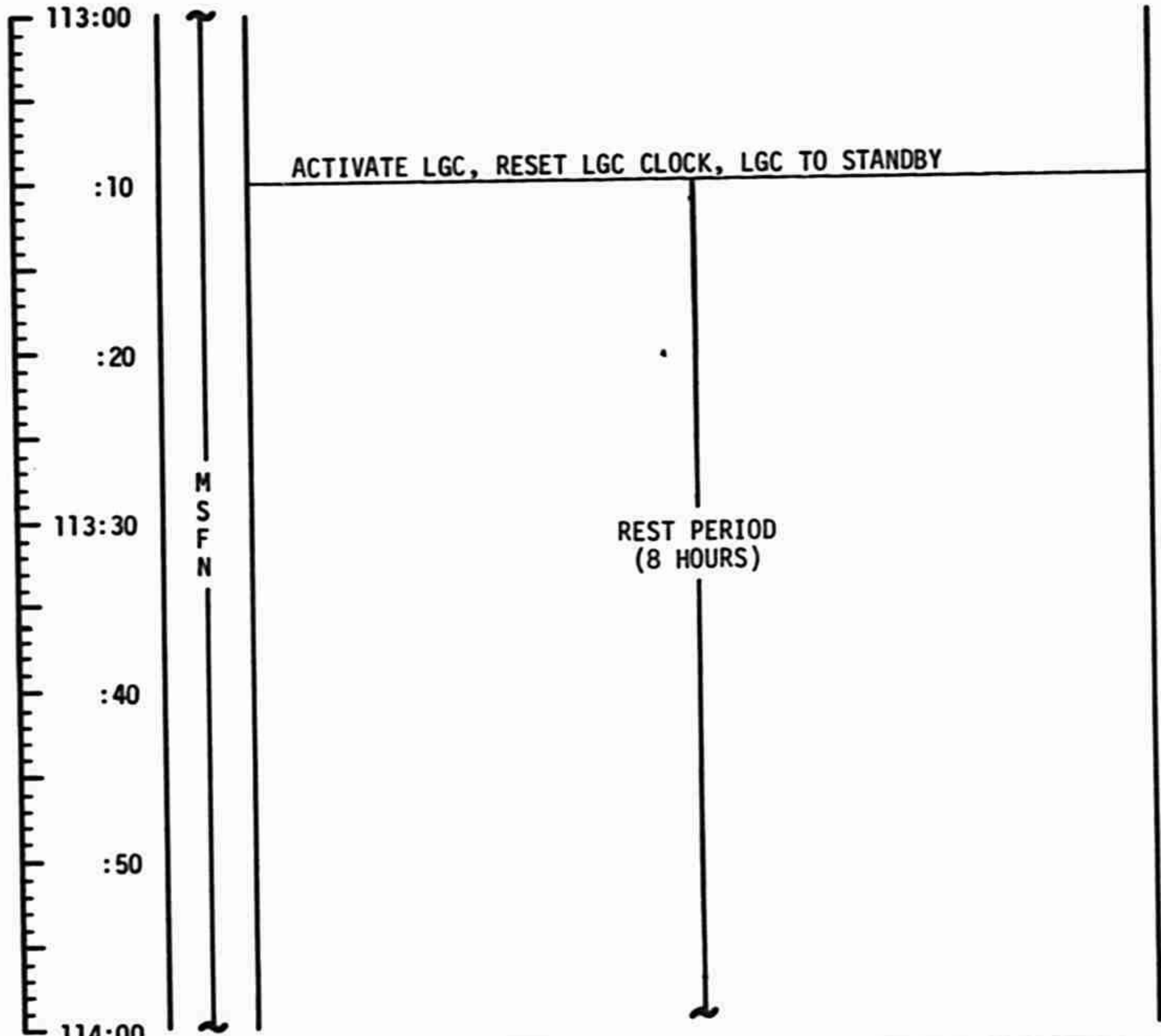
MCC-H

0454 CST

CDR

LMP

NOTES



CSM REV 21

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	113:00 - 114:00	5/20-21	3-142

FLIGHT PLANNING BRANCH

0454 CST

CSM FLIGHT PLAN

113:00
 (P20)
 (3.0°DB)
 (10101)
 (X1111)

MSFN

113:10

113:20

113:30

MSFN CMDS: (AOS +62 MIN)
DSE REWIND

MSFN CMDS: (AOS +68 MIN)
DSE RECORD

REST PERIOD
(8.5 HOURS)

SIM EXP STATUS
(-0111)
(01222)

113:30
 (P20)
 (3.0°DB)
 (10101)
 (X1111)

REV 21

113:40

113:50

114:00

MSFN

REST PERIOD
(8.5 HOURS)

SIM EXP STATUS
(-0111)
(01222)

MISSION	EDITION	DATE	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	3-143

MCC-H

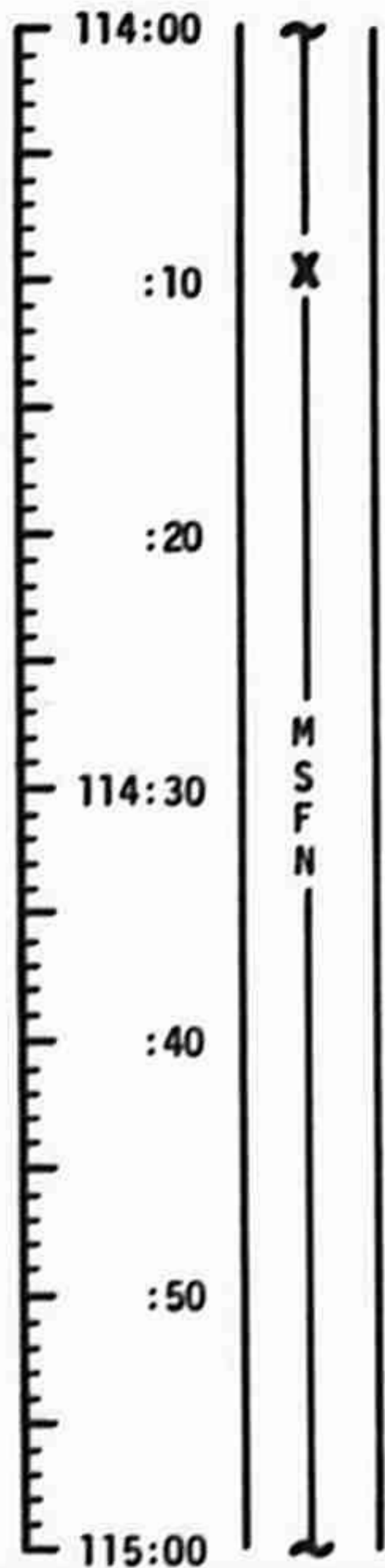
0554 CST

LM FLIGHT PLAN

CDR

LMP

NOTES

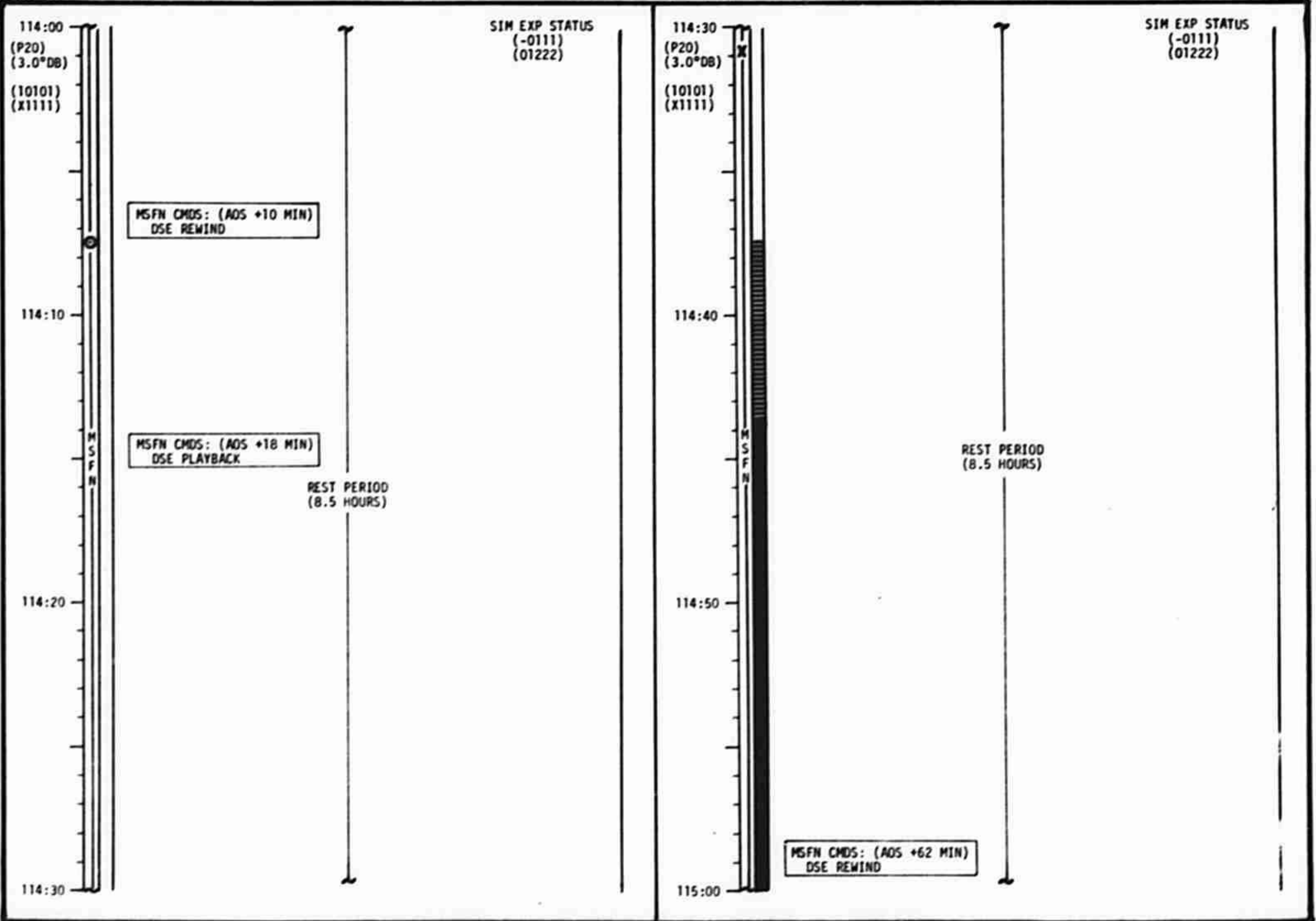


REST PERIOD
(8 HOURS)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	114:00 - 115:00	5/21	3-144

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	3-145

LM FLIGHT PLAN

MCC-H

0654 CST

CDR

LMP

NOTES

115:00
:10
:20
115:30
:40
:50
116:00

M
S
F
N

REST PERIOD
(8 HOURS)

CSM REV 22

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	115:00 - 116:00	5/21-22	3-146

FLIGHT PLANNING BRANCH

0654 CST

CSM FLIGHT PLAN

115:00
 (P20)
 (3.0°DB)
 (10101)
 (X1111)
 M
 S
 F
 N
 115:10
 115:20
 115:30

MSFN CMDS: (AOS +68 MIN)
 DSE RECORD

SIM EXP STATUS
 (-0111)
 (01222)

REST PERIOD
 (8.5 HOURS)

115:30
 (P20)
 (3.0°DB)
 (10101)
 (X1111)
 REV 22
 115:40
 115:50
 M
 S
 F
 N
 116:00

SIM EXP STATUS
 (-0111)
 (01222)

REST PERIOD
 (8.5 HOURS)

MISSION	EDITION	DATE	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	3-147

MCC-H

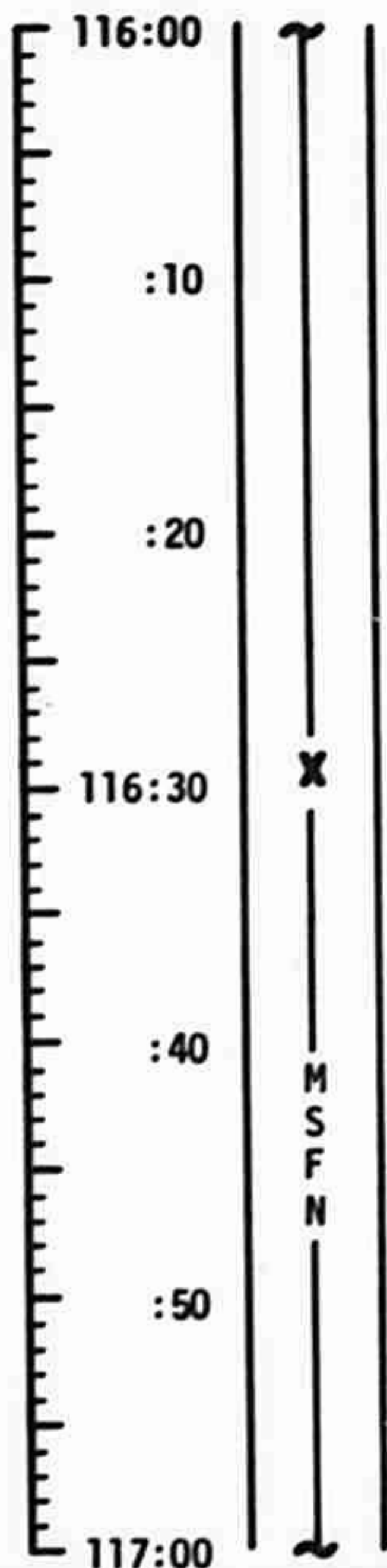
0754 CST

LM FLIGHT PLAN

CDR

LMP

NOTES

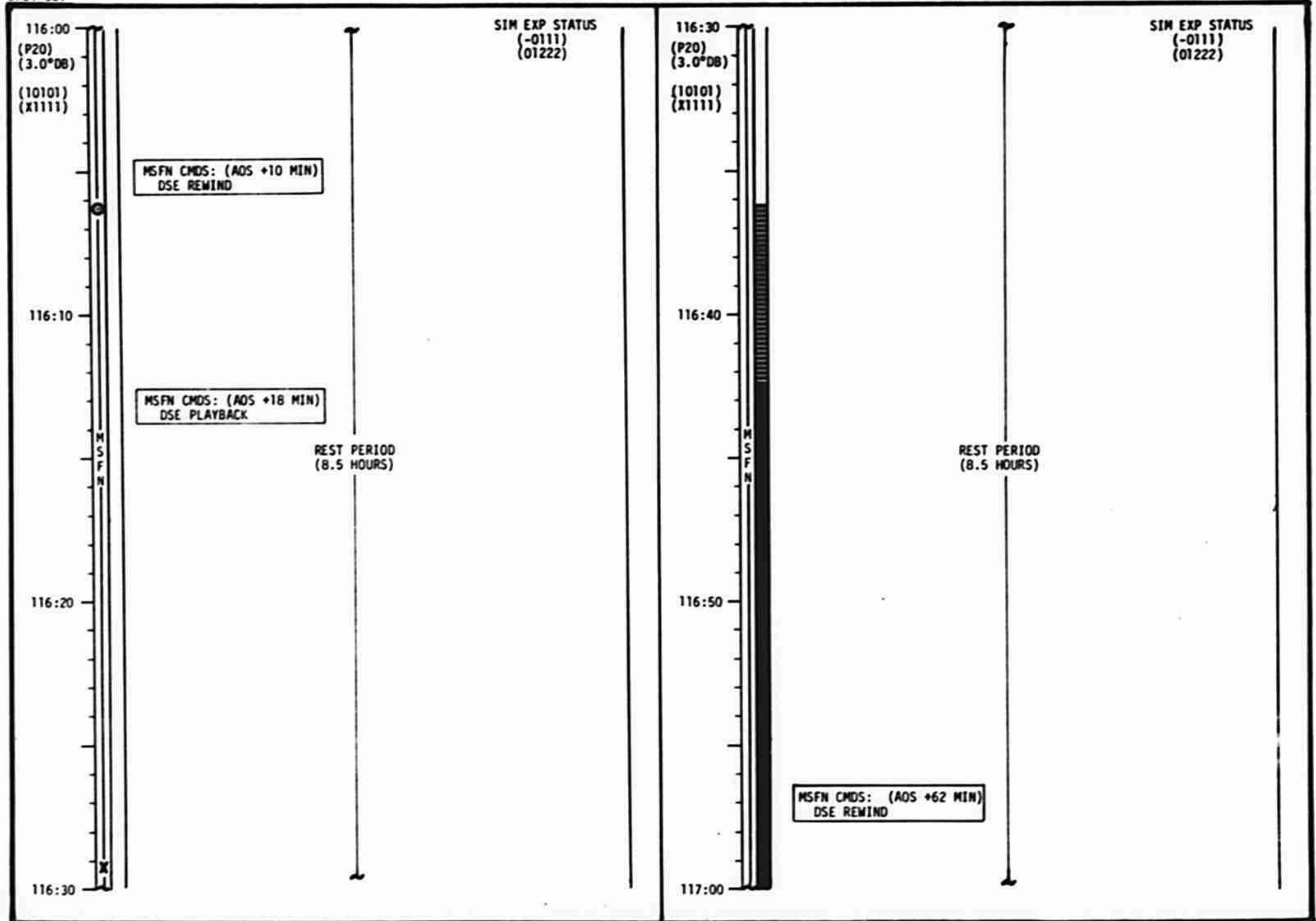


REST PERIOD
(8 HOURS)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	116:00 - 117:00	5/22	3-148

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	3-149

LM FLIGHT PLAN

MCC-H

0854 CST

CDR

LMP

NOTES

117:00
:10
:20
117:30
:40
:50
118:00

M
S
F
N

REST PERIOD
(8 HOURS)

CSM REV 23

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	117:00 - 118:00	5/22-23	3-150

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

117:00
 (P20)
 (3.0°DB)
 (10101)
 (X1111)
 M
 S
 F
 N
 117:10
 117:20
 117:30

MSFN CMDS: (AOS +68 MIN)
 DSE RECORD

SIM EXP STATUS
 (-0111)
 (01222)

REST PERIOD
 (8.5 HOURS)

117:30
 (P20)
 (3.0°DB)
 (10101)
 (X1111)
 REV 23
 117:40
 117:50
 M
 S
 F
 N
 118:00

SIM EXP STATUS
 (-0111)
 (01222)

REST PERIOD
 (8.5 HOURS)

MISSION	EDITION	DATE	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	3-151

MCC-H

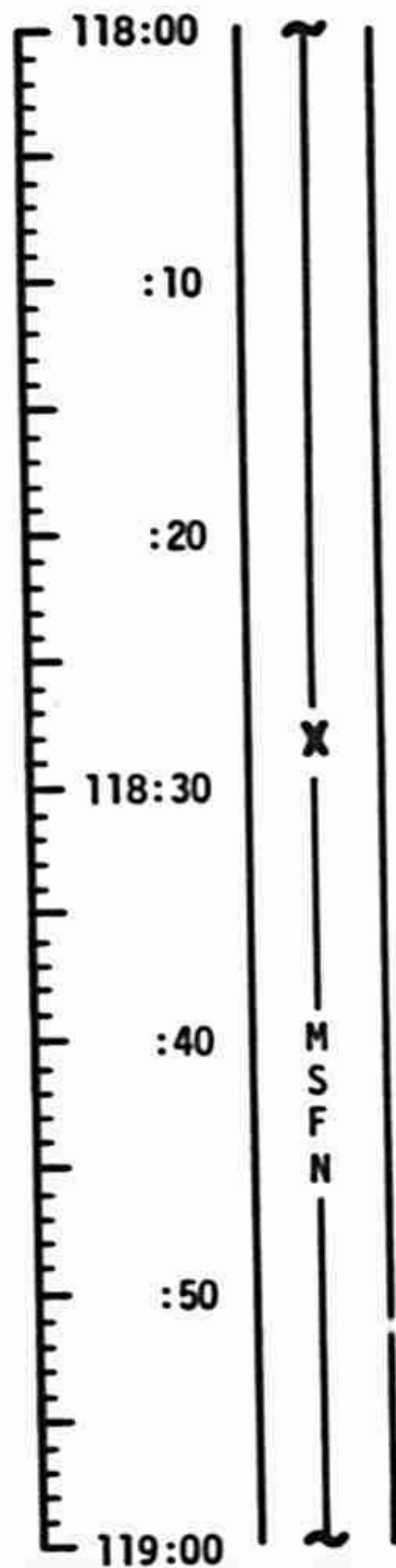
0954 CST

LM FLIGHT PLAN

CDR

LMP

NOTES



REST PERIOD
(8 HOURS)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	118:00 - 119:00	5/23	3-152

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

118:00
(P20)
(3.0°DB)

(10101)
(X1111)

118:10

118:20

118:30

CSM SYSTEMS CHECKLIST

POST-SLEEP CHECKLIST PAGE 5/1-29
REPORT: CDR & LMP FOOD
LOGIC PWR (2) - DPLY/RETR

MSFN CMDS: (AOS +10 MIN)
DSE REWIND

MSFN UPDATE:
CONSUMABLES STATUS
FLIGHT PLAN
SIM EXP STATUS
DSE VOICE STATUS

MS: ION SOURCE - STBY (CALIBRATION DATA)
PC: MODE - STBY
PWR - ON

MSFN UPLINK:
CSM S.V.

MSFN CMDS: (AOS +18 MIN)
DSE PLAYBACK

PC: PWR - OFF (MSFN CUE)

GR: SHIELD - OFF

MS: ION SOURCE - ON

GR: SHIELD - ON (CTR)

CONFIGURE CAMERA (TERMINATOR PHOTOS)
CM3/EL/250/VHBW (f5.6, 1/125, -) 6 FR
MAG (SS) _____, FR # _____

SIM EXP STATUS
(-0111)
(01222)

118:30
(P20)
(3.0°DB)

(10101)
(X1111)

118:40

(P20)
(5.0°DB)

118:50

119:00

TERMINATOR PHOTOS

DAVY RILLE (P20 - B11) CM3
**CRATER CHAIN INCLUDING HIGHLAND
CM3(f5.6, 1/125, 00) 6FR**
RECORD FR # _____

CMC MODE - FREE
P52 (OPTION 3)
(LDG SITE ORIENT)

REPORT: GYRO TORQUING
ANGLES

V22N79 (+005.00)
(DAP DEADBAND TEST RUNS FROM
118:46 TO 120:42)

P20 - CMC MODE - AUTO
GDC ALIGN

H₂ PURGE LINE HEATERS - ON

CHARGE BATTERY B

MSFN CMDS: (AOS +61 MIN)
DSE REWIND

CONFIGURE FOR URINE DUMP

SIM EXP STATUS
(-0111)
(01222)

P52 IMU REALIGN

N71: _____

N05: _____

N93: _____

X _____

Y _____

Z _____

GET _____

MISSION	EDITION	DATE	PAGE
APOLLO 16	CRAB A FINAL (4/16)	3/27/72 3/6/72	3-153

MCC-H

1054 CST

LM FLIGHT PLAN

CDR

LMP

NOTES

119:00
:10
:20
119:30
:40
:50
120:00

M
S
F
N

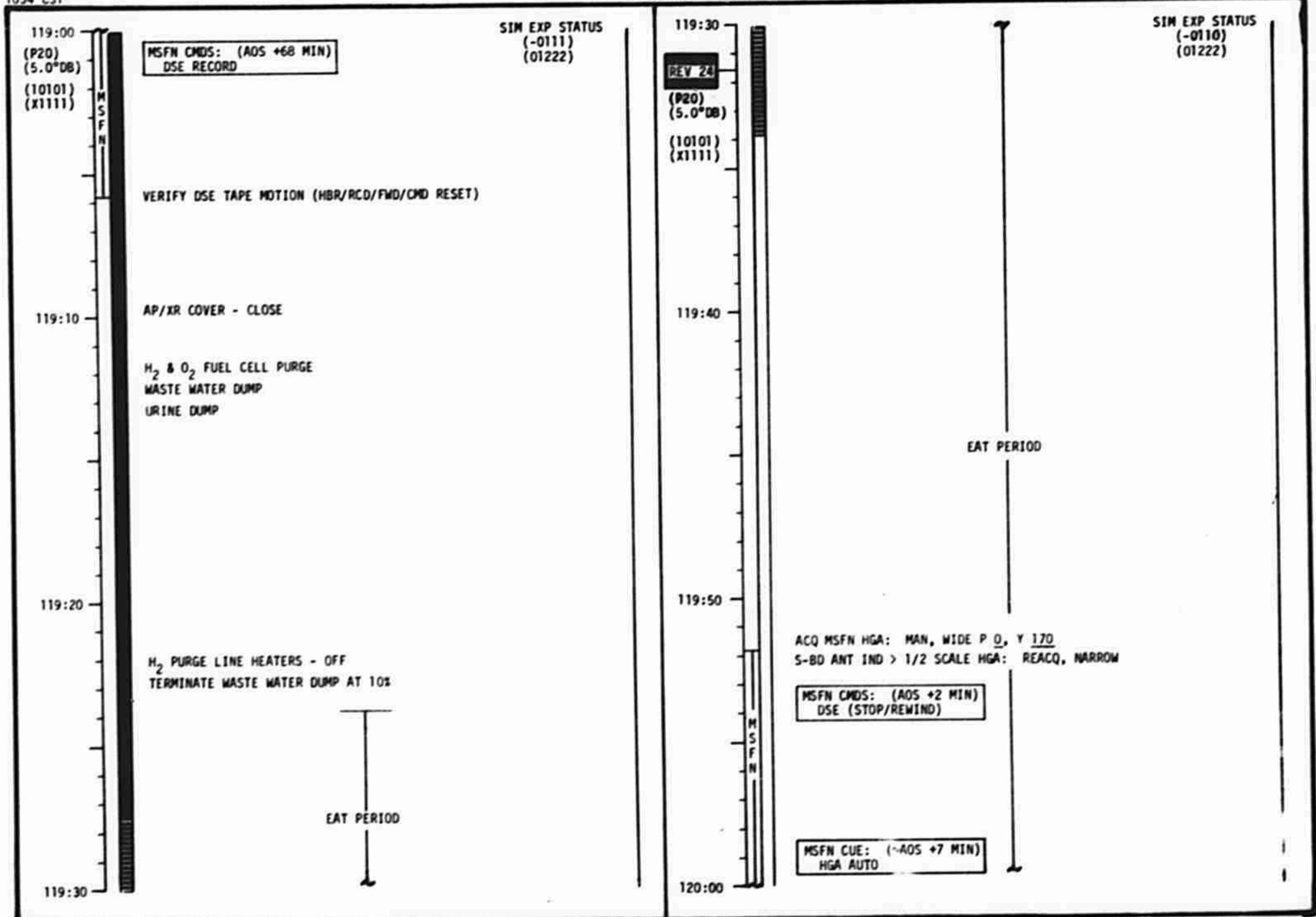
REST PERIOD
(8 HOURS)

CSM REV 24

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	119:00 - 120:00	5/23-24	3-154

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	3-155

LM FLIGHT PLAN

MCC-H

1154 CST

CDR

LMP

NOTES

120:00
:10
:20
120:30
:40
:50
121:00

X
M
S
F
N

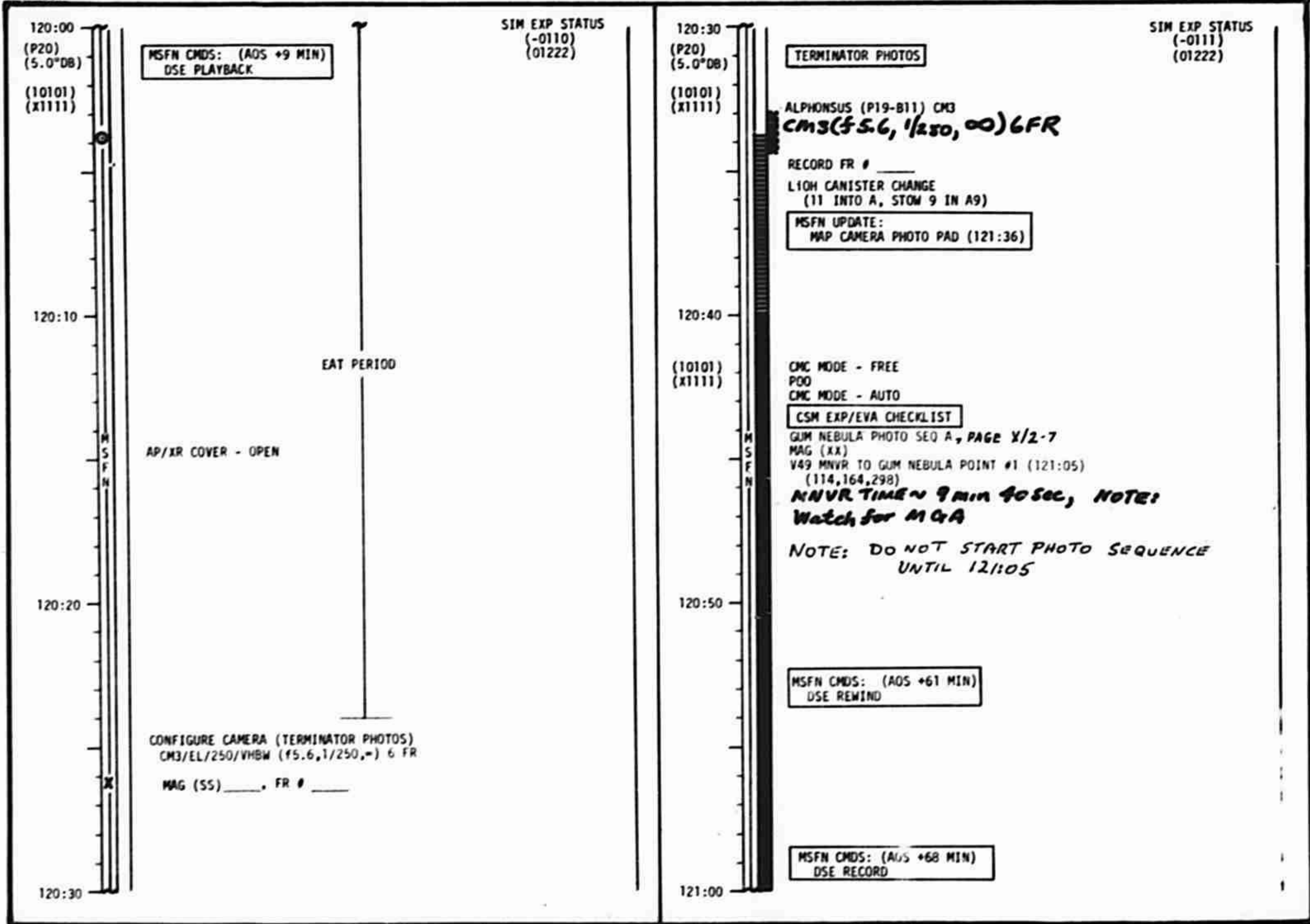
REST PERIOD
(8 HOURS)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 16	FINAL (4/16)	3/6/72	120:00 - 121:00	5/24	3-156

FLIGHT PLANNING BRANCH

1154 CST

CSM FLIGHT PLAN



SIM EXP STATUS (-0110) (01222)

SIM EXP STATUS (-0111) (01222)

MISSION	EDITION	DATE	PAGE
APOLLO 16	CHANGE # 5 - FINAL (4/16)	3/27/72-3/16/72-4/7/72	3-157