NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

APOLLO 17

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FINAL

FLIGHT PLAN

PREPARED BY

FLIGHT PLANNING BRANCH
CREW PROCEDURES DIVISION

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

OCTOBER 23, 1972

APOLLO 17

FINAL

FLIGHT PLAN

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ABB	abbreviation or abbreviated
AC	alternating current
ACCEL	accelerometer
ACN	Ascension
ACT	activation
ACQ	acquisition or acquire
ADAPT	adapter
AEA	abort electronics assembly
AGS	abort guidance subsystem
AH	ampere hours
ALSCC	Apollo lunar surface close-up camera
ALSD	Apollo lunar surface drill
ALSEP	Apollo lunar surface experiment package
ALT	altitude
ALTM	altimeter
AM	amplitude modulation
AMP or amp	amperes
AMPL	amplifier
ANG	Antigua
ANT	antenna
AOH	Apollo Operations Handbook
AOL	Atlantic Ocean line
AOS	acquisition of signal or acquisition of site
AOT	alignment optical telescope
AP	alpha particle spectrometer
APS	ascent propulsion subsystem
ARIA	Apollo range instrumentation aircraft
ARS	atmosphere revitalization system
ASC	ascent
A/T	alignment technique
ATT	attitude
AUX	auxiliary
AZ	azimuth
BAT	battery
BEF	blunt end forward
BD	band
BDA	Bermuda
BIOMED	bio-medical data
BKWD	backward
BMAG	body mounted attitude gyro
BP	barber pole
BRKT	bracket
BSLSS	buddy secondary life support system
BT	burn time
BU	backup
BUSS	biomedical urine sampling system

BW	black and white (Film 3400)
BW1	black and white (Film 3401)
CAP COM	capsule communicator
CAL	calibration
CAMR or CAM	camera
CARR	carrier
CB or cb	circuit breaker
CCGE	cold cathode gage experiment
CCIG	cold cathode ion gage
CCU	comm carrier umbilical
CCW	counter clockwise
CDH	constant delta altitude
CDR	Commander
CDU	coupling data unit
CEX	color exterior (SO-368)
CIN	color interior (SO-168)
CIRC	circulation
CK	check
CKT	circuit
C/L	centerline or checklist
CM	command module
CMC	command module computer
CMD	command
CMP	Command Module Pilot
CNTL	control
C/O	check out
COAS	crew optical alignment sight
COMM	communications
CONFIG	configuration
COMP	compare or compensate
CONT	continue or contingency
CP	control point
CPLEE	charged particle lunar environment experiment
CRO	Carnarvon, Australia
CRYO	cryogenic
CS	contingency sample
CSI	coelliptic sequence initiation
CSM	command and service modules
CST	central standard time
CSVC	core sample vacuum container
C/S	central station
CTR	center
C&WS	caution and warning system
CW	clockwise
CWEA	caution and warning electronics assembly

CWG	constant wear garment
CYI	Grand Canary Island
DAC	data acquisition camera
DAP	digital auto pilot
DB	deadband
DC	direct current or data camera (70mm)
DC5	500mm data camera/lens
DCA	digital command assembly
DCC	commander's data camera
DCL	Lunar Module Pilot's data camera
DECON	decontamination
DEDA	data entry and display assembly
DEG	degrees
DEPL	depletion
DES	descent
DET	digital event timer
DIFF	difference
DIR	direct
DK	docked
DO	detailed objective
DOI	descent orbit insertion
DPLY	deployment
DPS	descent propulsion system
DR	door
DRT	dome removal tool
DS	documented sample
DSCRM	discriminator
DSE	data storage equipment(CSM)
DSEA	data storage equipment assembly (LM)
DSKY	display and keyboard
DSM	deep space measurement
DTO	detailed test objective
DUA	digital uplink assembly
DWN	down
E	erasable or enter
ECS	environmental control system
ED	explosive device
EDT	eastern daylight time
EFH	earth far horizon
EI	earth (atmosphere) interface and entry interface
EKG	electrocardiogram
EL	electric Hasselblad camera
ELECT	electrical
ELEV	elevation

EMER	emergency
EMS	entry monitor system
EMU	extravehicular mobility unit
ENG	engine
ENH	earth near horizon
ENT	entry
E.O.	earth orbit
EOM	end of mission
EPO	earth parking orbit
EPHEM	Ephemeris
EPS	electrical power subsystem
EQUIP	equipment
ERECT	erectable
ERR	error
EST	eastern standard time
ETB	equipment transfer bag
EV	extravehicular
EVA	extravehicular activity
EVAP	evaporator
EVCS	extravehicular communications system
EVT	extravehicular transfer
EXP	experiment
EXT	external
EXTD	extend
f	f-stop
FAM	familiarize or familiarization
FC	fuel cell
FCS	fecal containment system
FDAI	flight director attitude indicator
FLT	flight
FM	frequency modulated
FOV	field of view
FPS	feet per second
fps	frames per second
FR	frame(s)
FREQ	frequency
FT or ft	feet
FTO	flight test objective
FTP	full throttle position
FTT	fuel tranfer tool
FWD	forward
G.A.	gas analysis
GA	gimbal angle
GAL	galactic

GBI	Grand Bahama Islands
GBM	Grand Bahama (STDN)
GDC	gyro display coupler
GDS	Goldstone, California
GET	ground elapsed time
GETI	ground elapsed time of ignition
GETIL	ground elapsed time of landing for TIG time of abort burn
GLY	glycol
GMT	Greenwich mean time
G&C	guidance and control
G&N	guidance and navigation
GNCS	guidance, navigation and control system (CSM)
GR	gamma ray spectrometer
GWM	Guam
GYM	Guaymas, Mexico
H_2	hydrogen
HA	apogee altitude
HAW	Hawaii
HBR	high bit rate (TLM)
HBW	high speed black and white film
HD	highly desirable
HDC	hasselblad data camera
HFE	heat flow experiment
HGA	high-gain antenna
HI	high (switch position)
HOR	horizon
H_2O	water
HP	perigee altitude
HR	hour(s)
HSB	helmet stowage bag
HSK	Honeysuckle (Canberra, Australia)
HTC	hand tool carrier
HTR	heater
HTV	USNS Huntsville
ICDU	inertial coupling data unit
ID	identification
ICG	inflight coverall garment
ICS	intercomm system
IGA	inner gimbal angle
IGN	ignition
IMC	image motion compensation
IMU	inertial measurement unit
INCR	increase
IND	indicator

INIT	initialization
INT	interval
IP	initial point
ISA	interim stowage assembly
ISS	interim stowage shelf
IU	instrumentation unit
IVC	intervehicular communications
IVL	intervalometer
IVT	intravehicular transfer
iR	inclination of the ascending return
IR	infrared scanning radiometer
JETT	jettison
KG	kilogram
KM	kilometer
kwh	kilowatt hour
LA	launch azimuth or laser altimeter
LACE	lunar atmospheric composition experiment
LAT	latitude
LBR	low bit rate (TLM)
LB or lb	pound(s)
LCG	liquid cooled garment
LCRU	lunar communications relay unit
L/D	lift/drag
LD	lunar day (TV lens)
LDG	landing
LDMK	landmark
LEAM	lunar ejecta & meteorite (experiment)
LEB	lower equipment bay
LEC	lunar equipment conveyor
LEVA	lunar extravehicular visor assembly
LFH	lunar far horizon
LGC	LM guidance computer
LH	left-hand
L/H	local horizontal
LHEB	left-hand equipment bay
LHFEB	left-hand forward equipment bay
LHSSC	left-hand side storage container
LiOH	lithium hydroxide
LLM	lunar landing mission
LLOS	landmark line of sight
LM	lunar module
LMP	Lunar Module Pilot
LMS	lunar mass spectrometer

LNH	lunar near horizon
L/O	lift-off
LOD	lunar orbit docked
LOI	lunar orbit insertion
LONG	longitude
LOS	loss of signal or loss of site
LPD	landing point designator
LPO	lunar parking orbit
LPM	lunar portable magnetometer
LR	landing radar
LRRR or LR3	laser ranging retro-reflector
LRV	lunar roving vehicle
L/S or LS	landing site or lunar surface
LS	lunar sounder
LSG	lunar surface gravimeter
LSM	lunar surface magnetometer
LSPE	lunar seismic profile experiment
LT	light
LTG	lighting
LUB	lubrication
LV	launch vehicle
L/V	local vertical
LVPD	launch vehicle pressure display
M	mandatory
MAD	Madrid, Spain
MAG	magazine (camera)
MAN	manual
MAX	maximum
MAX Q	maximum dynamic pressure
MBW	medium black and white film
MC	mapping camera
MCC	midcourse correction
MCC-H	Mission Control Center - Houston
MDC	main display console
MEAS	measurement
MED	medical
MEED	microbial ecology evaluation device
MESA	modular experiment stowage assembly
MET	mission event timer
MGA	middle gimbal angle
M/I	minimum impulse
MIN	minimum or minutes(s)
MIR	mirror
MLA	Merrit Island, Florida, launch area
mm or MM	millimeter

MNA or MNB	main electrical bus A or B
MNVR	maneuver
MON	monitor
MONO	monaural
MPL	mid-Pacific line
MPS	main propulsion system
M/R	mixture ratio (fuel to oxidizer)
MS	mass spectrometer
MSFN	Manned Space Flight Network
MSO	mass spectrometer outgasing
MTN	motion
MTVC	manual thrust vector control
MULT	multiplier
N_2	nitrogen
NAV	navigation
NEG	negative
NK	Nikon camera
NM	nautical miles
NO.	number
NOM	nominal
NXX	Noun XX
O_2	oxygen
OBS	observation
O/F	oxidizer to fuel ratio
OGA	outer gimbal angle
OID	octal identifier
OMNI	omnidirectional antenna
OPR	operate
OPS	oxygen purge system
OPT	option
ORB	orbital
ORDEAL	orbit rate display earth and lunar
ORIENT	orientation
OVBD	overboard
OVHD	overhead
P	pitch or program
PAD	voice update
PAN	panoramic
PART	particle
PCM	pulse code modulation
PC	plane change or chamber pressure
PDI	powered descent initiation

PER	Pericynthion
PGA	pressure garment assembly
PGNCS	primary guidance, navigation and control system (LM)
PGNS	primary guidance navigation system (LM)
PHOTO	photograph
PIPA	pulse integrating pendulous accelerometer
PKG	package
PKS	Parks, Australia
PLSS	portable life support system
PM	phase modulated
POL	polarity or polarizing
POS	positive
PRD	personal radiation dosimeter
PRO	proceed
PREF	preferred
PREP	preparation
PRESS	pressure
PRIM	primary
PROP	proportional
PRN	pseudo random noise
PRPLNT	propellant
PSE	passive seismic experiment
PSIA	pounds per square inch absolute
PSID	pounds per square inch differential
PSIG	pounds per square inch gage
PT	point
PTC	passive thermal control
PTT	push to talk
PU	propellant utilization
PUGS	propellant utilization gaging system
PWR	power
PXX	Program XX
PYRO	pyrotechnic
QTY	quantity
QUAD	quadrant
R	roll or range
R&B	red and blue
RAD	radiator, radial, or radiation
RCDR	recorder
RCS	reaction control system
RCU	remote control unit
RCVR	receiver
REACQ	reacquire
REFSMMAT	reference stable member matrix

REG	regulator
REL	release
REQD	required
RETR	retract
REV	revolution
RH	right-hand
RHC	rotational hand controller
RING	ringsight
RLS	radius of landing site
RMT	remote
RNDZ	rendezvous
RNG	range or ranging
ROD	rate of descent
RR	rendezvous radar
RSI	roll stability indicator
RSLV	resolver
RT	realtime
RTC	realtime command
RTG	radioisotope thermoelectric generator
RXX	Routine XX
SA	shaft angle
SATT	satellite
S-BD	S-BAND
SC	spacecraft
SCE	signal conditioning equipment
SCS	stabilization control system
SCT	scanning telescope
SE	southeast or subearth
SEC	secondary
SECO	S-IVB engine cutoff
SECS	sequential events control system
SEF	sharp end forward
SEL	select
SEP	separate
SEQ	sequence
SEVA	standup extravehicular activity
SIDE	suprathermal ion detector experiment
SII	Saturn II (second stage)
SIM	scientific instrument module
S-IVB	Saturn IVB(third stage)
SLA	service module LM adapter
SLOS	star line-of-sight
SM	service module
SPECT	spectrometer
SPOT	spot meter

SPS	service propulsion system
SR	sunrise
SRC	sample return container
SRX	S-Band receiver mode no. X
SS	sunset or subsolar
STBY	standby
STDN	Spaceflight Tracking and Data Network (formerly MSFN)
STX	S-Band transmit mode no. X
SUBSAT	subsatellite
S.V.	state vector
SW	switch
SWC	solar wind composition
SWE	solar wind experiment
SXT	sextant
SYS	system
T EPHEM	time of Ephemeris update
TA	trunnion angle
TAN	Tananarive, Madagascar
TB	time base or talkback
TCA	time of closest approach
TD	touchdown
T&D	transposition and docking
TD&E	transposition docking and LM ejection
TDS	thermal degradation sample
TEC	transearth coast
TECH	technique
TEI	transearth injection
TEMP	temperature or temporary
TERM	terminate
TEX	Corpus Christi, Texas
TGE	traverse gravimeter experiment
TGT	target
THC	translation hand controller
TIG	time of ignition
TK	tank
TLC	translunar coast
TLI	translunar injection
TLM or TM	telemetry
TPF	terminal phase final
TPI	terminal phase initiation
TPM	terminal phase midcourse
T/R	transmitter/receiver
TRANS	translation
TRK	track or tracking
TRUN	trunnion

TSB	temporary stowage bag
TV	television
TVC	thrust vector control
TWR	tower
UCTA	urine collection transfer assembly
UHT	universal hand tool
ULL	ullage
UMB	umbilical
UNBAL	unbalance (meter)
UNDK	undock
US	United States
UV	ultraviolet spectrometer
V	velocity
VG_{IMU}	velocity to be gained as related to IMU orientation
VGX	velocity to be gained (X-body axis)
VGY	velocity to be gained (Y-body axis)
VGZ	velocity to be gained (Z-body axis)
VR	resultant velocity
VX	velocity along the X-axis
VY	velocity along the Y-axis
VZ	velocity along the Z-axis
VAN	USNS Vanguard
VHBW	very high speed black and white film (2485)
VHF	very high frequency
VLV	valve
VOX	voice keying
VXX	Verb XX
W	Watts
WRT	with respect to
X	time of closest approach (symbol)
XDOT	rate of change along the X-axis
XFER	transfer
XMIT	transmit or transmitter
XPNDER XPNDR	transponder
Y	yaw
YDOT	rate of change along the Y-axis
ZDOT	rate of change along the Z-axis
ZPN	impedance pneumogram

ΔAz	azimuth change (difference)
ΔH	altitude change (difference)
ΔP	pressure change (difference)
ΔR	position change (difference)
ΔV	velocity change (difference)
ΔVC	velocity change at engine cutoff
ΔVT	velocity change loaded pre-burn
#	numbers
ϕ	latitude
λ	longitude

PHOTOGRAPHIC NOMENCLATURE

AAA/BBB/CCC/DDD - EEE, EEE, (fGG, HHH, III) JJ fps or JJ FR (KK% MAG)

AAA - Location from which photography is to be accomplished

BBB - Camera

CCC - Lens

DDD - Film Type

EEE - Photography aids (i.e., brackets, intervalometer, mirror, etc.)

fGG - Lens Aperture Setting

HHH - Shutter Speed

III - Focus Distance in Feet

JJ - Number of frames for DC, EL & NK cameras
JJ - Frame Rate for the DAC only

KK - Magazine percent for the DAC only

CODE EXAMPLE:

1. CM4/DAC/18/CEX-BRKT, SPOT (S,1/250,∞) 12 fps (50% MAG)

Meaning: Photos are taken from CM right hand rendezvous window using the DAC with 18mm lens and SO368 film. The camera will be bracket mounted with the following camera settings: f-stop from spotmeter reading, shutter speed 1/250 of a second, focus at infinity, 12 frames per second, 50% MAG.

2. CM4/EL/80/BW-BRKT, IVL 8 (f5.6,1/250,∞) 10 FR

Meaning: Photos are taken from CM right hand rendezvous window using the Electric Hasselblad camera with the 80mm lens and black & white film (3400). The camera will be bracket mounted with the following settings: f-stop (aperture) f5.6, shutter speed 1/250, and focus at infinity. The operation of the shutter will be controlled by the intervalometer; IVL 8 representing 8 sec between frames and IVL 20 representing 20 sec between frames. Ten frames have been allotted for this sequence.

CAMERA LOCATIONS

COMMAND MODULE

CM-1	LH Side Window
CM-2	LH Rendezvous Window
CM-3	Hatch Window
CM-4	RH Rendezvous Window
CM-5	RH Side Window

LUNAR MODULE

LM-1	LH Window
LM-2	Docking Window
LM-3	RH Window

CAMERA MOUNTS

CSM

Electric Hasselblad (EL) +X axis +12° (in X-Z plane)

Electric Hasselblad (EL) normal to RH Side Window

Data Acquisition Camera (DAC) with right angle mirror +X axis

Data Acquisition Camera (DAC) with SXT Adapter - same as SXT shaft & trunnion.

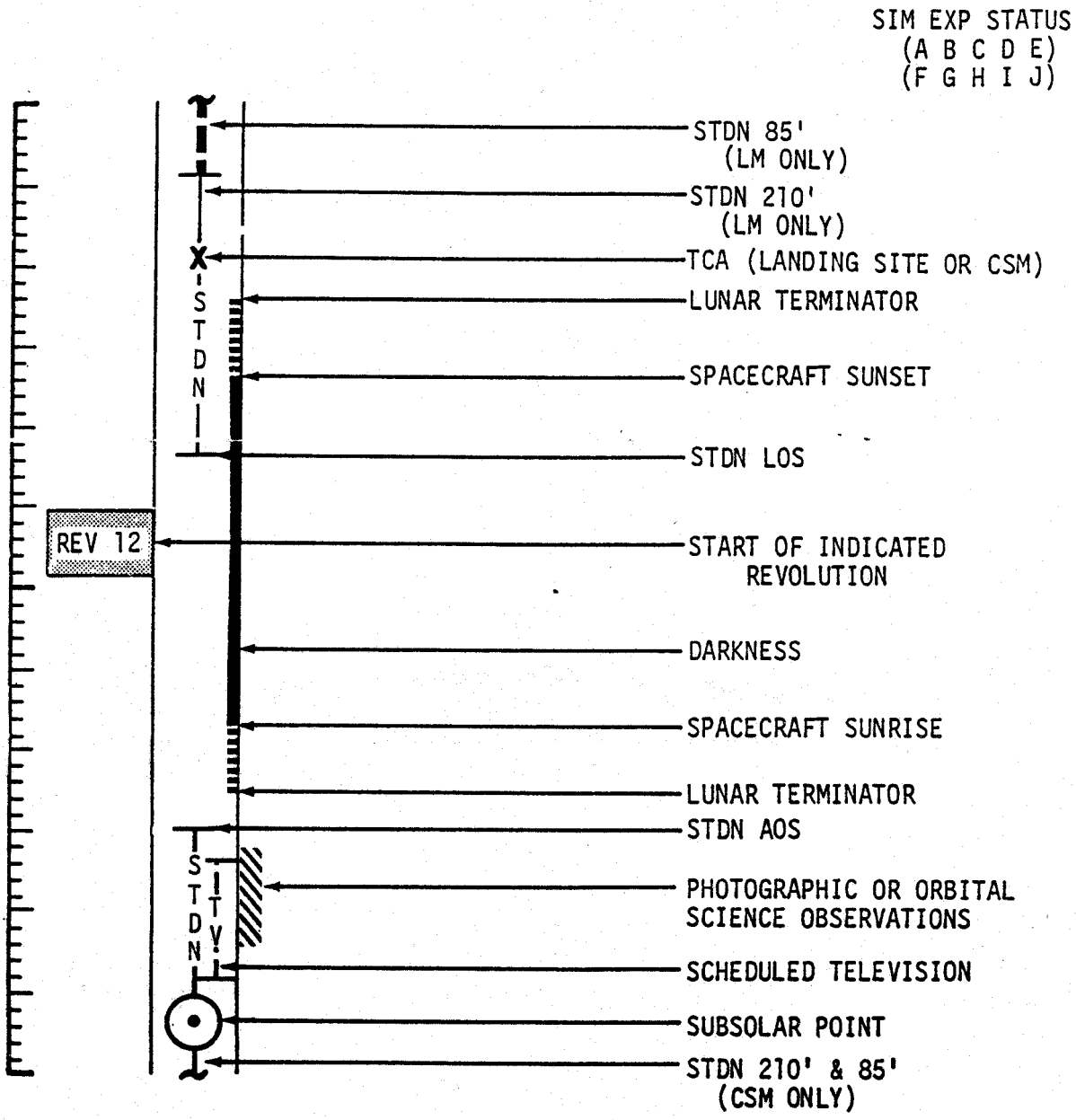
Data Acquisition Camera (DAC) with right angle mirror rotated 180° looking aft out RH side window.

NIKON (NK) Two positions

parallel to +X axis

+X axis +30° (in X-Z plane)

SYMBOL NOMENCLATURE



L1	SIM ATT **A**	MAP CAM COVER/POS **B**	LS HF ANT **C**	IR COVER **D**	UV COVER **E**
	+ +X FWD - -X FWD * NON SIM	0 CLOSED 1 OPEN/EXTD 2 OPEN/RETR	0 RETR 1 EXTD	0 CLOSED 1 OPEN	0 CLOSED 1 OPEN
L2	PAN CAM **F**	MAP CAM/ LASER ALTM **G**	LS **H**	IR **I**	UV **J**
	0 OFF/STBY 1 PWR/STBY 2 PWR/OPERATE 3 BOOST/STBY	0 OFF/OFF 1 STBY/OFF 2 ON/ON 3 STBY/ON 4 ON/OFF 5 ON(IMC-OFF) /OFF	0 OFF 1 HF MODE 2 VHF MODE 3 RECV ONLY 4 STBY	0 OFF 1 ON	0 OFF 1 ON

USUAL CONFIGURATIONS

PRE - SPS BURN PREP (*0000) (31000) or (31011)

SLEEP (±0011) (01011) or (±0111)

MIN POWER (0000) (00000)

SIM BAY SECURE (Dumps, Thermal, Thrusters) (0000) (01011) or (0001)

SECTION 1 - FLIGHT PLAN NOTES

FLIGHT PLAN NOTES

I. Crew

A. Crew designations are as follows:

Designation	Prime	Backup
Commander (CDR)	Cernan	Young
Command Module Pilot (CMP)	Evans	Roosa
Lunar Module Pilot (LMP)	Schmitt	Duke

B. The nominal CM couch positions are:

Activity	Left	Center	Right
Launch thru TLI	CDR	CMP	LMP
T&D thru Entry	CMP	CDR	LMP

C. The PGA's are worn as shown in Table 2-1.

D. The crew biomedical harness and sensor wearing schedule is shown in Table 2-2.

E. A crew status report for each crewman is voiced to MCC-H after each crew sleep period.

F. Negative reporting is used in reporting completion of each checklist.

G. All onboard gauge readings are read directly from the gauges with no calibration bias applied.

II. CSM Systems

A. Communications

1. The preferred S-Band communication modes are:
   (a) Uplink Mode 6 (Voice, PRN, and Updata)
   (b) Downlink Mode 2 (Voice, PRN, TLM-HBR)

2. VHF Duplex B is used for launch, and Simplex A is used for earth-orbit operations.

3. Table 2-3 summarizes the STDN coverage available for the CSM.

4. Table 2-4 contains a summary of the scheduled CSM & LM TV transmissions.

5. MCC-H switches OMNI antennas during TLC PTC periods, OMNI and HGA during TEC PTC periods. The crew manages antenna operations during all other TLC and TEC periods.

6. The HGA will be managed by the crew and MCC-H in order to minimize SIM bay experiment data loss at AOS and LOS while in lunar orbit during awake periods.

B. DSE

1. During the earth-orbit phase, the CSM LBR data is recorded when the CSM is not within STDN coverage. The DSE is dumped during the pass over the US prior to TLI.

2. CSM LBR data will be recorded during all P24 landmark tracking.

3. CSM HBR will be recorded during Launch, TLI, SIVB/CSM SEP, TD&E, all CSM SPS maneuvers (except LOPC), Sim Door Jettison, docking, undocking, and LM Final Separation.

4. LM LBR data will be recorded during STDN LOS periods between LM comm activation and PDI.

5. All entry data will be recorded in HBR during the blackout.

6. Lunar Sounder data will be managed per Table 2-15.

C. Electrical Power

1. The CSM normally remains powered up throughout the mission.

2. Table 2-5 lists the fuel cell purges.

3. Based on cryo purity and performance, the time between fuel cell O_2 purges may be increased to coincide with water dump times. The first O_2 purge allows a judgement to be made on the defined purge schedule.

4. The cryogenic heaters are managed such that the planned usage is obtained out of each O_2 tank. The H_2 fans are cycled prior to each sleep period.

5. Table 2-6 contains the battery charge schedule.

D. ECS and Water Management

1. Potable water is chlorinated once a day after the eat period prior to each sleep period.

2. Waste water dump, fuel cell purge, and urine collection scheduling criteria:
   (a) Table 2-5 contains the scheduled fuel cell purges, urine dumps and waste water dumps

      (1) Approximately once during each 24 hours following the initial dump and purge when three crewmen are in the CSM. Reduce interval to 22 hours when one crewman is in the CSM.

      (2) H_2 fuel cell purges are scheduled at every other O_2 fuel cell purge after the first O_2 fuel cell purge

   (b) The most opportune times to perform waste water dumps and fuel cell purges are as follows:

      (1) Immediately after the sextant star check in maneuver preparation or cislunar navigation

(2) Behind the moon, with completion of dump or purge before AOS

(3) At least three hours prior to SIM Bay photography and laser altimeter operation

(c) If possible, dumps and purges are not scheduled during the following periods, except just prior to the burn.

(1) Ten hours before MCC-2

(2) Eight hours before MCC-5

(d) Dumps and purges are not scheduled during the following STDN tracking periods:

(1) Between MCC-4 and LOI

(2) Ten hours before MCC-7 until entry, except urine is dumped just prior to MCC-7.

(e) All waste water dumps are manual.

3. Only one CO_2 absorber filter (LiOH canister) is changed at a time. Table 2-7 lists the LiOH canister change schedule. There are 26 filters on board.

4. At lift-off, the cabin contains 60% O_2 and 40% N_2. The CM is purged after launch. The purge is terminated prior to LM pressurization after TLI. After the LM is configured for ejection, it is isolated and the CM is purged for eight more hours. The purge is stopped for a sleep period and reinitiated after sleep.

5. CSM O_2 pressurizes the LM after transposition and docking; and repressurizes the LM before TLC LM entry(s), MCC-4 and LM activation.

E. Guidance and Navigation

1. REFSMMAT Definitions

(a) The "Launch Pad" REFSMMAT is used for launch, TLI, and TD&E. This REFSMMAT places the IMU X-axis along the launch azimuth at the pad and the Z-axis along the negative radius vector.

(b) The "PTC" REFSMMAT is used for all midcourse maneuvers (except MCC-7) and for other operations during TLC and TEC. This REFSMMAT places the X-axis in the ecliptic plane and perpendicular to the earth-moon line projection in the ecliptic plane at the average time of transearth injection for the monthly launch window and azimuth range. The Z-axis is perpendicular to the ecliptic and directed south. At the beginning of the PTC Mode the spacecraft maneuvers to an FDAI display of pitch 90° or 270°.

(c) A "Preferred" REFSMMAT is used by the CSM for LOI, Lunar-Orbit Plane Change, and TEI. The CSM IMU X-axis aligns normally with the spacecraft X-body axis (except LOPC) at the vehicle attitude for ignition with the thrust directed through the center of gravity. At burn ignition, the FDAI displays roll 0°, pitch 0°, and yaw 0°, except roll 180° for TEI. A yaw of 315° is used for LOPC, which places the X-axis 45° from the IMU X-axis.

(d) The "Landing Site" REFSMMAT is used for DOI, PDI, landing, and CSM lunar orbit activities up to the first plane change. This REFSMMAT places the CSM and LM IMU X-axis along the positive lunar radius vector at the landing site at the predicted landing time and places the Z-axis in the direction of flight parallel to the CSM orbital plane. At nominal touchdown, the LM FDAI displays roll 0°, pitch 0°, and yaw 0°.

(e) The "Lift-Off" REFSMMAT is used for all lunar activities after Plane Change, until transearth injection. This REFSMMAT places the CSM and LM IMU X-axis along the positive lunar radius vector at the landing site at predicted lift-off time, with the Z-axis down range parallel to the CSM orbital plane. At nominal lift-off time, the LM FDAI displays roll 0°, pitch 0°, and yaw 0° with slight differences reflecting actual touchdown yaw and slope tilt angles.

(f) The "Entry" REFSMMAT aligns the IMU X-axis in the local horizontal plane in the direction of flight at entry interface. The entry REFSMMAT is used for MCC-7 and all remaining activities. The Z-axis is down along the negative radius at entry interface. At entry interface, with wings level, local horizontal, heat shield forward inplane, lift up, heads down, the FDAI displays roll 0°, pitch 180°, and yaw 0°.

2. The CSM external lighting is operated during the rendezvous from lift-off to docking. The running lights only are on from CSM/LM separation through PDI.

3. The time tags on attitude maneuvers in Section 3 indicate the be-there-by time unless otherwise stated. All maneuver angles are the angles read on the FDAI after the maneuver has been completed.

4. CSM/LM and CSM attitude maneuvers are normally performed at the rate of 0.2°/sec unless other rates are required. LM maneuvers are normally performed at 2°/sec unless otherwise specified.

5. The SIM Bay RCS configuration provides single jet control authority in each axis to eliminate contamination of the SIM experiments. Table 2-8 identifies the periods when the CSM RCS is in an uncoupled configuration.

6. Undocking is done radially, CSM below, using the soft undocking procedure. The probe is extended its full length with the LM held on by the capture latches. When the rates are nulled, the CSM releases the LM. The separation maneuver is then performed immediately.

7. LM jettison is done radially, CSM below, with final sep pyros providing approximately 0.4 foot per second radial thrust. The separation burn is performed five minutes after jettison, providing 2 foot per second posigrade thrust.

8. The standard register load for nouns 78 and 70 for SIM bay experiment pointing using the Universal Tracking Program P20, option 5 is:

N78 (+090.00)
(+052.25)
(+180.00) +X-axis forward
or (+000.00) -X-axis forward
N70 (00050)

9. The SC RCS configuration and maneuver control is shown as a DAP LOAD code in the time column where applicable in Section 3. During passive thermal control the code is shown as a note indicating the status of the DAP.

F. Propulsion Systems

1. In order to conserve SM RCS, the SPS engine is used to "back-up" all LM rendezvous burns requiring a ΔV greater than 12 FPS. The SPS gimbal motors are not turned on during the normal maneuver preparation.

2. The SPS always is started using a single bank, however, the other bank will be opened 2 to 5 seconds after ignition for burns longer than 10 seconds. DOI will be performed on a single bank.

3. Table 2-9 lists the CSM propulsion burns.

G. Scientific Instruments Module

1. The panoramic and mapping cameras will be placed in the boost and standby modes, respectively, during launch through TD&E, rendezvous, and all SPS thrusting maneuvers.

2. The following switches may be left in their command position between uses in order to keep track of SIM Bay experiment status:

a) Mapping Camera Track
b) Mapping Camera/Laser Cover
c) IR Cover
d) UV Cover

The logic power will be in the OFF (center) position during SPS burns and all other events that may induce vibration or shock, i.e., undocking and rendezvous through LM jettison.

3. The SIM experiment status will be indicated in the upper righthand corner of each page, or half page in the CSM flight plan, of Section 3. The first line will indicate the CSM attitude and experiments positions at the beginning of each hour or half-hour as applicable. The second line indicates the experiments' functional modes as previously set up. Page xxv defines the SIM experiment position and mode status code.

III. LM Systems

A. Communications

1. The preferred S-Band communications are:
(a) Uplink Mode 7 (Voice, Updata)
(b) Downlink Mode 2 (Voice, TLM-HBR, PRN, BIOMED)

2. The LM DSEA schedule is shown in Table 2-10.

B. ECS

1. The LM contains ambient air at lift-off. During launch the pressure bleeds to zero psia. CSM O_2 pressurizes the LM after T&D. The LM is isolated after T&D and after each entry and allowed to bleed down via leakage. Before the first entry into the LM, the LM is vented to at least 2.7 PSID and repressurized with CSM O_2 in order to enrich the LM atmosphere. CSM O_2 is used to repressurize the LM for the second and third entries.

2. LM O_2 is used to pressurize the LM five times; after EVA-1, EVA-2, EVA-3, and two equipment jettison periods.

3. Table 2-7 lists the LiOH canister change schedule.

C. Guidance Systems

1. The LGC and CMC use the same landing site and lift-off REFSMMATS.

2. The AGS is placed in standby after the "GO" is given for lunar stay for T3.

3. The IMU platform is oriented so that all PIPA output axes are normal to the gravity vector, then powered down and the LGC placed in standby approximately 1 hour after TD until approximately 5 hours prior to lift-off. The LGC is placed in OPERATE several times to update the computer clock.

4. To prevent overheating of the antenna, the rendezvous radar is pointed away from the sun and turned off when no functional use is required.

5. The LM tracking light is operated continuously during rendezvous.

D. Propulsion Systems

1. The APS/RCS interconnect is used during the lunar lift-off and ascent only.

2. Table 2-11 lists the LM propulsion burns.

E. Electrical Power System

1. The LM is powered down to a minimum level to conserve battery consumables on the lunar surface from PDI +1:00 to lift-off -5:00 hours.

2. LM battery management is scheduled on the lunar surface to equalize the usage of the five descent stage batteries. Table 2-6 contains the LM battery management schedule.

IV. Procedures

A. CSM - Crew procedures called out in the flight plan may be found in the referenced crew checklist.

B. LM - Crew procedures called out in the flight plan may be found in the referenced crew checklist.

V. Synchronization of Ground Elapsed Time (GET)

The realtime GET is synchronized with the Flight Plan GET. In TLC, the GET is synchronized at 67:30 if the time propagated ahead to start of Rev 2 is more than ±1 minute from the flight plan GET. In lunar orbit the GET is synchronized at 95:40 and at 209:40 if the time propagated ahead to start of Rev 26 and Rev 66 respectively is more than ±2 minutes from the flight plan GET. The synchronization is performed by a V70 uplink from the ground followed by the crew synchronizing the mission timer to the CMC clock.

VI. Miscellaneous

A. Table 2-12 contains a schedule of the return to earth block data updates.

B. Table 2-13 is the landmark tracking and landing site data.

C. Table 2-14 contains the cryo management schedule.

D. Table 2-15 contains the Lunar Sounder Schedule.

E. Table 2-16 contains the Apollo 17 Film Budget.

F. Table 2-17 contains MC, LA and PC schedules.

G. Charts 2-1,2,3,4 & 5 identify principal LUNAR SOUNDER Rev activities.

SECTION 2 - CHARTS & TABLES

TABLE 2-1
(12/6)

SUIT WEARING SCHEDULE

ACTIVITY	PRESSURIZED (HARD SUIT)	SUITED (SOFT SUIT)	PARTIAL SUIT WITHOUT HELMET & GLOVES	SHIRTSLEEVES (ICG)
LAUNCH		ALL		
EARTH ORBIT THRU S-IVB EVASIVE MNVR			ALL	
TLC & TEC EXCEPT TEC EVA				ALL
PGA TEST			ALL	
LM ACTIVATION			ALL	
UNDOCKING		CDR & LMP	CMP*	
UNDOCK +5 MIN THRU CIRC			ALL	
PDI thru TD		CDR & LMP	CMP	
LUNAR STAY EXCEPT EVA				ALL
LUNAR SURFACE EVA'S & EQUIP JETT	CDR & LMP			CMP
LIFT-OFF PREP			ALL	
LIFT-OFF THRU DOCKING		CDR & LMP	CMP	
DOCKING TO LM JETT			ALL	
LM JETT		ALL		
POST LM JETT THRU TEI				ALL
TEC EVA	ALL			
ENTRY				ALL

*CMP DON HELMET & GLOVES FOR DOCKING LATCHES RELEASE.

TABLE 2-2
(12/6)

CREW BIOMED HARNESS WEARING SCHEDULE*

GET (HR:MIN)	CDR	CMP	LMP
LAUNCH	ON	ON	ON
05:50		OFF	OFF
19:00	OFF		ON
36:00		ON	OFF
47:00	ON	OFF	
59:00	OFF		ON
69:35		ON	OFF
85:10	ON	OFF	
95:10	OFF		ON
107:25	ON		
107:50		ON	
125:00	OFF**		
147:30	ON		OFF**
171:00	OFF**		ON
184:25	ON		
194:30	OFF	OFF	
210:43		ON	OFF
217:30	ON	OFF	
230:40	OFF		ON
238:30		ON	OFF
253:55	ON		ON
258:55		OFF	OFF
279:05	OFF		ON
286:55		ON	OFF
300:25	ON		ON

*In the event of an inflight medical problem or illness the Flight Surgeon has the option to revise this schedule.

**Crew option - the crewman not on BIOMED data downlink may elect to remove his BIOMED Harness during the lunar surface rest periods.

TABLE 2-3
(12/6)

CSM COVERAGE BY STDN STATIONS USING 85 FT/210 FT DISH ANTENNA

	GOLDSTONE (GDS)		*PARKS (PKS)		HONEYSUCKLE (HSK)		MADRID (MAD)		*GOLDSTONE (MAR)	
	AOS	LOS	AOS	LOS	AOS	LOS	AOS	LOS	AOS	LOS
EARTH ORBIT	01:29	01:33			01:00	01:05				
	03:00	03:06							03:01	03:05
TLI (3:21)					04:05	08:26				
	15:17	25:09					07:54	16:59	15:52	24:34
					19:35	33:27				
TRANSLUNAR COAST			22:15	30:58			22:15	30:58		
							32:07	41:52		
	39:28	49:41							40:00	49:08
			46:40	55:08	44:06	57:35				
	63:30	73:54					56:09	66:10	64:02	73:22
			70:50	79:11	68:18	81:36				
LOI (88:56)	87:28	88:44					80:08	88:44	87:59	88:44
TEI (236:40)					242:38	252:30				
			245:42	249:33					236:52	247:40
							250:45	265:01		
	258:25	272:24							258:56	271:52
TRANSEARTH COAST			270:22	272:53	266:52	276:17				
							274:34	289:38		
	282:17	297:25							282:50	296:43
					291:48	299:12				
							298:15	303:49		
EI (304:18)										

* 210 FT DISH ANTENNA

TABLE 2-3 (CONT)

REF	GET AT START OF REV	GOLDSTONE (GDS)		*PARKS (PKS)		HONEYSUCKLE (HSK)		MADRID (MAD)		*GOLDSTONE (MAR)	
LOI	88:56	AOS	LOS	AOS	LOS	AOS	LOS	AOS	LOS	AOS	LOS
1	88:56	89:17	90:41					89:17	90:16	89:17	90:41
2	90:59	91:25	92:49			92:27	92:49			91:25	92:49
3	93:07	93:35	94:41			93:35	94:41			93:35	94:41
4	95:01	95:29	96:35	95:29	96:35	95:29	96:35			95:29	96:35
5	96:55	97:23	98:15	97:23	98:29	97:23	98:29			97:23	97:41
6	98:49			99:17	100:23	99:17	100:23				
7	100:43			101:11	102:17	101:11	102:17				
8	102:37			103:05	103:26	103:05	104:12				
9	104:31					105:00	105:54	104:59	106:05		
10	106:25							106:53	107:59		
11	108:19							108:47	109:54		
12	110:13							110:42	111:48		
13	112:07	112:34	113:46					112:34	113:47	112:34	113:46
14	114:06	114:32	115:45					114:33	115:20	114:32	115:45
15	116:04	116:31	117:44			117:28	117:43			116:31	117:44
16	118:01	118:30	119:42			118:29	119:42			118:30	119:42
17	120:02	120:28	121:41	120:28	121:41	120:28	121:41			120:28	121:41
18	122:00	122:27	123:16	122:27	123:39	122:27	123:39			122:27	122:43
19	123:59			124:25	125:38	124:25	125:38				
20	125:57			126:24	127:37	126:24	127:37				
21	127:56					128:23	129:36	128:45	129:35		
22	129:55							130:21	131:34		
23	131:53							132:20	133:33		
24	133:52							134:18	135:31		
25	135:50	136:21	137:30					136:17	137:30	136:51	137:30
26	137:49	138:15	139:28					138:15	139:29	138:15	139:28
27	139:48	140:14	141:27					140:14	140:23	140:14	141:27
28	141:46	142:13	143:26			142:27	143:25			142:13	143:26
29	143:45	144:11	145:24	145:04	145:24	144:11	145:24			144:11	145:24
30	145:43	146:10	147:23	146:09	147:23	146:09	147:23			146:10	147:23
31	147:42	148:08	148:16	148:08	149:21	148:08	149:21				
32	149:41			150:06	151:20	150:06	151:20				
33	151:39			152:05	152:23	152:05	153:19	153:11	153:18		
34	153:38					154:04	154:50	154:04	155:17		
35	155:37							156:02	157:15		
36	157:35							158:01	159:14		
37	159:34	160:50	161:12					159:59	161:13		
38	161:32	161:58	163:11					161:58	163:12	161:58	163:11
39	163:31	163:56	165:10					163:57	165:10	163:56	165:10
40	165:30	165:55	167:08							165:55	167:08
41	167:28	167:54	169:07			167:53	169:07			167:54	169:07

* 210 FT ANTENNA

TABLE 2-3 (CONT)

REF	GET AT START OF REV	GOLDSTONE (GDS)		*PARKS (PKS)		HONEYSUCKLE (HSK)		MADRID (MAD)		*GOLDSTONE (MAR)	
LOI	88:56	AOS	LOS	AOS	LOS	AOS	LOS	AOS	LOS	AOS	LOS
42	169:27	169:52	171:06	170:08	171:05	169:52	171:05			169:52	171:06
43	171:25	171:51	173:04	171:50	173:04	171:50	173:04			171:51	172:51
44	173:24			173:49	175:03	173:49	175:03				
45	175:23					175:48	176:50				
46	177:21					177:46	179:00	177:46	179:00		
47	179:20							179:45	180:58		
48	181:18							181:43	182:57		
49	183:17							183:42	184:56		
50	185:16	185:40	186:54					185:41	186:55	185:49	186:54
51	187:14	187:39	188:53					187:39	188:53	187:39	188:53
52	189:13	189:38	190:52					189:38	190:41	189:38	190:52
53	191:12	191:36	192:50			192:39	192:50			191:36	192:50
54	193:10	193:35	194:49			193:34	194:48			193:35	194:49
55	195:09	195:34	196:48	195:33	196:47	195:33	196:47			195:34	196:48
56	197:08	197:32	198:28	197:32	198:46	197:32	198:46			197:32	197:54
57	199:06			199:31	200:45	199:31	200:45				
58	201:05					201:29	202:44	202:04	202:43		
59	203:04					203:28	203:49	203:28	204:42		
60	205:03							205:27	206:41		
61	207:01							207:25	208:34		
62	209:00	209:52	210:38					209:24	210:38	210:24	210:38
63	210:59	211:22	212:36					211:23	212:37	211:22	212:36
64	212:58	213:21	214:35					213:21	214:36	213:21	214:35
65	214:56	215:20	216:34					215:20	215:51	215:20	216:34
66	216:55	217:19	218:33			217:46	218:32			217:19	218:33
67	218:54	219:17	220:32			219:17	220:31			219:17	220:32
68	220:53	221:16	222:30	221:15	222:30	221:15	222:30			221:16	222:30
69	222:51	223:15	223:35	223:14	224:29	223:14	224:29				
70	224:50			225:13	225:34	225:13	226:27				
71	226:49					227:12	228:26	227:12	228:25		
72	228:48							229:10	230:24		
73	230:46							231:09	232:23		
74	232:45							233.08	234:22		
75	234:44	235:06	236:20					235:07	236:21	235:06	236:20
TEI	236:43	236:53	248:11					236:53	240:51	236:52	247:40

* 210 FT ANTENNA

TABLE 2-4
(12/6)

APOLLO 17 TV SCHEDULE

DAY	DATE	CST	GET (HR:MIN)	DURATION (HR:MIN)	ACTIVITY SUBJECT	VEHICLE	STATION
THURSDAY	7 DEC	01:05AM	4:12	0:20	TRANSPOSITION & DOCKING	CSM	HSK
MONDAY	11 DEC	6:48PM	117:55	5:19	LUNAR SURFACE EVA-1*	LRV	GDS/HSK/PKS
TUESDAY	12 DEC	4:21PM	139:38	6:21	LUNAR SURFACE EVA-2*	LRV	GDS
WEDNESDAY	13 DEC	3:58PM	163:05	6:35	LUNAR SURFACE EVA-3*	LRV	GDS
THURSDAY	14 DEC	4:41PM	187:48	0:25	LM LIFT-OFF	LRV	GDS/MAD
THURSDAY	14 DEC	6:31PM	189:38	0:06	RENDEZVOUS	CSM	GDS/MAD
THURSDAY	14 DEC	6:54PM	190:01	0:05	DOCKING	CSM	GDS/MAD
SATURDAY	16 DEC	5:46PM	236:53	0:32	VIEW OF MOON AFTER TEI	CSM	GDS/MAD
SUNDAY	17 DEC	2:19PM	257:26	1:04	TRANSEARTH EVA	CSM	MAD
MONDAY	18 DEC	5:00PM	284:07	0:30	TEC PRESS CONFERENCE	CSM	GDS/MAD

*TV WILL NOT BE USED WHILE LRV IS IN MOTION

TABLE 2-5
(12/6)

FUEL CELL PURGE, URINE DUMP AND WASTE WATER DUMP SCHEDULE

GET	O_2 FC PURGE		H_2 FC PURGE		WASTE H_2O DUMP		URINE COLLECTION PERIODS			URINE DUMP	
							GET				
(HR:MIN)	NO	ΔT (HR:MIN)	NO	ΔT (HR:MIN)	NO	ΔT (HR:MIN)	START	STOP	ΔT	NO	ΔT (HR:MIN)
*18:30	1	18:30			1	18:30	07:00	18:30	11:30	1	18:30
*35:00	2	16:30	1	35:00	2	16:30	18:30	35:00	16:30	2	16:30
*58:45	3	23:45			3	23:45	35:00	58:45	23:45	3	23:45
*83:30	4	24:45	2	48:30	4	24:45	58:45	83:30	24:45	4	24:45
94:13	5	10:43			5	10:43					
*117:45	6	23:32	3	34:15	6	23:32	83:30	107:00	23:30	5	34:15 &UTCA
**137:45	7	20:00			7	20:00	114:30	133:00	18:30	6	20:00
**159:40	8	21:55	4	41:55	8	21:55	133:00	156:10	23:10	7	21:55
**180:45	9	21:05			9	21:05	156:10	180:45	24:35	8	21:05
194:20										DUMP UCTA'S POST RNDZ	
196:50	10	16:05	5	37:10	10	16:05					
**208:20							180:45	208:00	27:15	DUMP UTS	
218:30	11	21:40			11	21:40					
*230:30	12	12:00	6	33:40	12	12:00	208:00	230:25	22:30	9	22:10
*252:50	13	22:20			13	22:20	230:25	252:50	22:25	10	22:20
*276:50	14	24:00	7	46:20	14	24:00	252:50	276:50	24:00	11	24:00
*300:30							276:50	300:30	23:40	12	23:40
*303:30							300:30	303:30	03:00	NO DUMP	

*DUMP URINE FROM BUSS'S (3)

**DUMP URINE FROM BUSS (1)

DUMP LAUNCH UTCA'S 06:30

TRANSFER TO LM - 108:00

TRANSFER TO CM - 193:00

TABLE 2-6
(12/6)

CSM BATTERY CHARGE AND LM BATTERY MANAGEMENT SCHEDULES

CSM BATTERY CHARGE SCHEDULE

GET (HR:MIN)	BATTERY
09:00	B
18:40	A
35:55	A
59:55	B
114:35	B
140:22	A
208:02	B
277:00	A
283:57	B

LM BATTERY MANAGEMENT SCHEDULE

GET (HR:MIN)	BATTERY						
	1	2	3	4	5	6	L
108:18	ON	ON	ON	ON	OFF	OFF	OFF
112:20					ON	ON	
113:17					OFF	OFF	
113:37	OFF	OFF					LMP
127:30	ON	ON	OFF	OFF			CDR
137:45			ON	ON			OFF
147:10			OFF	OFF			CDR
161:15	OFF	OFF	ON	ON			LMP
170:50	ON	ON					OFF
187:27	OFF		OFF		ON	ON	
187:49		OFF		OFF			

L - LUNAR BATTERY MAY BE USED ON EITHER CDR OR LMP BUS

TABLE 2-7
(12/6)

LiOH CANISTER CHANGE SCHEDULE

CSM LiOH CANISTER CHANGE

CHANGE NO	APPROX GET (HR:MIN)	APPROX ΔT (HR)	INSTALL		REMOVE & STOW		TOTAL TIME INSTALLED
			CANISTER NO.	POSITION	CANISTER NO.	STOWAGE LOCATION	
1	08:50	15	3	A	1	B5	*08:50
2	23:00	10	4	B	2	B5	*23:00
3	33:00	14	5	A	3	B5	24:10
4	47:00	10	6	B	4	B5	24:00
5	57:30	14	7	A	5	B6	24:30
6	71:00	12	8	B	6	B6	24:00
7	83:00	12	9	A	7	B6	25:30
8	95:00	13	10	B	8	B6	24:00
9	108:10	24	11	A	9	A9	25:10
10	132:00	11	12	B	10	A9	37:00
11	143:15	25	13	A	11	A9	35:05
12	167:45	14	14	B	12	A9	35:45
13	181:00	14	15	A	13	A3	37:45
14	195:25	13	16	B	14	A3	27:40
15	208:35	10	17	A	15	A3	27:35
16	218:12	13	18	B	16	A3	22:47
17	231:00	10	19	A	17	A4	22:25
18	240:30	12	20	B	18	A4	22:18
19	252:15	12	21	A	19	A4	21:15
20	264:30	16	22	B	20	A4	24:00
21	281:00	8	23	A	21	A5	28:45
22	287:50		24	B	22	A5	23:20

LM LiOH CANISTER CHANGE: GET (HR:MIN) 137:30 AND 172:55

TOTAL CM LiOH CANISTERS AVAILABLE 26
*GET FROM LIFTOFF

TABLE 2-8
(12/6)

CSM RCS UNCOUPLED CONFIGURATION

FROM (HR:MIN)	TO (HR:MIN)	REASON
8:35	8:55	RATE DAMPING FOR PTC
19:20	19:40	RATE DAMPING FOR PTC
42:35	43:50	RATE DAMPING FOR PTC & HEAT FLOW EXP
63:50	64:10	RATE DAMPING FOR PTC
90:39	91:22	SIM EXP
94:29	106:52	SIM EXP
113:18	182:16	SIM EXP
183:12	184:30	ROLL AXIS ONLY FOR MC/PC
194:14	233:05	SIM EXP
233:05	234:23	ROLL AXIS ONLY FOR MC/PC
236:48	240:45	SIM EXP
240:50	241:10	RATE DAMPING FOR PTC
256:45	259:20	CSM EVA
259:20	263:40	SIM EXP
263:40	264:00	RATE DAMPING FOR PTC
265:00	265:20	RATE DAMPING FOR PTC
276:30	285:30	SIM EXP
285:30	285:35	RATE DAMPING FOR PTC
286:15	287:20	SIM EXP
288:15	288:40	RATE DAMPING FOR PTC

TABLE 2-9
(12/6)

CSM BURN/EVENT SCHEDULE

BURN/ EVENT	GET I(HR:MIN)/ BURN TIME	ΔVT (FPS)	ULLAGE BT	REFSMMAT	RESULTANT HA/HP(NM)	DATE/ CST
LAUNCH SATURN	00:00 11 MIN 51.5 SEC	24,263	--	LAUNCH	93.4 89.7	DEC 6 20:53
S-IVB TLI	03:21:19.3 5 MIN 45.7 SEC	10,346.8	--	LAUNCH	--	DEC 7 00:14
CSM/LM EJECTION	05:07:00.0 3.0 SEC	1.2	--	LAUNCH	--	DEC 7 1:54
MCC-1	08:45	Nom Zero	--	PTC	--	DEC 7 05:38
MCC-2	35:30	Nom Zero	--	PTC	--	DEC 8 08:23
MCC-3	66:55	Nom Zero	--	PTC	--	DEC 9 15:48
MCC-4	83:55	Nom Zero	--	PTC	--	DEC 10 8:48
LOI SPS	88:55:37.5 06 MIN 35.4 SEC	2979.9	--	LOI	170.8 51.4	DEC 10 13:48
DOI SPS	93:13:08.5 22.9 SEC	198.7	4 JETS 15 SEC	LDG SITE	59.00 15.00	DEC 10 18:06
BAILOUT SPS	93:48:16.8 11.05 SEC	100	4 JETS 17 SEC	LDG SITE	61.5 5.0	DEC 10 18:41
DOI TRIM SPS	AS REQD			LS OR LOPC-1 AS REQD		
UNDOCK & SEP(RCS)	110:27:55.2 3.3 SEC	1.0	--	LDG SITE	60.33 13.6	DEC 11 11:20
CSM CIRC SPS	111:55:22.7 4.0 SEC	70.1	4 JETS 12 SEC	LDG SITE	70.3 54.3	DEC 11 12:48
LOPC SPS	182:35:45.3 18.7 SEC	336.7	4 JETS 12 SEC	LOPC-1	63.0 61.3	DEC 14 11:29
LM JETT	193:58:30.0	2.5	--	LIFT-OFF	62.2 60.3	DEC 14 22:51
CSM SEP RCS	194:03:30.0 12.6 SEC	2.0	--	LIFT-OFF	63.9 62.3	DEC 14 22:56

TABLE 2-9 (CONT)

CSM BURN/EVENT SCHEDULE

BURN/ EVENT	GET I(HR:MIN) BURN TIME	ΔVT (FPS)	ULLAGE BT	REFSMMAT	RESULTANT HA/HP(NM)	DATE/ CST
TEI SPS	236:39:51.1 2 MIN 22.2 SEC	3045.7	4 JETS 12 SEC	TEI	--	DEC 16 17:33
MCC-5	253:40	Nom Zero	--	PTC	--	DEC 17 10:33
MCC-6	282:18	Nom Zero	--	PTC	--	DEC 18 15:11
MCC-7	301:18	Nom Zero	--	ENTRY	--	DEC 19 10:11
EI	304:18:0.5	NO BURN	--	ENTRY	--	DEC 19 13:11
SPLASH-DOWN	304:31:10.5	NO BURN	--	ENTRY	--	DEC 19 13:24

TABLE 2-10

APOLLO 17 LM DSEA

ACTIVITY	MODE	GET (HR:MIN)	TAPE USED* (HR:MIN)	ACCUM. TAPE USED (HR:MIN)
COMM ACTIVATION	ICS/PTT	108:37	3:58 X 100%	
PDI PREP	VOX	112:35	= 3:58	3:58
PDI PREP	VOX	112:35	0:37 X 63%	
POST TOUCHDOWN (T2)	OFF	113:12	= 0:23.3	4:21
EVA-1 PLSS COMM CK	VOX	116:10	0:50 X 63%	
EVA-1 LMP EGRESS	OFF	117:00	= 0:31.5	4:53
EVA-2 PLSS COMM CK	VOX	138:40	0:50 X 63%	
EVA-2 LMP EGRESS	OFF	139:30	= 0:31.5	5:24
EVA-3 PLSS COMM CK	VOX	162:10	0:50 X 63%	
EVA-3 LMP EGRESS	OFF	163:00	= 0:31.5	5:56
JETTISON #1 PREP	VOX	170:40	0:20 X 63%	
JETTISON #1 POST	OFF	171:00	= 0:12.3	6:08
JETTISON #2 PREP	VOX	185:13	0:17 X 63%	
JETTISON #2 POST	OFF	185:30	= 0:10.7	6:19
ASCENT COMM (L/O -17 MIN)	ICS/PTT	187:46	0:17 X 100%	
LIFT-OFF -2 MIN	VOX	188:01	= 0:17	6:36
LIFT-OFF -2 MIN	VOX	188:01	0:10 X 63%	
INSERTION	ICS/PTT	188:11	= 0:6.3	6:42
INSERTION	ICS/PTT	188:11	1:59 X 100%	
POST DOCKING	OFF	190:10	= 1:59	8:41

*TAPE USED = RECORD TIME X DUTY CYCLE
**REMAINING TAPE (1:19) MAY BE USED AT CREW DISCRETION.

TABLE 2-11
(12/6)

LM BURN/EVENT SCHEDULE

BURN/ EVENT	GETI(HR:MIN) BURN TIME	ΔVT (FPS)	ULLAGE BT	REFSMMAT	RESULTANT HA/HP(NM)	DATE/ CST
DOI-2	112:00:33.7 26.9 SEC	9.4	--	LDG SITE	60.0 7.2	DEC 11 12:53
PDI	112:49:37.7 12 MIN 00 SEC	6701.8	4 JET 7.5SEC	LDG SITE	--	DEC 11 13:42
LANDING	113:01:38.1	NO BURN	--	--	LUNAR SURFACE	DEC 11 13:54
EVA-1	116:40	NO BURN	--	--	--	DEC 11 17:33
EVA-2	139:10	NO BURN	--	--	--	DEC 12 16:03
EVA-3	162:40	NO BURN	--	--	--	DEC 13 15:33
ASCENT	188:03:14.6 7 MIN 17.7 SEC	6062.2	None	LIFTOFF	47.85 9.06	DEC 14 16:56
ORBIT INSERTION	188:10:32.3	NO BURN	--	--		DEC 14 17:03
TPI	188:57:32.3 2.7 SEC	76.6	4 JET 10 SEC	LIFTOFF	64.4 46.7	DEC 14 17:50
BRAKING GATES	189:36:35.0 to 189:43:10.5		--	--	62.4 61.8	DEC 14 18:29
DOCKING	190:05:00.0	NO BURN	--	--	62.4 61.8	DEC 14 19:53
LM DEORBIT	195:39:13.0 1 MIN 56.4 SEC	281.8	--	LIFTOFF	64.9 -141.8	DEC 15 01:34

TABLE 2-12
(12/6)
APOLLO 17 RETURN TO EARTH BLOCK DATA SCHEDULE

DATA	GET UPDATE (HR:MIN)	GETI (HR:MIN)	PAD TYPE
TLI+90	01:30	04:50	COMPLETE P-30
L/O+9	01:30	09:00	P37
L/O+15	08:30	15:00	P37
L/O+25	08:30	25:00	P37
L/O+35	16:30	35:00	P37
L/O+45	16:30	45:00	P37
L/O+55	16:30	55:00	P37
L/O+65	16:30	65:00	P37
*FLYBY	40:55	83:56	P30
*PER+2	82:40	90:56	ABB P-30
TEI 4	85:10	97:22	ABB P-30
TEI 5	91:45	98:41	ABB P-30
TEI 12	95:30	111:56	ABB P-30
TEI 19	95:30	125:49	ABB P-30
TEI 26	118:37	139:43	ABB P-30
TEI 38	137:00	163:24	ABB P-30
TEI 49	144:15	185:17	ABB P-30
TEI 55	170:30	197:01	ABB P-30
TEI 65	195:47	216:43	ABB P-30
TEI 72	213:37	230:39	ABB P-30
PREL			
TEI 75	229:58	236:41	COMPLETE P-30
NOM			
TEI 75	235:32	236:41	COMPLETE P30
ONE REV LATE			
TEI 76	235:32	238:37	ABB P-30

*ASSUMES DOCKED CONFIGURATION

TABLE 2-12 (CONT)
(12/6)

APOLLO 17 RETURN TO EARTH BLOCK DATA SCHEDULE

NOTES:

1. All block data maneuvers are to the MPL line except
   a. TLI +90 abort is to the AOL
   b. Nominal TEI 75 and backup Rev TEI 76 is to the EOM target (λ=166°W)
2. Pass FLYBY early if pericynthion is not clear of moon
3. The FLYBY and PER+2 maneuvers are docked. All other aborts are undocked.
4. TEI 4 assumes no DOI.
5. TEI 5 assumes DOI.
6. TEI 12 assumes no CIRC.
7. TEI 19 assumes CIRC.
8. TEI 49 assumes no LOPC.
9. TEI 55 assumes LOPC.

TABLE 2-13
(12/6)

LANDMARK AND LANDING SITE DATA

SITE	REV	LATITUDE (DEG)	LONGITUDE (DEG)	ALTITUDE* (NM)
TAURUS LITTROW		20.164	30.750	-1.95
J-3	3	19.948	40.102	0.0
17-1	12,13,50	20.160	30.809	-1.96
17-2	12**	20.020	30.804	-1.97
17-3	12**	20.272	30.700	-1.89
RP-3	13	-3.694	131.912	0.0
F-1	50	1.863	88.250	0.0

*Difference between landmark radius vector and 938.4935 NM (mean Lunar Radius)

**Rev 12 Alternates for Perigee < 10 NM

TABLE 2-14
(12/6)

CRYO MANAGEMENT SCHEDULE

GET	O_2 HTRS 1,2,&3		H_2 HTRS 1&2		H_2 FANS 1,2,&3		
HRS:MIN	AUTO	OFF	AUTO	OFF	AUTO	ON	OFF
00:00	1,2	3	1,2			3	1,2
04:17	1,2,3						
05:05	1,2	3					
08:40	3	1,2			3		
15:10				1,2			
39:05	1,2,3						
39:55	3	1,2					
60:10*	1,2,3						
60:30*	3	1,2					
65:00			1,2			3	
81:15*	1,2,3						
82:50*	3	1,2					
84:40**	1,2	3					
234:18***							
256:50	1,2,3						
259:50	1,2	3					

*If LM/CM $\Delta P > 2.4$ PSID, these actions are required.

**Open 100W cb in oxygen tanks 1 & 2 at 84:40

***Close 100W cb in O_2 tanks 1 & 2

***Open 50W cb in O_2 tanks 1, 2, & 3.

TABLE 2-15
(12/6)

LUNAR SOUNDER SCHEDULE

REV	TARGET	GET		LONGITUDE		FILM
		START	STOP	START	STOP	HR:MIN
14	LS EMI TEST	115:10	115:59			0:08
16,17,18	HF MODE	118:54	122:59	28°E	3°E	4:05
24-26	GROUND TRACK VHF MODE	135:10	139:15	57°W	64°W	4:05
35	REINER γ & MARE RIDGE VHF MODE	156:51	156:56	49°W	64°W	0:05
36	REINER γ & MARE RIDGE HF MODE	158:50	158:55	49°W	64°W	0:05
39,40	*RCV-ONLY SEP-ON	163:56	167:23	104°E	165°W	N/A
40	MARIUS HILLS HF MODE	166:43	166:48	45°W	60°W	0:05
55	CRISIUM, SERENITATIS, FRA MAURO APENNINE BENCH EULER HILLS HF MODE	195:33	196:20	99°E	36°W	0:47
63,64	LS RCV ONLY SEP-OFF HF MODE	211:20	213:19	113°E	110°E	N/A
64	PASTEUR HF MODE	213:19	213:23	110°E	98°E	0:04
64	LS RCV ONLY SEP-OFF HF MODE	213:23	213:41	98°E	49°E	N/A

*REV 40 - "REC-ONLY SEP-ON" IS TERMINATED FOR 5 MIN FOR "MARIUS HILLS HF MODE".

TABLE 2-15 (CONT)
(12/6)

LUNAR SOUNDER SCHEDULE

REV	TARGET	GET		LONGITUDE		FILM HR:MIN
		START	STOP	START	STOP	
64	TRANQUILITATIS-SERENITATIS HF MODE	213:41	213:59	49°E	8°W	0:18
64	LS RCV ONLY SEP OFF HF MODE	213:59	214:47	8°W	152°W	N/A
73	TSIOLKOVSKY FERMI HF MODE	231:00	231:06	135°E	117°E	0:06
73	APOLLONIUS VOLCANICS HF MODE	231:26	231:48	58°E	8°W	0:22
73	HERTZSPRUNG HF MODE	232:24	232:33	117°W	144°W	0:09
					TOTAL FILM	10:19

APOLLO 17 FILM BUDGET

CSM

CAMERA: DAC FILM: CEX MAGAZINE: AA CAPACITY: 100%

GET	REV	TARGET	FILM USED	FILM REMAINING	REF
4:20	TL	UNDOCK S4BLM	30%	70%	OPS
5:07	TL	LM EJECTION	70%	0%	OPS

CAMERA: DAC FILM: CEX MAGAZINE: BB CAPACITY: 100%

GET	REV	TARGET	FILM USED	FILM REMAINING	REF
84:25	TL	DOOR JETT	5%	95%	OPS
110:59	12	LDMK TRK 17-X	3%	92%	LMK
112:20	13	LDMK TRK RP-3	4%	88%	LMK
112:54	13	LDMK TRK 17-1	4%	84%	LMK
185:43	50	F-1 TRACK	4%	80%	LMK
186:03	50	17-1 TRACK	4%	76%	LMK
189:38	52	RNDZ/DOCK	40%	36%	OPS

CAMERA: DAC FILM: CEX MAGAZINE: CC CAPACITY: 100%

GET	REV	TARGET	FILM USED	FILM REMAINING	REF
110:27	12	UNDOCKING	100%	0%	OPS

CAMERA: DAC FILM: CEX MAGAZINE: DD CAPACITY: 100%

GET	REV	TARGET	FILM USED	FILM REMAINING	REF
193:58	53	LM JETTISON	50%	50%	OPS

CSM

CAMERA: DAC FILM: CEX MAGAZINE: EE CAPACITY: 100%

GET	REV	TARGET	FILM USED	FILM REMAINING	REF
0:00		UNSCHEDULED	0%	100%	

CAMERA: DAC FILM: CEX MAGAZINE: FF CAPACITY: 100%

GET	REV	TARGET	FILM USED	FILM REMAINING	REF
257:30	TE	CMP ON EVA	100%	0%	OPS

CAMERA: DAC FILM: CEX MAGAZINE: GG CAPACITY: 100%

GET	REV	TARGET	FILM USED	FILM REMAINING	REF
303:08	EE	FIREBALL	50%	50%	OPS
303:20	EE	DROGUE CHUTE	50%	0%	OPS

CAMERA: DAC FILM: CIN MAGAZINE: HH CAPACITY: 100%

GET	REV	TARGET	FILM USED	FILM REMAINING	REF
43:00	TL	HEATFLOW	50%	50%	X4
45:20	TL	HEATFLOW	50%	0%	X4

CAMERA: DAC FILM: CIN MAGAZINE: II CAPACITY: 100%

GET	REV	TARGET	FILM USED	FILM REMAINING	REF
8:00	TL	SC INT (OPT)	100%	0%	OPS

APOLLO 17 FILM BUDGET

CSM

CAMERA:	DAC	FILM: VHBW	MAGAZINE: JJ	CAPACITY: 100%	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
0:00		UNSCHEDULED	0%	100%	

CAMERA:	EL	FILM: CEX	MAGAZINE: KK	CAPACITY: 160 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
19:35	TL	EARTH	4 FR	156 FR	OPS
90:51	01	AITKEN	58 FR	98 FR	OS
110:27	12	UNDOCKING	10 FR	88 FR	OPS
118:04	16	AITKEN	73 FR	15 FR	OS

CAMERA:	EL	FILM: CEX	MAGAZINE: LL	CAPACITY: 160 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
119:57	17	SNIADECKI	46 FR	114 FR	OS
136:39	25	LDG SITE	24 FR	90 FR	OS
142:26	28	PICARD	36 FR	54 FR	OS
144:02	29	ARABIA	21 FR	33 FR	OS

CSM

CAMERA:	EL	FILM: CEX	MAGAZINE: MM	CAPACITY: 160 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
144:24	2[illegible]	PIERCE	88 FR	72 FR	OS
157:35	36	MARE INGENII	34 FR	38 FR	OS
164:26	39	D-CALDERA	19 FR	19 FR	OS

CAMERA:	EL	FILM: CEX	MAGAZINE: NN	CAPACITY: 160 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
4:20	TL	UNDOCK S4BLM	10 FR	150 FR	OPS
5:07	TL	LM EJECTION	5 FR	145 FR	OPS
190:01	52	DOCKING	10 FR	135 FR	OPS
215:56	6[illegible]	IMBRIUM(S)	28 FR	107 FR	OS

CAMERA:	EL	FILM: CEX	MAGAZINE: OO	CAPACITY: 160 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
0:00	LC	SCHMITT OPT	160 FR	0 FR	OPT

CAMERA:	EL	FILM: CEX	MAGAZINE: PP	CAPACITY: 160 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
0:00	LC	EVANS OPT	160 FR	0 FR	OPT

TABLE 2-16

APOLLO 17 FILM BUDGET

CSM

CAMERA:	EL	FILM: VHBW	MAGAZINE: QQ	CAPACITY: 115 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
89:41	01	LDG SITE	12 FR	103 FR	NST
121:00	17	(NORTH)	12 FR	91 FR	NST
137:34	25	SR CORONA	9 FR	82 FR	X9
144:42	29	(SOUTH)	24 FR	58 FR	NST
159:36	37	AITKEN	12 FR	46 FR	FST
208:17	61	SS CORONA	9 FR	37 FR	X7

CAMERA:	EL	FILM: VHBW	MAGAZINE: RR	CAPACITY: 115 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
209:09	62	GAGARIN (N)	18 FR	97 FR	FST
210:09	62	(NORTH)	24 FR	73 FR	NST
218:08	66	(SOUTH)	24 FR	49 FR	NST
233:58	74	(SOUTH)	12 FR	37 FR	NST

CAMERA:	NK	FILM: CIN	MAGAZINE: SS	CAPACITY: 70 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
68:00	TL	ALFMED	6 FR	64 FR	X1

CAMERA:	NK	FILM: CIN	MAGAZINE: TT	CAPACITY: 70 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
0:00		UNSCHEDULED	0 FR	70 FR	

CAMERA:	NK	FILM: VHBW	MAGAZINE: UU	CAPACITY: 40 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
0:00		PREFLT CAL	40 FR	0 FR	CAL

CSM

CAMERA:	NK	FILM: VHBW	MAGAZINE: VV	CAPACITY: 40 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
0:00		DIM LT BU	40 FR	0 FR	CAL

CAMERA:	NK	FILM: VHBW	MAGAZINE: WW	CAPACITY: 40 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
121:06	17	EARTHSHINE	40 FR	0 FR	X17

CAMERA:	NK	FILM: VHBW	MAGAZINE: XX	CAPACITY: 40 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
133:29	23	ZOD LT RED	13 FR	27 FR	X13
163:12	38	ZOD LT BLUE	13 FR	14 FR	X13

CAMERA:	NK	FILM: VHBW	MAGAZINE: YY	CAPACITY: 40 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
185:00	49	ZOD LT POL	24 FR	16 Fr	X11

CAMERA:	NK	FILM: VHBW	MAGAZINE: ZZ	CAPACITY: 40 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
0:00		UNSCHEDULED	0 FR	40 FR	

TABLE 2-16

APOLLO 17 FILM BUDGET

LM

CAMERA:	DCL	FILM: CEX	MAGAZINE: A	CAPACITY: 160 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
110:30	12	LM/CM SEP	10 FR	150 FR	OPS
110:35	12	CABIN (OPT)	5 FR	145 FR	OPS
111:00	12	LDG SITE	5 FR	140 FR	OPS
112:35	13	EARTHRISE	5 FR	135 FR	OPS
116:40	LS	EVA-1	95 FR	40 FR	
CAMERA:	DCC	FILM: CEX	MAGAZINE: B	CAPACITY: 160 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
116:40	LS	EVA-1	94 FR	66 FR	
CAMERA:	DCC	FILM: CEX	MAGAZINE: C	CAPACITY: 160 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
139:20	LS	EVA-2	155 FR	5 FR	
CAMERA:	DCC	FILM: CEX	MAGAZINE: D	CAPACITY: 160 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
139:20	LS	EVA-2	94 FR	66 FR	
CAMERA:	DCC	FILM: CEX	MAGAZINE: E	CAPACITY: 160 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
163:40	LS	EVA-3	151 FR	9 FR	
CAMERA:	DCC	FILM: CEX	MAGAZINE: F	CAPACITY: 160 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
163:40	LS	EVA-3	99 FR	61 FR	
CAMERA:	DCL	FILM: HBW	MAGAZINE: G	CAPACITY: 170 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
116:40	LS	EVA-1	130 FR	40 FR	
CAMERA:	DCL	FILM: HBW	MAGAZINE: H	CAPACITY: 170 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
139:20	LS	EVA-2	128 FR	42 FR	
CAMERA:	DCL	FILM: HBW	MAGAZINE: I	CAPACITY: 170 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
139:20	LS	EVA-2	162 FR	8 FR	

LM

CAMERA:	DCL	FILM: HBW	MAGAZINE: J	CAPACITY: 170 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
139:20	LS	EVA-2	161 FR	9 FR	
CAMERA:	DCL	FILM: HBW	MAGAZINE: K	CAPACITY: 170 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
139:20	LS	EVA-2	135 FR	35 FR	
CAMERA:	DCL	FILM: HBW	MAGAZINE: L	CAPACITY: 170 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
163:40	LS	EVA-3	154 FR	16 FR	
CAMERA:	DCL	FILM: HBW	MAGAZINE: M	CAPACITY: 170 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
163:40	LS	EVA-3	165 FR	5 FR	
CAMERA:	DCL	FILM: HBW	MAGAZINE: N	CAPACITY: 170 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
163:40	LS	EVA-3	127 FR	43 FR	
CAMERA:	DAC	FILM: CEX	MAGAZINE: O	CAPACITY: 100%	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
110:30	12	LM/CM SEP	6%	94%	OPS
110:35	12	CABIN (OPT)	13%	81%	OPS
111:00	12	LDG SITE	6%	75%	OPS
112:50	13	DESCENT	75%	0%	OPS
CAMERA:	DAC	FILM: CEX	MAGAZINE: P	CAPACITY: 100%	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
113:02	LS	SURFACE OPT	100%	0%	
CAMERA:	DAC	FILM: CEX	MAGAZINE: Q	CAPACITY: 100%	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
188:03	51	ASCENT	100%	0%	
CAMERA:	DC5	FILM: HBW	MAGAZINE: R	CAPACITY: 170 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
163:40	LS	EVA 3	50 FR	120 FR	

TABLE 2-16

TABLE 2-17

MC/LA OPERATIONS

NOTE: BECAUSE OF ABUNDANT MC FILM, ALL MC/LA START/STOP TIMES ARE ± 2 MIN/6°

REV	T START	T STOP	TYPE	LONG(START)	LONG(STOP)	DEG	HR/MIN
1/2	90:48	91:51*	VERT	144°W	26°E	190°	1:03
13/14	114:00	115:03	VERT	162°W	7°E	191°	1:03
14/15	115:59	117:25	VERT	164°W	63°W	259°	1:26
23/24	133:48	134:52	VERT	168°W	2°W	194°	1:04
26/27	139:44	140:46	N.OBL	168°W	4°E	188°	1:03
27/29	140:46	144:46	VERT	4°E	6°W	730°	4:00
35/36	157:25	158:39	S.OBL	147°W	14°W	227°	1:14
38	161:38	163:32	VERT	162°E	177°E	345°	1:54
49	183:21	184:25	VERT	167°E	28°W	195°	1:04
62/63	209:05	211:08	VERT	163°E	150°E	373°	2:03
65	215:05	215:30	N.OBL	152°E	77°E	75°	0:25
65	215:30	215:35	MNVR	77°E	62°E	15°	0:05
65	215:35	216:10	S.OBL	62°E	47°W	109°	0:35
66	216:10	218:07	VERT	47°W	41°W	354°	1:57
73/74	232:39	235:47**	VERT	161°W	13°W	572°	3:08
POST TEI							

*LA OFF AT 91:28 TO AVOID ALTITUDE PROBLEMS
**RETR, CLOSE COVER AT 234:05

TOTAL	4017°	22:24
VERTICAL	3082°	17:15
OBLIQUE	614°	3:22
RUNOUT	321°	1:47

PC OPERATIONS

REV	T START	T STOP	TYPE	LONG(START)	LONG(STOP)	DEG	HR/MIN
1/2	90:51	91:11	STEREO	152°W	144°E	58°	0:20
2	91:18	91:28	STEREO	123°E	95°E	28°	0:10
13/14	114:03	114:33	STEREO	172°W	100°E	88°	0:30
15	116:31	117:00	STEREO	102°E	14°E	88°	0:29
28	141:54	142:19	STEREO	155°E	85°E	70°	0:25
49	183:50	184:09	STEREO	80°E	26°E	54°	0:19
62	209:14	209:29	STEREO	133°F	90°F	43°	0:15
62	209:49	209:51	MONO	33°E	27°E	6°	0:02
74	233:21	233:36	STEREO	67°E	25°E	42°	0:15
74	233:45	233:58	STEREO	5°W	45°W	40°	0:13
						514°	2:57

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CHART 2-1
(12/6)

LUNAR SOUNDER EMI TEST
REV 14
FILM USED: 5 MIN

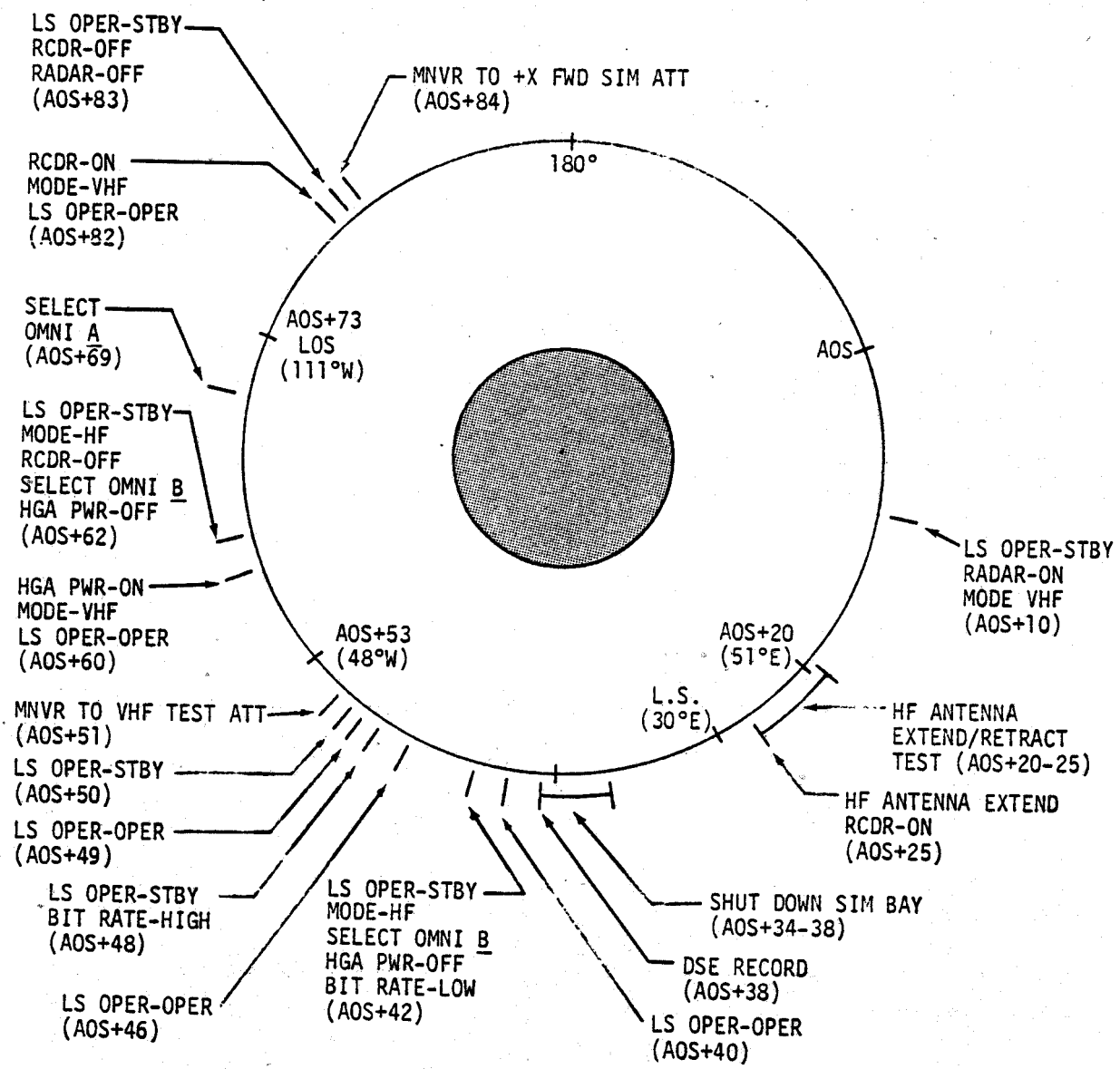


CHART 2-2

(12/6)

LUNAR SOUNDER HF MODE

REVS 16, 17, 18

FILM USED - 245 MIN

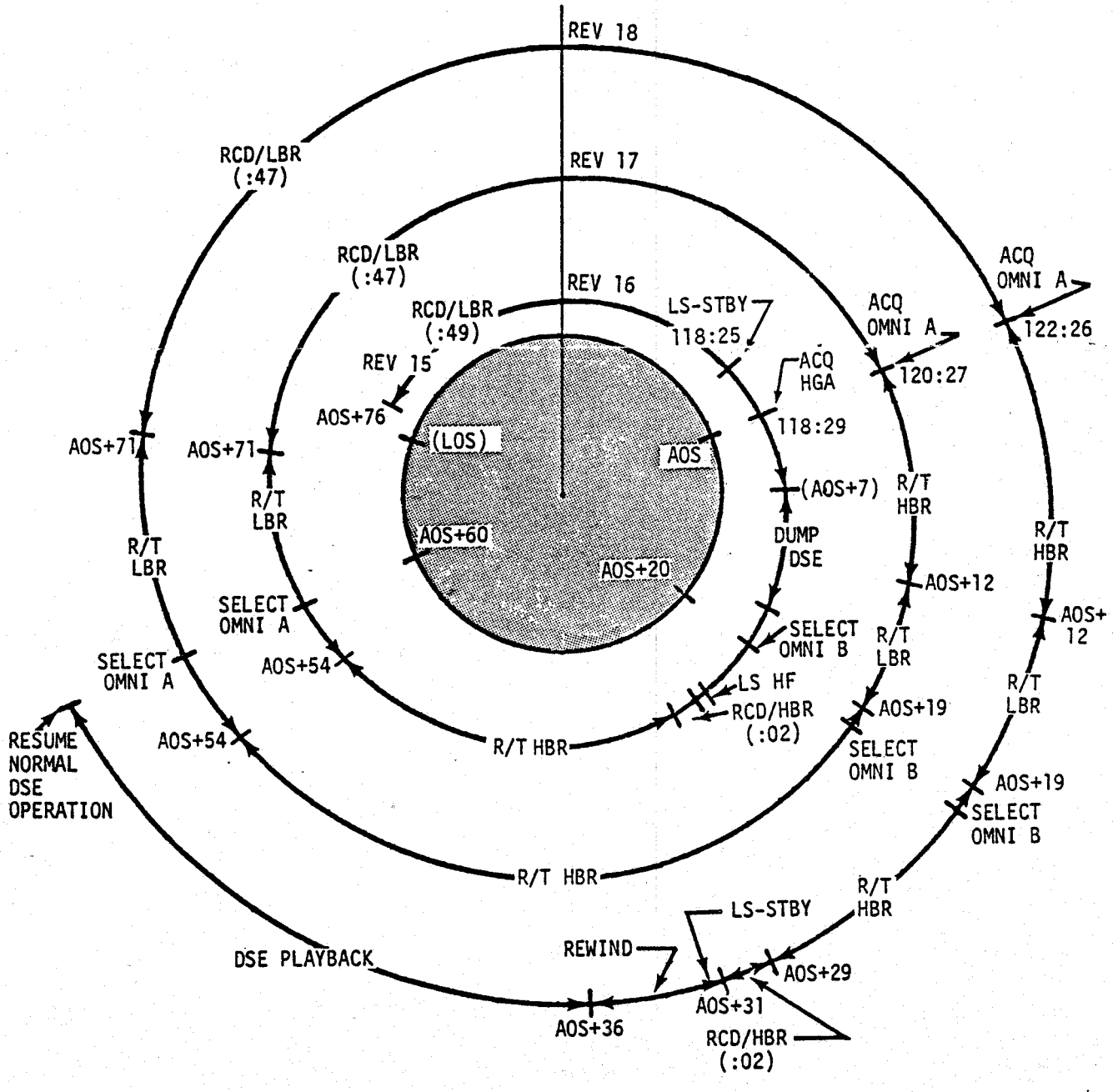


CHART 2-3
(12/6)
LUNAR SOUNDER VHF MODE
REVS 24, 25, 26, 27
FILM USED - 245 MIN

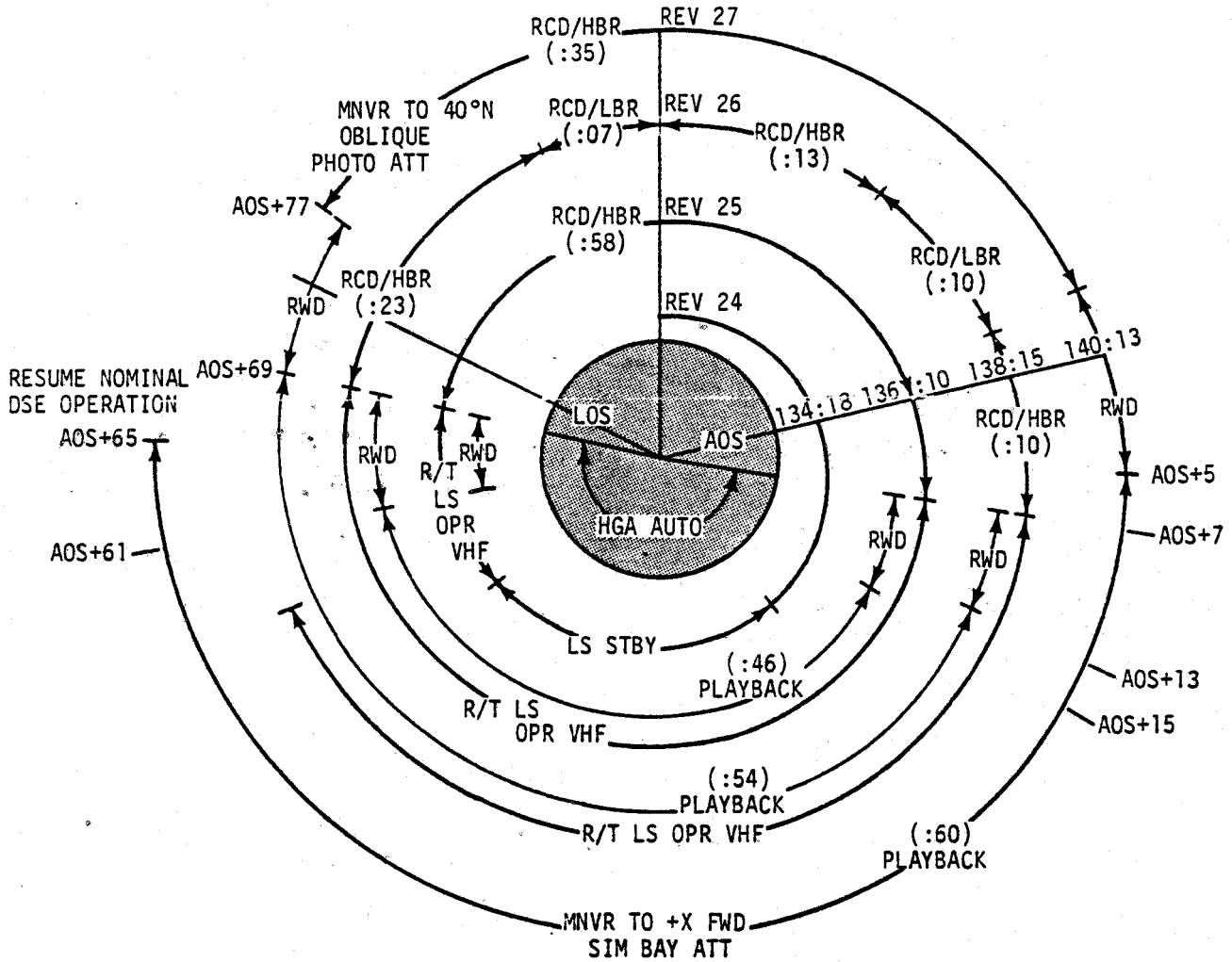


CHART 2-4

(12/6)

LUNAR SOUNDER RECEIVE ONLY (SEP-ON)

REVS 39, 40, 41

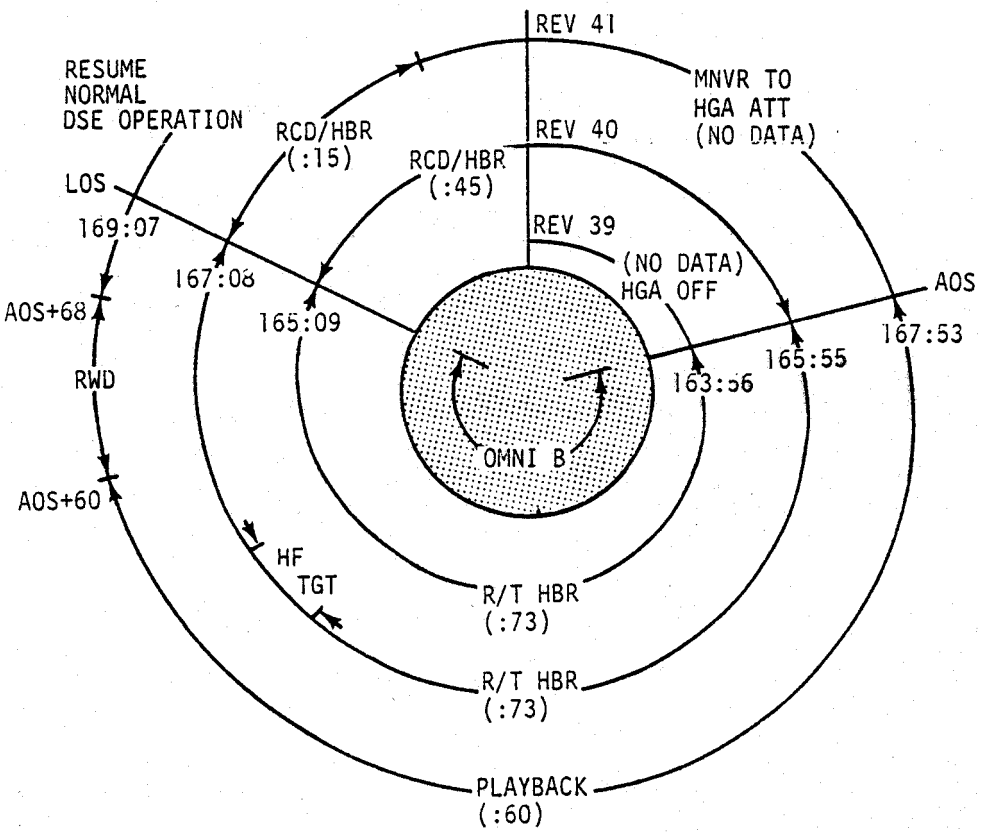
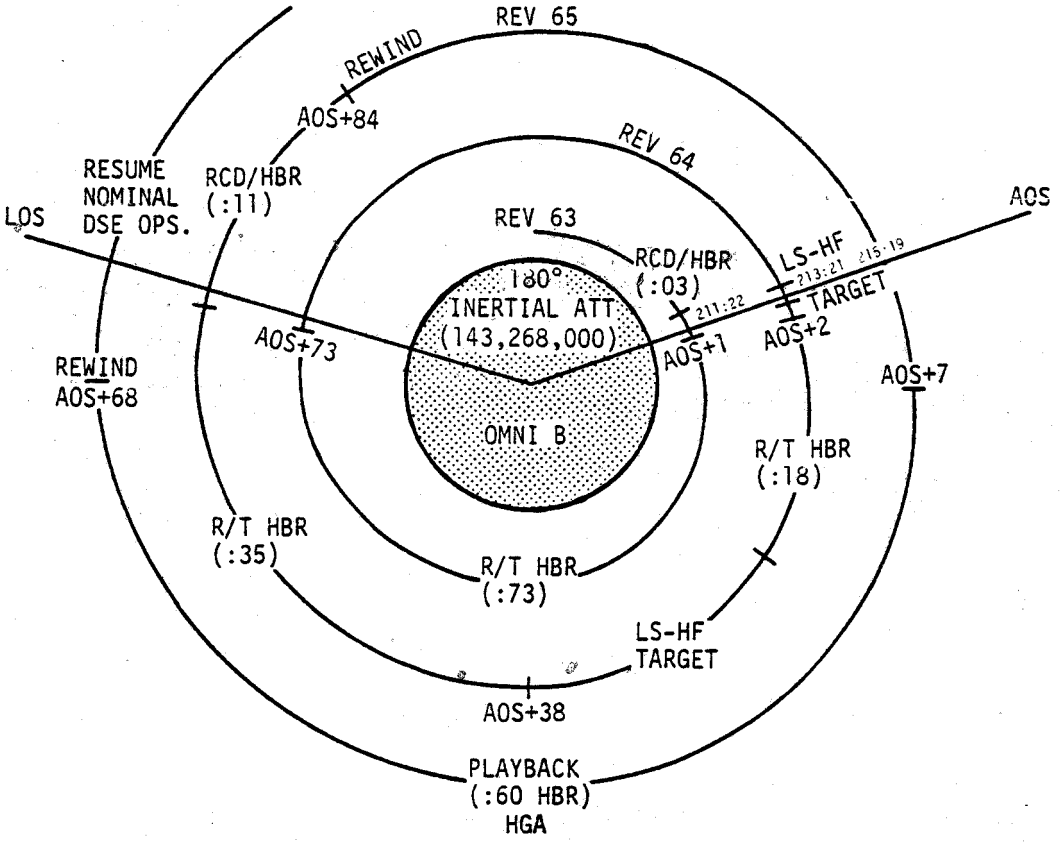


CHART 2-5

(12/6)

LUNAR SOUNDER - RECEIVE ONLY (SEP-OFF)

REVS 63, 64, 65



SECTION 3 - DETAILED TIMELINE

FLIGHT PLAN

MCC-H

2053 CST

NOTES

00:00 (31102) (01111)

LIFT-OFF DEC 6, 1972 CSM LAUNCH CHECKLIST

BOOST PAGE L/2-7 - C-1

STDN

:10

SECO

AT SECO+20 SEC, S-IVB MNVRS TO LH AND INITIATES ORB RATE (HEADS DOWN)

INSERTION AND SYSTEM CHECKS PAGE L/2-11 C-3

CYI

UPDATE
Z TORQUING ANGLE

:20

00:30

OPTICS DUST COVER JETT L/2-16 - C-6

P52 (OPTION 3)
(LAUNCH ORIENT)

:40

:50

GDC ALIGN

CRO

REPORT: GYRO TORQUING ANGLES
TWO WAY S-BAND VOICE CHECK
SCS ATT REF COMPARISON CHECK PAGE L/2-17 - 2-4

01:00

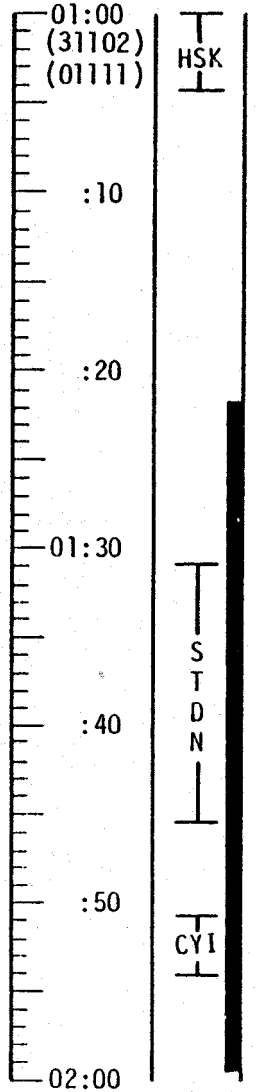
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	00:00 - 01:00	1/LAUNCH-E.O.	3-1

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2153 CST



CMD
DUMP DSE
UPDATE
TLI +90 MIN ABORT
PAD
P37 (L/O+9) PAD

EXTEND DOCKING PROBE PAGE L/2-18

P52 (OPTION 3)
(LAUNCH ORIENT)

GDC ALIGN
REPORT: GYRO TORQUING ANGLES

NOTES

P52 IMU REALIGN
N71: . __ __,__ __
N05: __ __ __.__ __
N93:
X __ __.__ __ __
Y __ __.__ __ __
Z __ __.__ __ __
GET __ __ __:__ __:__ __

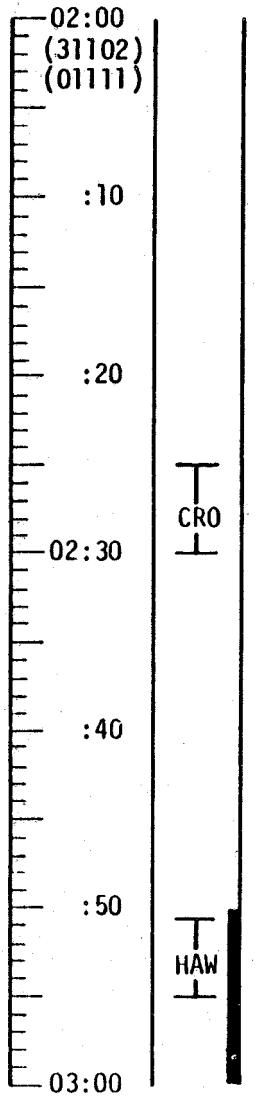
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	01:00 - 02:00	1/E.O.	3-2

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2253 CST



NOTES

UPDATE
GO/NO-GO FOR PYRO ARM
TLI PAD

UPLINK
CSM S.V. & V66

TLI PREPARATION PAGE L/2-27
GO/NO-GO FOR PYRO ARM (CUE STDN)
LOGIC ON
TLI NOMINAL & MANUAL PAGE L/2-28

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	02:00 - 03:00	1/E.O.	3-3

TLI
BURN TABLE

ROLL RATES	P OR Y RATES	P OR Y ATT DEVIATION	SHUTDOWN TIME	RESIDUALS
>20°/SEC TERMINATE	>10°/SEC TERMINATE	±45° TERMINATE	CMC T_{GO} = 0 PLUS 1 SECOND	NO TRIM

FLIGHT PLAN

MCC-H | 2353 CST | NOTES

03:00
(31102)
(01111)

STDN

:10

UPDATE
GO/NO-GO FOR TLI

TB6 3:11:41

GO/NO-GO FOR TLI

OMNI C

:20

ARIA

TLI

TIG: 03:21:19.3
BT: 5 MIN 45.7 SEC
ΔVC: 10,346.8 FPS

OMNI D

P00
V66 SET CSM S.V. INTO LM S.V.

AT SECO: S-IVB INERTIAL
AT SECO +2 MIN 31 SEC:
S-IVB TO LOCAL
HORIZONTAL, ORB RATE
HEADS DOWN

03:30

ACN

TLI BURN STATUS REPORT
CDR - TRANS TO CENTER COUCH, CMP - LEFT COUCH

NORMAL SC/BOOSTER SEPARATIONS PAGE L/3-1
DIRECT O2 VLV - OPEN, UNTIL CABIN IS 5.7 PSI, THEN CLOSE
V48 (11103)(01111)

(11103)
(01111)
:40

S-IVB MNVRS TO SEP ATT 03:42:05

(002,310,041) OMNI D

UPDATE
GO/NO-GO FOR T&D

:50

STDN

GO/NO-GO FOR TRANSPOSITION AND DOCKING
CSM SEPARATION PREP PAGE L/3-1

T&D MNVR
+X FOR 3 SEC (ΔV ~0.5 FPS)
AFTER 15 SEC PITCH UP AT
0.5°/SEC. V49 AUTO MNVR
TO DOCKING ATT. NULL
TRANSLATION AND RATES,
+X FOR 4 SEC (ΔV ~0.7 FPS)

04:00

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	03:00 - 04:00	E.O./TLC	3-5

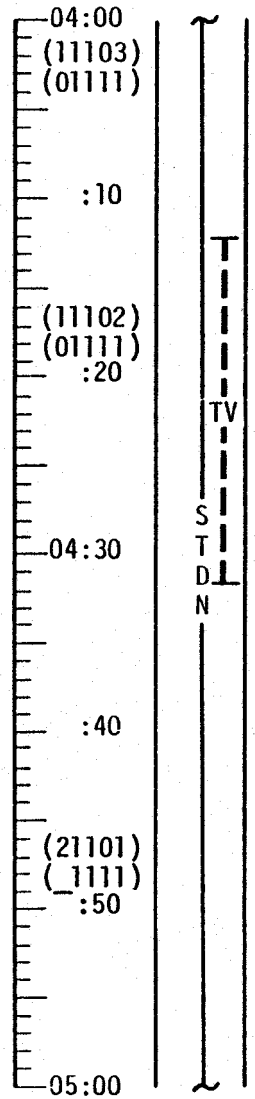
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0053 CST

NOTES



CSM/S-IVB SEP 04:12

CSM MNVR TO DOCK ATT (298,130,319) (04:18)
V48 (11102)(01111)
TV (HSK) 04:12 TO 04:32 CM4-BRKT (f22, MONITOR)
VISUALLY INSPECT AND PHOTOGRAPH S-IVB AND LM, MAG (AA,NN)

DOCK 04:22

CM/LM PRESSURE EQUALIZATION (DECAL) PAGE L/3-5

S-IVB NON-PROPULSIVE VENT START 4:27:05

TUNNEL HATCH REMOVAL (DECAL)
DOCKING LATCH VERIFICATION (DECAL)

LM UMBILICAL CONNECTIONS (DECAL)

HATCH INSTALLATION (DECAL)

S-IVB NON-PROPULSIVE VENT COMPLETE 4:42:05

PRE LM SEP & EJECTION

V48 (21101)(_1111)
GO/NO-GO FOR PYRO ARM (CUE STDN)
LOGIC ON
PYRO ARM

CMD
DUMP DSE

UPDATE
GO/NO-GO FOR
PYRO ARM AND
CSM/LM EJECTION

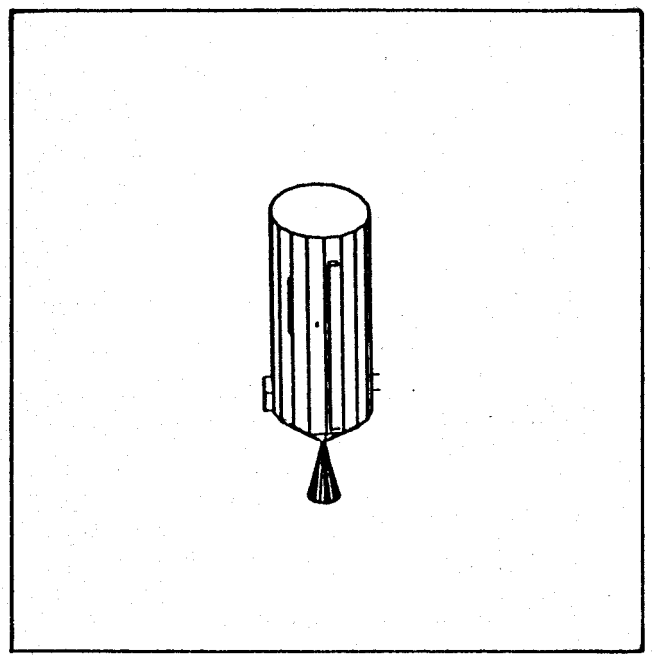
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	04:00 - 05:00	1/TLC	3-6

FLIGHT PLANNING BRANCH

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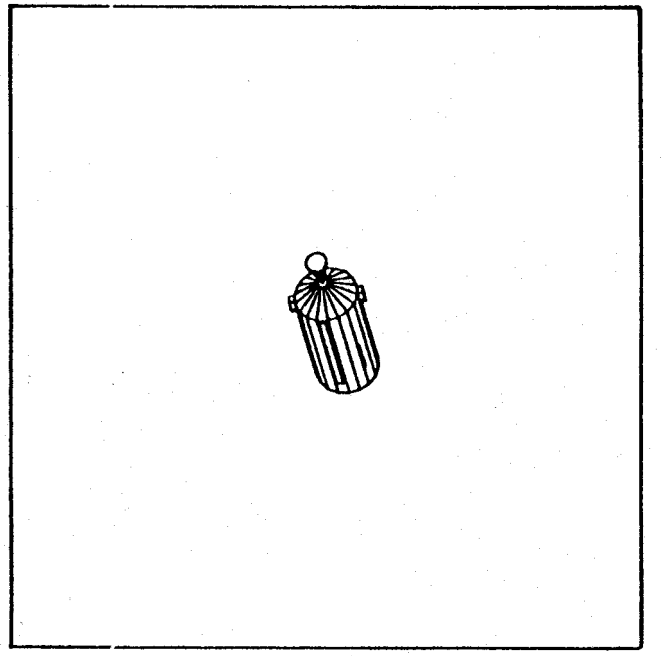
FLIGHT PLAN

GET 05:10 FOV 5°



S-IVB APS EVASIVE INITIATION

GET 05:31 FOV 1°



S-IVB LOX DUMP INITIATION

FLIGHT PLAN

MCC-H	0153 CST			NOTES
	05:00		P47 THRUST MONITOR PHOTOGRAPH LM EJECTION, MAG (AA,NN)	SPRING ACTUATOR ΔV ~0.8 FPS. 5 SEC AFTER EJECTION THERE IS A 4 JET RCS -X TRANSLATION FOR 3 SEC (ΔV ~ 0.4 FPS) TOTAL ΔV ~ 1.2 FPS.
	(21101) (_1111)			
TLI CUTOFF + 1 HR 40 MIN			CSM/LM EJECTION 05:07	
	:10		P00, V66 SET CSM S.V. INTO LM S.V. REPORT: GOOD EJECTION V49 MNVR TO VIEW S-IVB IN HATCH WINDOW BY 05:16 (270.0,129.8,004.3) HGA P -1, Y 273 REPORT: GO FOR S-IVB YAW MNVR VISUALLY INSPECT S-IVB/IU THERMAL SHROUD	THE MNVR TO ACQUIRE THE S-IVB WILL BE PERFORMED AT 0.2°/SEC AND WILL BE INITIATED AFTER GOOD EJECTION IS VERIFIED.
UPDATE GO FOR S-IVB YAW MNVR INITIATION				
	:20		S-IVB YAW MNVR 05:20 (GROUND COMMAND) REPORT: GO FOR S-IVB EVASIVE BURN	
	(21111)		V48 (21111)(1111)	GO FOR S-IVB YAW MNVR INDICATES THAT THE S-IVB IS IN THE CREW FIELD OF VIEW AND ADEQUATE SPACECRAFT SEPARATION HAS BEEN ACHIEVED. THE S-IVB YAW MNVR WILL BE PERFORMED NOMINALLY AT LM EJECTION +13 MIN
UPDATE GO/NO-GO FOR S-IVB EVASIVE BURN	(_1111)	STDN	S-IVB APS EVASIVE BURN 05:30 (GROUND COMMAND)	
	05:30		REPORT: LM/CM ΔP INSTALL CABIN FAN FILTER (U2)	
			CSM SYSTEMS CHECKLIST	
			DEACTIVATE PRIMARY EVAP PAGE S/1-16	
	:40		S-IVB MNVRS TO PROPELLANT DUMP ATT 05:40	
			VHF A SIMPLEX - OFF WASTE STOWAGE VENT VALVE - VENT (VERIFY)	EVASIVE BURN ΔV ~9.4 FPS
			S-IVB CONTINUOUS H_2 VENT - ON 05:47	
	:50		S-IVB LOX DUMP 05:51	LOX DUMP ΔV ~28 FPS
			DOFF PGA'S TRANSFER ITEMS OUT OF PGA POCKETS TRANSFER PRD TO CWG CMP & LMP DOFF BIOMED HARNESS DUMP UCTA	
	06:00			

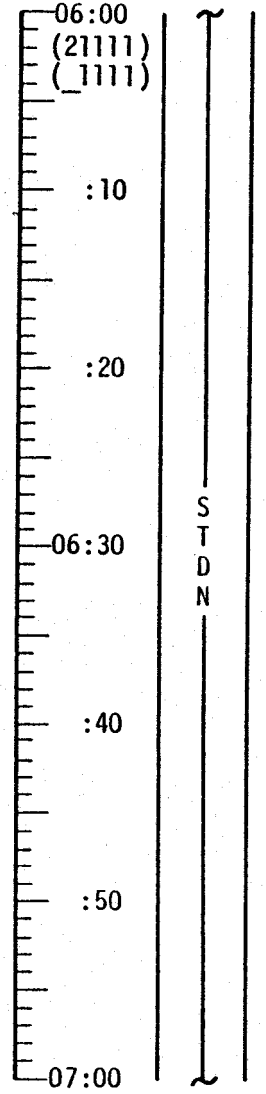
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	05:00 - 06:00	1/TLC	3-9

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0253 CST



DOFF PGA'S

NOTES

S-IVB APS MCC-1
GET ~ 06:35
ΔV ~30 FPS

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	06:00 - 07:00	1/TLC	3-10

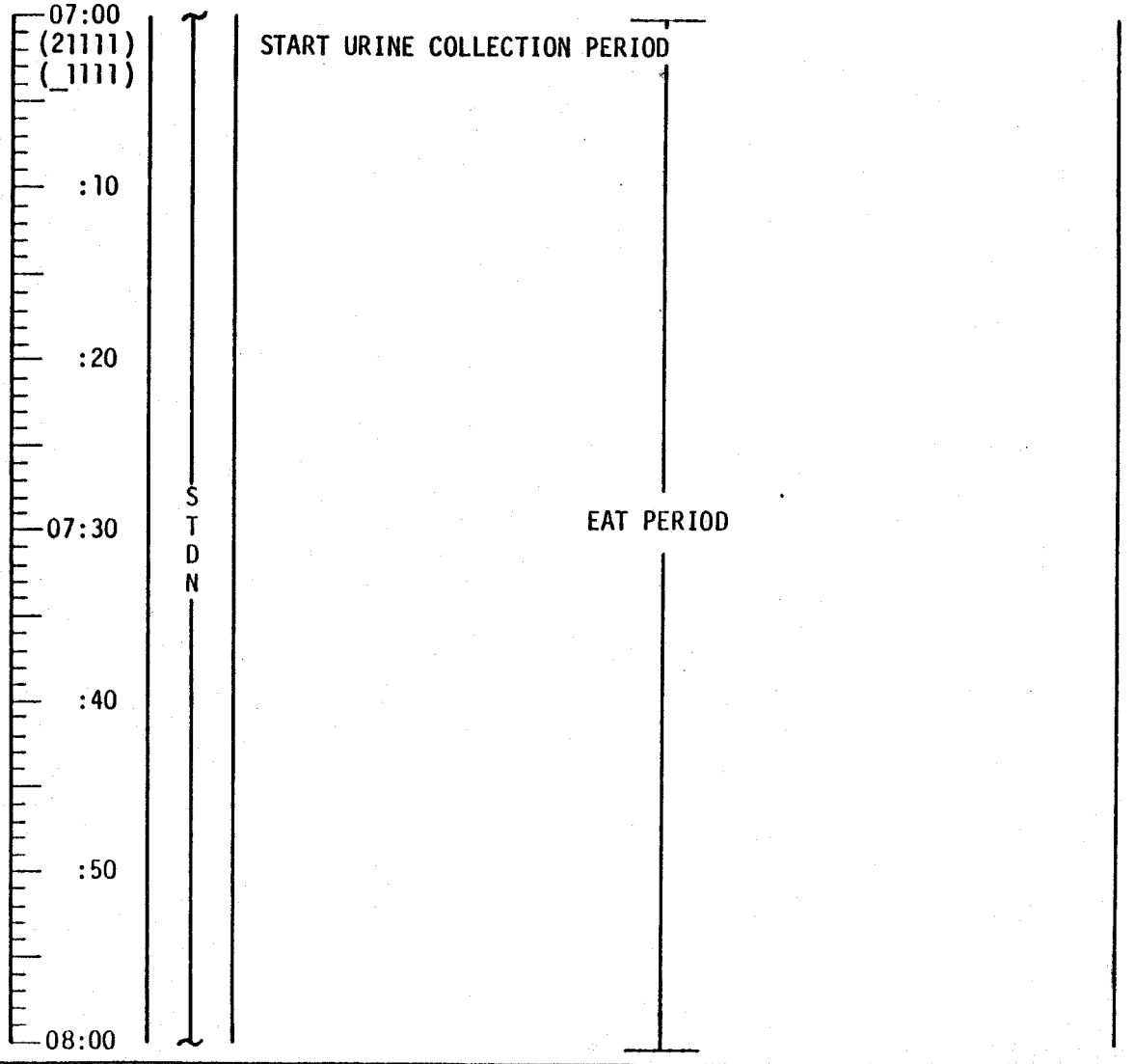
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0353 CST

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	07:00 - 08:00	1/TLC	3-11

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H 0453 CST

08:00

UPLINK
ZERO TRUNNION BIAS (21111)(_1111)
DESIRED ORIENT (PTC)

:10

:20

UPDATE
QUADS TO ENABLE (21101)(_1111)
FOR PTC SPINUP
P37 PAD (L/O+15,25)
FLIGHT PLAN

08:30

:40

:50

09:00

STDN

WASTE STOWAGE VENT VALVE - CLOSE

LIMIT CYCLE - ON
ATT DEADBAND - MIN
RATE - LOW
BMAG (3) - ATT 1/RATE 2
SC CONT - SCS
P52 (OPTION 3)
(LAUNCH ORIENT)

STARS _____, _____
SA _____, _____
TA _____, _____

REPORT: GYRO TORQUING ANGLES
P52 (OPTION 1)
(PTC ORIENT)
GDC ALIGN
SC CONT - CMC
BMAG (3) - RATE 2
CYCLE CMC MODE - FREE/AUTO
V48 (21101)(_1111)

CSM G&C CHECKLIST

PASSIVE THERMAL CONTROL (G&N) PAGE G/8-2
V49 MNVR TO PTC ATTITUDE
(N20,90,000)
H2 HEATERS 1 & 2 - AUTO (VERIFY)
H2 FANS 3 - AUTO
O2 HEATERS 1 & 2 - OFF
O2 HEATERS 3 - AUTO
P20 OPT 2, X-AXIS
N78 (0,0,0)
N79 (-0.4200, +000.50)
N34 (0,0,0)
LiOH CANISTER CHANGE
(3 INTO A, STOW 1 in B5)

CSM SYSTEMS CHECKLIST

PRE-SLEEP CHECKLIST PAGE S/1-29
COMM - OMNI

PTC

NOTES

SC INTERIOR PHOTOGRAPHY AT CREW OPTION
CM/DAC/10/CIN- SPOT
(T2.8,1/60,3) 6 fps

MAG (II) ___, FR #____

PTC REFSMMAT ATT
R 196, P 169, Y 055

P52 IMU REALIGN
N71: __ __,__ __
N05: __ __ __.__ __
N93:
X __ __.__ __ __
Y __ __.__ __ __
Z __ __.__ __ __
GET __ __ __:__ __:__ __

IF MCC-1 IS REQUIRED
PERFORM AT GET 08:45

DAP LOAD STATUS
(21101)(_1111)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	08:00 - 09:00	1/TLC	3-12

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0553 CST

NOTES

09:00

:20

:40

10:00

:20

:40

11:00

STDN

CHARGE BATTERY B

FILM MAGS REQUIRED FOR NEXT DAY

EL: KK

REST PERIOD
(5.75 HOURS)

PTC

DAP LOAD STATUS
(21101)(_1111)

S-IVB APS MCC-2
GET ~10:20
ΔV NOM. ZERO

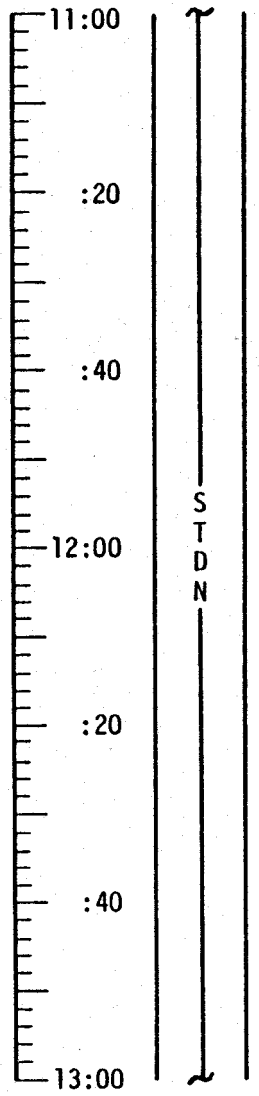
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	09:00 - 11:00	1/TLC	3-13

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0753 CST



S
T
D
N

REST PERIOD
(5.75 HOURS)

PTC

NOTES

DAP LOAD STATUS
(21101)(_1111)

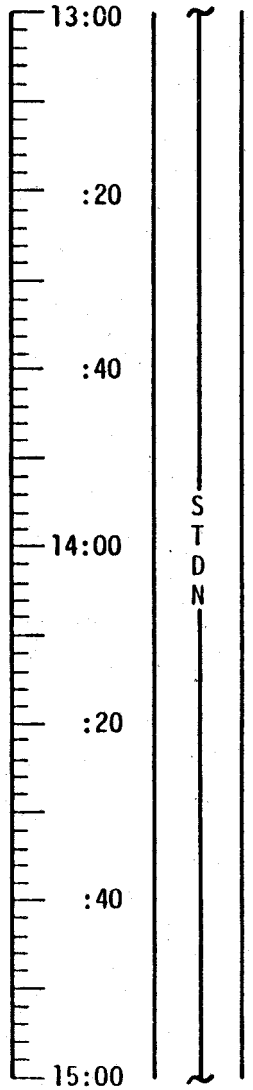
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	11:00 - 13:00	1/TLC	3-14

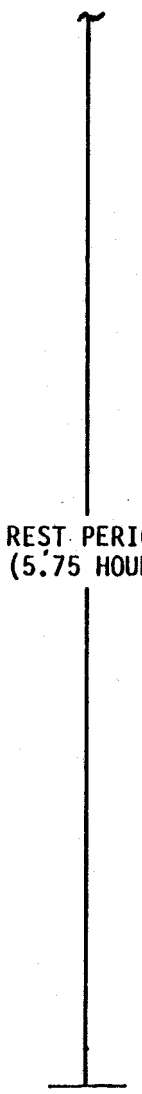
FLIGHT PLANNING BRANCH

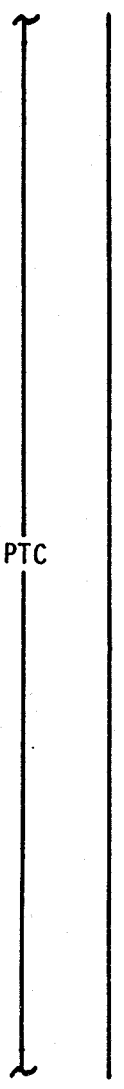
FLIGHT PLAN

MCC-H

0953 CST







NOTES

DAP LOAD STATUS
(21101)(_1111)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	13:00 - 15:00	1/TLC	3-15

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1153 CST

15:00

:10

:20

15:30

:40

:50

16:00

STDN

CSM SYSTEMS CHECKLIST

POST-SLEEP CHECKLIST PAGE S/1-29

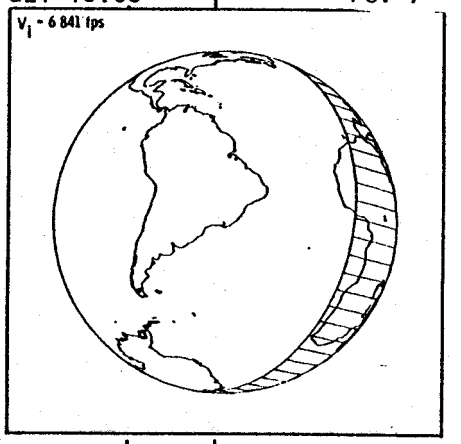
H_2 HEATERS 1&2 - OFF

EAT PERIOD

PTC

GET=15:00

FOV=7°



NOTES

DAP LOAD STATUS
(21101)(_1111)

EARTH DISTANCE
~66,783 NM

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	15:00 - 16:00	2/TLC	3-16

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1253 CST

16:00
(21101)
(_1111)

:10

:20

16:30

:40

:50

17:00

STDN

EAT PERIOD

PTC

NOTES

UPDATE
P37 PADS (LAUNCH +35,45,55, & 65)
FLIGHT PLAN

P52 (OPTION 3)
(PTC ORIENT)

REPORT: GYRO TORQUING ANGLES
GDC ALIGN

CSM G&C CHECKLIST

EXIT G&N PTC PAGE G/8-3
WASTE STOWAGE VENT VLV - OPEN

P52 IMU REALIGN
N71: __ __,__ __
N05: __ __ __.__ __
N93:
X __ __.__ __ __
Y __ __.__ __ __
Z __ __.__ __ __
GET __ __ __:__ __:__ __

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	16:00 - 17:00	2/TLC	3-17

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1353 CST

NOTES

17:00
(21101)
(_1111)

V49 MNVR TO OPTICS CALIBRATION ATTITUDE (17:13)
(175,298,330) HGA P -58, Y 307

P23 CISLUNAR NAVIGATION
OPTICS CALIBRATION STAR N70 (00022)
P00
V49 MNVR TO SIGHTING ATTITUDE (17:17)
(204,313,340) HGA P -55, Y 357
V67 (+80000) (+00070) (+00003)
P23 CISLUNAR NAVIGATION
5 MARKS ON EACH STAR, UPDATE STATE VECTOR

:10

:20

1. N70 (00000) (00000) (00110)
   N88 (-53277)(+14235)(+83420)

113 MERAK
(ENH)

STDN

17:30

2. N70 (00000) (00000) (00120)
   N88 (+02745)(+99128)(+12885)

55 BETELGEUSE
(EFH)

:40

:50

3. N70 (00000) (00000) (00110)
   N88 (-84900)(+40299)(+34176)

151 GAMMA PRIME
LEONIS
(ENH)

18:00

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	17:00 - 18:00	2/TLC	3-18

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1453 CST

NOTES

18:00
(21101)
(_1111)

:10

:20

18:30

:40

:50

19:00

STDN

4. N70 (00000) (0000Q) (00120)
N88 (+00780)(+70773)(+70644)

106 MENKALINAN
(EFH)

P00
V49 MNVR TO OPTICS CALIBRATION ATTITUDE (18:22)
(175,298,330) HGA P -58, Y 307
P23 CISLUNAR NAVIGATION
OPTICS CALIBRATION STAR N70 (00022)
CONFIGURE FOR URINE DUMP

O_2 FUEL CELL PURGE
SAMPLE BUSS's (3) - STOW SAMPLES (3)
DUMP URINE FROM BUSS's (3) - STOW
START NEW URINE COLLECTION PERIOD
WASTE WATER DUMP TO 10 PERCENT
CHARGE BATTERY A

CSM EXP/EVA CHECKLIST
PC & MC FILM CYCLING PAGE X/1-17

ON STDN CUE: CYCLE FILM

CMD
DATA SYS - OFF

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	18:00 - 19:00	2/TLC	3-19

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1553 CST

NOTES

19:00 (21101) (_1111)

LMP DON BIOMED HARNESS

:10

OMNI B
SECURE HGA: MAN, WIDE P -52, Y 270

CSM G&C CHECKLIST

PASSIVE THERMAL CONTROL PAGE G/8-2
V49 MNVR TO PTC ATTITUDE
(N20,090,000)
P20 OPT 2, X-AXIS
N78 (0,0,0)
N79 (-0.4200, +000.50)
N34 (0,0,0)

UPDATE
QUADS TO ENABLE
FOR PTC SPINUP
FLIGHT PLAN

:20

S
T
D
N

19:30

CHECK LMP BIOMED
CDR DOFF BIOMED HARNESS

EARTH PHOTOS
CM/EL/250-CEX(f8,1/250,∞) 4 FR

:40

MAG (KK) _____, FR # _____

PTC

:50

20:00

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	19:00 - 20:00	2/TLC	3-20

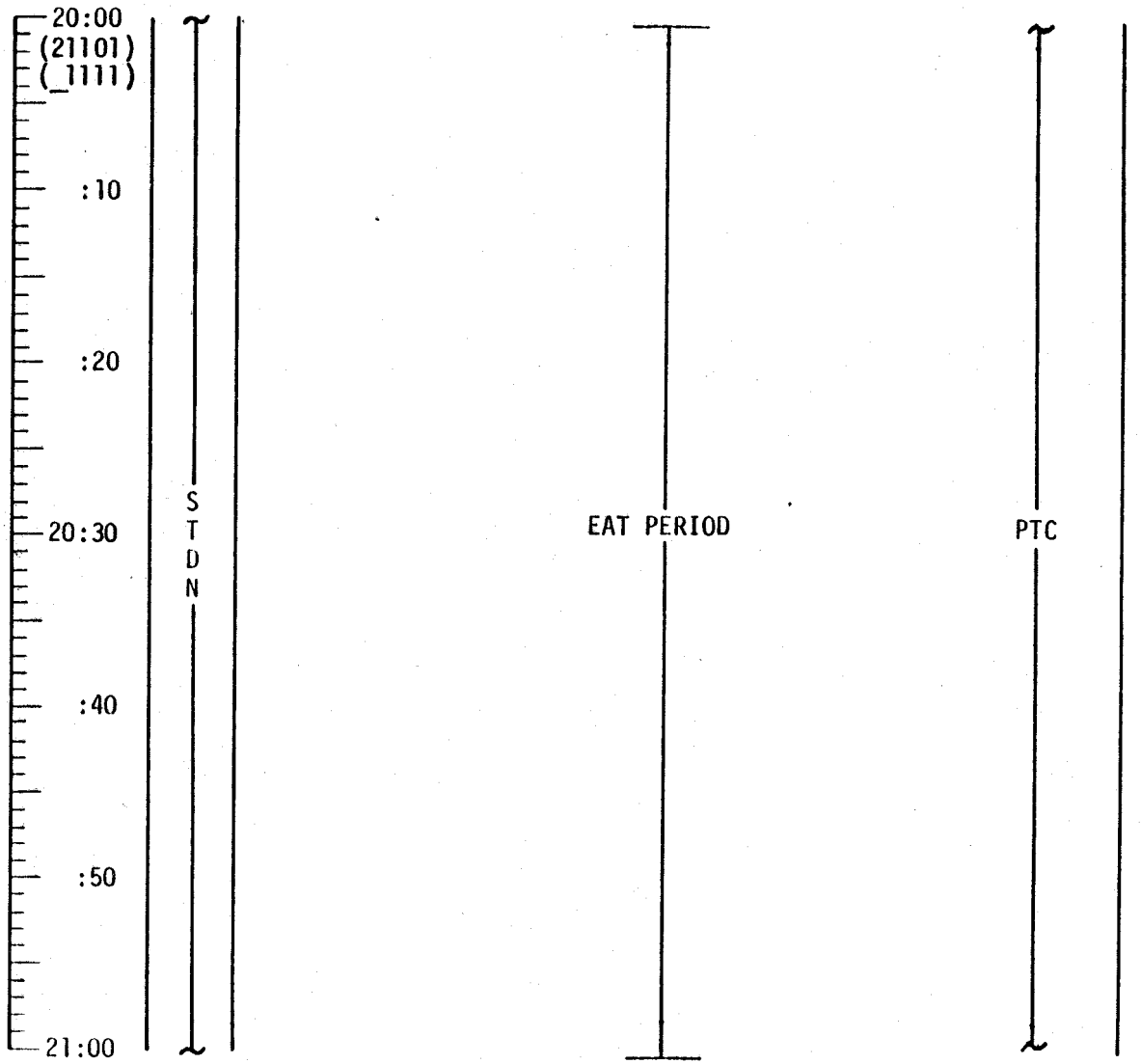
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1653 CST

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	20:00 - 21:00	2/TLC	3-21

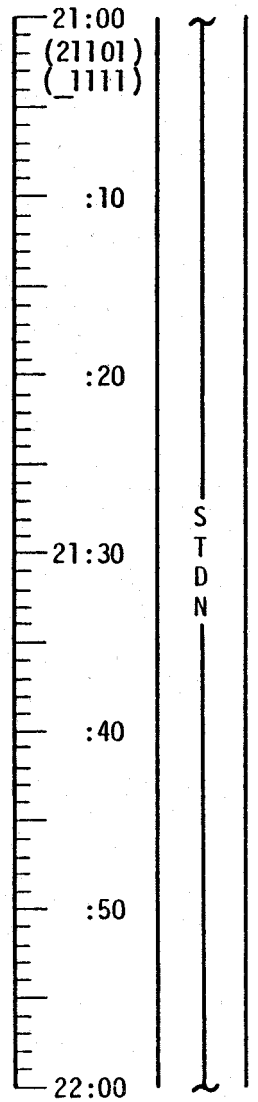
FLIGHT PLANNING BRANCH

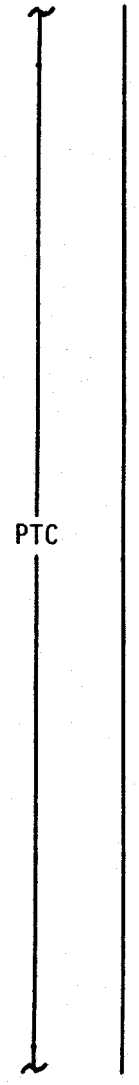
FLIGHT PLAN

MCC-H

1753 CST

NOTES





MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	21:00 - 22:00	2/TLC	3-22

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1853 CST

NOTES

22:00
(21101)
(_1111)

:10

:20

UPDATE
FLIGHT PLAN

22:30

:40

:50

23:00

STDN

CREW EXERCISE PERIOD

PTC

WASTE STOWAGE VENT VLV - CLOSE
LiOH CANISTER CHANGE
(4 INTO B, STOW 2 IN B5)

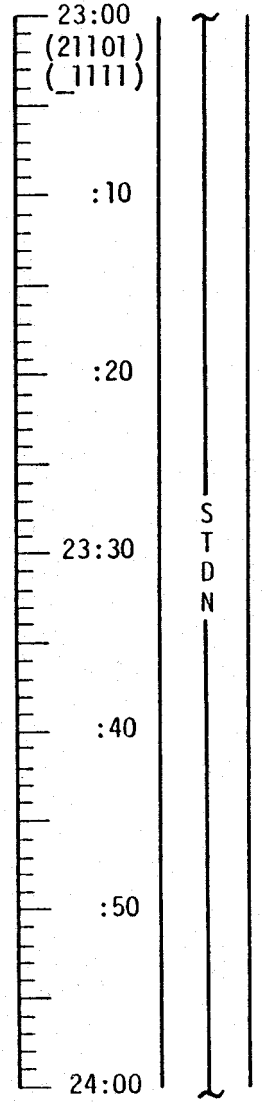
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	22:00 - 23:00	2/TLC	3-23

FLIGHT PLANNING BRANCH

FLIGHT PLAN

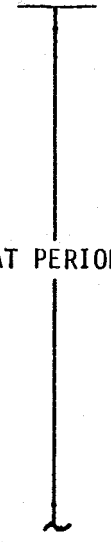
MCC-H

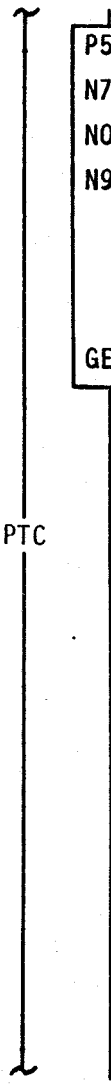
1953 CST



P52 OPTION 3
(PTC ORIENT)

REPORT: GYRO TORQUING ANGLES
GDC ALIGN





NOTES

P52 IMU REALIGN
N71: __ __,__ __
N05: __ __ __.__ __
N93:
X __ __.__ __ __
Y __ __.__ __ __
Z __ __.__ __ __
GET __ __ __:__ __:__ __

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	23:00 - 24:00	2/TLC	3-24

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2053 CST

NOTES

24:00
(21101)
(_1111)

:10

:20

24:30

:40

:50

25:00

STDN

EAT PERIOD

PTC

CSM SYSTEMS CHECKLIST

PRE-SLEEP CHECKLIST PAGE S/1-29
COMM - OMNI
FILM MAGS REQUIRED FOR NEXT DAY

DAC: HH

ONBOARD READOUT

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

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	24:00 - 25:00	2/TLC	3-25

FLIGHT PLANNING BRANCH

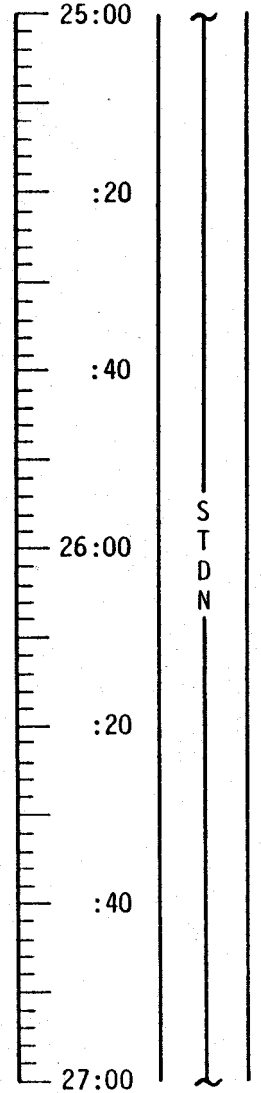
FLIGHT PLAN

MCC-H

2153 CST

NOTES

DAP LOAD STATUS
(21101)(_1111)



STDN

REST PERIOD
(8 HOURS)

PTC

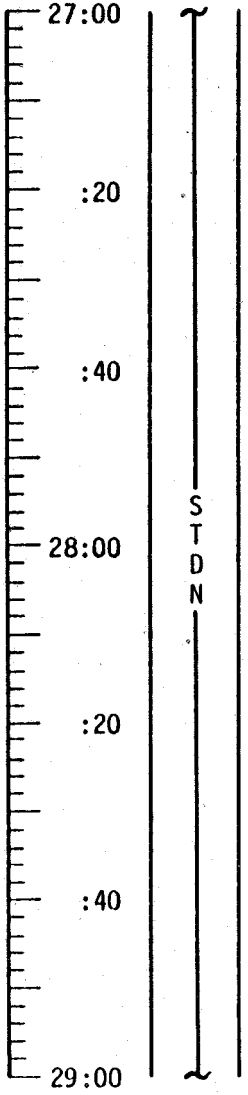
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	25:00 - 27:00	2/TLC	3-26

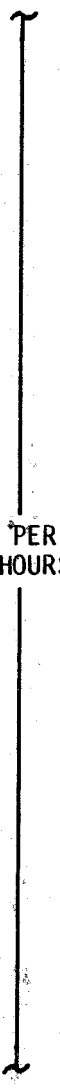
FLIGHT PLANNING BRANCH

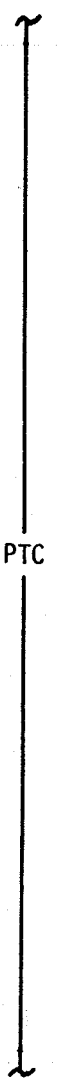
FLIGHT PLAN

MCC-H

2353 CST







NOTES

DAP LOAD STATUS
(21101)(_1111)

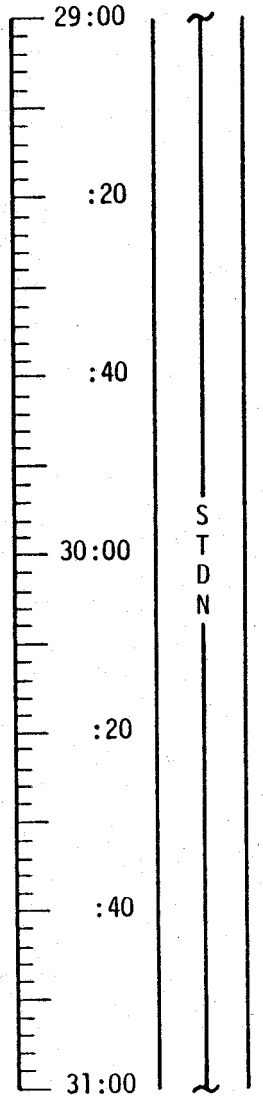
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	27:00 - 29:00	2/TLC	3-27

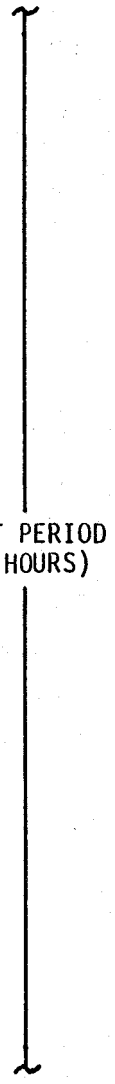
FLIGHT PLANNING BRANCH

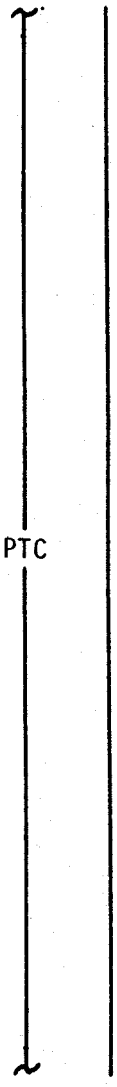
FLIGHT PLAN

MCC-H

0153 CST







NOTES

DAP LOAD STATUS
(21101)(_1111)

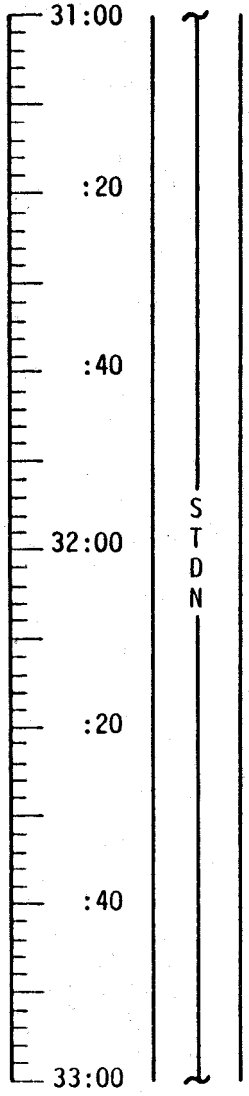
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	29:00 - 31:00	2/TLC	3-28

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0353 CST



S
T
D
N

REST PERIOD
(8 HOURS)

PTC

NOTES

DAP LOAD STATUS
(21101)(_1111)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	31:00 - 33:00	2/TLC	3-29

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0553 CST

33:00

:10

:20

33:30

:40

:50

34:00

UPDATE
GO/NO-GO FOR MCC-2

S
T
D
N

CSM SYSTEMS CHECKLIST

POST-SLEEP CHECKLIST PAGE S/1-29

LiOH CANISTER CHANGE
(5 INTO A, STOW 3 IN B5)

*CSM G&C CHECKLIST

*EMS ΔV TEST & NULL BIAS CHECK PAGE G/2-5

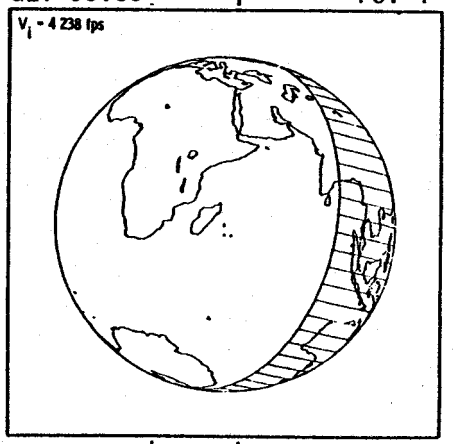
*REPORT: BIAS

EAT PERIOD

PTC

GET=33:00

FOV=4°



NOTES

DAP LOAD STATUS
(21101)(_1111)

EARTH DISTANCE
~121,497 NM

*PERFORM IF MCC-2
IS REQUIRED

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	33:00 - 34:00	3/TLC	3-30

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0653 CST

34:00
(21101)
(_1111)

:10

:20

34:30

:40

:50

35:00

STDN

EAT PERIOD

PTC

NOTES

P52 IMU REALIGN	
N71:	__ __.__ __
N05:	__ __ __.__ __
N93:	
X	__ __.__ __ __
Y	__ __.__ __ __
Z	__ __.__ __ __
GET	__ __ __:__ __:__ __

UPLINK
CSM S.V. & V66
MCC-2 TGT LOAD

UPDATE
MCC-2 MNVR PAD
FLIGHT PLAN

CONFIGURE FOR URINE DUMP
H_2 PURGE LINE HTRS-ON

P52 (OPTION 3)
(PTC ORIENT)
REPORT: GYRO TORQUING ANGLES
GDC ALIGN
* CSM G&C CHECKLIST
*EXIT G&N PTC PAGE G/8-3
*P30 EXTERNAL ΔV

*V49 MNVR TO PAD BURN ATTITUDE
*SXT STAR CHECK

*PERFORM IF MCC-2 IS REQUIRED

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	34:00 - 35:00	3/TLC	3-31

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-2
BURN TABLE

SPS LIMITS	P OR Y RATES	ATT DEVIATION	MANUAL START ACTION	OVERBURN SHUTDOWN CRITERIA	RCS TRIM GUIDELINES
TIGHT	10°/SEC TERMINATE	+10° TERMINATE	NO MANUAL STARTS NO RESTART	BT + 1 SEC	IF < 2 FPS, TRIM X-AXIS TO 0.2 FPS IF > 2 FPS, NO TRIM

BALL VLV FAILURE - START ON SUSPECT BANK
Shut down good bank to verify; reenable

FLIGHT PLAN

MCC-H

0753 CST

35:00
(21101)
(_1111)

:10

:20

35:30

:40

(21111)
(_1111)

:50

36:00

STDN

*IF SPS MIDCOURSE REQUIRED:
* PRE SPS BURN SIM PREP (CUE CARD)

H_2 & O_2 FUEL CELL PURGE
SAMPLE BUSS's (3) - STOW SAMPLES (3)
DUMP URINE FROM BUSS's (3) - STOW
START NEW URINE COLLECTION PERIOD
WASTE WATER DUMP TO 10 PERCENT
H_2 PURGE LINE HTRS - OFF
*P40 SPS THRUSTING OR P41 RCS THRUSTING

MCC-2

TIG: 35:30
BT: NOM ZERO
ΔVT: NOM ZERO
ULLAGE: NONE

*V66 SET CSM S.V. INTO LM S.V.
*IF SPS MIDCOURSE PERFORMED:
* PC - OFF
* MC - OFF
* SM/AC PWR - OFF

*REPORT: BURN STATUS
V48 (21111)(_1111)
REPORT: LM/CM ΔP
IF LM/CM ΔP <2.7 PSID, TUNNEL VENT VLV - VENT
UNTIL ΔP ≥2.7 PSID.

CHARGE BATTERY A

NOTES

*PERFORM IF MCC-2 IS REQUIRED

BURN STATUS REPORT

X	X					ΔTIG
X	X					BT
						V_{gx}
		TRIM				
X	X	X				R
X	X	X				P
X	X	X				Y
						V_{gx}
						V_{gy}
						V_{gz}
						ΔV_c
X	X	X				OX
X	X	X				FUEL
X	X	X				UNBAL

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	35:00 - 36:00	3/TLC	3-33

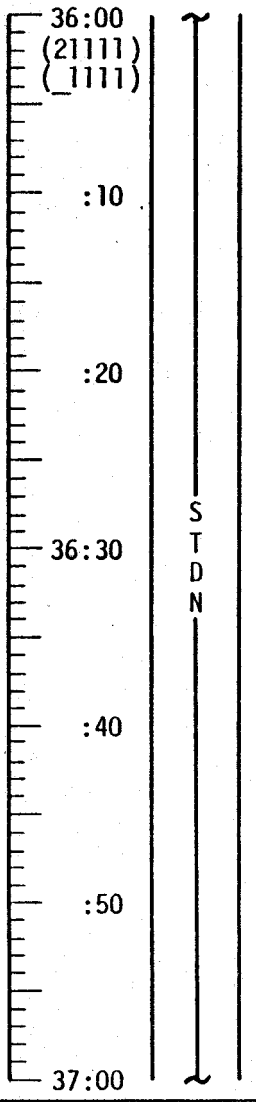
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0853 CST

NOTES



CMP DON BIOMED HARNESS

CHECK CMP BIOMED
LMP DOFF BIOMED HARNESS

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	36:00 - 37:00	3/TLC	3-34

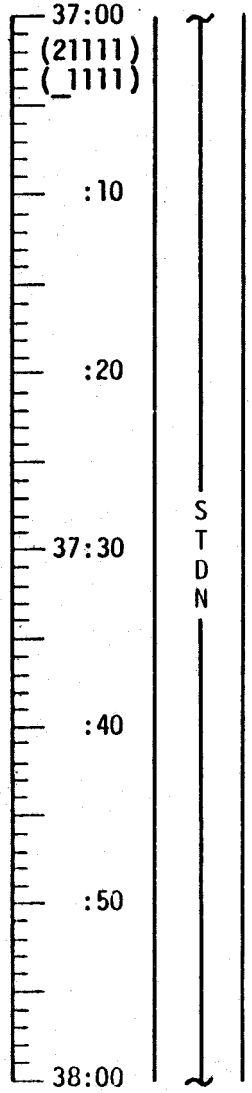
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0953 CST

NOTES



UPDATE
FLIGHT PLAN

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	37:00 - 38:00	3/TLC	3-35

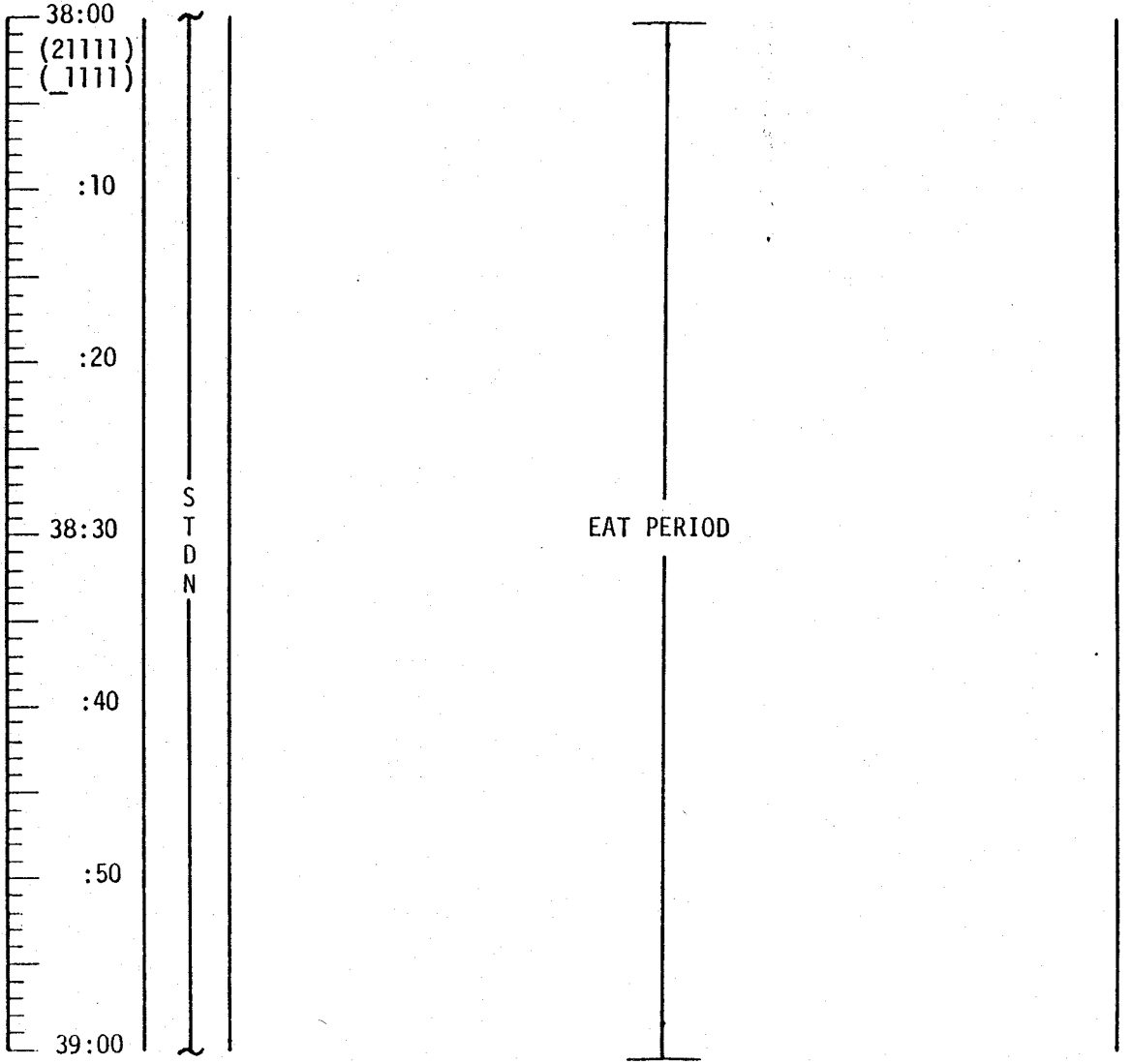
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1053 CST

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	38:00 - 39:00	3/TLC	3-36

FLIGHT PLANNING BRANCH

CSM TO LM TRANSFER LIST (TLC)

CSM LOCATION	ITEM	LM LOCATION
A2	JETTISON BAG	TEMP STOW
ICG	SCISSORS (1)	DATA FILE
CCU CABLE	CWG ELECT ADAPT W/CAP (2)	ON COMM CARRIER
ON CREW	COMM CARR (2)	ON CREW
R5	INFLIGHT STRAPS (4)	ON O2 UMP
R5	UTILITY STRAPS (3)	LHSSC
R13	70MM MAG (4) IN BAG	AFT RHSSC (BW-L, HCEX-A,E & F)
R13	70MM MAG (3) IN BAG	AFT ENG COVER (BW-H&I,HCEX-D)
R13	70MM MAG (3) IN BAG	FWD RHSSC (BW-G,HCEX-B&C)
R13	16MM MAG (3) IN BAG	2-W/BAG IN ISA (P,Q) 1-WINDOW SEQ CAMR (O)
A8	70MM MAG (3) IN BAG W/DOS	AFT ENG COVER(BW-J,K,R)
A8	70MM MAG (2) IN BAG	RHSSC (BW-M,N)
R3	LM ACTIVATION C/L (2)	DATA FILE
A8	LGT WGT HEADSETS	LHSSC
A8	CWG'S (2)	AFT ENG COVER
A7	APK	AFT BLKHD

FLIGHT PLAN

MCC-H | 1153 CST | NOTES

39:00 (21111) (_1111)

PREPARE ITEMS PER CSM TO LM TRANSFER LIST

O_2 HEATERS 1,2 - AUTO

:10

V49 MNVR TO LM
CHECKOUT ATTITUDE
(39:30)

(299,089,000)
HGA: P -30, Y 270

:20

DIRECT O_2 VLV - OPEN
UNTIL CABIN PRESS
=5.7 PSIA, then CLOSE

S
T
D
N

39:30

:40

REMOVE TSB FROM
TUNNEL AND TEMP
STOW
COUCHES: CDR - 0°, CMP - 0°, LMP - 180°
TUNNEL LIGHTS - ON
CM/LM PRESSURE EQUALIZATION (DECAL)
TUNNEL HATCH REMOVAL (DECAL)
PROBE REMOVAL (DECAL)
DROGUE REMOVAL (DECAL)
O_2 HEATERS 1,2 - OFF

:50

O_2 HEATERS 3 - AUTO

40:00

FLIGHT PLAN

CSM		LM		MCC-H
CMP	1253 CST	CDR	LMP	
REPORT: DOCKING TUNNEL INDEX ANGLE OPEN LM HATCH LMP TRANSFER TO LM TRANSFER ITEMS PER LM ACTIVATION CHECKLIST	40:00 (21111) (_1111)	LM ACTIVATION CHECKLIST PAGE 1-3 IVT TO LM		
		IVT TO LM	ENTRY STATUS CHECK	
	:10			
	:20	HOUSEKEEPING		
	40:30			
	:40			
	:50			
	41:00			UPDATE TO CSM LOI -5 HR FLYBY FLIGHT PLAN

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	40:00 - 41:00	3/TLC	3-39

FLIGHT PLANNING BRANCH

FLIGHT PLAN

CSM		LM		MCC-H
CMP	1353 CST	CDR	LMP	
	41:00 (21111) (_1111)	HOUSEKEEPING		
	:10			
LM PWR - RESET/OFF (AT LMP REQUEST) REPORT: GET(___:___:___) SYS TEST - 7D SYS TEST IND = 0 VOLTS		COMM ACTIVATION		
	:20			
CSM/LM VHF VOICE CHECK (SIMPLEX A&B)	41:30	S-BAND/VHF SIMPLEX VOICE TEST		
	:40			
		OPS PRESSURE C/O		
LM PWR - ON (AT LMP REQUEST) REPORT: GET(___:___:___) SYS TEST - 7D SYS TEST IND = 0.5-3.2 VOLTS	:50	COMM DEACTIVATION		
	42:00	LMP & CDR IVT TO CSM PAGE 1-21		

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	41:00 - 42:00	3/TLC	3-40

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1453 CST

NOTES

42:00
(21111)
(_1111)

CLOSE LM HATCH
INSTALL DROGUE (DECAL)
INSTALL PROBE (DECAL)
HATCH INSTALLATION (DECAL)
LM TUNNEL VENT VALVE - LM/CM ΔP
TUNNEL LIGHTS - OFF

:10

:20

(21101)
(_1111)

CYCLE CMC MODE - FREE/AUTO
V48 (21101)(_1111)

STDN

42:30

CSM G&C CHECKLIST

PASSIVE THERMAL CONTROL (G&N) PAGE G/8-2

V49 MNVR TO PTC ATTITUDE HGA: P -59, Y 90 REACQ, NARROW (029,090,000)

:40

WAIT FOR RATES TO DAMP FOR HEAT FLOW PERFORMANCE

CSM EXP/EVA CHECKLIST

HEAT FLOW & CONVECTION PREPARATION PAGE X/2-4
MAG (HH)

:50

43:00

LM TO CM TRANSFER LIST (TLC)

LM LOCATION	ITEM	CM LOCATION
ON CREW	COMM CARR (2)	ON CREW
ON CREW	CWG ADPTR W/CAP(2)	CCU CABLE
TEMP. STG.	LM ACT C/L (1)	R3
TEMP. STG.	JETTISON BAG	A2
JETT BAG	DRINK BAG (2)	TEMP STOWAGE
JETT BAG	FOOD STICK (2)	TEMP STOWAGE

FLIGHT PLAN

MCC-H

1553 CST

NOTES

43:00
(21101)
(_1111)

:10

UPDATE
QUADS TO ENABLE
FOR PTC SPINUP

:20

*PERFORM HEAT FLOW AND
CONVECTION DEMONSTRATION

*REPEAT AT 45:20

43:30

S
T
D
N

:40

CSM EXP/EVA CHECKLIST

CMD
DATA SYS - ON

PC & MC FILM CYCLING PAGE X/1-17
ON STDN CUE: CYCLE FILM

:50

CMD
DATA SYS - OFF

OMNI A
SECURE HGA: MAN, WIDE P -52, Y 270
P20 OPT 2, X-AXIS (G&C PAGE G/8-2)
N78 (0,0,0)
N79 (-0.4200, +000.50)
N34 (0,0,0)

44:00

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	43:00 - 44:00	3/TLC	3-42

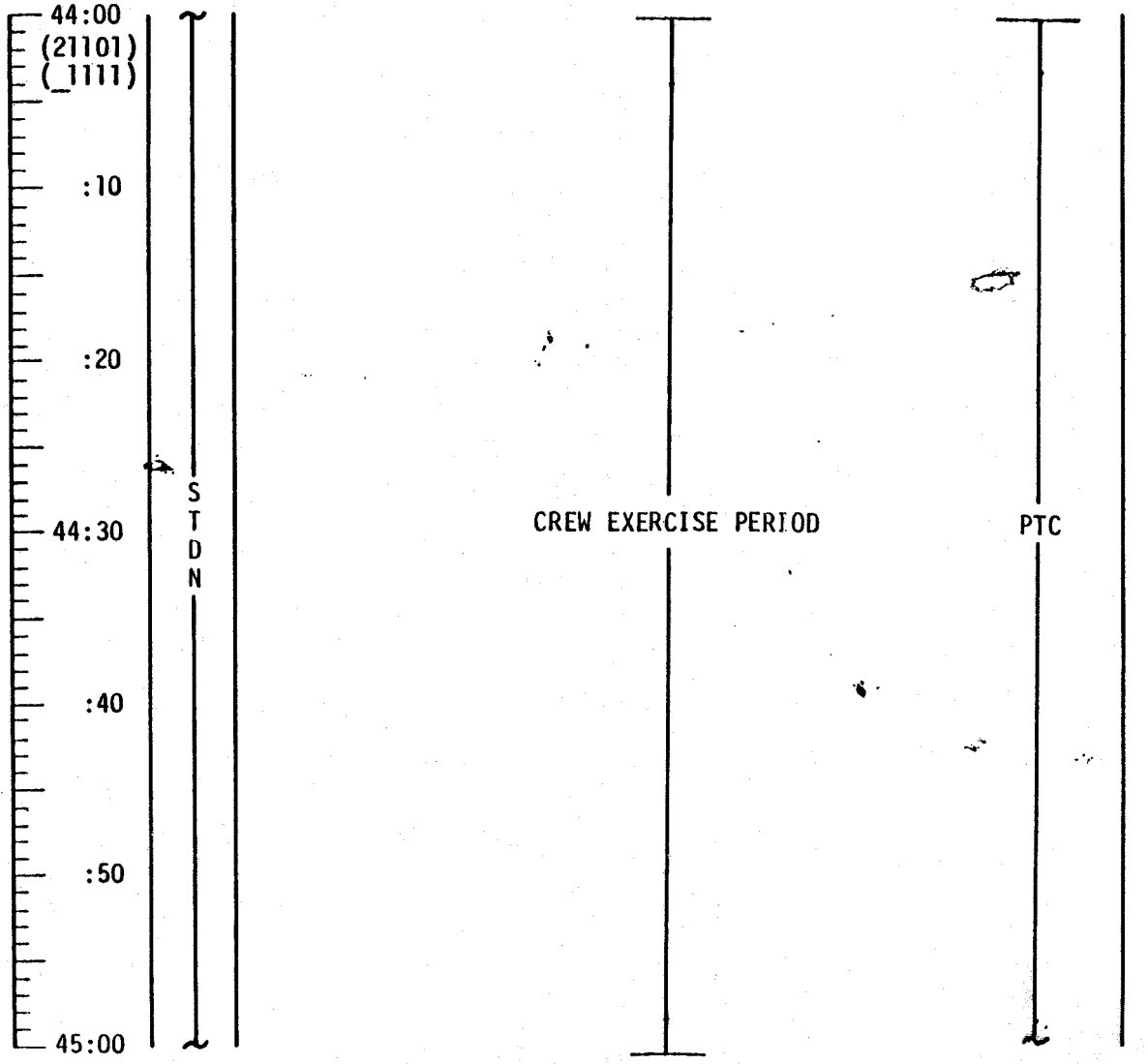
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1653 CST

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	44:00 - 45:00	3/TLC	3-43

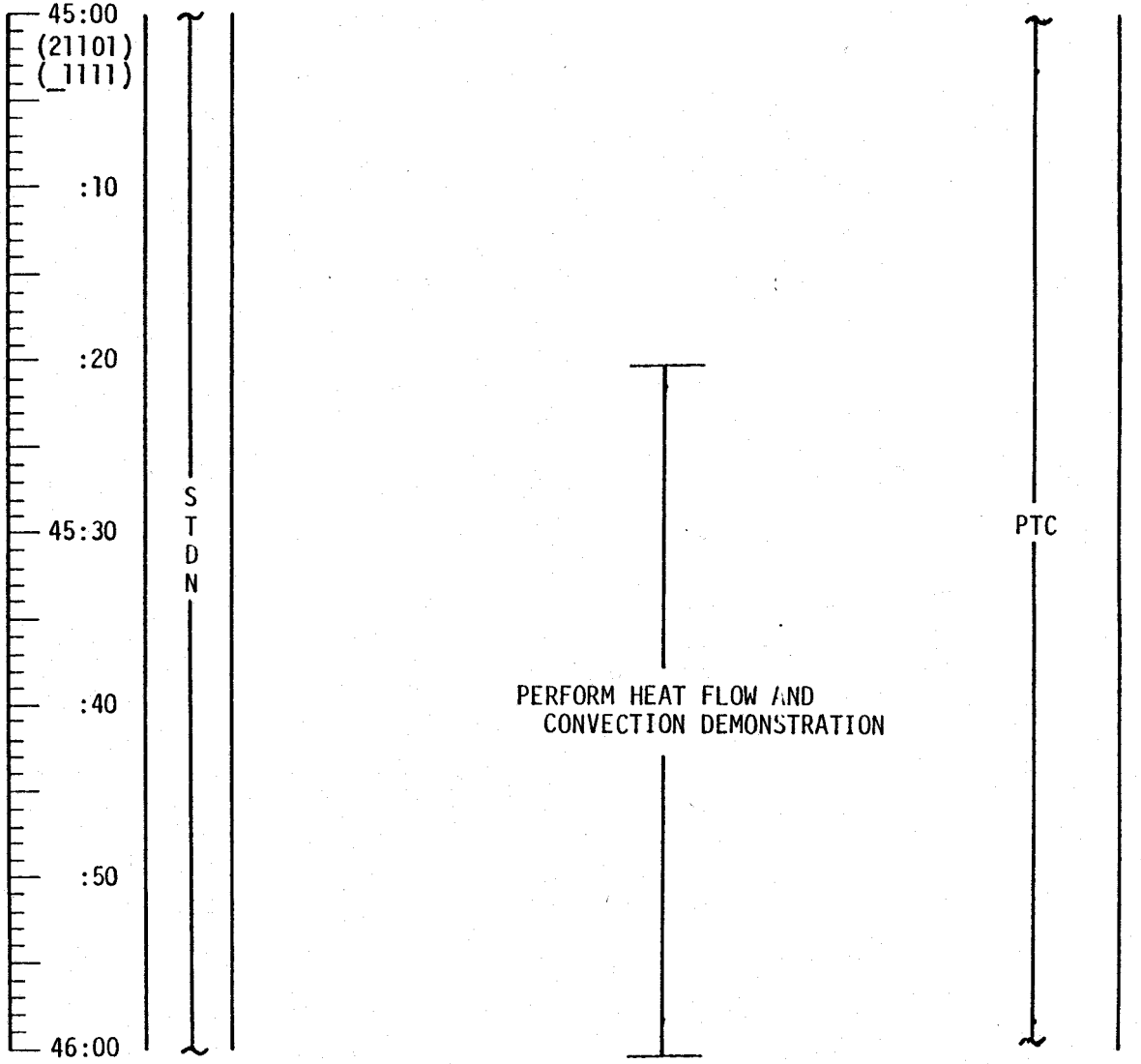
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1753 CST

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	45:00 - 46:00	3/TLC	3-44

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1853 CST

46:00
(21101)
(_1111)

:10

:20

46:30

:40

:50

47:00

STDN

STOW HEAT FLOW EQUIPMENT

UPDATE
FLIGHT PLAN

P52 OPT 3
(PTC ORIENT)

REPORT: GYRO TORQUING ANGLES
GDC ALIGN

LiOH CANISTER CHANGE
(6 INTO B, STOW 4 IN B5)

PTC

NOTES

ENTER LUNAR
PENUMBRA

P52 IMU REALIGN
N71: __ __,__ __ .
N05: __ __ __.__ __
N93:
X __ __.__ __ __
Y __ __.__ __ __
Z __ __.__ __ __
GET __ __ __:__ __:__ __

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	46:00 - 47:00	3/TLC	3-45

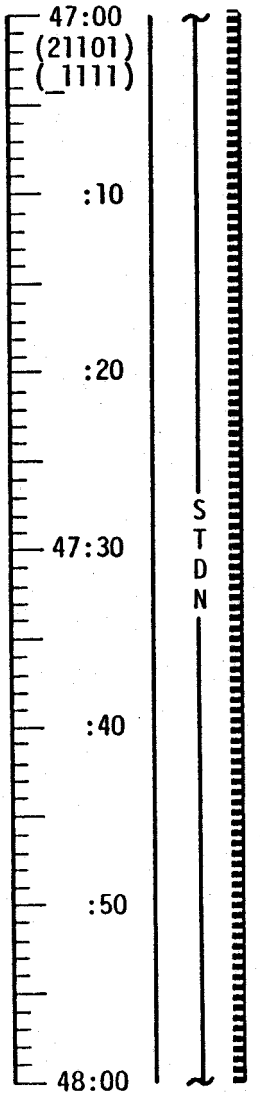
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1953 CST

NOTES



CDR DON BIOMED HARNESS

CHECK CDR BIOMED
CMP DOFF BIOMED HARNESS

EAT PERIOD

PTC

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	47:00 - 48:00	3/TLC	3-46

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2053 CST

48:00
(21101)
(_1111)

:10

:20

48:30

:40

:50

49:00

STDN

EAT PERIOD

CSM SYSTEMS CHECKLIST

PRE-SLEEP CHECKLIST PAGE S/1-29
COMM - OMNI
FILM MAGS REQUIRED FOR NEXT DAY

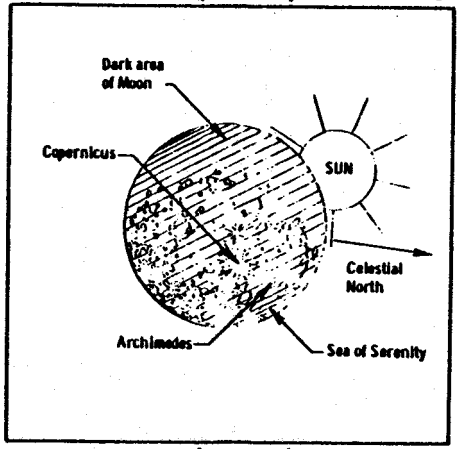
DAC: SS

NOTES

PTC

GET=50:00

FOV=3°



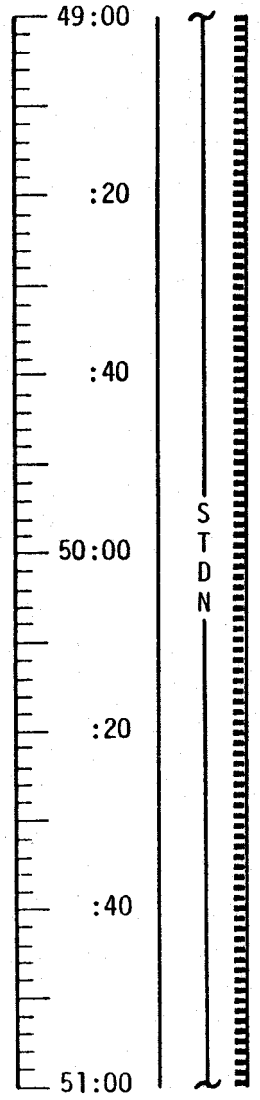
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	48:00 - 49:00	3/TLC	3-47

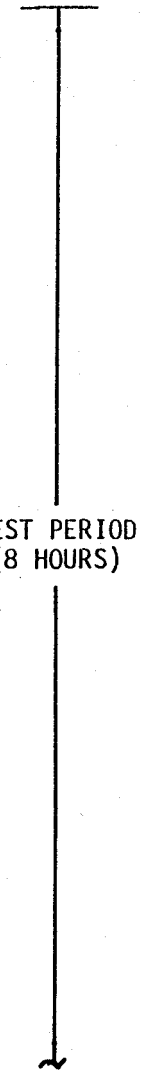
FLIGHT PLANNING BRANCH

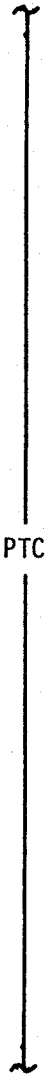
FLIGHT PLAN

MCC-H

2153 CST







NOTES

DAP LOAD STATUS
(21101)(_1111)

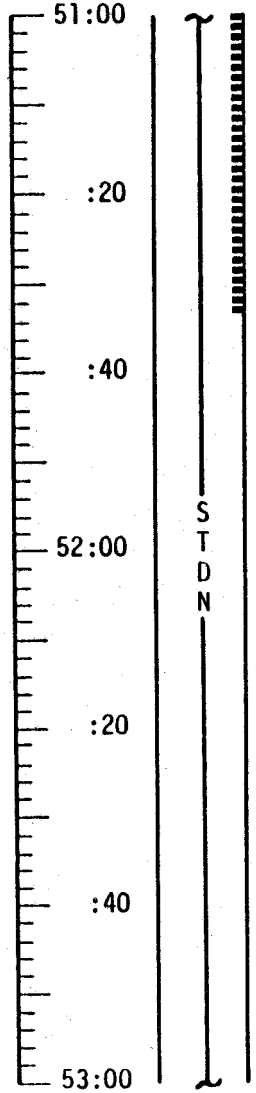
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	49:00 - 51:00	3/TLC	3-48

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2353 CST



STDN

REST PERIOD
(8 HOURS)

PTC

NOTES

DAP LOAD STATUS
(21101)(_1111)

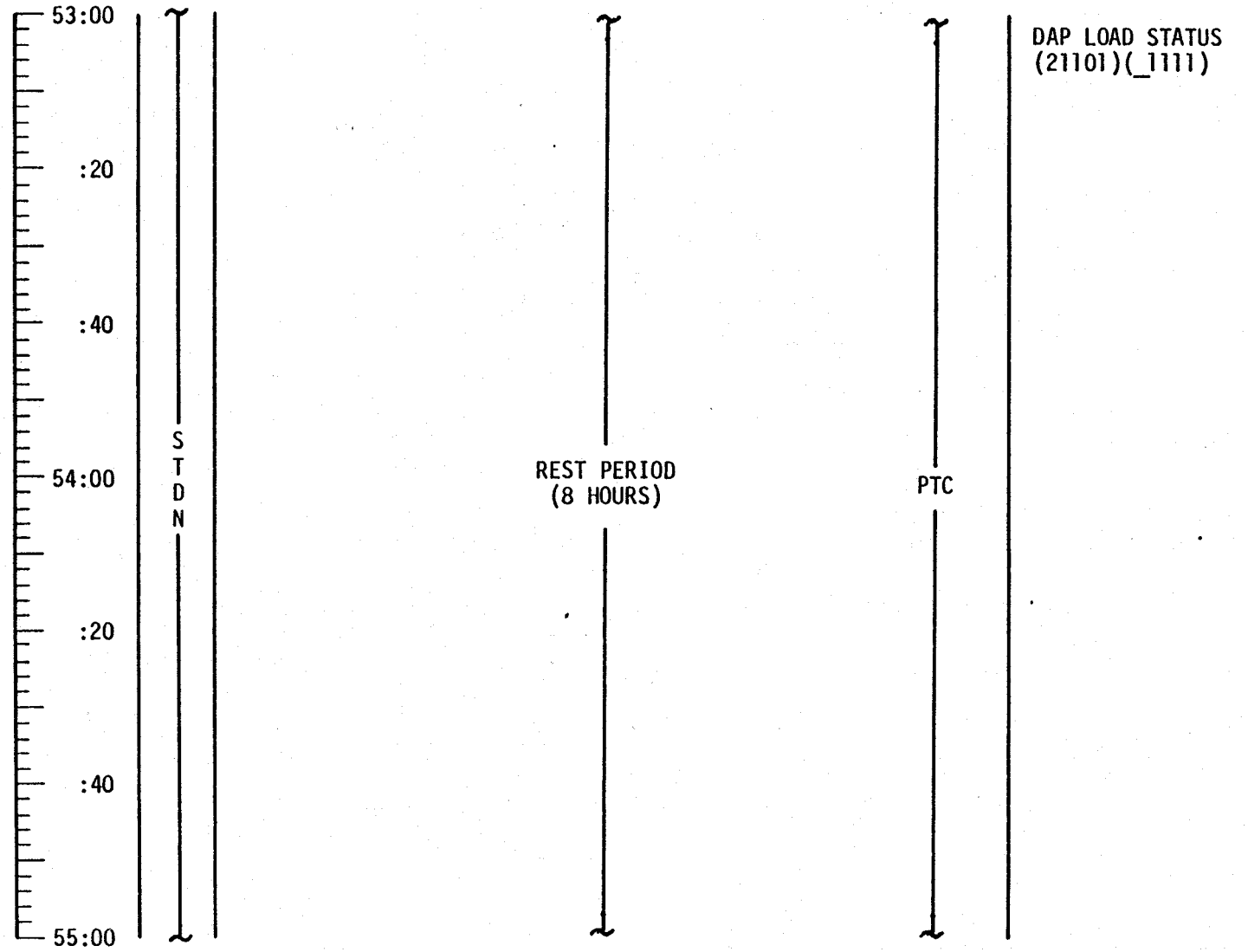
EXIT LUNAR PENUMBRA

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	51:00 - 53:00	3/TLC	3-49

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

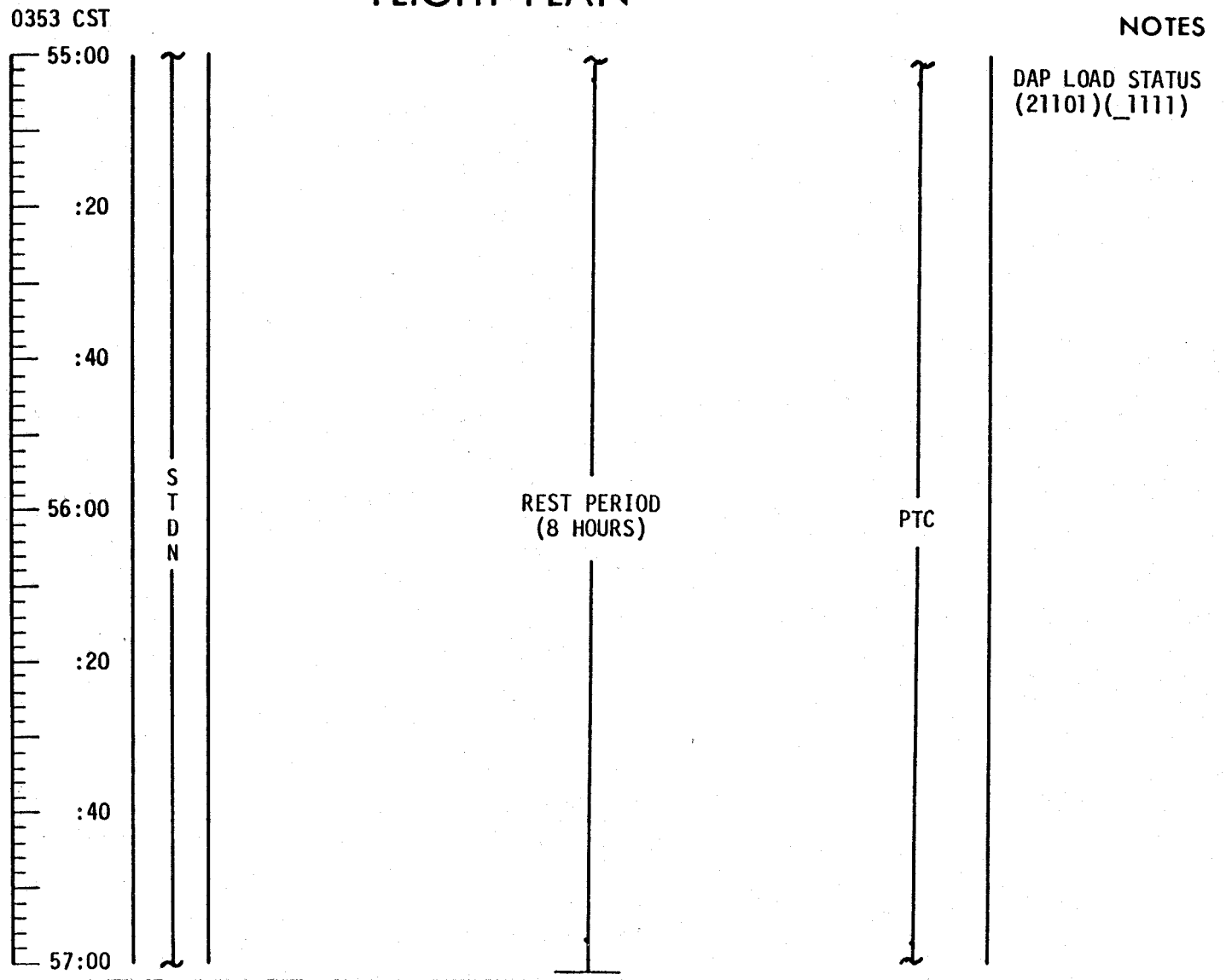


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	53:00 - 55:00	3/TLC	3-50

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	55:00 - 57:00	3/TLC	3-51

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0553 CST

57:00

:10

:20

57:30

:40

:50

58:00

STDN

CSM CHECKLIST

POST-SLEEP CHECKLIST PAGE S/1-29

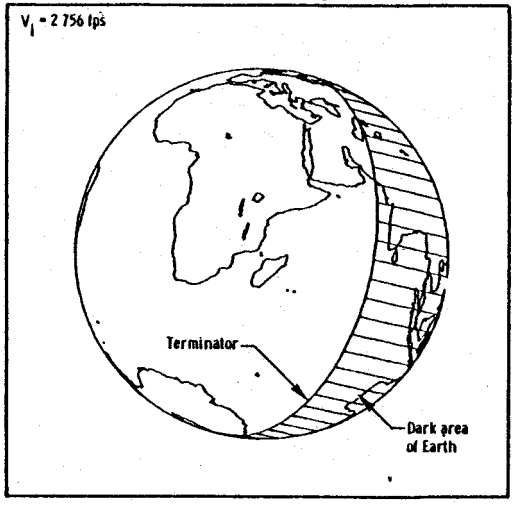
LiOH CANISTER CHANGE
(7 INTO A, STOW 5 IN B6)

EAT PERIOD

PTC

GET=58:00

FOV=3°



NOTES

DAP LOAD STATUS
(21101)(_1111)

EARTH DISTANCE
~170,566 NM

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	57:00 - 58:00	3/TLC	3-52

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0653 CST

NOTES

DAP LOAD STATUS
(21101)(_1111)

58:00

:10

:20

58:30

:40

:50

59:00

STDN

EAT PERIOD

CONFIGURE FOR URINE DUMP

PTC

UPDATE
CONSUMABLES STATUS
FLIGHT PLAN

SAMPLE BUSS's (3) - STOW SAMPLES (3)
DUMP URINE FROM BUSS's (3) - STOW
START NEW URINE COLLECTION PERIOD
WASTE WATER DUMP TO 10 PERCENT
O_2 FUEL CELL PURGE

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	58:00 - 59:00	4/TLC	3-53

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0753 CST

59:00

:10

:20

59:30

:40

:50

(21111)
(_1111)

60:00

STDN

LMP DON BIOMED HARNESS

CHECK LMP BIOMED
CDR DOFF BIOMED HARNESS

P52 (OPTION 3)
(PTC ORIENT)

REPORT: GYRO TORQUING ANGLES
GDC ALIGN

V48 (21111)(_1111)
CHARGE BATTERY B

NOTES

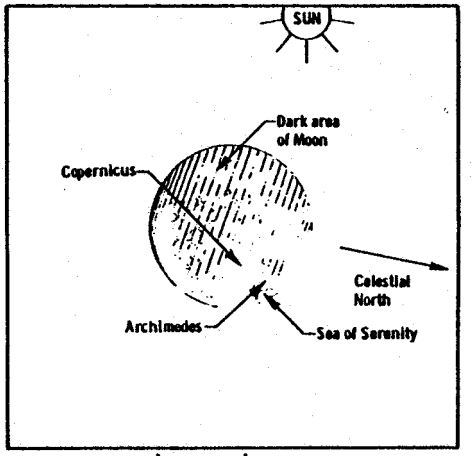
DAP LOAD STATUS
(21101)(_1111)

P52 IMU REALIGN
N71: __ __,__ __
N05: __ __ __.__ __
N93:
X __ __.__ __ __
Y __ __.__ __ __
Z __ __.__ __ __
GET __ __ __:__ __:__ __

PTC

GET=60:00

FOV=5°



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	59:00 - 60:00	4/TLC	3-54

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H | 0853 CST | NOTES

60:00 (21111) (_1111)

REPORT: LM/CM ΔP
IF ΔP >2.4 PSID:
O_2 HEATERS 1&2 - AUTO
PRESSURIZE CSM TO 5.7 PSIA

PTC

:10

COUCHES: CDR - 0°, CMP - 0°, LMP - 180°
CSM G&C CHECKLIST
EXIT G&N PTC PAGE G/8-3

V49 MNVR TO LM CHECKOUT ATTITUDE (60:30)
(302,088,000) HGA P -30, Y 270

:20

TUNNEL LIGHTS - ON
EQUALIZE CM/LM PRESSURE (DECAL)
TUNNEL HATCH REMOVAL (DECAL)
PROBE REMOVAL (DECAL)
DROGUE REMOVAL (DECAL)
REPORT: DOCKING TUNNEL INDEX ANGLE
O_2 HEATERS 1&2 - OFF (VERIFY)

STDN

60:30

CSM

OPEN LM HATCH

(AT LM REQUEST)
LM PWR - RESET/OFF
REPORT: GET ___:___:___

:40

:50

SYS TEST - 7D
SYS TEST IND = 0 VOLTS

LM

LM ACTIVATION CHECKLIST
IVT TO LM PAGE 2-1

TLM ACTIVATION

61:00

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	60:00 - 61:00	4/TLC	3-55

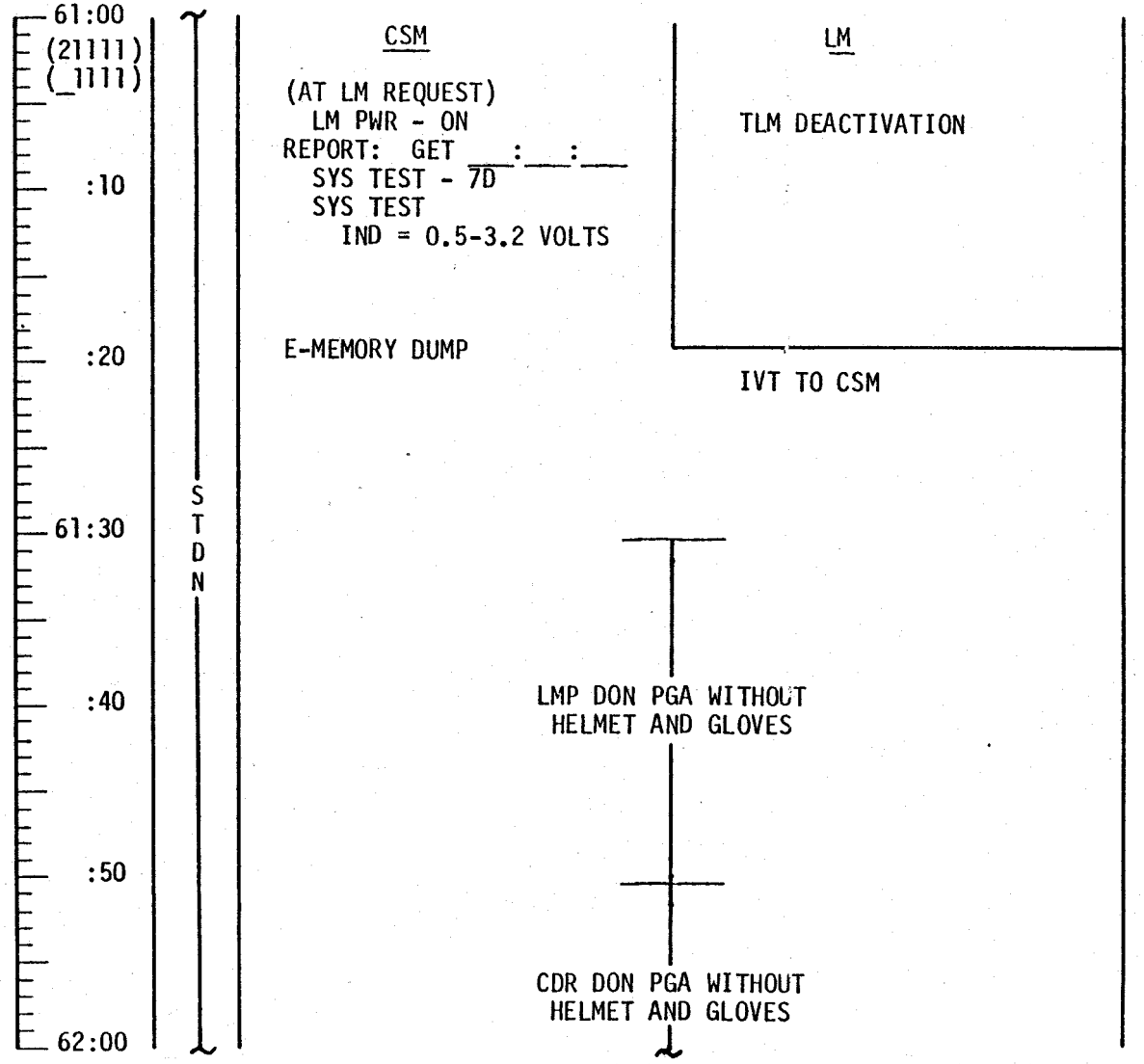
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0953 CST

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	61:00 - 62:00	4/TLC	3-56

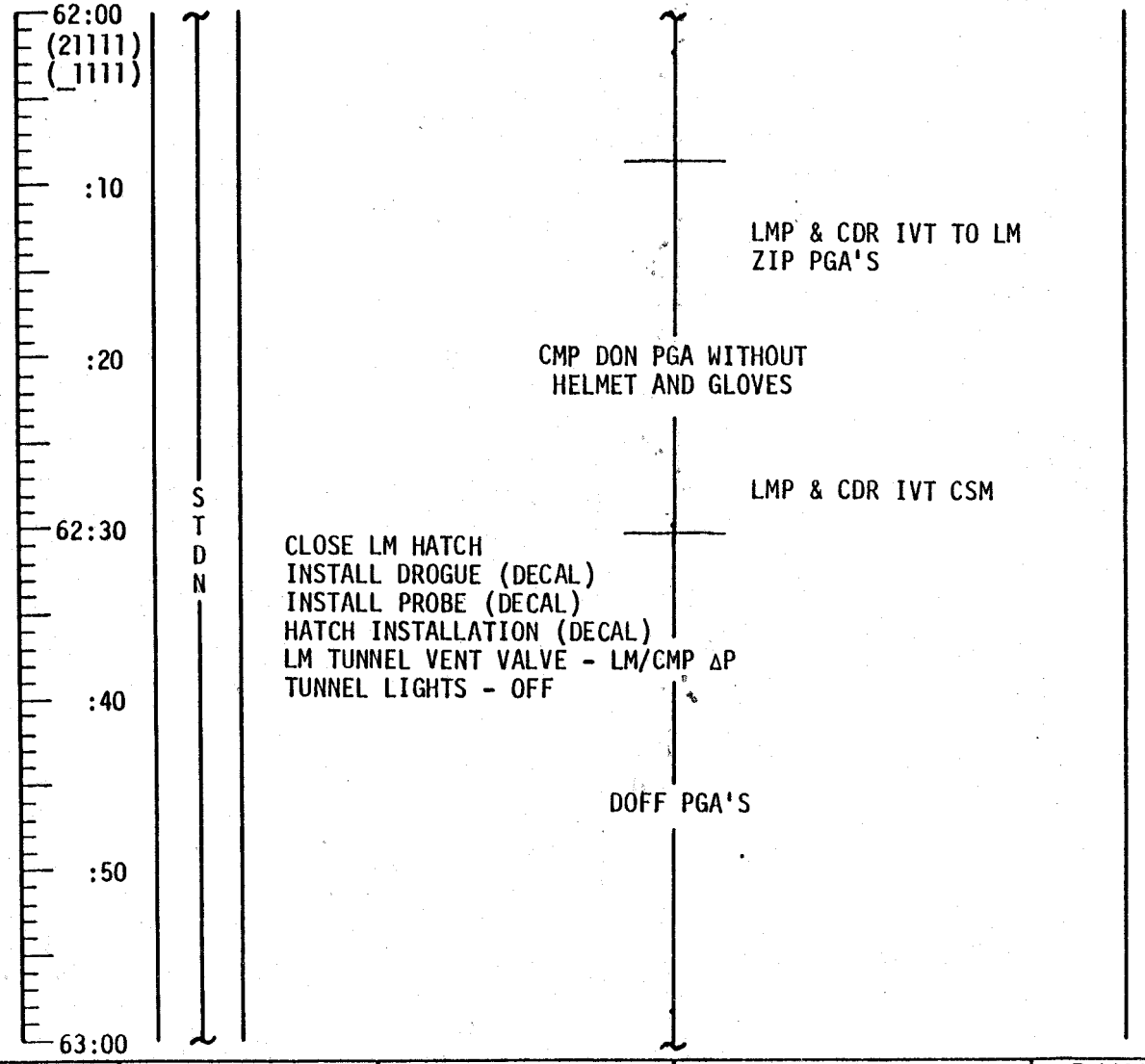
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1053 CST

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	62:00 - 63:00	4/TLC	3-57

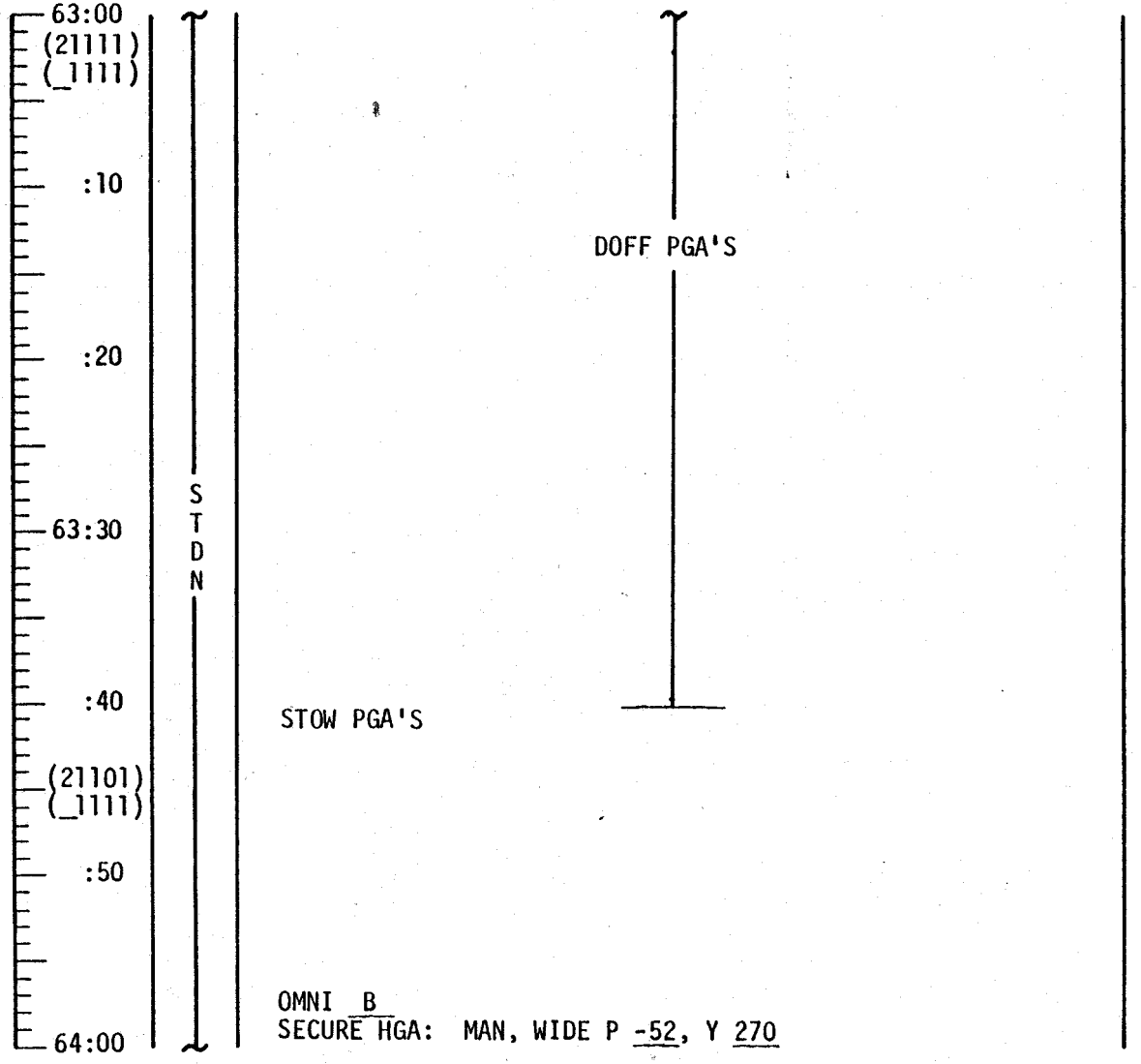
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1153 CST

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	63:00 - 64:00	4/TLC	3-58

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1253 CST

NOTES

UPDATE
FLIGHT PLAN
QUADS TO ENABLE
FOR PTC SPINUP

64:00
(21101)
(_1111)

CYCLE CMC MODE - FREE/AUTO
V48 (21101)(_1111)

CSM G&C CHECKLIST

PASSIVE THERMAL CONTROL (G&N) PAGE G/8-2
V49 MNVR TO PTC ATTITUDE
(N20,090,000)
P20 OPT 2, X-AXIS
N78 (0,0,0)
N79 (-0.4200, +000.50)
N34 (0,0,0)

:10

:20

64:30

:40

:50

H2 HEATERS 1 & 2 - AUTO

H2 FANS 3 - OFF

65:00

STDN

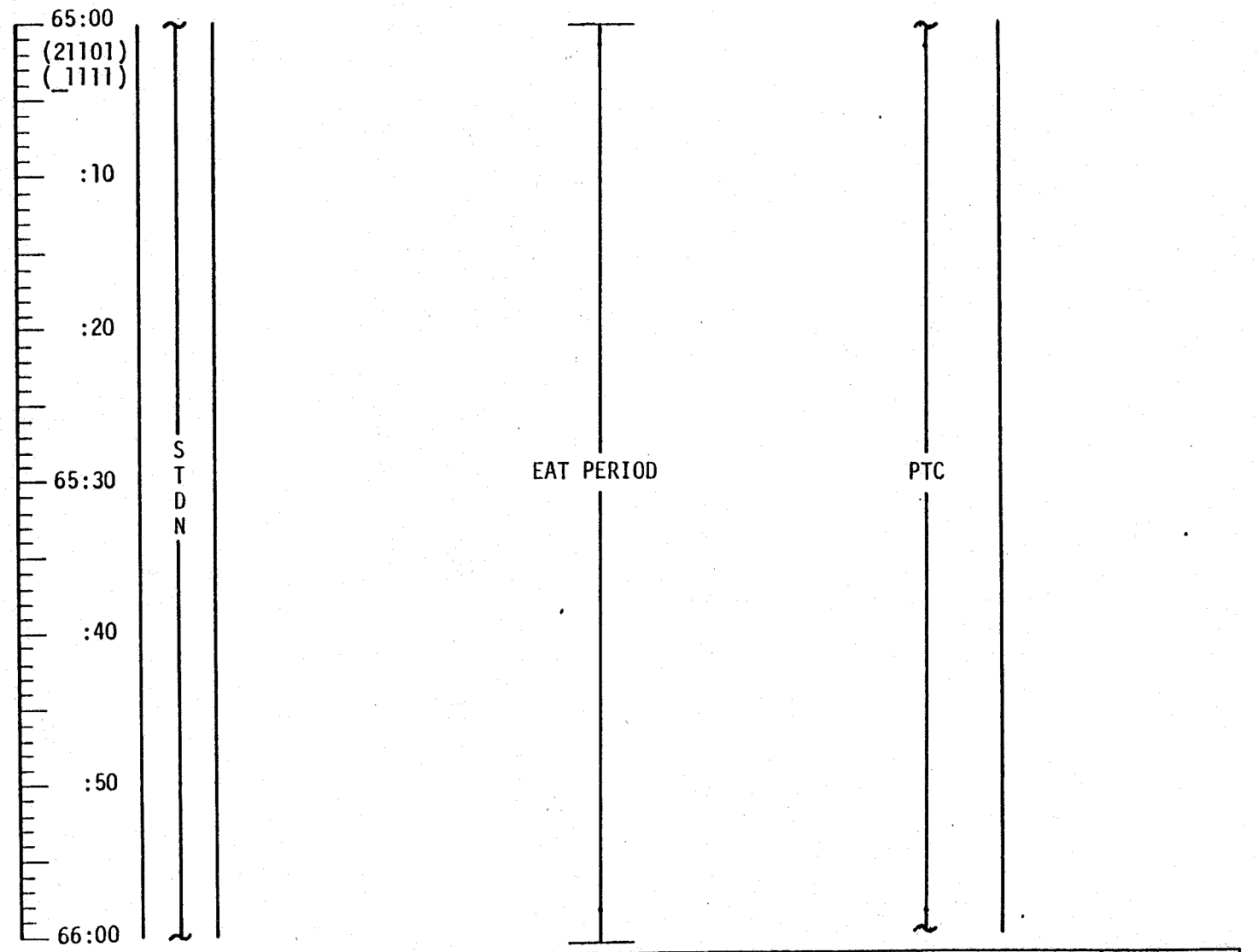
PTC

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	64:00 - 65:00	4/TLC	3-59

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H



NOTES

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	65:00 - 66:00	4/TLC	3-60

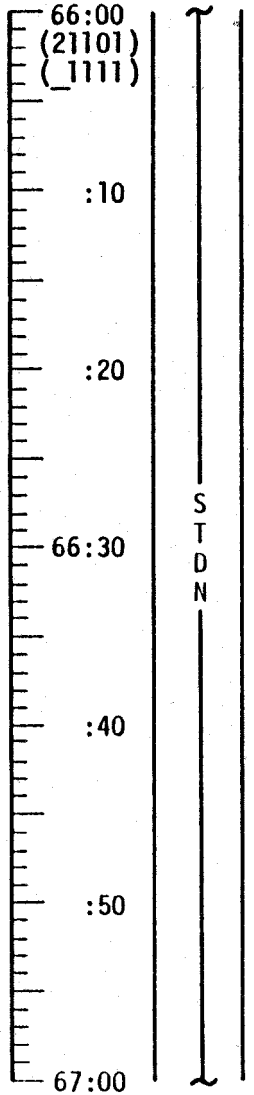
FLIGHT PLANNING BRANCH

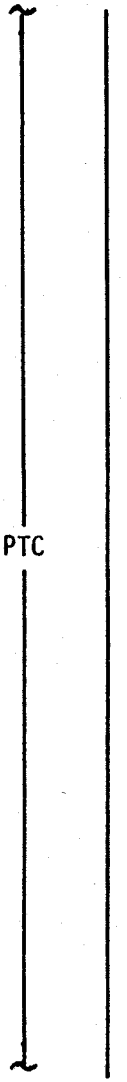
FLIGHT PLAN

MCC-H

1453 CST

NOTES





LOI -22 HOURS

IF MCC-3 IS REQD
PERFORM AT GET 66:55

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	8/28/72	66:00 - 67:00	4/TLC	3-61

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1553 CST

NOTES

UPDATE FLIGHT PLAN

67:00
(21101)
(_1111)

:10

:20

67:30

UPLINK LIFT-OFF TIME (IF REQUIRED)

:40

:50

68:00

STDN

SYNCHRONIZE MISSION TIMER TO CMC CLOCK (IF REQUIRED)
V05N01E, 1706E (T EPHEM VERIFICATION BY STDN,
COPY FROM DSKY ON STDN CUE).
COPY T-EPHEM IN FP SUPPLEMENT

T EPHEM UPDATE

OID	LOAD B
03	_ _ _ _ _
04	_ _ _ _ _
05	_ _ _ _ _

PTC

LIFTOFF TIME WILL BE UPDATED IF THE TIME OF REV 2 MERIDIAN CROSSING DIFFERS MORE THAN ± 1 MIN FROM 90:59:22

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	67:00 - 68:00	4/TLC	3-62

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1653 CST

NOTES

68:00
(21101)
(_1111)

CSM EXP/EVA CHECKLIST

ALFMED PAGE X/2-1
MAG (SS)

:10

:20

CMD
DSE RECORD
PCM BIT RATE - LOW

68:30

STDN

:40

ALFMED

PTC

:50

69:00

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	68:00 - 69:00	4/TLC	3-63

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1753 CST

NOTES

69:00
(21101)
(_1111)

:10

:20

69:30

:40

:50

70:00

STDN

ALFMED

PTC

CMD
DSE REWIND

CMP DON BIOMED HARNESS

CHECK CMP BIOMED
LMP DOFF BIOMED HARNESS

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	69:00 - 70:00	4/TLC	3-64

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1853 CST

70:00
(21101)
(_1111)

:10

CMD
DATA SYS-ON

:20

CMD
DATA SYS-OFF
DSE PLAYBACK

70:30

:40

:50

71:00

STDN

CSM EXP/EVA CHECKLIST

PC AND MC FILM CYCLING PAGE X/1-17
ON STDN CUE: ACQUIRE HGA
ON STDN CUE: CYCLE FILM

ON STDN CUE:
OMNI B
SECURE HGA: MAN, WIDE P -52, Y 270
P52 (OPTION 3)
(PTC ORIENT)

REPORT: GYRO TORQUING ANGLES
GDC ALIGN
LiOH CANISTER CHANGE
(8 INTO B, STOW 6 IN B6)

PTC

NOTES

P52 IMU REALIGN
N71: __ __,__ __
N05: __ __ __.__ __
N93:
X __ __.__ __ __
Y __ __.__ __ __
Z __ __.__ __ __
GET __ __ __:__ __:__ __

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	70:00 - 71:00	4/TLC	3-65

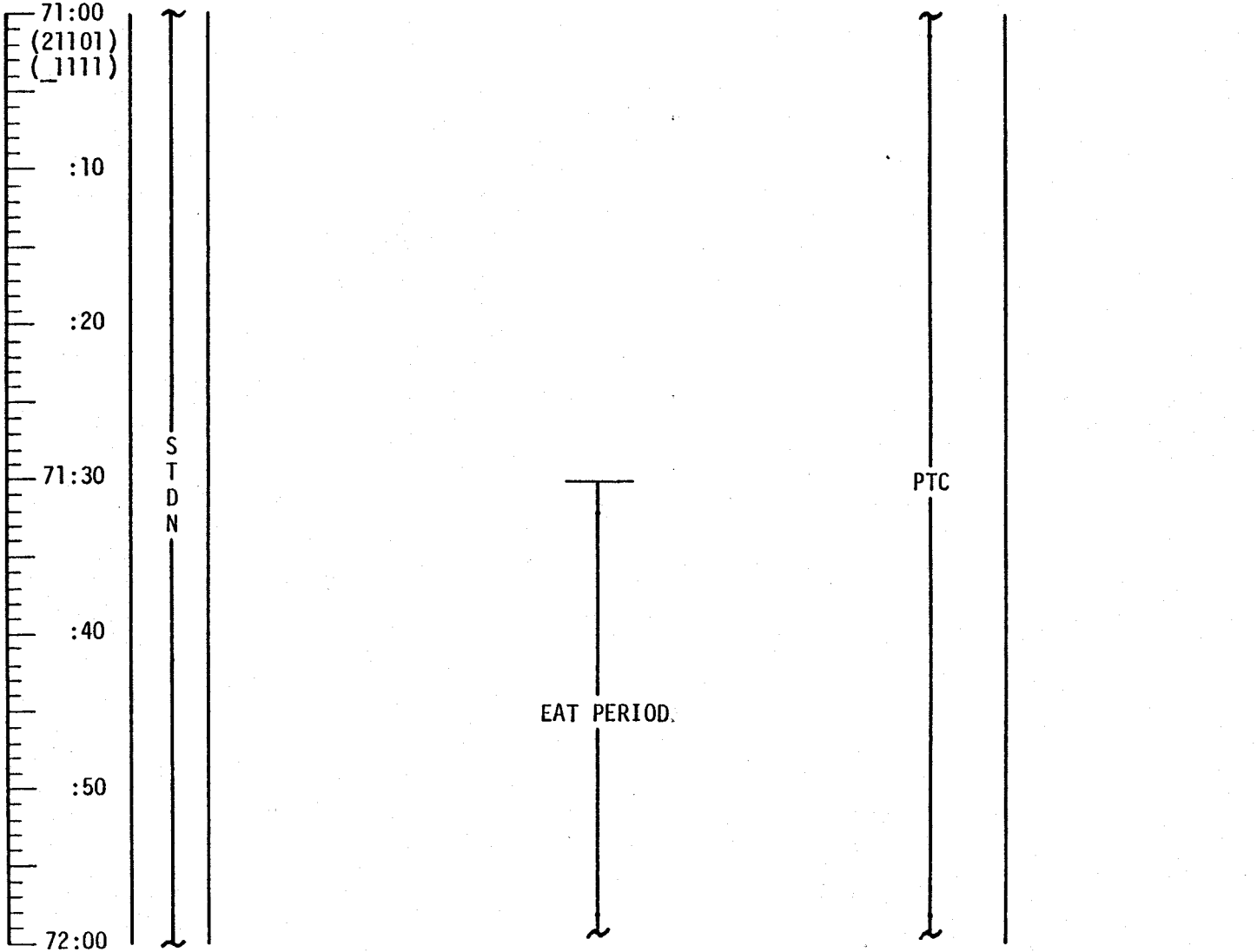
FLIGHT PLAN

MCC-H

1953 CST

NOTES

UPDATE
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	71:00 - 72:00	4/TLC	3-66

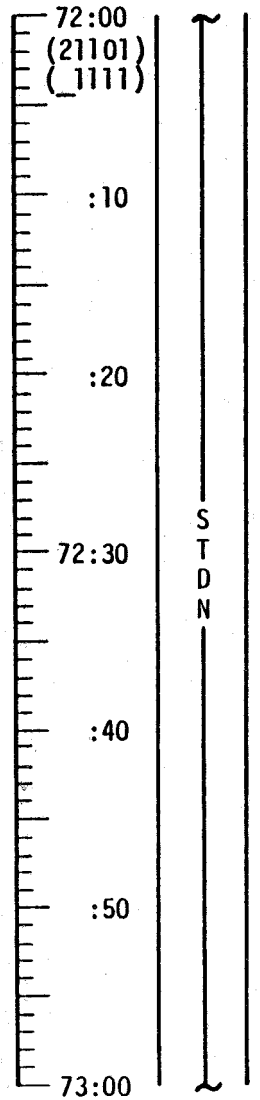
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2053 CST

NOTES



EAT PERIOD

PTC

CSM SYSTEMS CHECKLIST

PRE-SLEEP CHECKLIST PAGE S/1-29
COMM - OMNI
FILM MAGS REQUIRED FOR NEXT DAY

DAC: BB

EL: QQ, KK

ONBOARD READOUT

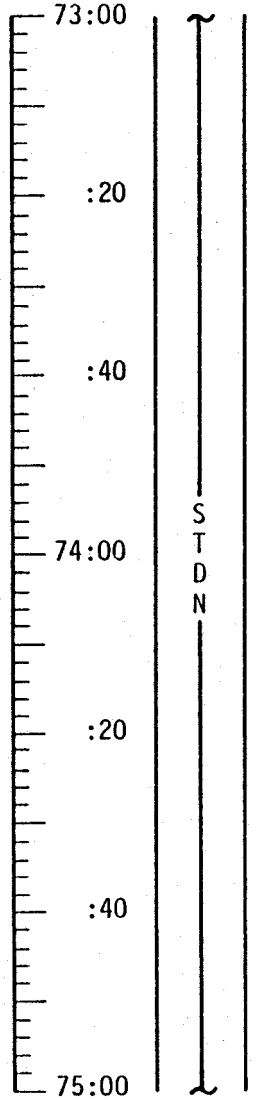
BAT C _____
PYRO BAT A _____
PYRO BAT B _____ _____
RCS A _____
B _____
C _____
D _____
DC IND SEL - MNA OR B

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	72:00 - 73:00	4/TLC	3-67

FLIGHT PLAN

MCC-H

2153 CST



STDN

REST PERIOD
(8 HOURS)

PTC

NOTES

DAP LOAD STATUS
(21101)(_1111)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	73:00 - 75:00	4/TLC	3-68

FLIGHT PLANNING BRANCH

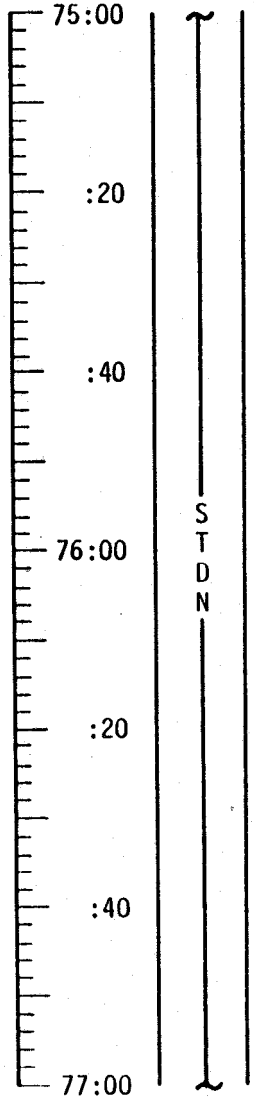
FLIGHT PLAN

MCC-H

2353 CST

NOTES

DAP LOAD STATUS
(21101)(_1111)



STDN

REST PERIOD
(8 HOURS)

PTC

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	75:00 - 77:00	4/TLC	3-69

FLIGHT PLANNING BRANCH

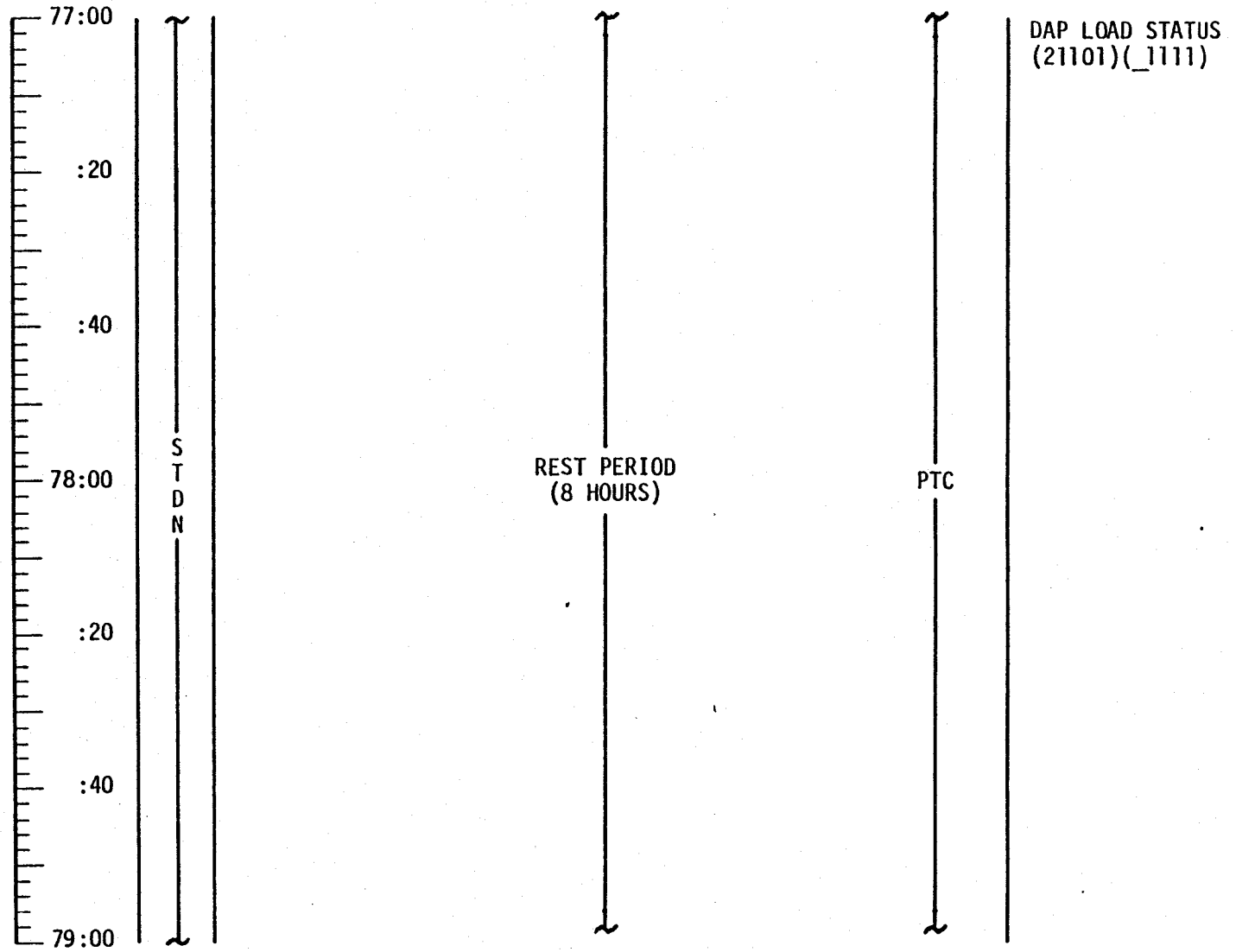
FLIGHT PLAN

MCC-H

0153 CST

NOTES

DAP LOAD STATUS
(21101)(_1111)



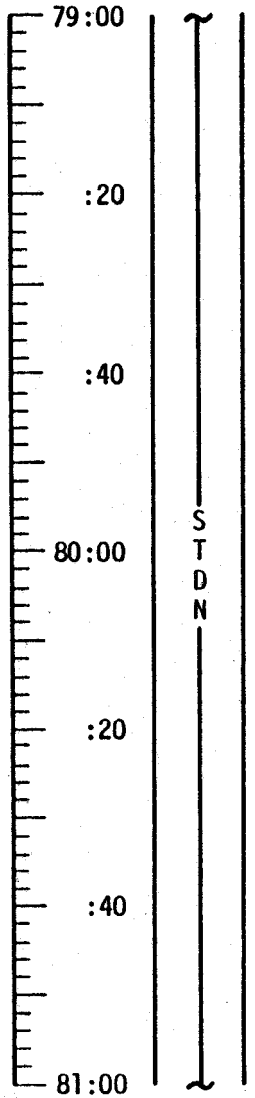
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	77:00 - 79:00	4/TLC	3-70

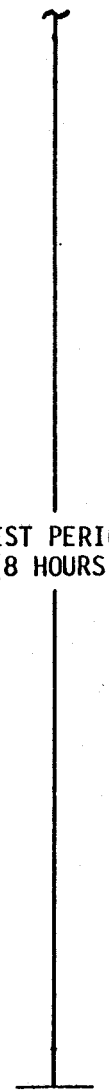
FLIGHT PLANNING BRANCH

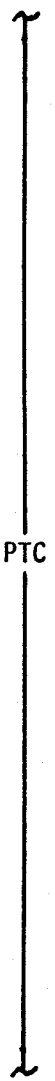
FLIGHT PLAN

MCC-H

0353 CST







NOTES

DAP LOAD STATUS
(21101)(_1111)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	79:00 - 81:00	4/TLC	3-71

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0553 CST

81:00

:10

:20

:30

:40

:50

82:00

STDN

UPDATE
GO/NO-GO FOR MCC-4

CSM SYSTEMS CHECKLIST

POST-SLEEP CHECKLIST PAGE S/1-29

REPORT: LM/CM ΔP
IF ΔP >2.4 PSID:
O_2 HEATERS 1&2 - AUTO
PRESSURIZE CSM TO 5.7 PSIA

CSM G&C CHECKLIST

*EMS ΔV TEST & NULL BIAS CHECK PAGE G/2-5 GET=82:00
*REPORT: BIAS

EAT PERIOD

PTC

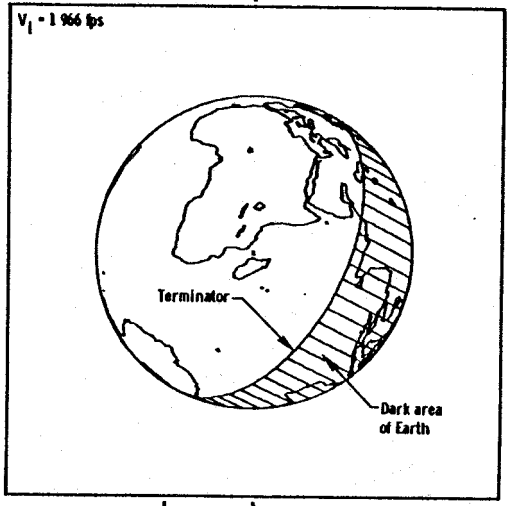
NOTES

DAP LOAD STATUS
(21101)(_1111)

EARTH DISTANCE
~202,616 NM

*PERFORM IF MCC-4
IS REQUIRED

FOV=3°



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	81:00 - 82:00	4/TLC	3-72

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0653 CST

82:00

:10

:20

82:30

:40

:50

83:00

STDN

EAT PERIOD

PTC

NOTES

DAP LOAD STATUS
(21101)(_1111)

*PERFORM IF MCC-4
IS REQUIRED

PERICYNTHION +2 HR
ABORT PAD TARGETED
FOR A FAST RETURN

UPDATE
CONSUMABLES STATUS
FLIGHT PLAN
MCC-4 MNVR PAD
PERICYNTHION +2 HR
ABORT PAD
WASTE WATER
DUMP PERCENT
UPLINK
CSM S.V. & V66
MCC-4 TGT LOAD

CSM G&C CHECKLIST

*EXIT G&N PTC AT R 299 (P52) PAGE G/8-3
HGA: P -30, Y 270 AUTO, NARROW
CM/LM PRESSURE EQUALIZATION (DECAL)
PRESSURE EQUAL VALVE - CLOSED
O_2 HEATERS 1&2 - OFF (VERIFY)

CONFIGURE CAMERA FOR SIM DOOR JETT PHOTOS
CM5/DAC/75/CEX (f8,1/250,100) 24 fps (5% MAG)
MAG (BB) ____, MAG % ____

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	82:00 - 83:00	5/TLC	3-73

FLIGHT PLANNING BRANCH

MCC-4
BURN TABLE

SPS LIMITS	P OR Y RATES	DEVIATION	MANUAL START ACTION	OVERBURN SHUTDOWN CRITERIA	RCS TRIM GUIDELINES
TIGHT	10°/SEC TERMINATE	+ 10° TERMINATE	NO MANUAL STARTS NO RESTART	BT + 1 SEC	TRIM ONLY X-AXIS TO 0.2 FPS

BALL VLV FAILURE - START ON SUSPECT BANK
Shut down good bank to verify; reenable

FLIGHT PLAN

MCC-H

0753 CST

83:00
(21101)
(_1111)

:10

:20

83:30

:40

:50

84:00

STDN

LiOH CANISTER CHANGE
(9 INTO A, STOW 7 IN B6)
CONFIGURE FOR URINE DUMP
H_2 PURGE LINE HTRS - ON

P52 (OPTION 3)
(PTC ORIENT)
REPORT: GYRO TORQUING ANGLES

GDC ALIGN

*P30 EXTERNAL ΔV
*V49 MNVR TO PAD BURN ATT
*IF SPS MIDCOURSE REQUIRED
* PRE-SPS BURN SIM PREP (CUE CARD)

*SXT STAR CHECK
*P40 SPS THRUSTING OR P41 RCS THRUSTING

H_2 & O_2 FUEL CELL PURGE
WASTE WATER DUMP TO PERCENTAGE SPECIFIED BY STDN
SAMPLE BUSS's (3) - STOW SAMPLES (3)
DUMP URINE FROM BUSS's (3) - STOW
START NEW URINE COLLECTION PERIOD
H_2 PURGE LINE HTRS - OFF

LOI -5 HR

MCC-4

TIG: 83:55
BT: NOM ZERO
ΔVT: NOM ZERO
ULLAGE: NONE

P52 IMU REALIGN
N71: __ __,__ __
N05: __ __ __.__ __
N93:
X __ __.__ __ __
Y __ __.__ __ __
Z __ __.__ __ __
GET __ __ __:__ __:__ __

NOTES
*PERFORM IF MCC-4 IS REQD

SIM EXP STATUS
(*0000)(31000)

BURN STATUS REPORT

X	X					ΔTIG
X	X					BT
						V_{gx}
		TRIM				
X	X	X				R
X	X	X				P
X	X	X				Y
						V_{gx}
						V_{gy}
						V_{gz}
						ΔV_c
X	X	X				OX
X	X	X				FUEL
X	X	X				UNBAL

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	83:00 - 84:00	5/TLC	3-75

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H | 0853 CST

84:00 (21101) (_1111)

CMD
DATA SYS - ON
DSE RECORD

:10

:20

UPDATE
GO/NO-GO FOR
SIM DOOR JETT

84:30

UPDATE
CUE FOR IR - OFF

:40

UPLINK
CSM S.V. & V66
(PRELIMINARY)
LOI TGT LOAD
(PRELIMINARY)
DESIRED ORIENT(LOI)

:50

85:00

STDN

*V66 SET CSM S.V. INTO LM S.V.
*REPORT: BURN STATUS
V49 MNVR TO SIM DOOR JETTISON ATTITUDE (84:15)
(138,249,000) HGA P -48, Y 238

CSM EXP/EVA CHECKLIST
SIM DOOR JETTISON PAGE X/1-6 (TO STDN CUE)

GO/NO-GO FOR SIM DOOR JETTISON (CUE)

SIM DOOR JETTISON 84:25

V49 MNVR TO P52 ATTITUDE (84:50)
(262,043,330) HGA P -11, Y 311

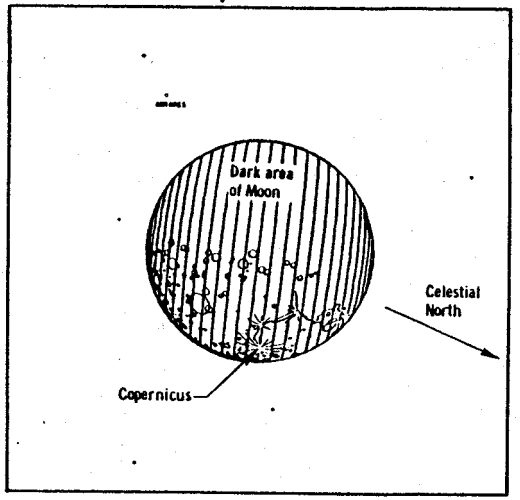
cb O_2 TK 100W HTRS (1 & 2) - OPEN
O_2 HEATERS 1 & 2 - AUTO
O_2 HEATER 3 - OFF
REPORT: LM/CM ΔP
IF ΔP <0.2 PSID, LM TUNNEL VENT VLV - LM PRESS
IF ΔP >0.2 PSID, PERFORM CM/LM PRESSURE EQUALIZATION (DECAL)
PRESS EQUAL VALVE - CLOSE
LM TUNNEL VENT VLV - LM PRESS
CHECK MISSION TIMER AGAINST CMC CLOCK

NOTES

*PERFORM IF MCC-4 IS REQUIRED

SIM EXP STATUS
(*0000)
(31000)

GET=85:00 FOV=25°



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	84:00 - 85:00	5/TLC	3-76

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0953 CST

UPDATE
LOI MNVR PAD
(PRELIMINARY)
TEI 4 PAD
FLIGHT PLAN

85:00
(21101)
(_1111)

:10

:20

85:30

:40

:50

86:00

STDN

CSM G&C CHECKLIST

EMS ΔV TEST & NULL BIAS CHECK PAGE G/2-5
REPORT: BIAS
CDR DON BIOMED HARNESS

LIMIT CYCLE - ON
ATT DEADBAND - MIN
RATE - LOW
BMAG (3) - ATT 1/RATE 2
SC CONT - SCS
P52 (OPTION 3)
(PTC ORIENT)

STARS _____, _____
SA _____, _____
TA _____, _____

REPORT: GYRO TORQUING ANGLES
P52 (OPTION 1)
(LOI ORIENT)

SC CONT - CMC
BMAG (3) - RATE 2
GDC ALIGN

CHECK CDR BIOMED
CMP DOFF BIOMED HARNESS

NOTES

SIM EXP STATUS
(*0000)
(31001)

P52 IMU REALIGN
N71: __ __,__ __
N05: __ __ __.__ __
N93:
X __ __.__ __ __
Y __ __.__ __ __
Z __ __.__ __ __
GET __ __ __:__ __:__ __

LOI REFSMMAT ATT
R 351, P 128, Y 034

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	85:00 - 86:00	5/TLC	3-77

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1053 CST

86:00
(21101)
(_1111)

:10

:20

86:30

:40

:50

87:00

STDN

CONFIGURE CABIN FOR LUNAR ORBIT

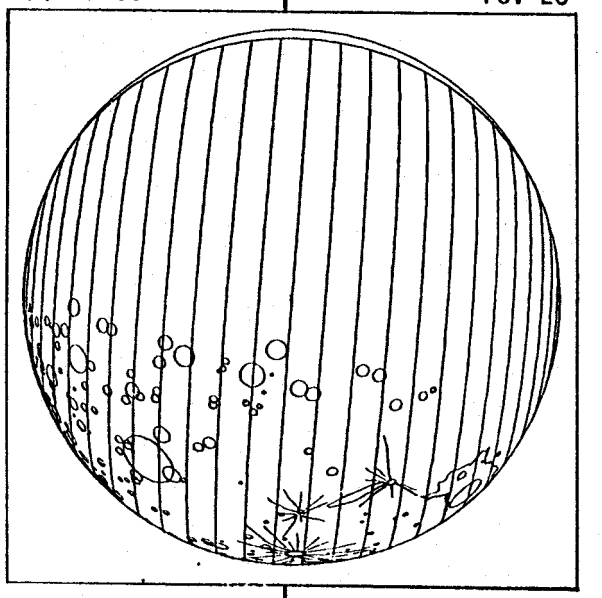
EAT PERIOD

NOTES

SIM EXP STATUS
(*0000)
(31001)

GET=87:00

FOV=20°



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	86:00 - 87:00	5/TLC	3-78

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1153 CST

87:00
(21101)
(_1111)

:10

:20

87:30

:40

:50

88:00

STDN

EAT PERIOD

CMC MODE - FREE
UV COVER-OPEN

UV COVER-CLOSE
CMC MODE - AUTO

P52 (OPTION 3)
(LOI ORIENT)

REPORT: GYRO TORQUING ANGLES

GDC ALIGN

CSM SYSTEMS CHECKLIST

PRE-LOI SECONDARY GLYCOL LOOP CHECK PAGE S/1-19
C/W SYSTEM OPERATIONAL CHECK PAGE S/1-20
SPS MONITORING CHECK PAGE S/1-1
SM RCS MONITORING CHECK
CM RCS MONITORING CHECK
ECS MONITORING CHECK PAGE S/1-5
OXIDIZER FLOW VALVE INCR - NORM (VERIFY)

PRE-SPS BURN SIM PREP (CUE CARD)

UPDATE
LOI MNVR PAD
MAP UPDATE REV 1
(88:20)

UPLINK
CSM S.V. & V66
LOI TGT LOAD

NOTES

SIM EXP STATUS
(*0000)
(31001)

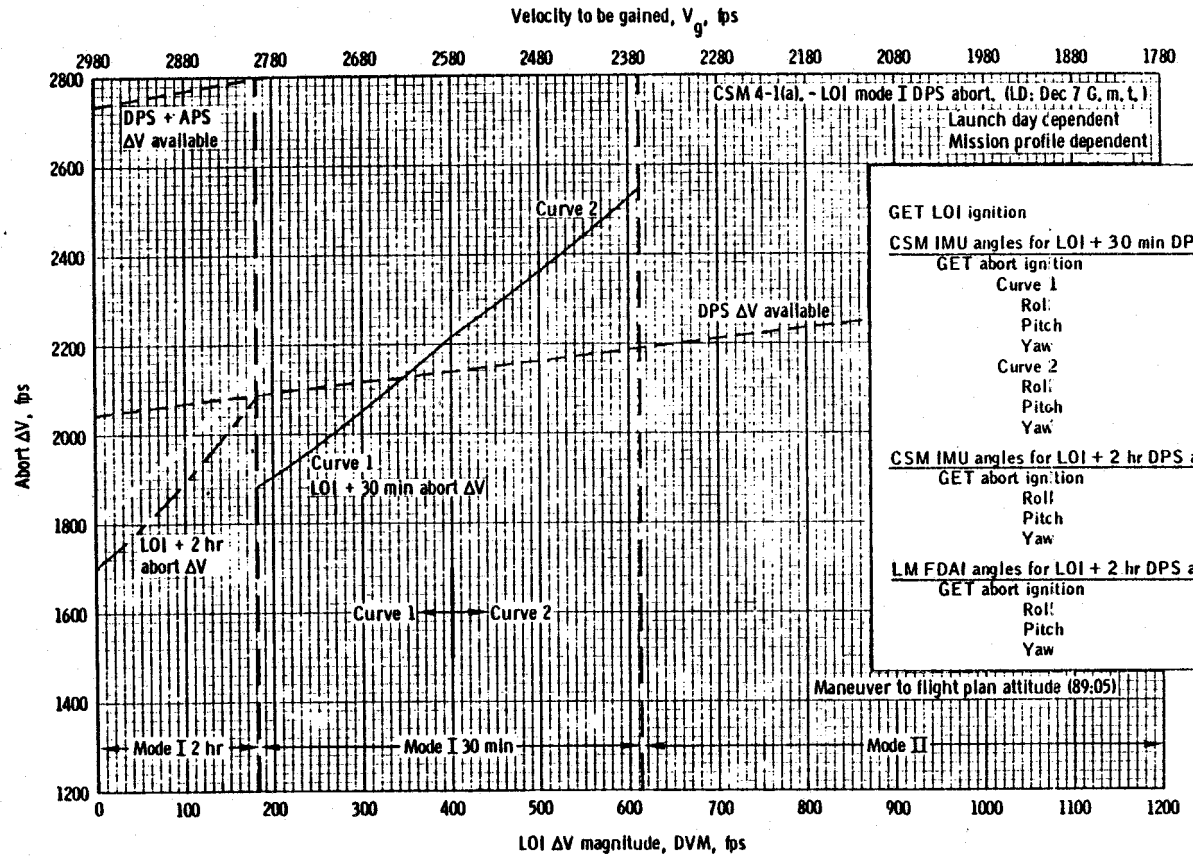
P52 IMU REALIGN
N71: __ __,__ __
N05: __ __ __.__ __
N93:
X __ __.__ __ __
Y __ __.__ __ __
Z __ __.__ __ __
GET __ __ __:__ __:__ __

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	87:00 - 88:00	5/TLC	3-79

FLIGHT PLANNING BRANCH

P30 MANEUVER

SET STARS	LOI						PURPOSE	
	S	P	S/G		&	N	PROP/GUID	
	+						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	
							ΔV_X	N81
ULLAGE _____							ΔV_Y	
_____							ΔV_Z	
_____								
_____	X	X	X				R (000)	
	X	X	X				P (000)	
	X	X	X				Y (000)	
	+						H_A	N44
							H_P	
	+						ΔVT	
HORIZON/WINDOW _____	X	X	X				BT	
	X						ΔVC	
_____	X	X	X	X			SXTS	
_____	+					0	SFT	
_____	+				0	0	TRN	
	X	X	X				BSS	
	X	X					SPA	
	X	X	X				SXP	



LOI mode I DPS abort.

CSM 4-1(a). - LOI mode I DPS abort. (LD: Dec 7 G. m. t.)

Launch day dependent

Mission profile dependent

		Nominal	Update
GET LOI ignition		88:55:37.6	
CSM IMU angles for LOI + 30 min DPS abort	HGA	Pitch = -48°, Yaw = 111°	
GET abort ignition		89:25:37.6	
Curve 1			
Roll		210	
Pitch		10	
Yaw		19	
Curve 2	HGA	Pitch = -45°, Yaw = 109°	
Roll		212	
Pitch		10	
Yaw		13	
CSM IMU angles for LOI + 2 hr DPS abort	HGA	Pitch = -69°, Yaw = 263°	
GET abort ignition		90:55:37.6	
Roll		146	
Pitch		21	
Yaw		13	
LM FDAI angles for LOI + 2 hr DPS abort			
GET abort ignition		90:55:37.6	
Roll		194	
Pitch		27	
Yaw		334	

LOI
BURN TABLE

P OR Y RATES	ATT DEVIATION	SHUTDOWN TIME	RESIDUALS
10°/SEC TAKEOVER & COMPLETE	±10° TAKEOVER & COMPLETE	BT + 10 SEC	DO NOT TRIM

BALL VLV FAILURE - START ON GOOD BANK (LM AVAIL)
Shut down good bank 10 sec before nominal C/O.
EARLY C/O - RESTART IF NO LIMITS EXCEEDED, G&N IS GO AND VGO>50

CSM 4-1(b).- LOI mode I DPS abort. (LD: Dec 7 G.m.t.) Launch day dependent Mission profile dependent 9/26/72 Final

Burntime	ΔVM	Mode	SPS limits	Procedure
0:00 - 0:28	0 - 183	I	TIGHT	DPS at 2 hr (RTCC)
0:28 - 0:53	183 - 348	I	TIGHT	DPS at 30 min (crewchart)
0:53 - 1:31	348 - 613	I	LOOSE	DPS at 30 min to depletion + APS at 2 1/2 hr (RTCC); loss of comm, DPS followed immediately by APS (crewchart)
1:31 - 2:03	613 - 833	II	LOOSE	DPS at 2 hr + DPS to depletion at perilune + APS at 2 hr after DPS depletion (RTCC)
2:03 - 2:54	833 - 1200	II	LOOSE	DPS at 2 hr + DPS at perilune (RTCC)
2:54 - 3:40	1200 - 1543	III	LOOSE	DPS at perilune (RTCC)
3:40 - 4:30	1543 - 1930	III	TIGHT	DPS at perilune (RTCC)
4:30 - Cutoff	1930 - 2980	III	TIGHT	DPS to depletion at perilune + APS at 2 hr after DPS depletion (RTCC)

IGN <3 MIN 40 SEC LATE
SHUTDOWN TIMES
0 TO 1 MIN 20 SEC - 10 SEC 1 MIN 20 SEC TO 2 MIN - 5 SEC 2 MIN TO 3 MIN 40 SEC - 0 SEC

THE PU VALVE SHOULD BE USED TO MAINTAIN THE INDICATED UNBALANCE TO WITHIN ±50 LB OF THE STABILIZED READING (TIG +25 SEC) UNTIL CROSSOVER. AFTER CROSSOVER THE VALVE SHOULD BE USED TO CONTROL THE GREEN BAND (0±100 LB). THE APPROXIMATE TIME OF CROSSOVER IS 4 MIN 20 SEC INTO THE LOI BURN

FLIGHT PLAN

MCC-H

1253 CST

88:00
(21101)
(_1111)

:10

:20

STDN

88:30
(P40)
(0.5°DB)

:40

:50

89:00

P30 EXTERNAL ΔV

V49 MNVR TO PAD BURN ATTITUDE (88:20)

OMNI C

MAP UPDATE REV _____

AOS WITHOUT BURN 89:02:16

AOS WITH BURN 89:16:29

SXT STAR CHECK

P40 SPS THRUSTING

RECORD VG_{IMU} DATA

UPDATE
GO/NO-GO FOR LOI

GO/NO-GO FOR LOI

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

LOI

TIG: 88:55:37.5
BT: 6 MIN 35.4 SEC
ΔVT: 2979.9 FPS
ULLAGE: NONE
ORBIT: 170.8x51.4 NM

NOTES

SIM EXP STATUS
(*0000)
(31001)

BURN STATUS REPORT

X	X		●			ΔTIG
X	X		●			BT
					●	V_{gx}
		TRIM				
X	X	X				R
X	X	X				P
X	X	X			.	Y
					●	V_{gx}
					●	V_{gy}
					●	V_{gz}
					●	ΔV_c
X	X	X				OX
X	X	X				FUEL
X	X	X				UNBAL

ΔV_M _____

PREDICTED LOI SINGLE BANK BURN TIME:
6 MIN 50 SEC

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	88:00 - 89:00	5/TLC	3-83

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

89:00
(P40)
(0.5°DB)
(21101)
(_1111)

SIM EXP STATUS
(*0000)
(31001)

P00
V66 SET CSM S.V. INTO LM S.V.
V49 MNVR TO COMM ATT (89:15)
(167,063,339)
SET HGA MAN P -43, Y 345 AUTO, NARROW FOR AOS

CONFIGURE CAMERA: (TERMINATOR PHOTOS)
CM5/EL/80/VHBW(f11,1/500,∞) 12 FR
MAG (QQ)_____, FR # ____

:10

TELCOM GRP 2 - AC 1

ACQ STDN HGA P -43, Y 345 AUTO, NARROW

CMDS:
DSE DUMP

REPORT: BURN STATUS

```
* * * * * * * * * * *
* S-IVB LUNAR IMPACT*
* GET: 89:21:25.8   *
* LAT:  7.0°S       *
* LONG: 8.0°W       *
* * * * * * * * * * *
```

:20

UPDATE:
FLIGHT PLAN
TEI 4 TIG (IF REQD) AND GIMBAL ANGLES
PAN CAMERA PHOTO PADS (90:45 and 91:20)

UPLINK:
DESIRED ORIENT (LDG SITE)

POST-SPS BURN SIM PREP (CUE CARD)

PC: MODE - STBY
PWR - ON

PC: PWR - OFF (CUE)

89:30

STDN

89:30
(21101)
(_1111)

SIM EXP STATUS
(*0000)
(01001)

V44 (SET LUNAR SURFACE FLAG)

(P20)
(0.5°DB)

P20 OPT 5 (+X FWD SIM ATT)
N78 (+090.00)
(+052.25)
(+180.00)
N79 (+000.50)

NOTE: PRO ON N70
AT 89:41 TO INSURE
P20 ATT = INERTIAL
ATT

:40

TERMINATOR PHOTOS

LANDING SITE (P1-A10)
CM5/EL/80/VHBW(f11,1/500,∞) 12 FR

RECORD FR # ____

IR - ON

STDN

:50

PREPARE FOR ORBITAL SCIENCE VISUAL
COPERNICUS (CM5)

90:00

CSM FLIGHT PLAN

90:00
(P20)
(0.5°DB)
(21101)
(_1111)

ORBITAL SCIENCE VISUALS
COPERNICUS (CM5)

SIM EXP STATUS
(+0000)
(01011)

P52 IMU REALIGN

N71: __ __ , __ __

N05: __ __ __ • __ __

N93:

X __ __ • __ __ __

Y __ __ • __ __ __

Z __ __ • __ __ __ • •

GET __ __ __ • __ __ • __ __

CMC MODE-FREE
P52 (OPTION 3)
(LOI ORIENT)

REPORT: GYRO TORQUING ANGLES

:10

P52 (OPTION 1)
(LDG SITE ORIENT)

S
T
D
N

P20: CMC MODE - AUTO
GDC ALIGN

:20

CONFIGURE CAMERA: (ORBITAL SCIENCE)
CM3/EL/80/CEX-IVL20(f2.8,1/250,∞) 58 FR

MAG (KK) ____, FR # ____

90:30

90:30
(P20)
(0.5°DB)
(21101)
(_1111)

SIM EXP STATUS
(+0000)
(01011)

S
T
D
N

(21101)
(01111)

V48 (21101)
(01111)

CMDS: (AOS +81 MIN)
DSE RECORD

INHIBIT ALL JETS EXCEPT D1&B2,A3,C4,B3,D4
IR COVER - OPEN
UV COVER - OPEN

:40

VERIFY DSE TAPE MOTION (HBR/RCD/FWD/CMD RESET)
SELECT OMNI D FOR AOS
SET HGA MAN, WIDE P -5, Y 15 FOR AOS +3 MIN

MC/LA COVER - OPEN

PAN CAMERA PHOTO PAD
T-START: __ __ __ : __ __ : __ __
T-STOP: __ __ __ : __ __ : __ __
152°W TO 144°E

MC-EXTD

PC: STBY
STEREO
PWR
V/h OVRD - HI ALT

LA - ON
IMAGE MTN - ON
MC - ON (144°W)
PC - OPR (T START)
IMAGE MTN - INCR (BP +4 STEPS)/ON

:50

ORBITAL SCIENCE PHOTOS
GALOIS (P 1/2 - A21)
CM3/EL/80/CEX-IVL20(f2.8,1/250,∞) 58 FR
CHANGE TO f4

CHANGE TO f5.6

CHANGE TO f8
V/H OVRD - LO ALT

REV 2

91:00

CSM FLIGHT PLAN

91:00
(P20)
(0.5°DB)
(21101)
(01111)

SIM EXP STATUS
(+1011)
(22011)

CHANGE TO f11

:10

PC - STBY (T STOP) (__ __ __:__ __:__ __)
RECORD FR #
V/h OVRD - HI ALT

MC - RETR
IR COVER - CLOSE
UV COVER - CLOSE
PC - OPR (T START)

NOTE: MC REMAINS ON EVEN THOUGH RETRACTED

PAN CAMERA PHOTO PAD
T-START: __ __ __:__ __:__ __
T-STOP: __ __ __:__ __:__ __
(123°E TO 95°E)

:20

ENABLE ALL JETS (BEFORE AOS) (VERIFY MC RETR tb GRAY)

ACQ STDN OMNI D

STDN

ACQ STDN HGA: MAN, WIDE P -5, Y 15
S-BD ANT IND >1/2 SCALE HGA: REACQ, NARROW
PC - STBY (T STOP)
V/h OVRD - NORMAL (ctr)
LA - OFF

91:30

91:30
(P20)
(0.5°DB)
(21101)
(01111)

CMDS: (AOS +6 MIN)
DSE REWIND

PC - OFF (CUE)

SIM EXP STATUS
(+2000)
(14011)

CUE: (AOS +14 MIN)
HGA AUTO
CMDS:
DSE PLAYBACK

:40

UPLINK:
DOI TARGET LOAD
CSM S.V. & V66
PIPA BIAS
SPS TAILOFF CONSTANT

UPDATE:
DOI MNVR PAD (92:15)
MAP UPDATE REV 3 (93:38)
J-3 OBS PAD (93:55)
TEI 5 PAD

CSM SYSTEMS CHECKLIST

C/W OPERATIONAL CHECKS	PAGE S/1-20
SPS MONITORING CHECK	PAGE S/1-1
SM RCS MONITORING CHECK	PAGE S/1-1
CM RCS MONITORING CHECK	PAGE S/1-1
ECS MONITORING CHECK	PAGE S/1-5

STDN

:50

MC - OFF (26°E)
WAIT 30 SECS
MC - STBY
IMAGE MTN - OFF
MC/LA COVER - CLOSE

92:00

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-86

CSM FLIGHT PLAN

92:00
(21101)
(_1111)

STDN

:10

:20

92:30

P00

SIM EXP STATUS
(+0000)
(01011)

P52 (OPTION 3)
(LDG SITE ORIENT)

REPORT: GYRO TORQUING ANGLES

GDC ALIGN

PRE-SPS BURN SIM PREP (CUE CARD)

P52 IMU REALIGN

N71:__ __.__ __

N05:__ __ __.__ __

N93:

X __ __.__ __ __

Y __ __.__ __ __

Z __ __.__ __ __

GET __ __ __.__ __ __.__ __ __

P30; VERIFY DOI TIG AND ΔV'S

P40

STDN RECORD:
VG_{IMU} DATA

P00
V49 MNVR TO DOI PAD BURN ATT (92:31)
ACQ STDN OMNI C

P30 MANEUVER

SET STARS	D S	O P	I S/C	- G	1 &	N	PURPOSE / PROP/GUID
	+						WT N47
R_{ALIGN} ___ ___ ___		O	O				P_{TRIM} N48
P_{ALIGN} ___ ___ ___		O	O				Y_{TRIM}
Y_{ALIGN} ___ ___ ___	+	O	O				HRS GETI
	+	O	O	O			MIN N33
	+	O					SEC
ULLAGE ___							ΔV_X N81
							ΔV_Y
							ΔV_Z
	X	X	X				R (000)
	X	X	X				P (225)
	X	X	X				Y (000)
	+						H_A N44
							H_P
	+						ΔVT
HORIZON/WINDOW ___	X	X	X				BT
	X						ΔVC
	X	X	X	X			SXTS
	+					O	SFT
	+				O	O	TRN
	X	X	X				BSS
	X	X					SPA
	X	X	X				SXP
OTHER ___		O					LAT N61
							LONG
	+						RTGO EMS
	+						V10
							GET 0.05G

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-87

CSM FLIGHT PLAN

92:30
(21101)
(_1111)

SIM EXP STATUS
(*0000)
(31011)

CMDS:
DSE REWIND

:40

STDN

SXT STAR CHECK

LOAD EMS WITH ΔVT

UPDATE:
GO/NO GO FOR DOI

CMDS:
DSE RECORD

(P40)
(0.5°DB)

P40 (TRIM)

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

:50

NOTE: DSE VOICE RECORDED THIS BACKSIDE WILL NOT BE DUMPED

93:00

CSM FLIGHT PLAN

93:00
(P40)
(0.5°DB)

(21101)
(_1111)

REV 3

:10

(21101)
(_1111)

:20

93:30

SIM EXP STATUS
(*0000)
(31011)

NOTE: DOI-1 WILL BE PERFORMED ON BANK A ONLY

DOI-1 (000,195/225,000)	TIG: 93:13:08.5 BT: 22.9 SEC ΔVT: 198.7 FEET/SEC ULLAGE: 4 JET 15 SEC ORBIT: 59 X 15 NM
____:____:____.____	

POO

V66 SET CSM S.V. INTO LM S.V.

DELAY POST-SPS BURN SIM PREP UNTIL 94:10

V49 MNVR TO LDMK OBS ATT (93:34) (020,293,000)
SET HGA MAN P +9, Y 338 REACQ, NARROW FOR AOS

* V49 MNVR TO BAILOUT BURN ATT * (000,002,000)
* SET HGA MAN P -49, Y 334 REACQ, NARROW FOR AOS *

DOI-1 BURN TABLE

SPS LIMITS	P OR Y RATES	ATT DEVIATIONS	SHUTDOWN TIME	RESIDUALS	MANUAL
TIGHT	10°/SEC	±10°	BT	*TRIM BURNS IN X TO WITHIN +1 FPS, DO NOT TRIM Y & Z	NO MANUAL START NO RESTART

*IF OVERBURN IS > 2.2 FPS AND < 10 FPS PITCH 180° AND TRIM WITH +X RCS THRUSTERS, IF > 10 FPS USE SPS

BALL VLV FAILURE - START ON SUSPECT BANK

BURN STATUS REPORT

X	X					ΔTIG
X	X					BT
						V_{gx}
TRIM						
X	X	X				R
X	X	X				P
X	X	X				Y
						V_{gx}
						V_{gy}
						V_{gz}
						ΔV_c
X						OX
X						FUEL
X						UNBAL

CSM FLIGHT PLAN

93:30
(21101)
(_1111)

:40

:50

94:00

STDN

X

```
                * * * * * * * * * * * * * * *      SIM EXP STATUS
                *AOS-NO UP VOICE PROCEDURE*          (*0000)
                *1. WAIT 30 SEC, CHECK HGA*          (31011)
                *2. SELECT OMNI  C        *
                *3. SELECT SEC XPNDR      *
                *4. AFTER 3 MIN GO TO LOSS*
                *   OF COMM CUE CARD      *
                * * * * * * * * * * * * * * *
ACQ STDN HGA P +9, Y 338  NOTE:  IF UNABLE TO LOCK UP
                                 HGA, GO TO OMNI  C
 CMDS:
   DSE DUMP
REPORT:  BURN STATUS


LOAD N89 (J-3 OBS)




 UPDATE:
   STAY/BAILOUT

P24 (ORB NAV MONITOR LDMK)(TAKE MARKS)
  OPT ZERO - OFF
  OPT MODE - CMC
  OPT TEL TRUN - SLAVE TO SXT
  OPT COUPLING - RSLV
  OPT SPEED - HIGH          * SC CONT - SCS                    *
                            * P47 THRUST MONITOR               *
                            *  BAILOUT BURN (000,083/002,000)  *
                            *  ___:___:___.___                 *
                            * P00                              *
                            * V66 SET CSM                      *
                              S.V. INTO LM   TIG:  93:48:17    *
                              S.V.           BT:   11.05 SEC   *
                                             ΔVC:  100.0 FEET/SEC *
                                             ULLAGE:  4 JET 17 SEC *
                                             ORBIT:  61.5 X 5.0 NM *
LDMK ACQUISITION
TCA
RELOAD P24
LOAD N89 (17-1 OBS)
  N89 (+20.160)(+15.405)
```

MAP UPDATE REV 3

AOS WITHOUT BURN ___ ___ ___:___ ___:___ ___

AOS WITH BURN ___ ___ ___:___ ___:___ ___

LDMK J-3 OBS

T HOR __ __:__ __:__ __

TCA -20 SEC __ __:__ __:__ __

LAT: + 19.948
LONG/2: + 20.051
ALT: +000.000

6:53

CSM FLIGHT PLAN

94:00
(21101)
(_1111)

SIM EXP STATUS
(*0000)
(31011)

STDN

:10 POST-SPS BURN SIM PREP (CUE CARD)

O_2 FUEL CELL PURGE
WASTE WATER DUMP

:20

TERMINATE WASTE WATER DUMP AT 10%

INHIBIT ALL JETS EXCEPT A1&C2 OR D1&B2,A3,C4,B3,D4

94:30

94:30
(21101)
(_1111)

V49 MNVR TO LUNAR GRAZING ATT (94:45)
(272,060,332)

SIM EXP STATUS
(*0000)
(01011)

STDN

CMDS:
DSE RECORD

:40 VERIFY DSE TAPE MOTION (HBR/RCD/FWD/CMD RESET)
SET HGA MAN P +24, Y 248 AUTO, NARROW FOR AOS

TELCOM GRP 2 - AC 2

:50

95:00

CSM FLIGHT PLAN

95:00
REV 4
(21101)
(_1111)

SIM EXP STATUS
(*0000)
(01011)

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

:10

LMP DON BIOMED HARNESS NOTE: CMP MAY DON BIOMED HARNESS

:20

IR COVER - OPEN
UV COVER - OPEN

ACQ STDN HGA P +24, Y 248 AUTO, NARROW

CMDS:
DSE DUMP

95:30

95:30
(21101)
(_1111)

:40

STDN
X

:50

UPDATE:
FLIGHT PLAN
TRAJECTORY STATUS
REFSMMAT 00 TIME (IF REQD)
TEI 12 AND TEI 19 PADS
LM DAP LOAD (COPY ON PAGE 1 IN THE LM DATA CARD BOOK)

UPLINK:
SHORT BURN CONSTANTS
CSM S.V. AND V66
LIFT-OFF TIME (IF REQD)
DESIRED ORIENT (LDG SITE) (IF REQD)

SYNCHRONIZE MISSION TIMER TO CMC (IF REQD)
V05N01E, 1706E (T EPHEM VERIFICATION BY STDN, COPY FROM DSKY ON STDN CUE) (COPY T EPHEM IN FP SUPPLEMENT)

PC: MODE - STBY
PWR - ON

CHECK LMP BIOMED HARNESS
CDR DOFF BIOMED HARNESS

NOTE: CDR HARNESS REMOVAL IS OPTIONAL

PC: PWR - OFF (CUE)

P20 OPT 5 (-X FWD SIM ATT)(96:03)
N78 (+086.74)
(+052.20)
(+358.45)
N79 (+002.00)

96:00

SIM EXP STATUS
(*0011)
(01011)

NOTE: LIFT-OFF TIME WILL BE UPDATED IF THE TIME OF REV 26 MERIDIAN CROSSING DIFFERS MORE THAN ±2 MIN FROM 137:49:03

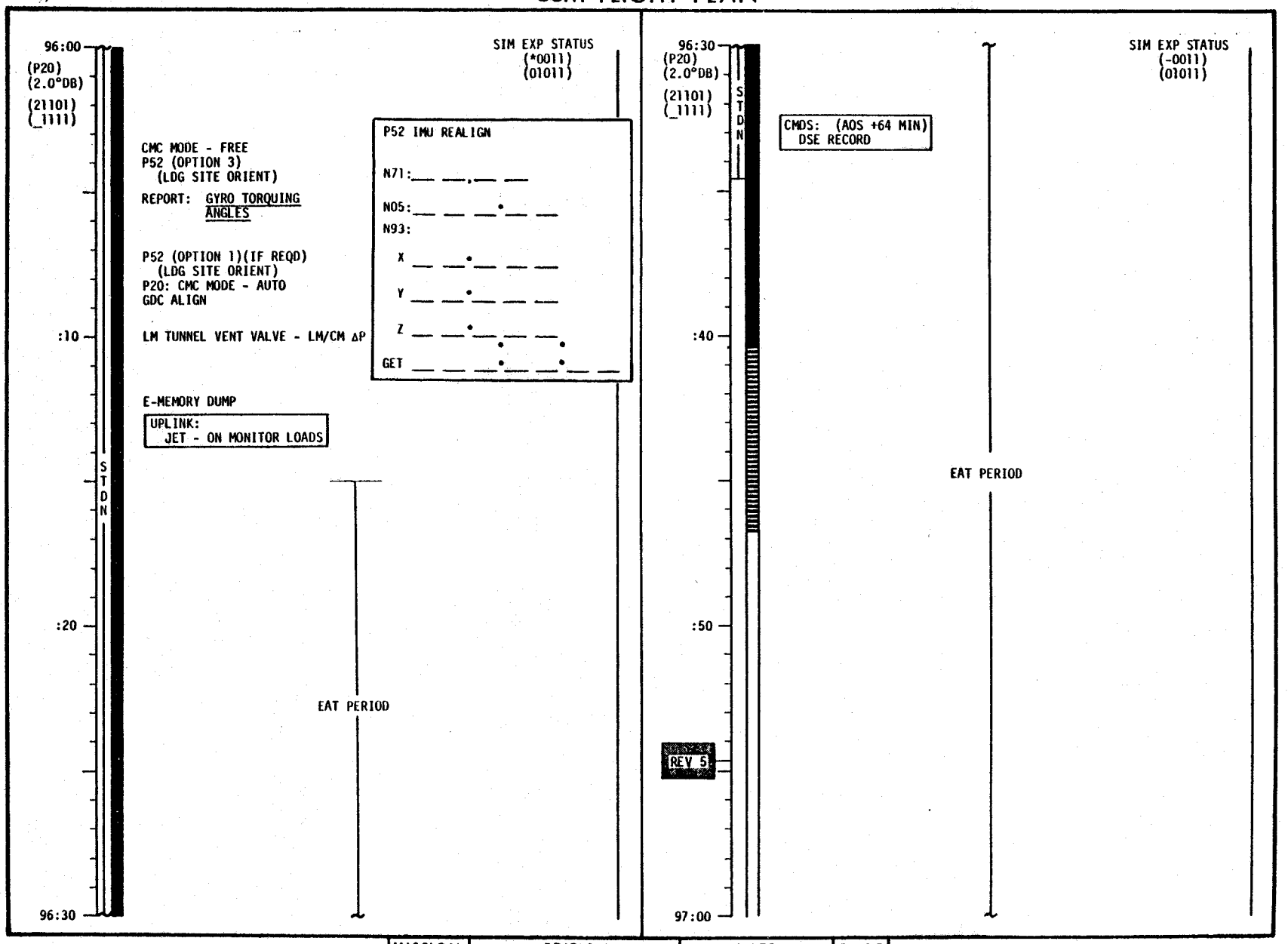
T EPHEM UPDATE

OID	LOAD B
03	_ _ _ _ _
04	_ _ _ _ _
05	_ _ _ _ _

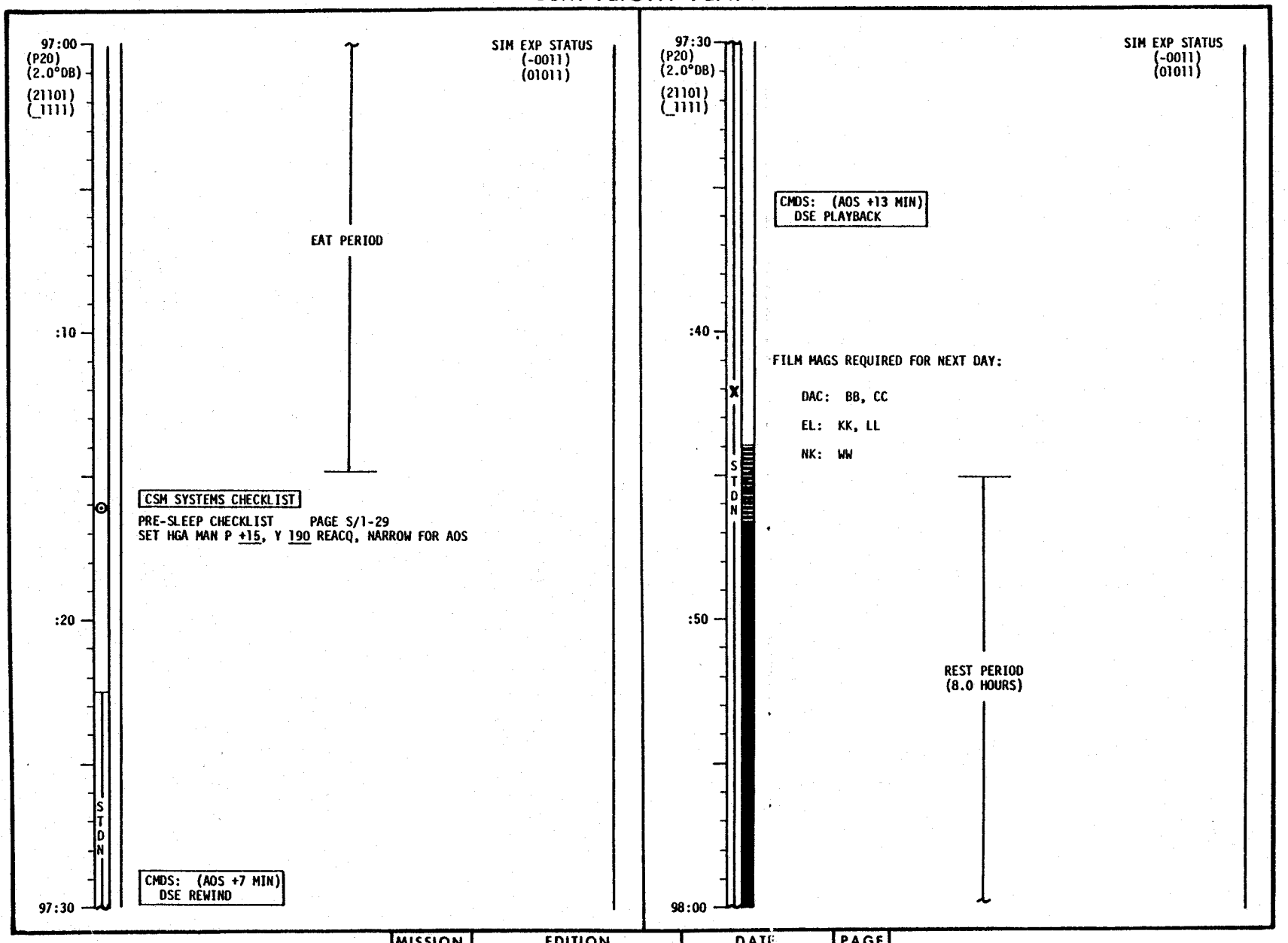
REFSMMAT 00 TIME

+	0	0				HRS
+	0	0	0			MIN
+	0					SEC

CSM FLIGHT PLAN

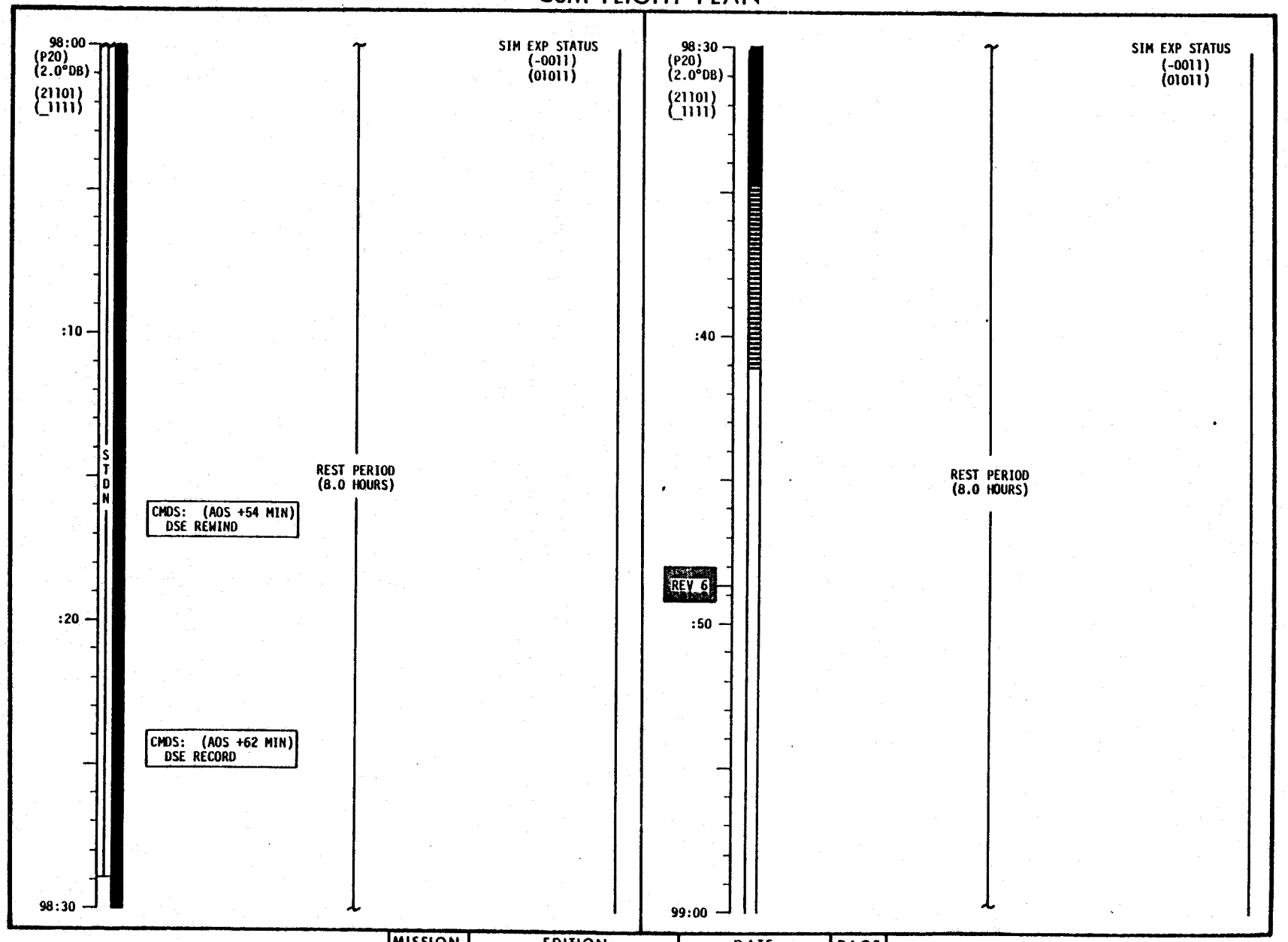


CSM FLIGHT PLAN

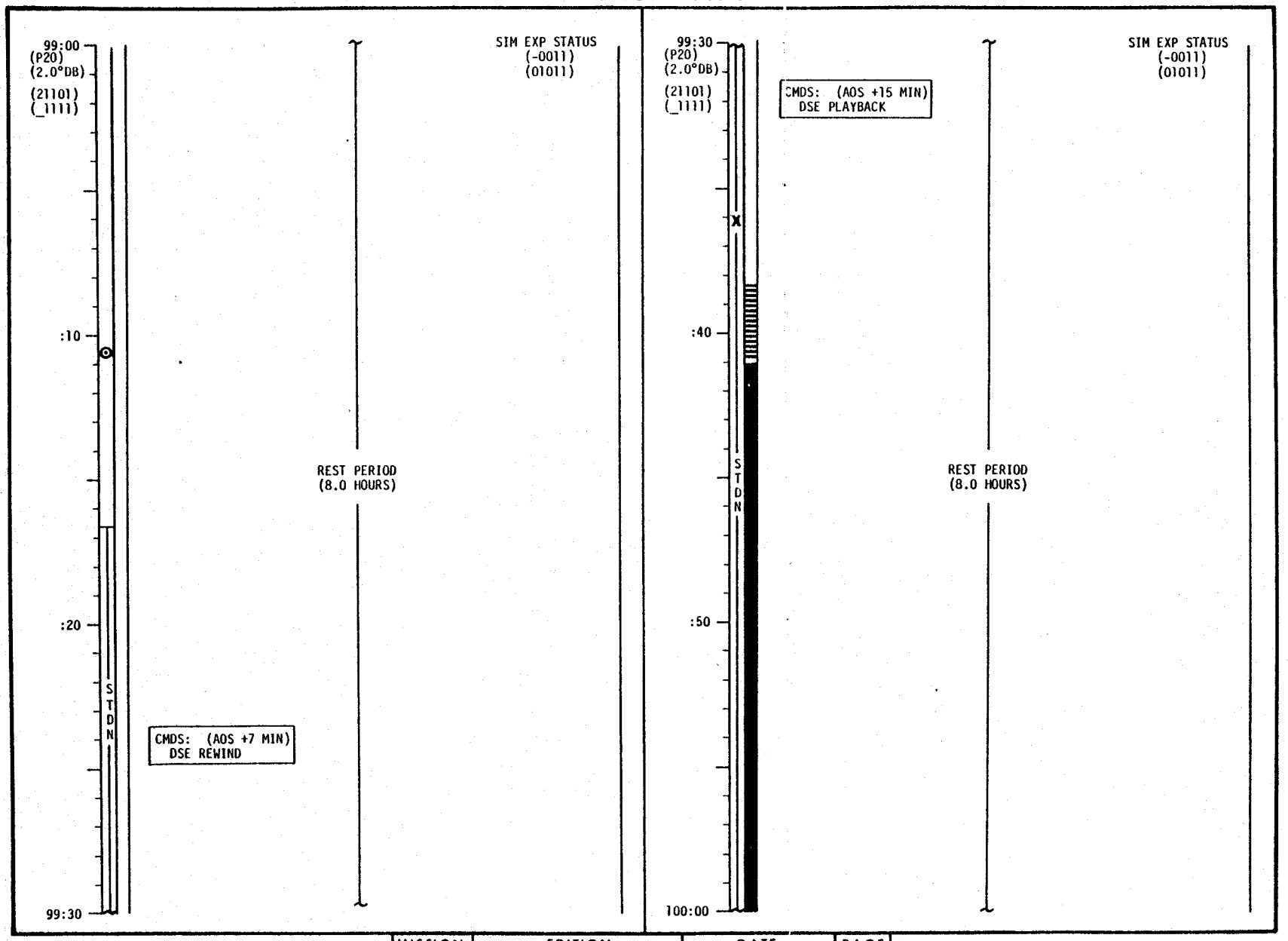


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-94

CSM FLIGHT PLAN

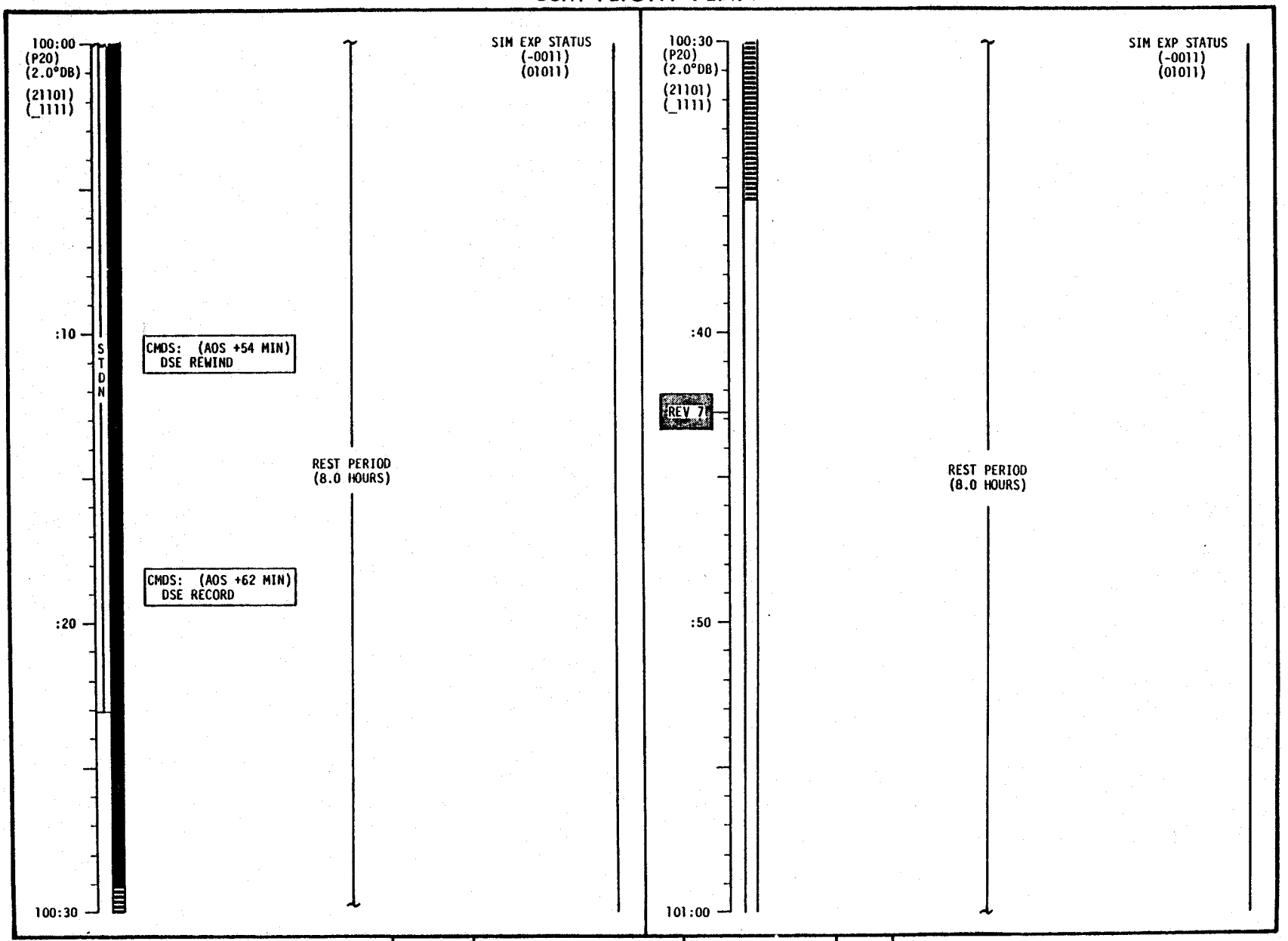


CSM FLIGHT PLAN

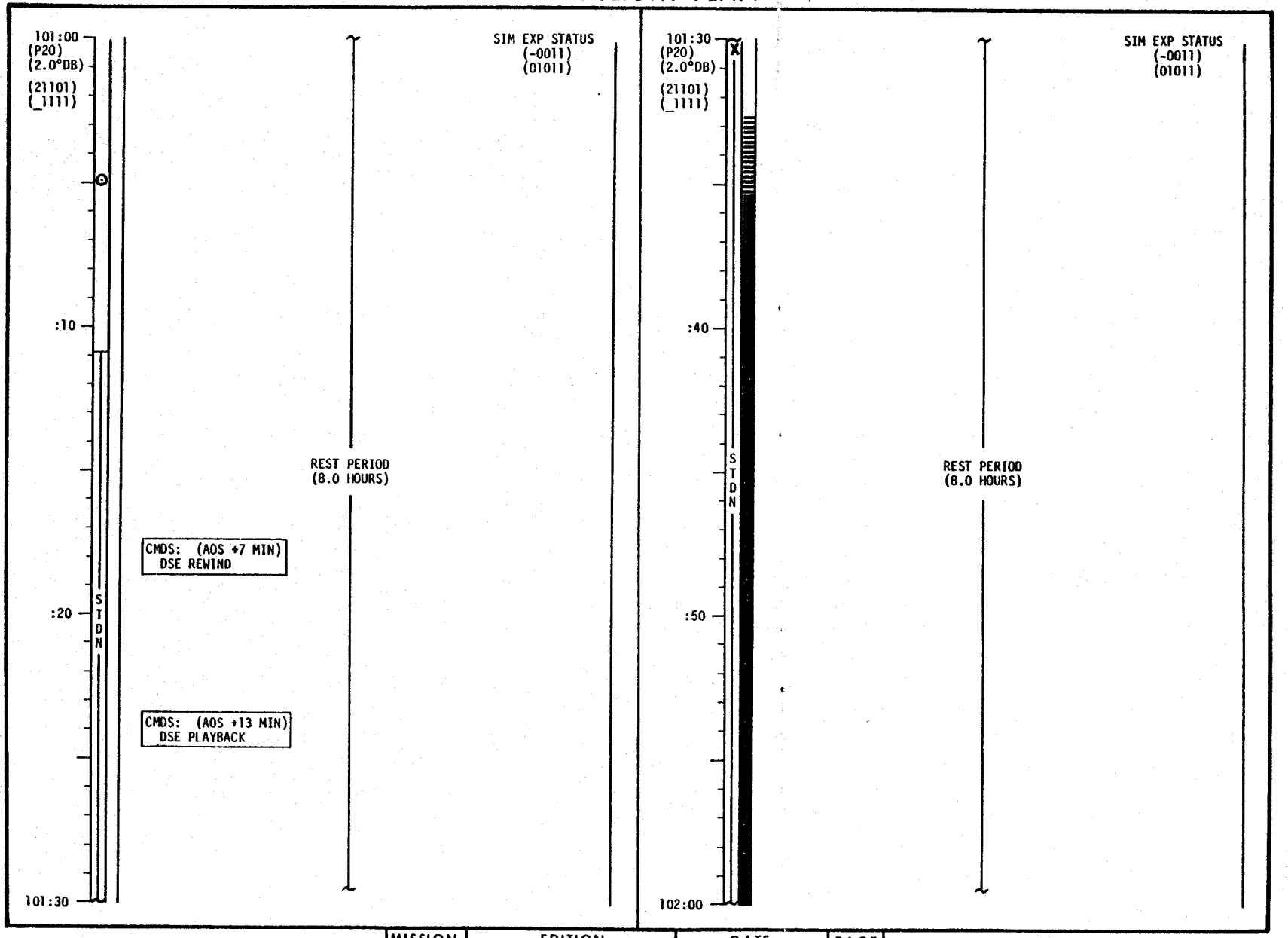


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-96

CSM FLIGHT PLAN

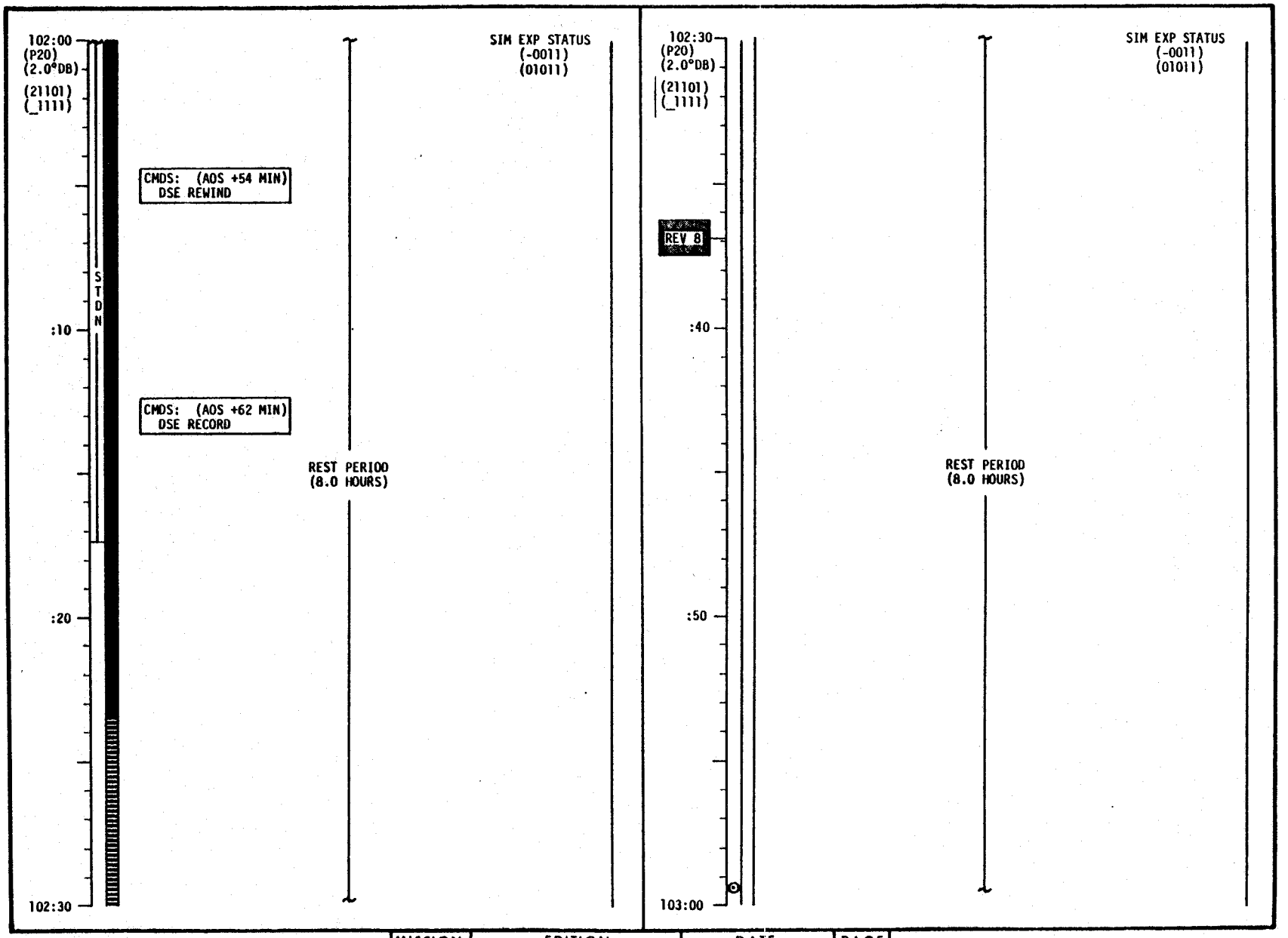


CSM FLIGHT PLAN

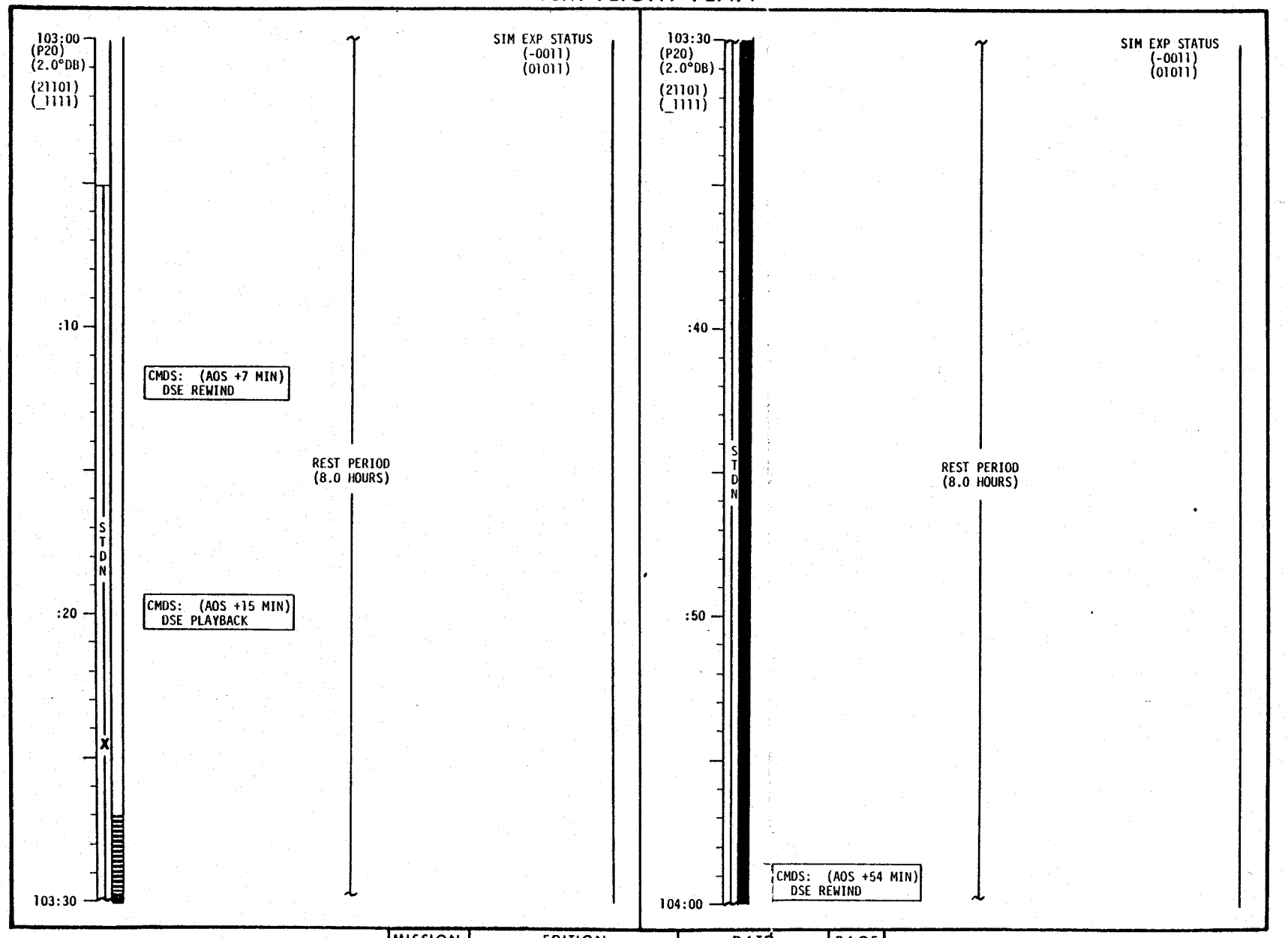


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-98

CSM FLIGHT PLAN

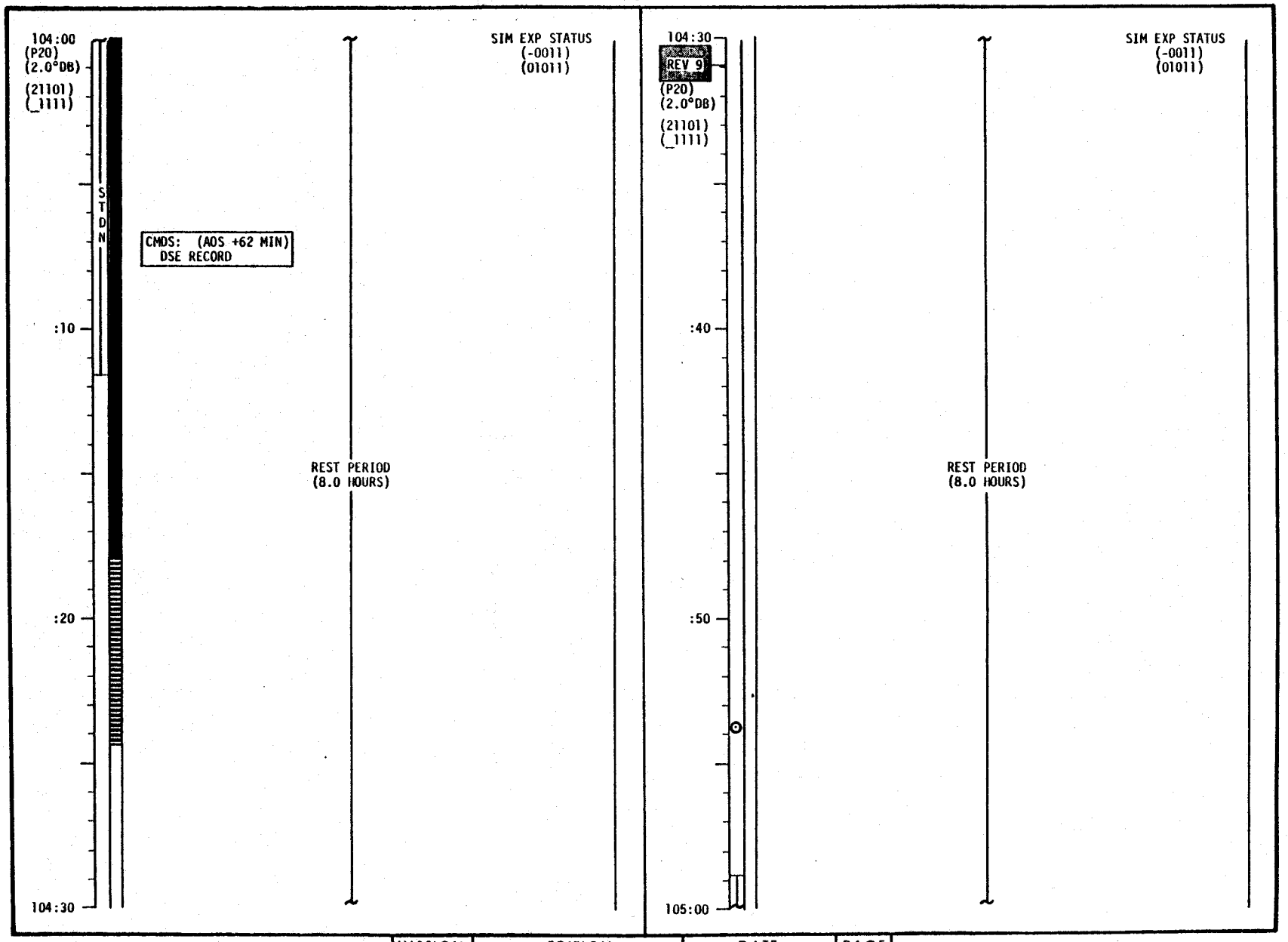


CSM FLIGHT PLAN



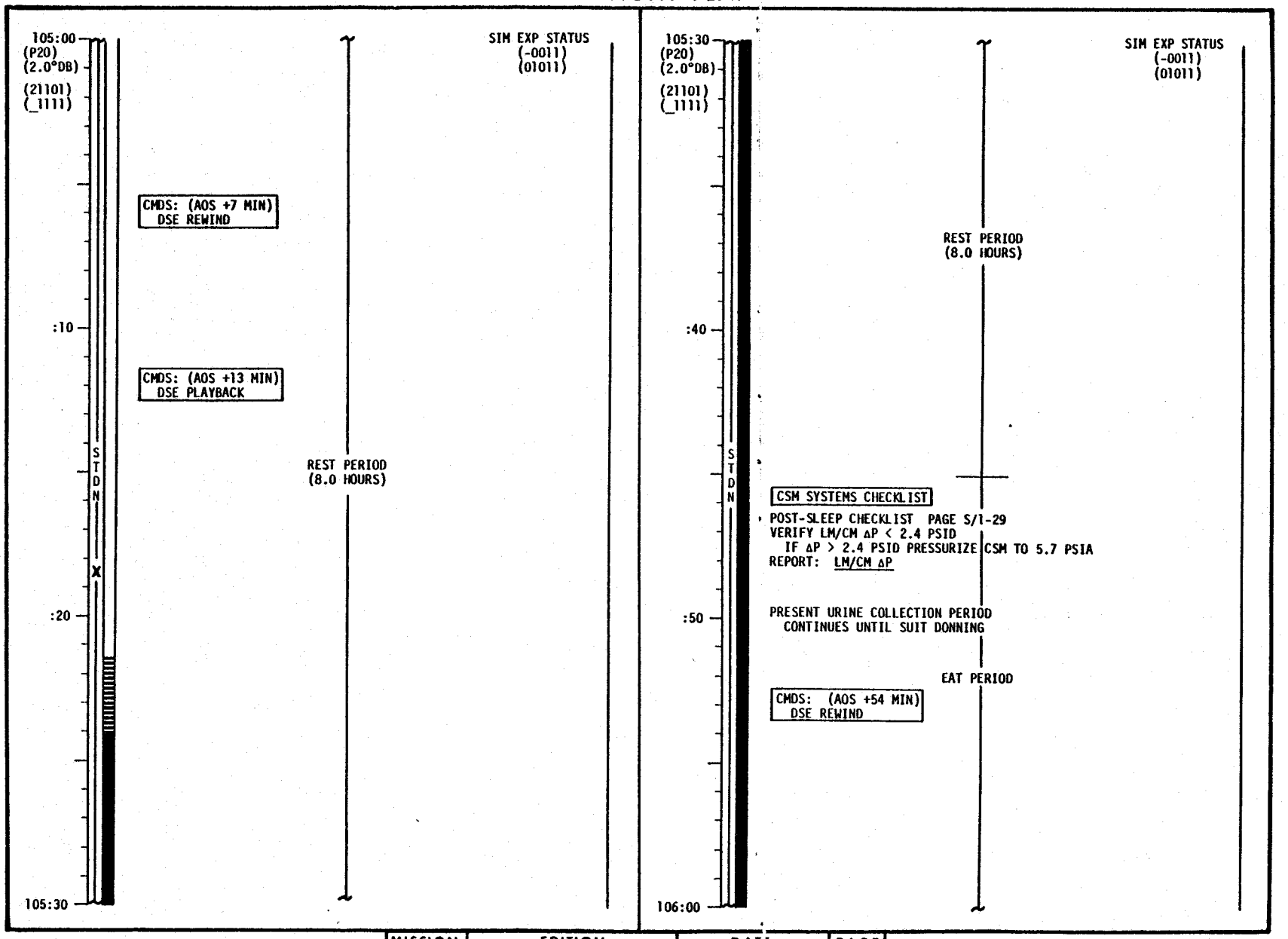
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-100

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-101

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-102

CSM FLIGHT PLAN

106:00
(P20)
(2.0°DB)
(21101)
(_1111)
STDN
:10
:20
REV 10
106:30

CMDS: (AOS +62 MIN)
DSE RECORD

SIM EXP STATUS
(-0011)
(01011)

EAT PERIOD

106:30
(P20)
(2.0°DB)
(21101)
(_1111)
:40
:50
STDN
107:00

SIM EXP STATUS
(-0011)
(01011)

EAT PERIOD

LMP & CDR: UNSTOW PGA'S
FILL DRINK BAG, EVAC AND INSTALL
INSTALL FOOD STICK
TERMINATE JET - ON MONITOR
P30
P20
V21N26 (00000)
UV COVER - CLOSE
IR COVER - CLOSE
LOGIC PWR (2) - OFF
IR - OFF
UV - OFF

ENABLE ALL JETS (BEFORE AOS)

PREPARE COUCHES: CDR -0°, CMP -0°, LMP -180°
REMOVE PROBE STRAPS (R5)
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

CMDS: (AOS +7 MIN)
DSE REWIND

CSM FLIGHT PLAN

107:00
(P20)
(2.0°DB)
(21101)
(_1111)

REPORT: DOCKING TUNNEL INDEX ANGLE

UPLINK:
CSM S.V. AND V66

UPDATE:
TRAJECTORY STATUS
FLIGHT PLAN

SIM EXP STATUS
(-0000)
(01000)

LMP DON LCG AND PGA WITHOUT HELMET AND GLOVES

CMDS: (AOS +15 MIN)
DSE PLAYBACK

:10

X STDN

:20

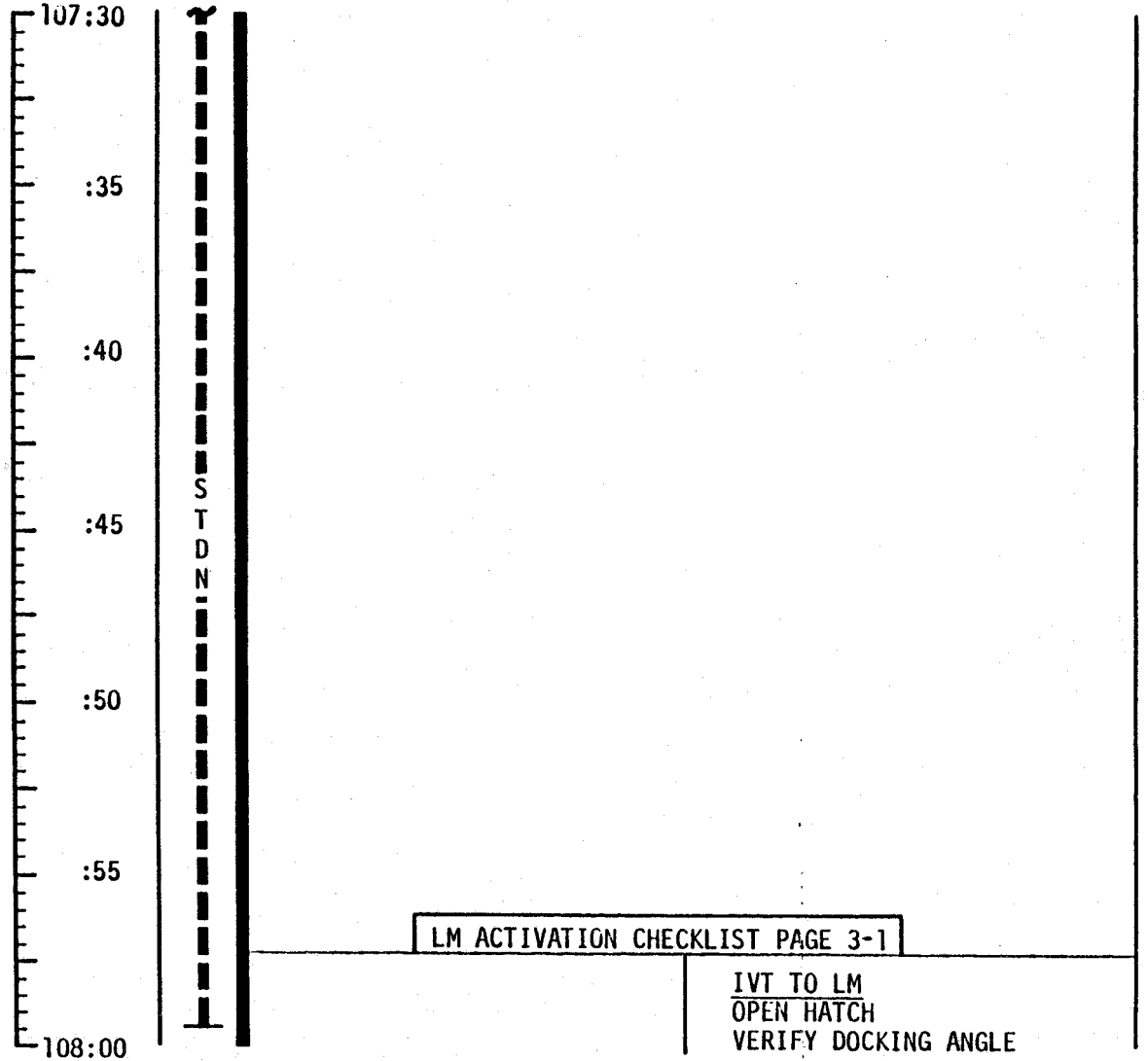
CDR DON BIOMED HARNESS, LCG AND PGA WITHOUT HELMET AND GLOVES

107:30

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LM FLIGHT PLAN

MCC-H | 0823 CST | CDR | LMP | NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	107:30 - 108:00	6/10	3-106

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

107:30
(P20)
(2.0°DB)
(21101)
(_1111)

SIM EXP STATUS
(-0000)
(01000)

V45 (RESET LUNAR SURFACE FLAG)
P00

P52 (OPTION 3)
(LDG SITE ORIENT)

P52 IMU REALIGN

N71:__ __ __ __

N05:__ __ __ __ __

N93:

X __ __ __ __ __

Y __ __ __ __ __

Z __ __ __ __ __

GET __ __ __ __ __ __

:40

REPORT: GYRO TORQUING ANGLES

GDC ALIGN
V49 MNVR TO UNDOCK ATT (107:48)
(000,105,000)
HGA P -30, Y 202

S
T
D
N

:50

CMDS: (AOS +58 MIN)
DSE REWIND

PGA INTERCONNECTS - A8 TO TSB
CMP DON BIOMED HARNESS, PGA WITHOUT
HELMET AND GLOVES

CDR & LMP IVT TO LM

CMDS: (AOS +66 MIN)
DSE RECORD

VERIFY DSE TAPE MOTION (LBR/RCD/FWD/CMD RESET)
SET HGA MAN P -30, Y 202 AUTO, NARROW FOR AOS

108:00

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 (2)	ON PGA
PGA BAG	SUIT ITSLA-EV (2)	ON CREW
ICG	SUNGLASSES IN POUCH (2)	PGA POCKET
ON CREW	WATCH/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
A8	LIGHTWEIGHT HEADSETS (2)	LHSSC
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	0853 CST	CDR	LMP	NOTES
	108:00	IVT TO LM	TRANSFER POWER LIGHTS ON DES O_2 AND H_2O - OPEN	
	:10			
	REV 11			
	:20	MISSION TIMER ACTIVATION	EPS ACTIVATION CONNECT TO LM COMM	
			PRIMARY GLYCOL LOOP ACT	
			CAUTION/WARNING CHECKOUT	
			ECS ACTIVATION & CHECKOUT	
	108:30	CONNECT TO LM ECS CB ACTIVATION ACTIVATE RCS HEATERS	CONNECT TO LM ECS CB ACTIVATION	-2:00
		PGNS TURN ON AND SELF TEST	VHF CHECKOUT RECORDER - ON	
	:40			
			SUIT FAN/H_2O SEP CHECK	
UPDATE TO LM AGS ABORT CONSTANTS DOI-2 PAD	:50	LGC/CMC CLOCK SYNC T EPHEM UPDATE	GLYCOL PUMP CHECK	
UPLINK TO LM L/S REFSMMAT LM S.V. & V66 LGC ABORT CONST LGC ΔT CLOCK SYNC (IF REQ)	(32022)	SET DAP E-MEMORY DUMP LDG GEAR DEPLOY	STEERABLE ANTENNA ACTIVATION PRIM S-BAND CHECK SEC S-BAND BIOMED - RIGHT	
	109:00			-1:30

TSTDN

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	108:00 - 109:00	6/10-11	3-108

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

108:00
(21101)
(_1111)

AT LM REQUEST: SIM EXP STATUS
LM PWR - RESET/OFF GET _____:_____:_____ (*0000)
(RECORD) (01000)
SYS TEST - 7D
SYS TEST ind - 0 volts

DATA SYS - OFF

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

MAG (CC) _____, MAG % _____
UTILITY PWR - ON
CM2/EL/80/CEX (f8,1/250,FOCUS) 10 FR

MAG (KK) _____, FR # _____

:10

LiOH CANISTER CHANGE
(11 INTO A, STOW 9 IN A9)

REV 11

:20

AT CDR REQUEST:
MARK TO LM FOR LM MISSION TIMER SYNC

108:30

108:30
(21101)
(_1111)

REMOVE AND STOW CSM/LM UMBILICAL IN F1 or F2 SIM EXP STATUS
INSTALL DROGUE AND PROBE (DECAL) (*0000)
PRE-LOAD PROBE (DECAL) (01000)

VHF C/O AT LMP REQUEST
VHF ANT - RIGHT
VHF AM B - SIMPLEX FOR VHF B CHECK then OFF
VHF AM A - SIMPLEX FOR VHF A CHECK
ADJUST SQUELCH

:40

RELEASE DOCKING LATCH NO'S. 1 & 7
CB DOCKING PROBE (2) - CLOSED
PROBE EXTD/REL - RETR
PROBE EXTD/REL tb (2) - bp (VERIFY)
CB DOCKING PROBE (2) - OPEN
PROBE EXTD/REL - OFF
VERIFY PROBE EXTEND LATCH
ENGAGED INDICATOR (RED)
NOT VISIBLE

LM CLOCK SYNC:
V16N65E
ON CDR MARK - V06N65E

LM T EPHEM UPDATE:
V05N01E, 1706E (T EPHEM)

ACQ STDN HGA P -30, Y 202 AUTO, NARROW

REPORT: LM PWR - RESET/OFF GET (FROM 108:00)

:50

STDN

CMDS:
DSE DUMP

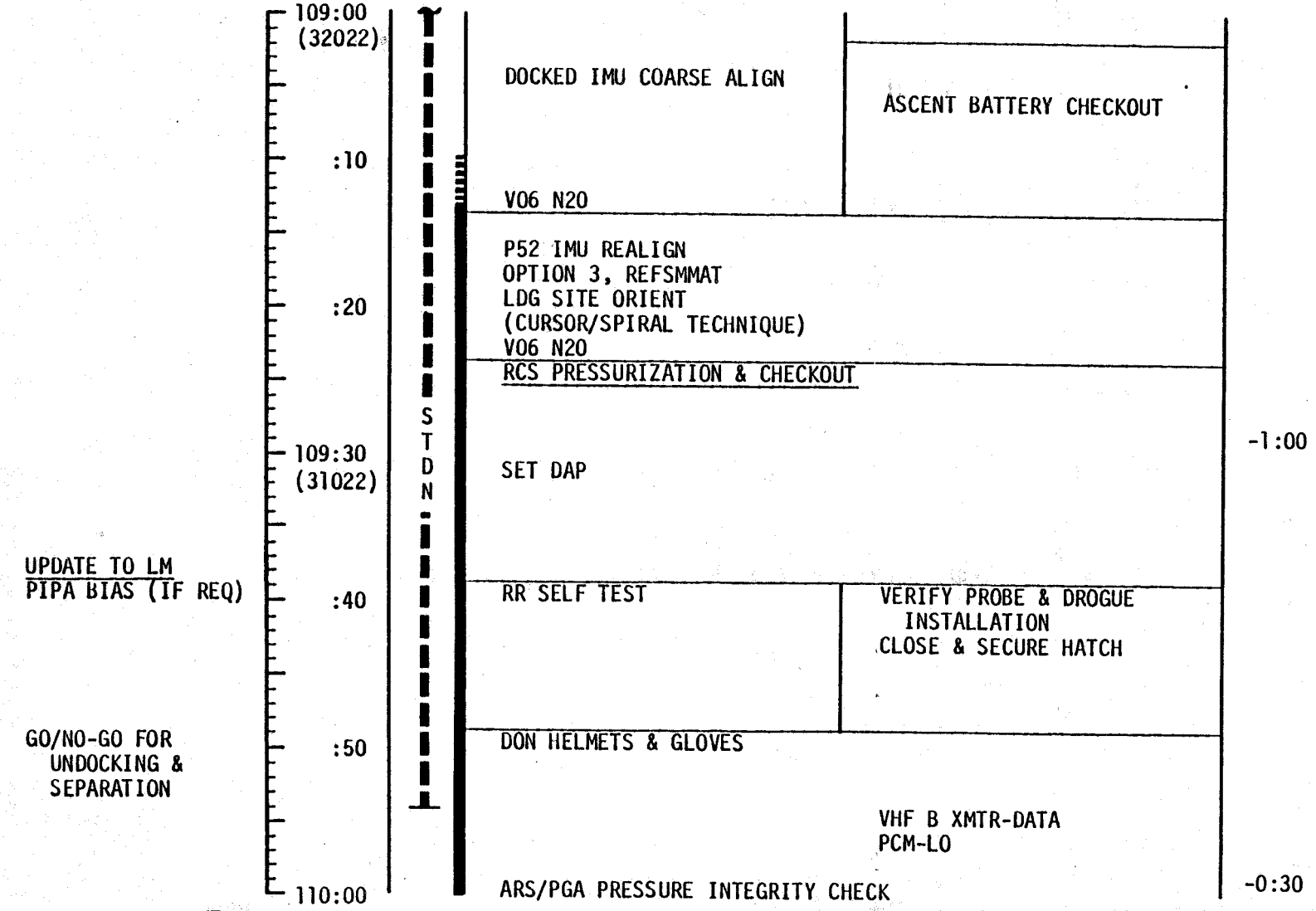
LM LANDING GEAR DEPLOY

UPLINK:
CSM S.V. AND V66

UPDATE:
DAP DATA (110:05)
UNDOCK/SEP PAD COPY AT (110:25)
P24 TRK PAD: (LDMK 17-X)(110:55)
LM DOI-2 P76 PAD (112:10)

109:00

LM FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	109:00 - 110:00	6/11	3-110

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

109:00
(21101)
(_1111)

SIM EXP STATUS
(*0000)
(01000)

MAN ATT (3) - RATE CMD
LIMIT CYCLE - ON
ATT DB - MIN
RATE - LOW
BMAG (3) - ATT 1/RATE 2
SC CONT - SCS
LM DOCKED IMU COARSE ALIGN

X

:10

VO6N20

S
T
D
N

VERIFY:
CM2/DAC/18/CEX-BRKT, MIR (T8,1/250,7) 12 fps
CM2/EL/80/CEX (f8,1/250,FOCUS) 10 FR
UTILITY PWR - ON

:20

VERIFY PGA INTERCONNECTS - TSB
DON HELMET AND GLOVES

VO6N20
ON LM CUE:
SC CONT - CMC
ATT DB - MAX
BMAG (3) - RATE 2
AT CDR'S REQUEST DURING RCS CHECKOUT
CMC MODE - FREE FOR RCS HOT FIRE

SUIT CKT INTEGRITY CHECK (DECAL)

109:30

109:30
(21101)
(_1111)

SIM EXP STATUS
(*0000)
(01000)

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

AFTER LM RCS CHECKOUT
CMC MODE - AUTO

LM RR SELF TEST
RNDZ XPNDR - OFF (VERIFY)
AUTO RCS SEL B3 - OFF

:40

S
T
D
N

ROLL (8) - OFF UNTIL LM/CM ΔP > 3.5 PSID
DOCKING LATCH RELEASE (DECAL)
HATCH INSTALLATION (DECAL)

CMDS:
DSE RECORD

UPDATE:
GO/NO-GO FOR UNDOCK/SEP

WHEN LM RR SELF TEST COMPLETE:
AUTO RCS SEL B3 - ON

:50

HATCH INTEGRITY CHECK (DECAL)

VHF ANT - RIGHT (VERIFY)
VHF RCV ONLY - B DATA
VHF AM A - SIMPLEX
VHF AM B - OFF
VERIFY DSE TAPE MOTION (LBR/RCD/FWD/CMD RESET)

DOFF HELMET, GLOVES

RR XPNDR ACTIVATION AND SELF TEST (DECAL)

114 VALUES
A ~ 1.75 AGC
B ~ 2.35 SELF TEST
C ~ 0.3 UNLOCKED
~ 4.9 LOCKED

RNDZ XPNDR - HTRS

110:00

LM FLIGHT PLAN

MCC-H	1053 CST	CDR	LMP	NOTES
	110:00 (31022)	CABIN REGULATOR CHECK		
	:05		RATE GYRO TEST	-0:20
	:10	PREP FOR UNDOCKING		
	REV 12			
	:15	LM TIMELINE BOOK PAGE 1		-0:10
	:20			
	(22012)	SET DAP V06 N20		
	:25	P47 THRUST MONITOR		
		CSM/LM UNDOCKING & SEPARATION		110:27
	110:30	YAW LEFT 60°, PITCH UP 90°		

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	110:00 - 110:30	6/11-12	3-112

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

110:00
(21101)
(_1111)

EXT LIGHTS RUN/EVA - ON (UP)
TUNNEL LIGHTS - OFF
ROLL (4) - ON

SIM EXP STATUS
(*0000)
(01000)

V48, LOAD N47 & N48
V49 TRIM MNVR TO CSM SEP PAD ATT

+						WT	N47
	0	0				P_{TRIM}	N48
	0	0				Y_{TRIM}	

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

GDC ALIGN
VERIFY ORDEAL
ALT SET = 40 NM

:10

REV 12

PERFORM UNDOCKING SWITCH CONFIGURATION

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)

NOTE: UNDOCKING MAY OCCUR:
1. FROM 4 MIN EARLY TO 4 MIN LATE ON THE NOMINAL INERTIAL (IMU) ATTITUDE
2. FROM 4 MIN LATE TO 45 MIN LATE ON THE NOMINAL LOCAL VERTICAL (ORDEAL) ATTITUDE

:20

P41 (TRIM)
BMAG (3) - ATT 1/RATE 2
SC CONT - SCS
V48 (11102)
(_1111)
RHC & THC - ARMED
V06N20E(AT LM REQUEST)
UNDOCKING CHECKLIST

(11102)
(_1111)

SEPARATION (000,090/105,000)
_____:_____:_____.____

TIG: 110:27:55
BT: 3.3 SEC
ΔVT: 1.0 FPS
ULLAGE: N/A
ORBIT: 60.3 X 13.6

DAC - OFF
RECORD MAG % ____, FR # ____

110:30

UNDOCKING CHECKLIST

DAC - ON
59:00 EMS MODE - NORM
THC PWR - ON

59:30 PROBE EXT/REL - EXT/REL (MOM)
VERIFY PROBE EXTENDED, LM ATTACHED
ALLOW MOTION TO DAMP (5 SEC)
PROBE EXT/REL - EXT/REL (HOLD)(< 20 SEC)
00:00 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
PCM BIT RATE - LOW

P30 MANEUVER

SET STARS	C R	S C	M S/C	S G	E &	P N	PURPOSE PROP/GUID
	+			N	/	A	WT N47
R_{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 (105)
	X	X	X				Y (000)

LM FLIGHT PLAN

MCC-H	1123 CST	CDR	LMP	NOTES
	110:30 (22012)		SEPARATION PHOTOGRAPHY LM3/DAC & DC	
		DOFF HELMETS & GLOVES	CONFIGURE CAMERAS FOR CABIN PHOTOS, LM/DAC & DC	
	:35	LDG RADAR CHECK		
	:40	REPORT: V06N20 ANGLES & GET DPS THROTTLE CHECK	VHF B XMTR-OFF, BIOMED-LEFT PCM-HI	
	:45	DPS PRESSURIZATION & CHECKOUT	AGS ACTIVATION	
UPDATE TO LM AGS K-FACTOR REV 12 LS TCA	:50		LOAD AGS ABORT CONSTANTS V47 AGS INITIALIZATION ALIGN AGS TO PGNS	
	:55	MNVR TO RR CHECK ATT	AGS CONTROL CHECK CONFIGURE CAMERAS FOR TCA LM3/DAC, LM/DC	
	111:00			

STDN

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	110:30 - 111:00	6/12	3-114

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

110:30 (11102) (_1111)

V49 MNVR TO LOW ALT LDMK TRK PAD ATT (110:40)

SIM EXP STATUS (*0000) (01000)

SET HGA MAN P +12, Y 334 REACQ, NARROW FOR AOS

CONFIGURE CAMERA: (LDMK TRK)
CM/DAC/SXT/CEX (EXP-PAD) 1 fps (3% MAG)

MAG (BB) ____, MAG % ____
UTILITY PWR - ON
RR XPNDR - PWR

:40

ACQ STDN HGA P +12, Y 334 REACQ, NARROW
VHF ANT - LEFT
VHF AM A - OFF
VHF AM B - DUPLEX
ADJUST SQUELCH
VHF RNG - RNG (DSE VOICE USE MARGINAL)
VHF AM RCV ONLY - OFF

CMDS:
DSE STOP
CUE:
HGA AUTO
UPDATE:
P24 T2 TIME (IF REQD)

:50

STDN

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

(P20) (-2.000) (0.5°DB)

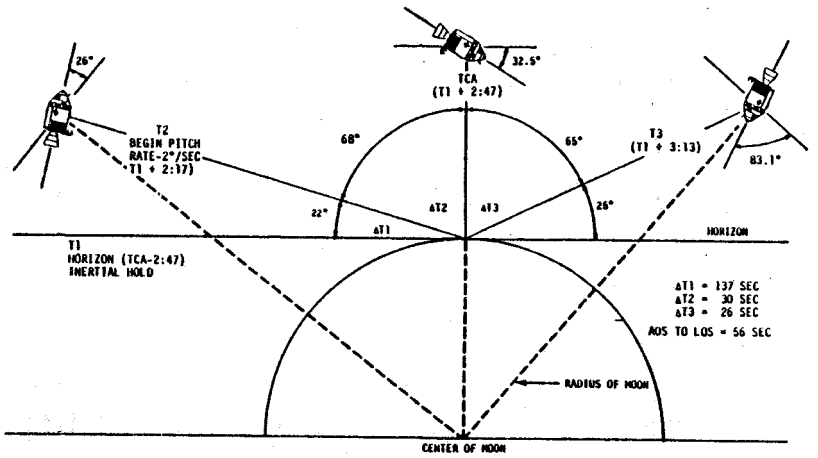
CMDS:
DSE RECORD

P24 (LDMK 17-X)
OPT ZERO - OFF
OPT MODE - CMC
OPT TEL TRUN - SLAVE TO SXT
OPT COUPLING - RSLV
OPT SPEED - HI

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

111:00

CSM LOW ALTITUDE LANDMARK TRACKING PROFILE



P24 LDMK TRACKING (1/125)

TGT:

T_1 ___:___:___

T_2 ___:___:___.___ (111:00:28.5)

TCA ___:___:___

T_3 ___:___:___

R ____ °P ____ °Y ____ °(T2 ACQ)
(0 2 0) (2 9 6) (0 0 0)
N or S NM ___ / SA ___ TA ___ (T2 ACQ)

N89	17-1	17-2	17-3
LAT	+20.160	+20.020	+20.272
LONG/2	+15.405	+15.402	+15.350
ALT	-001.96	-001.97	-001.89

LM FLIGHT PLAN

MCC-H	1153 CST	CDR	LMP	NOTES
UPDATE TO LM CSM CIRC P76 PAD NO PDI+12 ABORT PAD PDI PAD PDI EARLY ABORT PAD PDI LATE ABORT PAD T2 ABORT T3 TIG SHe PRESSURE	111:00 (22012)	OBSERVE LDG SITE		
	:05	RR CHECKOUT		
	:10	P52 IMU REALIGN OPTION 3, REFSMMAT (LDG SITE ORIENT)		
	:15			
	:20			
	:25	COAS CALIBRATION		
	111:30			



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	111:00 - 111:30	6/12	3-116

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

111:00 (P20) (0.5°DB) X
(11102) (_1111)
(11102) (_1111)
:10
STDN
:20
111:30

2:17 - T2 (AUTO PITCH RATE BEGINS) OPT MODE - MAN, TAKE MARKS
2:47 - TCA — SIM EXP STATUS (*0000) (01000)
3:13 - T3 (LDMK LOSS) DAC - OFF

STOP PITCH RATE AT P 091
VHF RNG - RESET, COMPARE RR AND VHF RANGE
ACQ STDN HGA P -49, Y 187
RECORD MAG % _____, REMOVE & STOW DAC

CMDS:
DSE DUMP

P00
P52 (OPTION 3)
(LDG SITE ORIENT)
REPORT: GYRO TORQUING ANGLES

GDC ALIGN

P52 IMU REALIGN

N71: __ __ . __ __
N05: __ __ __ . __ __
N93:
X __ __ . __ __ __
Y __ __ . __ __ __
Z __ __ . __ __ __
GET __ __ __ . __ __ . __ __

UPDATE:
CIRC PAD (111:15)
P24 LDMK TRACK PAD (LDMK RP-3) (112:20)
PADS E-N (113:15)
PIPA BIAS (IF REQD)

VHF AM A - SIMPLEX
ADJUST SQUELCH
VHF AM B - OFF
VHF RCV ONLY - B DATA
VHF AM T/R - T/R
MODE - ICOM/PTT (PNL 9)
VHF RNG - OFF
MODE - VOX (PNL 6 & 10)

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

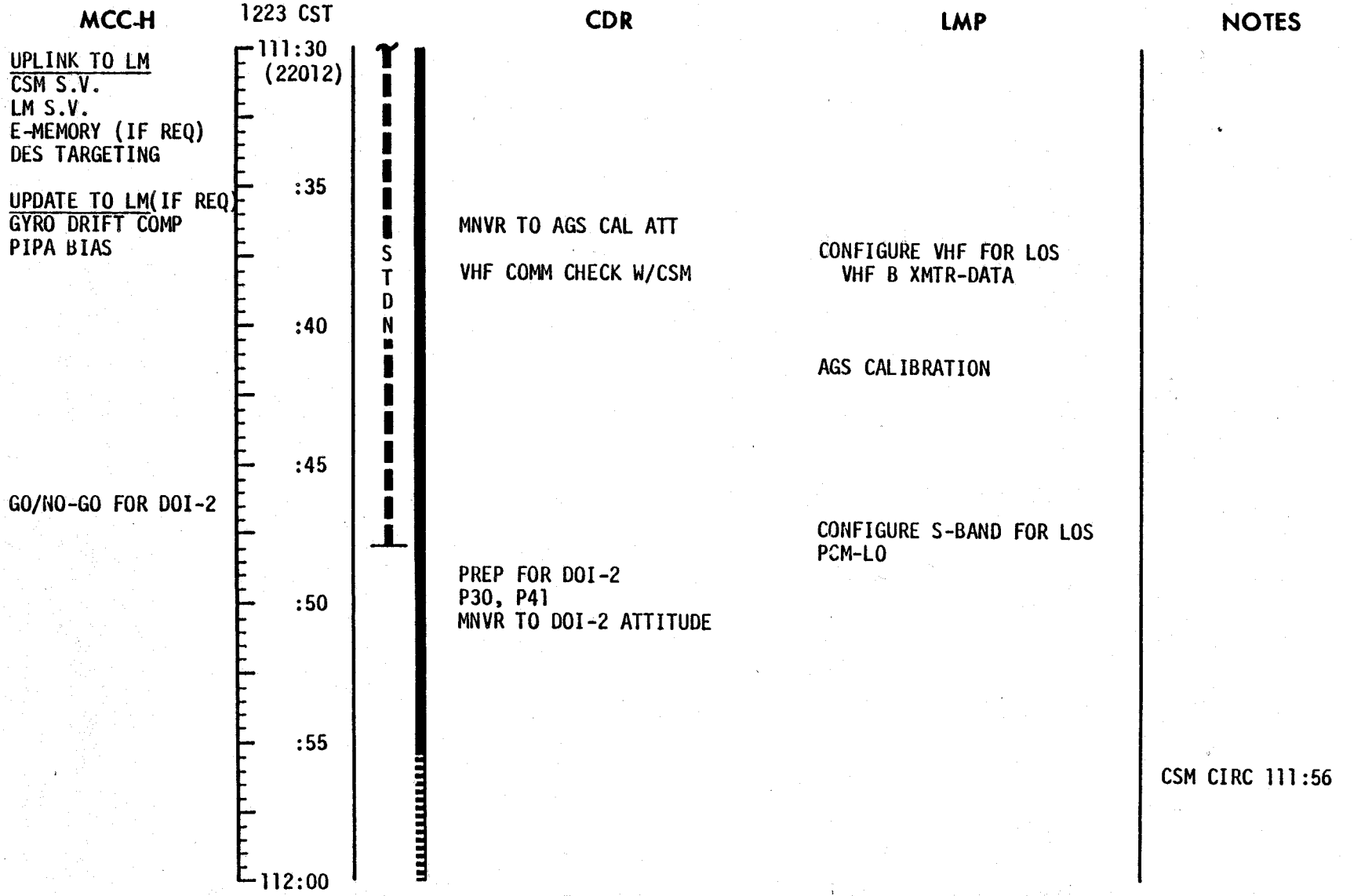
P30; VERIFY CIRC TIG AND ΔV'S

V49 MNVR TO CIRC BURN PAD ATT (111:34)
HGA P -35, Y 207

P30 MANEUVER

SET STARS	C S	I P	R S/G	C	&	N	PURPOSE / PROP/GUID
	+						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 (100)
	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	0	TRN
	X	X	X				BSS
	X	X					SPA
	X	X	X				SXP

LM FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	111:30 - 112:00	6/12	3-118

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

111:30
(11102)
(_1111)

STDN

(11101)
(_1111)

:40

(P40)
(0.5°DB)

:50

(11101)
(_1111)

112:00

SIM EXP STATUS
(*0000)
(01000)

GDC ALIGN
VERIFY ORDEAL
ALT SET = 60 NM
VHF COMM CHECK WITH LM
PRE-SPS BURN SIM PREP (CUE CARD)
V48 (11101)
(_1111)
SET DET COUNTING UP TO CIRC

P40 (TRIM)

UPDATE:
GO/NO-GO FOR CIRC

CMDS:
DSE RECORD

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

CSM CIRCULARIZATION (000,004/100,358)

_____:_____:_____._____

TIG: 111:55:22.7
BT: 4.0 SEC
ΔVT: 70.1 FPS
ULLAGE: 4 JET, 12 SEC
ORBIT: 70.3 X 54.3

P00

VOICE P76 BURN DATA TO LM
V82

CIRC BURN TABLE

SPS LIMITS	P OR Y RATES	ATT DEVIATIONS	SHUTDOWN TIME	RESIDUALS	MANUAL
TIGHT	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 (-)V_{gy} OR (+)V_{gz} ROLL LEFT AND USE -Z THRUSTERS	MANUAL START RESTART IF ΔV_{go} >20 FPS

BALL VLV FAILURE - START ON SUSPECT BANK

BURN STATUS REPORT

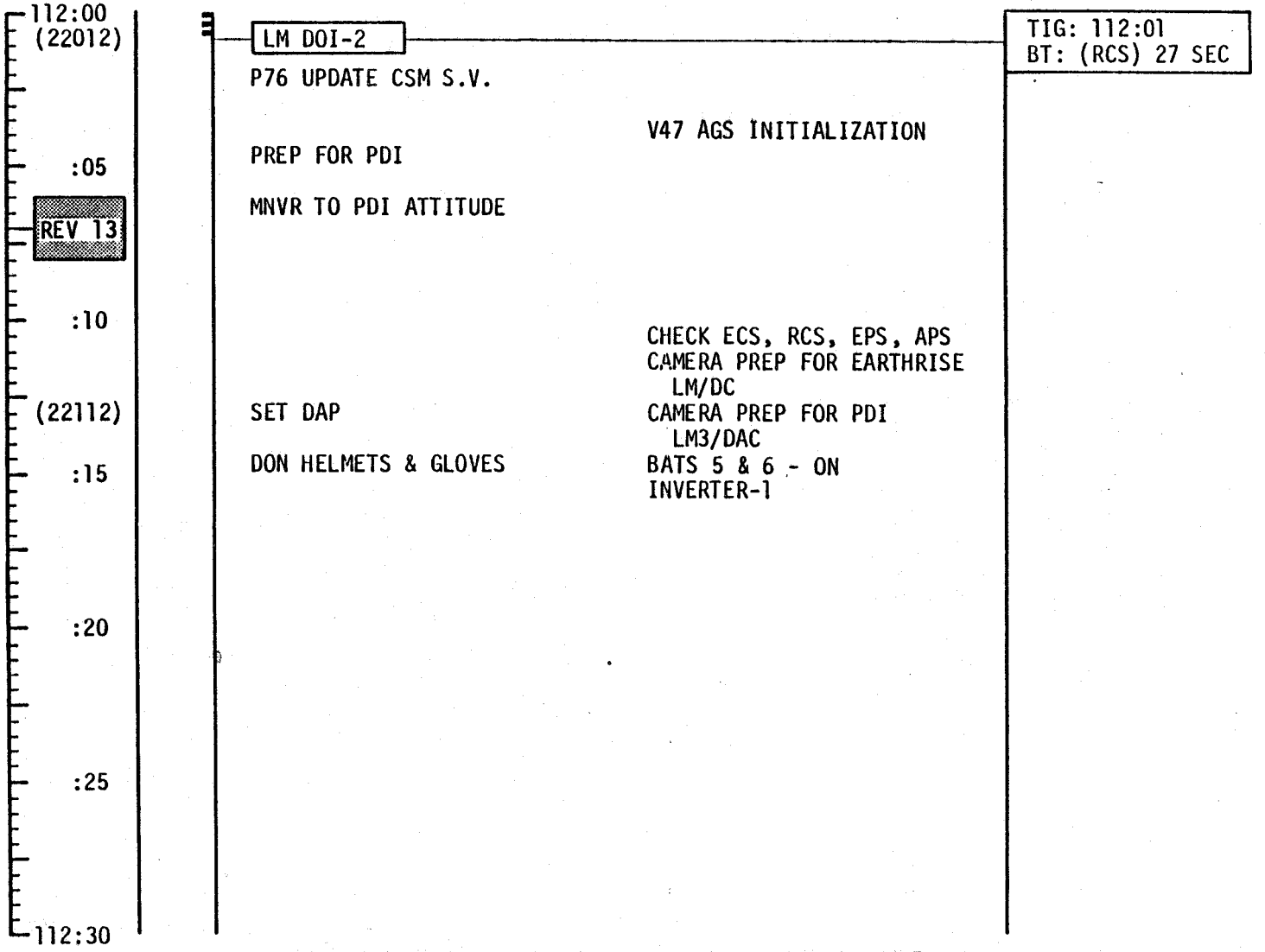
X X	ΔTIG
X X	BT
	V_{gx}
TRIM	
X X X	R
X X X	P
X X X	Y
	V_{gx}
	V_{gy}
	V_{gz}
	ΔV_c
X	OX
X	FUEL
X	UNBAL

CONTINGENCY COMMUNICATIONS

1. Loss of voice comm with LM
   VHF AM B - SIMPLEX
   VHF RCV ONLY - OFF
   (LM will select A and B simplex)
2. If no reply from CSM call or garbled voice
   VHF AM A - OFF
3. If no reply from CSM call
   VHF AM B - DUPLEX
   (LM will select duplex A)
4. Select back up audio center

LM FLIGHT PLAN

F8V277 MCC-H



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	112:00 - 112:30	6/12-13	3-120

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

112:00
(P20)
(0.5°DB)
(11101)
(_1111)

P20 OPT 5 (LDMK TRK ATT) (112:10)
N78 (+051.05)
(-053.41)
(+012.20)
N79 (+000.50)
(030,338/030,000)
SET HGA MAN P -10, Y 343
REACQ, NARROW FOR AOS

SIM EXP STATUS
(*0000)
(31000)

LM DOI-2 (112:01)
____:____:____.__

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

MAG (BB) _____, MAG % _____
UTILITY POWER - ON

REV 13

COPY P76 DATA FROM STDN		
33 ___:___:___.__		
84 ___.__	___.__	___.__

:10

P76 (LM DOI-2)
GDC ALIGN
VERIFY ORDEAL
ALT SET 70 NM

P24 (LDMK RP -3)
OPT ZERO - OFF
OPT MODE - CMC
OPT TEL TRUN - SLAVE TO SXT
OPT COUPLING - RSLV
OPT SPEED - MED

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

:20

3:50 - DAC - ON

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

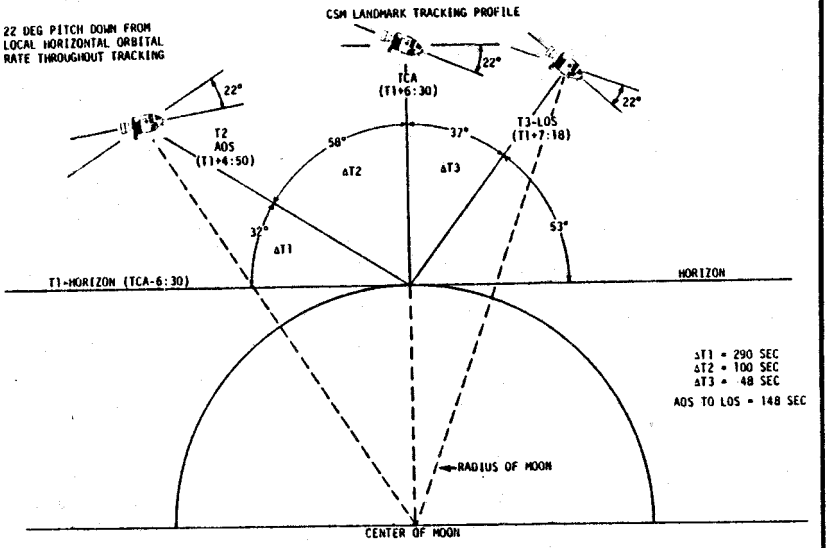
6:30 - TCA
7:18 - T3 (LDMK LOSS) DAC - OFF

P20

LOAD N89 FOR LDMK 17-1
(+20.160)(+15.405)

UNSTOW CSM RESCUE BOOK

112:30



P24 LDMK TRACKING
TGT: RP-3 (1/250)

T_1 — — —•— —•— —
T_2 — — —•— —•— — . __ (112:21:46.7)
TCA — — —•— —•— —
T_3 — — —•— —•— —

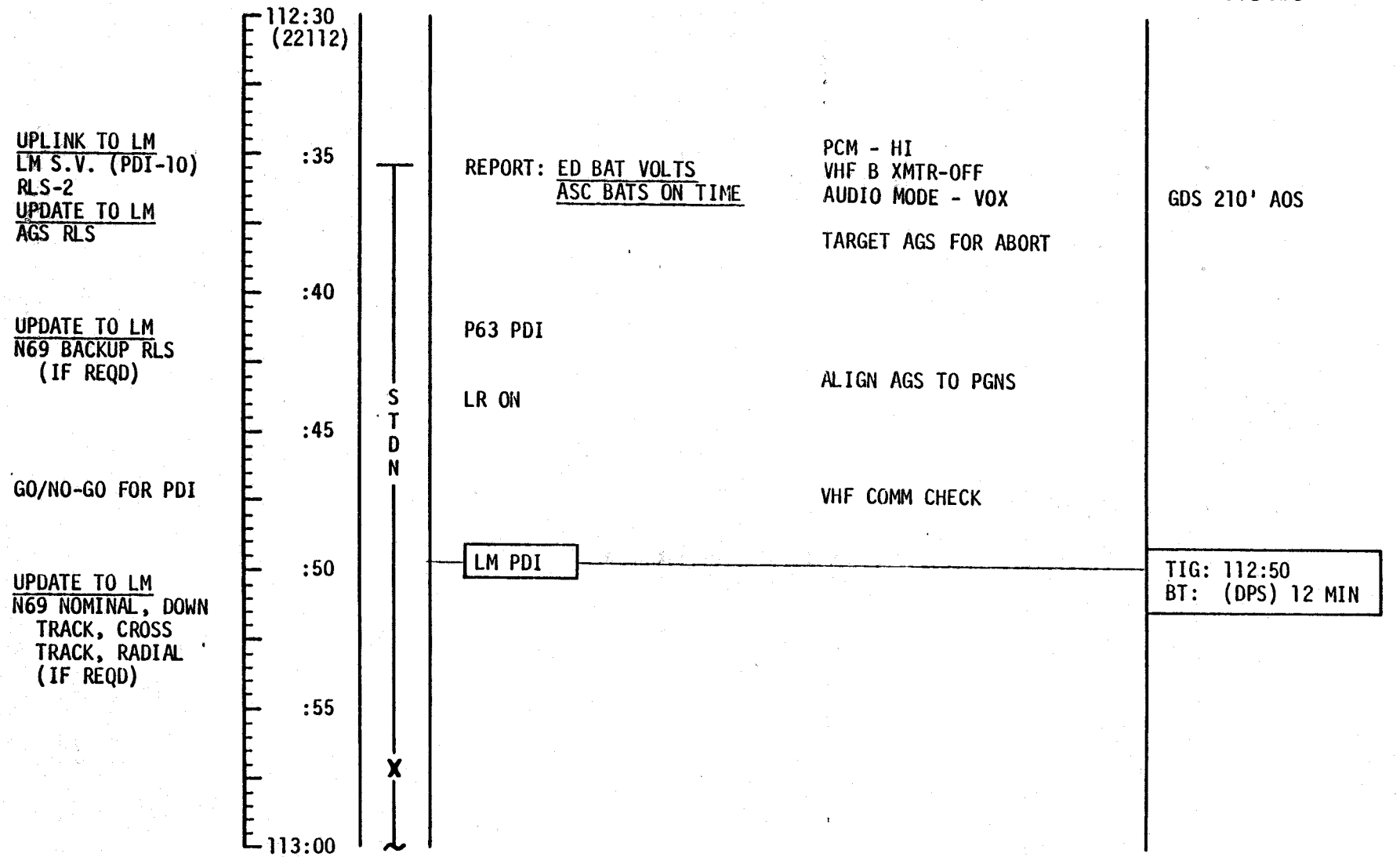
R _____ °P _____ °Y _____ ° (T2 ACQ)

N or S NM ____ /SA _____ TA ____ (T2 ACQ)

N89
LAT -03.694
LONG/2 +65.956
ALT +000.00

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-121

LM FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	112:30 - 113:00	6/13	3-122

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

112:30
(P20)
(0.5°DB)

(11101)
(_1111)

:40

STDN

:50

(11101)
(_1111)

113:00

SIM EXP STATUS
(*0000)
(31000)

ACQ STDN HGA P -10, Y 343 REACQ, NARROW

REPORT: BURN STATUS

CMDS:
DSE STOP

UPDATE:
FLIGHT PLAN
P24 LDMK TRACK PAD (LDMK 17-1 (112:50)
GO/NO-GO FOR PDI

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

VHF COMM CHECK WITH LM

P24 (LDMK 17-1)
OPT ZERO - OFF
OPT MODE - CMC

LM PDI (112:49:37.7)
_____:_____:_____.___

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

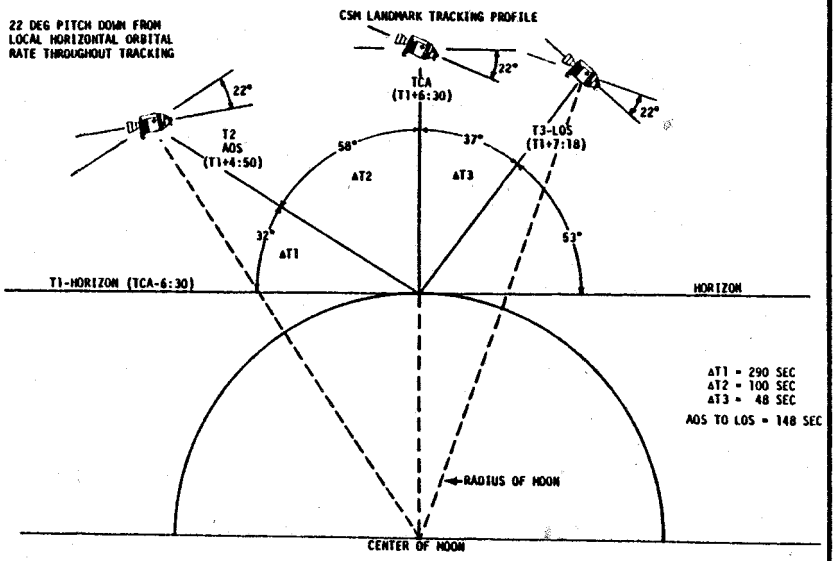
CMDS:
DSE RECORD

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

P00



P24 LDMK TRACKING
TGT: 17-1 (1/60)

T_1 — — —•— —•— —

T_2 — — —•— —•— —.— (112:55:46.7)

TCA — — —•— —•— —

T_3 — — —•— —•— —

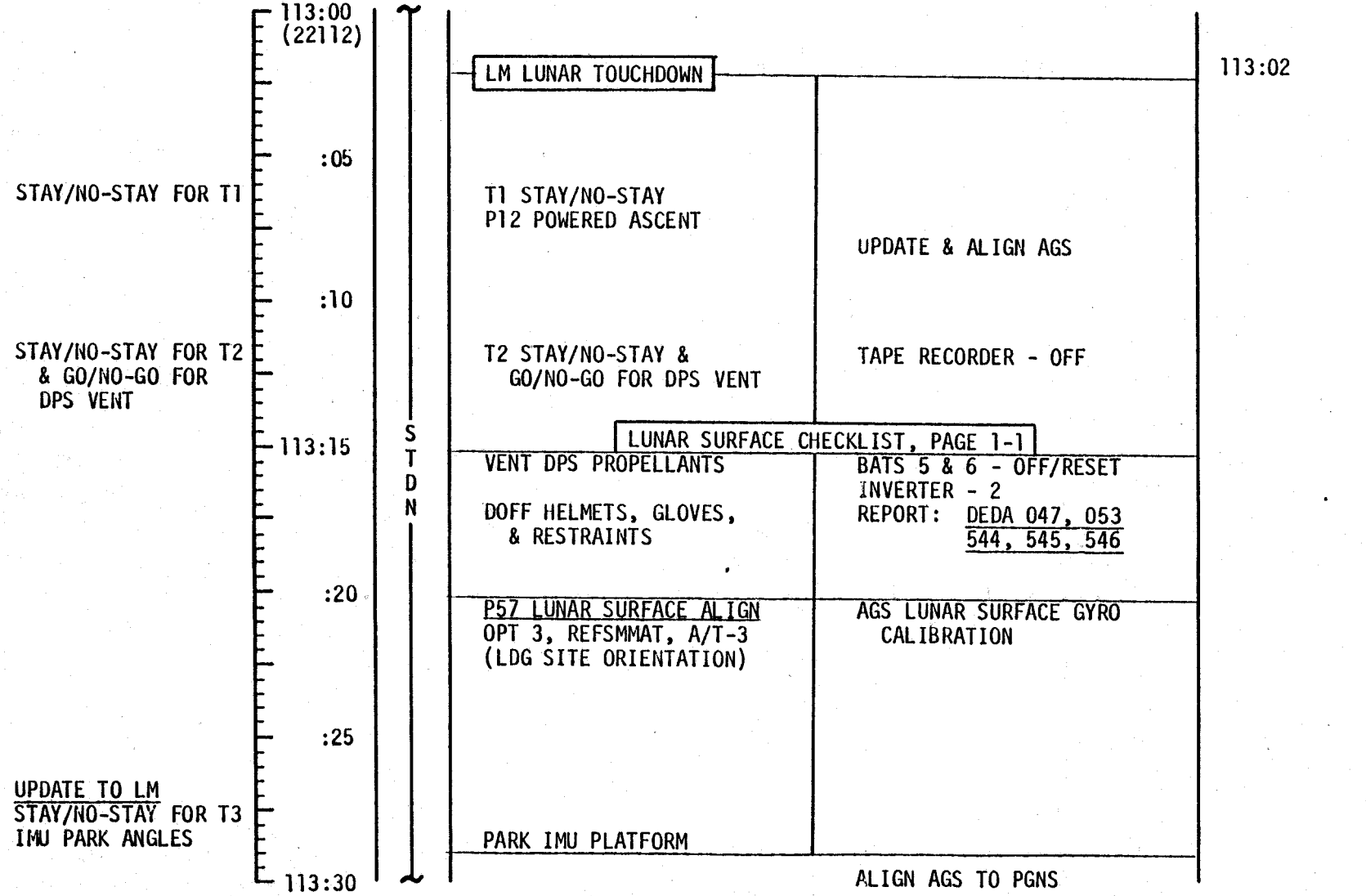
R ____ °P ____ °Y ____ ° (T2 ACQ)

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

N89
LAT +20.160
LONG/2 +15.405
ALT -001.96

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-123

LM FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	113:00 - 113:30	6/13	3-124

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

113:00
(11101)
(_1111)

V49 MNVR TO P52/COAS CAL ATT (113:10)
(180,284,338) HGA P -33, Y 2

SIM EXP STATUS
(*0000)
(21000)

LM TOUCHDOWN (113:02)
_____:_____:_____.__

P52 IMU REALIGN

N71: __ __.__ __
N05: __ __ __.__ __
N93:
X __ __.__ __ __
Y __ __.__ __ __
Z __ __.__ __ __
GET __ __ __.__ __.__ __

CONFIRM STAY/NO STAY FOR T1

CUE:
HGA AUTO
CMDS:
DSE DUMP

:10

P52 (OPTION 3)
(LDG SITE ORIENT)
CONFIRM STAY/NO STAY FOR T2

S
T
D
N

REPORT: GYRO TORQUING ANGLES
GDC ALIGN

CSM G&C CHECKLIST

P52 (COAS CALIB) PAGE G/7-6
USE STAR 16 (PROCYON)
V44 (SET LUNAR SURFACE FLAG)
INHIBIT ALL JETS EXCEPT A1&C2 OR D1&B2,A3,C4,B3,D4

P20 OPT 5 (+X FWD SIM ATT)(113:35)
N78 (+090.00)
(+052.25)
(+180.00)
N79 (+000.50)
HGA P -24, Y 173

:20
(P20)
(0.5°DB)

COAS CALIB - N92
SHAFT: __ __ __.__ __ __
TRUN: __ __.__ __ __ __

UPDATE:
PAN CAMERA PHOTO PAD (114:10)

RNDZ XPNDR - OFF

EXT LIGHTS RUN/EVA - OFF

CMDS:
PCM BIT RATE - HIGH

113:30

E

PURPOSE		NO PDI$_1$+12 ABORT					
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				

I

PURPOSE		PDI$_1$ PAD					
GETI PDI N33	HRS	+	0	0			
	MIN	+	0	0	0		
	SEC	+	0				

J

PURPOSE		PDI$_1$ ABORT EARLY PAD					
GETI TPI N37	HRS	+	0	0			
	MIN	+	0	0	0		
	SEC	+	0				

K

PURPOSE		PDI$_1$ ABORT LATE PAD					
GETI TPI N37	HRS	+	0	0			
	MIN	+	0	0	0		
	SEC	+	0				

L

PURPOSE		T2-1 ABORT PAD					
GETI T2	HRS	+	0	0			
	MIN	+	0	0	0		
	SEC	+	0				

M

GETI TPI N37	HRS	+	0	0			
	MIN	+	0	0	0		
	SEC	+	0				

N

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

LM FLIGHT PLAN

MCC-H	1423 CST	CDR	LMP	NOTES
	113:30 (22112)	LM POWER DOWN LGC - STANDBY, IMU - OFF		
	:35			
	:40		BAT L (LMP) - ON BATS 2 & 1 - OFF/RESET BIOMED - RIGHT	
UPDATE TO LM LIFT-OFF TIMES FOR REVS 15-20		CABIN CONFIGURATION FOR STAY DEPLOY LM EVA ANTENNA		
	113:45			
	:50			
	:55			
	114:00			

STDN

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	113:30 - 114:00	6/13	3-126

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

113:30
(P20)
(0.5°DB)
(11101)
(_1111)

STDN

:40

:50

114:00

POST-SPS BURN SIM PREP (CUE CARD)
VHF AM A - OFF (CTR)
VHF RCV ONLY - OFF

DATA SYS - ON
IR - ON
UV - ON
MC/LA COVER - OPEN
IR COVER - OPEN
UV COVER - OPEN
MC - EXTD

CMDS: (AOS +68 MIN)
DSE RECORD

VERIFY DSE TAPE MOTION (HBR/RCD/FWD/CMD RESET)
SET HGA MAN, WIDE P -10, Y 25 FOR AOS

PC: STBY
STEREO
PWR

LA - ON
IMAGE MTN - ON

SIM EXP STATUS
(+0000)
(31000)

LM FLIGHT PLAN

MCC-H | 1453 CST | CDR | LMP | NOTES

114:00

CABIN CONFIGURATION FOR STAY (CONT)

CSM REV 4

REPORT: PRD

:10

:20

STDN

114:30

EAT PERIOD

:40

:50

CABIN PREP FOR EVA-1

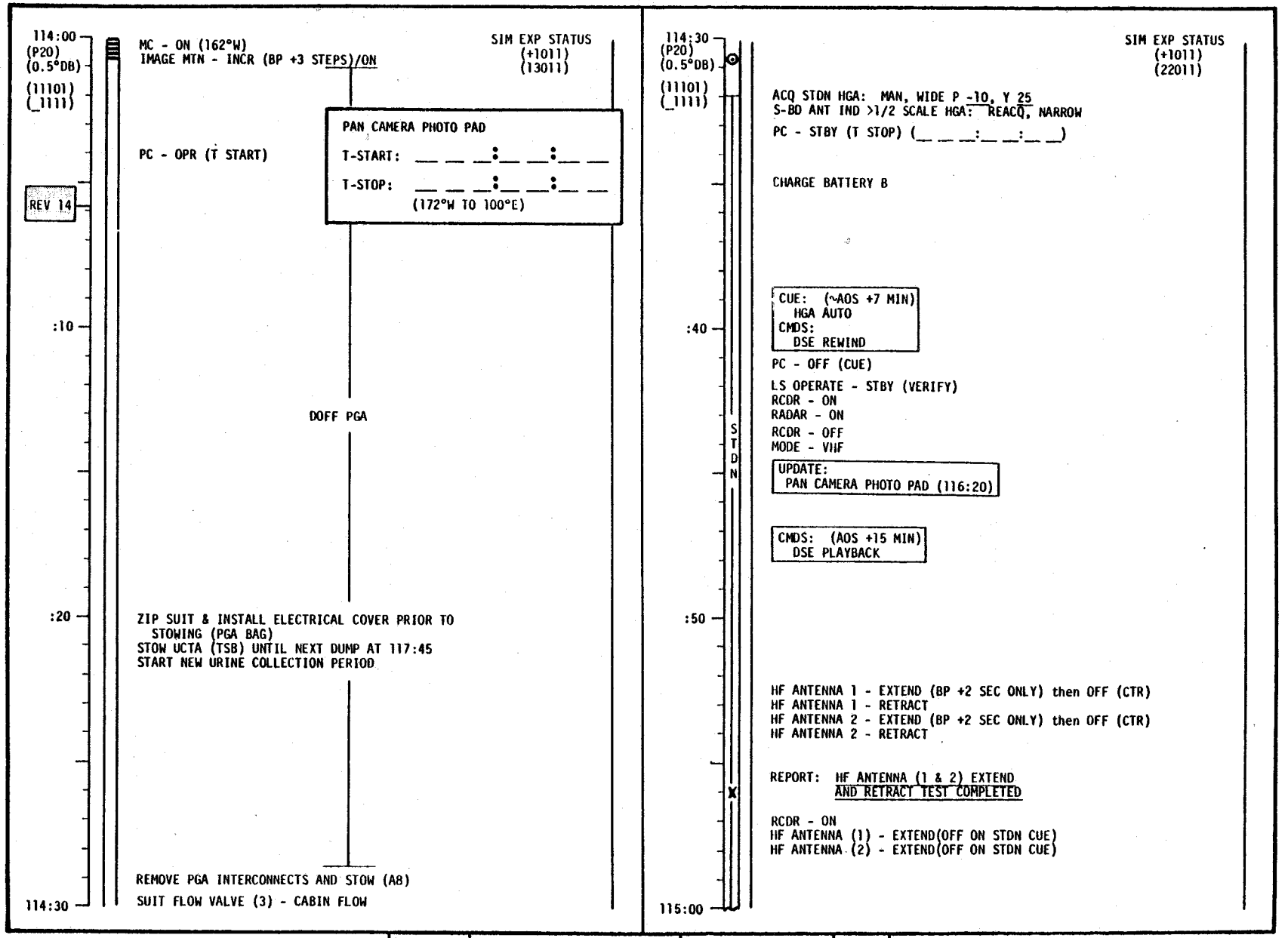
UNSTOW EVA-1 PREP & POST CARD, STOW LUNAR SURFACE CKLST

115:00

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	114:00 - 115:00	6/13-14	3-128

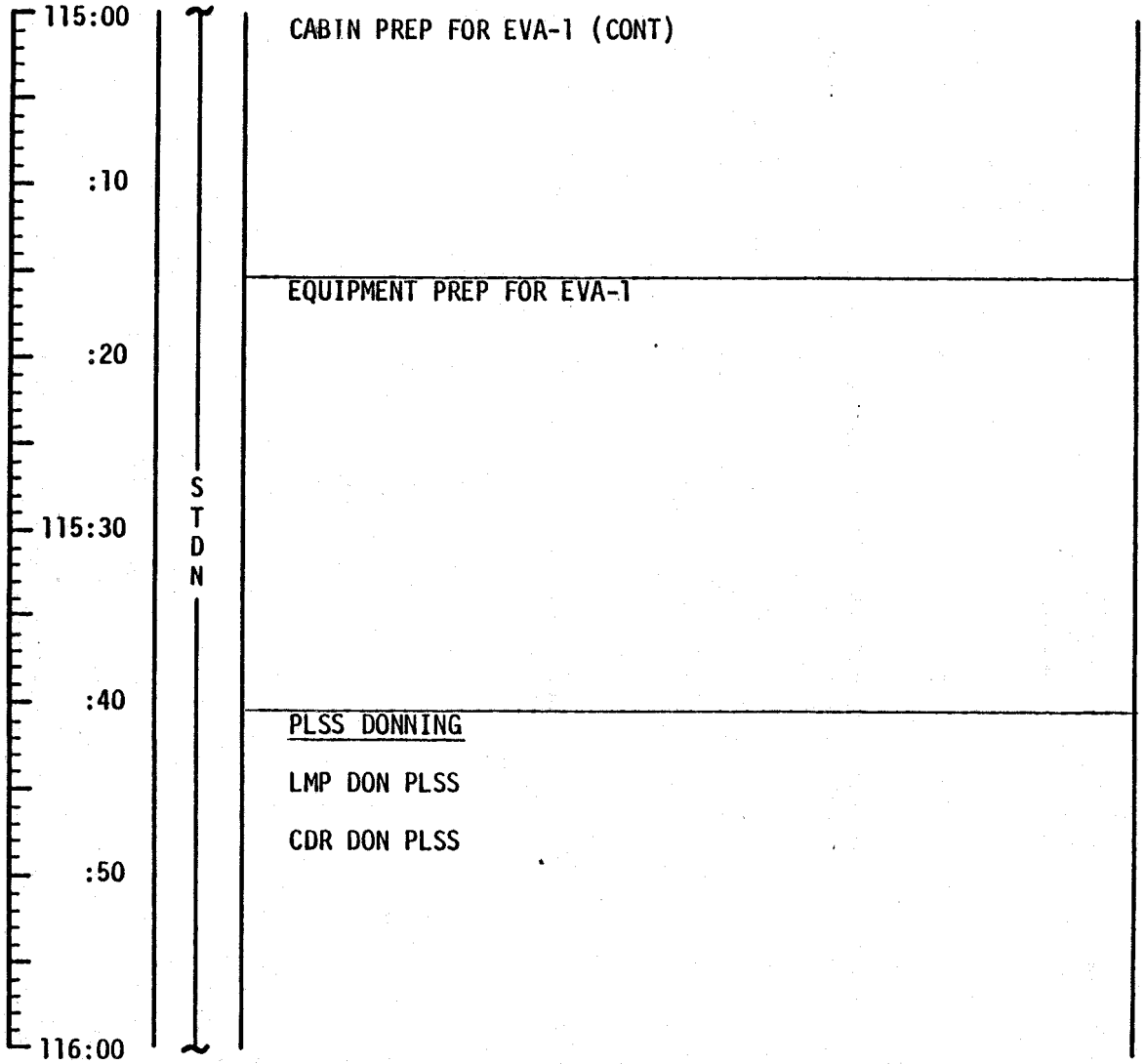
FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

MCC-H



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	115:00 - 116:00	6/14	3-130

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

115:00
(P20)
(0.5°DB)
(11101)
(_1111)

SIM EXP STATUS
(+1111)
(02411)

MC - OFF (7°E)
WAIT 30 SEC
MC - STBY
LA - OFF
IMAGE MTN - OFF
MC - OFF

CMDS:
DSE REWIND

PC SELF TEST - OFF
UV - OFF (AFTER SUNSET)
IR - OFF
DATA SYS - OFF
SM/AC PWR - OFF

:10

CMDS:
DSE RECORD

LS OPERATE - OPERATE (PULL FILM FOR 2 MIN)

LS OPERATE - STBY
MODE - HF
SELECT OMNI B
SET HGA: MAN, WIDE P -12, Y 211
HGA PWR - OFF
PCM BIT RATE - LOW

LS OPERATE - OPERATE (PULL FILM FOR 2 MIN)

:20

LS OPERATE - STBY
PCM BIT RATE - HIGH
LS OPERATE - OPERATE (PULL FILM FOR 1 MIN)

LS OPERATE - STBY

V25N78 (+090.00) VHF TEST ATT (115:30)
(-017.74)
(+000.00)
V58E
(072,000/168,000)

115:30

S
T
D
N

115:30
(P20)
(0.5°DB)
(11101)
(_1111)

HGA PWR - ON
SET HGA: MAN, WIDE P -12, Y 211 AUTO, NARROW
MODE - VHF
LS OPERATE - OPERATE (PULL FILM FOR 2 MIN)

SIM EXP STATUS
(*1111)
(00400)

LS OPERATE - STBY
MODE - HF
RCDR - OFF
SELECT OMNI B
SET HGA: MAN, WIDE P -10, Y 25 FOR AOS
HGA PWR - OFF

NOTE: S/C REALTIME
PCM AND REALTIME
SIM BAY DATA WILL
NOT BE RECEIVED
UNTIL 116:31

:40

SELECT OMNI A

VOICE MARGINAL
THRU LOS

:50

RCDR - ON
MODE - VHF
LS OPERATE - OPERATE (PULL FILM FOR 1 MIN)

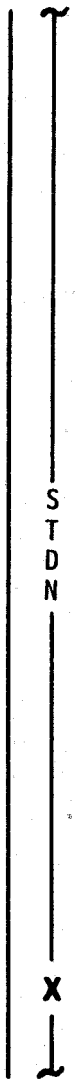
LS OPERATE - STBY
AFTER 1 MIN:
RCDR - OFF
RADAR - OFF
V25N78 (+090.00) +X FWD SIM ATT (116:02)
(+052.25)
(+180.00)
V58E
SM/AC PWR - ON
DATA SYS - ON

116:00

S
T
D
N

LM FLIGHT PLAN

MCC-H	1653 CST	CDR	LMP	NOTES
	116:00	PLSS DONNING (CONT)		CSM REV 15
	:10	PLSS COMM CHECK CONFIGURE COMM FOR EVA RECORDER - ON REPORT: PLSS O_2 QUANTITY		-0:30
	:20	OPS CONNECT		
		HELMET GLOVE DONNING		-0:15
	116:30			
GO/NO-GO FOR CABIN DEPRESS		PRESSURE INTEGRITY CHECK		
	:40	CABIN DEPRESS START WATCHES @ 3.5 PSIA		00:00/START EVA-1
		FINAL PREP FOR EVA OPEN FWD HATCH		
	:50	EGRESS DEPLOY MESA SURFACE FAMILIARIZATION	ASSIST CDR	+0:10
	117:00		RECORDER - OFF EGRESS, CLOSE HATCH SURFACE FAMILIARIZATION	+0:20



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	116:00 - 117:00	6/14-15	3-132

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

116:00
(P20)
(0.5°DB)
(11101)
(_1111)

REV 15

IR - ON
UV - ON
MC - STBY
IMAGE MTN - ON
MC - ON (164°W)
IMAGE MTN - INCR (BP +4 STEPS)/ON
LA - ON
PC SELF TEST - HTRS

SIM EXP STATUS
(+1111)
(01000)

:10

PREPARE FOR ORBITAL SCIENCE VISUAL
LANDING SITE (CM5)

:20

PAN CAMERA PHOTO PAD
T-START: __ __ __:__ __:__ __
T-STOP: __ __ __:__ __:__ __
(102°E TO 14°E)

PC: STBY
STEREO
PWR

CONFIGURE DSE (STOP/CMD RESET/REWIND)

PC - OPR (T START)

116:30

116:30
(P20)
(0.5°DB)
(11101)
(_1111)

HGA PWR - ON
ACQ STDN HGA: MAN, WIDE P -10, Y 25
S-BD ANT IND >1/2 SCALE HGA: REACQ, NARROW

SIM EXP STATUS
(+1111)
(22011)

CUE: (~AOS +7 MIN)
HGA: AUTO
CMDS:
DSE PLAYBACK

:40

UPDATE:
FLIGHT PLAN

S
T
D
N

:50

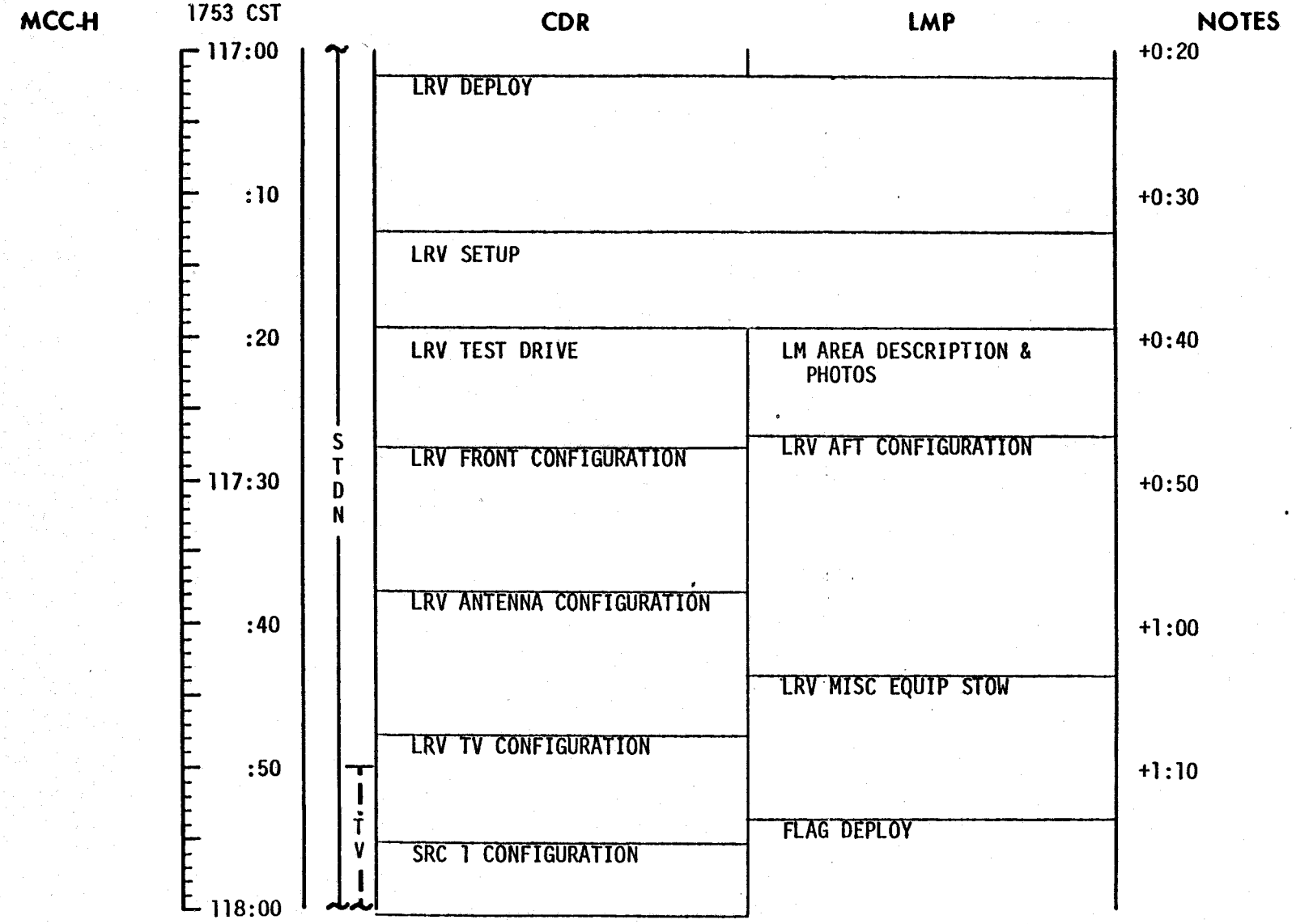
ORBITAL SCIENCE VISUAL
LANDING SITE (CM5)

PC - STBY (T STOP)(__ __ __:__ __:__ __)
PC - OFF (CUE)

117:00

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-133

LM FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	PRELIM (8/28)	10/23/72	117:00 - 118:00	6/15	3-134

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

117:00
(P20)
(0.5°DB)
(11101)
(_1111)

SIM EXP STATUS
(+1111)
(02011)

STDN

:10

CONFIGURE CAMERA: (ORBITAL SCIENCE PHOTOS)
CM5/EL/250/CEX-IVL8(f5.6,1/250,∞) 58 FR

MAG (KK) ____, FR # ____

:20

H_2 PURGE LINE HEATERS - ON
MC - OFF (63°W)
WAIT 30 SECONDS
MC - STBY
IMAGE MTN - OFF
MC - RETR
LA - OFF
UV - OFF
IR - OFF
UV COVER - CLOSE
IR COVER - CLOSE
MC/LA COVER - CLOSE

117:30

117:30
(P20)
(0.5°DB)
(11101)
(_1111)

CONFIGURE FOR URINE DUMP

SIM EXP STATUS
(+0100)
(01000)

STDN

:40

CMDS: (AOS +68 MIN)
DSE REWIND

CONFIGURE DSE (LBR/RCD/FWD/CMD RESET)(AOS +76 MIN)
SET HGA MAN, WIDE P -10, Y 25 FOR AOS

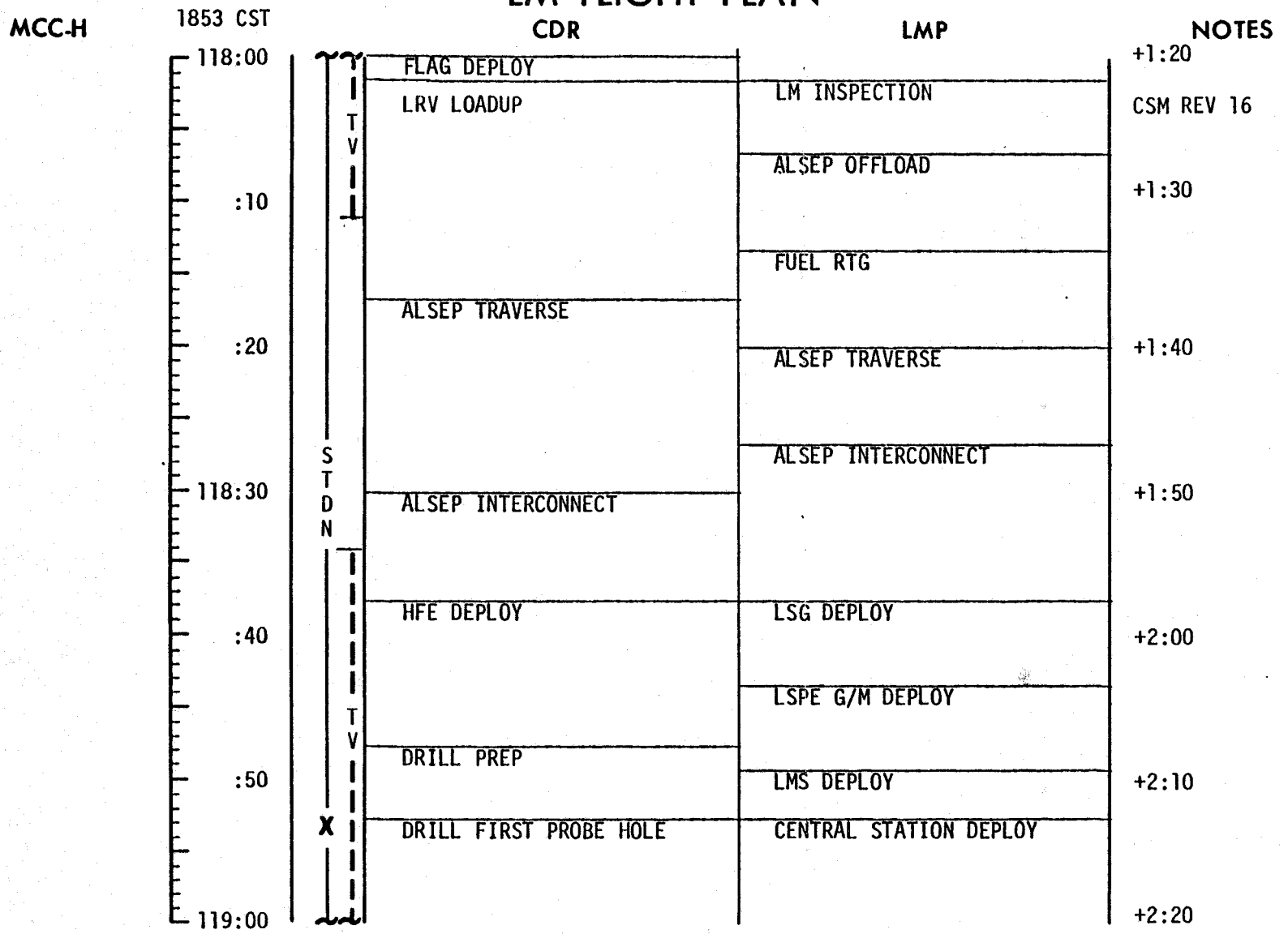
:50

H_2 & O_2 FUEL CELL PURGE
WASTE WATER DUMP
SAMPLE BUSS'S (3) - STOW SAMPLES (3)
DUMP URINE FROM BUSS'S (3) - STOW
DUMP UTCA
CONTINUE URINE COLLECTION PERIOD

TERMINATE WASTE WATER DUMP AT 10%

118:00

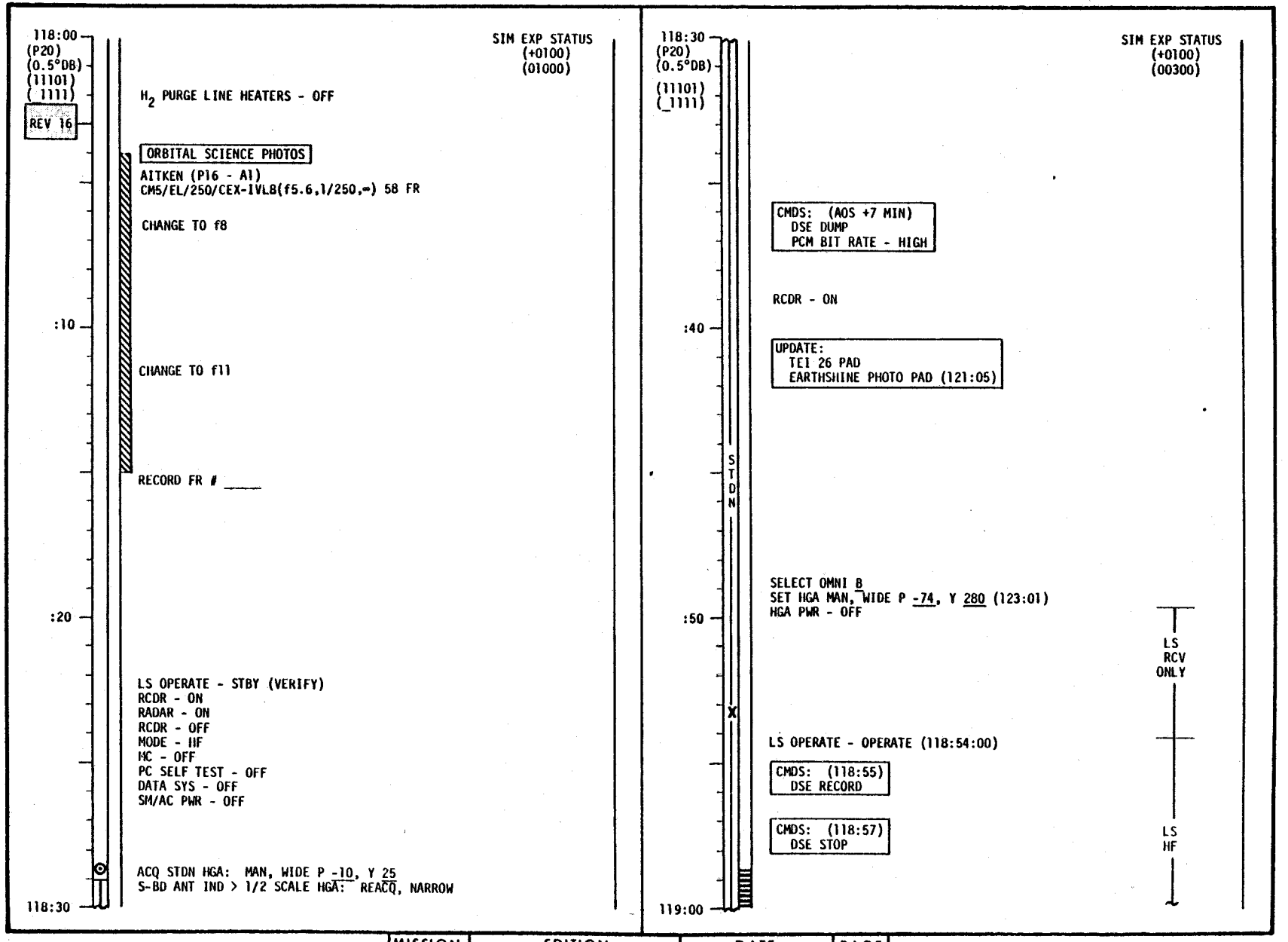
LM FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	PRELIM (8/28)	10/23/72	118:00 - 119:00	6/15-16	3-136

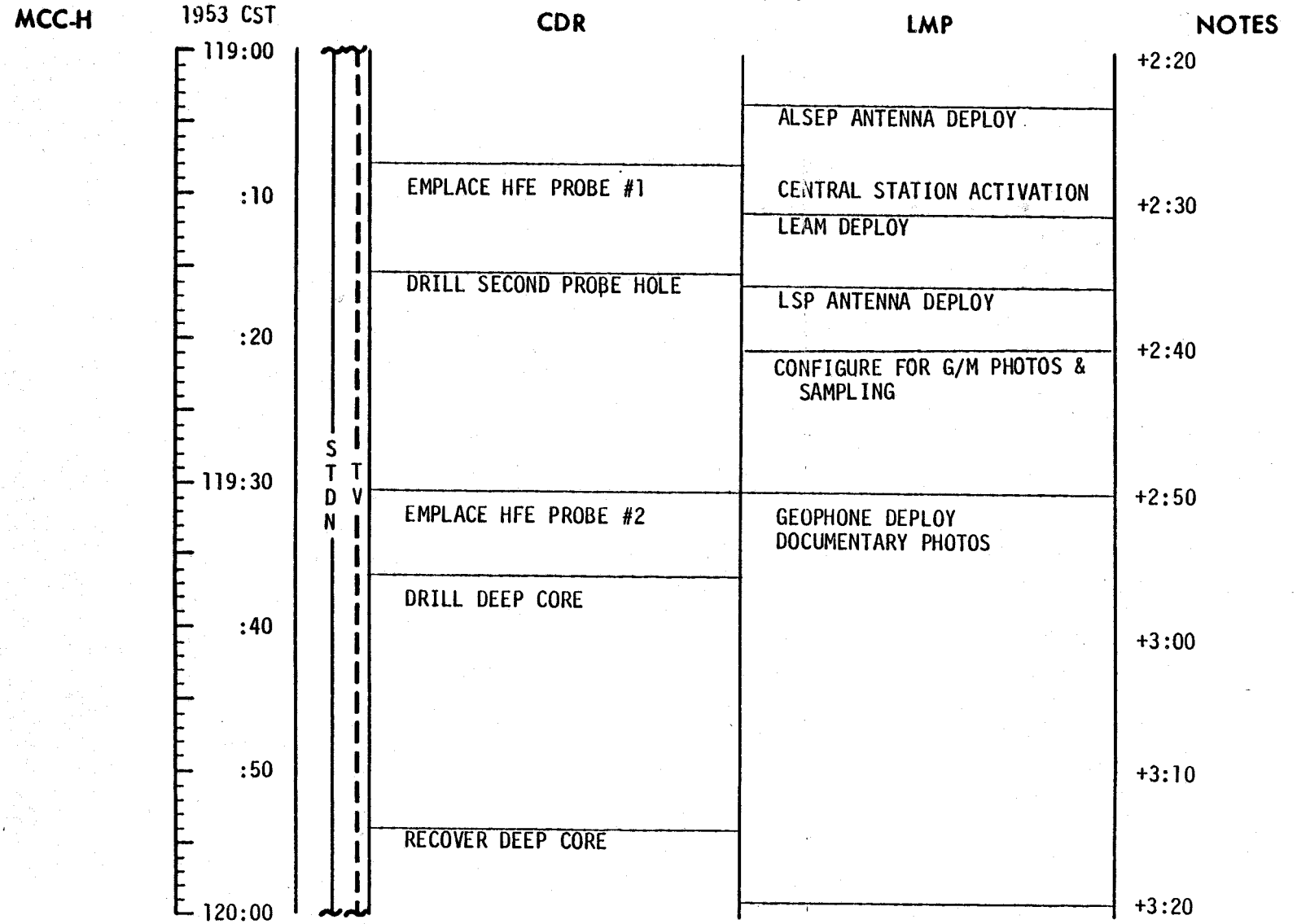
FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/5)	10/23/72	3-127

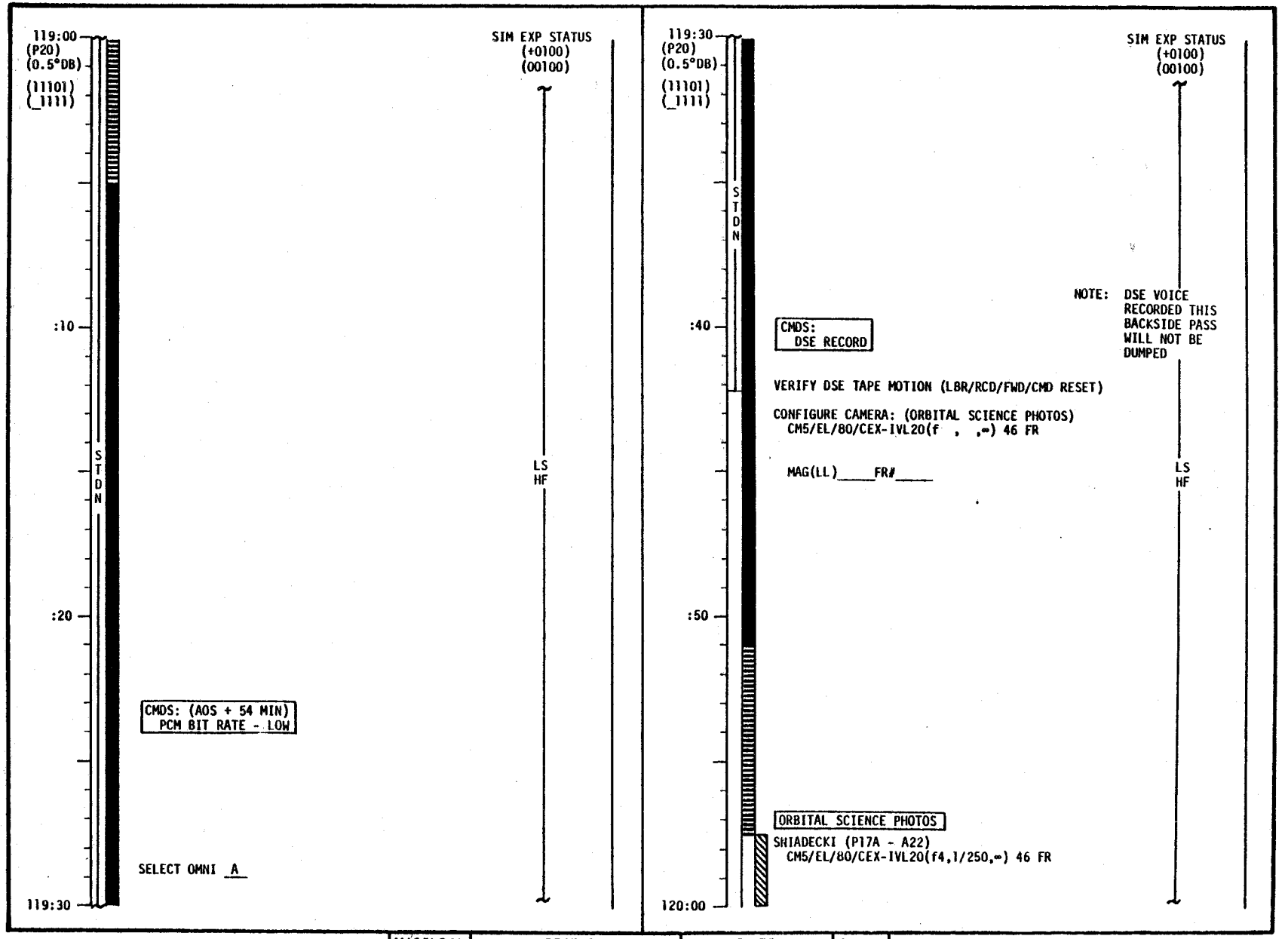
LM FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	119:00 - 120:00	6/16	3-138

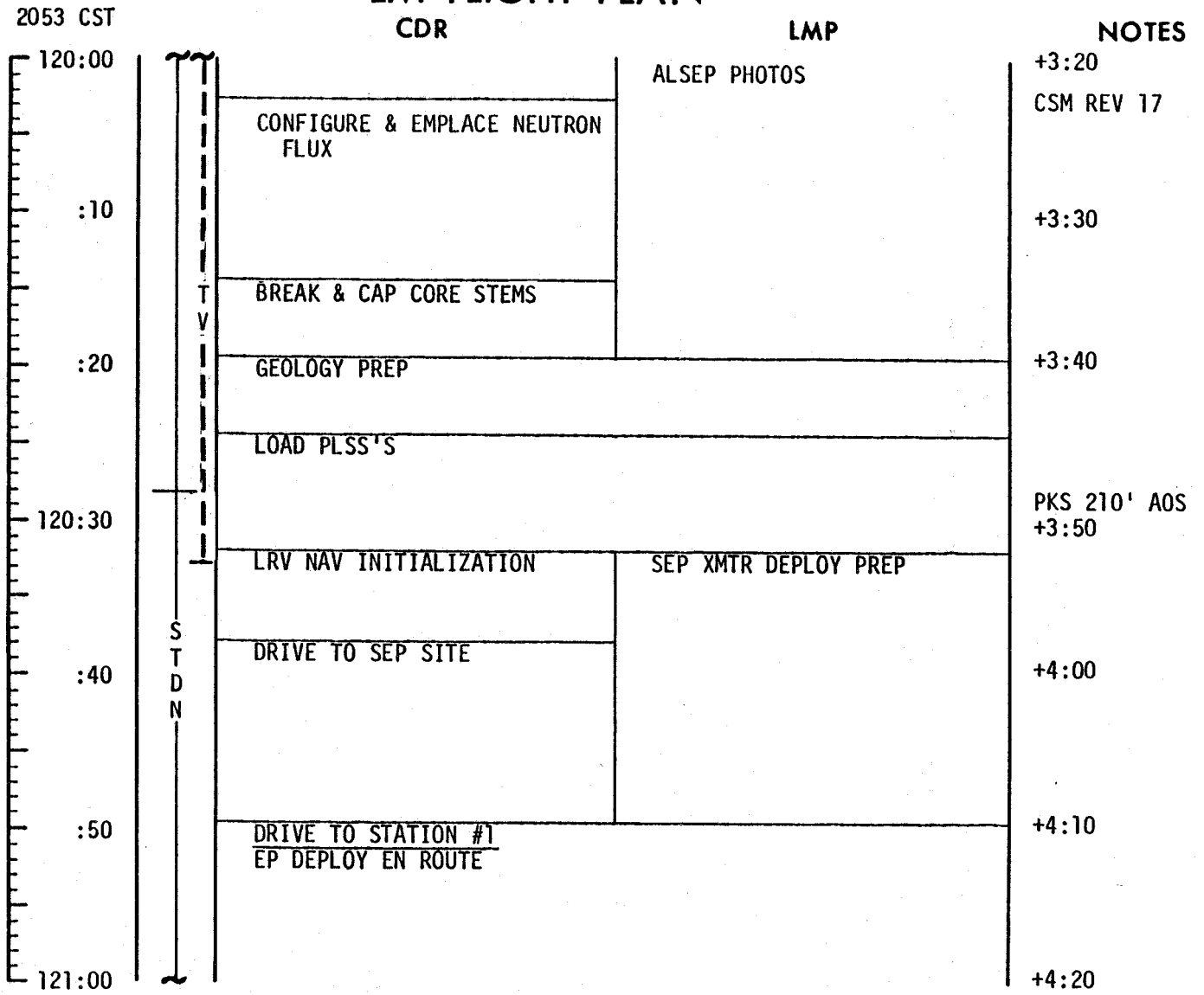
FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE

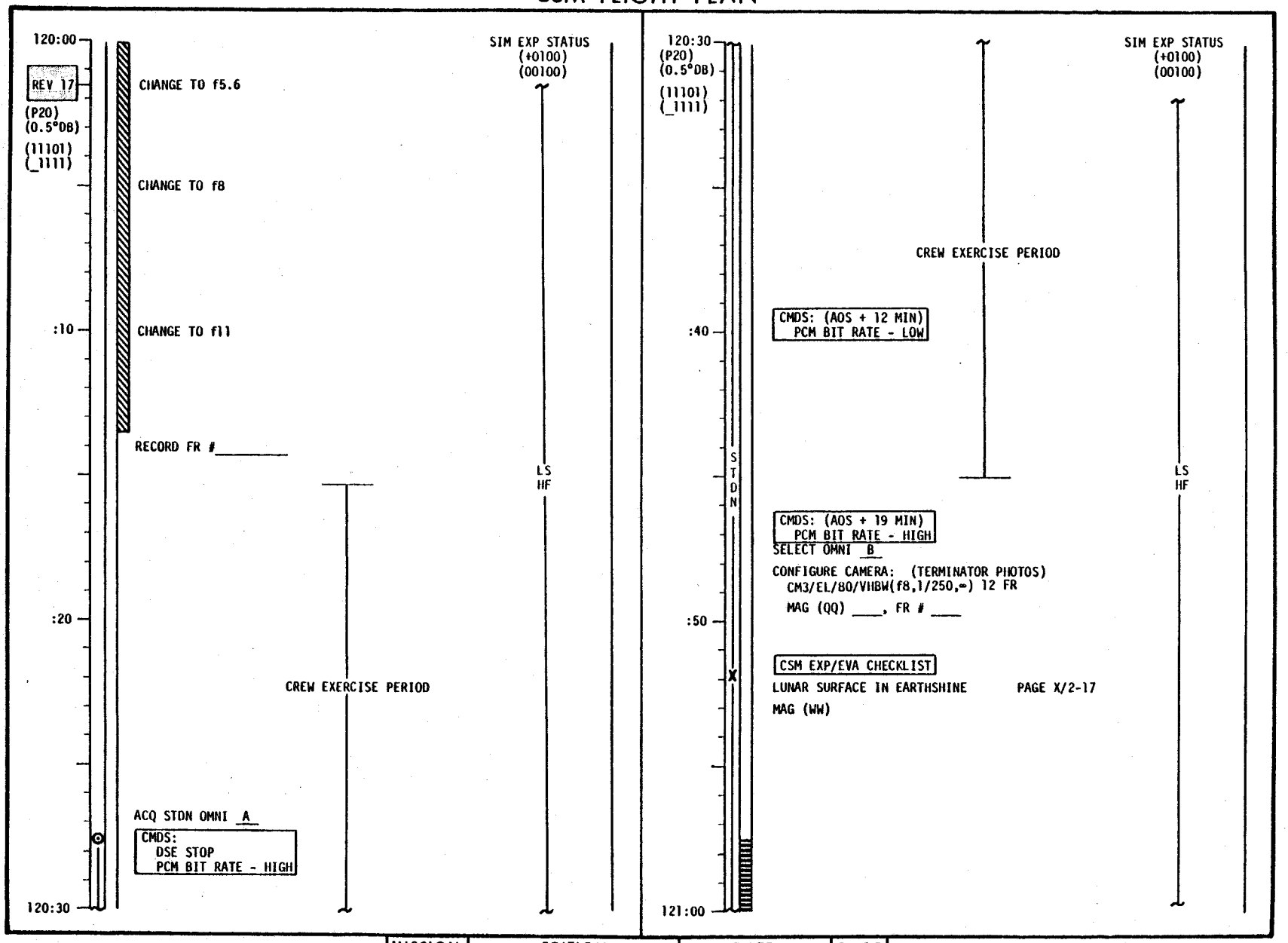
LM FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	PRELIM (8/28)	10/23/72	120:00 - 121:00	6/16-17	3-140

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

MCC-H	2153 CST	CDR	LMP	NOTES
	121:00			+4:20
		STATION #1		
	:10	GEOLOGICAL OBSERVATIONS & PHOTOS		+4:30
		RAKE SAMPLES		
		DOCUMENTED SAMPLES		
		DOUBLE CORE		
		EP DEPLOY		
	:20			+4:40
	121:30			+4:50
	:40			+5:00
	:50			+5:10
	122:00			+5:20 CSM REV 18

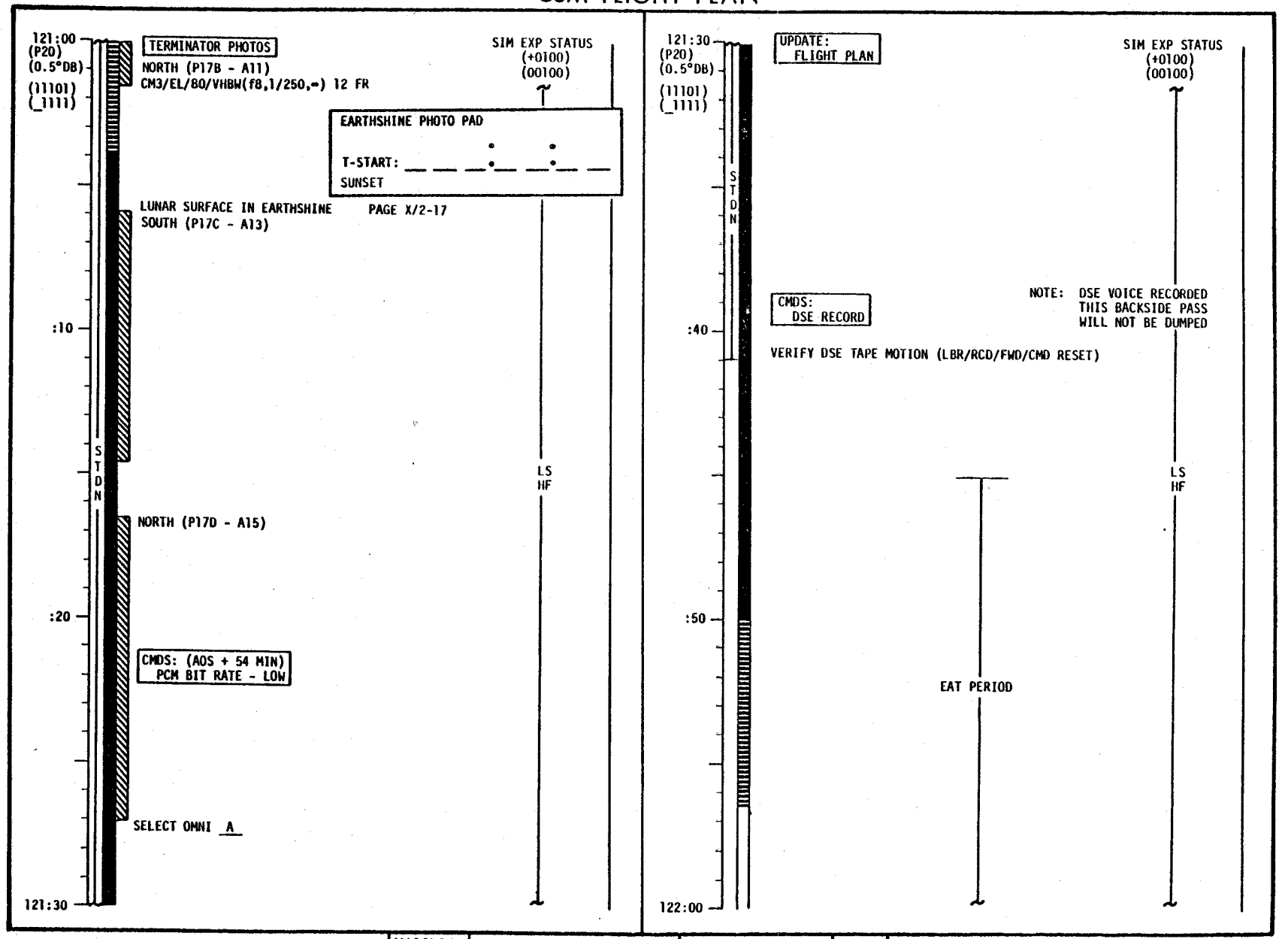
STDN

TV

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	PRELIM (8/28)	10/23/72	121:00 - 122:00	6/17	3-142

FLIGHT PLANNING BRANCH

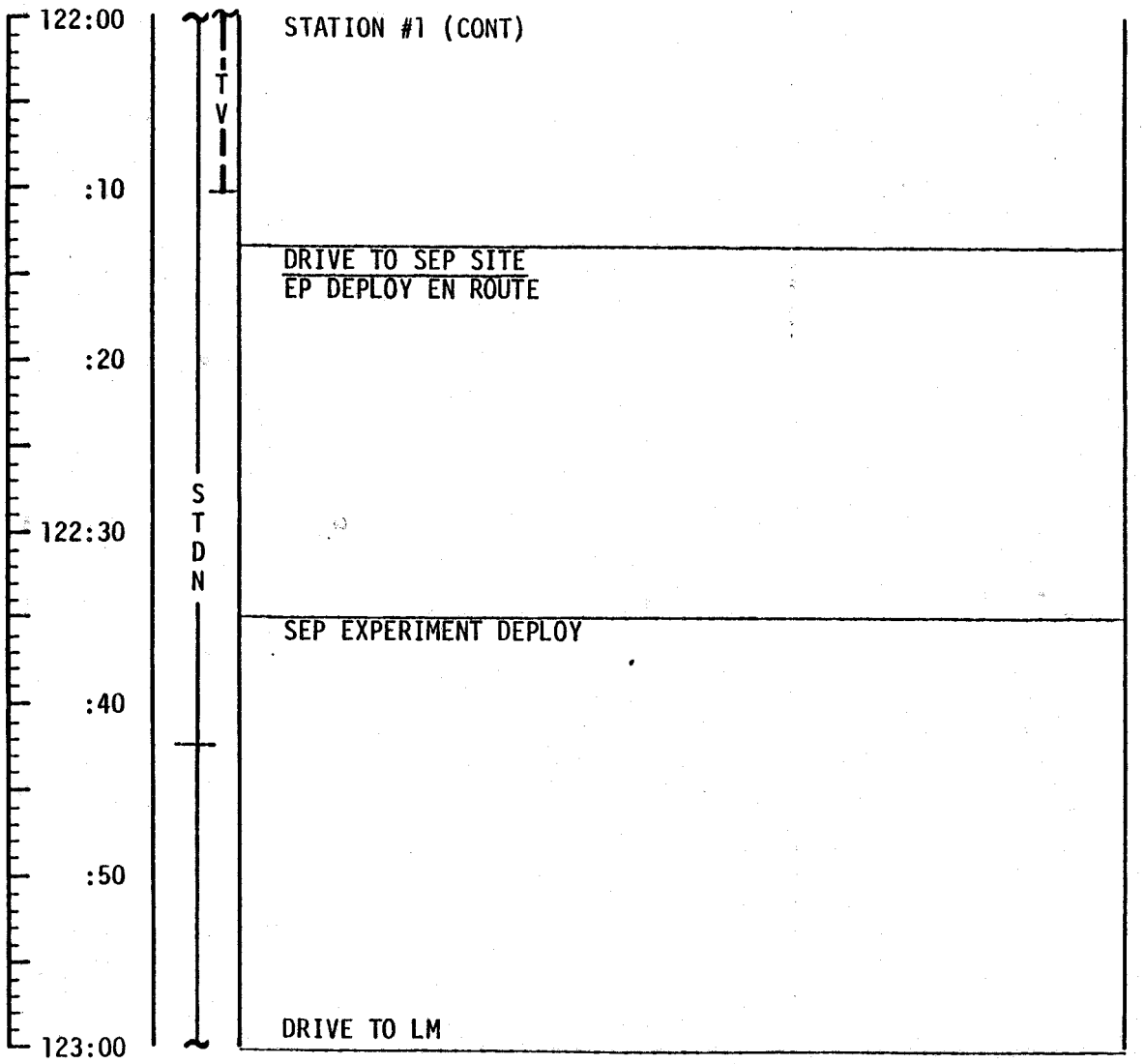
CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-143

LM FLIGHT PLAN

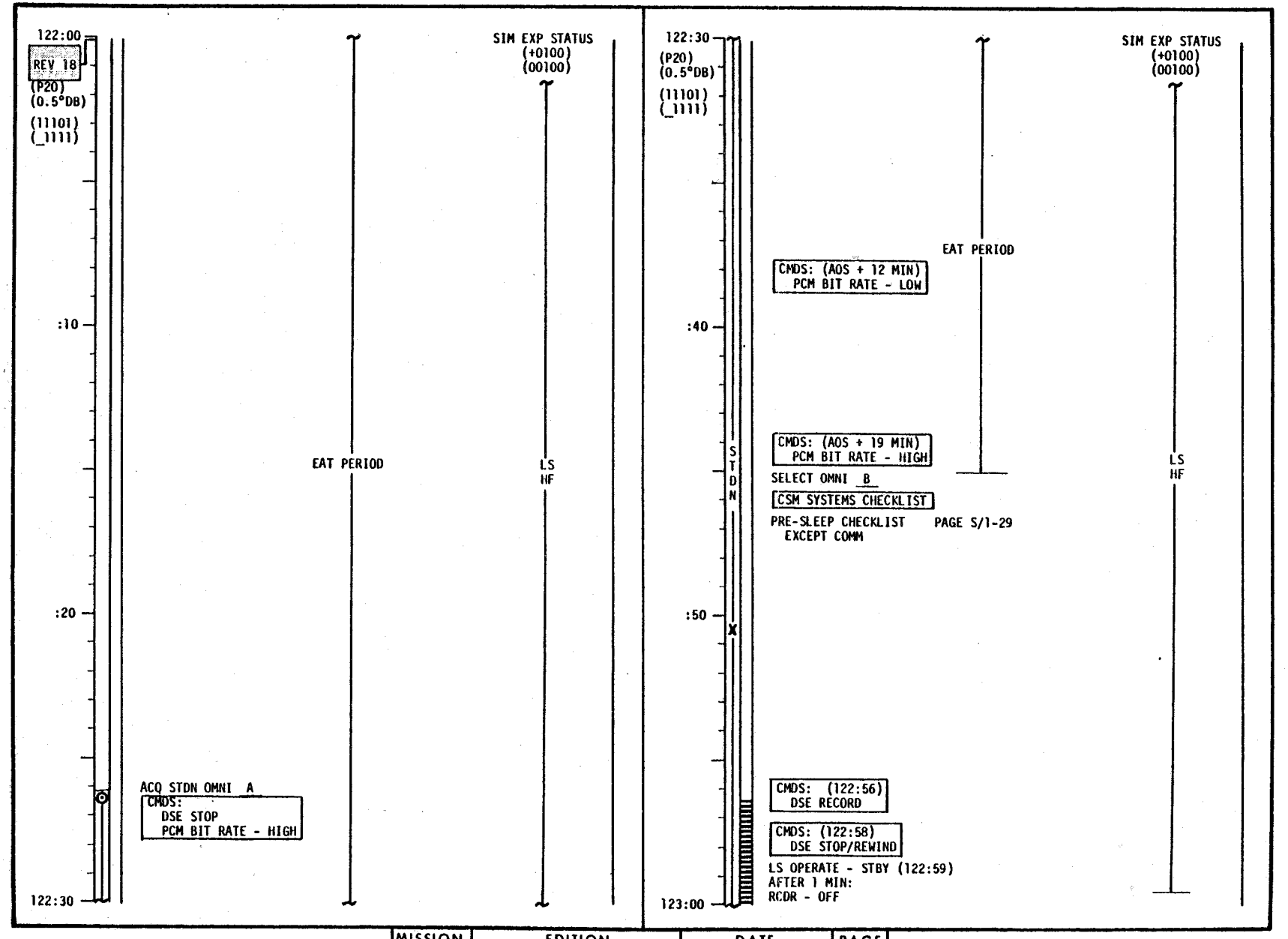
MCC-H



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	122:00 - 123:00	6/18	3-144

FLIGHT PLANNING BRANCH

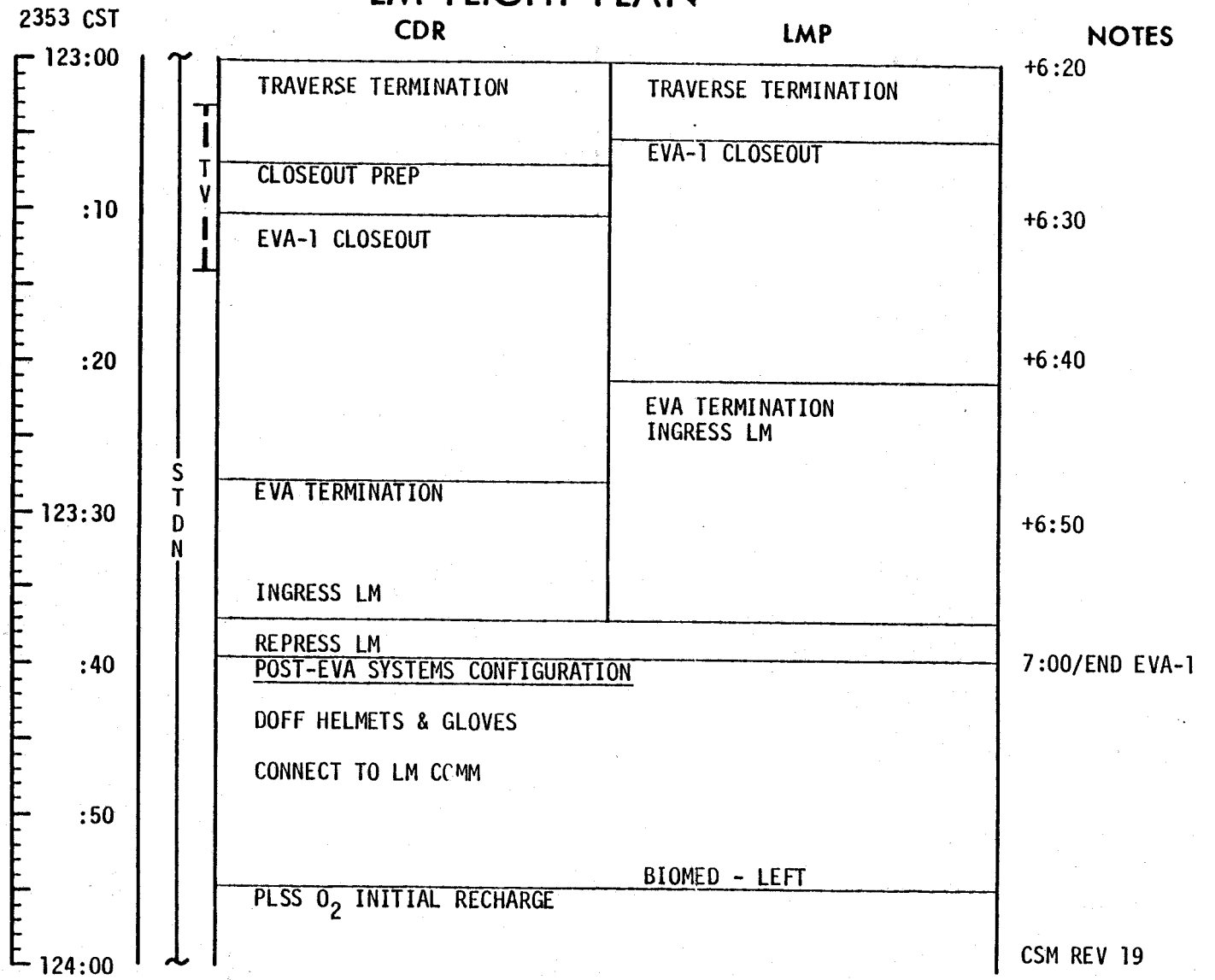
CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-145

LM FLIGHT PLAN

MCC-H



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	123:00 - 124:00	6/18-19	3-146

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

123:00
(P20)
(0.5°DB)
(11101)
(_1111)

(P20)
(2.5°DB)

:10

:20

123:30

STDN

RADAR - OFF
DATA SYS - ON
HGA PWR - PWR
ACQ STDN HGA P -74, Y 280 AUTO, NARROW

CMDS:
DSE PLAYBACK

SM/AC PWR - ON
MC - STBY
PC SELF TEST - HTRS
UV - ON
IR - ON
UV COVER - OPEN
IR COVER - OPEN
V22N79 (+002,50)

UPLINK:
JET-ON MONITOR LOADS

CSM SYSTEMS CHECKLIST

PRE-SLEEP CHECKLIST PAGE S/1-29
CONFIGURE COMM

VHF AM T/R - RCV (PANEL 9)
VHF AM A - DUPLEX
ADJUST SQUELCH B

FILM MAGS REQUIRED FOR NEXT DAY:

EL: LL,MM,QQ

NK: XX

CMDS: (AOS +60 MIN)
DSE REWIND

REST PERIOD
(8.0 HOURS)

SIM EXP STATUS
(+0100)
(00000)

ONBOARD READOUT

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

123:30
(P20)
(2.5°DB)
(11101)
(_1111)

:40

:50

REV 19

124:00

STDN

CMDS: (AOS +68 MIN)
DSE RECORD

REST PERIOD
(8.0 HOURS)

SIM EXP STATUS
(+0111)
(01011)

LM FLIGHT PLAN

MCC-H | 0053 CST, 12/12 | CDR | LMP | NOTES

124:00 — PLSS O_2 INITIAL RECHARGE (CONT)

:10 — PLSS/OPS DOFFING

REPORT: OPS PRESSURE

:20

124:30 — STDN

:40 — POST-EVA CABIN CONFIGURATION

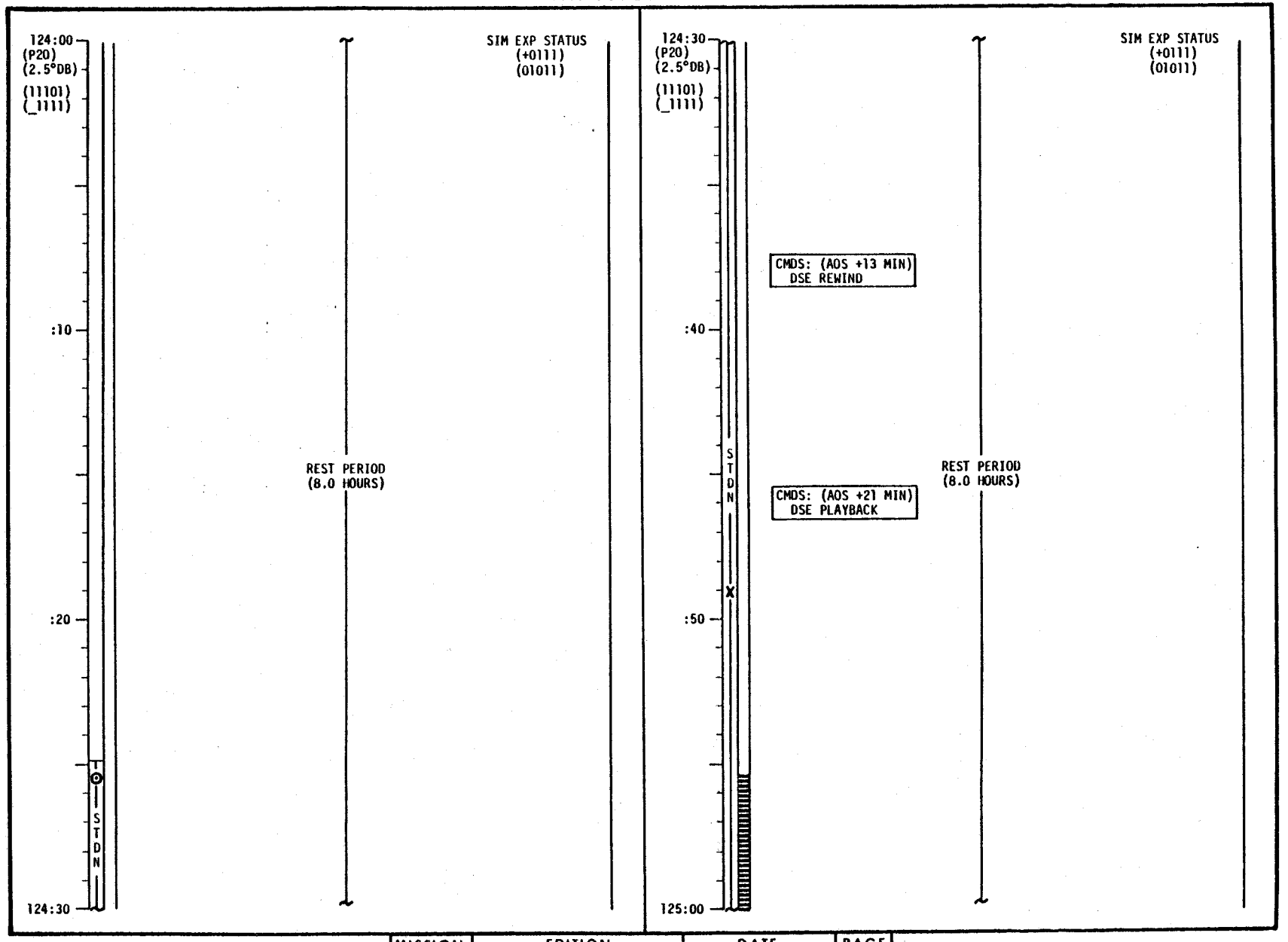
:50 — WEIGH SRC & COLLECTION BAGS, REPORT: WEIGHTS

125:00

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	124:00 - 125:00	6/19	3-148

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

MCC-H | 0153 CST | CDR | LMP | NOTES

125:00

DOFF SUITS

CDR, THEN LMP DOFF SUIT — BIOMED - OFF, THEN RIGHT

:10

:20

STDN

125:30

:40

:50

EVA-1 DEBRIEFING

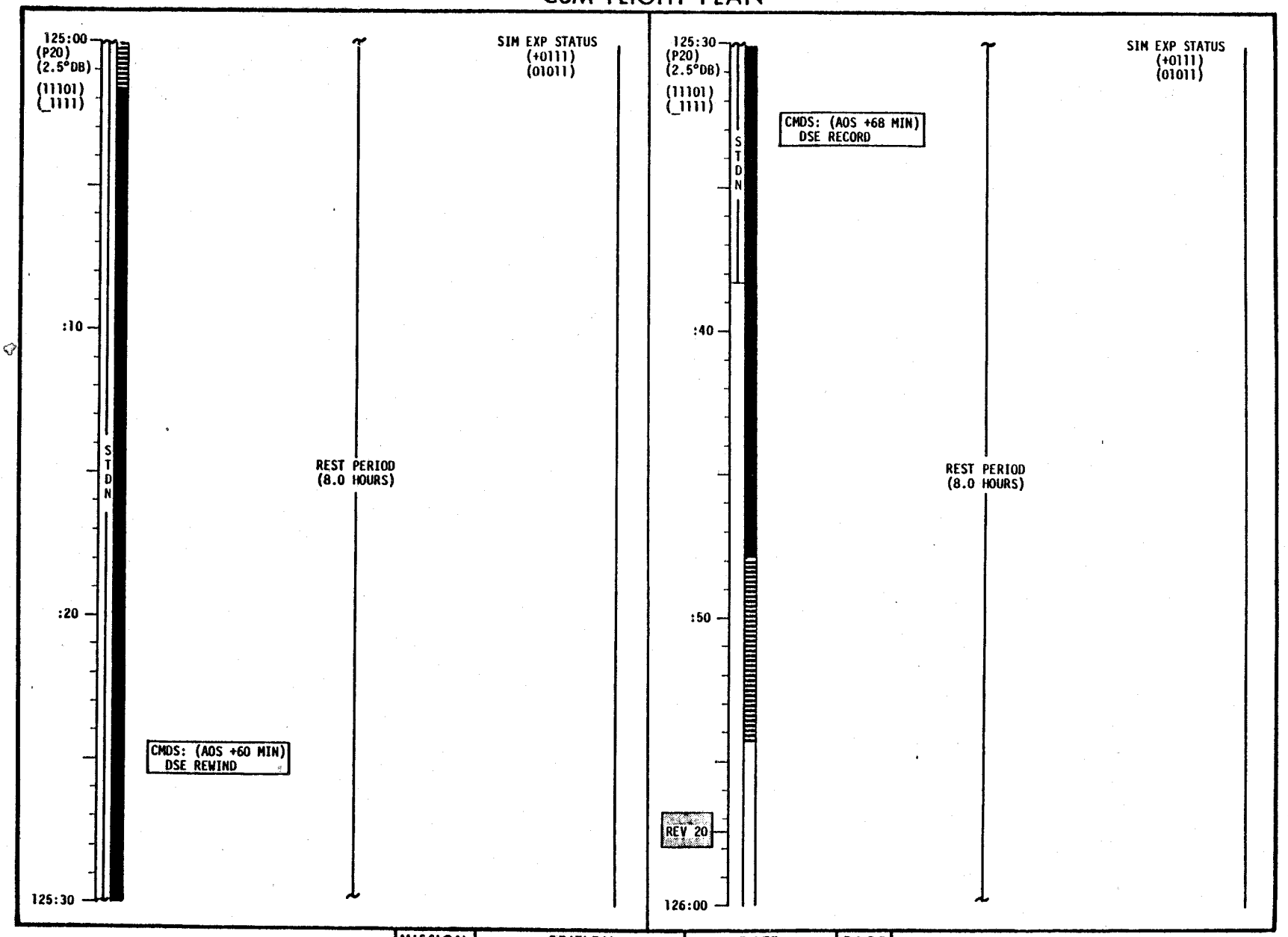
CSM REV 20

126:00

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	125:00 - 126:00	6/19-20	3-150

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-151

LM FLIGHT PLAN

MCC-H	0253 CST	CDR	LMP	NOTES
UPDATE TO LM LIFT-OFF TIMES FOR REVS 21-25	126:00	EVA-1 DEBRIEFING (CONT)		
		LOAD ETB		
	:10			
	:20			
	126:30			
	:40	EAT PERIOD		
	:50			
	127:00			

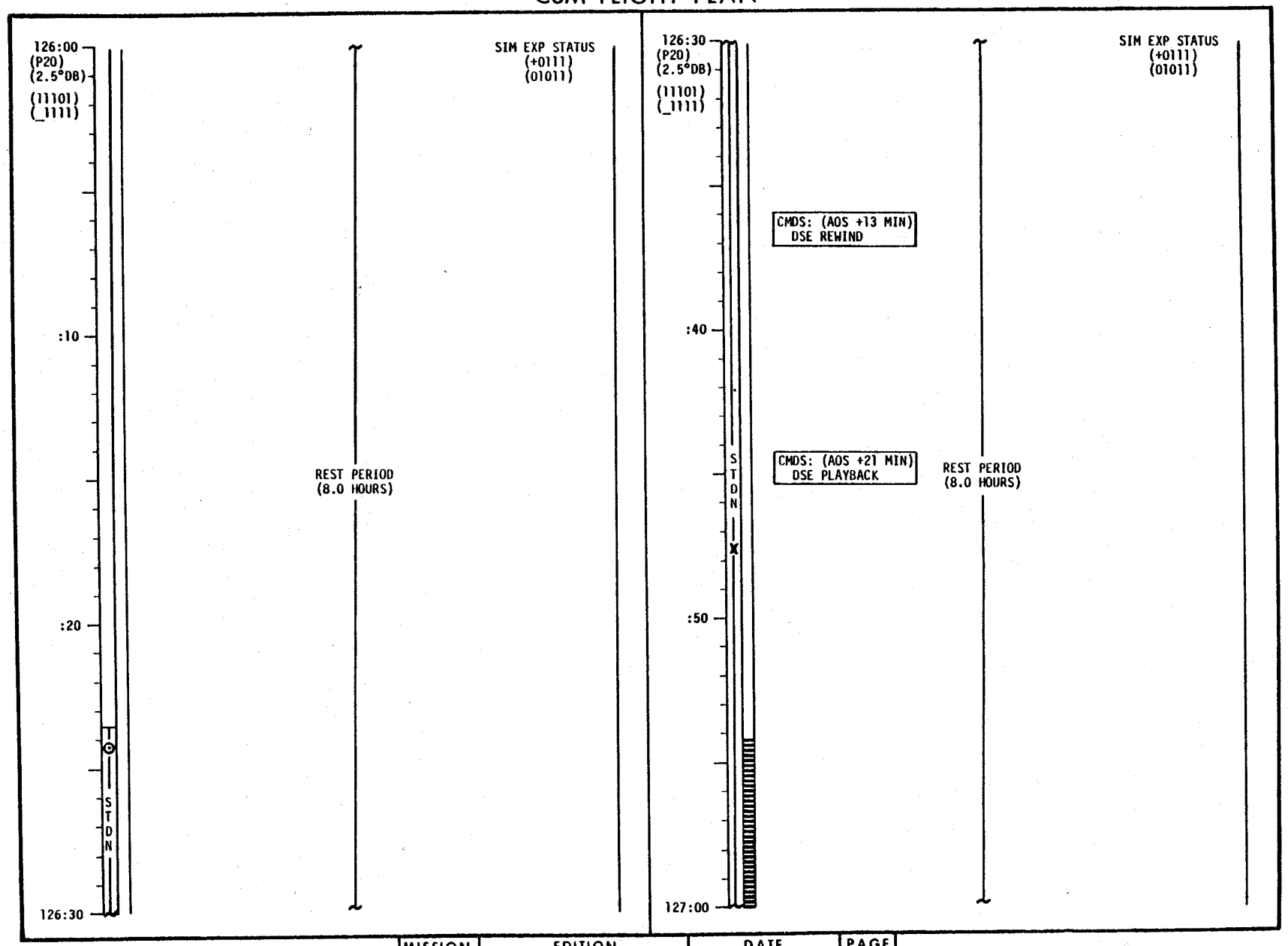
STDN

X

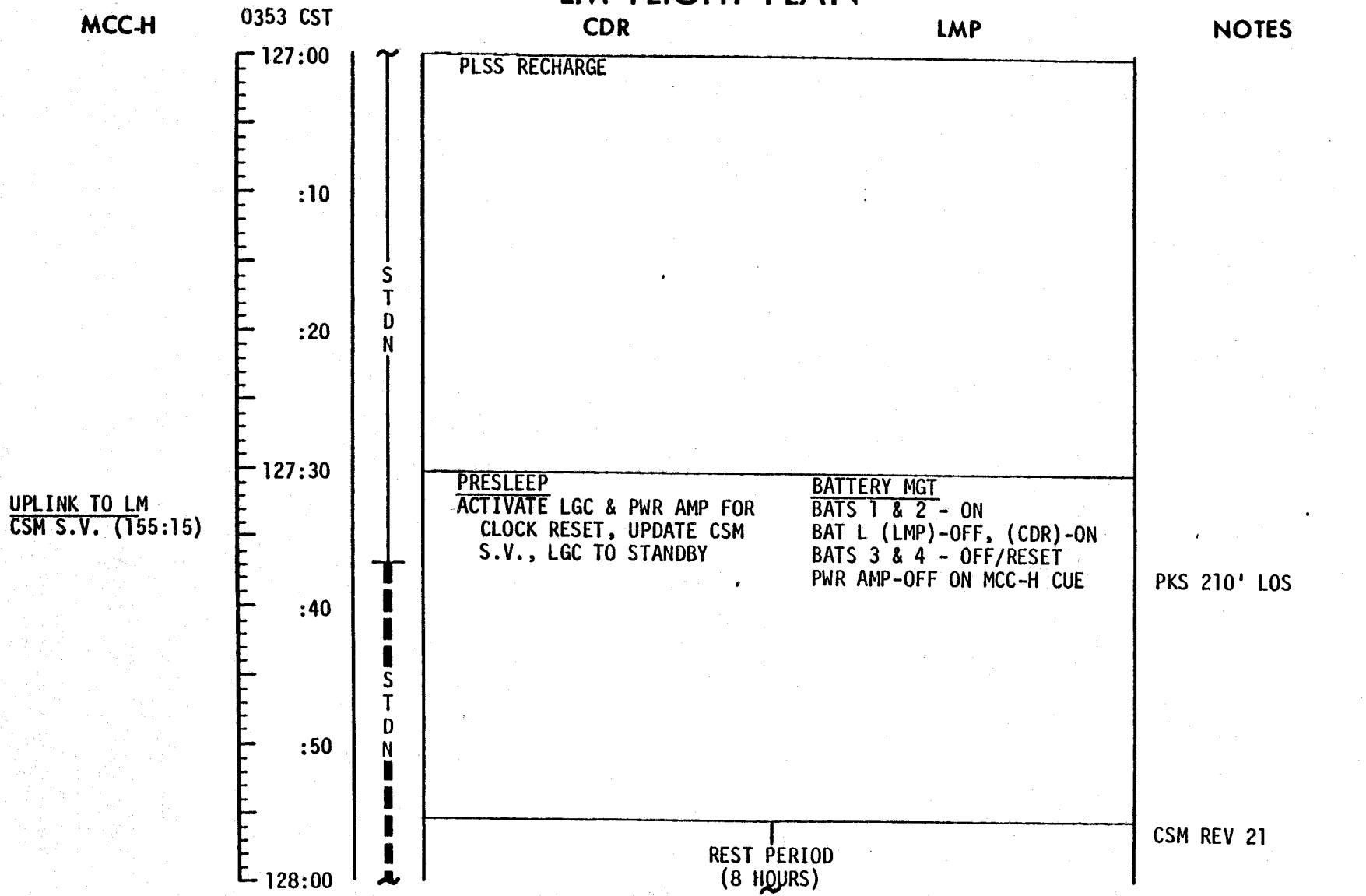
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	126:00 - 127:00	6/20	3-152

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



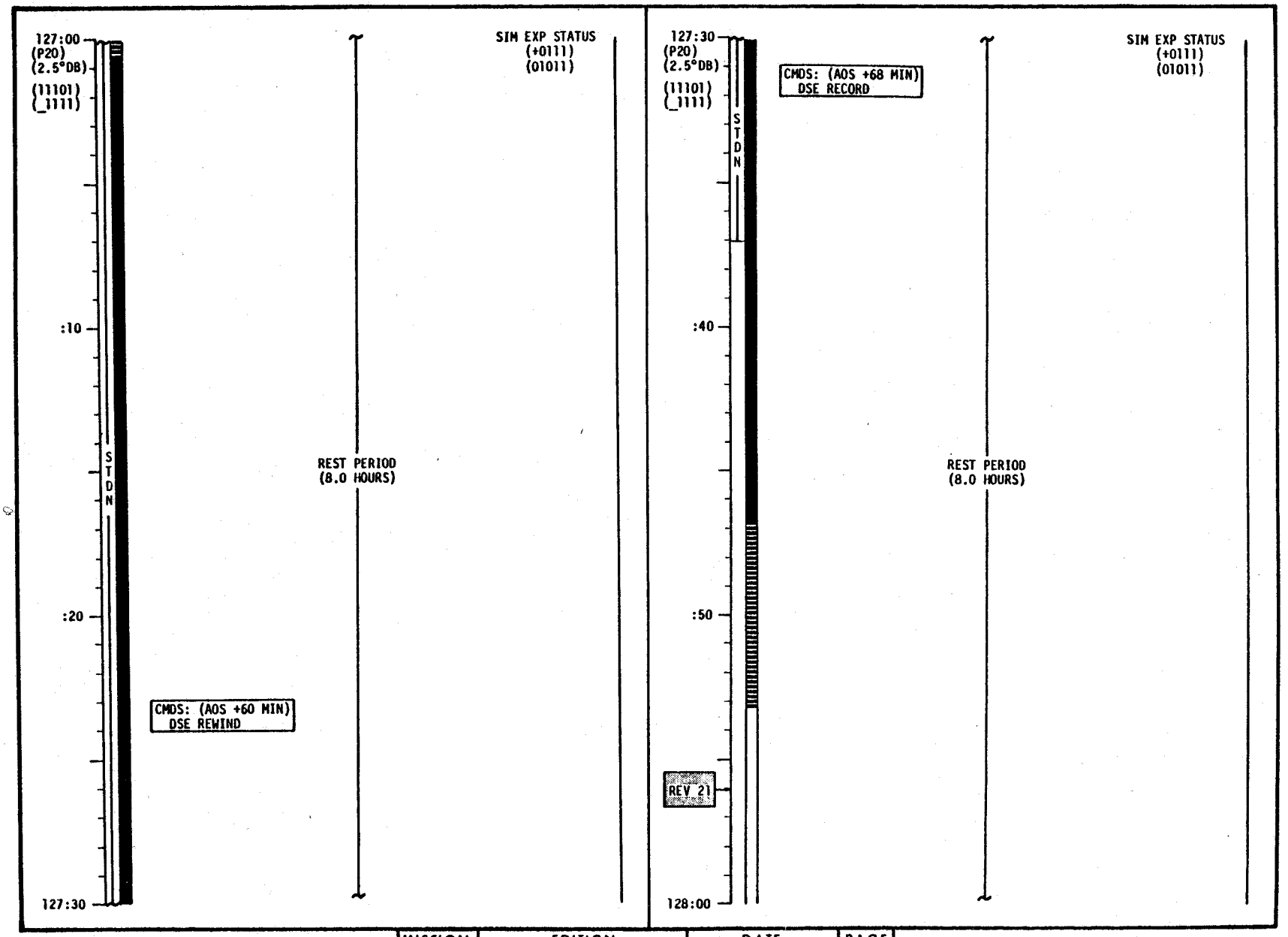
LM FLIGHT PLAN



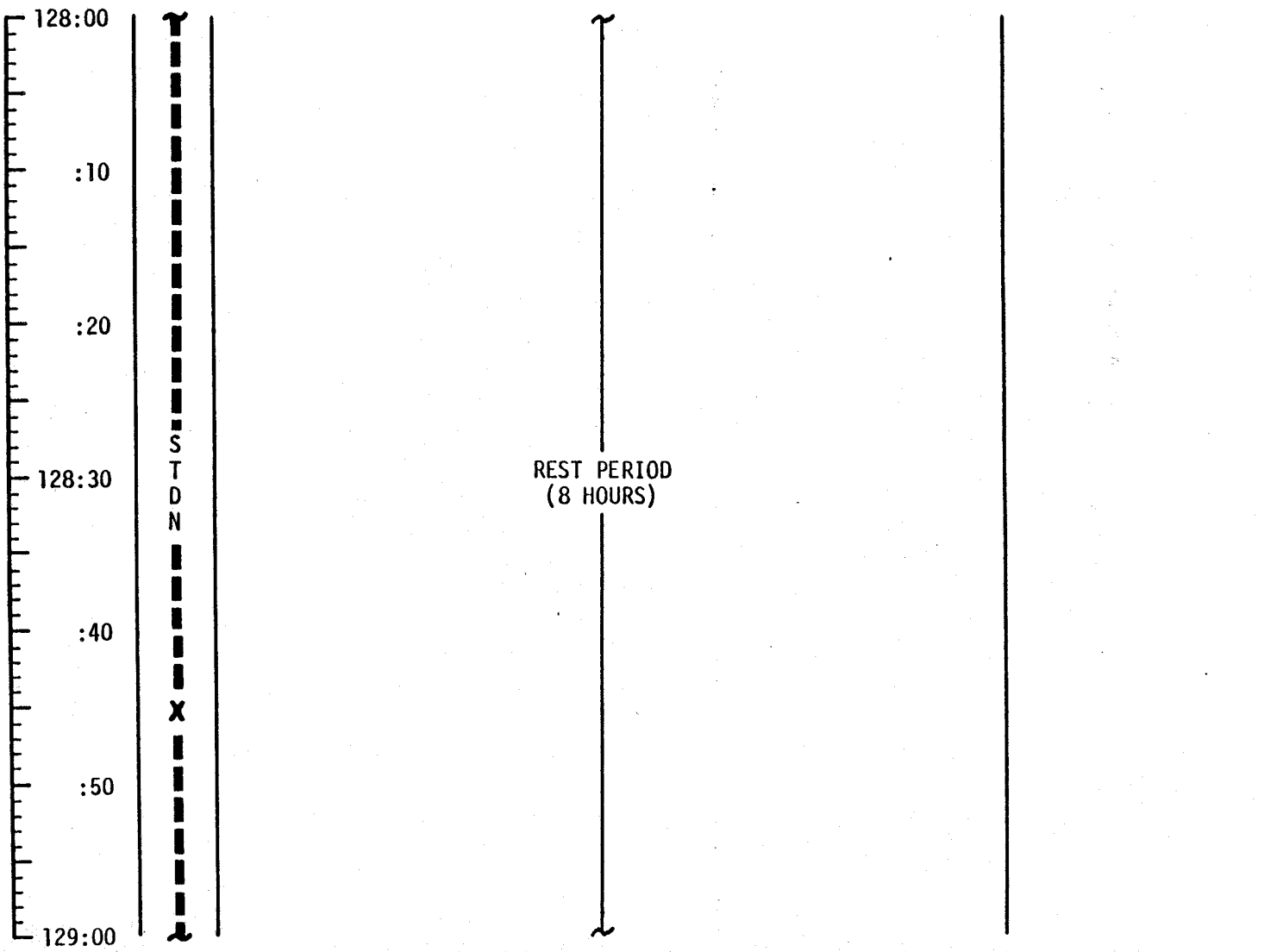
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	127:00 - 128:00	6/20-21	3-154

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



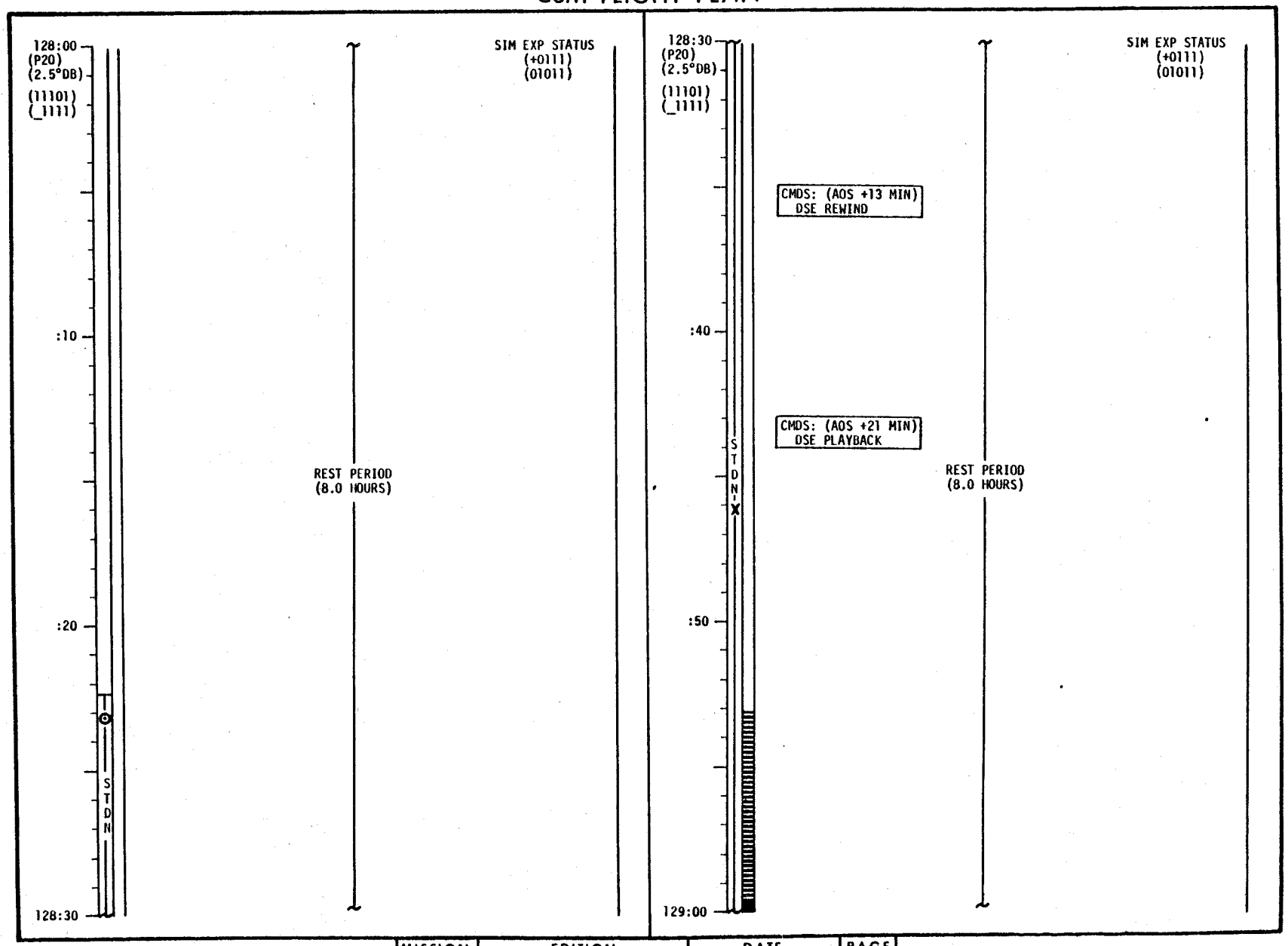
LM FLIGHT PLAN



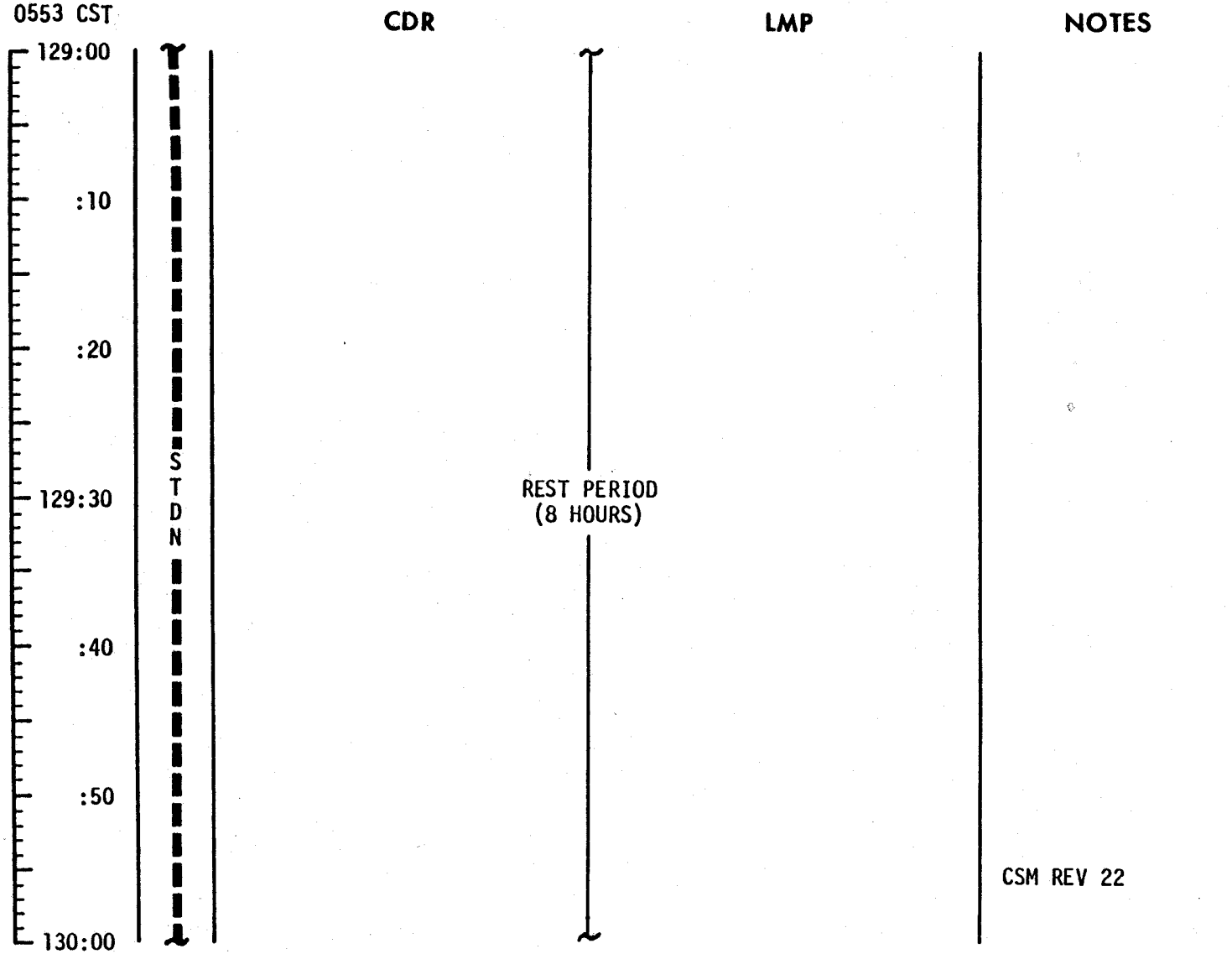
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	128:00 - 129:00	6/21	3-156

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



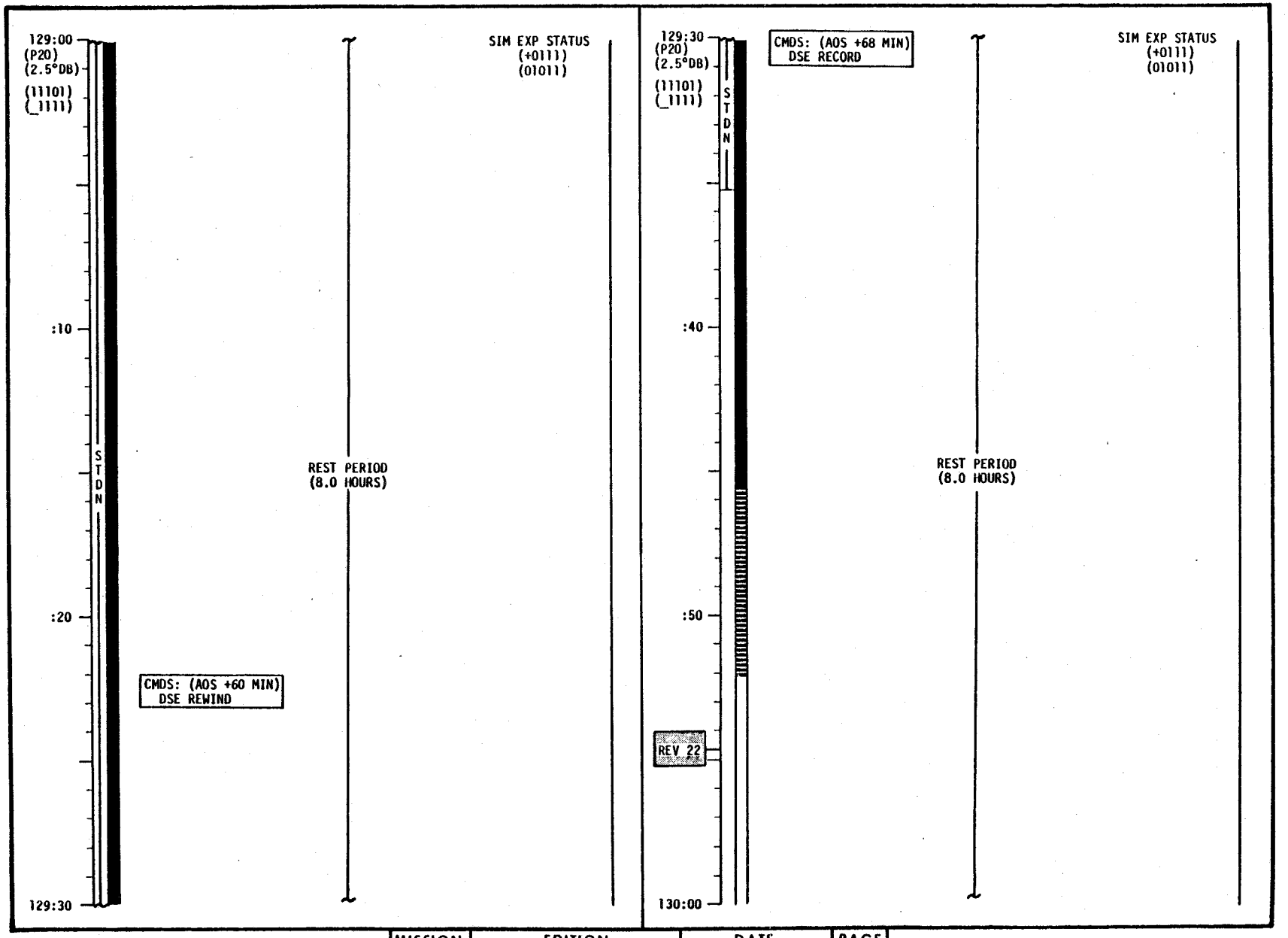
LM FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	129:00 - 130:00	6/21-22	3-158

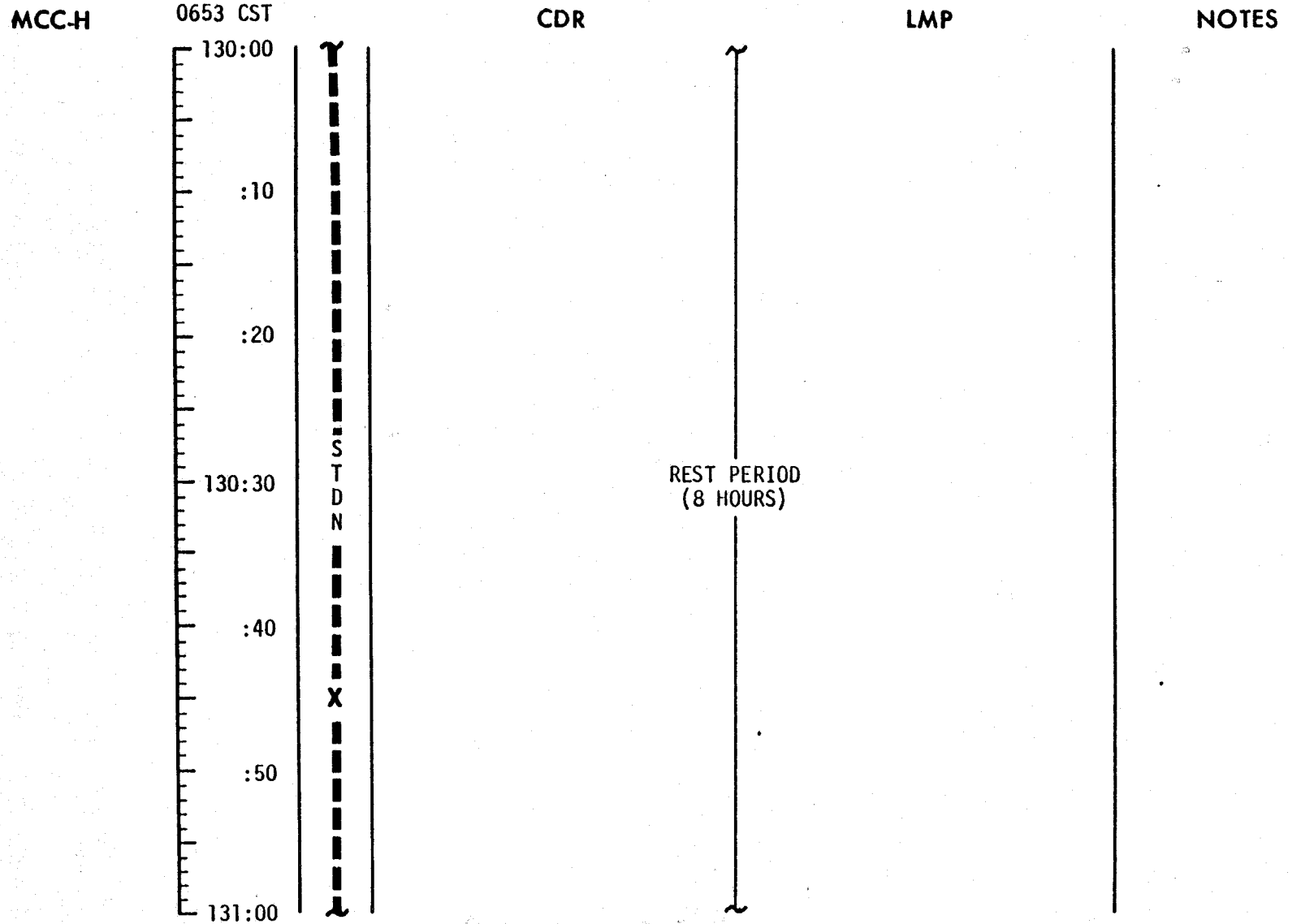
FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-159

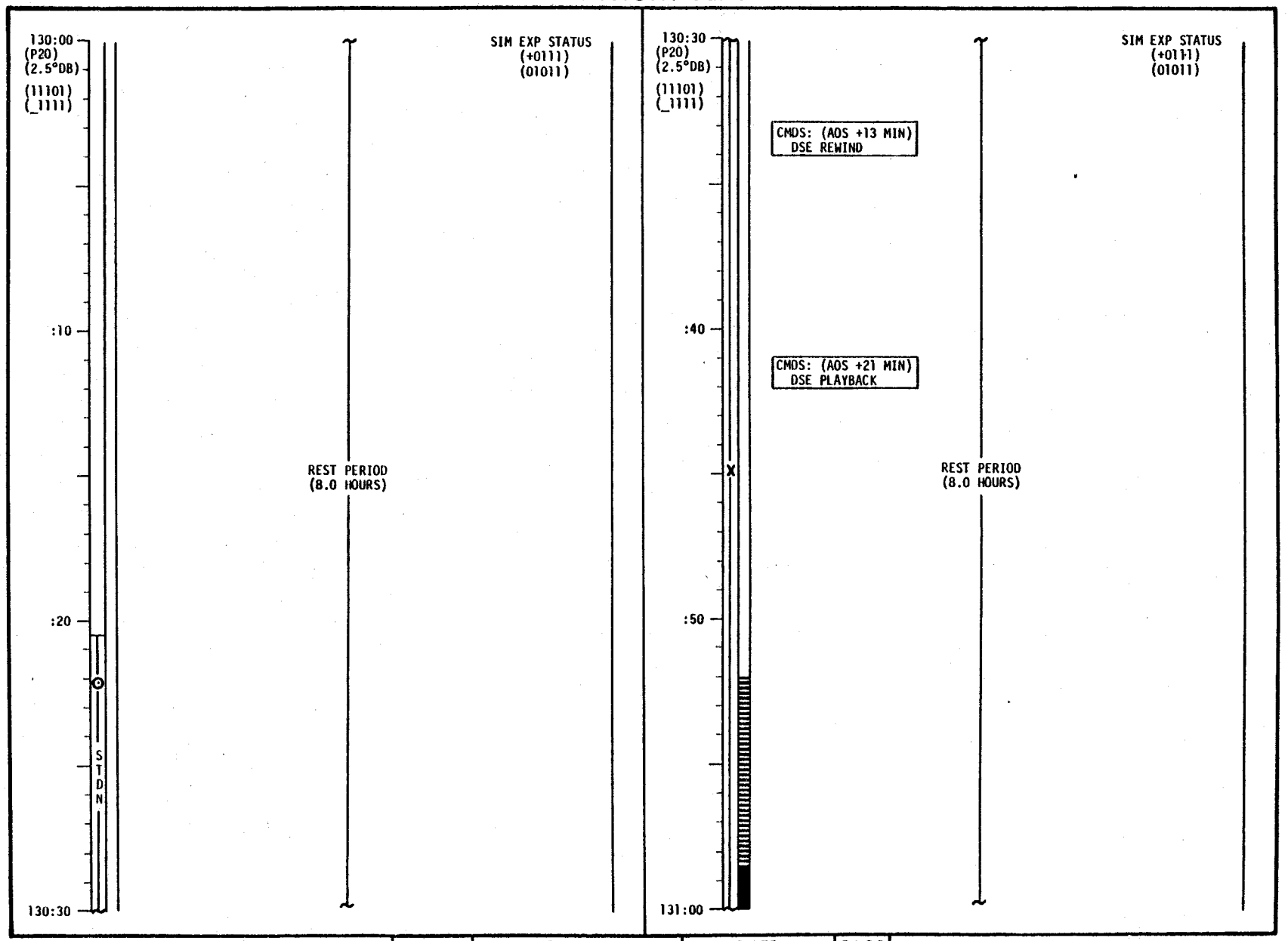
LM FLIGHT PLAN



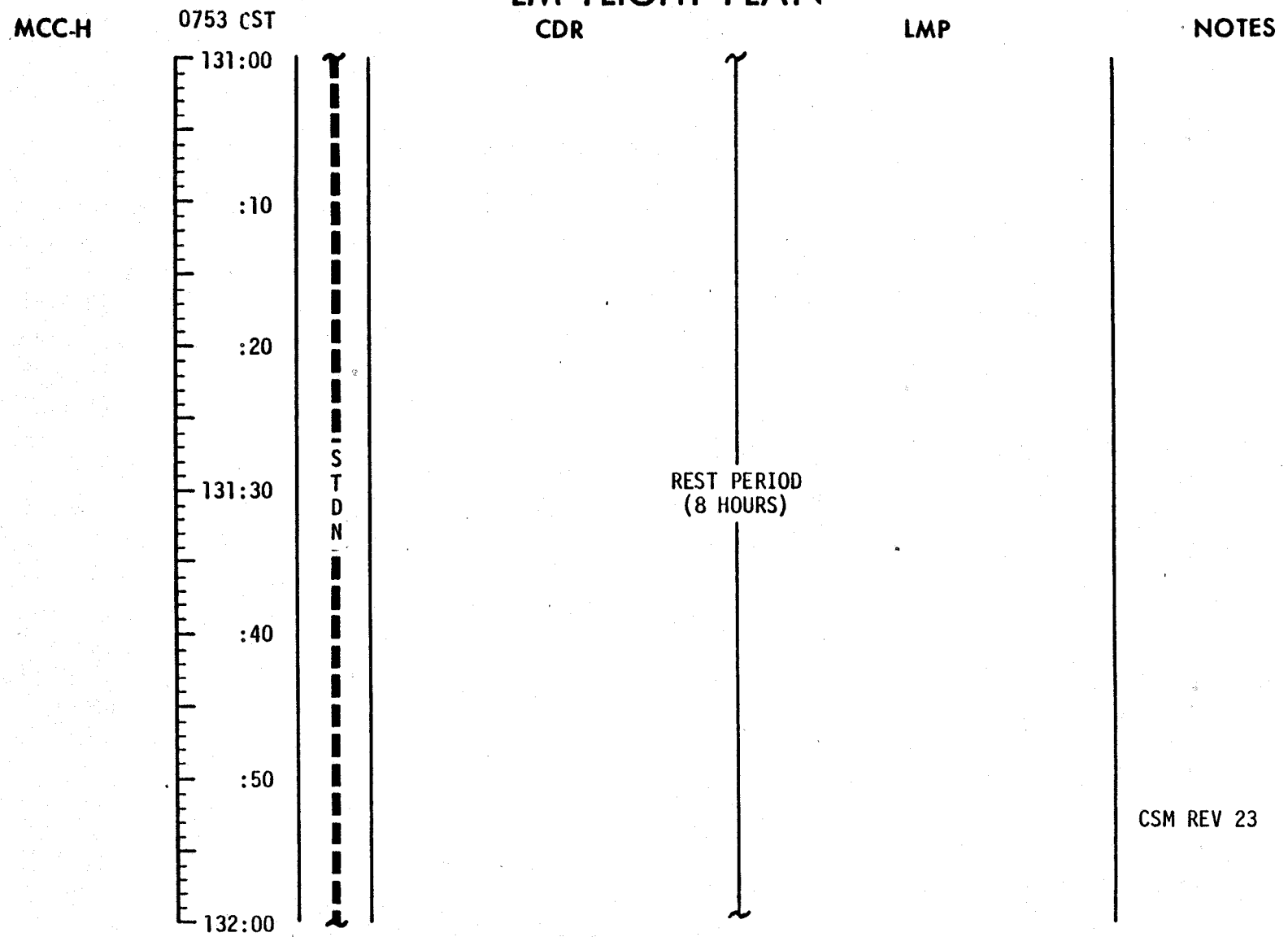
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	130:00 - 131:00	6/22	3-160

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



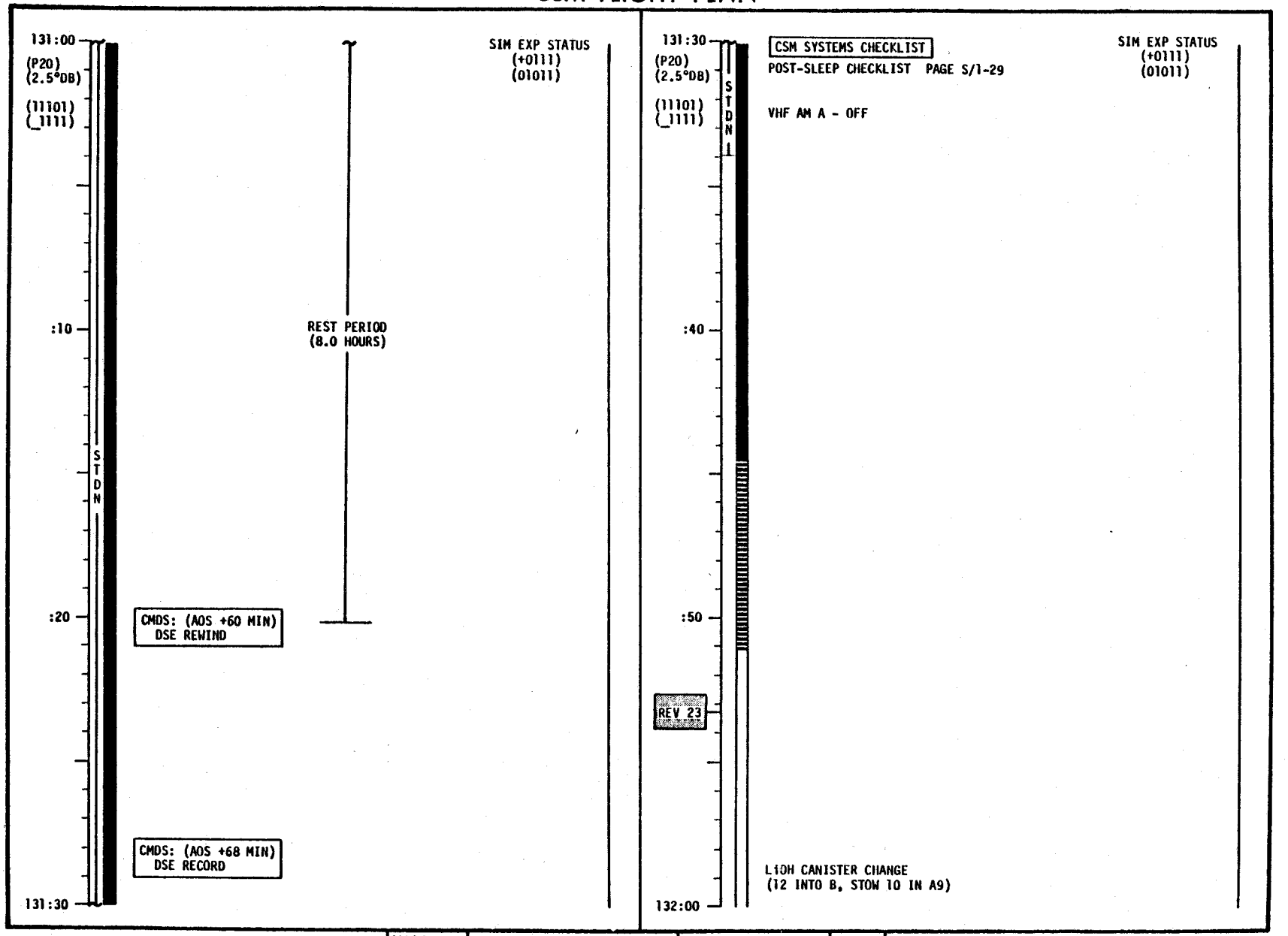
LM FLIGHT PLAN



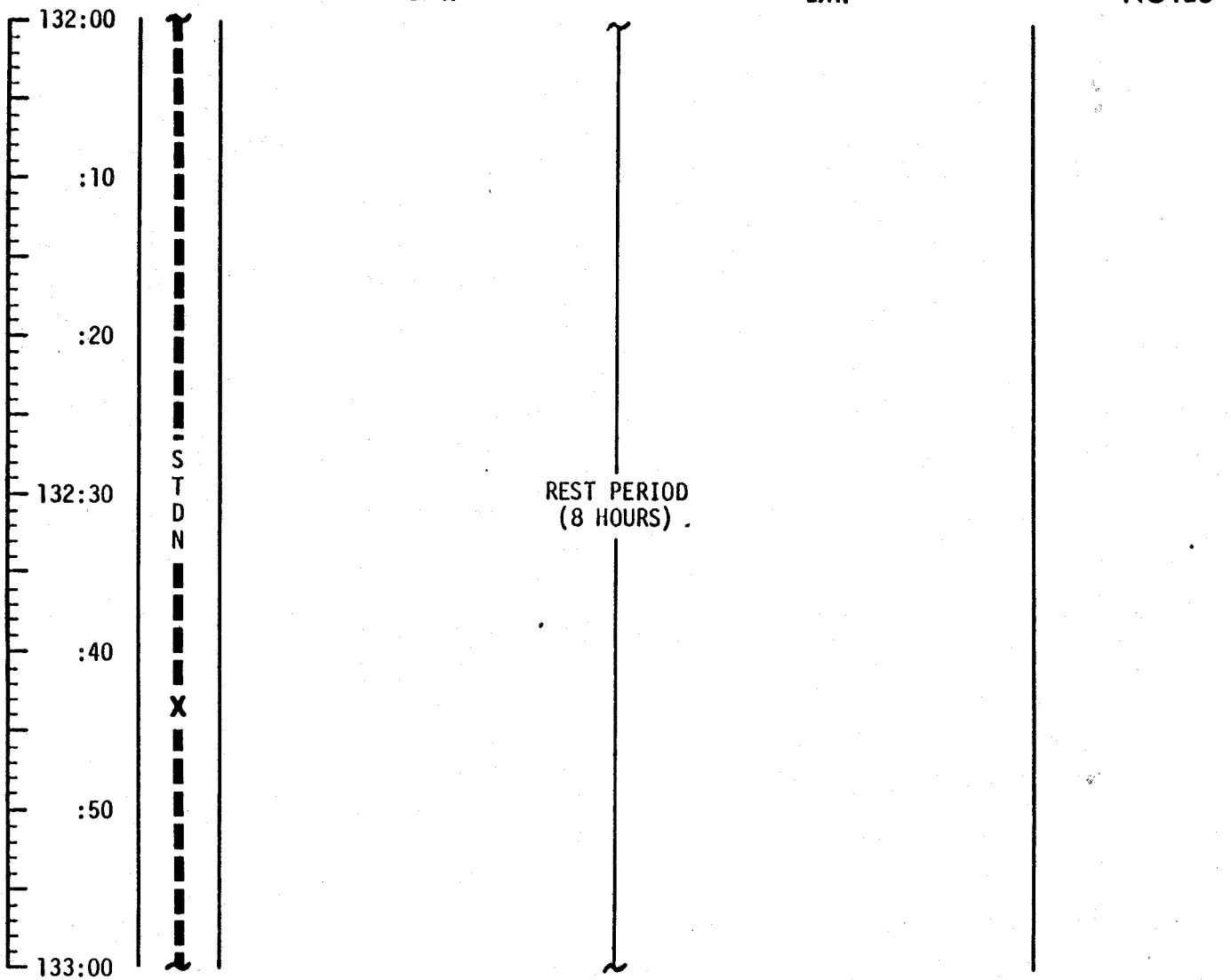
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	131:00 - 132:00	6-7/22-23	3-162

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



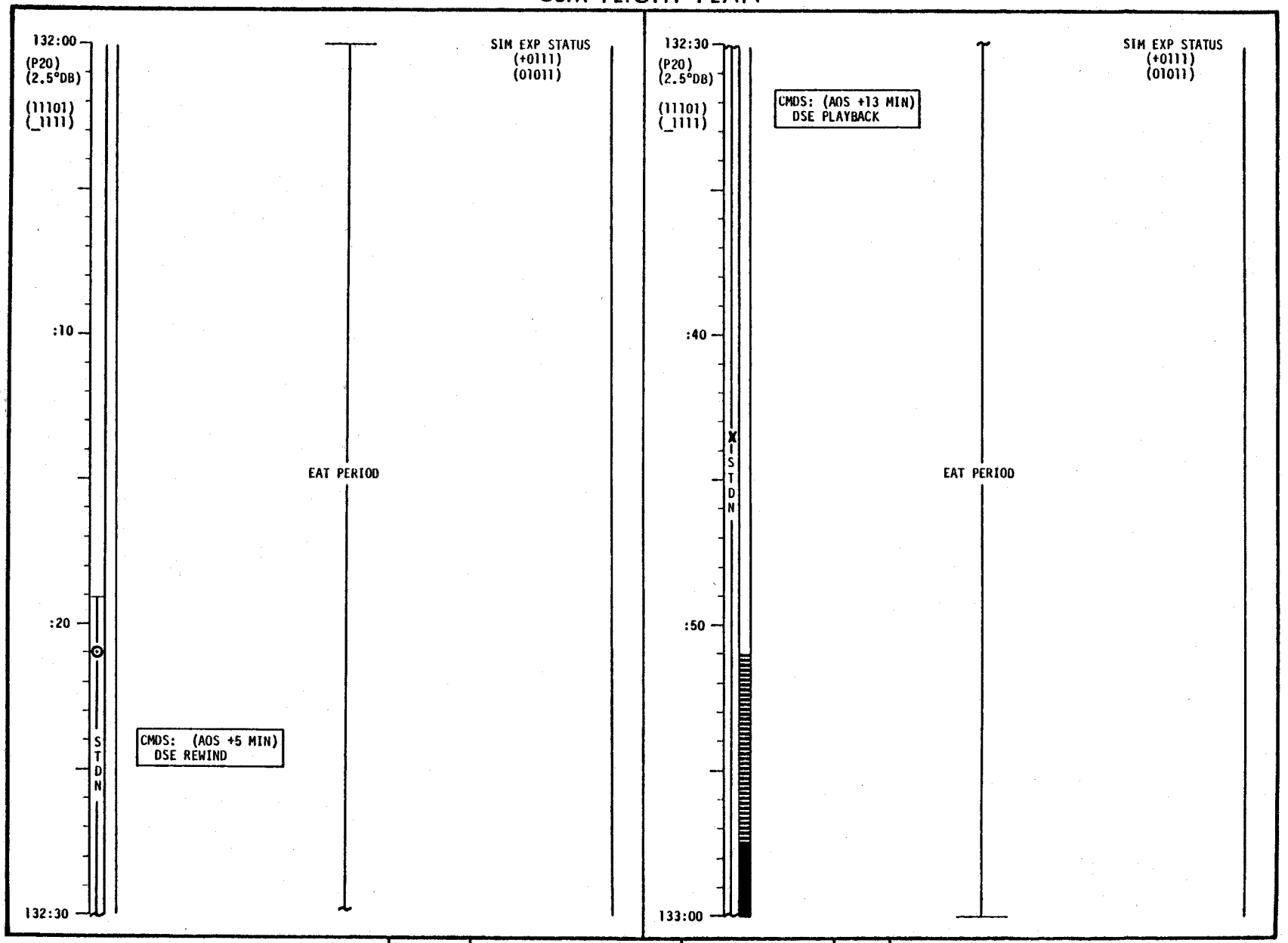
LM FLIGHT PLAN



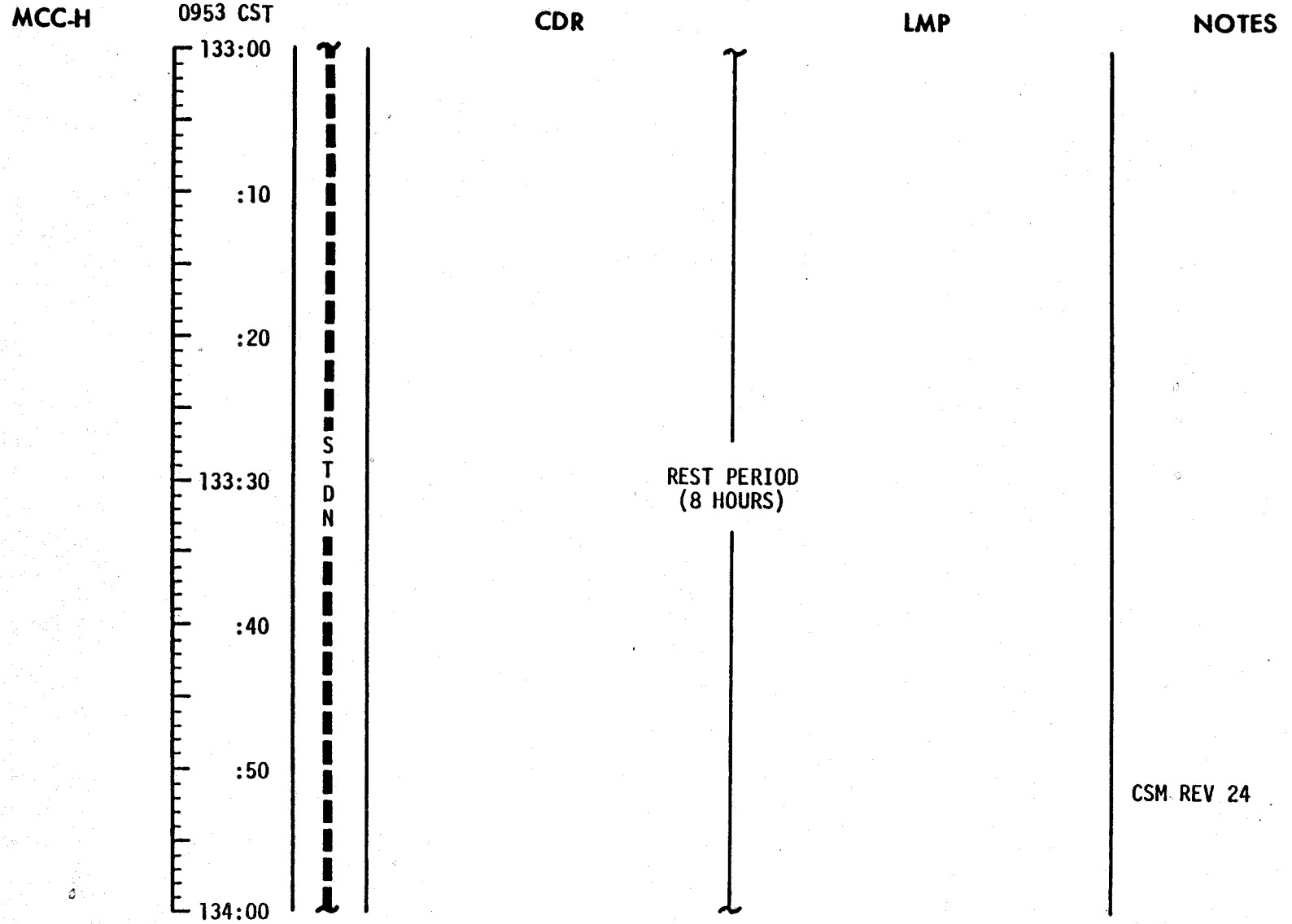
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	132:00 - 133:00	7/23	3-164

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	133:00 - 134:00	7/23-24	3-166

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

133:00
(P20)
(2.5°DB)
(11101)
(_1111)

START NEW URINE COLLECTION PERIOD
TERMINATE JET-ON MONITOR
P30
V21N26 (00000)

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

SIM EXP STATUS
(+0111)
(01011)

P52 IMU REALIGN

N71: __ __ , __ __
N05: __ __ __ • __ __
N93:
X __ __ • __ __ __
Y __ __ • __ __ __
Z __ __ • __ __ __
GET __ __ __ • __ __ • __ __ __

REPORT: GYRO TORQUING ANGLES

P20
V22N79 (+000.50)
CMC MODE - AUTO
GDC ALIGN

(P20)
(0.5°DB)
:10

MC/LA COVER - OPEN
MC - EXTD

STDN

UPDATE:
CONSUMABLES STATUS
FLIGHT PLAN
SIM EXP STATUS
ZODIACAL LIGHT PHOTO PAD

UPLINK:
CSM S.V.

CMDS: (AOS +60 MIN)
DSE REWIND

:20

CSM EXP/EVA CHECKLIST

ZODIACAL LIGHT, RED FILTER, PAGE X/2-13

MAG (XX)

ZODIACAL LIGHT PHOTO PAD(SR)

T-START: __ __ __ • __ __ • __ __ __
(SUNRISE - 15 MIN)

CMDS: (AOS +68 MIN)
DSE RECORD

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

133:30
ZODIACAL LIGHT

133:30
(P20)
(0.5°DB)
(11101)
(_1111)

STDN

SIM EXP STATUS
(+1111)
(01011)

:40

SET HGA: MAN, WIDE P -10, Y 25, FOR AOS

LA - ON
IMAGE MTN - ON
MC - ON (168°W)
IMAGE MTN - INCR (BP +4 STEPS)/ON

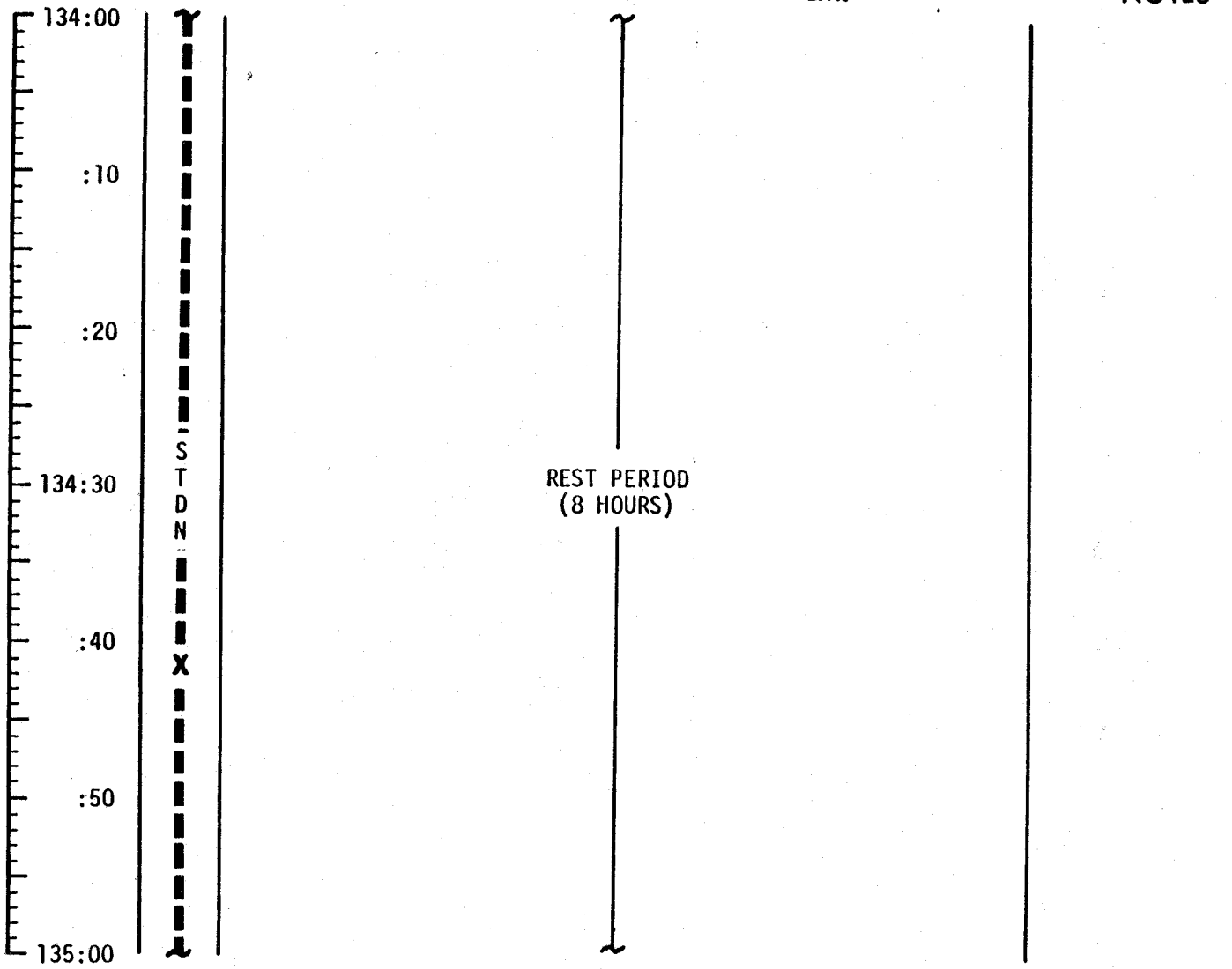
:50

REV 24

134:00

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-167

LM FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	134:00 - 135:00	7/24	3-168

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

134:00
(P20)
(0.5°DB)
(11101)
(_1111)

SIM EXP STATUS
(+1111)
(02011)

:10

ACQ STDN HGA: MAN, WIDE P -10, Y 25
S-BD ANT IND >1/2 SCALE HGA: REACQ, NARROW

:20

STDN

CUE: (~AOS +7 MIN)
HGA AUTO
CMDS:
DSE REWIND

PC: MODE - STBY
PWR - ON

134:30

PC: PWR - OFF (CUE)

134:30
(P20)
(0.5°DB)
(11101)
(_1111)

SIM EXP STATUS
(+1111)
(02011)

CMDS: (AOS +15 MIN)
DSE PLAYBACK

:40

LS OPERATE - STBY (VERIFY)
RCDR - ON
RADAR - ON
RCDR - OFF
MODE - VHF

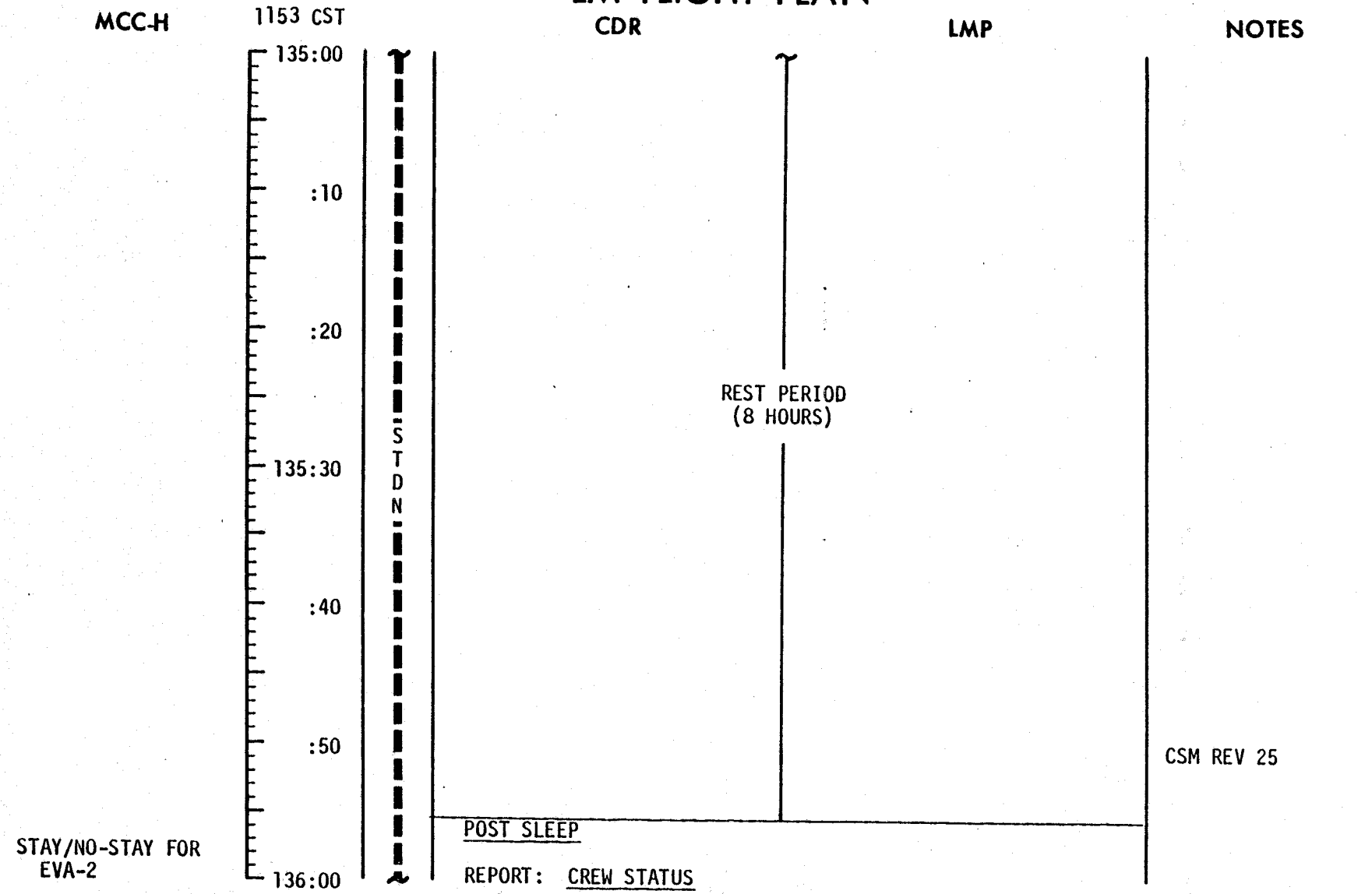
STDN

:50

MC - OFF (2°W)
WAIT 30 SEC
MC - STBY
IMAGE MTN - OFF
MC - OFF
MC - RETR
LA - OFF
RCDR - ON
IR - OFF
PC SELF TEST - OFF
UV - OFF (AFTER SUNSET)
MC/LA COVER - CLOSE
IR COVER - CLOSE
UV COVER - CLOSE
SMAC PWR - OFF

135:00

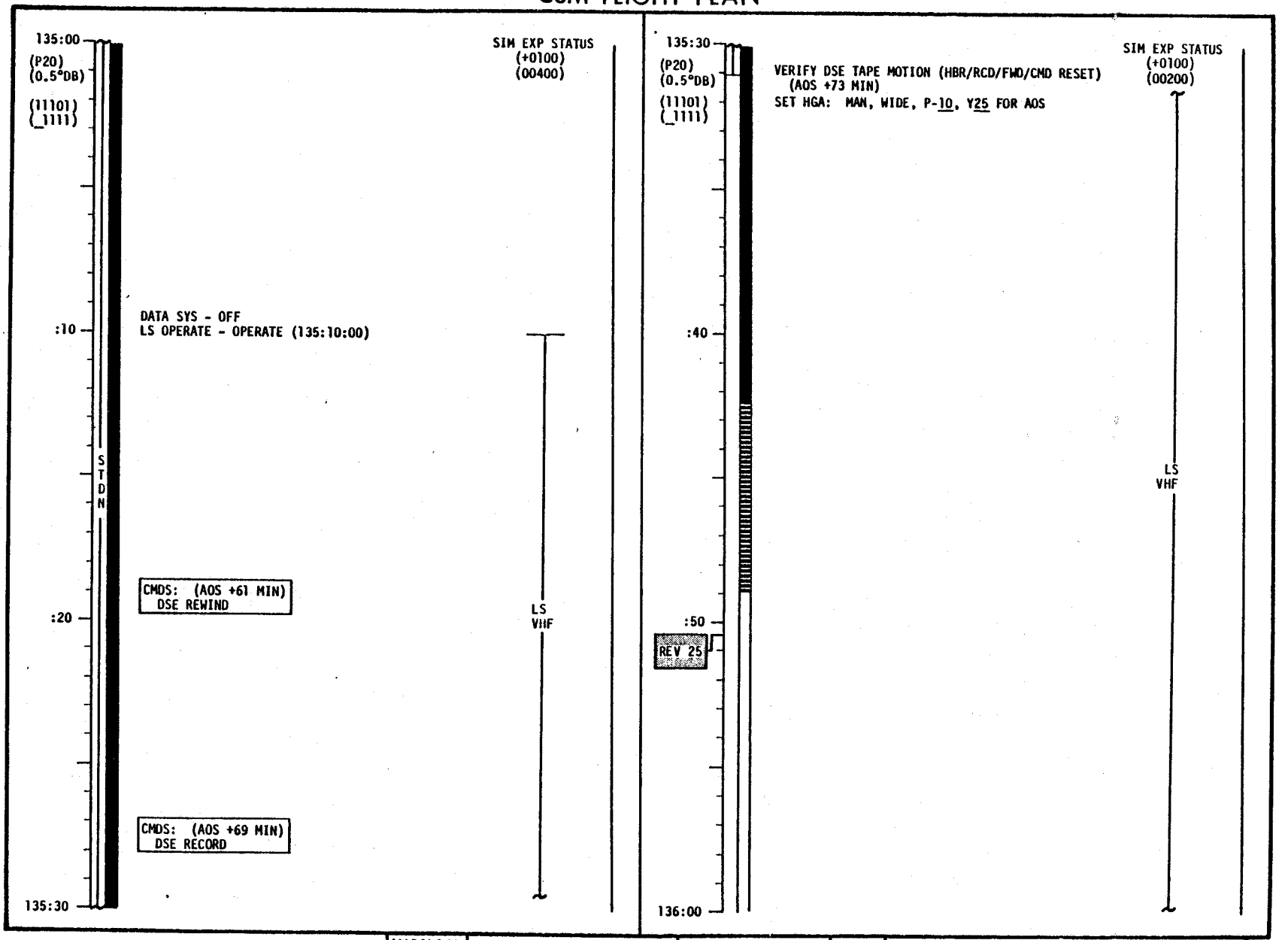
LM FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	135:00 - 136:00	7/24-25	3-170

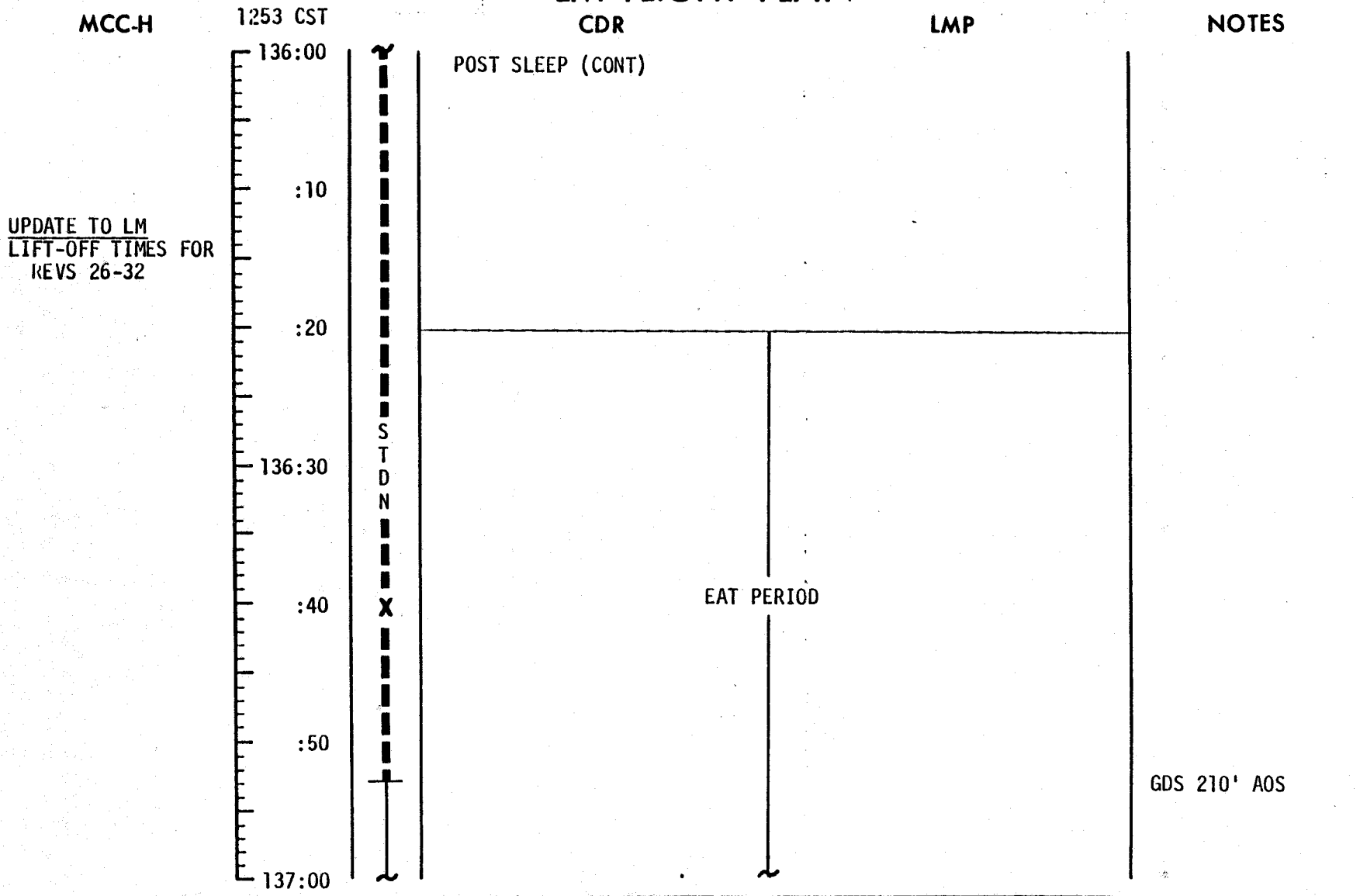
FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (134/6)	12/22/72	2-134

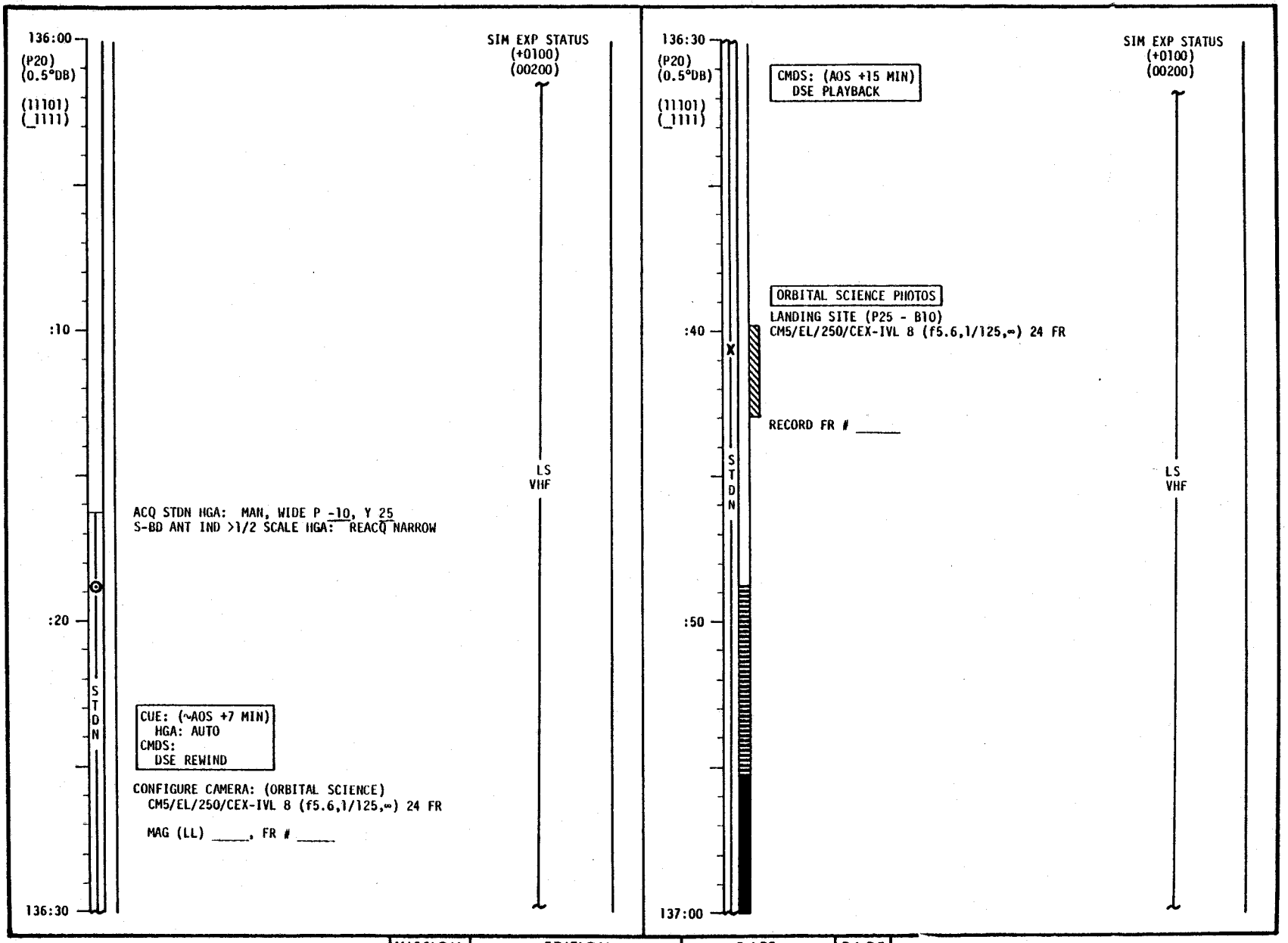
LM FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	136:00 - 137:00	7/25	3-172

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

MCC-H | 1353 CST | CDR | LMP | NOTES

137:00

EVA-2 PLANNING

:10

DON SUITS — BIOMED-OFF, THEN LEFT — -2:00

LMP, THEN CDR DON SUITS
FILL DRINK BAGS

:20

-1:45

STDN

137:30

CHANGE LM LiOH CANISTER

:40

-1:30

BATTERY MGT
BATS 3 & 4 - ON
BAT L (CDR) - OFF/RESET

:50

CSM REV 26

CABIN PREP FOR EVA-2

REPORT: PRD

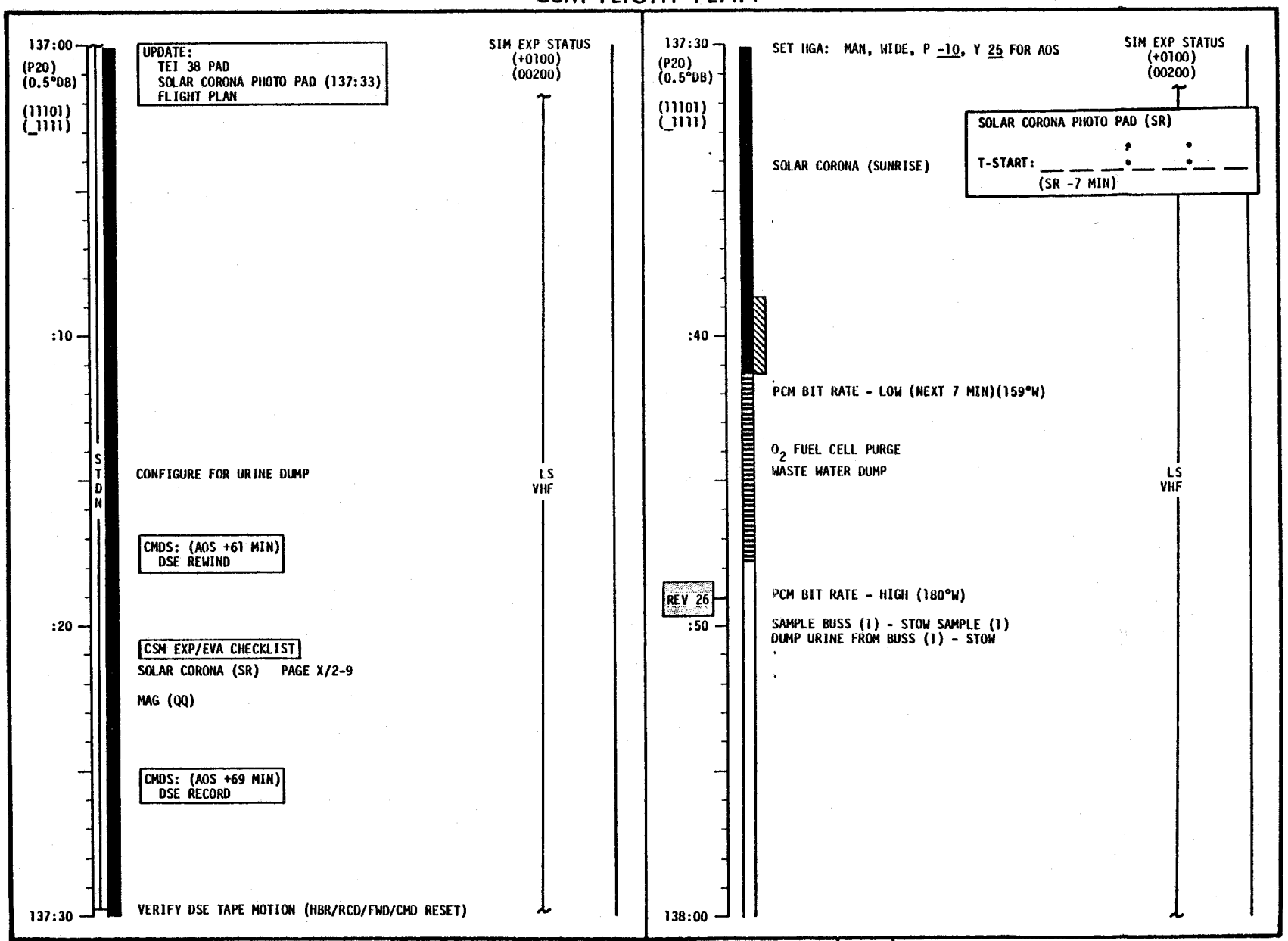
-1:15

138:00

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	137:00 - 138:00	7/25-26	3-174

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

MCC-H | 1453 CST | CDR | LMP | NOTES

138:00

EQUIPMENT PREP FOR EVA-2

:10

-1:00

PLSS DONNING

:20

-0:45

138:30

STDN

PLSS COMM CHECK
CONFIGURE COMM FOR EVA
RECORDER - ON
REPORT: PLSS O_2 QUANTITY

:40

-0:30

OPS CONNECT

:50

HELMET/GLOVE DONNING

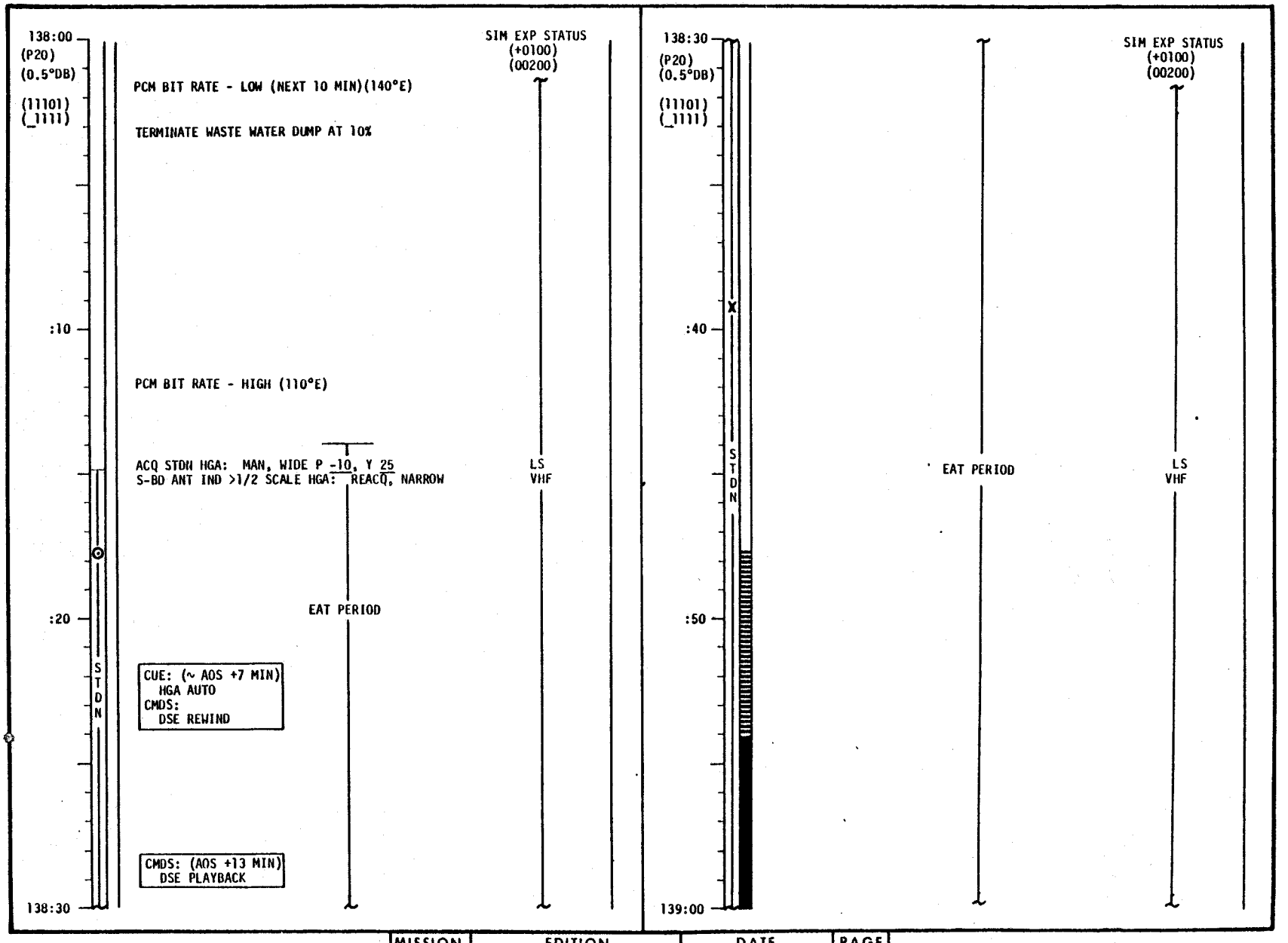
-0:15

139:00

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	138:00 - 139:00	7/26	3-176

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-177

LM FLIGHT PLAN

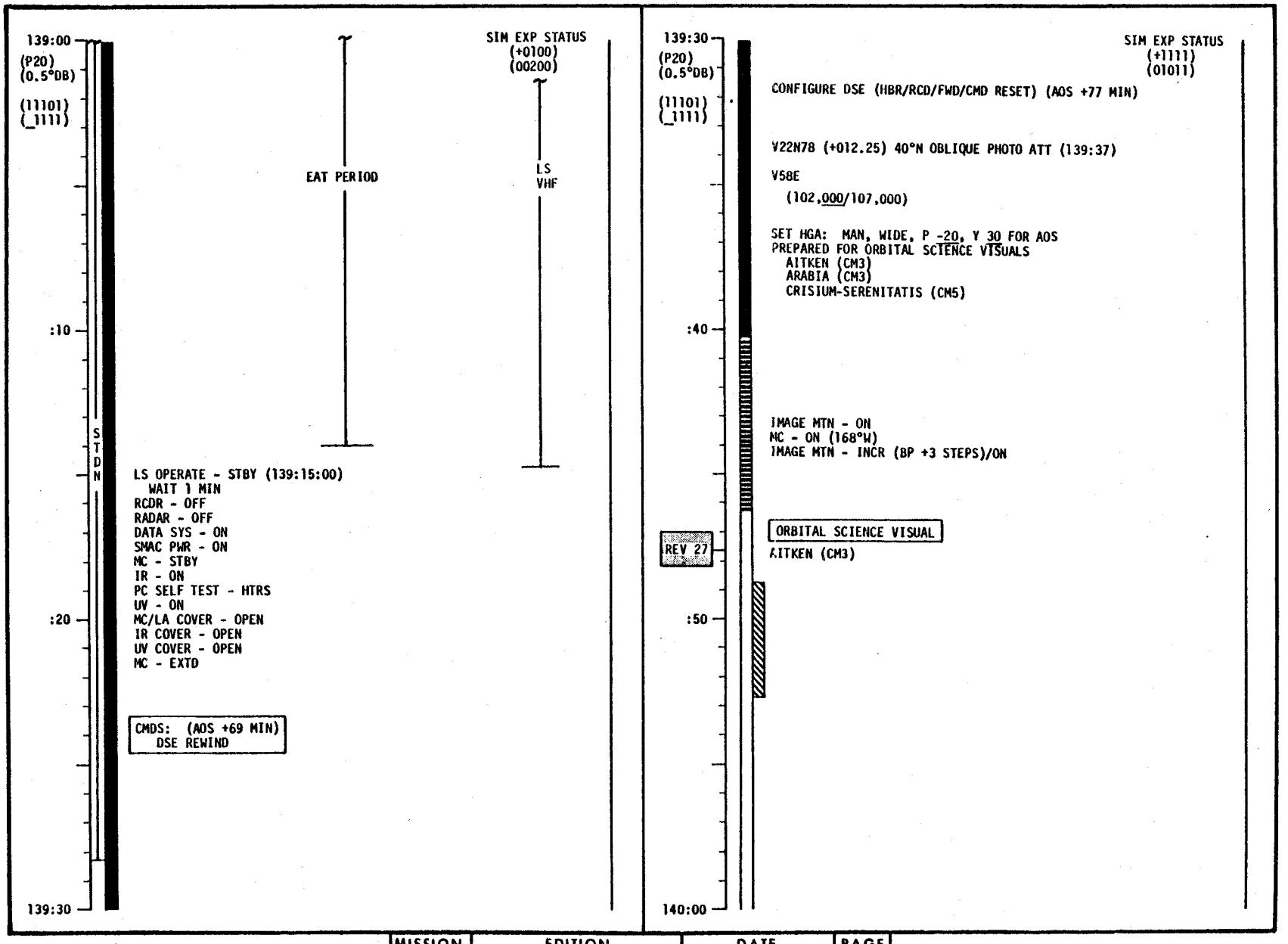
MCC-H	1553 CST	CDR	LMP	NOTES
	139:00	HELMET/GLOVE DONNING (CONT)		
GO/NO-GO FOR CABIN DEPRESS		PRESSURE INTEGRITY CHECK		
	:10	CABIN DEPRESS START WATCHES @ 3.5 PSIA FINAL EVA PREP		0:00/START EVA-2
	:20	EGRESS DESCEND TO SURFACE	ASSIST CDR RECORDER - OFF EGRESS, CLOSE HATCH DESCEND TO SURFACE	+0:10
	139:30	POWER LCRU	LRV EQUIPMENT PREP	+0:20
		SRC-2 EQUIPMENT PREP	PHOTO PAN	
	:40			+0:30
		GEOLOGICAL PREP	GEOLOGICAL PREP	
				CSM REV 27
	:50	LRV POWER UP	SEP POWER UP	+0:40
		DRIVE TO SEP SITE		
	140:00			+0:50

STDN — TVI

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	139:00 - 140:00	7/26-27	3-178

FLIGHT PLANNING BRANCH

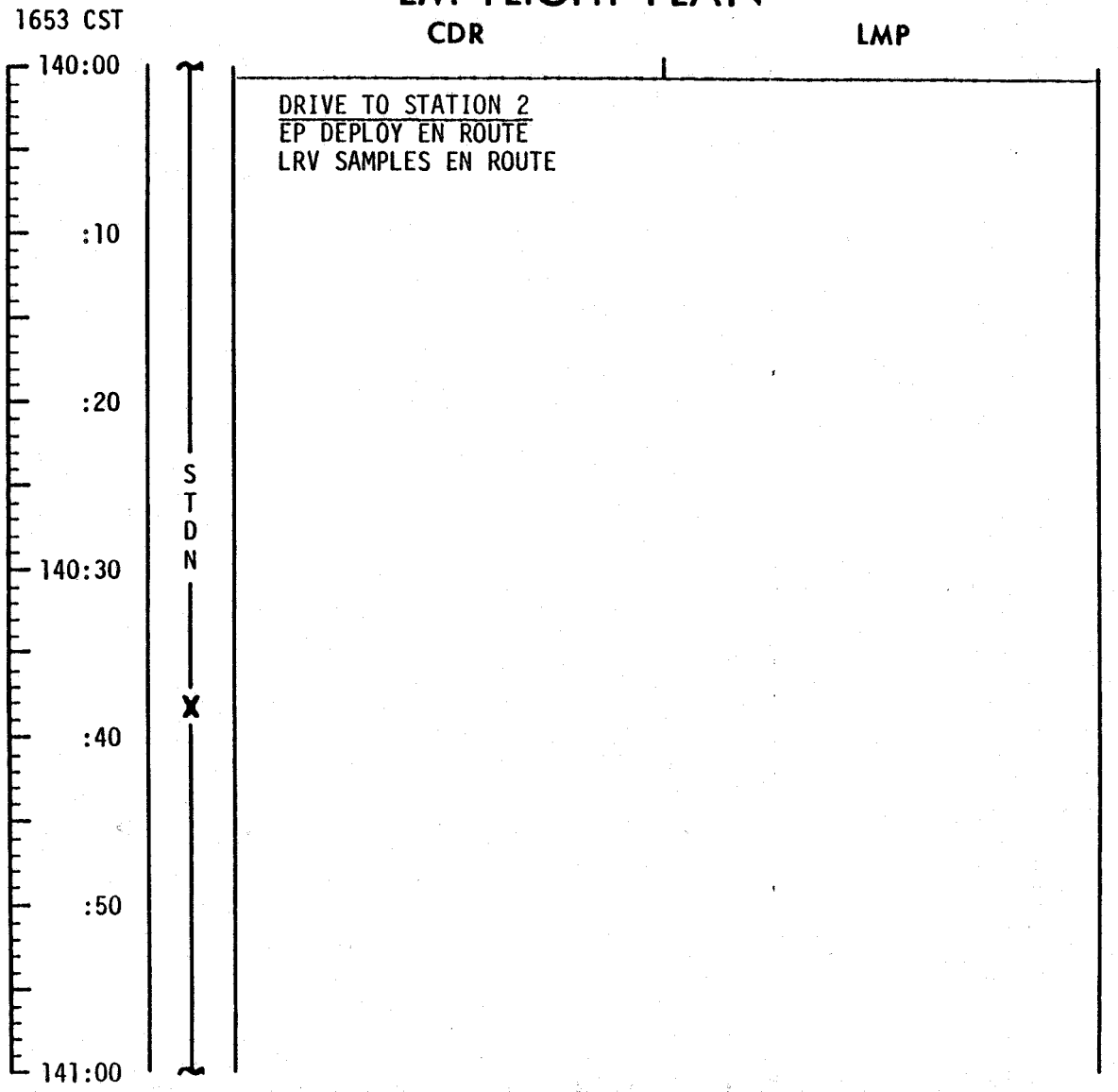
CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	12/22/72	

LM FLIGHT PLAN

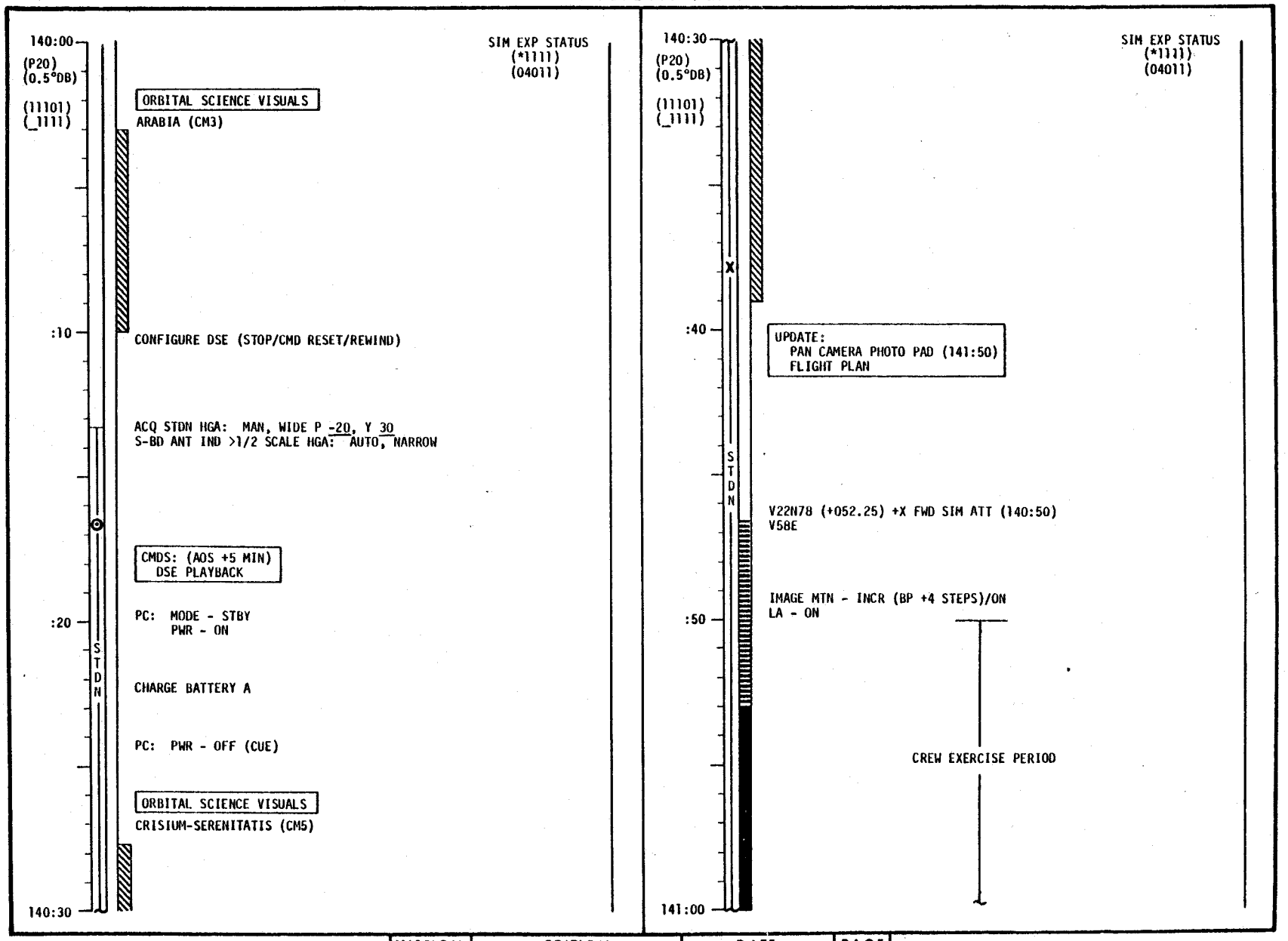
MCC-H



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	140:00 - 141:00	7/27	3-180

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

MCC-H | 1753 CST | CDR | LMP | NOTES

141:00 — DRIVE TO STATION #2 (CONT) — +1:50

STATION #2

:10 — GEOLOGICAL OBSERVATIONS & PHOTOS — +2:00
POLARIZATION PHOTOS
RAKE SAMPLE
CORE SAMPLE
DOCUMENTED SAMPLES

:20 — PHOTO PANS — +2:10

STDN

TV

141:30 — +2:20

:40 — +2:30

CSM REV 28

:50 — +2:40

142:00 — +2:50

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	141:00 - 142:00	7/27-28	3-182

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

141:00
(P20)
(0.5°DB)
(11101)
(_1111)
:10
:20
141:30
STDN
CREW EXERCISE PERIOD
SIM EXP STATUS
(+1111)
(02011)
CMDS: (AOS +65 MIN)
DSE REWIND
CONFIGURE DSE (HBR/RCD/FWD/CMD RESET) (AOS +73 MIN)
SET HGA: MAN, WIDE, P -10, Y 25 FOR AOS

141:30
(P20)
(0.5°DB)
(11101)
(_1111)
:40
REV 28
:50
142:00
SIM EXP STATUS
(+1111)
(02011)
PC: STBY
STEREO
PWR
PAN CAMERA PHOTO PAD
T-START: __ __ __:__ __:__ __
T-STOP: __ __ __:__ __:__ __
(155°E TO 85°E)
PC - OPR (T START)
CONFIGURE CAMERA (ORBITAL SCIENCE PHOTOS)
CM5/EL/80/CEX-IVL 20 (f8,1/250,∞) 36 FR
MAG (LL) _____, FR # _____

LM FLIGHT PLAN

MCC-H | 1853 CST

142:00	CDR	LMP	NOTES
	DRIVE TO STATION #3 LRV SAMPLES EN ROUTE		+2:50
:10			+3:00
:20			+3:10
142:30	STATION #3 GEOLOGICAL OBSERVATIONS & PHOTOS DOCUMENTED SAMPLES PHOTO PAN		+3:20
:40			+3:30
:50			+3:40
143:00			+3:50

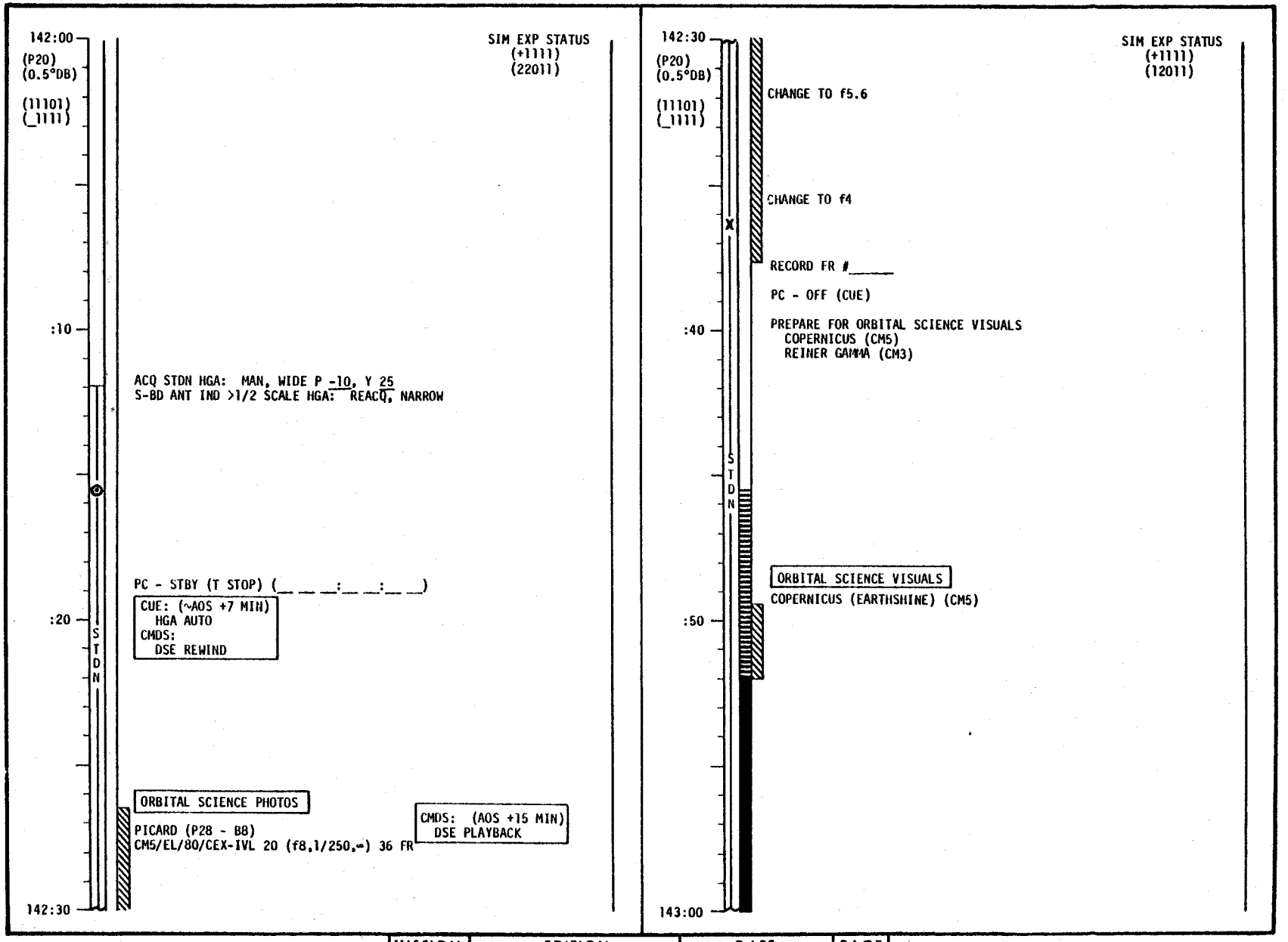
STDN - X

TV

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	142:00 - 143:00	7/28	3-184

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

MCC-H	1953 CST	CDR	LMP	NOTES
	143:00	STATION #3 (CONT)		+3:50
	:10			+4:00
		DRIVE TO STATION #4 LRV SAMPLE EN ROUTE		
	:20			+4:10
	143:30			+4:20
		STATION #4 GEOLOGICAL OBSERVATIONS & PHOTOS POLARIZATION PHOTOS RAKE SAMPLES		
	:40			+4:30
				CSM REV 29
	:50			+4:40
	144:00			+4:50

TV

STDN

TV

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	143:00 - 144:00	7/28/29	3-186

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

143:00
(P20)
(0.5°DB)
(11101)
(_1111)

SIM EXP STATUS
(+1111)
(02011)

STDN

ORBITAL SCIENCE VISUALS

REINER GAMMA (CM3)

:10

L1OH CANISTER CHANGE
(13 INTO A, STOW 11 IN A9)

CMDS: (AOS +65 MIN)
DSE REWIND

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

:20

REPORT: GYRO TORQUING ANGLES

P20, CMC MODE - AUTO
GDC ALIGN

P52 IMU REALIGN

N71: __ __, __ __

N05: __ __ __ __ __

N93:

X __ __ __ __ __

Y __ __ __ __ __

Z __ __ __ __ __

GET __ __ __ __ __ __

CONFIGURE DSE (HBR/RCD/FWD/CMD RESET) (AOS +73 MIN)

SET HGA: MAN, WIDE, P -10, Y 25 FOR AOS

143:30

143:30
(P20)
(0.5°DB)
(11101)
(_1111)

SIM EXP STATUS
(+1111)
(02011)

:40

REV 29

CONFIGURE CAMERA: (ORBITAL SCIENCE)
CM3/EL/80/CEX-IVL 20 (f11,1/250,∞) 21 FR

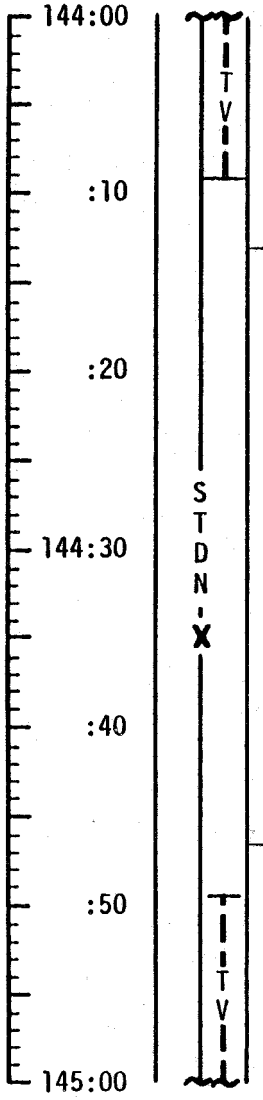
MAG (LL) _____, FR # _____

:50

144:00

LM FLIGHT PLAN

MCC-H | 2053 CST | CDR | LMP | NOTES



STATION #4 (CONT)

DRIVE TO STATION #5
PHOTO SITE, EP DEPLOY EN ROUTE
LRV SAMPLE EN ROUTE

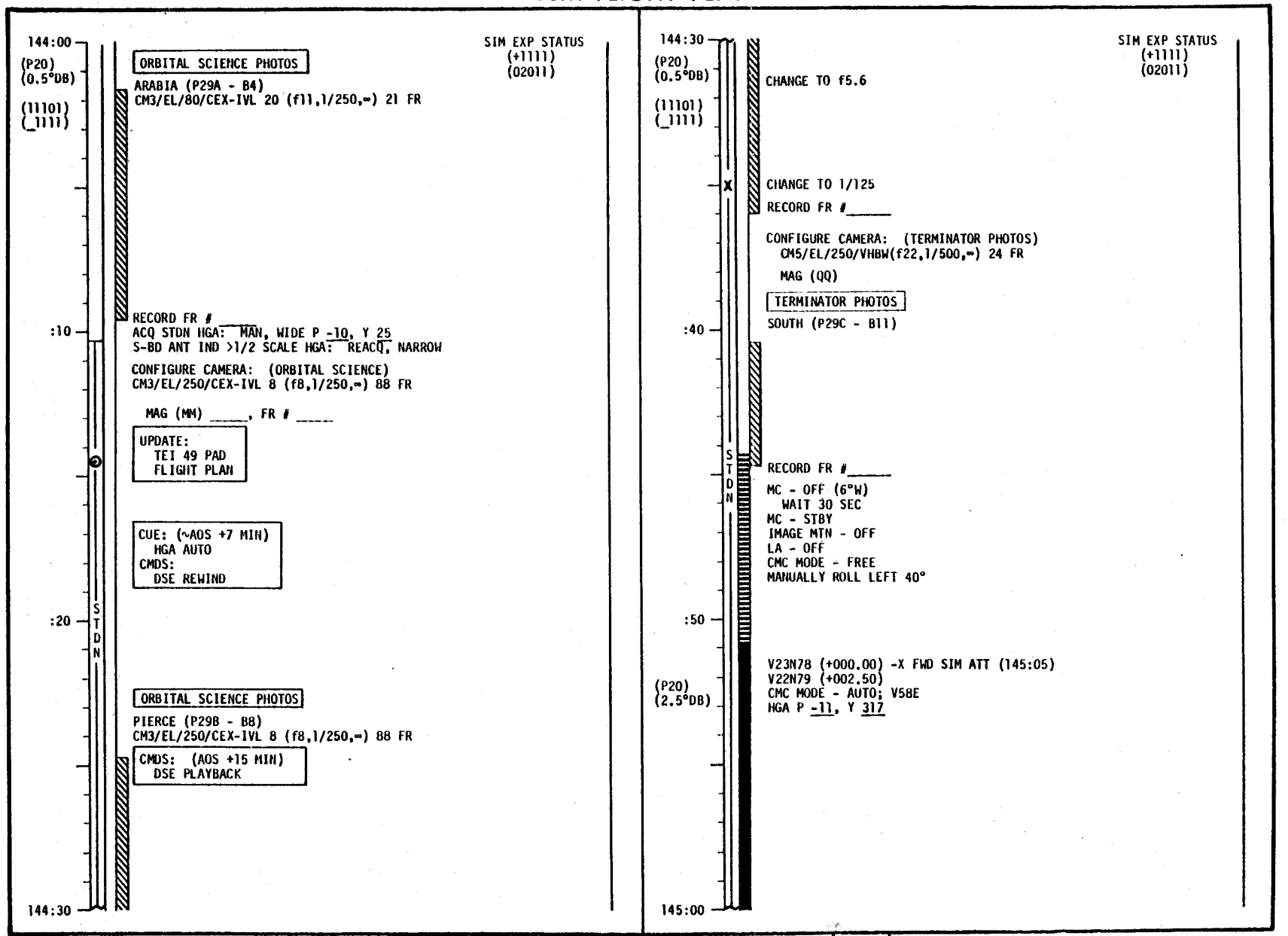
STATION #5
GEOLOGICAL OBSERVATIONS & PHOTOS
DOUBLE CORE
DOCUMENTED SAMPLES

+4:50
+5:00
+5:10
+5:20
+5:30
+5:40
+5:50

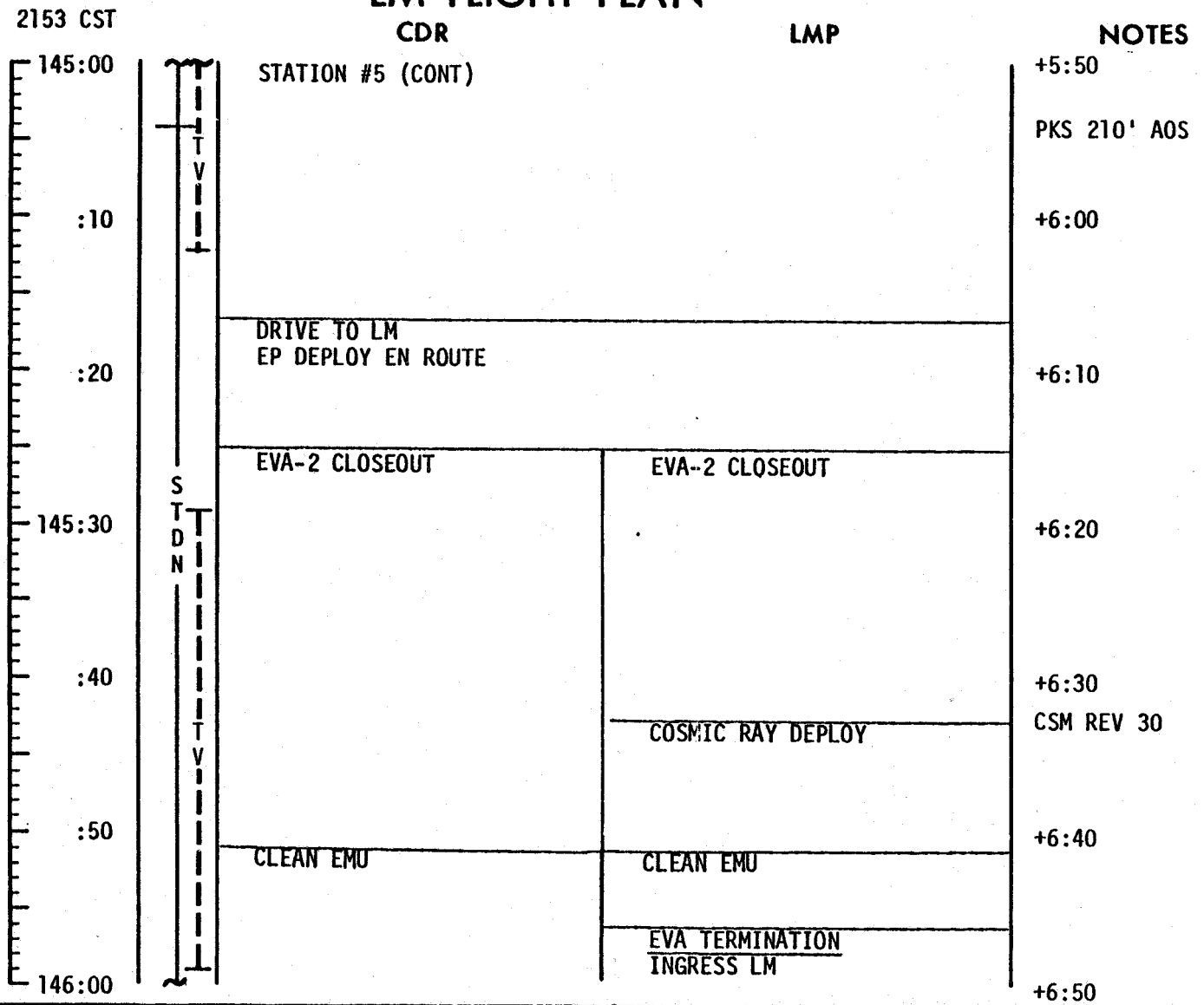
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	144:00 - 145:00	7/29	3-188

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



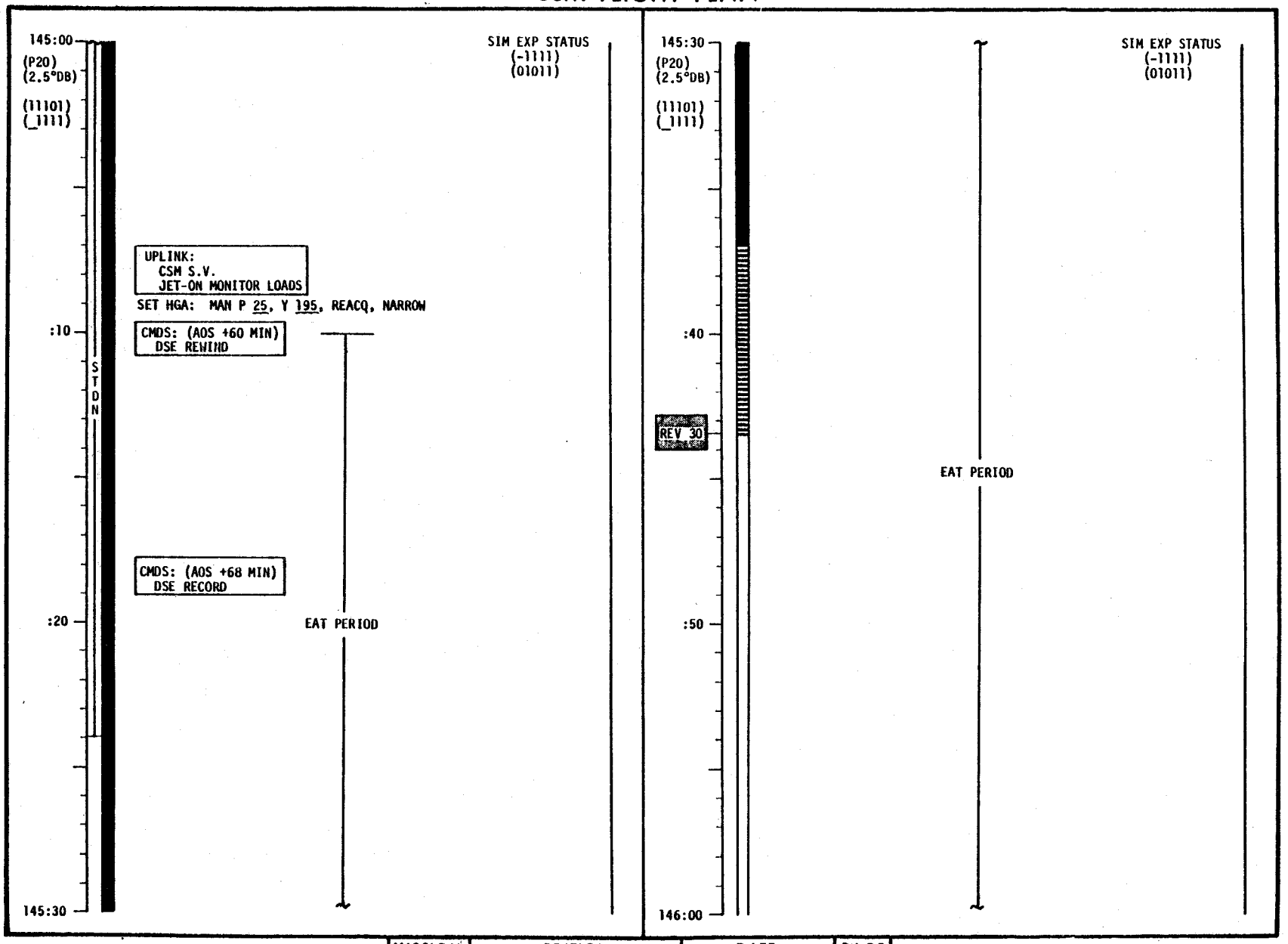
LM FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	145:00 - 146:00	7/29-30	3-190

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-191

LM FLIGHT PLAN

MCC-H | 2253 CST | CDR | LMP | NOTES

146:00 — TRANSFER PALLETS — +6:50

INGRESS LM

REPRESS LM

:10 — POST-EVA SYSTEMS CONFIGURATION — 7:00/END EVA-2

DOFF HELMETS & GLOVES

CONNECT TO LM COMM

:20

BIOMED - RIGHT

PLSS O_2 INITIAL RECHARGE

146:30

STDN-X

:40 — PLSS/OPS DOFFING

REPORT: OPS PRESSURE

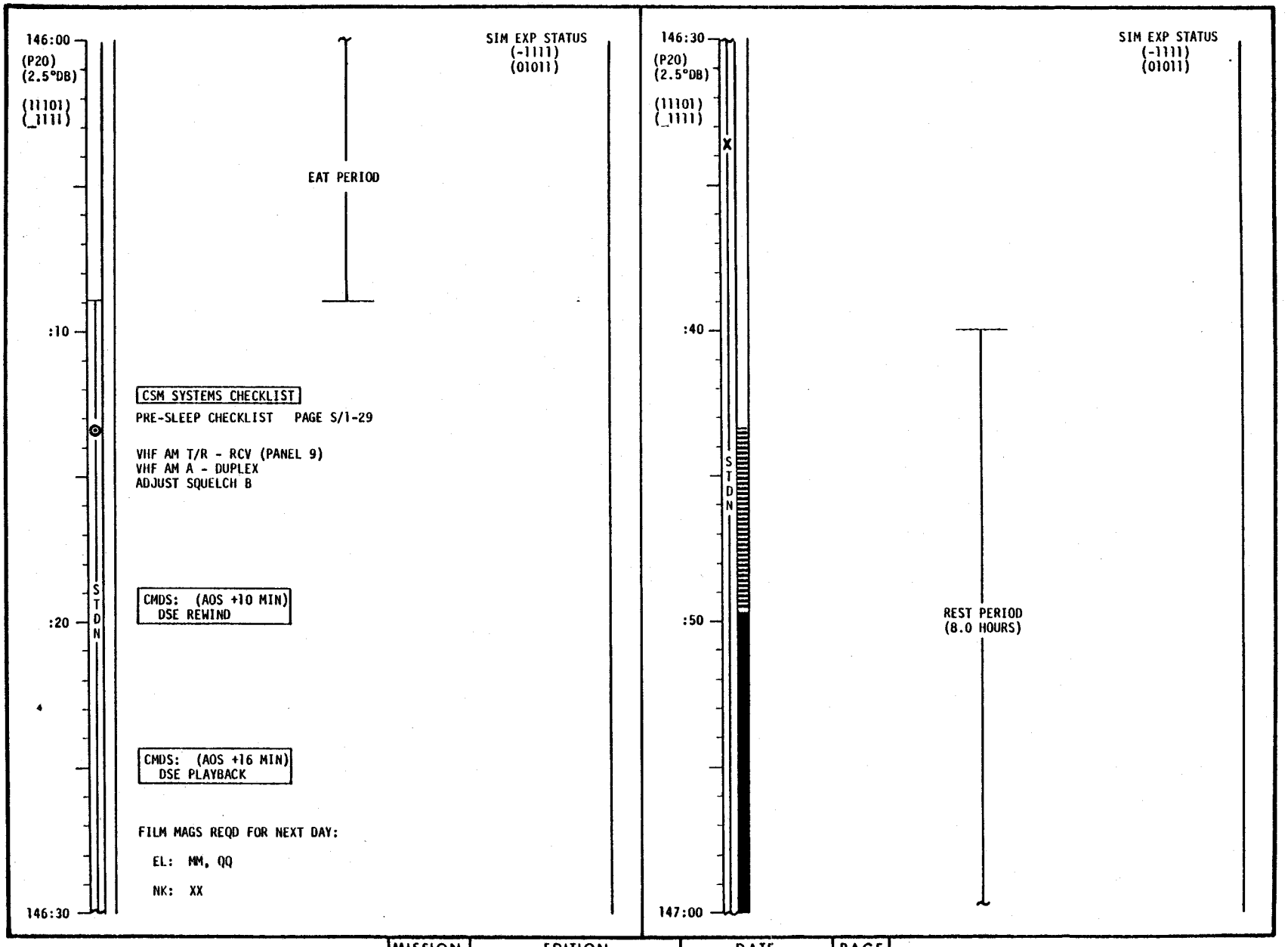
:50

147:00

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	146:00 - 147:00	7/30	3-192

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

MCC-H

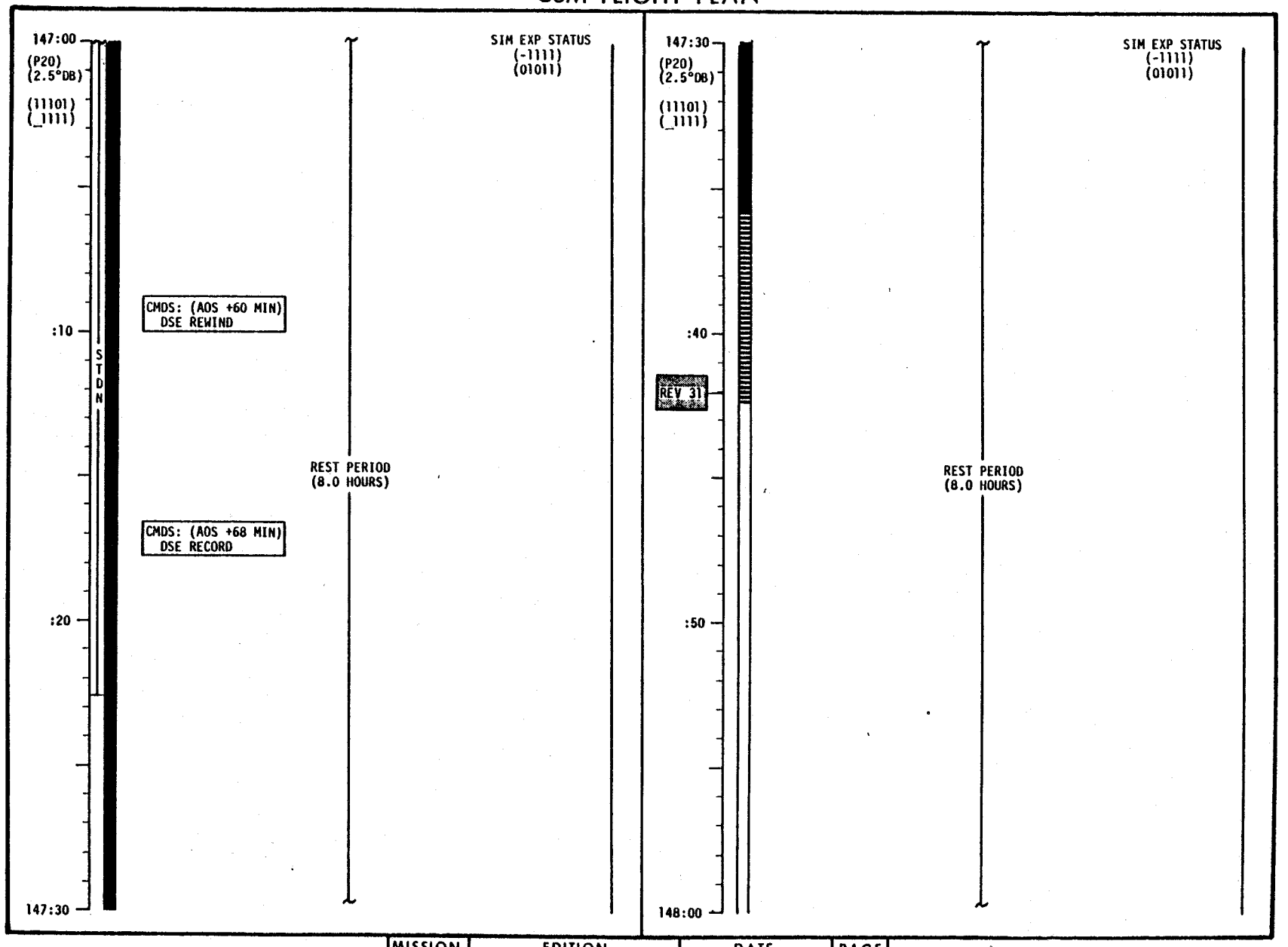
2353 CST

	CDR	LMP	NOTES
147:00	PLSS/OPS DOFFING (CONT)		
:10	POST-EVA CABIN CONFIGURATION	BATTERY MGT BATS 3 & 4 - OFF/RESET BAT L (CDR) - ON	
:20	WEIGH SRC & COLLECTION BAGS, REPORT: WEIGHTS		GDS 210' LOS
STDN			
147:30	DOFF SUITS CDR, THEN LMP DOFF SUITS	BIOMED - OFF, THEN LEFT	
:40			CSM REV 31
:50			
148:00			

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	147:00 - 148:00	7/30-31	3-194

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/22/72	3-105

LM FLIGHT PLAN

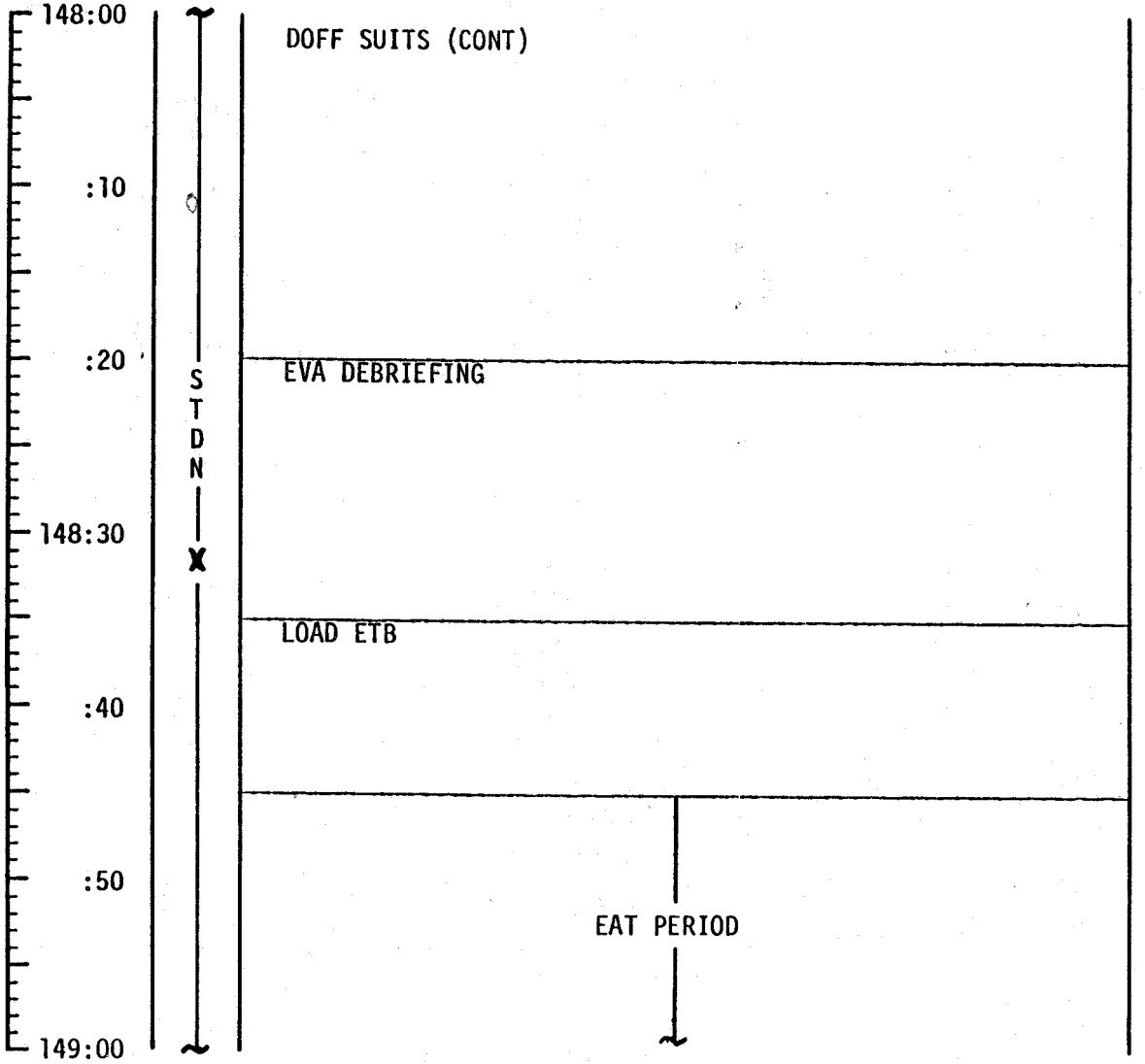
MCC-H

0053 CST, 12/13

CDR

LMP

NOTES

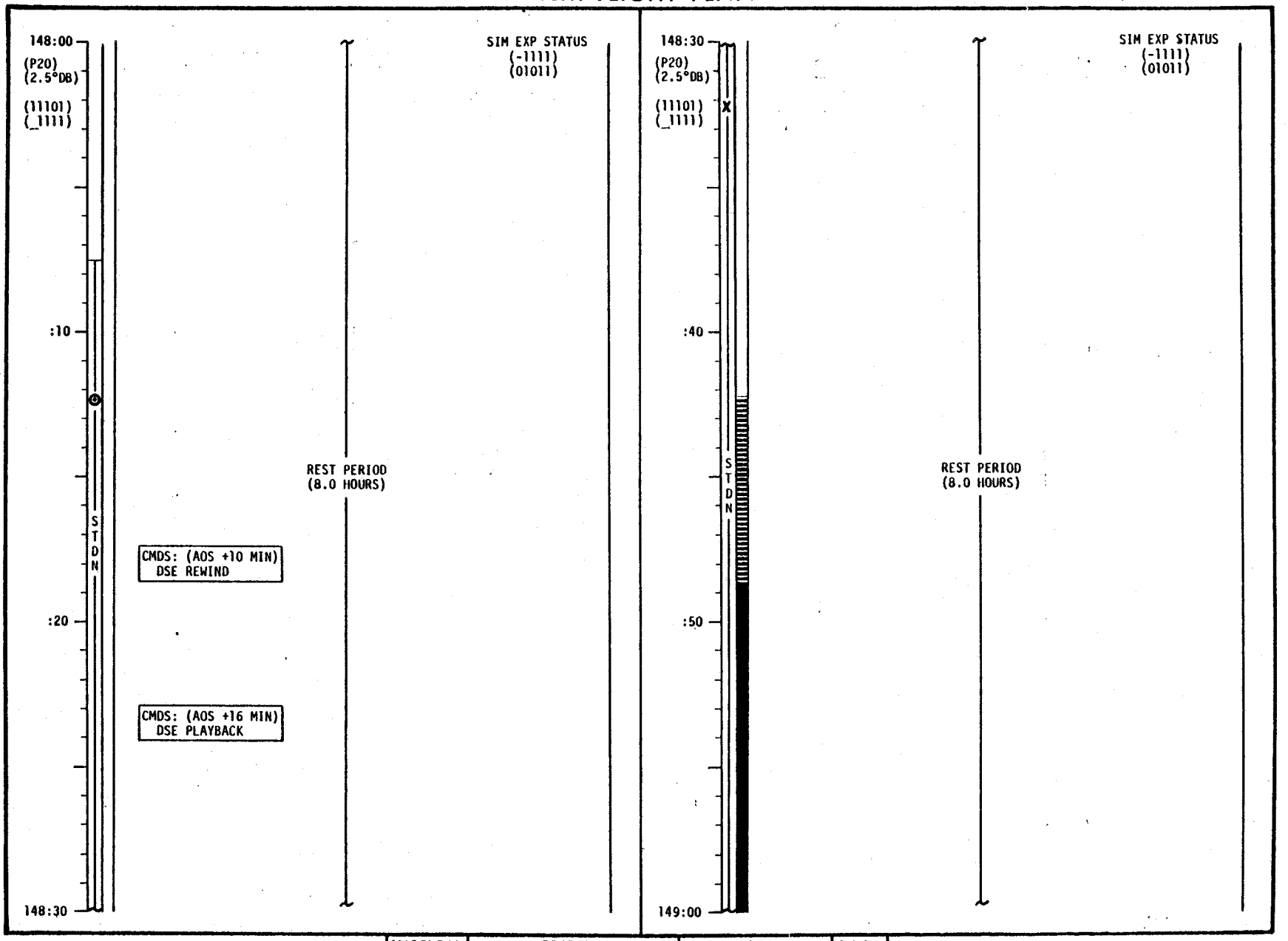


UPDATE TO LM LIFT-OFF TIMES FOR REVS 33-37

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	148:00 - 149:00	7/31	3-196

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-197

LM FLIGHT PLAN

MCC-H | 0153 CST | CDR | LMP | NOTES

149:00

:10

:20

149:30

:40

:50

150:00

STDN

EAT PERIOD

PLSS RECHARGE

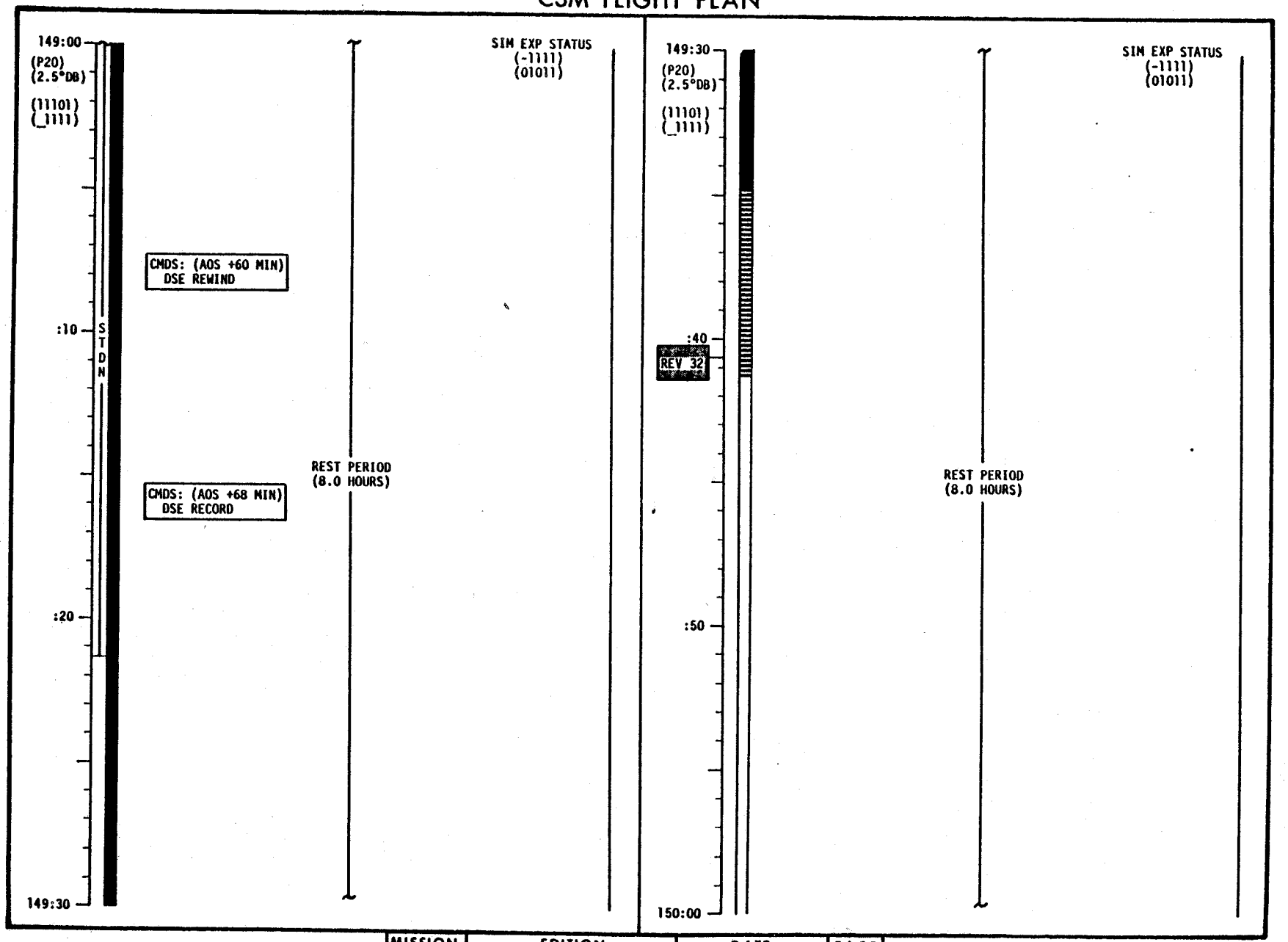
CSM REV 32

ACTIVATE LGC FOR CLOCK RESET, LGC TO STANDBY

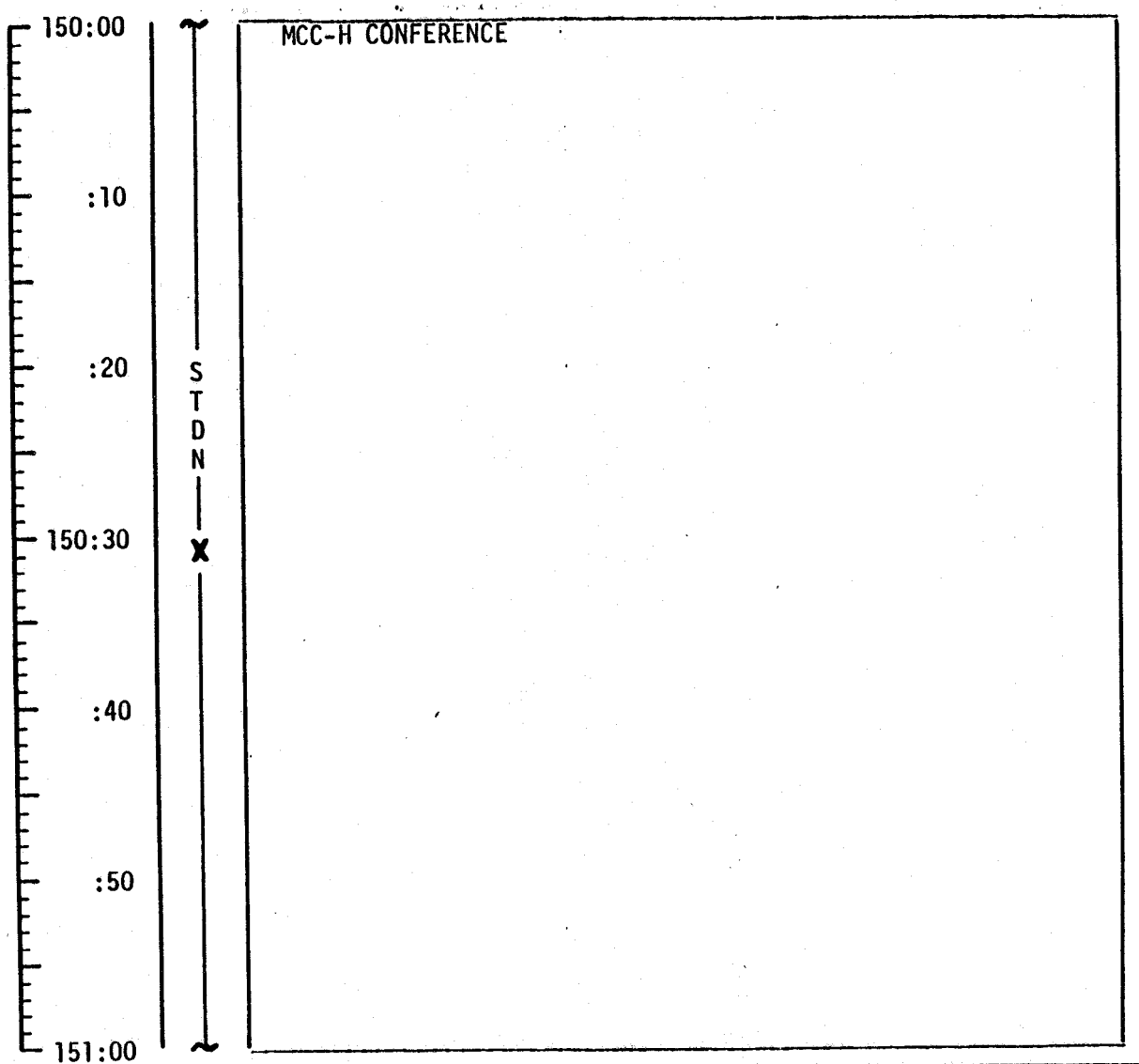
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	149:00 - 150:00	7/31-32	3-198

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



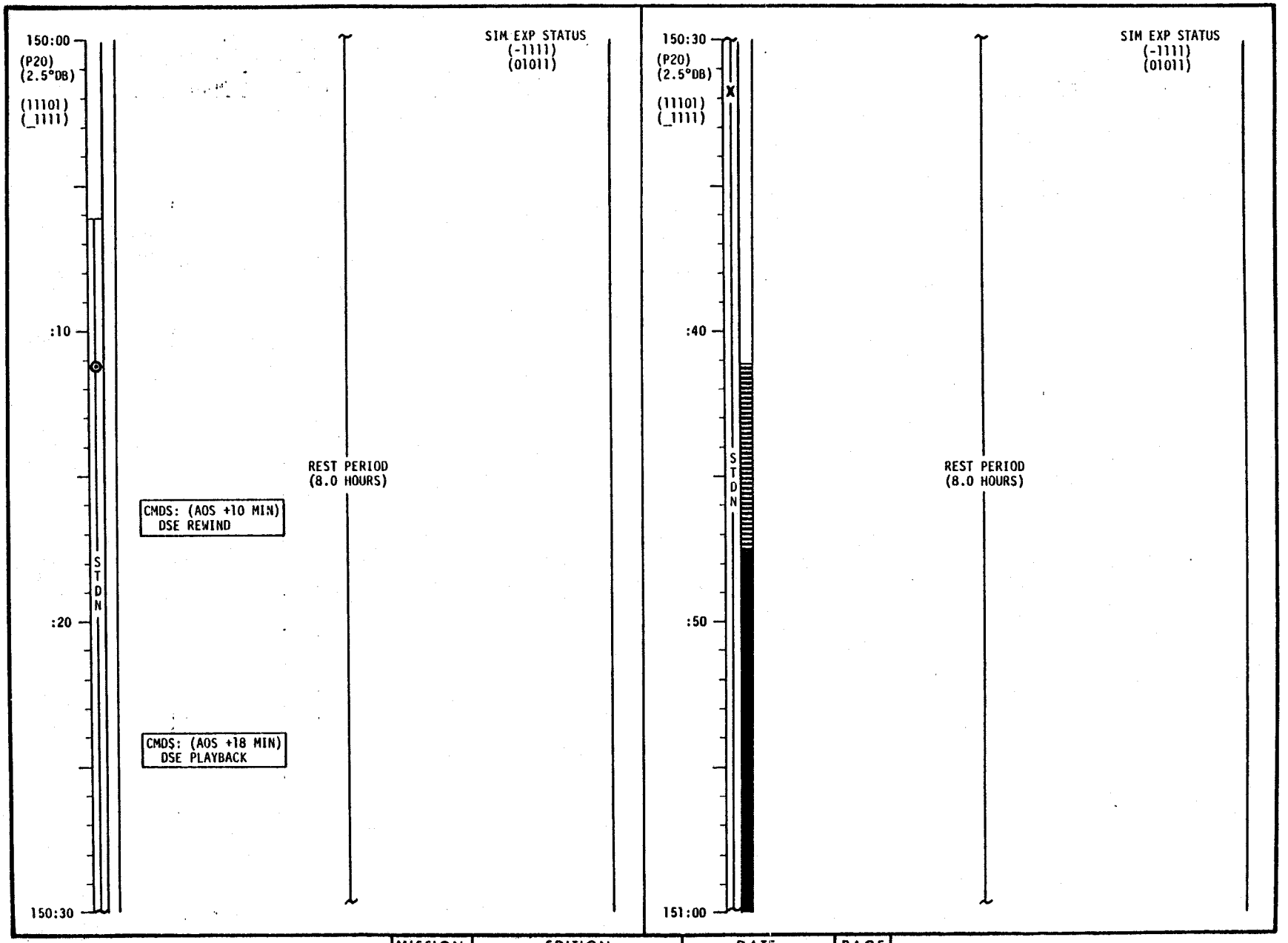
LM FLIGHT PLAN



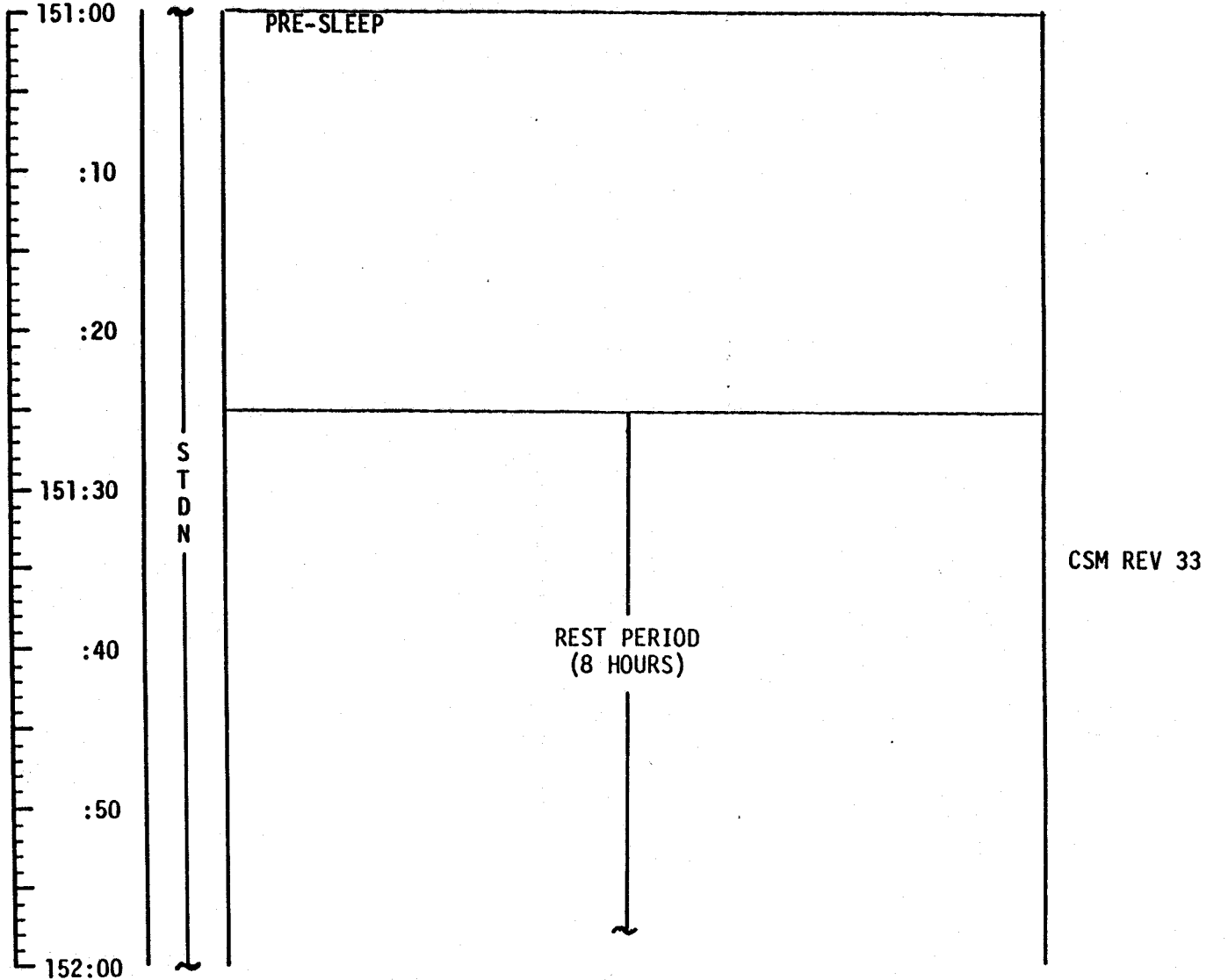
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	150:00 - 151:00	7/32	3-200

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



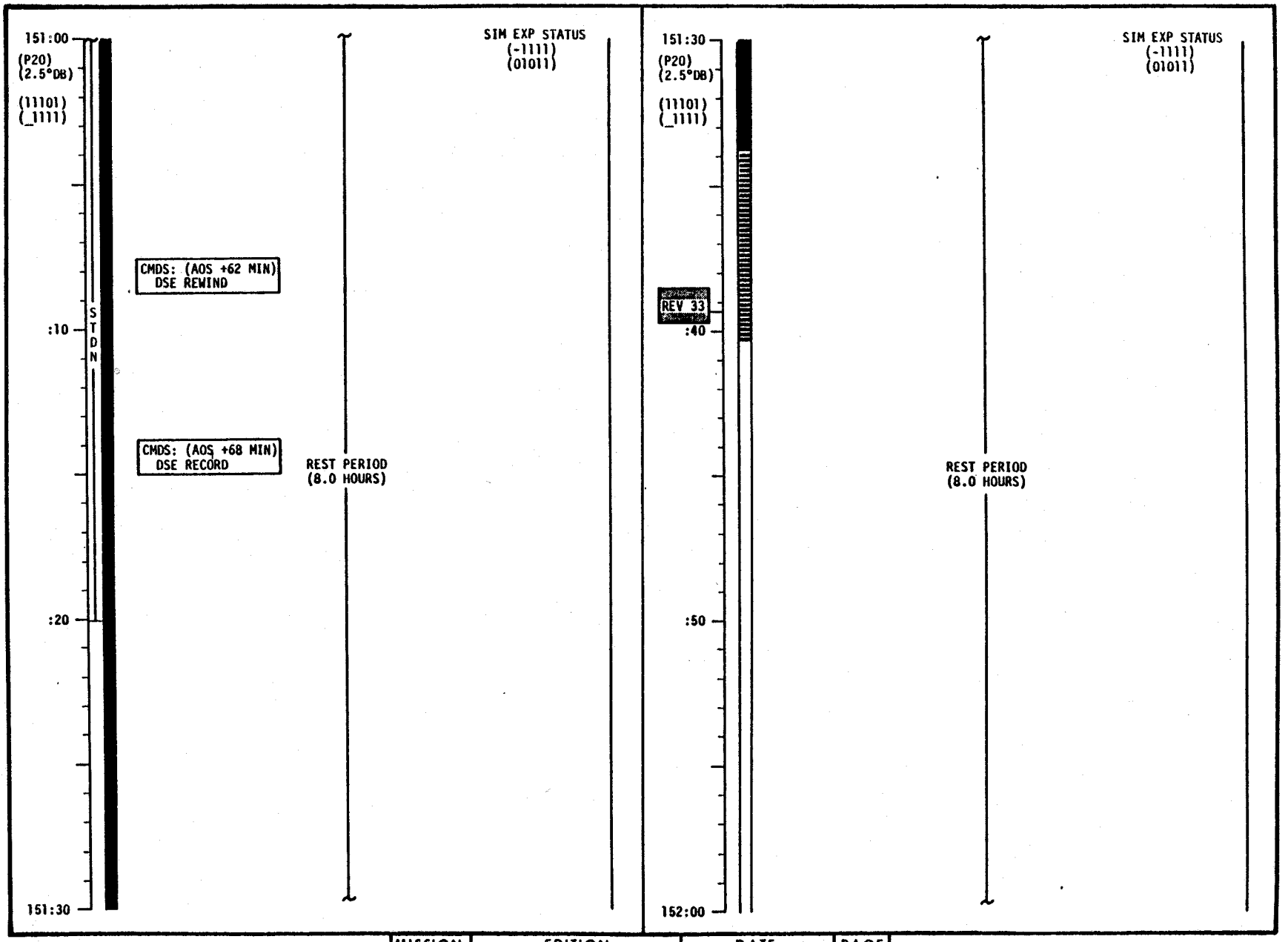
LM FLIGHT PLAN



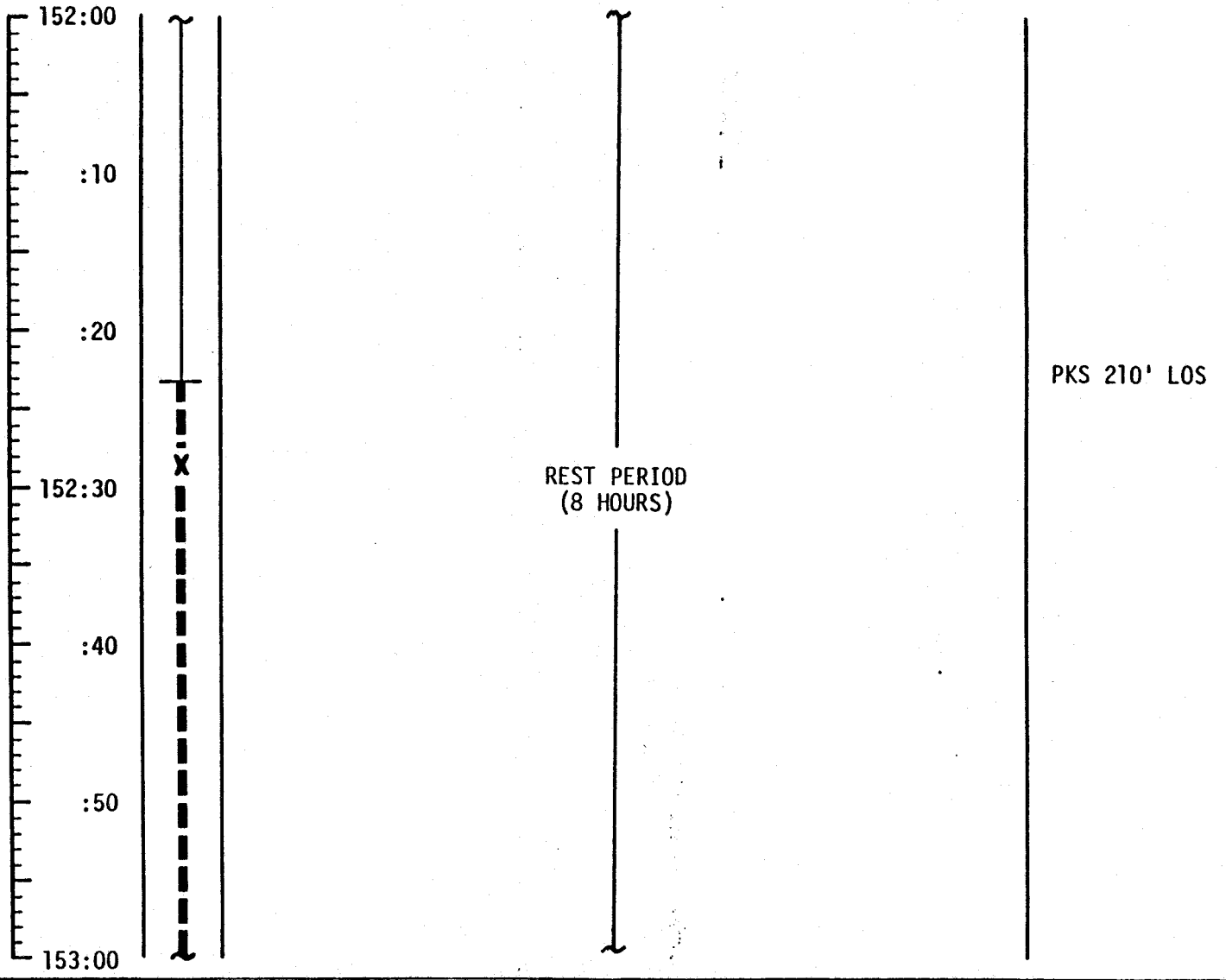
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	151:00 - 152:00	7/32-33	3-202

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



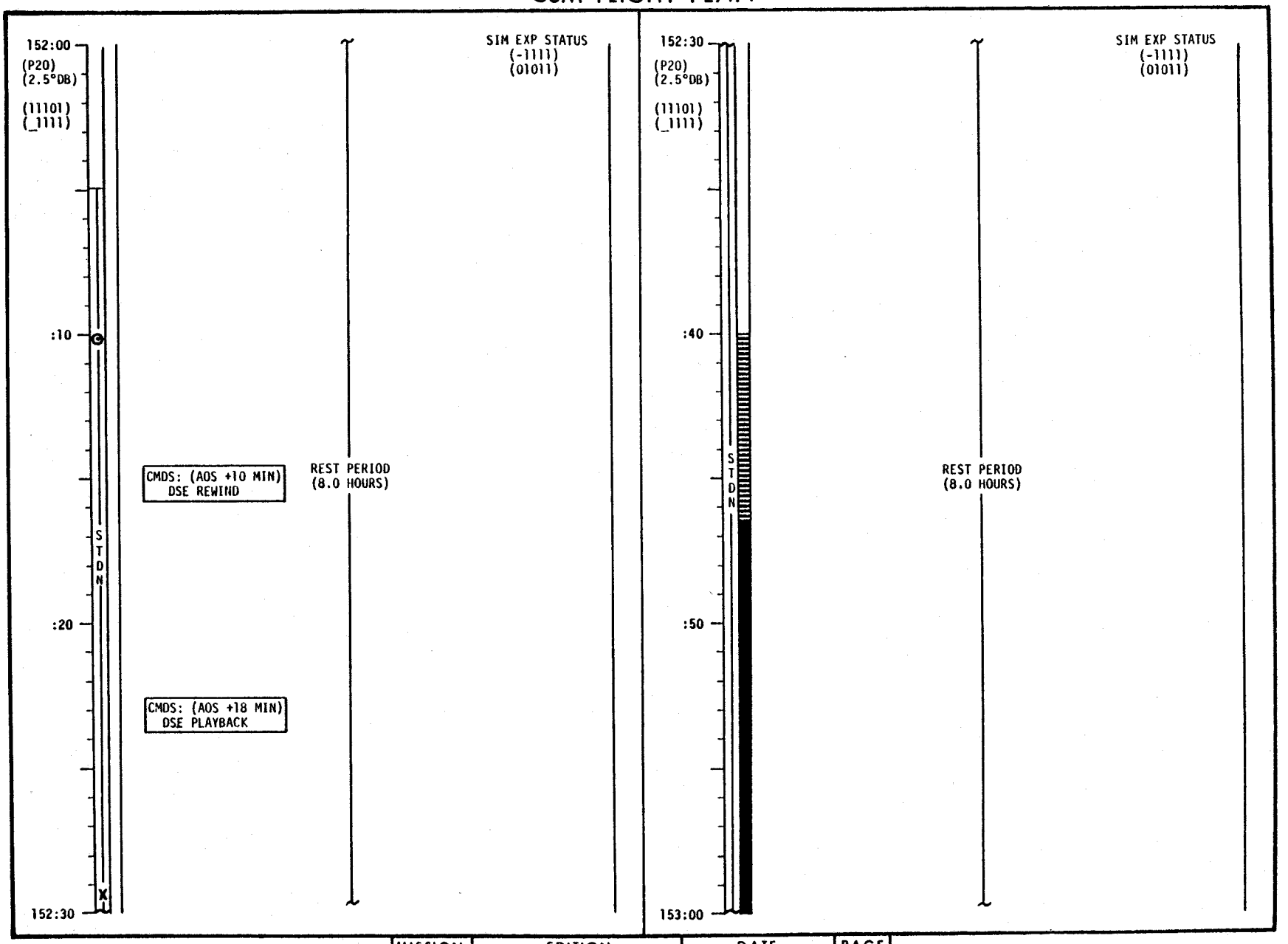
LM FLIGHT PLAN



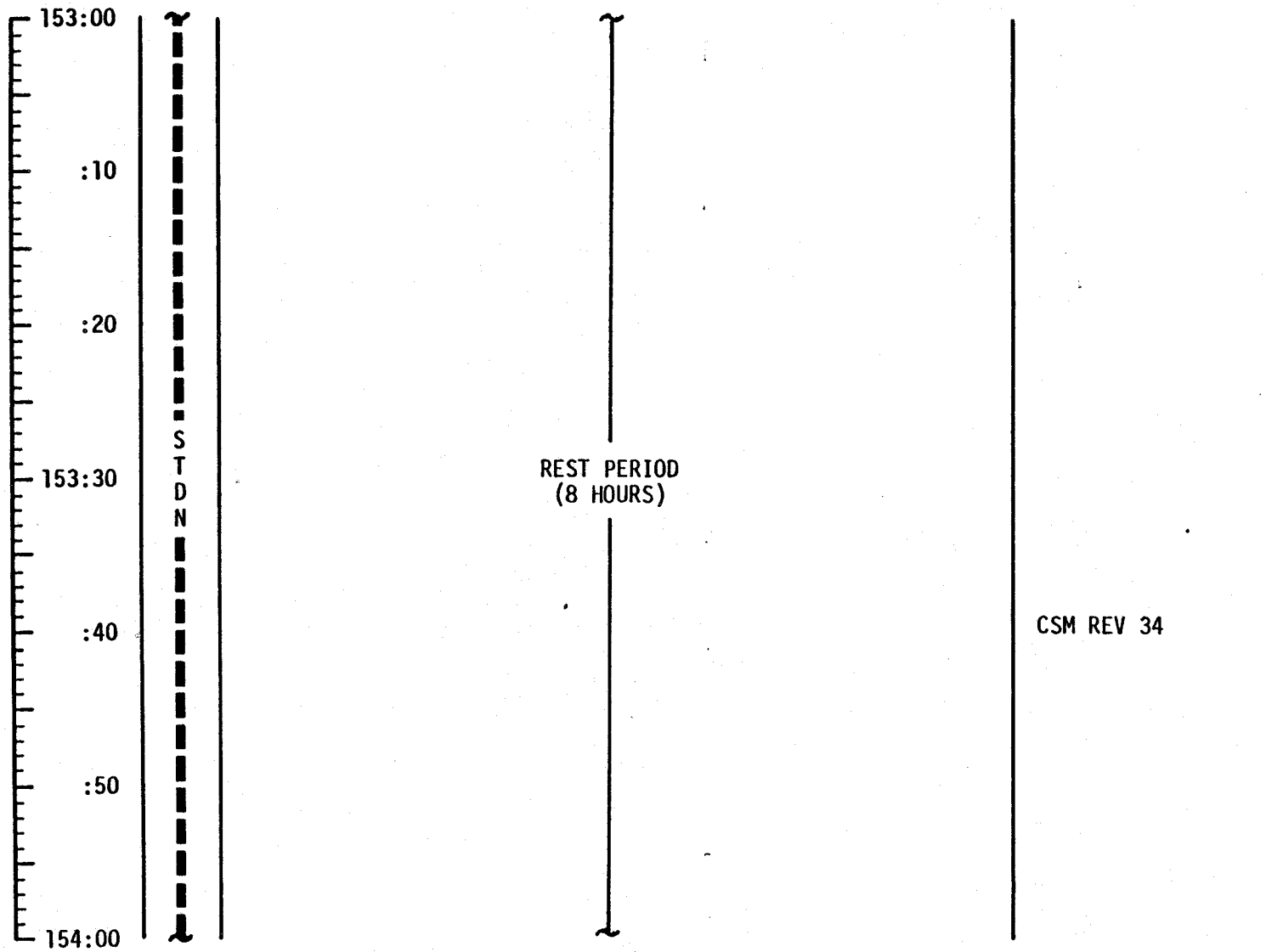
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	152:00 - 153:00	7/33	3-204

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



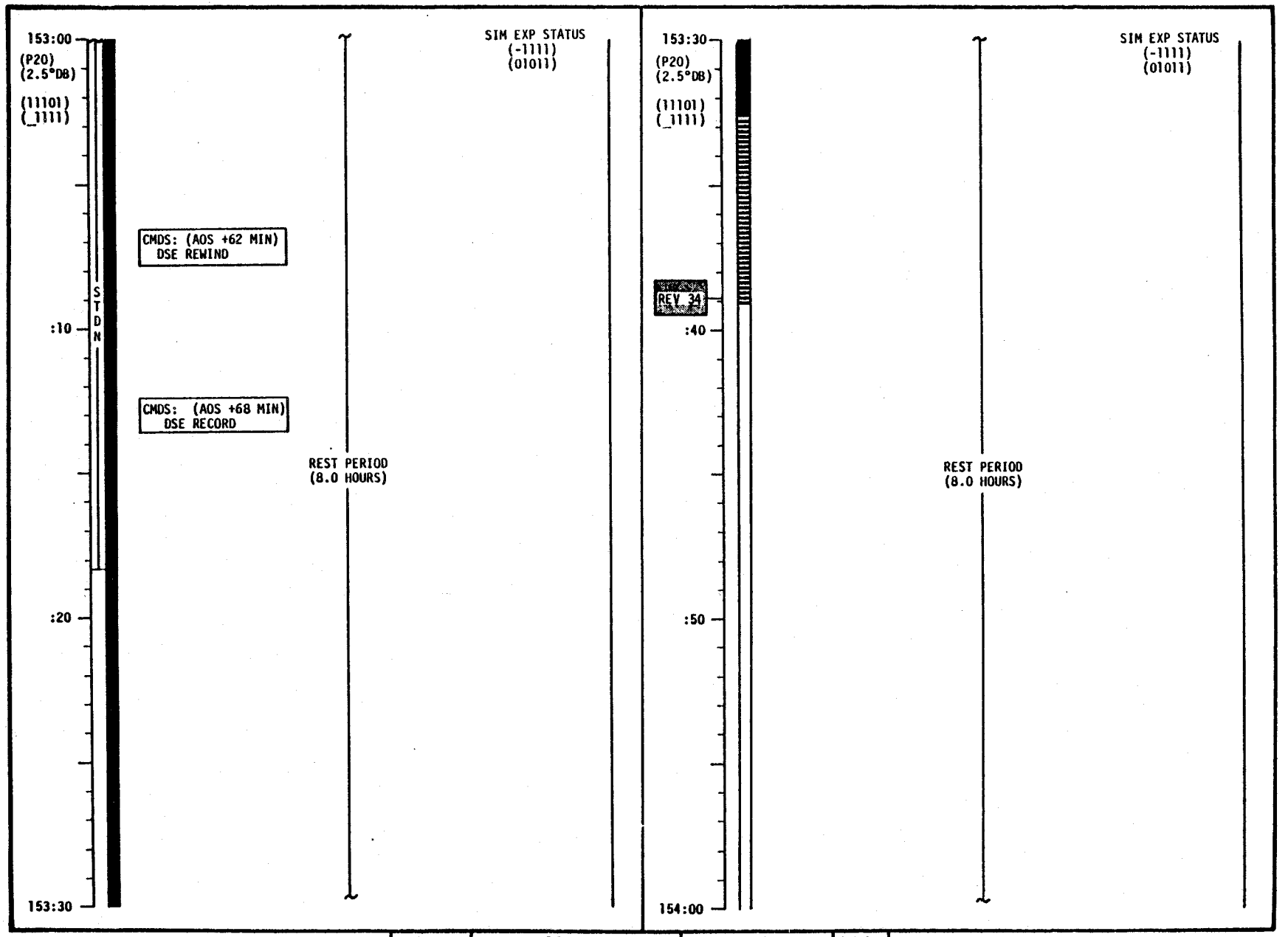
LM FLIGHT PLAN



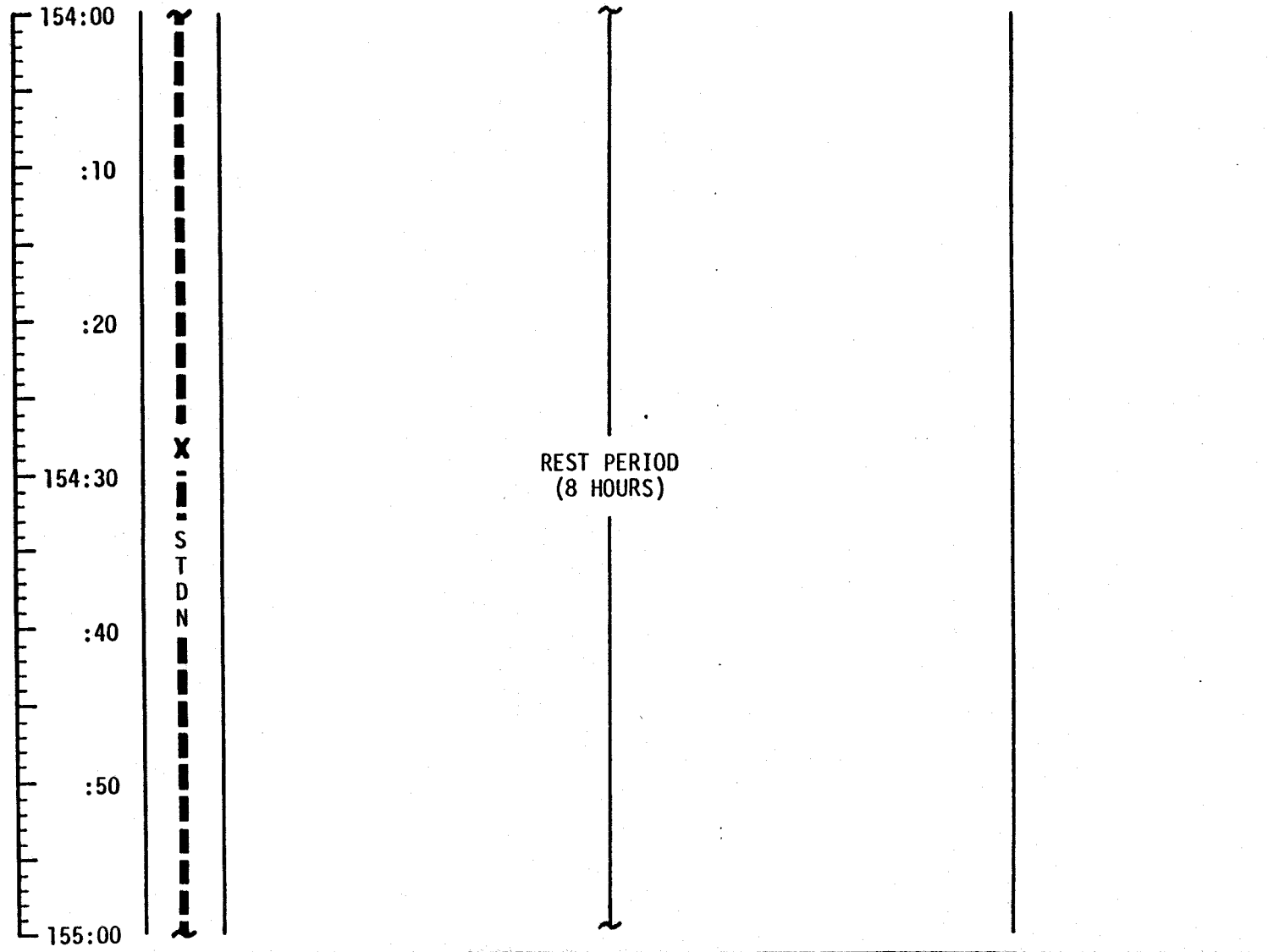
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	153:00 - 154:00	7/33-34	3-206

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



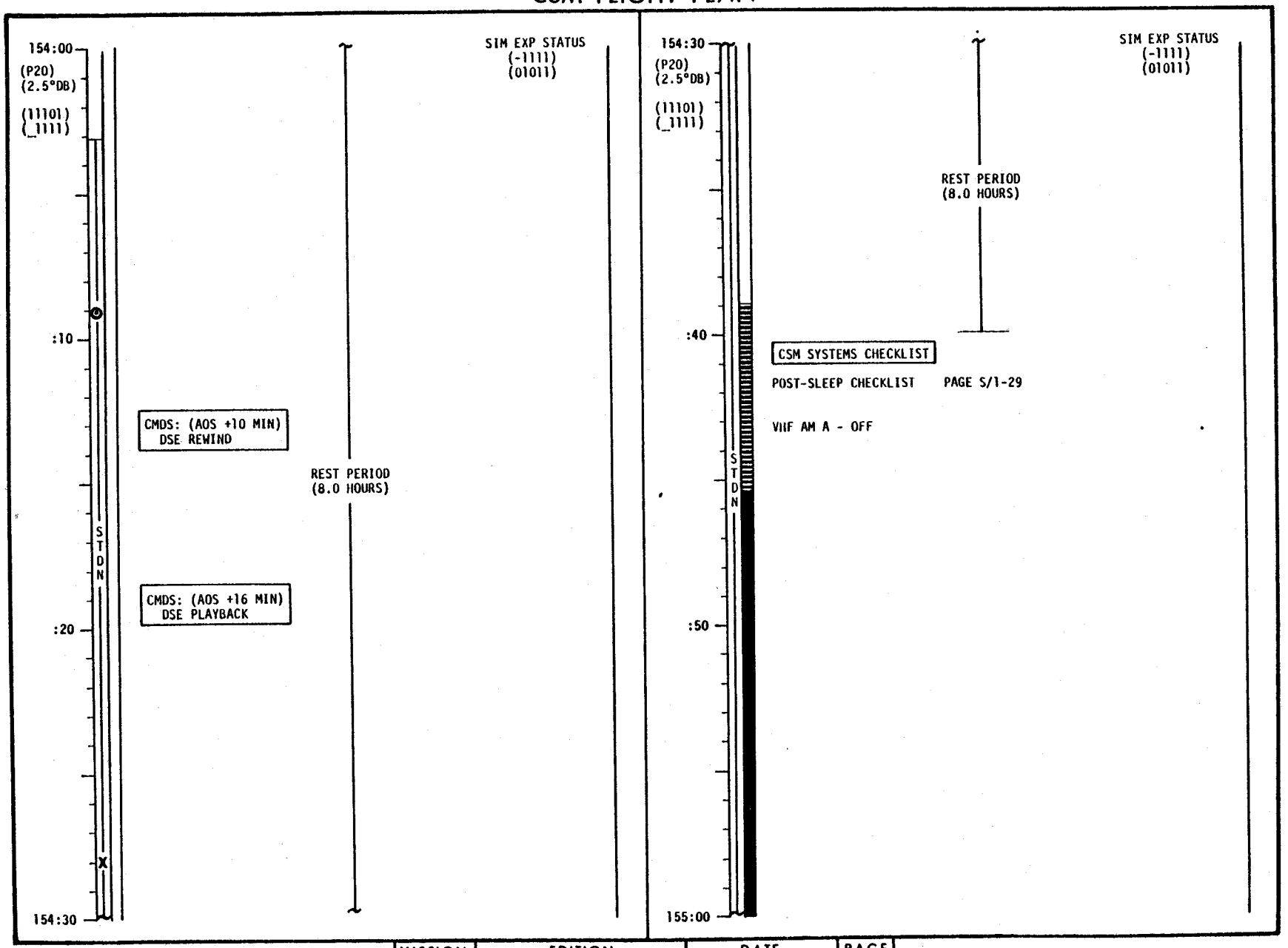
LM FLIGHT PLAN



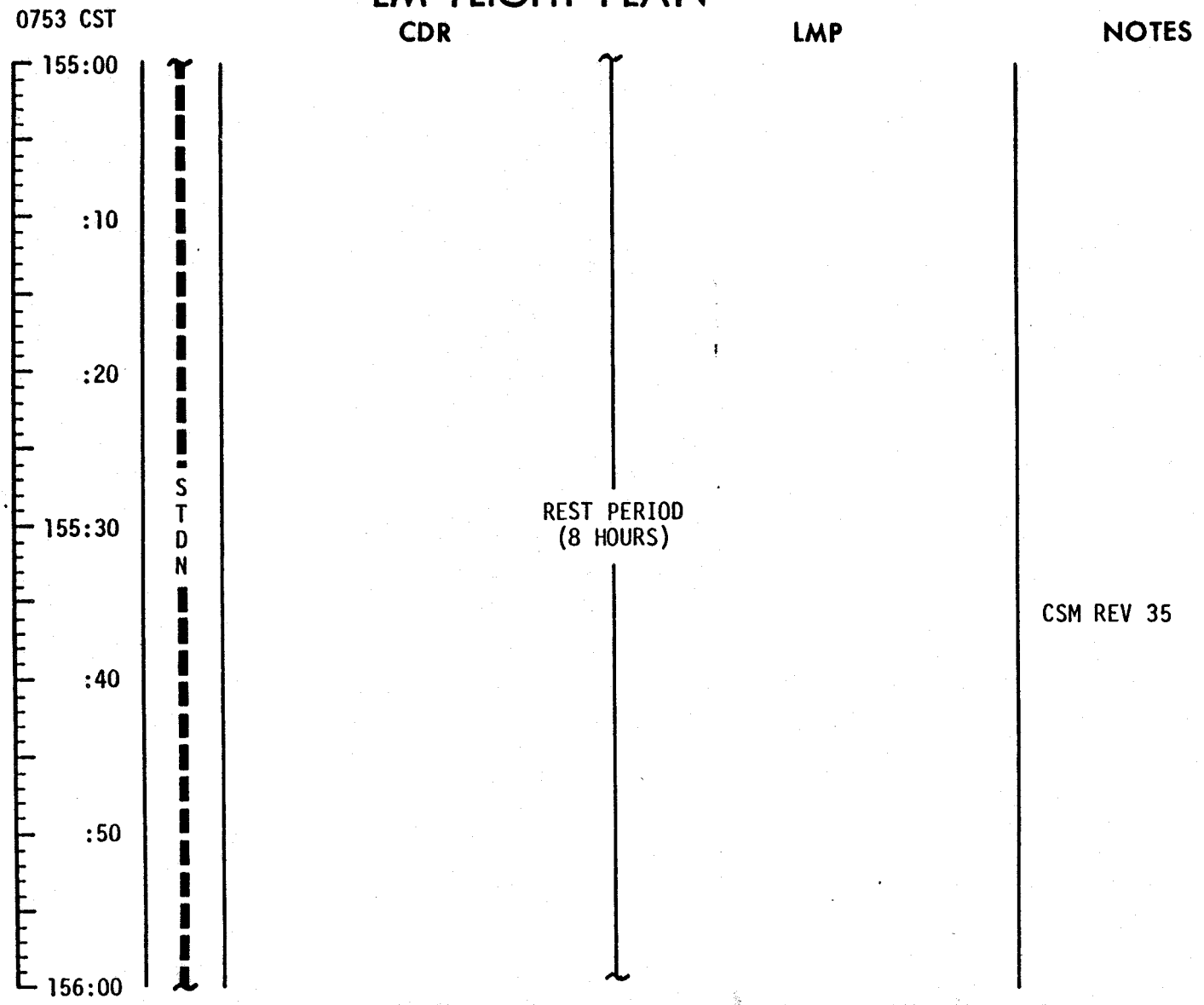
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	154:00 - 155:00	7-8/34	3-208

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



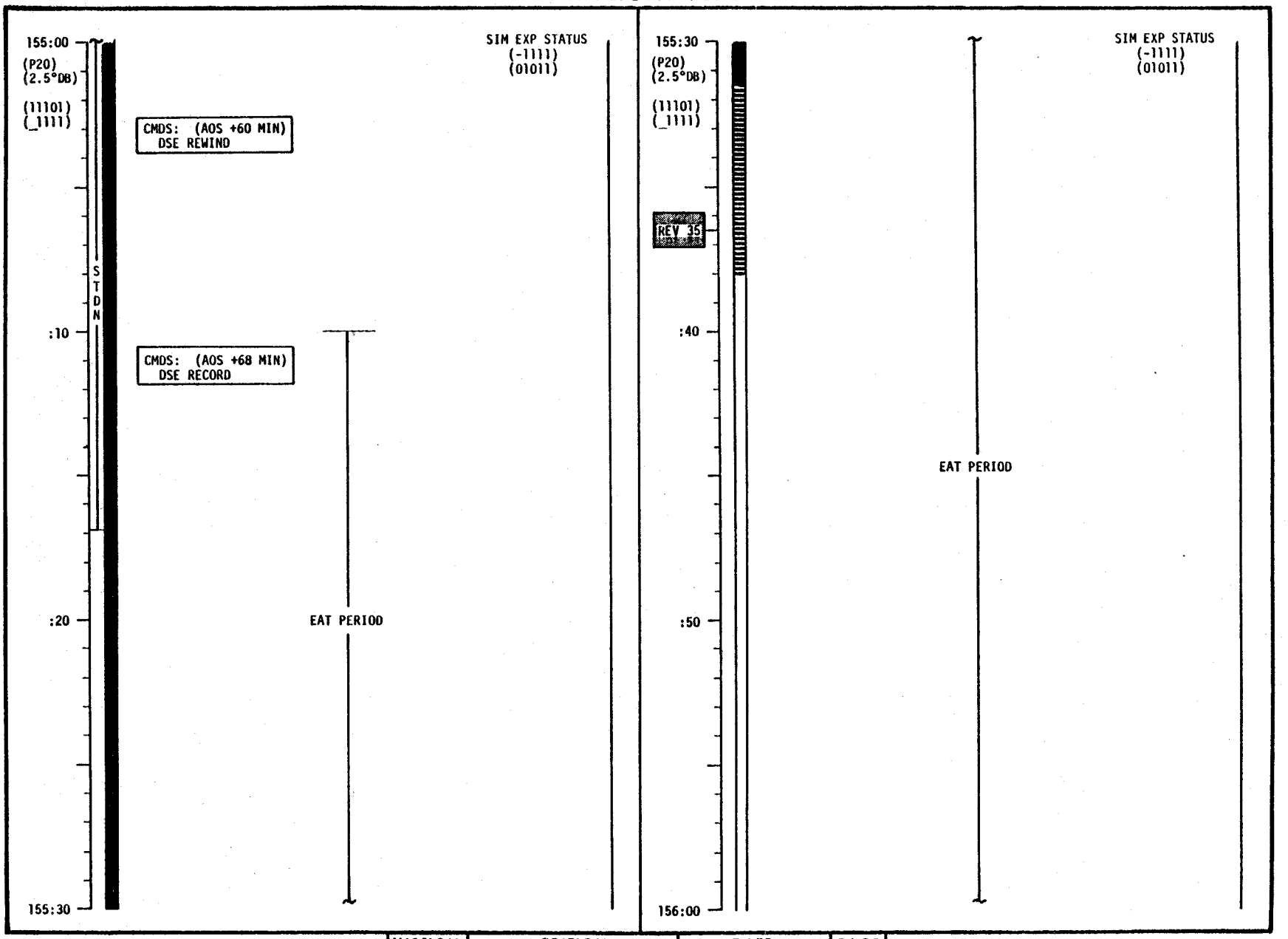
LM FLIGHT PLAN



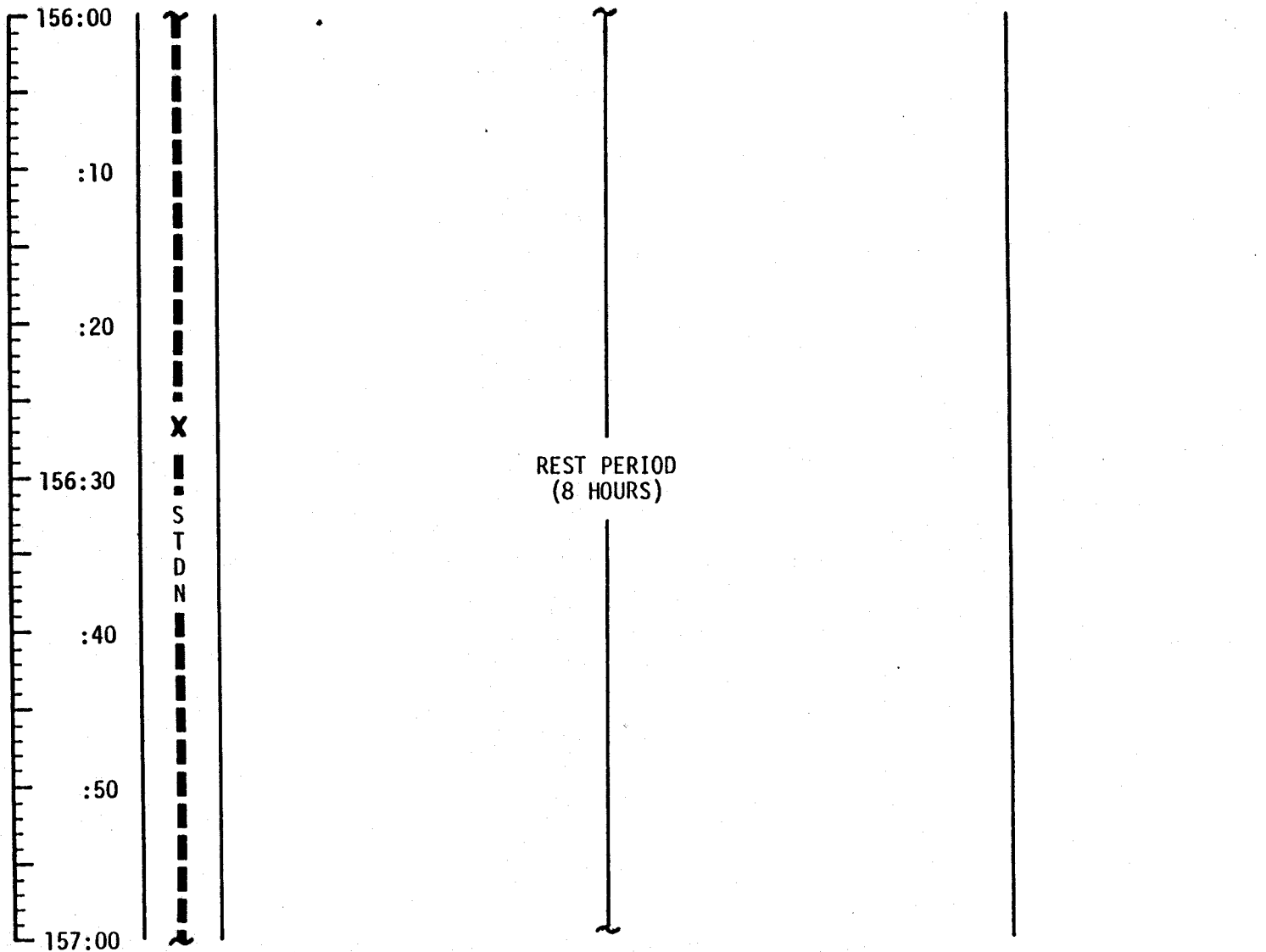
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	155:00 - 156:00	8/35	3-210

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	156:00 - 157:00	8/35	3-212

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

156:00
(P20)
(2.5°DB)
(11101)
(_1111)

:10

:20

(P20)
(0.5°DB)
156:30

STDN

SIM EXP STATUS
(-1111)
(01011)

EAT PERIOD

START NEW URINE COLLECTION PERIOD

CMDS: (AOS +10 MIN)
DSE REWIND

UPDATE:
CONSUMABLES STATUS
FLIGHT PLAN
SIM EXP STATUS
LUNAR SOUNDER PAD (156:50)
LUNAR SOUNDER PAD (158:40)

TERMINATE JET-ON MONITOR
P30
P20
V21N26 (00000)

CMDS: (AOS +18 MIN)
DSE PLAYBACK

UPLINK:
CSM S.V.

LS OPERATE - STBY (VERIFY)
RCDR - ON
RADAR - ON
RCDR - OFF
MODE - VHF
CMC MODE - FREE
MANUALLY ROLL RIGHT 40°

V23N78 (+180.00) +X FWD SIM ATT (156:45)
V22N79 (+000.50)
CMC MODE - AUTO; V58E

156:30
(P20)
(0.5°DB)
(11101)
(_1111)

:40

:50

157:00

STDN

SIM EXP STATUS
(+1111)
(01411)

RCDR - ON

MC - OFF
IR - OFF
PC SELF TEST - OFF
UV - OFF (AFTER SUNSET)
SMAC PWR - OFF

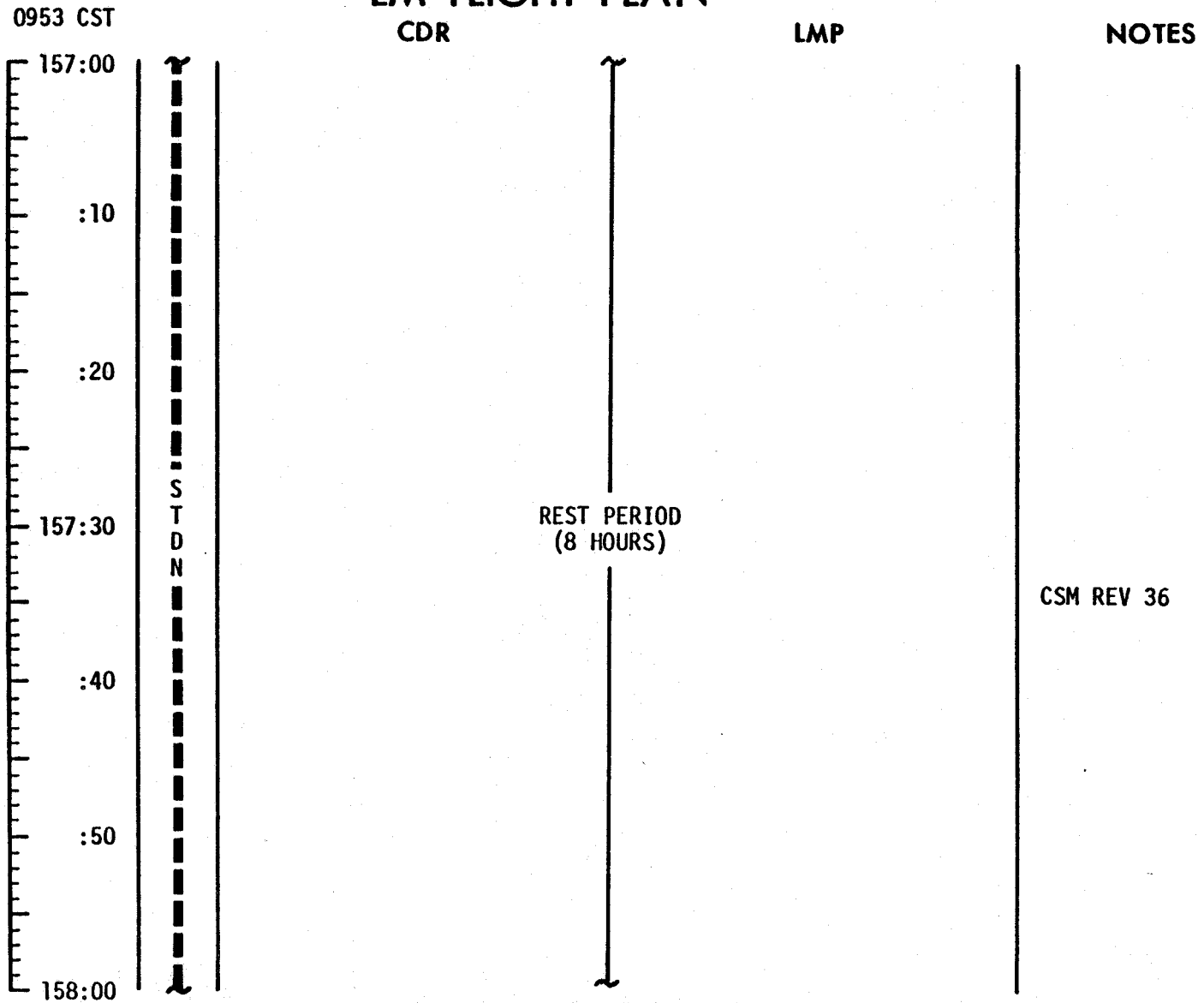
LUNAR SOUNDER PAD
T-START: ___ ___ ___:___ ___:___ ___
T-STOP: ___ ___ ___:___ ___:___ ___
(49°W TO 64°W)

DATA SYS - OFF
LS OPERATE - OPERATE (T START)

LS
VHF
REINER GAMMA
MARE RIDGE

LS OPERATE - STBY (T STOP)
WAIT 1 MIN
RCDR - OFF
RADAR - OFF
DATA SYS - ON
SMAC PWR - ON
MC - STBY

LM FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	157:00 - 158:00	8/35-36	3-214

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

157:00
(P20)
(0.5°DB)
(11101)
(_1111)

STDN

IR - ON
PC SELF TEST - HTRS
UV - ON

SIM EXP STATUS
(+1111)
(01000)

P52 IMU REALIGN

N71: __ __ , __ __

N05: __ __ __ • __ __

N93:

X __ __ • __ __ __

Y __ __ • __ __ __

Z __ __ • __ __ __ • __

GET __ __ __ • __ __ • __ __

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

CMDS: (AOS +66 MIN)
DSE REWIND

REPORT: GYRO TORQUING ANGLES

:10

GDC ALIGN

P20, OPT 5 (40°S OBLIQUE PHOTO ATT)(157:15)

N78 (+270.00)
(+087.75)
(+180.00)

CMC MODE - AUTO; V58E

(182,000/145,001)

CONFIGURE DSE (HBR/RCD/FWD/CMD RESET)(AOS +73 MIN)

SELECT OMNI D FOR AOS

SET HGA: MAN, WIDE, P -10, Y 25 FOR AOS +10 MIN

CONFIGURE CAMERA (ORBITAL SCIENCE PHOTOS)
CM5/EL/250/CEX-IVL 8 (f5.6,1/125,∞) 34 FR

MAG (MM) _____, FR # _____

:20

IMAGE MTN - ON
MC - ON (147°W)
IMAGE MTN - INCR (BP +3 STEPS)/ON

157:30

157:30
(P20)
(0.5°DB)
(11101)
(_1111)

SIM EXP STATUS
(*1111)
(04011)

REV 36

ORBITAL SCIENCE PHOTOS

MARE INGENII (P36 - C1)
CM5/EL/250/CEX-IVL 8 (f5.6,1/125,∞) 34 FR
CHANGE TO 1/250

:40

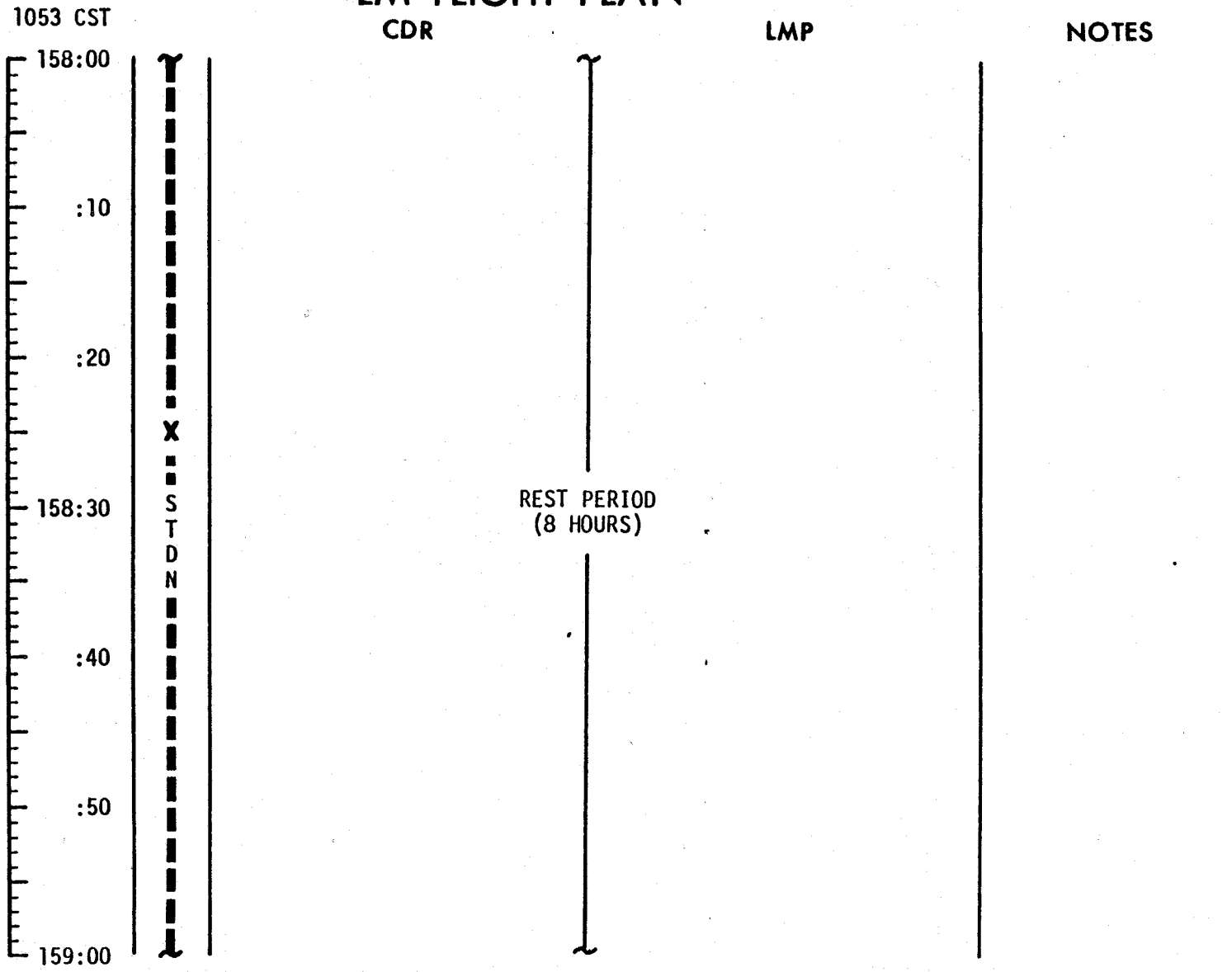
RECORD FR # _____

:50

158:00

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-215

LM FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	158:00 - 159:00	8/36	3-216

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

158:00
(P20)
(0.5°DB)
(11101)
(_1111)

ACQ STDN OMNI D

SIM EXP STATUS
(*1111)
(04011)

CMDS: (AOS +2 MIN)
DSE REWIND

ACQ STDN HGA: MAN, WIDE P -10, Y 25
S-BD ANT IND > 1/2 SCALE HGA: REACQ, NARROW

:10

CMDS: (AOS +10 MIN)
DSE PLAYBACK

PC: MODE - STBY
PWR - ON

STDN

PC: PWR - OFF (CUE)

LS OPERATE - STBY (VERIFY)
RCDR - ON
RADAR - ON
RCDR - OFF
HF ANTENNA 1 - EXTD/OFF (VERIFY)
HF ANTENNA 2 - EXTD/OFF (VERIFY)
MODE - HF

:20

CONFIGURE CAMERA: (TERMINATOR PHOTOS)
CM3/EL/250/VHBW (f5.6,1/125,∞) 12 FR

MAG (QQ) ____, FR # ____

158:30

158:30
(P20)
(0.5°DB)
(11101)
(_1111)

SIM EXP STATUS
(*1111)
(04411)

RCDR - ON

MC - OFF (14°W)
WAIT 30 SEC
MC - STBY
IMAGE MTN - OFF
MC - OFF
PC SELF TEST - OFF
SMAC PWR - OFF

:40

LUNAR SOUNDER PAD
T-START: ___ ___ ___:___:___ ___
T-STOP: ___ ___ ___:___:___ ___
(49°W TO 64°W)

IR - OFF
UV - OFF (AFTER SUNSET)
V24N78 (+090.00) +X FWD SIM ATT (158:49)
(+052.25)
V58E

STDN

CMDS:
DSE STOP
PCM BIT RATE - LOW

SELECT OMNI B
HGA: MAN, P -44, Y 179, PWR - OFF
DATA SYS - OFF
LS OPERATE - OPERATE (T START)

:50

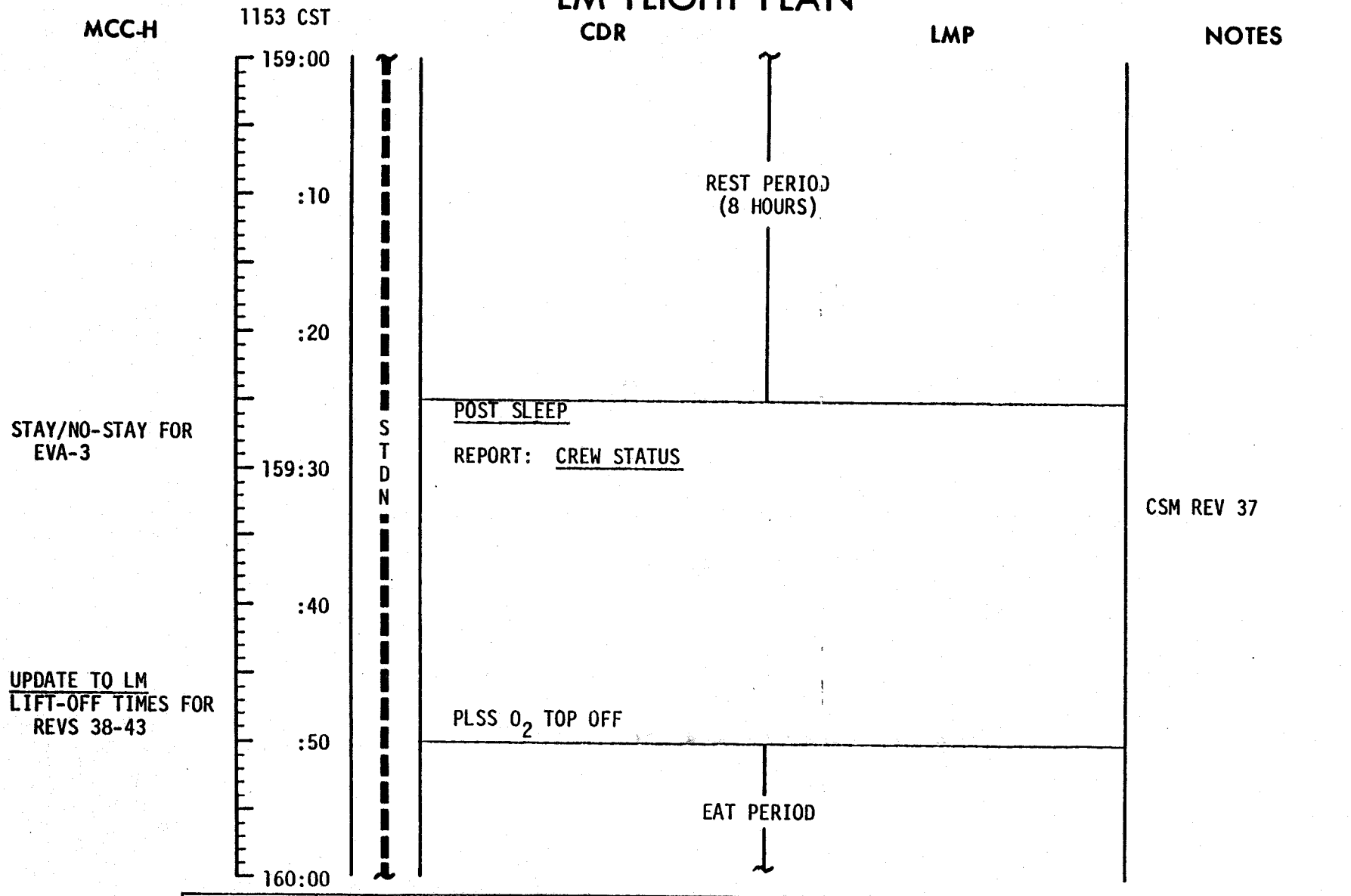
LS
HF
REINER GAMMA
MARE RIDGE

LS OPERATE - STBY (T STOP)
WAIT 1 MIN
RCDR - OFF
RADAR - OFF
DATA SYS - ON
HGA PWR - ON, 1/2 SCALE, AUTO, NARROW

CMDS:
DSE PLAYBACK
PCM BIT RATE - HIGH

159:00

LM FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	159:00 - 160:00	8/36-37	3-218

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

159:00
(P20)
(0.5°DB)
(11101)
(_1111)

STDN

:10

:20

159:30

SMAC PWR - ON
MC - STBY
MC - RETR
IR - ON
PC SELF TEST - HTRS
UV - ON
H_2 PURGE LINE HTR - ON

MC/LA COVER - CLOSE
IR COVER - CLOSE
UV COVER - CLOSE
CONFIGURE FOR URINE DUMP

CMDS: (AOS +68 MIN)
DSE REWIND

NOTE: DSE VOICE RECORDED THIS BACKSIDE PASS WILL NOT BE DUMPED

CONFIGURE DSE: (LBR/RCD/FWD/CMD RESET)(AOS +76 MIN)
SET HGA: MAN, P -10, Y 25 FOR AOS

SIM EXP STATUS
(+1111)
(00000)

159:30
(P20)
(0.5°DB)
(11101)
(_1111)

REV 37

:40

:50

160:00

TERMINATOR PHOTOS
AITKEN (P37 - C1)
CM3/EL/250/VHBW (f5.6,1/125,∞) 12 FR

RECORD FR # ____

H_2 & O_2 FUEL CELL PURGE

WASTE WATER DUMP

SAMPLE BUSS (1) - STOW SAMPLE (1)
DUMP URINE FROM BUSS (1) - STOW

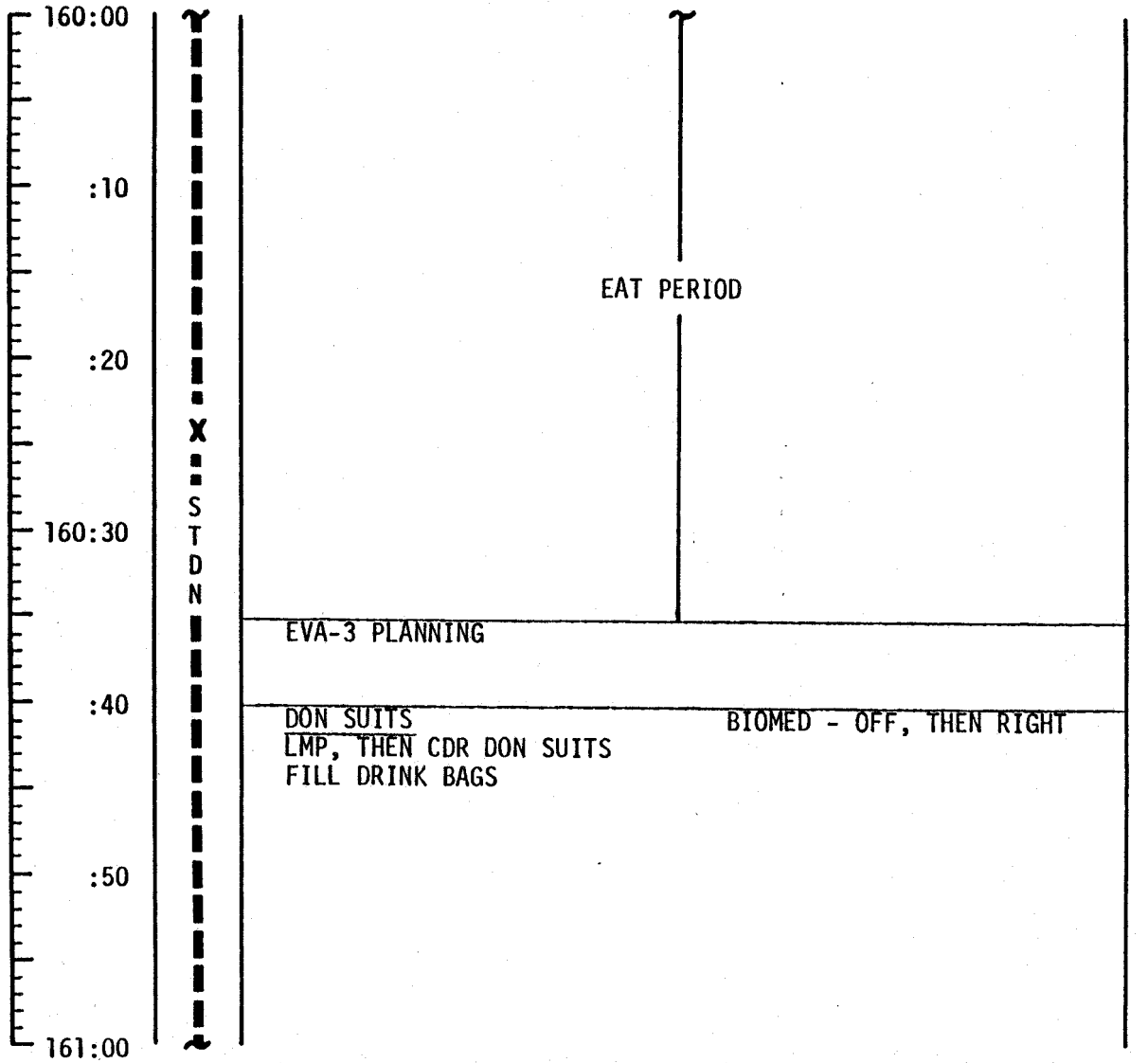
TERMINATE WASTE WATER DUMP AT 10%
H_2 PURGE LINE HTR - OFF

ACQ STDN HGA: MAN, WIDE P -10, Y 25
S-BD ANT IND >1/2 SCALE HGA: REACQ, NARROW

SIM EXP STATUS
(+0100)
(01011)

LM FLIGHT PLAN

MCC-H | 1253 CST | CDR | LMP | NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	160:00 - 161:00	8/37	3-220

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

160:00
(P20)
(0.5°DB)
(11101)
(_1111)

UPDATE:
FLIGHT PLAN
UV SOLAR ATMOSPHERE PAD (160:38)

SIM EXP STATUS
(+0100)
(01011)

CUE: (~AOS +7 MIN)
HGA AUTO
CMDS:
DSE DUMP
PCM BIT RATE - HIGH

:10

STDN

(11101)
(_1111)

P00
V49 MNVR TO UV SOLAR ATMOSPHERE ATT (160:31)
(341,012,000) HGA: P -13, Y 326

:20

160:30

160:30
(11101)
(_1111)

SIM EXP STATUS
(*0100)
(01011)

GDC ALIGN
VERIFY ORDEAL
ALT SET = 60 NM

P20, OPT 2 (UV SOLAR ATMOSPHERE, SUNSET)
N78 (+090.00)
(-019.74)
N79 (-0.0500)
(+000.50)
N34 (LOAD T START)

UV SOLAR ATMOSPHERE PAD
T START: ___ ___ ___:___ ___:___ ___
T STOP: ___ ___ ___:___ ___:___ ___
(SS TO SR)

:40

(P20)
(-0.0500)
(0.5°DB)

AFTER SUNSET:
UV COVER - OPEN
IR COVER - OPEN

STDN

:50

(P20)
(-0.2000)
(0.5°DB)

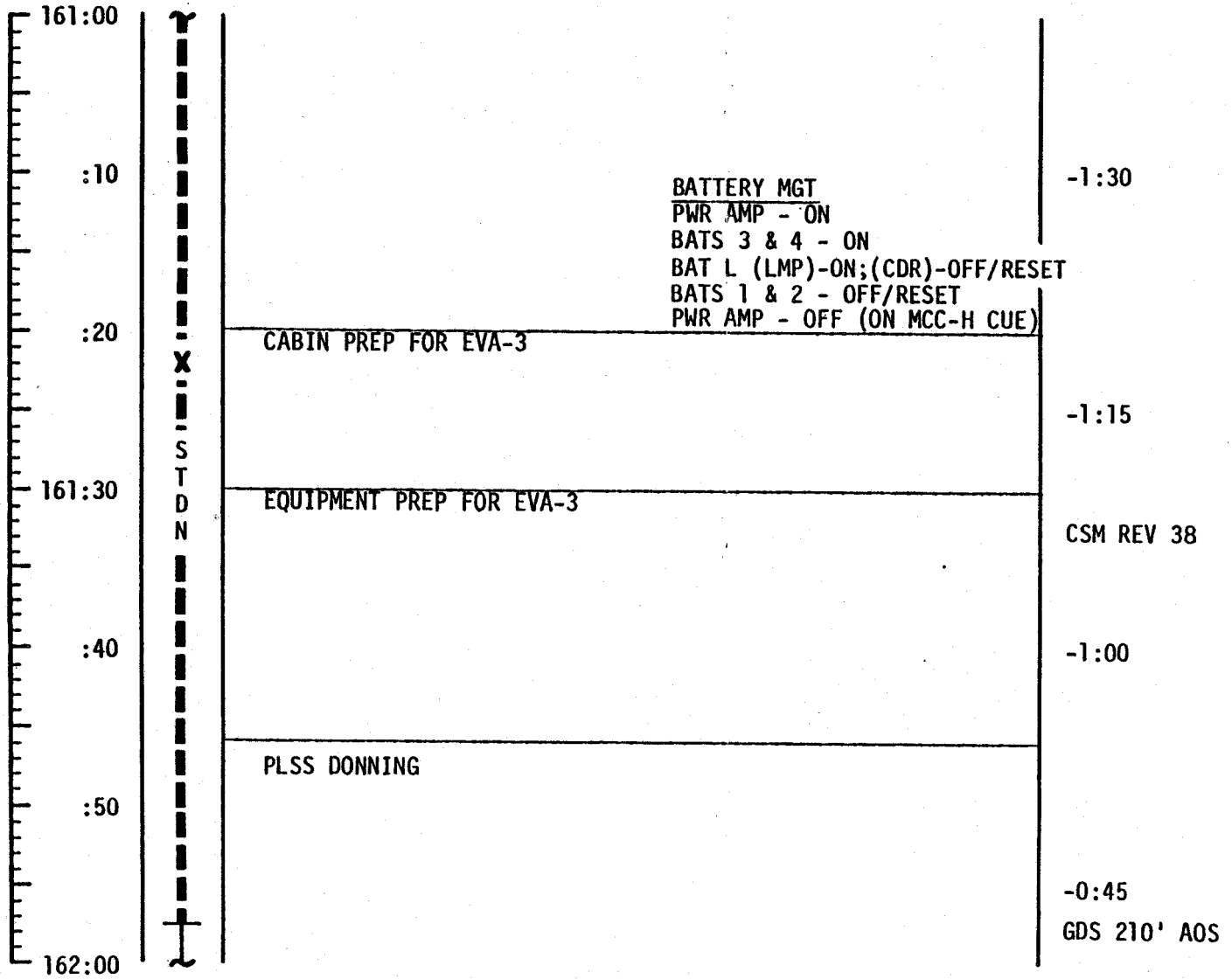
V21N79 (-0.2000)
CYCLE CMC MODE - FREE/AUTO (T START +10 MIN)

CMDS: (HGA LOS)
DSE RECORD
CUE:
OMNI C

SET HGA: MAN, WIDE P 20, Y 200 (161:05)

161:00

LM FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	161:00 - 162:00	8/37-38	3-222

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

161:00
(P20)
(-0.2000)
(0.5°DB)

(11101)
(_1111)

STDN

SIM EXP STATUS
(*0111)
(01011)

ACQ STDN HGA: MAN, WIDE, P 20, Y 200
S-BD ANT IND > 1/2 SCALE HGA: REACQ, NARROW

CMDS: (HGA AOS)
DSE STOP

:10

CMDS: (LOS -1 MIN)
DSE RECORD

VERIFY DSE TAPE MOTION (HBR/RCD/FWD/CMD RESET)(AOS +73 MIN)
SET HGA: MAN, WIDE, P -10, Y 25 FOR AOS

AT ORDEAL PITCH = 273°
P20, OPT 5 (UV SOLAR ATMOSPHERE, SUNRISE)
N78 (-001.01)
(-002.82)
(-019.72)
N79 (+000.50)

(P20)
(0.5°DB)

:20

(11102)
(_1111)

V48 (11102)
(_1111)

BEFORE SUNRISE:
IR COVER - CLOSE
UV COVER - CLOSE (T STOP) (__ __ __:__ __:__ __)

161:30

161:30
(P20)
(0.5°DB)

REV 38

(11102)
(_1111)

V25N78 (+X FWD SIM ATT)(161:35)
(+090.00)
(+052.25)
(+180.00)
V58E

AT MNVR COMPLETION:
MC/LA COVER - OPEN
IR COVER - OPEN
UV COVER - OPEN
MC - EXTD
IMAGE MTN - ON
MC - ON (162°E)
IMAGE MTN - INCR (BP +4 STEPS)/ON
LA - ON
V48 (11101)
(_1111)

(11101)
(_1111)

SIM EXP STATUS
(*0100)
(01011)

:40

EAT PERIOD

:50

ACQ STDN HGA: MAN, WIDE P -10, Y 25
S-BD ANT IND >1/2 SCALE HGA: REACQ, NARROW

162:00

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-223

LM FLIGHT PLAN

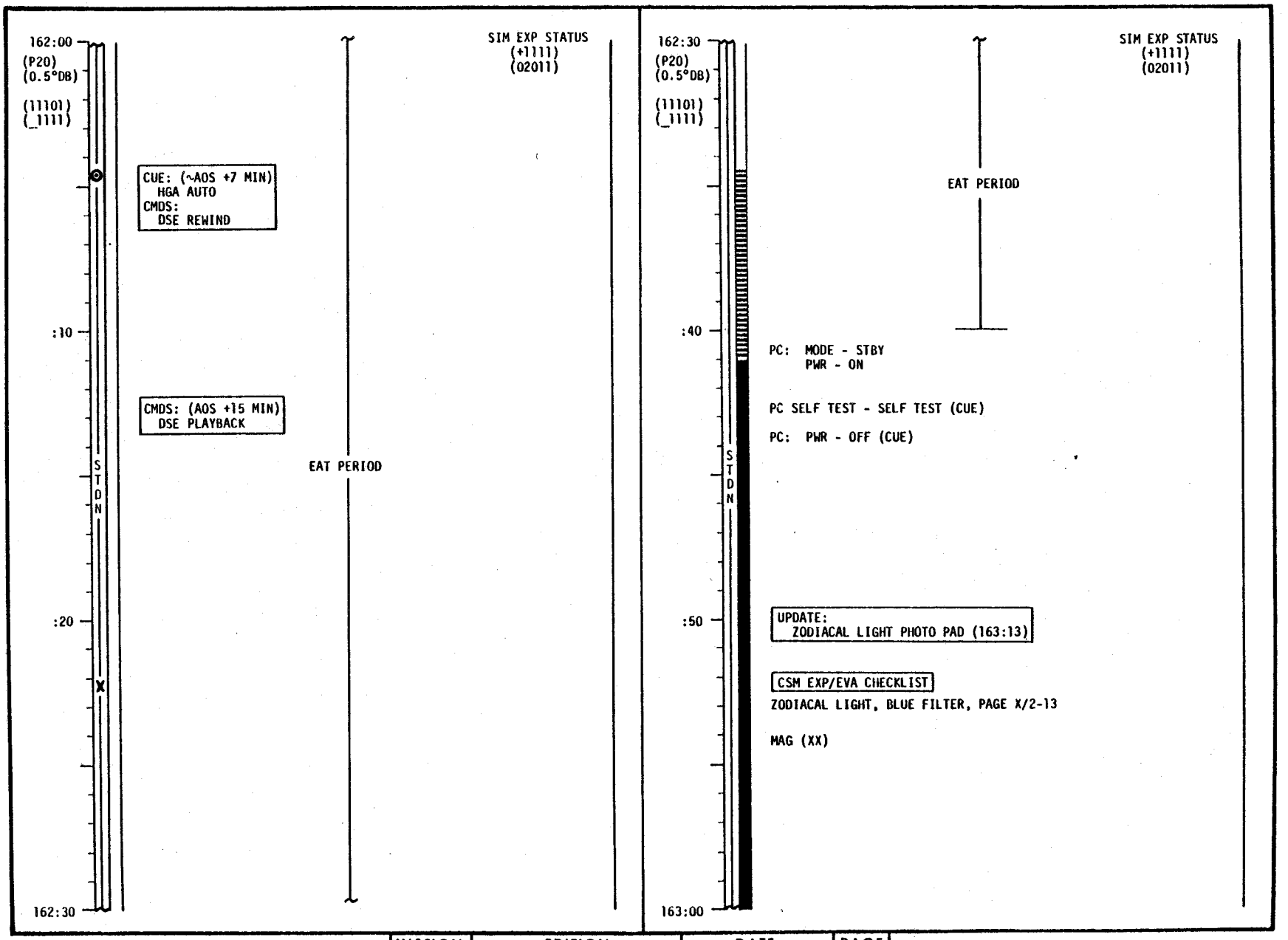
MCC-H	1453 CST	CDR	LMP	NOTES
	162:00			
	:10	PLSS COMM CHECK CONFIGURE COMM FOR EVA RECORDER - ON REPORT: PLSS O_2 QUANTITY		-0:30
	:20	OPS CONNECT		
		HELMET/GLOVE DONNING		-0:15
	162:30			
GO/NO-GO FOR CABIN DEPRESS		PRESSURE INTEGRITY CHECK		
	:40	CABIN DEPRESS START WATCHES @ 3.5 PSIA FINAL PREP FOR EVA		0:00/START EVA-3
	:50	EGRESS LM DESCEND TO SURFACE	ASSIST CDR RECORDER - OFF EGRESS LM, CLOSE HATCH DESCEND TO SURFACE	+0:10
	163:00			+0:20

X — STDN

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	162:00 - 163:00	8/38	3-224

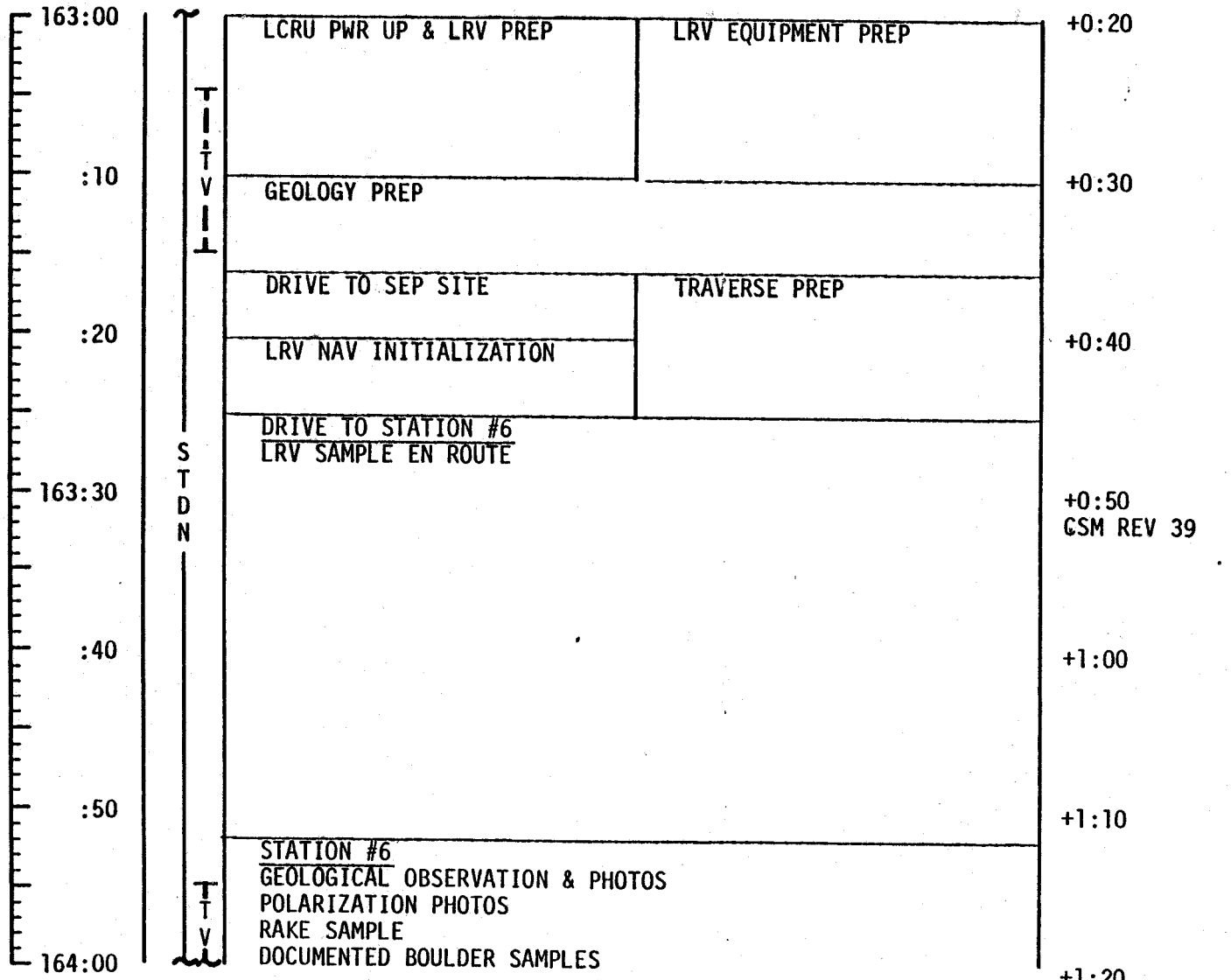
FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

MCC-H



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	163:00 - 164:00	8/38-39	3-226

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

163:00
(P20)
(0.5°DB)
(11101)
(_1111)

STDN

MC - RETR

CMDS: (AOS +69 MIN)
DSE REWIND

:10

ZODIACAL LIGHT

:20

RECORD FR #____

LS OPERATE - STBY (VERIFY)
RCDR - ON
RADAR - ON
RCDR - OFF
MODE - HF

163:30

SIM EXP STATUS
(+1111)
(02011)

NOTE: SIM BAY AND PCM DATA WILL NOT BE RECORDED UNTIL 165:10

ZODIACAL LIGHT PHOTO PAD(SR)

T-START: ___ ___ ___ ° ___ ___ ' ___ ___

(SUNRISE - 15 MIN)

163:30

REV 39

(P20)
(0.5°DB)
(11101)
(_1111)
(11111)
(_1111)

MC - OFF (177°E)
WAIT 30 SEC
MC - STBY
IMAGE MTN - OFF
LA - OFF
MC - OFF
IR - OFF
PC SELF TEST - OFF
PC: PWR - OFF
UV - OFF
DATA SYS - OFF
SMAC PWR - OFF
V48 (11111)
(_1111)
MC/LA COVER - CLOSE
IR COVER - CLOSE
UV COVER - CLOSE
POO
V49 MNVR TO LS RCV ONLY ATT (163:55)
(142,269,359)

:40

SET HGA: MAN, WIDE P 4, Y 297 FOR AOS AT 167:53
HGA: PWR - OFF
SELECT OMNI B FOR AOS
VERIFY DSE REWIND (STOP/CMD RESET/REWIND)

:50

ACQ STDN OMNI A (R/T HBR AOS - OMNI)

STDN

LS
RCV
ONLY
(SEP-ON)

164:00

SIM EXP STATUS
(+2111)
(02311)

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-227

LM FLIGHT PLAN

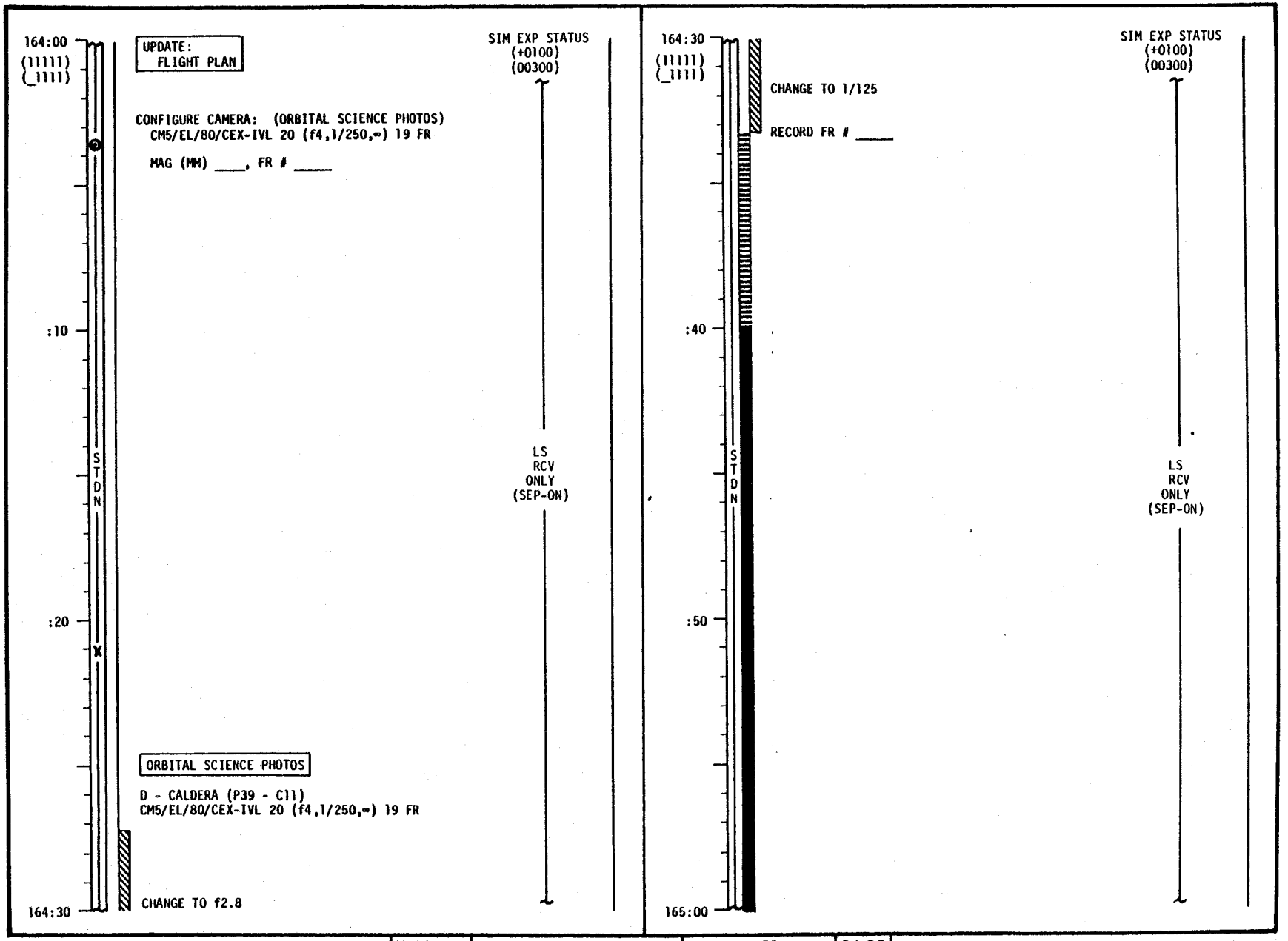
MCC-H	1653 CST	CDR	LMP	NOTES
	164:00	STATION #6 (CONT)		+1:20
	:10			+1:30
	:20			+1:40
	164:30			+1:50
	:40	DRIVE TO STATION #7		+2:00
	:50			+2:10
	165:00	STATION #7 GEOLOGICAL OBSERVATIONS & PHOTOS RAKE SAMPLE DOCUMENTED SAMPLES		+2:20

STDN TV

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	164:00 - 165:00	8/39	3-228

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

MCC-H | 1753 CST | CDR | LMP | NOTES

165:00 — STATION #7 (CONT) — +2:20

:10 — +2:30

:20 — +2:40

165:30 — +2:50 — CSM REV 40

STDN — TV

:40 — DRIVE TO STATION #8 — +3:00

:50 — +3:10

STATION #8
GEOLOGICAL OBSERVATIONS & PHOTOS
POLARIZATION PHOTOS
RAKE SAMPLES
DOCUMENTED SAMPLES

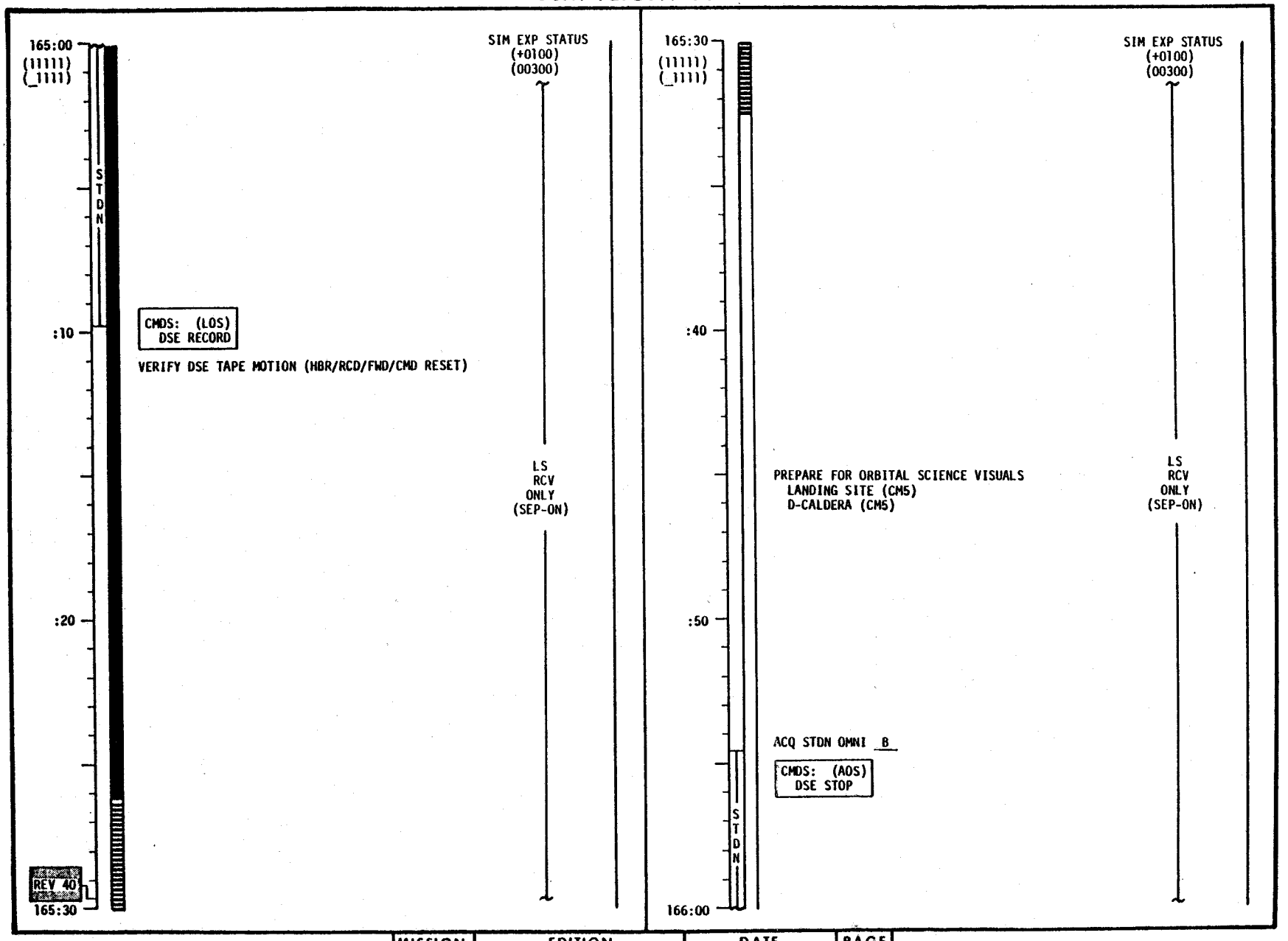
TV

166:00 — +3:20

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	165:00 - 166:00	8/39-40	3-230

FLIGHT PLANNING BRANCH

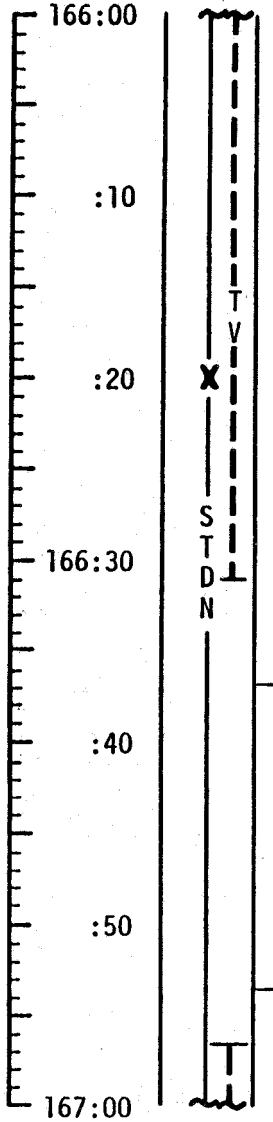
CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-231

LM FLIGHT PLAN

MCC-H | 1853 CST | CDR | LMP | NOTES



STATION #8 (CONT)

DRIVE TO STATION #9

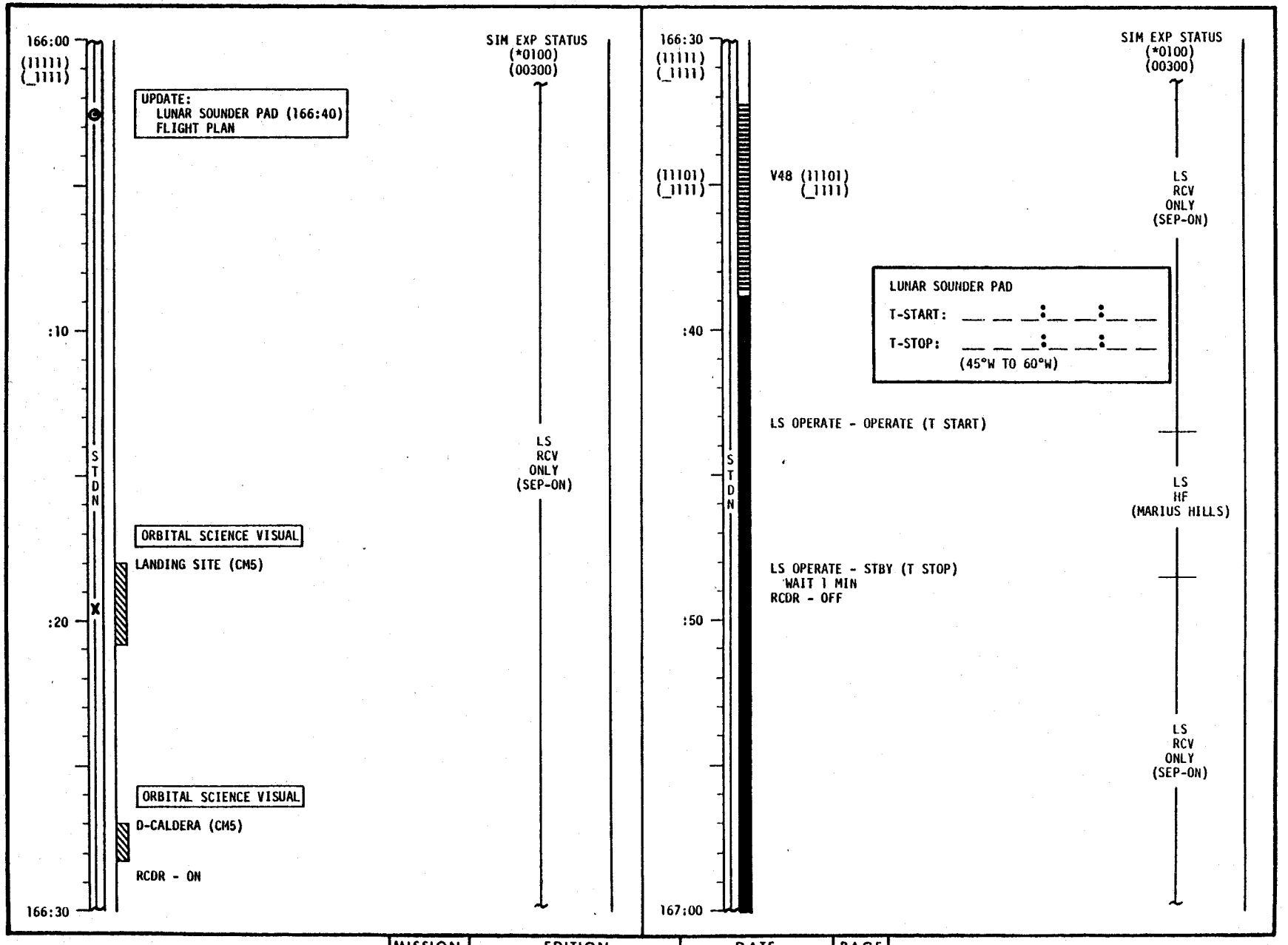
STATION #9
GEOLOGICAL OBSERVATIONS & PHOTOS
DOCUMENTED SAMPLES

+3:20
+3:30
+3:40
+3:50
+4:00
+4:10
+4:20

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	166:00 - 167:00	8/40	3-232

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

MCC-H

1953 CST

167:00	CDR	LMP	+4:20	NOTES
	STATION #9 (CONT)			
:10			+4:30	
:20			+4:40	
	DRIVE TO STATION #10 LRV SAMPLE EN ROUTE			
167:30			+4:50	CSM REV 41
:40			+5:00	
	STATION #10 GEOLOGICAL OBSERVATIONS & PHOTOS CORE SAMPLE DOCUMENTED BOULDER SAMPLES			
:50			+5:10	
168:00			+5:20	

TV

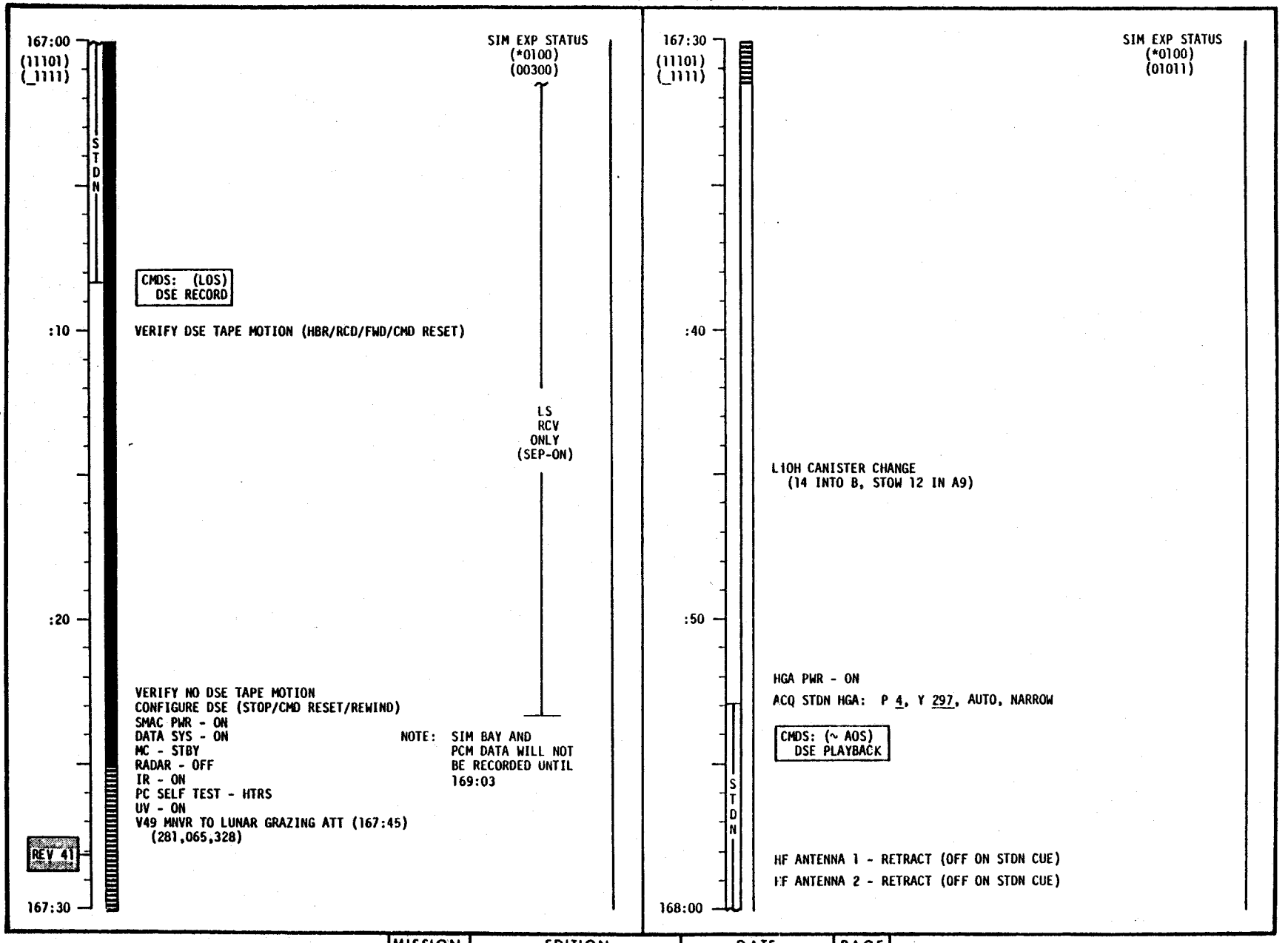
STDN

TV

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	167:00 - 168:00	8/40-41	3-234

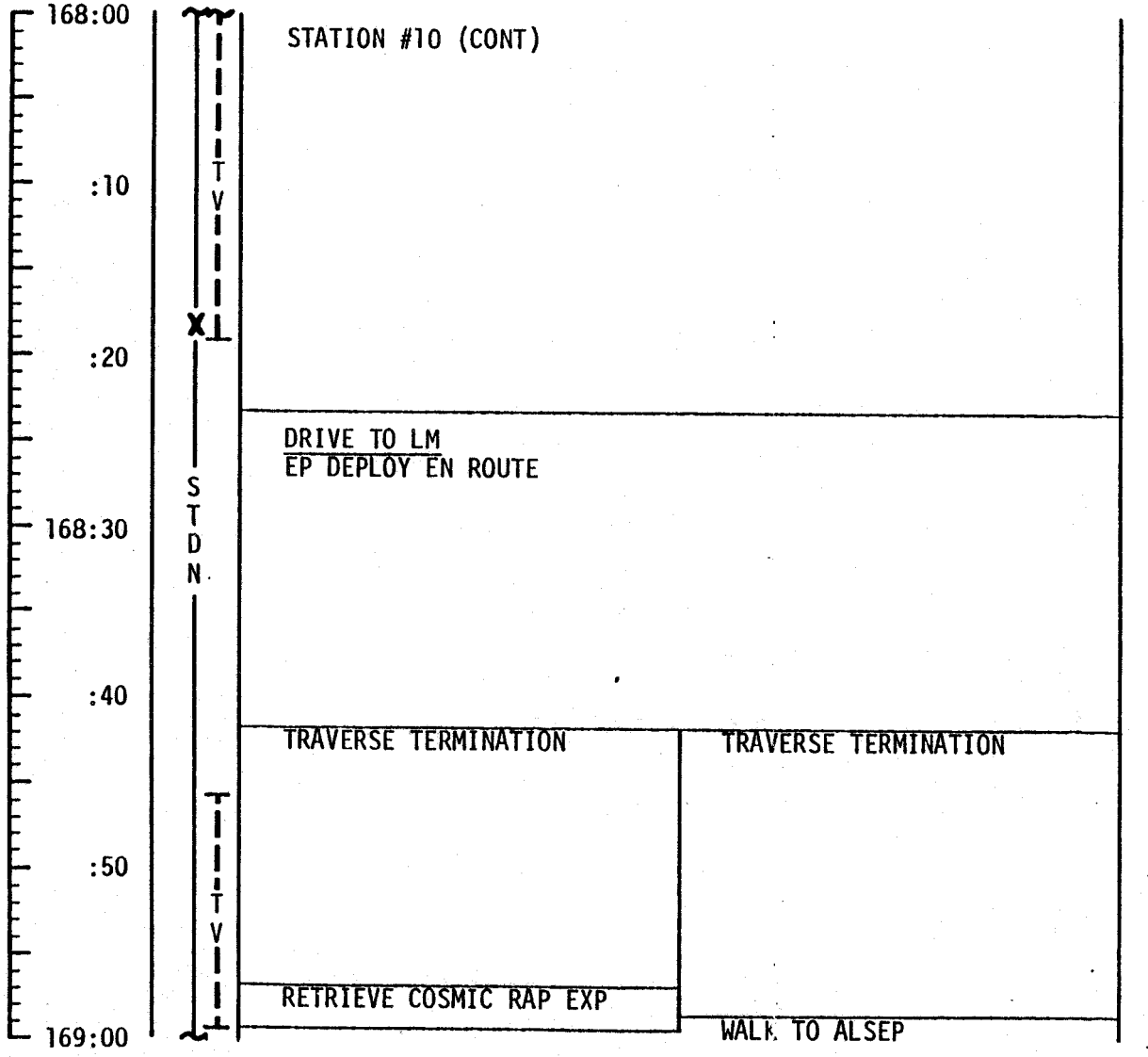
FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

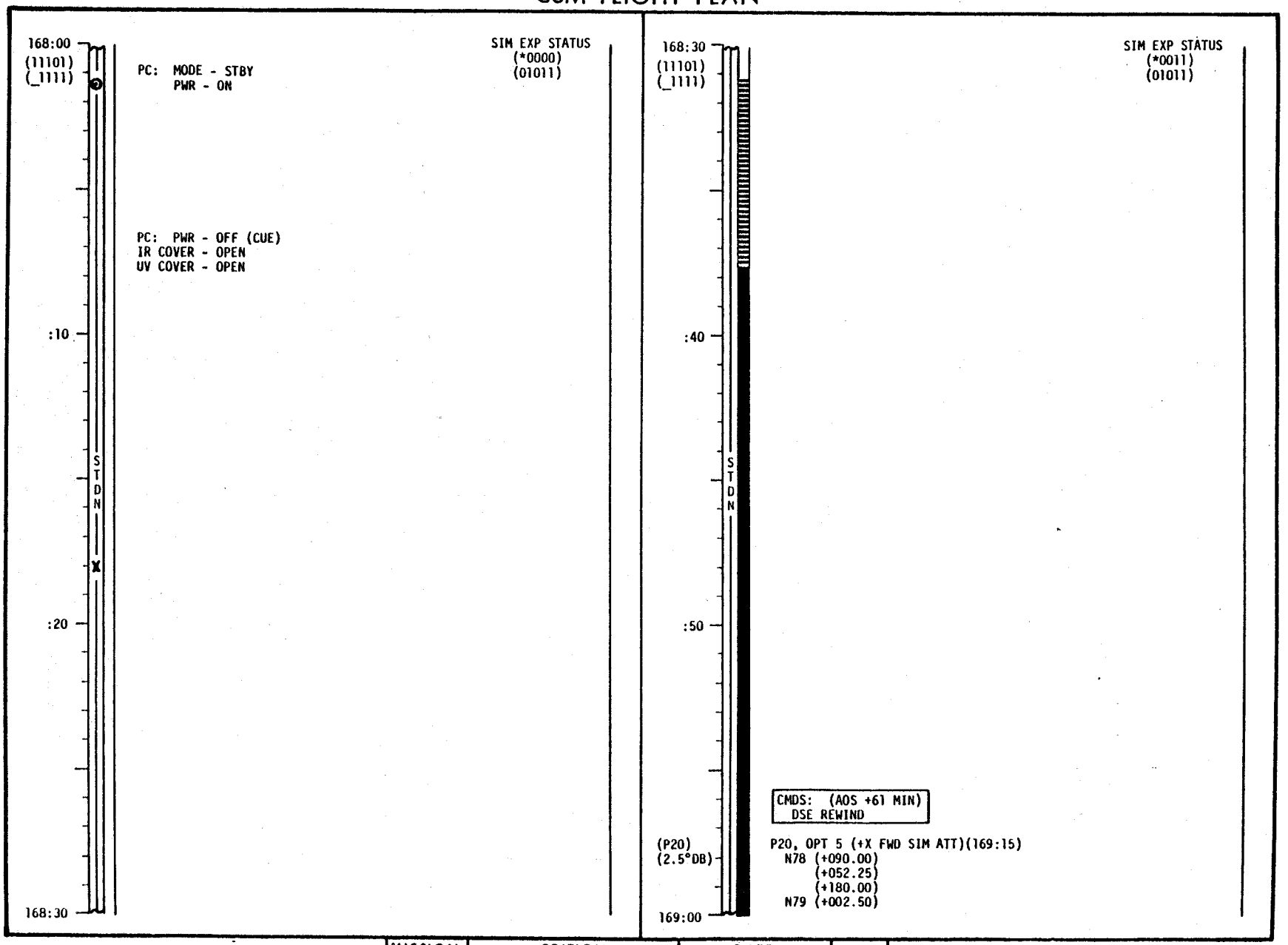
MCC-H



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	168:00 - 169:00	8/41	3-236

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

MCC-H

2153 CST

	CDR	LMP	NOTES
169:00	LRV FINAL DISPOSITION	RETRIEVE NFE	+6:20
:10			+6:30
		RETURN TO LM	
:20	DEACTIVATE SEP EP DEPLOY		+6:40
	RETURN TO LM		
169:30	CLEAN EMU'S	CLEAN EMU'S	CSM REV 42 +6:50
		INGRESS TRANSFER EQUIP & SAMPLES TRACKING LIGHT TEST	
	INGRESS		
:40	LM REPRESS		
	POST EVA-3 SYSTEMS CONFIGURATION		+7:00/END EVA-3
	DOFF HELMETS & GLOVES		
:50	CONNECT TO LM COMM		
		BIOMED - LEFT	
	PLSS/OPS DOFFING		
170:00			

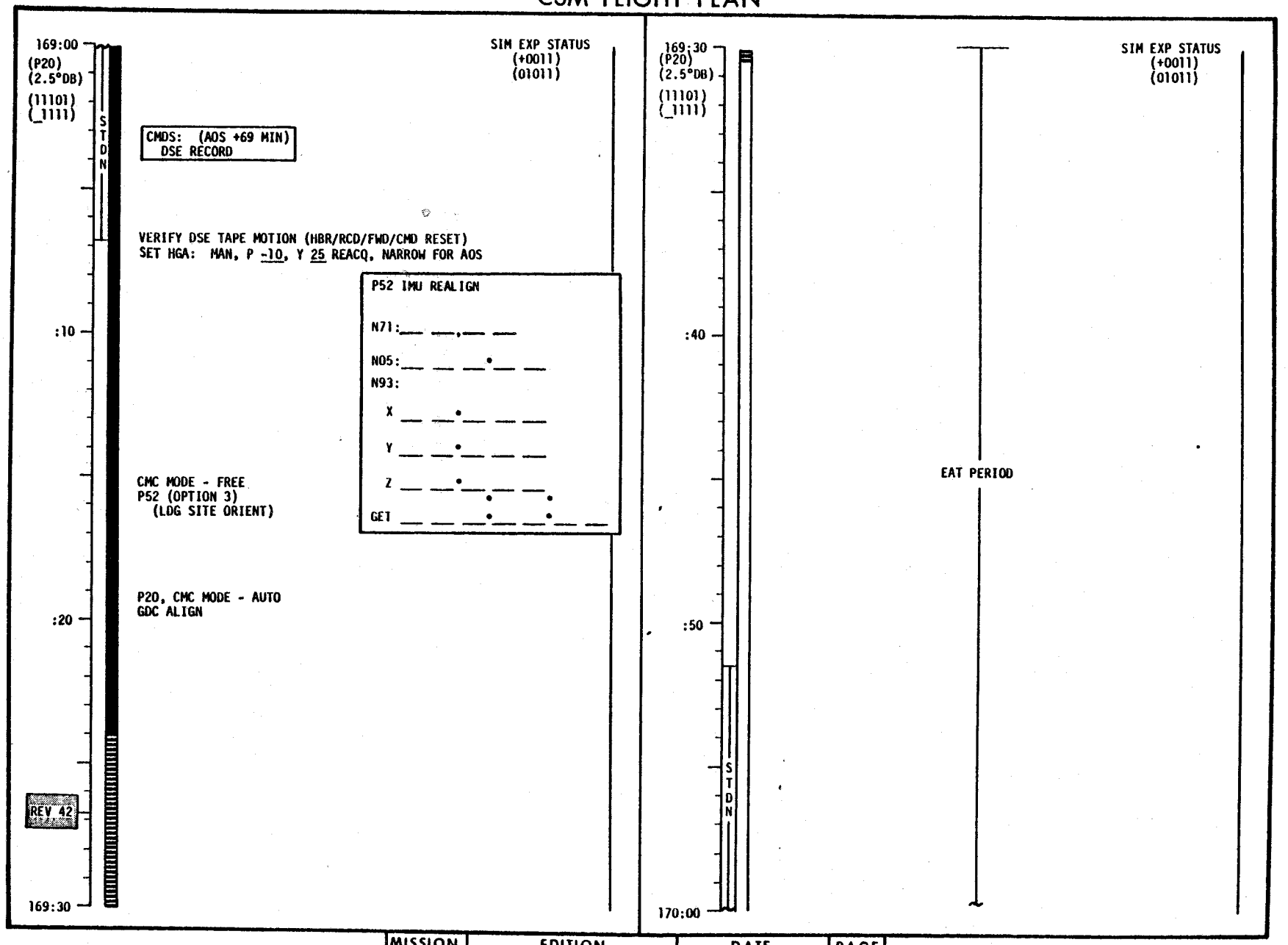
STDN

TV

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	169:00 - 170:00	8/41-42	3-238

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-239

LM FLIGHT PLAN

MCC-H | 2253 CST | CDR | LMP | NOTES

170:00

REPORT: OPS PRESSURE

PKS 210' AOS

:10

X

:20

PREP FOR EQUIPMENT JETT

WEIGH ROCK BAG & COLLECTION BAGS, REPORT: WEIGHTS

DON GLOVES

S
T
D
N

170:30

RECORDER - ON/VOX

GO/NO-GO FOR DEPRESS

:40

PRESSURE INTEGRITY CHECK

CABIN DEPRESS

JETTISON #1

:50

CABIN REPRESS

BATTERY MGT
BATS 1 & 2 - ON
LUNAR BAT - OFF/RESET

POST-EVA CABIN CLEANUP

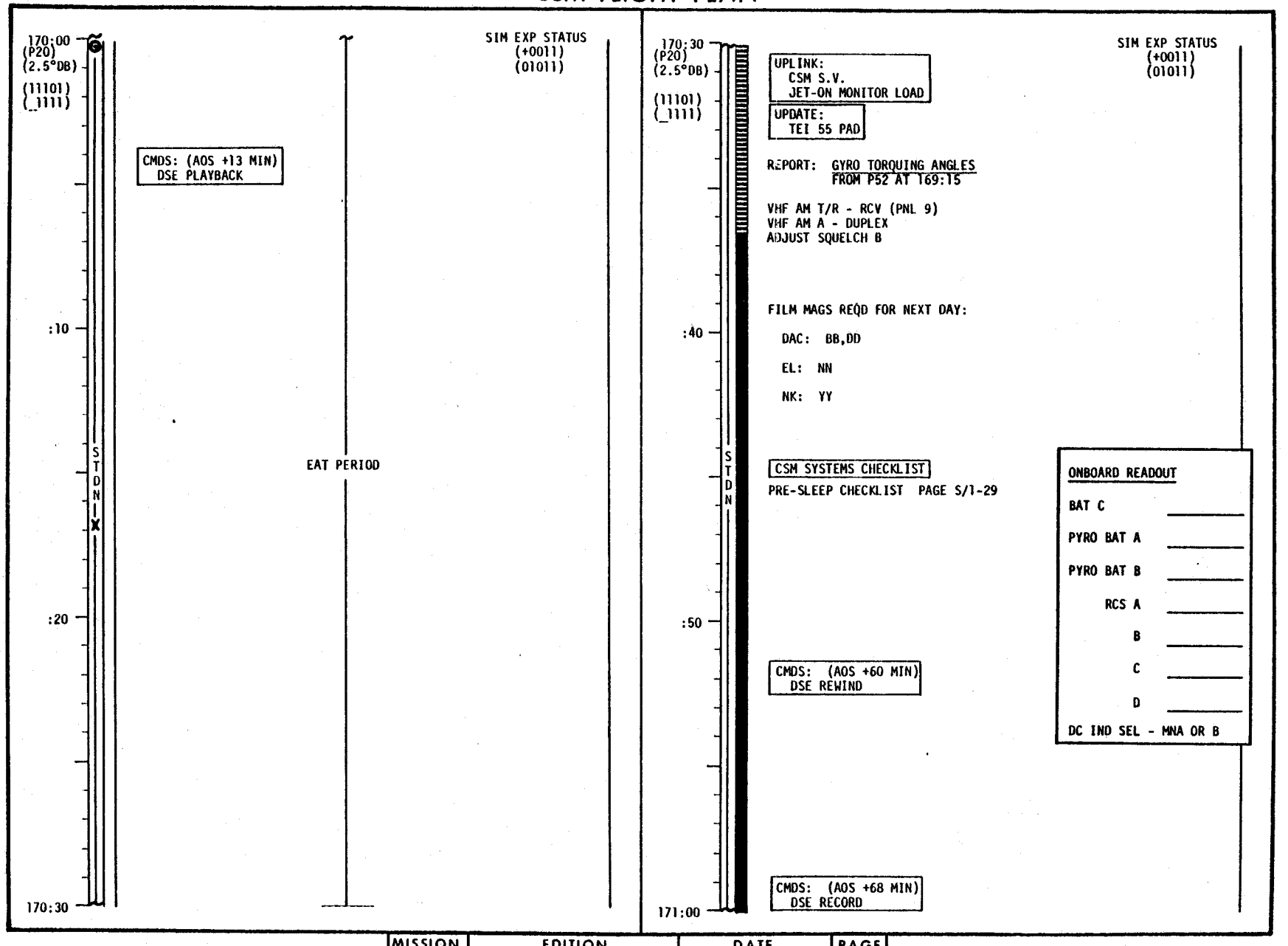
RECORDER - OFF

171:00

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	170:00 - 171:00	8/42	3-240

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

MCC-H

2353 CST

	CDR	LMP	NOTES
171:00	DOFF SUITS CDR, THEN LMP DOFF SUITS	BIOMED - OFF, THEN RIGHT	
:10			
:20			
			CSM REV 43
171:30			
:40			
:50	ACTIVATE LGC FOR CLOCK RESET, LGC TO STANDBY		
	EVA-3 DEBRIEFING		
172:00			

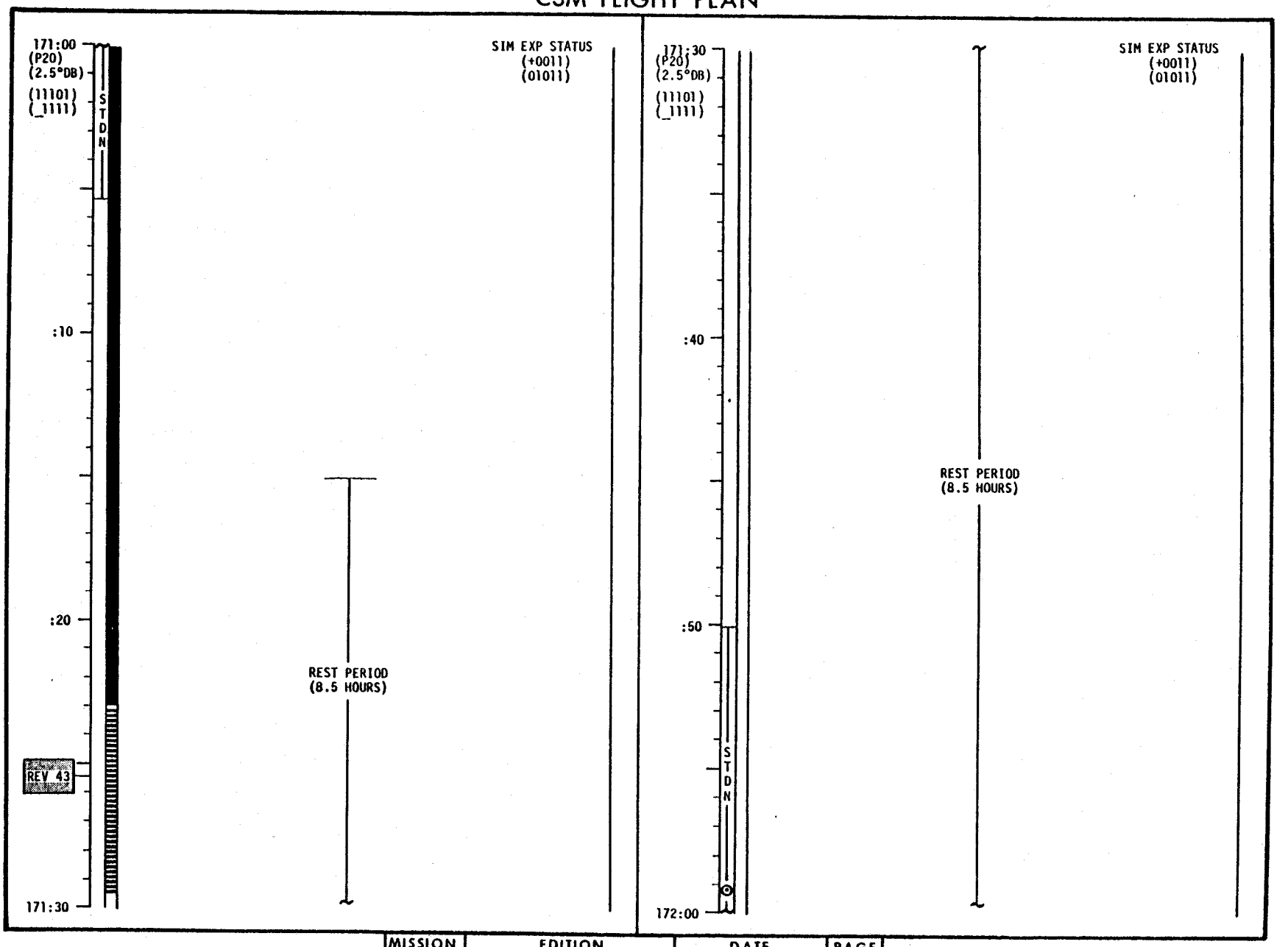
STDN

UPDATE TO LM LIFT-OFF TIMES FOR REVS 44-50

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	171:00 - 172:00	8/42-43	3-242

FLIGHT PLANNING BRANCH

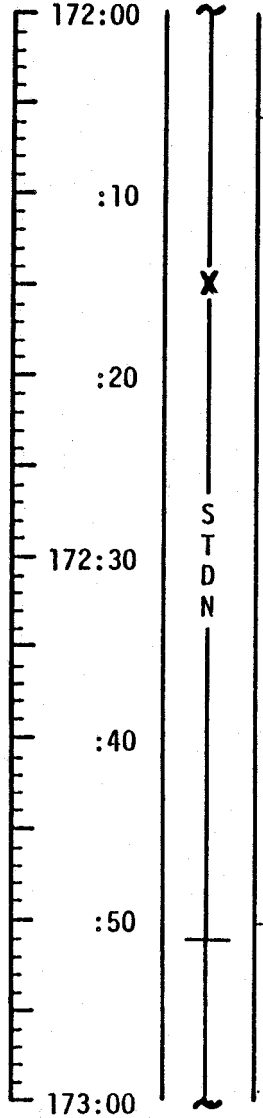
CSM FLIGHT PLAN



LM FLIGHT PLAN

MCC-H

0053 CST, 12/14

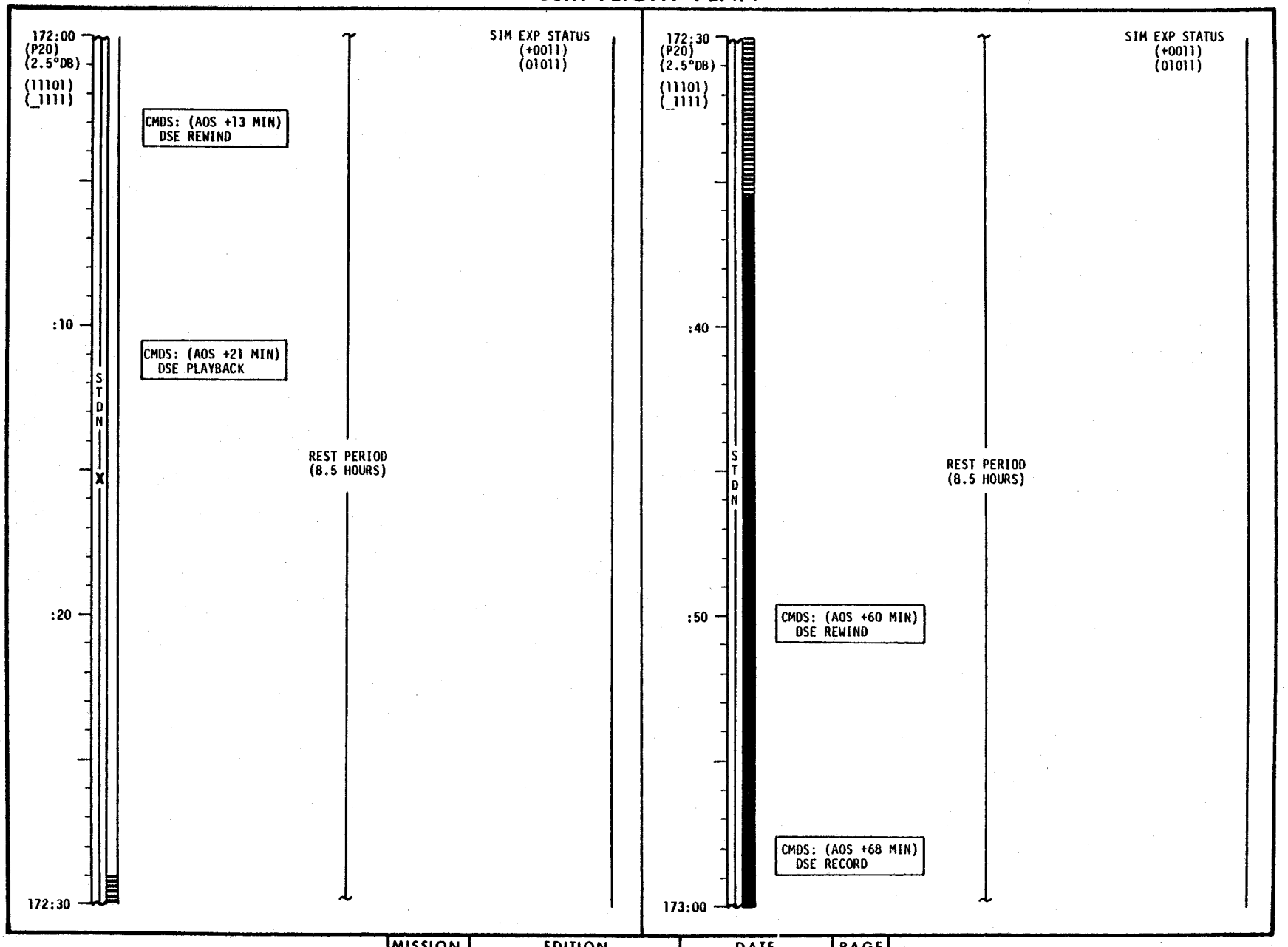


CDR	LMP	NOTES
EVA-3 DEBRIEFING (CONT)		
EAT PERIOD		
MCC-H CONFERENCE CHANGE LM LiOH CANISTER		GDS 210' LOS

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	172:00 - 173:00	8/43	3-244

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-245

LM FLIGHT PLAN

MCC-H | 0153 CST | CDR | LMP | NOTES

173:00

MCC-H CONF (CONT)

:10

:20

CSM REV 44

173:30

S
T
D
N

:40

:50

PRESLEEP

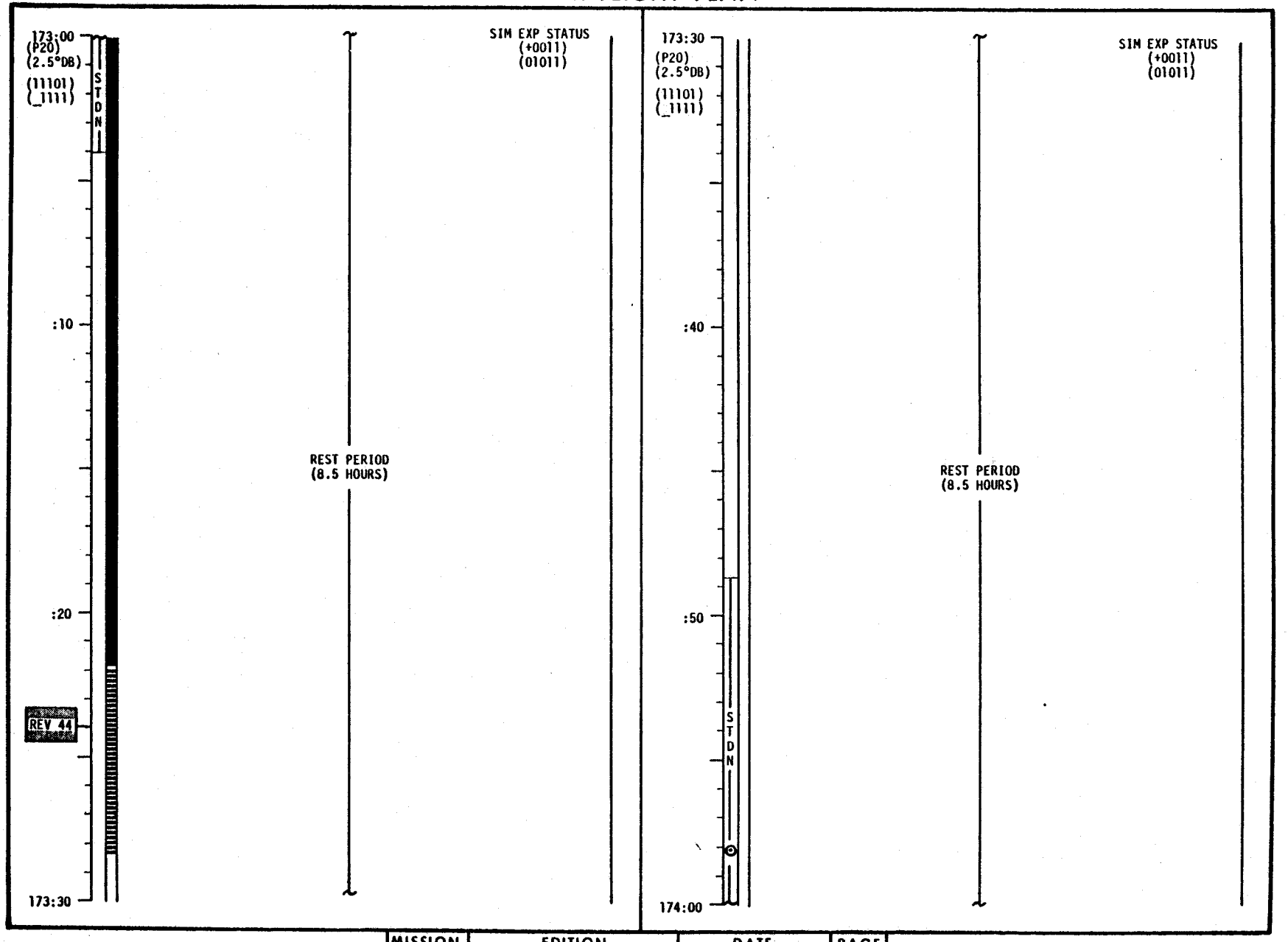
WEIGH ISA, REPORT: WEIGHT

174:00

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	173:00 - 174:00	8/43-44	3-246

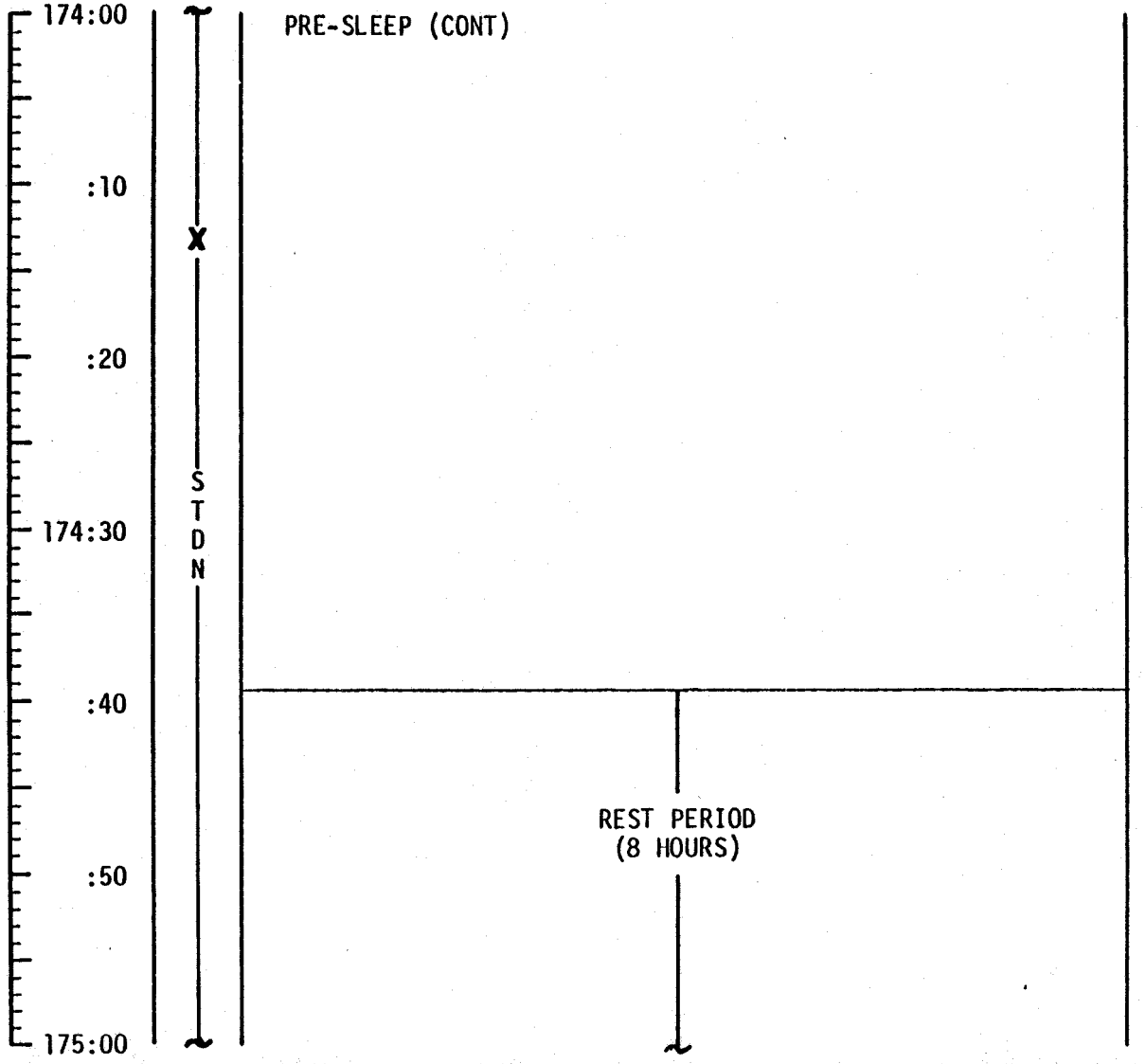
FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

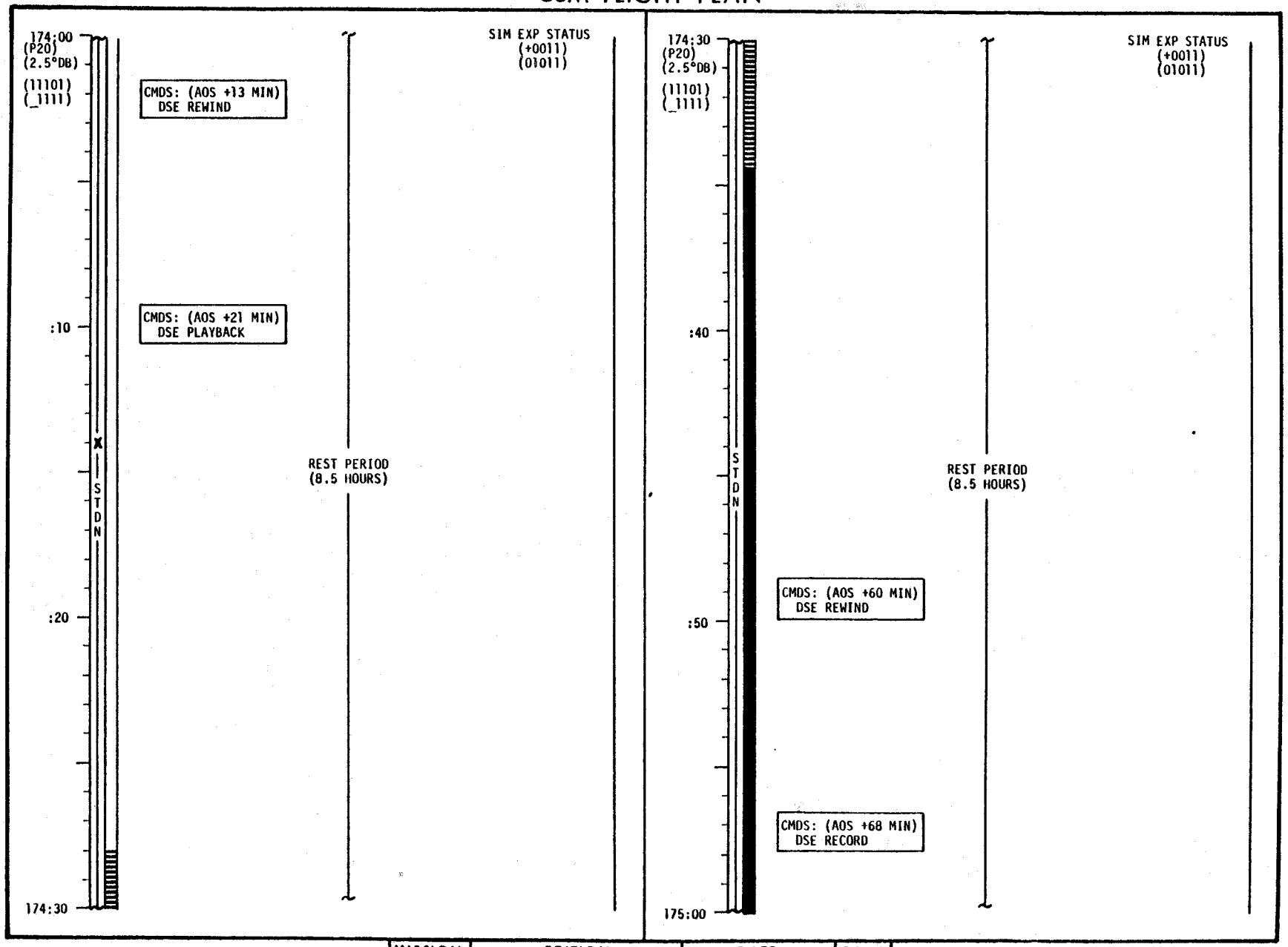
MCC-H | 0253 CST | CDR | LMP | NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	174:00 - 175:00	8/44	3-248

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

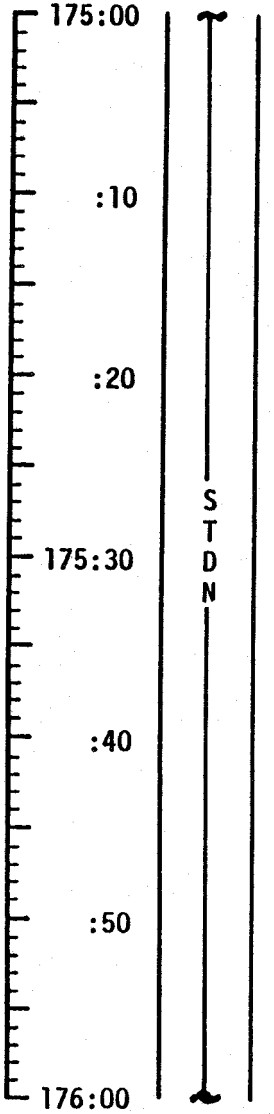
MCC-H

0353 CST

CDR

LMP

NOTES



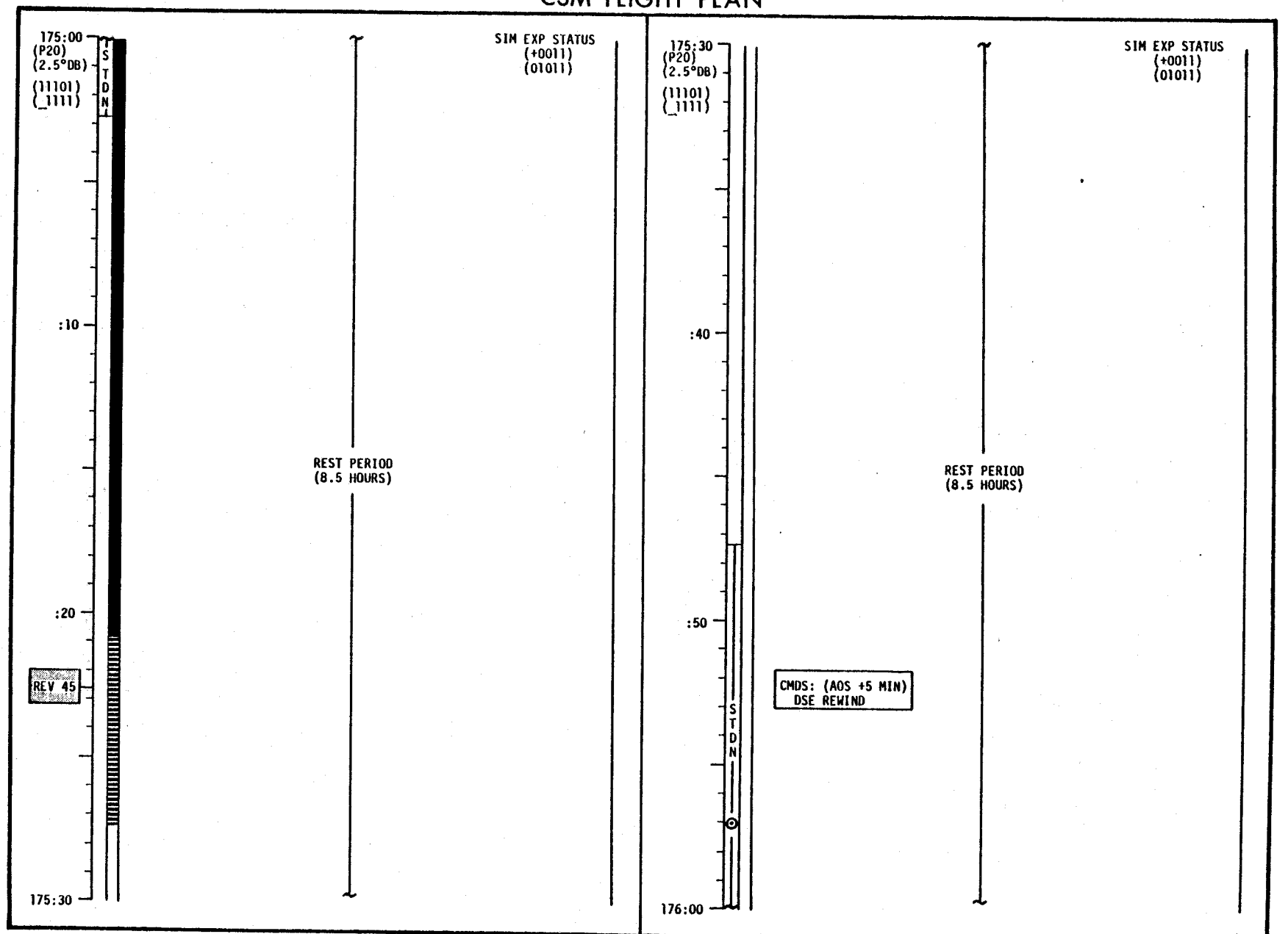
REST PERIOD
(8 HOURS)

CSM REV 45

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	175:00 - 176:00	8/44-45	3-250

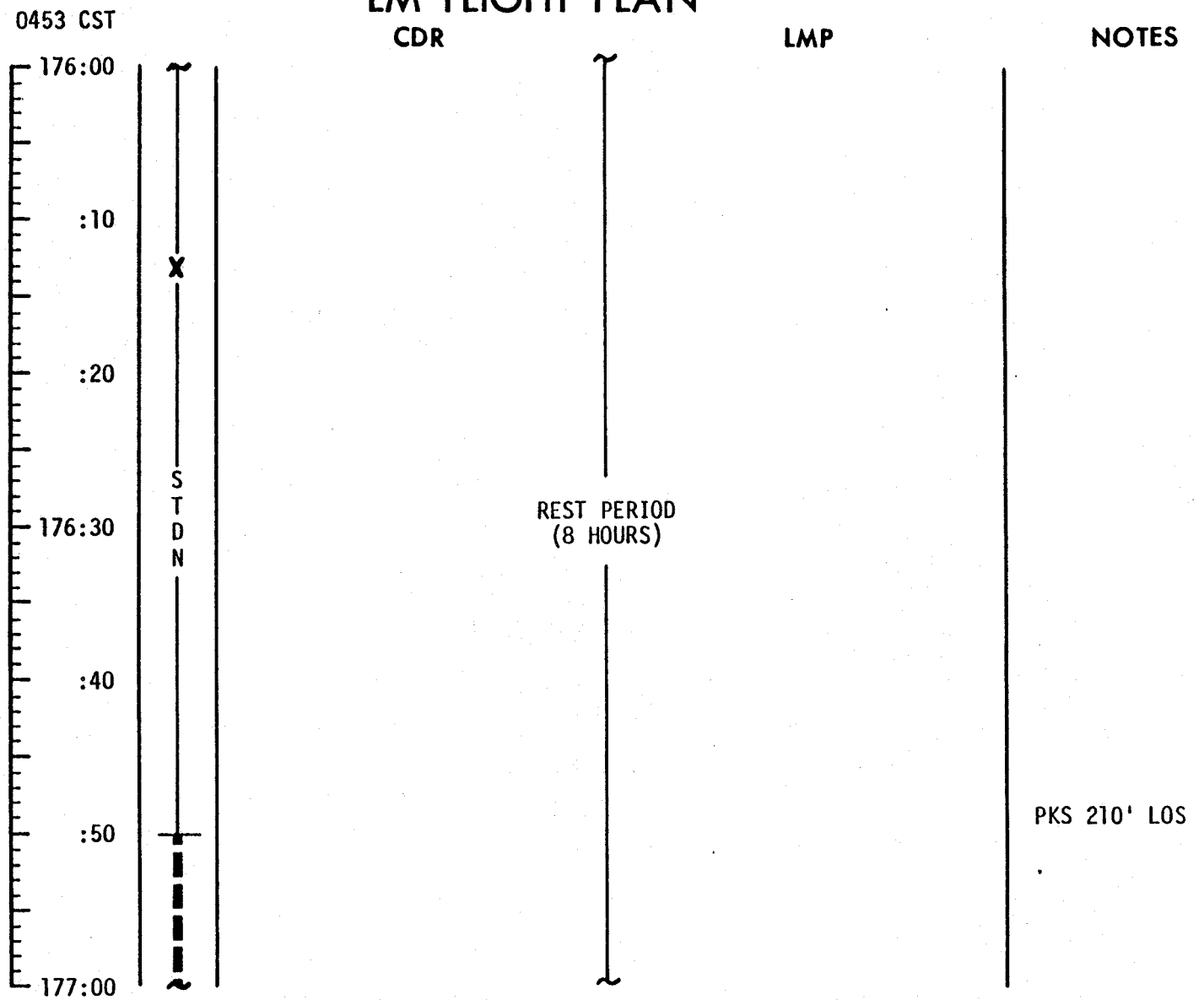
FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	2-251

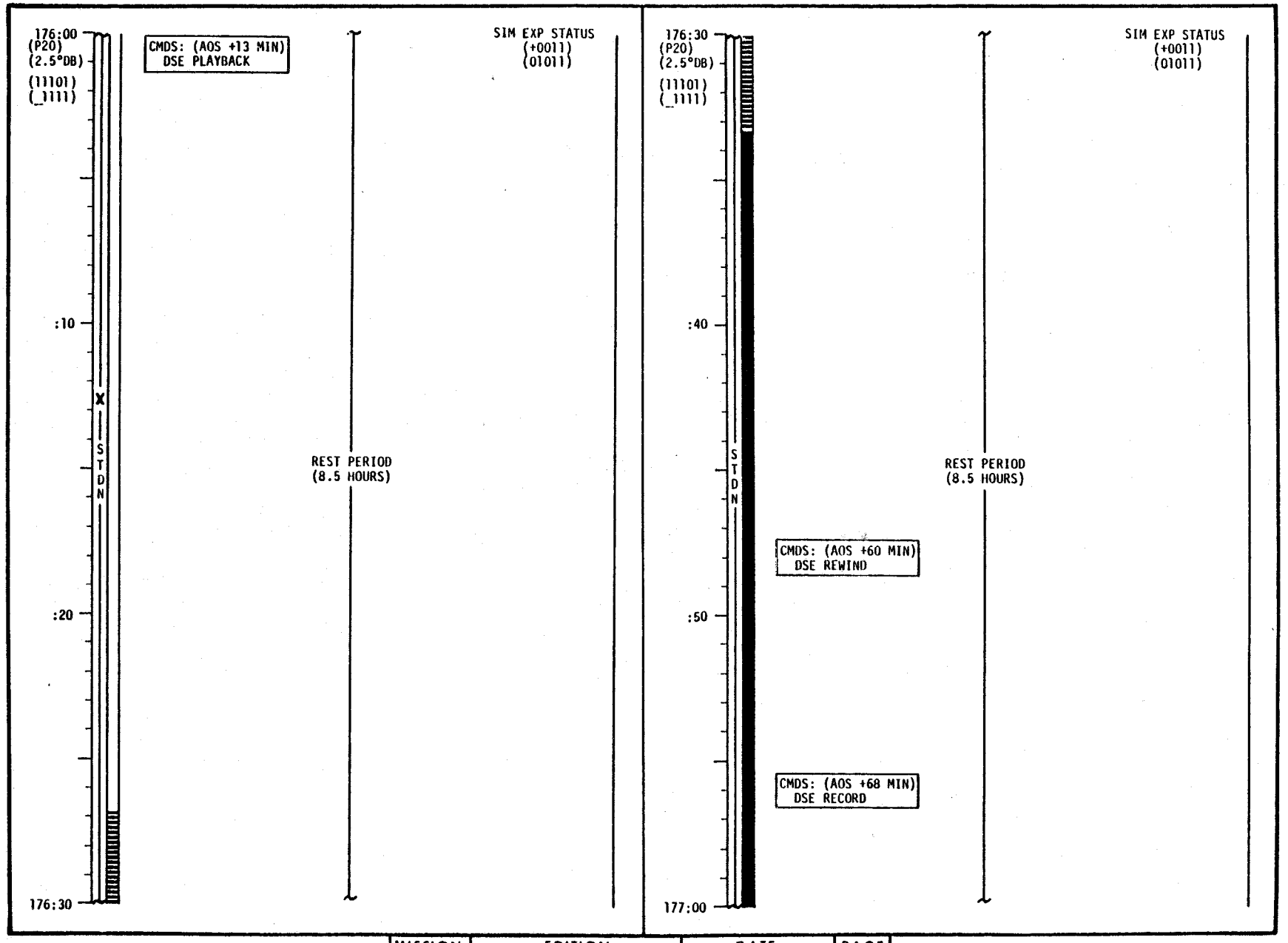
LM FLIGHT PLAN



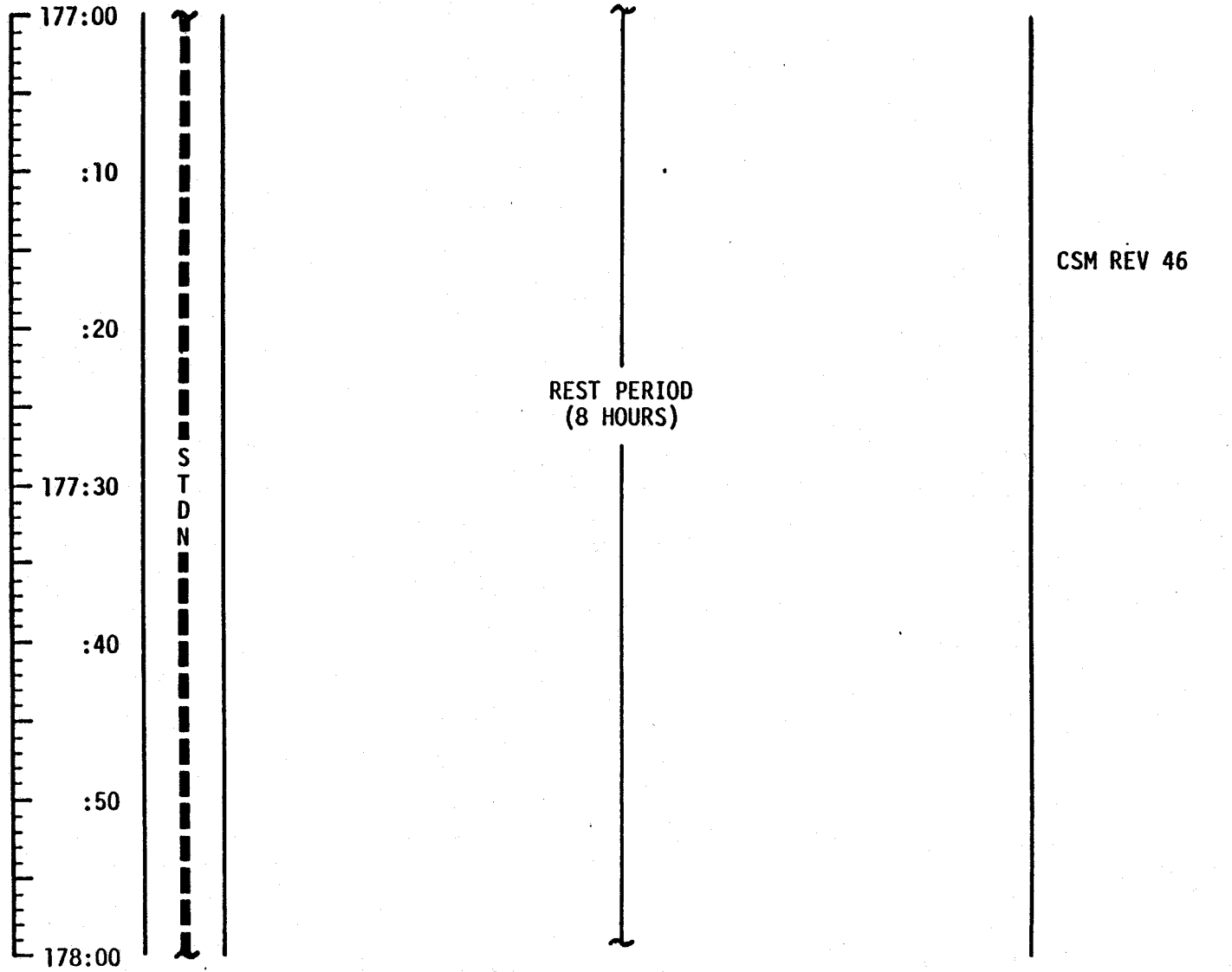
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	176:00 - 177:00	8/45	3-252

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



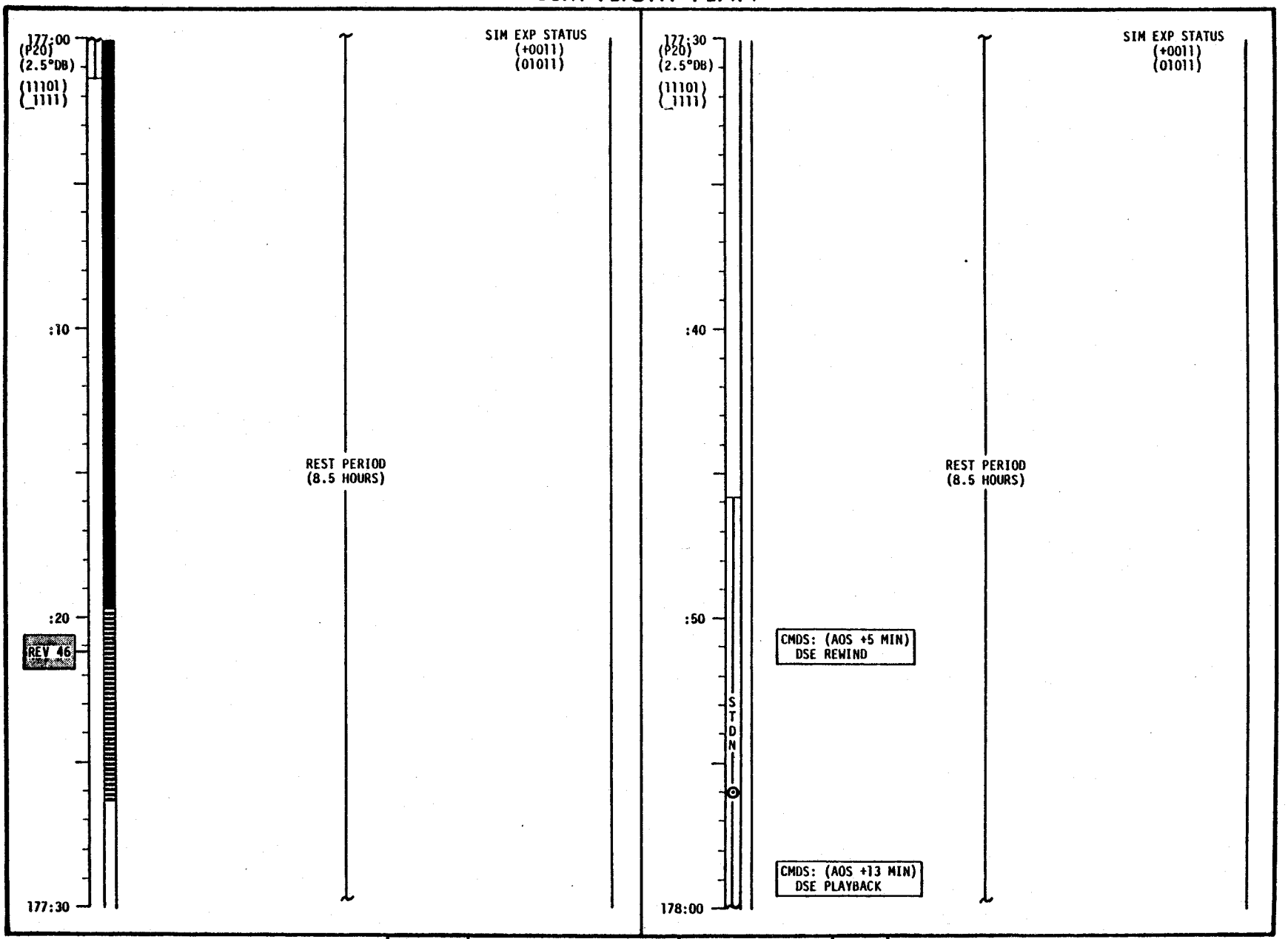
LM FLIGHT PLAN



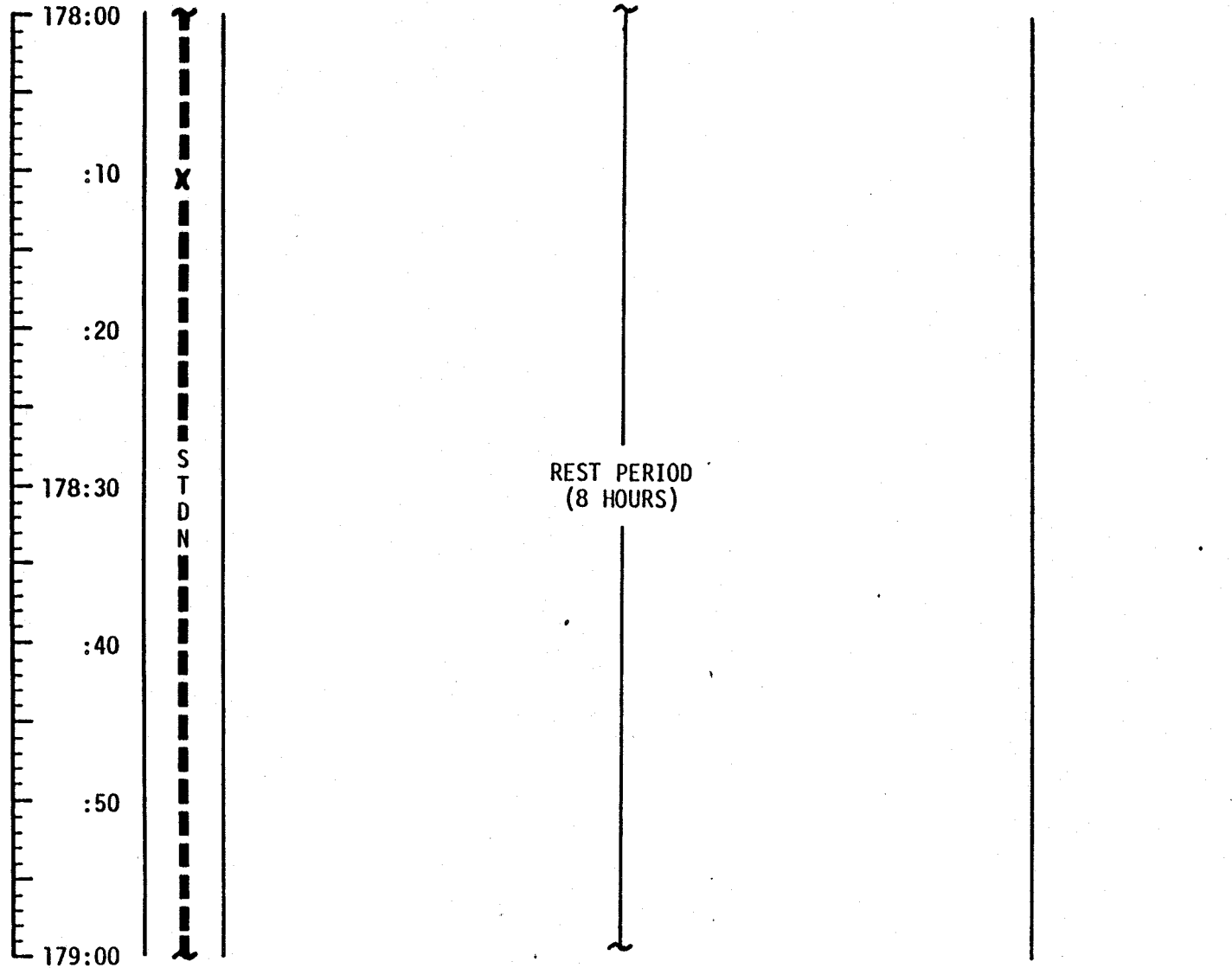
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	177:00 - 178:00	8/45-46	3-254

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



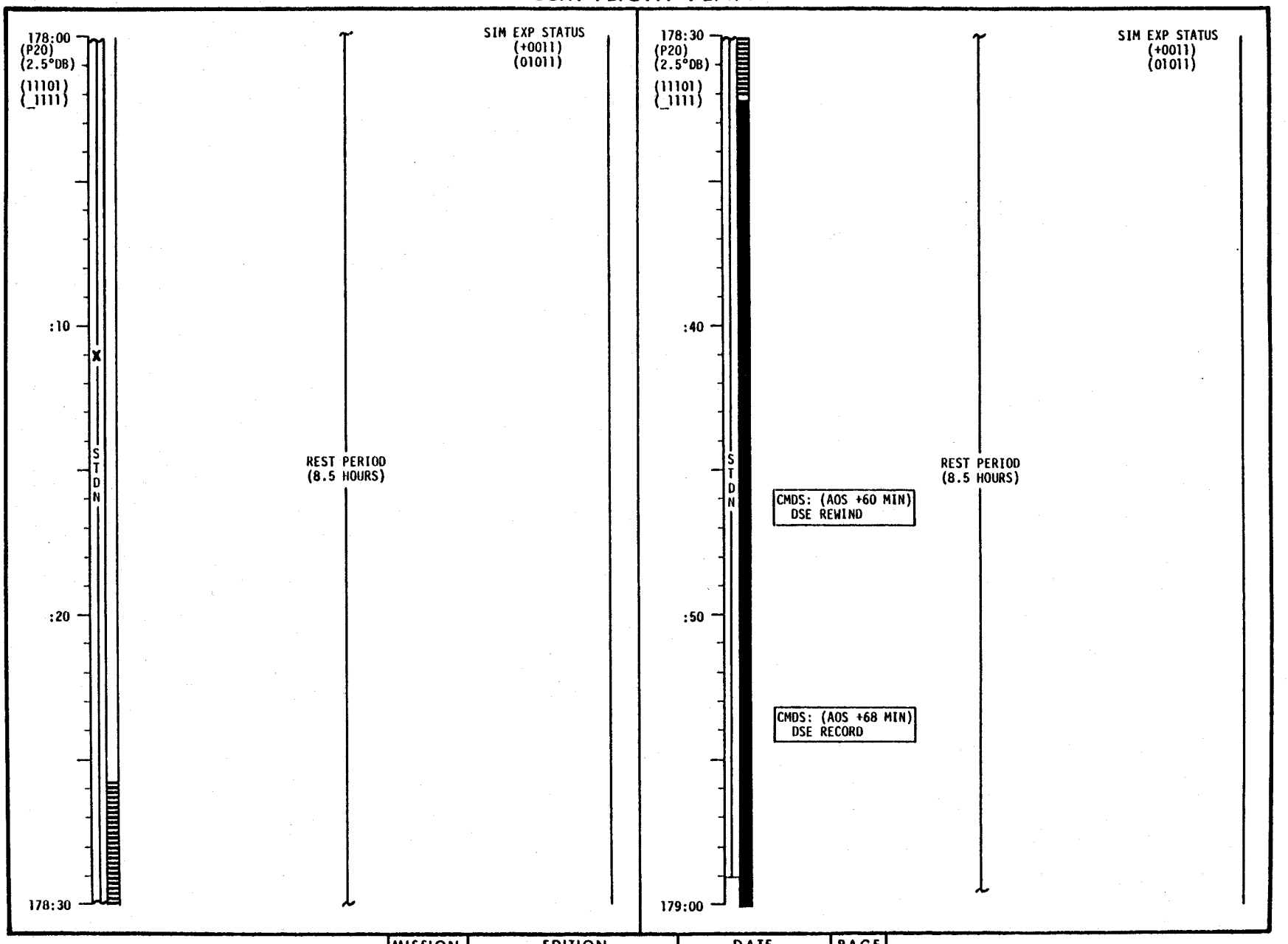
LM FLIGHT PLAN



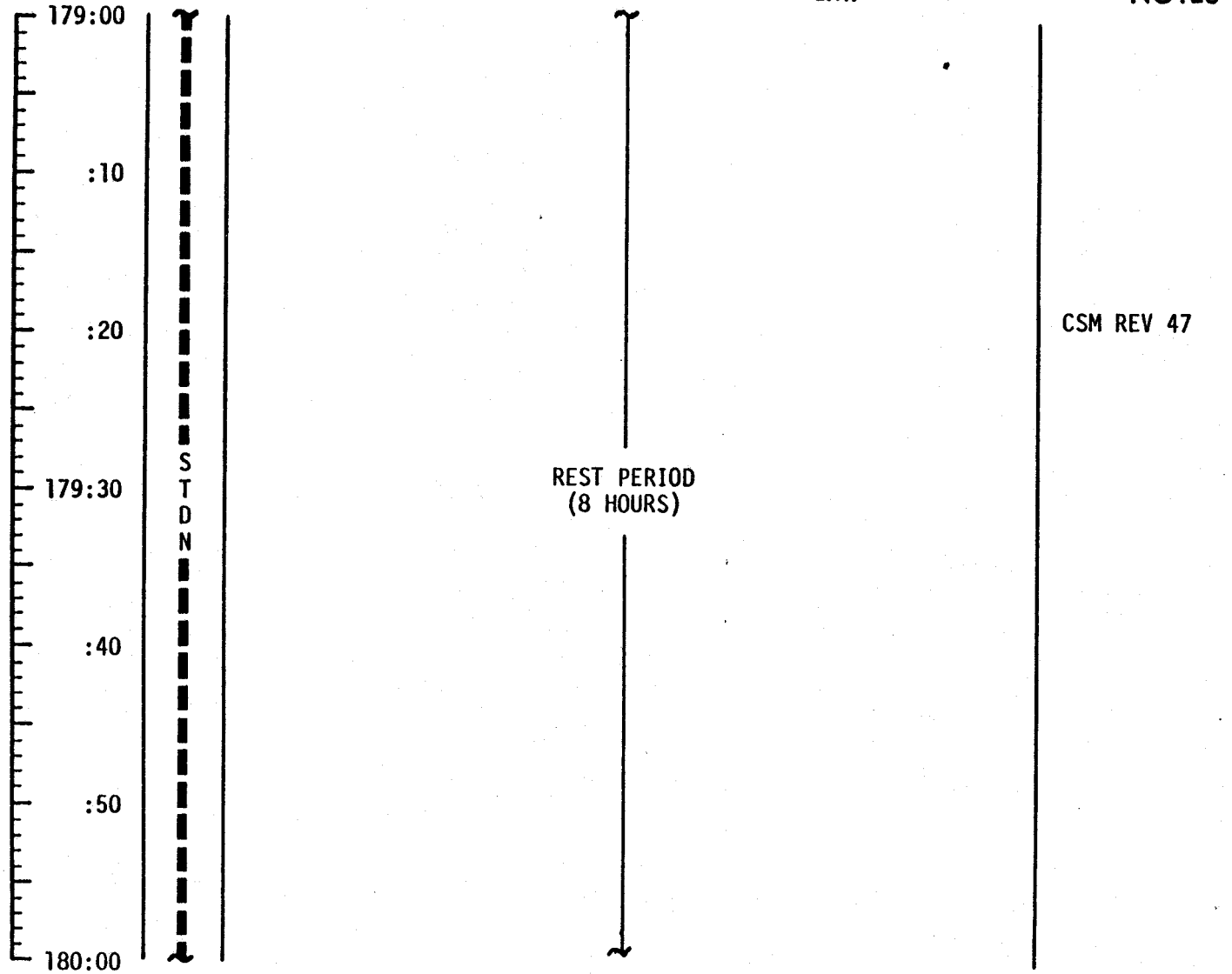
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	178:00 - 179:00	8/46	3-256

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



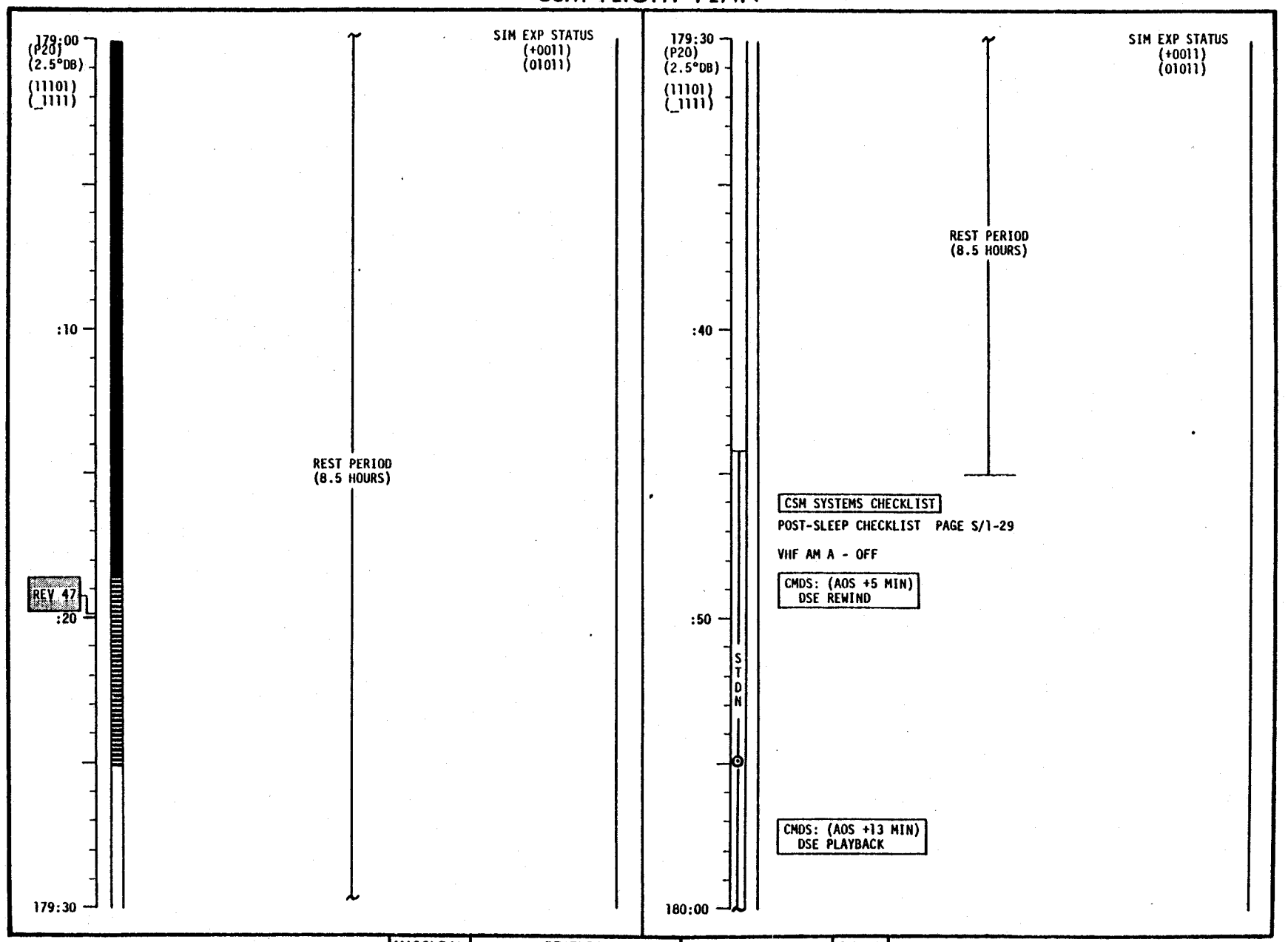
LM FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	179:00 - 180:00	8-9/46-47	3-258

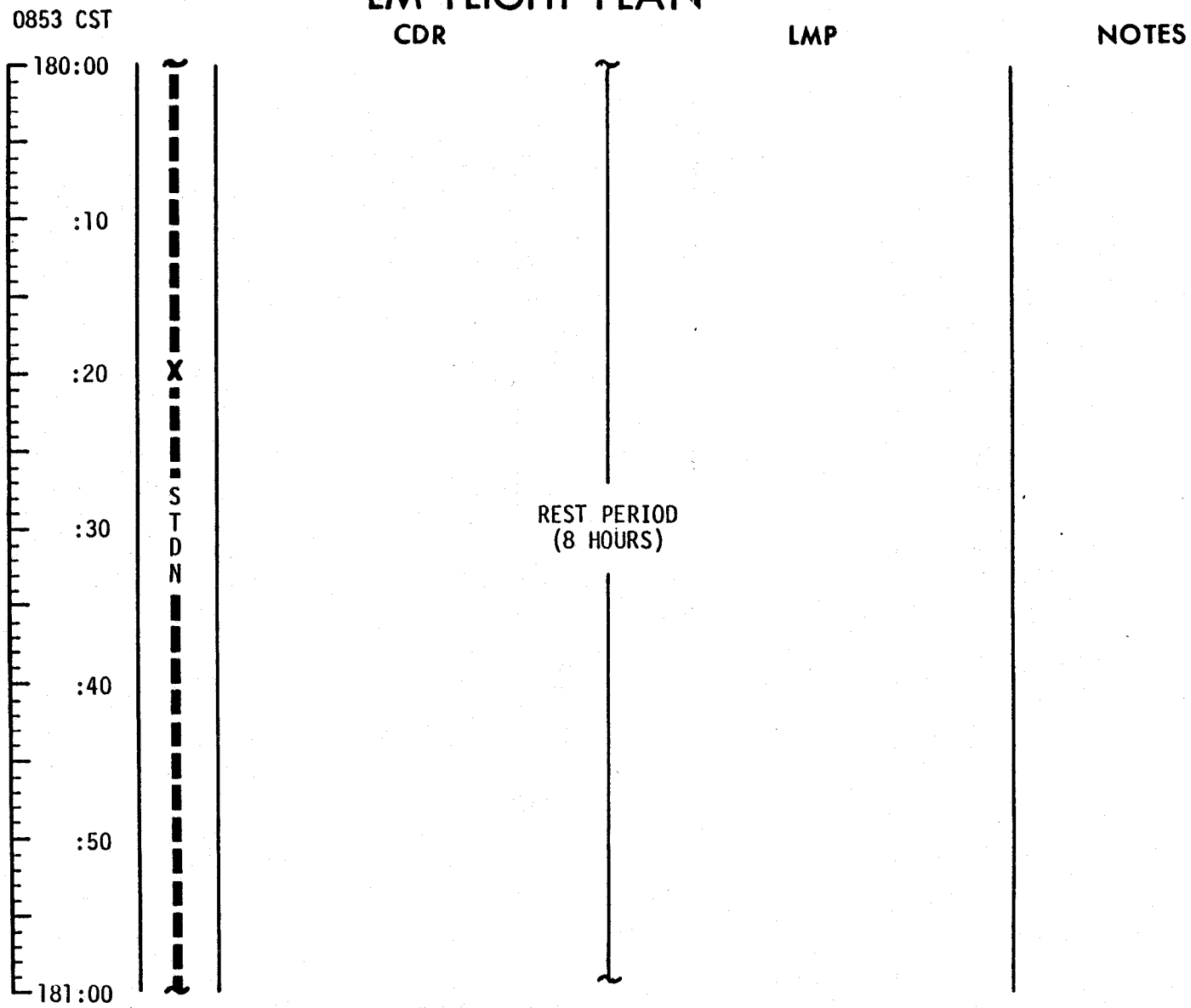
FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-259

LM FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	180:00 - 181:00	9/47	3-260

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

180:00
(P20)
(2.5°DB)
(11101)
(_1111)

SIM EXP STATUS
(+0011)
(01011)

:10

PC: MODE - STBY
PWR - ON

TERMINATE JET-ON MONITOR
P30
P20
V21N26 (00000)

UPLINK:
CSM S.V.
SPS BURN CONSTANTS
LOPC TGT LOAD
DESIRED ORIENT (LOPC)

PC: PWR - OFF (CUE)

UPDATE:
FLIGHT PLAN
LOPC MNVR PAD (182:15)
(COPY ATT AT 180:42 ALSO)

:20

CONFIGURE FOR URINE DUMP

STDN

(11101)
(_1111)

P00

LIMIT CYCLE - ON
ATT DEADBAND - MIN
RATE - LOW

180:30

180:30
(11101)
(_1111)

SIM EXP STATUS
(*0011)
(01011)

BMAG (3) - ATT 1/RATE 2
SC CONT - SCS
P52 (OPTION 3)
(LDG SITE ORIENT)

STARS ____, ____

SA ____, ____

TA ____, ____

REPORT: GYRO TORQUING
ANGLES
P52 (OPTION 1)
(LOPC ORIENT)

(106,133,330) ON LOPC ORIENT
SC CONT - CMC
BMAG (3) - RATE 2
GDC ALIGN

:40

V49 MNVR TO LOPC BURN PAD ATT (180:57)

P52 IMU REALIGN

N71: __ __, __ __

N05: __ __ __ __ __

N93:

X __ __ __ __ __ __

Y __ __ __ __ __ __

Z __ __ __ __ __ __

GET __ __ __ __ __ __

IR COVER - CLOSE

O_2 FUEL CELL PURGE

WASTE WATER DUMP
SAMPLE BUSS (1) - STOW SAMPLE (1)
DUMP URINE FROM BUSS (1)
START NEW URINE COLLECTION PERIOD

:50

CMDS: (AOS +65 MIN)
DSE REWIND

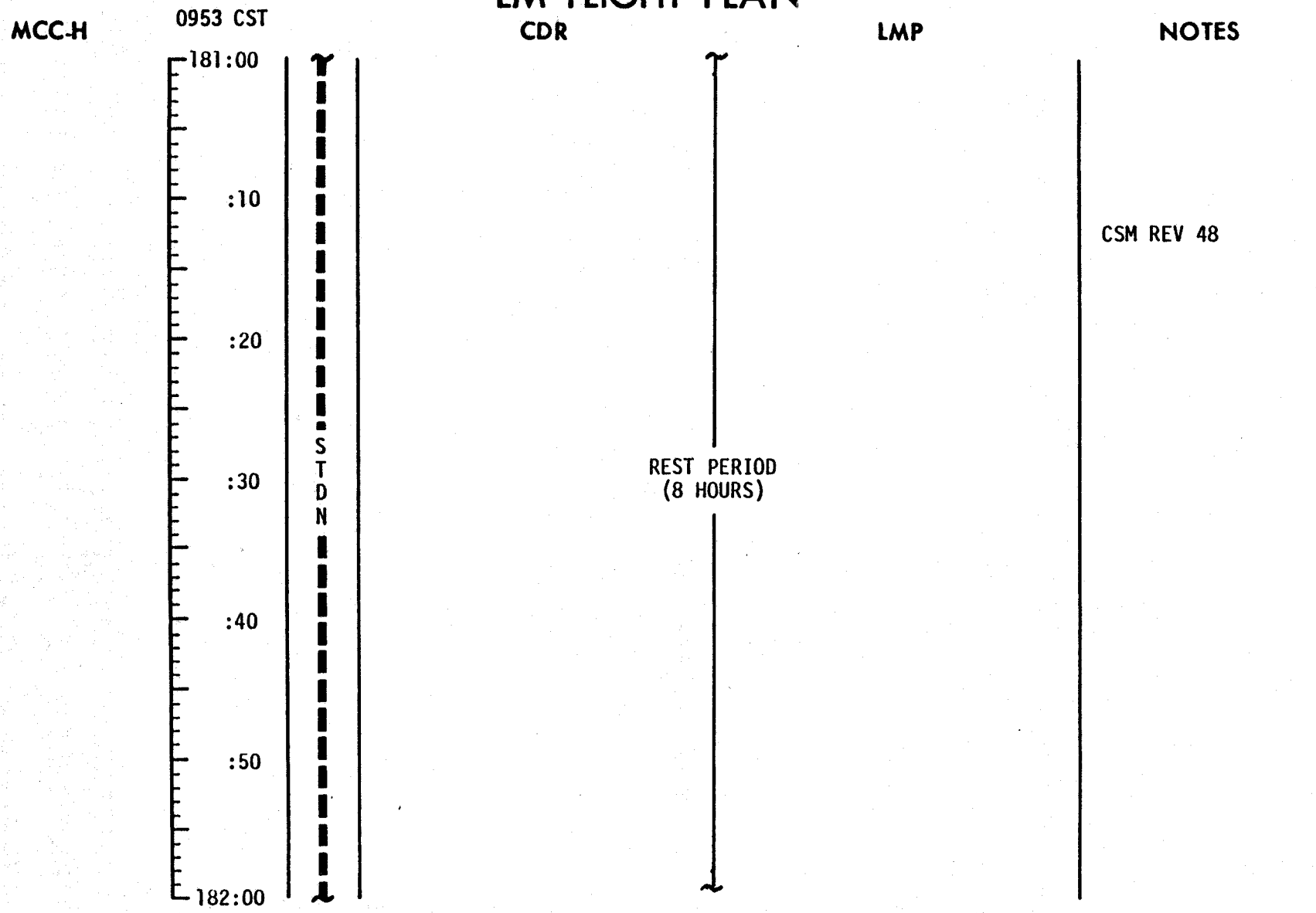
STDN

CONFIGURE DSE (HBR/RCD/FWD/CMD RESET) (AOS +73 MIN)

SET HGA: MAN, P -63, Y 7, AUTO, NARROW, FOR AOS

181:00

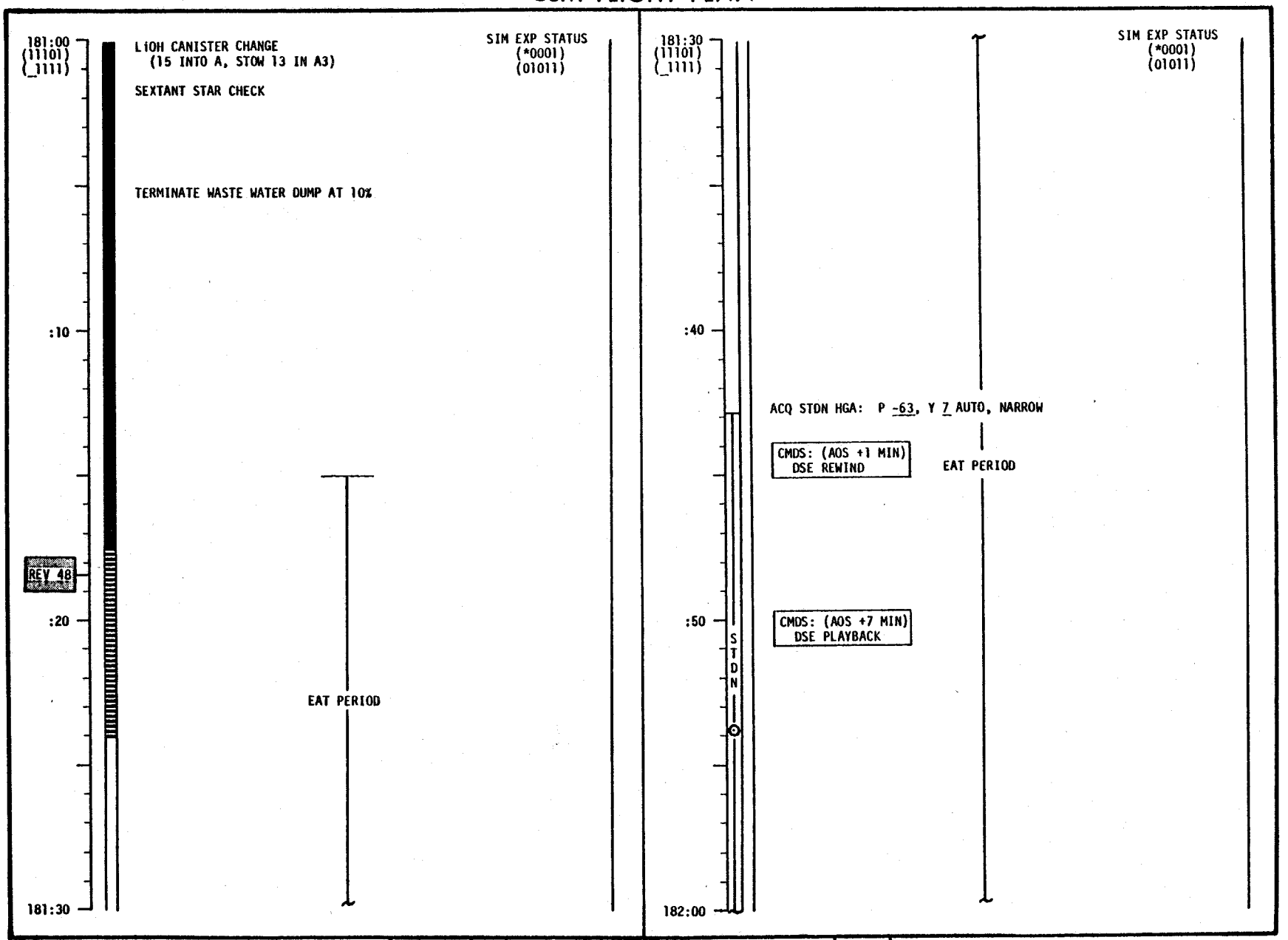
LM FLIGHT PLAN



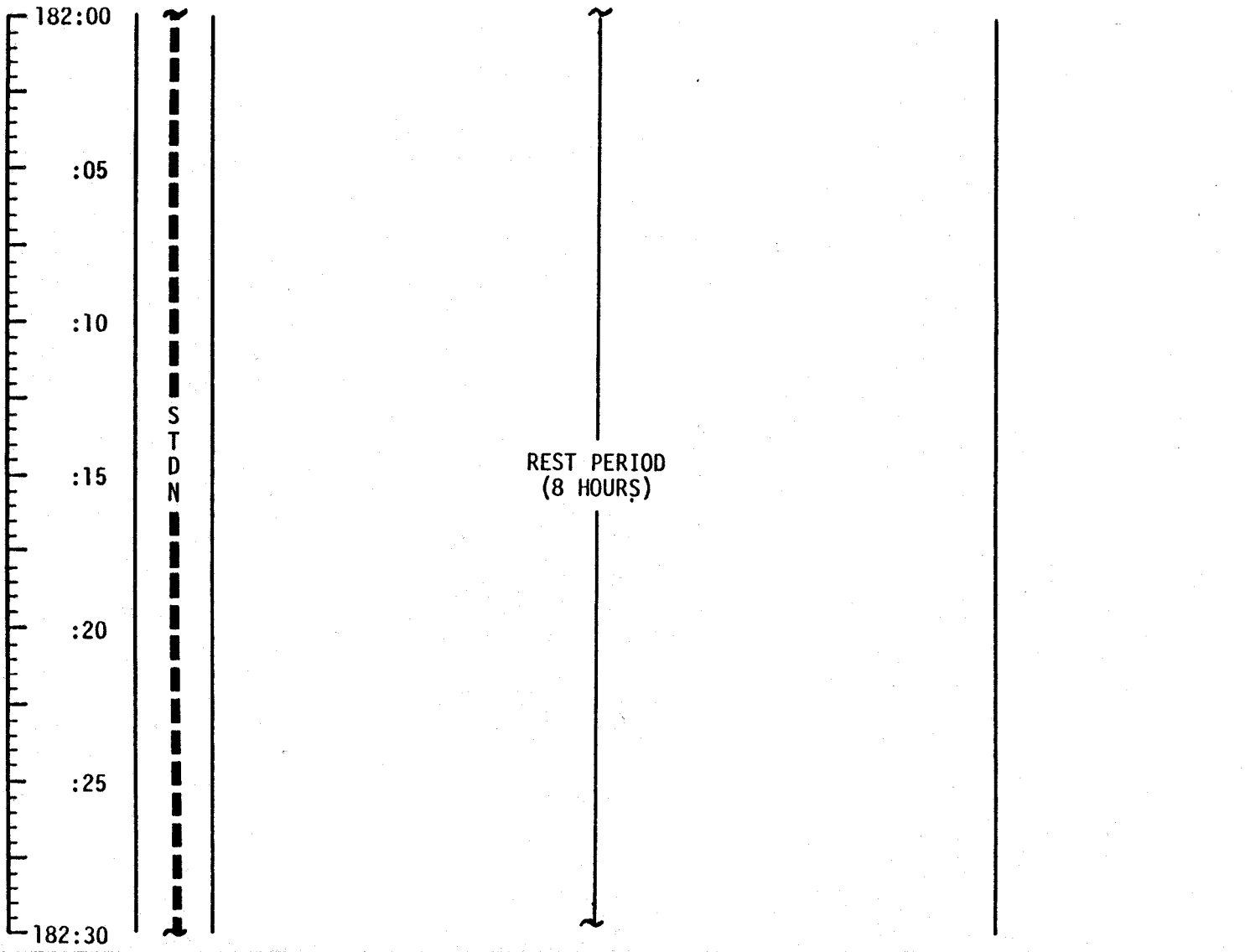
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	181:00 - 182:00	9/47-48	3-262

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	182:00 - 182:30	9/48	3-264

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

182:00
(11101)
(_1111)

:10

:20
(P40)
(0.5°DB)

182:30

STDN

SIM EXP STATUS
(*0001)
(01011)

EAT PERIOD

PRE-SPS BURN SIM PREP (CUE CARD)
IR - OFF
UV - OFF
ENABLE ALL JETS
SECURE EQUIPMENT FOR LOPC

P30, VERIFY LOPC TIG AND ΔV
SET DET COUNTING UP TO LOPC

P40 (TRIM)

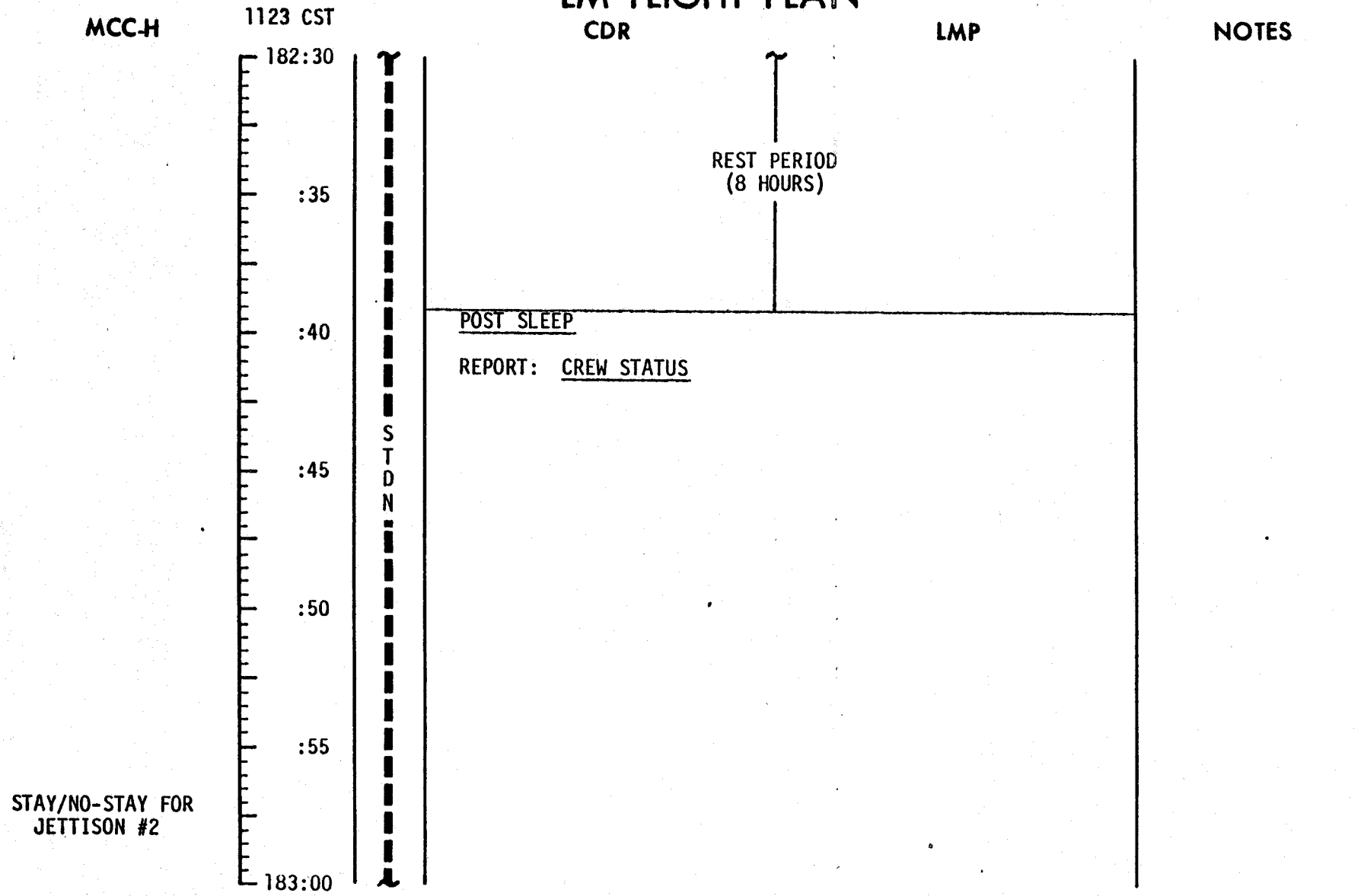
NOTE: PCM DATA WILL NOT BE RECORDED DURING LOPC

P30 MANEUVER

SET STARS	L S	O P	P S	C G	&	N	PURPOSE PROP/GUID	
	+						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	(000)
	X	X	X				Y	(315)
	+						H_A	N44
							H_P	
	+						ΔVT	
HORIZON/WINDOW ___	X	X	X				BT	
	X						ΔVC	
	X	X	X	X			SXTS	
	+					0	SFT	
	+				0	0	TRN	
	X	X	X				BSS	
	X	X					SPA	
	X	X	X				SXP	
OTHER ___		0					LAT	N61
							LONG	
	+						RTGO	EMS
	+						V10	
							GET 0.05G	

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-265

LM FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	182:30 - 183:00	9/48	3-266

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

182:30
(P40)
(0.5°DB)
(11101)
(_1111)

SIM EXP STATUS
(*0000)
(31000)

UPDATE:
GO/NO-GO FOR LOPC

LOPC (000,000,315)
____:____:____.____

TIG: 182:35:45.3
BT: 18.7 SEC
ΔVT: 336.7
ULLAGE: 4 JET 12 SEC
ORBIT: 63.0 X 61.3

P00
REPORT: BURN STATUS

POST-SPS BURN SIM PREP (CUE CARD)

:40

UPLINK:
DESIRED ORIENT (LIFT-OFF)
RLS (IF REQD)

(11101)
(11111)

V48 (11101) IF A/C ROLL NOT SELECTED
(11111)

USE A/C ROLL EXCEPT:
AUTO RCS SELECT: A1 & A2 - OFF
MC/LA COVER - OPEN
MC - EXTD

NOTE: ATTITUDE CONTROL
P&Y AXES COUPLED
R AXIS UNCOUPLED

S
T
D
N

(P20)
(0.5°DB)

P20, OPT 5 (+X FWD SIM ATT)(183:00)
N78 (+090.00)
(+052.25)
(+180.00)
N79 (+000.50)

(097,000/068,019)

CMDS:
DSE REWIND

:50

UPDATE:
PAN CAMERA PHOTO PAD (183:45)

CMDS:
DSE RECORD

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

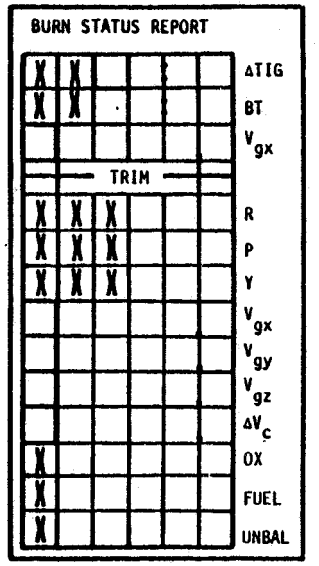
SET HGA: MAN, WIDE P -10, Y 25 FOR AOS

183:00

LOPC BURN TABLE

SPS LIMITS	P OR Y RATES	ATT DEVIATION	MANUAL START ACTION	OVERBURN SHUTDOWN CRITERIA	RCS TRIM GUIDELINES
TIGHT	10°/SEC TERMINATE	+10° TERMINATE	NO MANUAL START NO RESTART	BT + 1 SEC	TRIM Vgy TO 0.2 FPS, IF -Vgy ROLL 90° LEFT USE -Z THRUSTERS

NOTES: BALL VLV FAILURE - START ON SUSPECT BANK
Shut down good bank to verify; reenable



LM FLIGHT PLAN

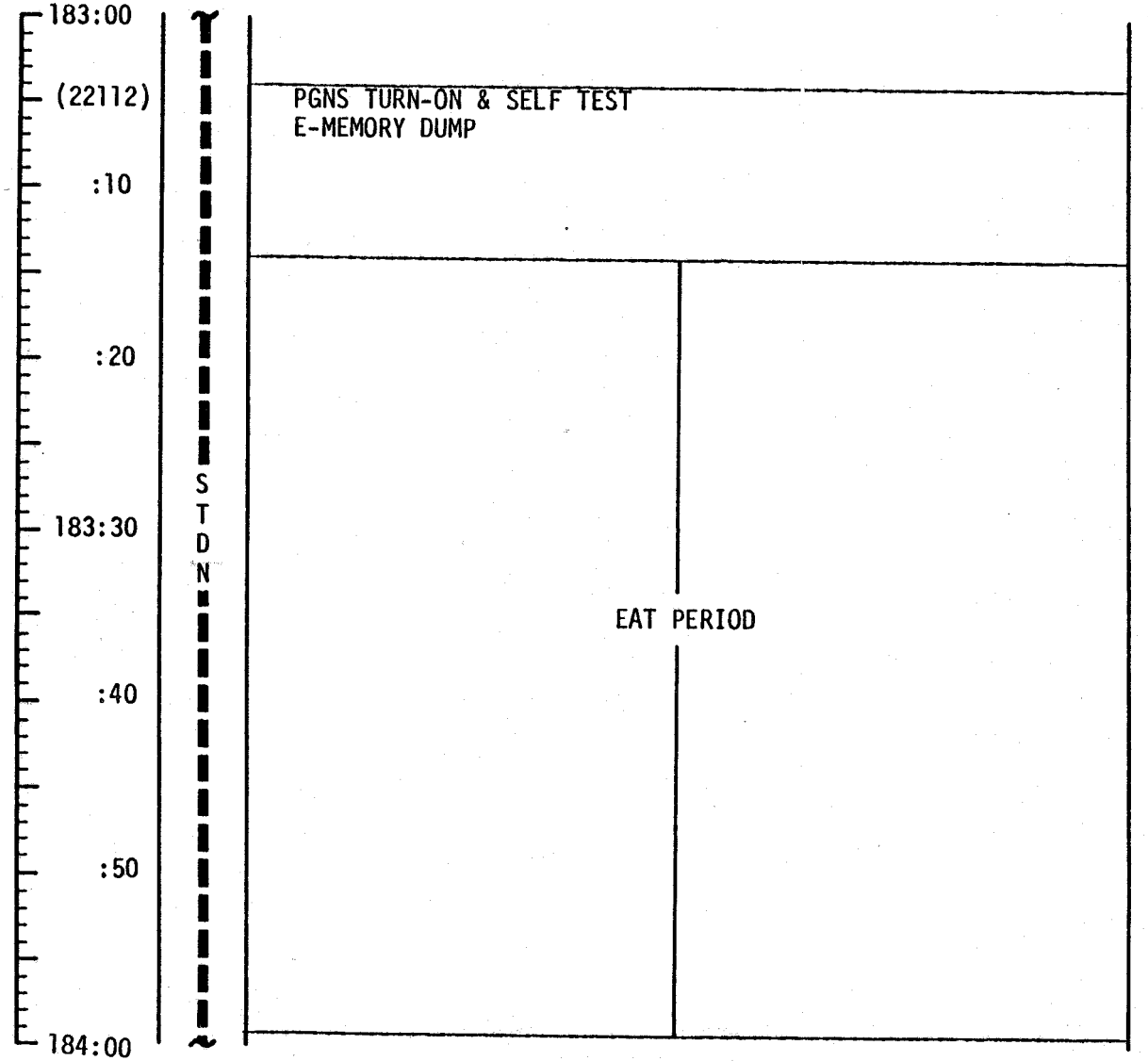
MCC-H

1153 CST

CDR

LMP

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	183:00 - 184:00	9/48-49	3-268

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

183:00
(P20)
(2.5°DB)
(11101)
(_1111)

CMC MODE - FREE
P52 (OPTION 1)
(LIFT-OFF ORIENT)

SIM EXP STATUS
(+1000)
(01000)

(142,111,000) LIFT-OFF ORIENT
GDC ALIGN

(P20)
(0.5°DB)

V22N79 (+000.50)
P20, CMC MODE - AUTO

:10

REV 49

:20

LA - ON
IMAGE MTN - ON
MC - ON (167°E)
IMAGE MTN - INCR (BP +4 STEPS)/ON

CSM EXP/EVA CHECKLIST
ZODIACAL LIGHT, PAGE X/2-11
MAG (YY)

183:30

183:30
(P20)
(0.5°DB)
(11101)
(11111)

SIM EXP STATUS
(+1000)
(02000)

:40

ACQ STDN HGA: MAN, WIDE P -10, Y 25
S-BD ANT IND >1/2 SCALE HGA: REACQ, NARROW

PC: STBY
STEREO
PWR

PAN CAMERA PHOTO PAD
T-START: ___ ___ __:__ __:__ __
T-STOP: ___ ___ __:__ __:__ __
(80°E TO 26°E)

:50

CUE: (AOS +7 MIN)
HGA: AUTO
CMDS:
DSE REWIND

PC - OPR (T START)

UPLINK:
CSM S.V.

STDN

PREPARATIONS FOR TRANSFER

CMDS: (AOS +15 MIN)
DSE PLAYBACK

PREPARATIONS FOR TRANSFER

INSTALL (1) TSB ON LH LEB - (1) ON RH LEB - (1) UNDER GIRTH SHELF AND (1) BEHIND LMP HEAD
REMOVE ROPE BAG FROM DECON BAGS ON TOP OF A2

184:00

LM FLIGHT PLAN

MCC-H

UPDATE TO LM
P57 LIFT-OFF TIME
P22 ACQ TIME (28°)
UPLINK TO LM
CSM S.V. (L/O)
RLS

1253 CST

184:00
(22112)
:10
:20
184:30
:40
:50
185:00

STDN

CDR	LMP	NOTES
P57 LUNAR SURFACE ALIGN OPTION 4 LANDING SITE A/T 3, PLUS 4 STARS (LIFT-OFF ORIENT)		-4:00
DON SUITS LMP, THEN CDR DON SUITS	BIOMED-OFF, THEN LEFT	

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	184:00 - 185:00	9/49	3-270

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

184:00
(P20)
(0.5°DB)
(11101)
(11111)

STOW ROPE IN RH TSB
REMOVE DECON BAG STRAPS FROM TOP OF A2 & HANG ON L3
REMOVE (2) JETTISON BAGS, (1) VACUUM BAG AND VACUUM CABLE FROM A2
STOW EMPTY JETT. BAG, VACUUM BAG & CABLE IN LH TSB
PLACE REMAINING JETT. BAG ON A2 AND LOAD WITH THE FOLLOWING:

- LiOH CANS & PARTITIONS FROM A9
- WASTE FOOD BAGS, FECAL BAG (12 PACK), HEAT FLOW IN BAG, FROM A7
- HELMET SHIELD FROM CMP HELMET
- USED CWG'S-4 FROM A8
- USED ICG-1 FROM U2
- USED TISSUES, TOWELS AND MISCELLANEOUS WASTE

SIM EXP STATUS
(+1000)
(22000)

PC - STBY (T STOP) (___ ___:___:___) (CUE)

:10

REMOVE CWG-(3) AND INTERCONNECTS (2) FROM A8 - STOW IN RH TSB AND VACUUM BRUSH FROM SIDE OF A8
UNSTOW AND ASSEMBLE:

- VACUUM BRUSH - VACUUM CLEANER (SIDE A6)
- POWER CABLE (LH-TSB) AND VACUUM BAG (LH-TSB)

CONNECT CABLE TO VACUUM AND TO PANEL 201
STOW ASSEMBLED VACUUM BETWEEN F2 AND MDC
INSTALL HSB'S IN LH TSB
REMOVE SPRINGS & CLIPS FROM CLOSEOUT CURTAIN AND INSTALL
REMOVE B5 & B6 CLOSEOUT CURTAIN AND STOW IN RH TSB
REMOVE R12 FROM GIRTH SHELF & STOW
OPEN BOTTOM OF PGA BAG AND INSERT BOTTOM FLAP IN TOP POCKET

:20

PC - OFF (CUE)
MC - OFF (28°W)
WAIT 30 SEC
MC - STBY
IMAGE MTN - OFF
LA - OFF
MC - RETR
RNDZ XPNDR - HTR

MC/LA COVER - CLOSE
P00
AUTO RCS SELECT: A1 & A2 - ON

NOTE: ATTITUDE CONTROL ALL AXES COUPLED

184:30

STDN

184:30
(11101)
(_1111)

UPDATE:
ZODIACAL LIGHT PHOTO PAD
P24 LDMK TRACK PADS (F-1 & 17-1)(185:50)

SIM EXP STATUS
(*0000)
(01000)

V49 MNVR TO ZODIACAL LIGHT PHOTO ATT (184:55)
(024,072,004)

:40

RNDZ XPNDR ACTIVATION AND SELF TEST (DECAL)
CSM 114 VALUES
A~ 1.75 AGC
B~ 2.35 SELF TEST
C~ 0.3 UNLOCKED
~ 4.9 LOCKED
RNDZ XPNDR - HTR

CMDS: (AOS +65 MIN)
DSE REWIND

:50

DATA SYS - OFF

CONFIGURE DSE (LBR/RCD/FWD/CMD RESET)(AOS +73 MIN)
AUTO RCS SELECT: A3,B3,C4,D4 - OFF
P20 OPT 2 (ZODIACAL LIGHT)
N78 (+090.00)
(+000.00)
N79 (-0.0500)
(+000.50)
N34 (LOAD T START)
PRO

ZODIACAL LIGHT PHOTO PAD(SR)
T-START: ___ ___ ___ ___ ___ ___ ___
(SUNRISE - 15 MIN)

185:00

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-271

LM FLIGHT PLAN

MCC-H

1353 CST

	CDR	LMP	NOTES
185:00 (22112)	PREP FOR EQUIPMENT JETTISON REPORT: PRD		-3:00
:05			
:10	HELMET/GLOVE DONNING		
GO/NO-GO FOR DEPRESS		RECORDER - ON/VOX	
:15	PRESSURE INTEGRITY CK		CSM REV 50
	CABIN DEPRESS		
:20			
	EQUIPMENT JETTISON #2		
:25	CABIN REPRESS		
185:30	POST-JETTISON CABIN CLEANUP	RECORDER - OFF	

STDN

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	185:00 - 185:30	9/49-50	3-272

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

185:00
(P20)
(0.5°DB)
(11101)
(_1111)

START AUTO PITCH RATE
ZODIACAL LIGHT (POLARIZED FILTER)

SIM EXP STATUS
(*0000)
(01000)

NOTE: ATTITUDE CONTROL
P & Y AXES UNCOUPLED
R AXIS COUPLED

:10

REV 50

AUTO RCS SELECT: A3,B3,C4,D4 - ON
P20 OPT 5 (LDMK TRK ATT)(185:26)
N78 (+000.00)
(-068.00)
(+000.00)
N79 (+000.50)

(000,338/007,000)

NOTE: ATTITUDE CONTROL
ALL AXES COUPLED

:20

SET HGA: MAN, P -2, Y 330 REACQ, NARROW FOR AOS

CONFIGURE CAMERA: (LDMK TRK)
CM/DAC/SXT/CEX (EXP PAD) 1 FPS (8% MAG)

MAG (BB) _____, MAG % _____

185:30

LM FLIGHT PLAN

MCC-H	1423 CST	CDR	LMP	NOTES
	185:30 (22112)	POST JETTISON CABIN CLEANUP (CONT)		
	:35			
	:40			
	:45			
	:50			GDS 210' AOS
UPDATE TO LM ASCENT PADS CSI PAD LM DAP WEIGHTS	:55	P22 RR LUNAR SURFACE NAVIGATION		
	186:00			

STDN

STDN

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	185:30 - 186:00	9/50	3-274

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

185:30
(P20)
(0.5°DB)
(11101)
(_1111)

SIM EXP STATUS
(*0000)
(01000)

LOAD N89 FOR LDMK F-1

P24 (LDMK F-1)
OPT ZERO - OFF
OPT MODE - CMC

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

:40 ACQ STDN HGA: P -2, Y 330 REACQ, NARROW

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
P20
LOAD N89 FOR LDMK 17-1
CONFIGURE VHF FOR COMM CHECK WITH LM
VHF AM B - DUPLEX
VHF AM - T/R (PANEL 9)
MODE - VOX
:50 VHF ANT - RIGHT
ADJUST SQUELCH A

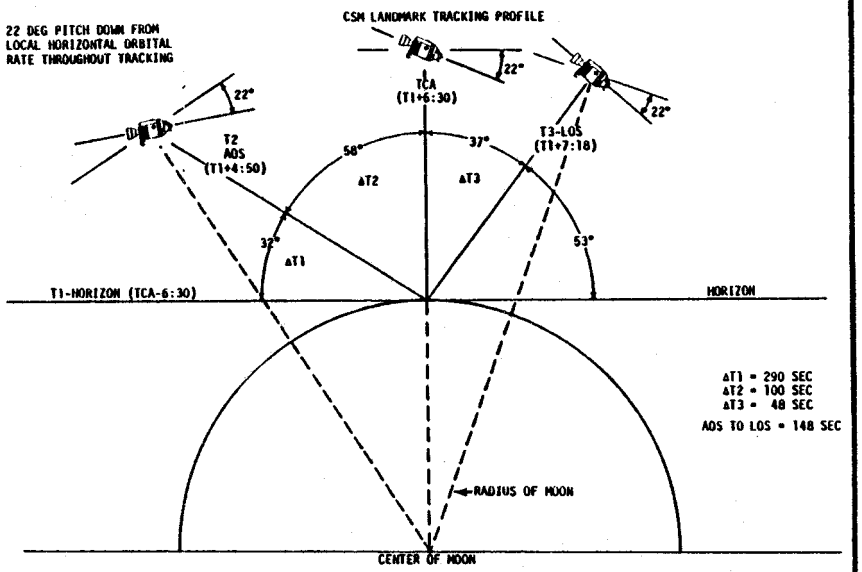
STDN

RNDZ XPNDR - PWR

P24 (L/S LDMK 17-1)
OPT ZERO - OFF
OPT MODE - CMC

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

186:00



P24 LDMK TRACKING
TGT: F-1 (1/250)

T_1 — — —•— —•— —
T_2 — — —•— —•— —•—
TCA — — —•— —•— —
T_3 — — —•— —•— —

R _____ °P _____ °Y _____ °(T2 ACQ)

N or S NM ___ / SA____TA ___(T2 ACQ)

N89
LAT +01.863
LONG/2 +44.125
ALT 000.00

P24 LDMK TRACKING
TGT: 17-1 (1/250)

T_1 — — —•— —•— —
T_2 — — —•— —•— —•—
TCA — — —•— —•— —
T_3 — — —•— —•— —

R _____ °P _____ °Y _____ °(T2 ACQ)

N or S NM ___ / SA___ _TA ___(T2 ACQ)

N89
LAT +20.160
LONG/2 +15.405
ALT -001.96

LM FLIGHT PLAN

MCC-H

1453 CST

	CDR	LMP	NOTES
186:00 (22112)	VHF VOICE CHECK		
			-2:00
:05			
	RR - OFF TERMINATE P22		
:10	CABIN PREP FOR ASCENT		
:15			
:20			
:25			
186:30			

STDN

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	186:00 - 186:30	9/50	3-276

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

186:00
(P20)
(0.5°DB)

(11101)
(_1111)

SIM EXP STATUS
(*0000)
(01000)

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

P00

VHF AM B - OFF (CTR)
MODE - INTERCOM/PTT
RNDZ XPNDR - HTR

:10

(11102)
(_1111)

V48 (11102)
(1111)
V49 MNVR TO P52/COAS CAL ATT (186:18)
(180,244,341) HGA P -58, Y 52

STDN

UPLINK:
LM S.V. (INS +5)
CSM S.V. (L/O)
RESET SURFACE FLAG

:20

UPDATE:
CONSUMABLES STATUS
CSM S.V. (L/O)
LM S.V. (INS +5)
ASCENT PADS AND CSM WEIGHT (COPY AT 187:15)
FLIGHT PLAN

CMDS:
DSE DUMP

P52 (OPTION 3)
(LIFT-OFF ORIENT)
REPORT: GYRO TORQUING ANGLES

186:30

P27 UPDATE

		CSM										LM									
PURP		CSM (INS+1)	V	7	1		V					LM (INS+1)	V	7	1		V				
GET		188 : 11 : 32					: :					188 : 11 : 32					: :				
304	01	INDEX			2	1	INDEX					INDEX			2	1	INDEX				
305	02	0	1	5	0	1						0	1	5	0	1					
306	03	0	0	0	0	2						7	7	7	7	5					
307	04	7	7	4	7	7						7	7	5	2	5					
310	05	5	1	3	7	7						7	7	7	3	2					
311	06	7	7	6	3	1						7	7	6	0	4					
312	07	6	5	3	6	1						6	4	4	7	6					
313	10	0	0	0	7	2						0	0	0	5	1					
314	11	1	0	7	2	2						1	4	2	0	4					
315	12	7	2	5	2	3						7	0	2	0	5					
316	13	7	1	7	3	3						4	6	3	3	5					
317	14	1	5	6	6	6						1	4	7	6	3					
320	15	1	5	5	3	2						1	1	6	6	2					
321	16	0	6	5	3	0						0	7	4	1	1					
322	17	1	4	0	2	4						3	2	5	0	0					
323	20	1	0	0	4	7						1	0	0	4	7					
324	21	1	0	1	0	0						1	0	1	0	0					
325	22																				
326	23																				
327	24																				

LM FLIGHT PLAN

MCC-H	1523 CST	CDR	LMP	NOTES
	186:30 (22112)	CABIN PREP FOR ASCENT (CONT)		
	:35			
	:40			
	:45			
	:50	FINAL LIFT-OFF PREP		-1:15
		CONFIGURE CB'S	CONFIGURE CB'S AGS STATUS - OPERATE	
	:55			
ENABLE STDN S-BAND RELAY		CONFIGURE RR		
	187:00			

STDN

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	186:30 - 187:00	9/50	3-278

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

186:30
(11102)
(_1111)

:40

:50

187:00

STDN

SIM EXP STATUS
(*0000)
(01000)

P52 IMU REALIGN

N71: __ __, __ __

N05: __ __ __• __ __

N93:

X __ __• __ __ __

Y __ __• __ __ __

Z __ __• __ __ __

GET __ __ __• __ __• __ __ __

CSM G&C CHECKLIST

P52 (COAS CALIB) (PG/7-6)
USE STAR NO. 16 (PROCYON)

POO
GDC ALIGN

DON PGA WITHOUT HELMET AND GLOVES

COAS CALIB - N92

SHAFT: __ __ __• __ __

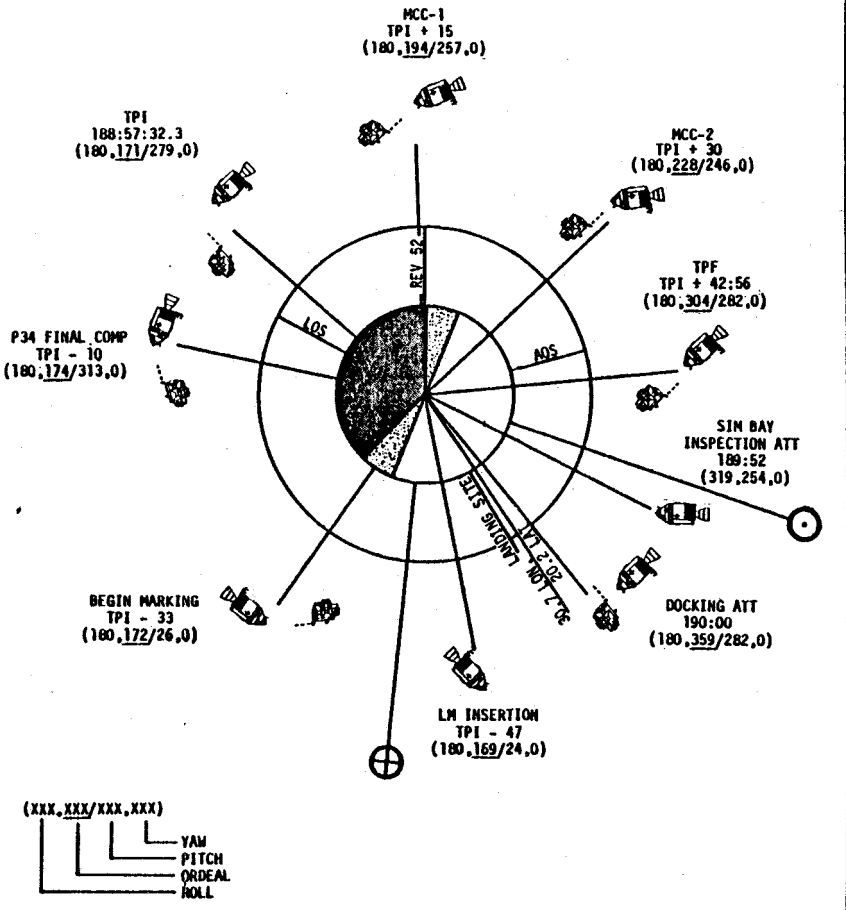
TRUN: __ __• __ __ __

CMDS:
DSE RECORD

STDN ENABLES S-BAND RELAY

VERIFY BUSS COVER INSTALLED AND SNAPPED
STOW BUSS IN PGA BAG
INSTALL INTERCONNECTS (TSB)
SUIT FLOW VALVE CMP - FULL FLOW
SUIT FLOW VALVES CDR AND LMP - OFF

VERIFY DSE TAPE MOTION (LBR/RCD/FWD/CMD RESET)
SET HGA MAN P -58 P -58, Y 52 AUTO, NARROW FOR AOS



LM FLIGHT PLAN

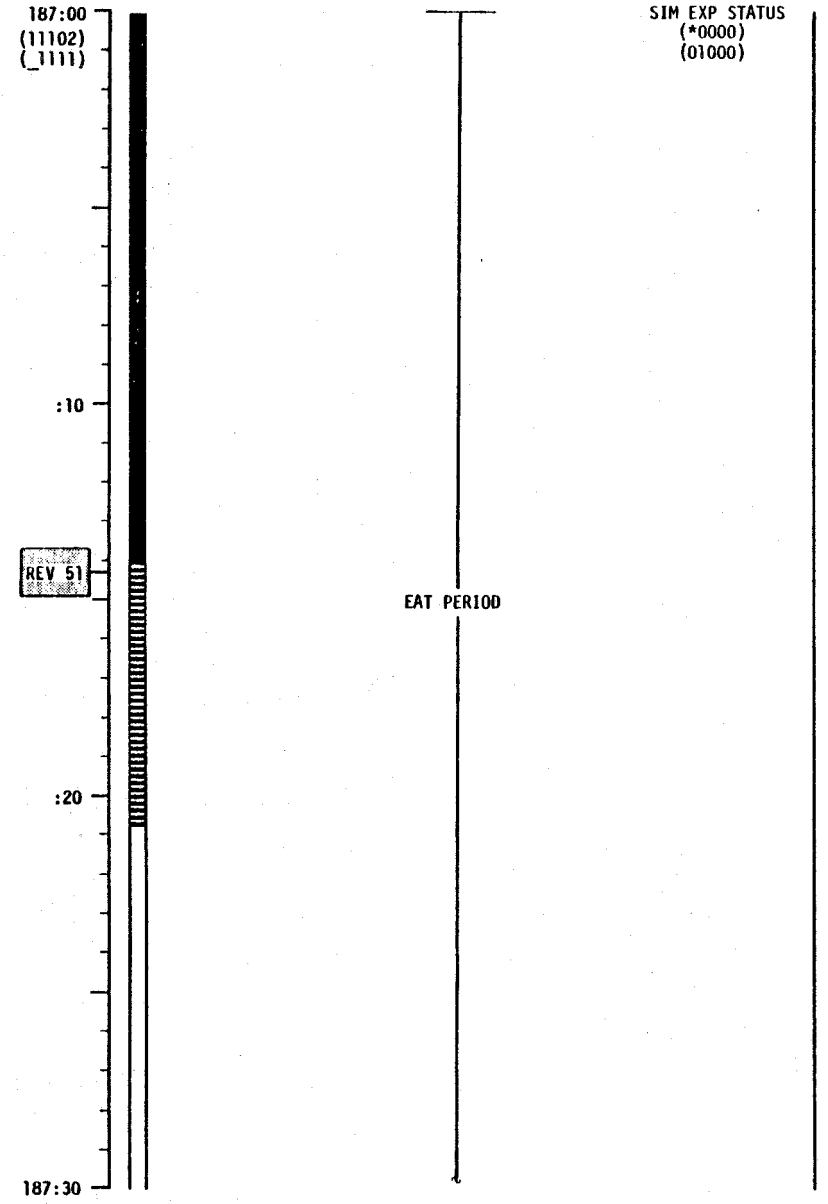
MCC-H	1553 CST	CDR	LMP	NOTES
	187:00 (22112)	V63 RR SELF TEST (IF REQ)	AGS GYRO CALIBRATION	
				-1:00
	:05		LOAD AGS ASCENT TARGETING	
		RATE GYRO TEST	PGNS/AGS CLOCK SYNC	
	:10			
	(12102)	SET DAP RCS CHECKOUT		
	:15			CSM REV 51
UPLINK TO LM ZERO POS/NEG CELLS CSM S.V. (L/O) (IF REQ) RLS (IF REQ)	:20	P57 LUNAR SURFACE ALIGN OPT 4 LANDING SITE A/T 3 (LIFT-OFF ORIENT)		-0:45
	:25			
	187:30	LOAD DAP, LM WEIGHT	BATS 5&6-ON, 1&3-OFF/RESET	

STDN

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	187:00 - 187:30	9/50-51	3-280

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



DIRECT ASCENT RNDZ PAD									UPDATE (IF REQ)								
GETI LIFT-OFF	HRS	+	0	0					+	0	0						
	MIN	+	0	0	0				+	0	0	0					
	SEC	+	0			.			+	0			.				
GETI	HRS	+	0	0					+	0	0						
TPI	MIN	+	0	0	0				+	0	0	0					
N37	SEC	+	0			.			+	0			.				

CSM WT	+						
LM WT	+	0	5	9	3	5	

COELLIPTIC RNDZ PAD									UPDATE (IF REQ)								
GETI LIFT-OFF	HRS	+	0	0					+	0	0						
	MIN	+	0	0	0				+	0	0	0					
	SEC	+	0			.			+	0			.				
GETI	HRS	+	0	0					+	0	0						
CSI	MIN	+	0	0	0				+	0	0	0					
N11	SEC	+	0			.			+	0			.				
GETI	HRS	+	0	0					+	0	0						
TPI	MIN	+	0	0	0				+	0	0	0					
N37	SEC	+	0			.			+	0			.				

LM FLIGHT PLAN

MCC-H	1623 CST		CDR	LMP	NOTES
UPDATE TO LM AGS K-FACTOR AGS 047 & 053 LGC GYRO COMP (IF REQ) PIPA BIAS (IF REQ)	187:30 (12102)		P12 POWERED ASCENT	COPY & LOAD AGS 047, 053 SET CAMERA: LM3/DAC	
				AGS LUNAR ALIGN	-0:30
	:35		PRELAUNCH SWITCH CHECKS		
	:40		DON HELMETS & GLOVES		
	:45	STDN		V47 SET AGS BIAS LIFT-OFF COMM,RECORDER - ON	
GUIDANCE RECOMMEN- DATION FOR ASCENT				BATS 2 & 4 - OFF/RESET DES BATS - DEADFACE	-0:15
	:50				
		TV	APS PRESSURIZATION		
	:55				
GO/NO-GO FOR LIFT-OFF	188:00				

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	187:30 - 188:00	9/51	3-282

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

187:30
(11102)
(_1111)

:40

:50

188:00

STDN

SIM EXP STATUS
(*0000)
(01000)

EAT PERIOD

ACQ STDN HGA P -58, Y +52 AUTO, NARROW

CMDS:
DSE DUMP

LOAD CSM AND LM WEIGHTS

V49 MNVR TO P20 ATT (187:48)
(180,026,000) OMNI D

CONFIGURE CAMERAS: (DOCKING)
CM2/DAC/18/CEX-BRKT,MIR (T8,1/250,∞) 6 fps (40% MAG)
MAG (BB) ____, MAG % ____
UTILITY PWR - ON
CM/EL/80/CEX (f8,1/250,FOCUS) 10 FR
MAG (NN) ____, FR # ____
CM4/TV-BRKT
(f44,PEAK,∞,150MM)

PRESSURIZE CABIN TO 5.5 PSIA

VHF AM T/R - OFF (PNL 9)
VHF AM B - DUPLEX
VHF AM A - OFF (CTR) (VERIFY)
VHF RANGING - ON (UP)
VHF ANT - RIGHT (VERIFY)
EXT LIGHTS RUN/EVA - ON (UP)
EXT LIGHTS RNDZ - RNDZ
RNDZ XPNDR - PWR

* * * * * * * * * * * * * * * *
* IF VHF VOICE REQ: *
* VHF AM T/R-T/R (PNL 9) *
* * * * * * * * * * * * * * * *

UPDATE:
GO/NO-GO FOR LM LIFT-OFF

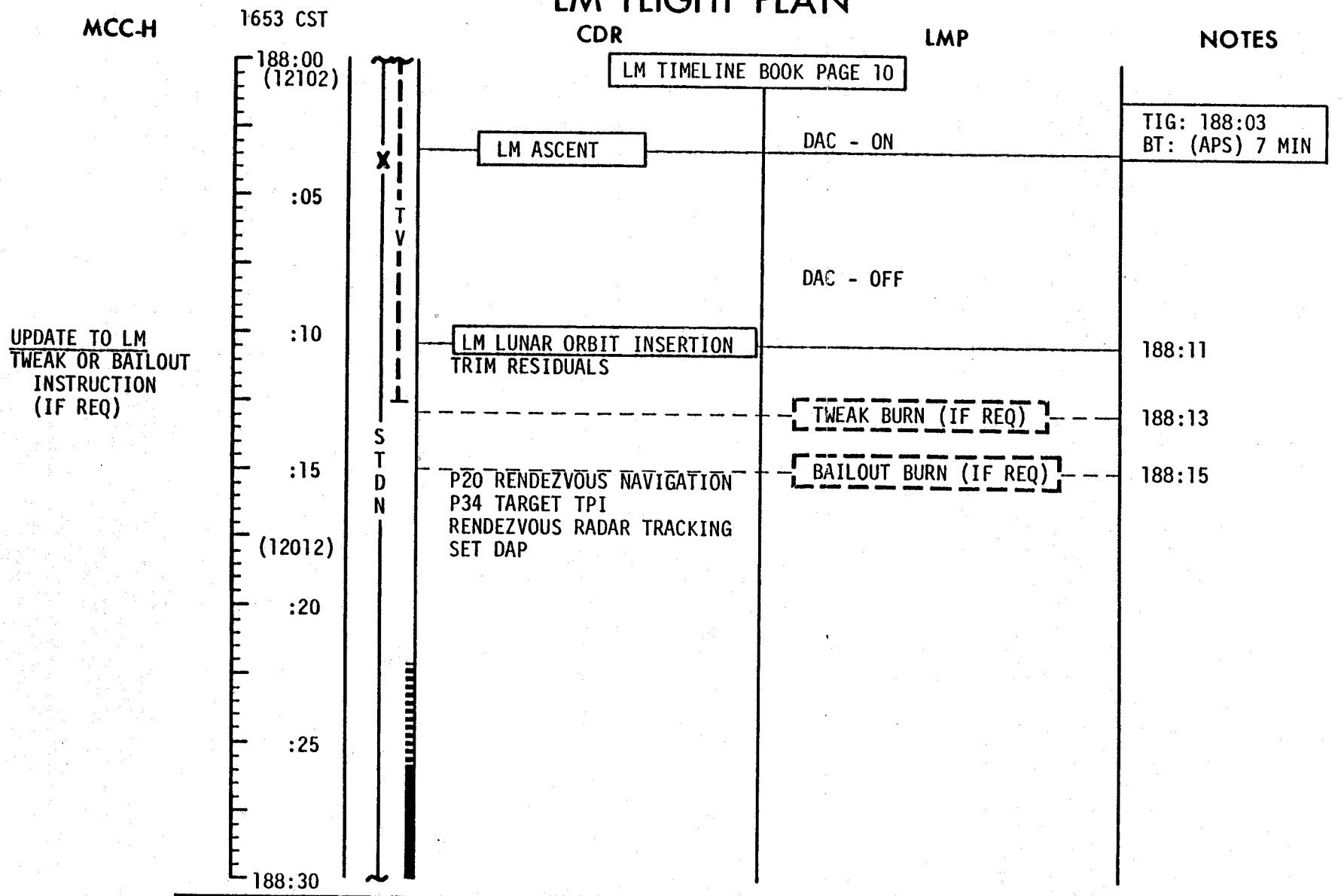
GDC ALIGN

CONTINGENCY MARKING SCHEDULES

EVENT	SXT FROZEN (USABLE)*				TRACKER LIGHT FAILURE				SXT FAILURE (UNUSABLE)				VHF FAILURE			
	VHF	SXT	COAS	MRI	VHF	SXT	COAS	MRI	VHF	SXT	COAS	MRI	VHF	SXT	COAS	MRI
-50																
INSERTION																
-40																
UPLINK																
P34			(COAS VAR)	AUTO				AUTO				AUTO				AUTO
-30								(V83)				(V83)				(V83)
-20											(V54)					
FINAL COMP -10																
TPI																
P35 0			(COAS VAR)	AUTO								(V54)				
+10																
FINAL COMP																
MCC-1			(COAS VAR)	AUTO				V83				(V54) V83				V83
P35 +20																
FINAL COMP																
MCC-2 +30																

*(1) SXT MARKS ARE TAKEN BY MANEUVERING SPACECRAFT
(2) TO USE COAS VARIANCE (MUST BE DONE PRIOR TO EACH MARKING PERIOD)
V25 N7E, 76E, 20000E, 0E, V21 N1E, 301E, 37777E
(IF MARK REJECT BUTTON INADVERTANTLY PUSHED: BEFORE PROCEEDING
ON F51: V21 N1E, 1336E, 31264E)

LM FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	188:00 - 188:30	9/51	3-284

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

188:00
(11102)
(_1111)

PRE-SPS BURN SIM PREP (CUE CARD)

SIM EXP STATUS
(*0000)
(01000)

LM LIFT-OFF — 188:03:14.6

188:13:32.3 (INS +3) TWEAK
188:15:32.3 (INS +5) LM B/O
188:22:32.3 (INS +12) CSM B/O

VHF RNG - RESET

LM INSERTION — 188:10:32.3

:10
-47
162.74
-473.3

142.26
-454.8

VHF VOICE CHECK

-38
:20

UPLINK:
LM S.V.

-34

P34 (TRIM) (180,172/26,0)

83.29
-328.4
188:30

BEFORE STEADY STATE
PRE-TPI: N49 > (+00200,+00120) REJECT/REPEAT
POST-TPI:N49 > (+00080,+00050) REJECT/REPEAT
AFTER STEADY STATE
ANYTIME: N49 > (+00030,+00020) REJECT/REPEAT

P30 MANEUVER

N/A
SET STARS

R_{ALIGN} N / A
P_{ALIGN} N / A
Y_{ALIGN} N / A

ULLAGE
4 JET, 11 SEC

ΔVC

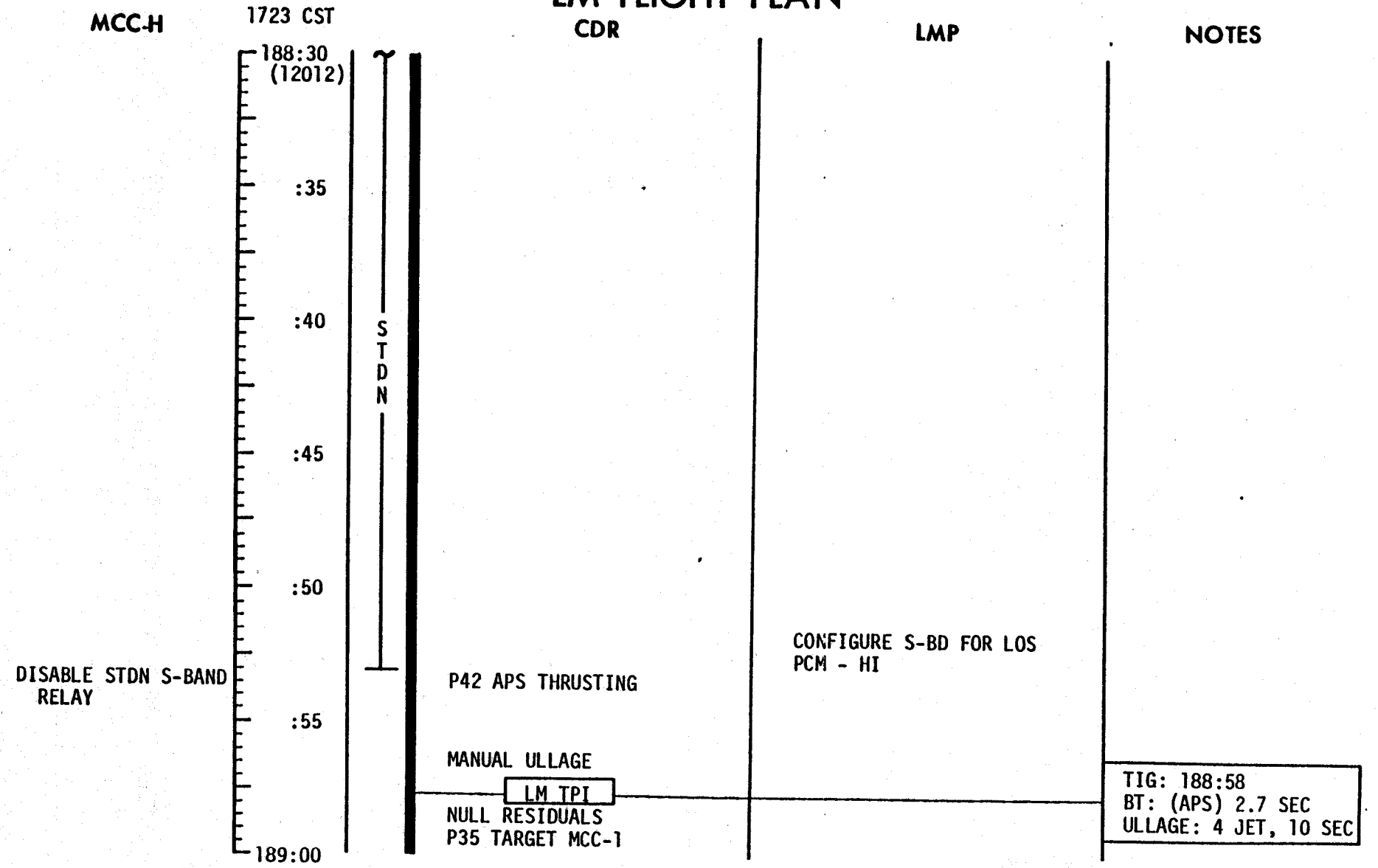
C/S	S/P	M/S	B/G	/ &	O/N	PURPOSE / PROP/GUID	
+			N	/	A	WT	N47
	0	0	N	/	A	P_{TRIM}	N48
	0	0	N	/	A	Y_{TRIM}	
+	0	0				HRS	GETI
+	0	0	0			MIN	N33
+	0					SEC	
						ΔV_X	N81
						ΔV_Y	
						ΔV_Z	
X	X	X				R	
X	X	X				P	
X	X	X				Y	
+			N	/	A	H_A	N44
			N	/	A	H_P	

*IF LM BAILOUT REQ:
* COPY P76 DATA FROM LM
*
*33 : : .
*
*84 . . .
*
*GO TO RESCUE BOOK PG 4

*IF CSM BAILOUT REQ:
*
*UPDATE:
* CSM BAILOUT P30 PAD
*P30
*P40; SET UP EMS
*SPS BURN CUE CARD
*CSM BAILOUT BURN
*GO TO RESCUE BOOK PG 4

P34 INPUT			
37	LM GETI-TPI : : .		
55	INTEG OPT +00000	ELEVATION +00000	TRANSFER +130.00

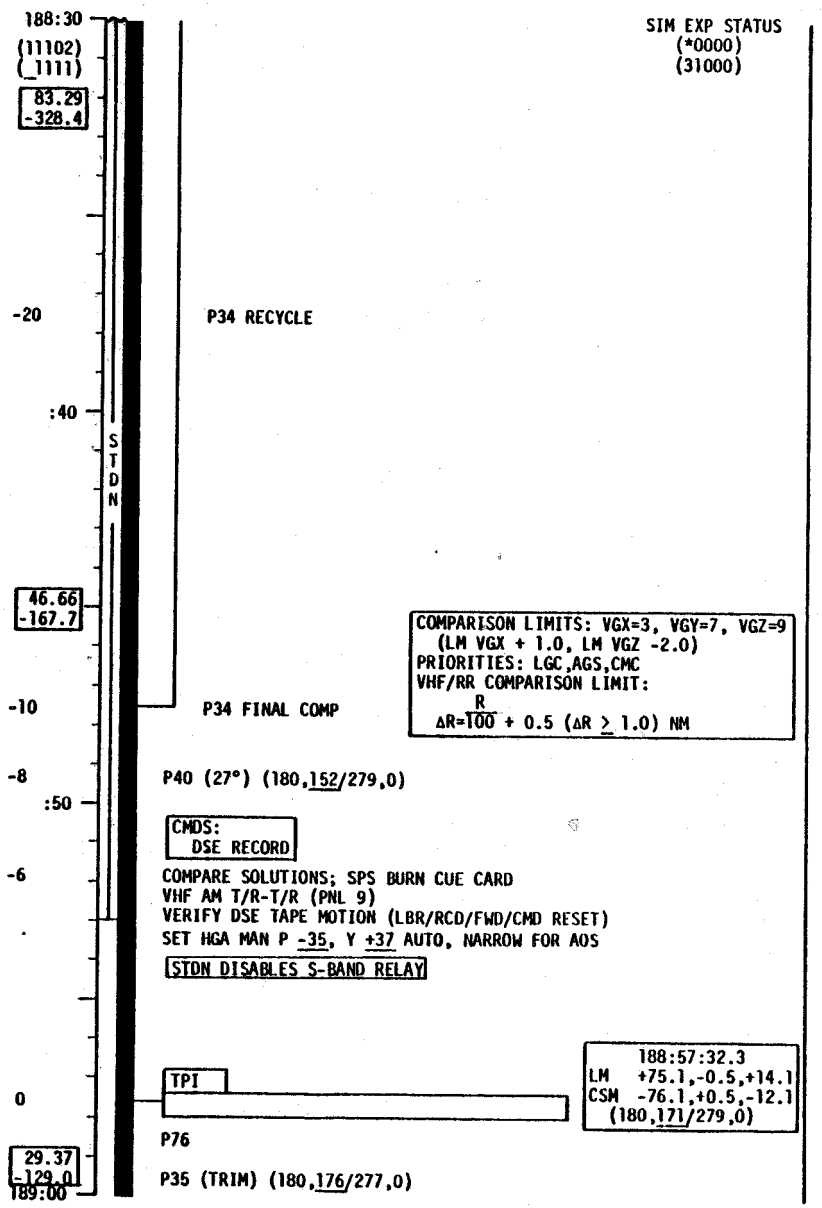
LM FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	188:30 - 189:00	9/51	3-286

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



P34 RECYCLE			
55	INTEG OPT +00000	ELEVATION }	TRANSFER } +130.00
58	PERILUNE ALT	TPI ΔV	TPF ΔV
81	TPI ΔV-LV		
84	LM TPI ΔV-LV		

GROUND TPI FOR LM

						ΔV_X
						ΔV_Y
						ΔV_Z

P34 FINAL COMP			
55	INTEG OPT +00000	ELEVATION }	TRANSFER } +130.00
58	PERILUNE ALT	TPI ΔV	TPF ΔV
81	TPI ΔV-LV		
84	LM TPI ΔV-LV		
84 P76	LM TPI ΔV-LV		

LM FLIGHT PLAN

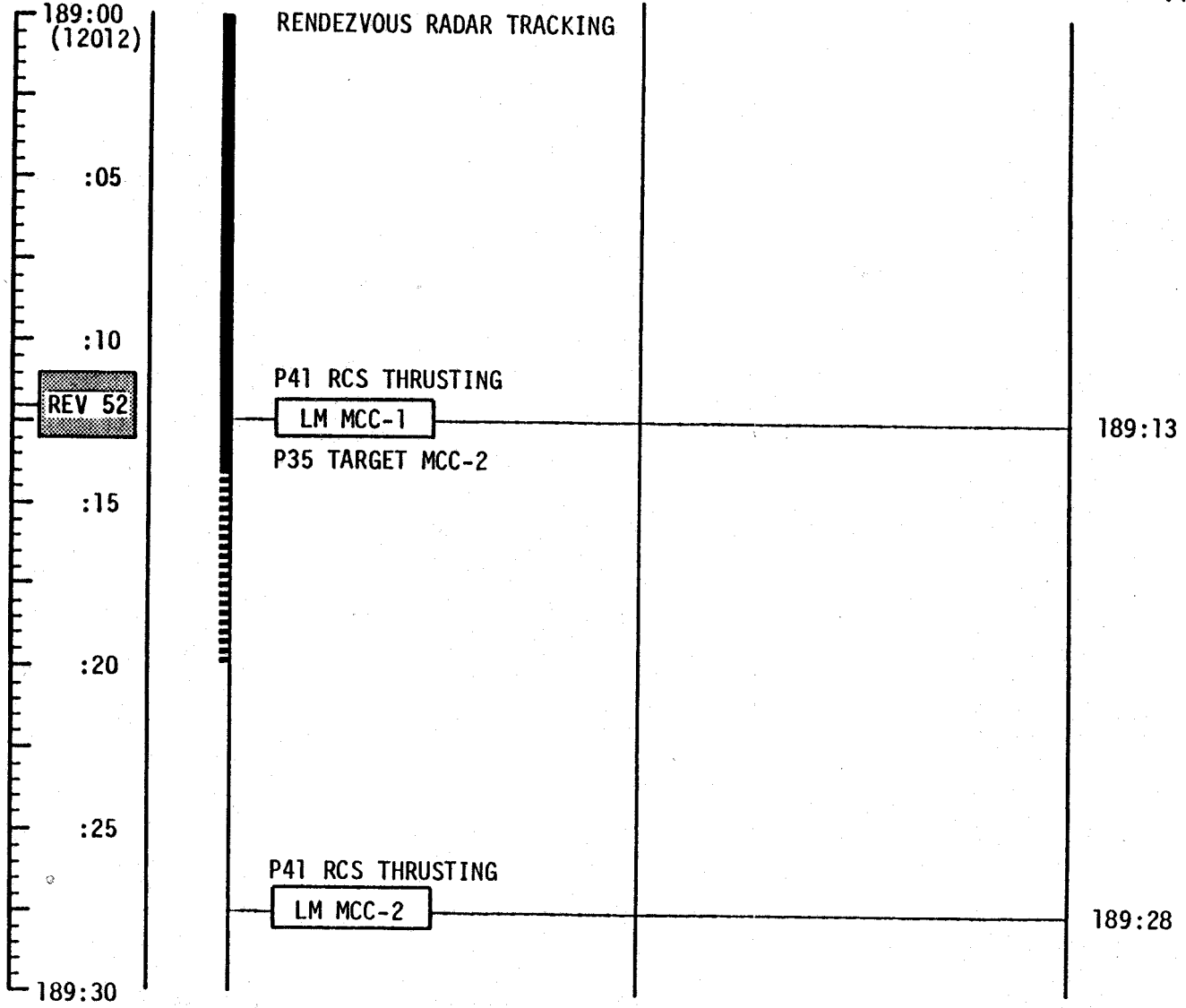
MCC-H

1753 CST

CDR

LMP

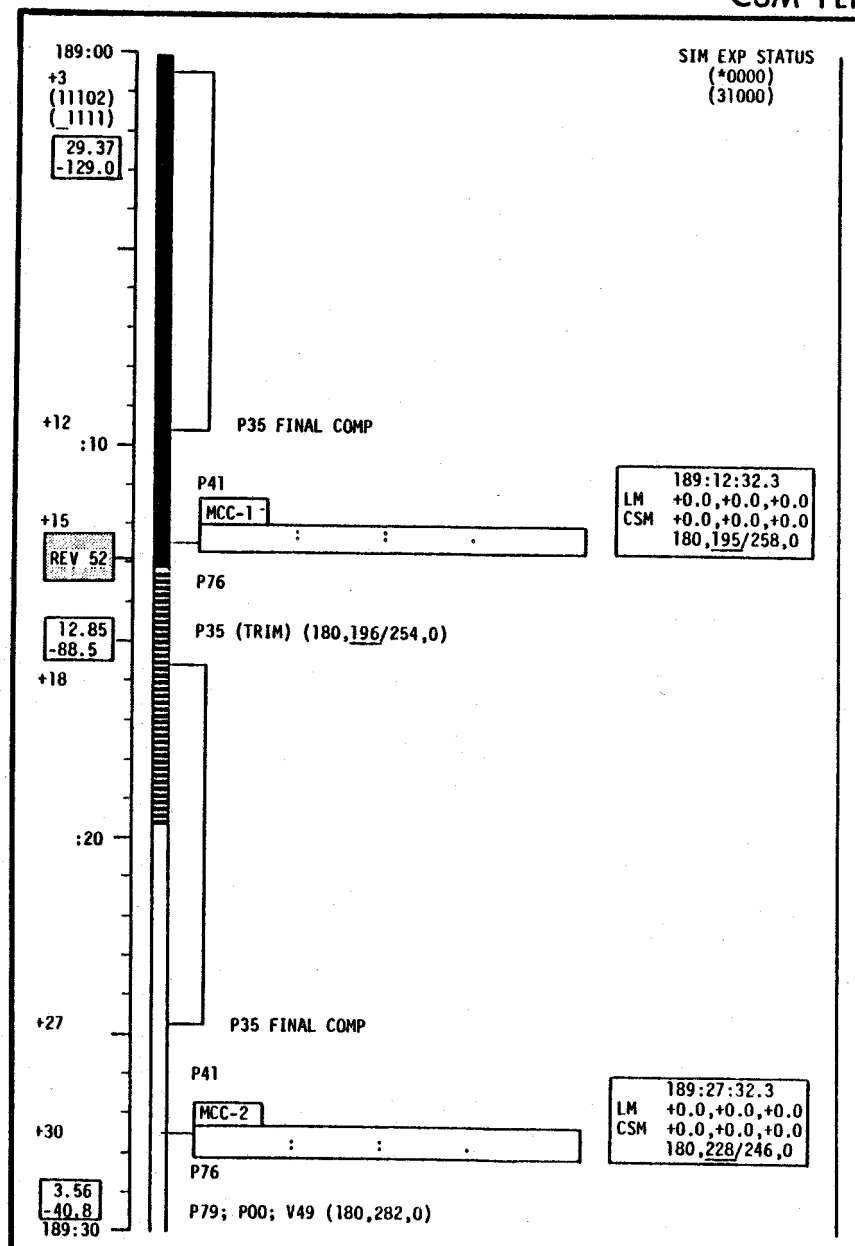
NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	189:00 - 189:30	9/51-52	3-288

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



P35 FINAL COMP				
P76	81	MCC1 ΔV-LV		
	84	LM MCC1 ΔV-LV		
	84	LM MCC1 ΔV-LV		

* *
* IF CSM ACTIVE & N58 TPF ΔV >55 FPS *
* GO TO PRE-BRAKING SPS BURN PROCEDURES *
* (SEE RESCUE BOOK PG 40) *
* *

P35 FINAL COMP				
P76	81	MCC2 ΔV-LV		
	84	LM MCC2 ΔV-LV		
	84	LM MCC2 ΔV-LV		

LM FLIGHT PLAN

MCC-H

1823 CST

189:30 (12012)	CDR	LMP	NOTES
(11002)	SET DAP	CONFIGURE COMM FOR AOS TPI BURN REPORT	
:35	P47 THRUST MONITOR LM BRAKING GATES		189:37 TO 189:43
:40			
:45	STDN		
:50		CSM/SIM BAY PHOTOGRAPHY LM3/DAC	
:55	MNVR TO DOCKING ATT		
190:00	RR - OFF		

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	189:30 - 190:00	9/52	3-290

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

189:30
(11102)
(_1111)
3.56
-40.8

PERFORM PRE-DOCK CHECKLIST

IF CSM ACTIVE:
P47 AT R=1.25 NM
SEC PRPLNT FUEL PRESS (4) - OPEN
V83E
N83E
KEY REL

SIM EXP STATUS
(*0000)
(31000)

ACQ STDN HGA P -35, Y +37 AUTO, NARROW
UTILITY PWR - ON (VERIFY)
DAC/TV - ON
LM PHOTOS WITH DAC/TV

TPF
: : .

189:40:28.1
LM 31.5 (TOTAL)
CSM 33.6 (TOTAL)
180,304/282,0

:40

EMS MODE - STBY
EMS FUNC - OFF
EXT LIGHT RNDZ - OFF

LM STATION KEEP

DAC/TV - OFF

V49 MNVR TO SIM BAY INSPECTION ATTITUDE (189:52)
(319,254,000) OMNI D

STDN

:50

V49 MNVR TO DOCKING ATT (190:00)
(180,282,0) HGA P -35, Y +37

CUE STDN FOR LOGIC ARM
SECS LOGIC (BOTH) - ON (UP)

UPDATE:
GO/NO GO FOR PYRO ARM

190:00
SECS PYRO ARM (2) - ON (UP)

PRE-DOCK CHECKLIST

MAN ATT (3)-RATE CMD (VERIFY)
LIMIT CYCLE - OFF (VERIFY)
ATT DB - MIN
RATE - LOW (VERIFY)
TRANS CONTR PWR - ON (UP)
ROT CONTR PWR DIRECT (BOTH) - MNA/MNB
SC CONT - CMC (VERIFY)
AUTO RCS SEL (16) - MNA/MNB

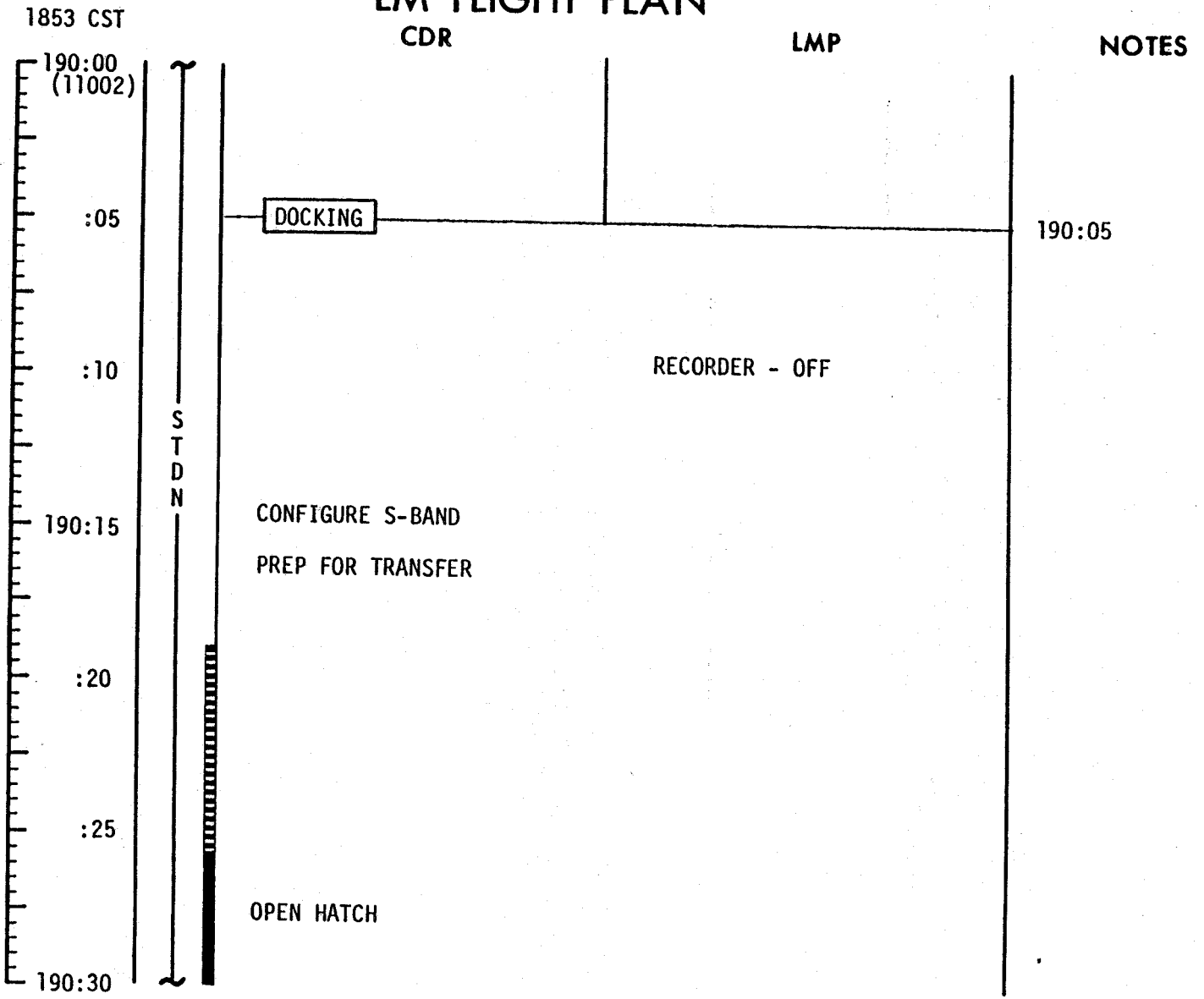
CB DOCK PROBE (2) - CLOSE
PROBE RETRACT (2) - OFF (VERIFY)
PROBE EXTD/REL - RETRACT
PROBE EXTD/REL TB (2) - GRAY (VERIFY)
(IF TB NOT GRAY, GO TO PG S/2-13,E)
CB SECS LOGIC (2) - CLOSE (VERIFY)
CB SECS ARM (2) - CLOSE
EXT LIGHTS RUN/EVA - ON (UP) (VERIFY)
COAS PWR - ON (UP) (VERIFY)

BRAKING GATES

R,NM	R,FPS	RETICLE ANG,DEG	R,FT
1.50	45	.08	9000
1.00	30	.13	6000
.50	20	.26	3000
.25	10	.54	1500
.08	5	1.60	500
.05		2.70	300
.03		4.00	200
.02		8.50	100

LM FLIGHT PLAN

MCC-H



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	190:00 - 190:30	9/52	3-292

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

190:00
(11102)
(_1111)

P47
DAC/TV - ON

SIM EXP STATUS
(*0000)
(31000)

X

T
V

TRANSLATE TO CAPTURE LATCH
PERFORM DOCKING CHECKLIST

DOCKING
: : . 190:05:00

DAC/TV - OFF
P00
V48 (61111)
(61111)
(_1111)
CMC MODE - AUTO

(61111)
(_1111)

RNDZ XPNDR - OFF

:10

V49 MNVR TO LM JETT ATT (190:25)
(020,007,349) HGA P -42, Y 349
S-BAND AUX TV - SCI
DATA SYSTEMS - ON
UV - ON
IR - ON

CMDS:
DSE DUMP

POST-SPS BURN SIM PREP (CUE CARD)

STOW OPTICS

S
T
D
N

PREPARE COUCHES: CDR - 0°, CMP - 0°, LMP - 180°

:20

REMOVE PROBE STRAPS (R5)

CDR - VERIFY FWD DUMP VLV - AUTO
CABIN FANS - ON (UP)

CM/LM PRESSURE EQUALIZATION (LOD) (DECAL)

TUNNEL LIGHTS - ON (UP)
TUNNEL HATCH REMOVAL (DECAL)

VERIFY DOCKING LATCHES ENGAGED (AT LEAST 3, 120° APART)

PROBE REMOVAL (CM SIDE) (DECAL)

DROGUE REMOVAL (DECAL)

190:30

DOCKING CHECKLIST

AT CAPTURE

PROBE EXTD/REL TB (2) - BP (VERIFY)
(IF TB NOT BP, GO TO PG S/2-11, A)
REPORT CAPTURE TO LM
SC CONT - CMC (VERIFY)
CMC MODE - FREE
ALLOW PROBE TO DAMP SC MOTION (10 SEC)
WHEN WITHIN +3° OF DOCKING ATTITUDE
PROBE RETRACT SEC - 1 (PRIM - 2 IF REQD)

AT DOCK LATCH

PROBE EXTD/REL TB (2) - GRAY

AT HARD DOCK

SECS PYRO ARM (2) - SAFE
SECS LOGIC (BOTH) - OFF
CB SECS ARM (2) - OPEN
CB DOCK PROBE (2) - OPEN
THC - LOCKED
RHC - LOCKED
BMAG MODE (3) - RATE 2 (VERIFY)
PROBE EXTD/REL - OFF
PROBE RETRACT (2) - OFF

EXT LIGHTS (2) - OFF
COAS PWR - OFF
AUTO RCS SEL: ROLL (4) - OFF
TRANS CONTR PWR - OFF
ROT CONTR PWR DIRECT (BOTH) - OFF
VHF RANGING - OFF

LM FLIGHT PLAN

MCC-H	1923 CST	CDR	LMP	NOTES
	190:30 (11002)	RECEIVE DROGUE PROBE VACUUM CLEANER TRANSFER LIST		
	:35			0:30
	:40	CABIN CLEANUP		
STDN	190:45	TRANSFER LEVA BAGS RECEIVE DECONTAMINATION BAGS		
	:50			
	:55			
	191:00	EQUIPMENT & SAMPLE TRANSFER		

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	190:30 - 191:00	9/52	3-294

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

190:30
(61111)
(_1111)

TRANSFER TO CDR AT HIS REQUEST:
PROBE
DROGUE
VACUUM CLEANER (ASSEMBLED)
LM TO CM TRANSFER LIST

SIM EXP STATUS
(*0000)
(01011)

:40

STDN

RECEIVE LEVA BAGS

CMDS:
DSE RECORD

TRANSFER TO CDR:
DECONTAMINATION BAGS

:50

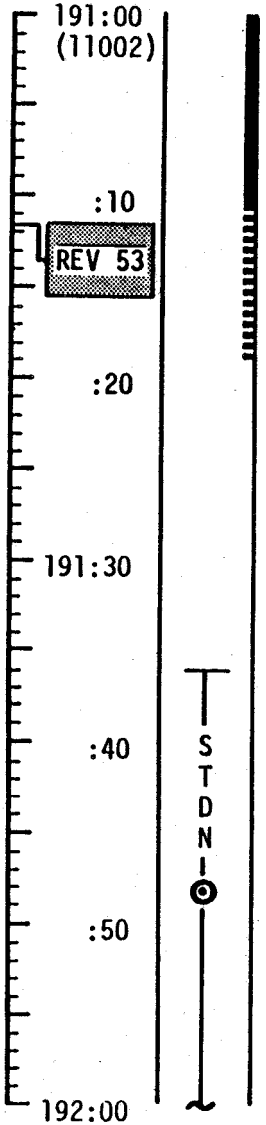
VERIFY DSE TAPE MOTION (HBR/RCD/FWD/CMD RESET)
SET HGA MAN P -42, Y 349 AUTO, NARROW FOR AOS

RECEIVE ITEMS FROM LM AND STOW
(LM TO CM TRANSFER LIST)

191:00

LM FLIGHT PLAN

MCC-H



CDR

TRANSFER SRC'S

RECEIVE B5 & B6

LMP

NOTES

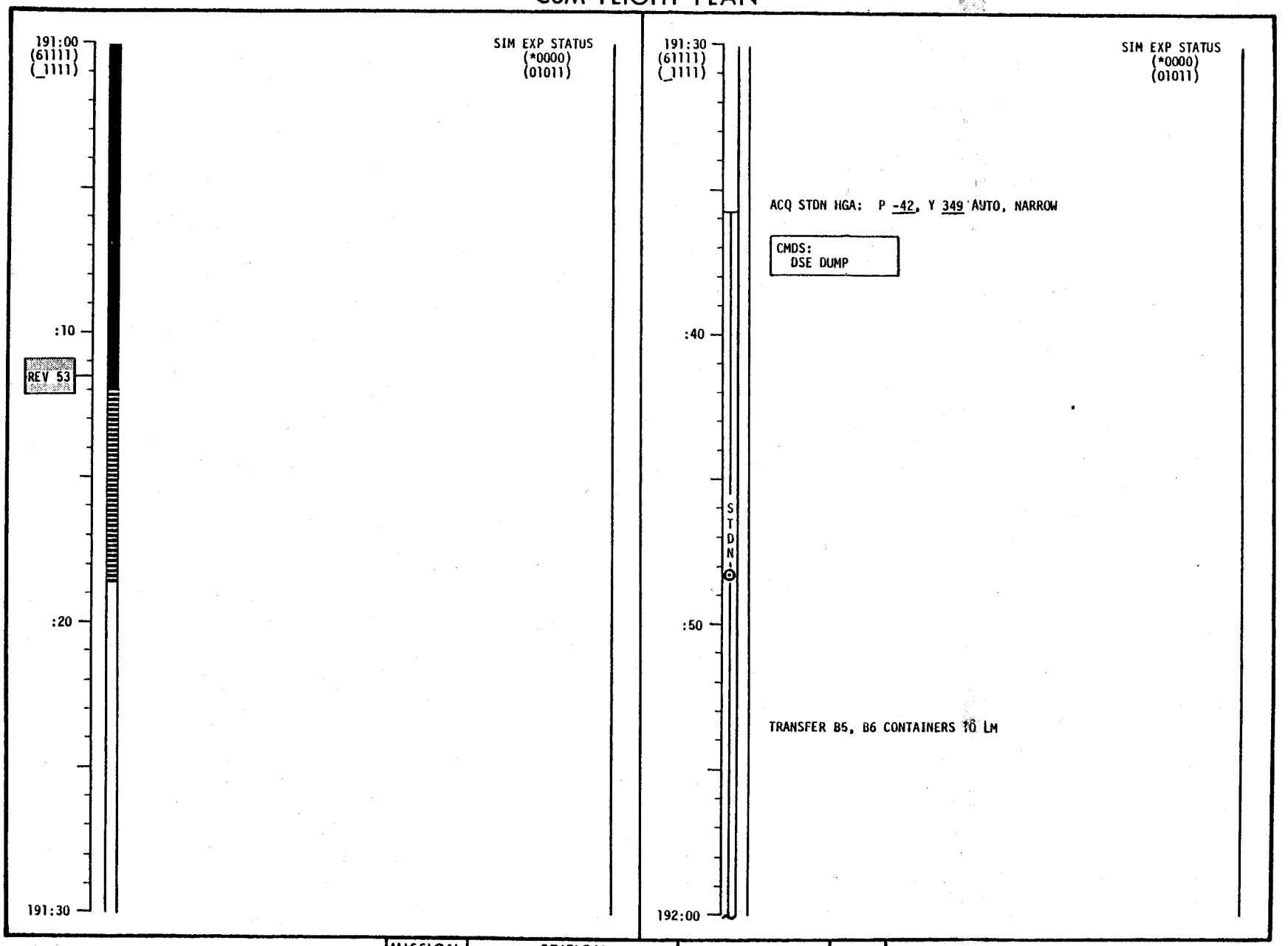
1:00

1:30

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	191:00 - 192:00	9/52-53	3-296

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-297

LM FLIGHT PLAN

MCC-H	2053 CST	CDR	LMP	NOTES
UPLINK TO LM LM S.V. (TIG-10) P30 TARGET LOAD P99 LM DEORBIT	192:00 (11002)			2:00
UPDATE TO LM DAP LOAD (WEIGHTS) DEORBIT BURN PAD	:10			
	(12021)	SET DAP P30 TARGET PGNS		
	:20		CONFIGURE AGS	
	192:30			2:30
	:40			
GO/NO-GO FOR LM CLOSEOUT		CONFIGURE LM FOR JETTISON		
	:50		CONFIGURE VHF FOR CLOSEOUT	
		TRANSFER JETTISON ITEMS		
	193:00			

STDN

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	192:00 - 193:00	9/53	3-298

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

192:00
(61111)
(_1111)

SIM EXP STATUS
(*0000)
(01011)

:10

UPDATE:
DAP LOAD - UPDATE WEIGHTS
LM JETTISON PAD
FLIGHT PLAN

V48 LOAD CSM & LM WEIGHTS

CSM WT	+					
LM WT	+					

UPLINK:
CSM S.V. (CSM SEP-10)

:20
(61101)
(_1111)

V48 (61101)
(_1111)
CONTINUE EQUIP & SAMPLE TRANSFER

LM JETTISON PAD						
+	0	0				HRS GETI
+	0	0	0			MIN N33
+	0	0		.		SEC
X	X	X				R (020)N22
X	X	X				P (007)
X	X	X				Y (349)

192:30

192:30
(61101)
(_1111)

SIM EXP STATUS
(*0000)
(01011)

:40

UPDATE:
GO/NO-GO FOR LM CLOSEOUT

CMDS:
DSE RECORD

:50

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

TRANSFER CM JETTSION ITEMS TO LM

NOTICE

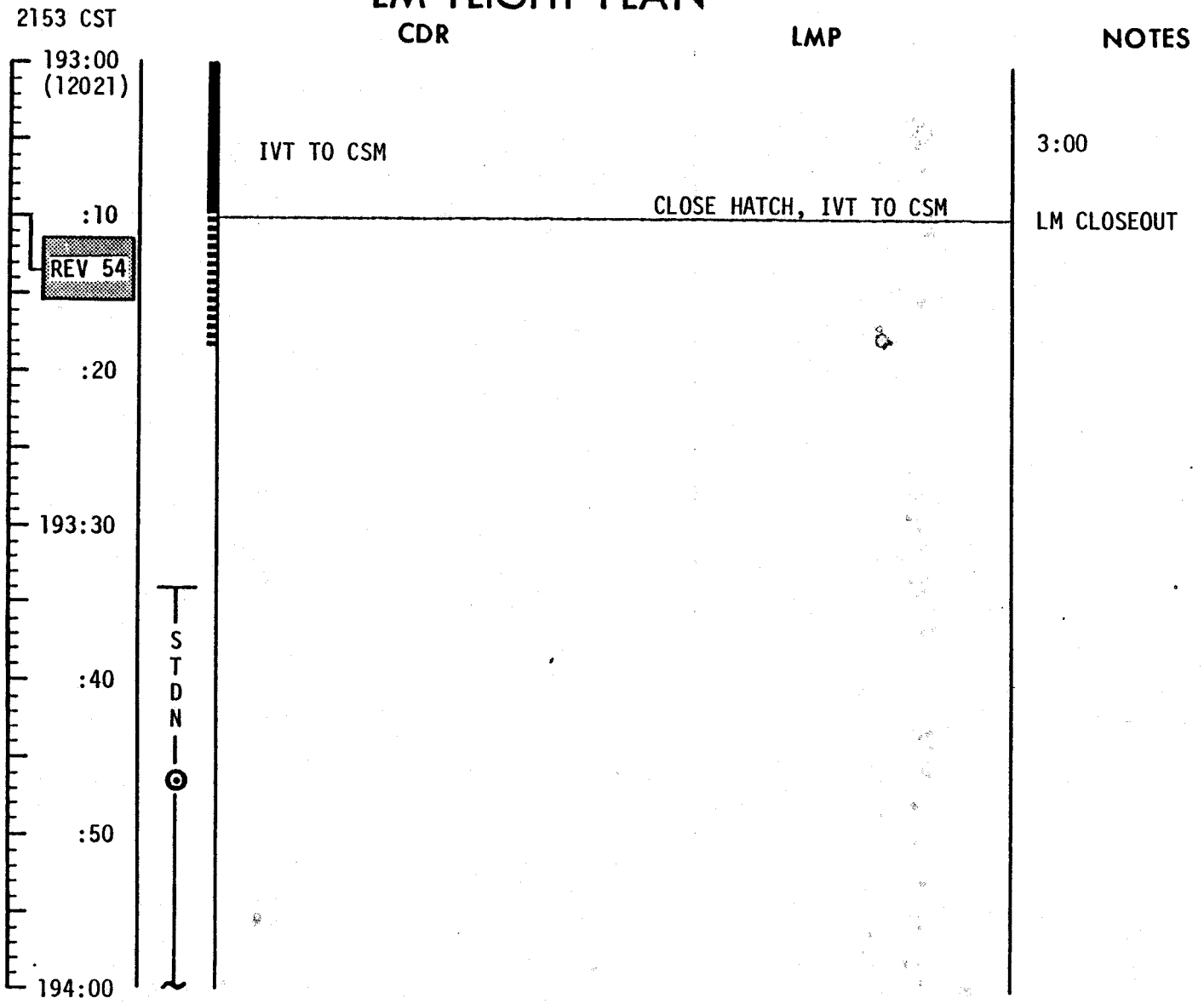
NO URINE/FECES
ALL OPEN FOOD MUST
BE TREATED AND
STORED IN BETA BAG

193:00

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-299

LM FLIGHT PLAN

MCC-H



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	193:00 - 194:00	9/53-54	3-300

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

193:00
(61101)
(_1111)

SIM EXP STATUS
(*0000)
(01011)

CDR & LMP IVT TO CSM
VHF AM B - OFF (CTR)

:10

REV 54

LMP - CLOSE LM HATCH

STOW INTERCONNECTS - A8
SUIT FLOW VALVE (3) - SUIT FULL FLOW
HATCH INSTALLATION (DECAL)

HATCH INTEGRITY CHECK (DECAL)

:20

CONFIGURE CAMERA FOR LM JETTISON PHOTOS
CM2/DAC/18/CEX - BRKT,MIR(T8,1/250,7) 12 fps (50% MAG)

MAG (DD) _____, MAG % _____
UTILITY PWR - ON

193:30

193:30
(61101)
(_1111)

P30; N33: LM JETTISON TIG +5 MIN
N81 (+2.0, +0.0, +0.0)

SIM EXP STATUS
(*0000)
(01011)

LM PWR - OFF (VERIFY)
cb SECS PYRO ARM (2) - CLOSE

ACQ STDN HGA: P -42, Y 349 REACQ, NARROW

CMDS:
DSE DUMP

CUE STDN FOR LOGIC ARM
SECS LOGIC (2) - ON (UP)

REPORT: LM/CM ΔP
DON HELMETS AND GLOVES

:40

SUIT CKT INTEGRITY CHECK (DECAL)

STDN

PRE-JETTISON CHECKLIST

BMAG MODE (3) - ATT 1/RATE 2
RATE - LOW
ATT DB - MIN
SC CONT - SCS
EMS FUNC - ΔV
THC PWR - ON
RHC PWR DIR - MNA/MNB
THC - ARMED
RHC - ARMED
cb CSM/LM FINAL SEP (2) - CLOSE

:50

LOAD ΔV IN EMS TO +100.0
CHECK NULL BIAS
GDC ALIGN

UPDATE:
GO/NO-GO FOR PYRO ARM

PRE-JETTISON CHECKLIST
V48 (11102)
(11102)
(_1111)

SECS PYRO ARM (2) - ARM

P47 (JETT -1 MIN)
EMS MODE - NORMAL (JETT -30 SEC)
DAC - ON (JETT -25 SEC)

LM JETTISON	193:58:30
___:___:___.___	(020,090/007.349)

HOLD P47 FOR STDN
P00

194:00

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-301

CSM FLIGHT PLAN

194:00 (11102) (_1111)

PRE-SEPARATION CHECKLIST

SIM EXP STATUS
(*0000)
(01011)

CSM SEPARATION
____:____:____._____

TIG: 194:03:30
BT: 12.6 SECS
ΔVT: 2.0 FPS
ORBIT: 63.9x62.3NM

HOLD N85 FOR STDN
P00

EMS FUNC - OFF
THC PWR - OFF
RHC PWR DIR - OFF
THC LOCKED
RHC LOCKED

INHIBIT ALL JETS EXCEPT A1 & C2 OR D1 & B2, A3,C4,B3,D4
HF ANTENNA 1 - EXTEND (OFF ON STDN CUE)
HF ANTENNA 2 - EXTEND (OFF ON STDN CUE)
V44 (SET LUNAR SURFACE FLAG)
V48 (11101)
(_1111)
P20 OPT 5 (-X FWD SIM ATT) (194:30)
N78 (+090.00)
(+052.25)
(+000.00)
N79 (+002.50)
HGA P -4, Y 316
DOFF PGA'S, HELMETS AND GLOVES
UNSTOW BUSS (CMP'S) FROM PGA BAG
ZIP SUITS & INSTALL ELECTRICAL COVERS PRIOR TO STOWING (PGA BAG)
CDR & LMP INSTALL LCG PLUGS (LH TSB TOP POCKET)
INSTALL NECK RING COVERS (PGA BAG)
DUMP UCTA'S OVERBOARD
CDR & LMP DUMP URINE OVERBOARD
(VIA UTS-R11) UNTIL 197:00
CMP RESUME COLLECTION IN BUSS
STOW UCTAS (PGA BAG)
TRANSFER PRD'S TO CWG'S

:10

(11101)
(_1111)
(P20)
(2.5°DB)

STDN

:20

DOFF PGA'S

UPLINK:
CSM S.V. & V66

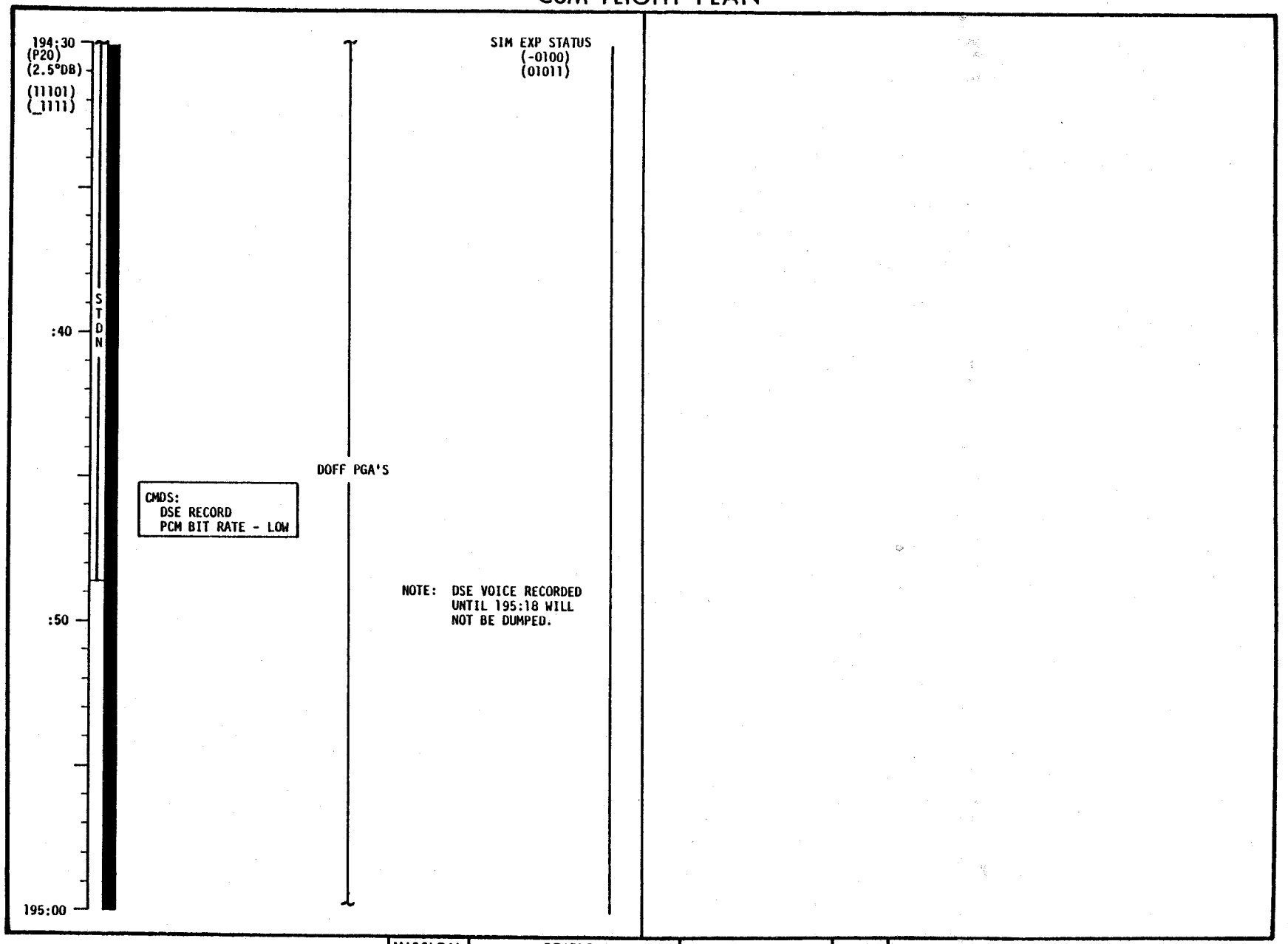
194:30 CDR, CMP DOFF BIOMED HARNESS

PRE-SEPARATION CHECKLIST

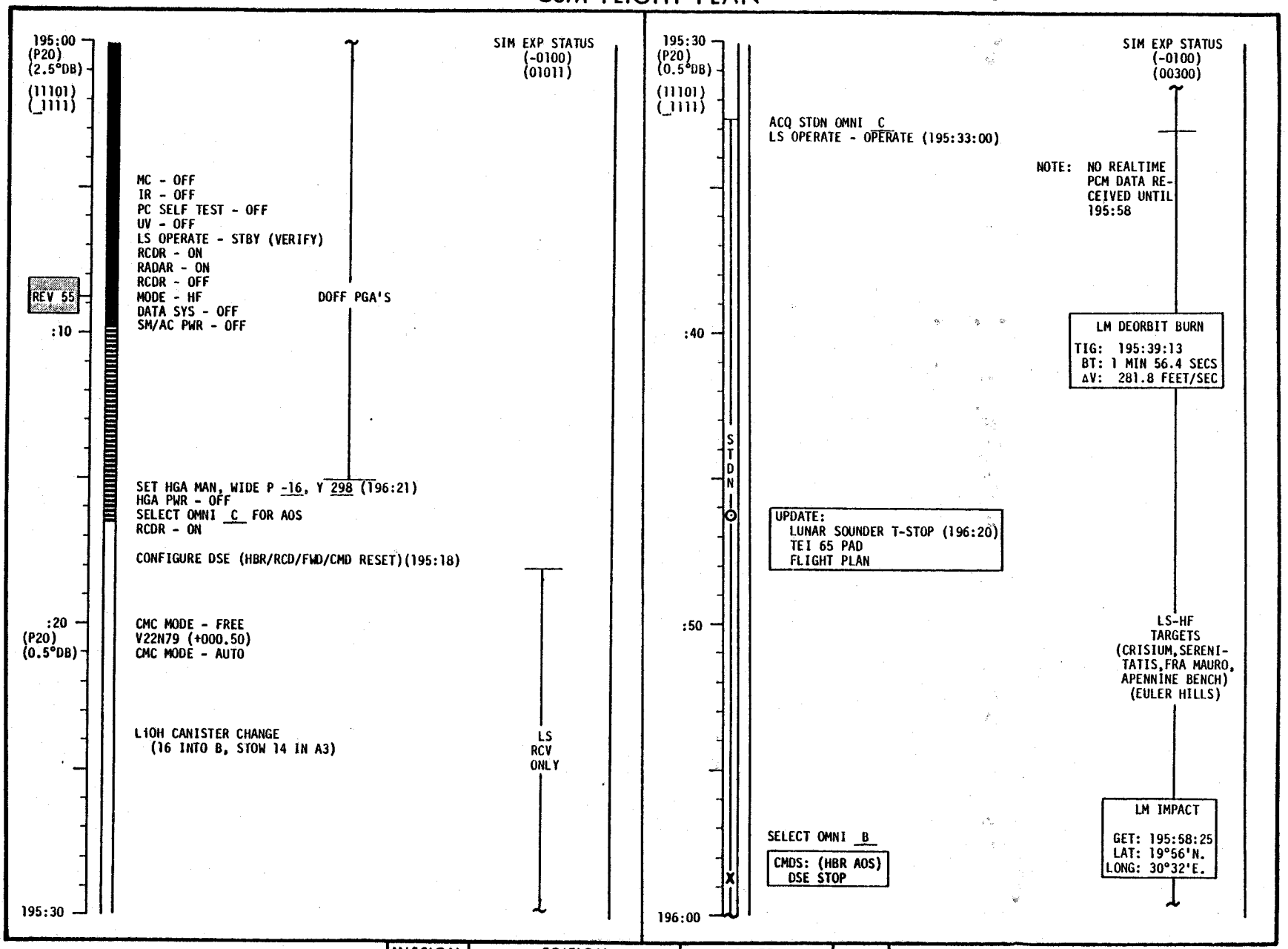
EMS MODE - STBY
SC CONT - CMC
BMAG MODE (3) - RATE 2
V49 MNVR RIGHT 90°
(110,007,349)
DAC - OFF
AUTO RCS SEL (16) - MNA/MNB
SECS PYRO ARM (2) - SAFE
SECS LOGIC (2) - OFF
cb SECS PYRO ARM (2) - OPEN
cb CSM/LM FINAL SEP (2) - OPEN
P41 (BYPASS MNVR)
EMS MODE - NORMAL (SEP -30 SECS)

NOTE:
LM JETTISON MAY BE
DONE IN LM JETTISON
ATTITUDE UNTIL LOS (194:48)

CSM FLIGHT PLAN



CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-304

CSM FLIGHT PLAN

196:00
(P20)
(0.5°DB)
(11101)
(_1111)

STDN

:10

:20

196:30

SIM EXP STATUS
(-0100)
(00100)

LS-HF
TARGETS
(CRISIUM,SERENI-
TATIS,FRA MAURO,
APENNINE BENCH)
(EULER HILLS)

LS OPERATE - STBY (T STOP) (__ __ __:__ __:__ __)
DATA SYS - ON
HGA PWR - ON
ACQ STDN HGA P -16, Y 298 AUTO, NARROW
SM/AC PWR - ON
MC - STBY
RCDR - OFF
RADAR - OFF
IR - ON
PC SELF TEST - HTRS
UV - ON

H_2 PURGE LINE HEATERS - ON

196:30
(P20)
(2.5°DB)
(11101)
(_1111)

STDN

:40

:50

197:00

SIM EXP STATUS
(-0100)
(01011)

V22N79 (+002.50)

UPLINK:
JET-ON MONITOR LOADS

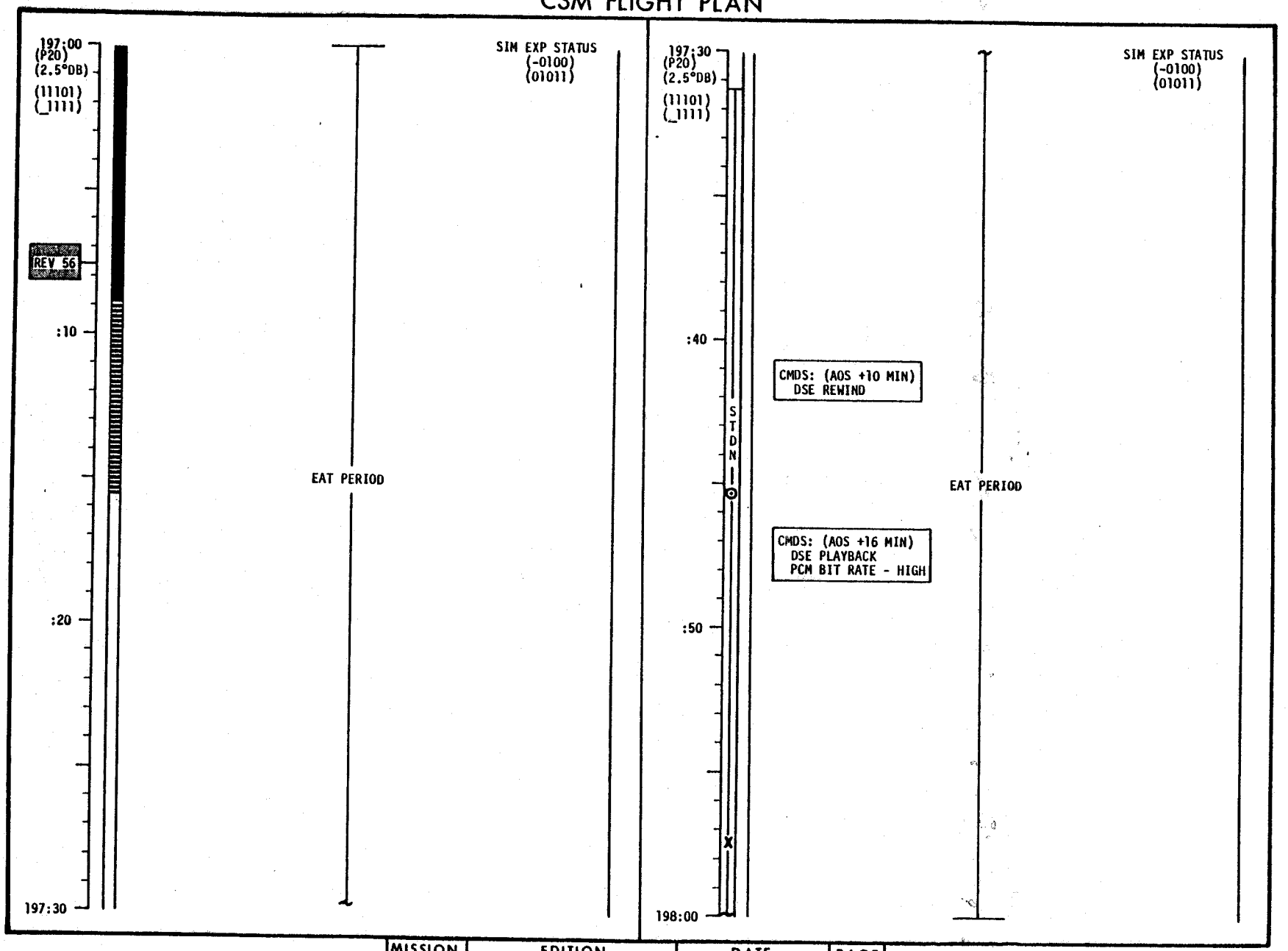
CMDS:
DSE RECORD
PCM BIT RATE - LOW

VERIFY DSE TAPE MOTION (LBR/RCD/FWD/CMD RESET)(AOS +73 MIN)
SET HGA MAN P 25, Y 195 REACQ, NARROW FOR AOS
H_2 & O_2 FUEL CELL PURGE
WASTE WATER DUMP

NOTE: DSE VOICE RECORDED
THIS BACKSIDE WILL
NOT BE DUMPED

TERMINATE WASTE WATER DUMP AT 10%
H_2 PURGE LINE HEATERS - OFF
CDR & LMP COLLECT URINE IN UTS'S UNTIL 208:00

CSM FLIGHT PLAN



CSM FLIGHT PLAN

198:00
(P20)
(2.5°DB)
(11101)
(_1111)

IR COVER - OPEN
UV COVER - OPEN

CSM SYSTEMS CHECKLIST

PRE-SLEEP CHECKLIST PAGE S/1-29

SIM EXP STATUS
(-0100)
(01011)

FILM MAGS REQUIRED FOR NEXT DAY:

EL: NN, QQ, RR

STDN

:10

:20

198:30

198:30
(P20)
(2.5°DB)
(11101)
(_1111)

CMDS: (AOS +60 MIN)
DSE REWIND

CMDS: (AOS +68 MIN)
DSE RECORD

STDN

:40

:50

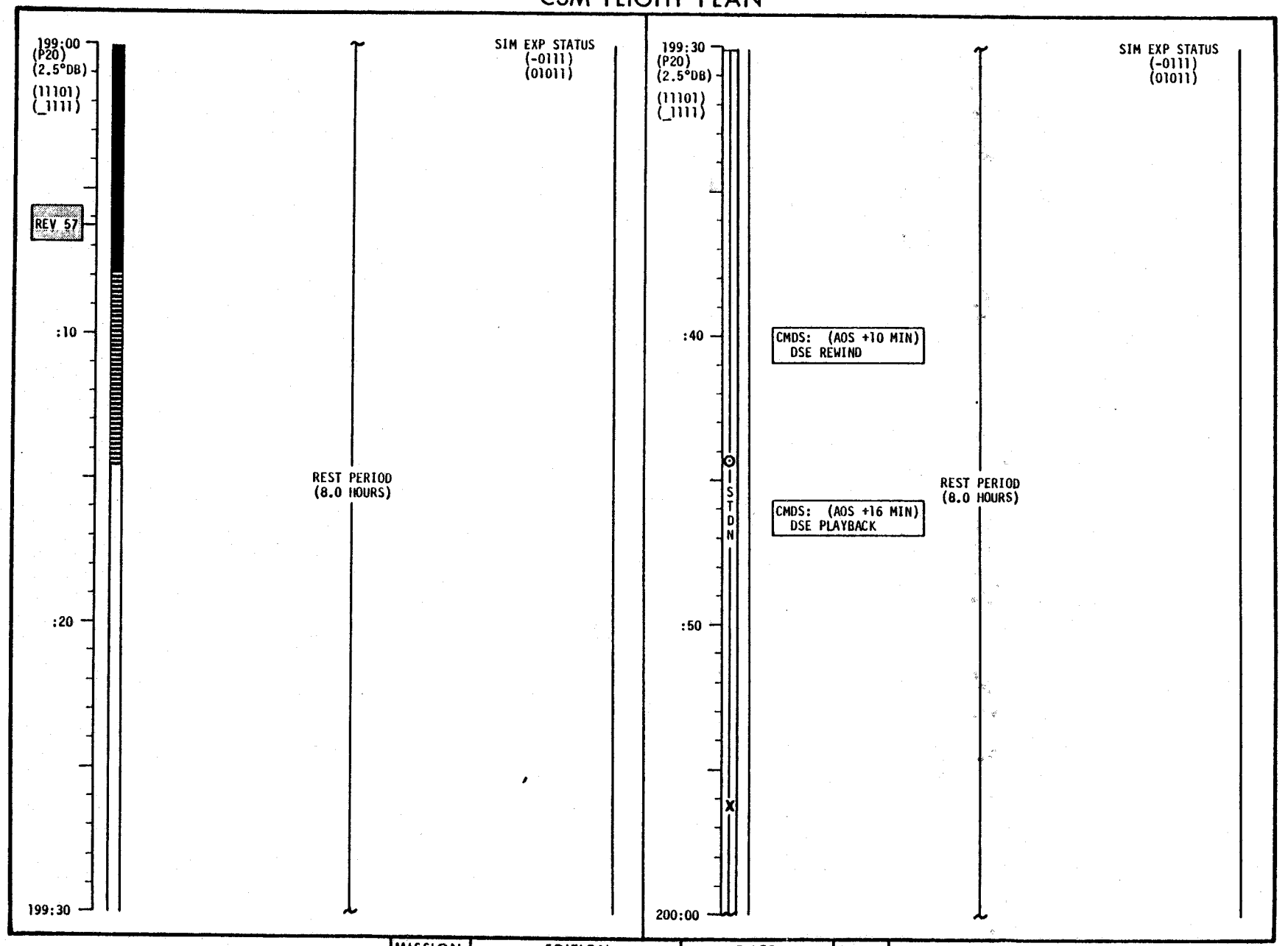
199:00

REST PERIOD
(8.0 HOURS)

SIM EXP STATUS
(-0111)
(01011)

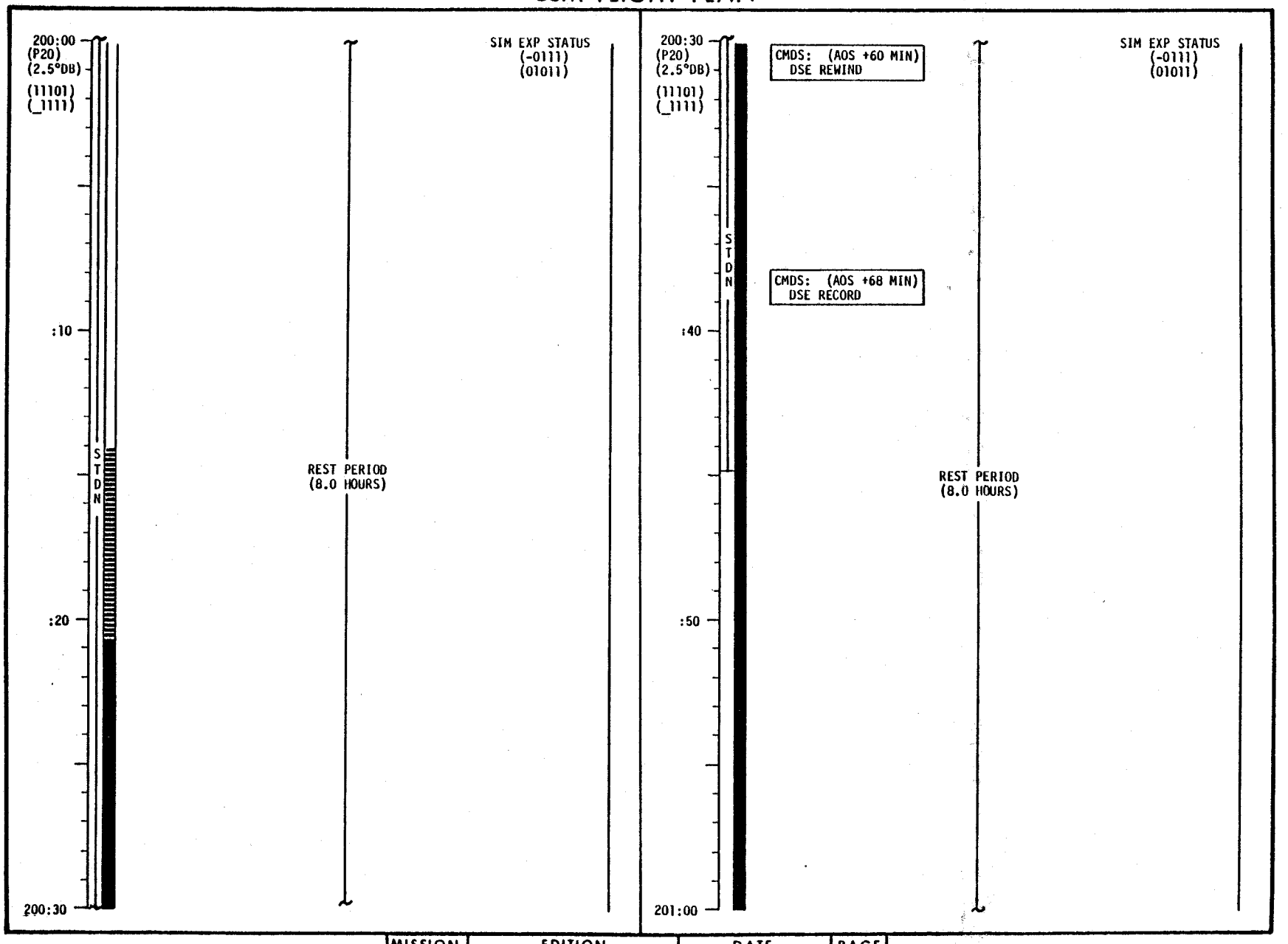
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-307

CSM FLIGHT PLAN

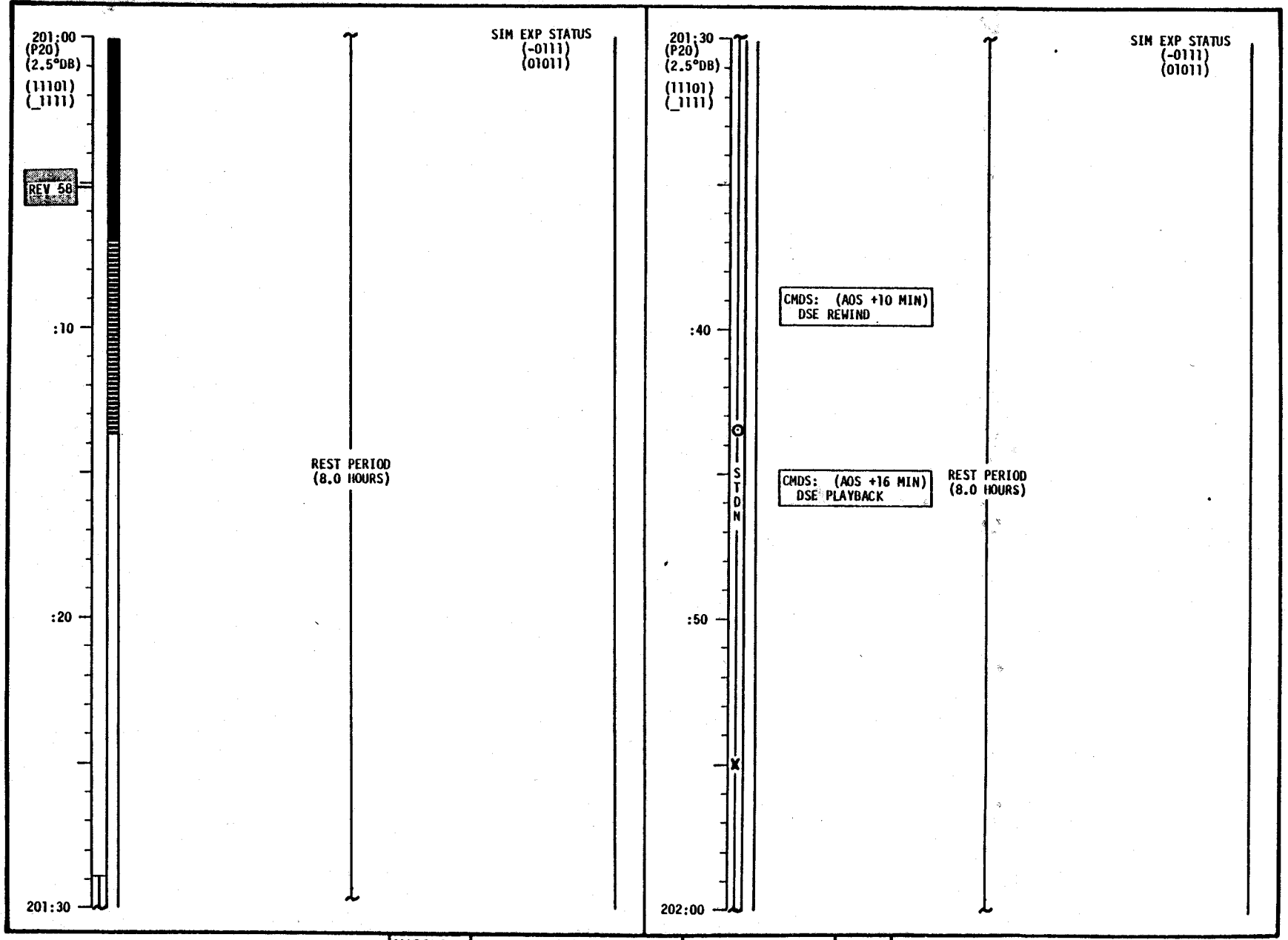


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-308

CSM FLIGHT PLAN

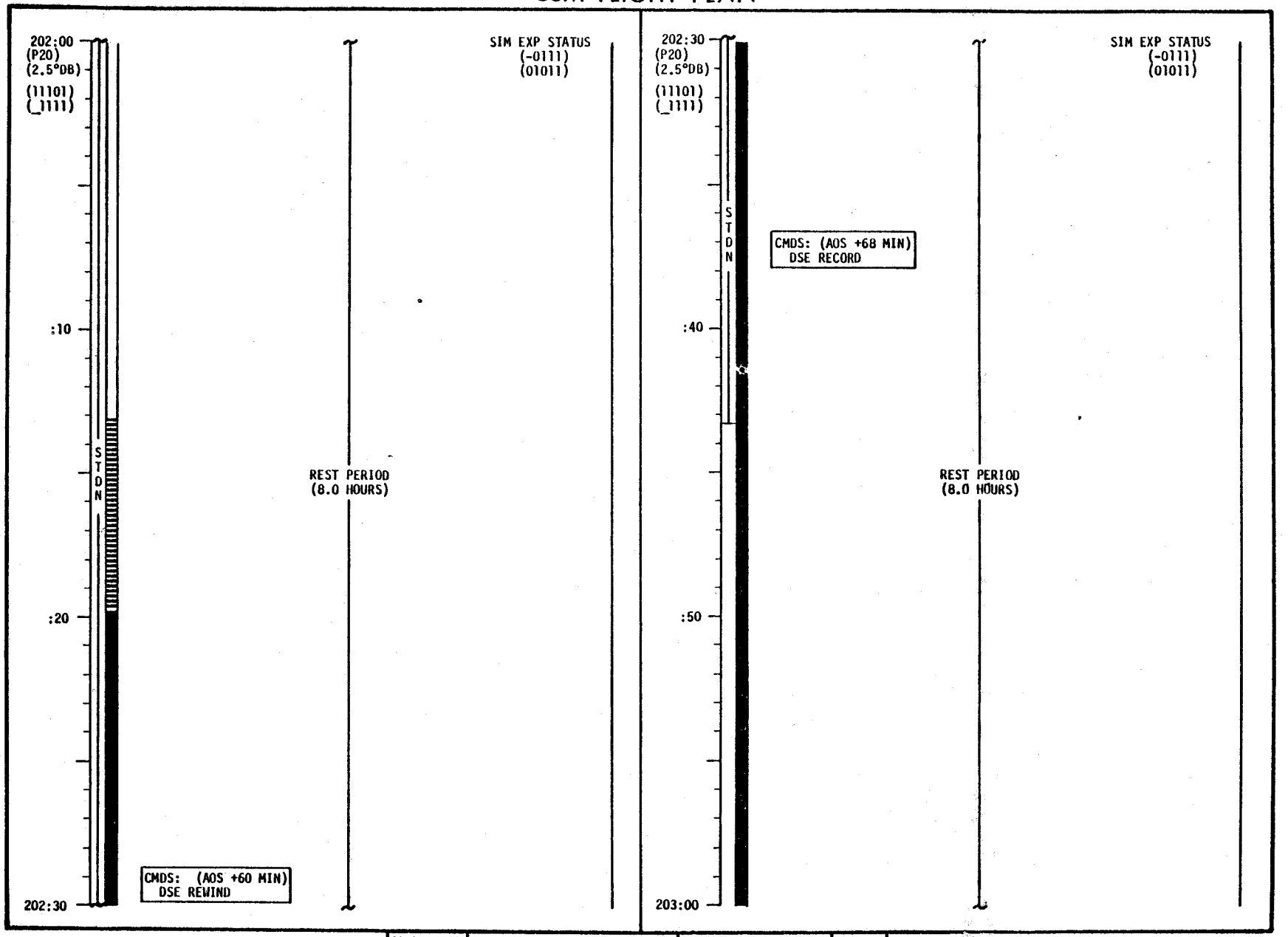


CSM FLIGHT PLAN



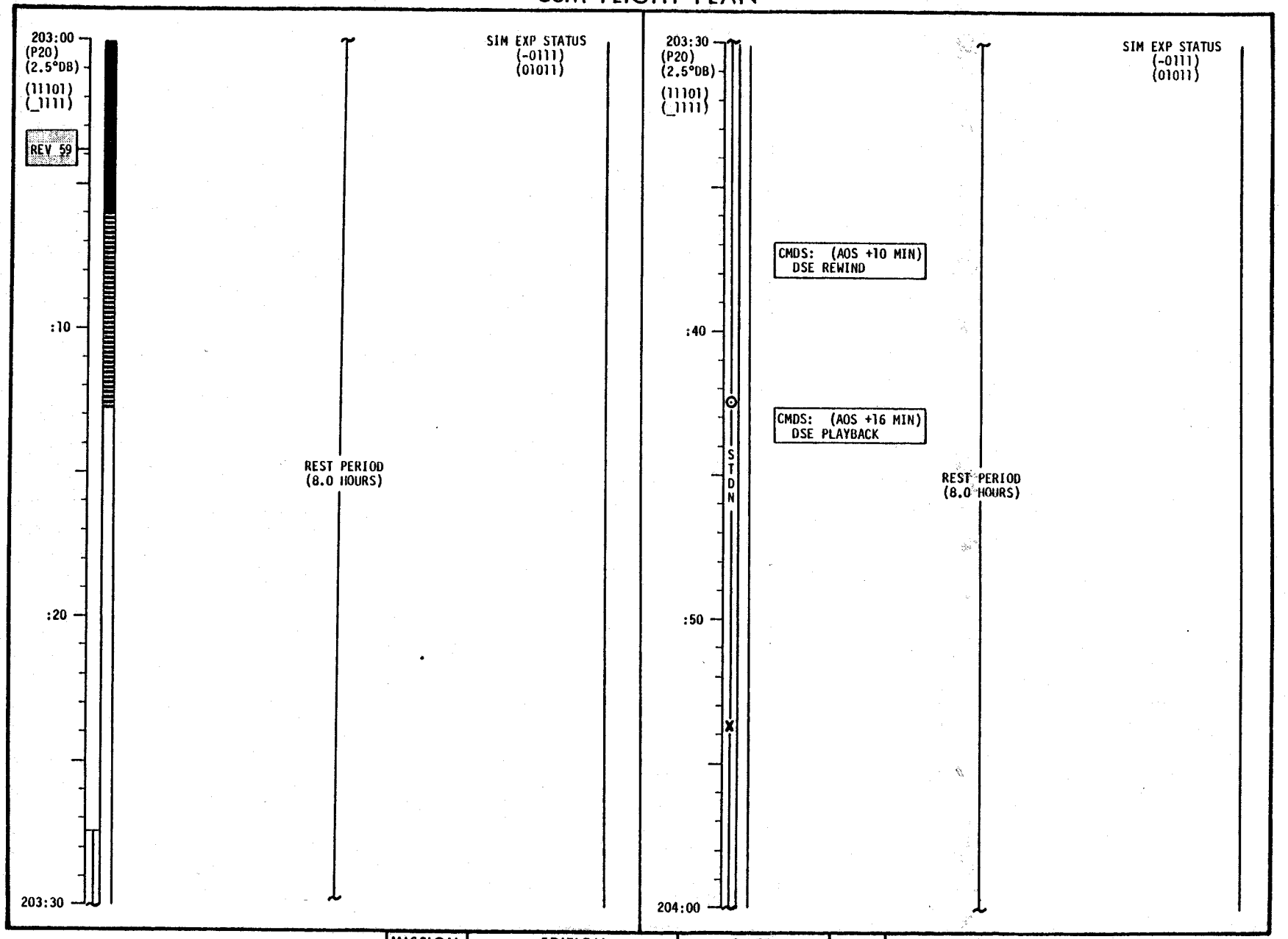
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-310

CSM FLIGHT PLAN

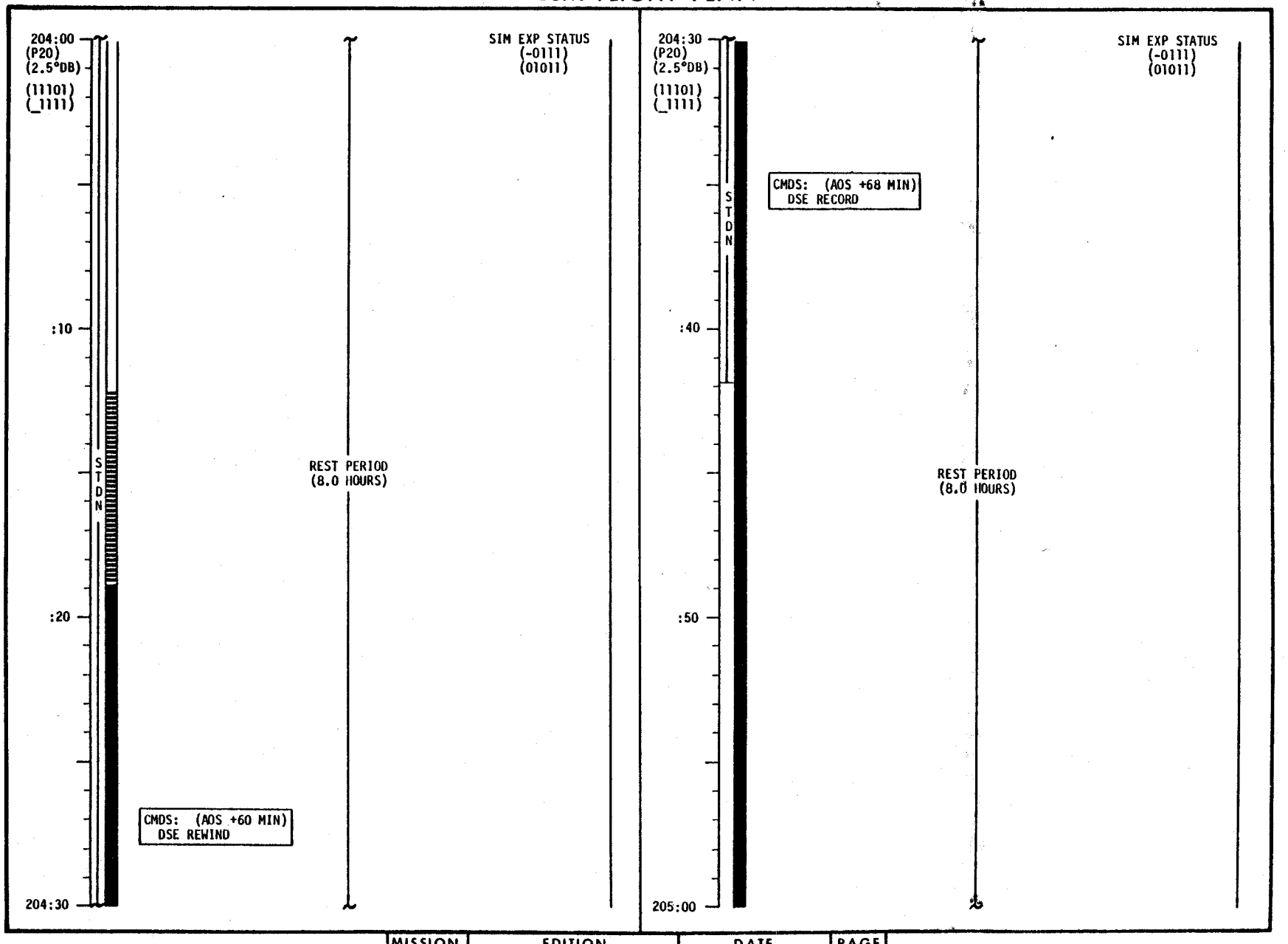


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-311

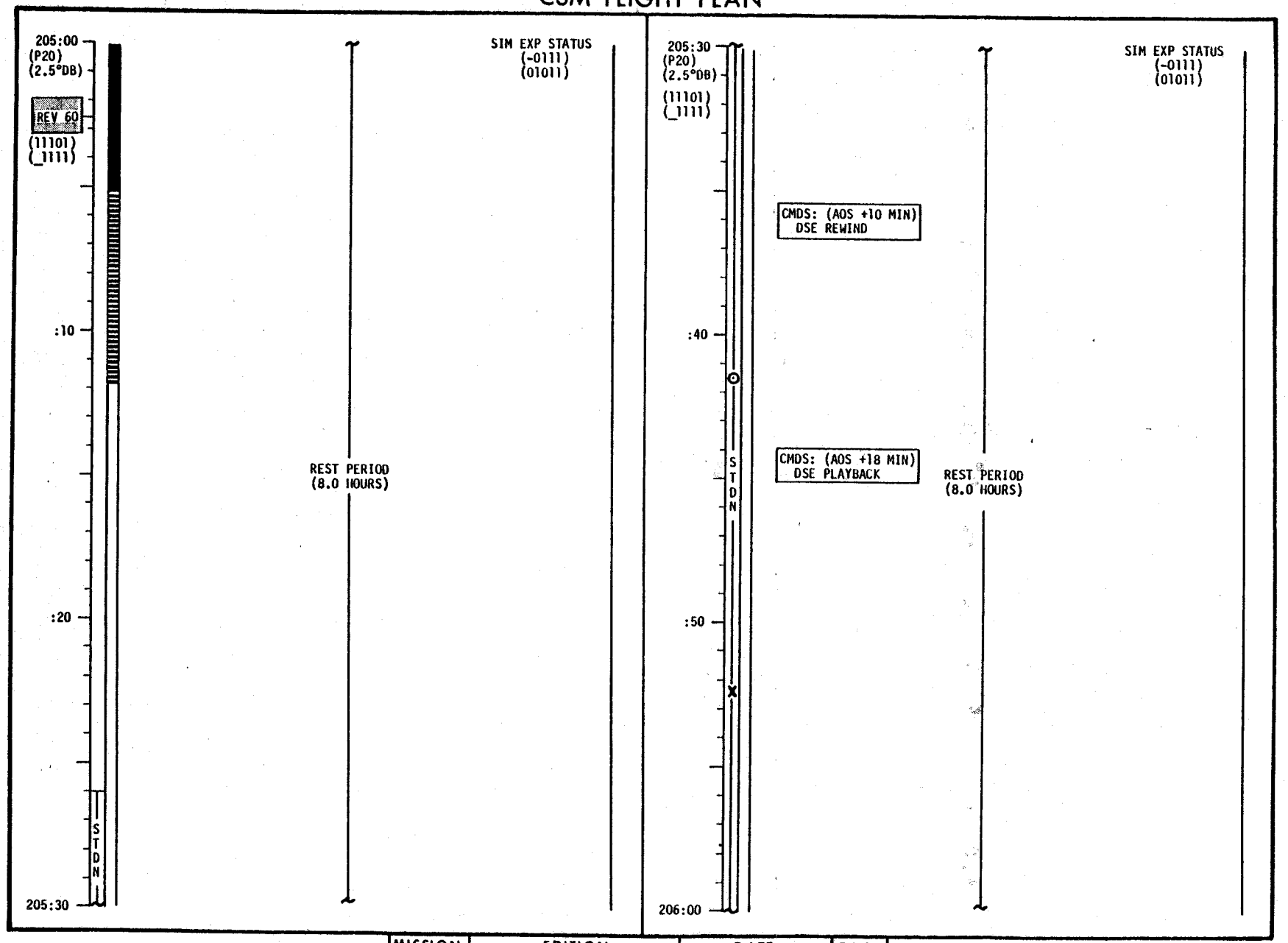
CSM FLIGHT PLAN



CSM FLIGHT PLAN

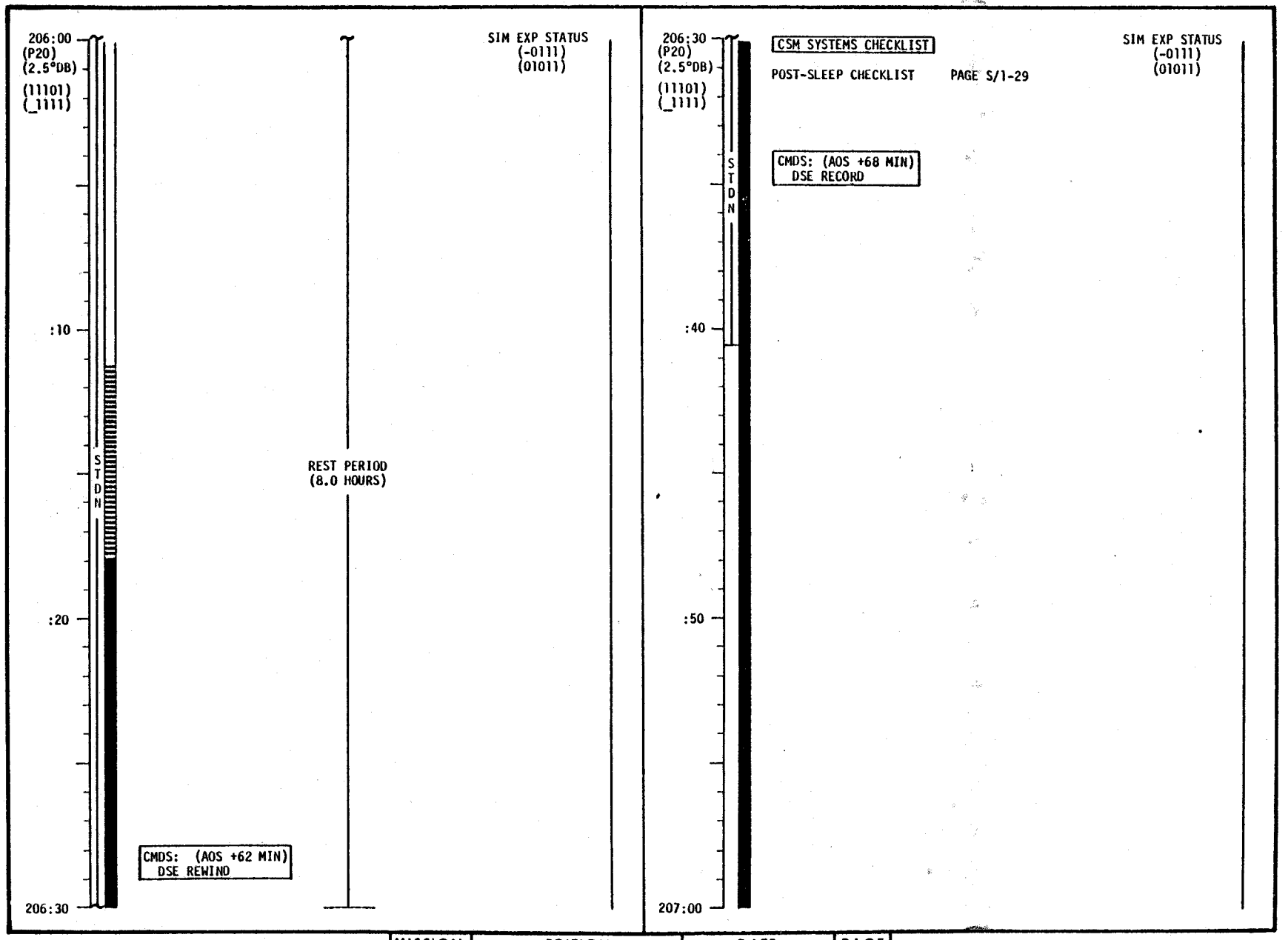


CSM FLIGHT PLAN

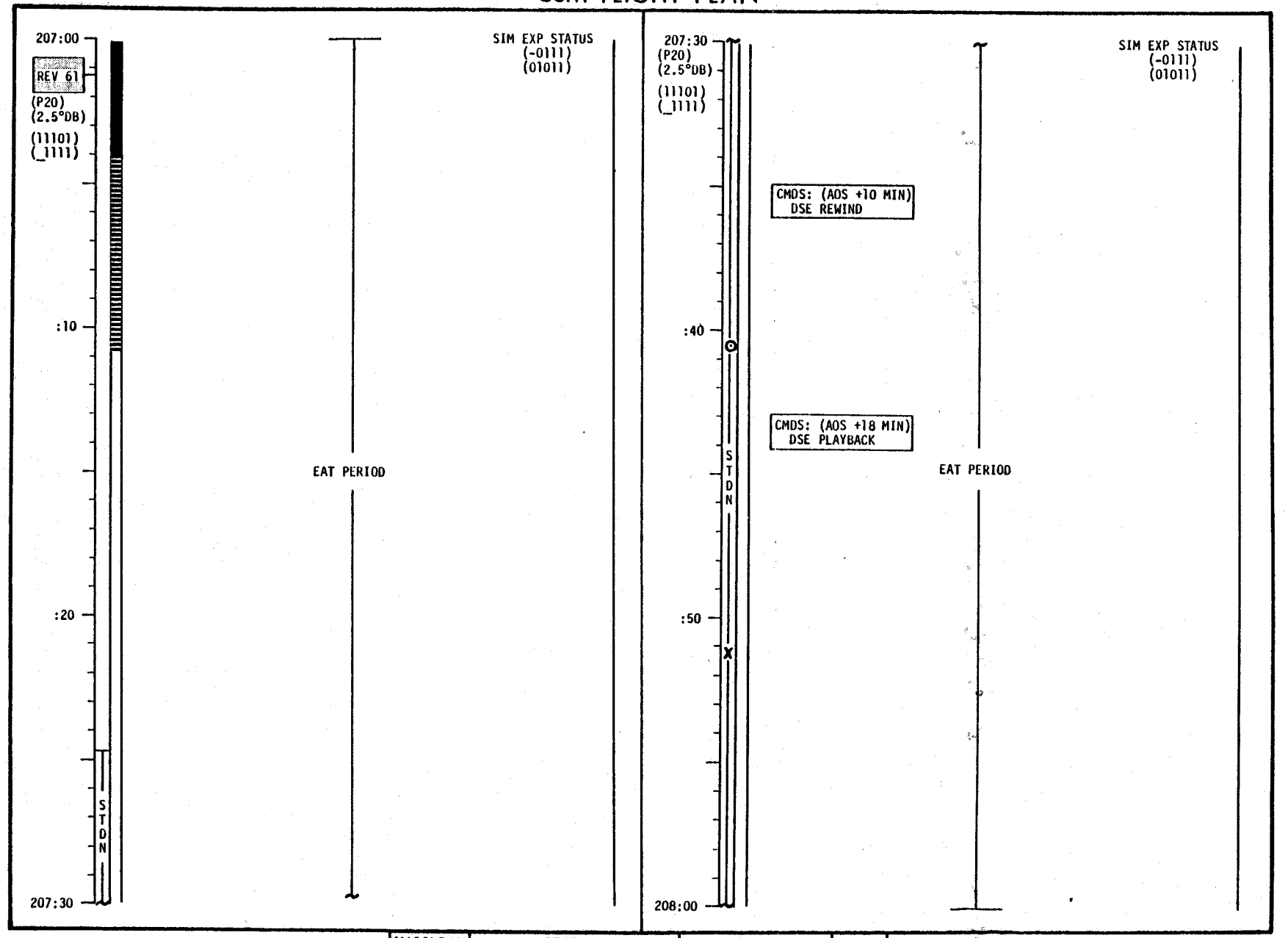


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-314

CSM FLIGHT PLAN



CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-316

CSM FLIGHT PLAN

208:00
(P20)
(2.5°DB)
(11101)
(_1111)

UPDATE:
FLIGHT PLAN
SOLAR CORONA PHOTO PAD
PAN CAMERA PHOTO PAD (209:15)

SIM EXP STATUS
(-0111)
(01011)

START NEW URINE COLLECTION PERIOD (ALL)
CHARGE BATTERY B
PC: MODE - STBY
PWR - ON

CSM EXP/EVA CHECKLIST

SOLAR CORONA (SUNSET) PAGE X/2-7
MAG (QQ)

PC: PWR - OFF (CUE)

:10

SOLAR CORONA (SUNSET)

SOLAR CORONA PHOTO PAD (SS)
T-START: ___ ___ ___ ___ ___ ___
(SS - 5 MIN)

S
T
D
N

:20

IR COVER - CLOSE
UV COVER - CLOSE
SAMPLE CMP BUSS (1) - STOW SAMPLE (1)
DUMP URINE FROM BUSS (1) AND UTS (CDR'S AND LMP'S)

CMDS: (AOS +62 MIN)
DSE REWIND

TERMINATE JET-ON MONITOR
P30
P20
V21N26 (00000)

208:30

208:30
(P20)
(2.5°DB)
(11101)
(_1111)

SIM EXP STATUS
(-0100)
(01011)

S
T
D
N

CMDS: (AOS +69 MIN)
DSE RECORD

LiOH CANISTER CHANGE
(17 INTO A, STOW 15 IN A3)

VERIFY DSE TAPE MOTION (HBR/RCD/FWD/CMD RESET)
SET HGA MAN, WIDE P -10, Y 25 FOR AOS
CMC MODE - FREE
P00
V49 MNVR TO UV SCAN ATT (208:49)
(003,222,000)
CMC MODE - AUTO
UV COVER - OPEN

:40
(11101)
(_1111)

:50
(P20)
(0.5°DB)

P20 OPT 5 (+X FWD SIM ATT)(209:05)
N78 (+090.00)
(+052.25)
(+180.00)
N79 (+000.50)

CONFIGURE CAMERA: (TERMINATOR PHOTOS)
CM3/EL/80/VHBW (f5.6,1/250,∞) 18 FR

MAG (RR) ____, FR # ____

209:00

CSM FLIGHT PLAN

209:00
REV 62
(P20)
(0.5°DB)
(11101)
(_1111)

IR COVER - OPEN
MC/LA COVER - OPEN
MC - EXTD
PC - STBY
STEREO
PWR

LA - ON
IMAGE MTN - ON
MC - ON (163°E)
IMAGE MTN - INCR (BP +4 STEPS)/ON

SIM EXP STATUS
(+1101)
(01011)

TERMINATOR PHOTOS
GAGRIN (P62A - D3)
CM3/EL/80/VHBW (f5.6,1/250,∞) 18 FR

:10

RECORD FR #____

PREPARE FOR ORBITAL SCIENCE VISUALS
MARE SMITHII (CM5)
LDG SITE (CM3)

PC - OPR (T START)

PAN CAMERA PHOTO PAD
T-START: __ __ __:__ __:__ __
T-STOP: __ __ __:__ __:__ __
(133°E TO 90°E)

:20

ACQ STDN HGA: MAN, WIDE P -10, Y 25
S-BD ANT IND > 1/2 SCALE HGA: REACQ, NARROW

CMDS: (AOS +2 MIN)
DSE REWIND

STDN

PC - STBY (T STOP)

ORBITAL SCIENCE VISUAL
MARE SMITHII (CM5)

209:30

209:30
(P20)
(0.5°DB)
(11101)
(_1111)

CUE: (~AOS +7 MIN)
HGA AUTO

SIM EXP STATUS
(+1111)
(12011)

CMDS: (AOS +10 MIN)
DSE PLAYBACK

NOTE: LIFT-OFF TIME WILL BE UPDATED IF THE TIME OF REV 66 MERIDIAN CROSSING DIFFERS MORE THAN +2 MIN FROM 216:55:05

PC - MONO

UPLINK:
CSM S.V. & V66
LIFT-OFF TIME (IF REQD)

SYNCHRONIZE MISSION TIMER TO CMC CLOCK (IF REQD)
V05N01E,1706E (T EPHEM VERIFICATION BY STDN, COPY FROM DSKY ON STDN CUE)(COPY T EPHEM IN F.P. SUPPLEMENT)

T EPHEM UPDATE

OID	LOAD B
03	__ __ __ __ __
04	__ __ __ __ __
05	__ __ __ __ __

:40

UPDATE:
FLIGHT PLAN
CONSUMABLES STATUS
SIM EXP STATUS
PAN CAMERA PHOTO PAD

STDN

PAN CAMERA PHOTO PAD
T-START: __ __ __:__ __:__ __
T-STOP: __ __ __:__ __:__ __
(33°E TO 27°E)

PC - OPR (T START)

ORBITAL SCIENCE VISUAL

LANDING SITE (CM3)

:50

PC - STBY (T STOP)

PC - OFF (CUE)

CONFIGURE CAMERA (TERMINATOR PHOTOS)
CM3/EL/250/VHBW (f32,1/500,∞) 24 FR

MAG (RR) ____, FR # ____

210:00

CSM FLIGHT PLAN

210:00
(P20)
(0.5°DB)
(11101)
(_1111)

STDN

SIM EXP STATUS
(+1111)
(02011)

TERMINATOR PHOTOS
NORTH (P62B - D13)
CM3/EL/250/VHBW (f32,1/500,∞) 24 FR

:10

RECORD FR # ____

:20

P52 IMU REALIGN

N71:___ ___,___ ___

N05:___ ___ ___•___ ___

N93:

X ___ ___•___ ___ ___

Y ___ ___•___ ___ ___

Z ___ ___•___ ___ ___•

GET ___ ___ ___•___ ___•___ ___

CMC MODE - FREE

P52 (OPTION 3)
(LIFT-OFF ORIENT)

REPORT: GYRO TORQUING ANGLES

P20; CMC MODE - AUTO
GDC ALIGN

CMDS: (AOS +68 MIN)
DSE REWIND

210:30

210:30
(P20)
(0.5°DB)
(11101)
(_1111)

STDN

SIM EXP STATUS
(+1111)
(02011)

SET HGA MAN P -20, Y 30 AUTO; NARROW (215:19)
HGA PWR - OFF

:40

SELECT OMNI B FOR AOS

NOTE: SIM BAY AND PCM DATA IS NOT RECORDED UNTIL 211:20

CMP DON BIOMED HARNESS

:50

LS OPERATE - STBY (VERIFY)
RCDR - ON
RADAR - ON
RCDR - OFF
MODE - HF

NOTE: ALL CREWMEN SKETCH SUNRISE AND SUNSET SOLAR CORONA BEFORE TEI.

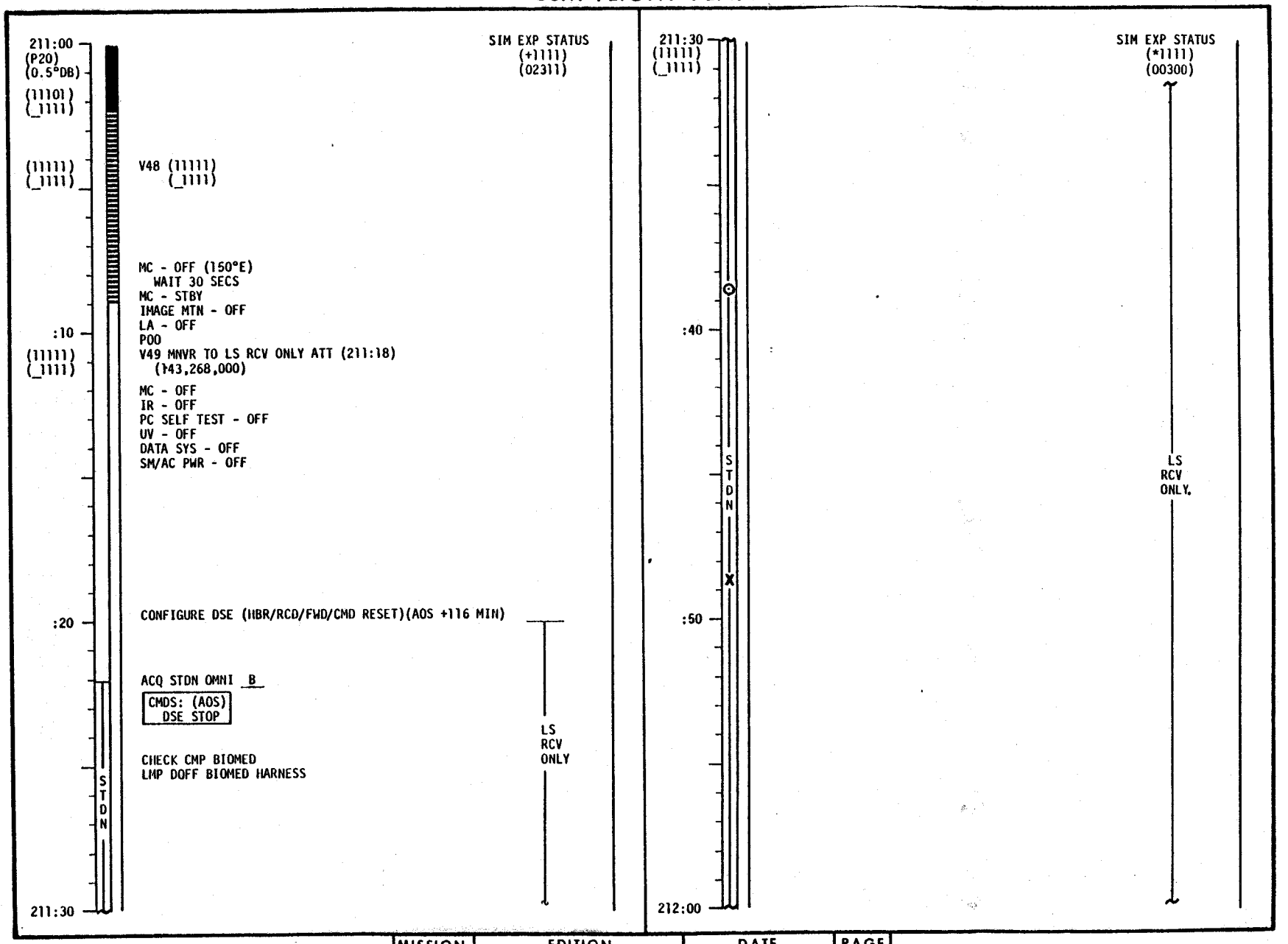
CSM EXP/EVA CHECKLIST

PPS. X/2-10 a,b (CMP)
X/2-10 c,d (CDR)
X/2-10 e,f (LMP)

REV 63

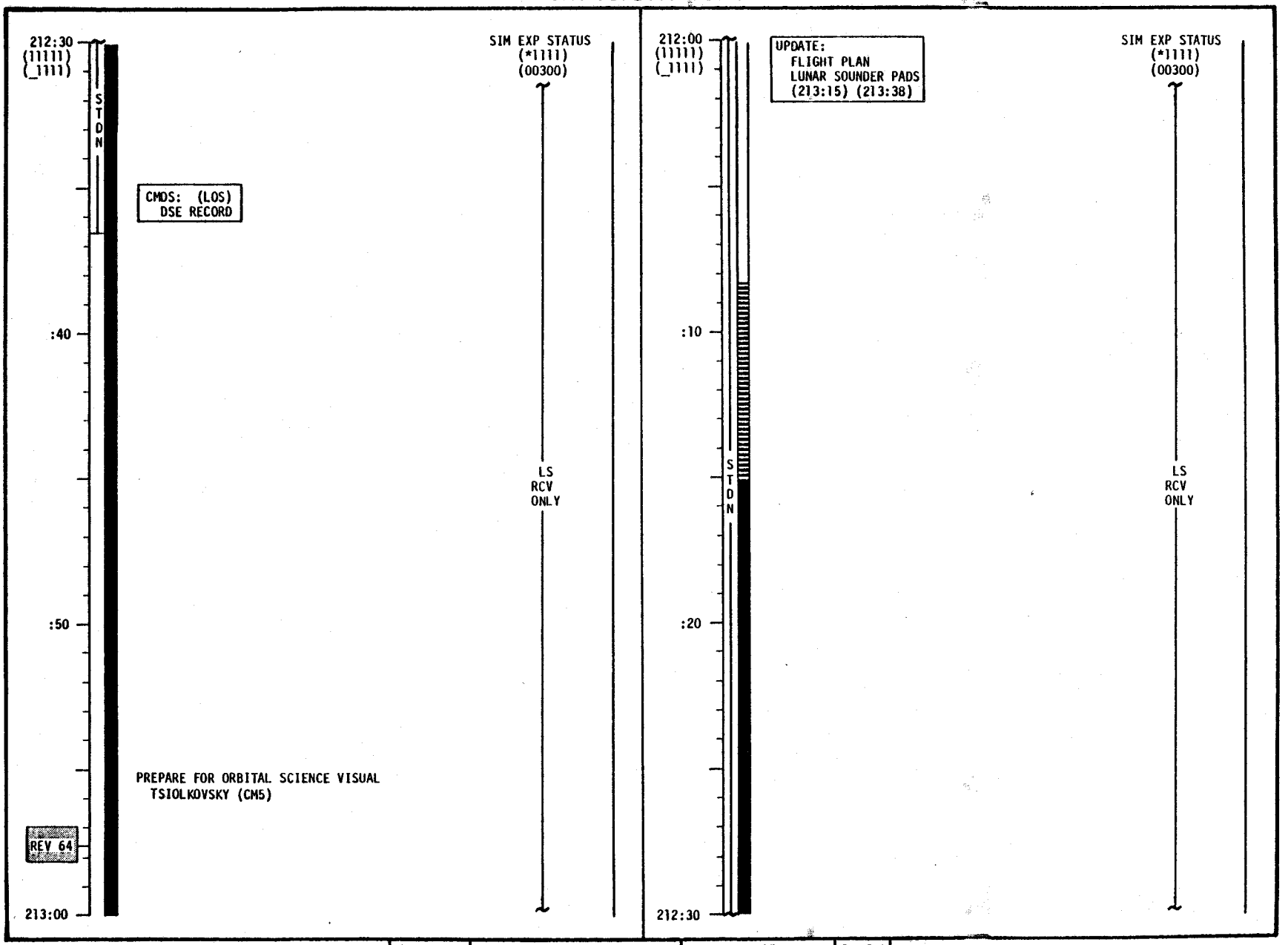
211:00

CSM FLIGHT PLAN

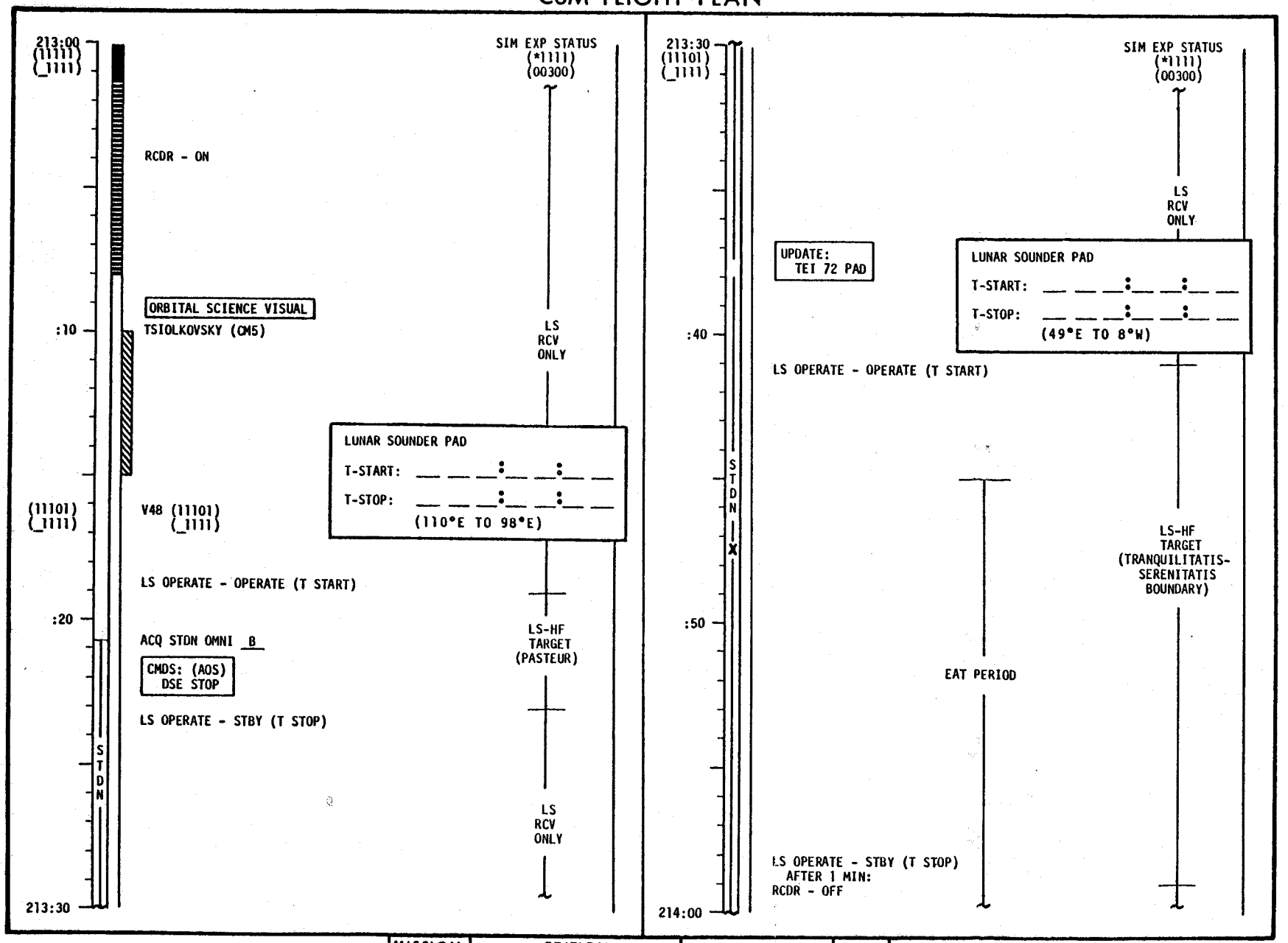


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-320

CSM FLIGHT PLAN

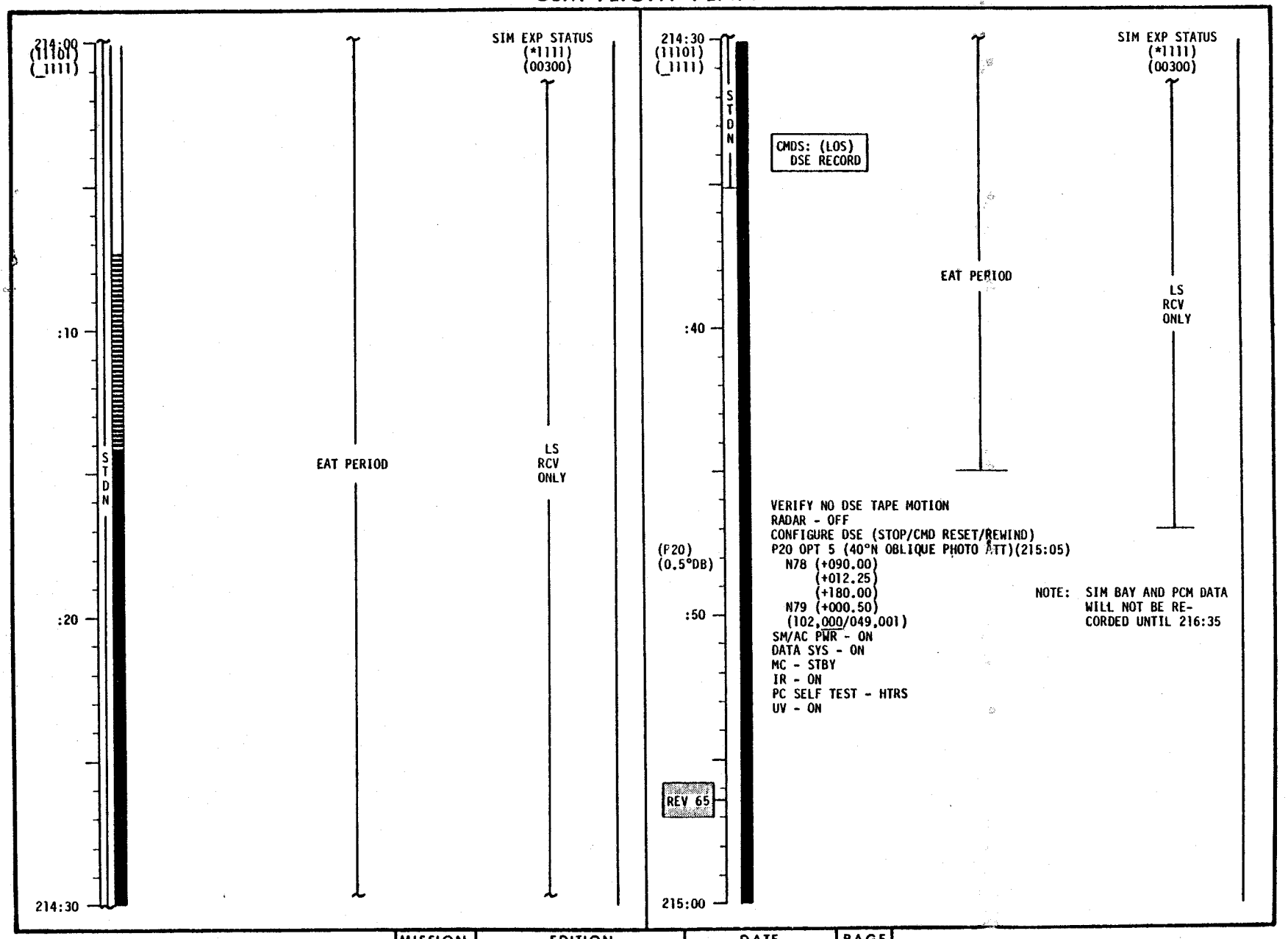


CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-322

CSM FLIGHT PLAN



CSM FLIGHT PLAN

215:00
(P20)
(0.5°DB)
(11101)
(_1111)

SIM EXP STATUS
(*1111)
(01011)

IMAGE MTN - ON
MC - ON (152°E)
IMAGE MTN - INCR (BP +3 STEPS)

(11102)
(_1111)

V48 (11102)
(_1111)

:10

HGA PWR - ON
ACQ STDN HGA: P -20, Y 30 AUTO, NARROW

:20

CMDS:
DSE PLAYBACK

STDN

215:30

215:30
(P20)
(0.5°DB)
(11102)
(_1111)

MNVR TO 40°S OBLIQUE PHOTO ATT (215:35)
V24N78 (+270.00)
(+087.75)
V58E

(183,000/315,000)

SIM EXP STATUS
(*1111)
(04011)

CONFIGURE CAMERA (ORBITAL SCIENCE PHOTOS)
CM3/EL/80/CEX-IVL8(f , ,) 28 FR

MAG (NN) ____, FR # ____

(11101)
(_1111)

V48 (11101)
(_1111)

:40

:50

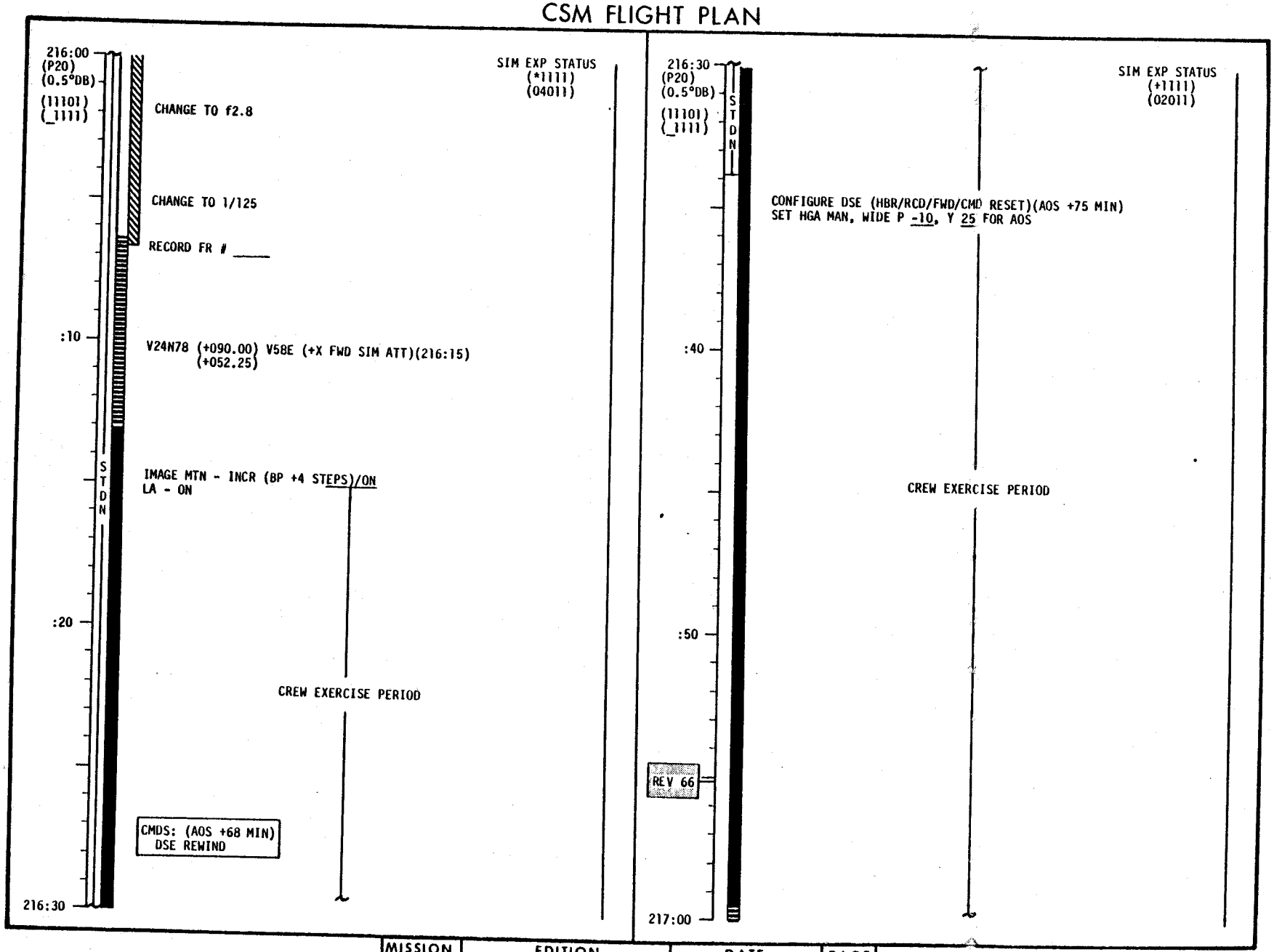
STDN

ORBITAL SCIENCE PHOTOS
SOUTH IMBRIUM (P65 - D12)
CM3/EL/80/CEX-IVL8(f4,1/250,-) 28 FR

216:00

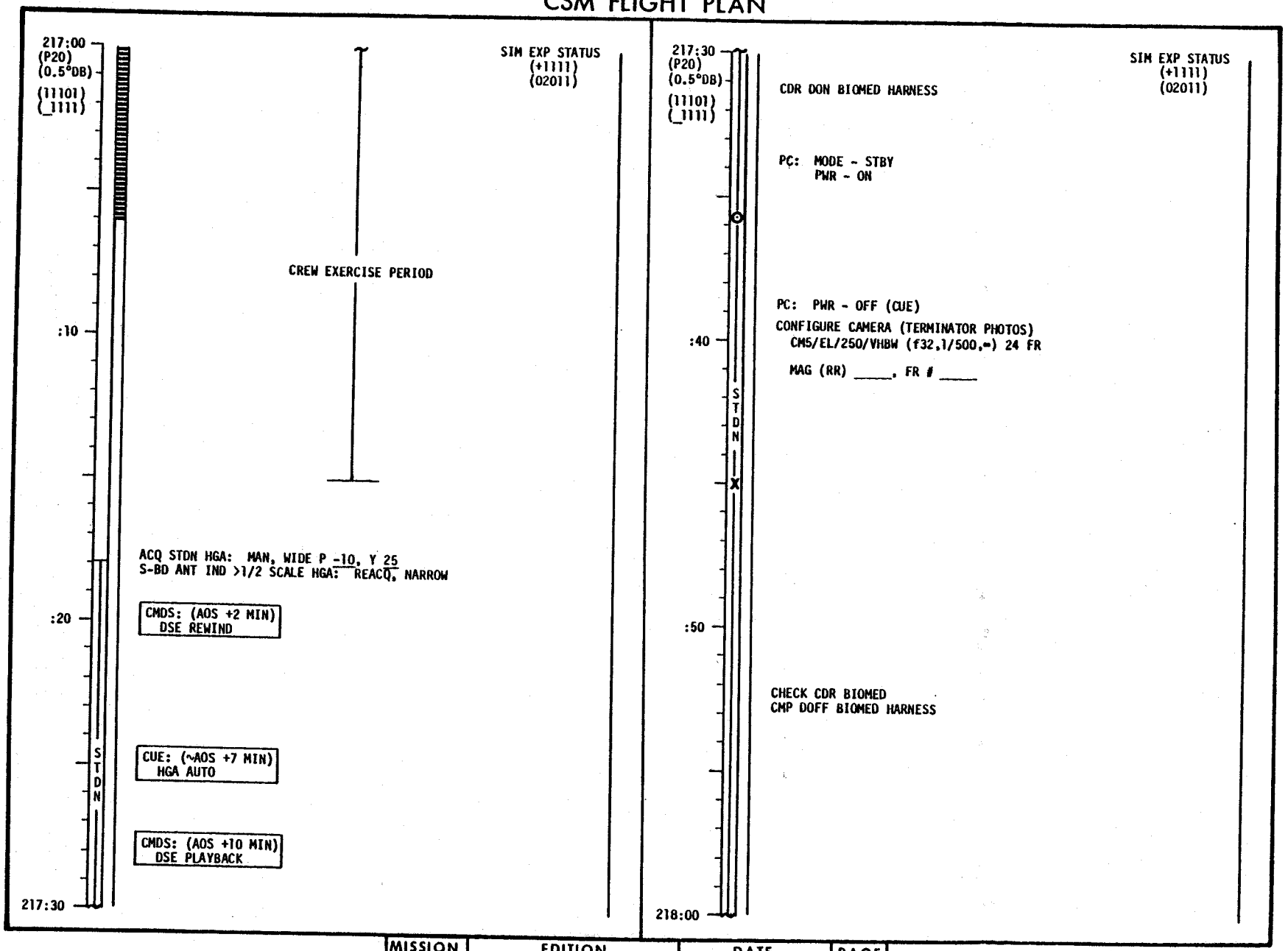
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-324

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-325

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-326

CSM FLIGHT PLAN

218:00
(P20)
(0.5°DB)
(11101)
(_1111)

UPDATE:
FLIGHT PLAN

TERMINATOR
SOUTH (P66 - D14)
CM5/EL/250/VHBW (f32,1/500,-) 24 FR

RECORD FR #
MC - OFF (41°W)
WAIT 30 SEC
MC - STBY
IMAGE MTN - OFF
LA - OFF
MC - RETR

:10
(P20)
(2.5°DB)

V22N79 (+002.50)

L1OH CANISTER CHANGE
(18 INTO B, STOW 16 IN A3)

STDN

P52 IMU REALIGN

N71:__ __,__ __
N05:__ __ __°__ __
N93:
X __ __°__ __ __
Y __ __°__ __ __
Z __ __°__ __ __
GET __ __ __°__ __°__ __

:20

CMC MODE - FREE
P52 (OPTION 3)
(LIFT-OFF ORIENT)
REPORT: GYRO TORQUING ANGLES

CMDS:
DSE REWIND

P20; CMC MODE - AUTO
GDC ALIGN

218:30

SIM EXP STATUS
(+1111)
(02011)

218:30
(P20)
(2.5°DB)
(11101)
(_1111)

STDN

MC/LA COVER - CLOSE
IR COVER - CLOSE
UV COVER - CLOSE
VERIFY NO DSE TAPE MOTION
CONFIGURE DSE (HBR/RCD/FWD/CMD RESET) (AOS +73 MIN)
HGA: MAN P 25, Y 195 REACQ, NARROW FOR AOS
O_2 FUEL CELL PURGE
WASTE WATER DUMP

CMC MODE - FREE
MANUALLY ROLL LEFT 40°

V23N78 (+000.00) -X FWD SIM ATT (218:53)
CMC MODE - AUTO, V58E

:40

TERMINATE WASTE WATER DUMP AT 10%

:50

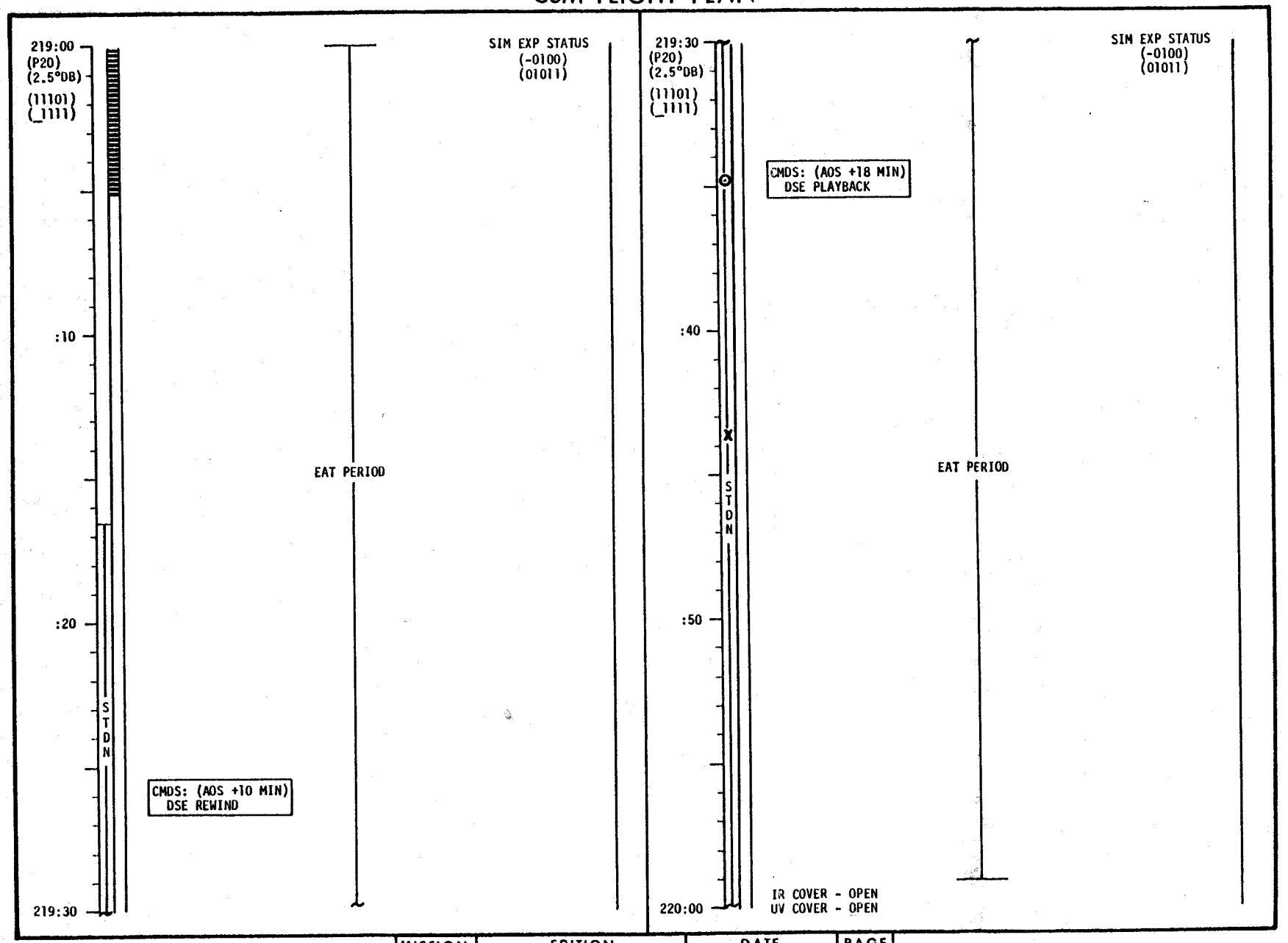
REV 67

219:00

SIM EXP STATUS
(+2111)
(01011)

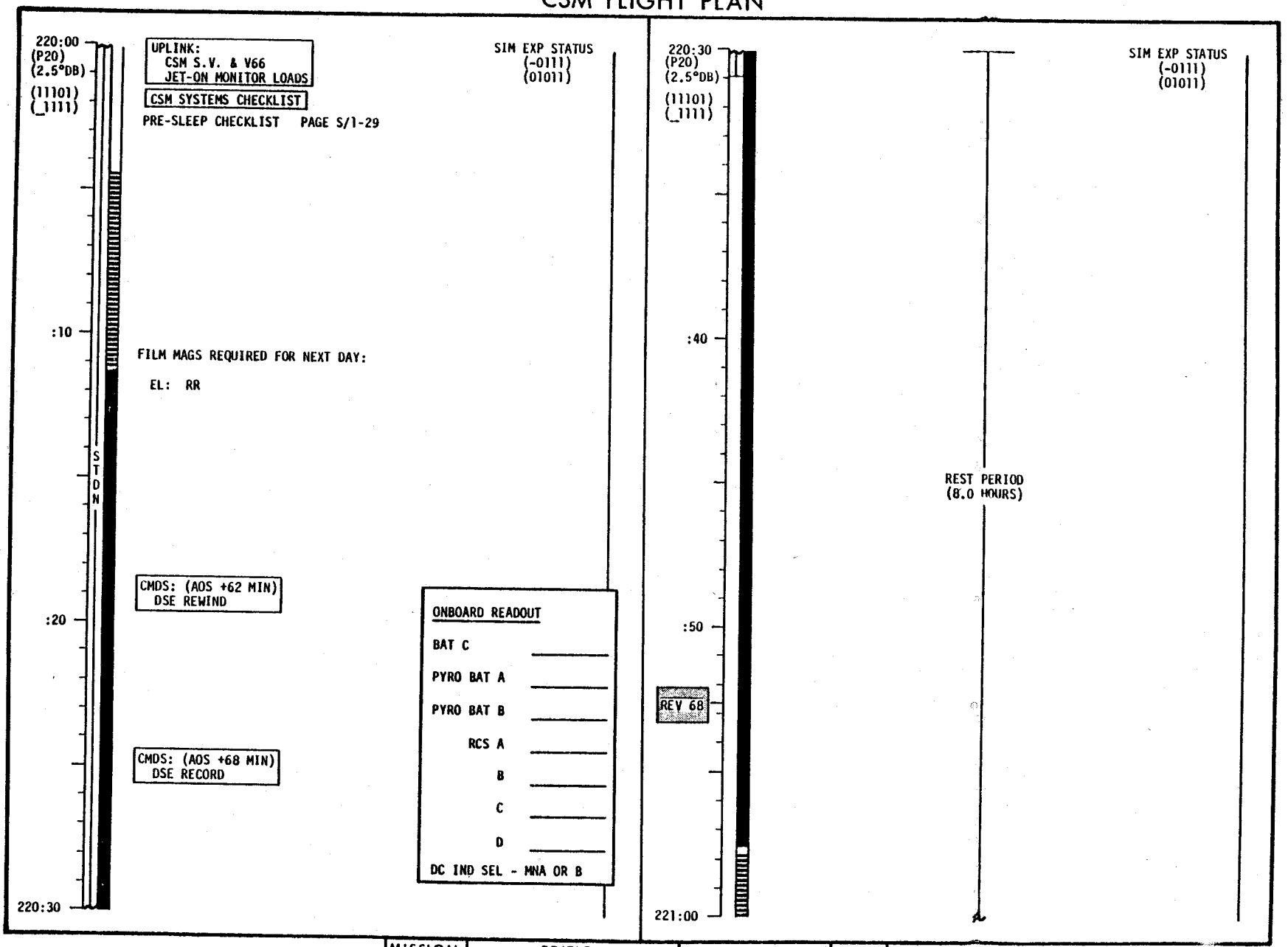
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-327

CSM FLIGHT PLAN

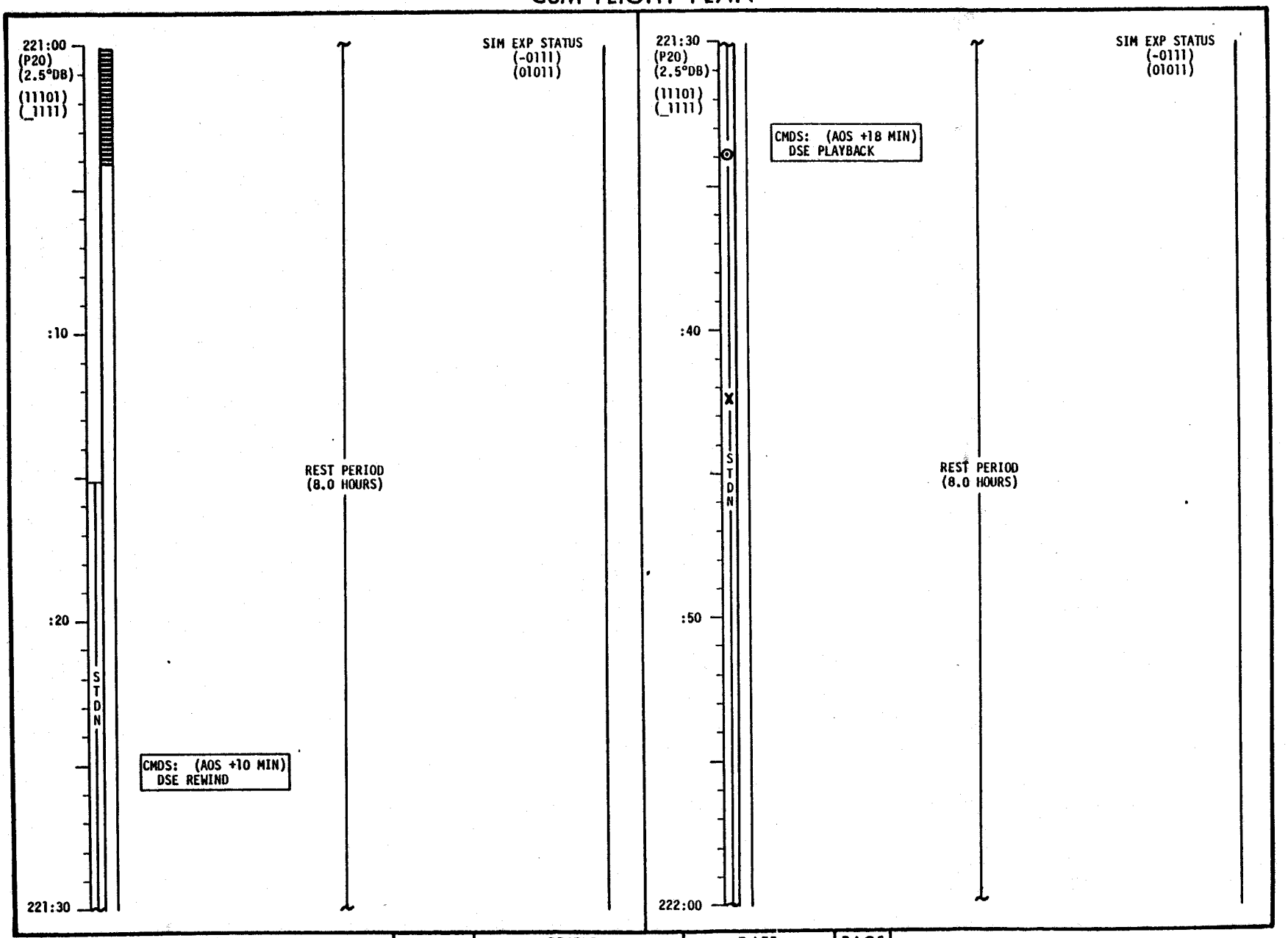


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-328

CSM FLIGHT PLAN

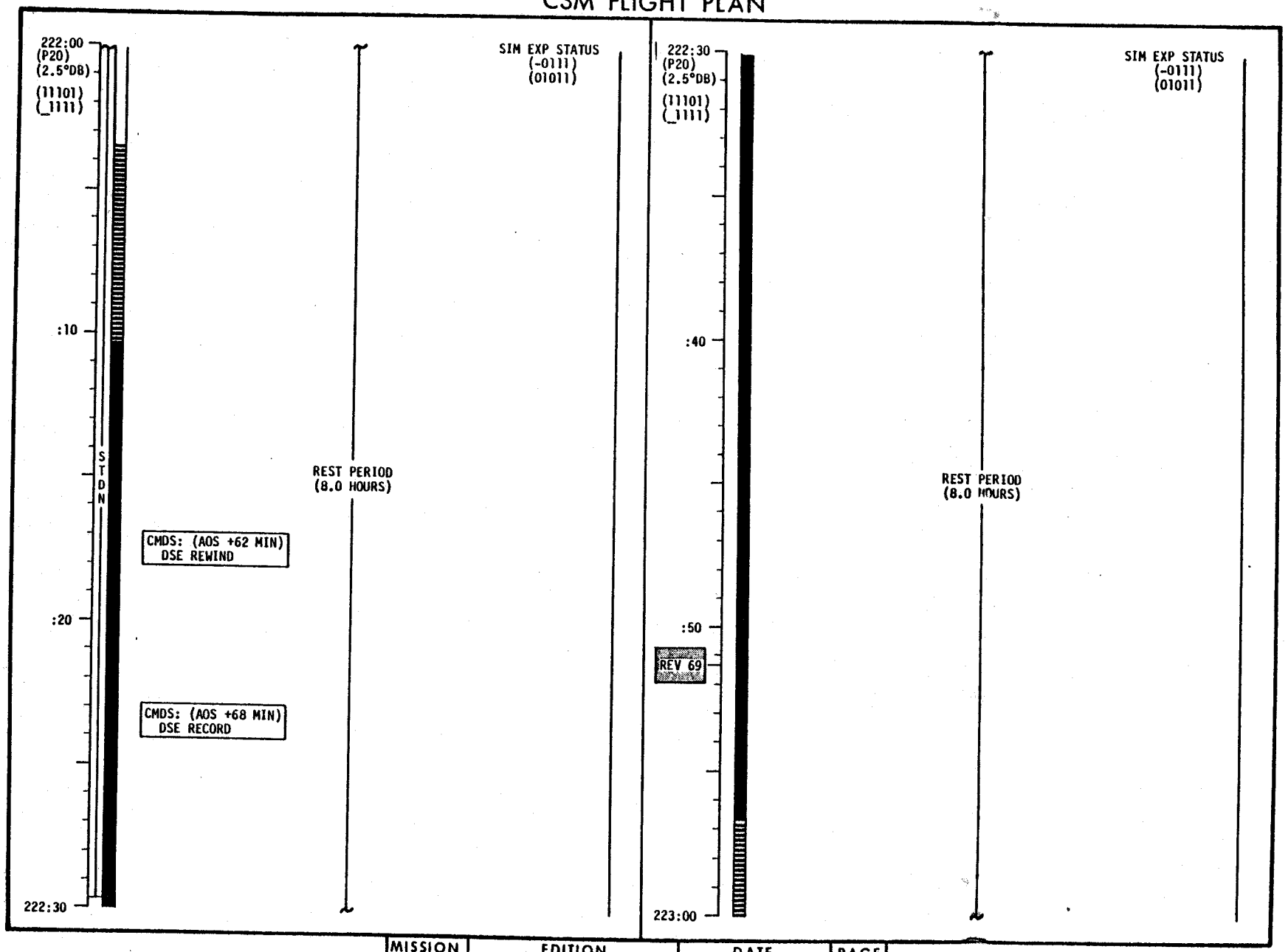


CSM FLIGHT PLAN

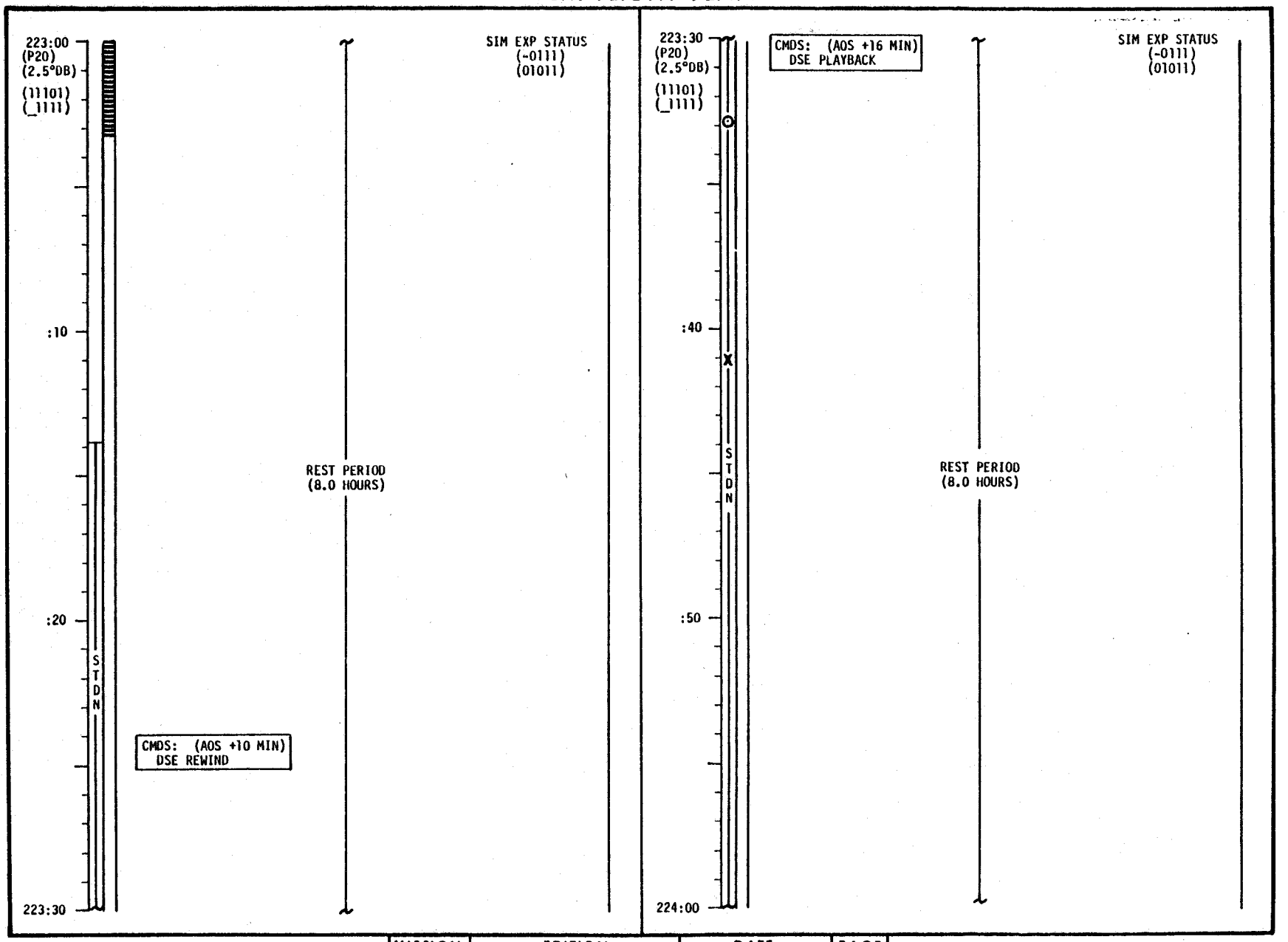


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-330

CSM FLIGHT PLAN

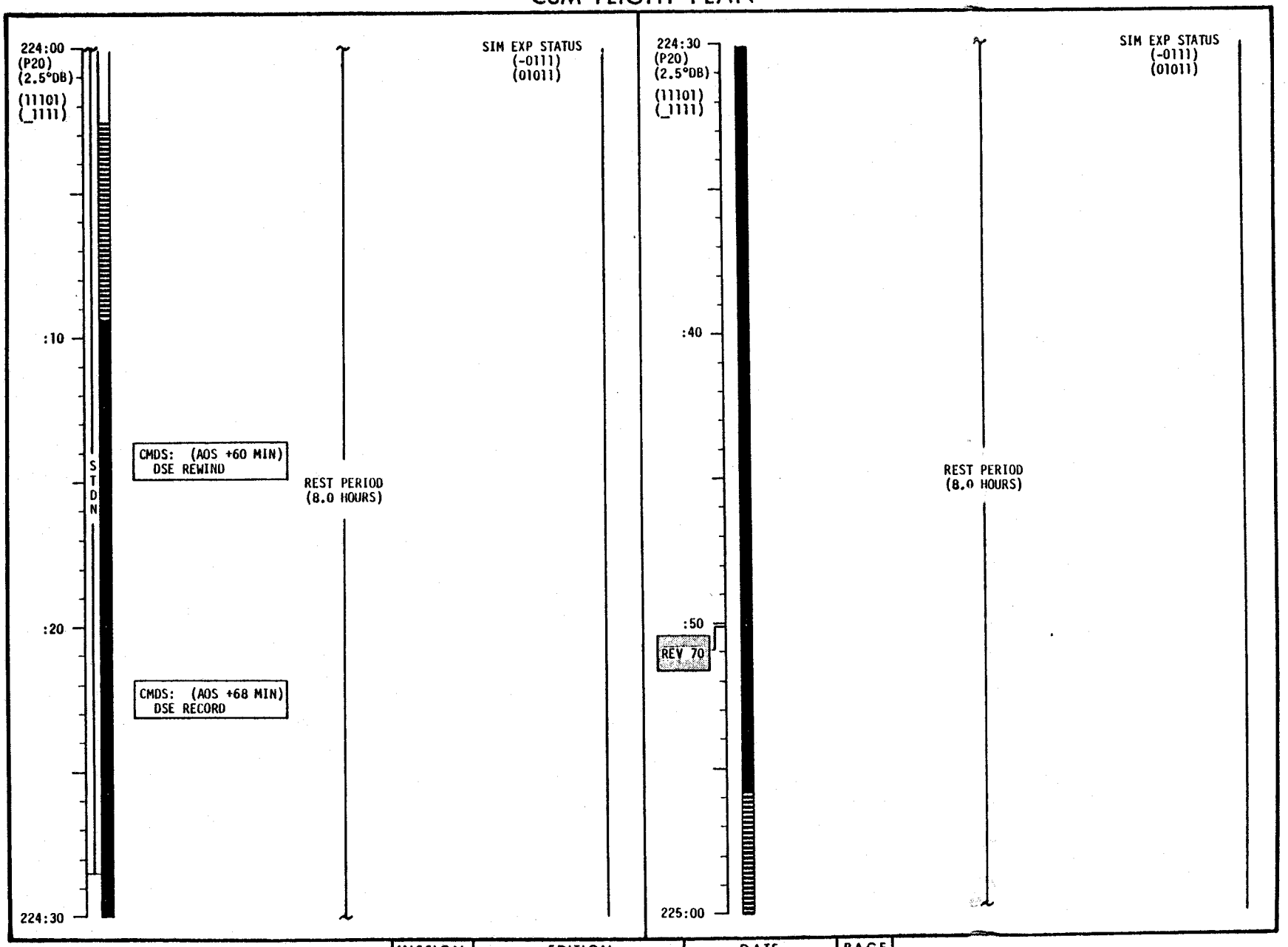


CSM FLIGHT PLAN

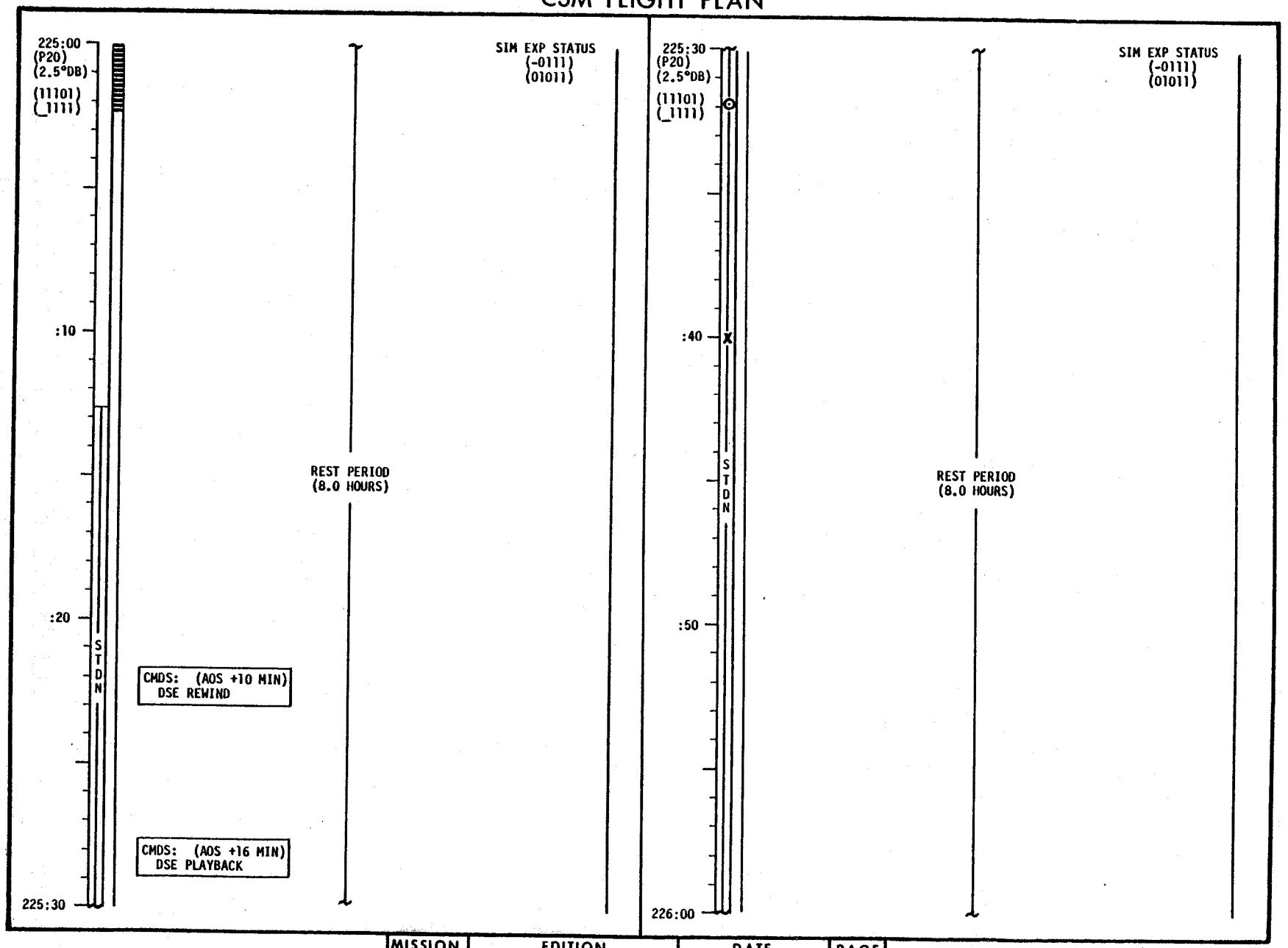


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-332

CSM FLIGHT PLAN

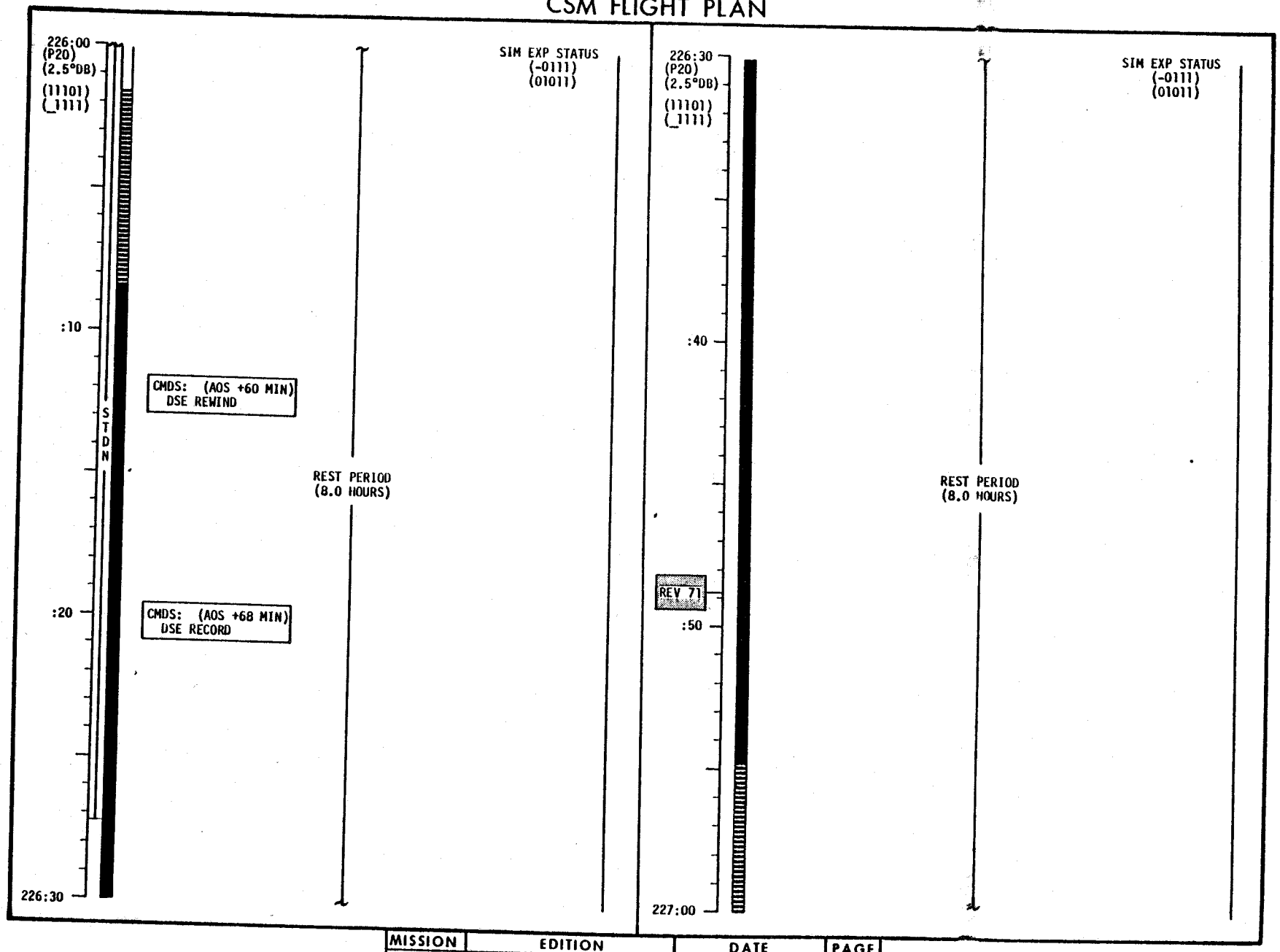


CSM FLIGHT PLAN

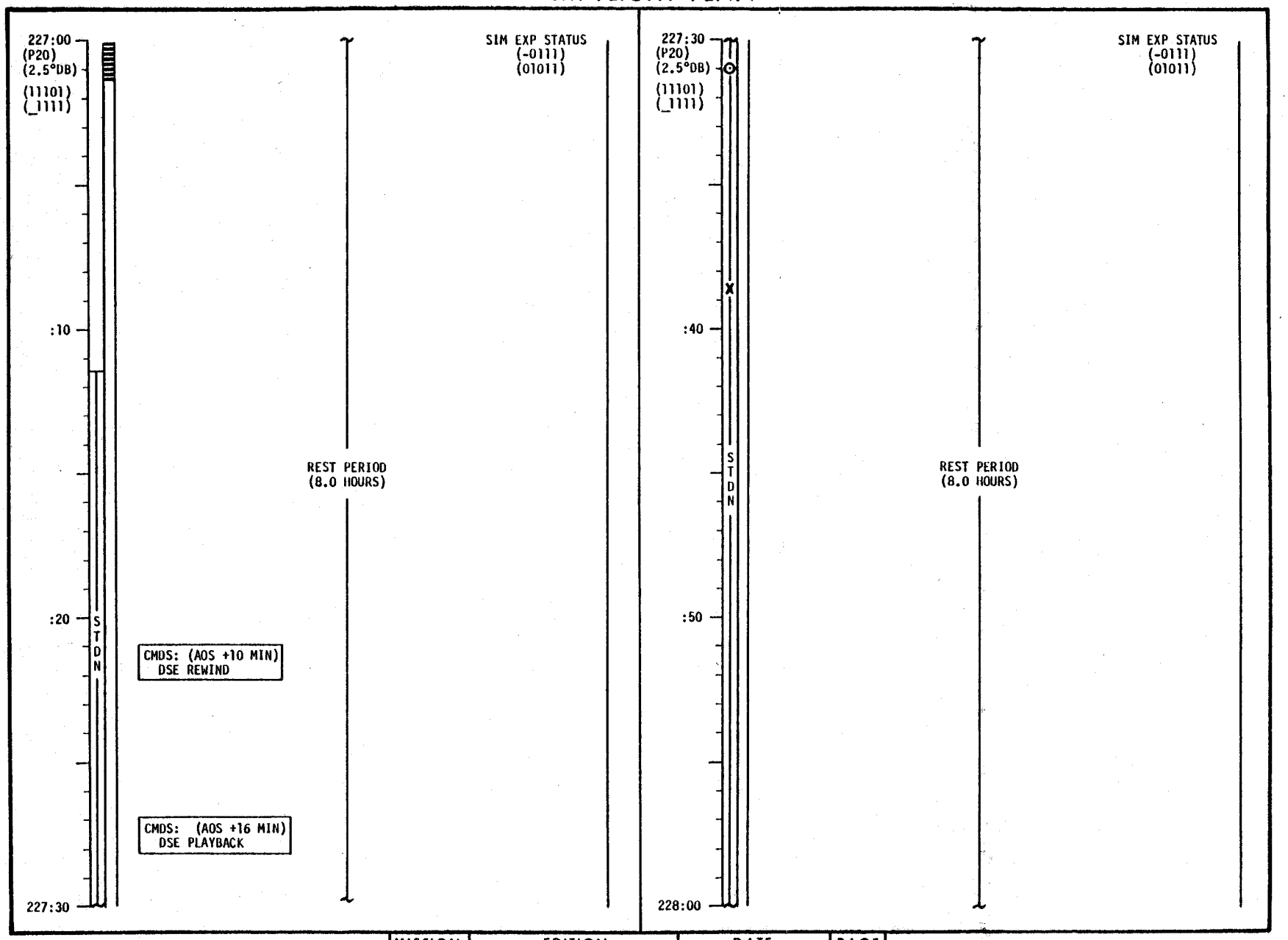


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-334

CSM FLIGHT PLAN

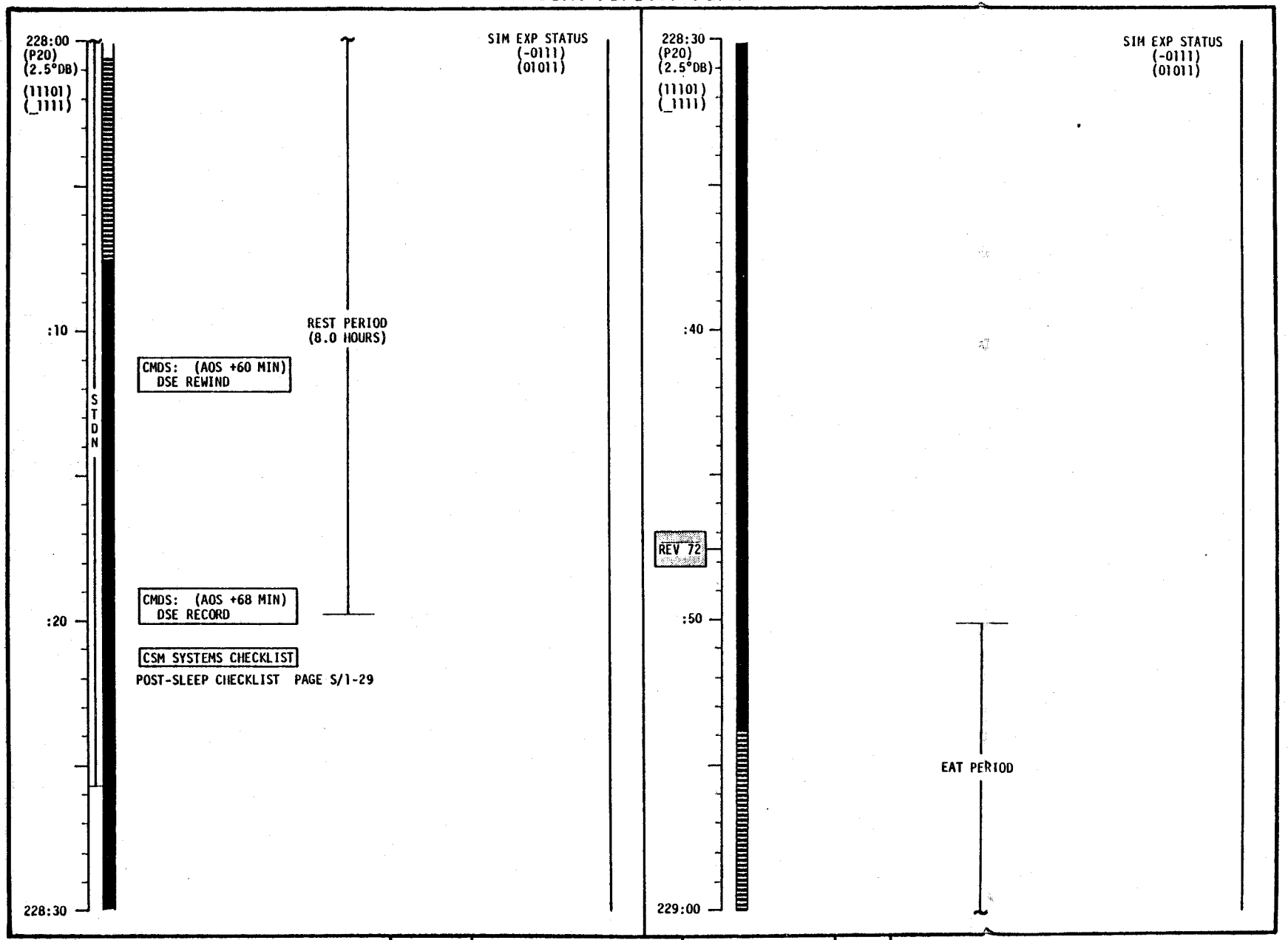


CSM FLIGHT PLAN

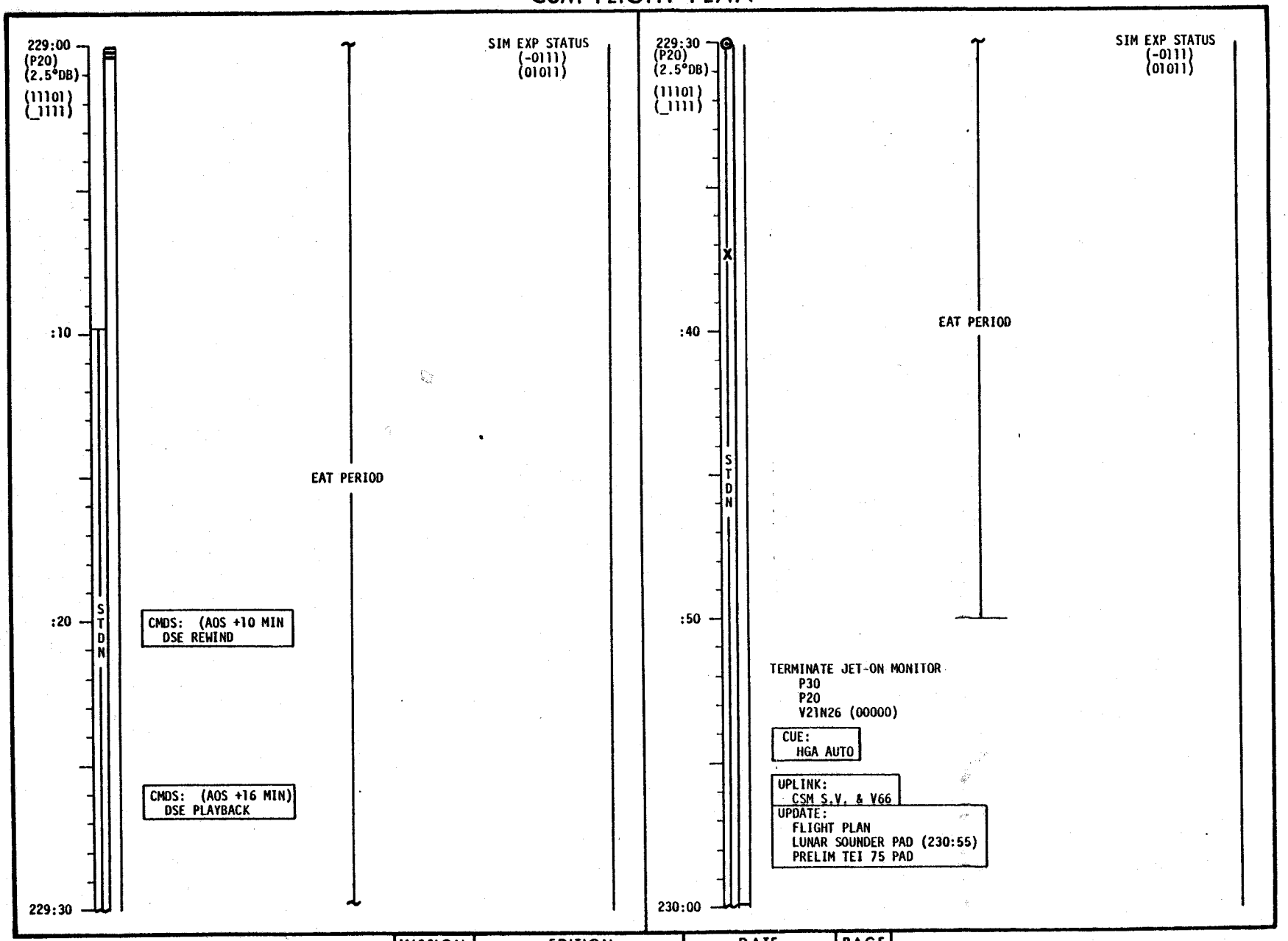


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-336

CSM FLIGHT PLAN



CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-338

CSM FLIGHT PLAN

230:00
(P20)
(2.5°DB)
(11101)
(_1111)

H_2 PURGE LINE HEATERS - ON
CONFIGURE FOR URINE DUMP

SIM EXP STATUS
(-0111)
(01011)

P52 IMU REALIGN

N71: ___ ___.___ ___
N05: ___ ___ ___.___ ___
N93:
X ___ ___.___ ___ ___
Y ___ ___.___ ___ ___
Z ___ ___.___ ___ ___
GET ___ ___ ___.___ ___.___ ___ ___

CMC MODE - FREE

P52 (OPTION 3)
(LIFT-OFF ORIENT)

REPORT: GYRO TORQUING ANGLES

:10

CMDS:
DSE REWIND

MANUALLY ROLL RIGHT 40°

STDN

(P20)
(0.5°DB)

V23N78 (+180.00) +X FWD SIM ATT (230:30)
V22N79 (+000.50)
CMC MODE - AUTO; V58E

CMDS: (HGA LOS)
DSE RECORD
PCM BIT RATE - LOW

UV COVER - CLOSE
IR COVER - CLOSE
MC - OFF

:20

IR - OFF
PC SELF TEST - OFF
UV - OFF
DATA SYS - OFF
SM/AC PWR - OFF
SET HGA MAN P -27, Y 18 REACQ, NARROW (231:21)
HGA PWR - OFF
SELECT OMNI A FOR AOS

NOTE: DSE VOICE RECORDED UNTIL 230:39 WILL NOT BE DUMPED

LS OPERATE - STBY (VERIFY)
RCDR - ON
RADAR - ON
RCDR - OFF
MODE - HF

REV 73

230:30

230:30
(P20)
(0.5°DB)
(11101)
(_1111)

H_2 & O_2 FUEL CELL PURGE
WASTE WATER DUMP
SAMPLE BUSS'S (3) - STOW SAMPLES (3)
DUMP URINE FROM BUSS'S (3) - STOW
START NEW URINE COLLECTION PERIOD

SIM EXP STATUS
(+0100)
(00400)

CONFIGURE DSE (HBR/RCD/FWD/CMD RESET)

:40

LMP DON BIOMED HARNESS

TERMINATE WASTE WATER DUMP AT 10%
H_2 PURGE LINE HEATERS - OFF

RCDR - ON

LS
RCV
ONLY

:50

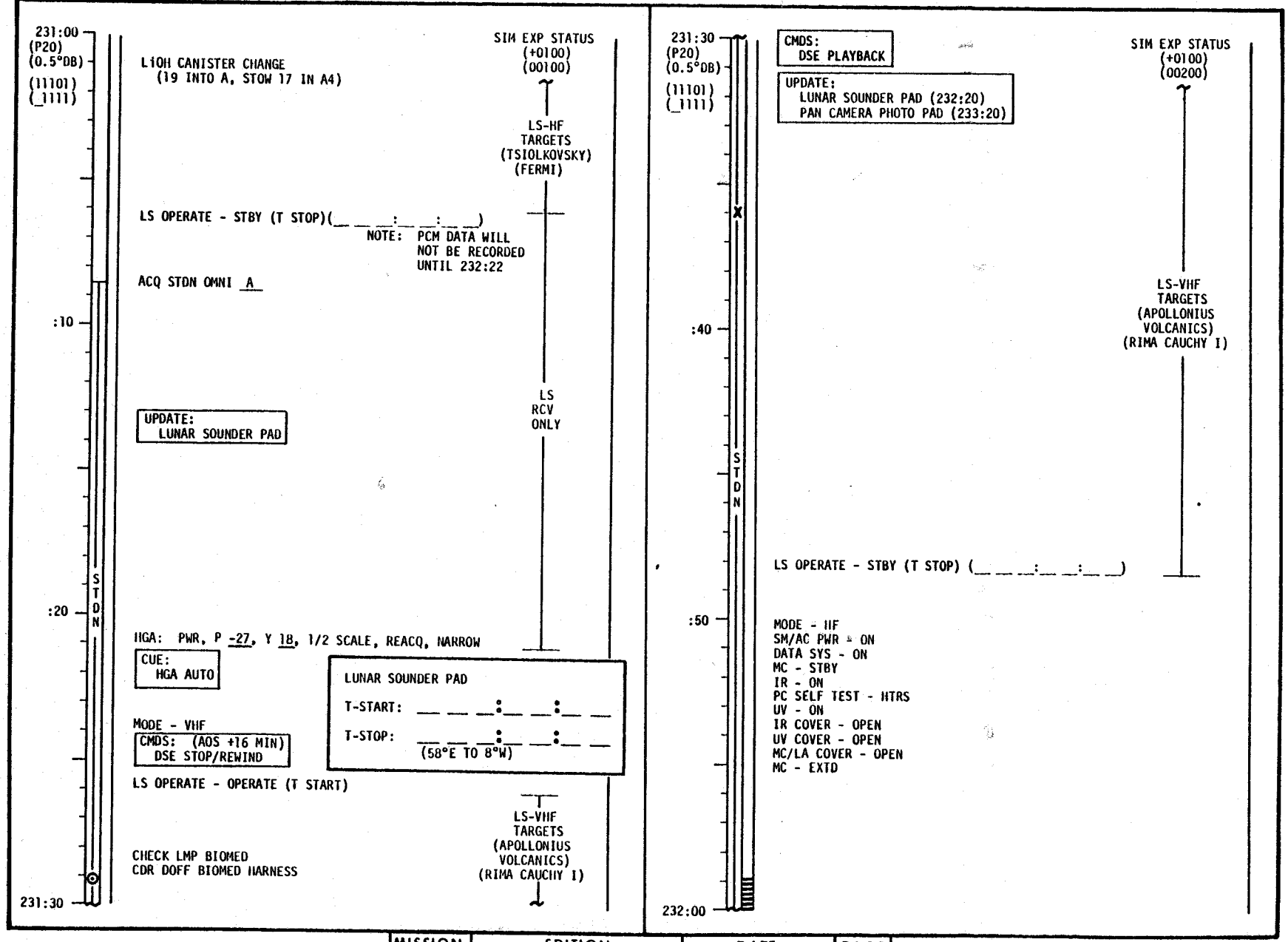
LUNAR SOUNDER PAD
T-START: ___ ___ ___:___ ___:___ ___
T-STOP: ___ ___ ___:___ ___:___ ___
(135°E TO 117°E)

231:00

LS OPERATE - OPERATE (T START)

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-339

CSM FLIGHT PLAN



CSM FLIGHT PLAN

232:00
(P20)
(0.5°DB)
(11101)
(_1111)

:10

STDN

:20

232:30

SIM EXP STATUS
(+1111)
(00011)

CMDS:
DSE REWIND

MC - OFF
IR - OFF
PC SELF TEST - OFF
UV - OFF
DATA SYS - OFF
SM/AC PWR - OFF
CONFIGURE DSE (HBR/RCD/FWD/CMD RESET)(AOS +73 MIN)
SET HGA: MAN, WIDE P -10, Y 25 FOR AOS
HGA PWR - OFF
LS OPERATE - OPERATE (T START)

LUNAR SOUNDER PAD
T-START: ___ ___ ___:___ ___:___ ___
T-STOP: ___ ___ ___:___ ___:___ ___
(117°W TO 144°W)

LS-HF
TARGET
(HERTZSPRUNG)

232:30
(P20)
(0.5°DB)
(11101)
(_1111)

:40

REV 74

:50

233:00

SIM EXP STATUS
(+1111)
(00100)

LS OPERATE - STBY (T STOP) (___ ___:___ ___:___ ___)
AFTER 1 MIN:
RCDR - OFF
RADAR - OFF
SM/AC PWR - ON
DATA SYS - ON
MC - STBY
IMAGE MTN - ON
LA - ON
IR - ON
PC SELF TEST - HTRS
UV - ON
MC - ON (161°W)
IMAGE MTN - INCR (BP +4 STEPS)/ON

CSM FLIGHT PLAN

233:00
(P20)
(0.5°DB)
(11101)
(_1111)
(11101)
(11111)
:10
:20
STDN
233:30

SIM EXP STATUS
(+1111)
(02011)

UV COVER - CLOSE

V48 (11101)
(11111)
USE A/C ROLL AND ENABLE ALL JETS EXCEPT A1 AND A2
(BEFORE AOS)

NOTE: P & Y AXES COUPLED
R AXIS UNCOUPLED

HGA PWR - ON
ACQ STDN HGA: MAN, WIDE P -10, Y 25
S-BD ANT IND > 1/2 SCALE HGA: REACQ, NARROW

CMDS: (AOS +2 MIN)
DSE REWIND

PC - STBY
STEREO
PWR

HF ANTENNA 1 - RETRACT (OFF ON STDN CUE)
HF ANTENNA 2 - RETRACT (OFF ON STDN CUE)

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

CMDS: (AOS +10 MIN)
DSE PLAYBACK

UPDATE:
FLIGHT PLAN
PAN CAMERA PHOTO PAD (233:40)

PC - OPR (T START)

PAN CAMERA PHOTO PAD
T-START: ___ ___ ___:___ ___:___ ___
T-STOP: ___ ___ ___:___ ___:___ ___
(67°E TO 25°E)

E-MEMORY DUMP

UPLINK:
DESIRED ORIENT (TEI)

CONFIGURE CAMERA (TERMINATOR PHOTOS)
CM5/EL/250/VHBW (f11,1/500,-) 18 FR

MAG (RR) _____, FR # _____

233:30
(P20)
(0.5°DB)
(11101)
(11111)
:40
:50
STDN
234:00

SIM EXP STATUS
(+1010)
(22011)

PC - STBY (T STOP)(___ ___ ___:___ ___:___ ___)

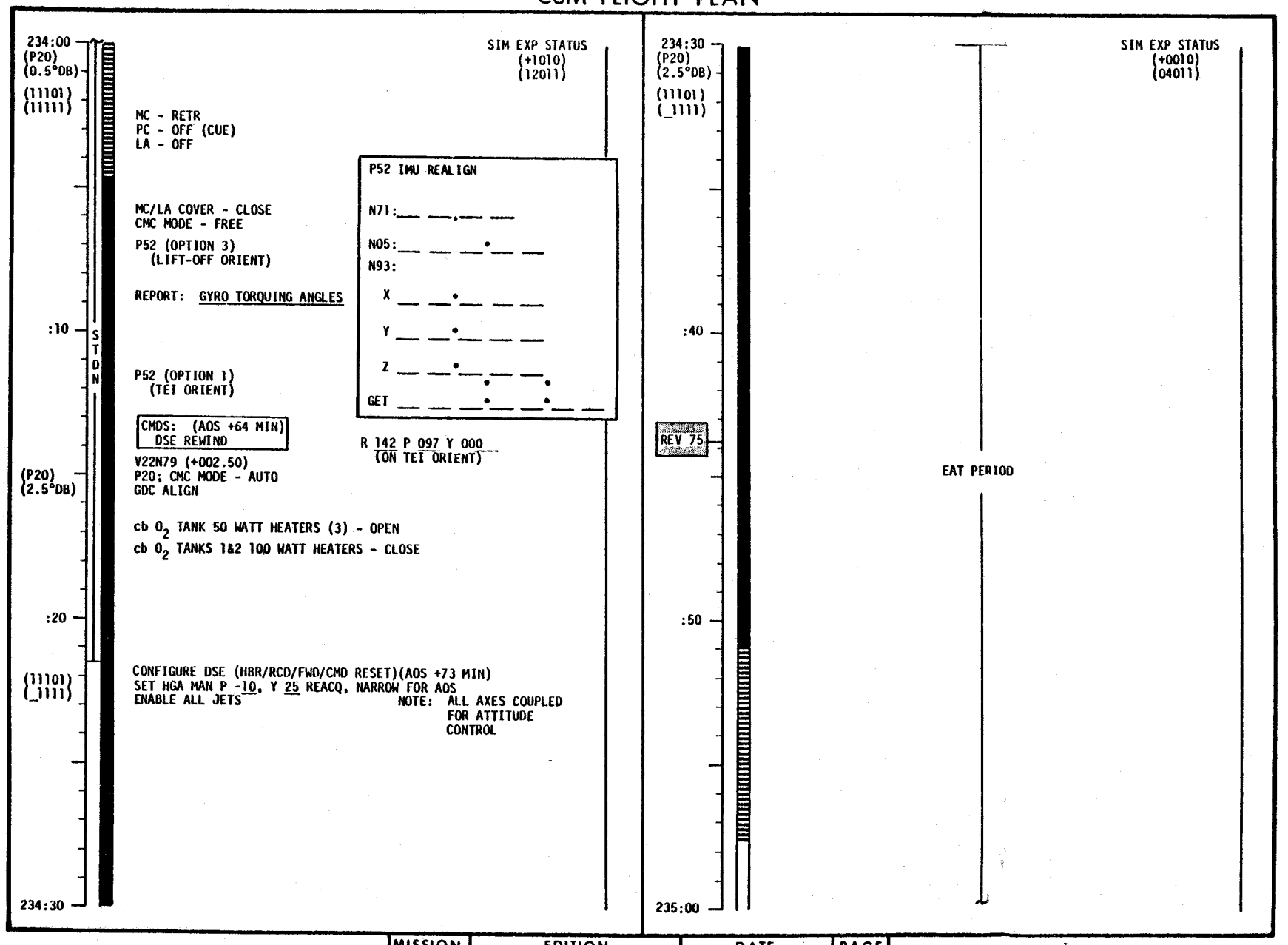
PAN CAMERA PHOTO PAD
T-START: ___ ___ ___:___ ___:___ ___
T-STOP: ___ ___ ___:___ ___:___ ___
(5°W TO 45°W)

PC - OPR (T START)

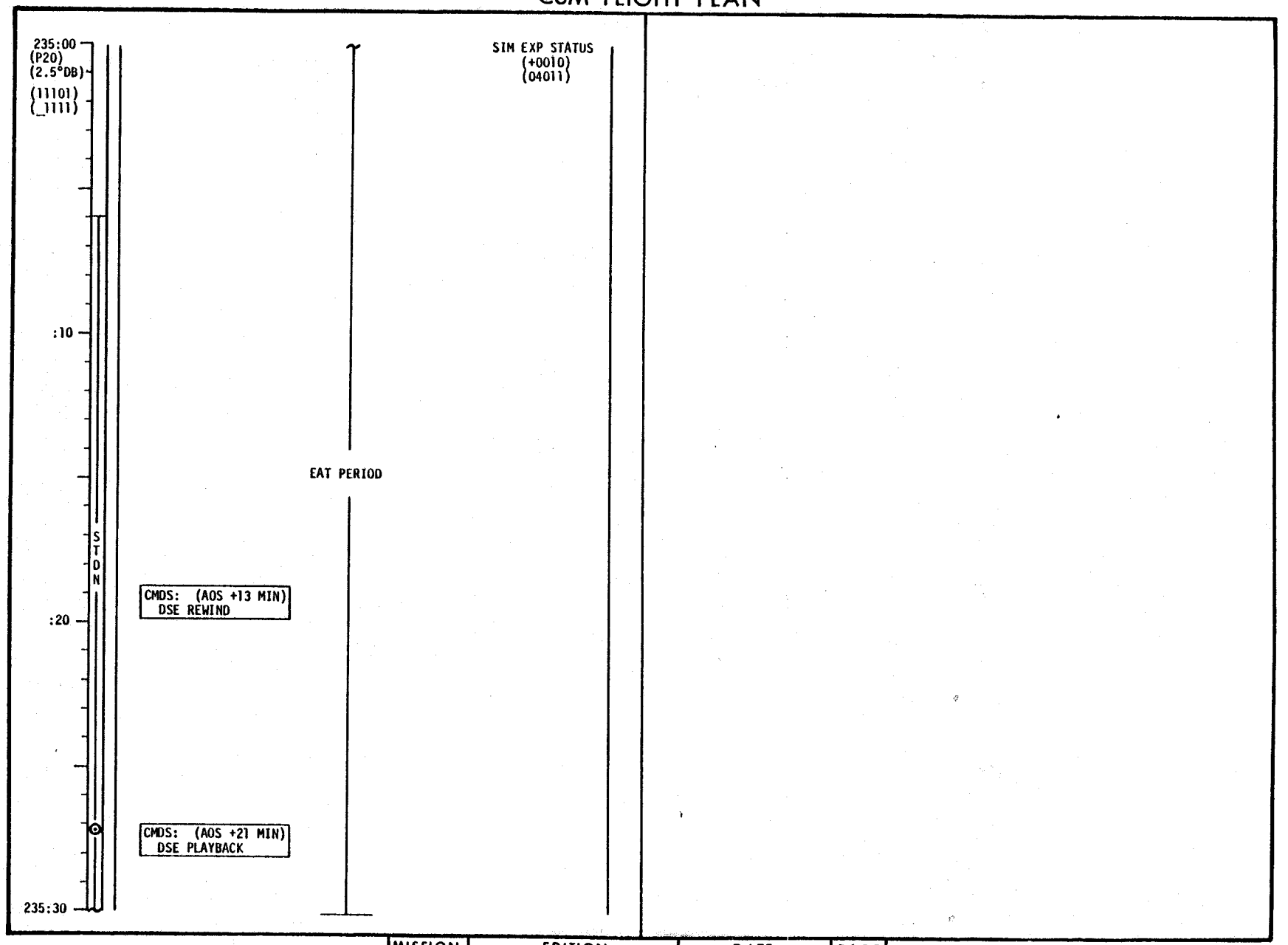
TERMINATOR PHOTOS
SOUTH (P74-D14)
CM5/EL/250/VHBW (f11,1/500,-) 18 FR

PC - STBY (T STOP)
RECORD FR # _____

CSM FLIGHT PLAN



CSM FLIGHT PLAN



CSM FLIGHT PLAN

235:30
(P20)
(2.5°DB)
(11101)
(_1111)

:40

:50
(11101)
(_1111)

236:00

STDN

UPLINK:
CSM S.V. & V66
TEI 75 TGT LOAD

UPDATE:
TEI 75 PAD (235:45)
TEI 76 PAD
MAP UPDATE REV 76 (236:50)

CSM SYSTEMS CHECKLIST

WIPE EXCESS MOISTURE FROM TUNNEL
C&WS OPERATIONAL CHECKS PAGE S/1-20
CM RCS MONITORING CHECKS PAGE S/1-1
SM RCS MONITORING CHECKS PAGE S/1-1
SPS MONITORING CHECKS PAGE S/1-1

MC - OFF
WAIT 30 SEC
MC - STBY
IMAGE MTN - OFF
PRE-SPS BURN SIM PREP (CUE CARD) EXCEPT: IR COVER - OPEN
P30; VERIFY TEI TIG AND ΔV's
CMC MODE - FREE
P00
CMC MODE - AUTO
V45 (RESET LUNAR SURFACE FLAG)
V49 MNVR TO TEI PAD BURN ATT (236:07)
OMNI D

CMDS: (HGA LOS)
DSE REWIND
PCM BIT RATE - LOW

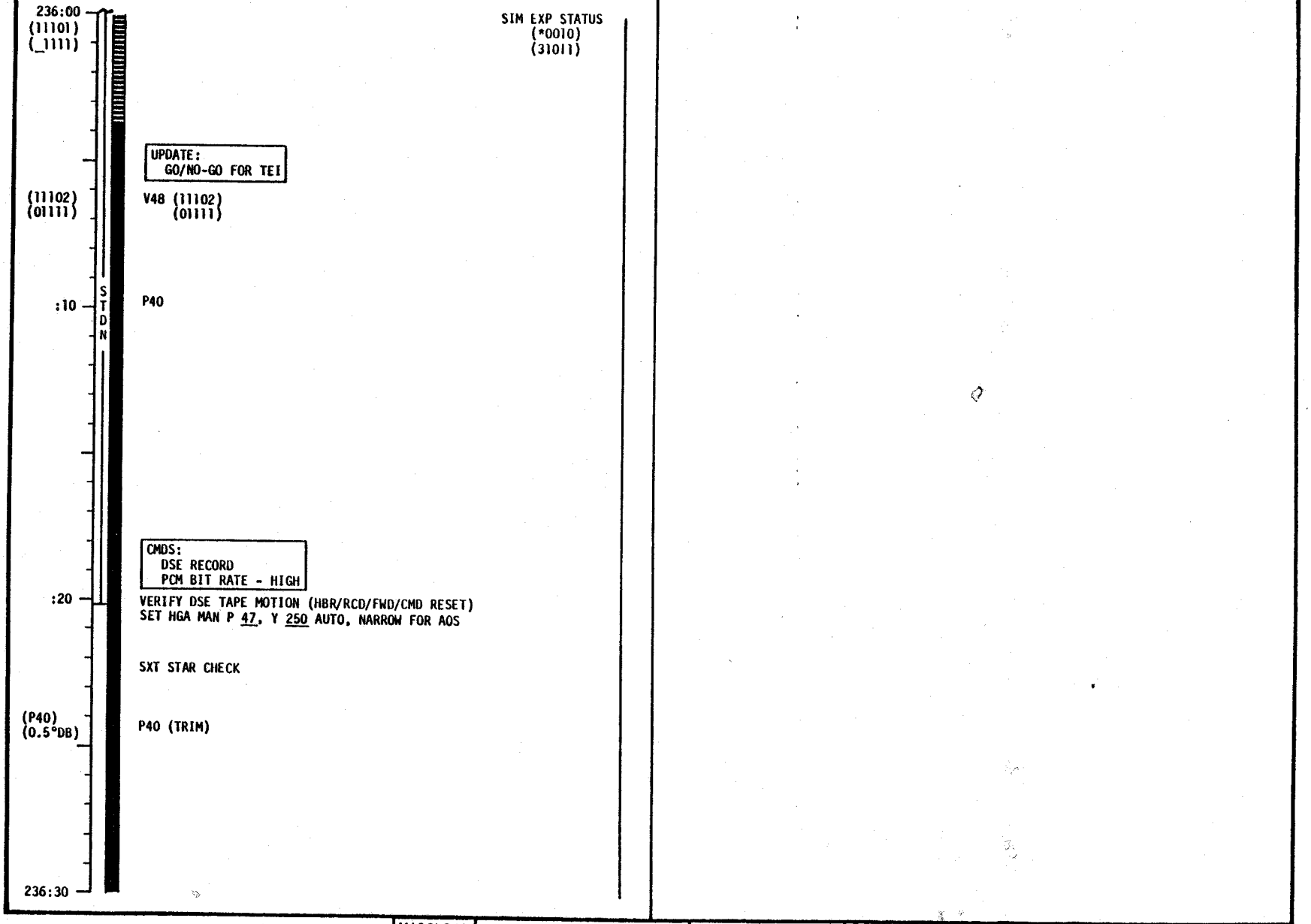
SIM EXP STATUS
(+0010)
(04011)

P30 MANEUVER

SET STARS	T/S	E/P	I/S	G	&	N	PURPOSE / PROP/GUID
	+						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 (180)
	X	X	X				P (000)
	X	X	X				Y (000)
	+						H_A N44
							H_P
	+						ΔVT
HORIZON/WINDOW ___	X	X	X				BT
	X						ΔVC
	X	X	X	X			SXTS
	+					0	SFT
	+				0	0	TRN
	X	X	X				BSS
	X	X					SPA
	X	X	X				SXP
OTHER ___		0					LAT N61
							LONG
	+						RTGO EMS
	+						V10
							GET 0.05G

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-345

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-346

CSM FLIGHT PLAN

236:30
(P40)
(0.5°DB)
(11102)
(01111)

:40

REV 76
(11102)
(01111)

:50

237:00

STDN TV

SIM EXP STATUS
(*0010)
(31011)

```
* * * * * * * * * * * * * * * *
*NOTE:                         *
*  1) PCM IS ALREADY IN HBR    *
*  2) DO NOT GO LBR POST-SPS   *
* * * * * * * * * * * * * * * *
```

```
* * * * * * * * * * * * * * * *   * * * * * * * * * * * * * * *
* TEI TIG MAY BE DELAYED      *   * SINGLE BANK BURN TIME     *
* 19 SEC WITHOUT VIOLATING    *   *      2 MIN 27.6 SEC       *
* SPS OR RCS RESERVE FOR MCC  *   * * * * * * * * * * * * * * *
* * * * * * * * * * * * * * * *
```

TEI (180,000,000)	TIG: 236:39:51 BT: 2 MIN 22.2 SEC ΔVT: 3045.7 FEET/SEC ULLAGE: 4 JET 12 SEC ORBIT: N/A
_____:_____:_____._____	

POO
V66 SET CSM S.V. INTO LM S.V.
V49 MNVR TO TV, PC & MC ATT (236:49)

(345,125,320)

POST-SPS BURN SIM PREP (CUE CARD)

TV (GDS) 236:53 TO 237:25 - CM 3 (f , MONITOR)
INHIBIT ALL JETS EXCEPT: D1 & B2, A3, C4, B3, D4
UV COVER - OPEN
MC/LA COVER - OPEN
MC - EXTD
S-BD AUX TV - TV

ACQ STDN HGA: P 47, Y 250 AUTO, NARROW

TV - ON
PC - STBY
MONO
PWR
V/h OVRD - HI ALT
MC - ON
IMAGE MTN - INCR (BP +3 STEPS)/OFF (FOR RATE CONTROL)
REPORT: BURN STATUS

PC - OPR

TEI BURN TABLE

SPS LIMITS	P OR Y RATES	ATT DEVIATION	MANUAL START ACTION	OVERBURN SHUTDOWN CRITERIA	RCS TRIM GUIDELINES
NONE	10°/SEC COMPLETE	±10° COMPLETE	G&N - DELAY 1 REV SCS - START	BT +2 SECS & ΔV_C = -40 FPS	TRIM X AND Z AXES TO 0.2 FPS IF (+) V_{gz} ROLL RIGHT 90° AND USE +Y THRUSTERS

NOTE: BALL VALVE FAILURE - START ON SUSPECT BANK

BURN STATUS REPORT

X	X					ΔTIG
X	X					BT
						V_{gx}
TRIM						
X	X	X				R
X	X	X				P
X	X	X				Y
						V_{gx}
						V_{gy}
						V_{gz}
						ΔV_C
X						OX
X						FUEL
X						UNBAL

UNDERBURN CRITERIA

IF ΔVM<1700 FPS - TEI AT FIRST PERILUNE
IF ΔVM>1700 FPS - DO DIRECT RETURN ΔV

IF VGO > RCS CAPABILITY -20 FPS - RESTART (NO TRIM)
IF VGO >5 AND < RCS CAPABILITY -20 FPS:
RCS +X OR SPS (NO TRIM)
IF VGO <5, RCS TRIM X AND Z

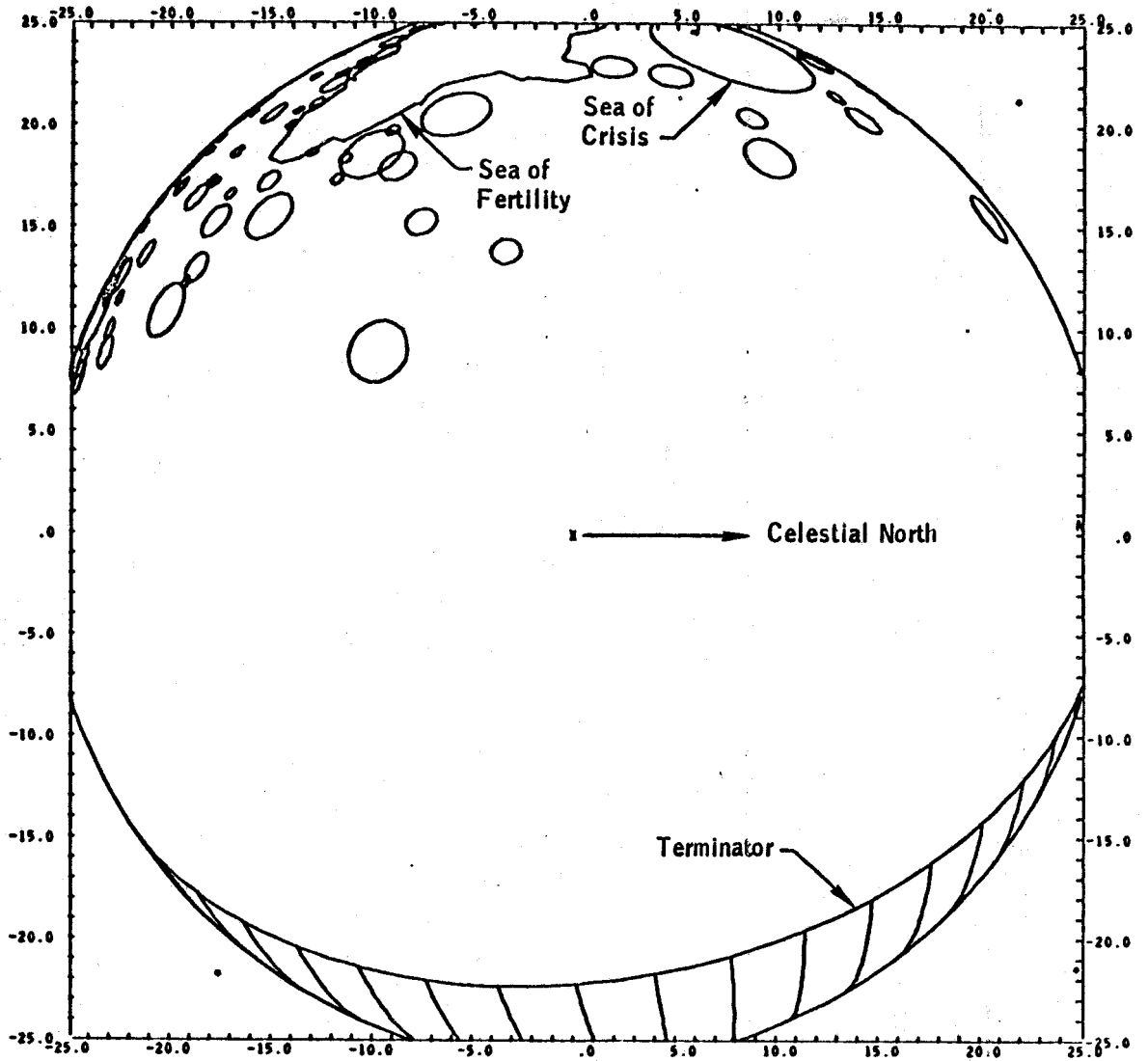
SCS EARLY C/O - RESTART IF C/O >5 SEC
EARLY OR VGO > 50 FPS
SCS RESIDUALS - NO TRIM

MAP UPDATE REV 76

AOS WITHOUT BURN __ __ __:__ __:__ __

AOS WITH BURN __ __ __:__ __:__ __

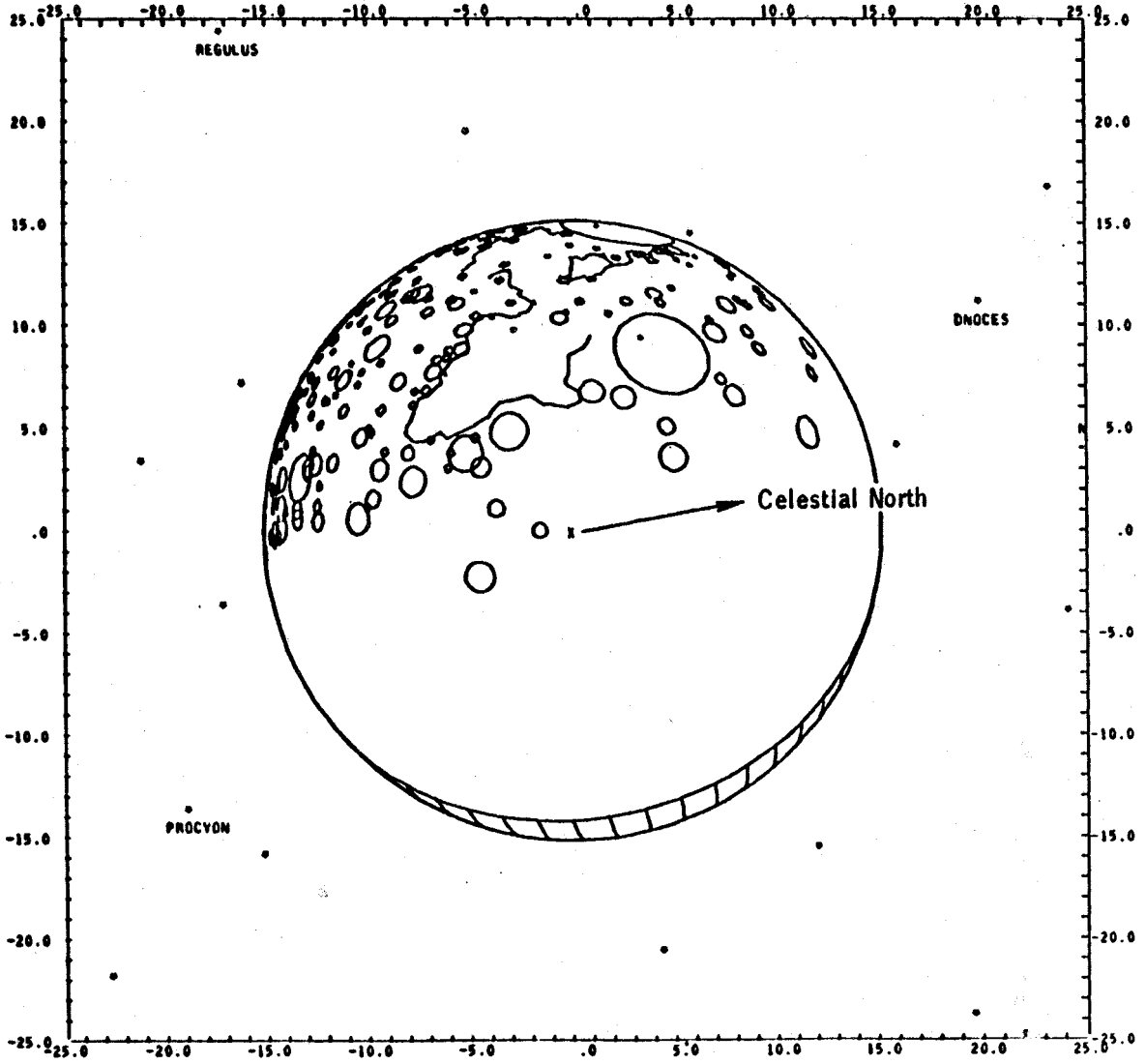
Longitude = 96.24° Latitude = -13.32° Radius = 2121.73 n. mi.



GET=237:10

TEI cutoff + 30 minutes.

Longitude = 78.28° Latitude = -6.51° Radius = 3587.53 n. mi.



GET=237:40

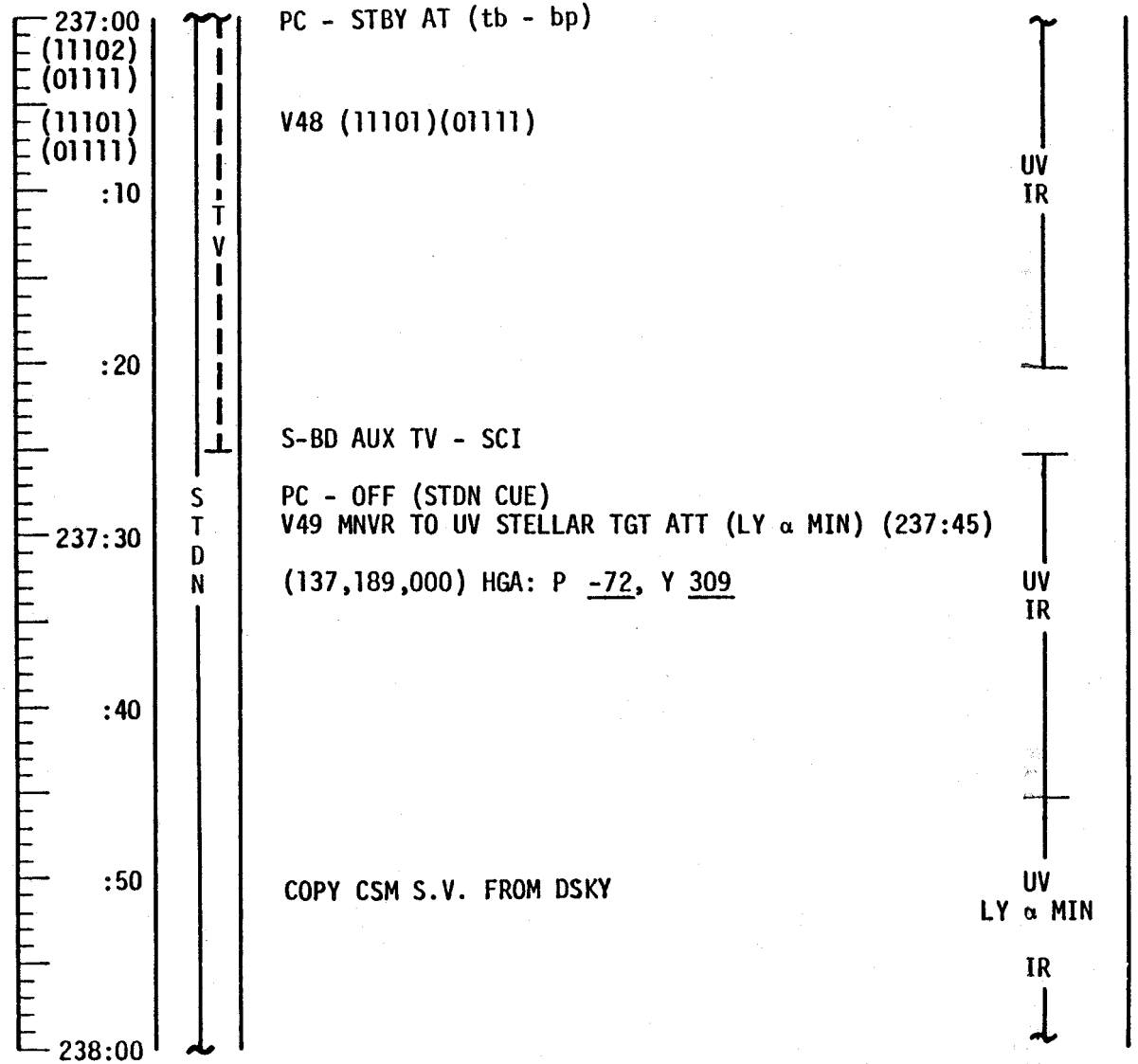
TEI cutoff + 1 hour.

P27 UPDATE

PURP	TEI BO +1.0MIN V			7	1	V			V		
GET	236: 43 :13.3					: :			: :		
304 01	INDEX			2	1	INDEX			INDEX		
305 02	0	1	5	0	1						
306 03	0	0	0	0	2						
307 04	0	0	2	4	7						
310 05	1	7	3	1	4						
311 06	0	0	2	2	6						
312 07	2	7	6	0	1						
313 10	7	7	7	3	6						
314 11	4	7	2	2	3						
315 12	1	7	3	5	4						
316 13	0	6	7	6	5						
317 14	5	7	5	7	1						
320 15	4	2	4	1	5						
321 16	6	3	7	6	6						
322 17	4	5	0	2	0						
323 20	1	2	1	2	1						
324 21	1	1	3	2	0						
325 22											
326 23											
327 24											
N34 HRS				X	X	X			X	X	X
MIN				X	X	X	X		X	X	X
NAV CHECK SEC				X	X				X	X	
N43 LAT					0					0	
LONG											
ALT				+	0				+	0	

FLIGHT PLAN

MCC-H | 1753 CST | NOTES



CMD / DSE REWIND

PC - STBY AT (tb - bp)

V48 (11101)(01111)

S-BD AUX TV - SCI

UPDATE / FLIGHT PLAN

PC - OFF (STDN CUE)
V49 MNVR TO UV STELLAR TGT ATT (LY α MIN) (237:45)

(137,189,000) HGA: P -72, Y 309

CMD / DSE PLAYBACK

COPY CSM S.V. FROM DSKY

UPLINK / DESIRED ORIENT (PTC)

SIM EXP STATUS
(*1011)
(24011)

UV OPTICAL AXIS POINTED AT RA 4:35, DEC +30° WITH CSM +X AXIS AT RA 9:48:20, DEC 28°51'51"

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	237:00 - 238:00	11/TEC	3-351

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1853 CST

238:00
(11101)
(01111)

:10

:20

238:30

:40

:50

239:00

STDN

LIMIT CYCLE - ON
ATT DEADBAND - MIN
RATE - LOW
BMAG (3) - ATT 1/RATE 2
SCS CONT - SCS
P52 (OPTION 3)
(TEI ORIENT)

STARS ____, ____
SA ____, ____
TA ____, ____

REPORT: GYRO TORQUING ANGLES
P52 (OPTION 1)
(PTC ORIENT)
GDC ALIGN
SC CONT - CMC
BMAG (3) - RATE 2
CMP DON BIOMED HARNESS

PTC REFSMMAT ATT.
R 070, P 015, Y 351

CHECK CMP BIOMED
LMP DOFF BIOMED HARNESS

V49 MNVR TO UV STELLAR TGT ATT (EARTH) (239:00)

(248,331,342) OMNI D

CMD
DSE REWIND

CMD
DSE RECORD

UV
LY α MIN

IR

NOTES

SIM EXP STATUS
(*1011)
(04011)

P52 IMU REALIGN
N71: __ __,__ __
N05: __ __ __.__ __
N93:
X __ __.__ __ __
Y __ __.__ __ __
Z __ __.__ __ __
GET __ __ __:__ __:__ __

SPACECRAFT REAL TIME DATA IS NOT AVAILABLE UNTIL 240:00

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	238:00 - 239:00	11/TEC	3-352

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1953 CST

239:00
(11101)
(01111)

:10

:20

239:30

:40

:50

240:00

S
T
D
N

EXERCISE PERIOD

UV
EARTH

IR

V49 MNVR TO UV STELLAR TGT ATT (MOON) (240:00)

(071,355,320) HGA: P -46, Y 347

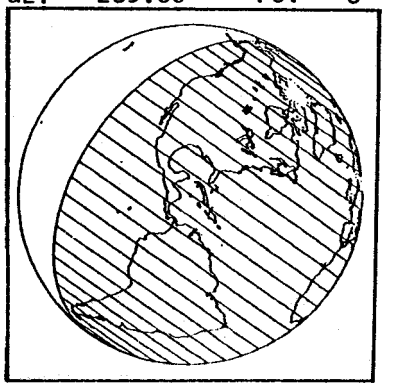
CMD
DSE REWIND

NOTES

SIM EXP STATUS
(*1011)
(04011)
EARTH DISTANCE
~190,239 NM

UV OPTICAL AXIS
POINTED AT EARTH
WITH +X AXIS AT
RA 9:31, DEC -14°

GET = 239:00 FOV = 3°



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	239:00 - 240:00	11/TEC	3-353

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2053 CST

240:00

CMD
DSE PLAYBACK

(11101)
(01111)

:10

UPDATE
FLIGHT PLAN

:20

240:30

:40

UPLINK
CSM S.V. & V66

:50

CMD
DSE REWIND

241:00

STDN

LiOH CANISTER CHANGE
(20 INTO B, STOW 18 IN A4)
MC - OFF
WAIT 30 SEC
MC - STBY
IMAGE MTN - OFF
MC - RETR
IR - OFF
MC/LA COVER - CLOSE
IR COVER - CLOSE

CSM G&C CHECKLIST

PASSIVE THERMAL CONTROL (G&N) PAGE G/8-2
AFTER STDN CUE
V49 TO UV/PTC SLEEP ATT

(N20,357,335)
P20 OPT 2, X-AXIS
N78 (0,0,0)
N79 (-0.4200, +000.50)
N34 (0,0,0)
COMM: HGA REACQ, NARROW P -40, Y 90

D1,B2,A3,C4,B3 AND D4 WILL BE USED FOR PTC RATE DAMPING, B2 & D2 FOR PTC SPINUP

UV
MOON
IR

NOTES

SIM EXP STATUS
(*1011)
(04011)

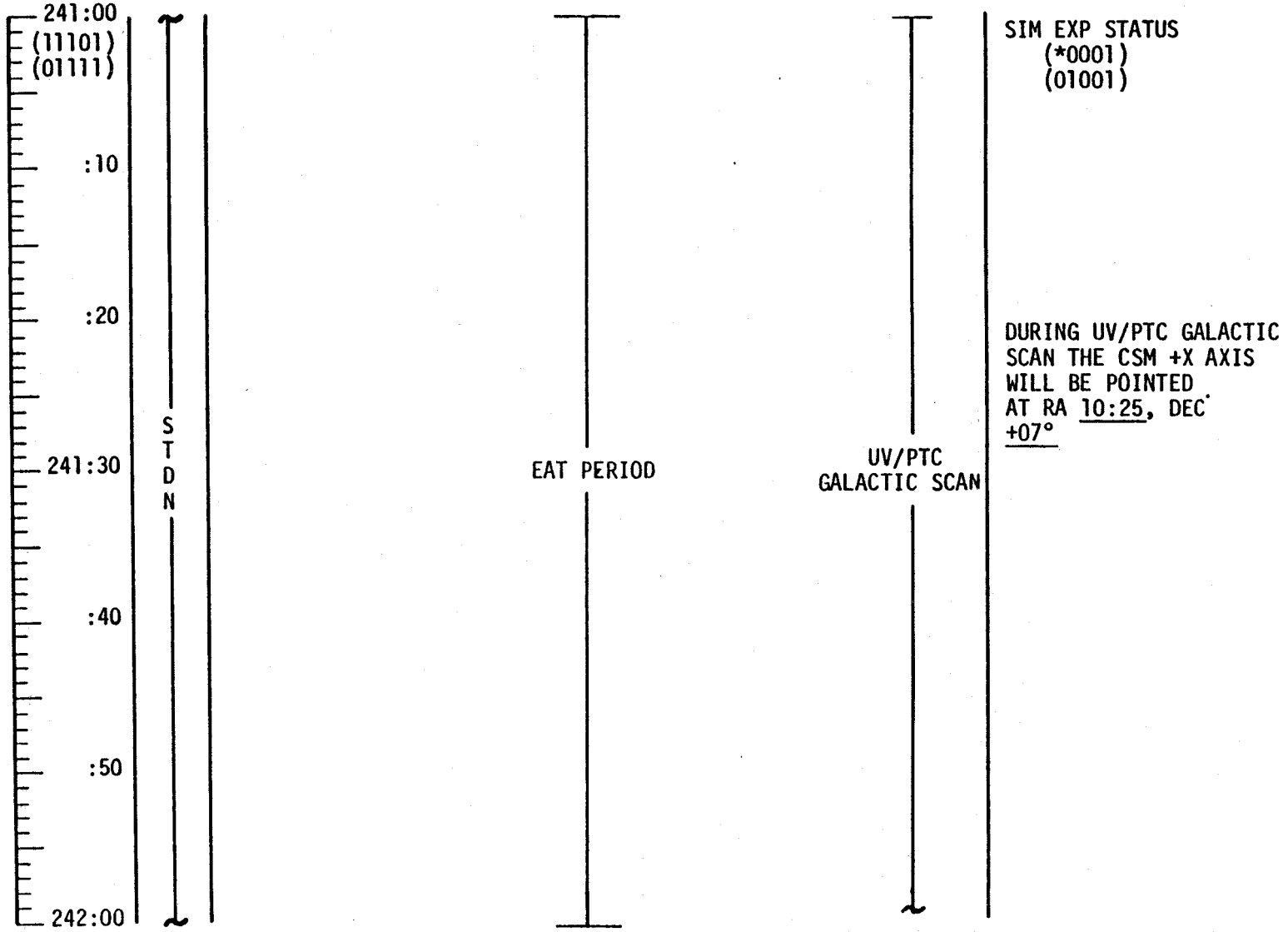
UV OPTICAL AXIS POINTED AT RA 6:58, DEC +22° CSM + X AXIS AT RA 11:20 DEC +4°

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	240:00 - 241:00	11/TEC	3-354

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	241:00 - 242:00	11/TEC	3-355

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2253 CST

242:00

:20

:40

243:00

:20

:40

244:00

STDN

CSM SYSTEMS CHECKLIST

PRE-SLEEP CHECKLIST PAGE S/1-29
COMM: HGA

FILM MAGS REQUIRED FOR NEXT DAY
DAC: FF

REST PERIOD
(8 HOURS)

UV/PTC
GALACTIC SCAN

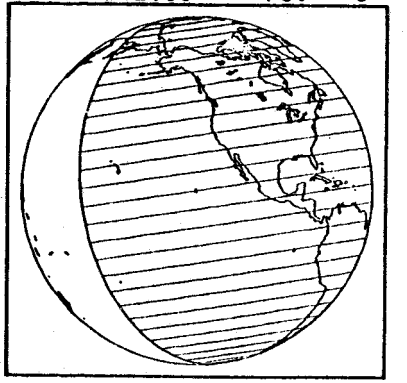
NOTES

SIM EXP STATUS
(*0001)
(01001)

DAP LOAD STATUS
(11101)(01111)

EARTH DISTANCE
~ 185,522 NM

GET = 242:00 FOV = 3°



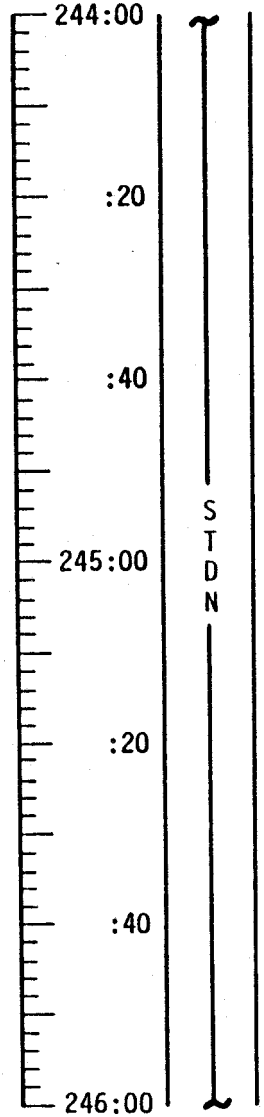
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	242:00 - 244:00	11/TEC	3-356

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0053 CST



STDN

REST PERIOD
(8 HOURS)

UV/PTC
GALACTIC SCAN

NOTES

SIM EXP STATUS
(*0001)
(01001)
DAP LOAD STATUS
(11101)(01111)

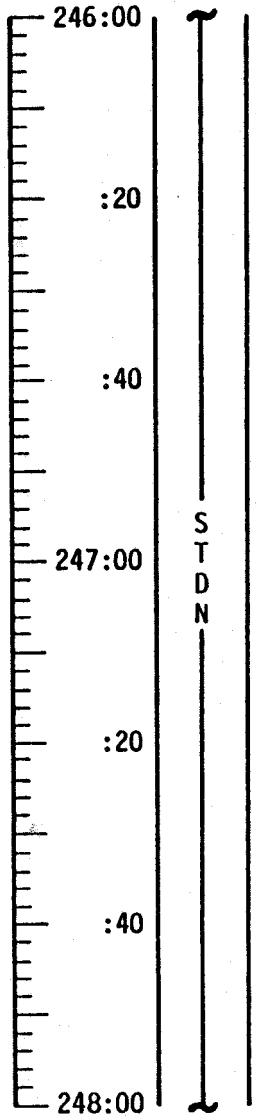
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	244:00 - 246:00	11/TEC	3-357

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0253 CST



STDN

REST PERIOD
(8 HOURS)

UV/PTC
GALACTIC SCAN

NOTES

SIM EXP STATUS
(*0001)
(01001)

DAP LOAD STATUS
(11101)(01111)

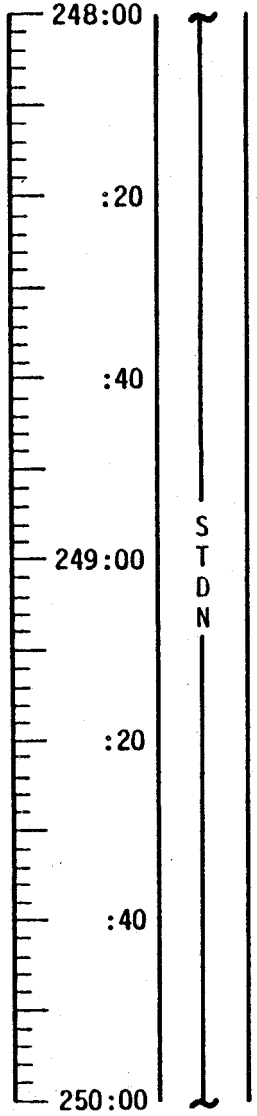
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	246:00 - 248:00	11/TEC	3-358

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0453 CST



STDN

REST PERIOD
(8 HOURS)

UV/PTC
GALACTIC SCAN

NOTES

SIM EXP STATUS
(*0001)
(01001)

DAP LOAD STATUS
(11101)(01111)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	248:00 - 250:00	11/TEC	3-359

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0653 CST

250:00

:10

:20

250:30

:40

:50

251:00

STDN

REST PERIOD
(8 HOURS)

CSM SYSTEMS CHECKLIST

POST-SLEEP CHECKLIST PAGE S/1-29

UV/PTC
GALACTIC SCAN

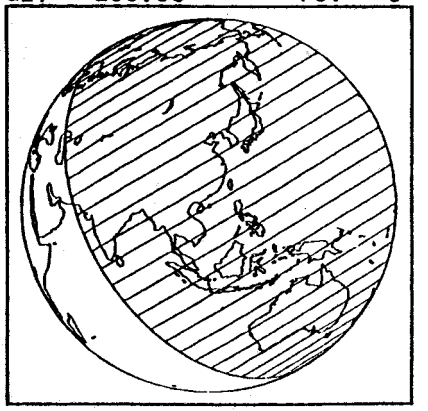
NOTES

SIM EXP STATUS
(*0001)
(01001)

DAP LOAD STATUS
(11101)(01111)

EARTH DISTANCE
~ 172,669 NM

GET = 250:00 FOV = 3°



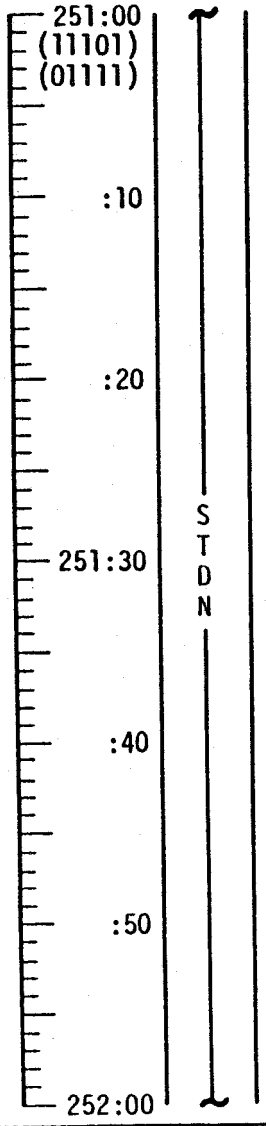
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	250:00 - 251:00	11-12/TEC	3-360

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0753 CST



STDN

EAT PERIOD

UV/PTC
GALACTIC SCAN

NOTES

SIM EXP STATUS
(*0001)
(01001)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	251:00 - 252:00	12/TEC	3-361

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H | 0853 CST

UPDATE
GO/NO-GO FOR MCC-5
MCC-5 MNVR PAD
(IF REQUIRED)

CONSUMABLES STATUS
FLIGHT PLAN
SIM EXP STATUS

UPLINK
CSM S.V. & V66
MCC-5 TGT LOAD
(IF REQUIRED)

252:00
(11101)
(01111)

:10

:20

252:30

:40

:50

253:00

STDN

IR - ON
P52 (OPTION 3)
(PTC ORIENT)

REPORT: GYRO TORQUING ANGLES
GDC ALIGN

LiOH CANISTER CHANGE
(21 INTO A, STOW 19 IN A4)

*UV COVER - CLOSE
*EXIT G&N PTC AT ROLL ANGLE 071, HGA P -58, Y 337
(COUPLED JETS) PAGE G/8-3
IR COVER - OPEN
CONFIGURE FOR URINE DUMP

*P30 EXTERNAL ΔV
*V49 MNVR TO PAD BURN ATTITUDE

*SXT STAR CHECK

O_2 FUEL CELL PURGE
WASTE WATER DUMP

SAMPLE BUSS'S (3) - STOW SAMPLES (3)
DUMP URINE FROM BUSS'S (3) - STOW
START NEW URINE COLLECTION PERIOD

UV/PTC GALACTIC SCAN

IR

NOTES

SIM EXP STATUS
(*0001)
(01001)

*PERFORM IF MCC-5 IS REQUIRED

IF MCC-5 IS NOT REQUIRED EXIT G&N PTC USING JETS D1, B2, A3, C4, B3 AND D4, WITH A ROLL ANGLE OF 071 AND HGA: P -58, Y 337

P52 IMU REALIGN
N71: __ __,__ __
N05: __ __ __.__ __
N93:
X __ __.__ __ __
Y __ __.__ __ __
Z __ __.__ __ __
GET __ __ __:__ __:__ __

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	252:00 - 253:00	12/TEC	3-362

FLIGHT PLANNING BRANCH

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FLIGHT PLAN

MCC-5
BURN TABLE

MANEUVER	SPS LIMITS	P OR Y RATES	ATT DEVIATION	MANUAL START ACTION	OVERBURN SHUTDOWN CRITERIA	RCS TRIM GUIDELINES
CORRIDOR CONTROL	LOOSE	10°/SEC COMPLETE	±10° COMPLETE	DELAY NO RESTART	BT + 1 SEC AND ΔV_C=0	TRIM X AXIS ONLY TO 0.2 FPS
IP CONTROL	TIGHT	10°/SEC TERMINATE	±10° TERMINATE	DELAY NO RESTART	BT + 1 SEC AND ΔV_C=0	*TRIM X & Z AXIS TO 0.2 FPS

*TRIM ONLY IF X $\leq$ 2 FPS
IF (+) V_{gz} ROLL RIGHT 90°
AND USE (+) Y THRUSTERS.

FLIGHT PLAN

MCC-H

0953 CST

253:00
(11101)
(01111)

:10

:20

253:30

:40

:50

254:00

TEI +17 HR

STDN

*LOGIC PWR (2) - OFF
*P40 SPS THRUSTING OR
*P41 RCS THRUSTING

TERMINATE WASTE WATER DUMP AT 10% LEVEL

MCC-5

*V66 SET CSM S.V. INTO LM S.V.
*REPORT: BURN STATUS
*LOGIC PWR (2) - DPLY/RETR

CSM EXP/EVA CHECKLIST

CM EVA PREP PAGE X/3-1
CABIN PREP FOR EVA
CDR & LMP DON BIOMED HARNESS AND VERIFY OPERATION

IR

TIG: 253:40
BT: NOM ZERO
ΔVT: NOM ZERO
ULLAGE: NOM ZERO

NOTES

SIM EXP STATUS
(*0010)
(01011)

*PERFORM IF MCC-5 IS REQUIRED

BURN STATUS REPORT

X	X					ΔTIG
X	X					BT
						V_{gx}
		TRIM				
X	X	X				R
X	X	X				P
X	X	X				Y
						V_{gx}
						V_{gy}
						V_{gz}
						ΔV_c
X	X	X				OX
X	X	X				FUEL
X	X	X				UNBAL

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	253:00 - 254:00	12/TEC	3-365

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1053 CST

NOTES

254:00
(11101)
(01111)

:10

:20

254:30

:40

:50

255:00

STDN

TV AND DAC PREP
MAG (FF)

IR

SIM EXP STATUS
(*0010)
(01011)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	254:00 - 255:00	12/TEC	3-366

FLIGHT PLANNING BRANCH

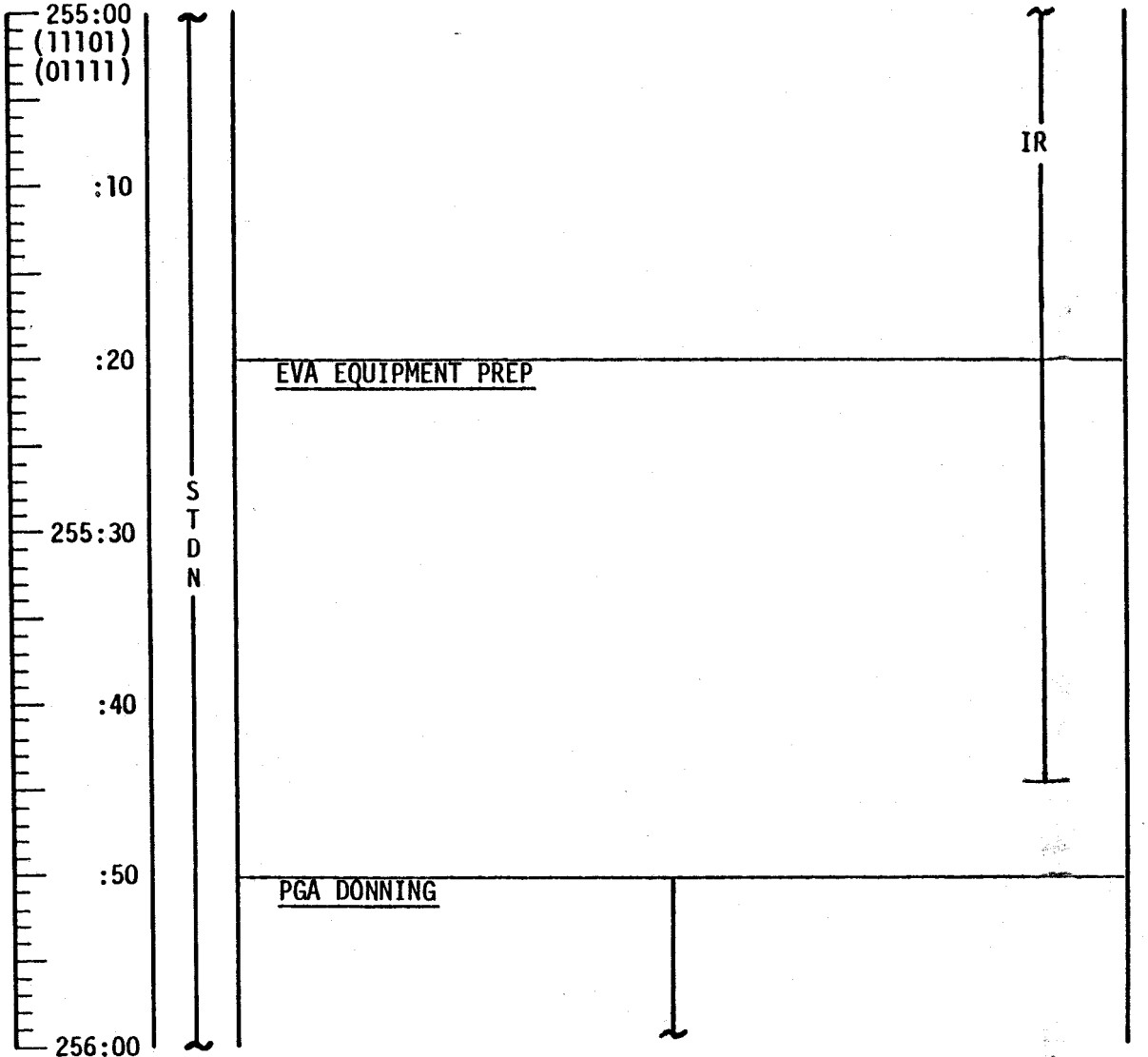
FLIGHT PLAN

MCC-H

1153 CST

NOTES

SIM EXP STATUS
(*0010)
(01011)



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	255:00 - 256:00	12/TEC	3-367

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1253 CST

NOTES

SIM EXP STATUS
(*0000)
(00000)

256:00
(11101)
(01111)

:10

:20

256:30

:40

:50

257:00

STDN

PGA DONNING

V49 MNVR TO EVA ATT (256:30)
(310,356,009) HGA P 43, Y 262

PRESS GAGE STATIC CHECK

COMM CHECK

(10101)
(10011)

SYSTEMS PREP FOR DEPRESS
V48 (10101)(10011)
INHIBIT ALL JETS EXCEPT:
C1, C2, C3, C4, D3, & D4 AT CONCLUSION OF MNVR
O_2 HEATERS 3 - AUTO

CMP EVA EQUIP DONNING

OPS DONNING

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	256:00 - 257:00	12/TEC	3-368

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1353 CST

257:00
(10101)
(10011)

:10

:20

257:30

:40

:50

258:00

STDN

TV

CDR/LMP INTEGRITY CHECK

CMP HELMET/GLOVE DONNING
EVA WARNING TONE CHECK
CMP INTEGRITY CHECK

CABIN DEPRESS
GO/NO-GO FOR CABIN DEPRESS
S-BD AUX TV - TV
HATCH OPENING

EVA OPERATIONS

CMP EGRESS

INSTALL TV/DAC, ADJUST

RETRIEVE LUNAR SOUNDER FILM CASSETTE

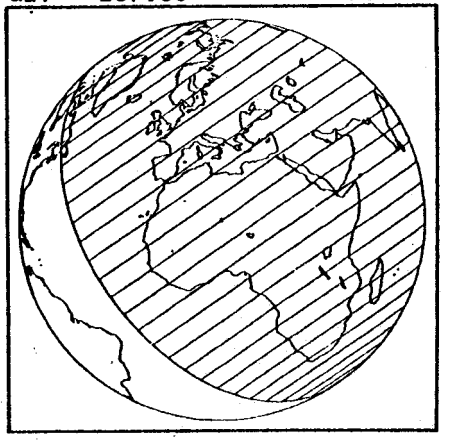
RETRIEVE PAN CAMERA CASSETTE

UPDATE
CONFIRM GO
FOR DEPRESS

NOTES

SIM EXP STATUS
(*0000)
(00000)
EARTH DISTANCE
~ 160,372 NM

GET = 257:00 FOV 3°



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	257:00 - 258:00	12/TEC	3-369

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1453 CST

258:00
(10101)
(10011)

:10

:20

258:30

:40

:50

259:00

STDN

TV

REST
RETRIEVE MAPPING CAMERA CASSETTE

REST
REMOVE TV/DAC & INGRESS

INGRESS
CM POST EVA

HATCH CLOSING
CABIN REPRESS

POST EVA PROCEDURES

CLEANUP PROCEDURES
DOFF PGA'S
CDR VERIFY BIOMED OPERATION
CMP & LMP DOFF BIOMED HARNESS
STOW EQUIPMENT

NOTES

SIM EXP STATUS
(*0000)
(00000)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	258:00 - 259:00	12/TEC	3-370

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1553 CST

259:00
(10101)
(10011)
:10
(11101)
(01111)
:20
259:30
:40
:50
260:00

STDN

V48 (11101)(01111)
SIM EXP PREP
AUTO RCS SELECT - OFF
EXCEPT: D1, B2, A3, C4, B3, D4

PCM BIT RATE - HIGH
S-BD AUX TV - SCI
DATA SYS - ON
LOGIC PWR (2) - DPLY/RETR
cb INST SCI EQUIP SEB (2) - CLOSE
IR - ON
UV - ON
IR COVER - OPEN
UV COVER - OPEN

MANUALLY ROLL LEFT 40° TO R 270°

V49 MNVR TO UV STELLAR TGT ATT (COMA CLUSTER) (260:00)

(206,161,301) OMNI: A
O_2 HEATERS 3 - OFF

CONTINUE POST EVA

NOTES

SIM EXP STATUS
(*0000)
(00000)

CMD
DSE RECORD

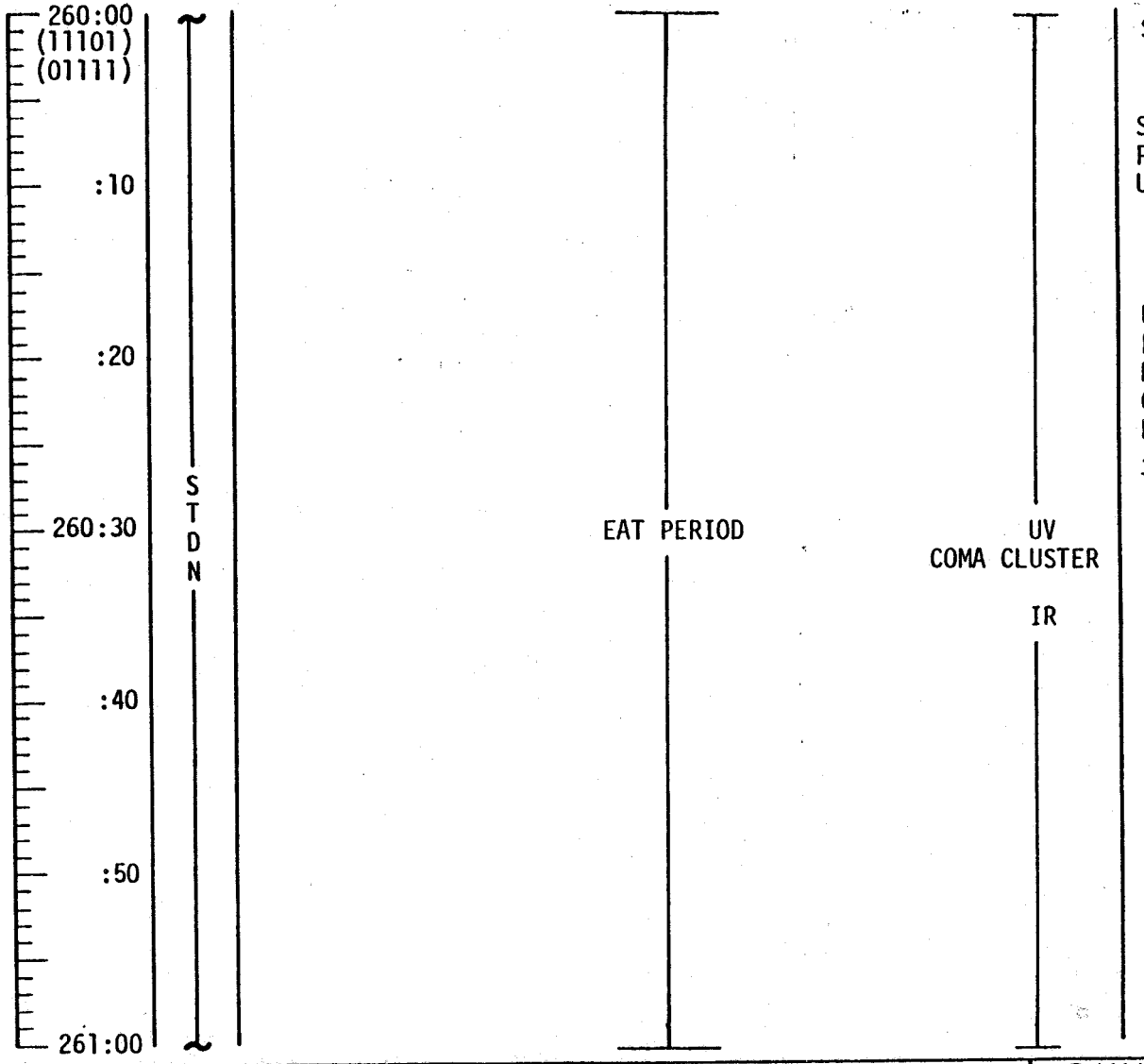
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	259:00 - 260:00	12/TEC	3-371

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1653 CST



NOTES

SIM EXP STATUS
(*0011)
(00011)

SPACECRAFT REAL TIME PCM IS NOT AVAILABLE UNTIL 261:20

UV OPTICAL AXIS POINTED AT RA 12:58, DEC +26° WITH CSM +X AXIS AT RA 16:37:00, DEC -12° 24'

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	260:00 - 261:00	12/TEC	3-372

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1753 CST

NOTES

CMD
DSE REWIND

261:00
(11101)
(01111)

:10

CMD
DSE PLAYBACK

:20

261:30

:40

:50

262:00

STDN

CONTINUE POST EVA
MANUALLY ROLL RIGHT 40° TO R 246
V49 MNVR TO UV STELLAR TGT ATT (CAL LUNAR GRAZING 60x14)
(261:20)

(024,224,293) HGA: P -2, Y 340

UV
STELLAR CAL

IR

SIM EXP STATUS
(*0011)
(00011)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	261:00 - 262:00	12/TEC	3-373

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1853 CST

NOTES

262:00
(11101)
(01111)

:10

:20

262:30

:40

:50

263:00

STDN

V49 MNVR TO UV STELLAR TGT ATT (CAL LUNAR GRAZING 60 X 60)
(262:15)

(035,228,298) HGA: P -8, Y 336

SIM EXP STATUS
(*0011)
(00011)

CREW EXERCISE PERIOD

UV
STELLAR CAL

IR

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	262:00 - 263:00	12/TEC	3-374

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1953 CST

263:00
(11101)
(01111)

:10

(11111)
(01111)

:20

263:30
(11101)
(01111)

:40

:50

264:00

STDN

V49 MNVR TO UV STELLAR TGT ATT (α ERIDANII) (263:15)
(014,192,333) HGA P -5, Y 296

CREW EXERCISE PERIOD

V48 (11111)(01111)

UV
α ERIDANII
IR

V48 (11101)(01111)

CSM G&C CHECKLIST

PASSIVE THERMAL CONTROL (G&N) G/8-2
V49 TO UV/PTC ATT

(014,175,066)
IR COVER - CLOSE
IR - OFF
P20, OPT 2, X-AXIS
N78 (0,0,0)
N79 (-0.4200, +000.50)
N34 (0,0,0)
COMM: HGA REACQ NARROW P -40, Y 90

D1, B2, A3, C4, B3 AND D4 WILL BE USED FOR PTC RATE DAMPING.
B2 & D2 FOR PTC SPINUP

NOTES

SIM EXP STATUS
(*0011)
(00011)

UV OPTICAL AXIS POINTED AT RA 01:38:33.0, DEC -58°10'28" WITH CSM +X AXIS AT RA 19:00, DEC -33°

UPLINK
CSM S.V. & V66

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	263:00 - 264:00	12/TEC	3-375

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2053 CST

264:00
(11101)
(01111)

:10

:20

264:30

:40

:50

265:00

STDN

LiOH CANISTER CHANGE
(22 INTO B, STOW 20 IN A4)

P52 (OPTION 3)
(PTC ORIENT)

REPORT: GYRO TORQUING ANGLES
GDC ALIGN

UV/PTC
α ERI, α GRU

NOTES

SIM EXP STATUS
(*0001)
(00001)

DURING UV/PTC GALACTIC SCAN THE CSM +X AXIS WILL BE POINTED AT RA 00:55, DEC +08°

P52 IMU REALIGN
N71: __ __,__ __
N05: __ __ __.__ __
N93:
X __ __.__ __ __
Y __ __.__ __ __
Z __ __.__ __ __
GET __ __ __:__ __:__ __

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	264:00 - 265:00	12/TEC	3-376

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2153 CST

NOTES

UPDATE
FLIGHT PLAN

265:00
(11101)
(01111)

:10

:20

265:30

:40

:50

266:00

STDN

EXIT G&N PTC AT ROLL ANGLE 014, HGA: P 02, Y 203
USING JETS D1,B2,A3,C4,B3,D4 PAGE G/8-3

CSM G&C CHECKLIST

PASSIVE THERMAL CONTROL (G&N) PAGE G/8-2
AFTER STDN CUE

V49 MNVR TO UV/PTC SLEEP ATT

(014,074,015)
P20 OPT 2, X-AXIS
N78 (0,0,0)
N79 (-0.4200, +000.50)
N34 (0,0,0)
COMM: HGA REACQ NARROW
P -40, Y 90

D1,B2,A3,C4,B3
AND D4 WILL BE USED
FOR PTC RATE
DAMPING, B2 & D2
FOR PTC SPINUP

EAT PERIOD

UV/PTC
GALACTIC SCAN

SIM EXP STATUS
(*0001)
(00001)

DURING UV/PTC
GALACTIC SCAN
THE CSM +X AXIS
WILL BE POINTED
AT RA 20:20, DEC
+88°

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	265:00 - 266:00	12/TEC	3-377

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2253 CST

266:00
(11101)
(01111)

:10

:20

266:30

:40

:50

267:00

STDN

EAT PERIOD

CSM SYSTEMS CHECKLIST

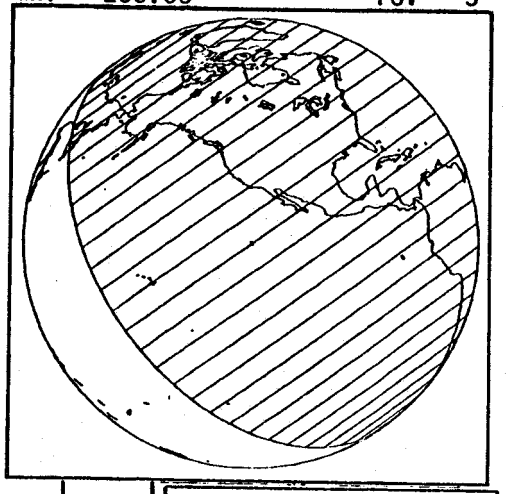
PRE-SLEEP CHECKLIST PAGE S/1-29
COMM - HGA

NO FILM MAGS REQD FOR NEXT DAY

NOTES

SIM EXP STATUS
(*0001)
(00001)

GET = 266:00 FOV = 3°



UV/PTC
GALACTIC SCAN

ONBOARD READOUT

BAT C _____
PYRO BAT A _____
PYRO BAT B _____
RCS A _____
B _____
C _____
D _____

DC IND SEL - MNA OR B

EARTH DISTANCE
~ 140,423 NM

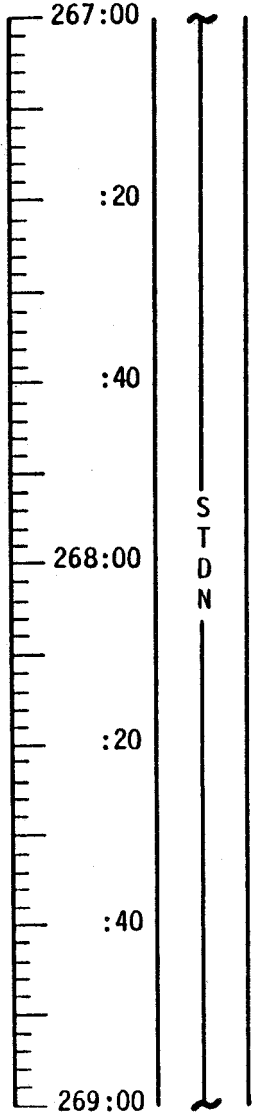
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	266:00 - 267:00	12/TEC	3-378

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2353 CST



STDN

REST PERIOD
(8 HOURS)

UV/PTC
GALACTIC SCAN

NOTES

SIM EXP STATUS
(*0001)
(00001)

DAP LOAD STATUS
(11101)(01111)

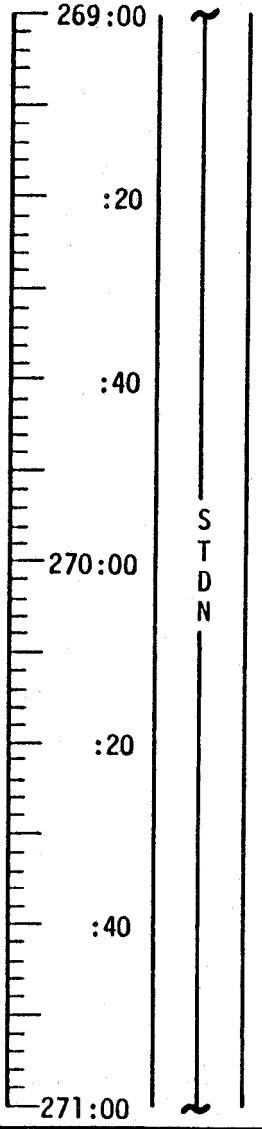
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	267:00 - 269:00	12/TEC	3-379

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0153 CST



STDN

REST PERIOD
(8 HOURS)

UV/PTC
GALACTIC SCAN

NOTES

SIM EXP STATUS
(*0001)
(00001)

DAP LOAD STATUS
(11101)(01111)

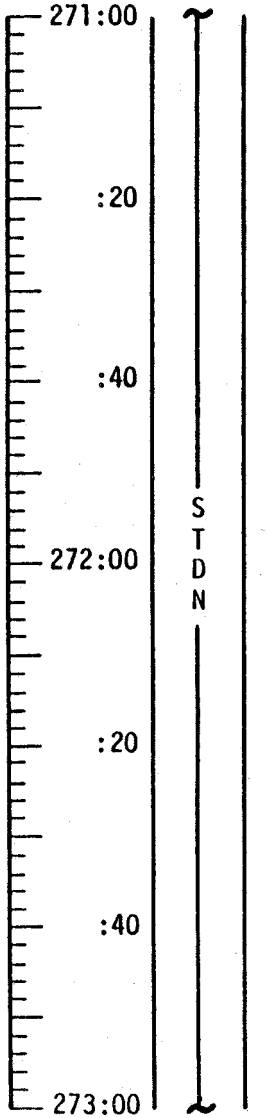
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	269:00 - 271:00	12/TEC	3-380

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0353 CST



STDN

REST PERIOD
(8 HOURS)

UV/PTC
GALACTIC SCAN

NOTES

SIM EXP STATUS
(*0001)
(00001)

DAP LOAD STATUS
(11101)(01111)

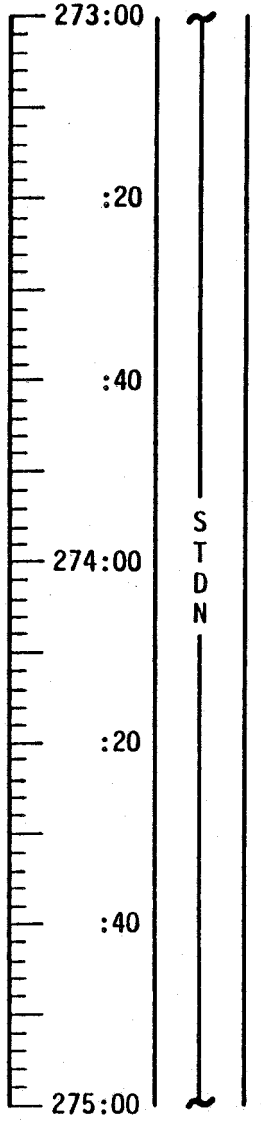
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	271:00 - 273:00	12/TEC	3-381

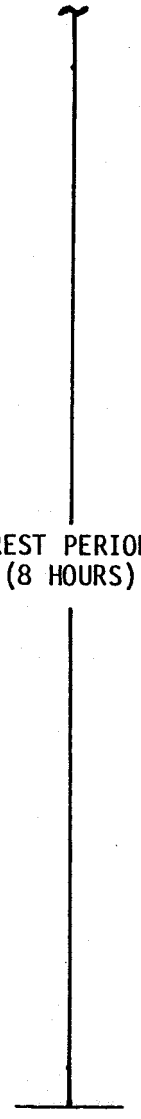
FLIGHT PLANNING BRANCH

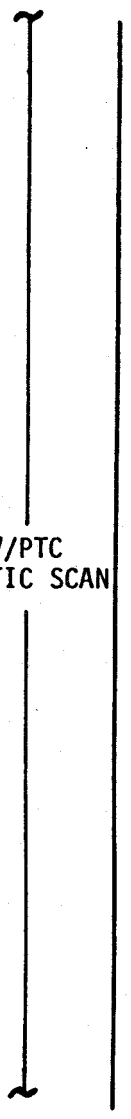
FLIGHT PLAN

MCC-H

0553 CST







NOTES

SIM EXP STATUS
(*0001)
(00001)

DAP LOAD STATUS
(11101)(01111)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	273:00 - 275:00	12/TEC	3-382

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0753 CST

275:00

:10

:20

275:30

:40

:50

276:00

STDN

CSM SYSTEMS CHECKLIST

POST-SLEEP CHECKLIST PAGE S/1-29

EAT PERIOD

UV/PTC
GALACTIC SCAN

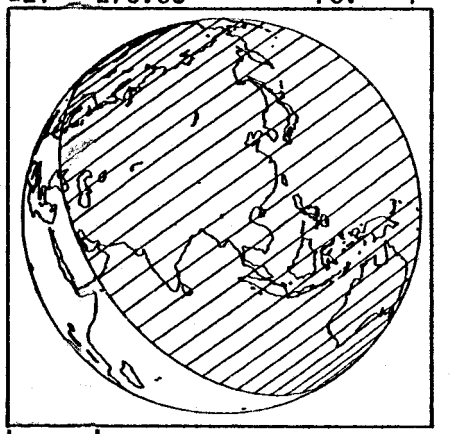
NOTES

SIM EXP STATUS
(*0001)
(00001)

DAP LOAD STATUS
(11101)(01111)

EARTH DISTANCE
~ 121,855 NM

GET = 275:00 FOV = 4°



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	8/28/72	275:00 - 276:00	13/TEC	3-383

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0853 CST

276:00
(11101)
(01111)

:10

:20

276:30

:40

:50

277:00

STDN

UPDATE
CONSUMABLES STATUS
FLIGHT PLAN
SIM EXP STATUS
WASTE WATER DUMP
PERCENTAGE

EAT PERIOD

UV/PTC
GALACTIC SCAN

UV
IR

CSM G&C CHECKLIST

IR - ON
EXIT G&N PTC AT ROLL ANGLE 014 HGA: P -16, Y 247
USING JETS D1,B2,A3,C4,B3,D4 PAGE G/8-3
H_2 PURGE LINE HEATER - ON
P52 (OPTION 3)
(PTC ORIENT)
CONFIGURE FOR URINE DUMP

REPORT: GYRO TORQUING ANGLES
GDC ALIGN
IR COVER - OPEN (BEFORE DUMP)
H_2 & O_2 FUEL CELL PURGE
SAMPLE BUSS'S (3) - STOW SAMPLES (3)
DUMP URINE FROM BUSS'S (3) - STOW
START NEW URINE COLLECTION PERIOD
WASTE WATER DUMP TO PERCENTAGE SPECIFIED BY STDN
CHARGE BATTERY A
H_2 PURGE LINE HEATER - OFF

NOTES

SIM EXP STATUS
(*0001)
(00001)

P52 IMU REALIGN
N71: __ __,__ __
N05: __ __ __.__ __
N93:
X __ __.__ __ __
Y __ __.__ __ __
Z __ __.__ __ __
GET __ __ __:__ __:__ __

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	276:00 - 277:00	13/TEC	3-384

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0953 CST

277:00
(11101)
(01111)

:10

CMD
DSE RECORD

:20

277:30

:40

:50

CMD
DSE STOP
PCM BIT RATE - LOW

278:00

S
T
D
N

V49 MNVR TO UV STELLAR TGT ATT (DARK NORTH) (277:15)
(212,172,316) OMNI D

STOWAGE
, FOR
ENTRY

UV
IR

UV
DARK NORTH

IR

NOTES

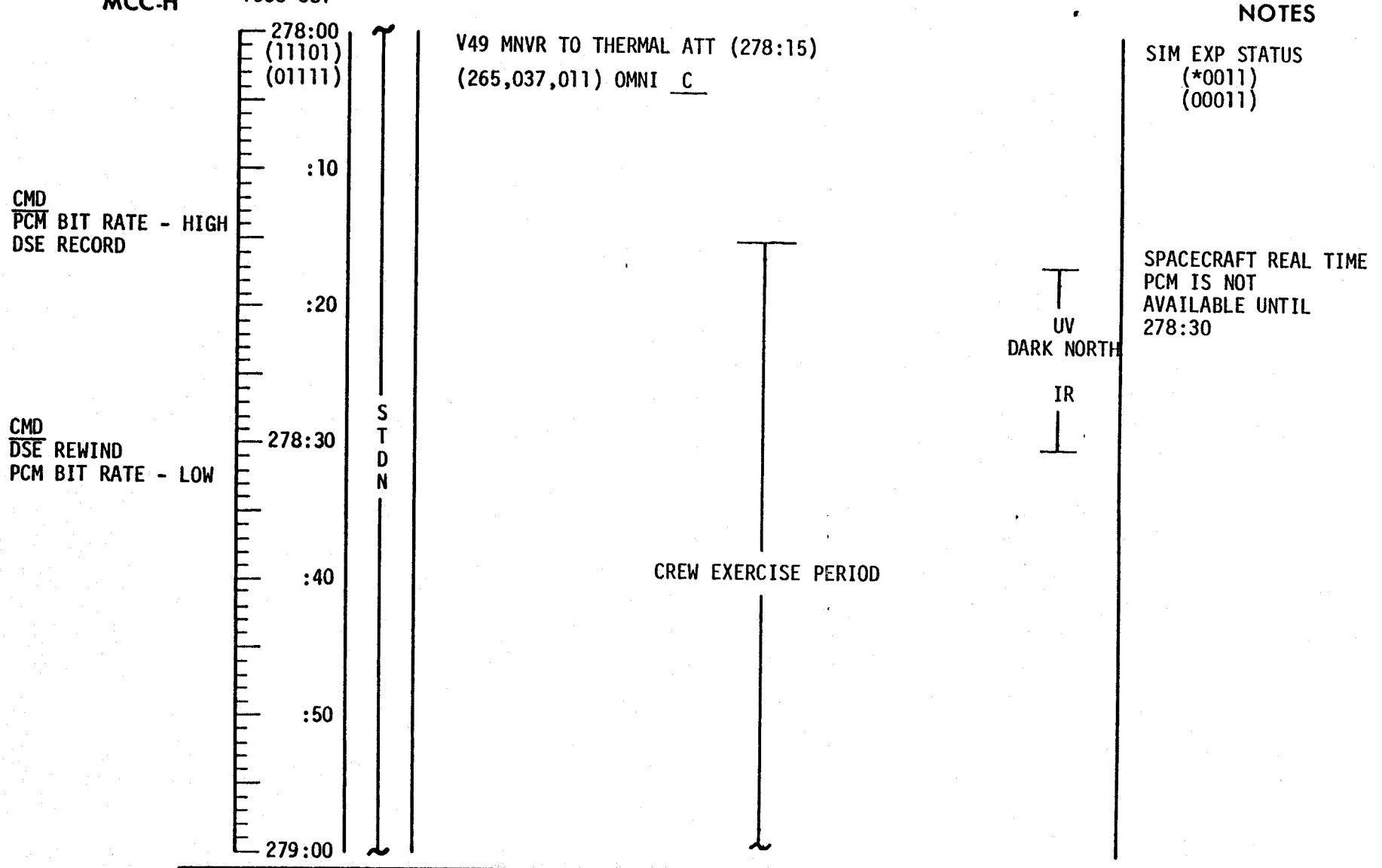
SIM EXP STATUS
(*0011)
(00011)
SPACECRAFT REAL TIME
PCM IS NOT
AVAILABLE UNTIL
278:00

UV OPTICAL AXIS
POINTED AT RA 14:00,
DEC +22° WITH CSM
+X AXIS AT RA 17:40,
DEC -17°30'.

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	277:00 - 278:00	13/TEC	3-385

FLIGHT PLANNING BRANCH

FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	278:00 - 279:00	13/TEC	3-386

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1153 CST

279:00
(11101)
(01111)

:10

:20

279:30

:40

:50

280:00

STDN

NOTES

SIM EXP STATUS
(*0011)
(00011)

LMP DON BIOMED HARNESS
CREW EXERCISE PERIOD

V49 MNVR TO UV STELLAR TGT ATT(NORTH ECLIPTIC POLE)(279:25)
(131,138,327) HGA: P -45, Y 50

CMD
DSE PLAYBACK
PCM BIT RATE - HIGH

CHECK LMP BIOMED HARNESS
CDR DOFF BIOMED HARNESS

CSM EXP/EVA CHECKLIST

LIGHT FLASH PHENOMENON OBSERVATION PAGE X/2-1

REPORT: READINESS TO DON EYE SHIELDS
WHEN EACH EYE SHIELD IS DONNED
THE OCCURRENCE OF EACH LIGHT FLASH
WHEN OBSERVATIONS ARE TERMINATED

UV OPTICAL AXIS POINTED AT RA 19:00, DEC +78° WITH CSM +X AXIS AT RA 17:55, DEC +11°

UV
NEP

IR

LIGHT
FLASH
OBS

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	279:00 - 280:00	13/TEC	3-387

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1253 CST

280:00
(11101)
(01111)

:10

:20

280:30

:40

:50

281:00

CUE
WHEN 60 MIN
FLASH OBS IS
COMPLETE

CMD
DSE REWIND

UPLINK
CSM S.V. & V66

STDN

LIGHT
FLASH
OBS

LiOH CANISTER CHANGE
(23 INTO A, STOW 21 IN A5)

ENTRY CHECKLIST

EMS ENTRY CHECK PAGE E/1-3

UV
NEP

IR

NOTES

SIM EXP STATUS
(*0011)
(00011)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	280:00 - 281:00	13/TEC	3-388

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1353 CST

UPDATE
ENTRY PAD
FLIGHT PLAN

CMD
DSE RECORD

CMD (HGA AOS)
DSE DUMP

281:00
(11101)
(01111)
:10
:20
281:30
:40
:50
282:00

STDN

MANUALLY ROLL LEFT 40° TO R 091°
V49 MNVR TO UV SOLAR ATMOSPHERE CAL ATT (281:15)
(273,026,325) OMNI C
P20 OPT 2
N78 (+090.00)
(+019.74)
N79 (-0.2000)
(+000.50)
N34 (0,0,0)

SPACECRAFT REAL TIME
PCM IS NOT AVAILABLE
UNTIL 281:35

UV
ATMOSPHERE
CAL

IR

ACQ HGA: MAN, WIDE, P 20, Y 200
S-BD ANT IND >1/2 SCALE HGA: REACQ, NARROW

STOP PITCH RATE AT 146°

NOTES

SIM EXP STATUS
(*0011)
(00011)

IF MCC-6 IS REQUIRED:
UPLINK TGT LOAD
UPDATE MNVR PAD

IF MCC-6 IS REQUIRED:
PERFORM AT 282:18

FLIGHT PLAN

MCC-H

1453 CST

282:00
(11101)
(01111)

:10

CMD
DSE RECORD

EI -22 HRS

:20

282:30

:40

:50

283:00

S
T
D
N

ON STDN CUE

V49 MNVR TO UV STELLAR TGT ATT (VIRGO CLUSTER)(282:25)

(253,018,017) OMNI D

EAT PERIOD

UV
VIRGO CLUSTER

IR

NOTES

SIM EXP STATUS
(*0011)
(00011)

SPACECRAFT REAL TIME
PCM IS NOT AVAILABLE
UNTIL 283:15

UV OPTICAL AXIS
POINTED AT RA 12:30,
DEC +12°

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	282:00 - 283:00	13/TEC	3-390

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1553 CST

283:00
(11101)
(01111)

:10

CMD
DSE STOP/REWIND
PCM BIT RATE LOW

:20

283:30

CMD
PCM BIT RATE HIGH
DSE PLAYBACK

:40

:50

284:00

STDN

EAT PERIOD

MANUALLY ROLL RIGHT 40° TO R293°

V40 MNVR TO UV STELLAR TGT ATT (DARK SOUTH)(283:37)

(056,186,354) HGA: P -44, Y 283

PREPARE FOR TV PRESS CONFERENCE

TV (GDS) 284:07-284:37 CM/TV AVG (f5.6 MONITOR)

CHARGE BATTERY B

UV
VIRGO CLUSTER

IR

UV
DARK SOUTH

IR

NOTES

SIM EXP STATUS
(*0011)
(00011)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	283:00 - 284:00	13/TEC	3-391

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1653 CST

284:00
(11101)
(01111)

CMD
DSE STOP

:10

:20

284:30

CMD
DSE PLAYBACK

:40

:50

285:00

STDN

TV

TEC PRESS CONFERENCE

S-BD AUX TV - TV

S-BD AUX TV - SCI

UV
DARK SOUTH
IR

UV
DARK SOUTH
IR

NOTES

SIM EXP STATUS
(*0011)
(00011)

UV OPTICAL AXIS
POINTED AT RA 01:05,
DEC -10° WITH CSM
+X AXIS AT RA 20:30
DEC -25°

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	284:00 - 285:00	13/TEC	3-392

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1753 CST

NOTES

UPDATE
FLIGHT PLAN

CMD
DSE REWIND

285:00
(11101)
(01111)

:10
(11102)
(01111)

:20

285:30

:40

:50

286:00

STDN

V48 (11102)(01111)

CSM G&C CHECKLIST

PASSIVE THERMAL CONTROL (G&N) PAGE G/8-2
EXCEPT: DAMP RATE FOR 5 MIN

V49 MNVR TO UV/PTC ATT

(N20,035,047)
IR COVER - CLOSE
P20 OPT 2, X-AXIS
N78 (0,0,0)
N79 (-0.4200, +000.50)
N34 (0,0,0)
COMM: HGA REACQ NARROW P -40, Y 90

D1,B2,A3,C4,B3 AND D4 WILL BE USED FOR PTC RATE DAMPING
B2 & D2 FOR PTC SPINUP

UV
DARK SOUTH
IR

UV/PTC
NEP, PEG

SIM EXP STATUS
(*0011)
(00011)

DURING UV/PTC GALACTIC SCAN THE CSM + AXIS WILL BE POINTED AT RA 04:55, DEC +46°

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	285:00 - 286:00	13/TEC	3-393

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1853 CST

286:00
(11102)
(01111)

:10

:20

CMD
DSE RECORD

286:30
(11112)
(01111)

:40

(11102)
(01111)

:50

CMD
DSE DUMP

287:00

STDN

CSM G&C CHECKLIST

EXIT G&N PTC AT ROLL ANGLE 131, HGA: P -21, Y 149
USING JETS D1,B2,A3,C4,B3 AND D4 PAGE G/8-3
AFTER STDN CUE

V49 MNVR TO UV STELLAR TGT ATT (SPICA)(286:30)

(255,188,321) OMNI D

IR COVER - OPEN

V48 (11112)(01111)

V48 (11102)(01111)
V49 MNVR TO COMM/UV PTC ATT (286:52)
(148,142,321) HGA: P -37, Y 48

CMP DON BIOMED HARNESS

UV/PTC
NEP, γ PEG

UV
SPICA

IR

UV
SPICA, NUMA
IR

NOTES

SIM EXP STATUS
(*0001)
(00011)

SPACECRAFT REAL TIME
PCM IS NOT
AVAILABLE UNTIL
286:52

UV OPTICAL AXIS
POINTED AT RA
13:24, DEC -11°
WITH CSM +X AXIS
AT RA 18:02, DEC -30°

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	286:00 - 287:00	13/TEC	3-394

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1953 CST

NOTES

287:00
(11102)
(01111)

:10

:20

287:30

:40

:50

288:00

STDN

E-MEMORY DUMP (CUE STDN)

CSM G&C CHECKLIST

PASSIVE THERMAL CONTROL (G&N) PAGE G/8-2
AFTER STDN CUE
IR COVER - CLOSE
IR - OFF
P20 OPT 2, X-AXIS
N78 (0,0,0)
N79 (-0.4200, +000.50)
N34 (0,0,0)
COMM: HGA REACQ NARROW
P -40, Y 90

CHECK CMP BIOMED
LMP DOFF BIOMED HARNESS

LiOH CANISTER CHANGE
(24 INTO B, STOW 22 IN A5)

UV
SPICA, NUMA

IR

D1,B2,A3,C4,B3 AND
D4 WILL BE USED
FOR PTC RATE
DAMPING, B2 & D2
FOR PTC SPINUP

UV/PTC
SPICA, NUMA

SIM EXP STATUS
(*0011)
(00011)

DURING UV/PTC
GALACTIC SCAN
THE CSM +X
AXIS WILL BE
POINTED AT
RA 17:40, DEC
+05°

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	287:00 - 288:00	13/TEC	3-395

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2053 CST

NOTES

UPDATE
FLIGHT PLAN

288:00
(11102)
(01111)

:10

:20

288:30
(11101)
(01111)

:40

:50

289:00

STDN

P52 (OPTION 3)
(PTC ORIENT)
REPORT: GYRO TORQUING ANGLES
GDC ALIGN

CSM G&C CHECKLIST

EXIT G&N PTC AT ROLL ANGLE 146 HGA: P -39, Y 46
USING JETS D1,B2,A3,C4,B3,D4 PAGE G/8-3
PASSIVE THERMAL CONTROL (G&N) PAGE G/8-2
AFTER STDN CUE
V49 MNVR TO UV/PTC SLEEP ATT
(146,284,014)
P20 OPT 2, X-AXIS
N78 (0,0,0)
N79 (-0.4200, +000.50)
N34 (0,0,0)
COMM: HGA REACQ NARROW
P -40, Y 90
V48 (11101)(01111)

D1,B2,A3,C4,B3 AND
D4 WILL BE USED
DAMPING, B2 & D2
FOR PTC SPINUP

EAT PERIOD

UV/PTC
SPICA, NUMA

UV/PTC
GALACTIC SCAN

SIM EXP STATUS
(*0001)
(00001)

P52 IMU REALIGN
N71: __ __,__ __
N05: __ __ __.__ __
N93:
X __ __.__ __ __
Y __ __.__ __ __
Z __ __.__ __ __
GET __ __ __:__ __:__ __

DURING UV/PTC
GALACTIC SCAN THE
CSM +X AXIS WILL
BE POINTED AT
RA 05:45, DEC -47°

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	288:00 - 289:00	13/TEC	3-396

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2153 CST

289:00
(11101)
(01111)

:10

:20

289:30

:40

:50

290:00

STDN

EAT PERIOD

CSM SYSTEMS CHECKLIST

PRE-SLEEP CHECKLIST PAGE S/1-29
COMM - HGA

FILM MAGS REQUIRED FOR NEXT DAY

DAC: GG

NOTES

SIM EXP STATUS
(*0001)
(00001)

EARTH DISTANCE
~ 80,921 NM

GET = 289:00 FOV = 7°



UV/PTC
GALACTIC SCAN

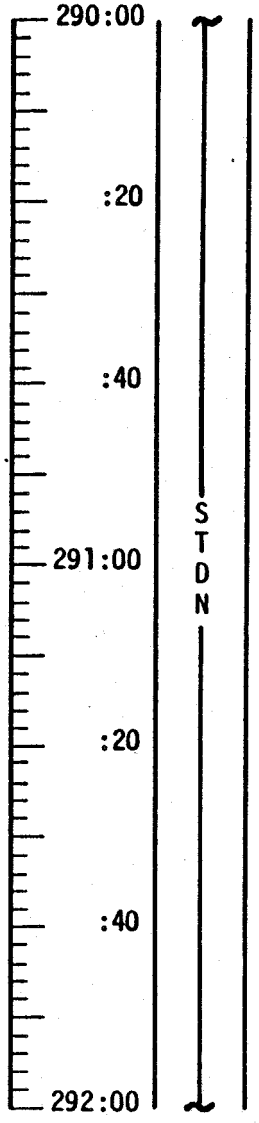
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	289:00 - 290:00	13/TEC	3-397

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2253 CST



STDN

REST PERIOD
(8 HOURS)

UV/PTC
GALACTIC SCAN

NOTES

SIM EXP STATUS
(*0001)
(00001)

DAP LOAD STATUS
(11101)(01111)

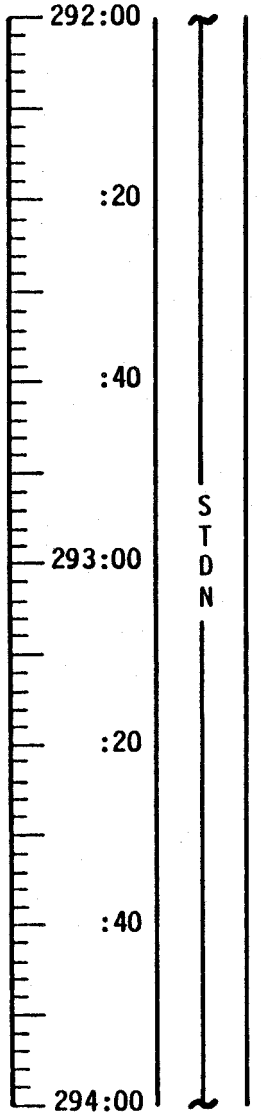
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	290:00 - 292:00	13/TEC	3-398

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0053 CST



STDN

REST PERIOD
(8 HOURS)

UV/PTC
GALACTIC SCAN

NOTES

SIM EXP STATUS
(*0001)
(00001)

DAP LOAD STATUS
(11101)(01111)

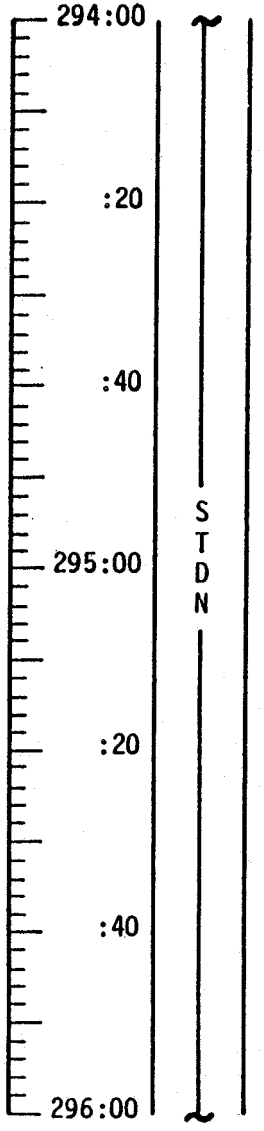
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	292:00 - 294:00	13/TEC	3-399

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0253 CST



STDN

REST PERIOD
(8 HOURS)

UV/PTC
GALACTIC SCAN

NOTES

SIM EXP STATUS
(*0001)
(00001)

DAP LOAD STATUS
(11101)(01111)

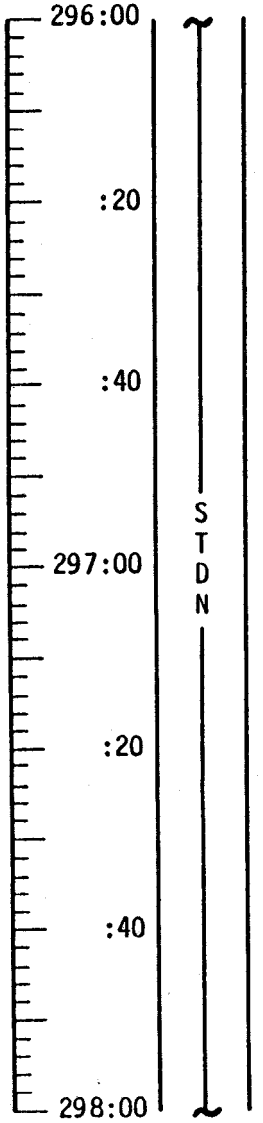
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	294:00 - 296:00	13/TEC	3-400

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0453 CST



S
T
D
N

REST PERIOD
(8 HOURS)

UV/PTC
GALACTIC SCAN

NOTES

SIM EXP STATUS
(*0001)
(00001)

DAP LOAD STATUS
(11101)(01111)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	296:00 - 298:00	13/TEC	3-401

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0653 CST

298:00

:10

:20

298:30

:40

:50

299:00

EI - 6 HRS

STDN

CSM SYSTEMS CHECKLIST

POST-SLEEP CHECKLIST PAGE S/1-29

EAT PERIOD

NOTES

SIM EXP STATUS
(*0001)
(00001)
DAP LOAD STATUS
(11101)(01111)

UV/PTC
GALACTIC SCAN

GET = 299:00 FOV = 20°



EARTH DISTANCE
~ 38,615

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	298:00 - 299:00	14/TEC	3-402

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0753 CST

NOTES

299:00
(11101)
(01111)

:10

EI - 5 HRS

:20

299:30

UPDATE
CONSUMABLE STATUS
FLIGHT PLAN
GO/NO-GO FOR
MCC-7

:40
(11102)
(01111)

UPLINK

DESIRED ORIENT
(ENTRY)

:50

300:00

STDN

EAT PERIOD

UV/PTC
GALACTIC SCAN

SIM EXP STATUS
(*0001)
(00001)

REPORT: CM INJECTOR VALVE TEMPS
SYS TEST METER 5C,5D,6A,6B,6C,6D
CSM G&C CHECKLIST
EXIT G&N PTC AT ROLL ANGLE 146, HGA: P -27, Y 93
(COUPLED JETS) PAGE G/8-3
V48 (11102)(01111)
IR - ON
IR COVER - OPEN
LIMIT CYCLE - ON
ATT DEADBAND - MIN
RATE - LOW
BMAG (3)-ATT 1/RATE 2
SC CONT - SCS
P52 (OPT - 3)
(PTC ORIENT)
REPORT: GYRO TORQUING ANGLES
P52 (OPT 1)
(ENTRY ORIENT)

STARS ____, ____
SA ____, ____
TA ____, ____

EI REFSMMAT ATT
R 246
P 324
Y 059

UV

IR

P52 IMU REALIGN
N71: __ __,__ __
N05: __ __ __.__ __
N93:
X __ __.__ __ __
Y __ __.__ __ __
Z __ __.__ __ __
GET __ __ __:__ __:__ __

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	299:00 - 300:00	14/TEC	3-403

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0853 CST

UPLINK
MCC-7 TGT LOAD
CSM S.V. & V66
UPDATE
MCC-7 MNVR PAD
ENTRY PAD

EI -4 HR

300:00
(11102)
(01111)
:10
:20
300:30
:40
:50
301:00

S T D N

GDC ALIGN
SC CONT - CMC
BMAG (3) - RATE 2
EXTEND AND LOCK YY ATTENUATOR STRUTS
DON MAE WESTS & FOOT RESTRAINTS
cb S-BD FM XMTR/DSE (2) CLOSE-(VERIFY)
CSM SYSTEMS CHECKLIST
ECS CKS
 02 SUPPLY REFILL PAGE S/1-7
 PGA VERIFICATION (IF SUITED) PAGE S/1-14
 ECS MONITOR CK PAGE S/1-5
EVAP H2O CONT PRI VLV - AUTO
*P30 EXTERNAL ΔV
*V49 MNVR TO BURN ATT
CONFIGURE FOR URINE DUMP
UPDATE STOWAGE LIST & TAPE TO LEB
CDR & LMP DON BIOMED HARNESS

*SXT STAR CHECK
SAMPLE BUSS'S (3) - STOW SAMPLES (3)
DUMP URINE FROM BUSS'S (3) - STOW
START NEW URINE COLLECTION PERIOD

NOTES

SIM EXP STATUS
(*0011)
(00011)

EVAP H2O CONT SEC VLV - AUTO
SUIT HEAT EXCH SEC GLY - FLOW
MARK DIRECT 02 "OFF" POSITION WITH TAPE
CSM SYSTEMS CHECKLIST
EPS CKS PAGE S/1-2
SPS CK PAGE S/1-1
RCS CKS PAGE S/1-1
C&W SYS CK PAGE S/1-20

*PERFORM IF
MCC-7 IS REQUIRED

UV

IR

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	300:00 - 301:00	14/TEC	3-404

FLIGHT PLANNING BRANCH

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FLIGHT PLAN

MCC-7
BURN TABLE

MANEUVER	SPS LIMITS	P OR Y RATES	ATT DEVIATION	MANUAL START ACTION	OVERBURN SHUTDOWN CRITERIA	RCS TRIM GUIDELINES
CORRIDOR CONTROL	LOOSE	10°/SEC COMPLETE	± 10° COMPLETE	DELAY NO RESTART	BT + 1 SEC AND ΔV_C=0	TRIM X AXIS ONLY TO 0.2 FPS

FLIGHT PLAN

MCC-H

0953 CST

EI -3 HR

301:00
(11102)
(01111)

:10

:20

301:30

:40

:50

302:00

STDN

*P40 SPS THRUSTING OR
*P41 RCS THRUSTING

MCC-7

TIG: 301:18
BT: NOM ZERO
ΔVT: NOM ZERO
ULLAGE: NOM ZERO

*V66 SET S.V. INTO LM S.V.
*REPORT: BURN STATUS

CMP DON COUNTERPRESSURE GARMENT

VERIFY STOWAGE

REMOVE AND STOW CABIN FAN FILTER (U2)

UV

IR

NOTES

SIM EXP STATUS
(*0011)
(00011)

*PERFORM IF MCC-7 IS REQUIRED

BURN STATUS REPORT

X	X		●			ΔTIG
X	X		●			BT
				●		V_{gx}
		TRIM				
X	X	X				R
X	X	X				P
X	X	X				Y
				●		V_{gx}
				●		V_{gy}
				●		V_{gz}
				●		ΔV_c
X	X	X				FUEL
X	X	X				OX
X	X	X				UNBAL

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	301:00 - 302:00	14/TEC	3-407

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1053 CST

302:00
(11102)
(01111)

:10

:20

302:30

:40

:50

303:00

STDN

IR - OFF
UV - OFF
IR COVER - CLOSE
UV COVER - CLOSE
S-BD AUX TV - OFF
DATA SYS - OFF

STOW FLIGHT PLAN

CSM ENTRY CHECKLIST

LOGIC SEQUENCE CHECK PAGE E/1-2

EI -2 HR

UPDATE
GO/NO-GO FOR
PYRO ARM
SEQUENCE

P52 (OPTION 3) PAGE E/1-2
(ENTRY ORIENT)

NOTES

SIM EXP STATUS
(*0011)
(00011)

P52 IMU REALIGN
N71: __ __,__ __
N05: __ __ __.__ __
N93:
X __ __.__ __ __
Y __ __.__ __ __
Z __ __.__ __ __
GET __ __ __:__ __:__ __

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	302:00 - 303:00	14/TEC	3-408

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H	1153 CST		NOTES
	303:00 (11102) (01111)	REPORT: GYRO TORQUING ANGLES	SIM EXP STATUS (*0000) (00000)
		GDC ALIGN PAGE E/1-3 V49 MNVR TO HORIZON CHECK ATT BORESIGHT & SXT STAR CHECK	
	:10	EMS ENTRY CHECK PAGE E/1-3 PRI & SEC WATER EVAP ACTIVATION PAGE E/1-4	
		CONFIGURE CAMERA EQUIP FOR FIREBALL & CHUTES PHOTOS	
EI -1 HR		CM RCS PREHEAT (IF REQUIRED)	
	:20	FINAL STOWAGE PAGE E/1-5	
UPDATE GO/NO-GO FOR PYRO ARM ENTRY PAD RECOVERY PAD		CONFIGURE FOR VHF A SIMPLEX VOICE CHECK	
		TERMINATE RCS PREHEAT PYRO BATT CHECK	
	303:30	SYSTEMS TEST PANEL CONFIGURATION PAGE E/1-6 CONFIGURE PNL 8	
UPLINK CSM S.V. & V66		P27 & ENTRY PAD UPDATE	
	:40	EMS INITIALIZATION PAGE E/2-1	
		RSI ALIGNMENT	
EI -30 MIN		CM RCS CHECK	
	:50		
		SEPARATION CHECKLIST PAGE E/2-2	
VHF-A SIMPLEX COMM CHECK		P61 ENTRY PREP PAGE E/2-2	
		P62 CM/SM SEP & PRE-ENTRY MNVR PAGE E/2-3	
	304:00	P63 ENTRY INIT PAGE E/2-4	

STDN

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	303:00 - 304:00	14/TEC	3-409

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1253 CST

NOTES

EI -15 MIN

304:00
(11102)
(01111)

:10

:20

304:30

:40

:50

305:00

STDN

CM/SM SEP 304:03

ENTRY ATT
(000,152,000)

EI 304:18

SPLASHDOWN 304:31

TIME FROM 400K FT	
TRAJECTORY EVENTS	MIN:SEC
400K FT (GET 304:18:00.5)	00:00
ENTRY S-BAND BLACKOUT	00:17
0.05G	00:29
KA-INITIATE CONSTANT DRAG	00:52
MAX HEATING RATE	01:12
RDOT = -700 FPS	01:20
PEAK G (FIRST)	01:23
SUBCIRCULAR VELOCITY	02:06
P64 TO P67	02:02
EXIT S-BAND BLACKOUT	03:36
PEAK G (SECOND)	05:32
GUIDANCE TERMINATION	06:44
DROGUE DEPLOYMENT	07:41
MAIN DEPLOYMENT	08:23
SPLASHDOWN	13:09

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	304:00 - 305:00	14/TEC	3-410

FLIGHT PLANNING BRANCH

SECTION 4 - CONSUMABLES ANALYSIS

Mission profile dependent
8/29/72 Basic

THE SPS ANALYSIS ASSUMPTIONS

FOR THE SPS PROPELLANT ANALYSIS

1. All spacecraft weights and the sequential consumables losses were taken from the Spacecraft Operational Data Book, Amendment 127.

2. The engine I_{sp} assumed for this analysis is 314.5 seconds.

3. The 3σ dispersions are the RSS of the penalties imposed on the SPS margin by 3σ dispersions in propellant loading, mixture ratio, engine I_{sp}, maneuver ΔV, spacecraft weight, and consumable weight losses.

4. The CSM/LM weights for the J-missions have increased to an extent that, for some launch dates, the S-IVB will not have sufficient propellant reserves to compensate for a 3σ engine. Thus, in order to have a combined 3σ confidence level for the S-IVB and SPS, the S-IVB ΔV deficit is covered in the SPS propellant budget. Currently, the nominal mission does not require this allowance.

5. The ground rule for a contingency allowance is to budget for either an LM rescue or for a maneuver to avoid adverse weather conditions at entry, whichever produces the least SPS margin. The ΔV for the LM rescue allowance and the weather avoidance allowance is 600 ft/sec and 300 ft/sec, respectively. For this mission, the weather avoidance allowance produces the least SPS margin.

Mission profile dependent
8/29/72 Basic

APOLLO 17 SPS PROPELLANT SUMMARY

[DECEMBER 7, 1972, G.m.t., LAUNCH DATE; 72° LAUNCH AZIMUTH]

Item	Required, lb	Remaining, lb
Actual loading		40 796
Trapped and unavailable	441	40 355
Outage	60	40 295
Unbalance meter	100	40 195
Available for ΔV		40 195
Required for ΔV		
LOI (2979.9 fps)	26 143	14 052
DOI	1 497	12 555
CIRC (70.1 fps)	276	12 279
LOPC-1 (336.7 fps)	1 238	11 041
TEI (3045.7 fps)	9 446	1 595
Nominal remaining		1 595
Dispersions		
TLMC (23 fps)	263	1 332
-3σ performance	367	965
S-IVB ΔV deficit	0	965
Margin above 3σ		965
Available for contingencies*		965

*965 lb is equivalent to 378 fps end-if-mission reserve. Weather avoidance contingency allowance of 300 fps requires 795 lbs, which results in a margin after contingencies of 172 lbs.

Mission profile dependent

SM RCS budget 8/29/72 Basic

Ground Rules and Assumptions

1. Following transposition and docking, the S-IVB performs the evasive maneuver.

2. Two midcourse corrections (translunar) are executed as SPS burns with one MCC followed by an RCS trim.

3. One midcourse correction (transearth) is executed as an RCS burn of 5 fps.

4. Quad management is to be determined during the mission.

5. Single jet RCS control during SIM exps.

6. Couple jet RCS control during SIM off periods (major burns).

7. All maneuvering at low rate (0.2°/sec) both docked and undocked.

8. Attitude hold deadband during SIM photography and major burns - 0.5°.

9. Attitude hold deadband at other times - 2.5°.

10. Lunar orbit usage

Sim photography	1.0 lb/hr
Rest periods	0.1 lb/hr
Other	0.5 lb/hr

11. Nominal ullages.

12. Redlines will be defined by the Flight Control Division as an aid in assuring that mission rules are not violated during the mission. They are subject to review during the mission as mission phases are completed and systems capabilities are evaluated. In the event the rescue redline is violated prior to rendezvous, lunar orbit photography activities can be curtailed to conserve propellant. The lunar orbit redline includes a nominal transearth coast phase (with all navigational sightings) plus a 3 sigma G&N TEI cutoff error MCC. If a rescue is required and the lunar orbit redline is violated prior to the nominal TEI, TEI can be performed early and navigational sighting activity curtailed during the transearth phase. The rescue redline is based on the minimized activity during the transearth phase.

Mission profile dependent
8/29/72 Basic

APOLLO 17 SM RCS ANALYSIS

Item	Required, lb	Remaining, lb
Nominal loading	- -	1338.4
Initial M/R outage	15.6	- -
Total trapped	26.4	- -
Gaging inaccuracy	56.0	- -
Deliverable		1240.4
Nominal usage		
Translunar coast	177.5	- -
Lunar orbit	395.9	- -
Transearth coast	99.4	- -
Total	672.8	- -
Nominal remaining usable		567.6

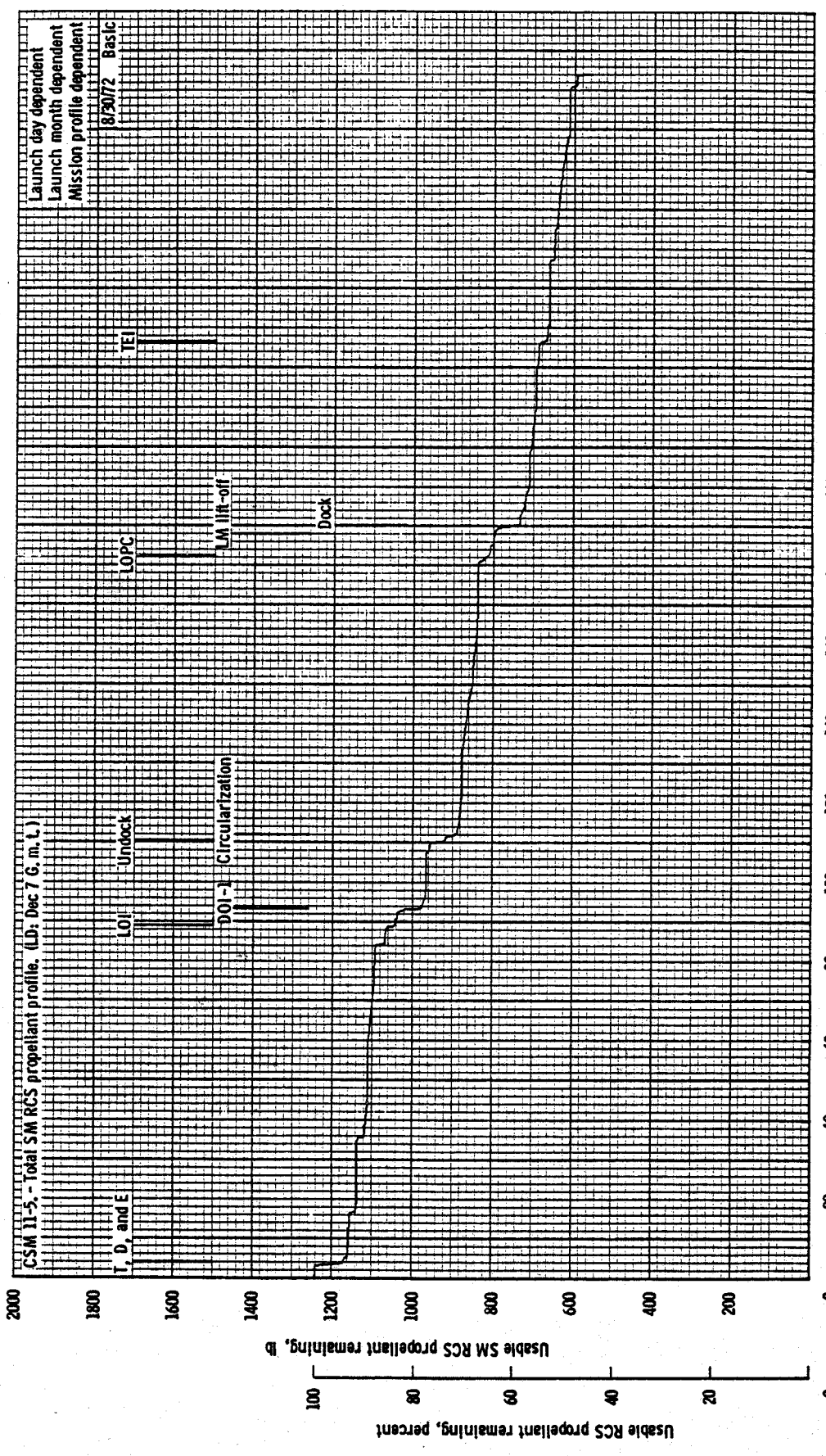
Mission profile dependent
8/29/72 Basic

SM RCS PROPELLANT TRANSLATION COST

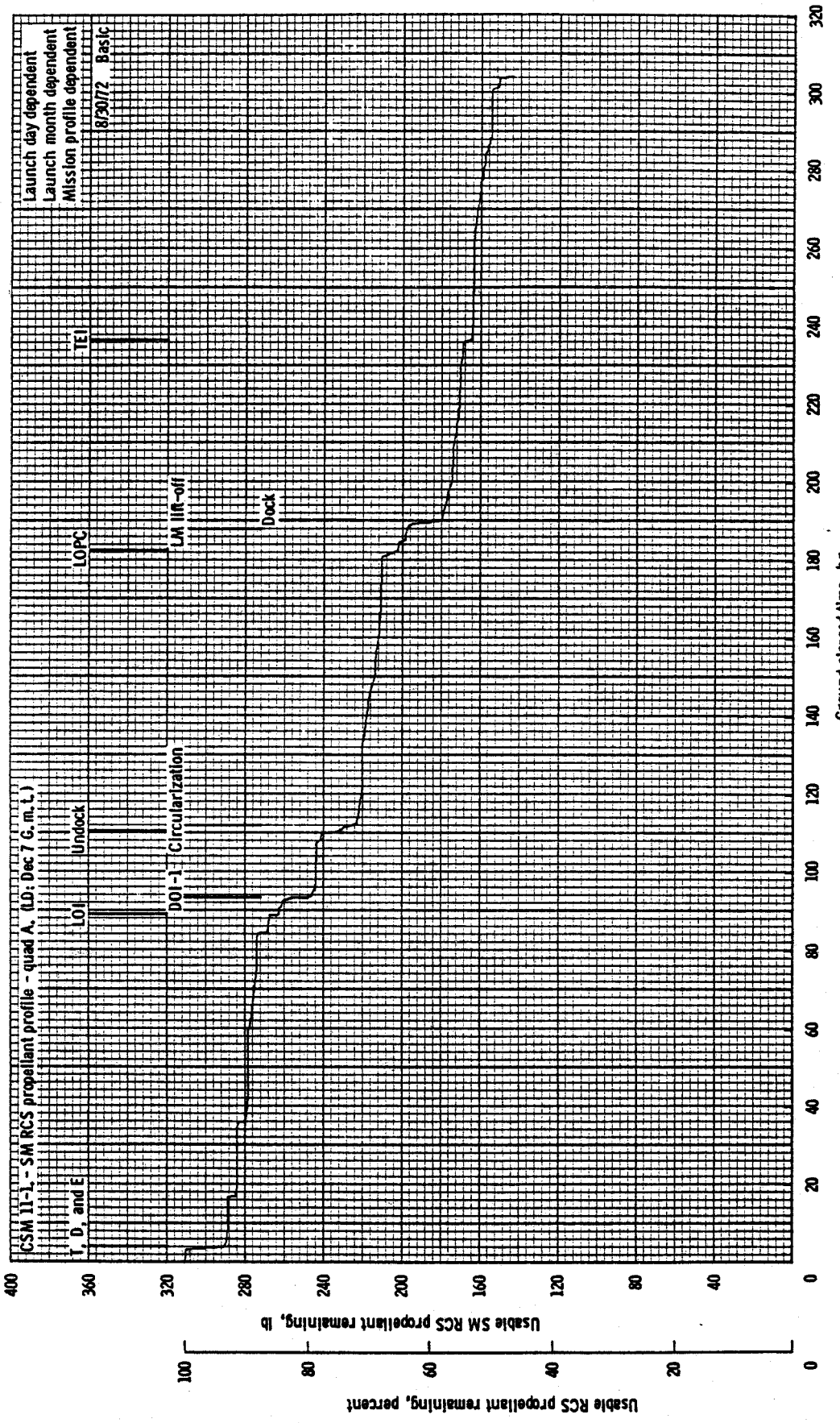
APOLLO 17

(CSM 114/LM-12)

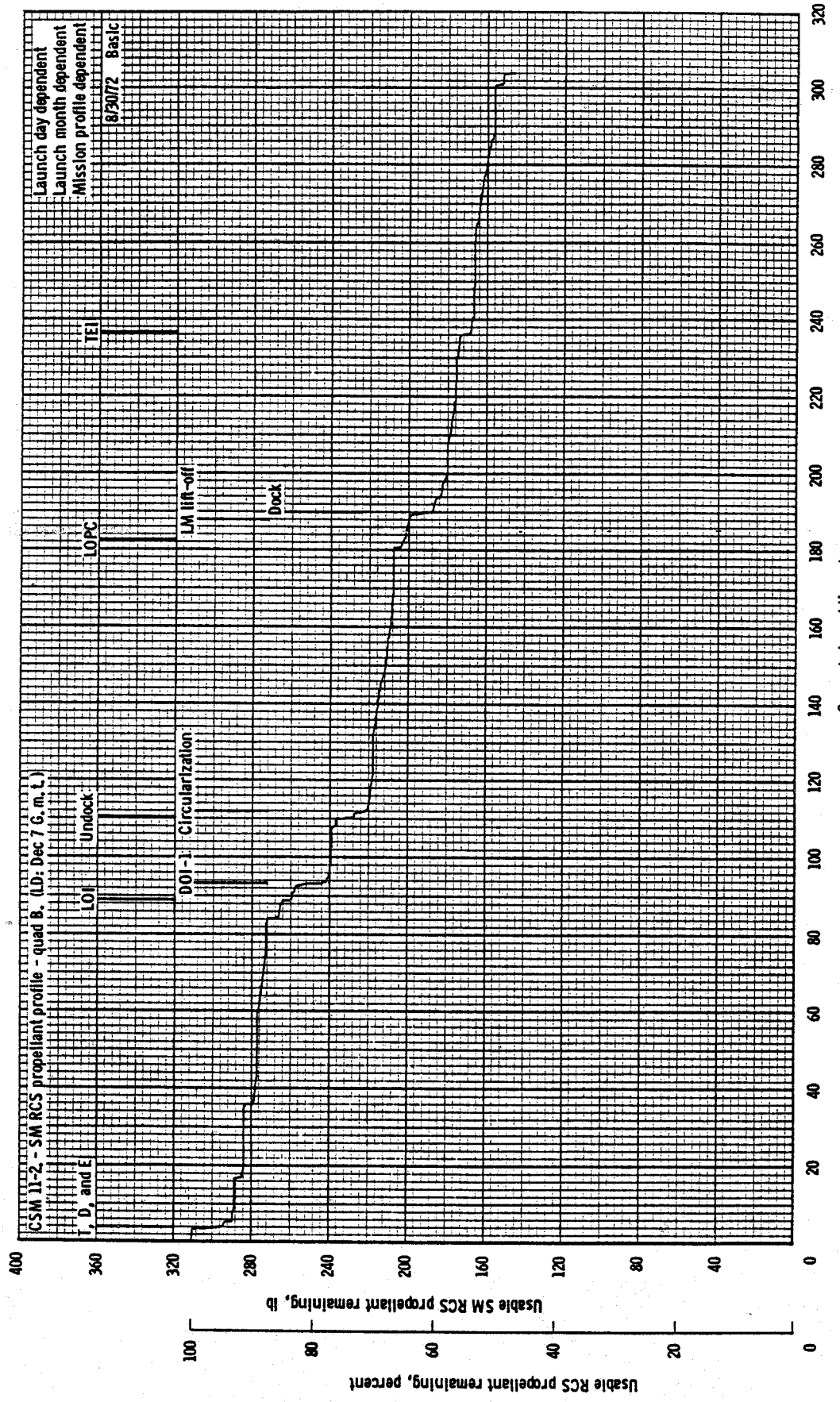
Mission phase	Typical S/C weight (lb)	+X 4 jet G&C (lb/fps)	+X 4 jet SCS (lb/fps)	+X 2 jet A/C G&C (lb/fps)	+X 2 jet A/C SCS (lb/fps)	+X 2 jet B/D G&C (lb/fps)	+X 2 jet B/D SCS (lb/fps)	±Y or ±Z G&C (lb/fps)
Translunar	103 000	11.7	13.3	12.0	13.3	12.4	13.3	--
Lunar orbit docked	75 000	8.6	9.3	8.7	9.3	8.8	9.3	--
Lunar orbit undocked	36 500	4.0	4.7	4.1	4.7	4.3	4.7	5.0
Transearth	26 900	3.1	3.8	3.2	3.8	3.4	3.8	3.5



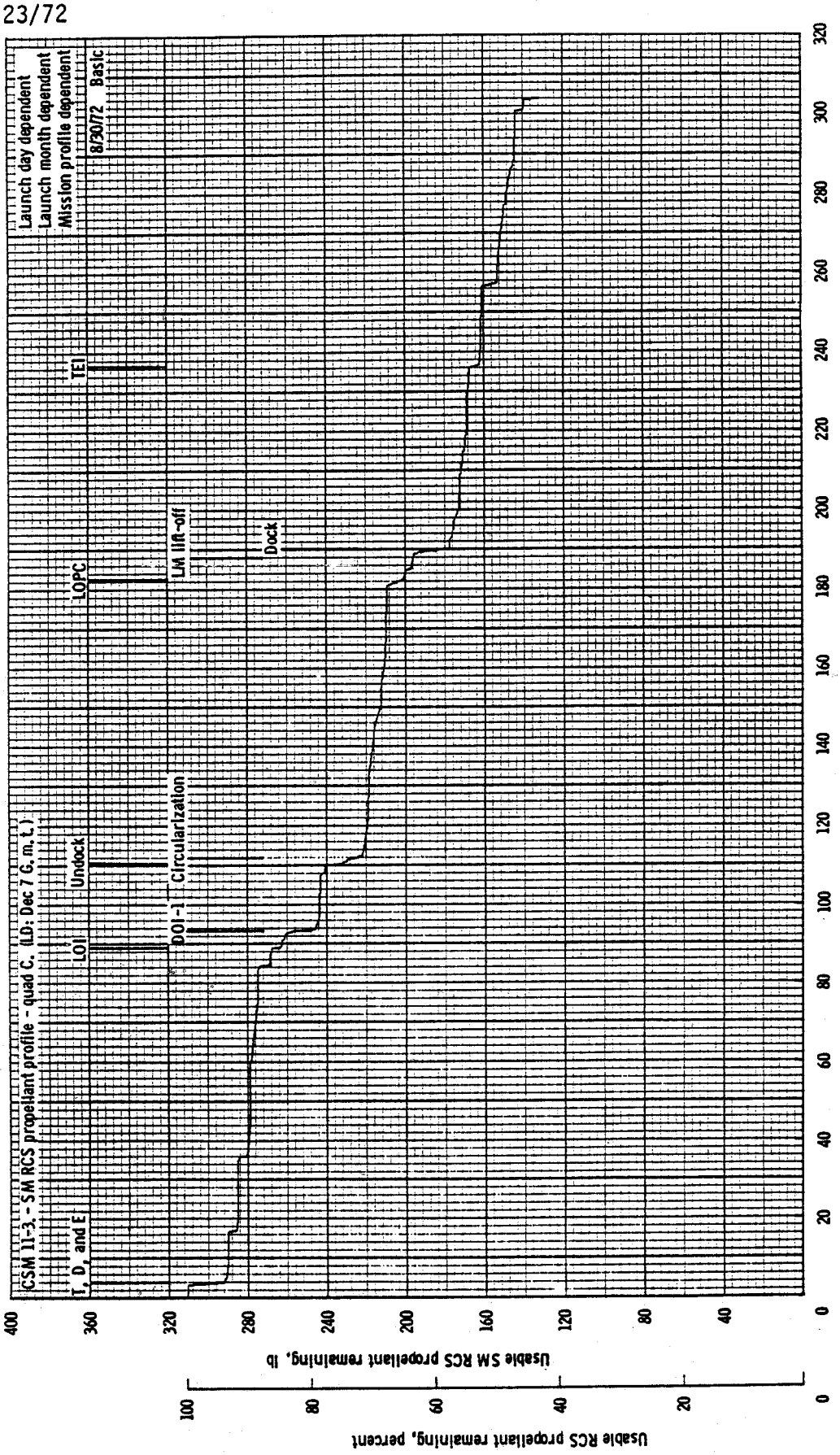
Total SM RCS propellant usage profile.



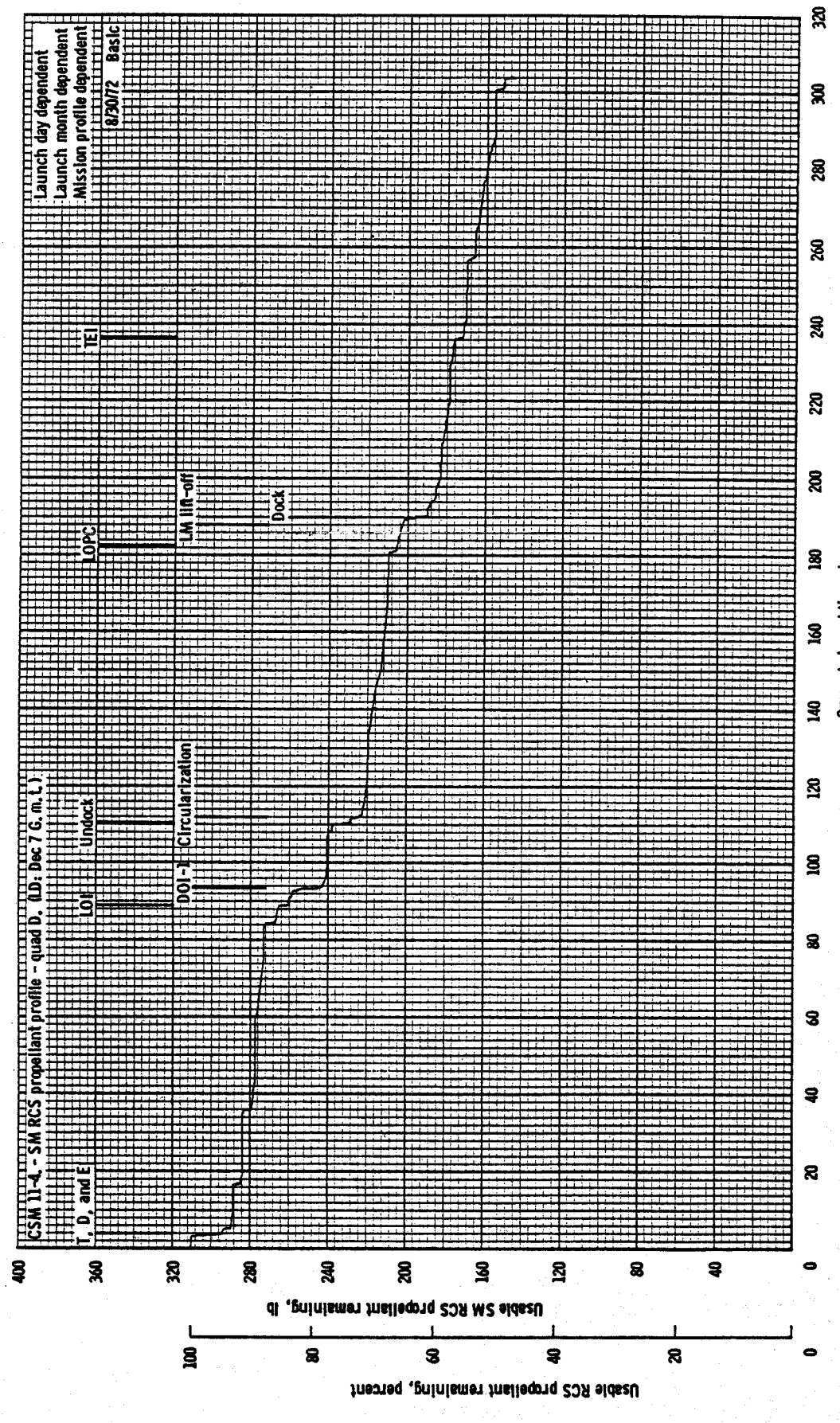
SM RCS propellant profile - quad A.



SM RCS propellant profile - quad B.



SM RCS propellant profile - quad C.



SM RCS propellant profile - quad D.

Mission profile dependent
8/29/72 Basic

CM RCS PROPELLANT SUMMARY

Item	Propellant required, lb	Propellant remaining, lb
Loaded	--	233.2
Trapped	36.4	196.8
Available for mission planning . . .	--	196.8
Nominal usage*	54.7	142.1
Nominal remaining	--	142.1

*CM RCS propellant usage is for dual ring operation with DAP control

Mission profile dependent
8/30/72 Basic

GROUND RULES AND ASSUMPTIONS FOR THE CSM CRYOGENICS

1. Three O_2 and H_2 tanks are available.

2. Fuel cell purging is included in the EPS requirements.

3. No cryogenic venting was assumed in flight.

4. The EPS hydrogen consumption rate ($\dot{H}_2$) (lb/hr) = $0.00257 \times I_{fc}$ when I_{fc} is the total fuel cell current.

5. The EPS oxygen consumption rate ($\dot{O}_2$) (lb/hr) = $7.936 \times \dot{H}_2$.

6. No allowance for the SM enhancement battery is assumed.

7. The following tank depletion schedules are being used:

CRYO MANAGEMENT SCHEDULE

GET (hrs:min)	Tank numbers				
	Oxygen htrs[a]		H_2 tank 1, 2 htrs, tank 3 fan		
	Auto	Off	Auto	Manual	Off
0:00	1, 2	3	1, 2	3	
4:17	1, 2, 3				
5:05	1, 2	3			
8:40	3	1, 2	3		
15:10					1, 2
39:05	1, 2, 3				
39:55	3	1, 2			3
70:00			1, 2	3	
[b]84:40	1, 2	3			
[c]256:50	1, 2, 3				
259:23	1, 2	3			

[a] O_2 tank 1 and 2 heaters may be required if the LM pressure equalization at approximately 39:00 hrs GET causes a pressure decay in the O_2 tanks.

[b] Switch to 50-watt heaters in O_2 tanks 1, 2 at this time.

[c] Switch to 100-watt heaters in O_2 tanks 1, 2 and 3 at this time.

The CSM consumables summary (table 5-I) shows that a significant H_2 and O_2 margin exists at the end of the mission. This is reflected in the H_2 and O_2 usage profiles shown in figures 5-1 and 5-2. However, these curves do not include dispersions.

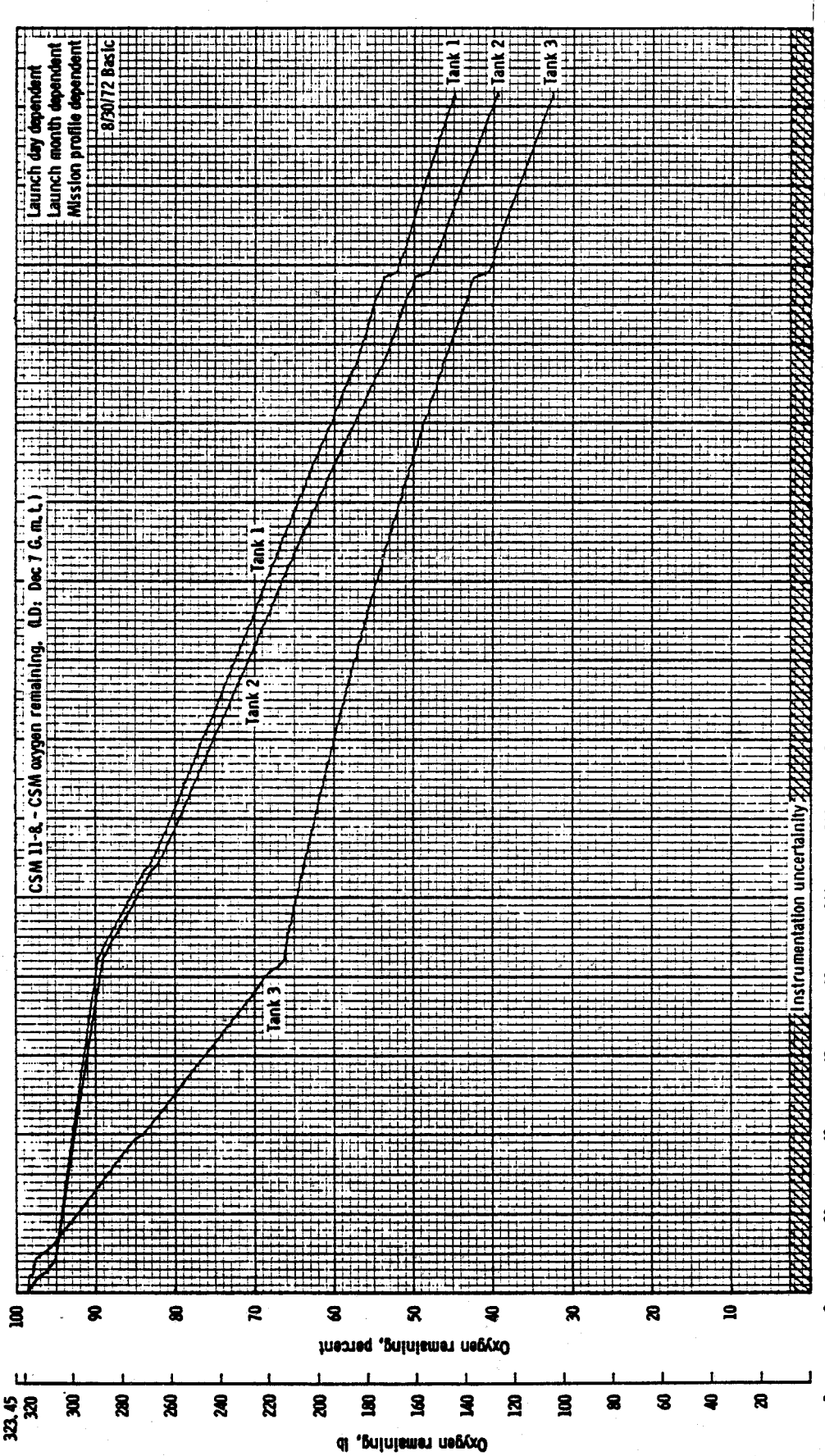
In summary, the nominal mission requirements can be satisfied with the existent consumables.

Mission profile dependent
8/30/72 Basic

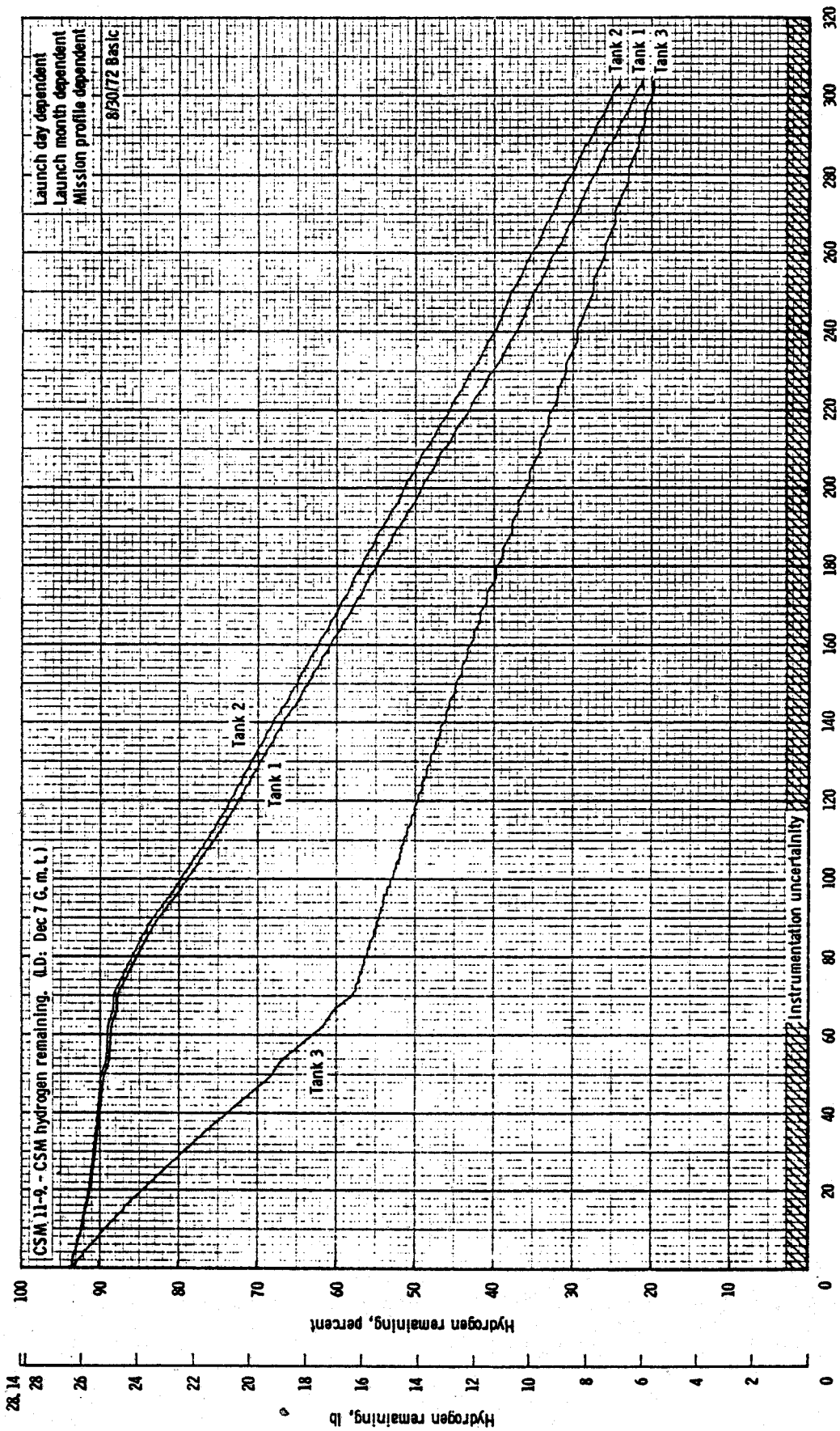
APOLLO 17 CRYOGENIC SUMMARY

	H_2 lbs	O_2 lbs
Planning allowance		
Total loaded	87.9	990.3
Less residual	3.5	19.8
Less instrumentation error	2.3	26.0
Available for mission planning	82.1	944.5
Prelaunch requirement*	5.7	44.8
Flight requirement		
EPS (including fuel cell purge)	60.5	479.3
ECS (including cabin purge + EVA)	--	85.7
LM pressurization	--	11.9
	60.5	576.9
Nominal reserves		
EPS uncertainty (2.5%)	1.5	12.0
ECS uncertainty (.08 #/hr)	--	24.3
	1.5	36.3
Total requirement	67.7	658.0
Margin T = 0 (fill/launch)	14.4	286.5

*Supplied by KSC.



CSM oxygen remaining.



CSM hydrogen remaining.

Mission profile dependent
8/29/72 Basic

ASSUMPTIONS FOR THE DPS ANALYSIS

The propellant loading is based on the optimization of the fuel and oxidizer balance that was computed from the LM-12 engine data. The ΔV requirements were coordinated with the Landing Analysis Branch. The ΔV requirement for lunar descent differs from that in the operational trajectory because of differences in the inert vehicle weight, plus an allowance for 155 seconds from low gate to touchdown.

The 3σ dispersions represent total propellant cost based on 3σ uncertainties in propellant loading, trapped propellant, specific impulse, ΔV, separation weight, non-ΔV consumables weight, mixture ratio, and physical location of the low level sensor.

A flying time of 2 minutes and 35 seconds below low gate will be called a nominal requirement.

The following data were used:

a. The separation weight is 36 733.5 ± 39.3 pounds.

b. Integrated average I_{sp} is 305.1 ± 1.8 seconds.

c. Mixture ratio is 1.5999 ± .012.

d. Non-ΔV consumables from separation to PDI are 110.7 pounds.

Mission profile dependent
8/29/72 Basic

DPS PROPELLANT SUMMARY

Item	Total propellant, lb	Hover time, sec
Loaded	19 562.9	--
Trapped and unavailable	-100.9	--
Outage	-16.6	--
Available for ΔV	19 445.4	--
Required for ΔV (155-sec flying time from low gate, ΔV = 7099.3 fps)	-18 820.0	--
Remaining	625.4	67
Dispersion (-3σ)	-280.9	--
Pad	344.5	37
Operational allowances		
Low-level (5 sec, 26.5 fps)	-47.2	--
Abort reserve (20 sec, 106 fps)	-187.5	--
Margin (hover time before abort decision point)	109.8	12

Mission profile dependent
8/29/72 Basic

ASSUMPTIONS FOR THE APS ANALYSIS

The propellant loading is based on the optimization of the fuel and oxidizer balance that was computed from the LM-12 engine data. The ΔV requirements were coordinated with the Landing Analysis Branch. The ΔV requirement for the lunar ascent differs from that in the Operational Trajectory because of differences in the inert vehicle weight.

The APS analysis accounts for an APS TPI, engine valve-pair malfunction, and balanced couples. The following data were used in determining the APS propellant requirements for Apollo 17.

a. I_{sp} = 309.9 $\pm$ 3.5 seconds.

b. Mixture ratio = 1.598 $\pm$ .027.

c. Lift-off weight = 10 917.1 $\pm$ 38.7 pounds.

Mission profile dependent
8/29/72 Basic

APS PROPELLANT SUMMARY

Item	Total propellant, lb
Loaded	5257.5
Trapped and unavailable	-51.9
Outage	-12.2
Available for ΔV	5193.4
Required for Ascent (6062.2 fps)	-4974.2
Remaining	219.1
Required for APS TPI[a] (54.8 fps)	-32.6
Remaining	186.5
Dispersions (-3σ)	-67.6
Pad	118.9
Operational allowances	
Engine valve-pair malfunction (ΔMR = +.0097 or -.0183)	-22.8
Balanced couples on	-39.2
Half-degree out of plane (18 fps)	-10.7
Margin	46.3

[a]The total TPI ΔV is 76.6 fps. It is assumed that 22 fps is obtained by a 10-sec, 4-jet ullage.

Mission profile dependent
8/29/72 Basic

ASSUMPTIONS AND GROUND RULES FOR THE LM RCS ANALYSIS

1. Data for the LM RCS engine performance and propellant requirements were obtained from the SODB, Volume II, and from postflight analyses of Apollo 9-16 missions.

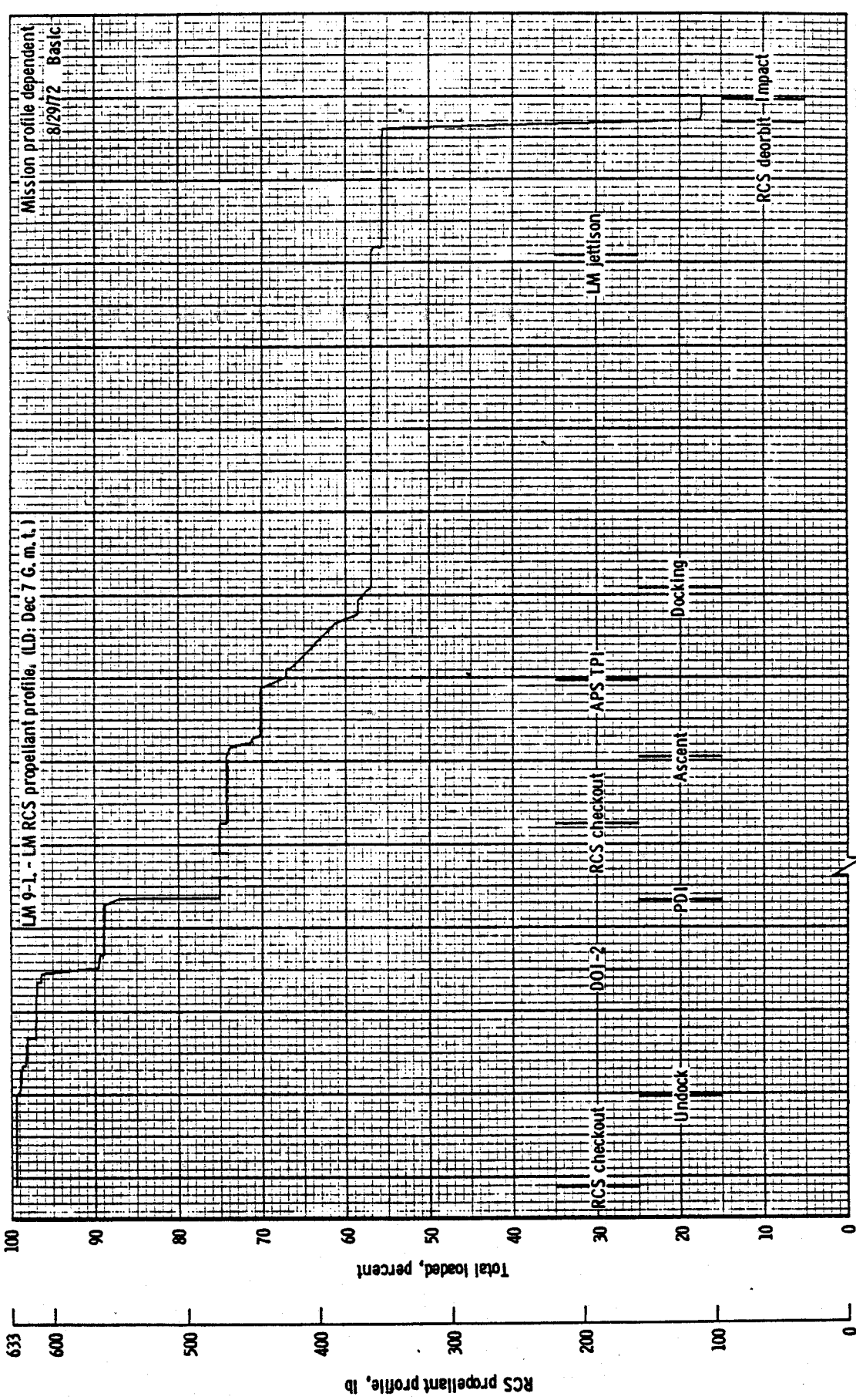
2. The analysis assumes an insertion trim or RCS tweak burn (nominally zero) of 20 fps.

3. It is assumed there will be a 5-fps RCS trim following the APS TPI maneuver.

Mission profile dependent
(LD: Dec 7 G.m.t.)

LM RCS PROPELLANT LOADING AND USAGE SUMMARY

Item	Required, lb	Remaining, lb
Loaded		631.2
Trapped	38.0	593.2
Gaging inaccuracy and loading tolerance	43.5	549.7
Mixture ratio uncertainty	17.0	532.7
Usable		532.7
Nominal usage through lunar landing	158.2	374.5
Nominal usage from landing through docking	114.2	260.3
Nominal usage from docking through impact	249.4	10.9
Usable propellant remaining		10.9



LM RCS propellant profile.

Mission profile dependent
8/28/72 Basic

ASSUMPTIONS FOR THE LM EPS ANALYSIS

a. Energy available from the descent batteries is 2075 A-h and from the ascent batteries is 592 A-h.

b. Energy unusables caused by lack of continuous STDN coverage for the descent and ascent stages are zero.

c. Energy unusables caused by TM inaccuracies for the descent and ascent stages were 74 and 18 A-h, respectively. The new descent battery current measurement uncertainty of 0.5 amperes per battery was used.

d. Energy unusables caused by checklist deviations (dispersion) for the descent and ascent stages were 34 and 6 A-h, respectively. This dispersion is obtained by calculating 2 percent of the energy used.

e. In accordance with the Flight Plan, the PGNCS was in standby mode from surface powerdown until 3.7 hours before powerup.

f. The RCS heaters were assumed to have a 100 percent duty cycle for 15 minutes after initial activation and then to decrease to an 18.3 percent duty cycle until undocking. For the remainder of the mission, except for lunar surface stay, the duty cycle was 2.6 percent. The duty cycle during lunar surface stay was 3.9 percent.

g. The invertor was operated throughout the mission.

h. The CDR and LMP forward window heaters were assumed not to be needed.

i. The six MESA heaters have a total power rating of 150 watts. The power required by the heaters during the period LM activation to touchdown was assumed to be 5.6 watts. From touchdown until 1 hour into EVA-2, the heating were assumed to draw 27.5 watts. The power required until the beginning of EVA-3 was 20 watts. The MESA heaters were turned off at that point.

j. TV power is supplied by the LM during the first hour of EVA-1. For the remainder of EVA-1 and the other EVA's, the TV will be powered by the lunar communications relay unit (LCRU).

k. The liquid cooled garment pump was operated before each EVA for 10 minutes.

Mission profile dependent
8/28/72 Basic

ASSUMPTIONS FOR THE LM EPS ANALYSIS - Concluded

l. The S-band power amplifier was cycled as dictated by the time line.

m. The portable utility lights were assumed to be off throughout the mission.

n. In accordance with the Flight Plan, the floodlights were turned off at surface powerdown, and on again at powerup. The overhead and forward floodlights were not used.

o. The short (M=1) rendezvous was considered nominal.

p. At the beginning of the analysis, it was assumed that a total of 10 A-h had been used from the descent batteries between the period starting 30 minutes before launch and ending at the conclusion of transposition and docking.

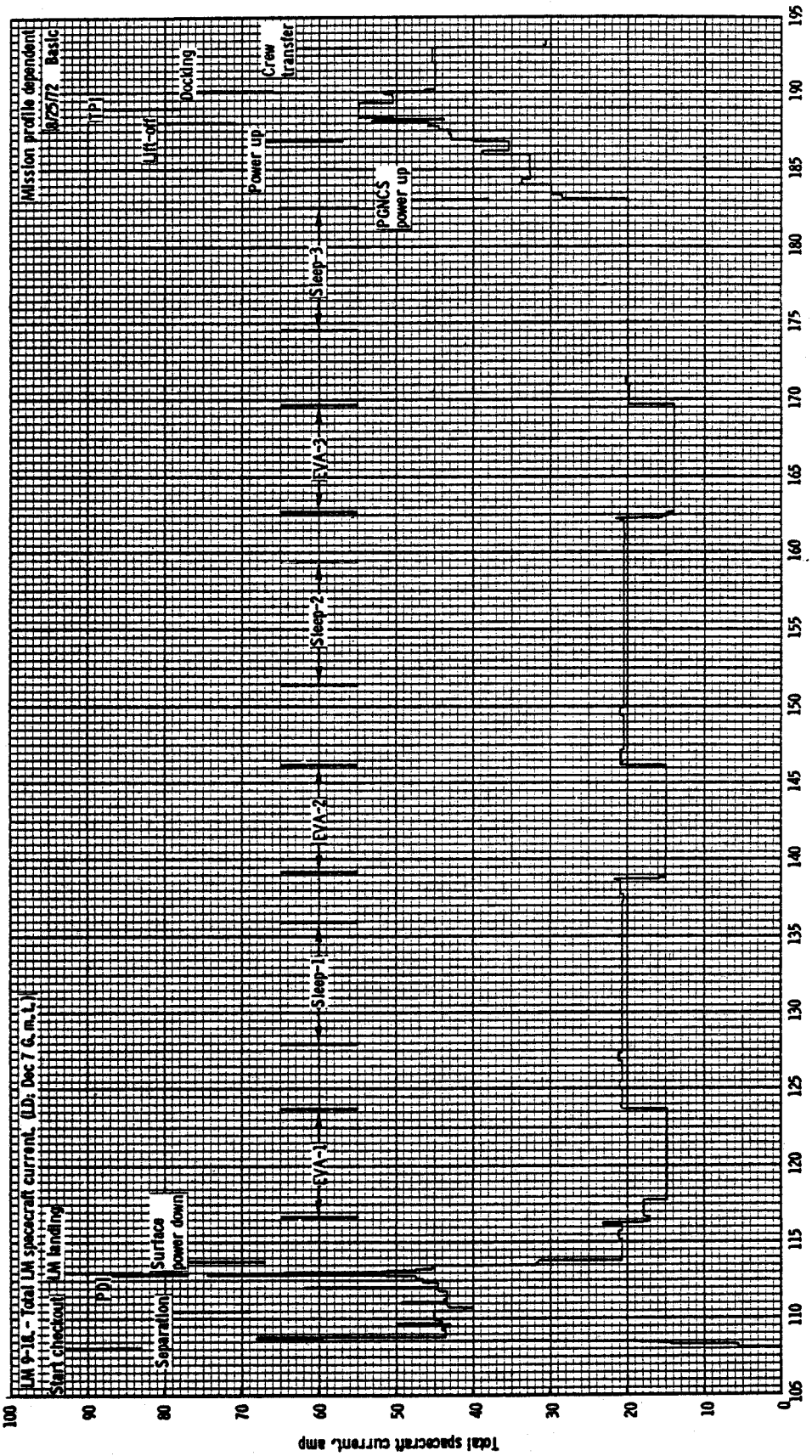
Mission profile dependent
8/28/72 Basic

DESCENT STAGE EPS SUMMARY

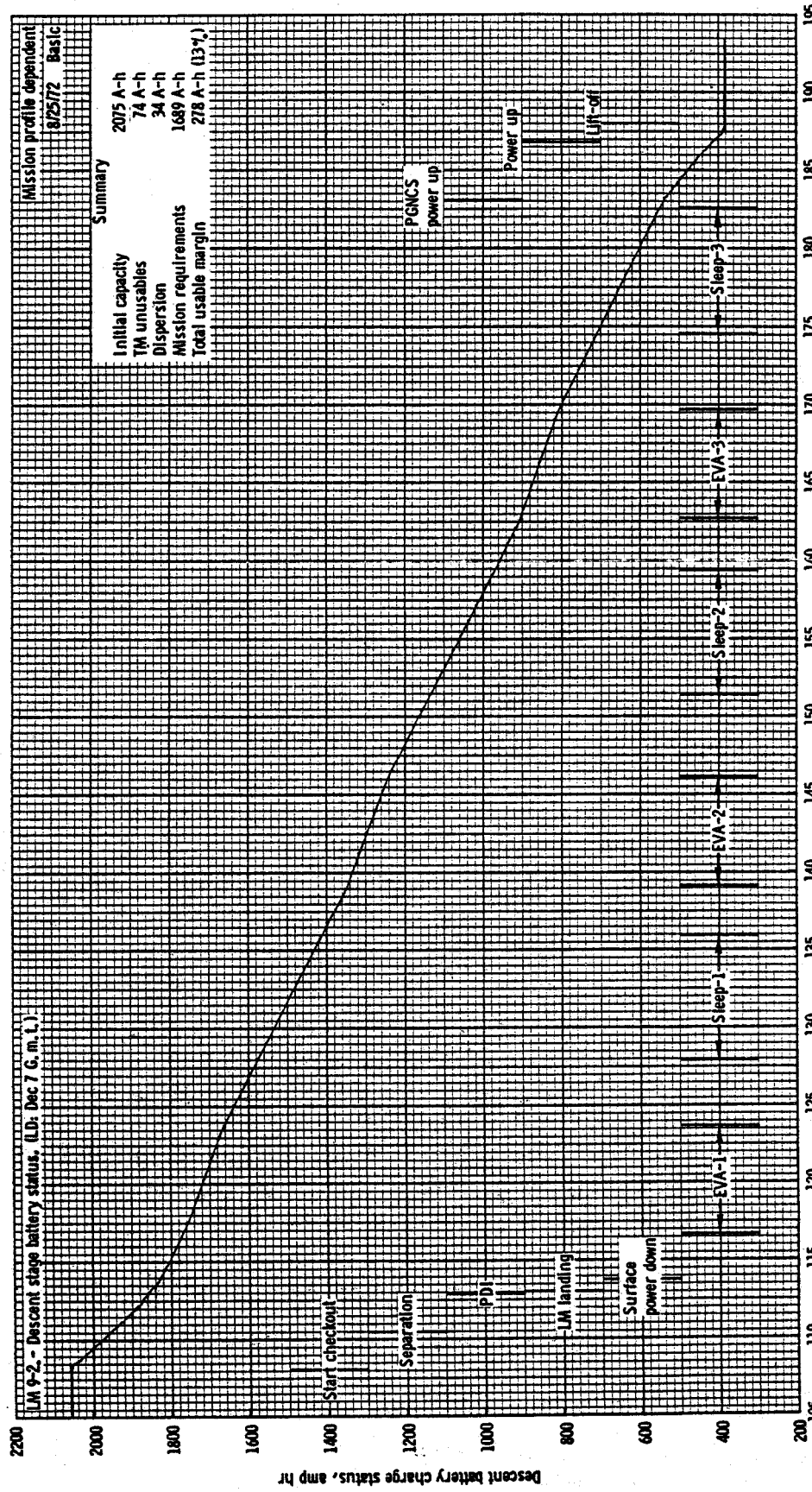
Item	A-h required	A-h remaining
Initial capacity	--	2075
Total unusables	108	1967
Required through touchdown	219	1748
Required for surface stay	1470	278
Total usable margin	--	278

ASCENT STAGE EPS SUMMARY

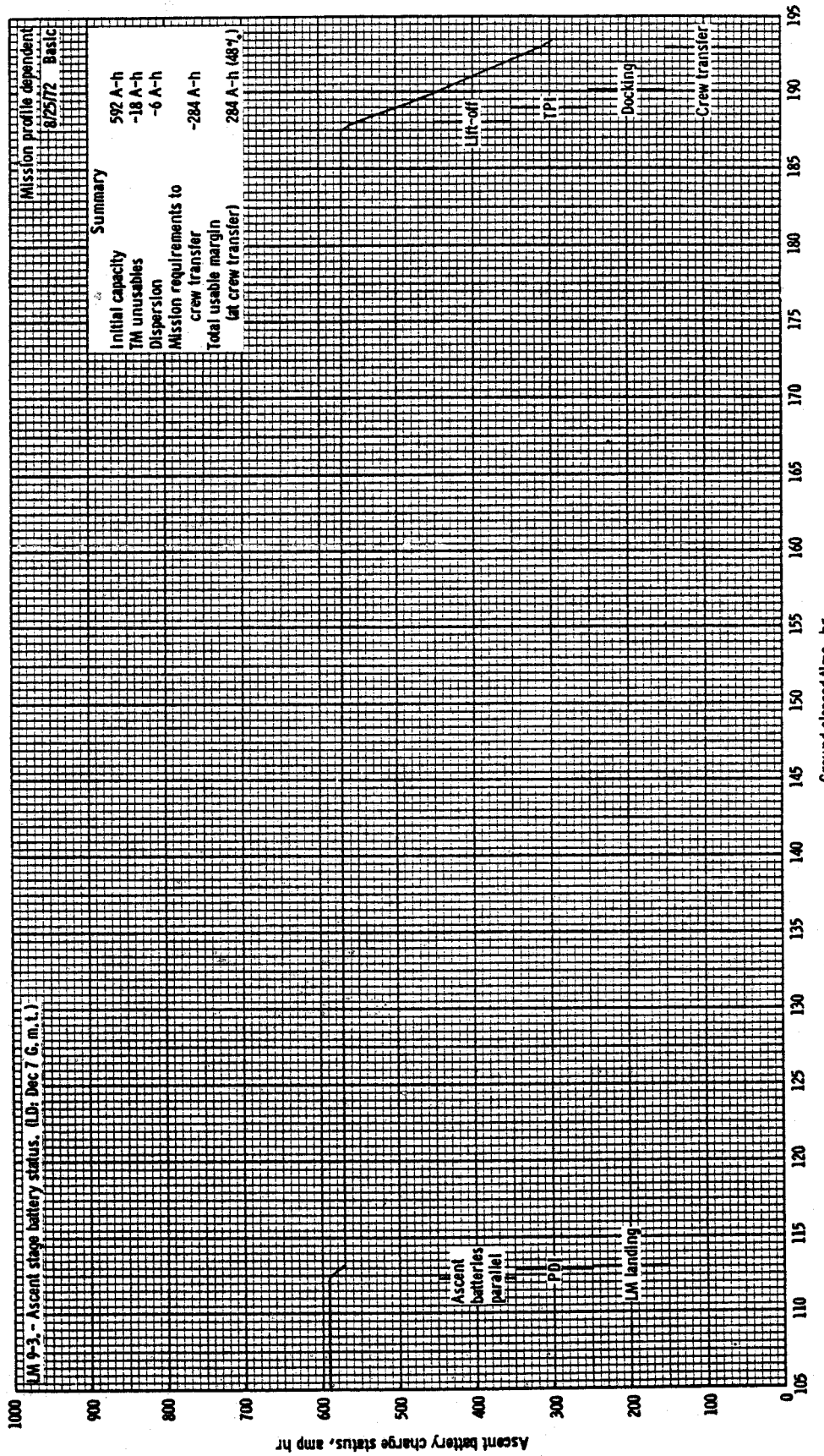
Item	A-h required	A-h remaining
Initial capacity	--	592
Total unusables	24	568
Required through docking	150	418
Required through crew transfer	284	284



Apollo 17 total LM spacecraft current.



Apollo 17 descent electrical energy remaining.



Apollo 17 ascent electrical energy remaining.

Mission profile dependent
8/28/72 Basic

LM ECS ASSUMPTIONS

a. The oxygen analyses were calculated using a cabin leak rate of 0.06 lb/hr based on previous Apollo postflight analyses.

b. Metabolic rates were varied using the final flight plan and table 4.3-II of SODB Vol. II.

c. Metabolic oxygen consumed was calculated by $(1.643 \times 10^{-4} \times \text{lb/Btu})$ (metabolic rate, Btu/hr).

d. The cabin regulator check and the suit integrity check were assumed to require 0.5 pound of oxygen.

e. The cabin was pressurized five times with 5.5 pounds required for each pressurization except the last two which required 5.8 pounds.

f. The dispersion in the oxygen profile was calculated as 5 percent of the nominal oxygen requirement.

g. The PLSS refills required 47.0 pounds of water and 5.4 pounds of oxygen.

h. The sublimator fill required 2.23 pounds.

i. The drink bags required 8.0 pounds of water.

j. Water list through crew micturition was 0.11 lb/hr per man.

k. Water required for thermal control was calculated by dividing the total spacecraft heat load by 1040 Btu/lb.

l. The dispersion in the water profile was calculated as 5 percent of the nominal usage.

m. The descent oxygen tanks were loaded to 2610.0 psi at 70.0°F.

Mission profile dependent
9/1/72 Basic

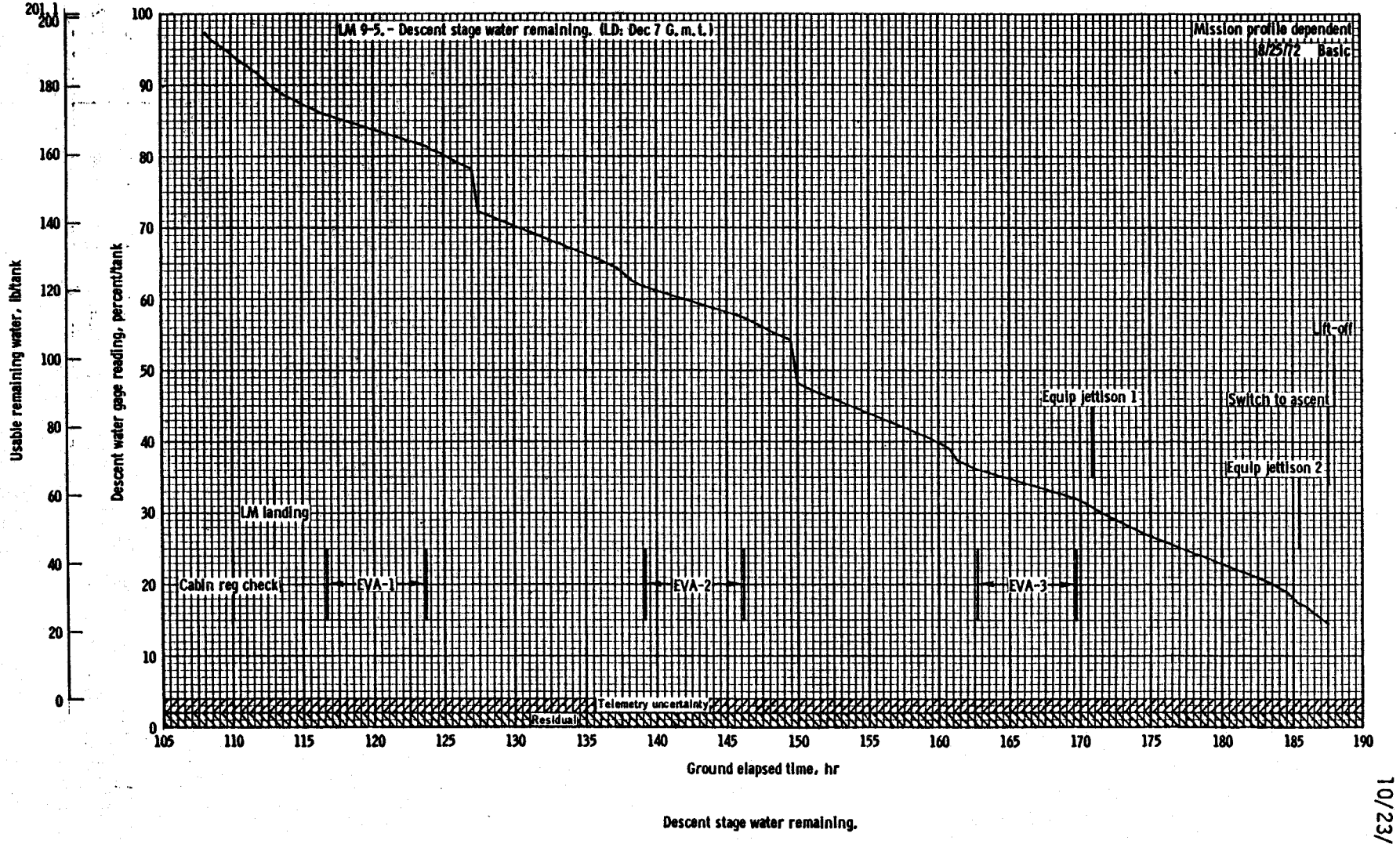
LM ECS SUMMARY

(a) Water

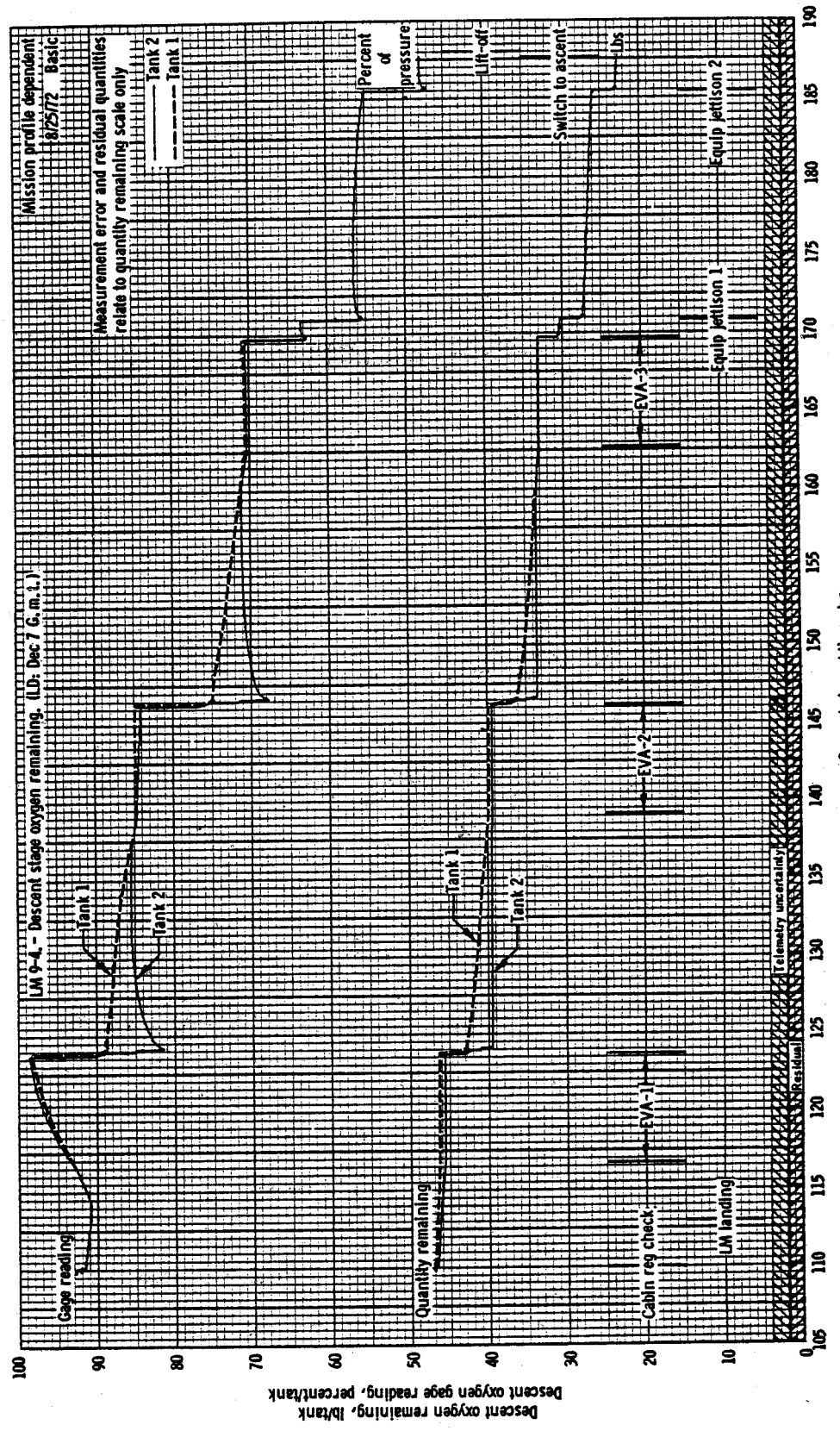
Description	Descent, lb	Ascent, lb
Loaded	419.0	85.0
Sampling	11.0	0
Residual	8.4	1.7
Telemetry uncertainty	8.4	7.5
Loading uncertainty	3.0	1.8
Available for mission	388.2	74.0
Required to lunar landing	28.1	0
Required to lunar lift-off	319.2	0
Required to LM/CSM docking	0	17.2
Required to LM close-out	0	15.1
Remaining in tanks	40.9	41.7
Dispersion	17.4	1.6
Margin	23.5	40.1

(b) Oxygen

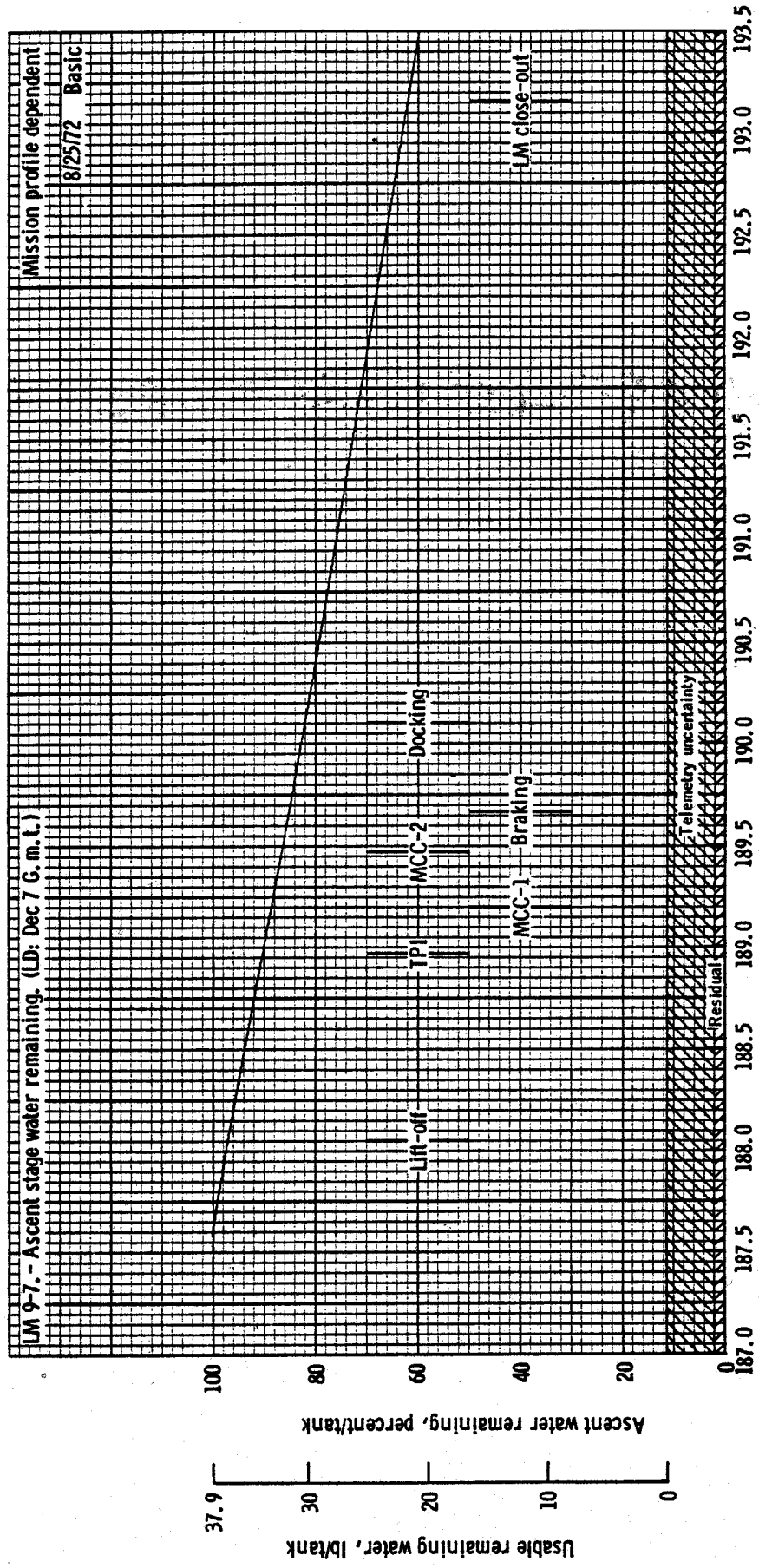
Description	Descent, lb	Ascent 1, lb	Ascent 2, lb
Loaded	93.8	2.4	2.4
Residual	1.6	0.1	0.1
Measurement uncertainty	2.2	0.1	0.1
Available for mission	90.0	2.2	2.2
Required to lunar landing	1.3	0	0
Required to lunar lift-off	47.5	0	0
Required to LM/CSM docking	0	0.6	0
Required to LM close-out	0	0.1	0
Remaining in tank	41.2	1.5	2.2
Dispersion	2.4	0.1	0
Margin	38.8	1.4	2.2



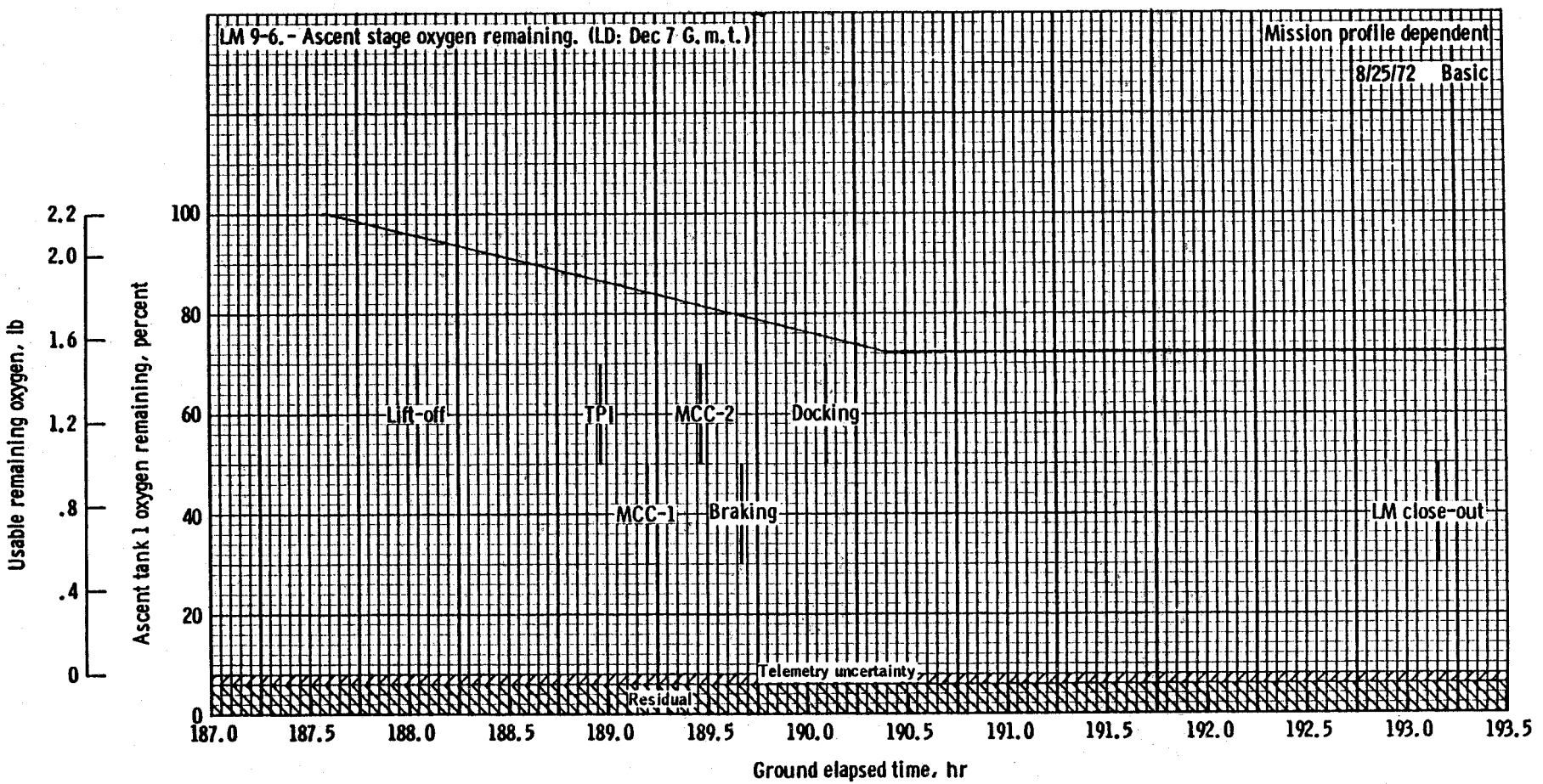
Descent stage water remaining.



Descent stage oxygen remaining.



Ascent stage water remaining.



Ascent tank 1 oxygen remaining.

Mission profile dependent
8/28/72 Basic

ASSUMPTIONS FOR THE LRV EPS ANALYSIS

a. The energy available from each of the two batteries is 121 A-h.

b. No unusables or uncertainties are considered in the budget.

c. Slopes were derived from the Apollo 17 landing site form line map.

d. Terrain types and stop times were derived from the traverse data package.

e. The MSFC soil model L-3 was used.

f. The vehicle speed was 8 km/hr except where mobility conditions dictated lower speeds.

g. The traction drive system was off during stops longer than 5 minutes.

h. The navigation and caution systems were operated throughout each traverse.

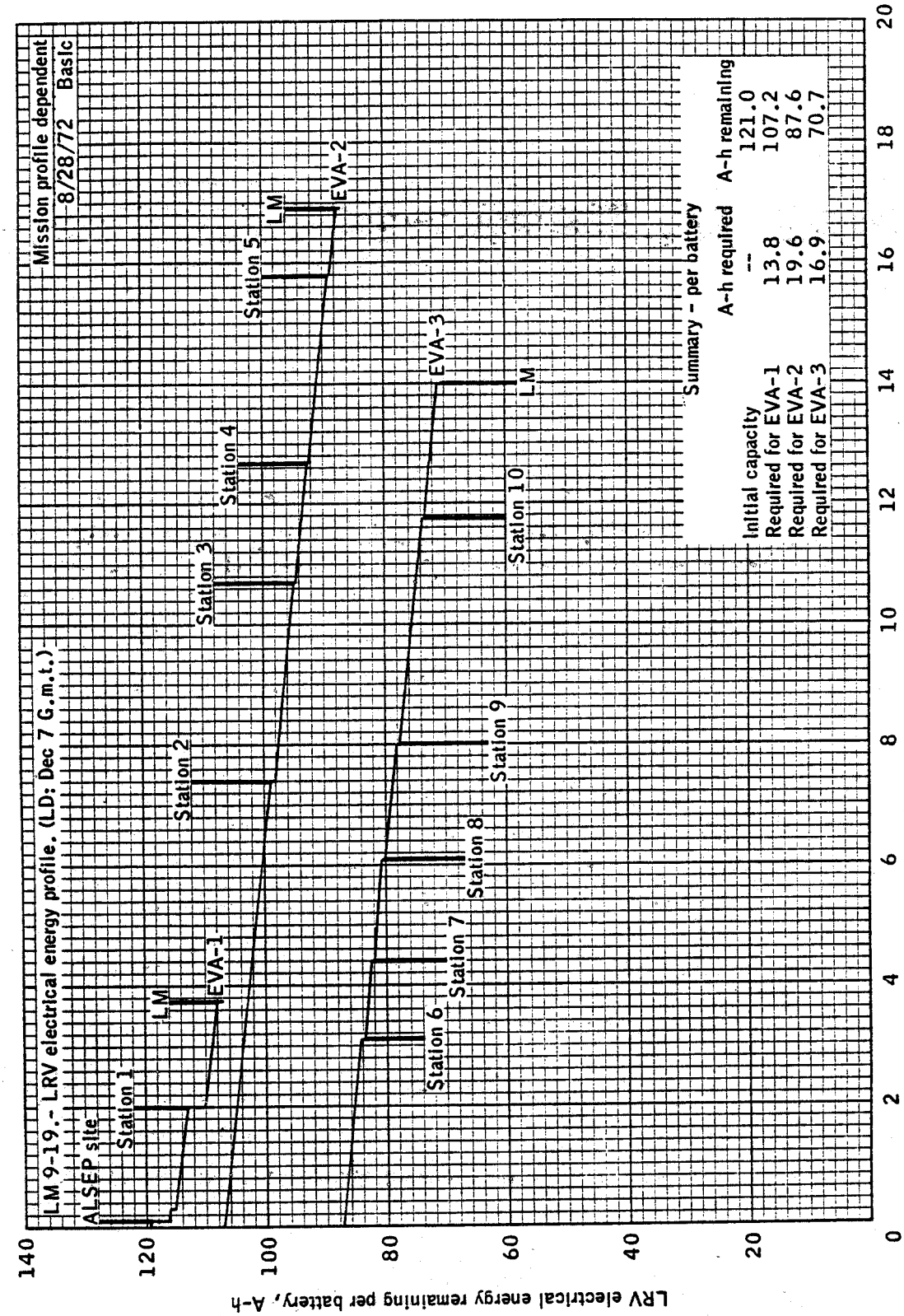
i. Electrical power required by the LCRU during EVA-1 was supplied by LRV batteries. While driving, the LCRU was in the PM1/WB mode. During all station stops the LCRU mode of operation was FM/TV.

j. The vehicle weight was 1470 pounds.

k. A wander factor of 1.1 is included in the analysis.

l. The distance traveled is the map or straight line distance between points.

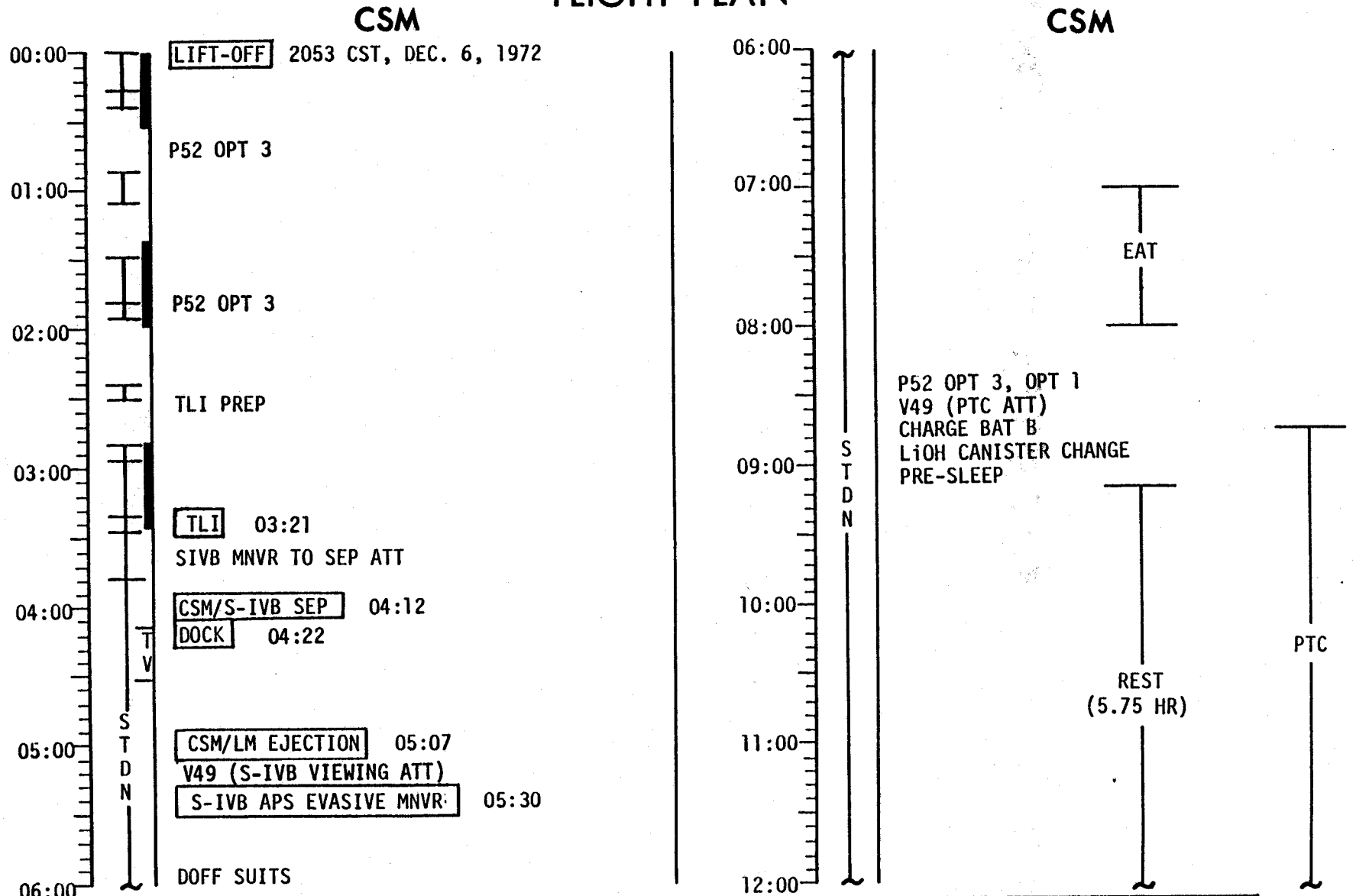
m. An effective alpha of 0.40 was assumed for all cool-down periods.



LRV electrical energy profile.

SECTION 5 - SUMMARY TIMELINE

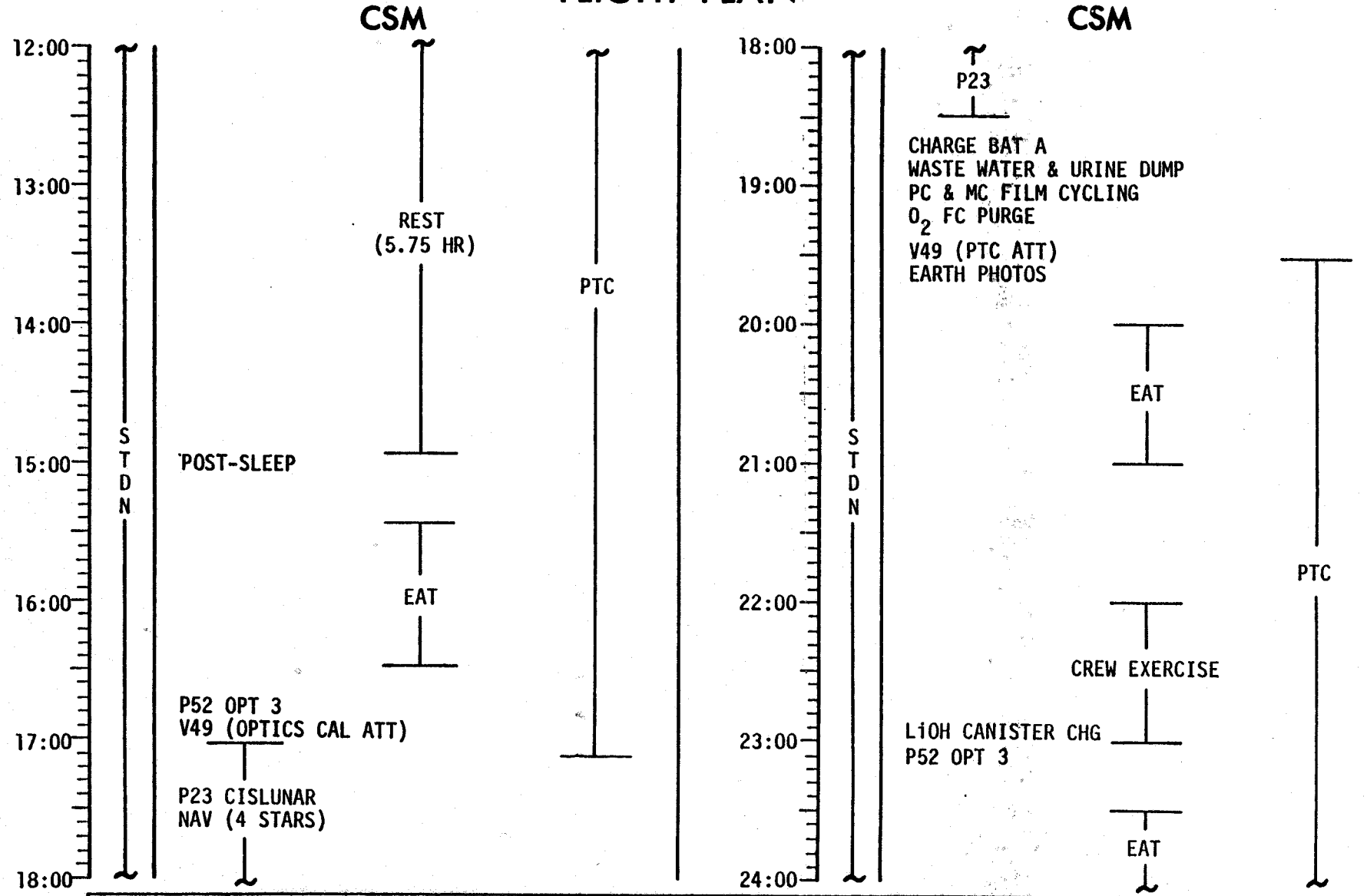
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	00:00 - 12:00	1/EO-TLC	5-1

FLIGHT PLANNING BRANCH

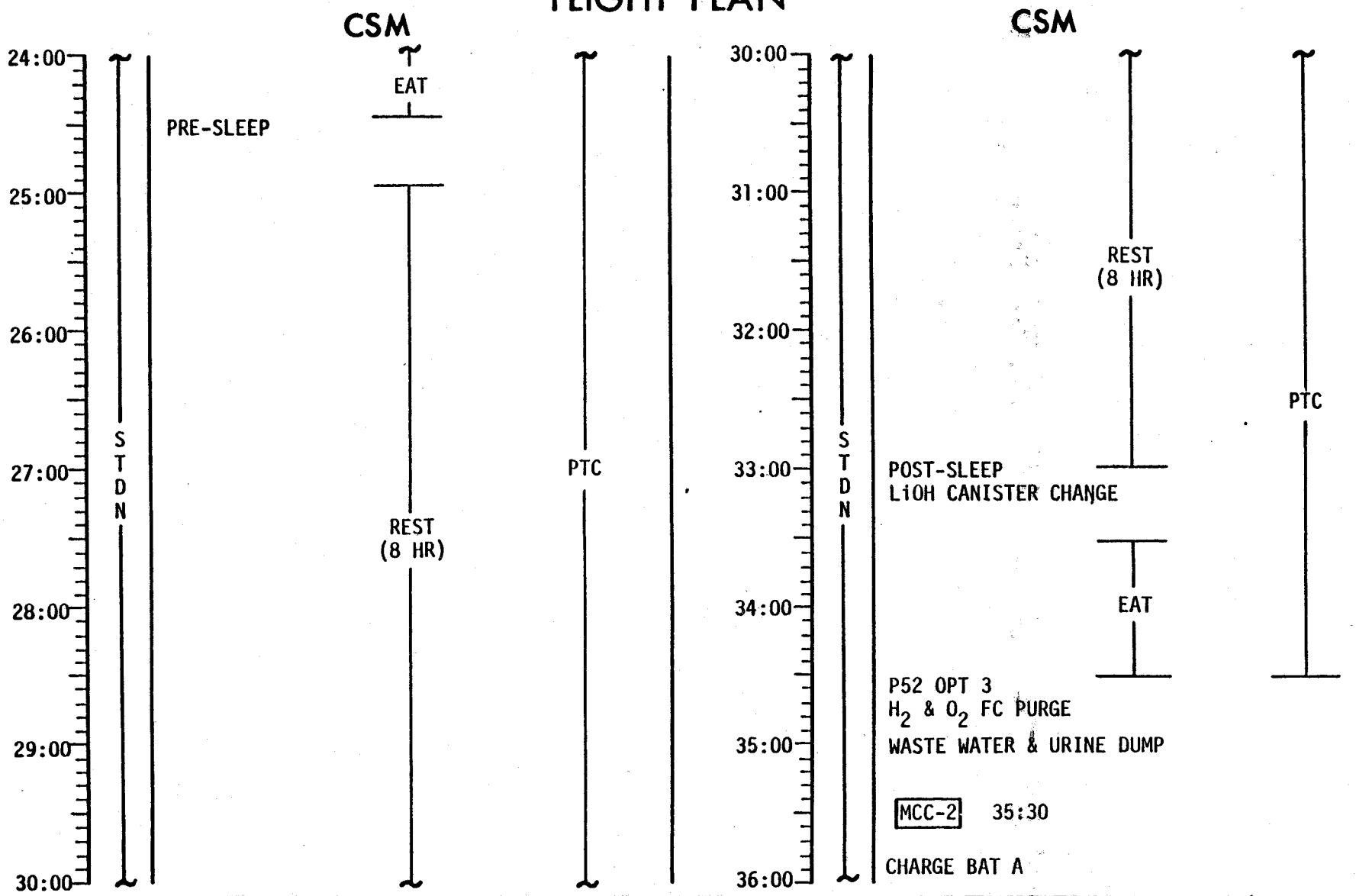
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	12:00 - 24:00	1-2 /TLC	5-2

FLIGHT PLANNING BRANCH

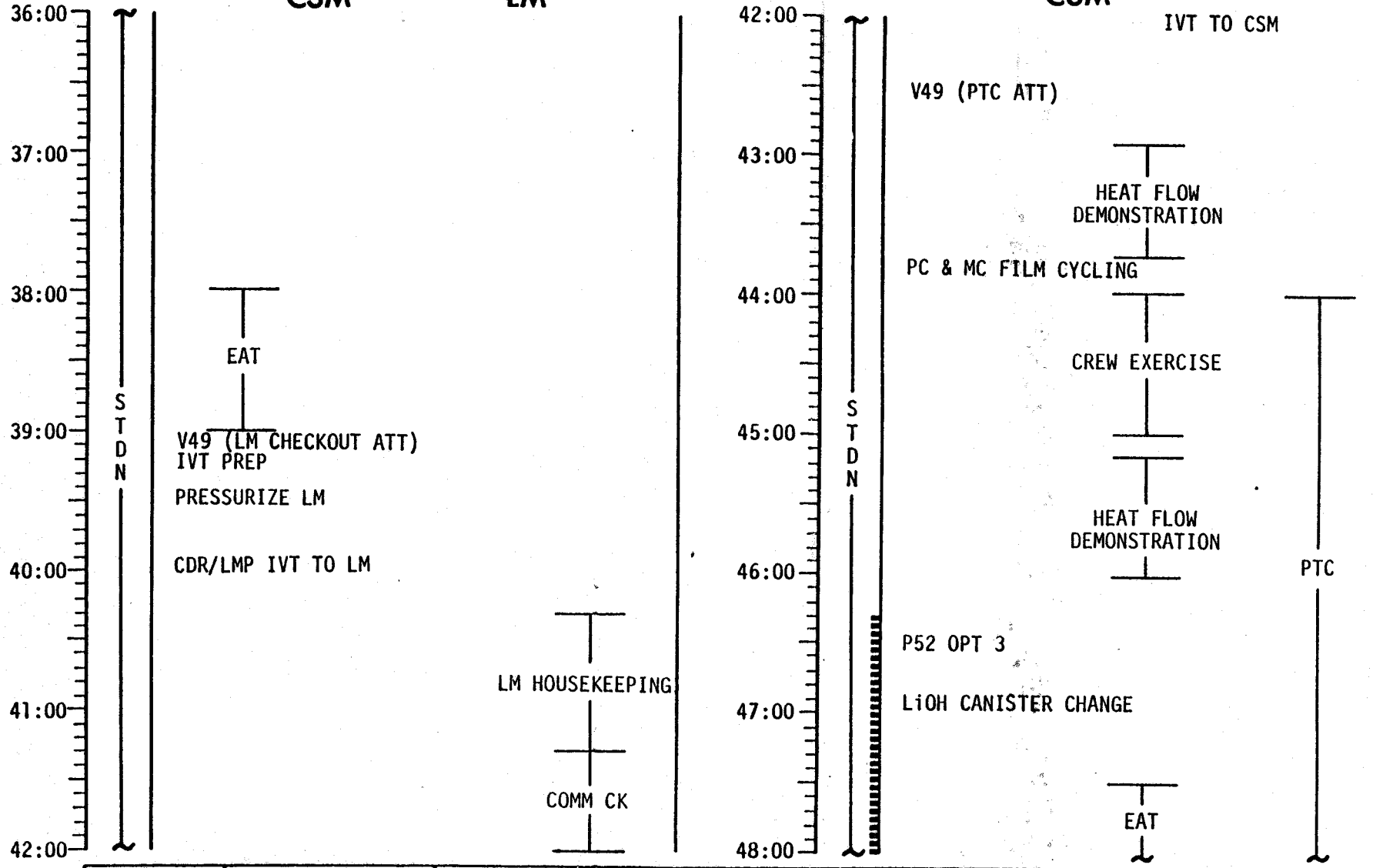
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	24:00 - 36:00	2-3 /TLC	5-3

FLIGHT PLANNING BRANCH

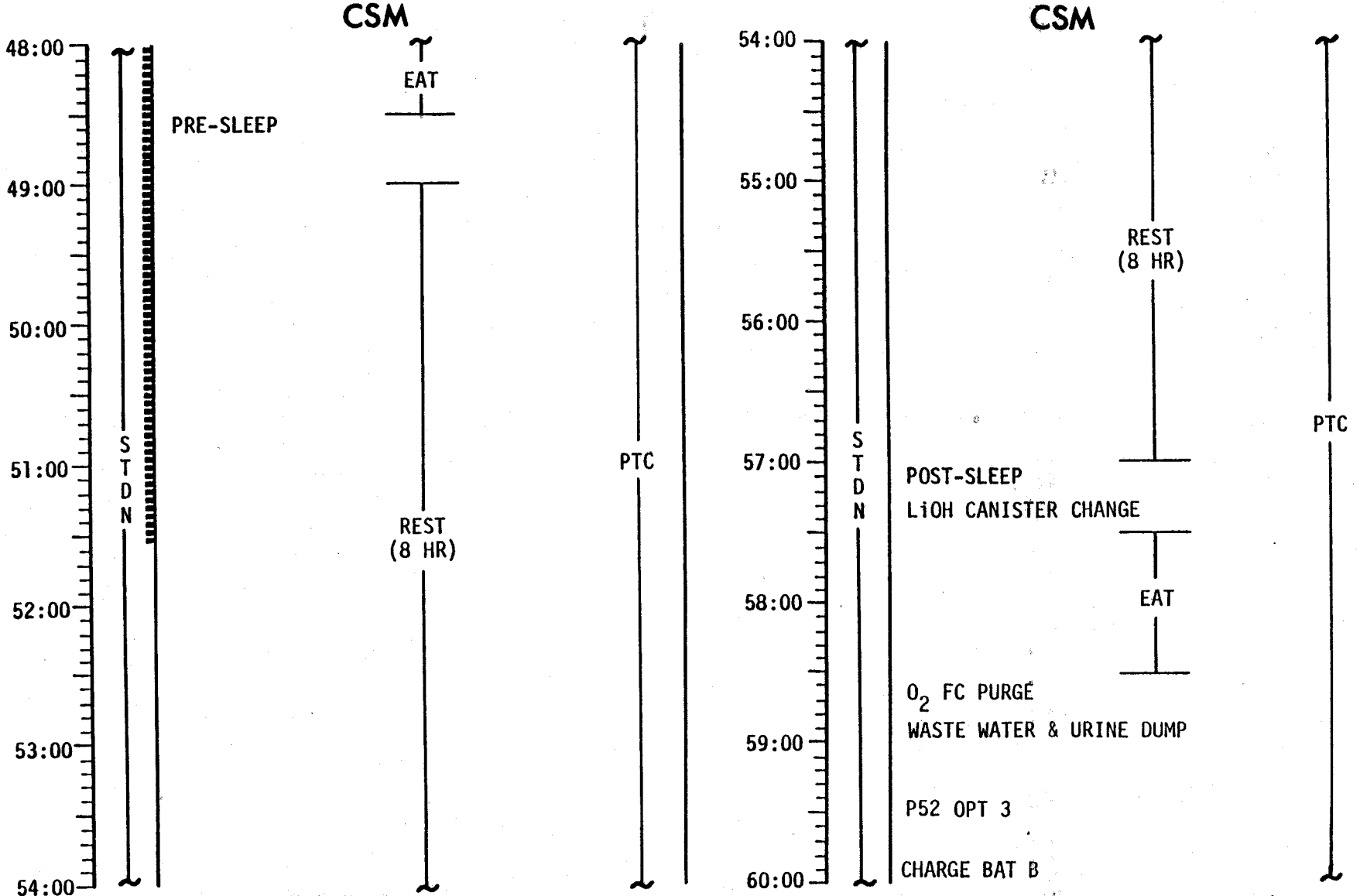
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	36:00 - 48:00	3 /TLC	5-4

FLIGHT PLANNING BRANCH

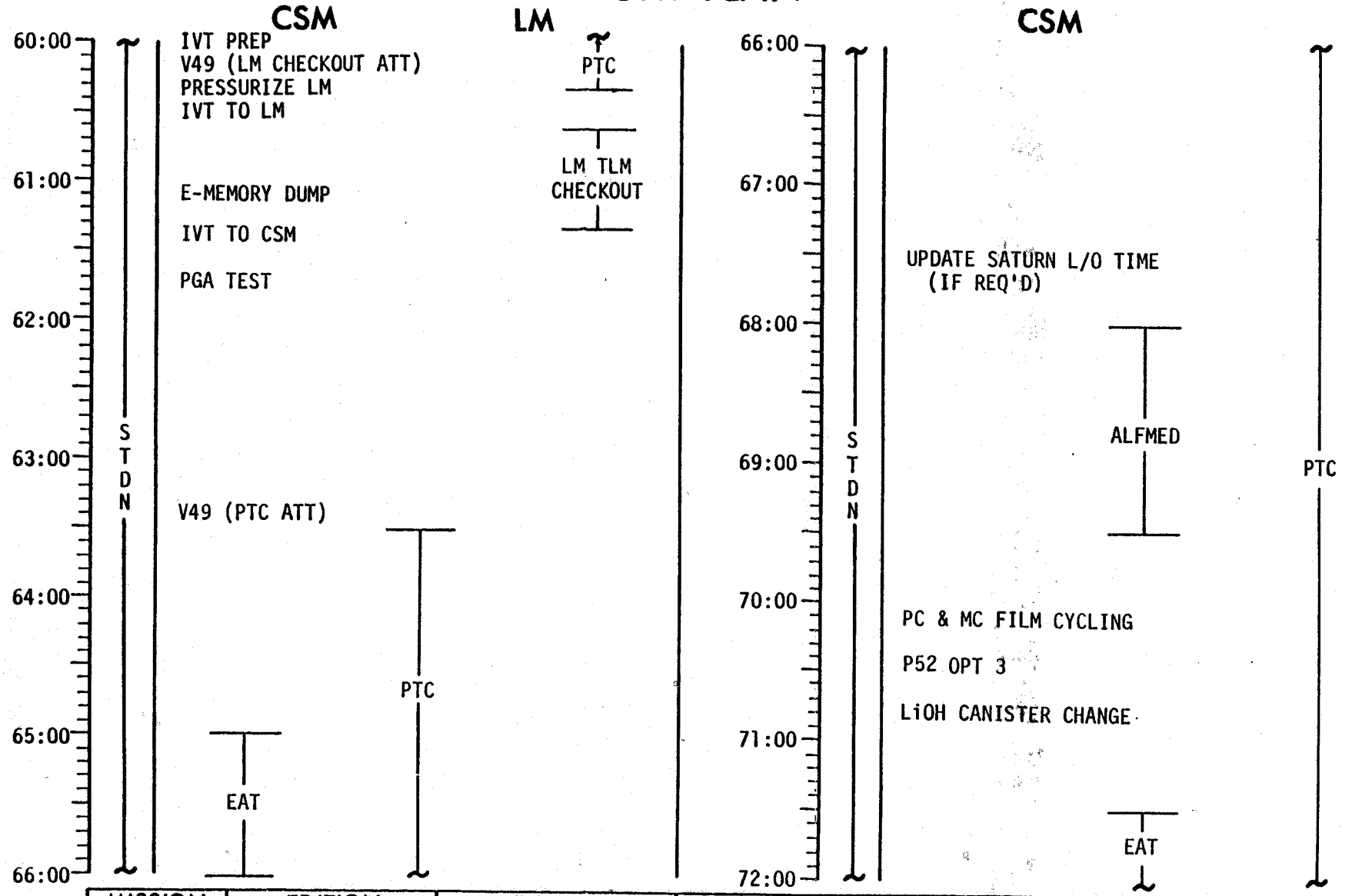
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	48:00 - 60:00	3-4 /TLC	5-5

FLIGHT PLANNING BRANCH

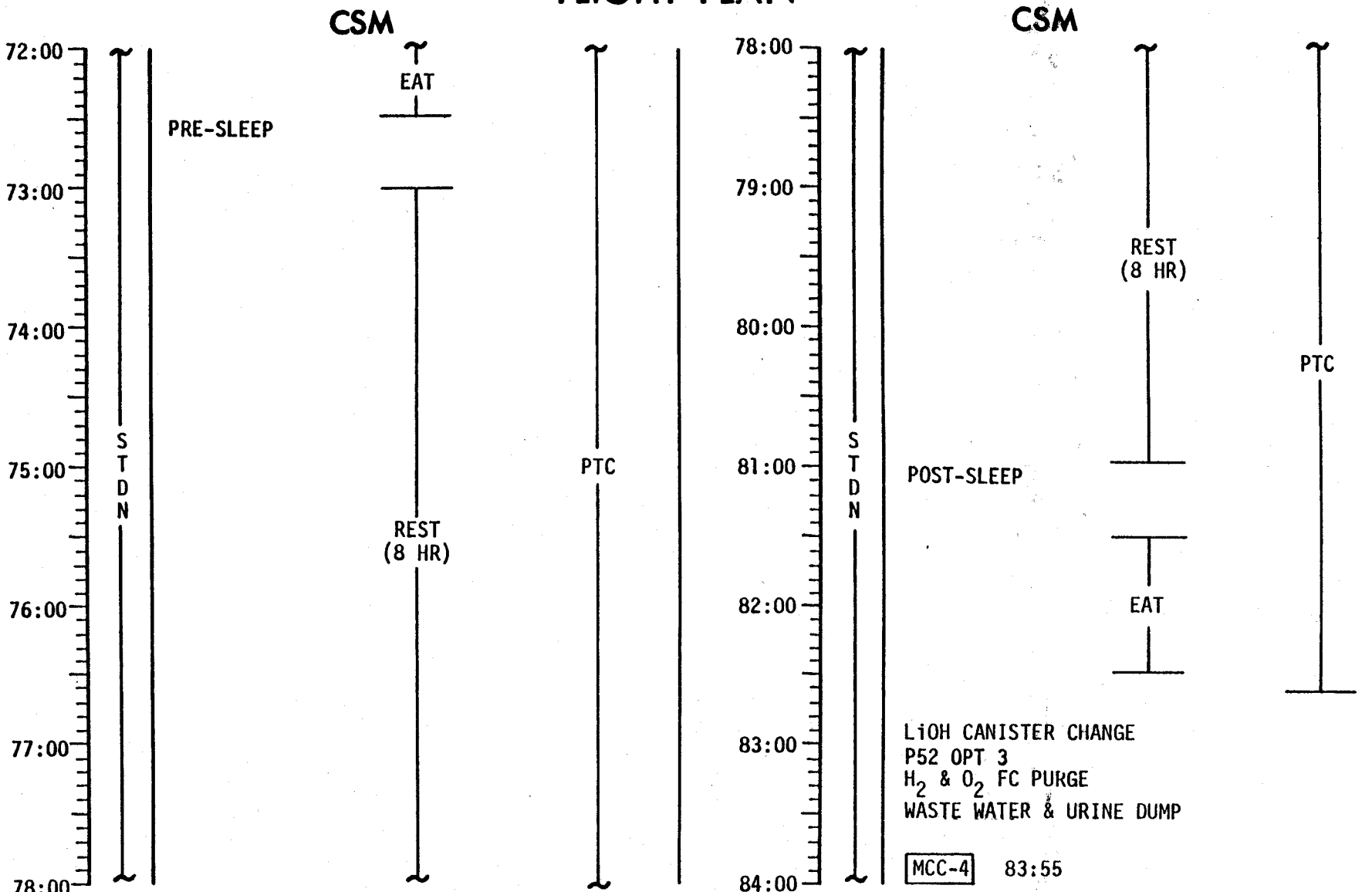
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	60:00 - 72:00	4/TLC	5-6

FLIGHT PLANNING BRANCH

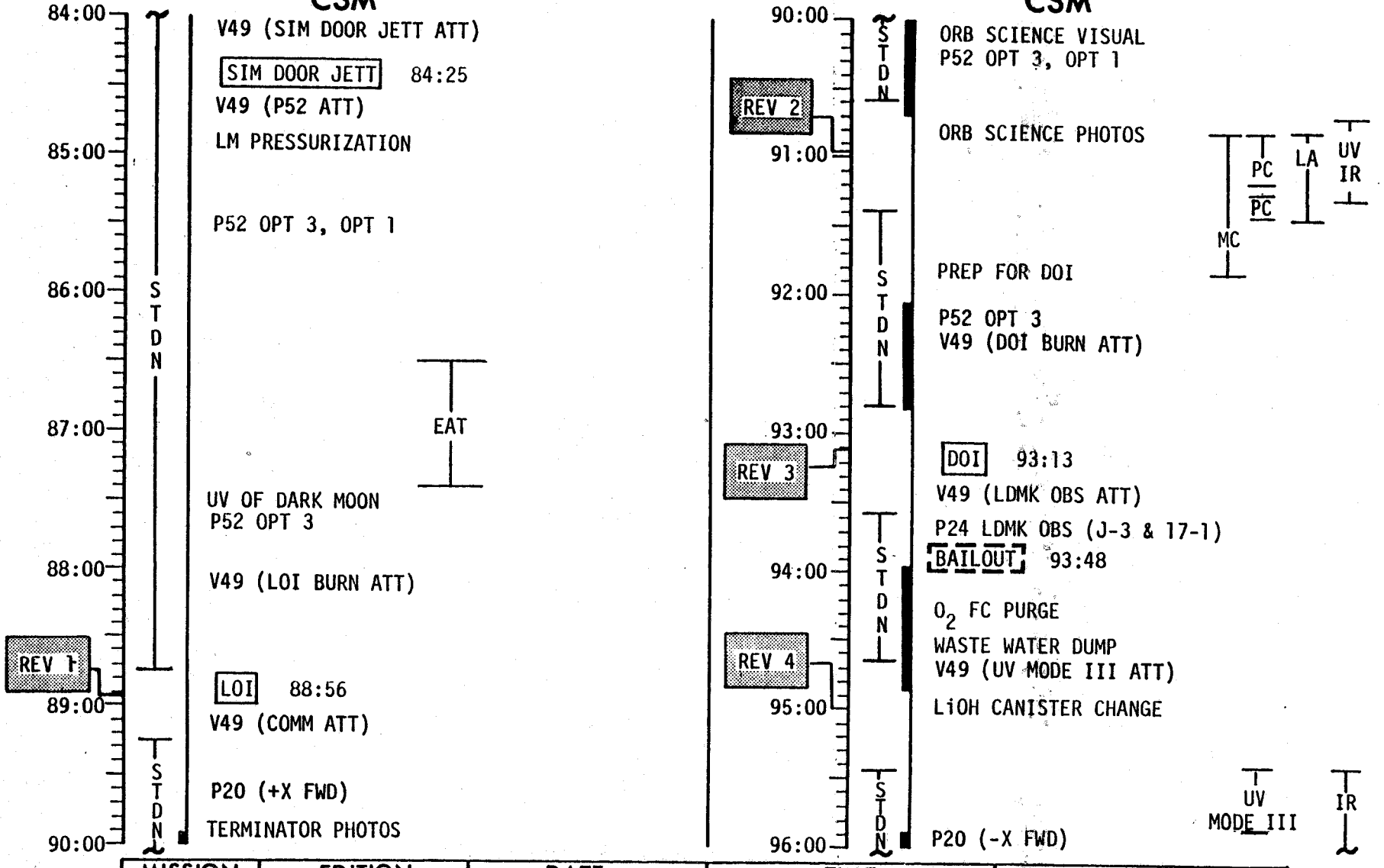
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	72:00 - 84:00	4-5/TLC	5-7

FLIGHT PLANNING BRANCH

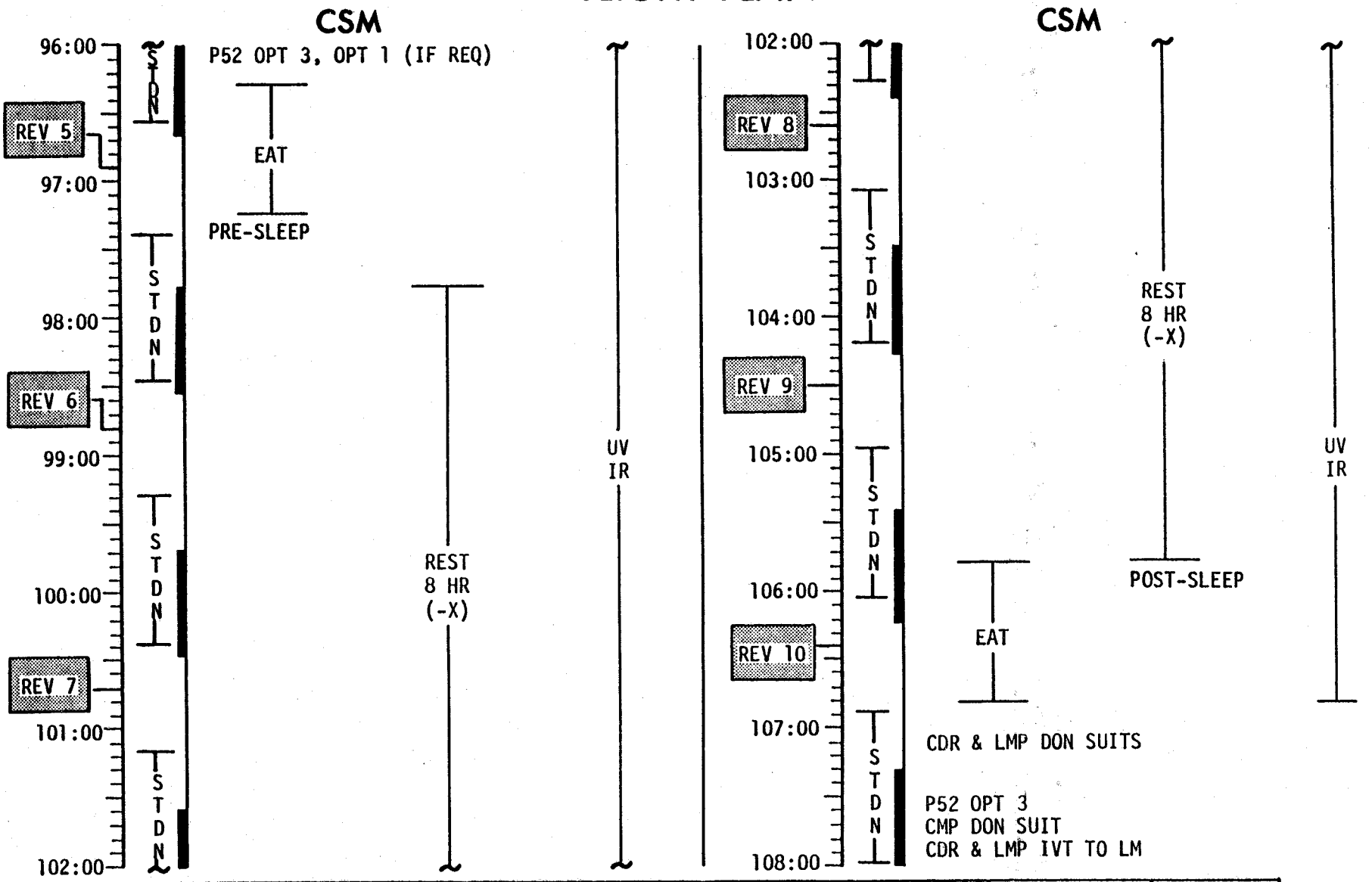
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	84:00 - 96:00	5/TLC-4	5-8

FLIGHT PLANNING BRANCH

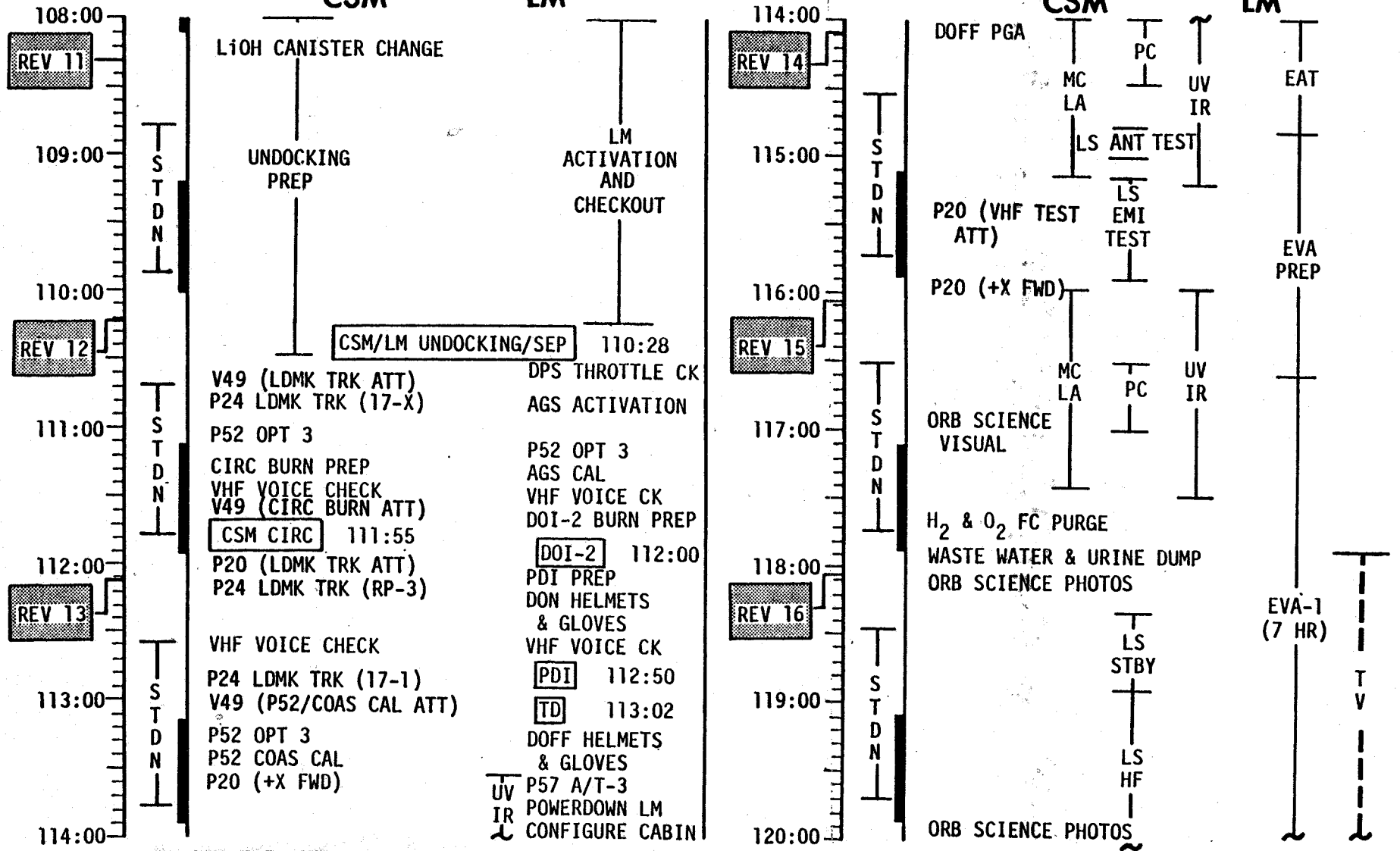
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	96:00 - 108:00	5-6/5-10	5-9

FLIGHT PLANNING BRANCH

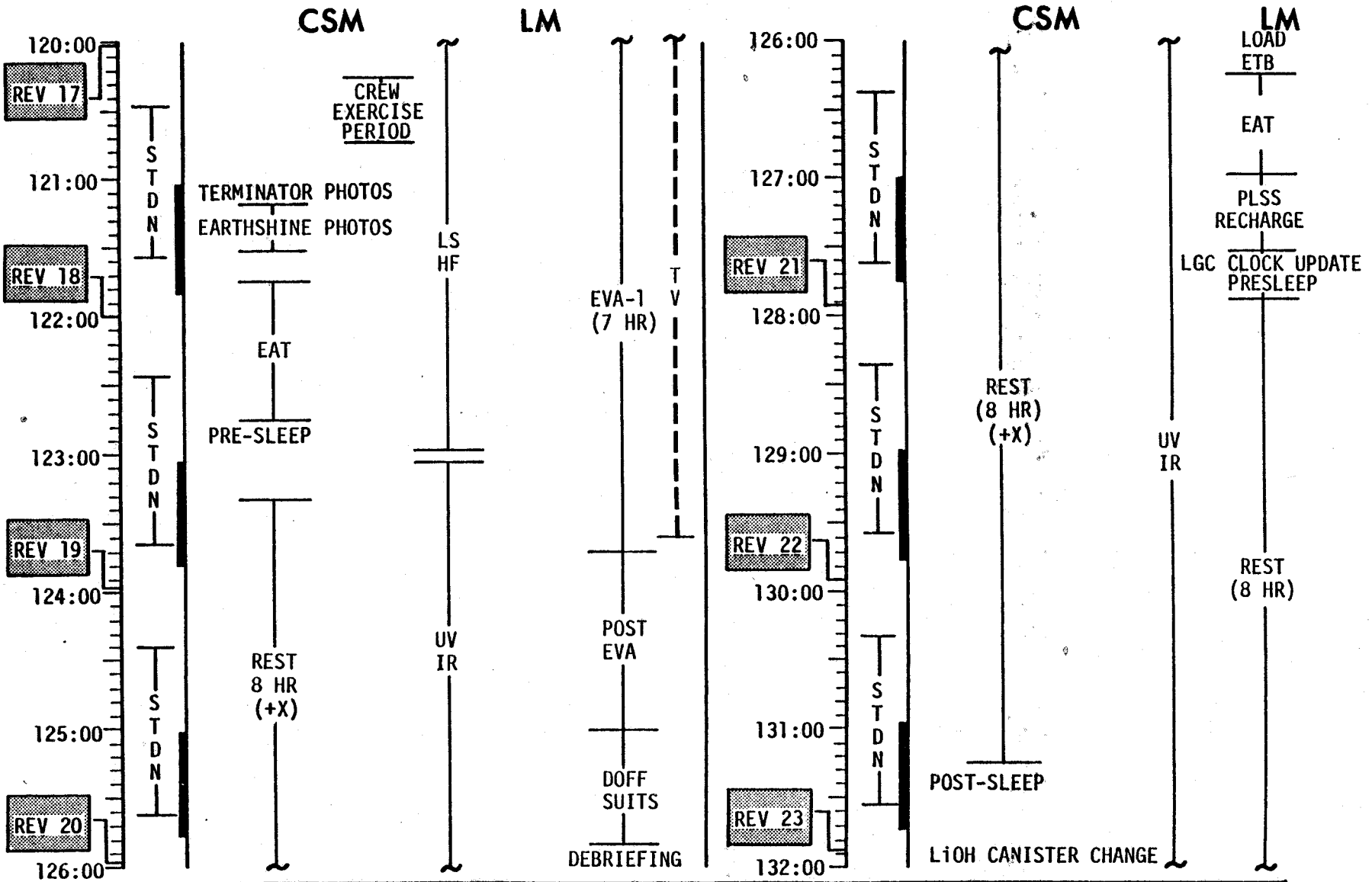
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	108:00 - 120:00	6 /11-16	5-10

FLIGHT PLANNING BRANCH

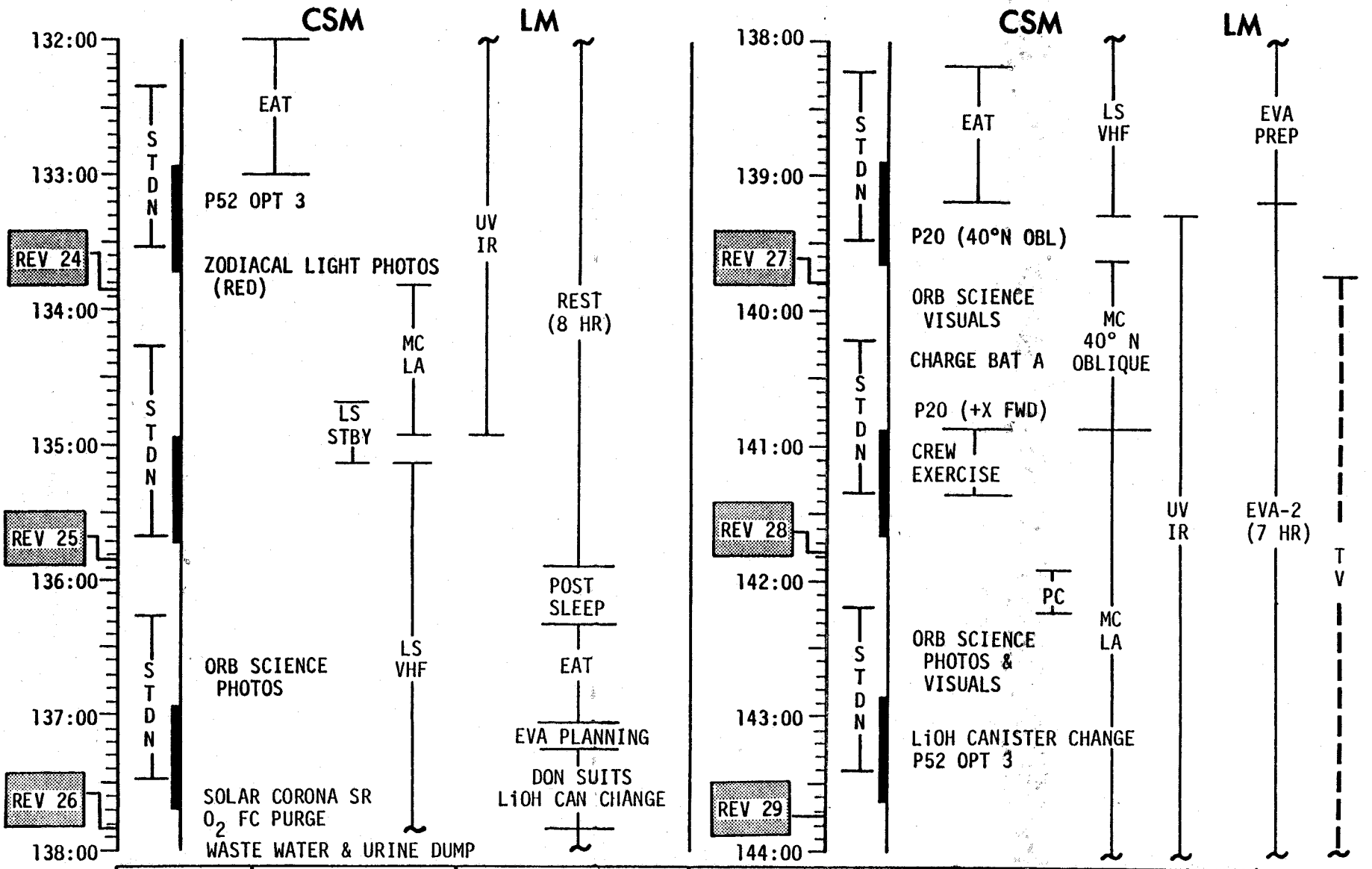
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	120:00 - 132:00	6-7/17-23	5-11

FLIGHT PLANNING BRANCH

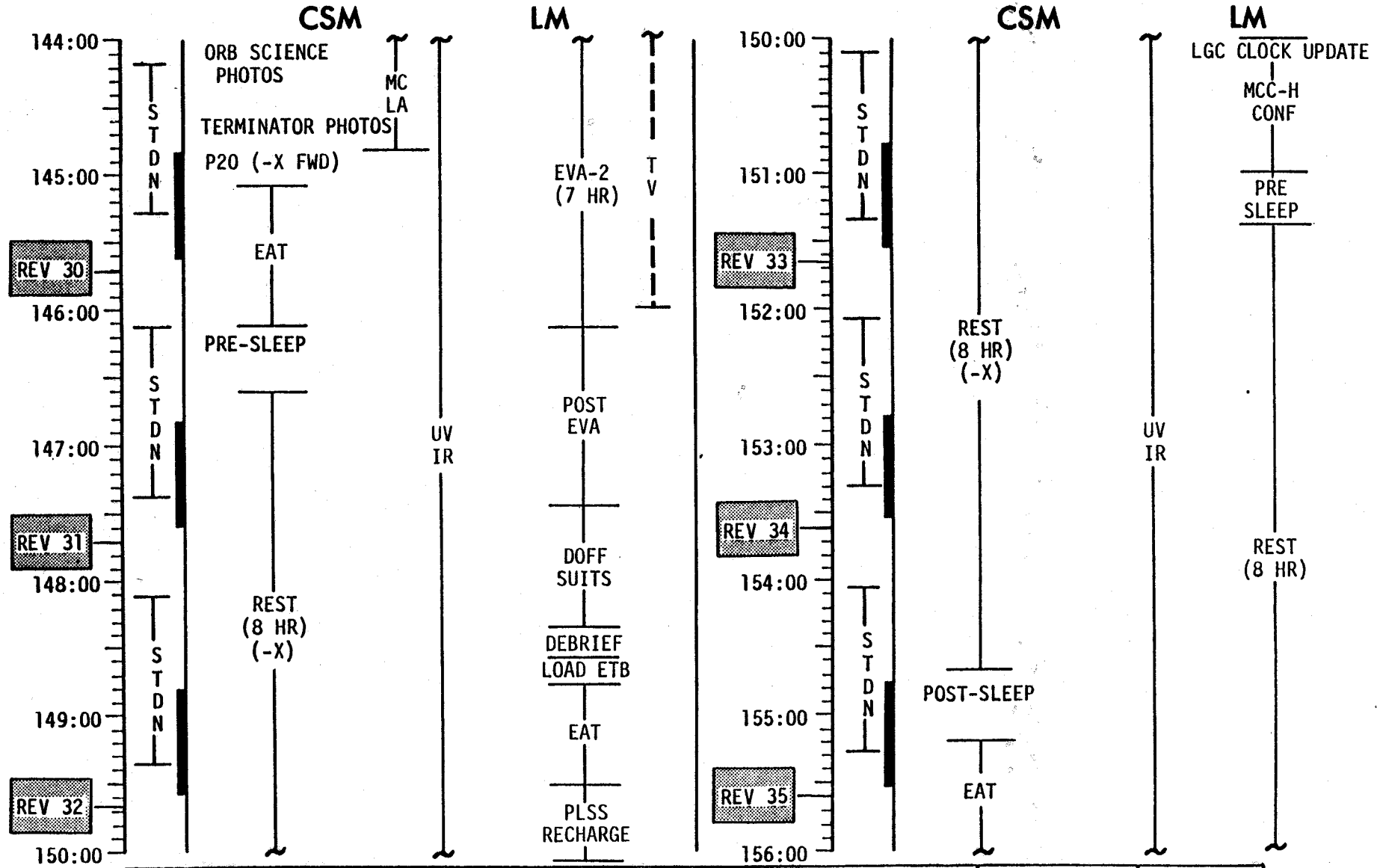
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	132:00 - 144:00	7/24-29	5-12

FLIGHT PLANNING BRANCH

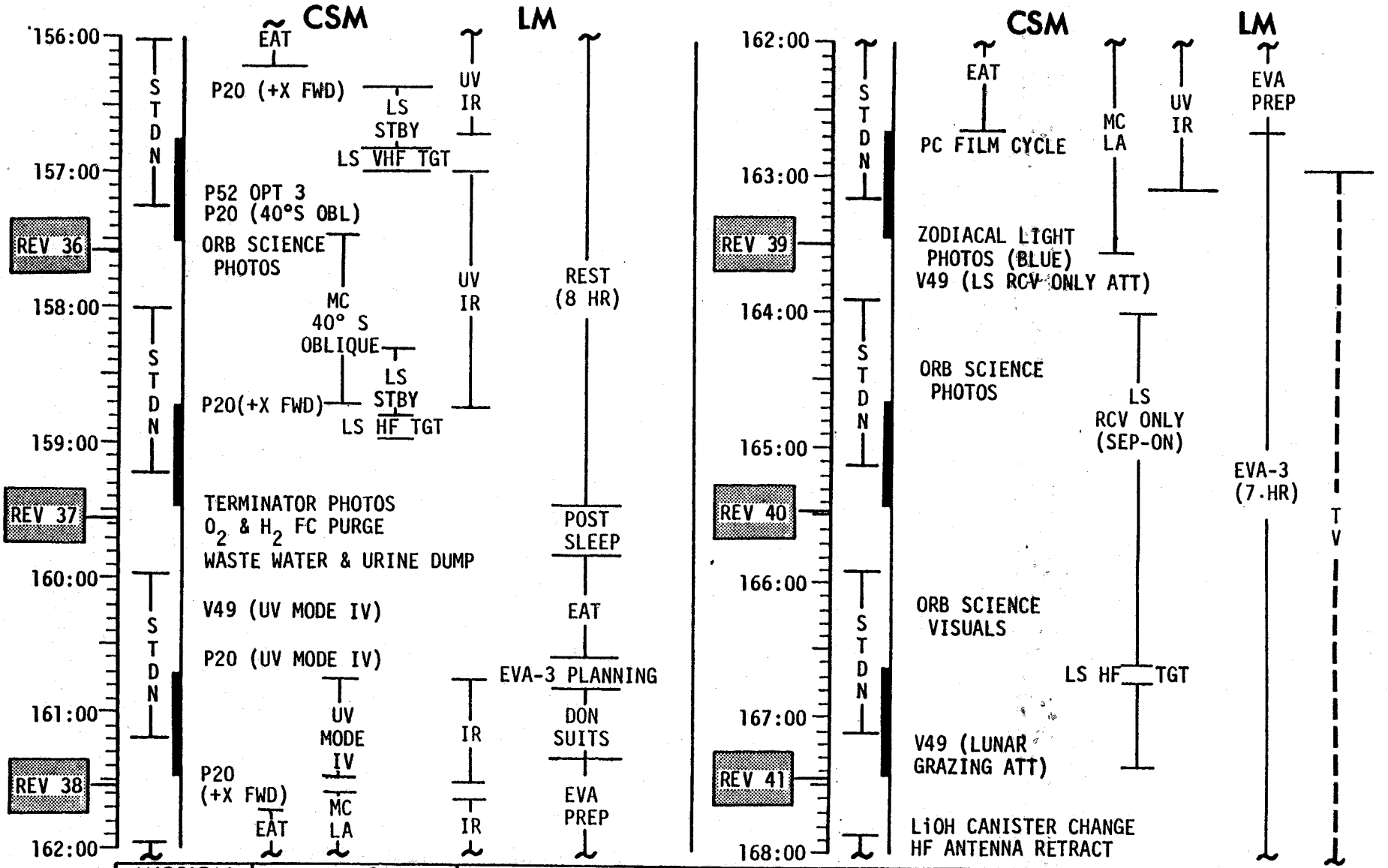
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	144:00 - 156:00	7-8/30-35	5-13

FLIGHT PLANNING BRANCH

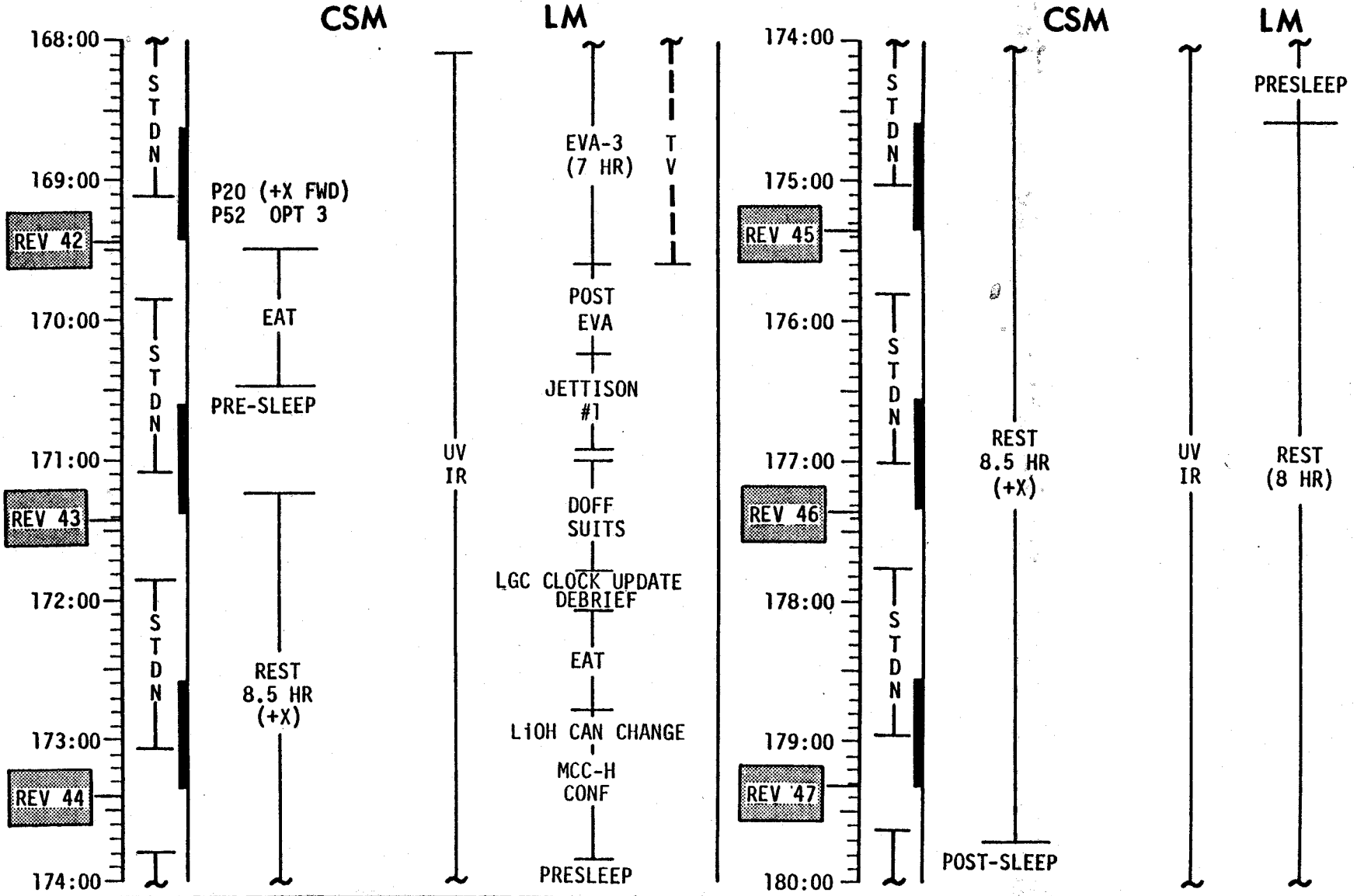
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	156:00 - 168:00	8/36-41	5-14

FLIGHT PLANNING BRANCH

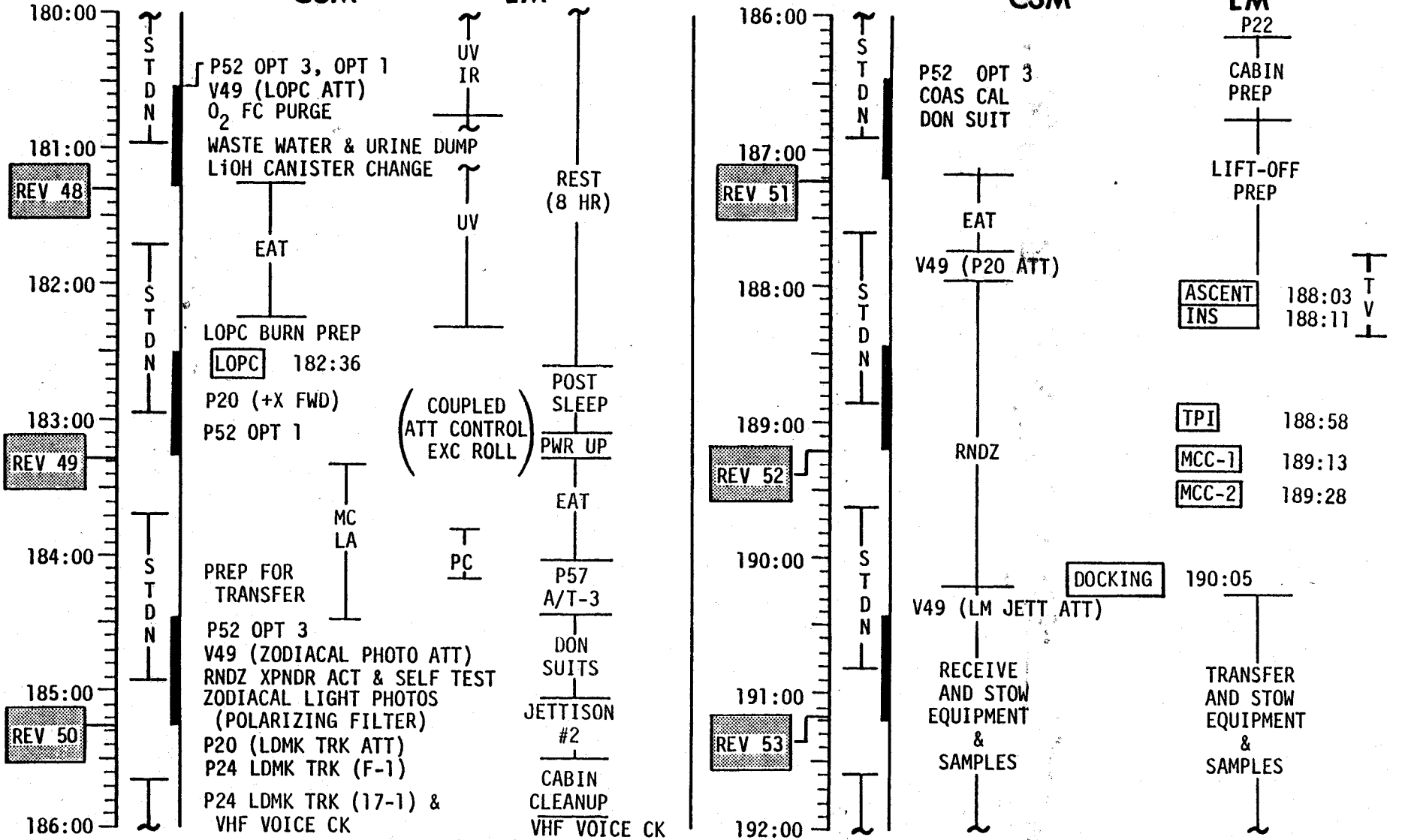
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	168:00 - 180:00	8-9 /42-47	5-15

FLIGHT PLANNING BRANCH

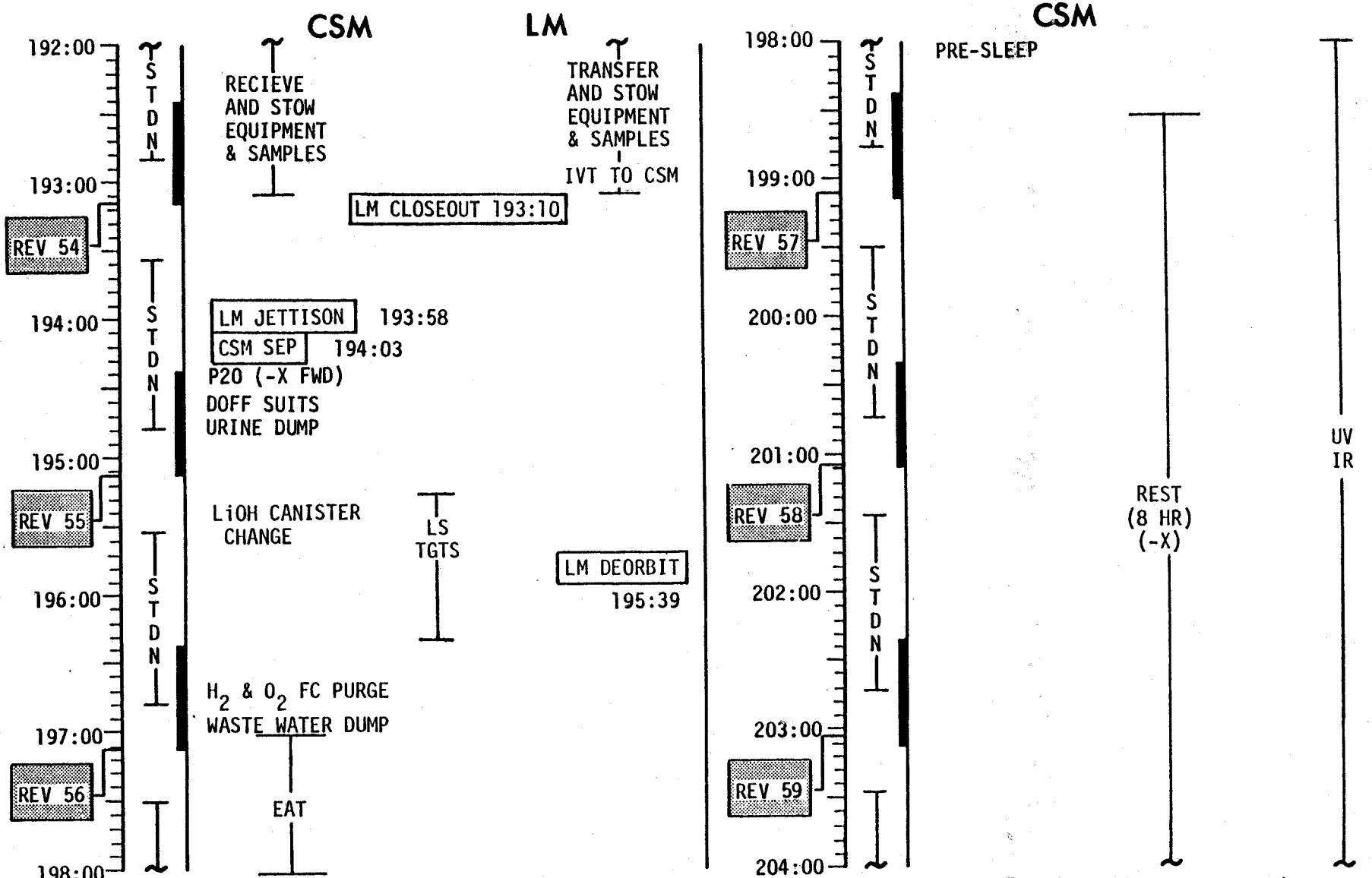
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	180:00 - 192:00	9 /48-53	5-16

FLIGHT PLANNING BRANCH

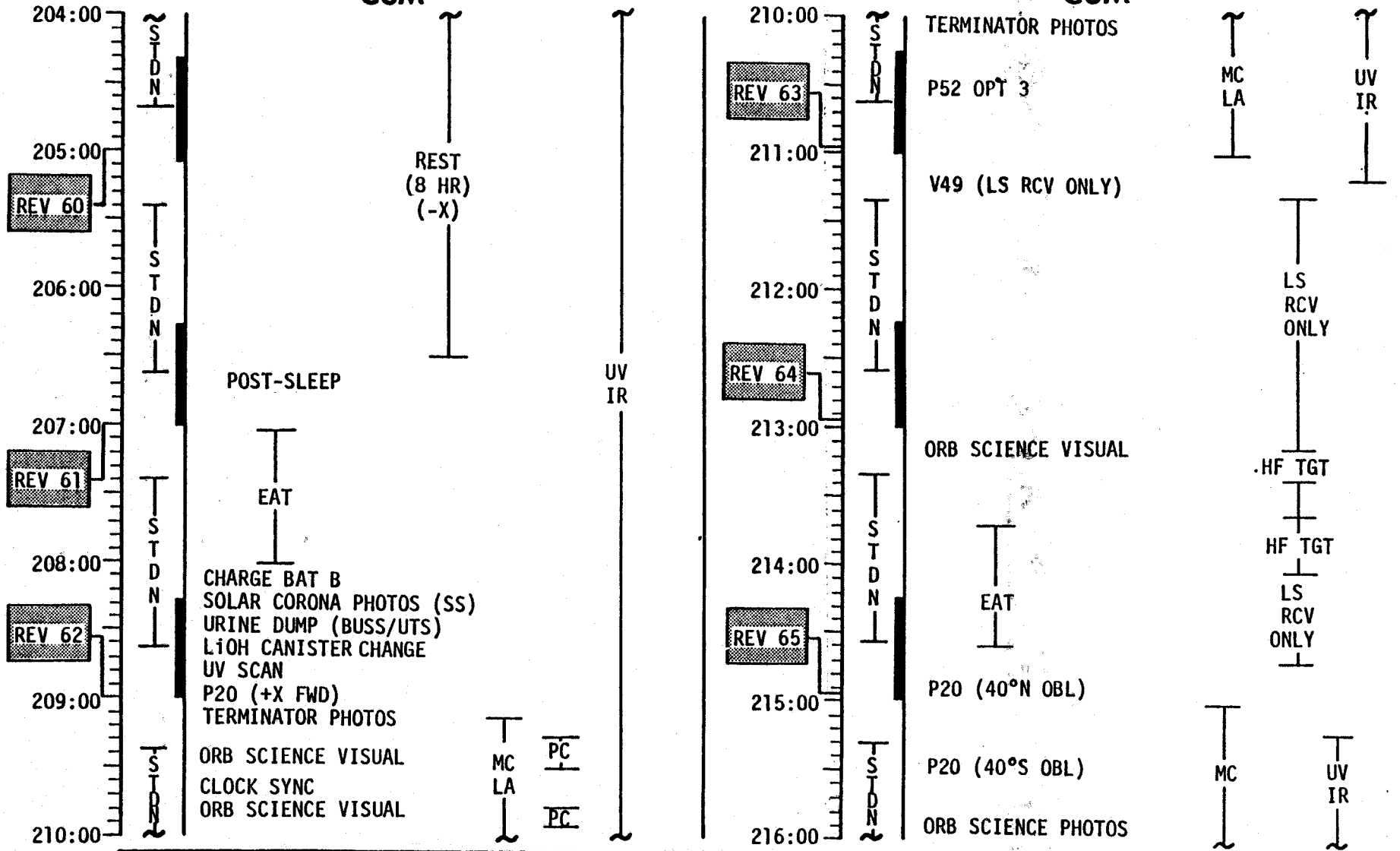
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	192:00 - 204:00	9/54-59	5-17

FLIGHT PLANNING BRANCH

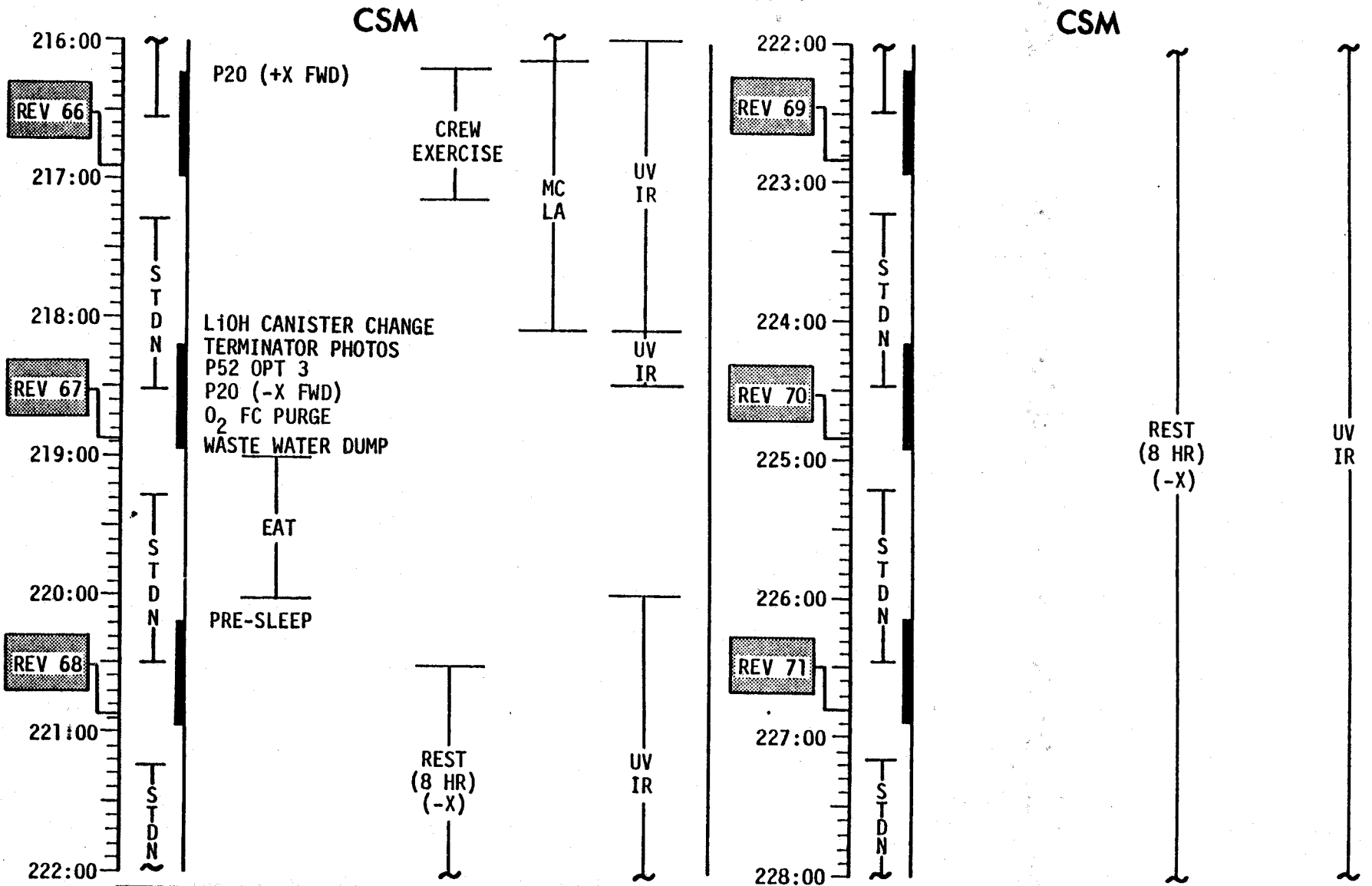
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	204:00 - 216:00	9-10/60-65	5-18

FLIGHT PLANNING BRANCH

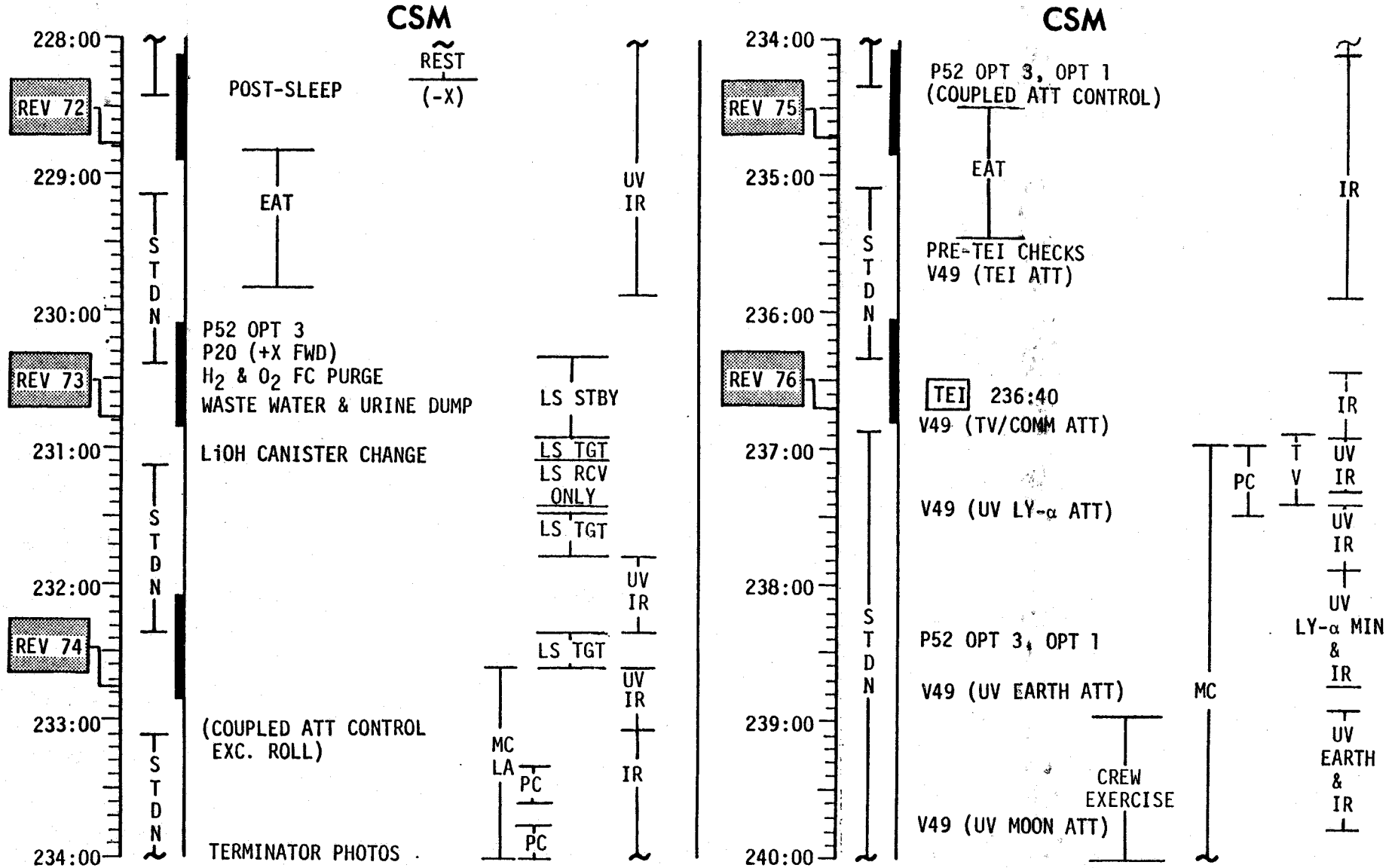
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	216:00 - 228:00	10/66-71	5-19

FLIGHT PLANNING BRANCH

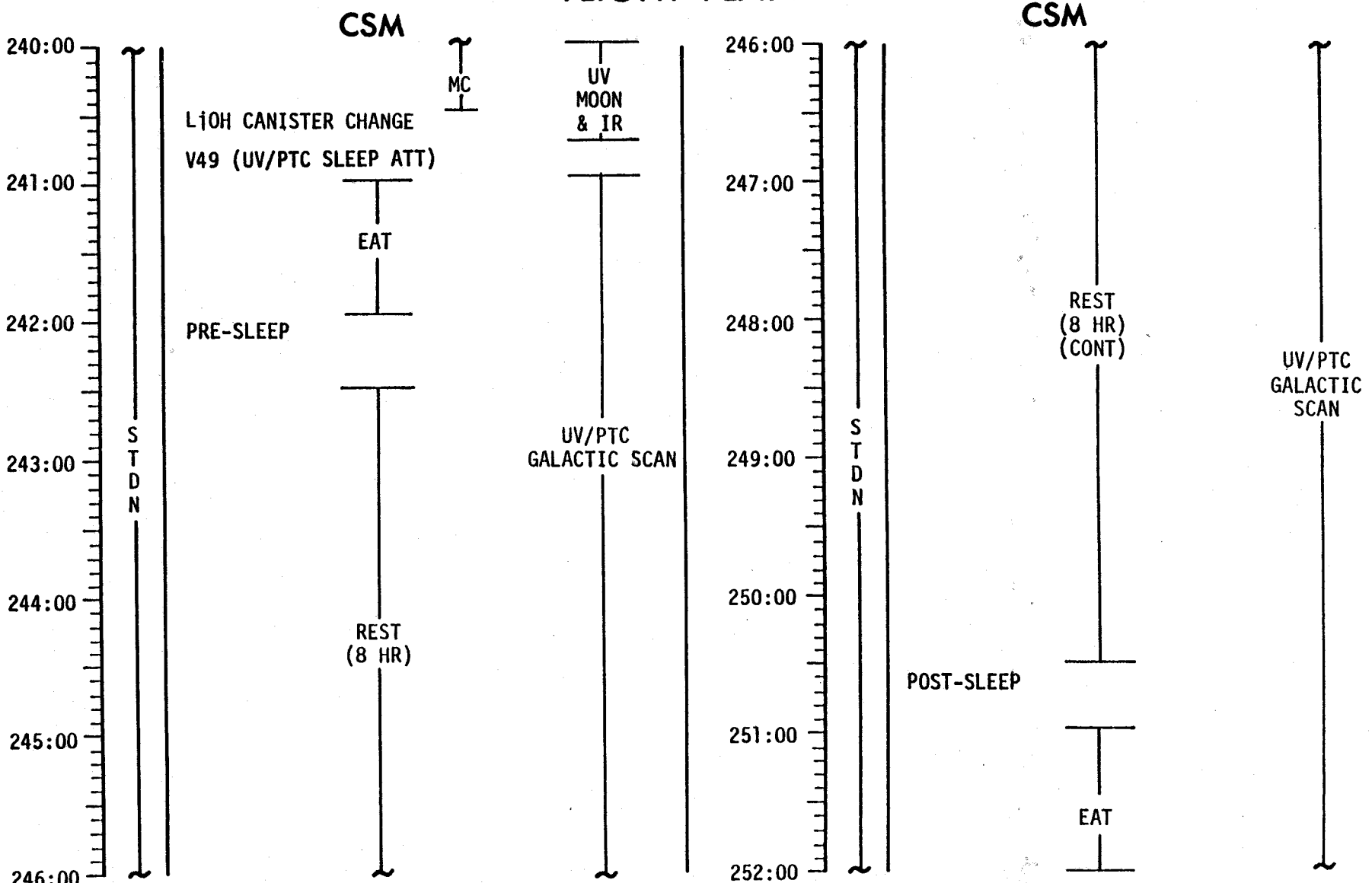
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	228:00 - 240:00	10-11 /72-TEC	5-20

FLIGHT PLANNING BRANCH

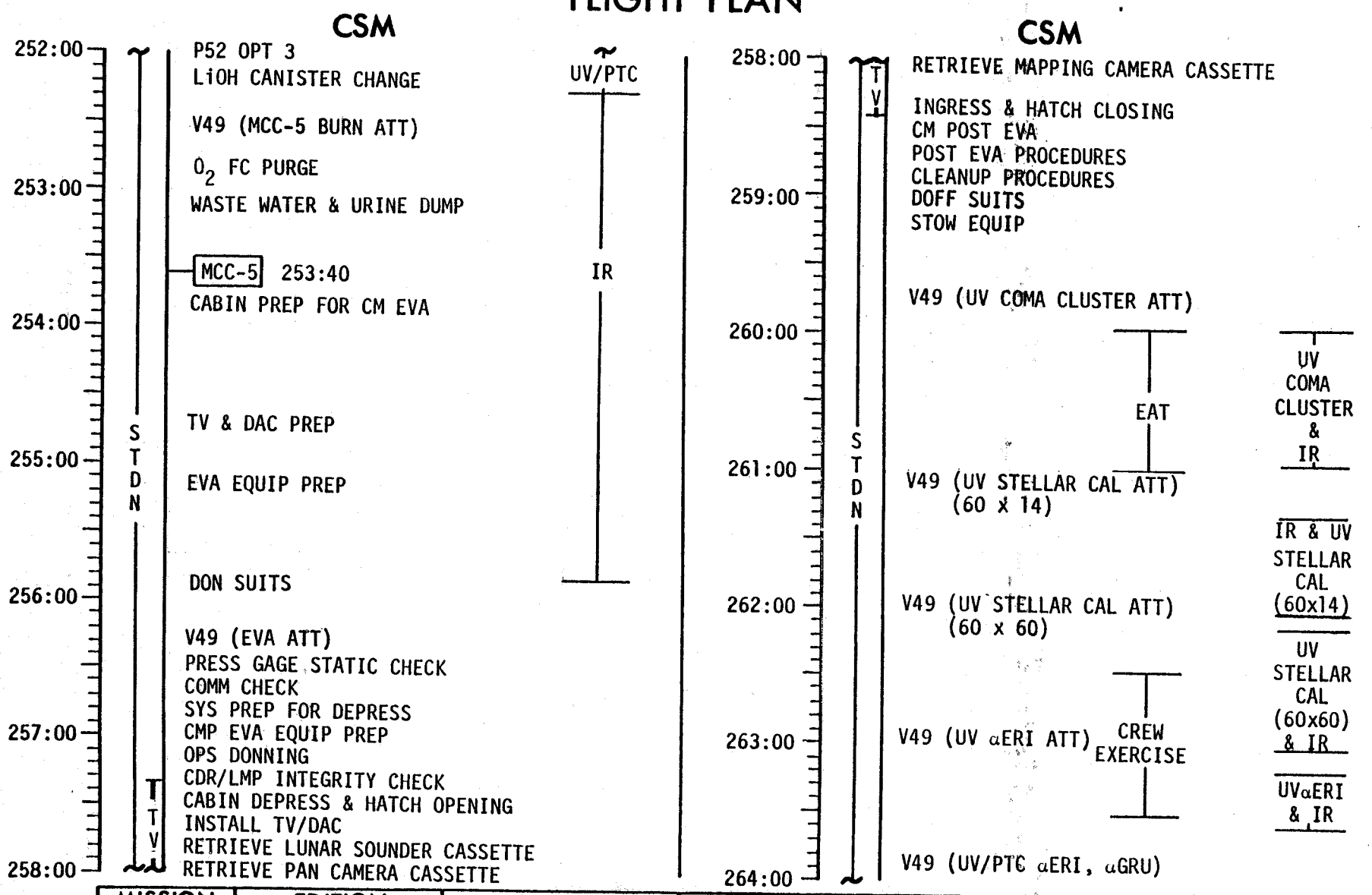
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	240:00 - 252:00	11-12/TEC	5-21

FLIGHT PLANNING BRANCH

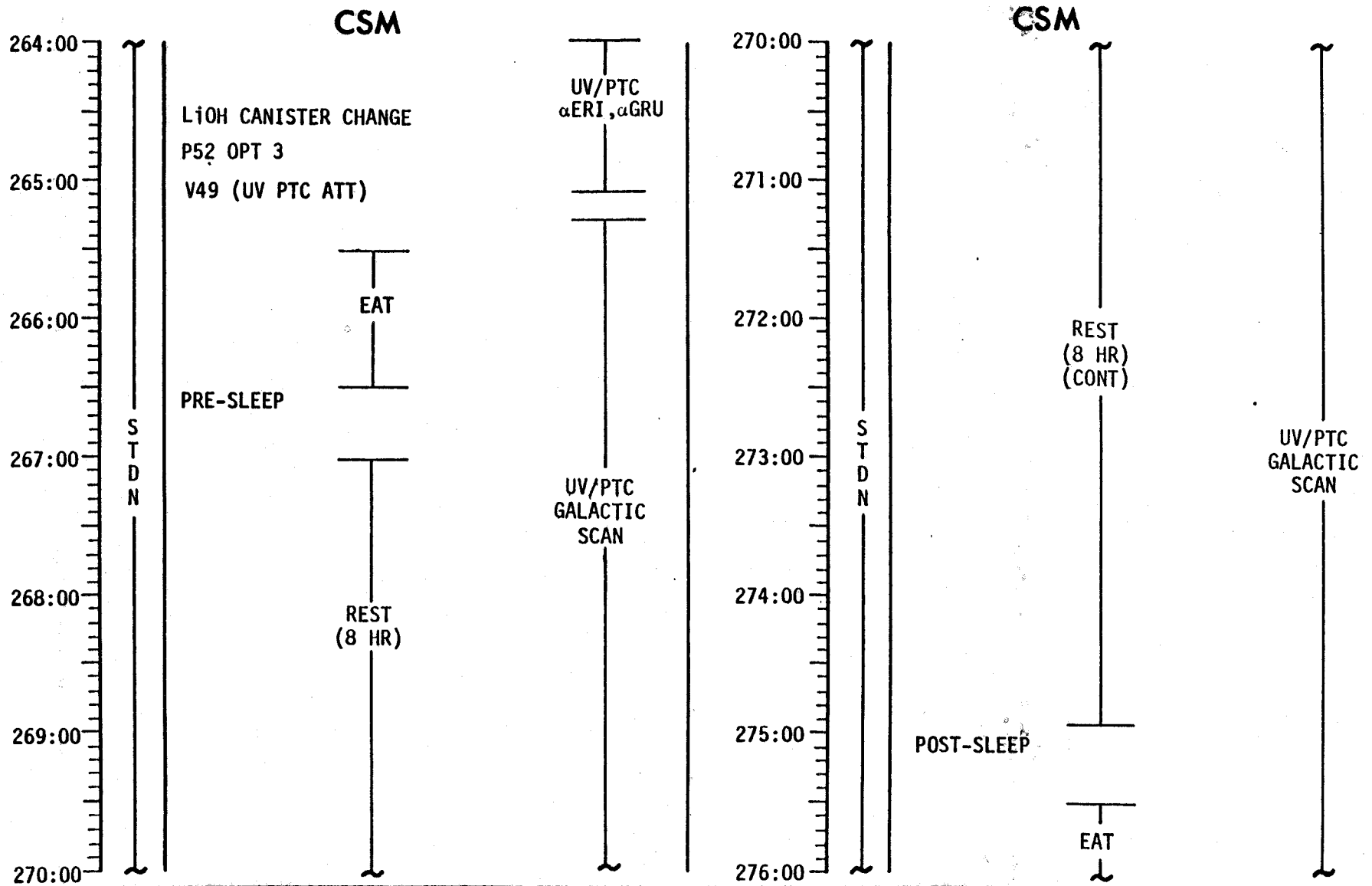
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	252:00 - 264:00	12 /TEC	5-22

FLIGHT PLANNING BRANCH

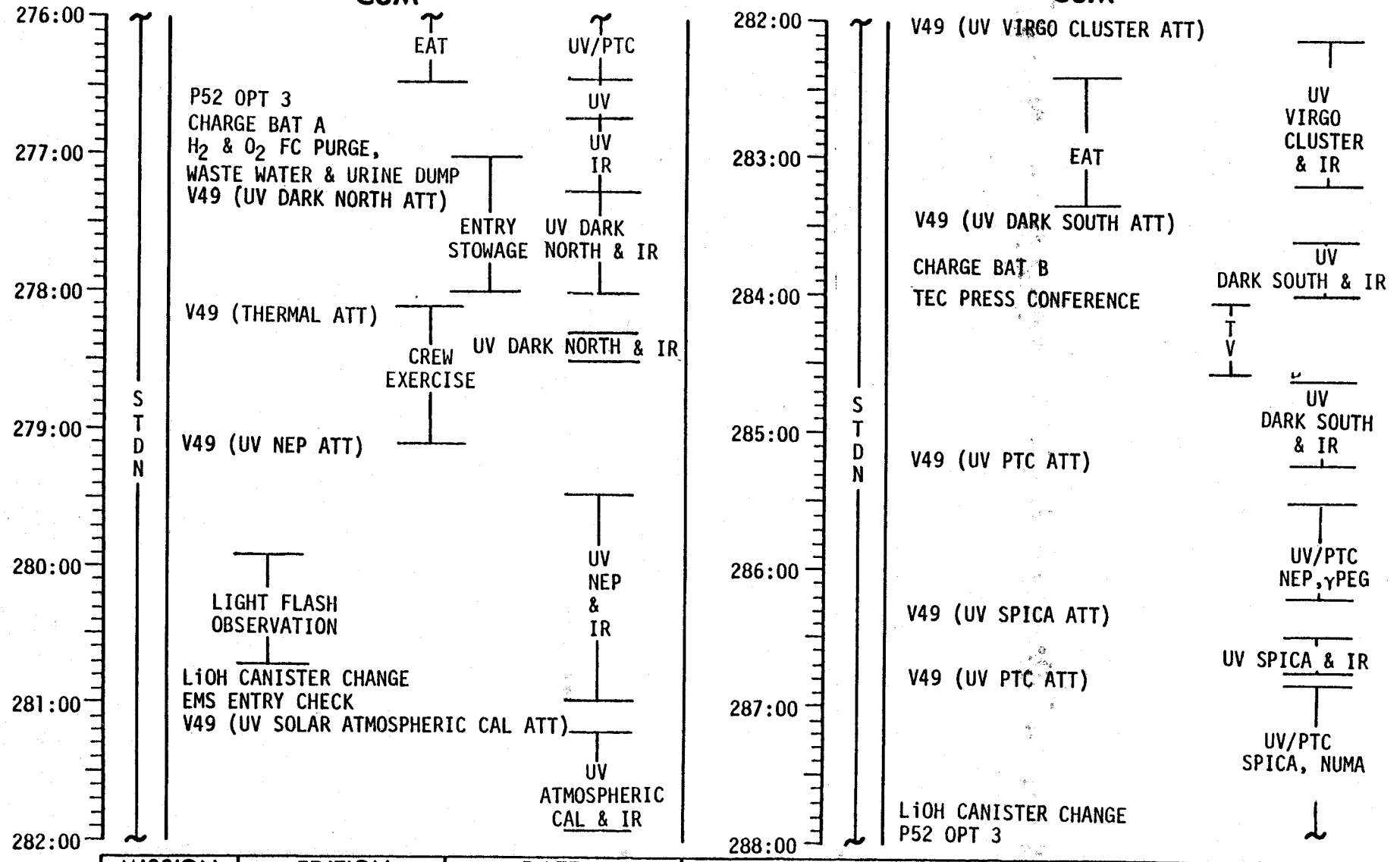
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	264:00 - 276:00	12-13/TEC	5-23

FLIGHT PLANNING BRANCH

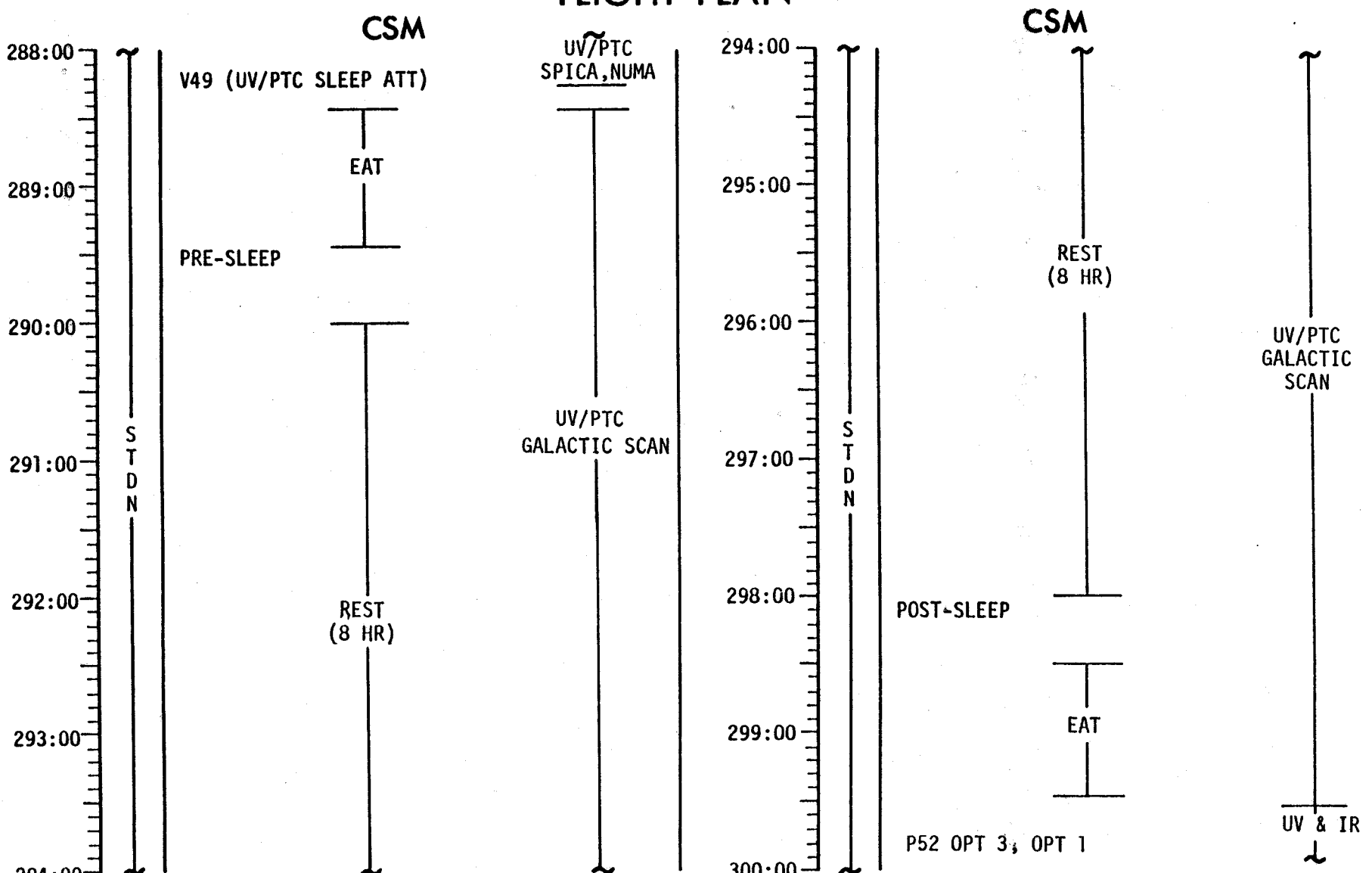
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	276:00 - 288:00	13/TEC	5-24

FLIGHT PLANNING BRANCH

FLIGHT PLAN

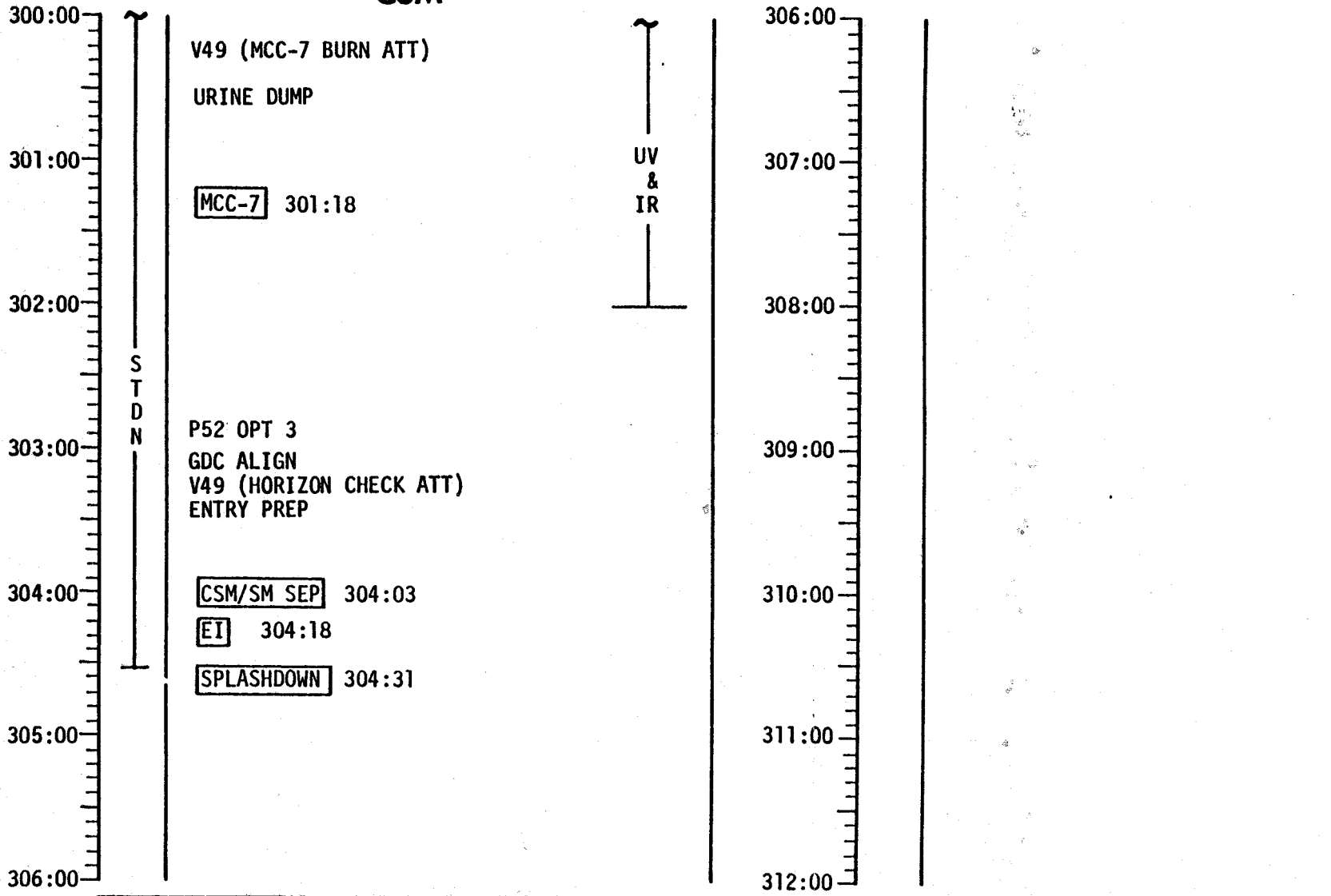


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	288:00 - 300:00	13-14/TEC	5-25

FLIGHT PLANNING BRANCH

FLIGHT PLAN

CSM



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	300:00 - 312:00	14/TEC-ENTRY	5-26

FLIGHT PLANNING BRANCH

SECTION 6 - ALTERNATE MISSION SUMMARIES

EARTH ORBIT ALTERNATE MISSION

Assumptions

1) A SAFE insertion orbit has been achieved by the S-IVB.
2) A systems failure has resulted in a NO/GO for TLI.

CONSTRAINTS

1) Maintain SM-RCS deorbit capability
2) Photography in the southern hemisphere
3) LM to be jettisoned for water impact.

Sequence of Events

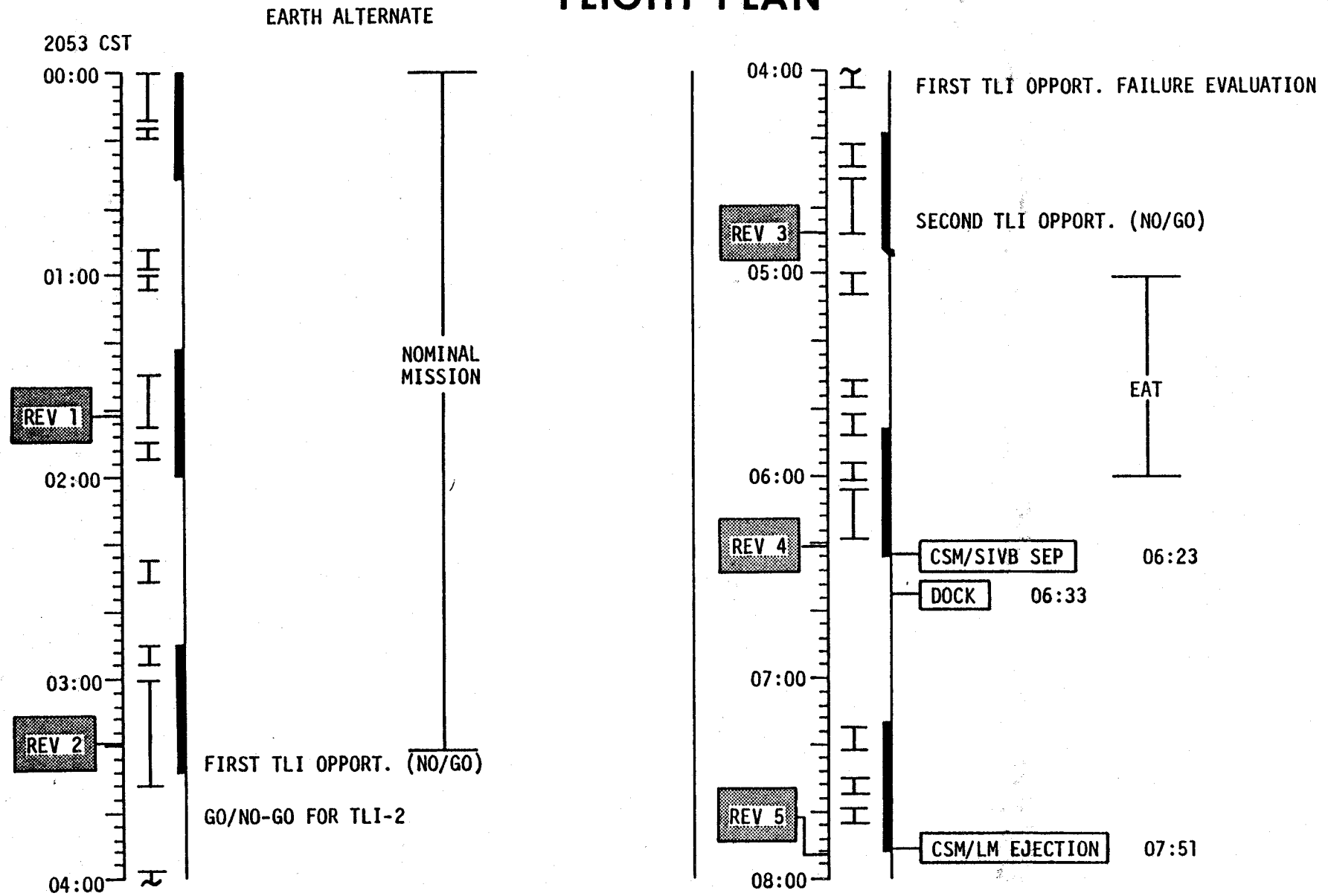
This alternate mission is initiated by a systems failure which will not allow TLI. The alternate mission timeline is entered at the nominal time of TLI and allows for a failure checkout period followed by a possible second TLI opportunity. If the second TLI is not performed, the CSM executes TD&E and prepares the LM for an ocean impact. The CSM executes five SPS burns to position itself for photographic coverage of the Southern Hemisphere with an inclination of forty-five degrees.

All the Sim Bay experiments are activated, except for the IR Radiometer, and an EVA is planned to retrieve the film canisters. The timeline indicates that lunar sounder operations is continuous but these will be broken into passes of approximately five minutes each when specific targets are chosen. At that time additional UV passes will be scheduled for Mode IV, lunar surface albedo, and galactic targets. The DSE will be managed such that data will be recorded during the daytime and dumped to STDN during the crew sleep periods when possible.

The mission is open ended but for flight planning purposes, a seven-day mission is planned.

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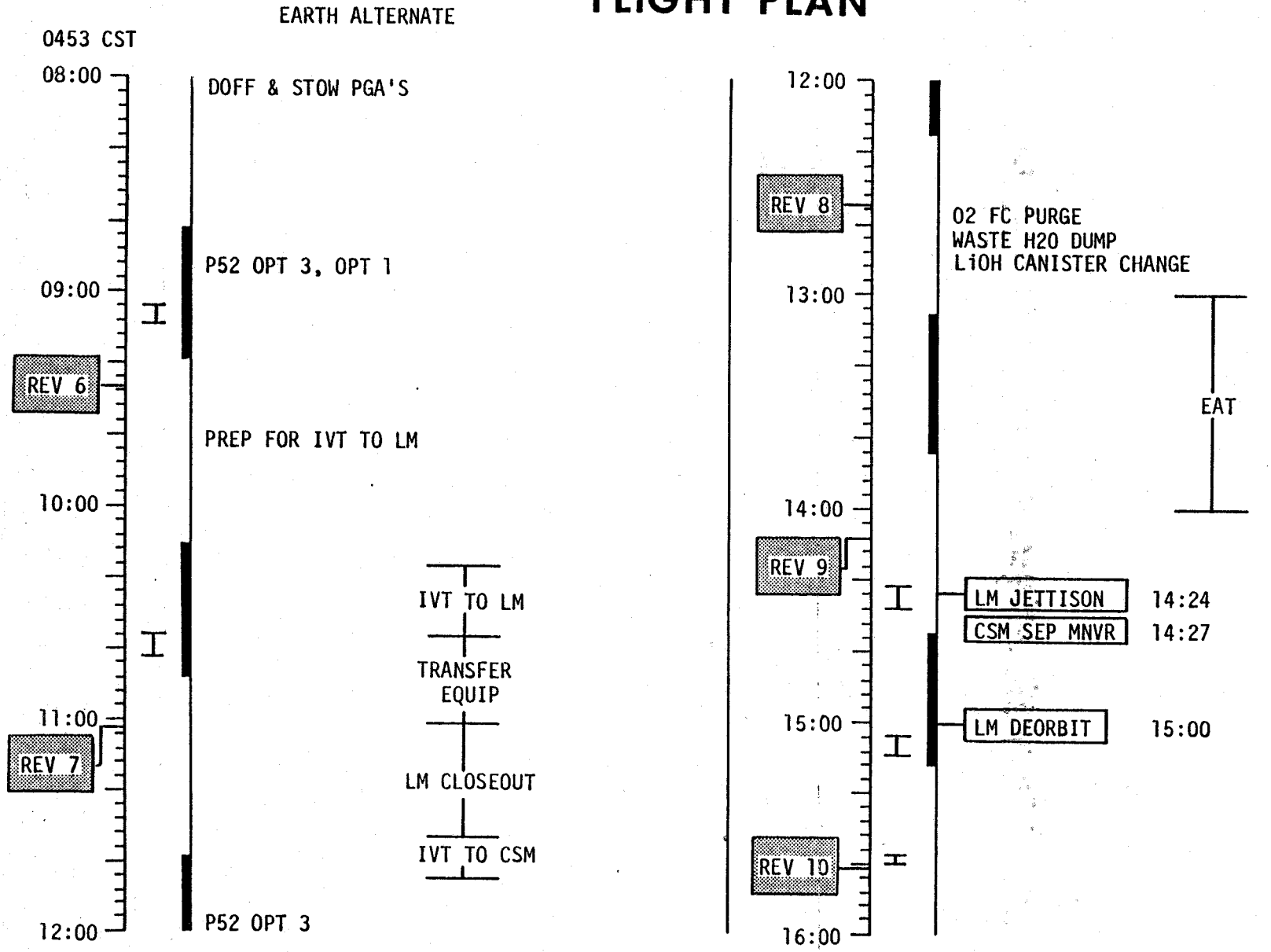
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	00:00 - 08:00	1/1-5	6-3

FLIGHT PLANNING BRANCH

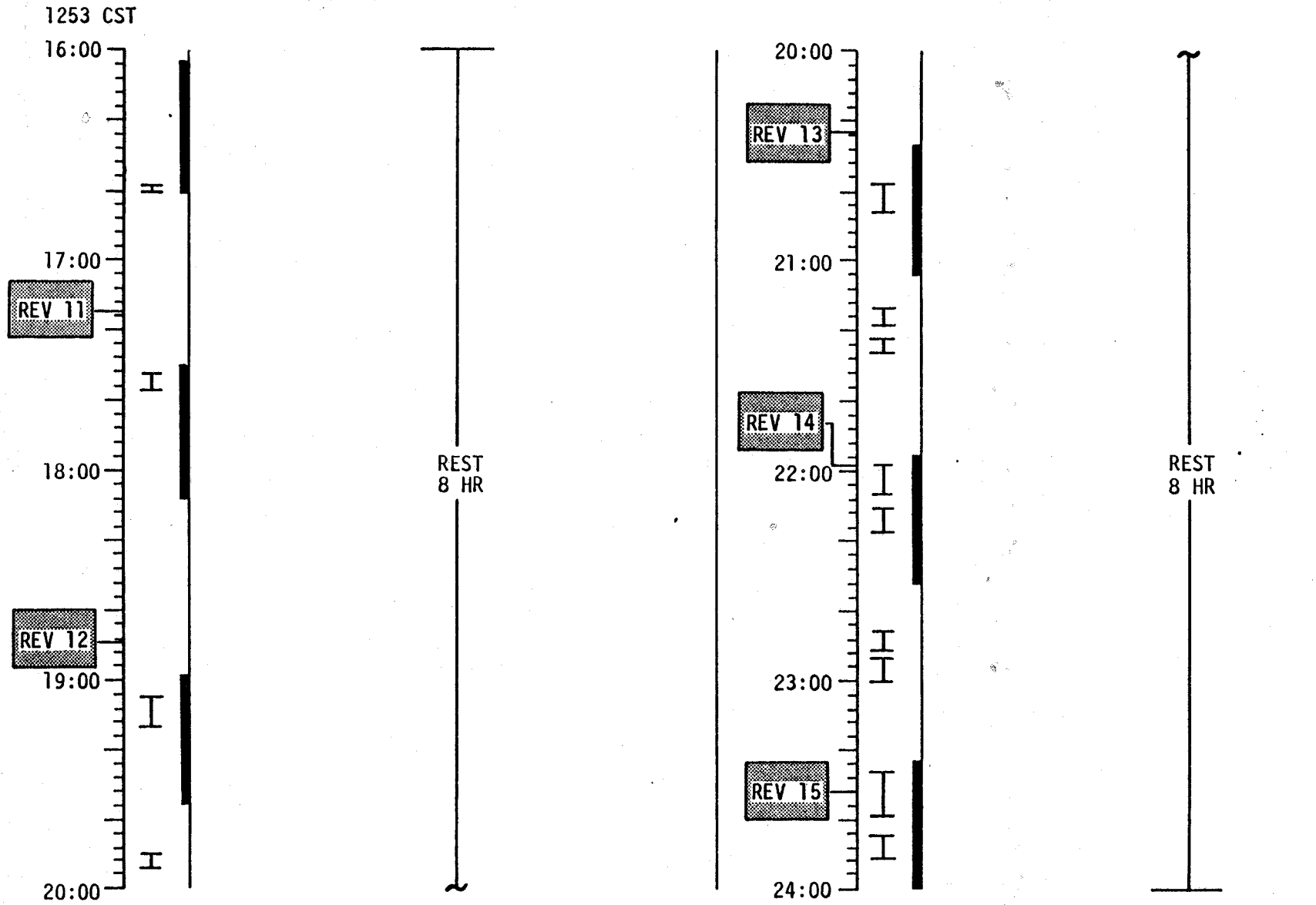
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	08:00 - 16:00	1/5-10	6-4

FLIGHT PLANNING BRANCH

FLIGHT PLAN



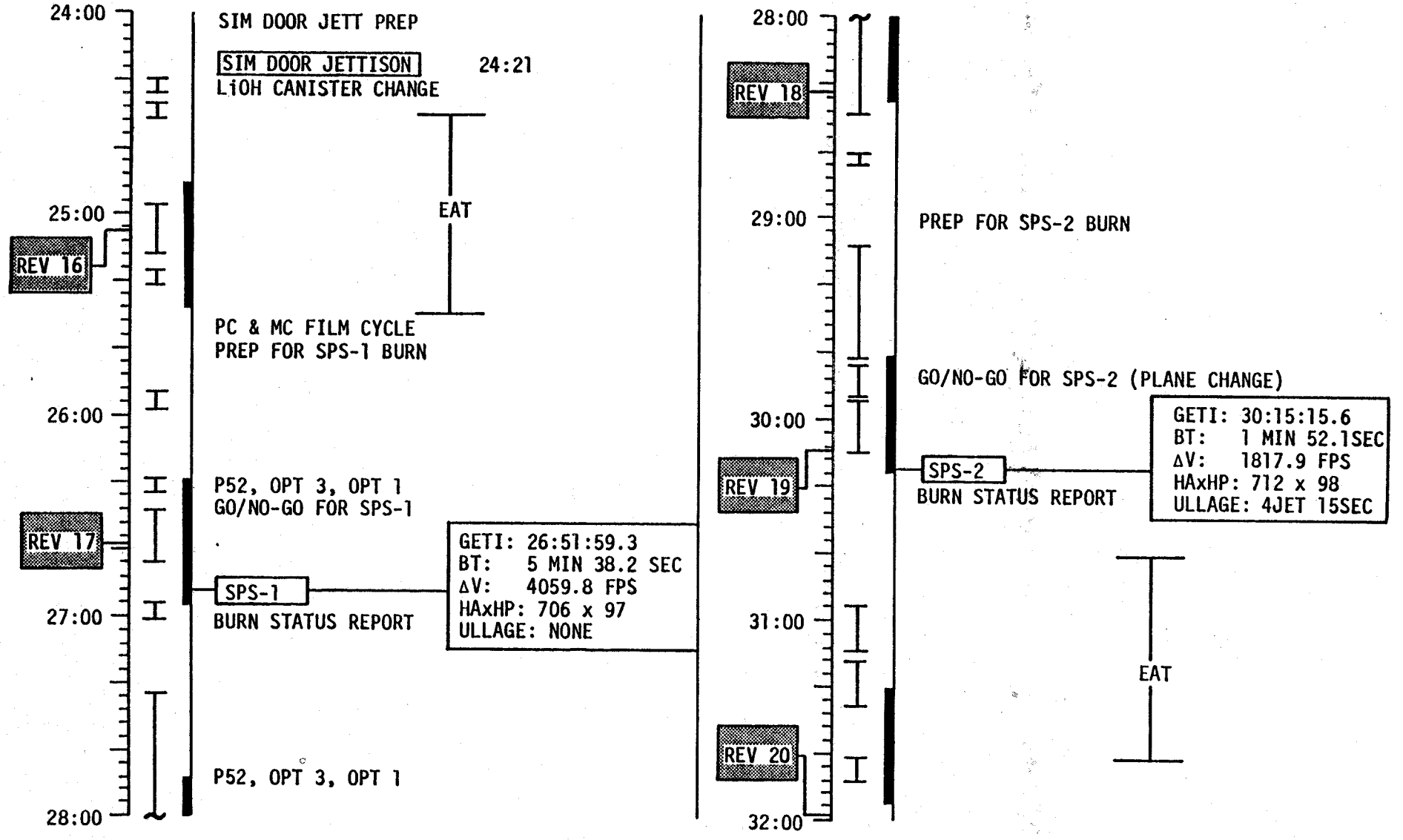
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	16:00 - 24:00	1/10-15	6-5

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE

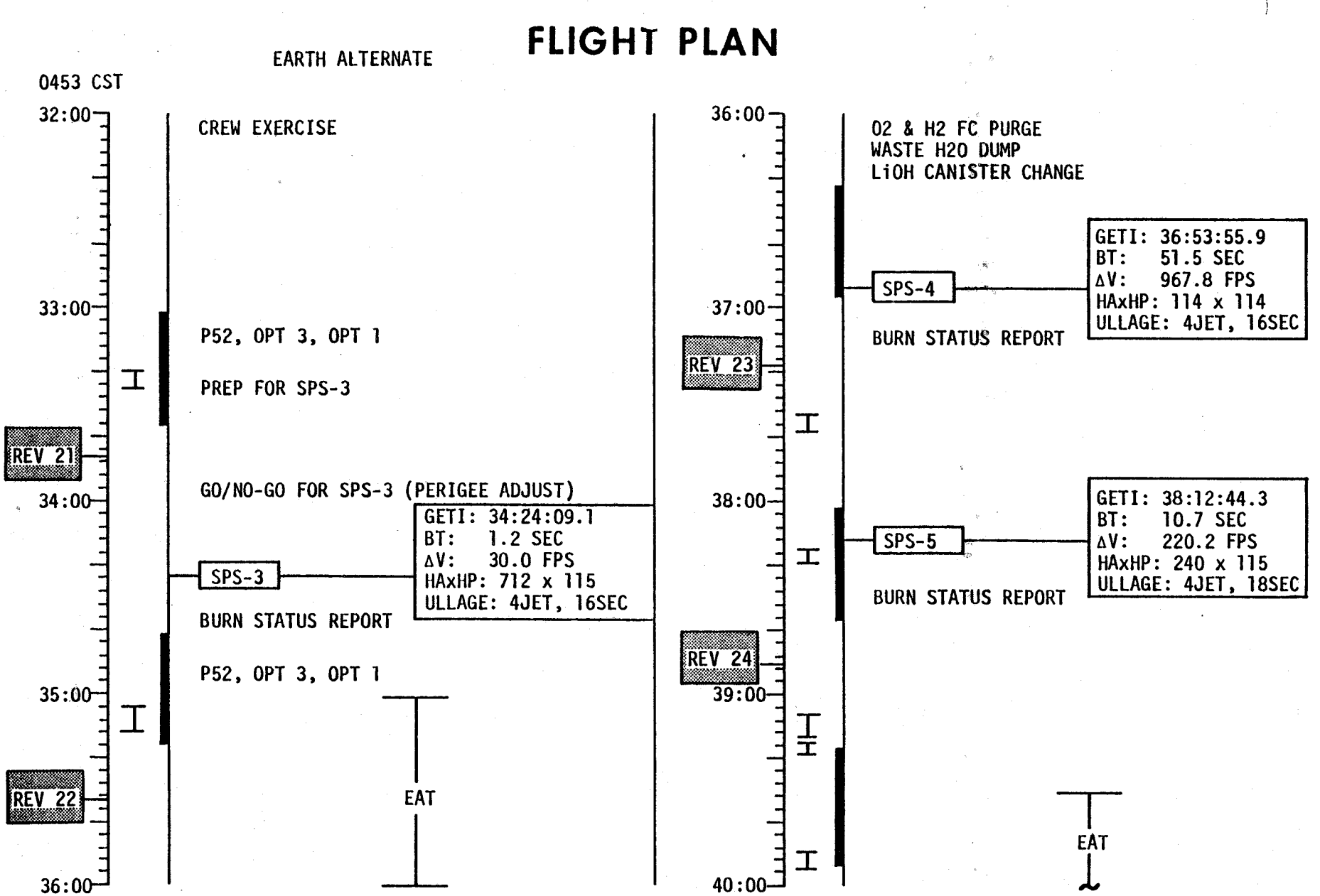
2053 CST



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	24:00 - 32:00	2/15-20	6-6

FLIGHT PLANNING BRANCH

FLIGHT PLAN

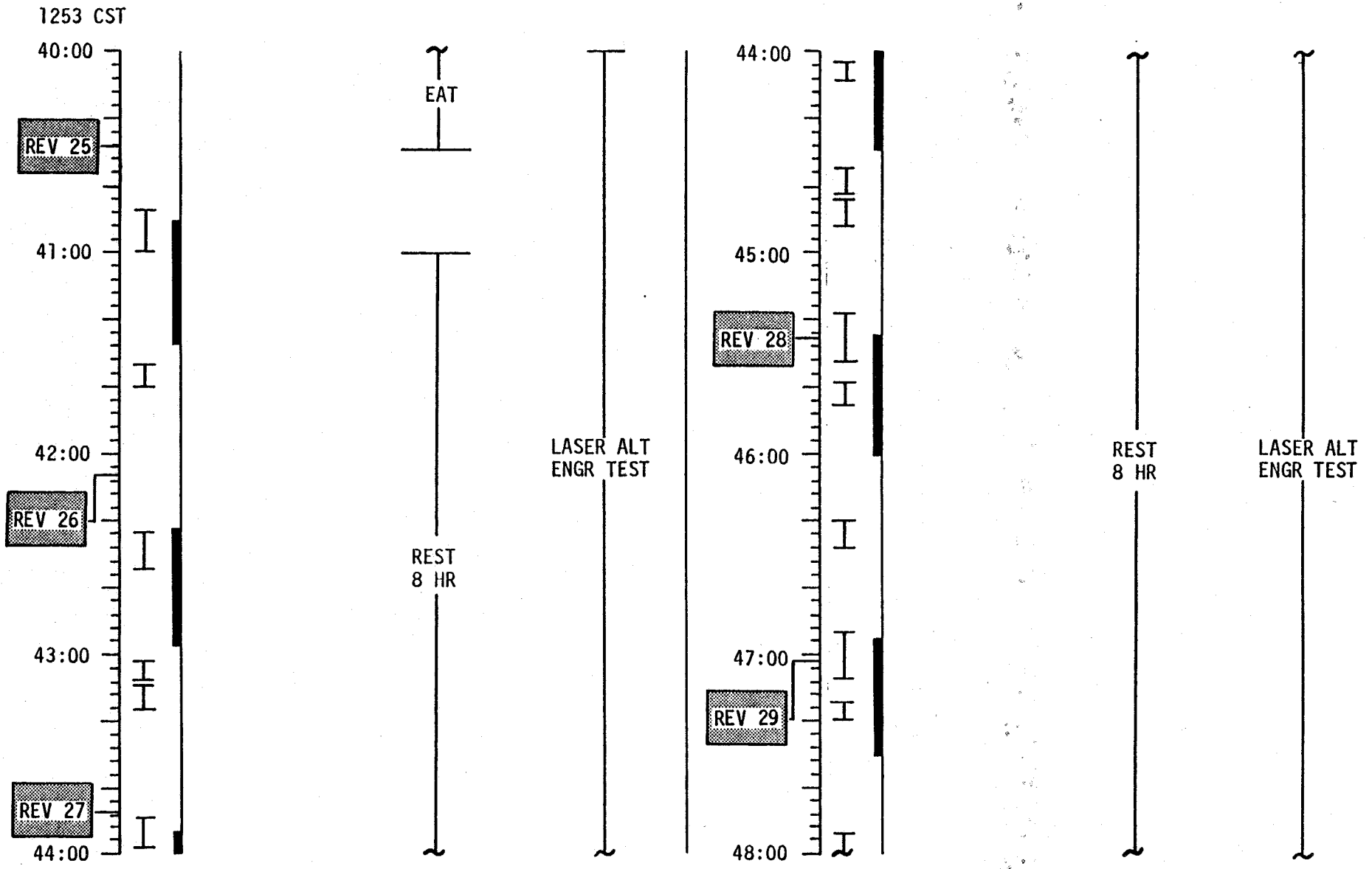


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	32:00 - 40:00	2/20-24	6-7

FLIGHT PLANNING BRANCH

FLIGHT PLAN

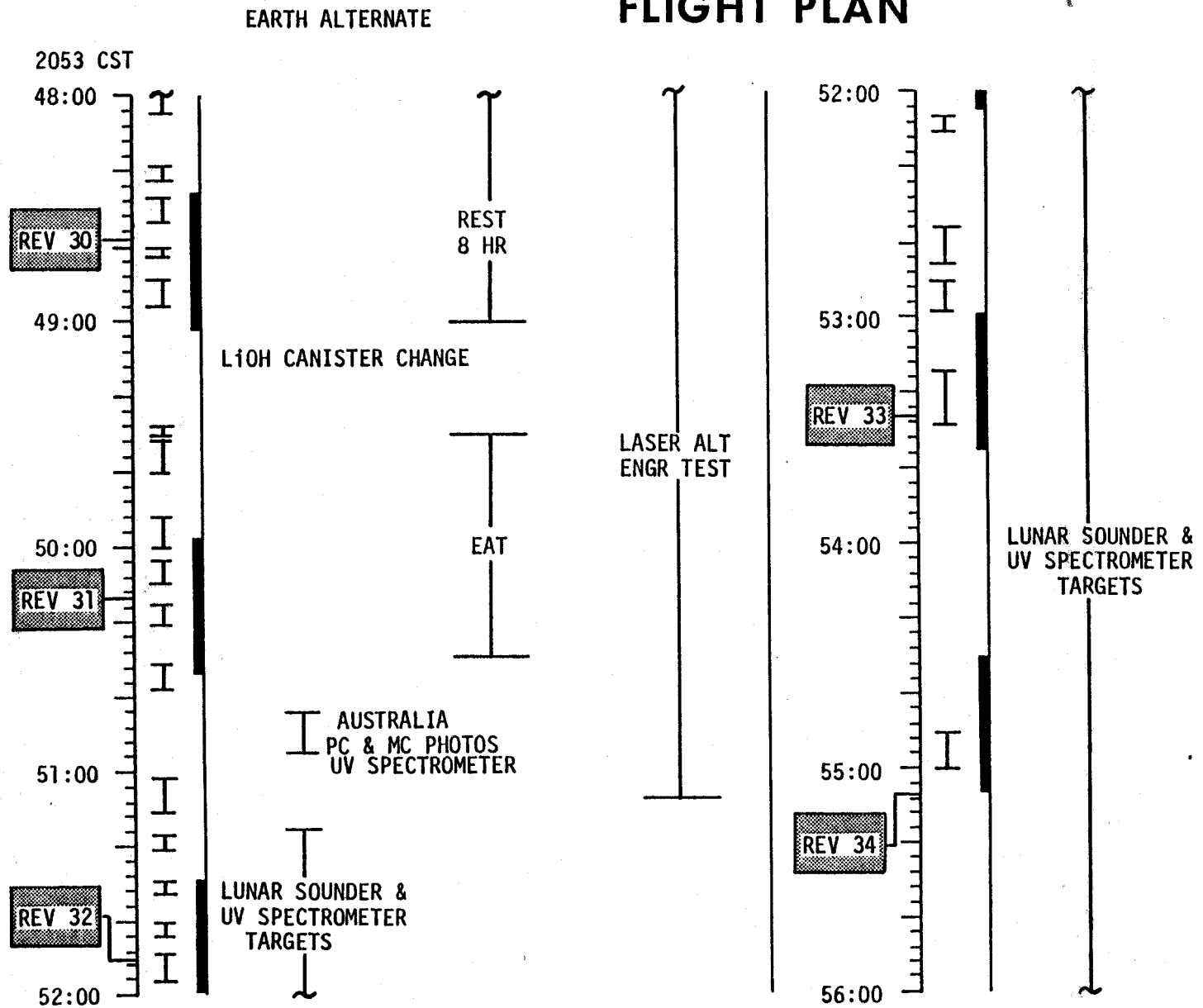
EARTH ALTERNATE



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	40:00 - 48:00	2/25-29	6-8

FLIGHT PLANNING BRANCH

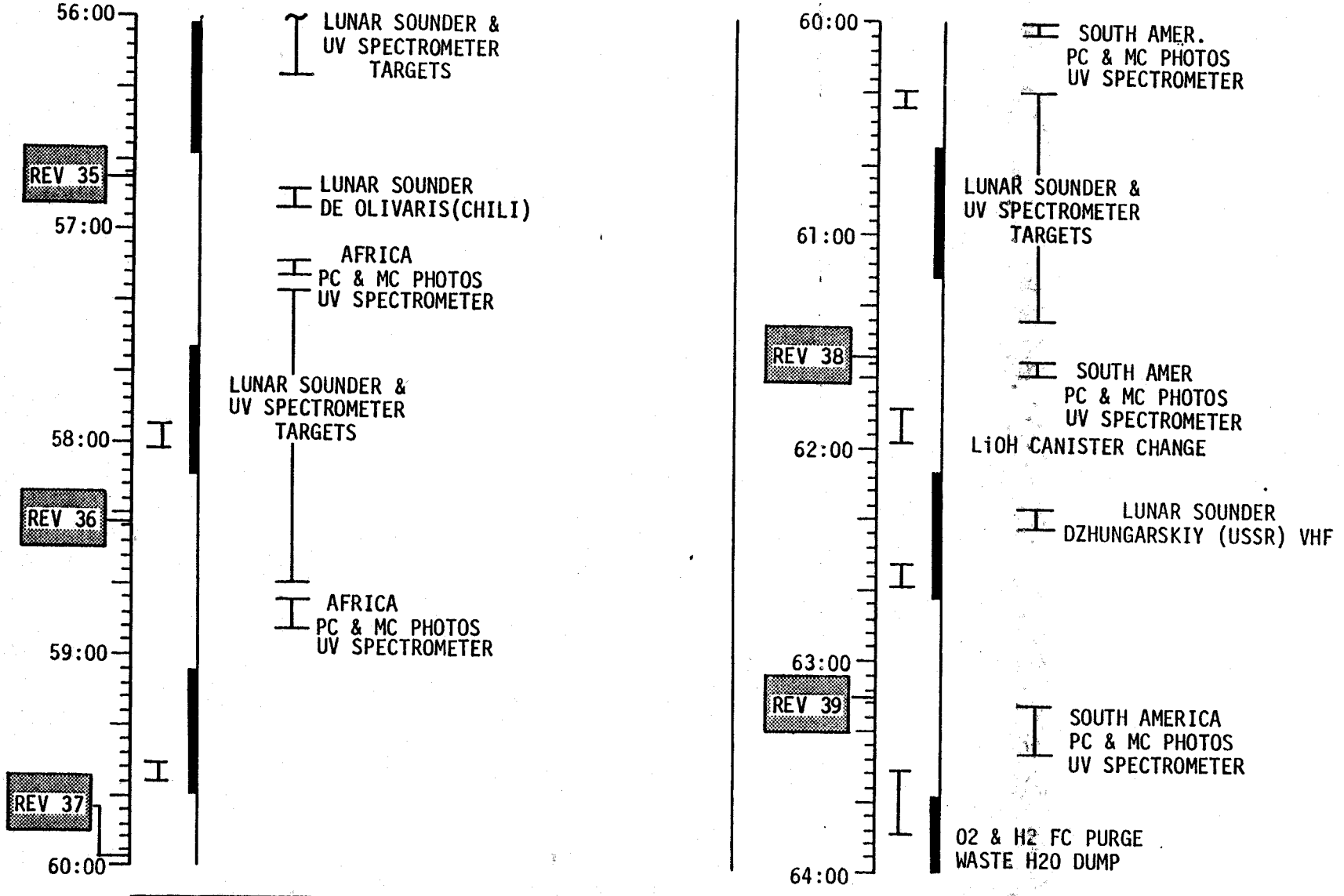
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	48:00 - 56:00	3/30-34	6-9

FLIGHT PLANNING BRANCH

FLIGHT PLAN

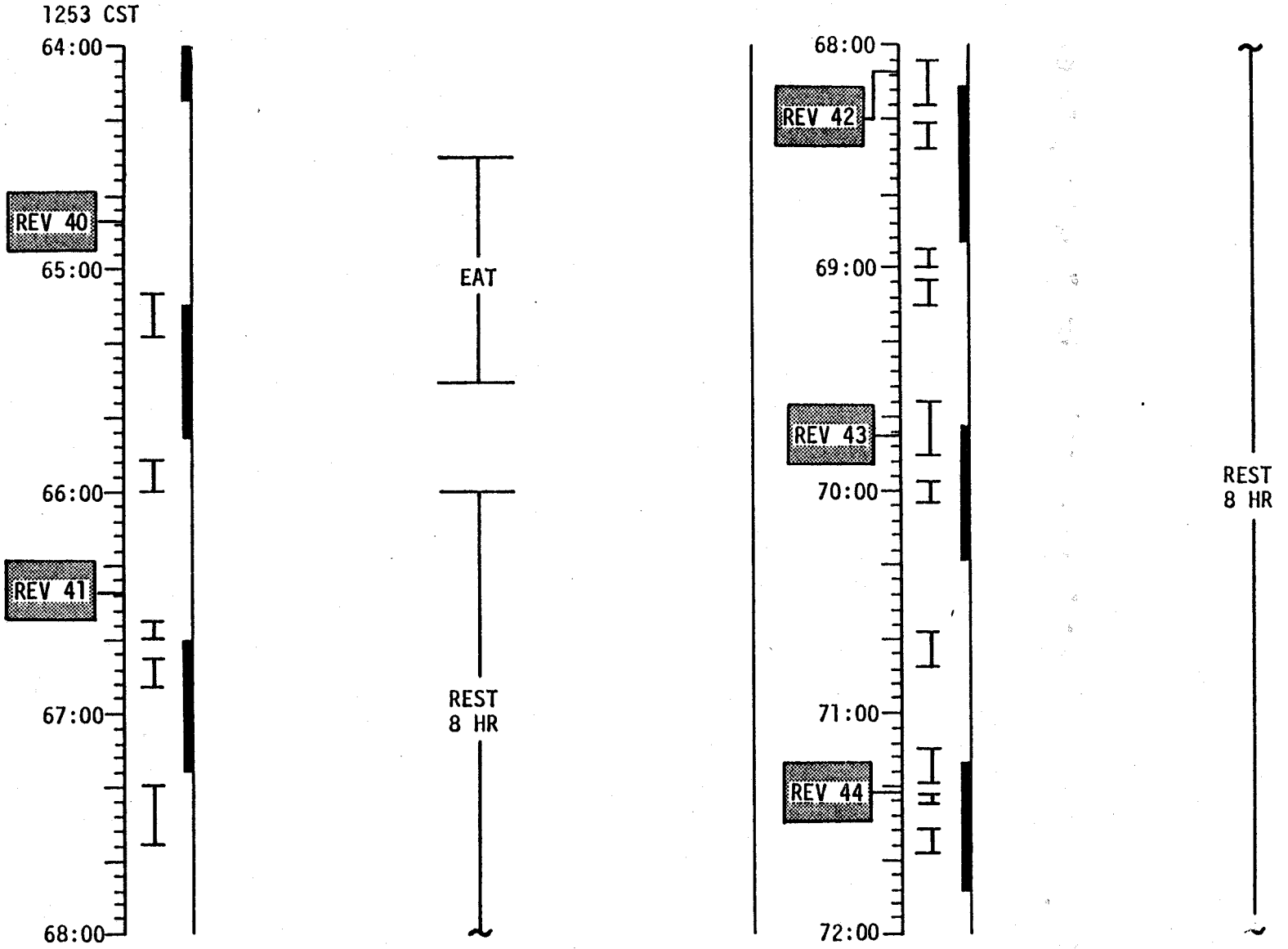


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	56:00 - 64:00	3/35-39	6-10

FLIGHT PLANNING BRANCH

FLIGHT PLAN

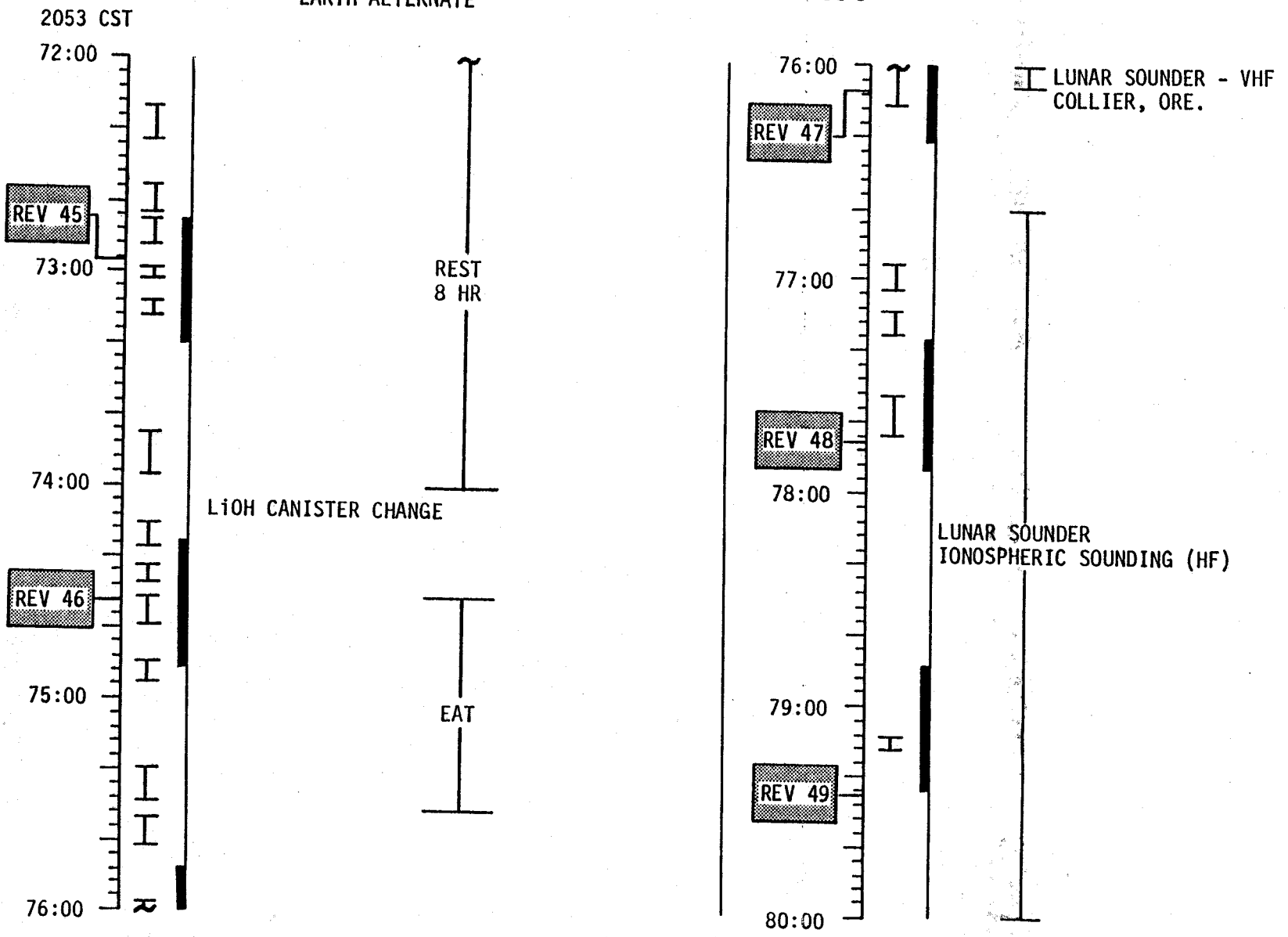
EARTH ALTERNATE



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	64:00 - 72:00	3/40-44	6-11

FLIGHT PLANNING BRANCH

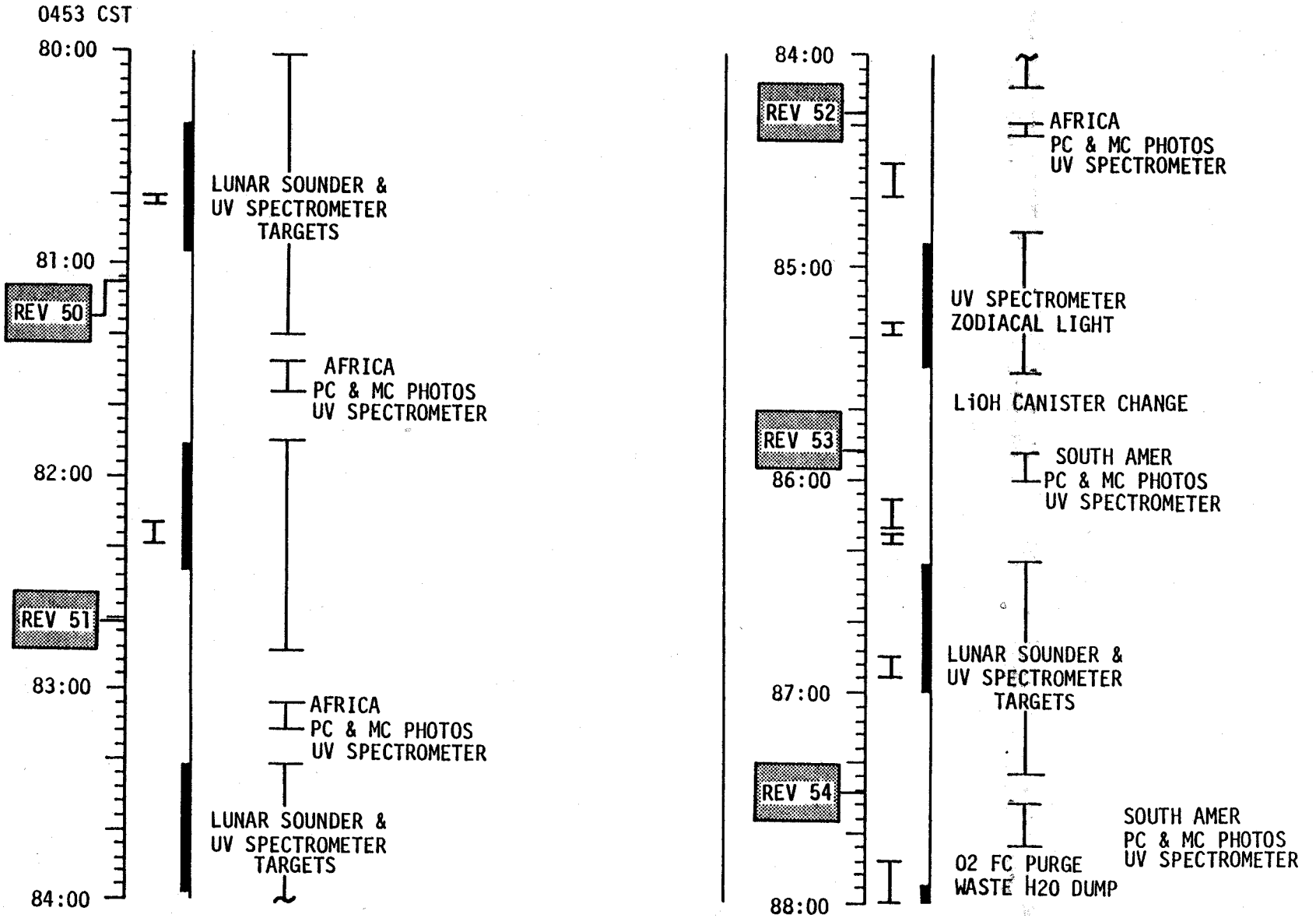
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	72:00 - 80:00	4/45-49	6-12

FLIGHT PLANNING BRANCH

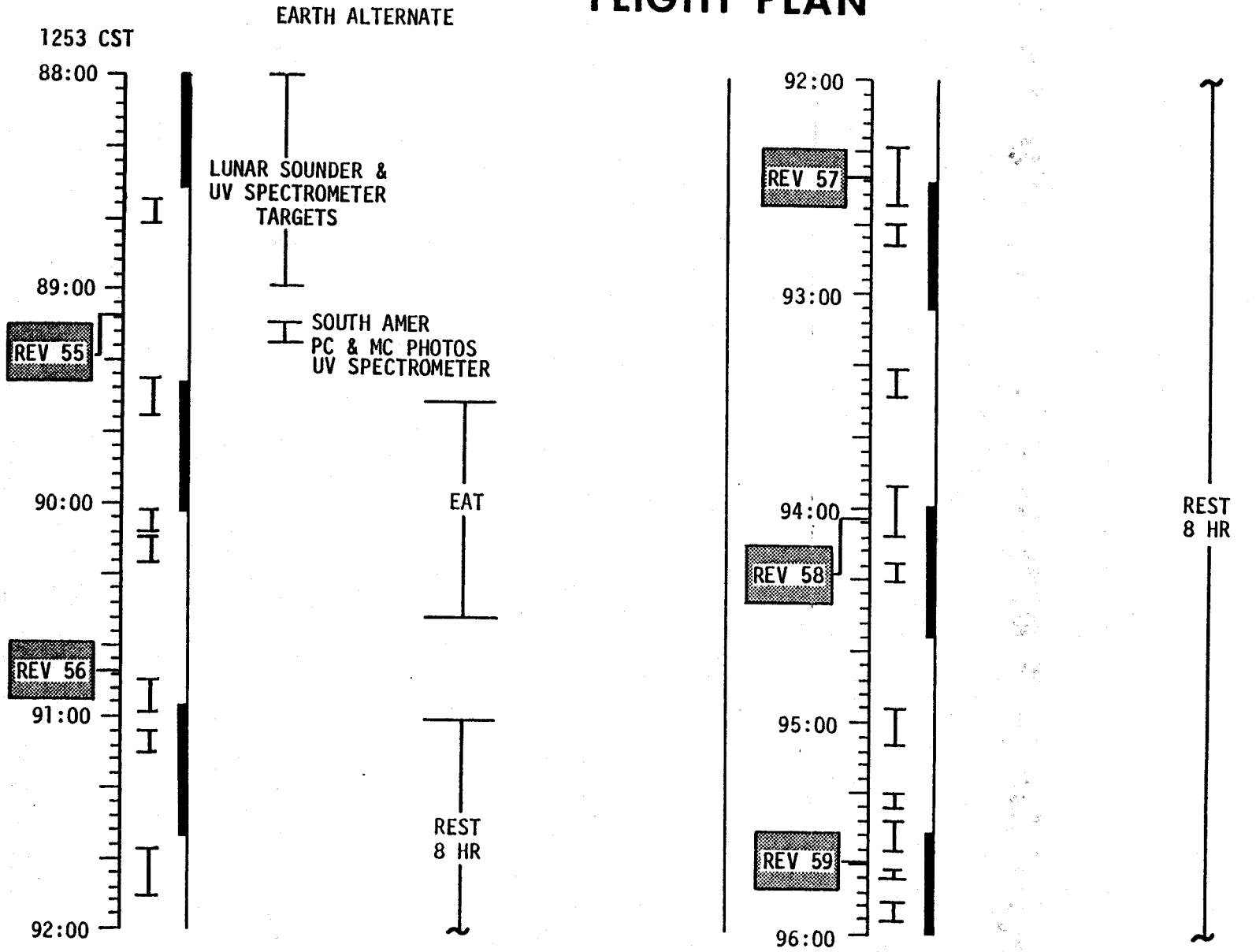
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	80:00 - 88:00	4/50-54	6-13

FLIGHT PLANNING BRANCH

FLIGHT PLAN

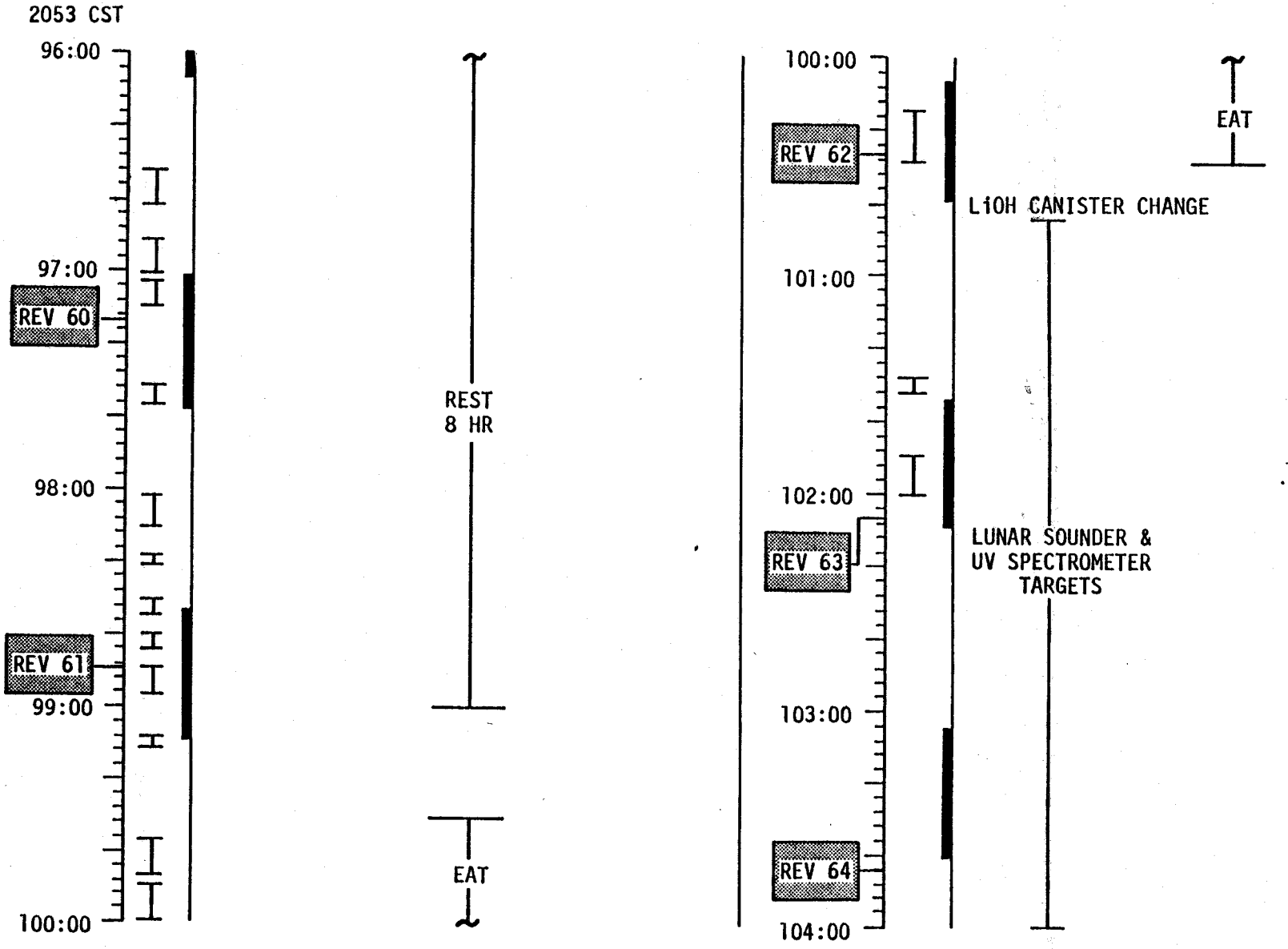


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	88:00 - 96:00	4/55-59	6-14

FLIGHT PLANNING BRANCH

FLIGHT PLAN

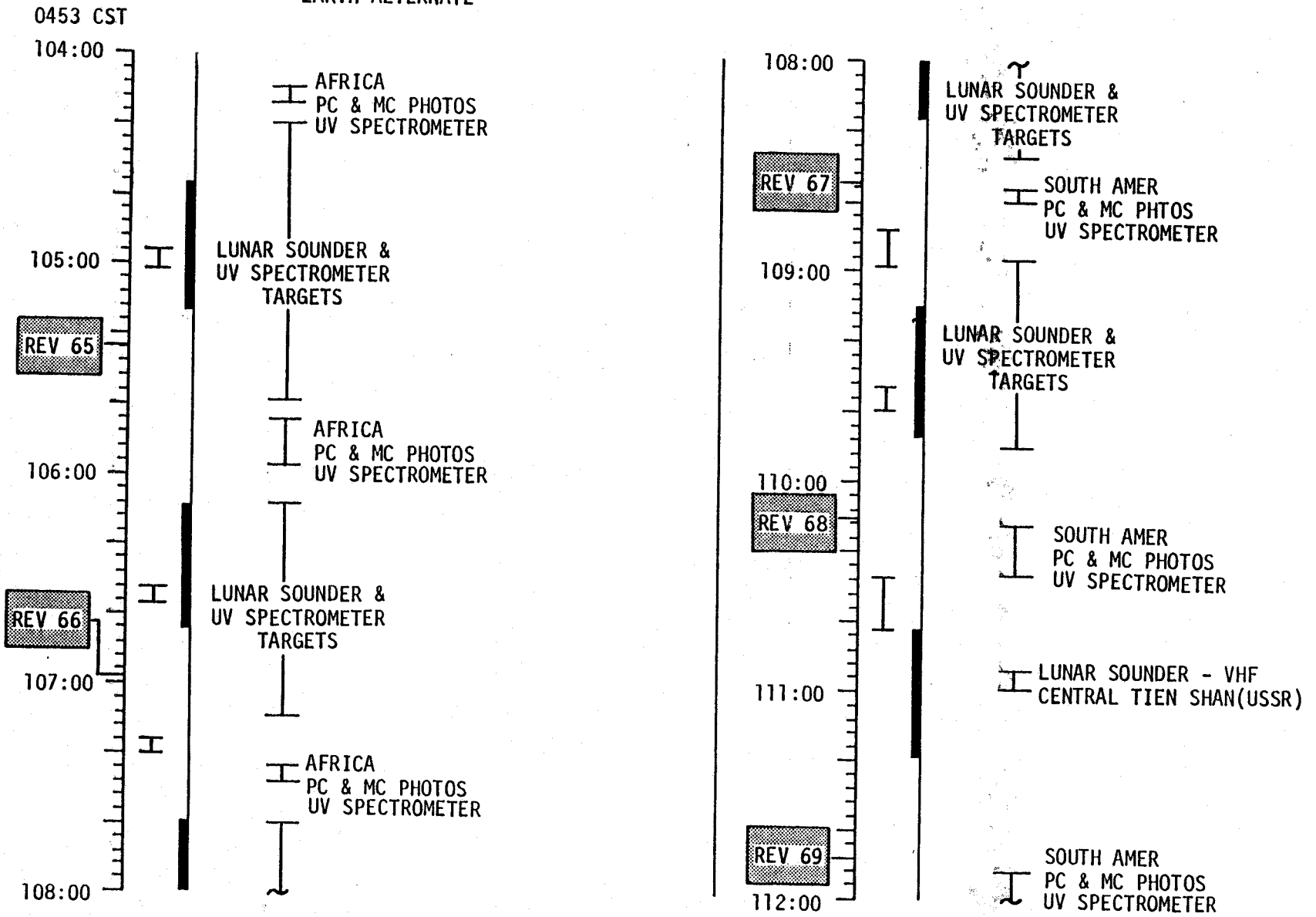
EARTH ALTERNATE



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	96:00 - 104:00	5/60-64	6-15

FLIGHT PLANNING BRANCH

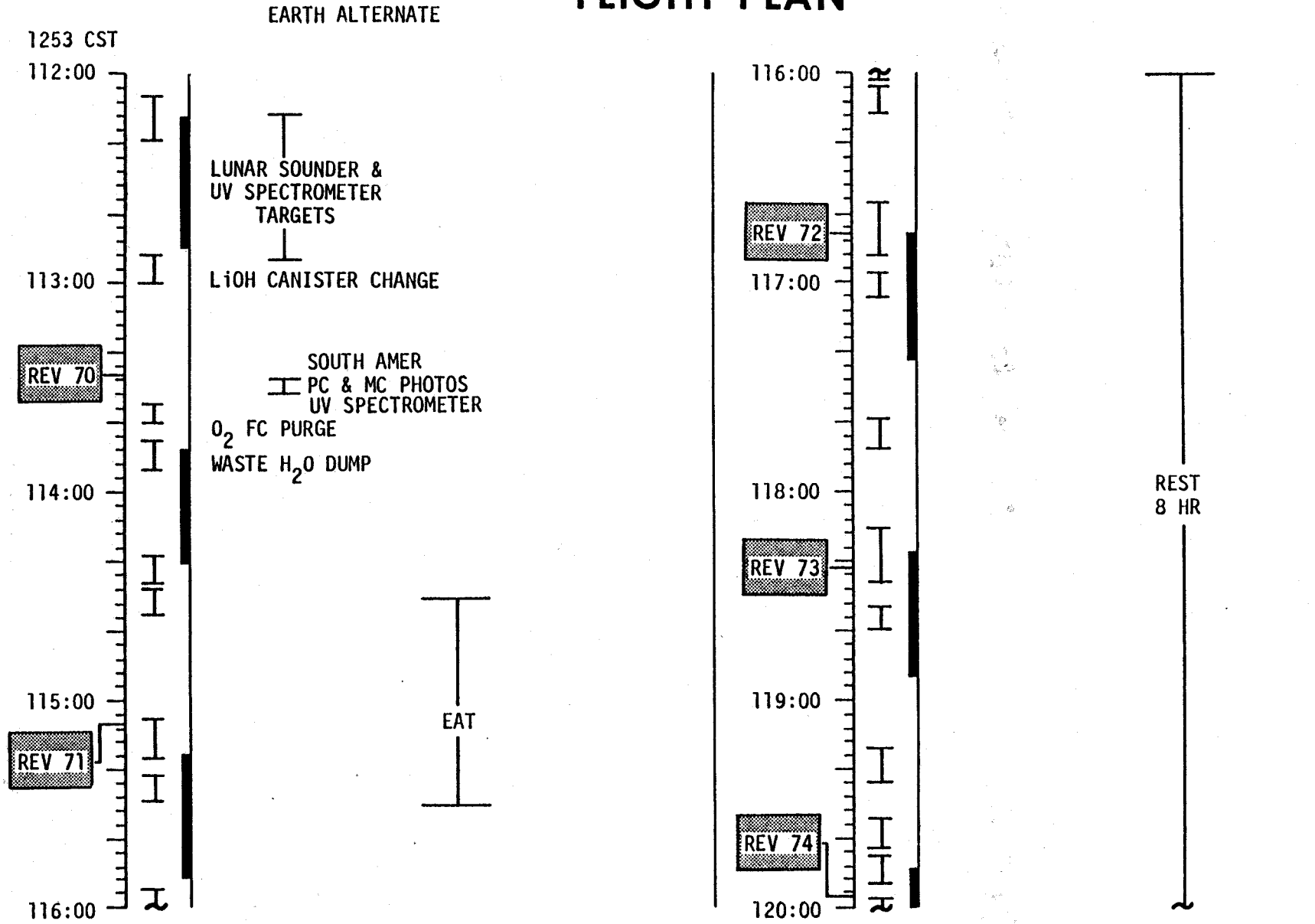
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	104:00 - 112:00	5/65-69	6-16

FLIGHT PLANNING BRANCH

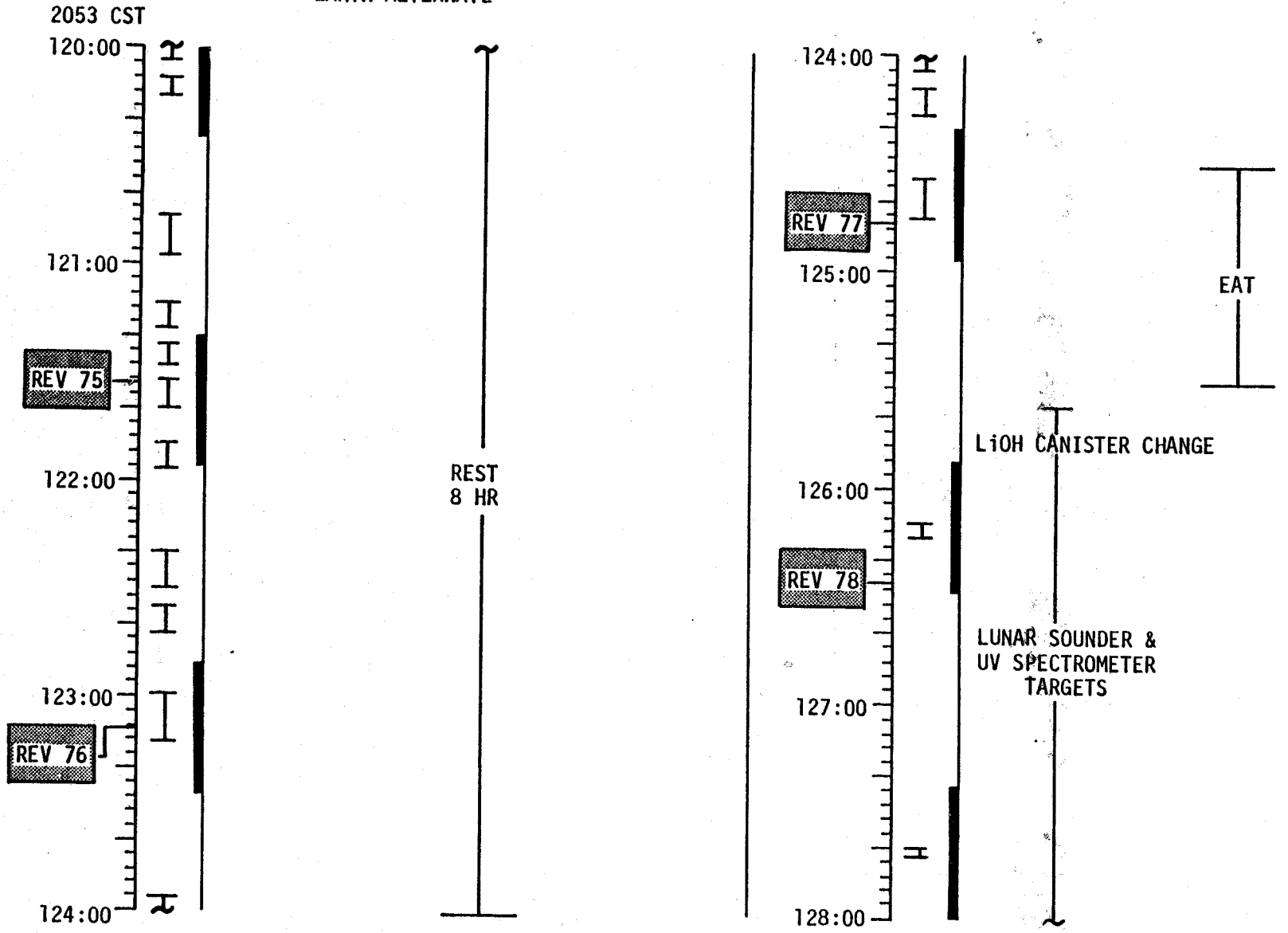
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	112:00 - 120:00	5/70-74	6-17

FLIGHT PLANNING BRANCH

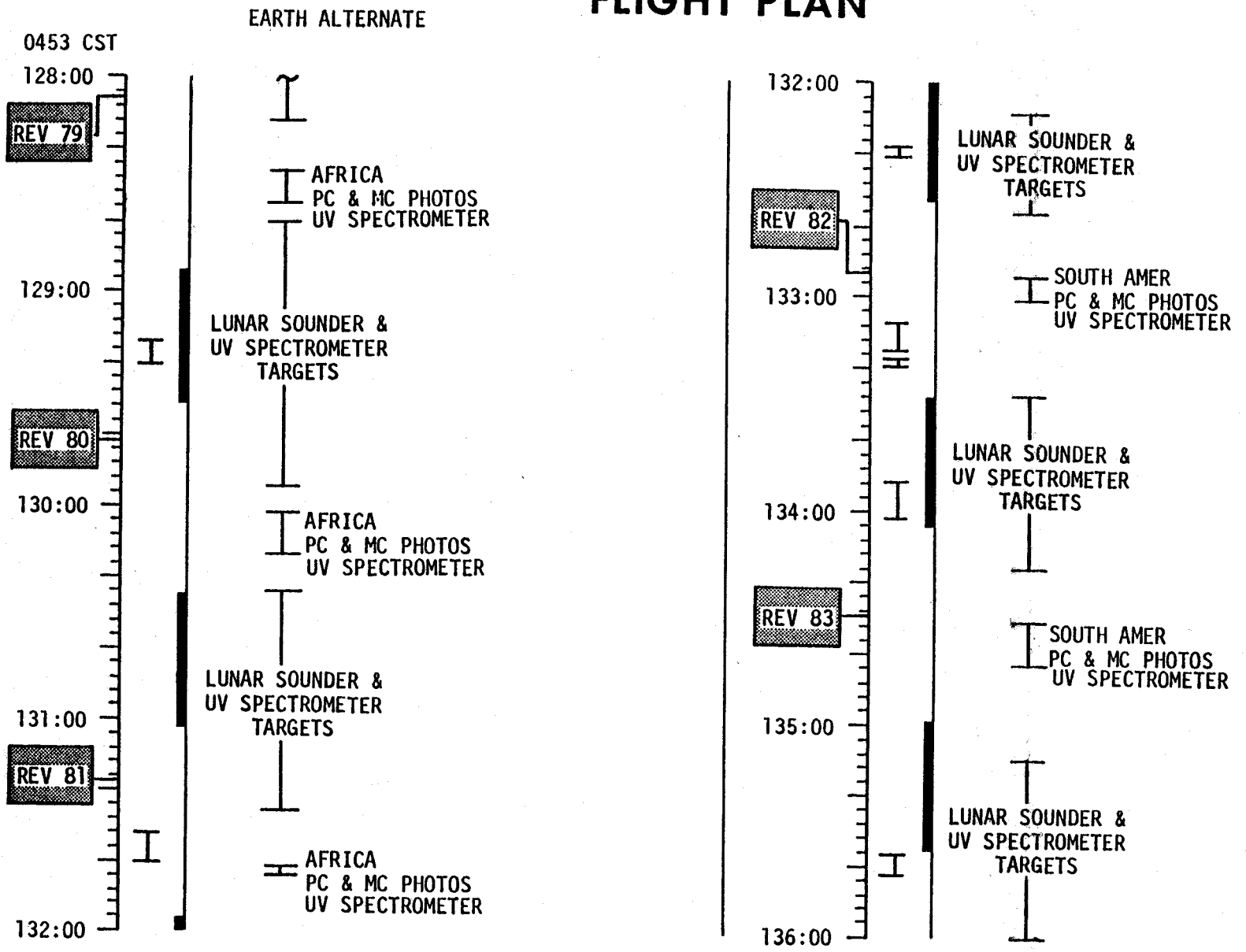
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	120:00 - 128:00	6/75-78	6-18

FLIGHT PLANNING BRANCH

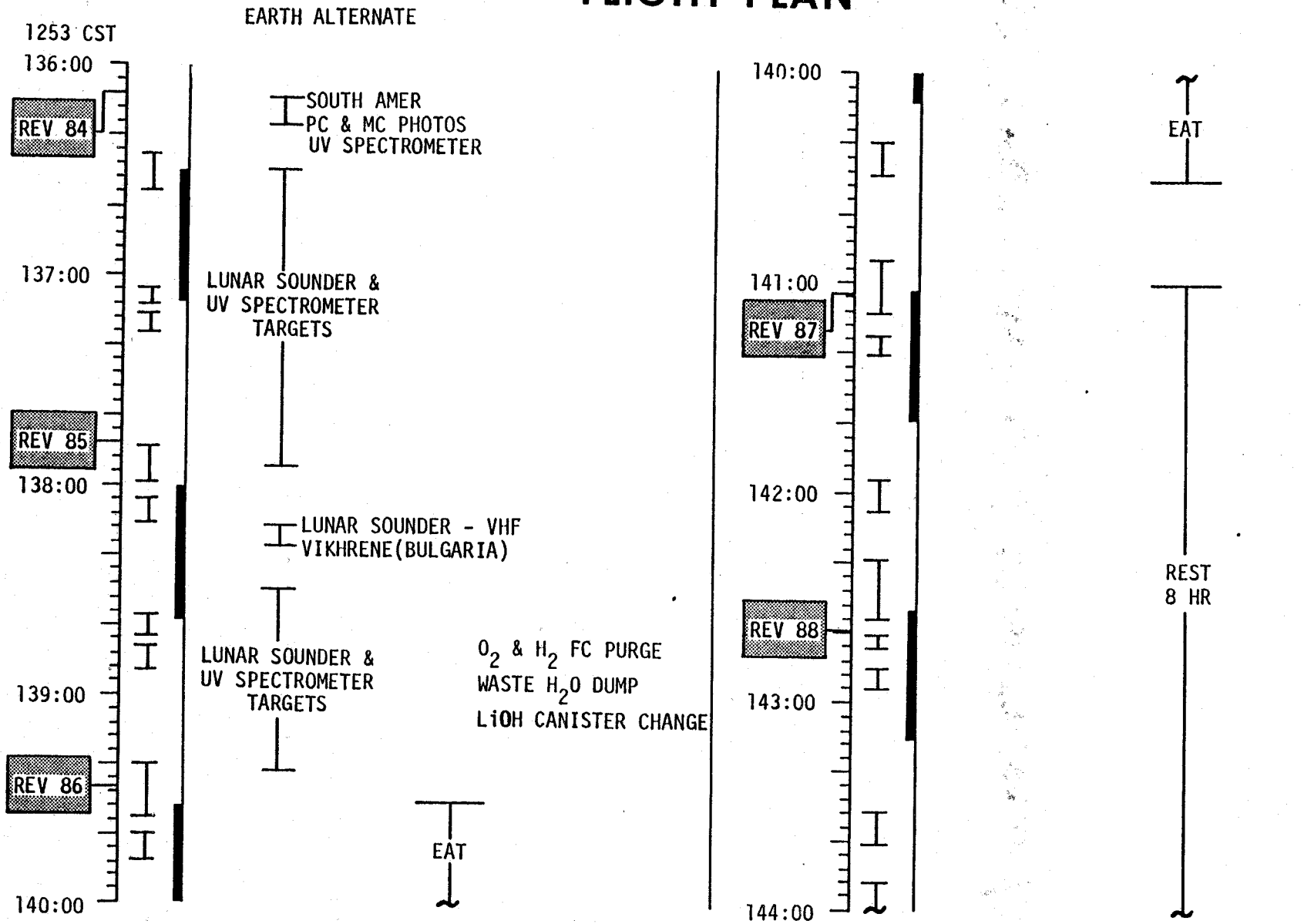
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	128:00 - 136:00	6/79-83	6-19

FLIGHT PLANNING BRANCH

FLIGHT PLAN



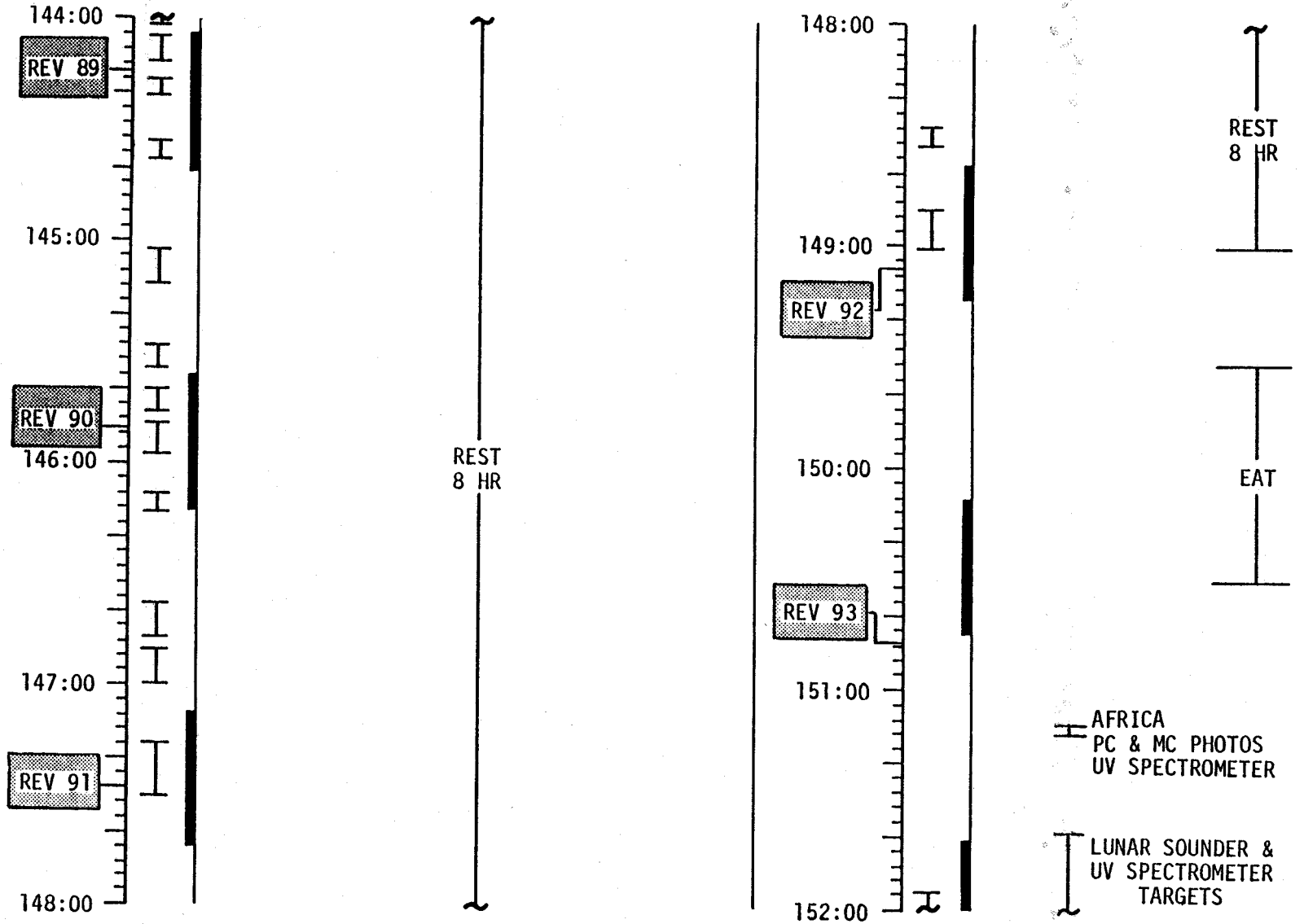
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	136:00 - 144:00	6/84-88	6-20

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE

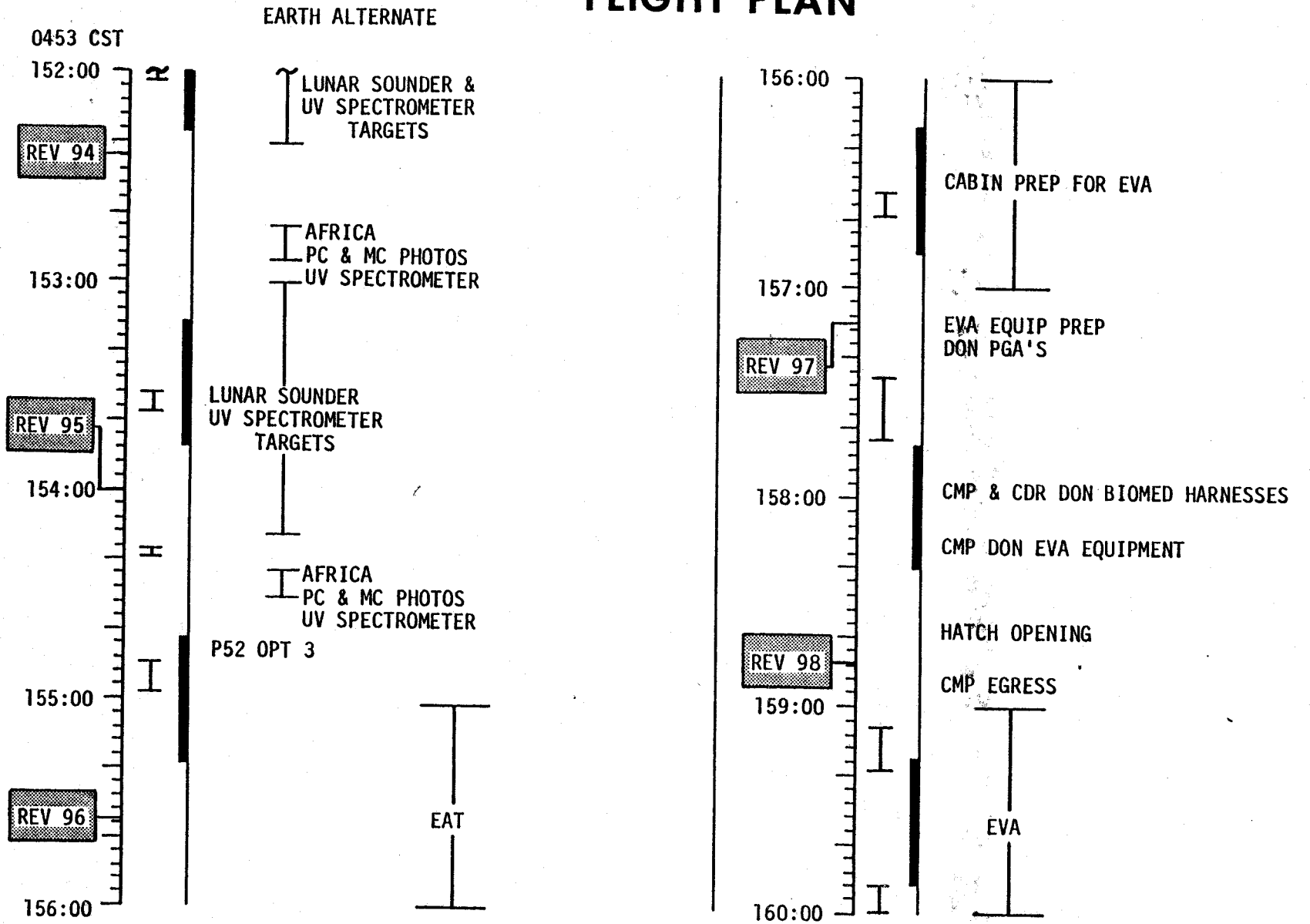
2053 CST



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	144:00 - 152:00	7/89-93	6-21

FLIGHT PLANNING BRANCH

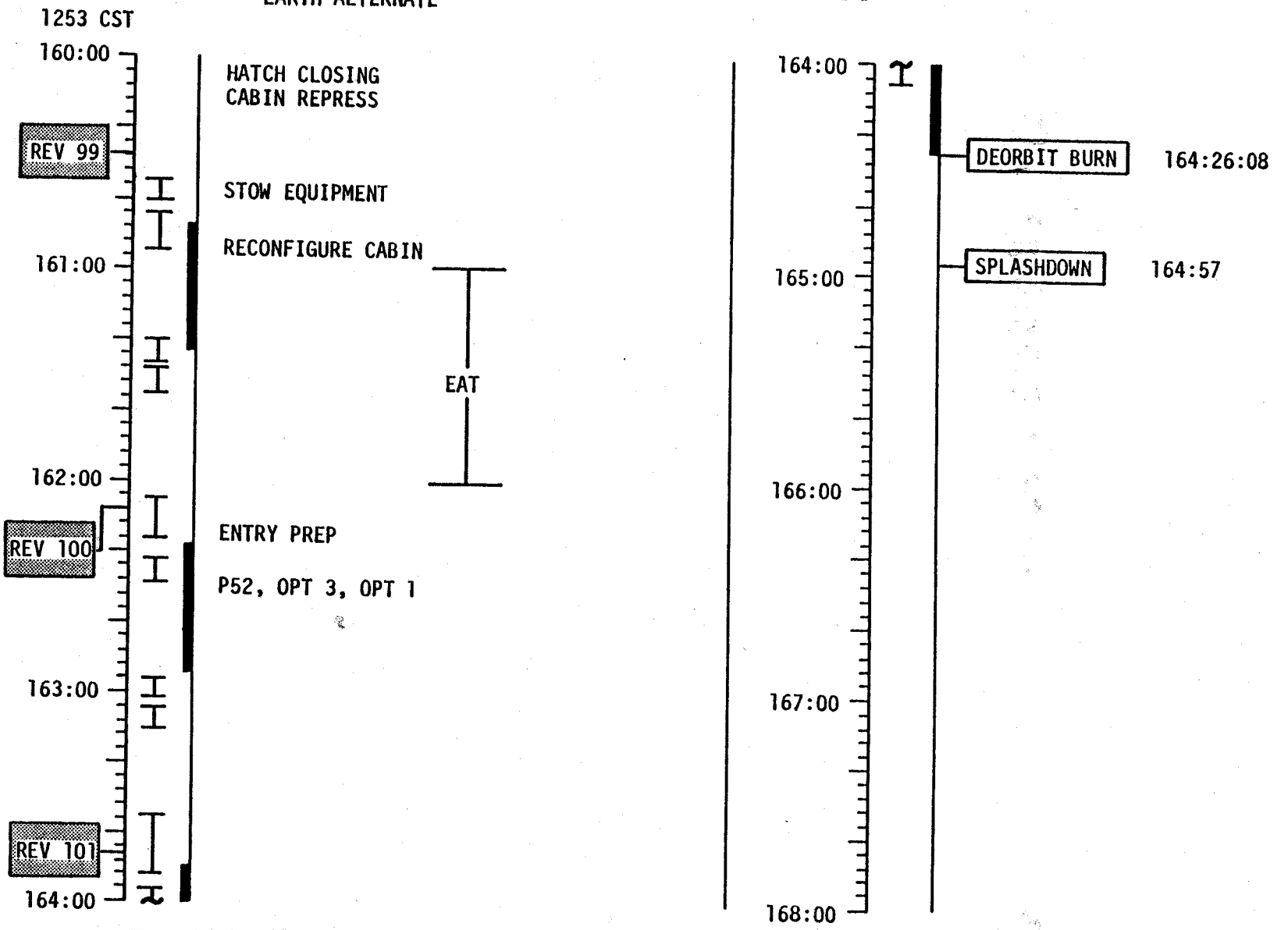
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	152:00 - 160:00	7/94-98	6-22

FLIGHT PLANNING BRANCH

FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	160:00 - 168:00	7/99-101	6-23

FLIGHT PLANNING BRANCH

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CSM/LM ALTERNATE MISSION

Assumptions

1) Nominal LOI and DOI Burns have been achieved by the SPS.
2) A systems failure while in lunar orbit has resulted in a NO/GO for landing.

Constraints

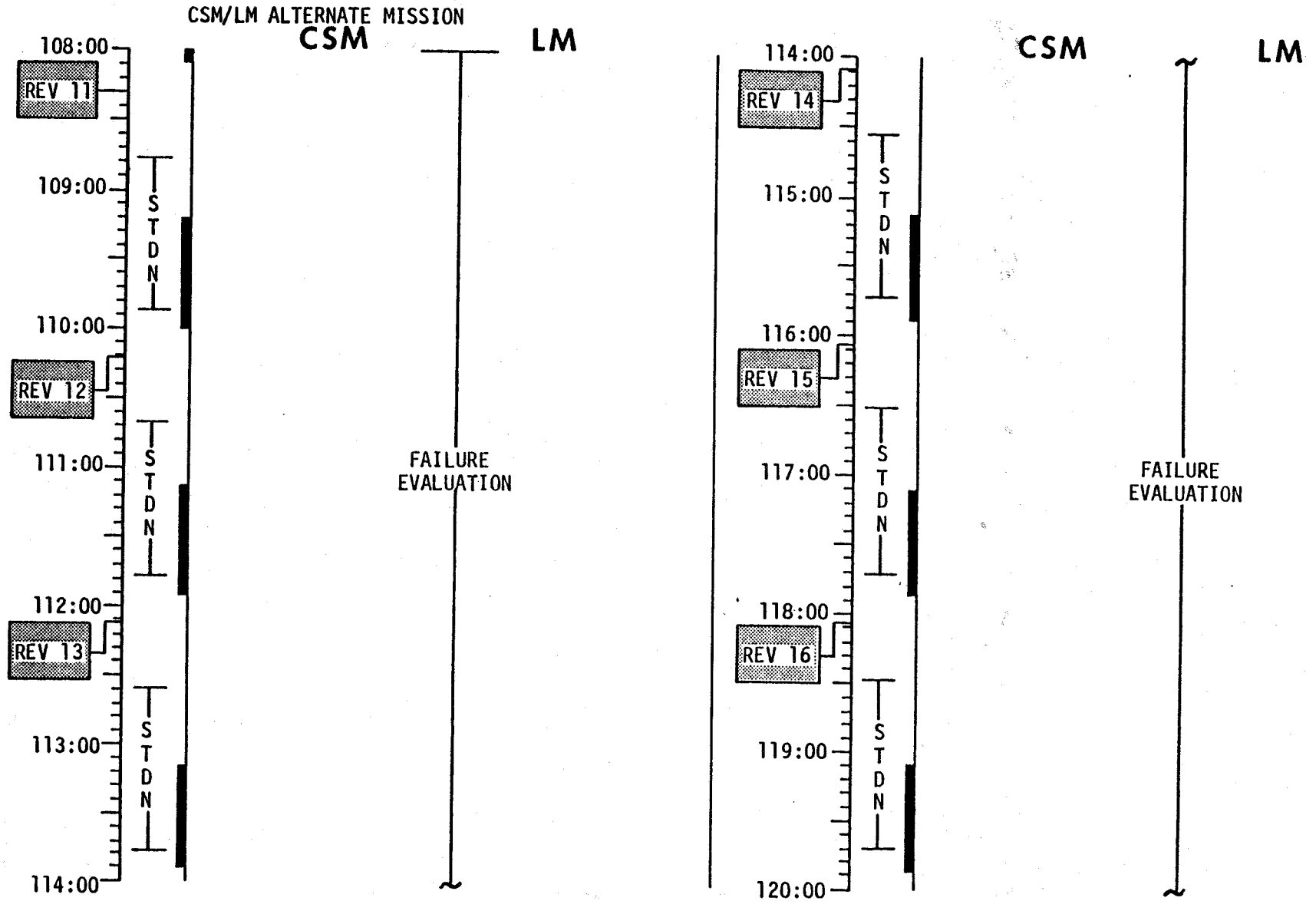
1) Jettison LM to a lunar impact.
2) Circularize to a 60 nm orbit.
3) Adhere to the nominal flight plan as much as possible
4) Obtain sim bay experiments data.

Sequence of Events

This alternate mission is initiated by a systems failure with the DPS which will not allow a landing mission. LM jettison, Circularization and TEI occurrs at approximately the nominal time.

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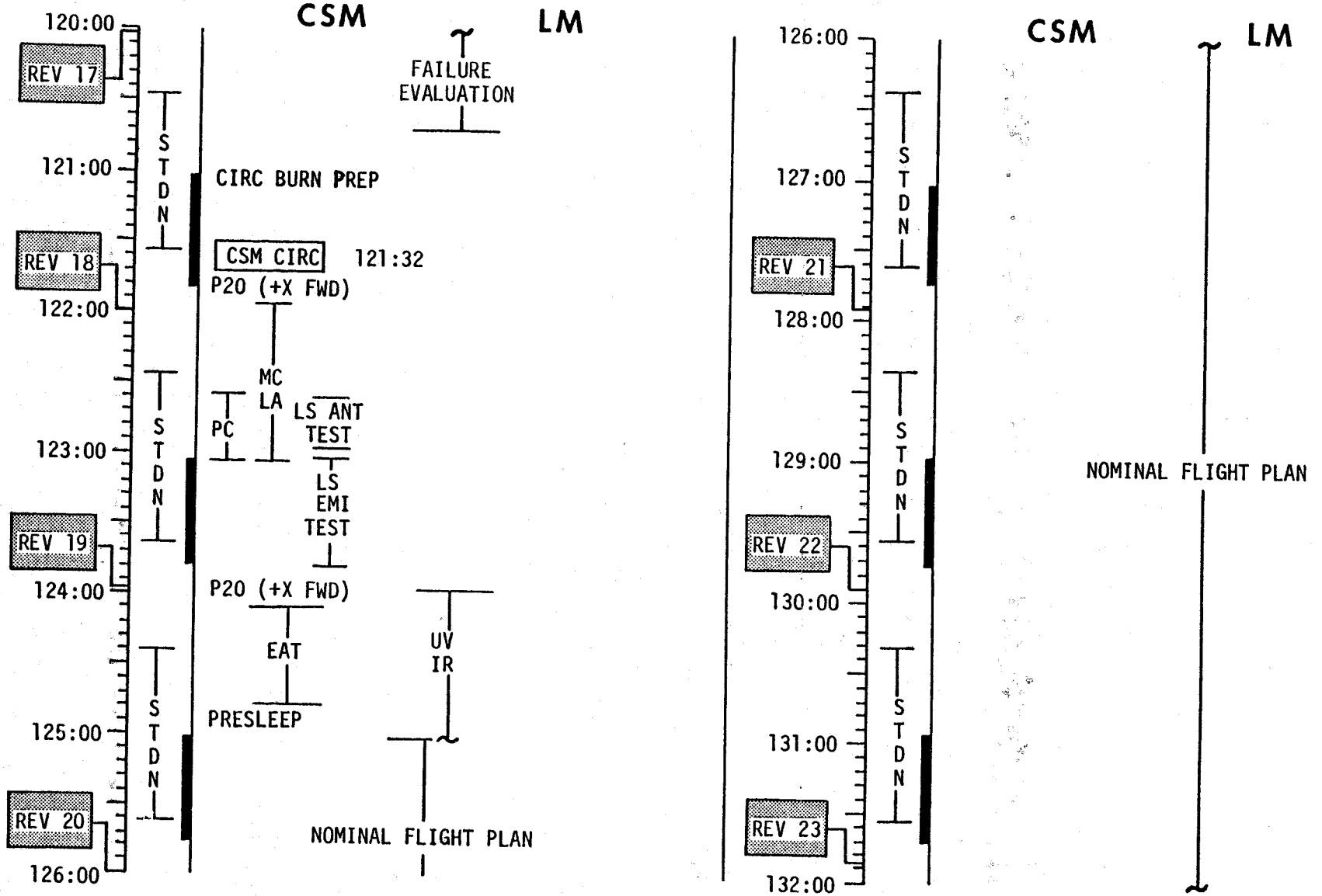
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	108:00 - 120:00	6/11-16	6-27

FLIGHT PLANNING BRANCH

FLIGHT PLAN

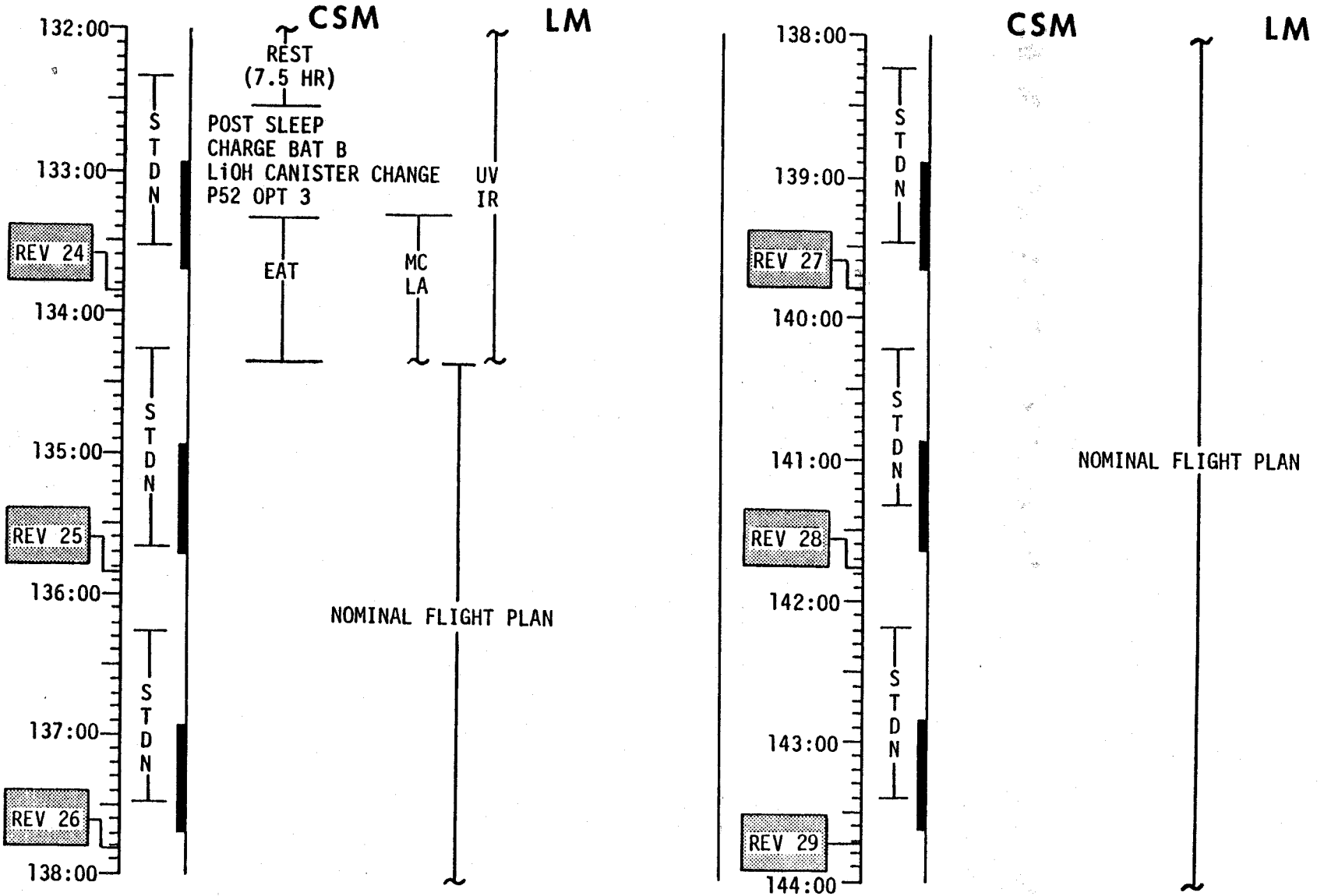


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	120:00 - 132:00	6-7/17-23	6-28

FLIGHT PLANNING BRANCH

FLIGHT PLAN

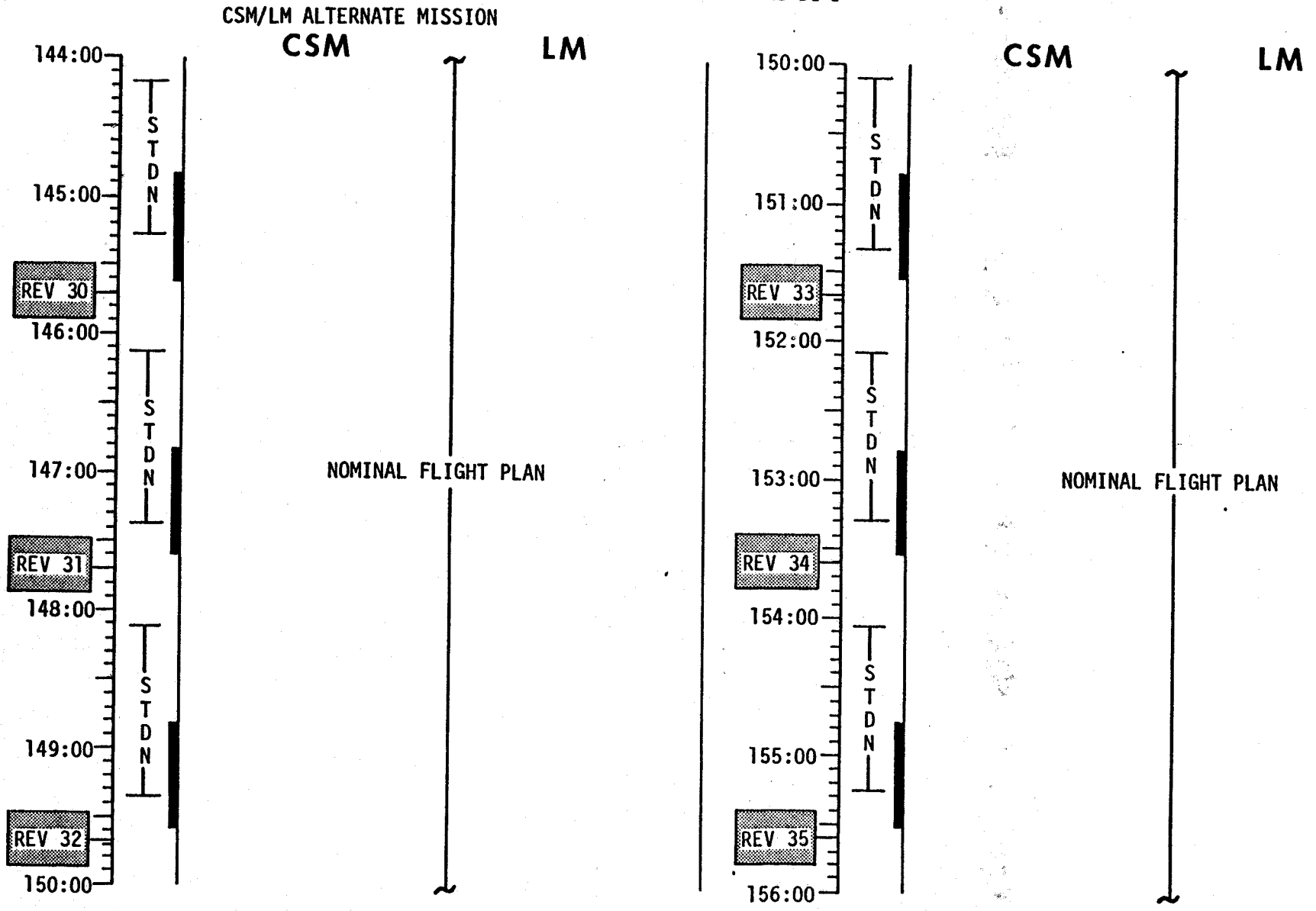
CSM/LM ALTERNATE MISSION



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	132:00 - 144:00	7/24-29	6-29

FLIGHT PLANNING BRANCH

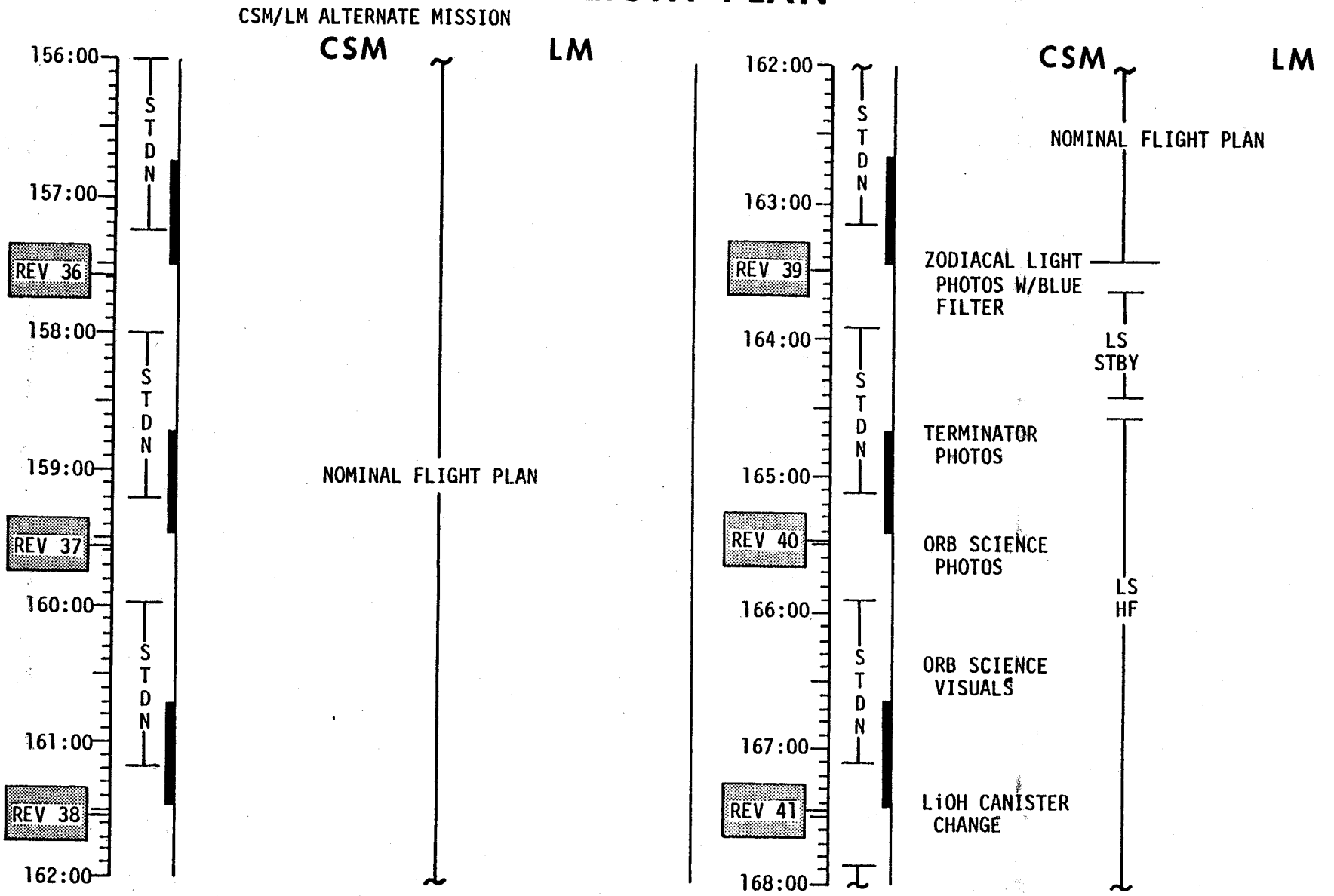
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	144:00 - 156:00	7-8/30-35	6-30

FLIGHT PLANNING BRANCH

FLIGHT PLAN

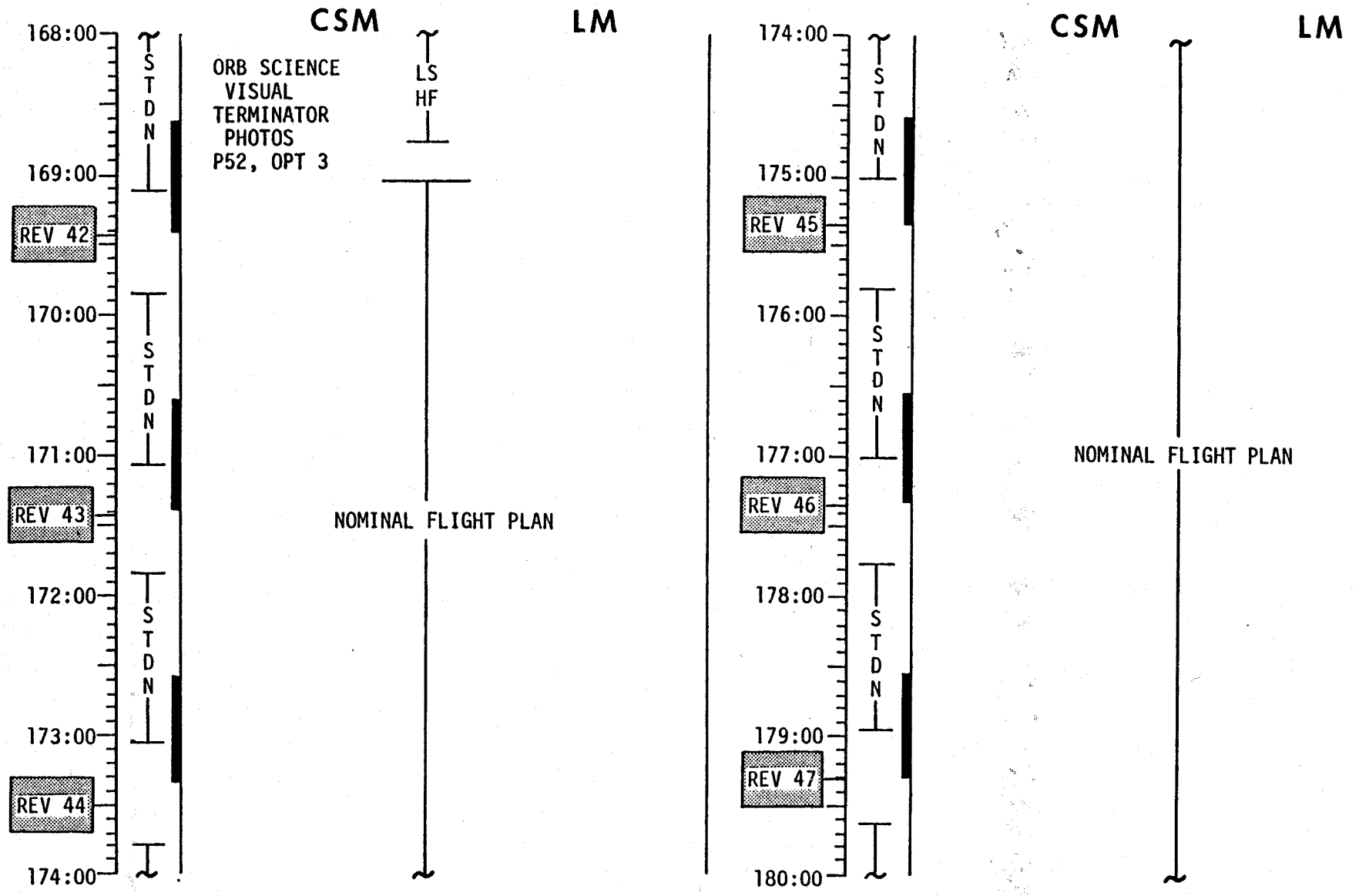


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	156:00 - 168:00	8/36-41	6-31

FLIGHT PLANNING BRANCH

FLIGHT PLAN

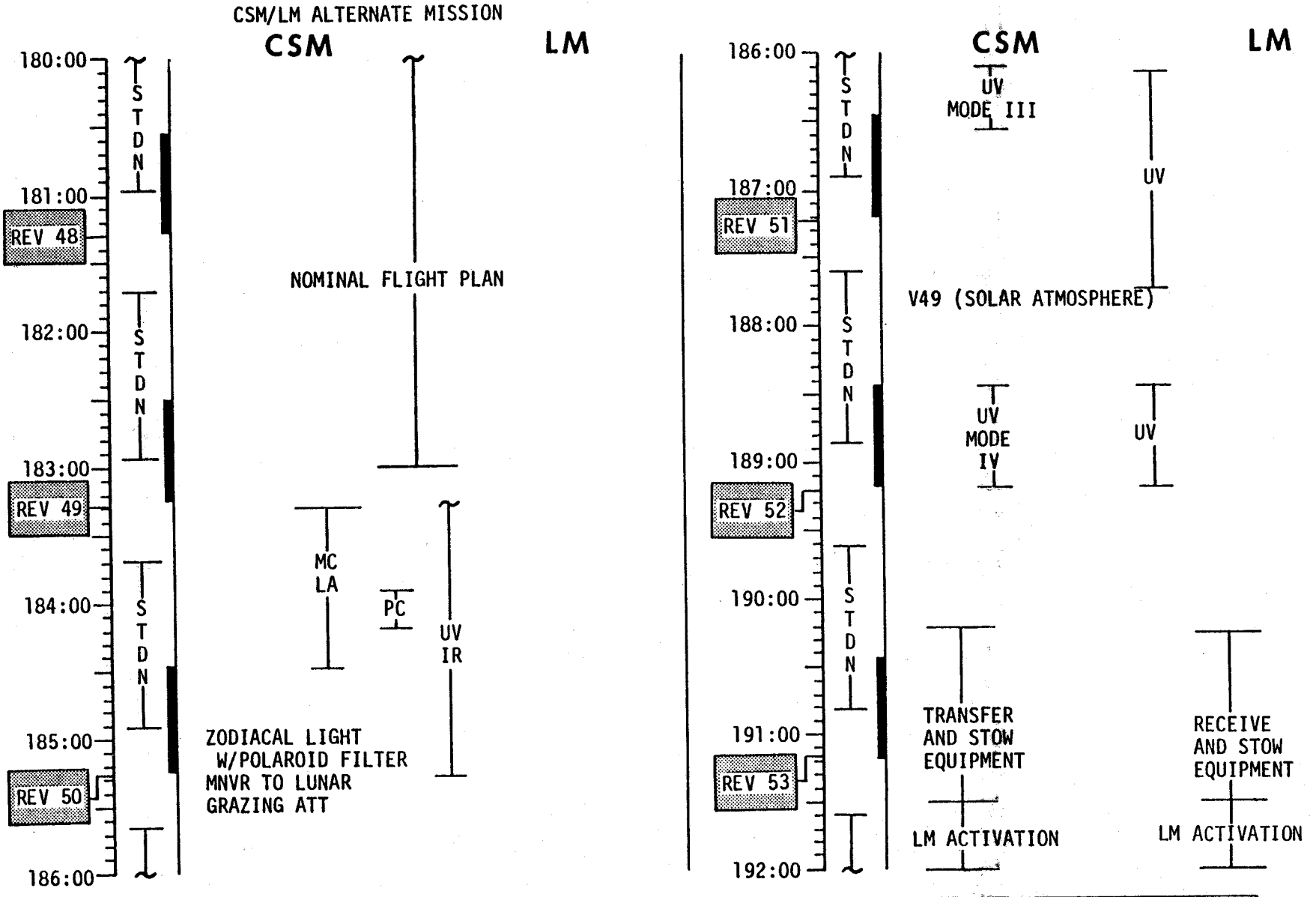
CSM/LM ALTERNATE MISSION



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	168:00 - 180:00	8-9/42-47	6-32

FLIGHT PLANNING BRANCH

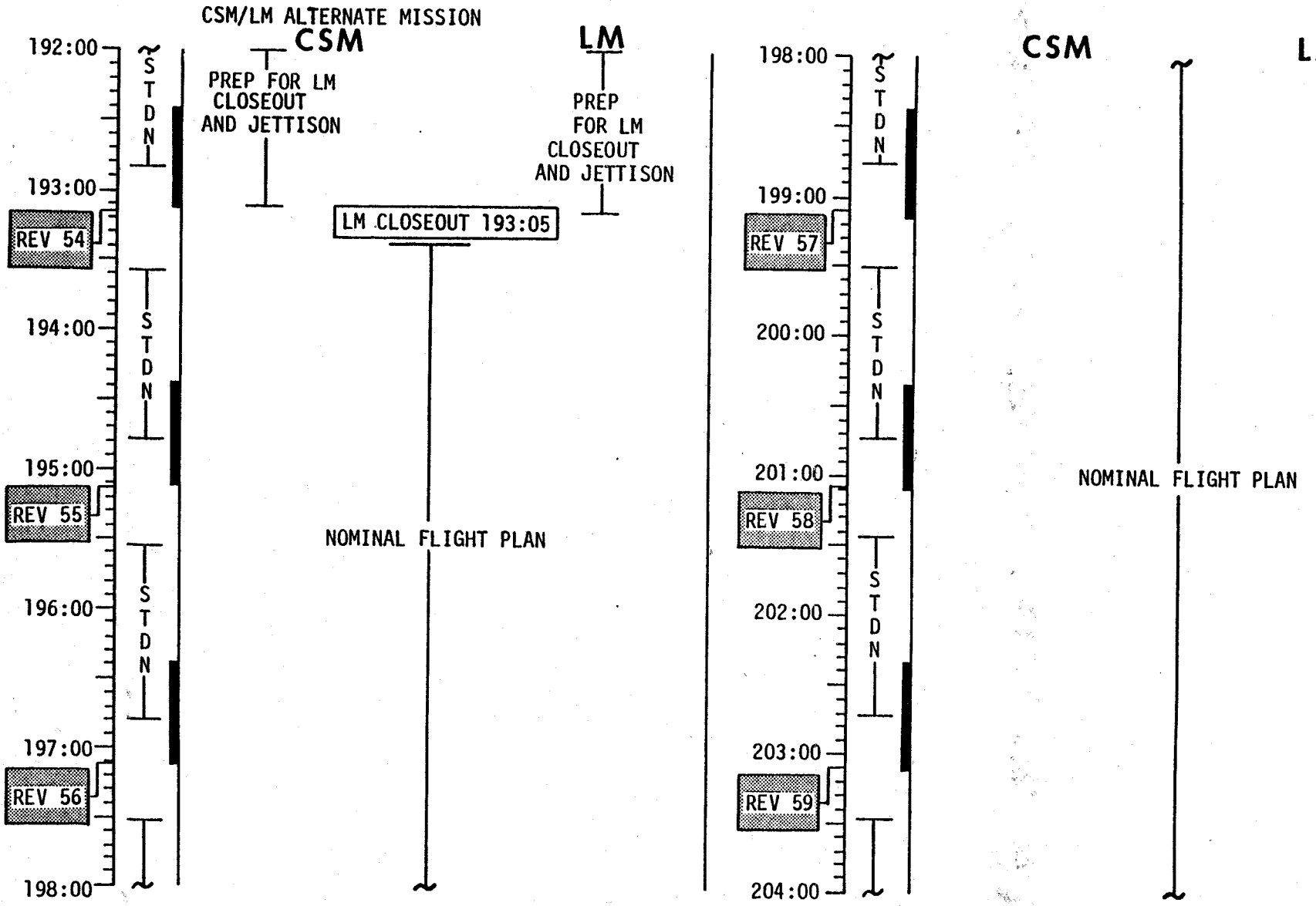
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	180:00 - 192:00	9/48-53	6-33

FLIGHT PLANNING BRANCH

FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DA./REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	192:00 - 204:00	9/54-59	6-34

FLIGHT PLANNING BRANCH

CSM ONLY ALTERNATE MISSION

Assumptions

1) A nominal TLI Burn has been achieved by the S-IVB.
2) A systems failure during T.D.&E or a LM Jettison during TLC has resulted in a CSM-Only Alternate Mission.

Constraints

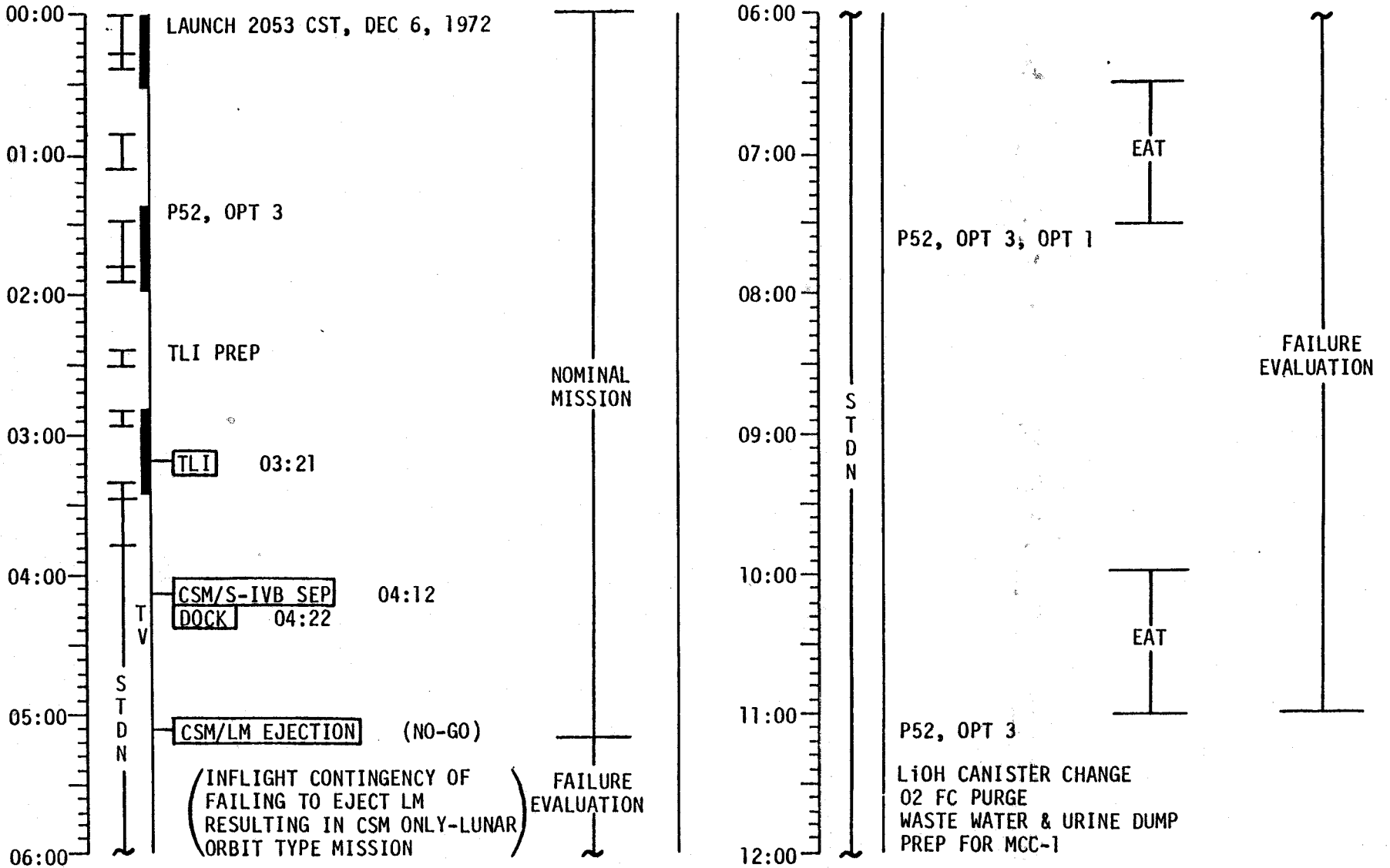
1) SPS midcourse burn to return to a free return trajectory.
2) Maintain any rev TEI Capability.
3) Obtain sim bay experiments data.

Sequence of Events

This alternate mission is initiated by a failure to eject the LM at T.D.&E or a LM Jettison during TLC. An SPS midcourse will be performed to a free return trajectory. The CSM will perform an LOI and Circularization Burn sequence with an inclination of approximately twenty degrees. Six days are planned in lunar orbit operating all the sim bay equipment and expending all the pan and mapping camera film. The TEI burn will follow a sequence similar to the nominal mission.

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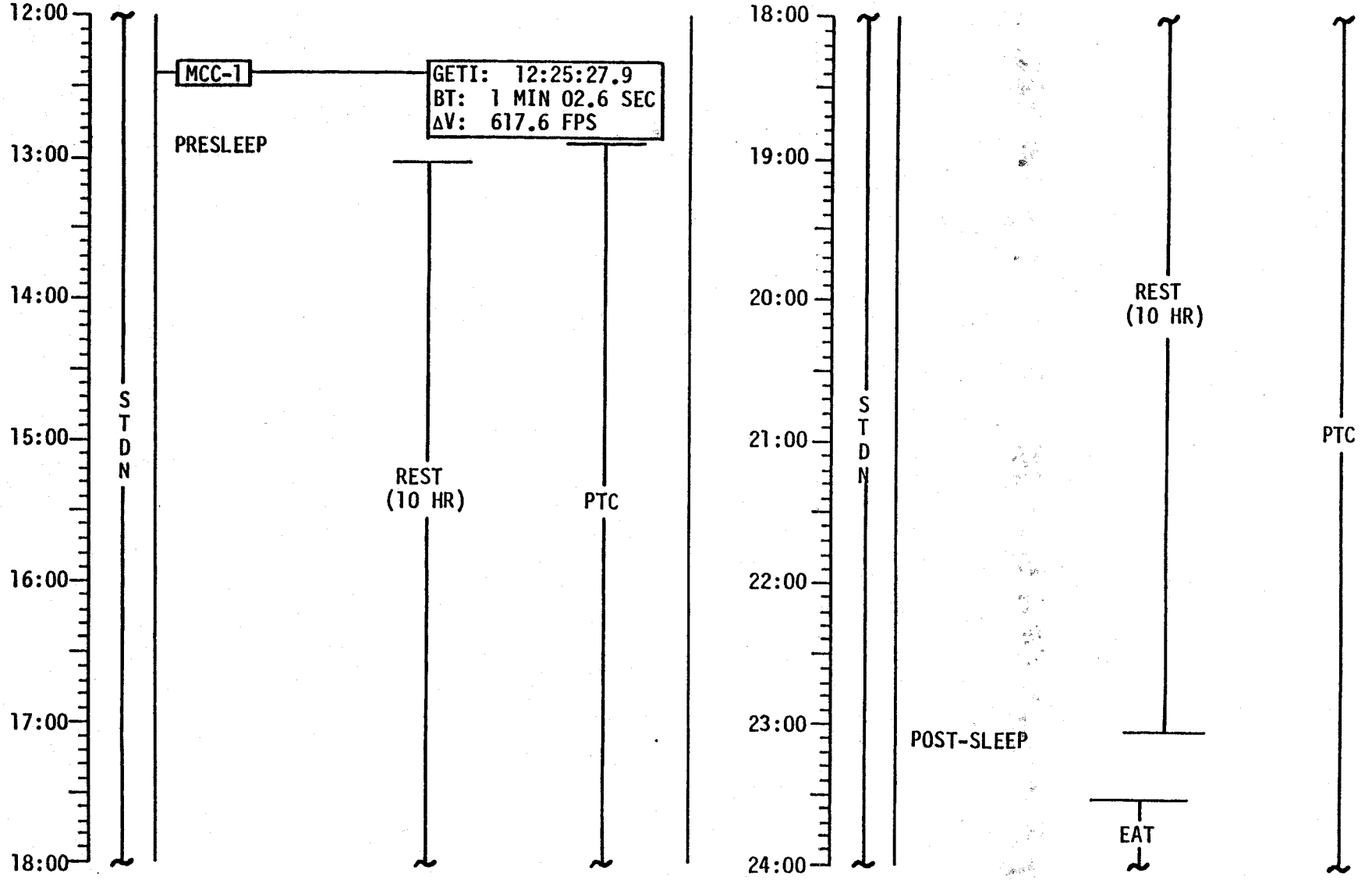
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	00:00 - 12:00	1/TLC	6-37

FLIGHT PLANNING BRANCH

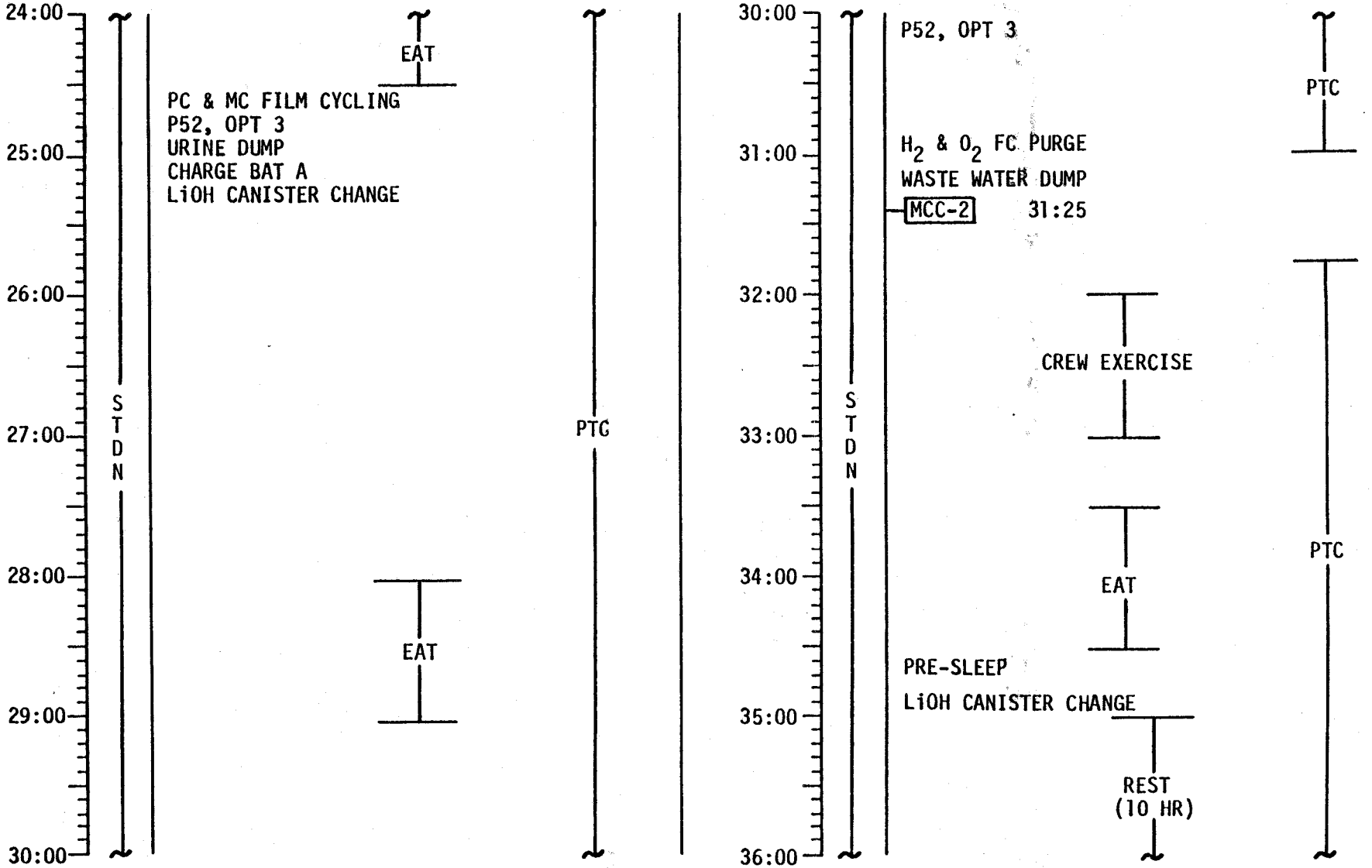
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	12:00 - 24:00	1/TLC	6-38

FLIGHT PLANNING BRANCH

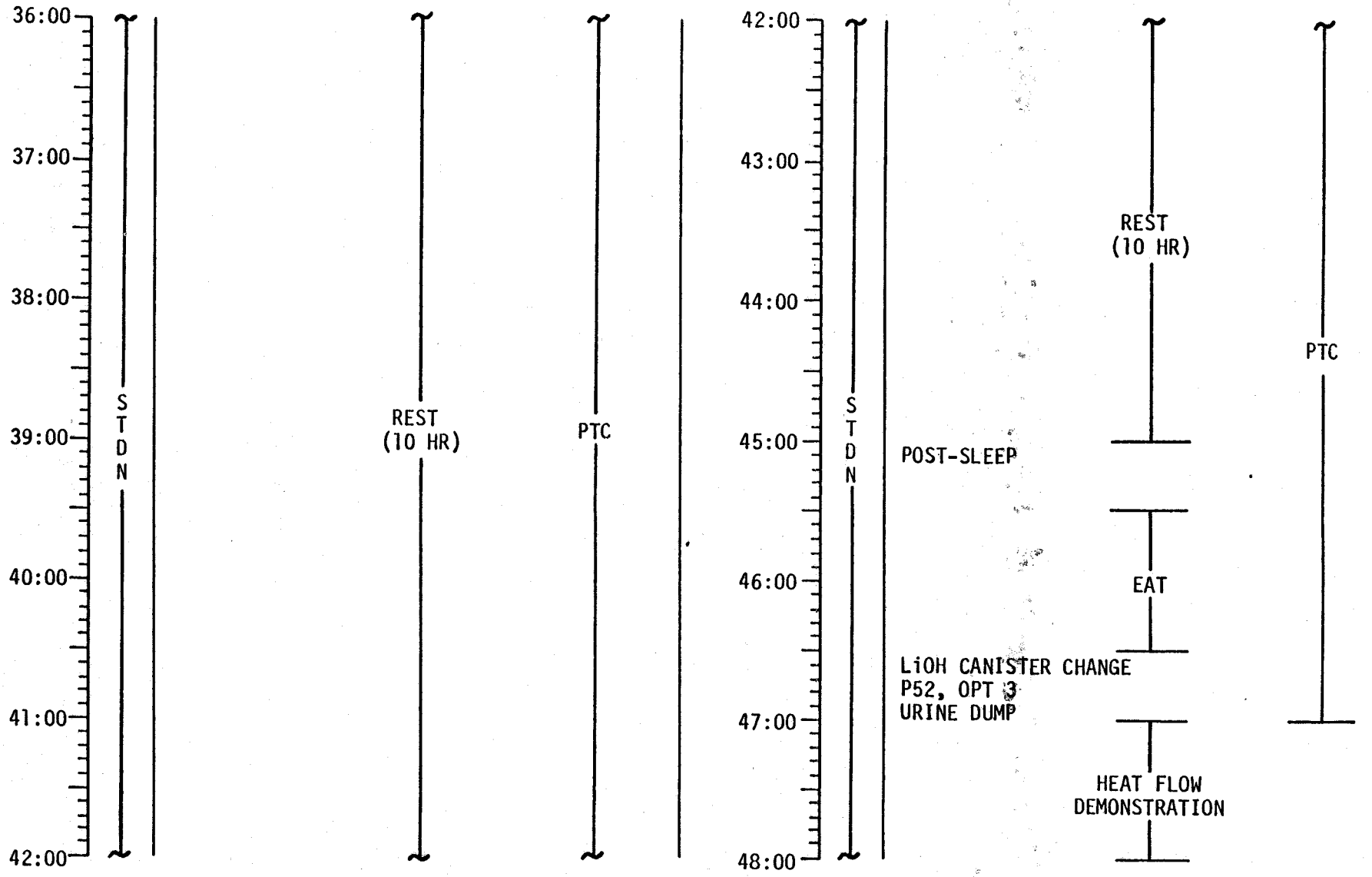
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	24:00 - 36:00	2/TLC	6-39

FLIGHT PLANNING BRANCH

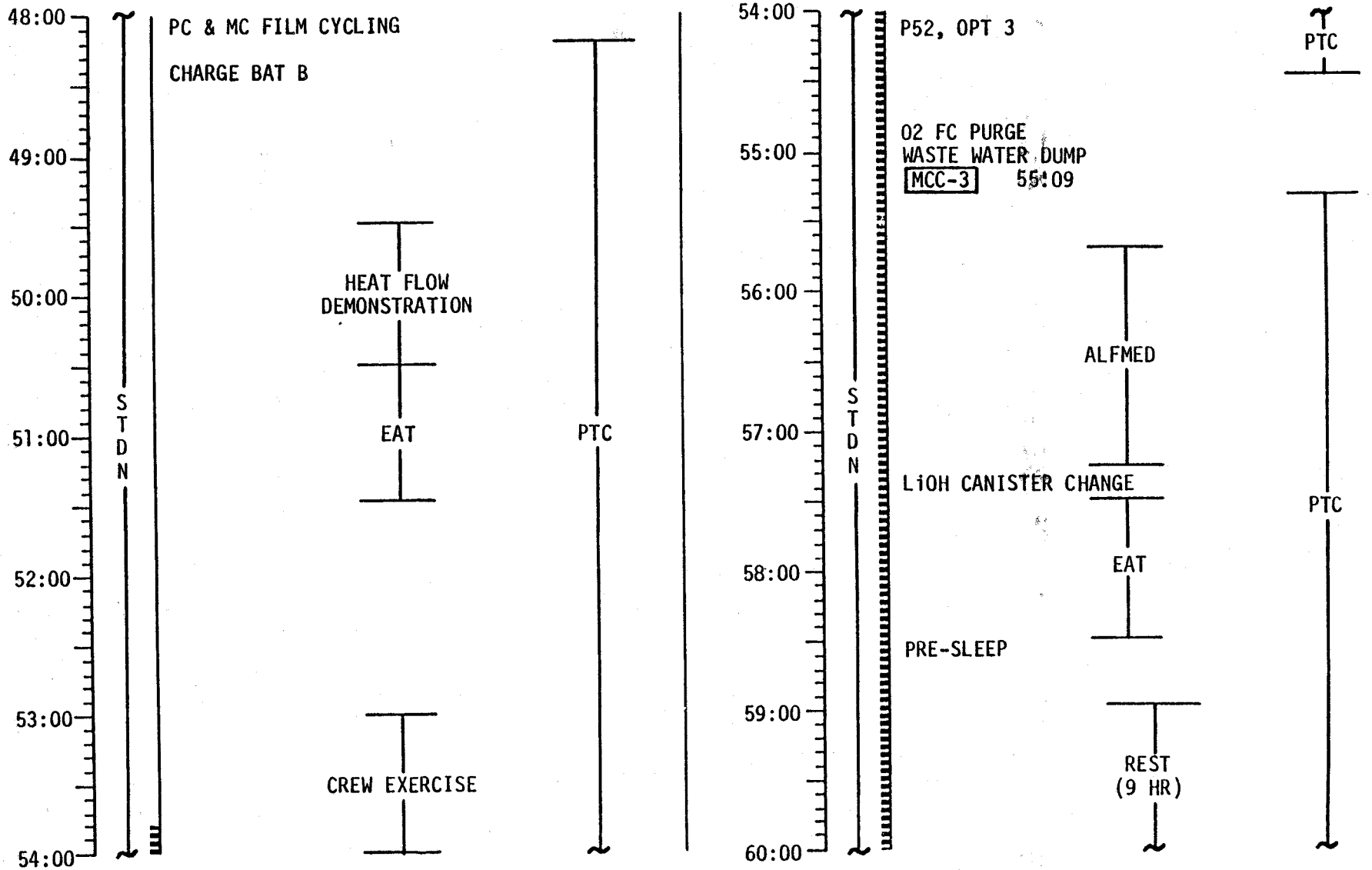
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	36:00 - 48:00	2/TLC	6-40

FLIGHT PLANNING BRANCH

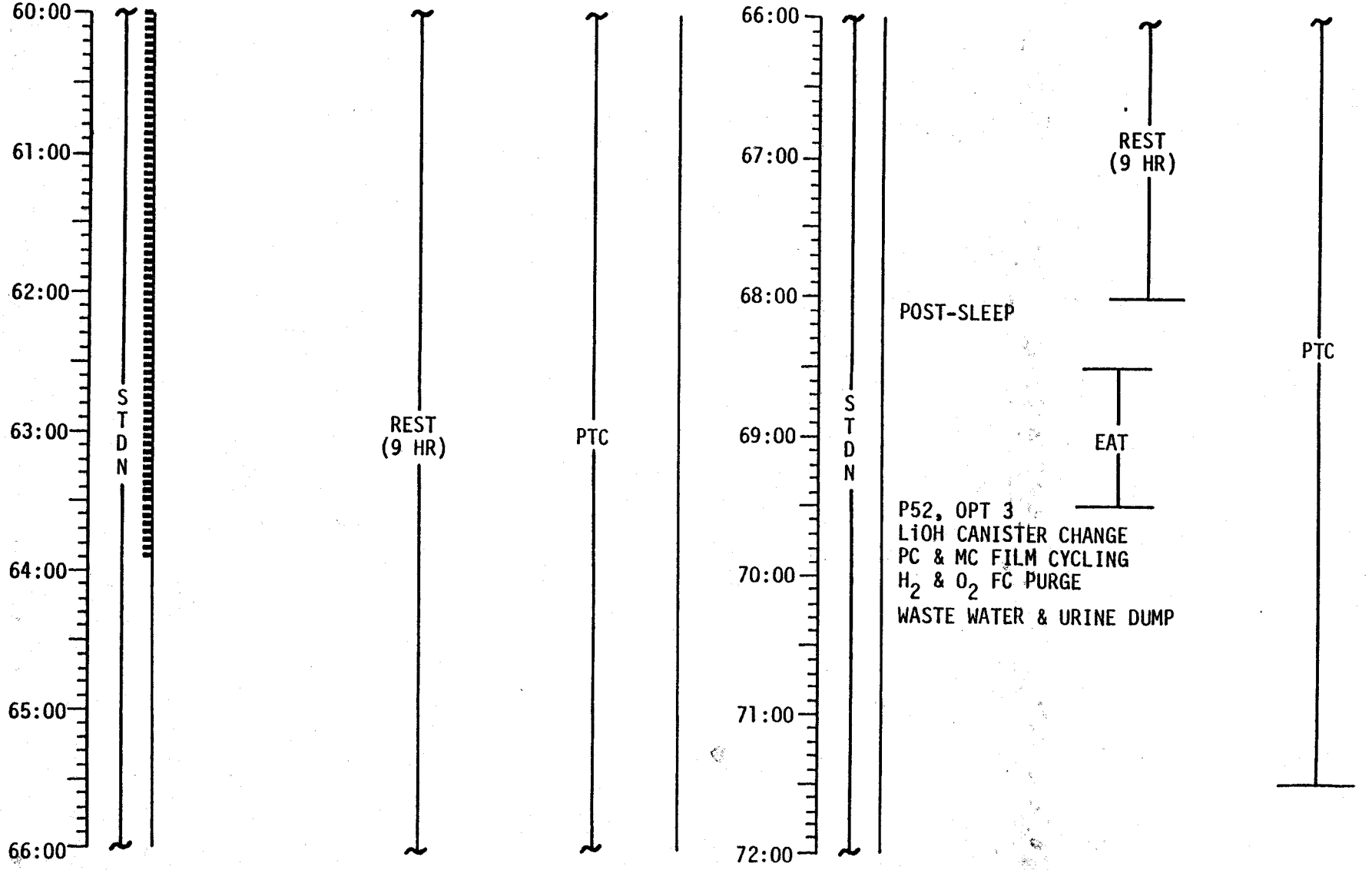
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	48:00 - 60:00	3/TLC	6-41

FLIGHT PLANNING BRANCH

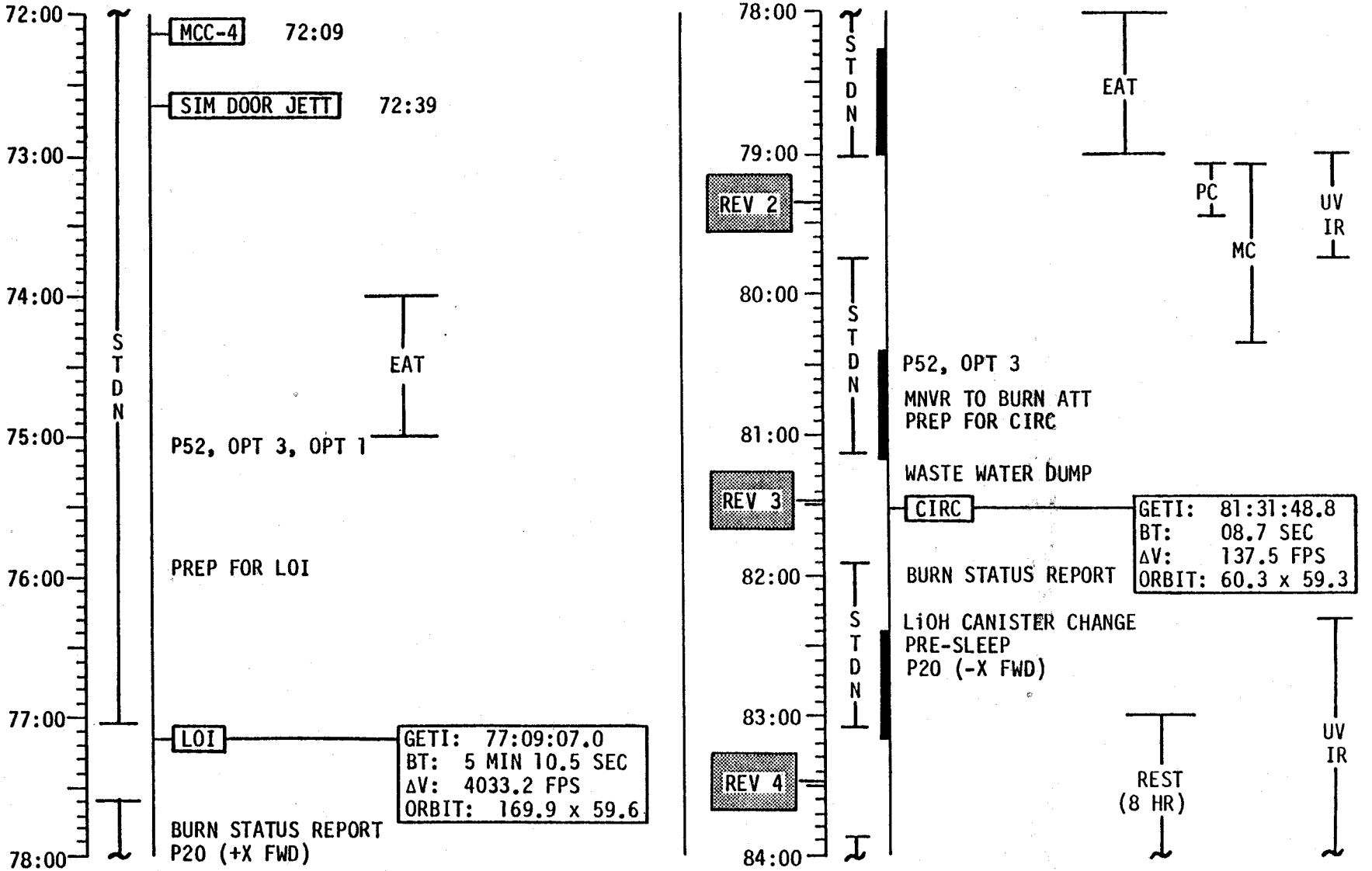
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	60:00 - 72:00	3/TLC	6-42

FLIGHT PLANNING BRANCH

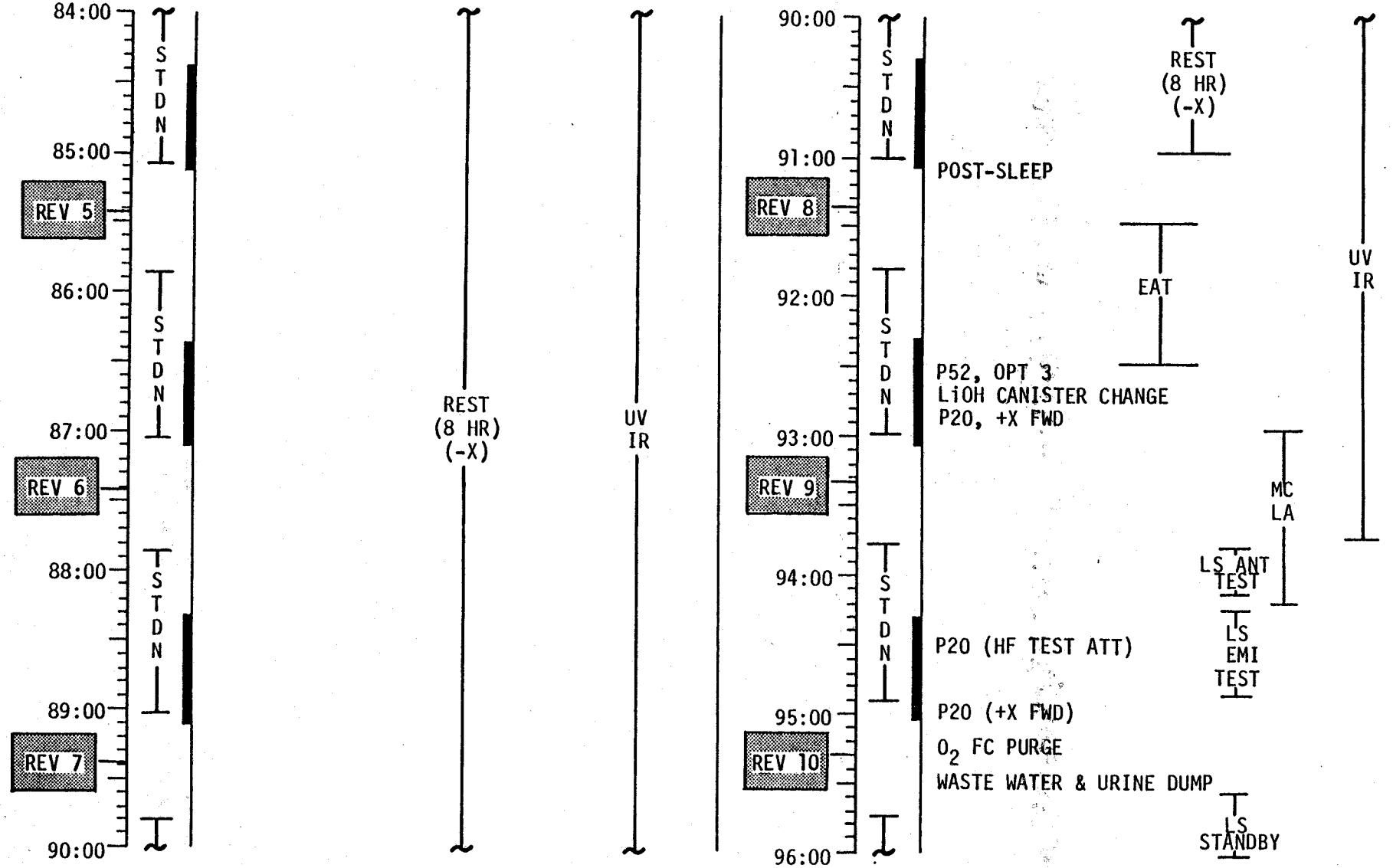
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	72:00 - 84:00	4/1-4	6-43

FLIGHT PLANNING BRANCH

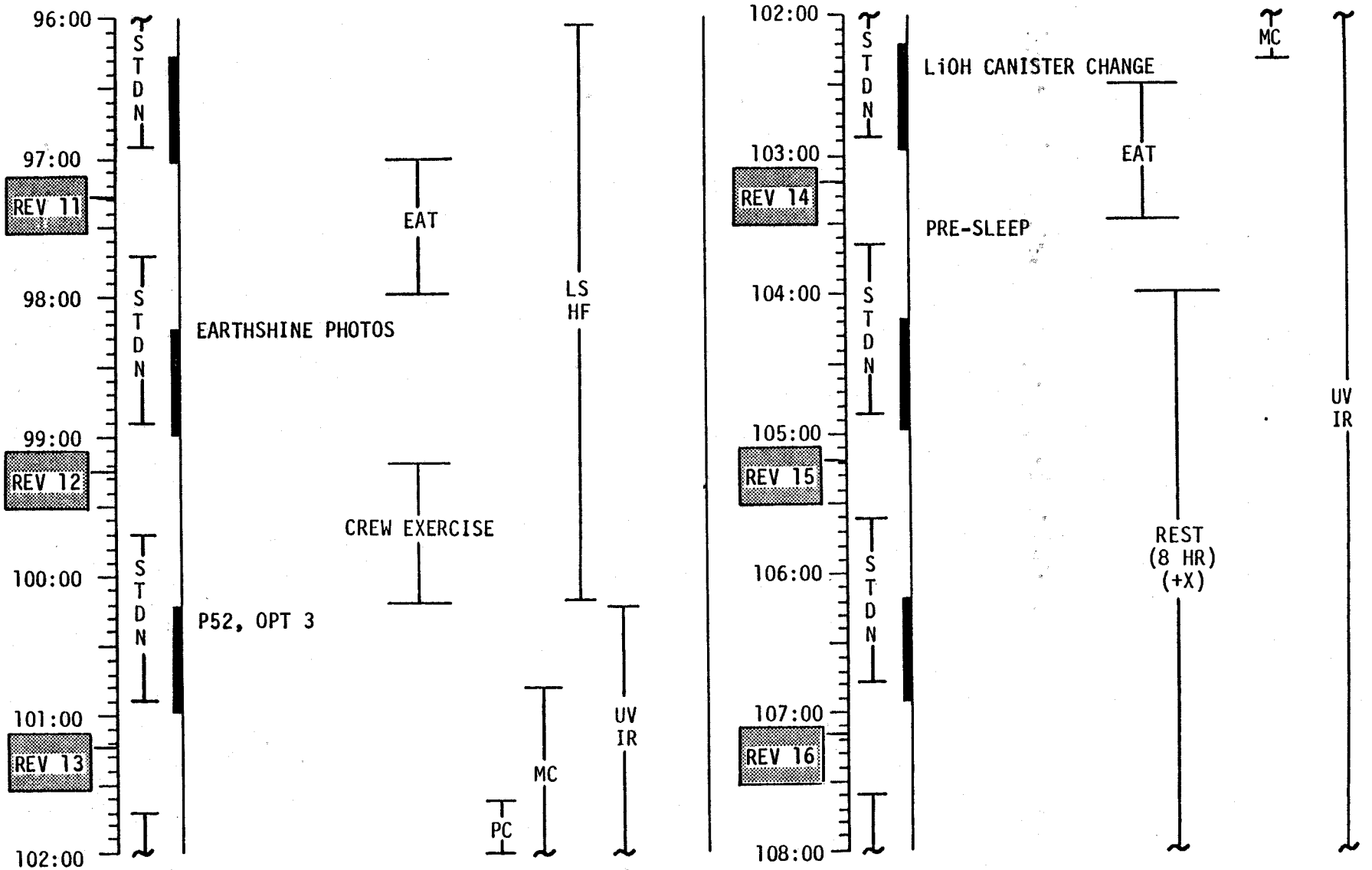
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	84:00 - 96:00	4/4-10	6-44

FLIGHT PLANNING BRANCH

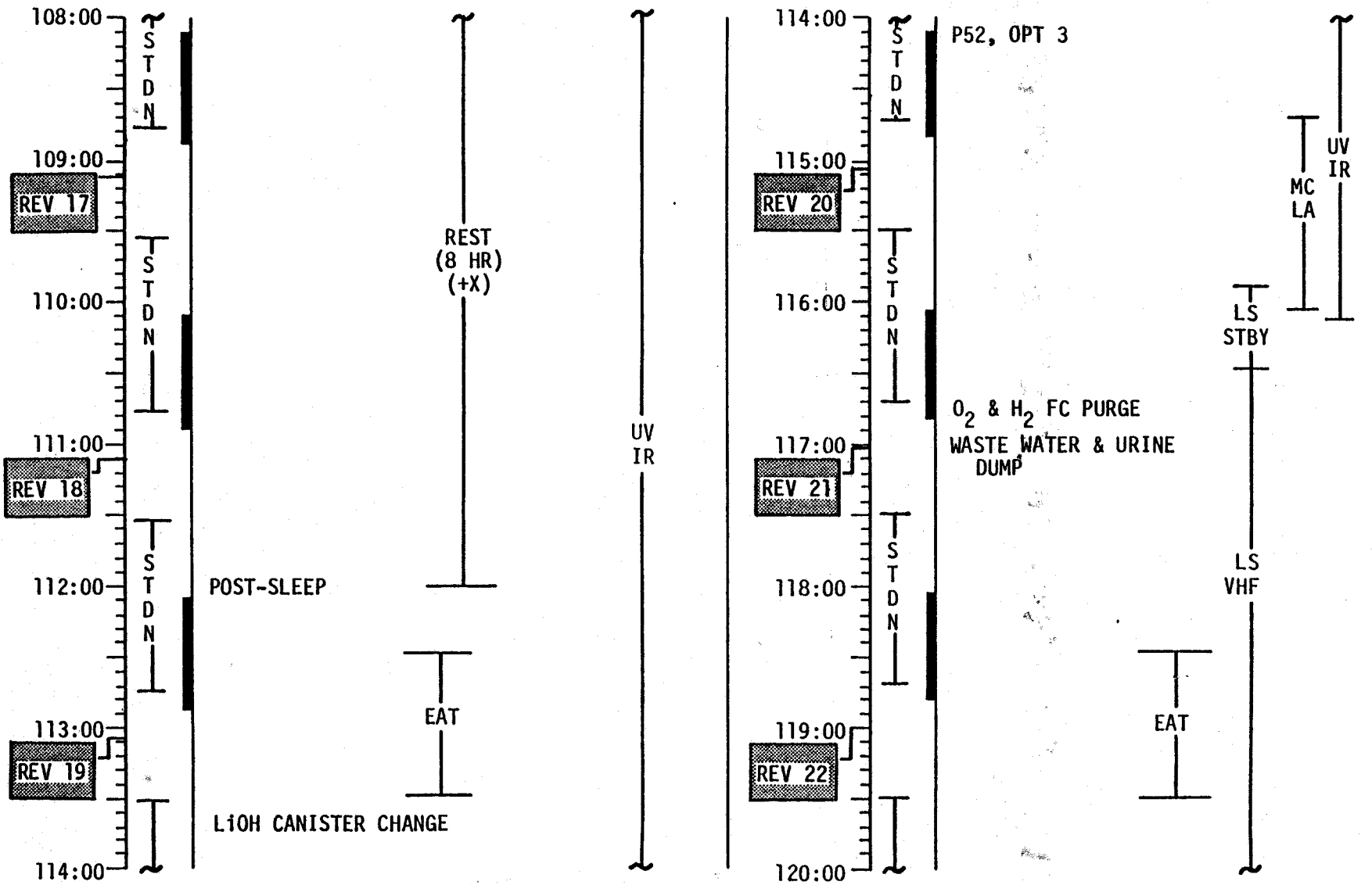
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	96:00 - 108:00	5/11-16	6-45

FLIGHT PLANNING BRANCH

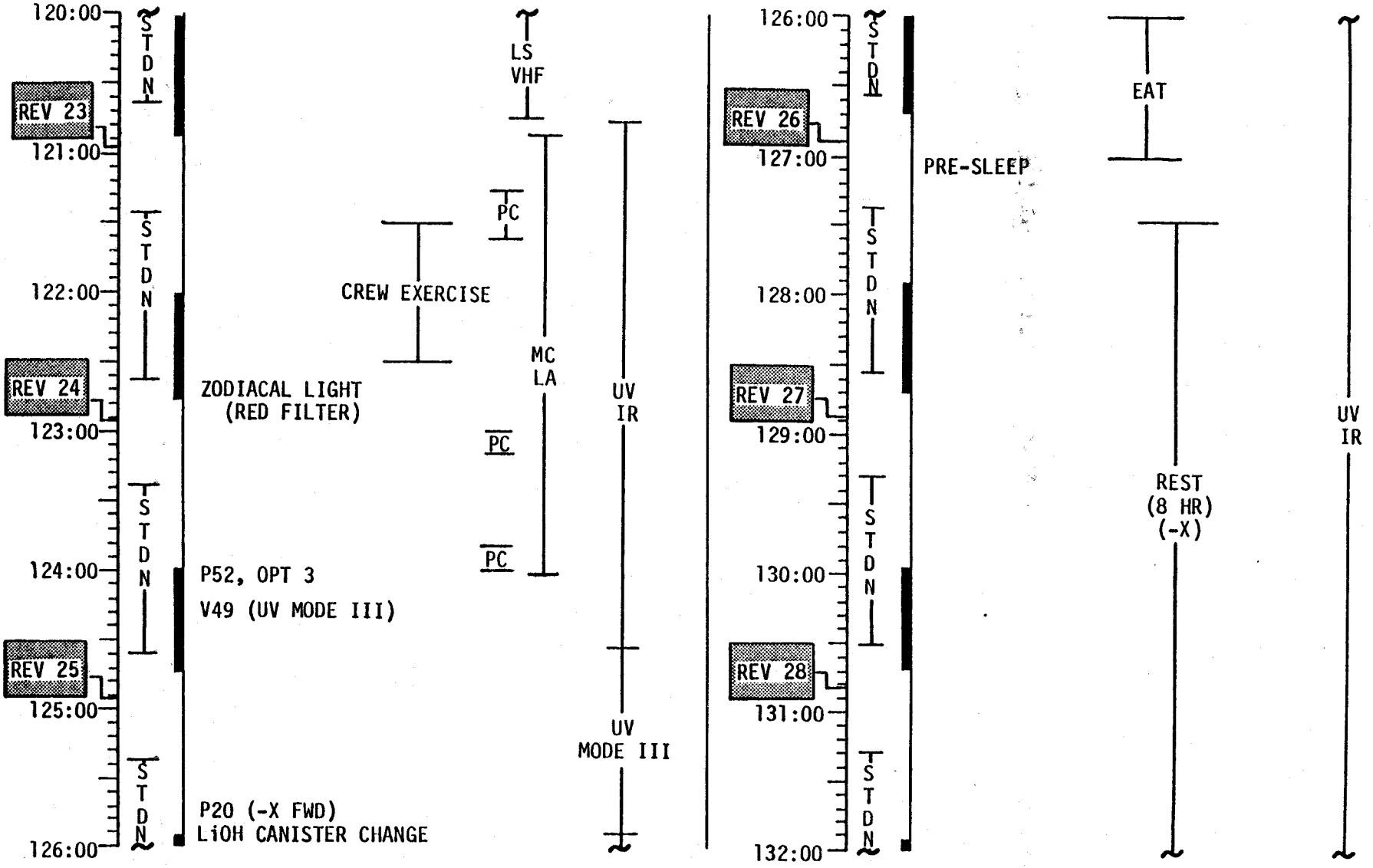
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	108:00 - 120:00	5-6/17-22	6-46

FLIGHT PLANNING BRANCH

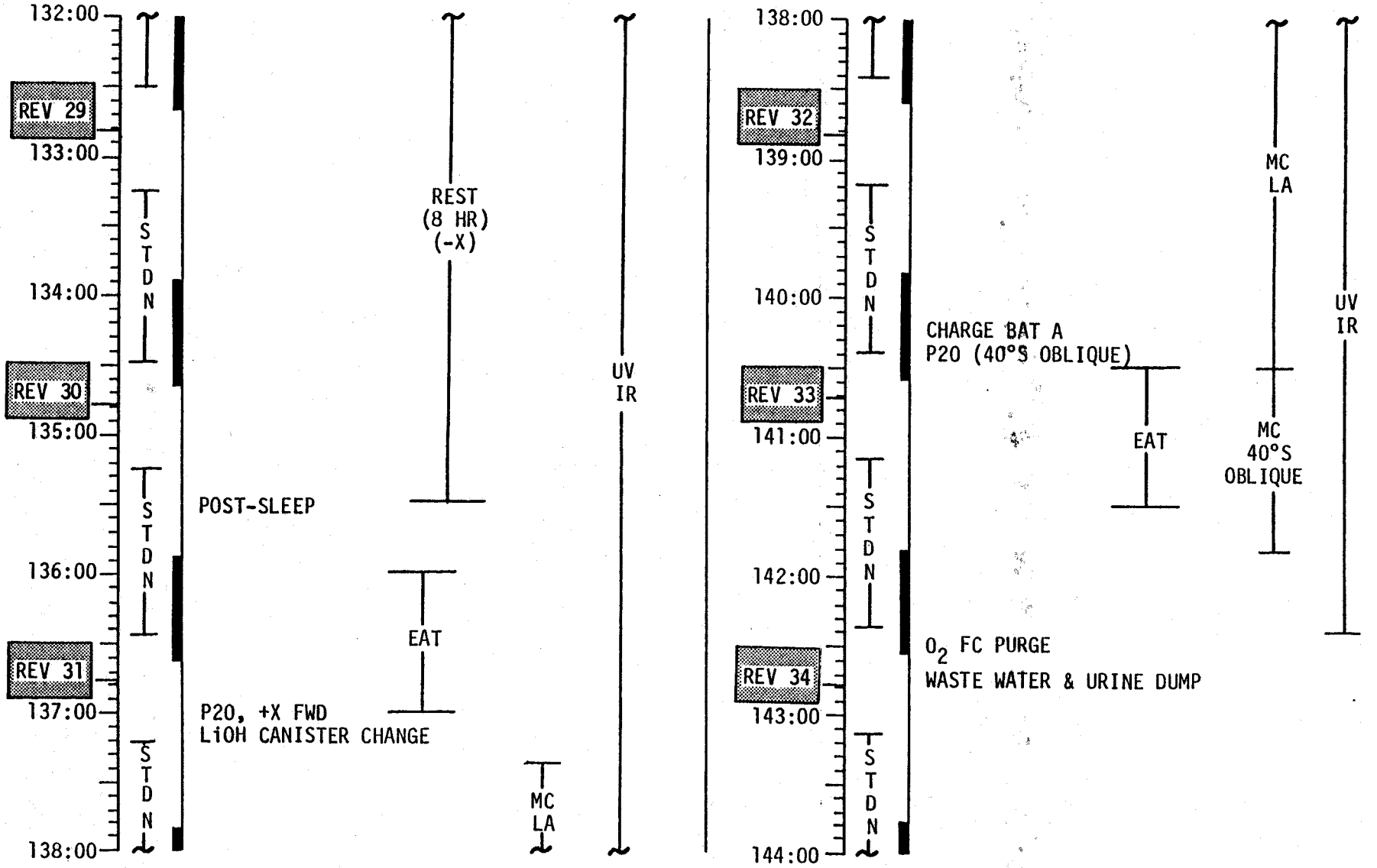
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	120:00 - 132:00	6/23-28	6-47

FLIGHT PLANNING BRANCH

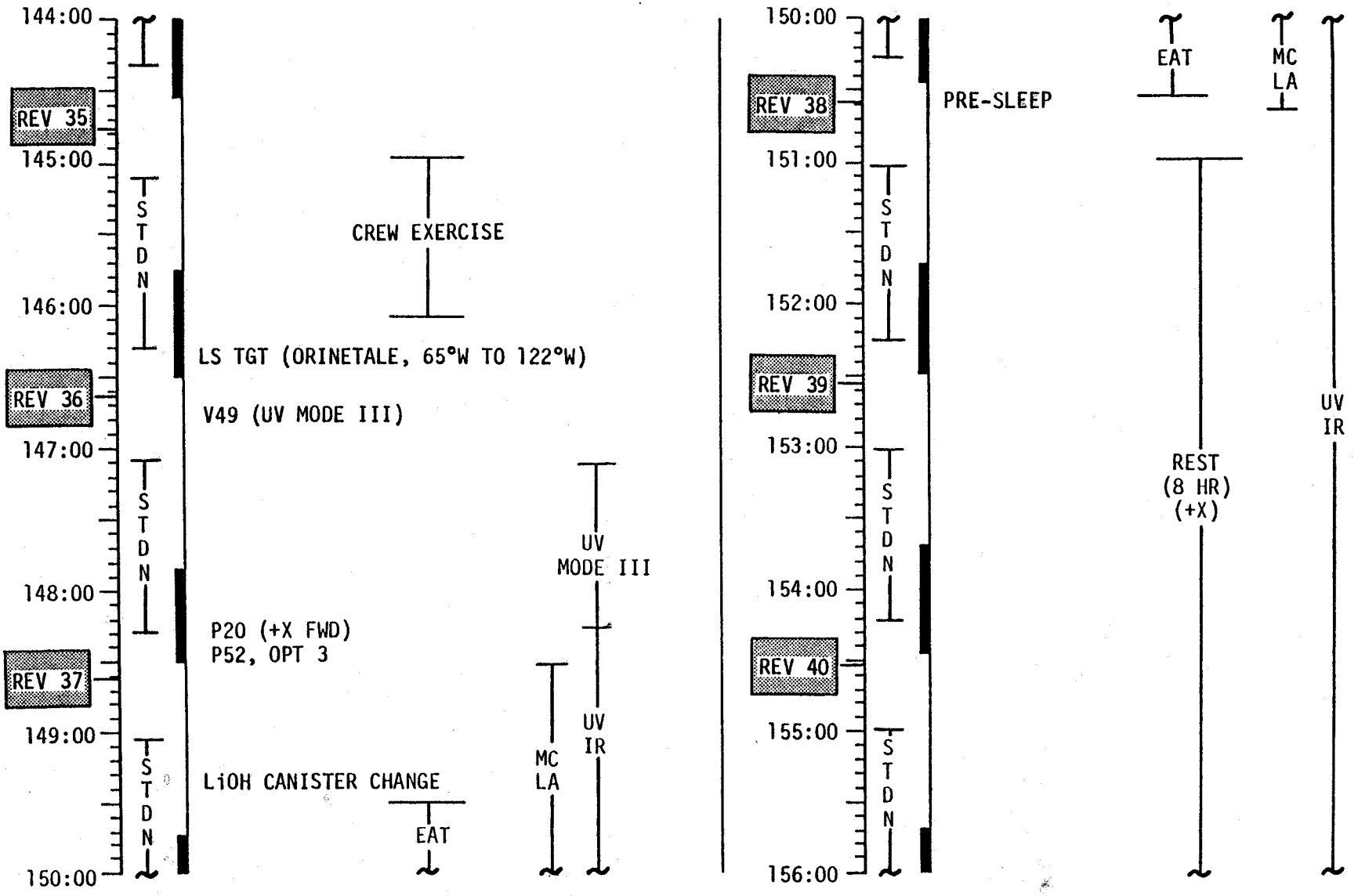
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	132:00 - 144:00	6-7/29-34	6-48

FLIGHT PLANNING BRANCH

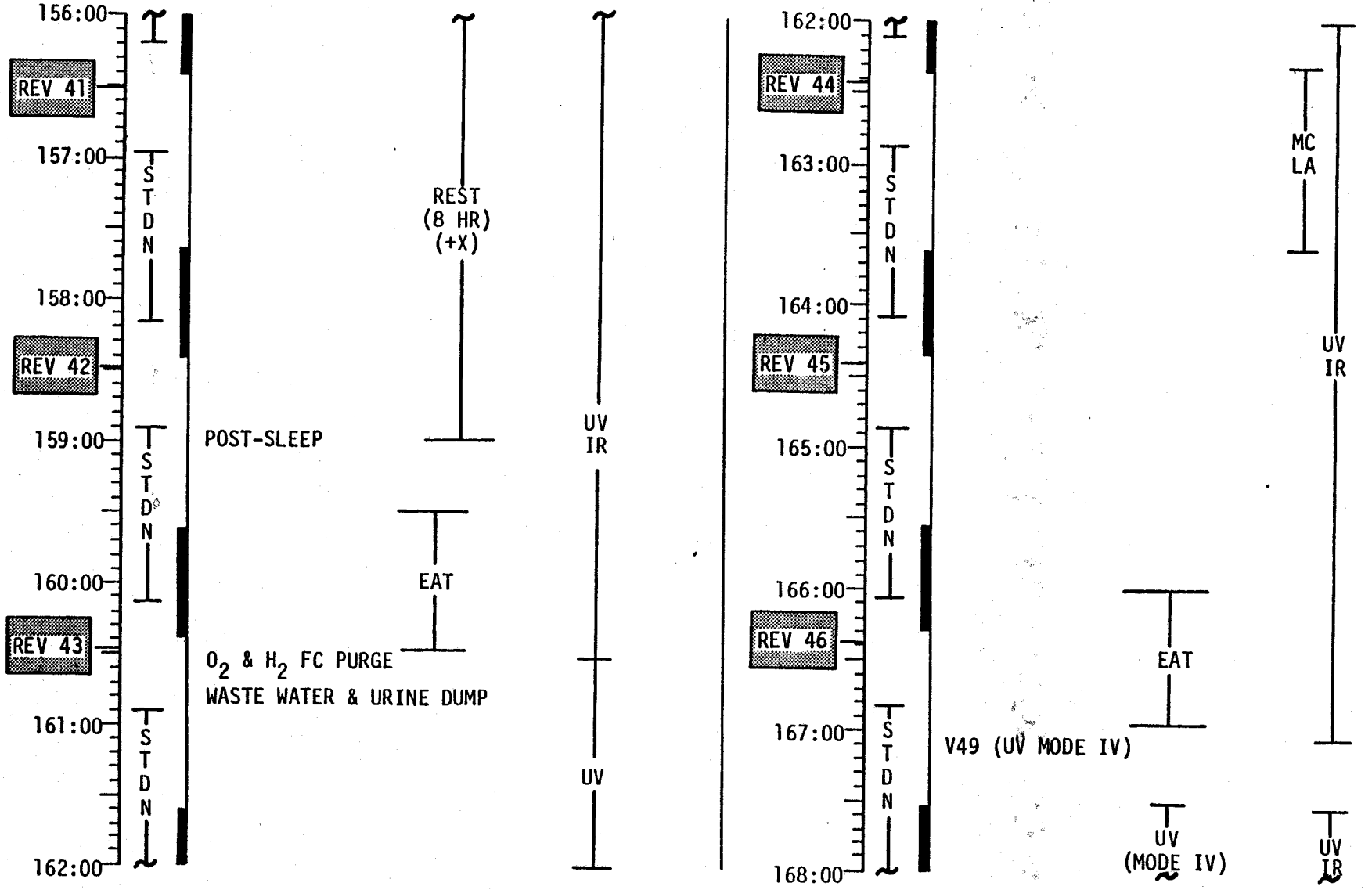
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	144:00 - 156:00	7/35-40	6-49

FLIGHT PLANNING BRANCH

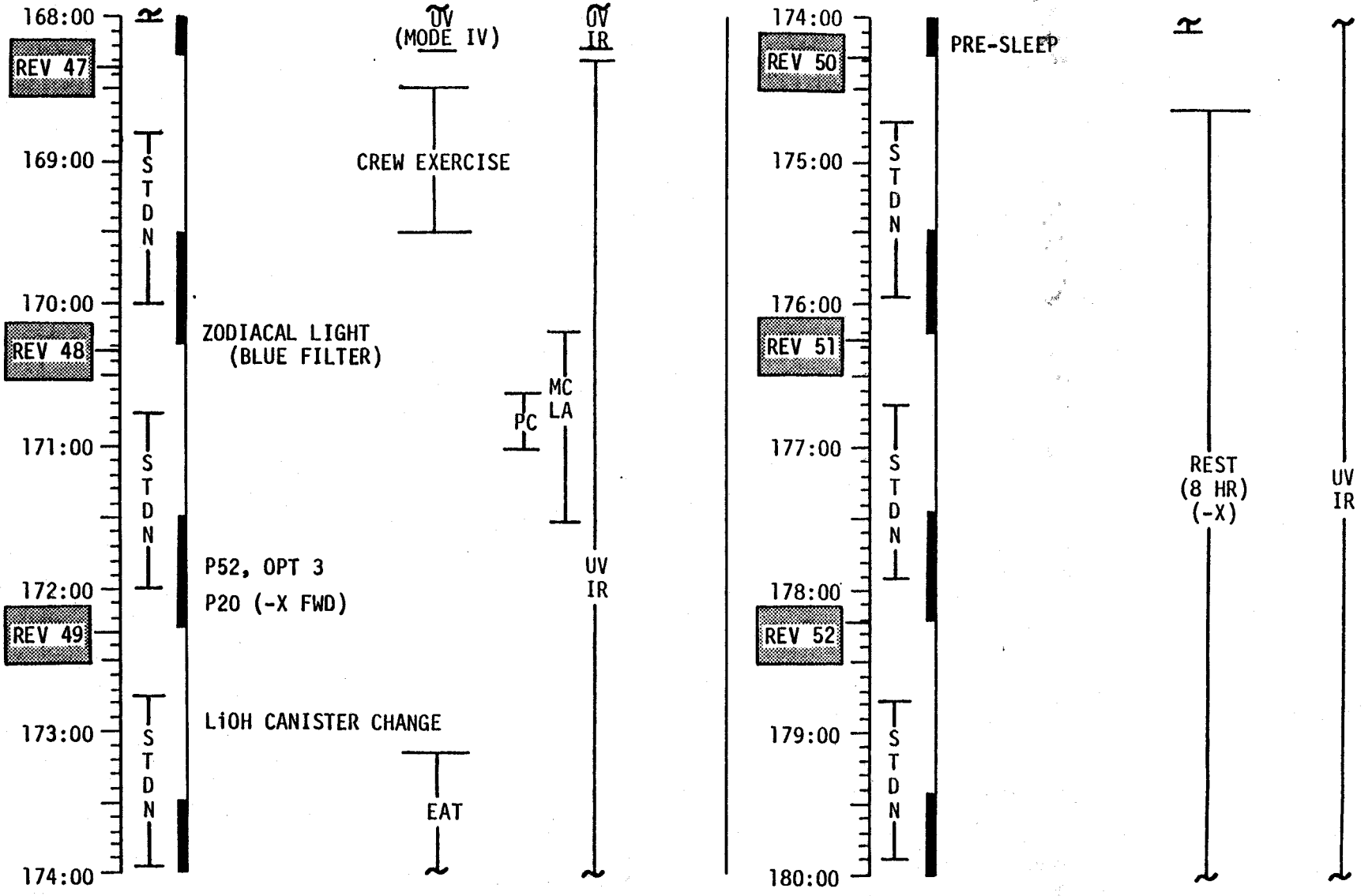
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	156:00 - 168:00	7-8/41-46	6-50

FLIGHT PLANNING BRANCH

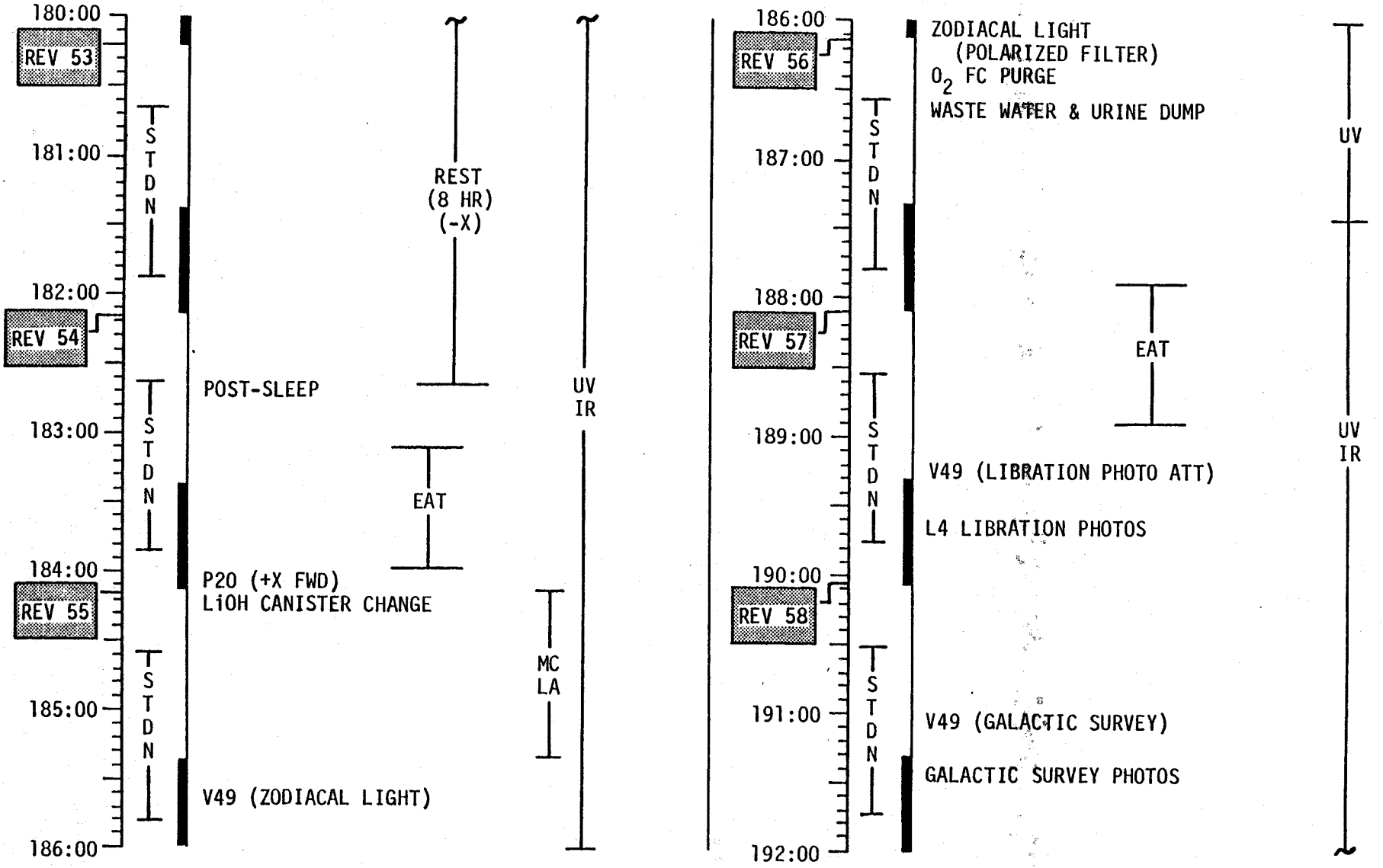
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	168:00 - 180:00	8/47-52	6-51

FLIGHT PLANNING BRANCH

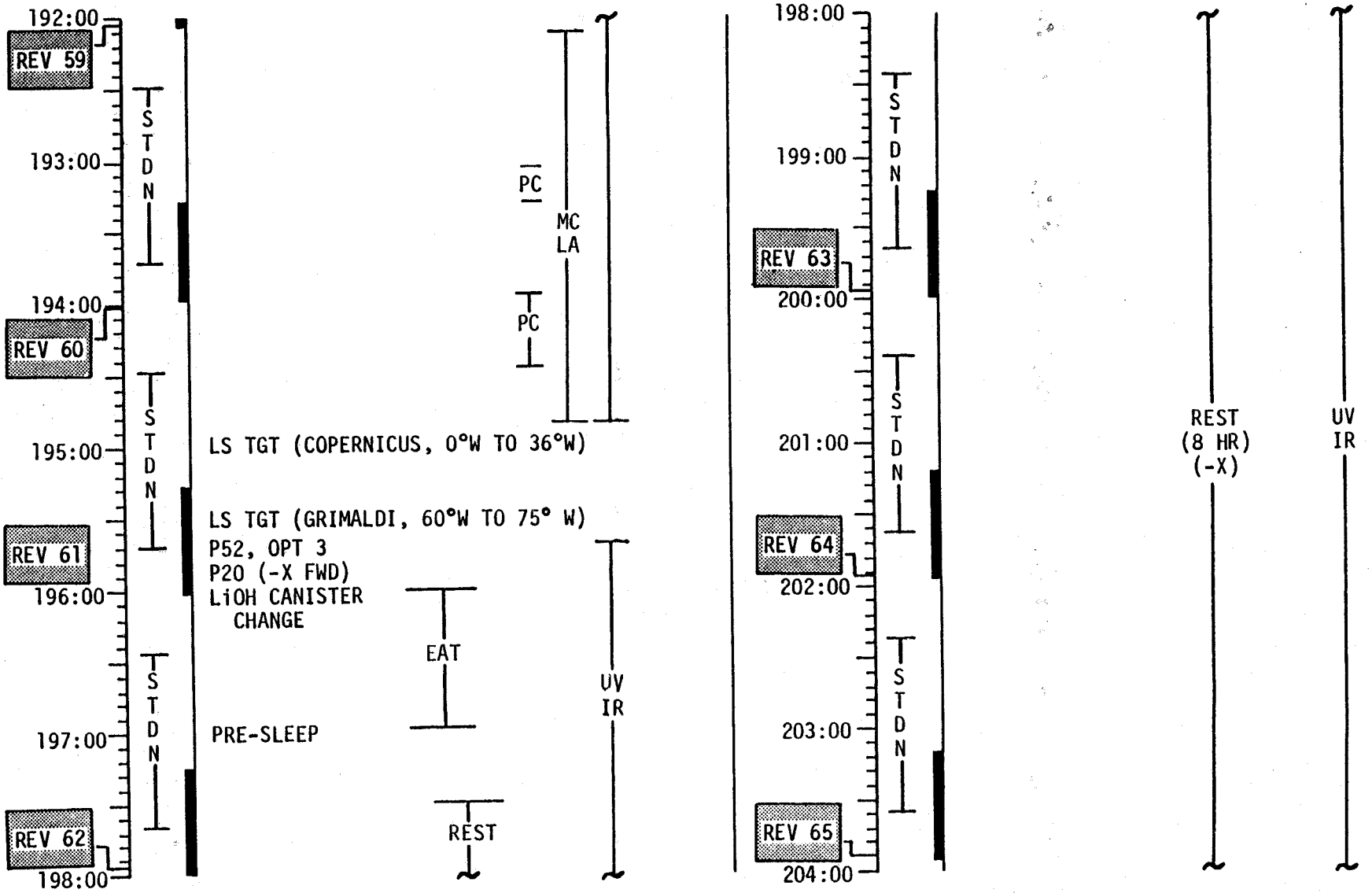
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	180:00 - 192:00	8-9/53-58	6-52

FLIGHT PLANNING BRANCH

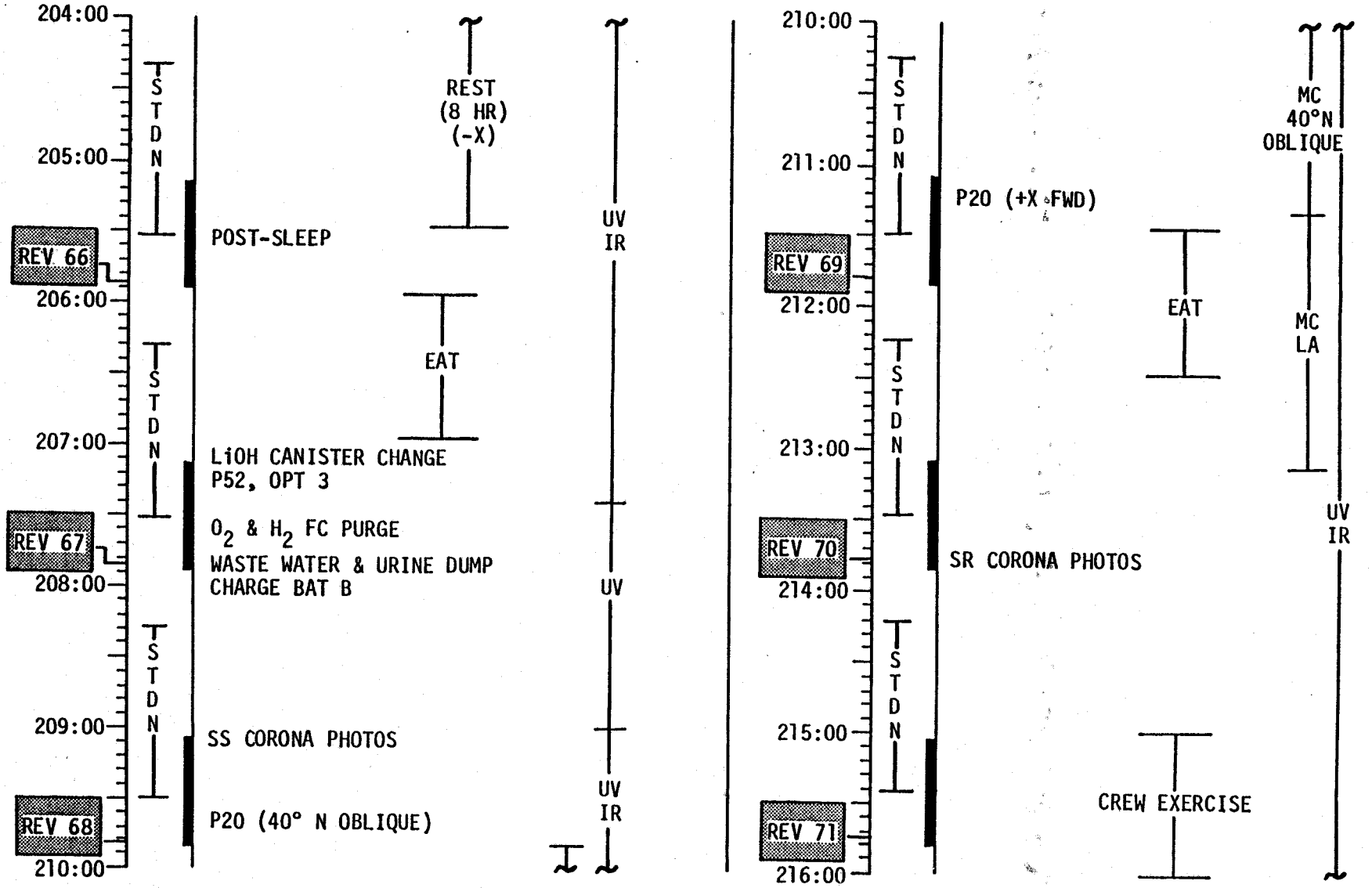
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	192:00 - 204:00	9/59-65	6-53

FLIGHT PLANNING BRANCH

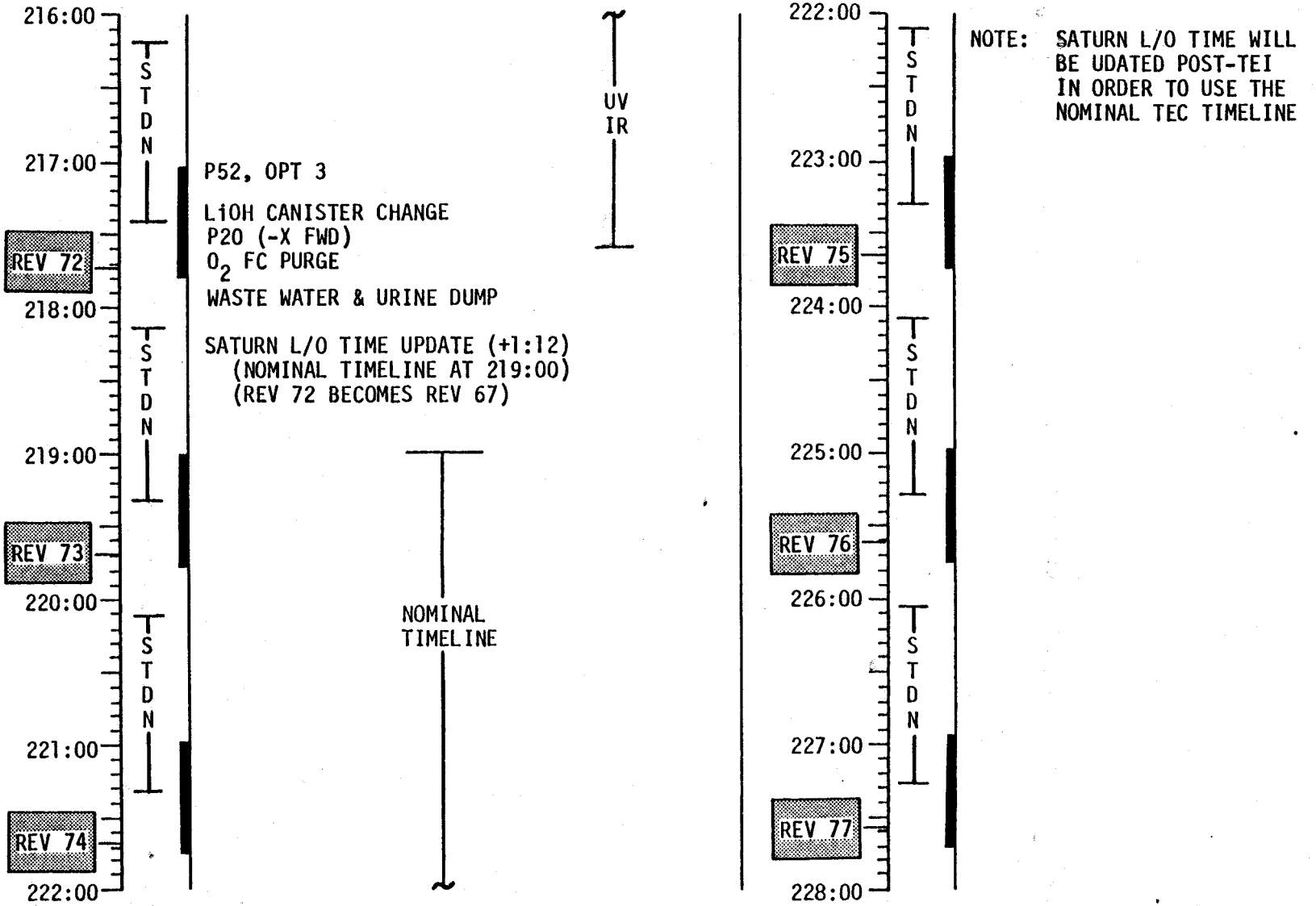
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	204:00 - 216:00	9-10/66-71	6-54

FLIGHT PLANNING BRANCH

FLIGHT PLAN

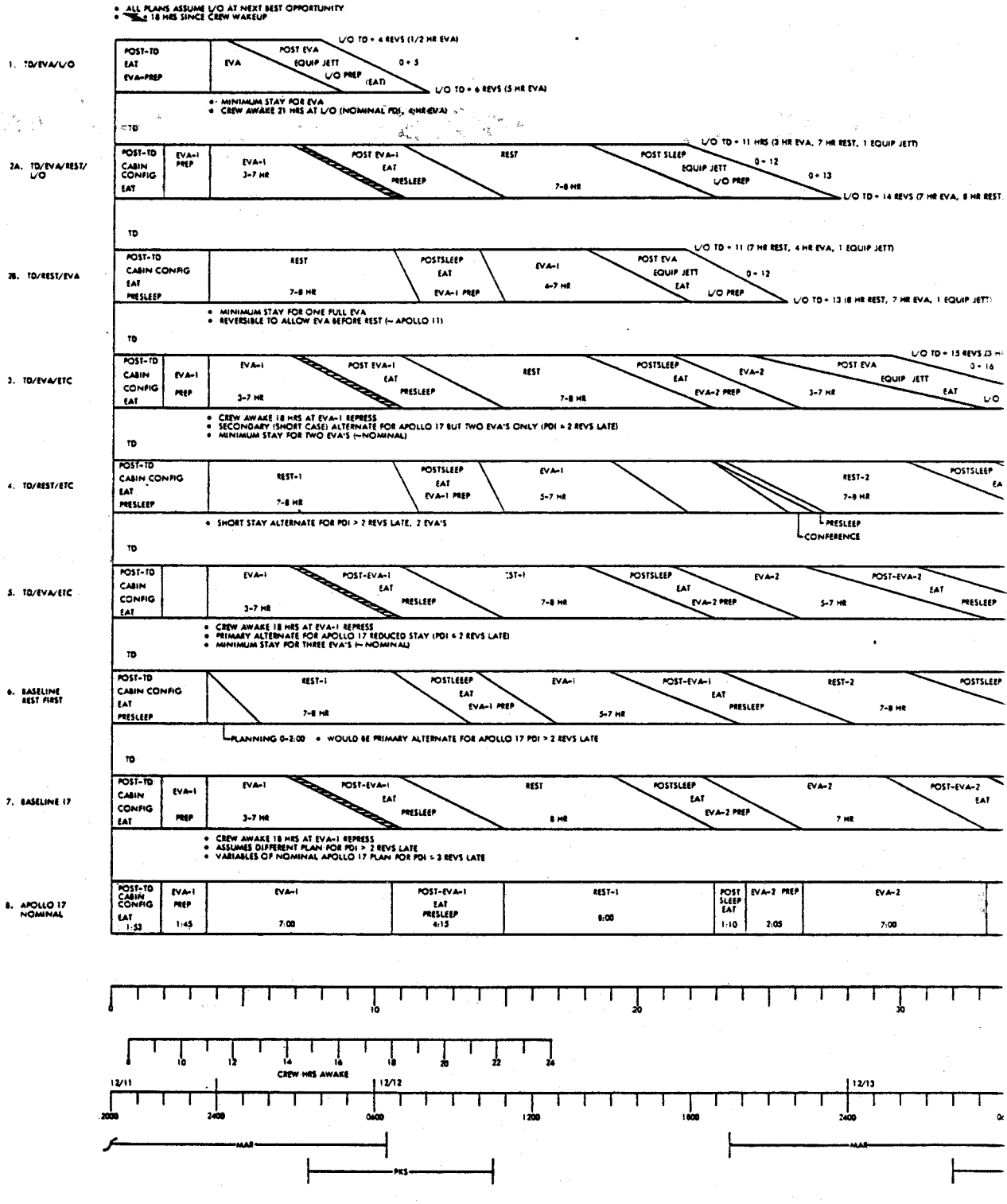


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	216:00 - 228:00	10/71-72	6-55

FLIGHT PLANNING BRANCH

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10/23/72

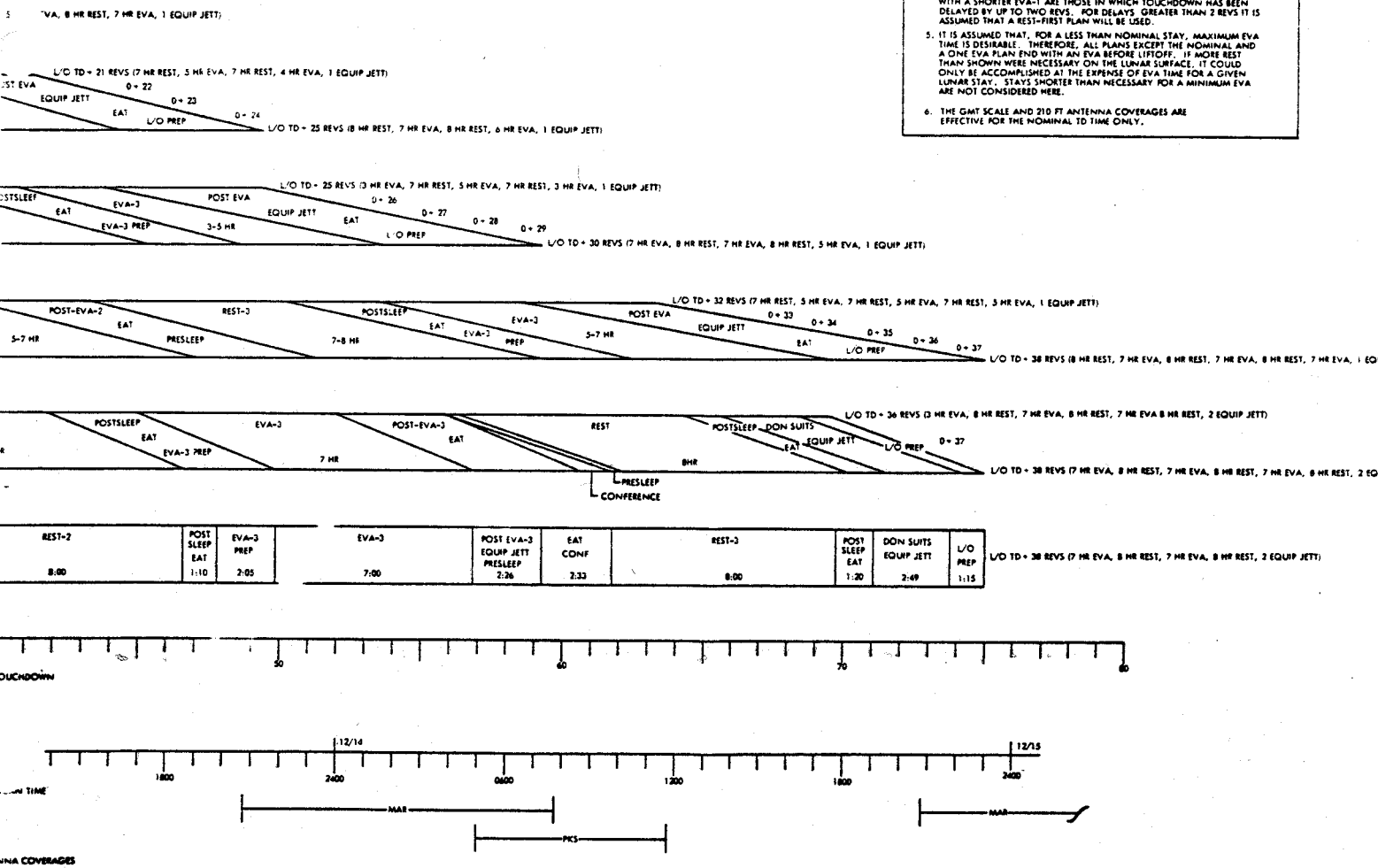

• ALL PLANS ASSUME L/O AT NEXT BEST OPPORTUNITY
• ≥ 18 HRS SINCE CREW WAKEUP
1. TD/EVA/L/O
POST-TD
EAT
EVA-PREP
EVA
POST EVA
EQUIP JETT
L/O PREP
(EAT)
0 + 5
L/O TD + 4 REVS (1/2 HR EVA)
L/O TD + 6 REVS (5 HR EVA)
• MINIMUM STAY FOR EVA
• CREW AWAKE 21 HRS AT L/O (NOMINAL PDI, 4HR EVA)
TD
2A. TD/EVA/REST/ L/O
POST-TD
CABIN CONFIG
EAT
EVA-1 PREP
EVA-1
3-7 HR
POST EVA-1
EAT
PRESLEEP
REST
7-8 HR
POST SLEEP
EQUIP JETT
L/O PREP
0 + 12
0 + 13
L/O TD + 11 HRS (3 HR EVA, 7 HR REST, 1 EQUIP JETT)
L/O TD + 14 REVS (7 HR EVA, 8 HR REST
TD
2B. TD/REST/EVA
POST-TD
CABIN CONFIG
EAT
PRESLEEP
REST
7-8 HR
POSTSLEEP
EAT
EVA-1 PREP
EVA-1
4-7 HR
POST EVA
EQUIP JETT
EAT
L/O PREP
0 + 12
L/O TD + 11 (7 HR REST, 4 HR EVA, 1 EQUIP JETT)
L/O TD + 13 (8 HR REST, 7 HR EVA, 1 EQUIP JETT)
• MINIMUM STAY FOR ONE FULL EVA
• REVERSIBLE TO ALLOW EVA BEFORE REST (~ APOLLO 11)
TD
3. TD/EVA/ETC
POST-TD
CABIN CONFIG
EAT
EVA-1
PREP
EVA-1
3-7 HR
POST EVA-1
EAT
PRESLEEP
REST
7-8 HR
POSTSLEEP
EAT
EVA-2 PREP
EVA-2
3-7 HR
POST EVA
EQUIP JETT
EAT
0 + 16
L/O
L/O TD + 15 REVS
• CREW AWAKE 18 HRS AT EVA-1 REPRESS
• SECONDARY (SHORT CASE) ALTERNATE FOR APOLLO 17 BUT TWO EVA'S ONLY (PDI ≤ 2 REVS LATE)
• MINIMUM STAY FOR TWO EVA'S (~NOMINAL)
TD
4. TD/REST/ETC
POST-TD
CABIN CONFIG
EAT
PRESLEEP
REST-1
7-8 HR
POSTSLEEP
EAT
EVA-1 PREP
EVA-1
5-7 HR
REST-2
7-8 HR
PRESLEEP
CONFERENCE
POSTSLEEP
• SHORT STAY ALTERNATE FOR PDI > 2 REVS LATE, 2 EVA'S
TD
5. TD/EVA/ETC
POST-TD
CABIN CONFIG
EAT
EVA-1
3-7 HR
POST-EVA-1
EAT
PRESLEEP
REST-1
7-8 HR
POSTSLEEP
EAT
EVA-2 PREP
EVA-2
5-7 HR
POST-EVA-2
EAT
PRESLEEP
• CREW AWAKE 18 HRS AT EVA-1 REPRESS
• PRIMARY ALTERNATE FOR APOLLO 17 REDUCED STAY (PDI ≤ 2 REVS LATE)
• MINIMUM STAY FOR THREE EVA'S (~ NOMINAL)
TD
6. BASELINE REST FIRST
POST-TD
CABIN CONFIG
EAT
PRESLEEP
REST-1
7-8 HR
POSTLEEEP
EAT
EVA-1 PREP
EVA-1
5-7 HR
POST-EVA-1
EAT
PRESLEEP
REST-2
7-8 HR
POSTSLEEP
PLANNING 0-2:00 • WOULD BE PRIMARY ALTERNATE FOR APOLLO 17 PDI > 2 REVS LATE
TD
7. BASELINE 17
POST-TD
CABIN CONFIG
EAT
EVA-1
PREP
EVA-1
3-7 HR
POST-EVA-1
EAT
PRESLEEP
REST
8 HR
POSTSLEEP
EAT
EVA-2 PREP
EVA-2
7 HR
POST-EVA-2
EAT
• CREW AWAKE 18 HRS AT EVA-1 REPRESS
• ASSUMES DIFFERENT PLAN FOR PDI > 2 REVS LATE
• VARIABLES OF NOMINAL APOLLO 17 PLAN FOR PDI ≤ 2 REVS LATE
8. APOLLO 17 NOMINAL
POST-TD
CABIN CONFIG
EAT
1:53
EVA-1
PREP
1:45
EVA-1
7:00
POST-EVA-1
EAT
PRESLEEP
4:15
REST-1
8:00
POST SLEEP
EAT
1:10
EVA-2 PREP
2:05
EVA-2
7:00
0
10
20
30
0
10
12
14
16
18
20
22
24
CREW HRS AWAKE
12/11
12/12
12/13
2000
2400
0400
1200
1800
2400
MAR
PRS
MAR

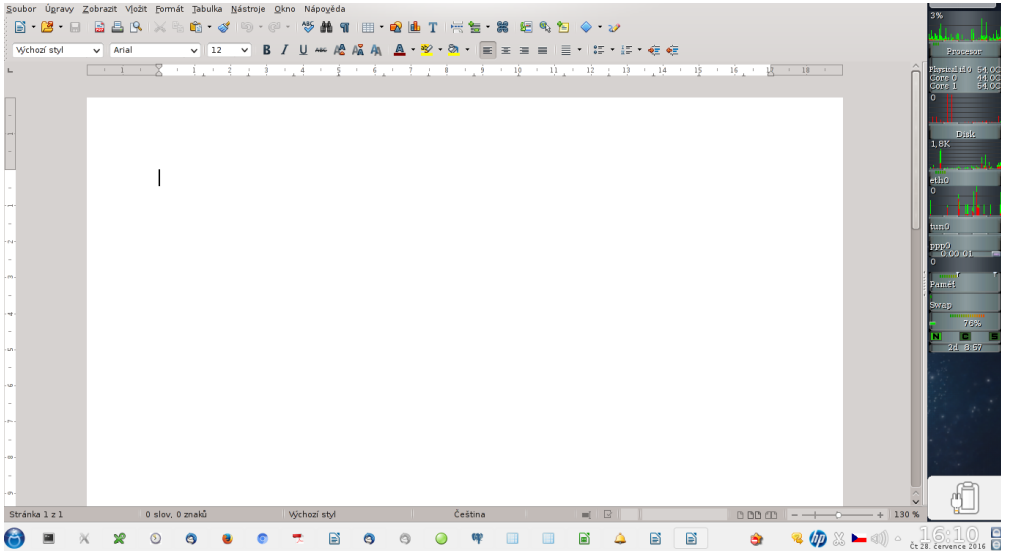
APOLLO 17
LUNAR SURFACE ALTERNATE MISSIONS

SEPTEMBER 21, 1972

LUNAR SURFACE ALTERNATE PLANS NOTES:

1. THIS CHART IS INTENDED AS A GUIDELINE FOR DETERMINING THE MOST EFFECIENT LUNAR-STAY PLAN FOR VARIOUS SURFACE STAY TIMES LESS THAN THAT NOMINALLY PLANNED FOR APOLLO 17. ALL PLANS ASSUME THAT THE LENGTH OF THE LUNAR STAY WILL BE KNOWN AT OR NEAR THE TIME OF TOUCHDOWN. HOWEVER, ANY OF THE EVA-FIRST PLANS COULD BE MODIFIED TO ASSIST IN PLANNING SHORTER STAYS REALIZED LATER AFTER TOUCHDOWN.
2. VARIABLES IN THE PLAN ARE INDICATED BY THE NUMBERS IN EACH BLOCK (E.G. REST, 7-8 HRS). OTHER TIME BLOCKS ARE ASSUMED TO BE FIXED AND, WHERE APPLICABLE, THE SAME LENGTH OF TIME AS ON THE NOMINAL APOLLO 17 PLAN.
3. ALL LIFTOFFS ARE INDICATED AT THE ACTUAL LIFTOFF OPPORTUNITY. THUS, THE TIME ALLOWED IN THE LAST BLOCK IN EACH PLAN MAY VARY FROM THE MINIMUM REQUIRED FOR THE ACTIVITIES INDICATED BY AS MUCH AS THE EXCESS REQUIRED TO GET TO THE NEXT OPPORTUNITY LIFTOFF.
4. ALL EVA-FIRST PLANS ARE CONSTRAINED BY A LIMIT OF 18 HOURS FROM WAKEUP TO EVA-1 REPRESS. THE 18 HOUR LIMIT IS INDICATED BY A HATCHED LINE AT THE END OF EVA-1 ON THESE PLANS. THUS, THOSE WITH A SHORTER EVA-1 ARE THOSE IN WHICH TOUCHDOWN HAS BEEN DELAYED BY UP TO TWO REVS. FOR DELAYS GREATER THAN 2 REVS IT IS ASSUMED THAT A REST-FIRST PLAN WILL BE USED.
5. IT IS ASSUMED THAT, FOR A LESS THAN NOMINAL STAY, MAXIMUM EVA TIME IS DESIRABLE. THEREFORE, ALL PLANS EXCEPT THE NOMINAL AND A ONE EVA PLAN END WITH AN EVA BEFORE LIFTOFF. IF MORE REST THAN SHOWN WERE NECESSARY ON THE LUNAR SURFACE, IT COULD ONLY BE ACCOMPLISHED AT THE EXPENSE OF EVA TIME FOR A GIVEN LUNAR STAY. STAYS SHORTER THAN NECESSARY FOR A MINIMUM EVA ARE NOT CONSIDERED HERE.
6. THE GMT SCALE AND 210 FT ANTENNA COVERAGES ARE EFFECTIVE FOR THE NOMINAL TD TIME ONLY.




Soubor Úpravy Zobrazit Vložit Formát Tabulka Nástroje Okno Nápověda
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Arial
12
Stránka 1 z 1
0 slov, 0 znaků
Výchozí styl
Čeština
130 %
Procesor
Disk
Paměť
Swap
16:10
Čt 28. července 2016