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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

APOLLO 17

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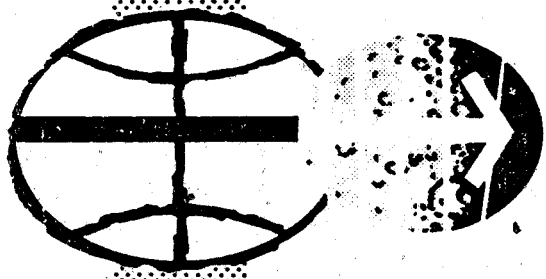
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FINAL FLIGHT PLAN

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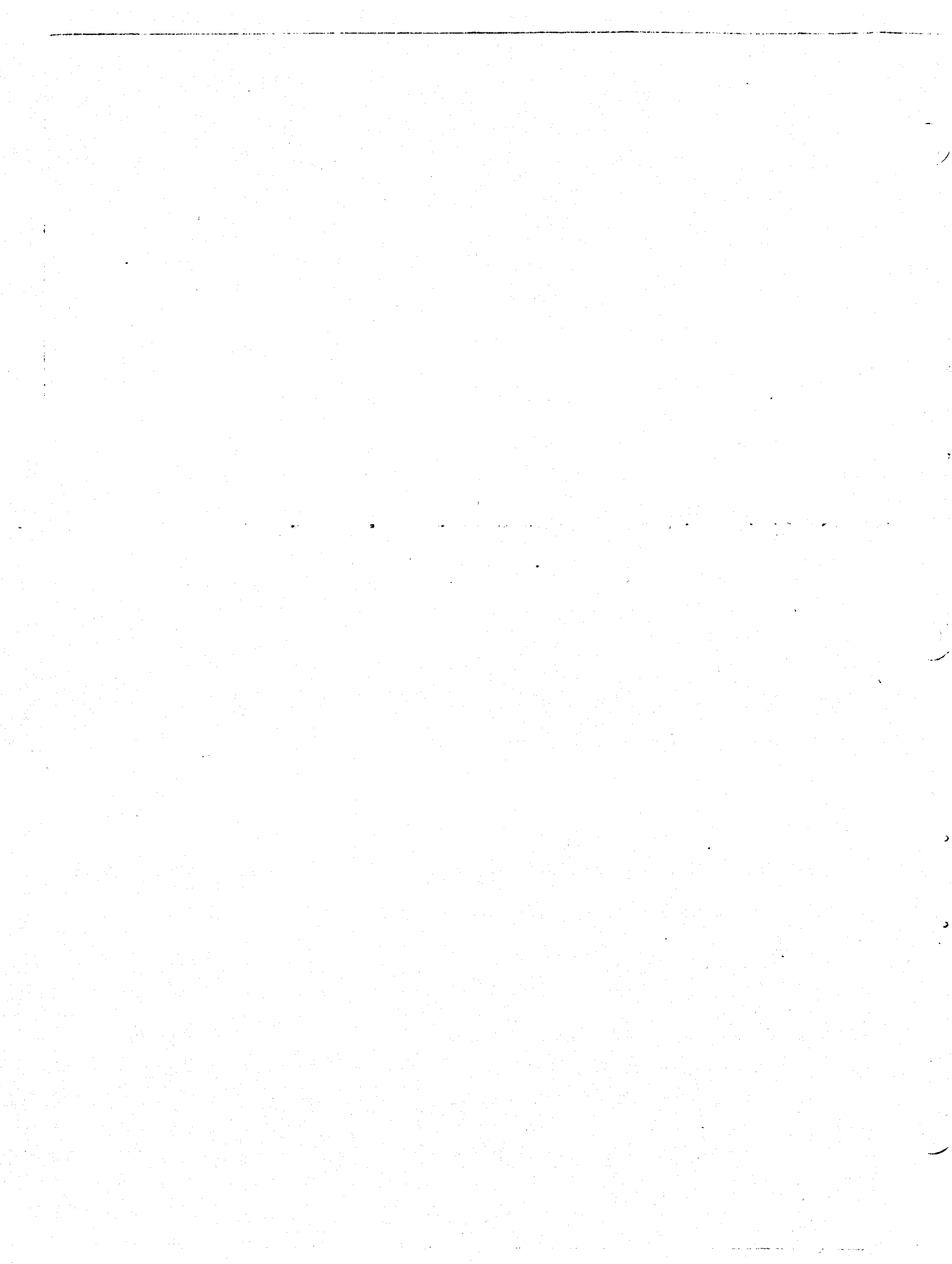
**PREPARED BY
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CREW PROCEDURES DIVISION**



**MANNED SPACECRAFT CENTER
HOUSTON, TEXAS**

OCTOBER 23, 1972

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APOLLO 17

FINAL

FLIGHT PLAN

OCTOBER 28, 1972

SUBMITTED BY:


T. W. HOLLOWAY
BOOK MANAGER

APPROVED BY:


JAMES W. BILODEAU, CHIEF
CREW PROCEDURES DIVISION


DONALD K. SLAYTON
DIRECTOR OF FLIGHT CREW OPERATIONS

CONCURRENCE:


OWEN MORRIS, MANAGER
APOLLO SPACECRAFT PROGRAM OFFICE


HOWARD W. TINDALL
DIRECTOR OF FLIGHT OPERATIONS

It is requested that any organization having comments, questions, or suggestions concerning this document contact T. W. Holloway, Flight Planning Branch, CG52, Building 4, room 230, telephone 483-4271.

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Distribution of this document is controlled by Flight Data File Manager, T. W. Holloway, Flight Planning Branch, Crew Procedures Division.

ACKNOWLEDGMENTS

Acknowledgment is made to the following for their contributions to the Apollo 17 Flight Plan:

Principal Contributors

Wood Calvert *WC*
Richard Meckley *PCM*
Billy Pinkston *BSP*
Steve Pollock *SP*
Richard Rogers *RR*

Dennis Wammack *DW*
Chuck Stough *CPS*
Leon Vick *L*
William Wolf *W.W.*
Elvin Pippert *EP*
Tom Hanchett *TH*

Graphics and Copy Preparation Support

Andy Adams *AA*
Erin Applegate *EA*
Barbara Bolthouse *BB*
Mike Cox *MC*
Pat Dewey *PD*
Barbara Forse *BF*
Evelyn Franks *EF*

Netha Mayberry *NM*
Christine Rizzo *CR*
Lela Stewart *LS*
James Wilkinson *JW*
Marcy Kennedy *MK*
Margaret Jones *MJ*
Gary Green *GG*

The CSM and LM Attitude information is taken from the document, "Operational Lunar Orbit Attitude Sequence for Apollo 17".

Consumable Analysis data were prepared by the Consumables Analysis Section of the Mission Planning and Analysis Division.

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ABBREVIATIONS

ix

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 (S0-368)
CIN	color interior (S0-168)
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
CPLLE	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 transfer 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 ₂ O	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
REFSMAT	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	subsattellite
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

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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 S0368 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, IYL 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; IYL 8 representing 8 sec between frames and IYL 20 representing 20 sec between frames. Ten frames have been allotted for this sequence.

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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.

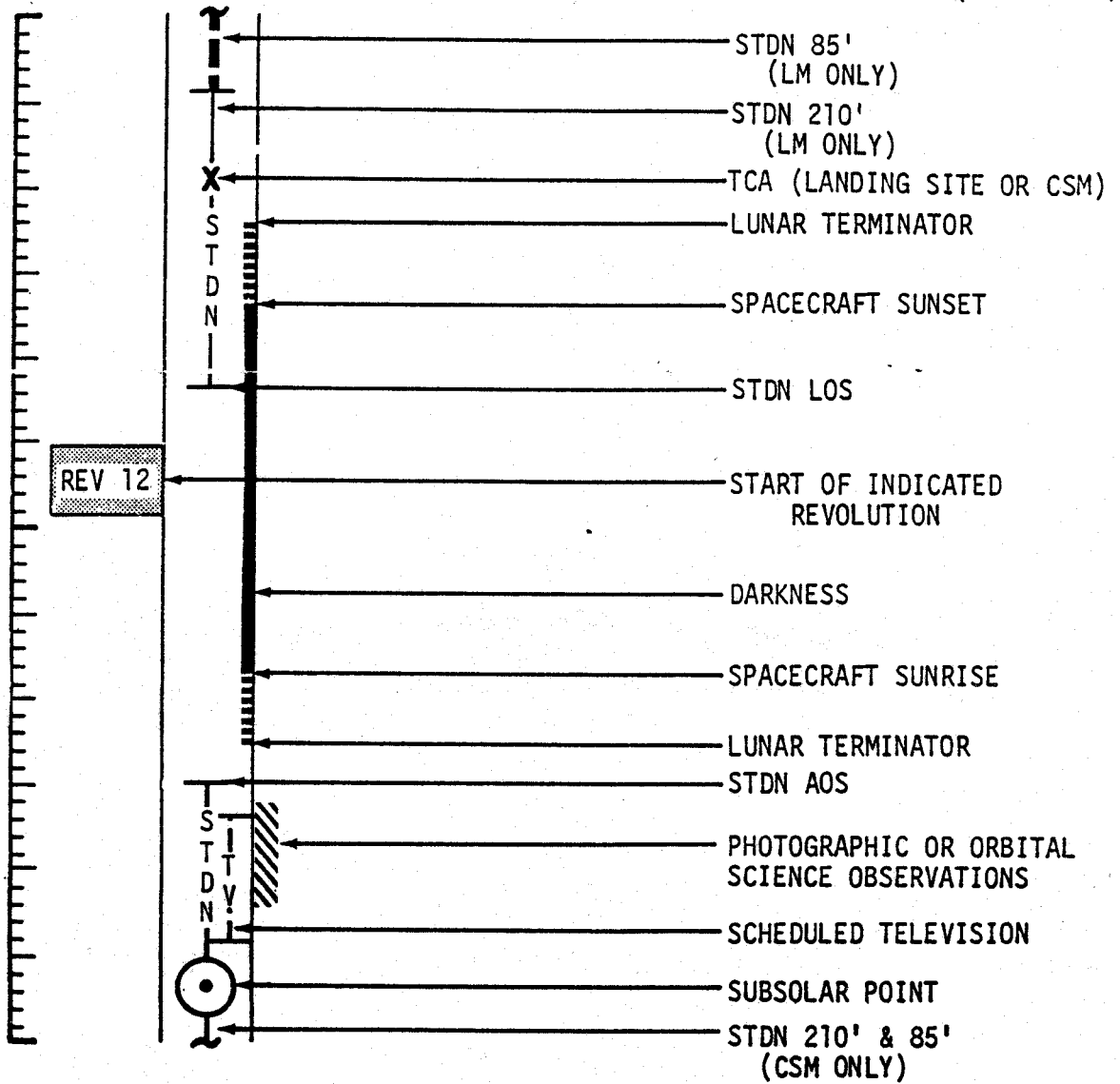
NIKON (NK) Two positions

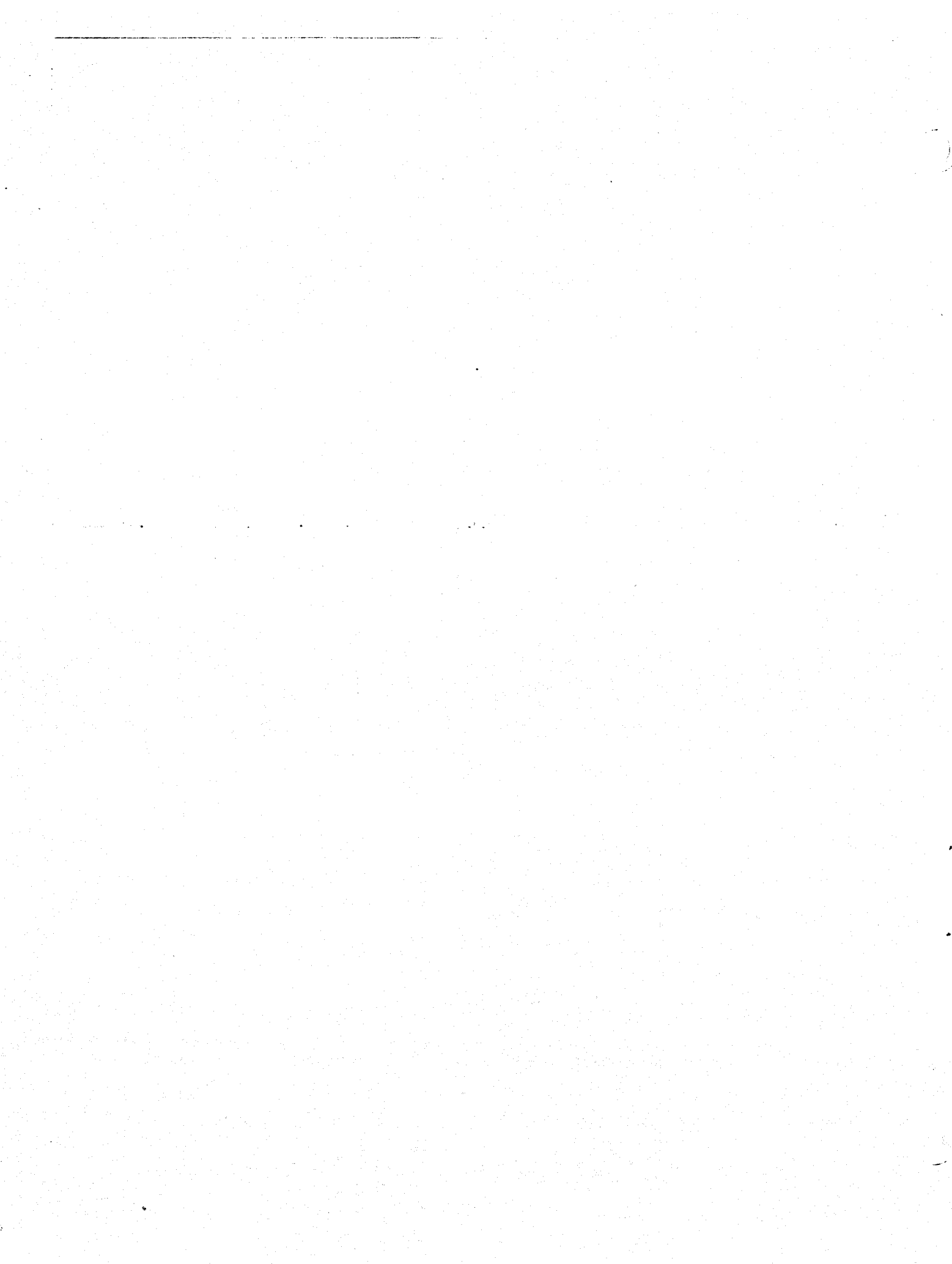
parallel to +X axis

+X axis +30° (in X-Z plane)

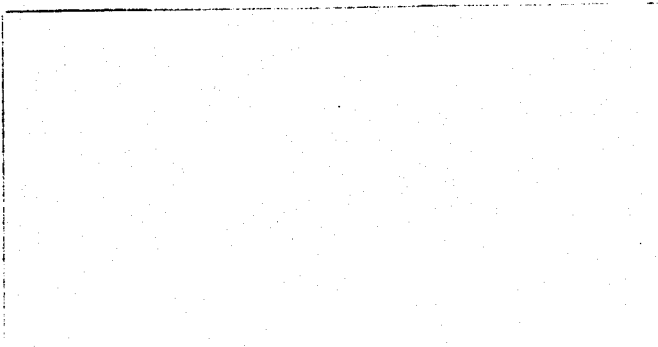
SYMBOL NOMENCLATURE

SIM EXP STATUS
(A B C D E)
(F G H I J)





SECTION 1 - FLIGHT PLAN NOTES



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1-1

FLIGHT PLAN NOTES

I. Crew

A. Crew designations are as follows:

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

B. The nominal CM couch positions are:

<u>Activity</u>	<u>Left</u>	<u>Center</u>	<u>Right</u>
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 black-out.
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

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- (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 CO₂ 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% O₂ and 40% N₂. 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 O₂ 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)

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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, Udata)
 - (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 O₂ 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 O₂ in order to enrich the LM atmosphere. CSM O₂ is used to repressurize the LM for the second and third entries.
2. LM O₂ 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

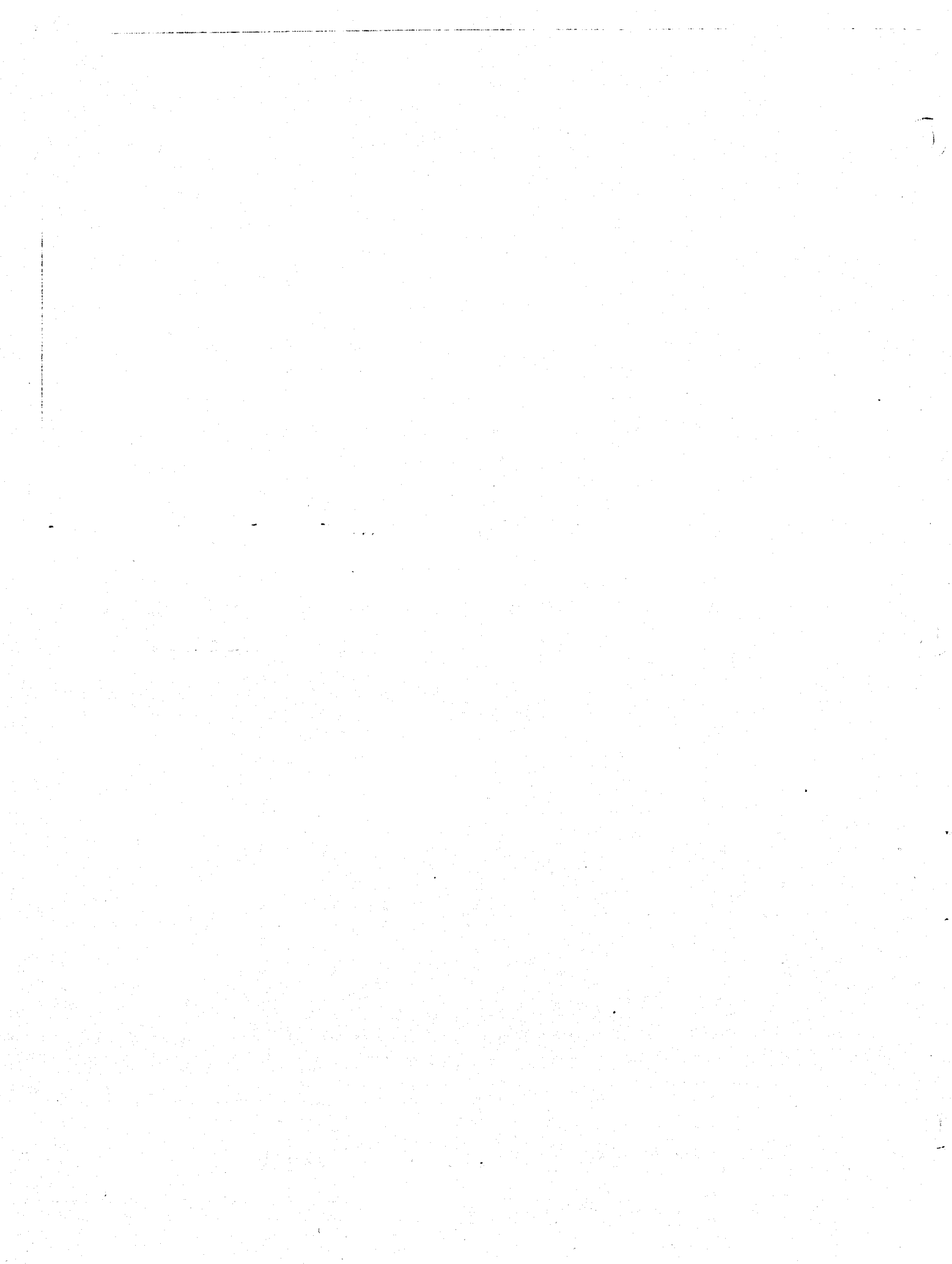


TABLE 2-1
(12/6)

SUIT WEARING SCHEDULE

ACTIVITY	PRESSURIZED (HARD SUIT)	SUITED (SOFT SUIT)	PARTIAL SUIT WITH- OUT 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*

<u>GET (HR:MIN)</u>	<u>CDR</u>	<u>CMP</u>	<u>LMP</u>
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

8/28/72

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

* 210 FT DISH ANTENNA

TABLE 2-3 (CONT)

REF	GET AT START OF REV	GOLDSTONE (GDS)		*PARKS (PKS)		HONEYSUCKLE (HSK)		MADRID (MAD)		*GOLDSTONE (MAR)	
		AOS	LOS	AOS	LOS	AOS	LOS	AOS	LOS	AOS	LOS
LO1	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

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TABLE 2-3 (CONT)

REF	GET AT START OF REV	GOLDSTONE (GDS)		*PARKS (PKS)		HONEYSUCKLE (HSK)		MADRID (MAD)		*GOLDSTONE (MAR)	
		AOS	LOS	AOS	LOS	AOS	LOS	AOS	LOS	AOS	LOS
LOI	88:56										
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				
47	179:20							177:46	179:00		
48	181:18							179:45	180:58		
49	183:17							181:43	182:57		
50	185:16	185:40	186:54					183:42	184:56		
51	187:14	187:39	188:53					185:41	186:55	185:49	186:54
52	189:13	189:38	190:52					187:39	188:53	187:39	188:53
53	191:12	191:36	192:50					189:38	190:41	189:38	190:52
54	193:10	193:35	194:49			192:39	192:50			191:36	192:50
55	195:09	195:34	196:48	195:33	196:47	193:34	194:48			193:35	194:49
56	197:08	197:32	198:28	197:32	198:46	195:33	196:47			195:34	196:48
57	199:06			199:31	200:45	197:32	198:46			197:32	197:54
58	201:05					199:31	200:45				
59	203:04					201:29	202:44	202:04	202:43		
60	205:03					203:28	203:49	203:28	204:42		
61	207:01							205:27	206:41		
62	209:00	209:52	210:38					207:25	208:34		
63	210:59	211:22	212:36					209:24	210:38	210:24	210:38
64	212:58	213:21	214:35					211:23	212:37	211:22	212:36
65	214:56	215:20	216:34					213:21	214:36	213:21	214:35
66	216:55	217:19	218:33					215:20	215:51	215:20	216:34
67	218:54	219:17	220:32			217:46	218:32			217:19	218:33
68	220:53	221:16	222:30	221:15	222:30	219:17	220:31			219:17	220:32
69	222:51	223:15	223:35	223:14	224:29	220:53	221:15			221:16	222:30
70	224:50			225:13	225:34	223:14	224:29				
71	226:49					225:13	226:27				
72	228:48					227:12	228:26	227:12	228:25		
73	230:46							229:10	230:24		
74	232:45							231:09	232:23		
75	234:44	235:06	236:20					233:08	234:22		
TEI	236:43	236:53	248:11					235:07	236:21	235:06	236:20
								236:53	240:51	236:52	247:40

* 210 FT ANTENNA

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TABLE 2-4
(12/6)

APOLLO 17 TV SCHEDULE

<u>DAY</u>	<u>DATE</u>	<u>CST</u>	<u>GET (HR:MIN)</u>	<u>DURATION (HR:MIN)</u>	<u>ACTIVITY SUBJECT</u>	<u>VEHICLE</u>	<u>STATION</u>
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 (HR:MIN)	O ₂ FC PURGE		H ₂ FC PURGE		WASTE H ₂ O DUMP		URINE COLLECTION PERIODS			URINE DUMP	
	NO	ΔT (HR:MIN)	NO	ΔT (HR:MIN)	NO	ΔT (HR:MIN)	GET		ΔT	NO	ΔT (HR:MIN)
							START	STOP			
*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

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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)

L10H CANISTER CHANGE SCHEDULE

CSM L10H 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 L10H CANISTER CHANGE: GET (HR:MIN) 137:30 AND 172:55

TOTAL CM L10H 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

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TABLE 2-9
(12/6)

CSM BURN/EVENT SCHEDULE

BURN/ EVENT	GET I(HR:MIN)/ BURN TIME	Δ VT (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	Δ VT (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

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TABLE 2-10

APOLLO 17 LM DSEA

<u>ACTIVITY</u>	<u>MODE</u>	<u>GET (HR:MIN)</u>	<u>TAPE USED* (HR:MIN)</u>	<u>ACCUM. TAPE USED (HR:MIN)</u>
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	Δ VT (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

<u>DATA</u>	<u>GET UPDATE (HR:MIN)</u>	<u>GETI (HR:MIN)</u>	<u>PAD TYPE</u>
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
<u>PREL</u>			
TEI 75	229:58	236:41	COMPLETE P-30
<u>NOM</u>			
TEI 75	235:32	236:41	COMPLETE P30
<u>ONE REV LATE</u>			
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 ($\lambda=166^\circ\text{W}$)
2. Pass FLYBY early if pericyynthion 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.

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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 HRS:MIN	O ₂ HTRS 1,2,&3		H ₂ HTRS 1&2		H ₂ FANS 1,2,&3		
	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 O₂ tanks 1 & 2

***Open 50W cb in O₂ tanks 1, 2, & 3.

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TABLE 2-15
(12/6)

LUNAR SOUNDER SCHEDULE

REV	TARGET	GET		LONGITUDE		FILM HR:MIN
		START	STOP	START	STOP	
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, SERENI- TATIS, 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		
CSM							
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		
CSM							
CAMERA:	DAC	FILM:	CEX	MAGAZINE:	CC	CAPACITY:	100%
GET	REV	TARGET	FILM USED	FILM REMAINING	REF		
110:27	12	UNDOCKING	100%	0%	OPS		
CSM							
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%			
CSM							
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		
CSM							
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		
CSM							
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		
CSM							
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

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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	SNIADOCKI	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	28	PIERCE	88 FR	72 FR	OS		
157:35	36	MARE INGENIT	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	61	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		UNSCHEДУLED	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		UNSCHEДУLED	0 FR	40 FR	

TABLE 2-16

APOLLO 17 FILM BUDGET

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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

10/23/72

2-25

TABLE 2-17

MC/LA OPERATIONSNOTE: 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°E	90°E	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

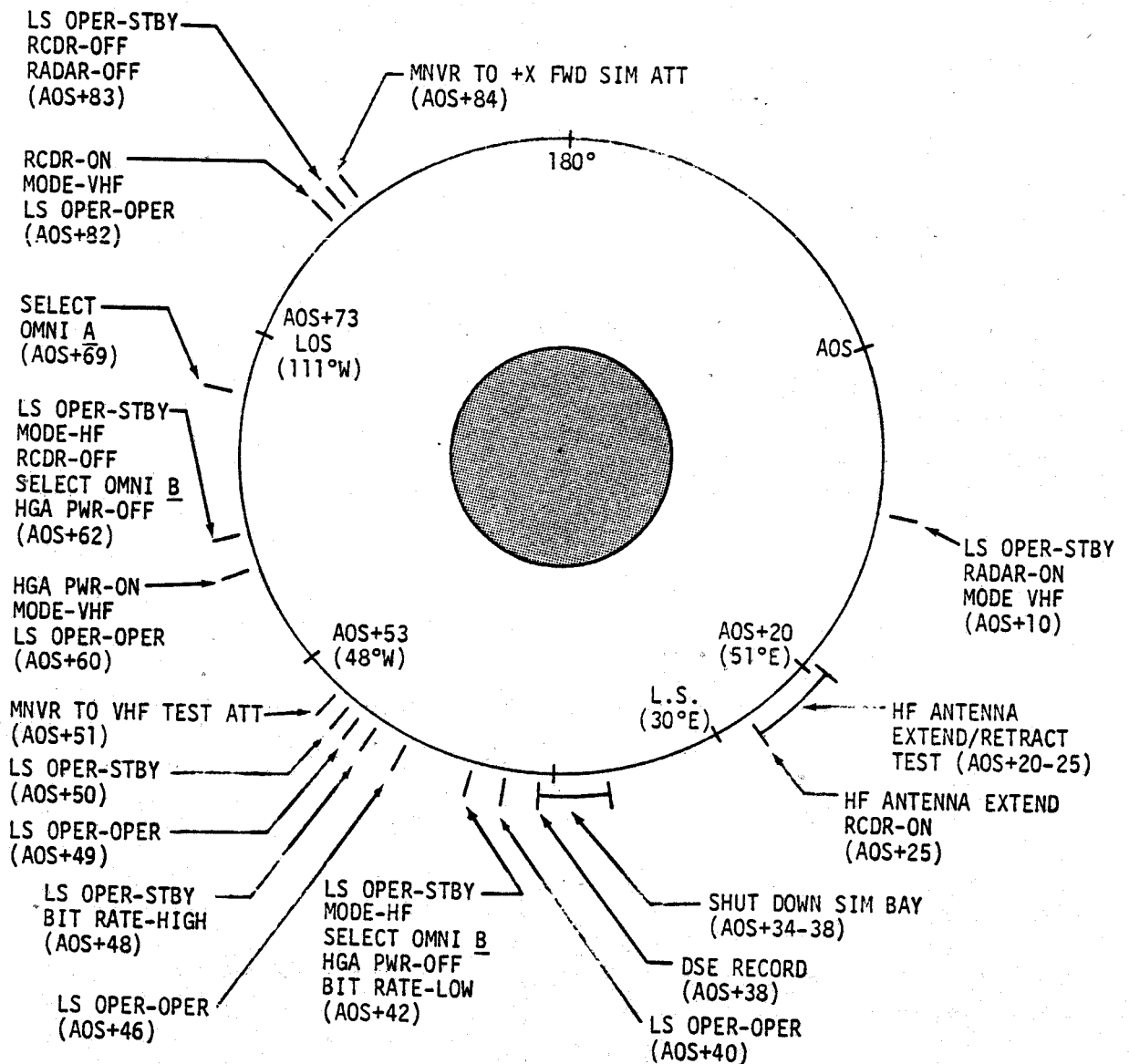
2-26

10/23/72

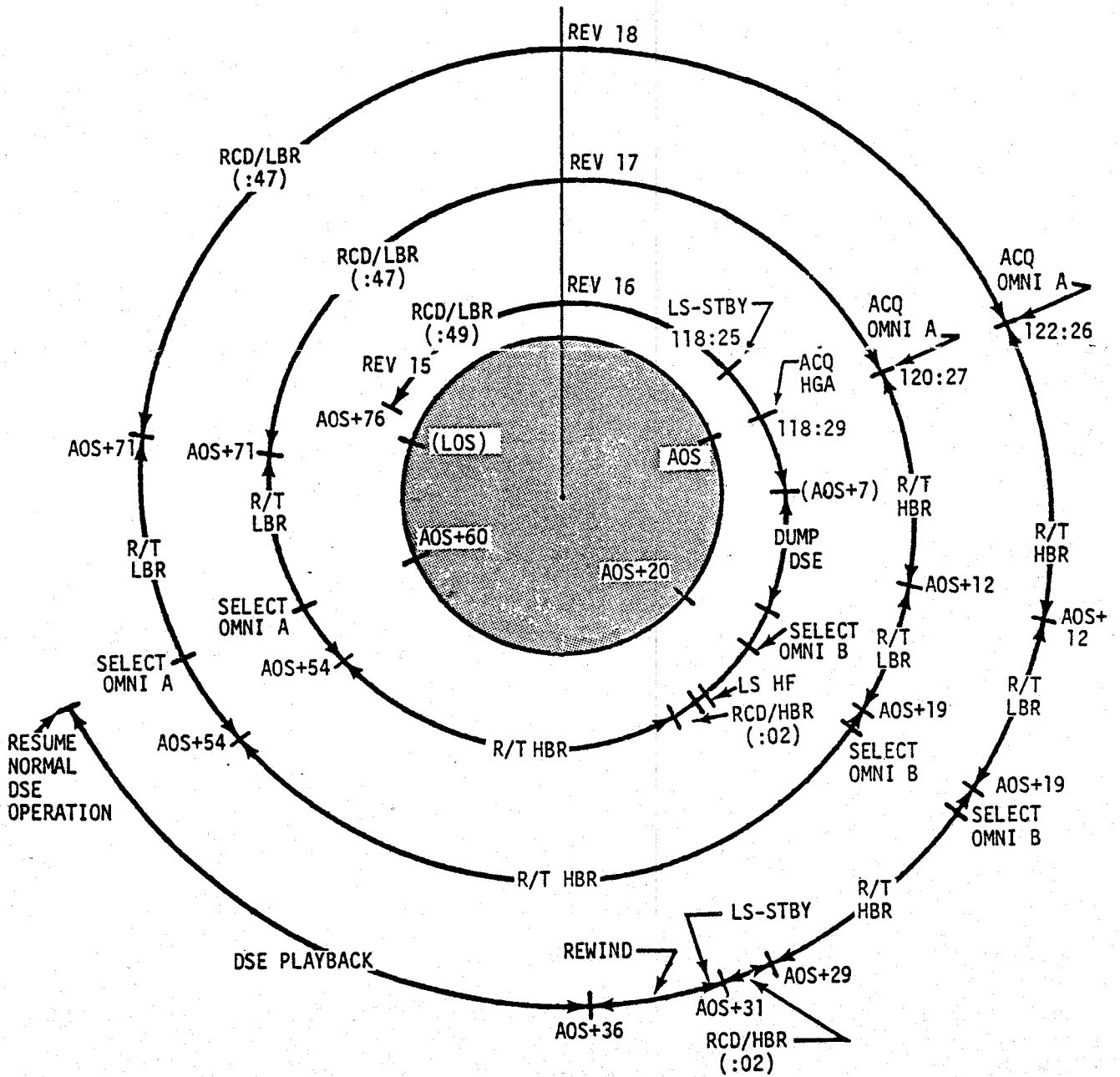
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CHART 2-1
(12/6)

LUNAR SOUNDER EMI TEST
REV 14
FILM USED: 5 MIN



LUNAR SOUNDER HF MODE
REVS 16, 17, 18
FILM USED - 245 MIN



10/23/72

CHART 2-3
(12/6)

2-29

LUNAR SOUNDER VHF MODE
REVS 24, 25, 26, 27
FILM USED - 245 MIN

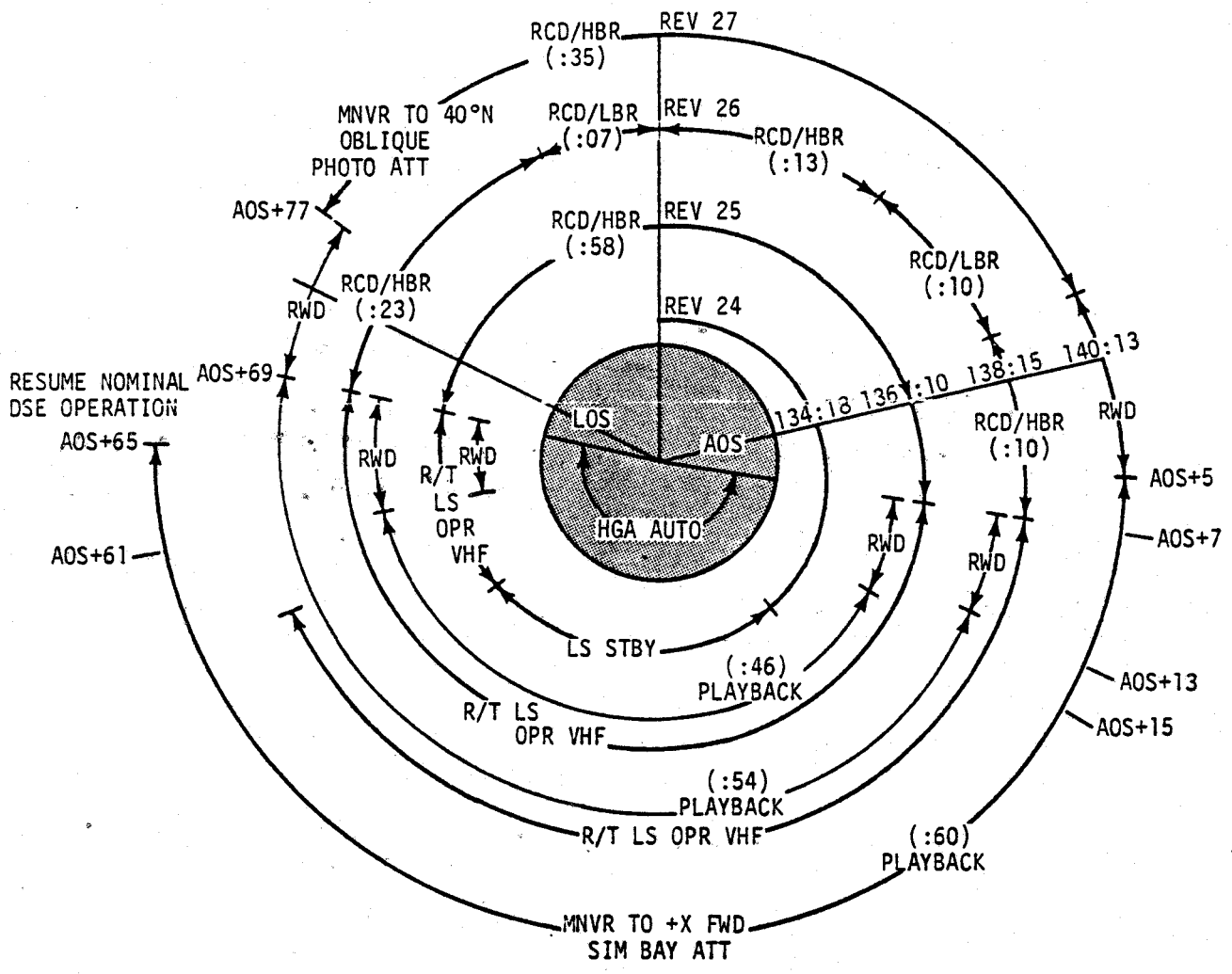


CHART 2-4
(12/6)
LUNAR SOUNDER RECEIVE ONLY (SEP-ON)
REVS 39, 40, 41

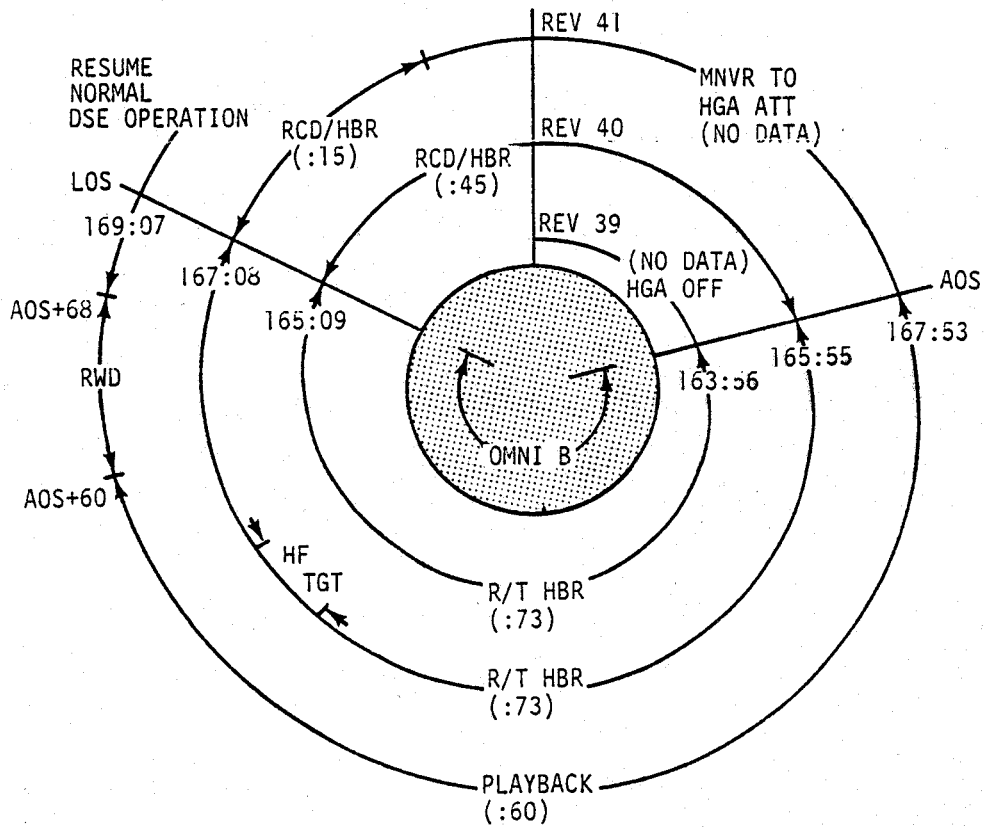
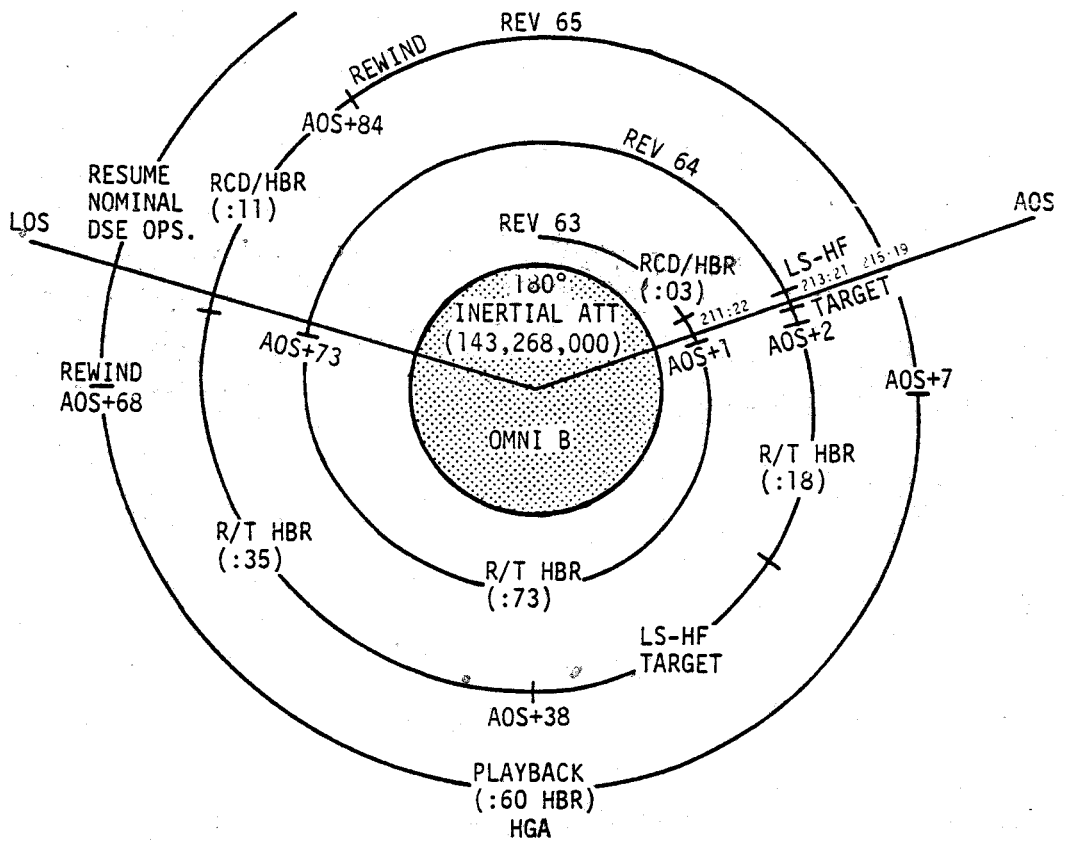
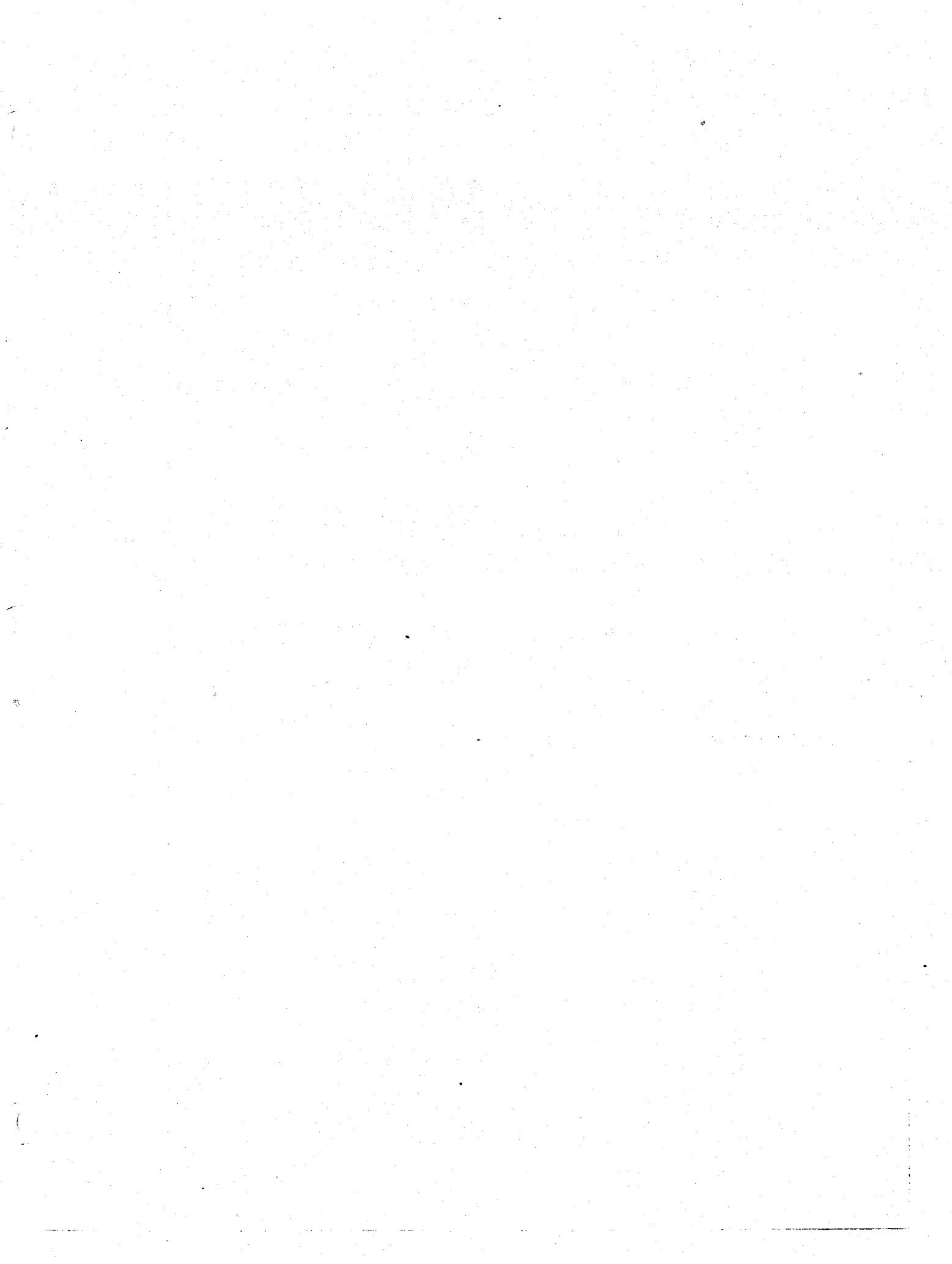


CHART 2-5
(12/6)
LUNAR SOUNDER - RECEIVE ONLY (SEP-OFF)
REVS 63, 64, 65





SECTION 3 - DETAILED TIMELINE



FLIGHT PLAN

MCC-H

2053 CST

NOTES

00:00
(31102)
(01111)

:10

:20

00:30

:40

:50

01:00

S
T
D
N

C
Y
I

C
R
O

LIFT-OFF DEC 6, 1972 CSM LAUNCH CHECKLIST

BOOST PAGE L/2-7 - C-1

SECO

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

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

P52 (OPTION 3)
(LAUNCH ORIENT)

GDC ALIGN

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

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

UPDATE
Z TORQUING ANGLE

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

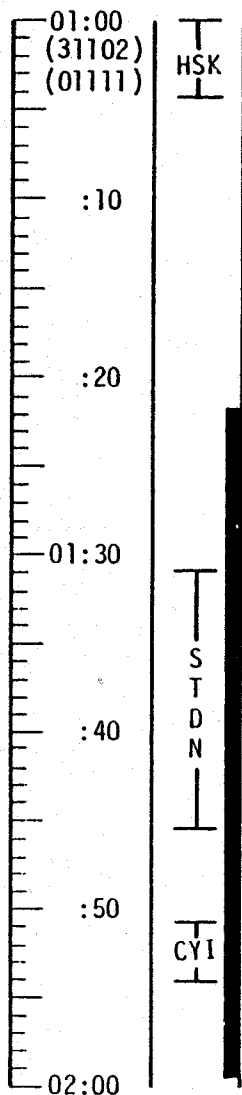
FLIGHT PLAN

MCC-H

2153 CST

NOTES

CMD
DUMP DSE
UPDATE
TLI +90 MIN ABORT
PAD
P37 (L/0+9) PAD



EXTEND DOCKING PROBE PAGE L/2-18

P52 (OPTION 3)
(LAUNCH ORIENT)

GDC ALIGN
REPORT: GYRO TORQUING ANGLES

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

02:00
(31102)
(01111)

:10

:20

02:30

:40

:50

03:00

CRO

HAW

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

UPDATE
GO/NO-GO FOR PYRO
ARM
TLI PAD

UPLINK
CSM S.V. & V66

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

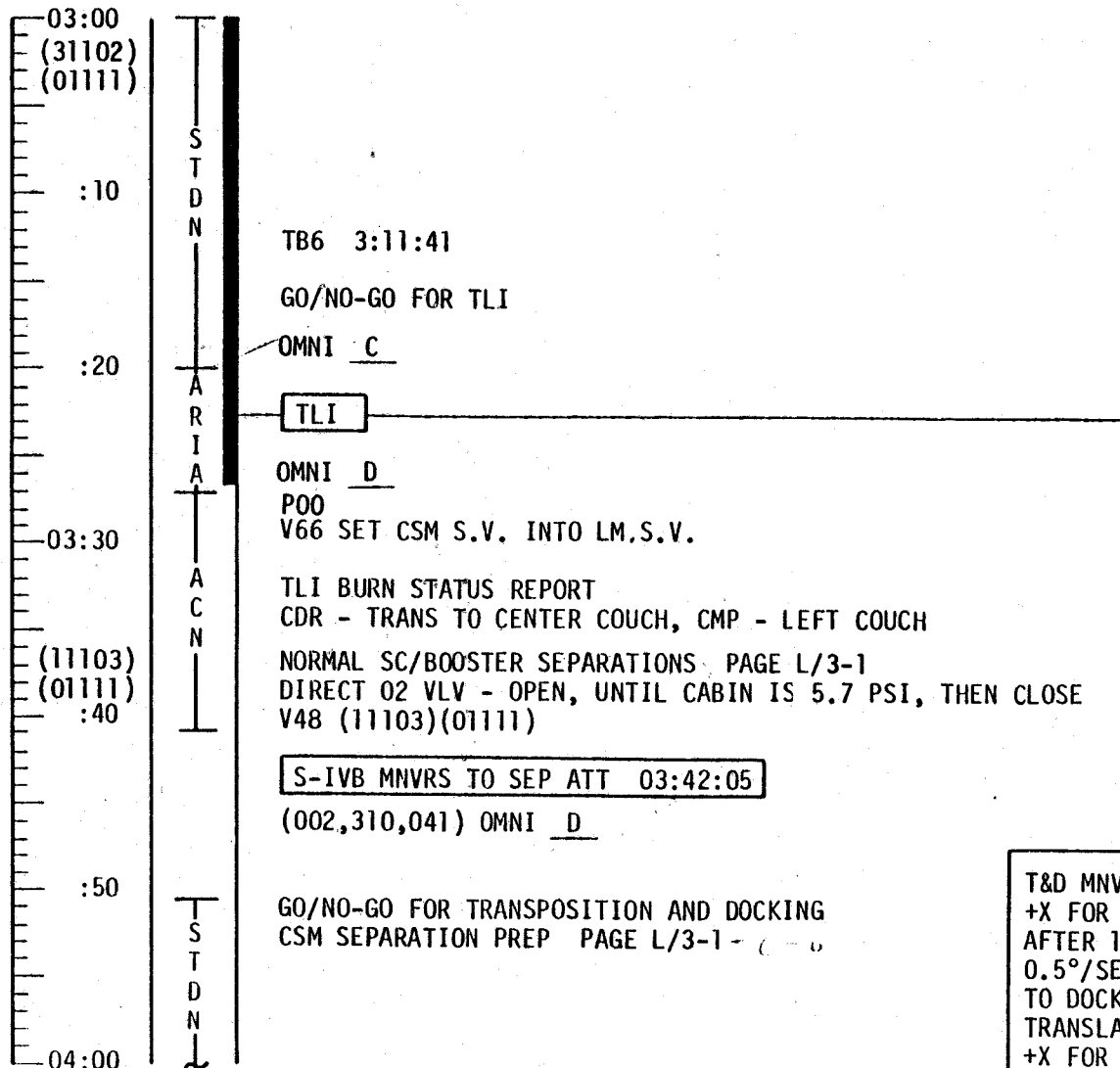
MCC-H

2353 CST

NOTES

UPDATE
GO/NO-GO FOR TLI

UPDATE
GO/NO-GO FOR T&D



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

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

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)

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 PLAN

NOTES

MCC-H

0053 CST

04:00
 (11103)
 (01111)
 :10
 (11102)
 (01111)
 :20
 04:30
 :40
 (21101)
 (1111)
 :50
 05:00

T

 TV

 S
 T
 D
 N

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

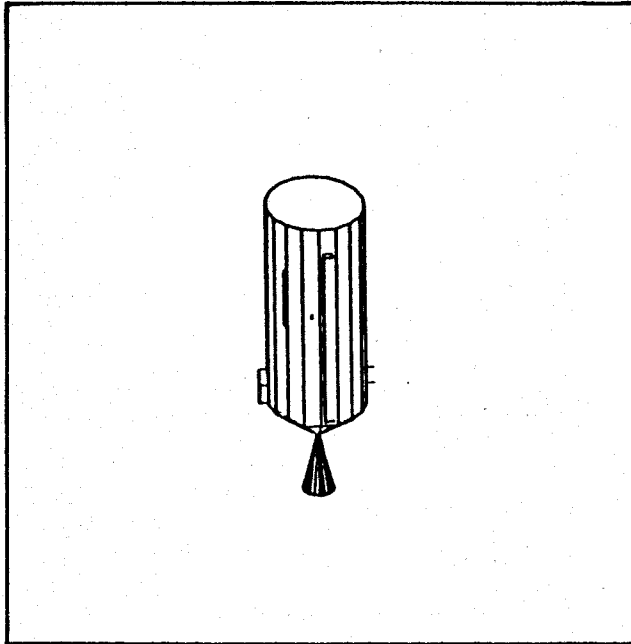
FLIGHT PLANNING BRANCH

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FLIGHT PLAN

GET 05:10

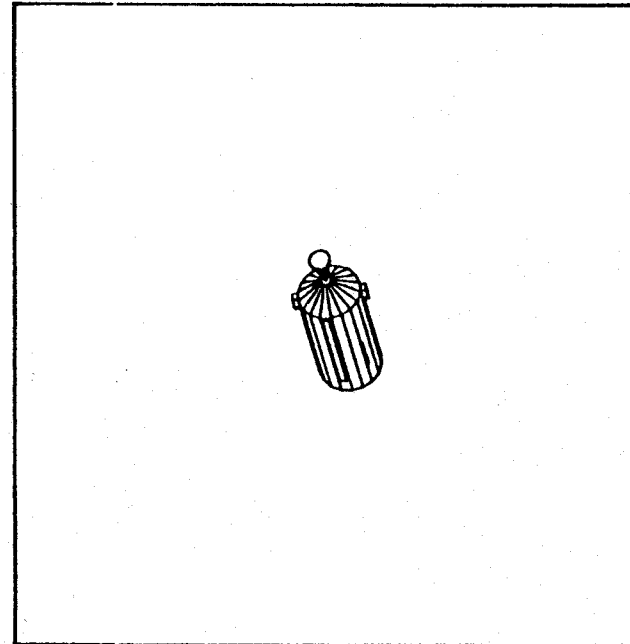
FOV 5°



S-IVB APS EVASIVE INITIATION

GET 05:31

FOV 1°



S-IVB LOX DUMP INITIATION

FLIGHT PLAN

MCC-H

0153 CST

NOTES

TLI CUTOFF +
1 HR 40 MIN

UPDATE
GO FOR S-IVB YAW
MNVR INITIATION

UPDATE
GO/NO-GO FOR S-IVB
EVASIVE BURN

05:00
(21101)
(1111)
:10
:20
(21111)
(1111)
05:30
:40
:50
06:00

S
T
D
N

P47 THRUST MONITOR
PHOTOGRAPH LM EJECTION, MAG. (AA,NN)

CSM/LM EJECTION 05:07

POO, 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

S-IVB YAW MNVR 05:20 (GROUND COMMAND)

REPORT: GO FOR S-IVB EVASIVE BURN

V48 (21111)(1111)

S-IVB APS EVASIVE BURN 05:30 (GROUND COMMAND)

REPORT: LM/CM ΔP
INSTALL CABIN FAN FILTER (U2)

CSM SYSTEMS CHECKLIST

DEACTIVATE PRIMARY EVAP PAGE S/1-16

S-IVB MNVRS TO PROPELLANT DUMP ATT 05:40

VHF A SIMPLEX - OFF
WASTE STOWAGE VENT VALVE - VENT (VERIFY)

S-IVB CONTINUOUS H₂ VENT - ON 05:47

S-IVB LOX DUMP 05:51

DOFF PGA'S
TRANSFER ITEMS OUT OF PGA POCKETS
TRANSFER PRD TO CWG
CMP & LMP DOFF BIOMED HARNESS
DUMP UCTA

SPRING ACTUATOR ΔV
~0.8 FPS. 5 SEC AFTER
EJECTION THERE IS A
4 JET RCS -X TRANSLA-
TION FOR 3 SEC (ΔV
~ 0.4 FPS) TOTAL ΔV
~ 1.2 FPS.

THE MNVR TO ACQUIRE
THE S-IVB WILL BE
PERFORMED AT 0.2°/SEC
AND WILL BE INITIATED
AFTER GOOD EJECTION
IS VERIFIED.

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

EVASIVE BURN ΔV
~9.4 FPS

LOX DUMP ΔV ~28 FPS

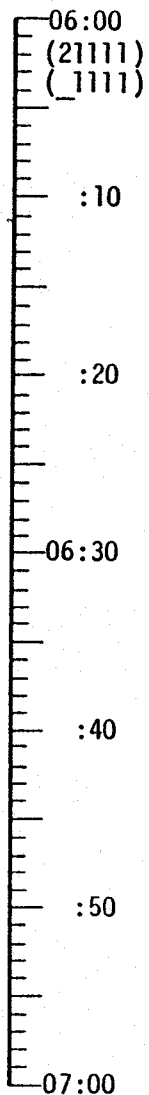
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	05:00 - 06:00	1/TLC	3-9

FLIGHT PLAN

MCC-H

0253 CST

NOTES



06:00
(21111)
(1111)

:10

:20

06:30

:40

:50

07:00

S
T
D
N

DOFF PGA'S

S-IVB APS MCC-1
GET ~ 06:35
 $\Delta V \sim 30$ FPS

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

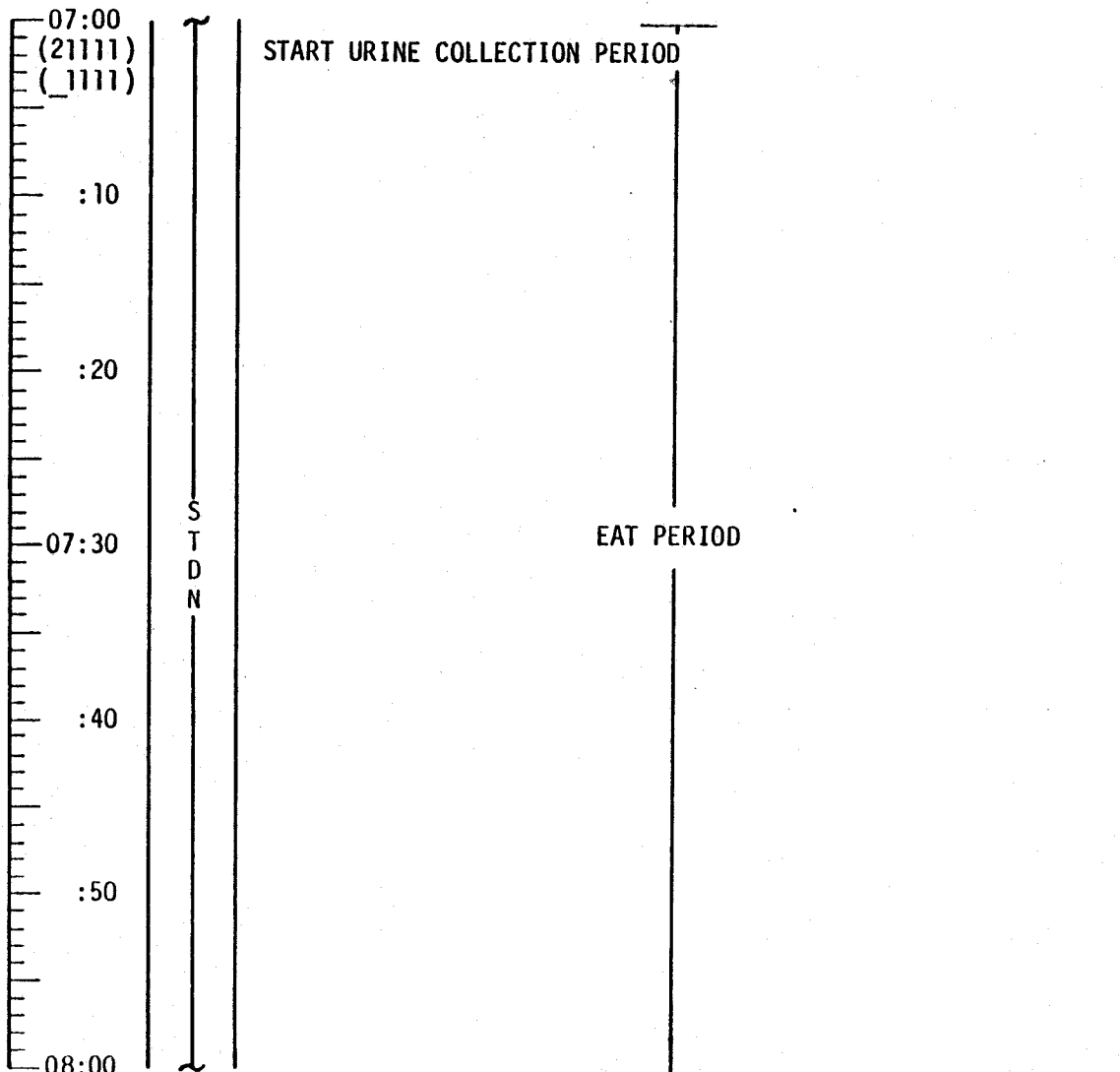
FLIGHT PLANNING BRANCH

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 PLAN

MCC-H 0453 CST

NOTES

UPLINK
ZERO TRUNNION BIAS
DESIRED ORIENT (PTC)

08:00
(21111)
(_1111)

:10

:20

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

(21101)
(_1111)
08:30

:40

:50

09:00

S
T
D
N

WASTE STOWAGE VENT VALVE - CLOSE

LIMIT CYCLE - ON
ATT DEADBAND - MIN

STARS _____, _____

RATE - LOW
BMAG (3) - ATT 1/RATE 2

SA _____, _____

SC CONT - SCS
P52 (OPTION 3)

TA _____, _____

(LAUNCH ORIENT)

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

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)

PTC

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

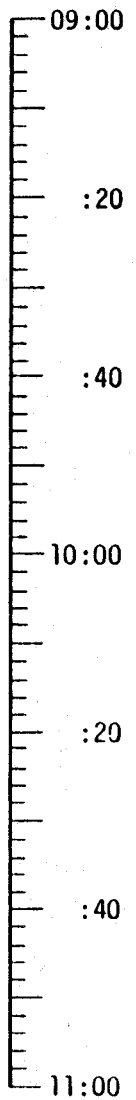
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0553 CST

NOTES



S
T
D
N

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

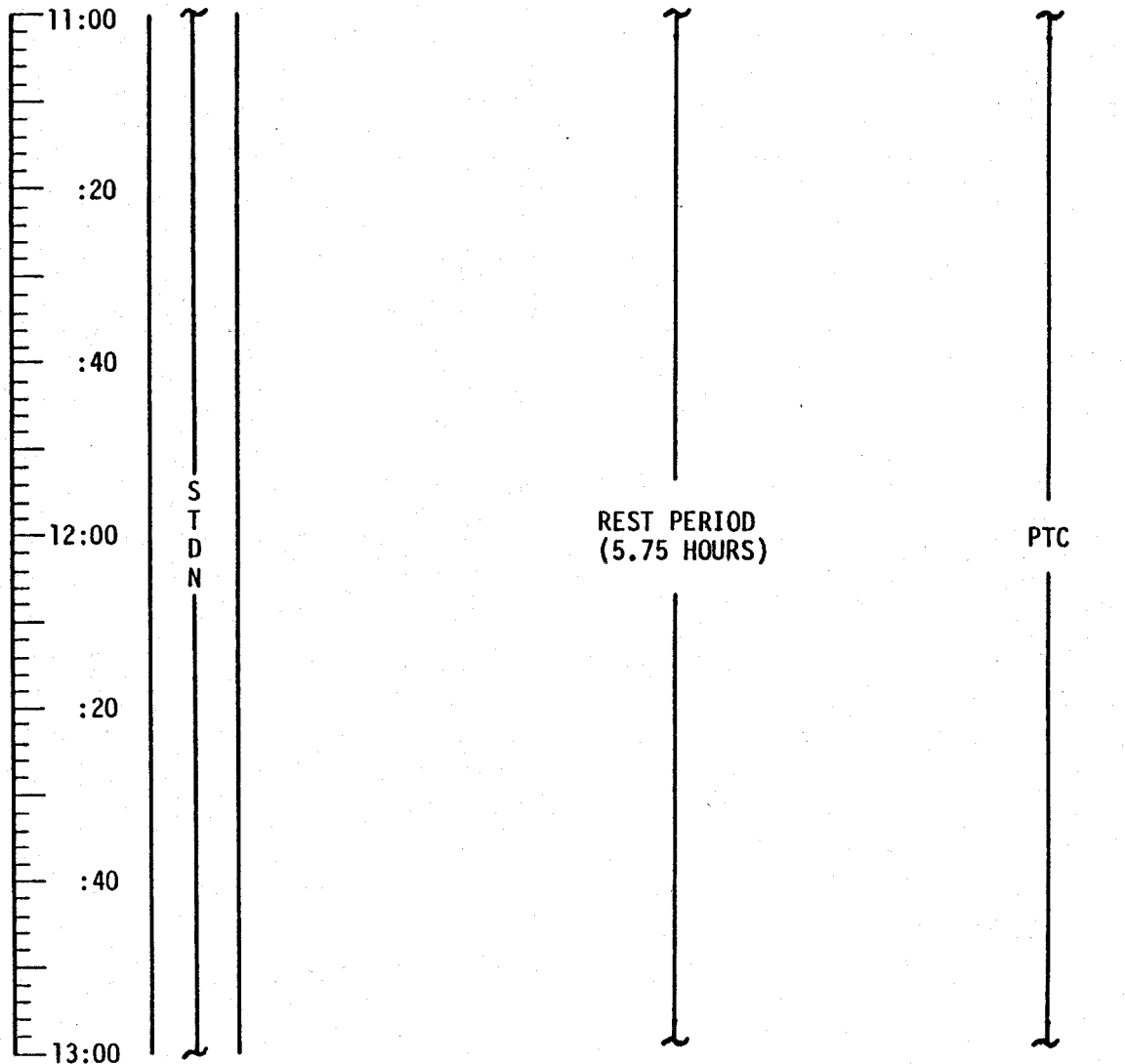
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0753 CST

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

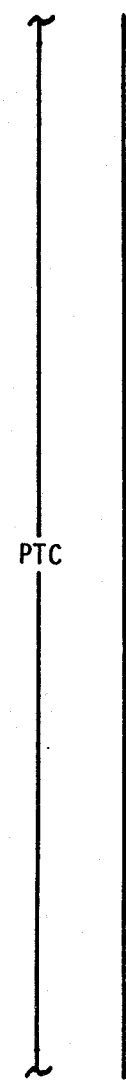
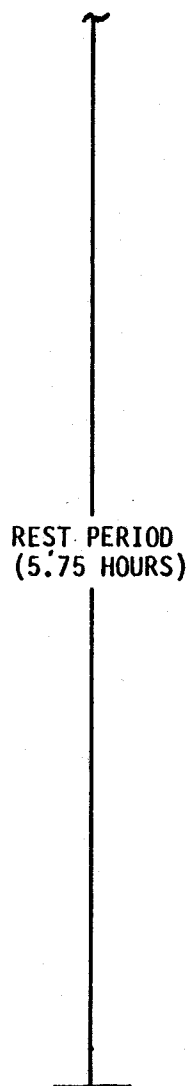
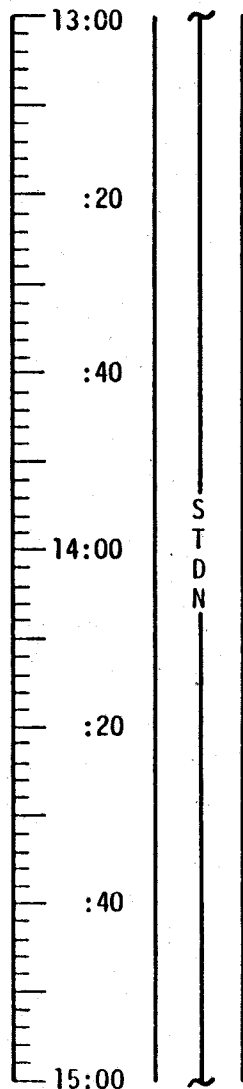
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0953 CST

NOTES



DAP LOAD STATUS
(21101)(_1111)

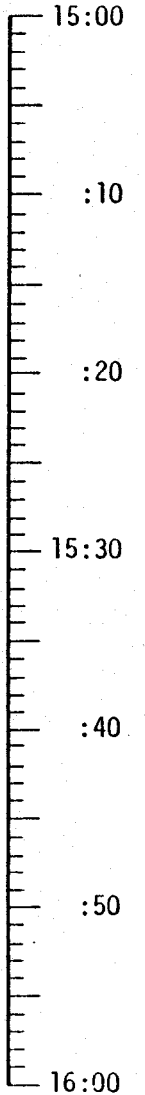
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	13:00 - 15:00	1/TLC	3-15

FLIGHT PLAN

MCC-H

1153 CST

NOTES



S
T
D
N

CSM SYSTEMS CHECKLIST

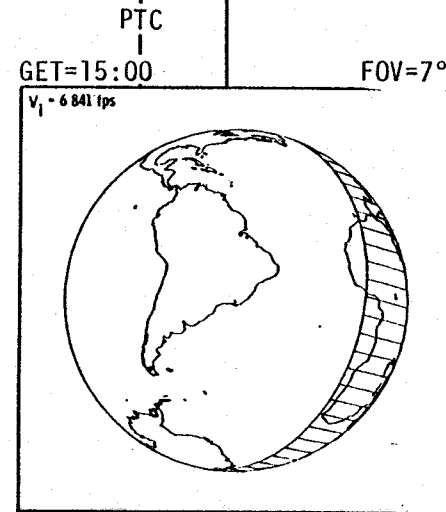
POST-SLEEP CHECKLIST PAGE S/1-29

H₂ HEATERS 1&2 - OFF

DAP LOAD STATUS
(21101)(1111)

EARTH DISTANCE
~66,783 NM

EAT PERIOD



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

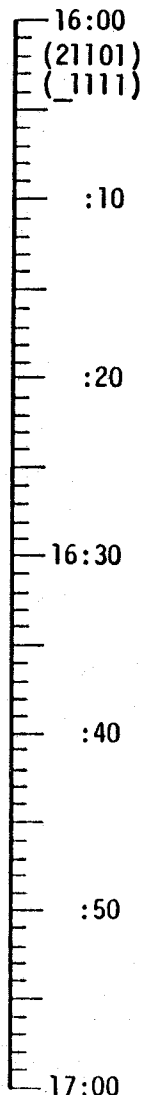
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1253 CST

NOTES



S
T
D
N

EAT PERIOD

PTC

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 VLV - OPEN

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

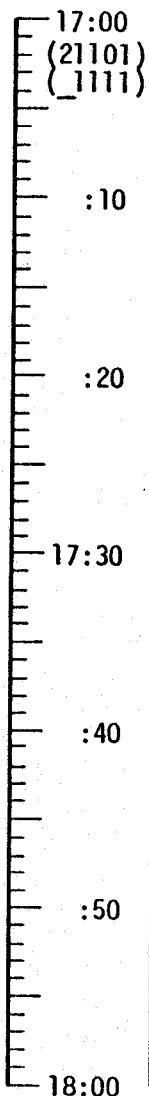
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	16:00 - 17:00	2/TLC	3-17

FLIGHT PLAN

MCC-H

1353 CST

NOTES



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

P23 CISELUNAR 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 CISELUNAR NAVIGATION
5 MARKS ON EACH STAR, UPDATE STATE VECTOR
1. N70 (00000) (00000) (00110)
N88 (-53277)(+14235)(+83420)

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

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

113 MERAK
(ENH)

55 BETELGEUSE
(EFH)

151 GAMMA PRIME
LEONIS
(ENH)

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

S
T
D
N

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

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

O₂ 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

106 MENKALINAN
(EFH)

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 PLAN

MCC-H 1553 CST

NOTES

UPDATE
QUADS TO ENABLE
FOR PTC SPINUP
FLIGHT PLAN

19:00
(21101)
(1111)
:10
:20
19:30
:40
:50
20:00

S
T
D
N

LMP DON BIOMED HARNESS

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)

CHECK LMP BIOMED
CDR DOFF BIOMED HARNESS

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

MAG (KK) _____, FR # _____

PTC

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

20:00
(21101)
(1111)

:10

:20

20:30

:40

:50

21:00

S
T
D
N

EAT PERIOD

PTC

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

FLIGHT PLAN

MCC-H

1753 CST

NOTES

21:00
 (21101)
 (1111)

:10

:20

21:30

:40

:50

22:00

S
T
D
N

PTC

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

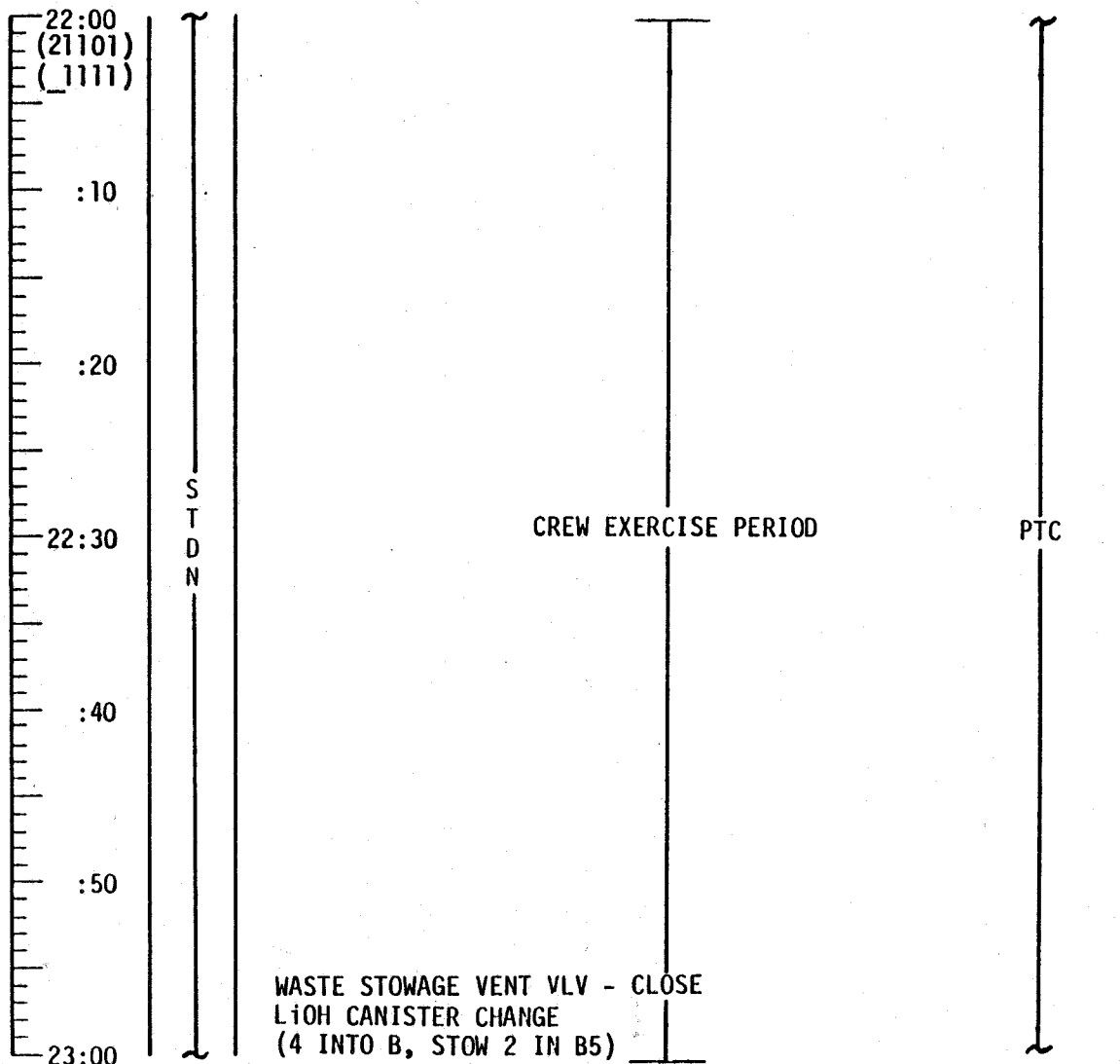
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1853 CST

NOTES



UPDATE
FLIGHT PLAN

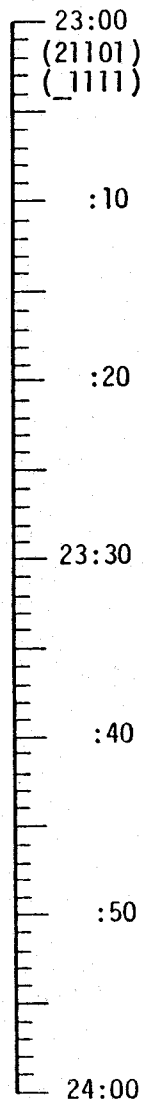
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	22:00 - 23:00	2/TLC	3-23

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1953 CST



S
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P52 OPTION 3
(PTC ORIENT)

REPORT: GYRO TORQUING ANGLES
GDC ALIGN

EAT PERIOD

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	23:00 - 24:00	2/TLC	3-24

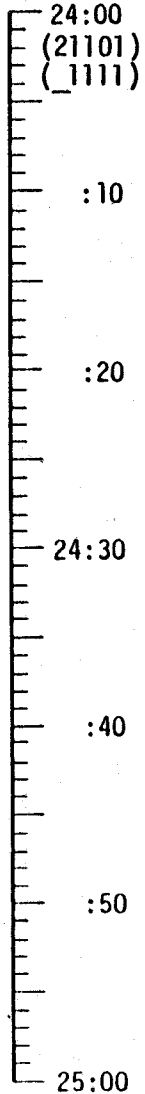
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2053 CST

NOTES



S
T
D
N

EAT PERIOD

CSM SYSTEMS CHECKLIST

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

DAC: HH

PTC

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

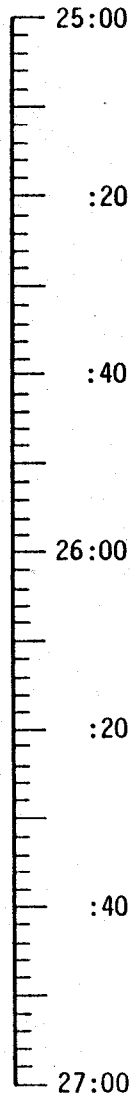
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	24:00 - 25:00	2/TLC	3-25

FLIGHT PLAN

MCC.H

2153 CST

NOTES



S
T
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N

REST PERIOD
(8 HOURS)

PTC

DAP LOAD STATUS
(21101)(_1111)

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

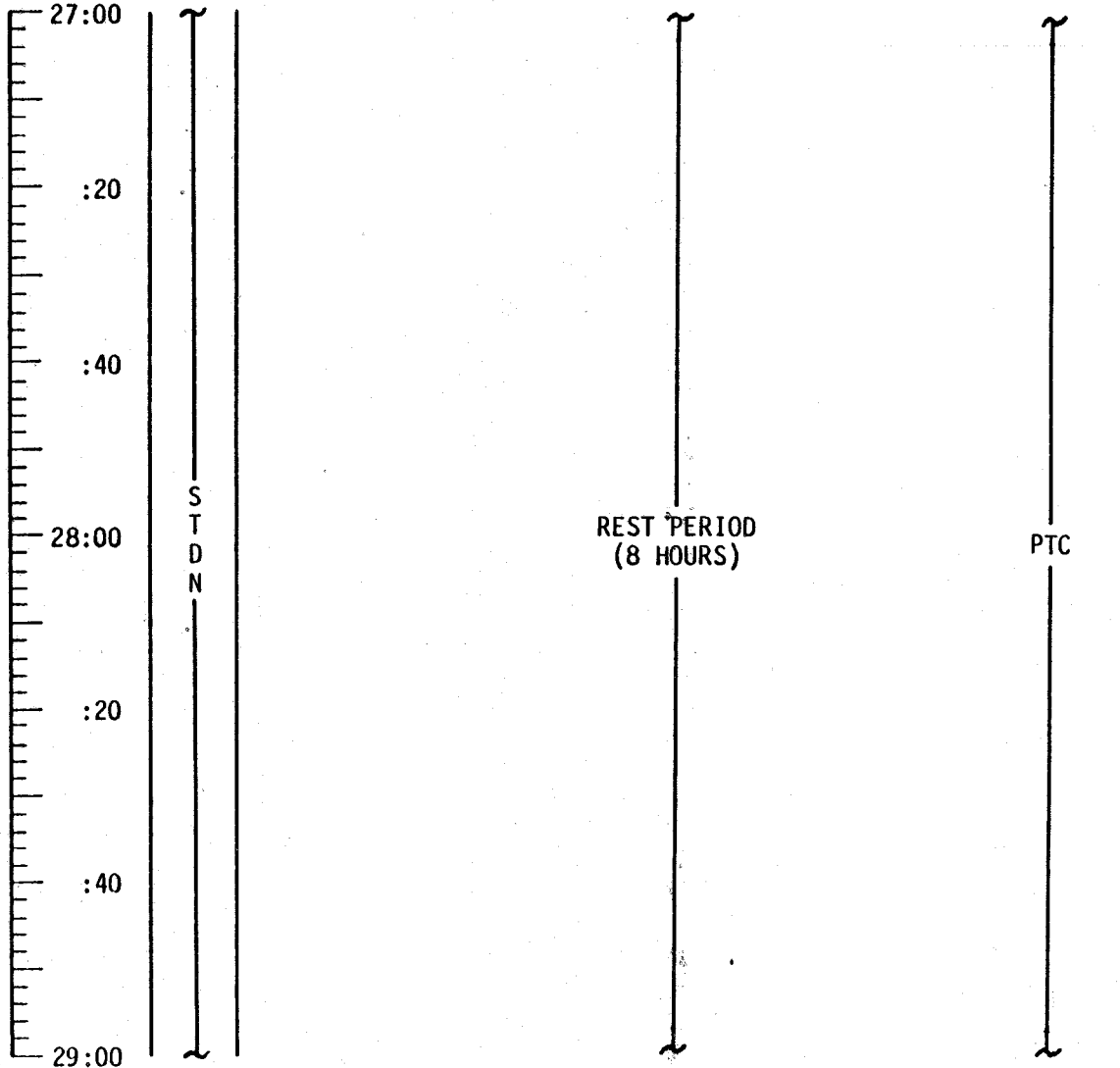
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2353 CST

NOTES



DAP LOAD STATUS
(21101)(1111)

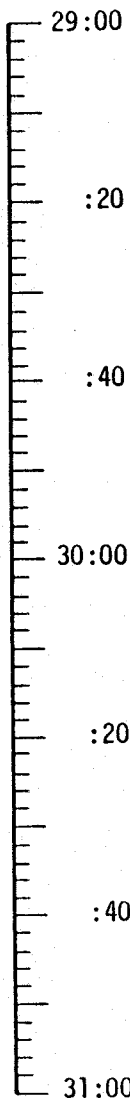
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	27:00 - 29:00	2/TLC	3-27

FLIGHT PLAN

MCC-H

0153 CST

NOTES



S
T
D
N

REST PERIOD
(8 HOURS)

PTC

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

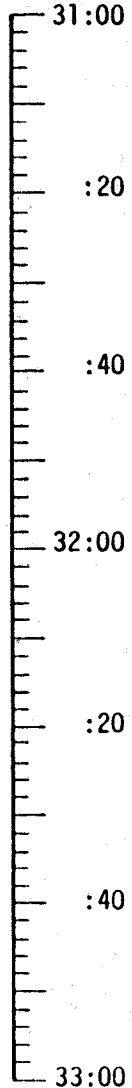
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0353 CST

NOTES



S
T
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N

REST PERIOD
(8 HOURS)

PTC

DAP LOAD STATUS
(21101)(_1111)

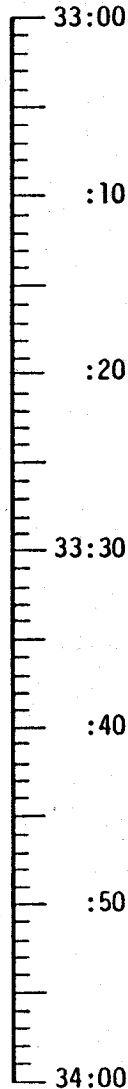
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	31:00 - 33:00	2/TLC	3-29

FLIGHT PLAN

MCC-H

0553 CST

NOTES



CSM SYSTEMS CHECKLIST

POST-SLEEP CHECKLIST PAGE S/1-29

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

DAP LOAD STATUS
(21101)(1111)

EARTH DISTANCE
~121,497 NM

UPDATE
GO/NO-GO FOR MCC-2

***CSM G&C CHECKLIST**

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

*REPORT: BIAS

*PERFORM IF MCC-2
IS REQUIRED

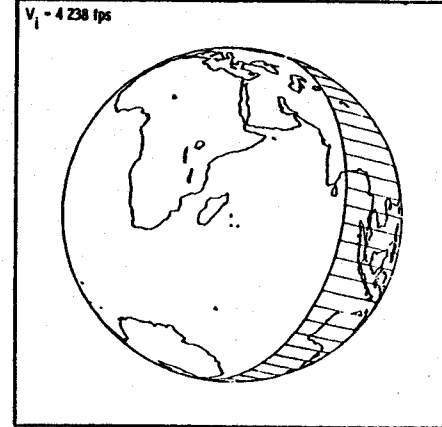
S
T
D
N

EAT PERIOD

PTC

GET=33:00

FOV=4°



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

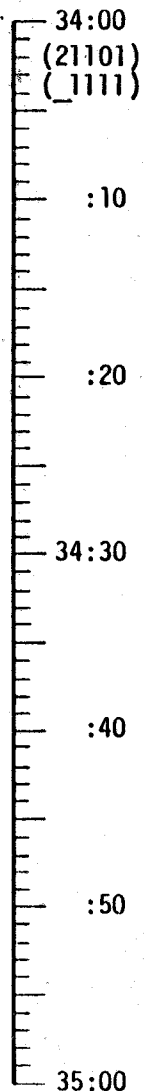
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0653 CST

NOTES



S
T
D
N

EAT PERIOD

CONFIGURE FOR URINE DUMP
H₂ 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

PTC

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

*PERFORM IF MCC-2 IS REQUIRED

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

UPDATE
MCC-2 MNVR PAD
FLIGHT PLAN

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

FLIGHT PLAN

MCC-2 BURN TABLE

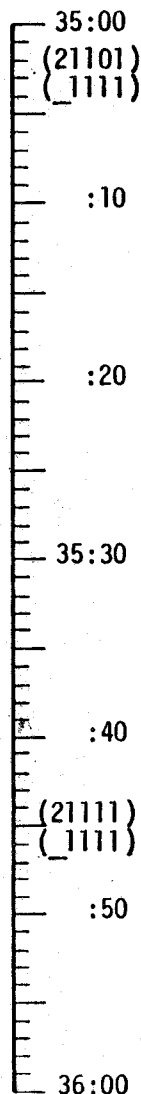
SPS LIMITS	P OR Y RATES	ATT DEVIATION	MANUAL START ACTION	OVERBURN SHUTDOWN CRITERIA	RCS TRIM GUIDELINES
TIGHT	10°/SEC TERMINATE	+10° TERMINATE	NO MANUAL STARTS NO RESTART	BT + 1 SEC	IF < 2 FPS, TRIM X-AXIS TO 0.2 FPS IF > 2 FPS, NO TRIM

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

FLIGHT PLAN

MCC-H

0753 CST



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

H₂ & O₂ 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

- H₂ 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 _{gy}
			●	V _{gz}
			●	ΔV _c
X	X	X		OX
X	X	X		FUEL
X	X	X		UNBAL

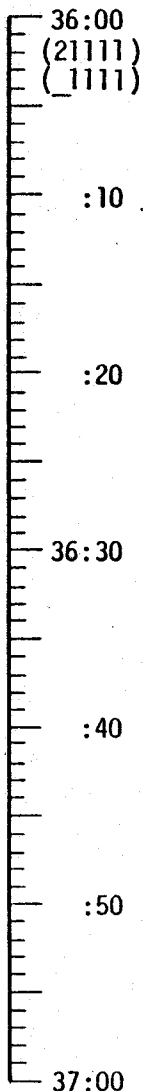
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	35:00 - 36:00	3/TLC	3-33

FLIGHT PLAN

MCC-H

0853 CST

NOTES



S
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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

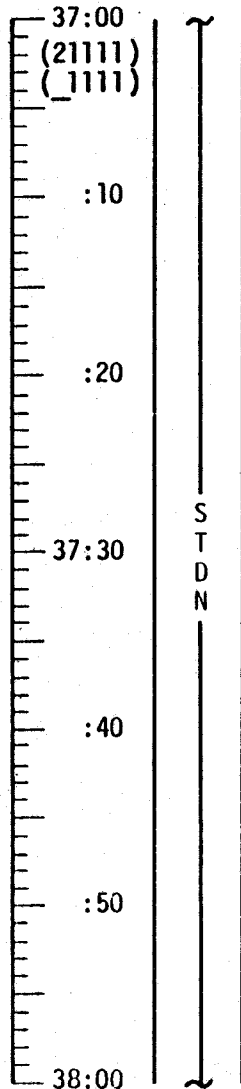
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0953 CST

NOTES



UPDATE
FLIGHT PLAN

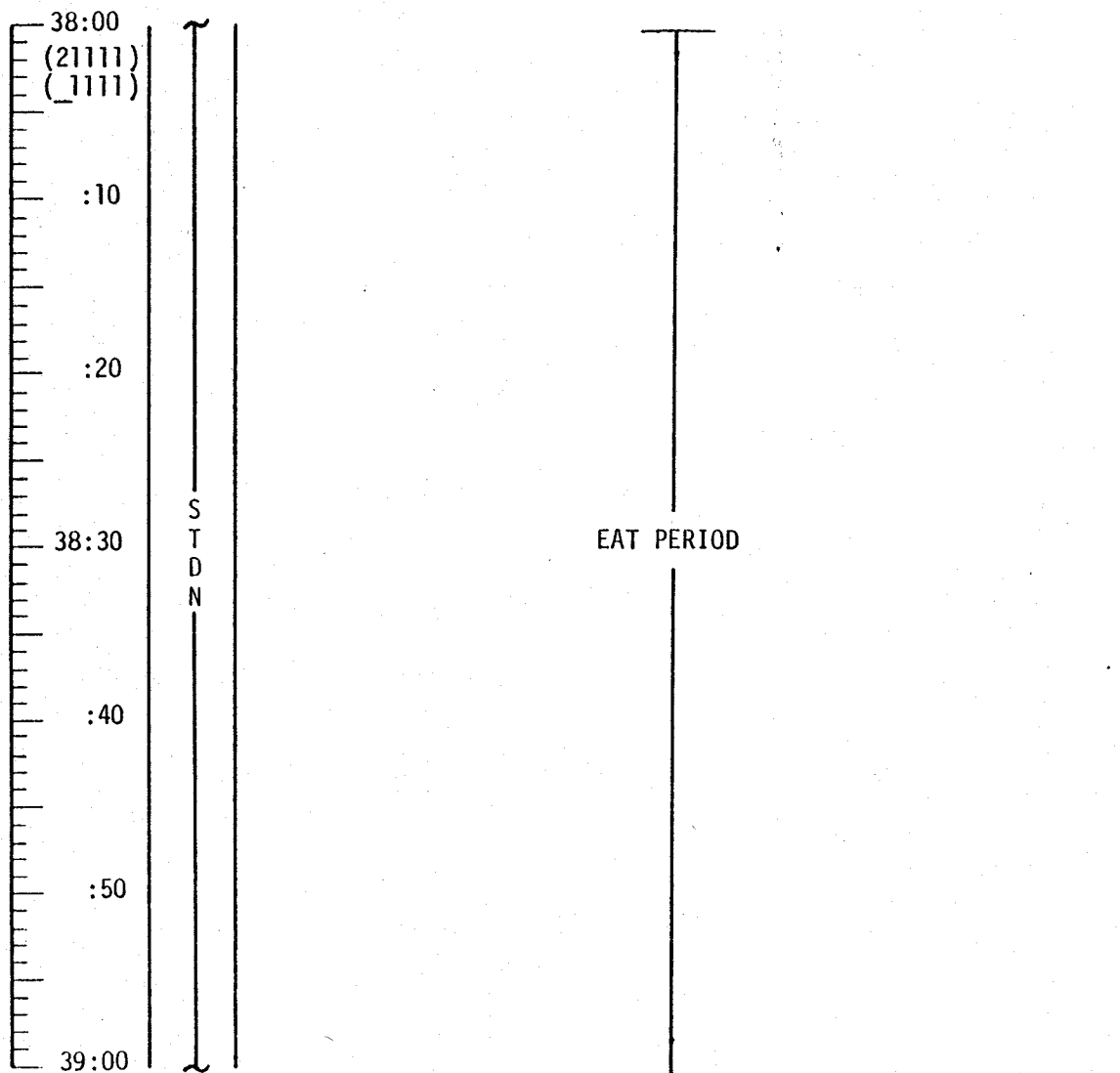
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	37:00 - 38:00	3/TLC	3-35

FLIGHT 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)

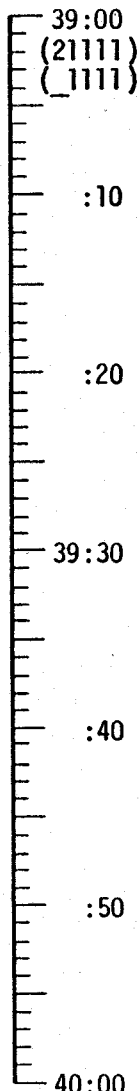
<u>CSM LOCATION</u>	<u>ITEM</u>	<u>LM LOCATION</u>
A2	JETTISON BAG	TEMP STOW
ICG	SCISSORS (1)	DATA FILE
CCU CABLE ON CREW	CWG ELECT ADAPT W/CAP (2)	ON COMM CARRIER
R5	COMM CARR (2)	ON CREW
R5	INFLIGHT STRAPS (4)	ON O2 UMP
R5	UTILITY STRAPS (3)	LHSSC
R13	70MM MAG (4) IN BAG	AFT RHSSC (BW-L, HCEX-A, E & 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 (0)
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



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N

PREPARE ITEMS PER CSM TO LM TRANSFER LIST

O₂ HEATERS 1,2 - AUTO

V49 MNVR TO LM
CHECKOUT ATTITUDE
(39:30)

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

DIRECT O₂ VLV - OPEN
UNTIL CABIN PRESS
=5.7 PSIA, then CLOSE

REMOVE TSB FROM
TUNNEL AND TEMP
STOW
COUCHES: CDR - 0°, CMP - 0°, LMP - 80°
TUNNEL LIGHTS - ON
CM/LM PRESSURE EQUALIZATION (DECAL)
TUNNEL HATCH REMOVAL (DECAL)
PROBE REMOVAL (DECAL)
DROGUE REMOVAL (DECAL)
O₂ HEATERS 1,2 - OFF
O₂ HEATERS 3 - AUTO

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	39:00 - 40:00	3/TLC	3-38

FLIGHT PLANNING BRANCH

FLIGHT PLAN

CSM

LM

MCC-H

CMP

REPORT: DOCKING
TUNNEL INDEX ANGLE
 OPEN LM HATCH
 LMP TRANSFER TO LM
 TRANSFER ITEMS PER
 LM ACTIVATION
 CHECKLIST

1253 CST

CDR

LMP

LM ACTIVATION CHECKLIST PAGE 1-3

IVT TO LM

40:00
 (21111)
 (1111)

:10

IVT TO LM

ENTRY STATUS CHECK

: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 PLAN

CSM
CMP

LM

MCC-H

1353 CST

CDR

LMP

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

SYS TEST - 7D
SYS TEST IND = 0 VOLTS

CSM/LM VHF VOICE CHECK
(SIMPLEX A&B)

LM PWR - ON
(AT LMP REQUEST)
REPORT: GET(__:__:__)
SYS TEST - 7D
SYS TEST IND = 0.5-3.2
VOLTS

41:00 (21111) (1111)	HOUSEKEEPING
:10	
:20	COMM ACTIVATION
41:30	S-BAND/VHF SIMPLEX VOICE TEST
:40	
:50	OPS PRESSURE C/O
: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 PLAN

MCC-H

1453 CST

NOTES

42:00
(21111)
(_1111)

:10

:20

(21101)
(_1111)

42:30

:40

:50

43:00

S
T
D
N

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

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 HGA: P -59, Y 90 REACQ, NARROW
(029,090,000)

WAIT FOR RATES TO DAMP FOR HEAT FLOW PERFORMANCE

CSM EXP/EVA CHECKLIST

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

<u>LM TO CM TRANSFER LIST (TLC)</u>		
<u>LM LOCATION</u>	<u>ITEM</u>	<u>CM LOCATION</u>
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

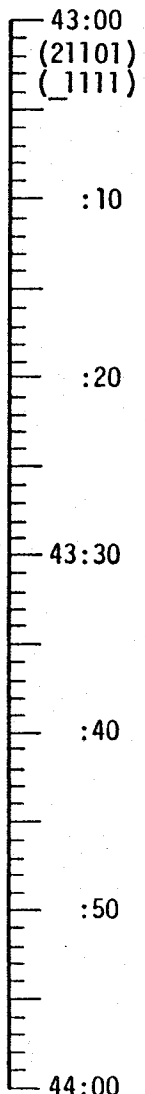
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	42:00 - 43:00	3/TLC	3-41

FLIGHT PLAN

MCC-H

1553 CST

NOTES



S
T
D
N

UPDATE
QUADS TO ENABLE
FOR PTC SPINUP

*PERFORM HEAT FLOW AND
CONVECTION DEMONSTRATION

*REPEAT AT 45:20

CMD
DATA SYS - ON

CSM EXP/EVA CHECKLIST

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

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)

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

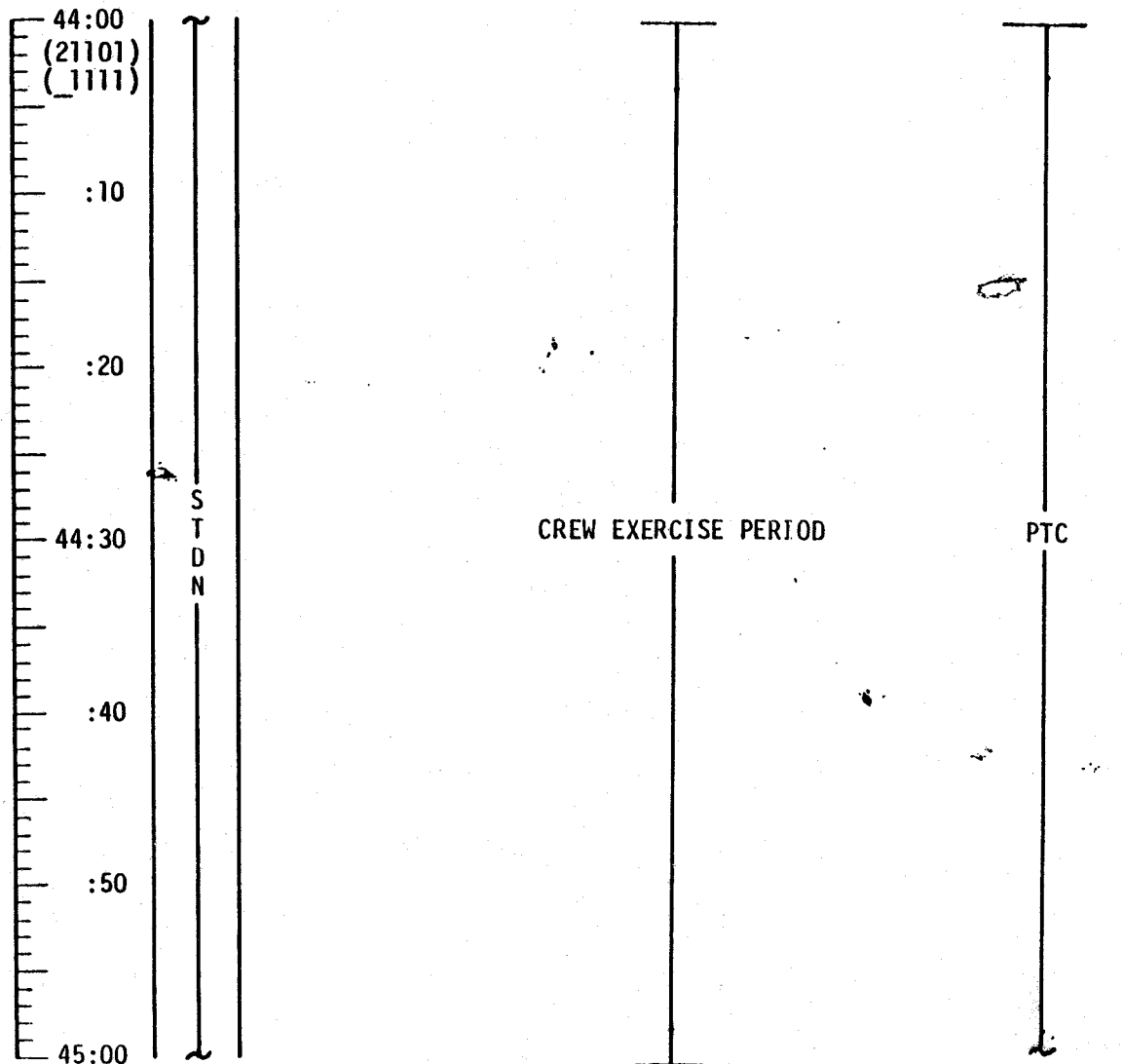
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1653 CST

NOTES



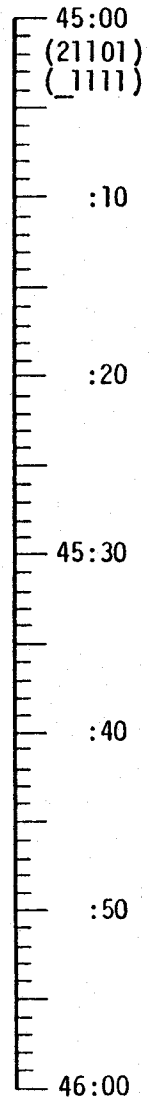
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	44:00 - 45:00	3/TLC	3-43

FLIGHT PLAN

MCC-H

1753 CST

NOTES



S
T
D
N

PERFORM HEAT FLOW AND
CONVECTION DEMONSTRATION

PTC

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

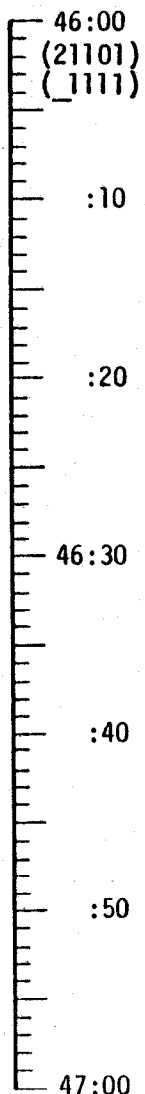
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1853 CST

NOTES



S
T
D
N

STOW HEAT FLOW EQUIPMENT

P52 OPT 3
(PTC ORIENT)

REPORT: GYRO TORQUING ANGLES
GDC ALIGN

L10H CANISTER CHANGE
(6 INTO B, STOW 4 IN B5)

PTC

ENTER LUNAR
PENUMBRA

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

UPDATE
FLIGHT PLAN

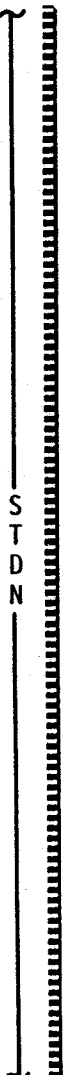
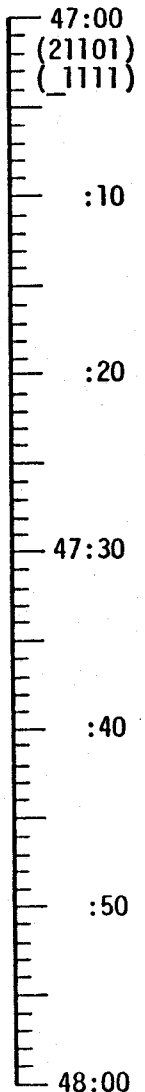
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	46:00 - 47:00	3/TLC	3-45

FLIGHT PLAN

MCC-H

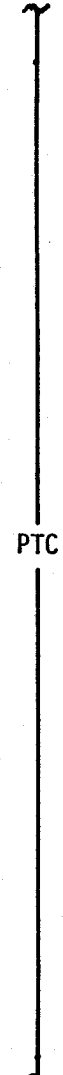
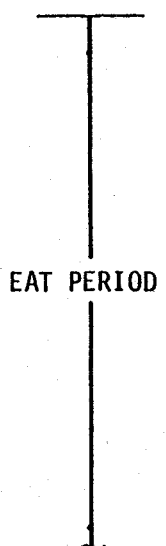
1953 CST

NOTES



CDR DON BIOMED HARNESS

CHECK CDR BIOMED
CMP DOFF BIOMED HARNESS



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

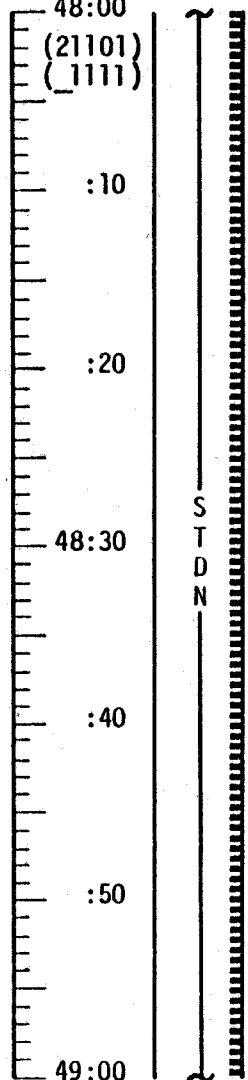
FLIGHT PLAN

NOTES

MCC-H

2053 CST

48:00
(21101)
(1111)



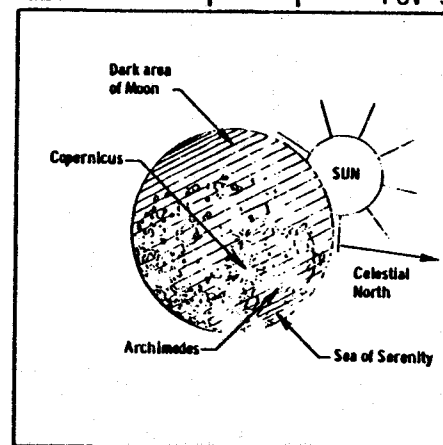
EAT PERIOD

CSM SYSTEMS CHECKLIST

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

DAC: SS

GET=50:00 PTC 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

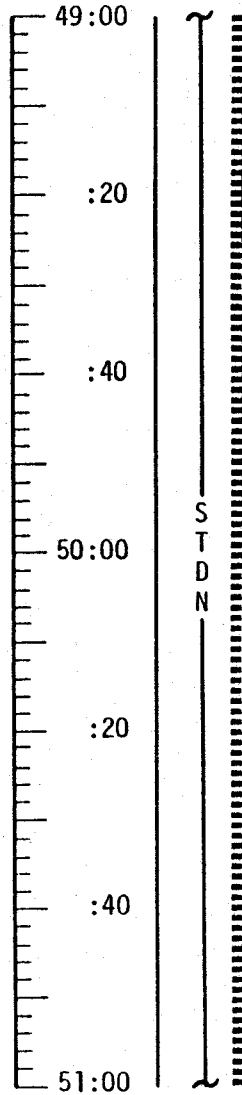
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2153 CST

NOTES



REST PERIOD
(8 HOURS)

PTC

DAP LOAD STATUS
(21101)(_1111)

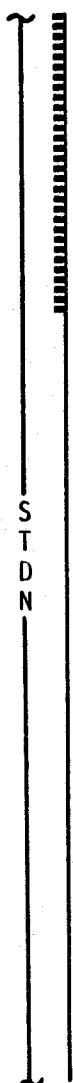
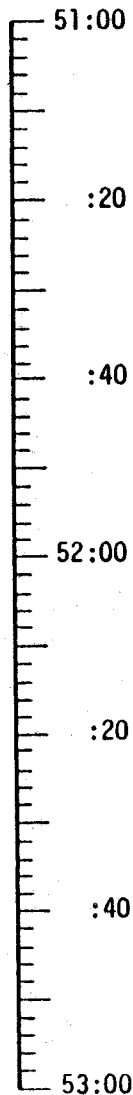
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	49:00 - 51:00	3/TLC	3-48

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2353 CST



REST PERIOD
(8 HOURS)

PTC

NOTES

DAP LOAD STATUS
(21101)(_1111)

EXIT LUNAR PENUMBRA

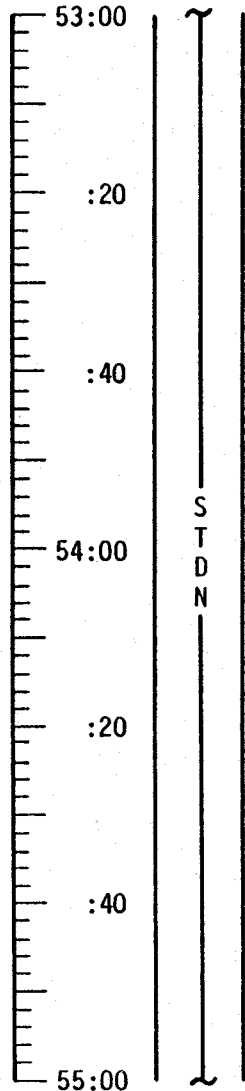
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	51:00 - 53:00	3/TLC	3-49

FLIGHT PLAN

MCC-H

0153 CST

NOTES



S
T
D
N

REST PERIOD
(8 HOURS)

PTC

DAP LOAD STATUS
(21101)(1111)

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

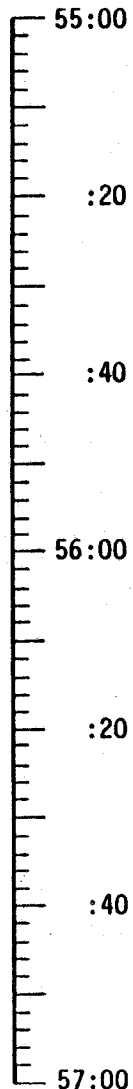
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0353 CST

NOTES



S
T
D
N

REST PERIOD
(8 HOURS)

PTC

DAP LOAD STATUS
(21101)(_1111)

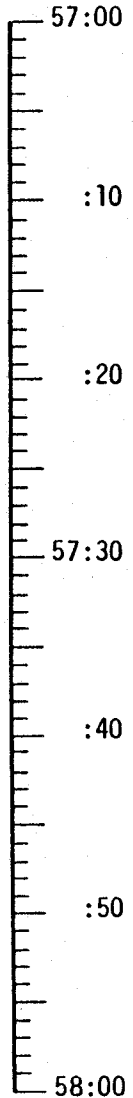
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	55:00 - 57:00	3/TLC	3-51

FLIGHT PLAN

MCC-H

0553 CST

NOTES



S
T
D
N

CSM CHECKLIST

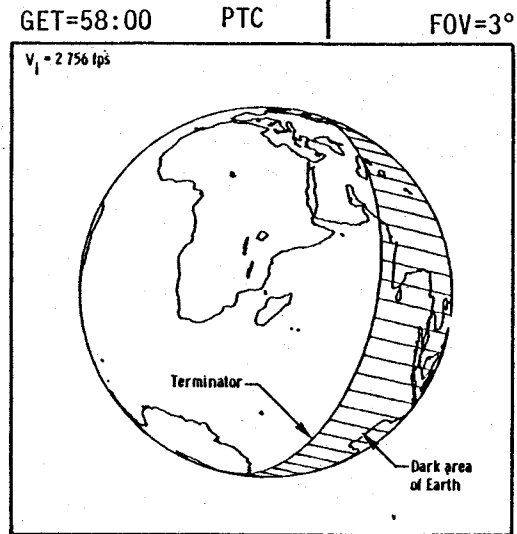
POST-SLEEP CHECKLIST PAGE S/1-29

DAP LOAD STATUS
(21101)(_1111)

EARTH DISTANCE
~170,566 NM

L10H CANISTER CHANGE
(7 INTO A, STOW 5 IN B6)

EAT PERIOD



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

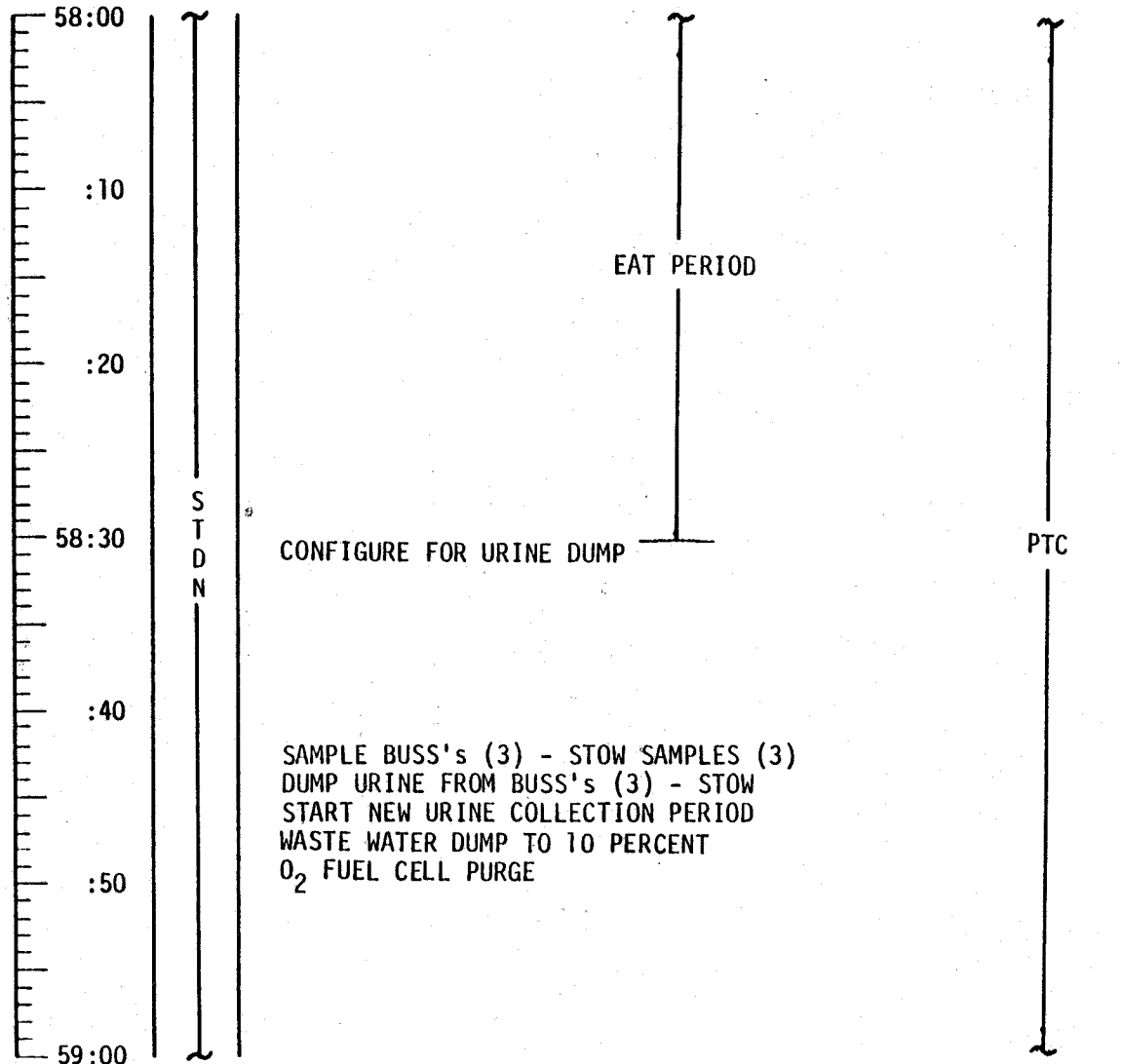
FLIGHT PLAN

MCC-H

0653 CST

NOTES

DAP LOAD STATUS
(21101)(_1111)



UPDATE
CONSUMABLES STATUS
FLIGHT PLAN

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

NOTES

59:00
:10
:20
59:30
:40
:50
(21111)
(_1111)
60:00

S
T
D
N

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

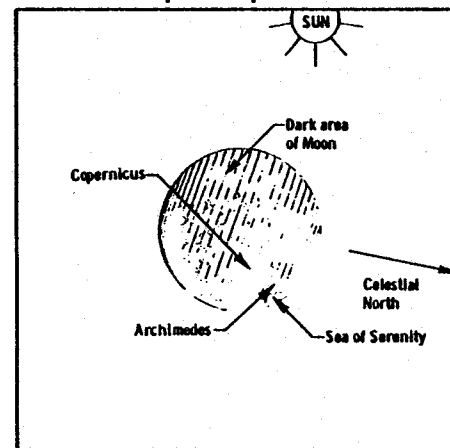
DAP LOAD STATUS
(21101)(_1111)

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)

:10

:20

60:30

:40

:50

61:00

S
T
D
N

REPORT: LM/CM ΔP
 IF $\Delta P > 2.4$ PSID:
 O₂ HEATERS 1&2 - AUTO
 PRESSURIZE CSM TO 5.7 PSIA

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

P
T
C

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

TUNNEL LIGHTS - ON
 EQUALIZE CM/LM PRESSURE (DECAL)
 TUNNEL HATCH REMOVAL (DECAL)
 PROBE REMOVAL (DECAL)
 DROGUE REMOVAL (DECAL)

REPORT: DOCKING TUNNEL INDEX ANGLE
 O₂ HEATERS 1&2 - OFF (VERIFY)
CSM

OPEN LM HATCH

LM

LM ACTIVATION CHECKLIST

IVT TO LM PAGE 2-1

TLM ACTIVATION

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

SYS TEST - 7D
 SYS TEST IND = 0 VOLTS

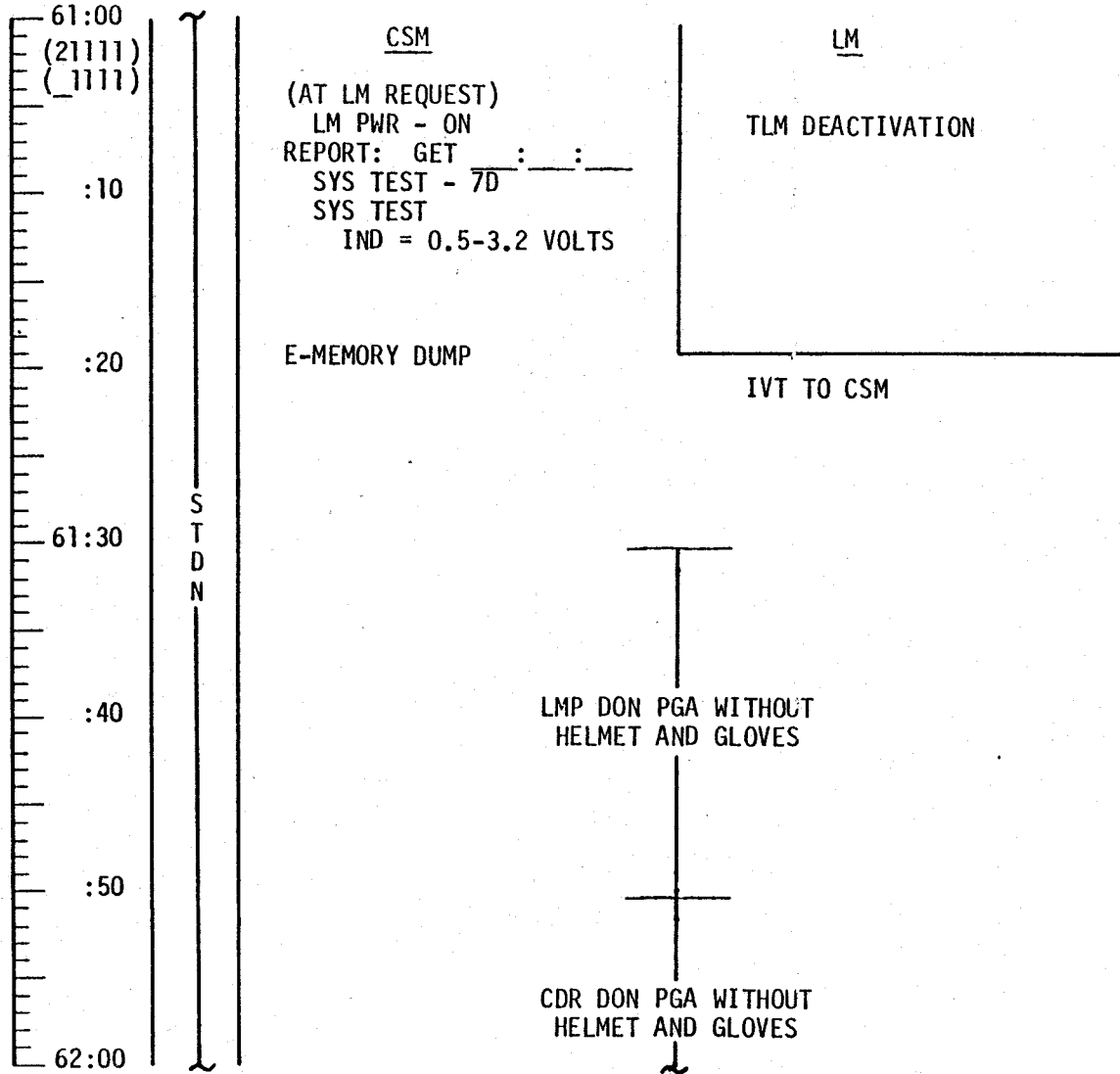
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	60:00 - 61:00	4/TLC	3-55

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

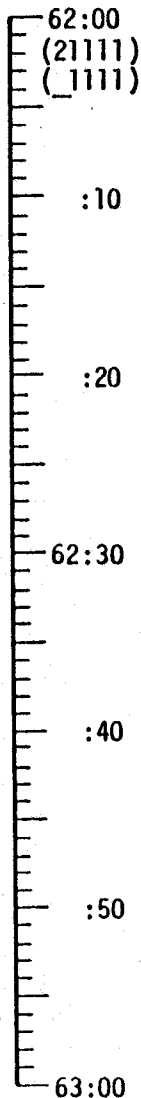
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1053 CST

NOTES



S
T
D
N

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

DOFF PGA'S

CMP DON PGA WITHOUT
 HELMET AND GLOVES

LMP & CDR IVT TO LM
 ZIP PGA'S

LMP & CDR IVT CSM

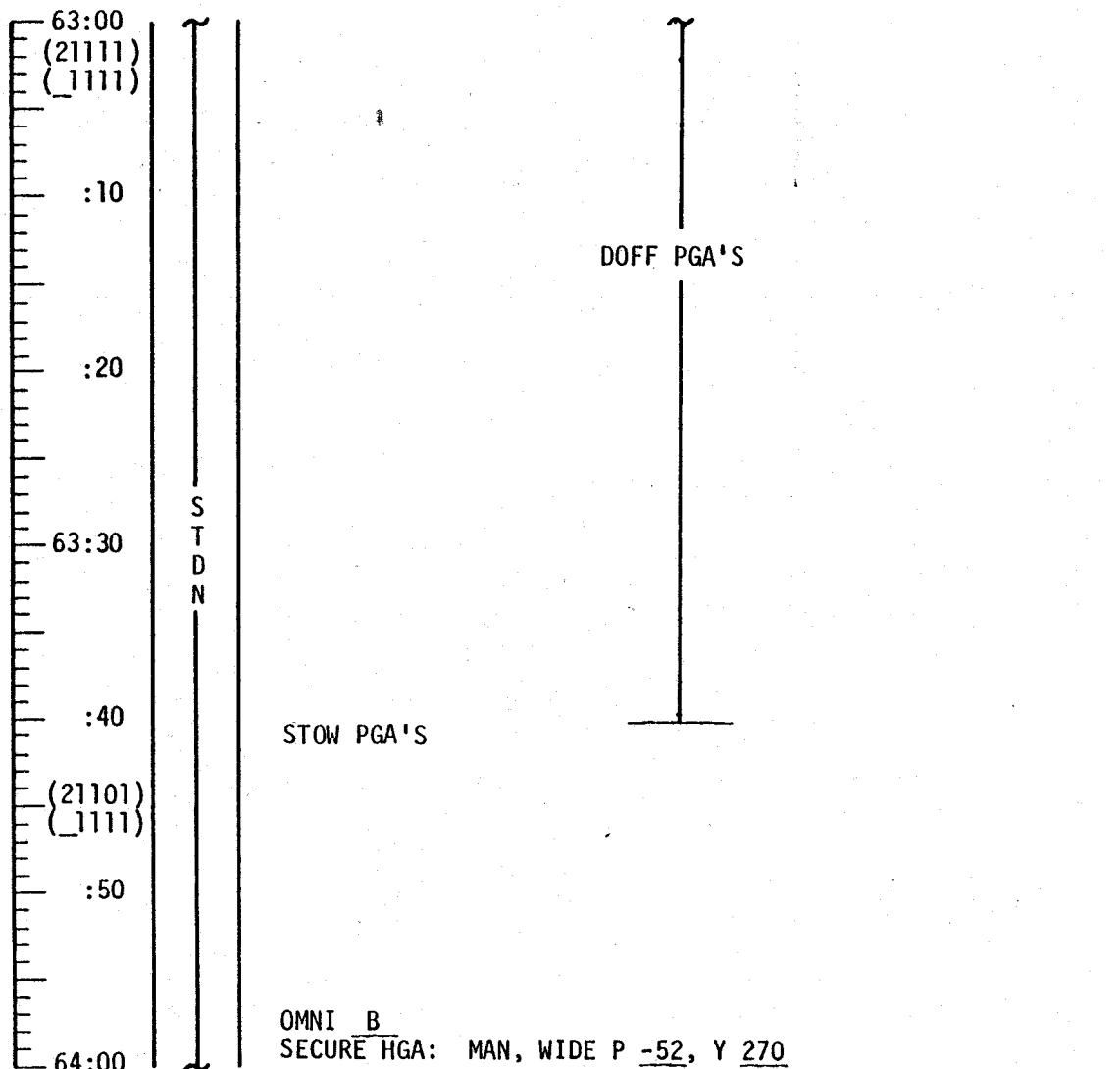
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	62:00 - 63:00	4/TLC	3-57

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

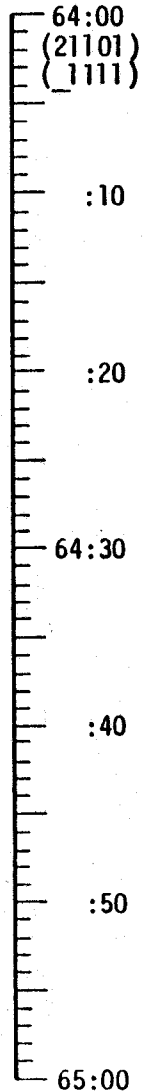
FLIGHT PLAN

MCC-H

1253 CST

NOTES

UPDATE
FLIGHT PLAN
QUADS TO ENABLE
FOR PTC SPINUP



S
T
D
N

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)

PTC

H2 HEATERS 1 & 2 - AUTO

H2 FANS 3 - OFF

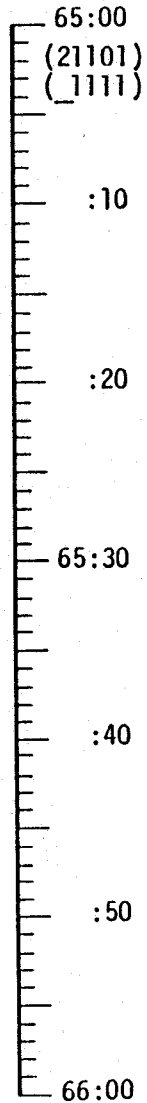
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	64:00 - 65:00	4/TLC	3-59

FLIGHT PLAN

MCC-H

1353 CST

NOTES



S
T
D
N

EAT PERIOD

PTC

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

66:00
(21101)
(1111)

:10

:20

66:30

:40

:50

67:00

S
T
D
N

P
T
C

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 PLAN

NOTES

MCC-H

1553 CST

UPDATE
FLIGHT PLAN

67:00
(21101)
(1111)

:10

:20

67:30

: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

UPLINK
LIFT-OFF TIME
(IF REQUIRED)

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

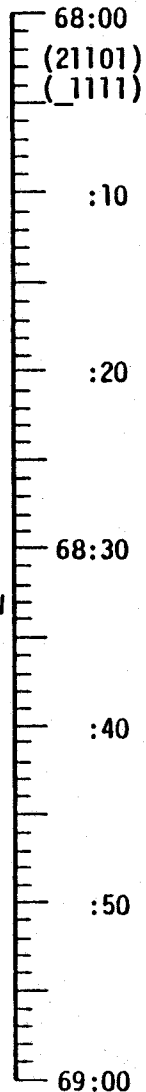
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1653 CST

NOTES



CSM EXP/EVA CHECKLIST
ALFMED PAGE X/2-1
MAG (SS)

CMD
DSE RECORD
PCM BIT RATE - LOW

S
T
D
N

ALFMED

PTC

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

S
T
D
N

CMP DON BIOMED HARNESS

ALFMED

PTC

CMD
DSE REWIND

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

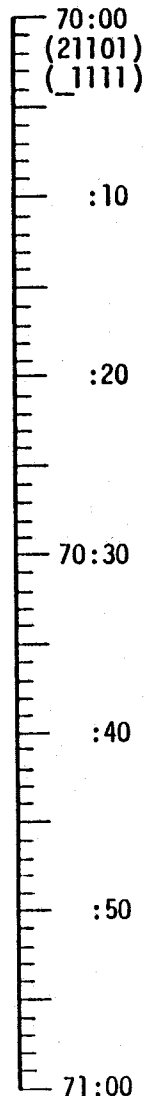
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1853 CST

NOTES



S
T
D
N

CMD
DATA SYS-ON

CMD
DATA SYS-OFF
DSE PLAYBACK

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

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

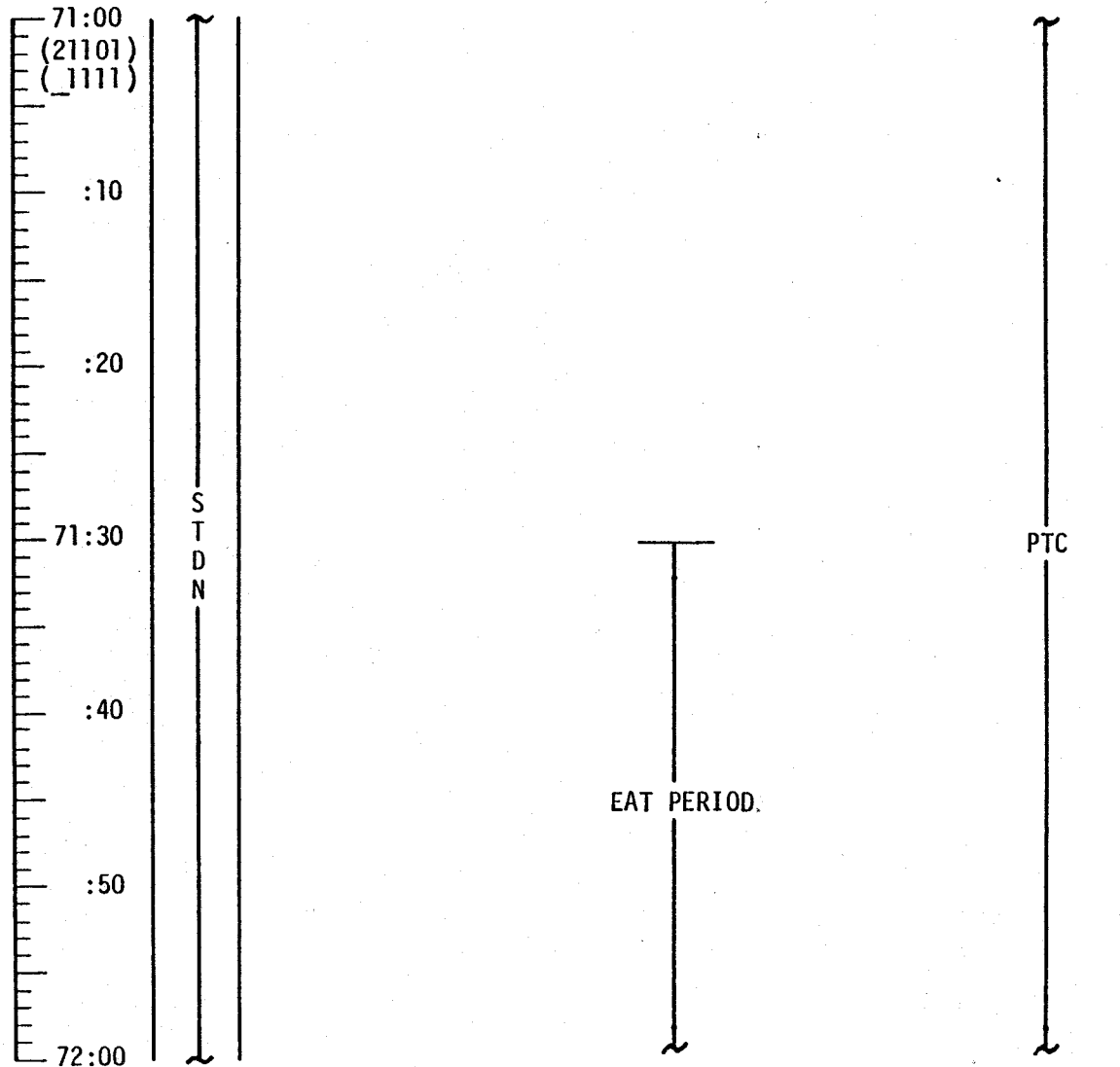
FLIGHT PLAN

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

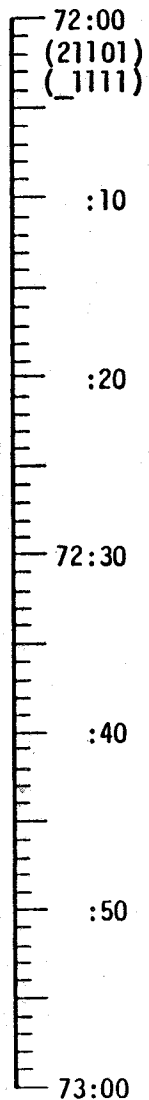
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2053 CST

NOTES



S
T
D
N

EAT PERIOD

CSM SYSTEMS CHECKLIST

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

DAC: BB

EL: QQ, KK

PTC

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

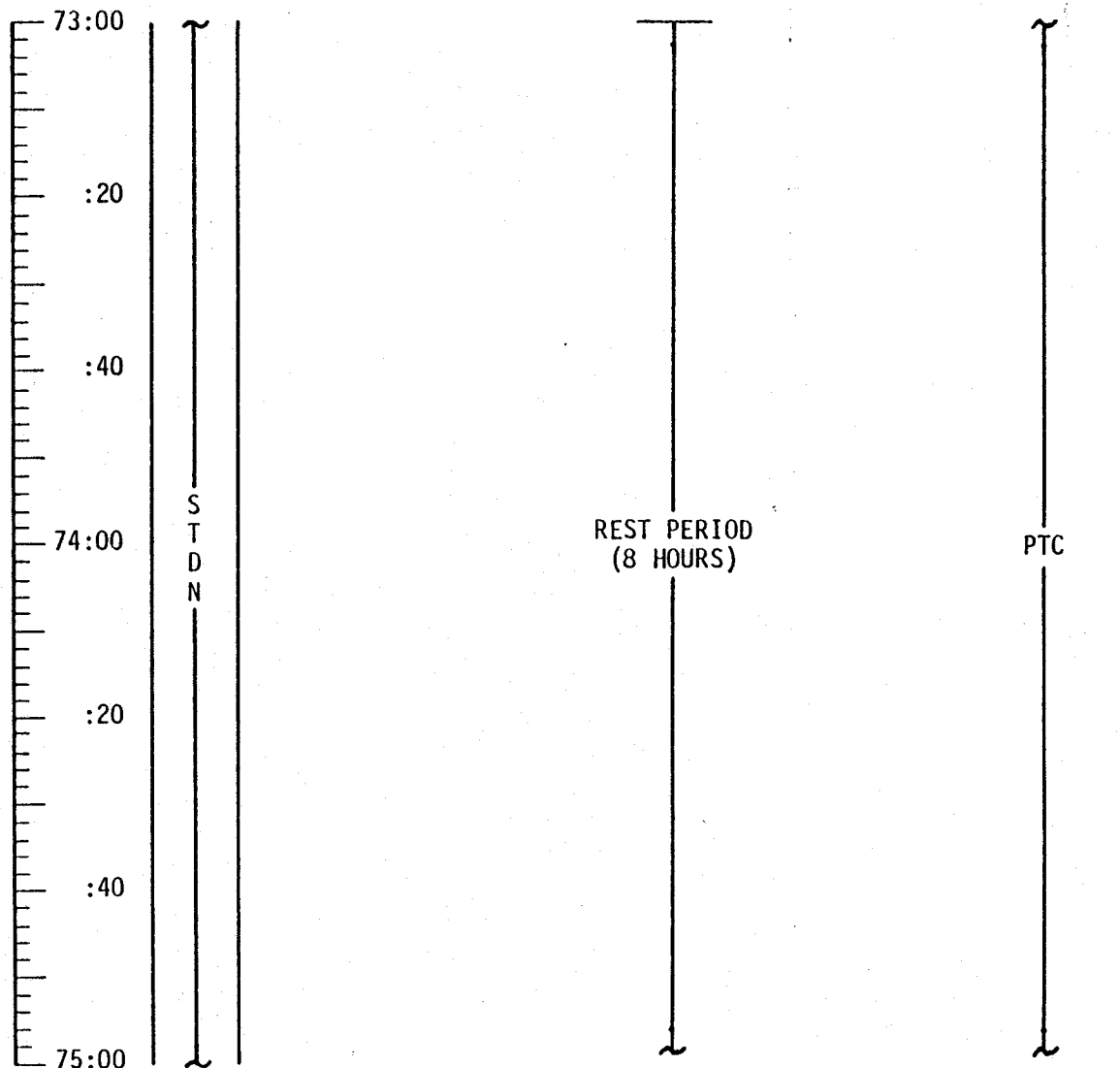
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	72:00 - 73:00	4/TLC	3-67

FLIGHT PLAN

MCC-H

2153 CST

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

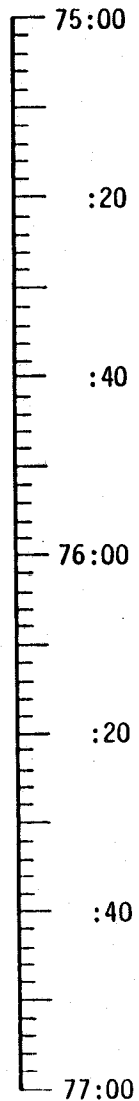
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2353 CST

NOTES



S
T
D
N

R
E
S
T
P
E
R
I
O
D

(8 HOURS)

P
T
C

DAP LOAD STATUS
(21101)(_1111)

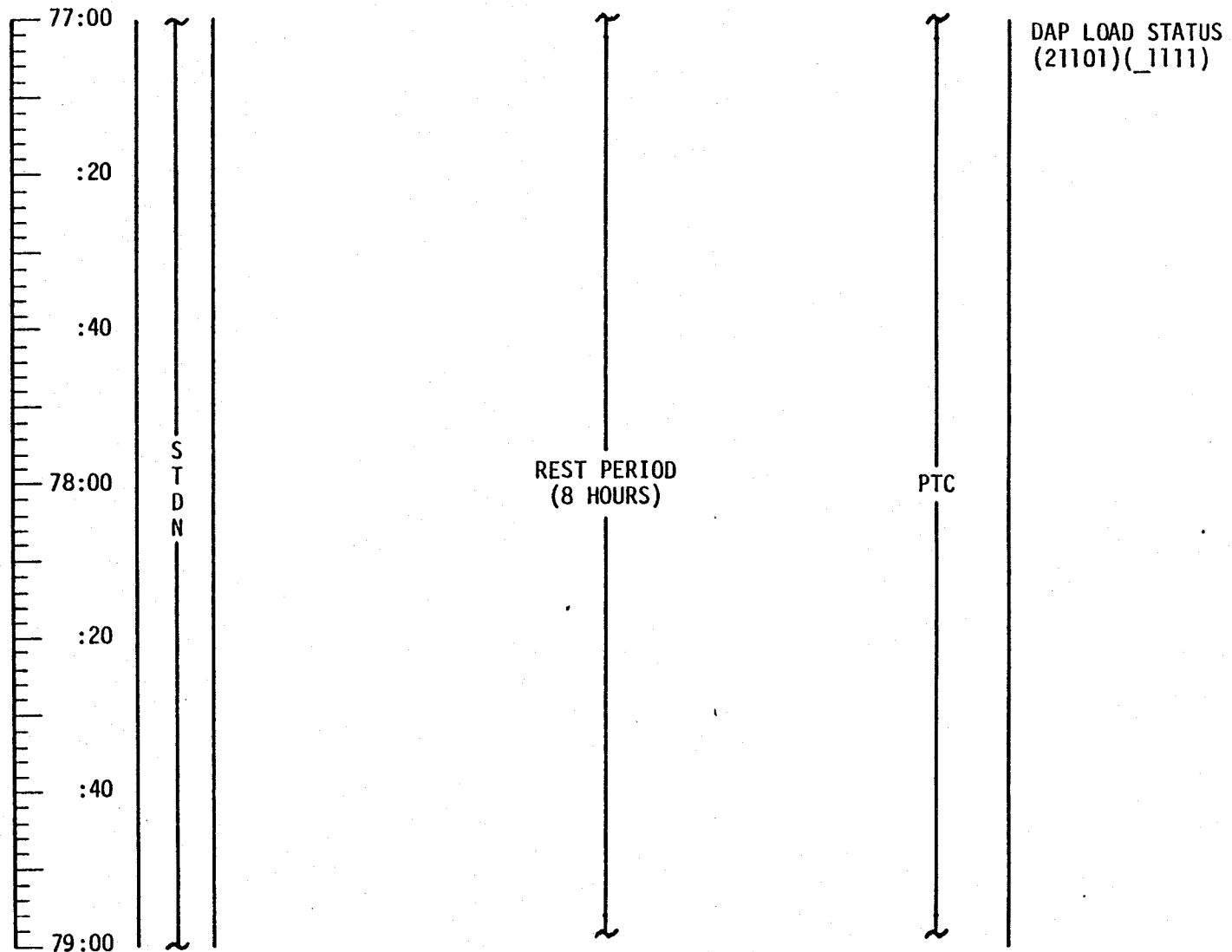
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	75:00 - 77:00	4/TLC	3-69

FLIGHT PLAN

MCC-H

0153 CST

NOTES



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

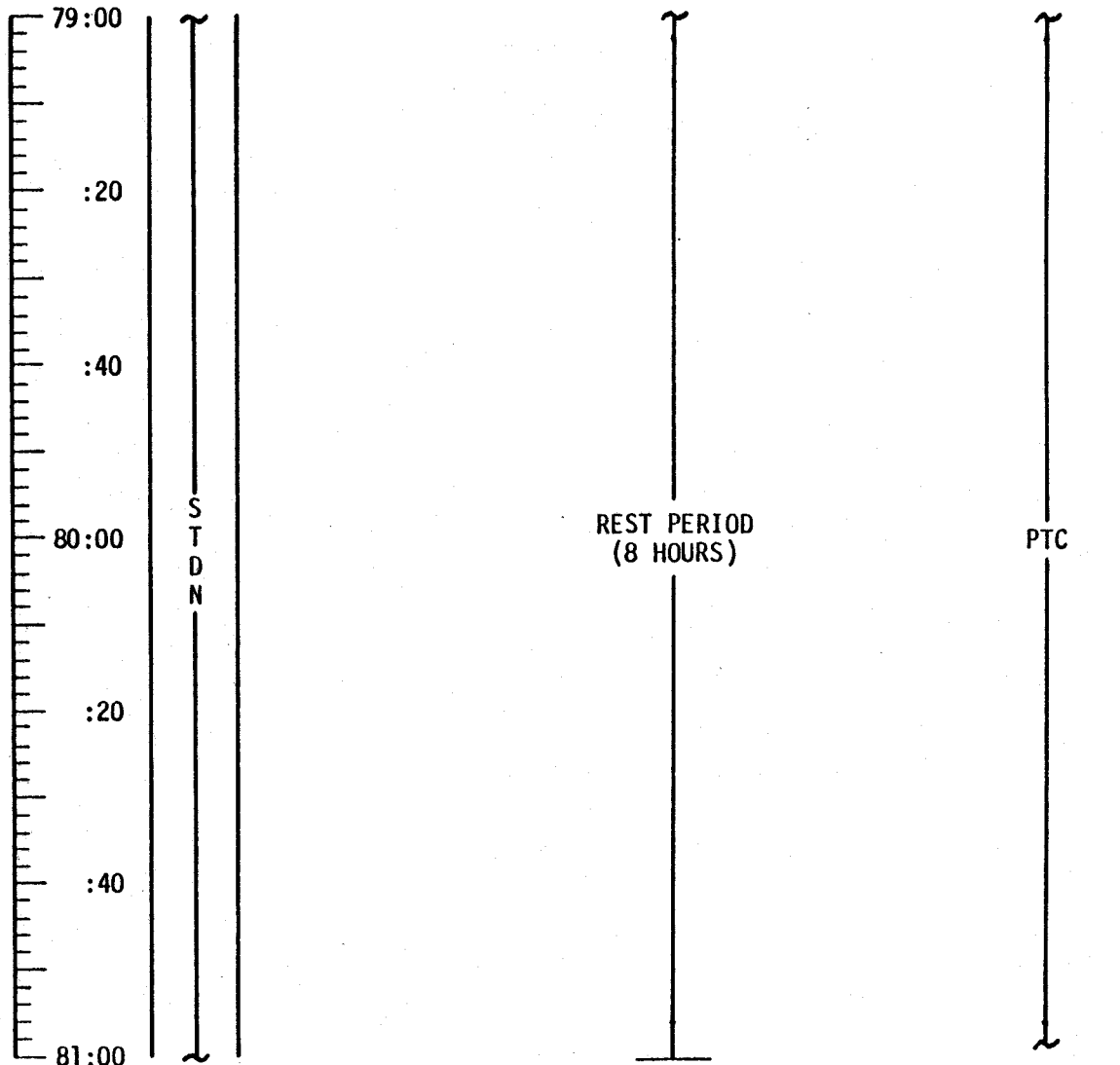
FLIGHT PLANNING BRANCH

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

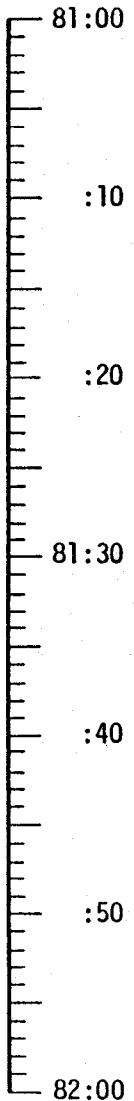
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0553 CST

NOTES



S
T
D
N

CSM SYSTEMS CHECKLIST

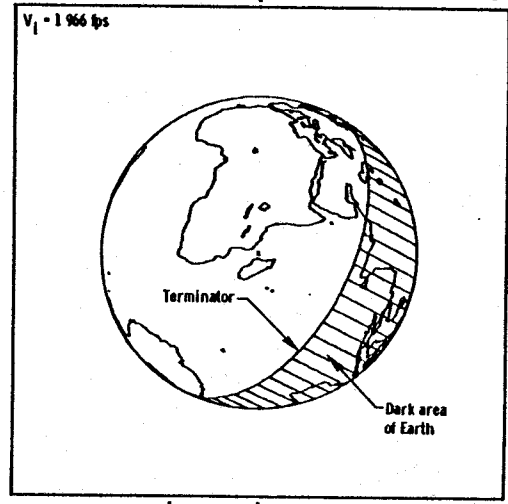
POST-SLEEP CHECKLIST PAGE S/1-29

REPORT: LM/CM ΔP
 IF ΔP > 2.4 PSID:
 O₂ 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



DAP LOAD STATUS
(21101)(_1111)

EARTH DISTANCE
~202,616 NM

*PERFORM IF MCC-4
IS REQUIRED

PTC

UPDATE
GO/NO-GO FOR MCC-4

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

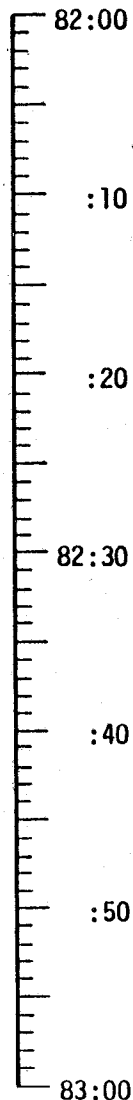
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0653 CST

NOTES



S
T
D
N

EAT PERIOD

PTC

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
O₂ 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

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

APOLLO 17

FINAL (12/6)

10/23/72

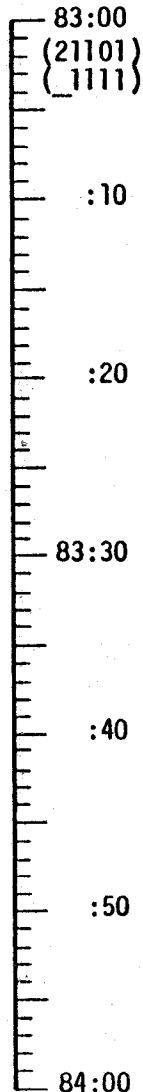
5/TLC

3-74

FLIGHT PLAN

MCC-H

0753 CST



L10H CANISTER CHANGE
(9 INTO A, STOW 7 IN B6)
CONFIGURE FOR URINE DUMP
H₂ 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

H₂ & O₂ 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
H₂ PURGE LINE HTRS - OFF

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

MCC-4

NOTES

*PERFORM IF
MCC-4 IS REQD

SIM EXP STATUS
(*0000)(31000)

P52 IMU REALIGN

N71: ____ . ____

N05: ____ . ____

N93:

X ____ . ____

Y ____ . ____

Z ____ . ____

GET ____ : ____ : ____

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

LOI -5 HR

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

FLIGHT PLAN

MCC-H

0853 CST

NOTES

CMD
DATA SYS - ON
DSE RECORD

UPDATE
GO/NO-GO FOR
SIM DOOR JETT

UPDATE
CUE FOR IR - OFF

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

84:00
(21101)
(1111)

:10

:20

84:30

:40

:50

85:00

S
T
D
N

*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 O₂ TK 100W HTRS (1 & 2) - OPEN

O₂ HEATERS 1 & 2 - AUTO

O₂ 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

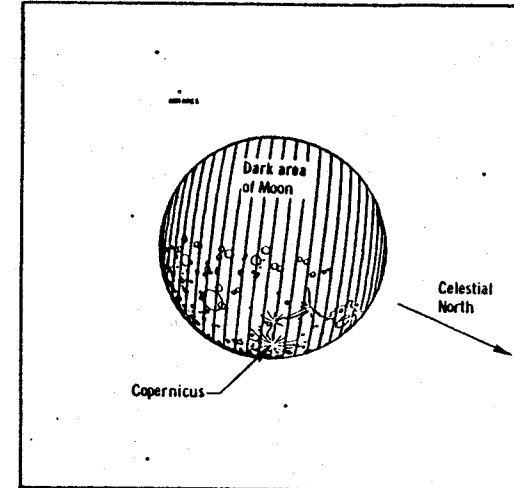
CHECK MISSION TIMER AGAINST CMC CLOCK

*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

NOTES

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

85:00
(21101)
(1111)
:10
:20
85:30
:40
:50
86:00

S
T
D
N

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

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 PLAN

MCC-H

1053 CST

NOTES

86:00
(21101)
(1111)

CONFIGURE CABIN FOR LUNAR ORBIT

SIM EXP STATUS
(*0000)
(31001)

:10

:20

86:30

:40

:50

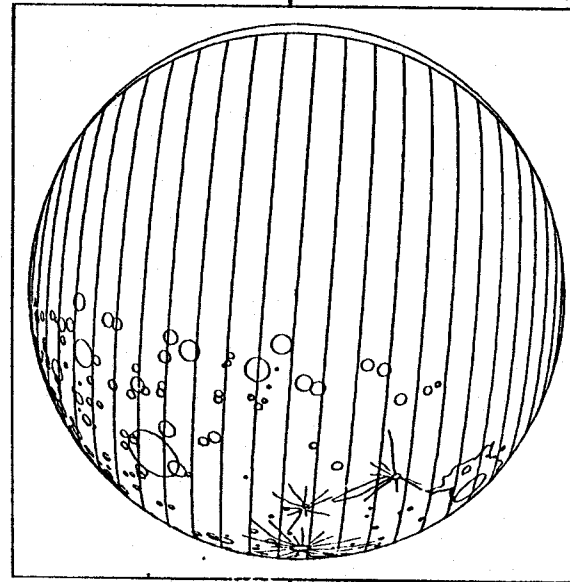
87:00

S
T
D
N

EAT PERIOD

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

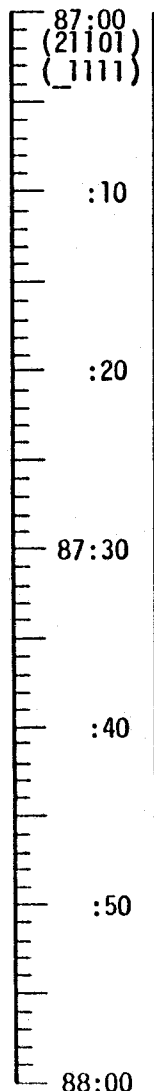
FLIGHT PLANNING BRANCH

FLIGHT PLAN

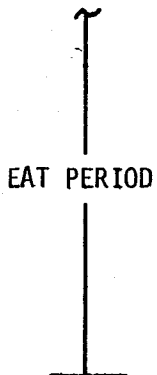
MCC-H

1153 CST

NOTES



S
T
D
N



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)

SIM EXP STATUS
(*0000)
(31001)

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

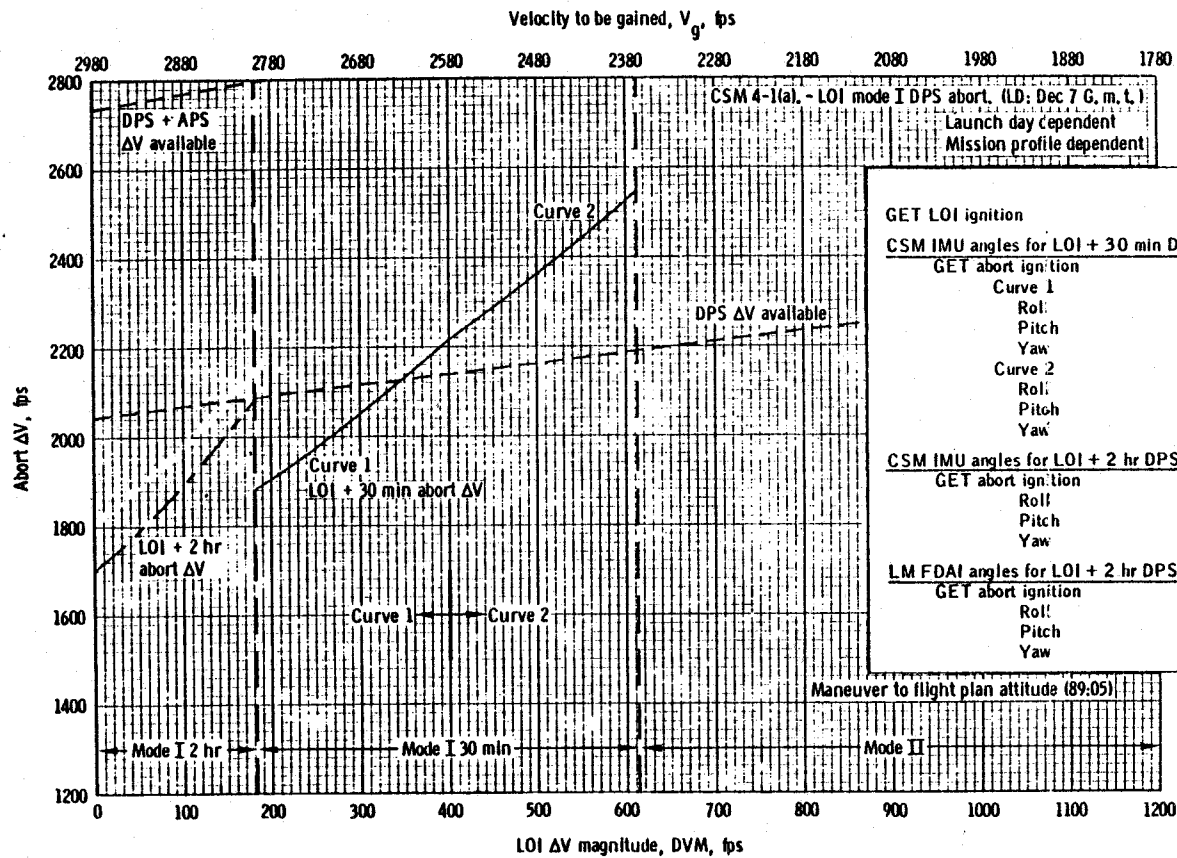
UPDATE
LOI MNVR PAD
MAP UPDATE REV 1
(88:20)

UPLINK
CSM S.V. & V66
LOI TGT LOAD

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

P30 MANEUVER

SET STARS	L	O	I			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
ULLAGE _____					•	ΔV_x N81
					•	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
	+				•	SFT
	+			0	0	TRN
	X	X	X			BSS
	X	X			•	SPA
	X	X	X		•	SXP



	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 IDPS 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 (crew chart)
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 (crew chart)
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 $\bar{3}$ 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

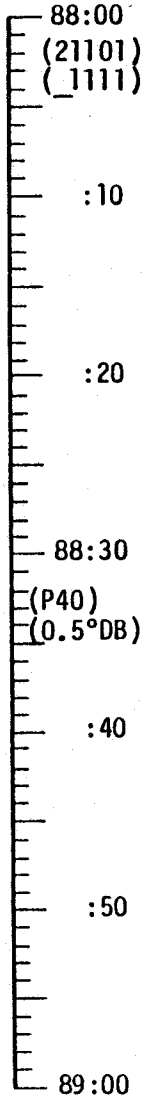
THE PU VALVE SHOULD BE USED TO MAINTAIN THE INDICATED UNBALANCE TO WITHIN +50 LB OF THE STABILIZED READING (TIG +25 SEC) UNTIL CROSSOVER. AFTER CROSSOVER THE VALVE SHOULD BE USED TO CONTROL THE GREEN BAND (0+100 LB). THE APPROXIMATE TIME OF CROSS-OVER IS 4 MIN 20 SEC INTO THE LOI BURN

FLIGHT PLAN

MCC-H

1253 CST

NOTES



S
T
D
N

P30 EXTERNAL ΔV

V49 MNVR TO PAD BURN ATTITUDE (88:20)

OMNI C

MAP UPDATE REV _____

AOS WITHOUT BURN 89:07:46

AOS WITH BURN 89:16:29

SXT STAR CHECK

P40 SPS THRUSTING

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 *169 x 53*
 ORBIT: 170.8x51.4 NM

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

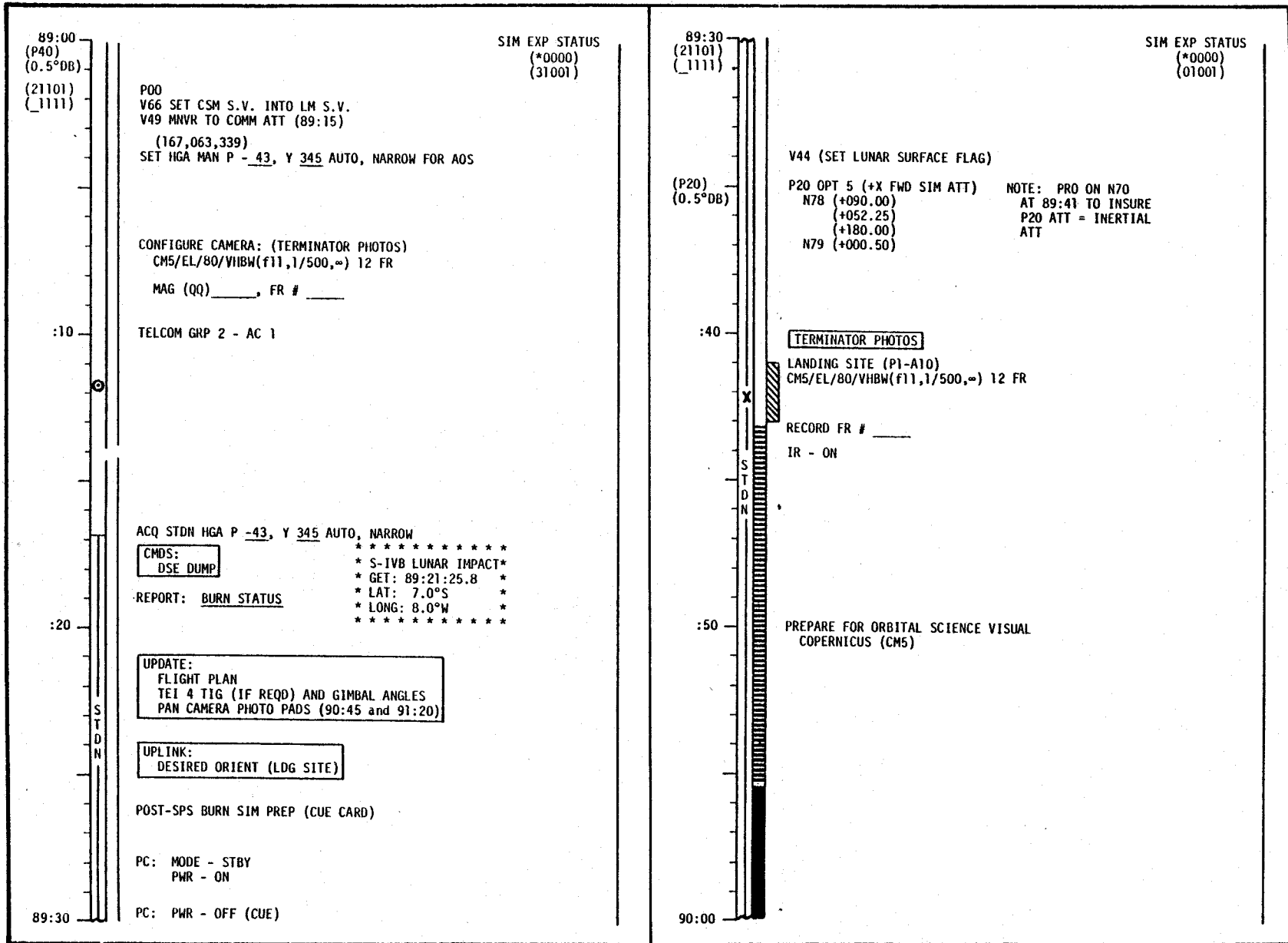
ΔV_M _____

PREDICTED LOI SINGLE
 BANK BURN TIME:
6 MIN 50 SEC

RECORD VG_{IMU} DATA
 UPDATE
 GO/NO-GO FOR LOI

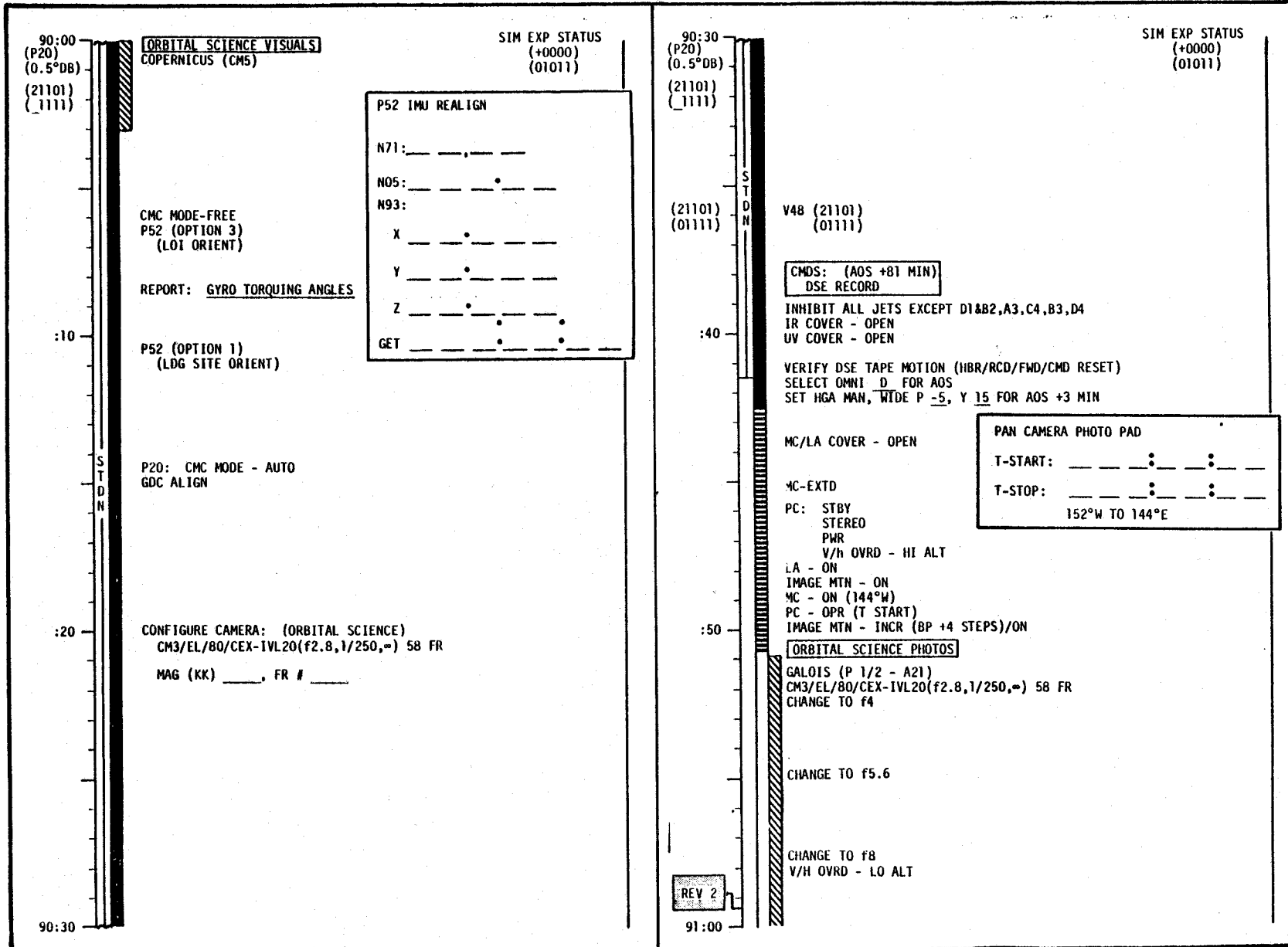
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	88:00 - 89:00	5/TLC	3-83

CSM FLIGHT PLAN



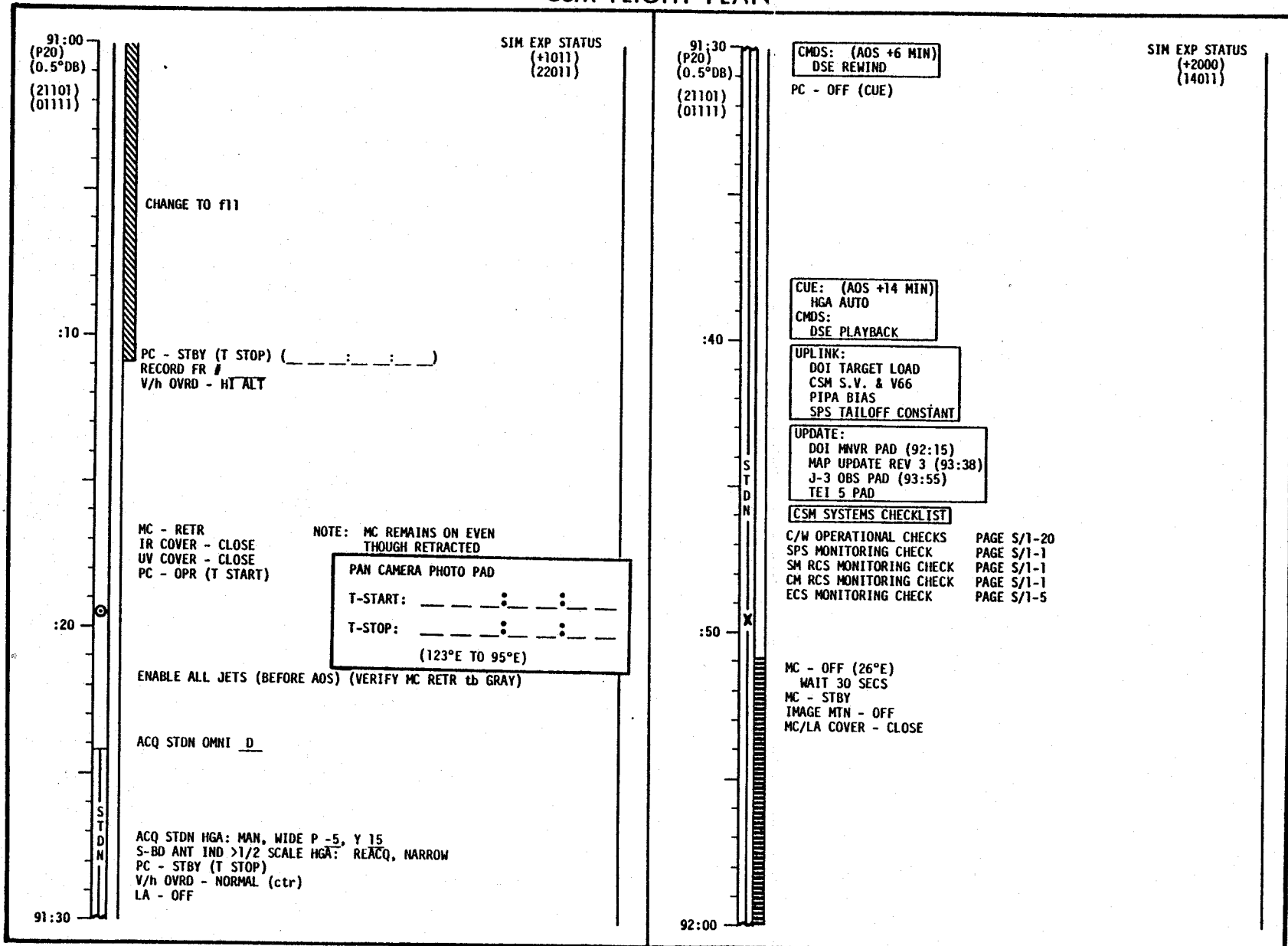
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-84

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-85

CSM FLIGHT PLAN



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 IMU REALIGN

N71: _____

N05: _____

N93: _____

X _____

Y _____

Z _____

GET _____

P52 (OPTION 3)
(LDG SITE ORIENT)

REPORT: GYRO TORQUING
ANGLES

GDC ALIGN

PRE-SPS BURN SIM PREP (CUE CARD)

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		D	O	I	-	I	PURPOSE
SET STARS		S	P	S	G	&	N
		+					WT N47
R ALIGN _____		0	0				P TRIM N48
P ALIGN _____		0	0				Y TRIM
Y ALIGN _____		+	0	0			HRS GETI
		+	0	0	0		MIN N33
		+	0				SEC
ULLAGE _____							ΔV _X N81
							ΔV _Y
							ΔV _Z
		X	X	X			R (000)
		X	X	X			P (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
		+				0	SFT
		+				0	TRN
		X	X	X			BSS
		X	X				SPA
		X	X	X			SXP
OTHER _____		0					LAT N61
							LONG
		+					RTGO EMS
		+					V10
							GET 0.05G

CSM FLIGHT PLAN

<p>92:30 (21101) (1111)</p>	<p style="text-align: center;">SIM EXP STATUS (*0000) (31011)</p>	
<p>:40</p>	<p style="text-align: center;">ST D N</p>	<div style="border: 1px solid black; padding: 2px; margin-bottom: 10px;"> <p>CMDS: DSE REWIND</p> </div> <p>SXT STAR CHECK LOAD EMS WITH ΔVT</p>
<p>(P40) (0.5°DB)</p>	<p>:50</p>	<div style="border: 1px solid black; padding: 2px; margin-bottom: 10px;"> <p>UPDATE: GO/NO GO FOR DOI</p> </div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 10px;"> <p>CMDS: DSE RECORD</p> </div> <p>P40 (TRIM) VERIFY DSE TAPE MOTION (LBR/RCD/FWD/CMD RESET)</p>
<p>93:00</p>	<p>NOTE: DSE VOICE RECORDED THIS BACKSIDE WILL NOT BE DUMPED</p>	

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-88

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) * V49 MNVR TO BAILOUT BURN ATT *
 (020,293,000) * (000,002,000) *
 SET HGA MAN P +9, Y 338 REACQ, * SET HGA MAN P -49, Y 334 *
 NARROW FOR AOS * 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
					OX
X					FUEL
X					UNBAL

CSM FLIGHT PLAN

93:30
(21101)
(1111)

S
T
D
N

X

94:00

 AOS-NO UP VOICE PROCEDURE
 1. WAIT 30 SEC, CHECK HGA
 *2. SELECT OMNI C *
 *3. SELECT SEC XPNDR *
 4. AFTER 3 MIN GO TO LOSS
 * OF COMM CUE CARD *

SIM EXP STATUS
(*0000)
(31011)

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 *
 S.V. *
 TIG: 93:48:17 *
 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)

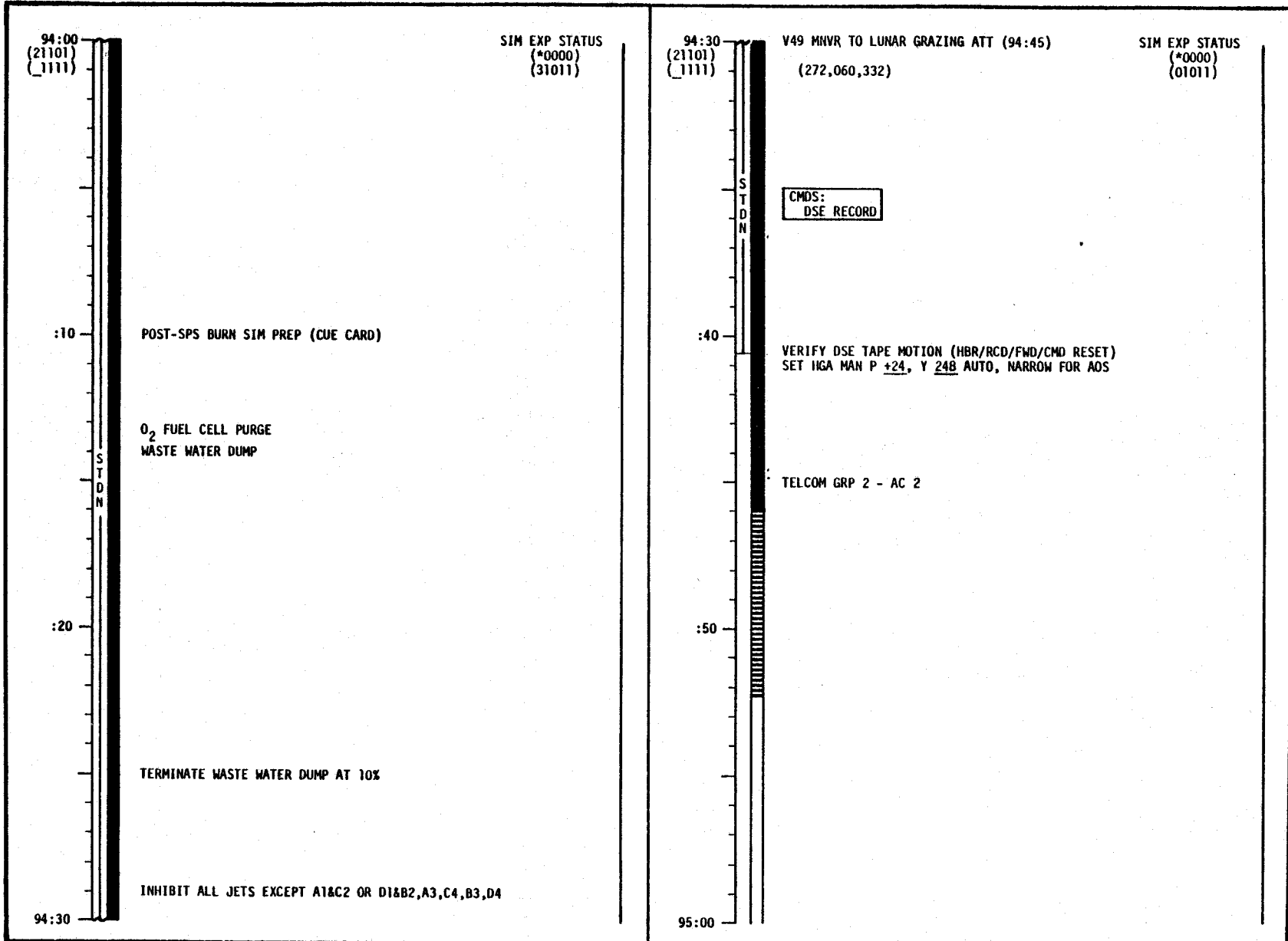
MAP UPDATE REV	3
AOS WITHOUT BURN	_____ : _____ : _____
AOS WITH BURN	_____ : _____ : _____

LDMK J-3 OBS	
T HOR	_____ : _____ : _____
TCA -20 SEC	_____ : _____ : _____
LAT:	+ 19.948
LONG/2:	+ 20.051
ALT:	+000.000

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-90

653

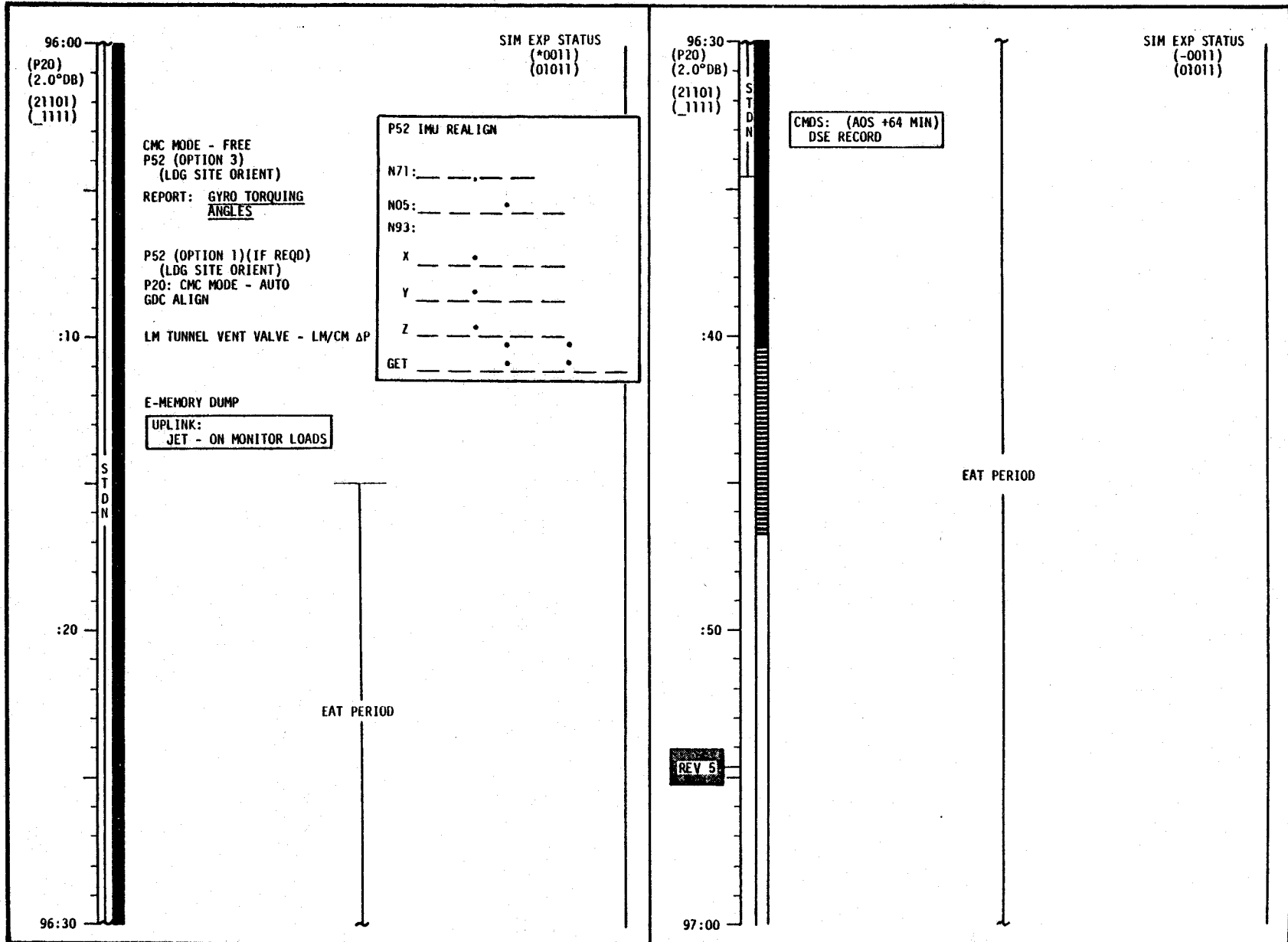
CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-91

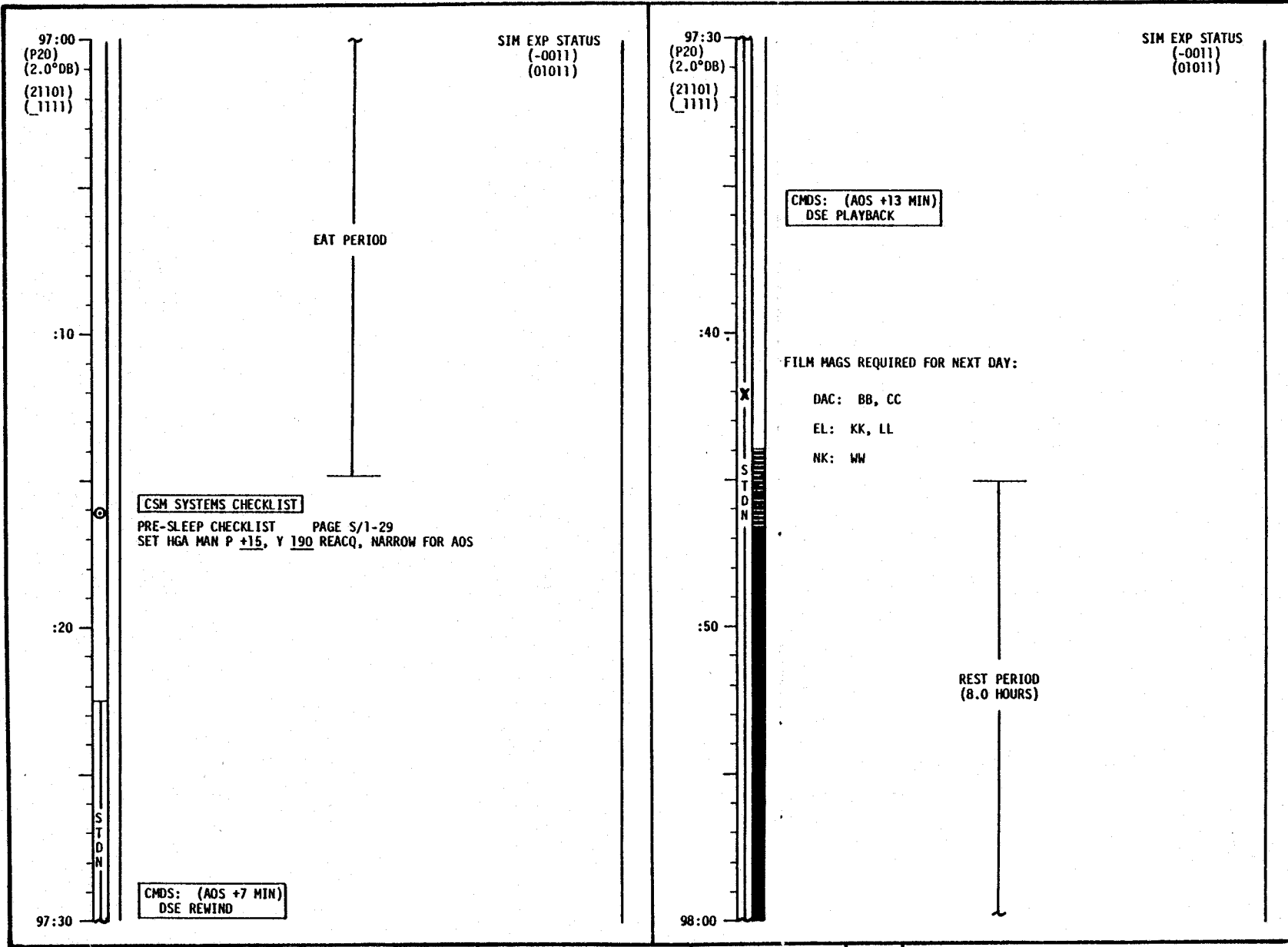
8-53

CSM FLIGHT PLAN



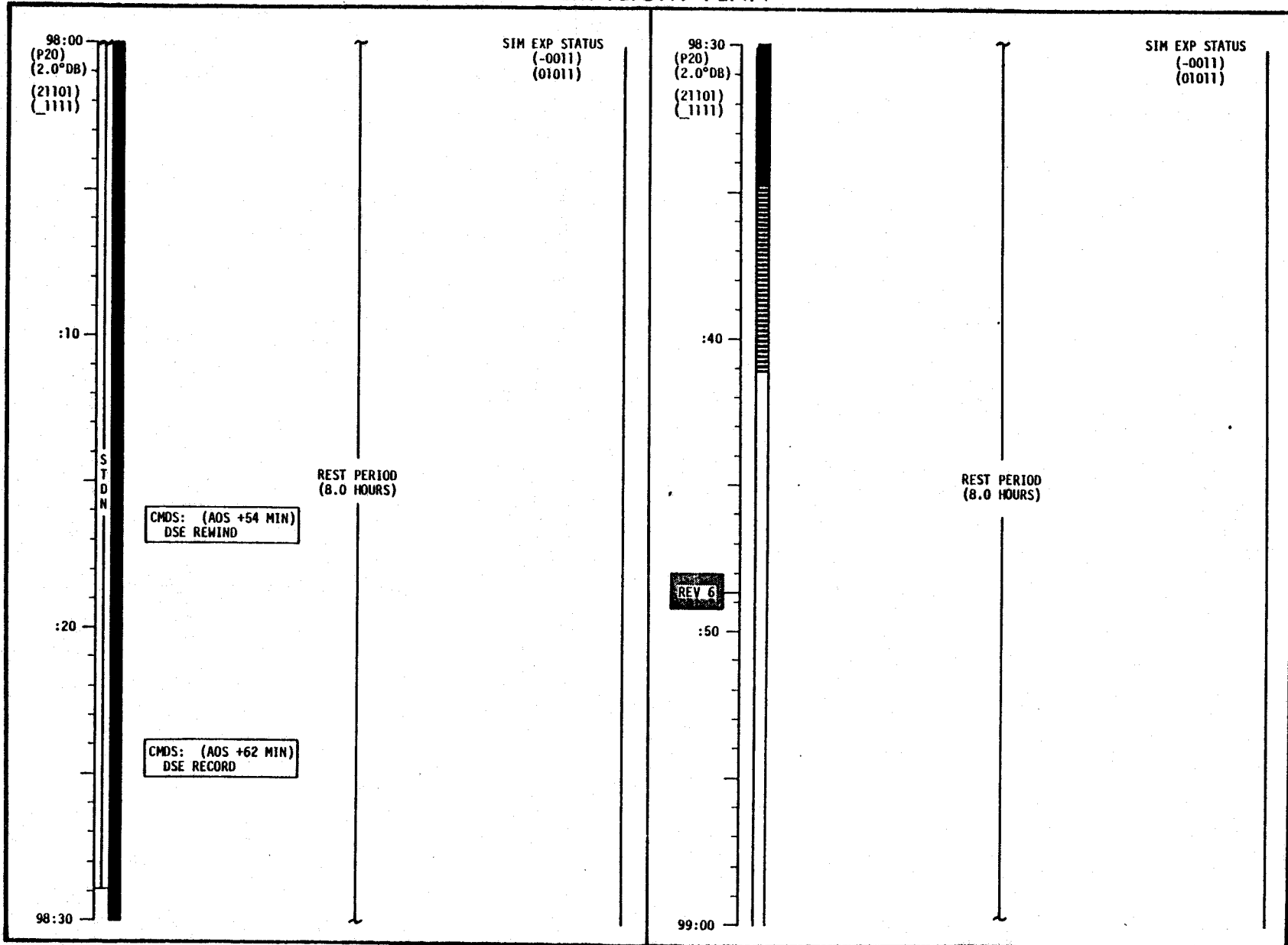
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-93

CSM FLIGHT PLAN



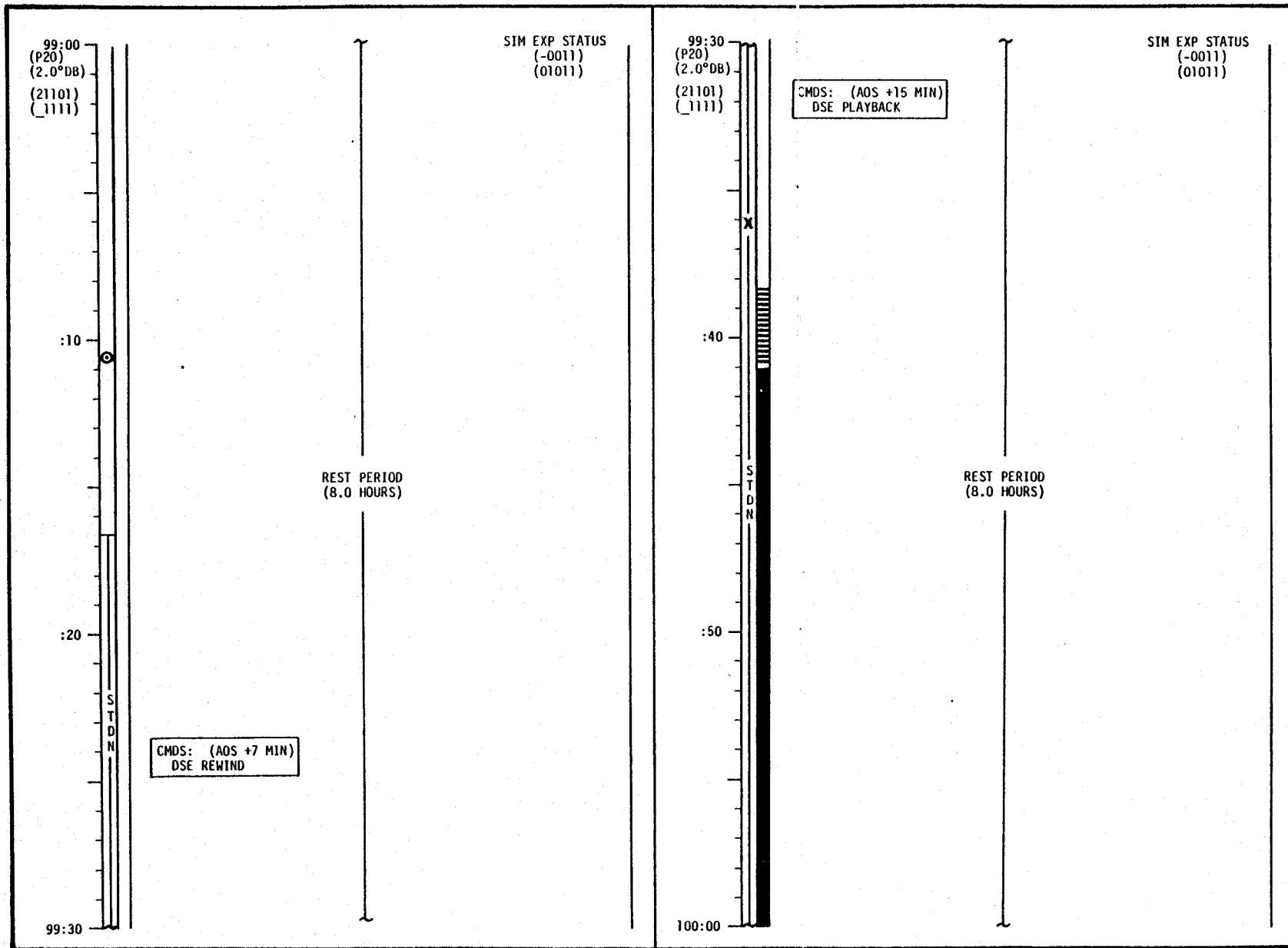
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-94

CSM FLIGHT PLAN



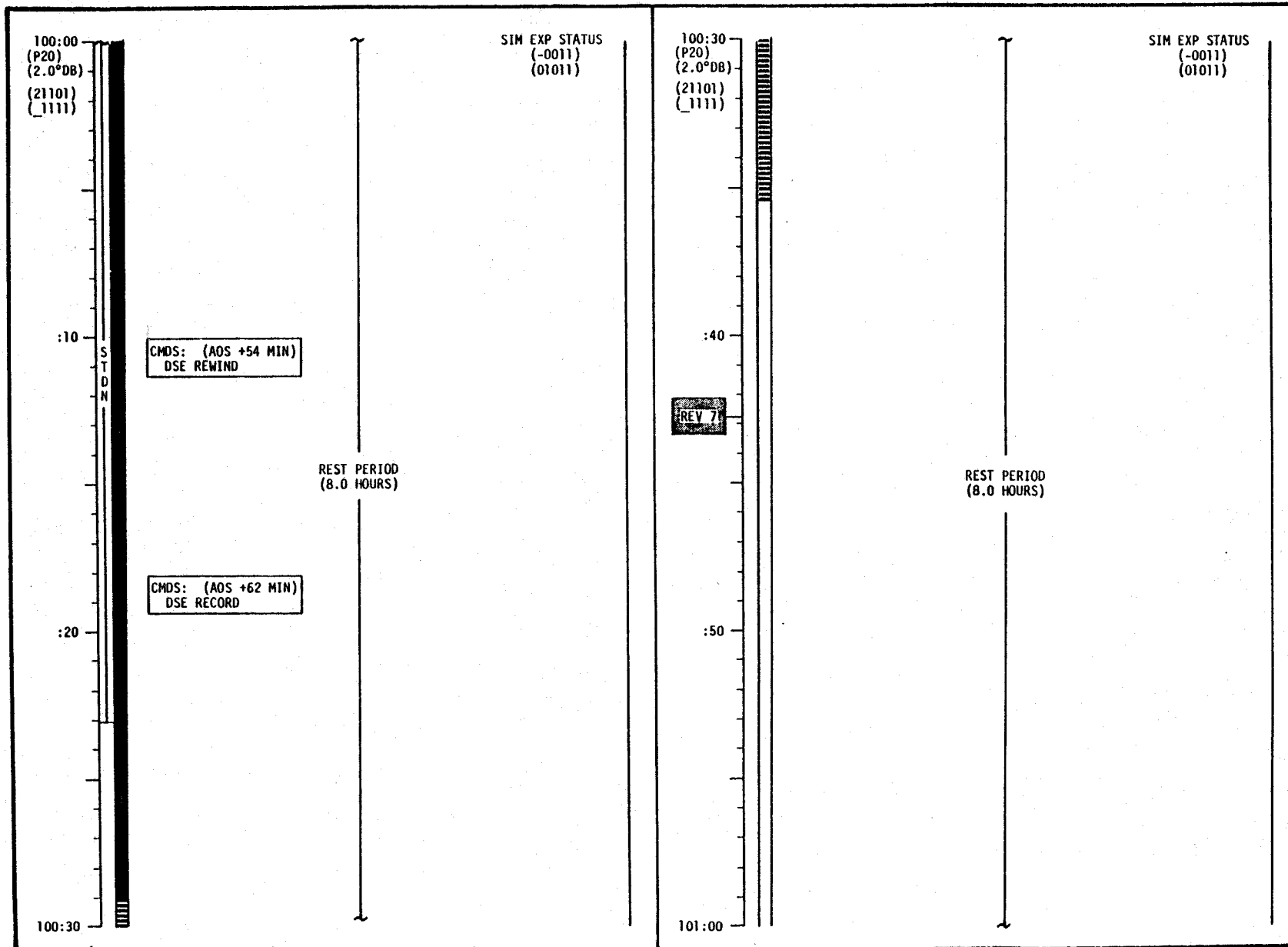
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-95

CSM FLIGHT PLAN



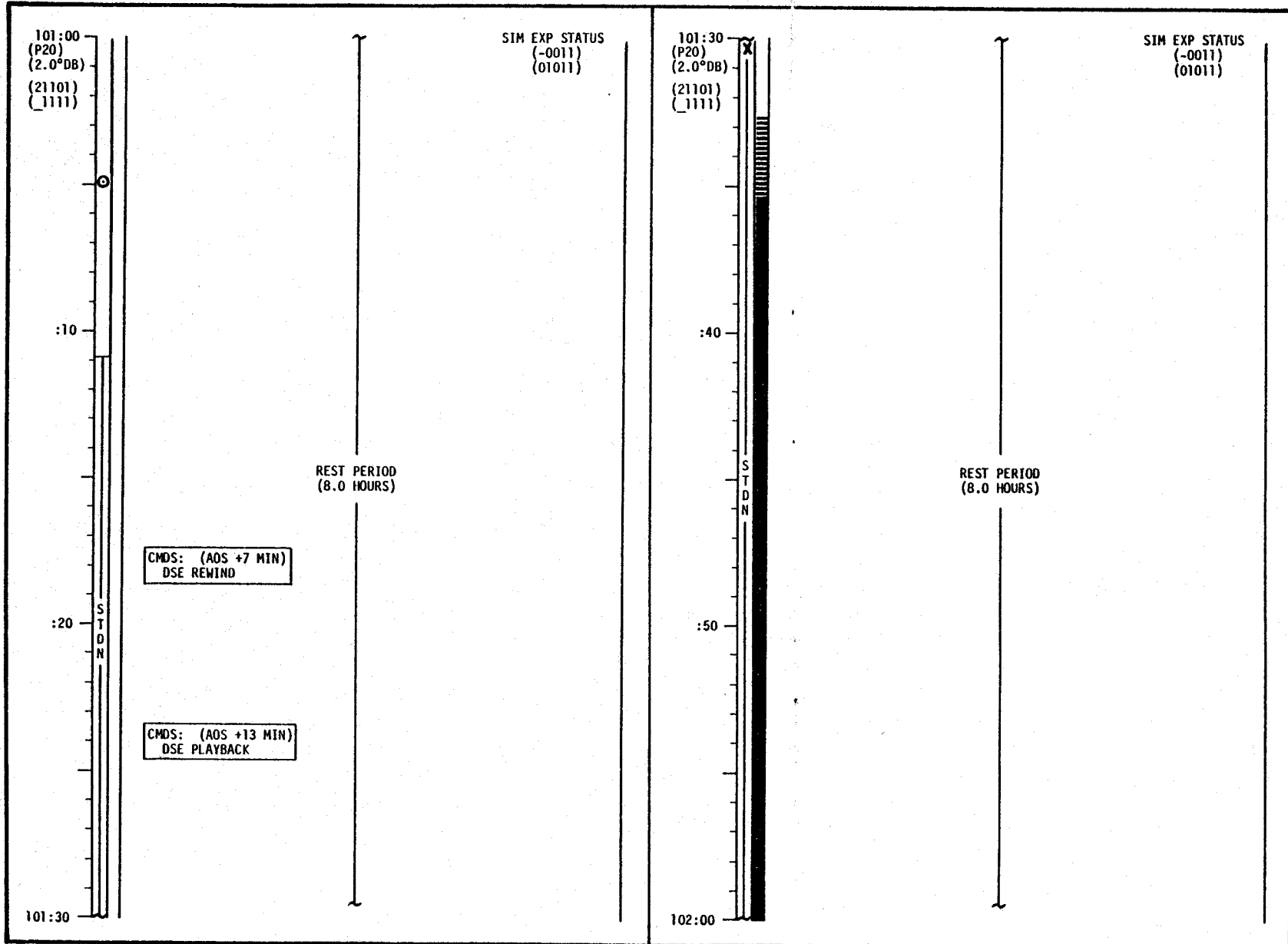
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-96

CSM FLIGHT PLAN



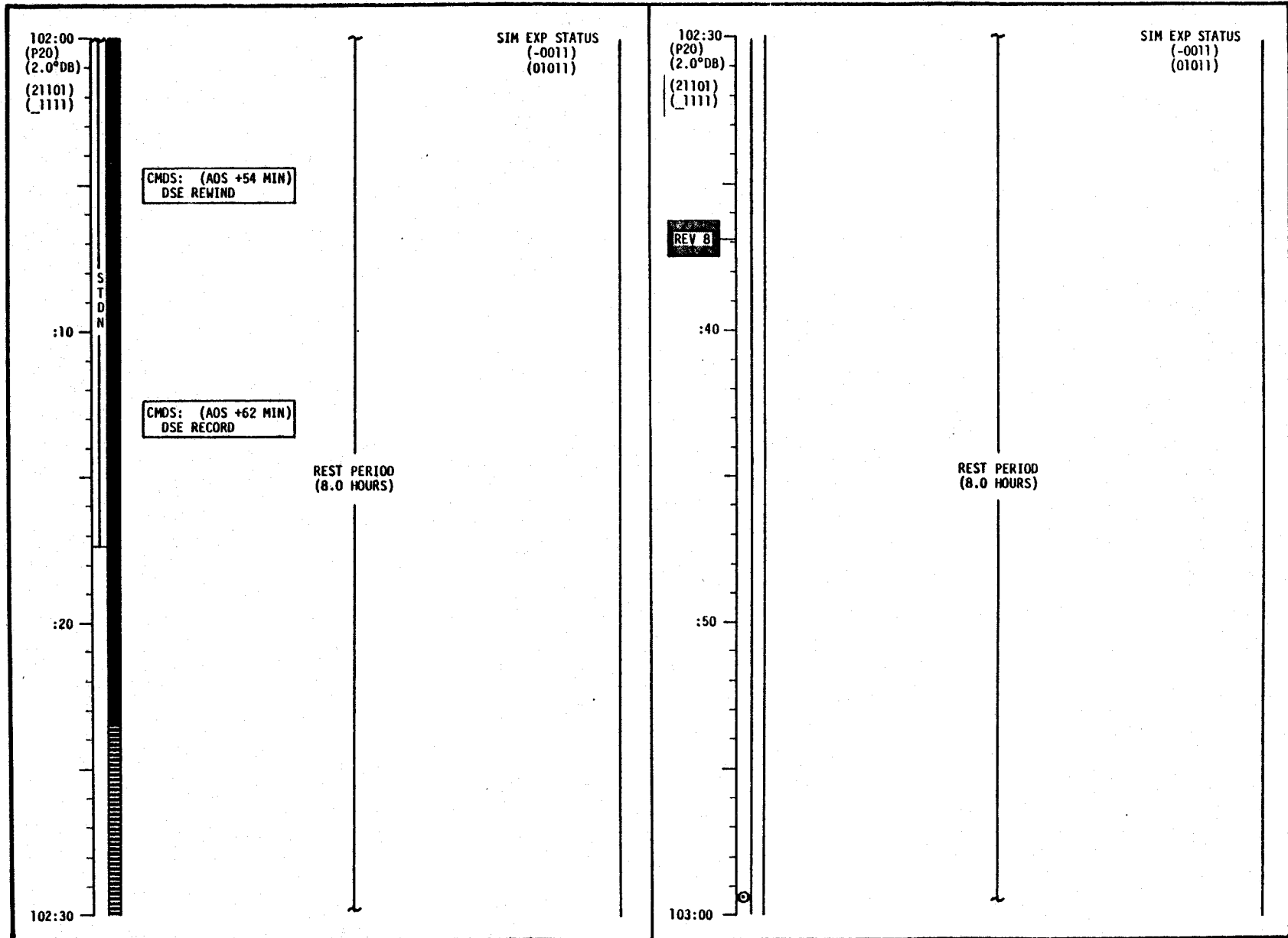
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-97

CSM FLIGHT PLAN



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

CSM FLIGHT PLAN



102:00
(P20)
(2.0°DB)
(21101)
(1111)

S
T
D
N

:10

CMDS: (AOS +54 MIN)
DSE REWIND

CMDS: (AOS +62 MIN)
DSE RECORD

REST PERIOD
(8.0 HOURS)

102:30

SIM EXP STATUS
(-0011)
(01011)

102:30
(P20)
(2.0°DB)
(21101)
(1111)

:40

REV 8

:50

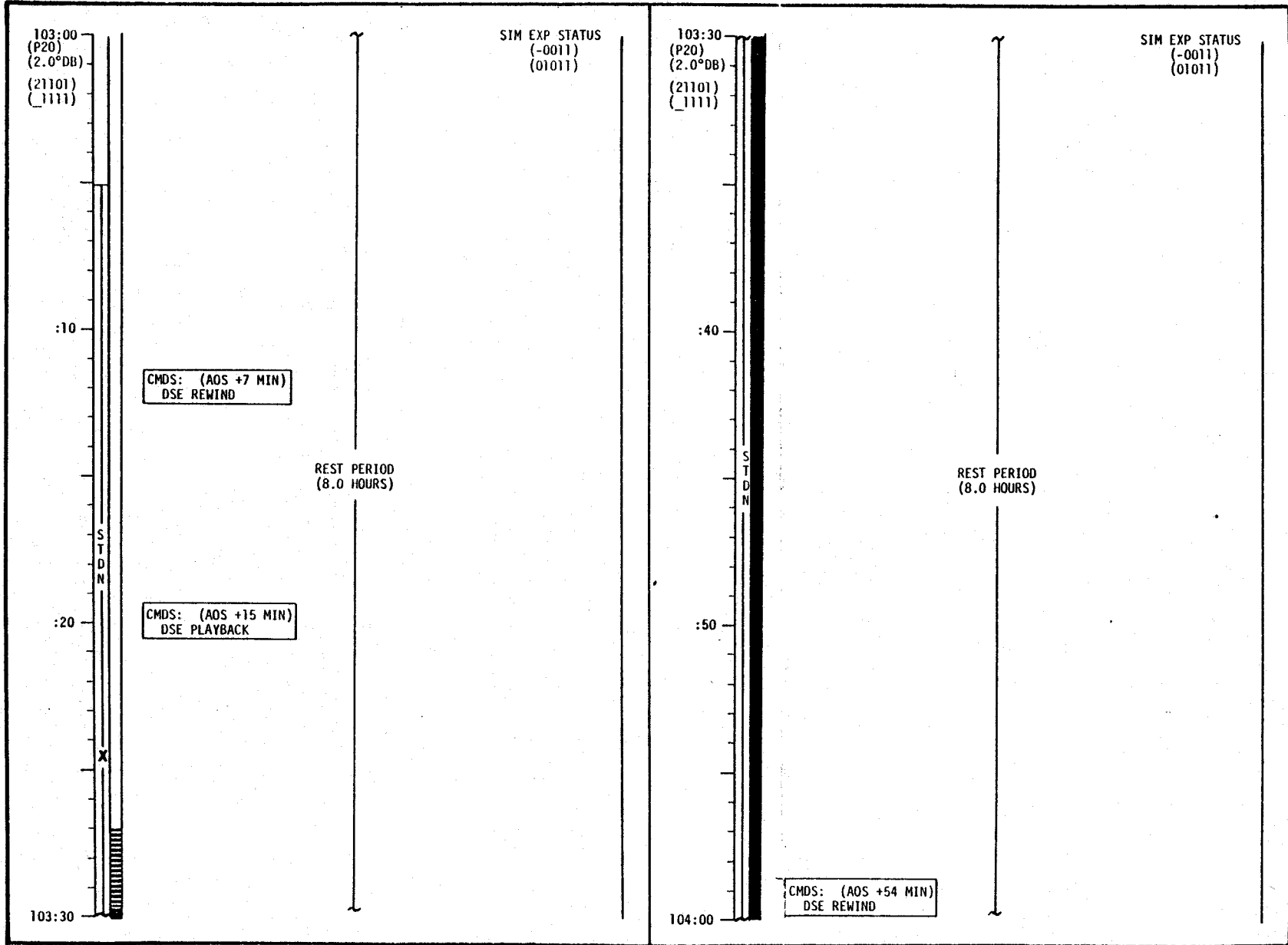
REST PERIOD
(8.0 HOURS)

103:00

SIM EXP STATUS
(-0011)
(01011)

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-99

CSM FLIGHT PLAN



103:00
(P20)
(2.0°DB)
(21101)
(1111)

SIM EXP STATUS
(-0011)
(01011)

103:30
(P20)
(2.0°DB)
(21101)
(1111)

SIM EXP STATUS
(-0011)
(01011)

:10

CMDS: (AOS +7 MIN)
DSE REWIND

REST PERIOD
(8.0 HOURS)

:20

CMDS: (AOS +15 MIN)
DSE PLAYBACK

103:30

:40

REST PERIOD
(8.0 HOURS)

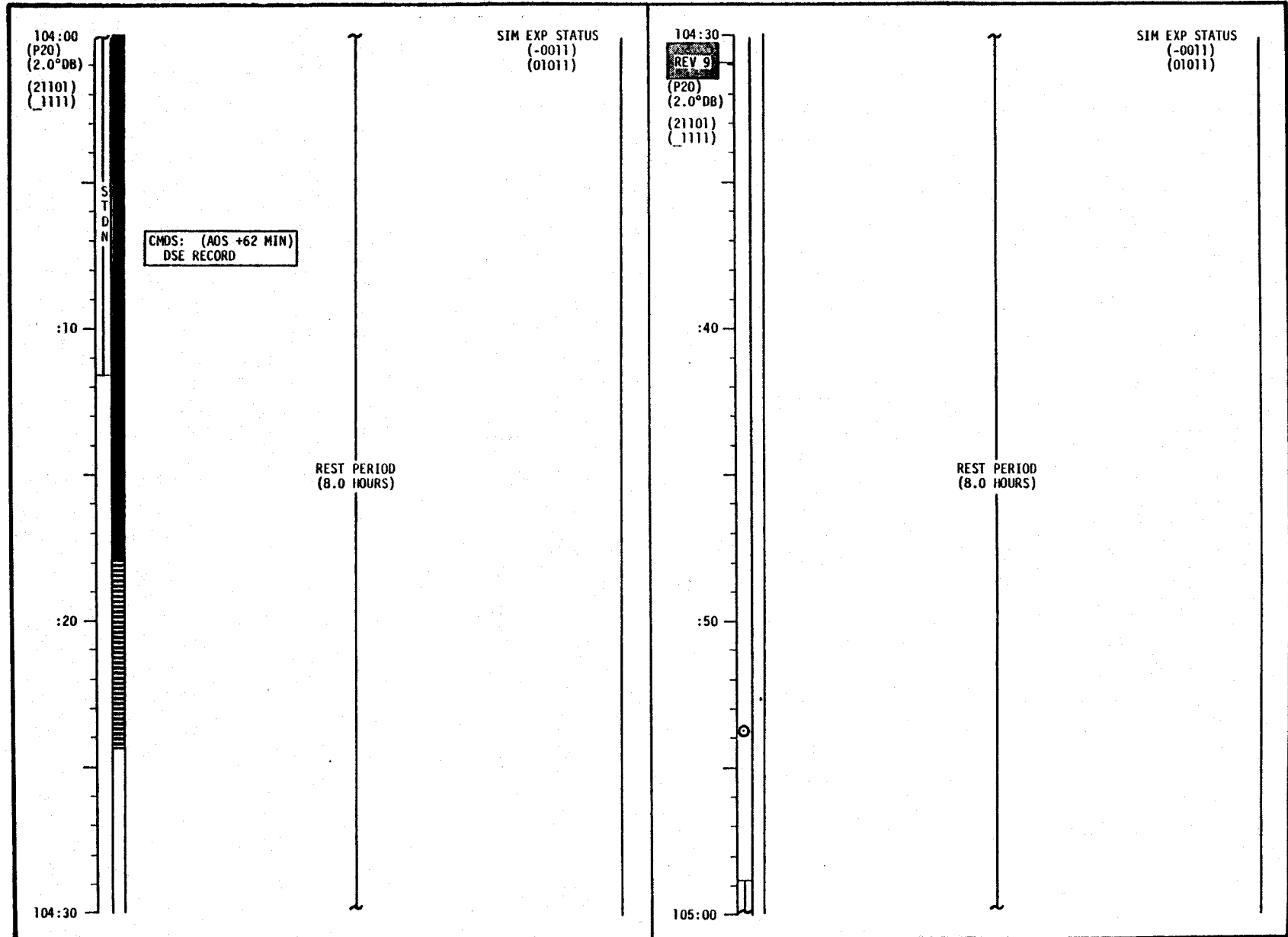
:50

CMDS: (AOS +54 MIN)
DSE REWIND

104:00

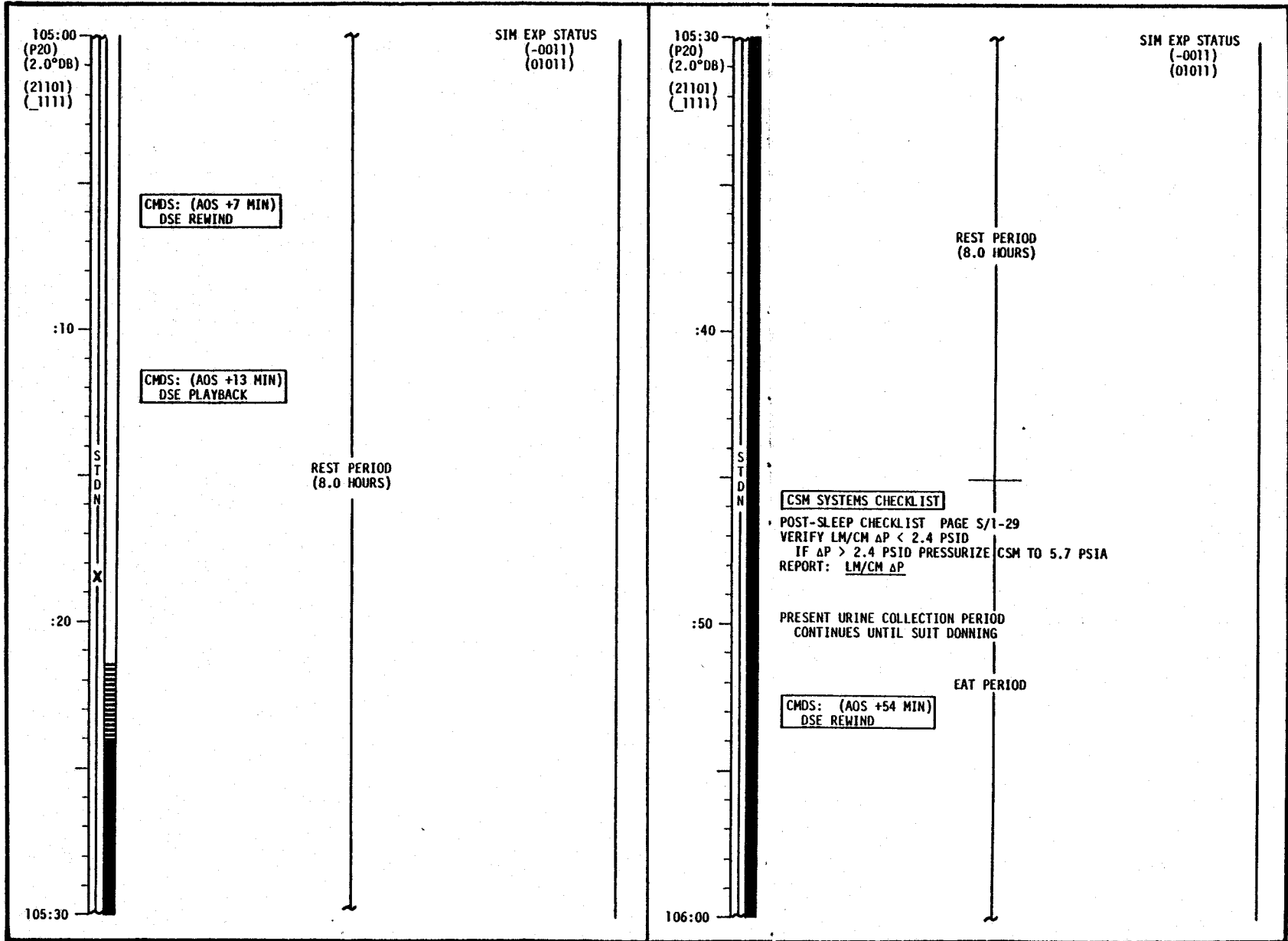
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-100

CSM FLIGHT PLAN



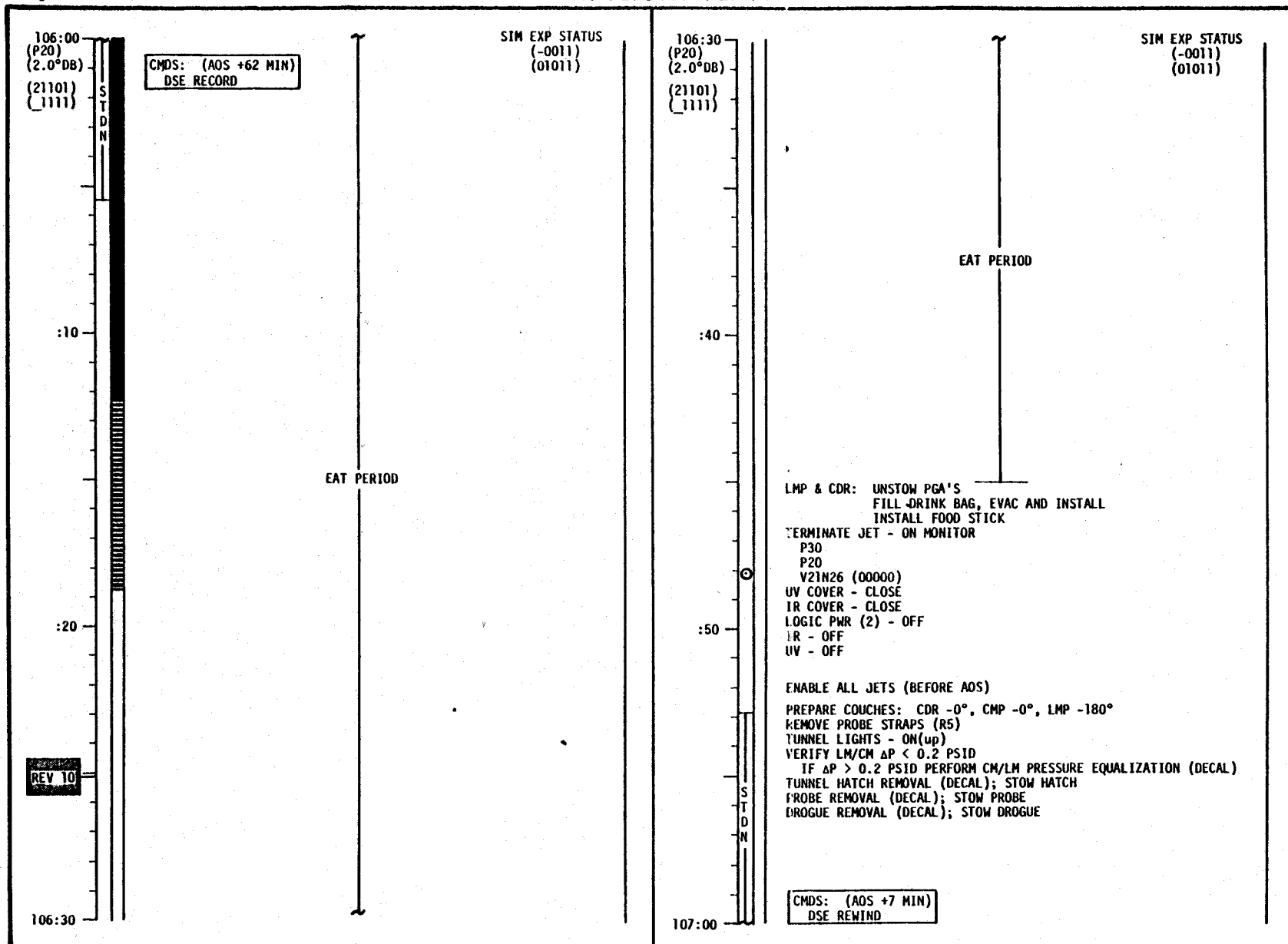
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-101

CSM FLIGHT PLAN



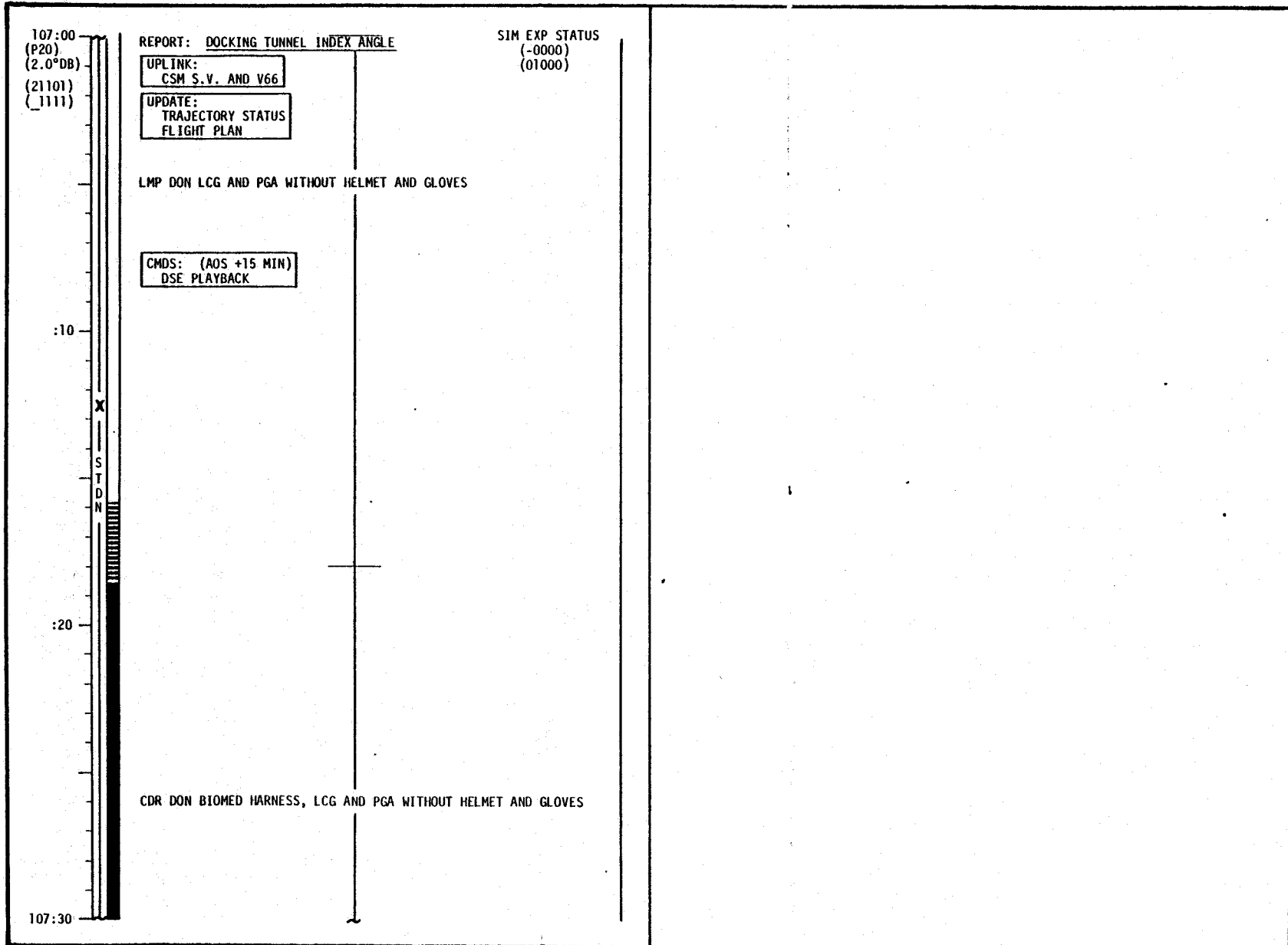
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-102

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-103

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-104

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LM FLIGHT PLAN

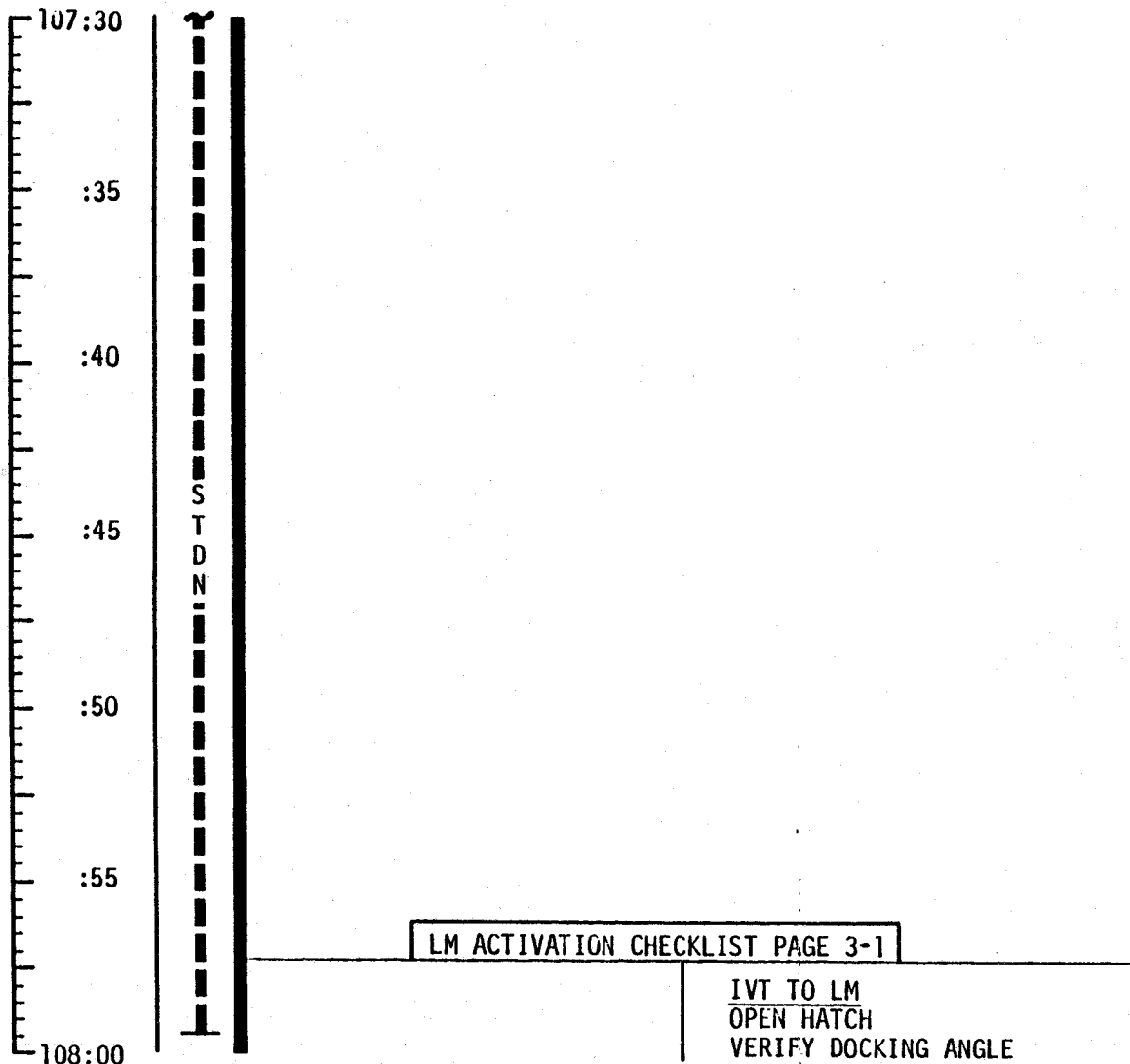
MCC-H

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 IMU REALIGN

N71: _____

N05: _____

N93: _____

X _____

Y _____

Z _____

GET _____

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

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

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
RB	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)	

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/77	2.107

LM FLIGHT PLAN

MCC-H

0853 CST

CDR

LMP

NOTES

108:00		IVT TO LM	TRANSFER POWER LIGHTS ON DES O ₂ AND H ₂ O - OPEN
:10			
:20	REV 11	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
:40		PGNS TURN ON AND SELF TEST	VHF CHECKOUT RECORDER - ON
		LGC/CMC CLOCK SYNC T EPHEM UPDATE	SUIT FAN/H ₂ O SEP CHECK GLYCOL PUMP CHECK
:50		SET DAP	STEERABLE ANTENNA ACTIVATION PRIM S-BAND CHECK SEC S-BAND BIOMED - RIGHT
(32022)		E-MEMORY DUMP	
		LDG GEAR DEPLOY	-1:30
109:00			

UPDATE TO LM
 AGS ABORT CONSTANTS
 DOI-2 PAD
 UPLINK TO LM
 L/S REFSMMAT
 LM S.V. & V66
 LGC ABORT CONST
 LGC ΔT CLOCK SYNC
 (IF REQ)

T
S
T
D
N

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

<p>108:00 (21101) (1111)</p> <p>AT LM REQUEST: LM PWR - RESET/OFF GET _____:_____:_____ (RECORD) SYS TEST - 7D SYS TEST ind - 0 volts</p> <p>DATA SYS - OFF</p> <p>CONFIGURE CAMERA: (UNDOCKING PHOTOS) CM2/DAC/18/CEX-BRKT,MIR (TB,1/250,7) 12 fps (100% MAG)</p> <p>MAG (CC) _____, MAG % _____ UTILITY PWR - ON CM2/EL/80/CEX (f8,1/250,FOCUS) 10 FR</p> <p>MAG (KK) _____, FR # _____</p> <p>L10H CANISTER CHANGE (11 INTO A, STOW 9 IN A9)</p> <p>REV 11</p> <p>AT CDR REQUEST: MARK TO LM FOR LM MISSION TIMER SYNC</p> <p>108:30</p>	<p>108:30 (21101) (1111)</p> <p>REMOVE AND STOW CSM/LM UMBILICAL IN F1 or F2 INSTALL DROGUE AND PROBE (DECAL) PRE-LOAD PROBE (DECAL)</p> <p>SIM EXP STATUS (*0000) (01000)</p> <p>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</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>RELEASE DOCKING LATCH NO'S. 1 & 7 CB DOCKING PROBE (2) - CLOSED PROBE EXT/REL - RETR PROBE EXT/REL tb (2) - bp (VERIFY) CB DOCKING PROBE (2) - OPEN PROBE EXT/REL - OFF VERIFY PROBE EXTEND LATCH ENGAGED INDICATOR (RED) NOT VISIBLE</p> </div> <p>LM CLOCK SYNC: V16N65E ON CDR MARK - V06N65E</p> <p>LM T EPHEM UPDATE: V05N01E, 1706E (T EPHEM)</p> <p>ACQ STDN HGA P -30, Y 202 AUTO, NARROW REPORT: LM PWR - RESET/OFF GET (FROM 108:00)</p> <p>STDN</p> <div style="border: 1px solid black; padding: 2px; margin: 5px 0;"> <p>CMDS: DSE DUMP</p> </div> <p>LM LANDING GEAR DEPLOY</p> <div style="border: 1px solid black; padding: 2px; margin: 5px 0;"> <p>UPLINK: CSM S.V. AND V66</p> </div> <div style="border: 1px solid black; padding: 2px; margin: 5px 0;"> <p>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)</p> </div> <p>109:00</p>
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LM FLIGHT PLAN

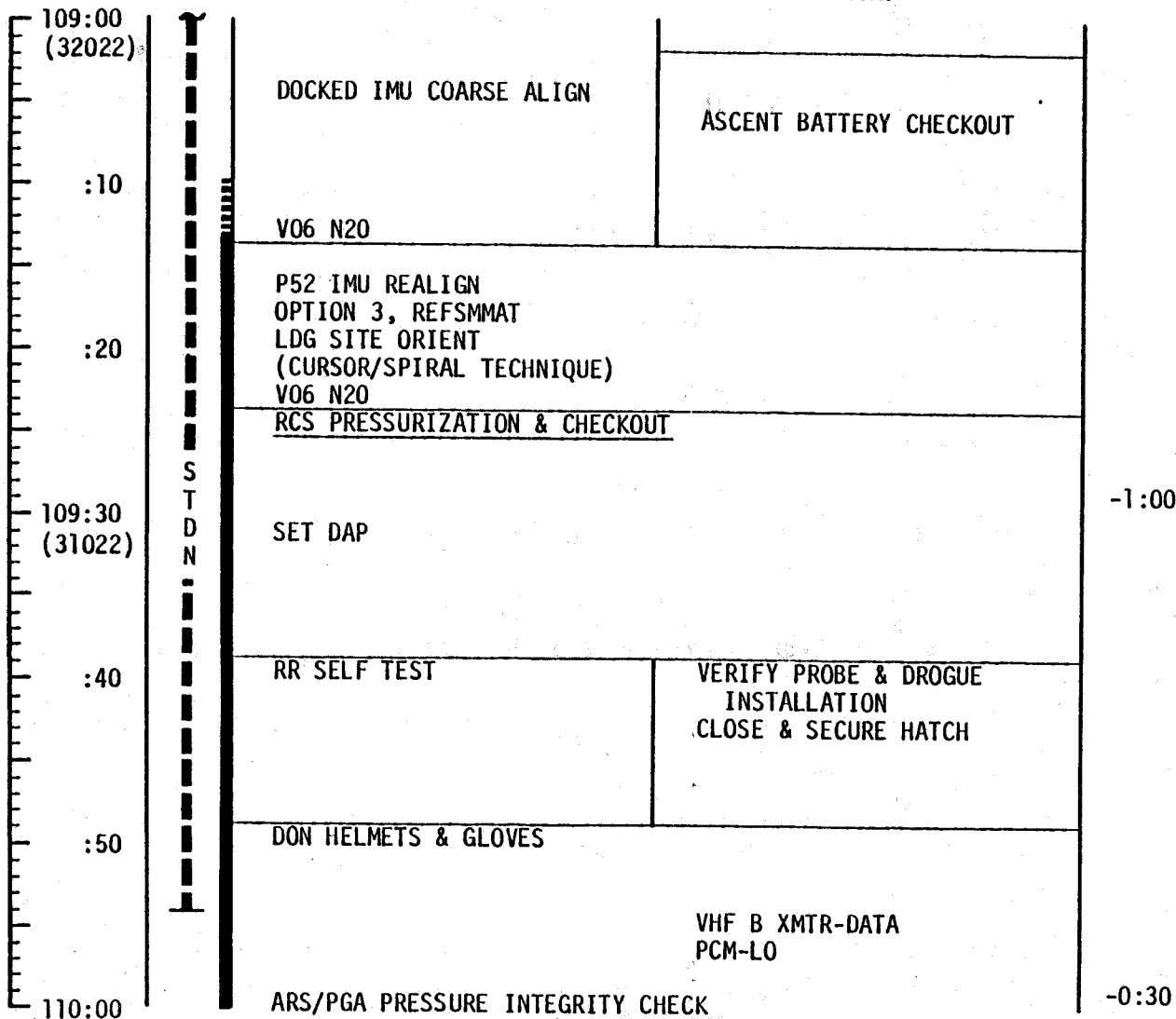
MCC-H

0953 CST

CDR

LMP

NOTES



UPDATE TO LM
PIPA BIAS (IF REQ)

GO/NO-GO FOR
UNDOCKING &
SEPARATION

-1:00

-0:30

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

<p>109:00 (21101) (1111)</p>	<p style="text-align: center;">SIM EXP STATUS (*0000) (01000)</p> <p>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</p> <p style="text-align: center;">X</p> <p style="text-align: center;">:10</p> <p style="text-align: center;">V06N20</p> <p style="text-align: center;">S T D N</p> <p>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</p> <p style="text-align: center;">:20</p> <p>VERIFY PGA INTERCONNECTS - TSB DON HELMET AND GLOVES</p> <p style="text-align: center;">V06N20</p> <p>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</p> <p>SUIT CKT INTEGRITY CHECK (DECAL)</p> <p>109:30</p>	<p style="text-align: center;">SIM EXP STATUS (*0000) (01000)</p>	<p>109:30 (21101) (1111)</p> <p>PANEL 10 MODE - VOX VOX SENS sw - 5 S-BD - OFF INTERCOM - OFF VHF AM T/R - T/R (VERIFY)</p> <p>AFTER LM RCS CHECKOUT CMC MODE - AUTO</p> <p style="text-align: center;">:40</p> <p>LM RR SELF TEST RNDZ XPNDR - OFF (VERIFY) AUTO RCS SEL B3 - OFF</p> <p style="text-align: center;">S T D N</p> <p>ROLL (8) - OFF UNTIL LM/CM ΔP > 3.5 PSID DOCKING LATCH RELEASE (DECAL) HATCH INSTALLATION (DECAL)</p> <div style="border: 1px solid black; padding: 2px; width: fit-content;"> <p>CMDS: DSE RECORD</p> </div> <div style="border: 1px solid black; padding: 2px; width: fit-content;"> <p>UPDATE: GO/NO-GO FOR UNDOCK/SEP</p> </div> <p>WHEN LM RR SELF TEST COMPLETE: AUTO RCS SEL B3 - ON</p> <p style="text-align: center;">:50</p> <p>HATCH INTEGRITY CHECK (DECAL)</p> <p>VHF ANT - RIGHT (VERIFY) VHF RCY ONLY - B DATA VHF AM A - SIMPLEX VHF AM B - OFF VERIFY DSE TAPE MOTION (LBR/RCD/FWD/CMD RESET)</p> <p>DOFF HELMET, GLOVES</p> <p>RR XPNDR ACTIVATION AND SELF TEST (DECAL)</p> <div style="border: 1px solid black; padding: 2px; width: fit-content;"> <p>114 VALUES A ~ 1.75 AGC B ~ 2.35 SELF TEST C ~ 0.3 UNLOCKED ~ 4.9 LOCKED</p> </div> <p>RNDZ XPNDR - HTRS</p> <p>110:00</p>
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MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-111

LM FLIGHT PLAN

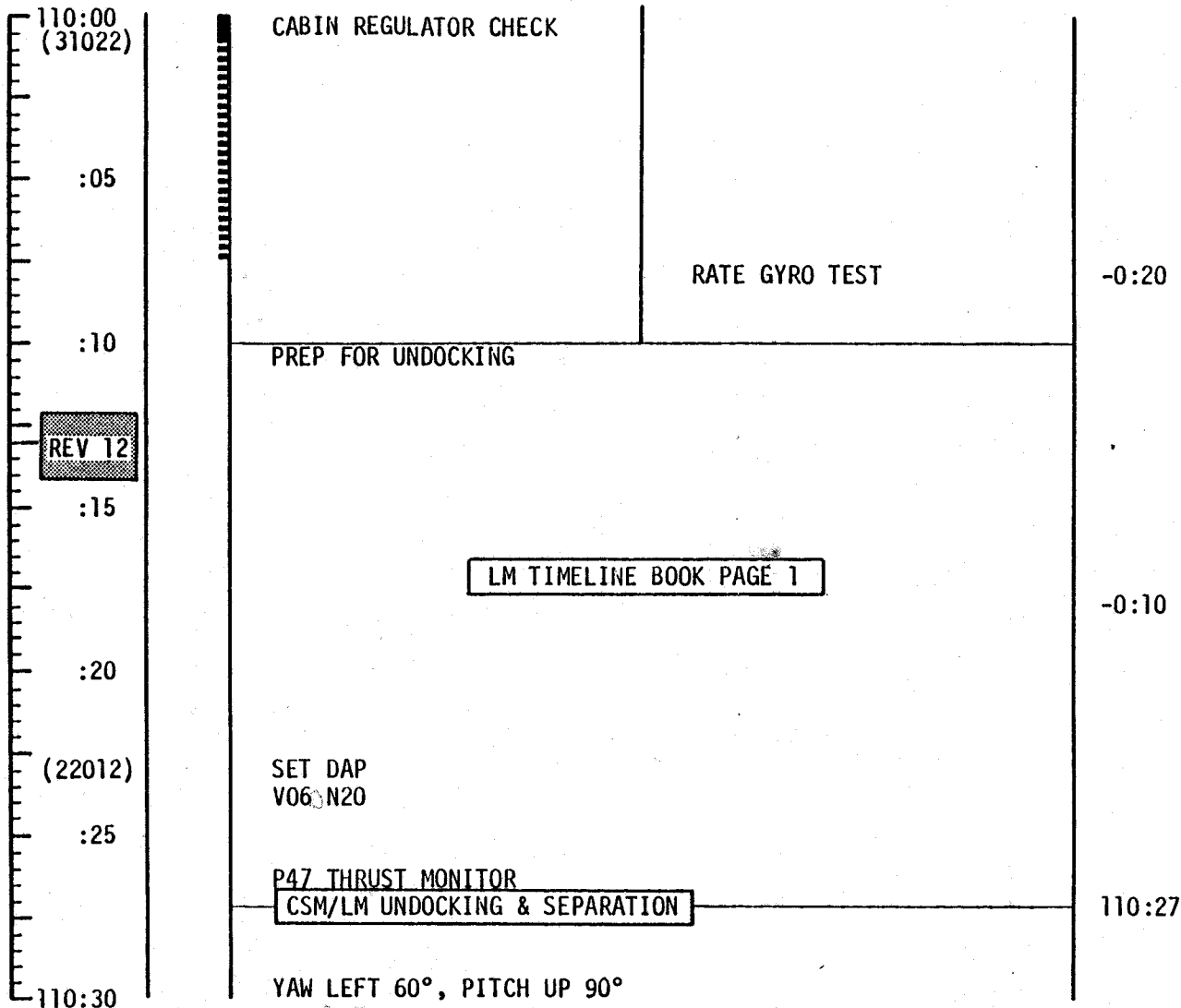
MCC-H

1053 CST

CDR

LMP

NOTES



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)

:10

REV 12

:20

(11102)
(1111)

110:30

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

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)

GDC ALIGN
VERIFY ORDEAL
ALT SET = 40 NM

PERFORM UNDOCKING SWITCH CONFIGURATION

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

P41 (TRIM)
BMAG (3) - ATT 1/RATE 2
SC CONT - SCS
V48 (11102)
(1111)
RHC & THC - ARMED
VO6N20E(AT LM REQUEST)
UNDOCKING CHECKLIST

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 # _____

UNDOCKING CHECKLIST

DAC - ON
59:00 EIS 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 - VIHF RNG
PCM BIT RATE - LOW

P30 MANEUVER

	C	S	M	S	E	P	PURPOSE
SET STARS	R	C	S	G	&	N	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 GET1
	+	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

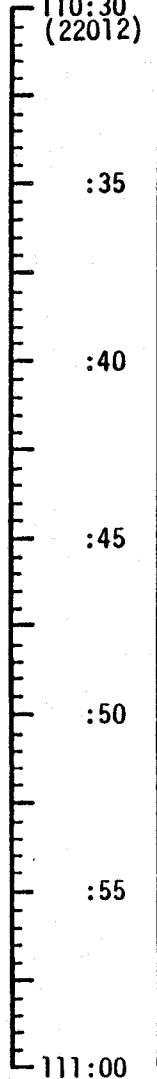
1123 CST

CDR

LMP

NOTES

110:30
(22012)



⊙

↓
S
T
D
N

DOFF HELMETS & GLOVES

SEPARATION PHOTOGRAPHY
LM3/DAC & DC

LDG RADAR CHECK

CONFIGURE CAMERAS FOR CABIN
PHOTOS, LM/DAC & DC

:35

REPORT: VO6N20 ANGLES & GET
DPS THROTTLE CHECK

VHF B XMTR-OFF, BIOMED-LEFT
PCM-HI

:40

DPS PRESSURIZATION & CHECKOUT

AGS ACTIVATION

:45

: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

UPDATE TO LM
AGS K-FACTOR
REV 12 LS TCA

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
SET HGA MAN P +12, Y 334 REACQ, NARROW FOR AOS (*0000)
(01000)

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

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

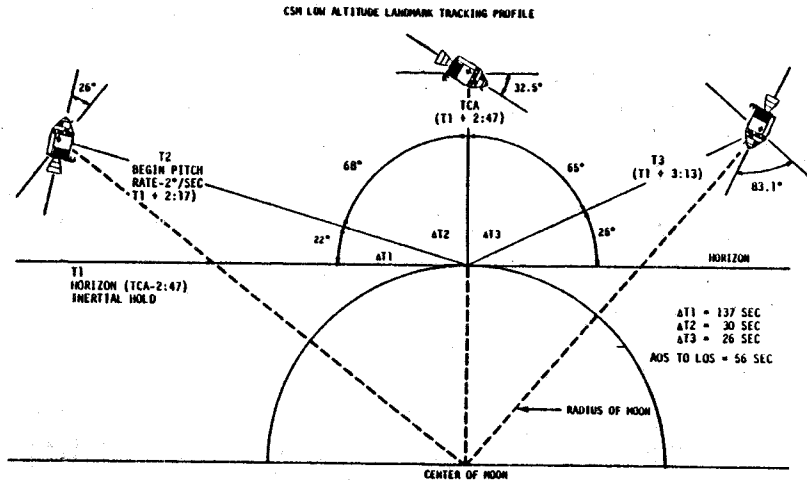
PRO
CMDS:
DSE RECORD

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

(P20)
(-2.000)
(0.5°DB)

111:00



P24 LDMK TRACKING

(1/125)

TGT:

T₁ _____ : _____ : _____
T₂ _____ : _____ : _____ (111:00:28.5)
TCA _____ : _____ : _____
T₃ _____ : _____ : _____
R _____ °p _____ °y _____ °(T2 ACQ)
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)
 :05
 :10
 :15
 :20
 :25
 111:30



OBSERVE LDG SITE

RR CHECKOUT

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

COAS CALIBRATION

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)

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

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

P52 IMU REALIGN

(11102)
(1111)

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

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

GDC ALIGN

:10

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)

:20

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

111:30

P30 MANEUVER

	C I R C					PURPOSE
	S	P	S/G	&	N	
SET STARS						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

MCC-H

1223 CST

CDR

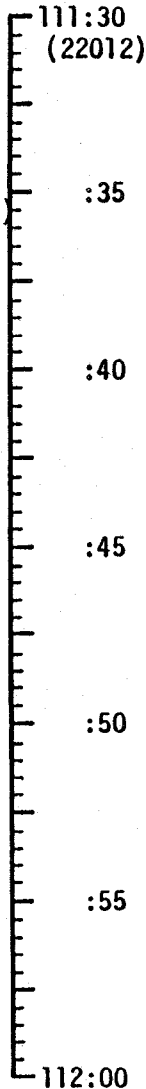
LMP

NOTES

UPLINK TO LM
CSM S.V.
LM S.V.
E-MEMORY (IF REQ)
DES TARGETING

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

GO/NO-GO FOR DOI-2



STND

MNVR TO AGS CAL ATT
VHF COMM CHECK W/CSM

CONFIGURE VHF FOR LOS
VHF B XMTR-DATA

AGS CALIBRATION

CONFIGURE S-BAND FOR LOS
PCM-LO

PREP FOR DOI-2
P30, P41
MNVR TO DOI-2 ATTITUDE

CSM CIRC 111:56

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)

SIM EXP STATUS
(*0000)
(01000)

S
T
D
N

(11101)
(1111)

:40

(P40)
(0.5°DB)

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)

:50

(11101)
(1111)

112:00

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									ATIG
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 RCY 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	

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

F8V277 MCC-H

1253 CST

LM FLIGHT PLAN

CDR

LMP

NOTES

112:00
(22012)

:05

REV 13

:10

(22112)

:15

:20

:25

112:30

LM DOI-2

P76 UPDATE CSM S.V.

PREP FOR PDI

MNVR TO PDI ATTITUDE

SET DAP

DON HELMETS & GLOVES

V47 AGS INITIALIZATION

CHECK ECS, RCS, EPS, APS
 CAMERA PREP FOR EARTHRISE
 LM/DC
 CAMERA PREP FOR PDI
 LM3/DAC
 BATS 5 & 6 - ON
 INVERTER-1

TIG: 112:01
 BT: (RCS) 27 SEC

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 ADS

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

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

REV 13

: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

3:50 - DAC - ON

4:50 - T2 (LDMK ACQ) OPT MODE - MAN,
TAKE MARKS TO 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

SIM EXP STATUS

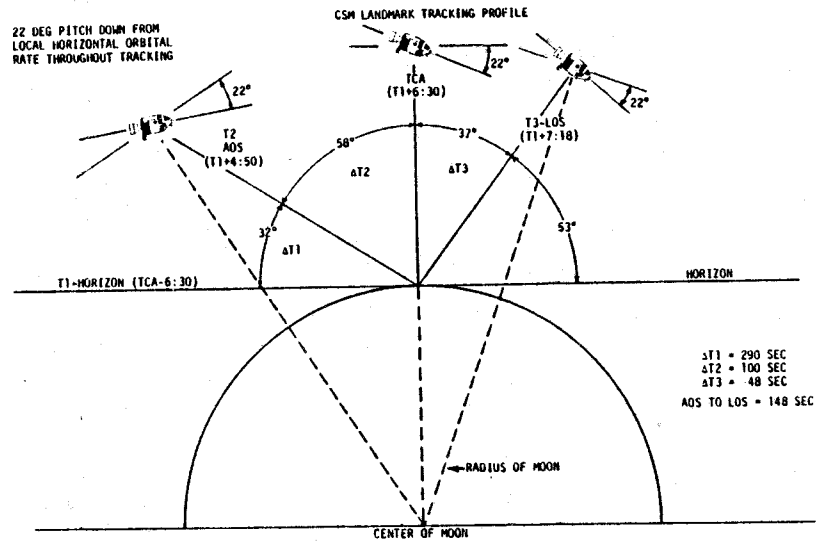
(*0000)
(31000)

LM DOI-2 (112:01)

COPY P76 DATA FROM STDN

33 _____ : _____ : _____
84 _____ : _____ : _____

22 DEG PITCH DOWN FROM
LOCAL HORIZONTAL ORBITAL
RATE THROUGHOUT TRACKING



P24 LDMK TRACKING

TGT: RP-3

(1/250)

T₁ _____ : _____ : _____
T₂ _____ : _____ : _____ (112:21:46.7)
TCA _____ : _____ : _____
T₃ _____ : _____ : _____
R _____ °P _____ °Y _____ ° (T2 ACQ)
N or S NM _____ /SA _____ TA _____ (T2 ACQ)
N89
LAT -03.694
LONG/2 +65.956
ALT +000.00

LM FLIGHT PLAN

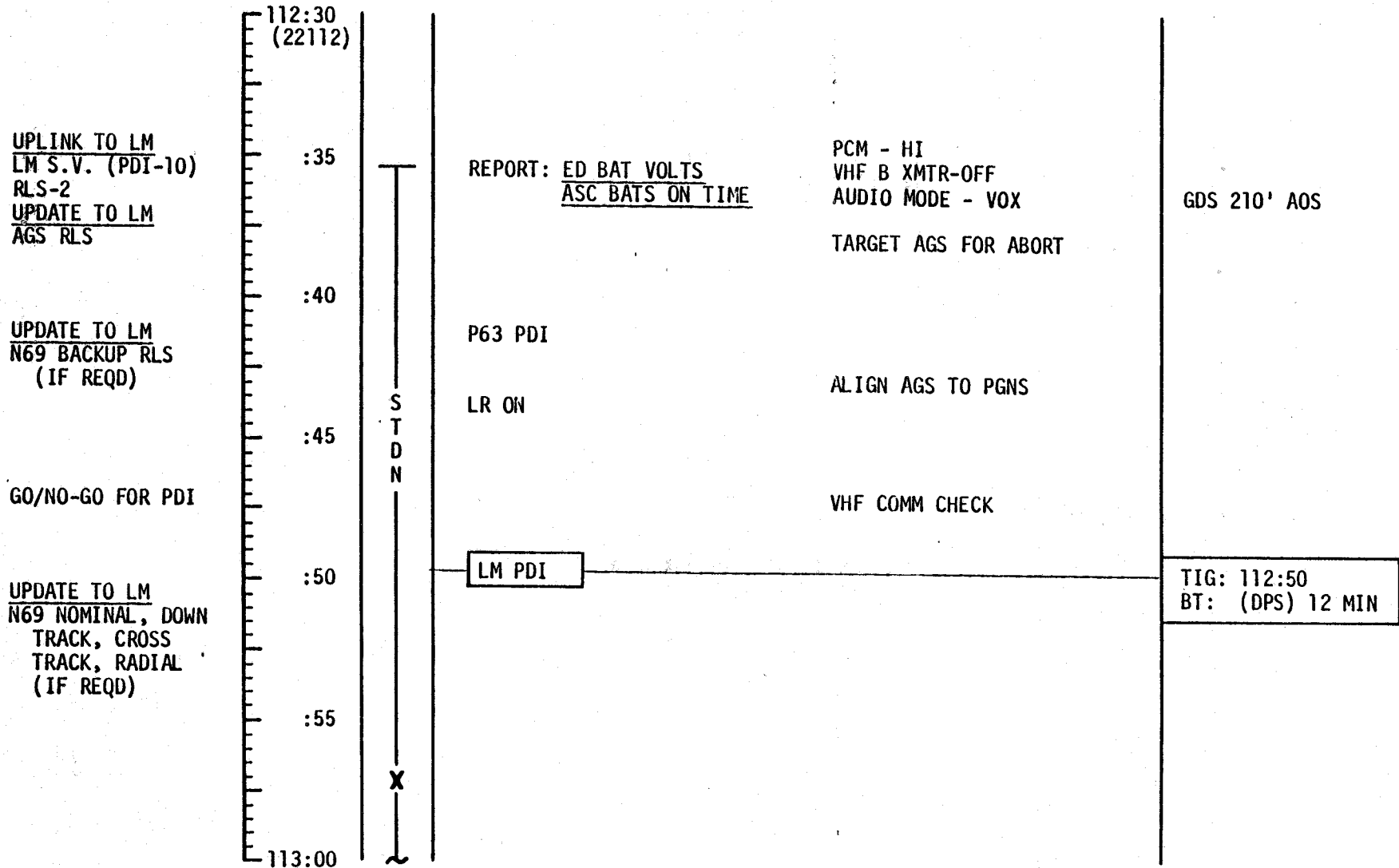
MCC-H

1323 CST

CDR

LMP

NOTES



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)

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 TO SEC APART

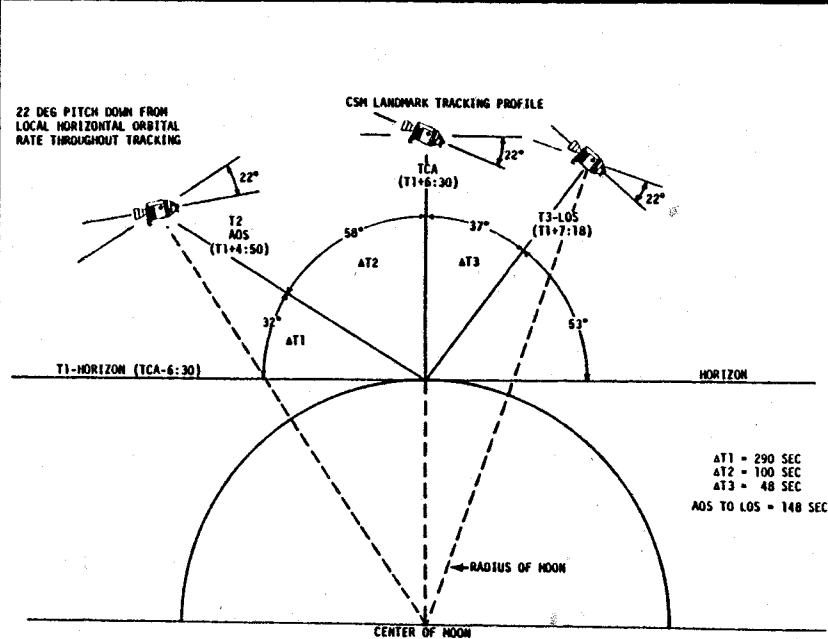
6:30 - TCA

7:18 - T3 (LDMK LOSS) DAC - OFF

P00

(11101)
(1111)

113:00



AT1 = 290 SEC
AT2 = 100 SEC
AT3 = 48 SEC
AOS TO LOS = 148 SEC

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

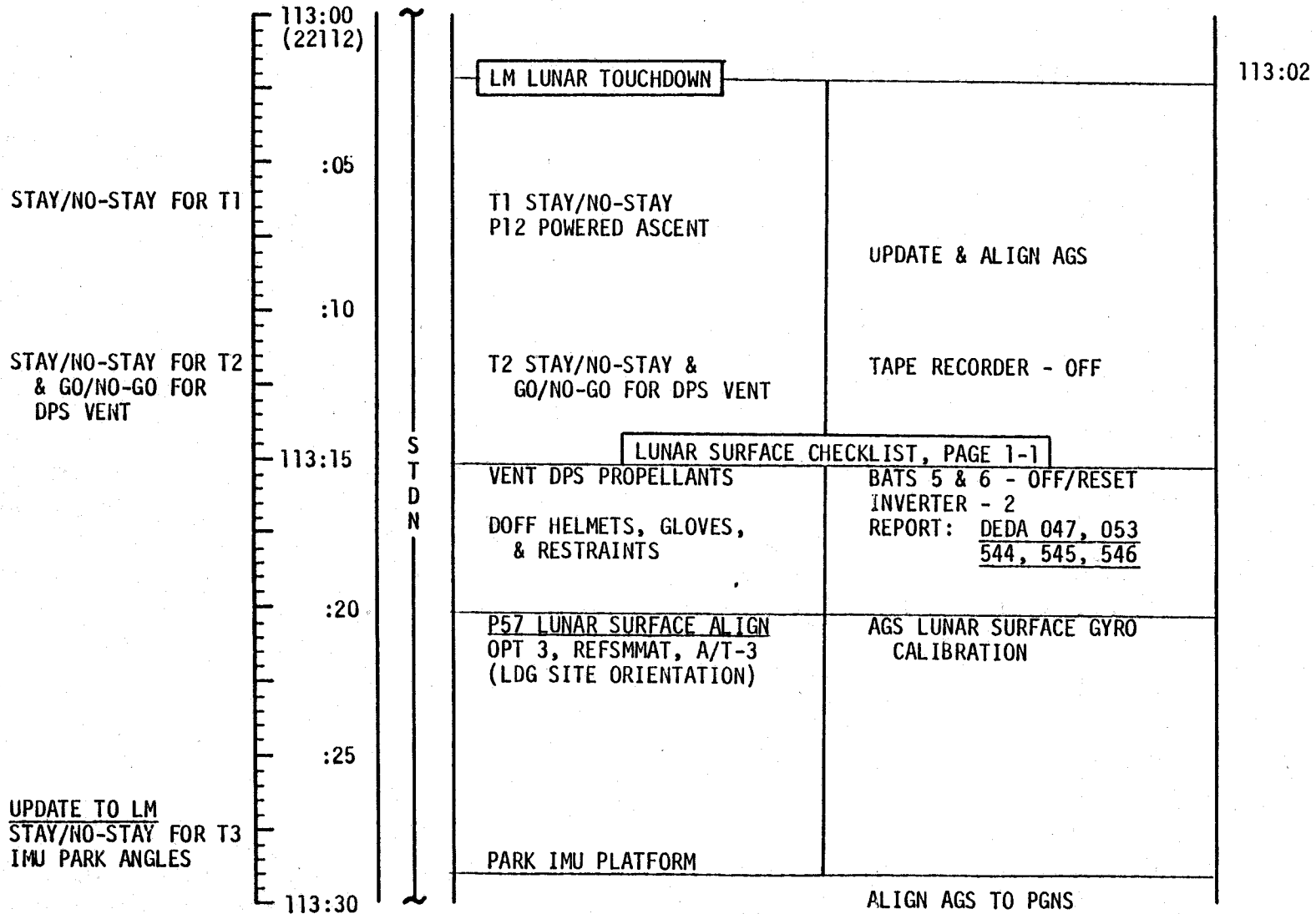
MCC-H

1353 CST

CDR

LMP

NOTES



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)

S
T
D
O
W
N

:10

:20
(P20)
(0.5°DB)

113:30

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

P52 (OPTION 3)
(LDG SITE ORIENT)

CONFIRM STAY/NO STAY FOR T2

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

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

I

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

J

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

K

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

L

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

M

PURPOSE		T3 ABORT PAD			
GETI	HRS	+	0	0	
TPI	MIN	+	0	0	0
N37	SEC	+	0		

N

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

E

PURPOSE		NO PDI ₁ +12 ABORT			
GETI	HRS	+	0	0	
N33	MIN	+	0	0	0
	SEC	+	0		

F

PURPOSE		NO PDI ₁ +12 ABORT			
NB4	ΔVX				
LOCAL	ΔVY				
VERT	ΔVZ				

G

PURPOSE		NO PDI ₁ +12 ABORT			
GETI	HRS	+	0	0	
CSI	MIN	+	0	0	0
N11	SEC	+	0		

H

PURPOSE		NO PDI ₁ +12 ABORT			
GETI	HRS	+	0	0	
TPI	MIN	+	0	0	0
N37	SEC	+	0		

LM FLIGHT PLAN

MCC-H

1423 CST

CDR

LMP

NOTES

113:30
(22112)

LM POWER DOWN
LGC - STANDBY, IMU - OFF

:35

BAT L (LMP) - ON
BATS 2 & 1 - OFF/RESET
BIOMED - RIGHT

:40

CABIN CONFIGURATION FOR STAY

UPDATE TO LM
LIFT-OFF TIMES FOR
REVS 15-20

DEPLOY LM EVA ANTENNA

113:45

S
T
D
N

:50

:55

114:00

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

<p>113:30 (P20) (0.5°DB) (11101) (1111)</p> <p style="text-align: center;">S T D N</p> <p>:40</p> <p style="border: 1px solid black; padding: 2px; width: fit-content; margin: 10px auto;">CMDS: (AOS +68 MIN) DSE RECORD</p> <p>:50</p> <p>PC: STBY STEREO PWR</p> <p>LA - ON IMAGE MTH - ON</p> <p>114:00</p>	<p>POST-SPS BURN SIM PREP (CUE CARD) VHF AM A - OFF (CTR) VHF RCY ONLY - OFF</p> <p>DATA SYS - ON IR - ON UV - ON MC/LA COVER - OPEN IR COVER - OPEN UV COVER - OPEN MC - EXTD</p> <p>VERIFY DSE TAPE MOTION (HBR/RCD/FWD/CMD RESET) SET HGA MAN, WIDE P <u>-10</u>, Y <u>25</u> FOR AOS</p>	<p>SIM EXP STATUS (+0000) (31000)</p>
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MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-127

LM FLIGHT PLAN

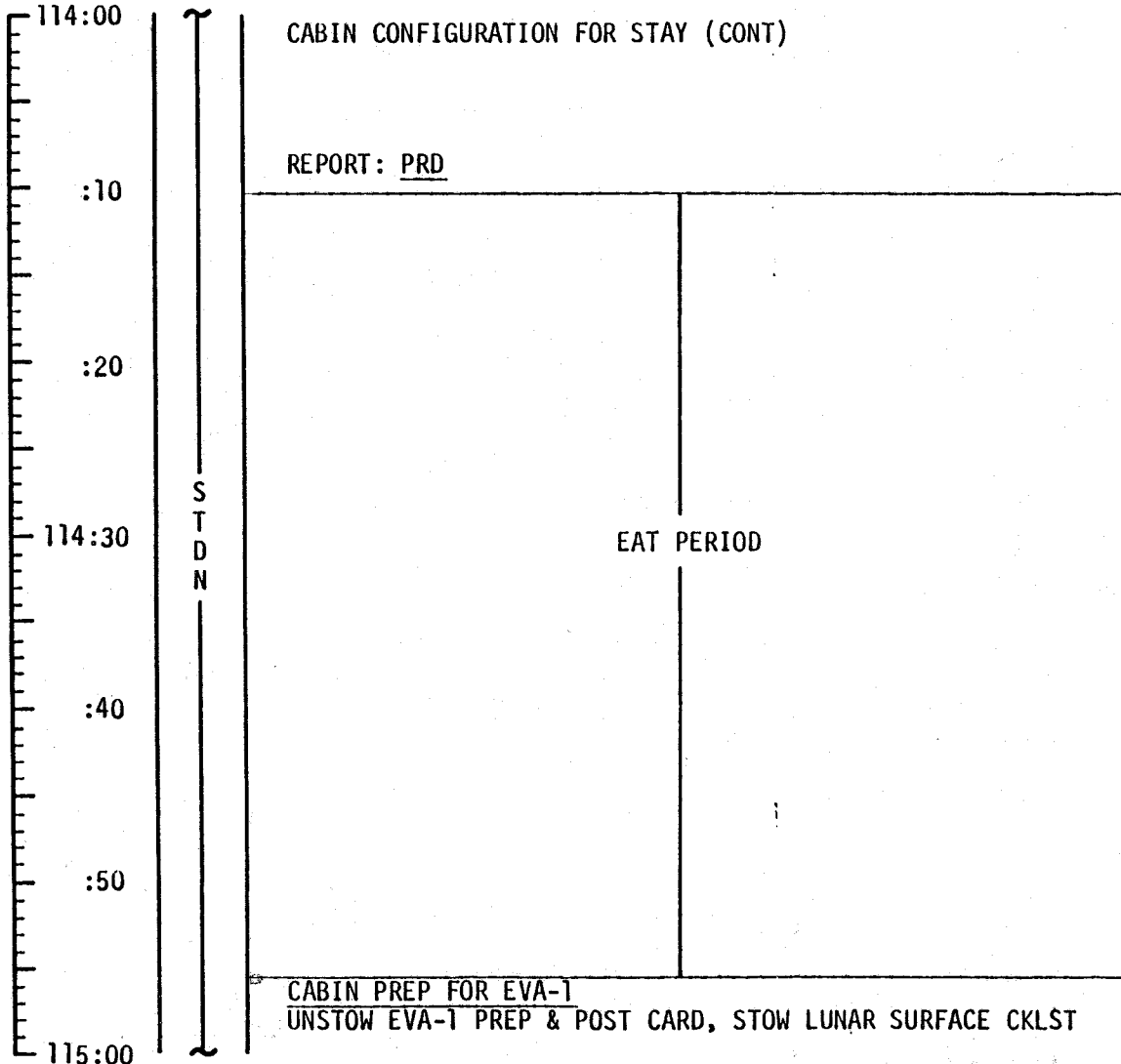
MCC-H

1453 CST

CDR

LMP

NOTES

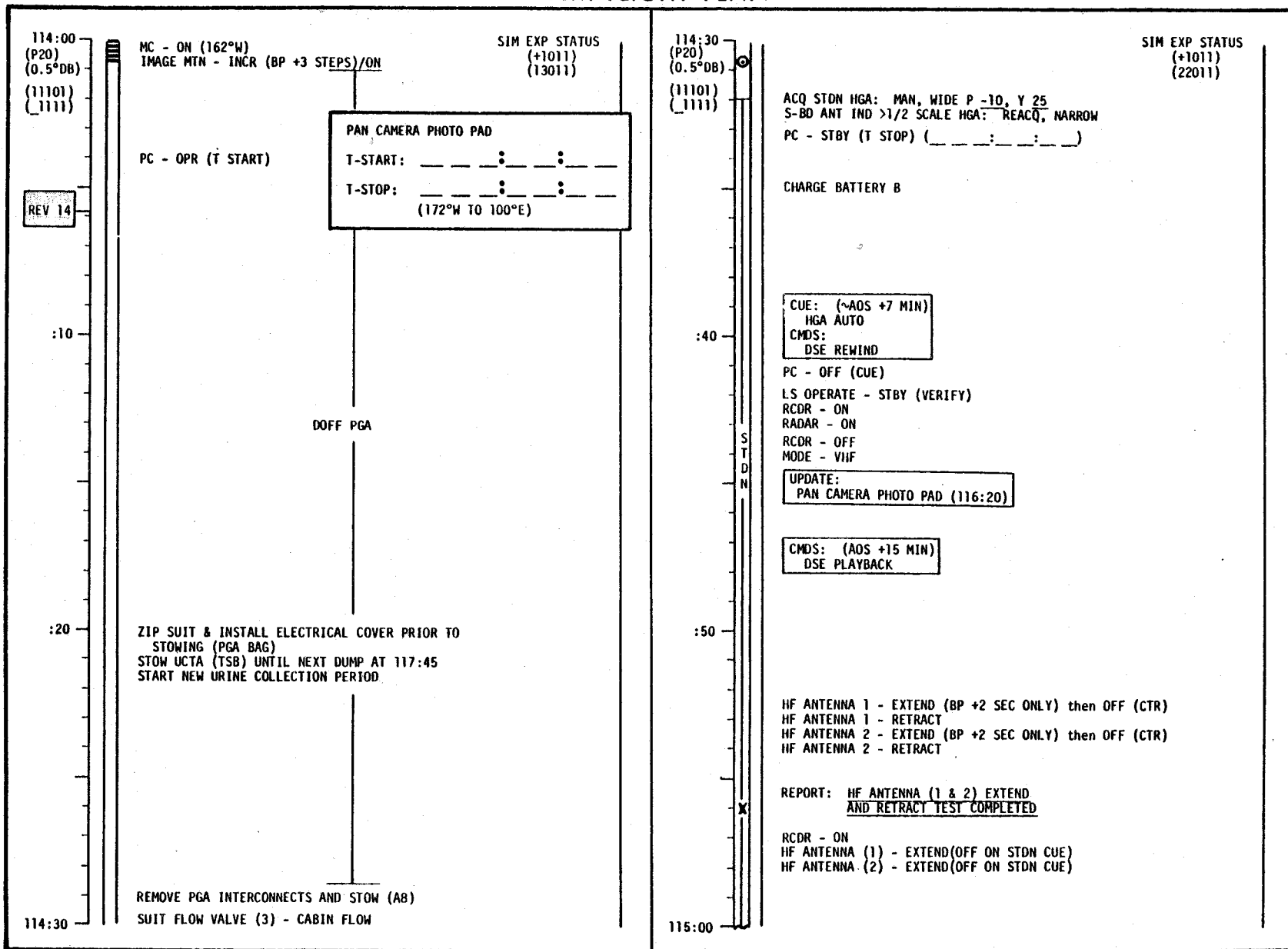


CSM REV 4

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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-129

LM FLIGHT PLAN

MCC-H

1553 CST

CDR

LMP

NOTES

<p>115:00</p> <p style="text-align: center;">:10</p> <p style="text-align: center;">:20</p> <p>115:30</p> <p style="text-align: center;">:40</p> <p style="text-align: center;">:50</p> <p>116:00</p>	<p>S T D N</p>	<p>CABIN PREP FOR EVA-1 (CONT)</p> <hr/> <p>EQUIPMENT PREP FOR EVA-1</p> <hr/> <p><u>PLSS DONNING</u></p> <p>LMP DON PLSS</p> <p>CDR DON PLSS</p>	<p>-1:30</p> <p>-1:15</p> <p>-1:00</p> <p>-0:45</p>
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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

<p>115:00 (P20) (0.5°DB) (11101) (1111)</p>	<p style="text-align: center;">SIM EXP STATUS (+1111) (02411)</p>	<p>115:30 (P20) (0.5°DB) (11101) (1111)</p>	<p style="text-align: center;">SIM EXP STATUS (*1111) (00400)</p>
<p style="text-align: center;">S T D N</p>	<p>MC - OFF (7°E) WAIT 30 SEC MC - STBY LA - OFF IMAGE MTN - OFF MC - OFF</p> <p style="border: 1px solid black; padding: 2px;">CMDS: DSE REWIND</p> <p>PC SELF TEST - OFF UV - OFF (AFTER SUNSET) IR - OFF DATA SYS - OFF SM/AC PWR - OFF</p> <p style="border: 1px solid black; padding: 2px;">CMDS: DSE RECORD</p> <p>LS OPERATE - OPERATE (PULL FILM FOR 2 MIN)</p> <p>LS OPERATE - STBY MODE - HF SELECT OMNI B SET HGA: MAN, WIDE P -12, Y 211 HGA PWR - OFF PCM BIT RATE - LOW</p> <p>LS OPERATE - OPERATE (PULL FILM FOR 2 MIN)</p> <p>LS OPERATE - STBY PCM BIT RATE - HIGH LS OPERATE - OPERATE (PULL FILM FOR 1 MIN)</p> <p>LS OPERATE - STBY</p> <p>V25N78 (+090.00) VHF TEST ATT (115:30) (-017.74) (+000.00)</p> <p>V58E (072,000/168,000)</p>	<p style="text-align: center;">S T D N</p> <p>HGA PWR - ON SET HGA: MAN, WIDE P -12, Y 211 AUTO, NARROW MODE - VHF LS OPERATE - OPERATE (PULL FILM FOR 2 MIN)</p> <p>LS OPERATE - STBY MODE - HF RCDR - OFF SELECT OMNI B SET HGA: MAN, WIDE P -10, Y 25 FOR AOS HGA PWR - OFF</p> <p style="text-align: right;">NOTE: S/C REALTIME PCM AND REALTIME SIM BAY DATA WILL NOT BE RECEIVED UNTIL 116:31</p> <p>SELECT OMNI A</p> <p style="text-align: right;">VOICE MARGINAL THRU LOS</p> <p>RCDR - ON MODE - VHF LS OPERATE - OPERATE (PULL FILM FOR 1 MIN)</p> <p>LS OPERATE - STBY AFTER 1 MIN: RCDR - OFF RADAR - OFF V25N78 (+090.00) +X FWD SIM ATT (116:02) (+052.25) (+180.00)</p> <p>V58E SM/AC PWR - ON DATA SYS - ON</p>	<p style="text-align: center;">S T D N</p>
<p>115:30</p>		<p>116:00</p>	

LM FLIGHT PLAN

MCC-H

1653 CST

CDR

LMP

NOTES

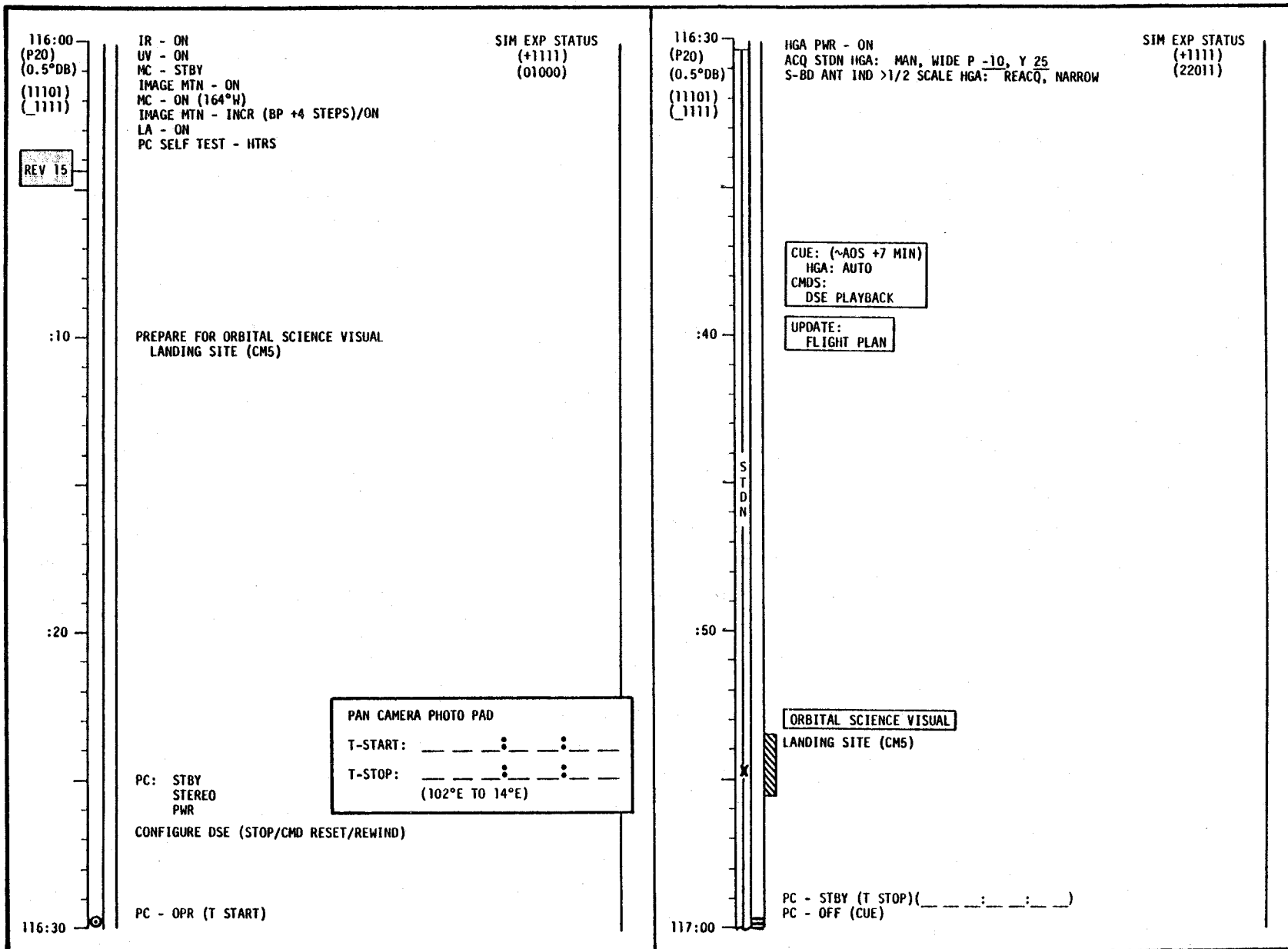
116:00		PLSS DONNING (CONT)	
:10		PLSS COMM CHECK CONFIGURE COMM FOR EVA RECORDER - ON REPORT: <u>PLSS O₂ QUANTITY</u>	CSM REV 15 -0:30
:20		OPS CONNECT	
116:30	S T D N	HELMET GLOVE DONNING	-0:15
:40		PRESSURE INTEGRITY CHECK	
:50		CABIN DEPRESS <u>START WATCHES @ 3.5 PSIA</u>	00:00/START EVA-1
		FINAL PREP FOR EVA OPEN FWD HATCH	
117:00	X	EGRESS DEPLOY MESA SURFACE FAMILIARIZATION	+0:10 +0:20
		ASSIST CDR RECORDER - OFF EGRESS, CLOSE HATCH SURFACE FAMILIARIZATION	

GO/NO-GO FOR CABIN
DEPRESS

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



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

LM FLIGHT PLAN

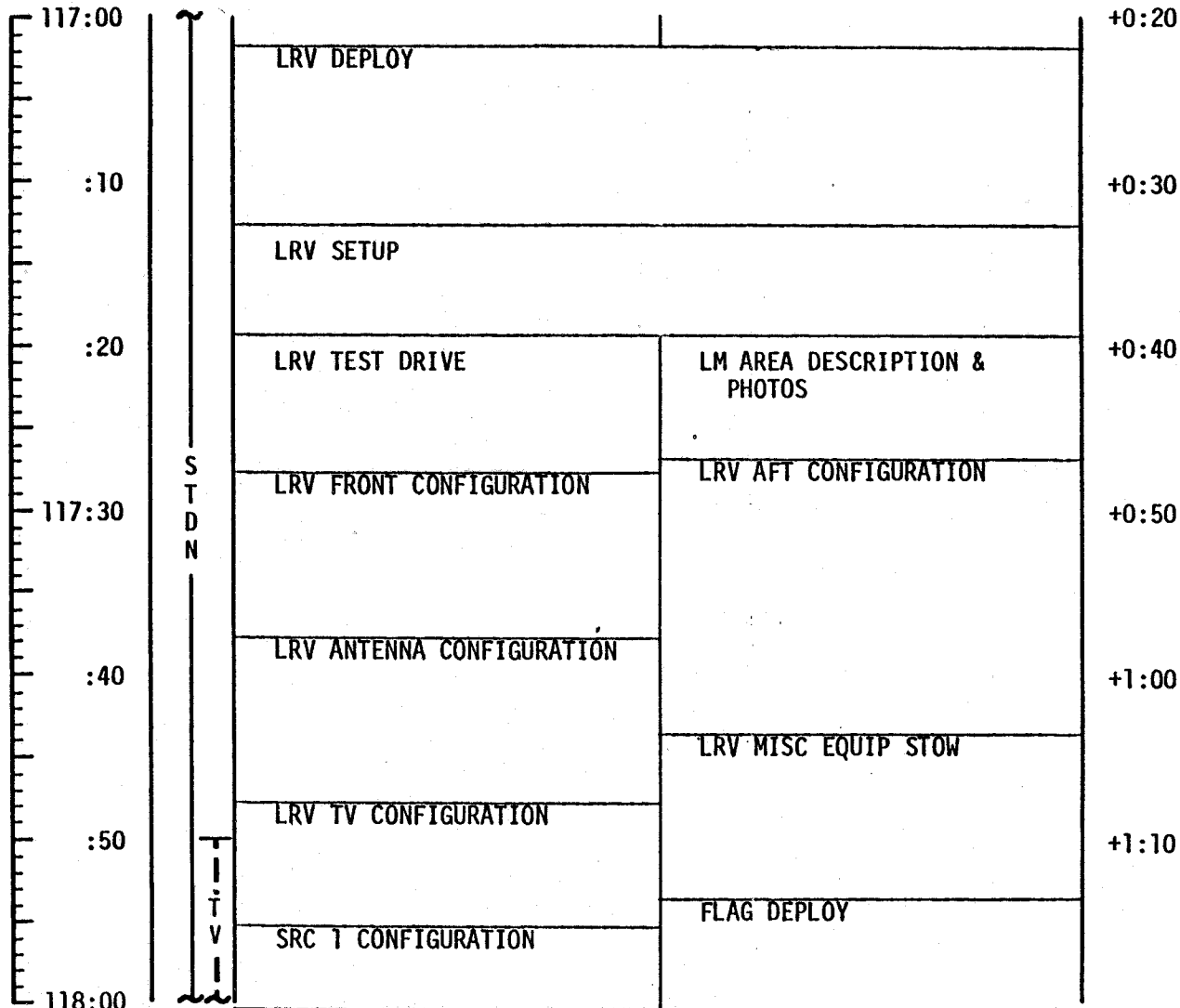
MCC-H

1753 CST

CDR

LMP

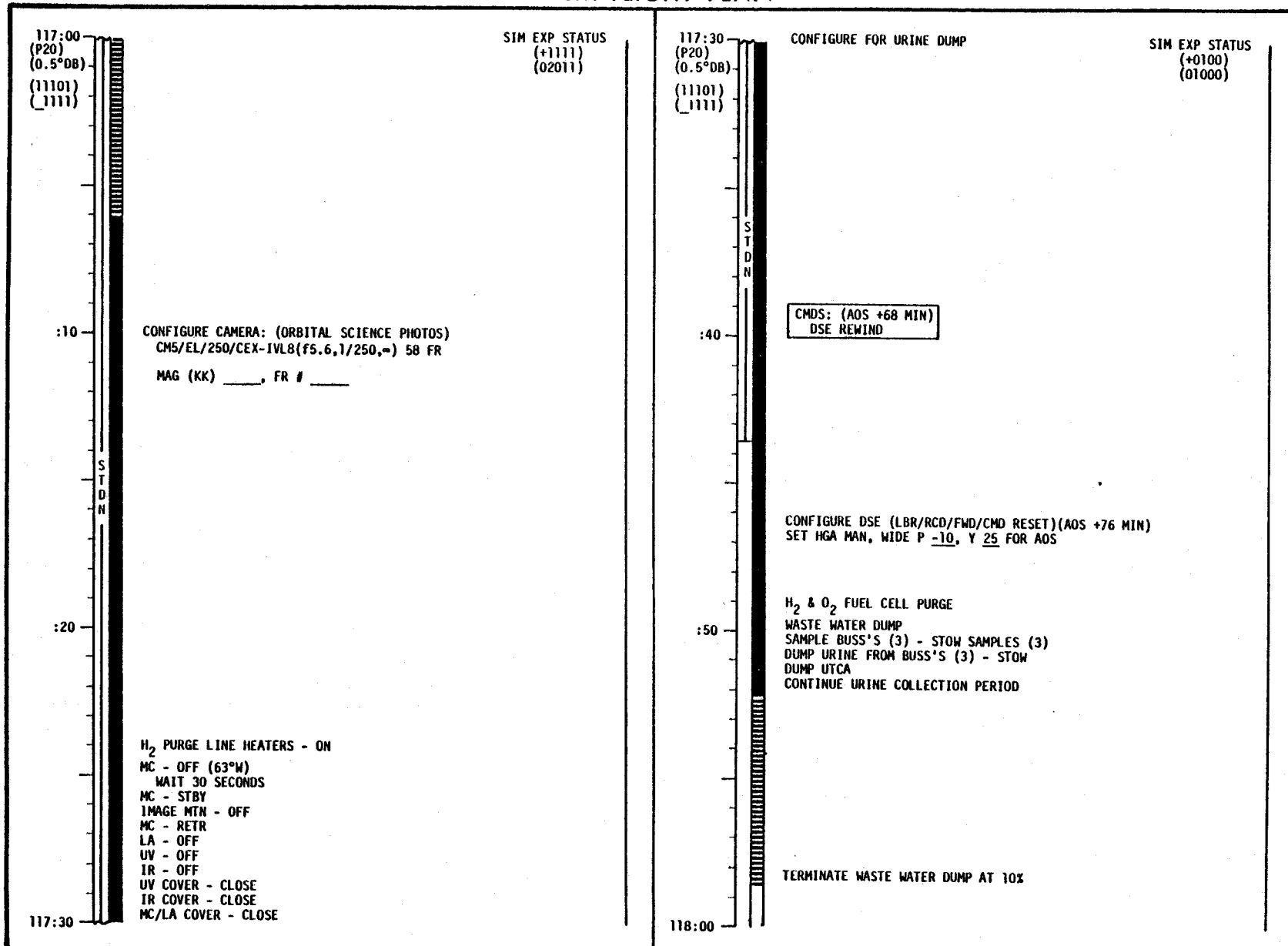
NOTES



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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-135

LM FLIGHT PLAN

MCC-H

1853 CST

CDR

LMP

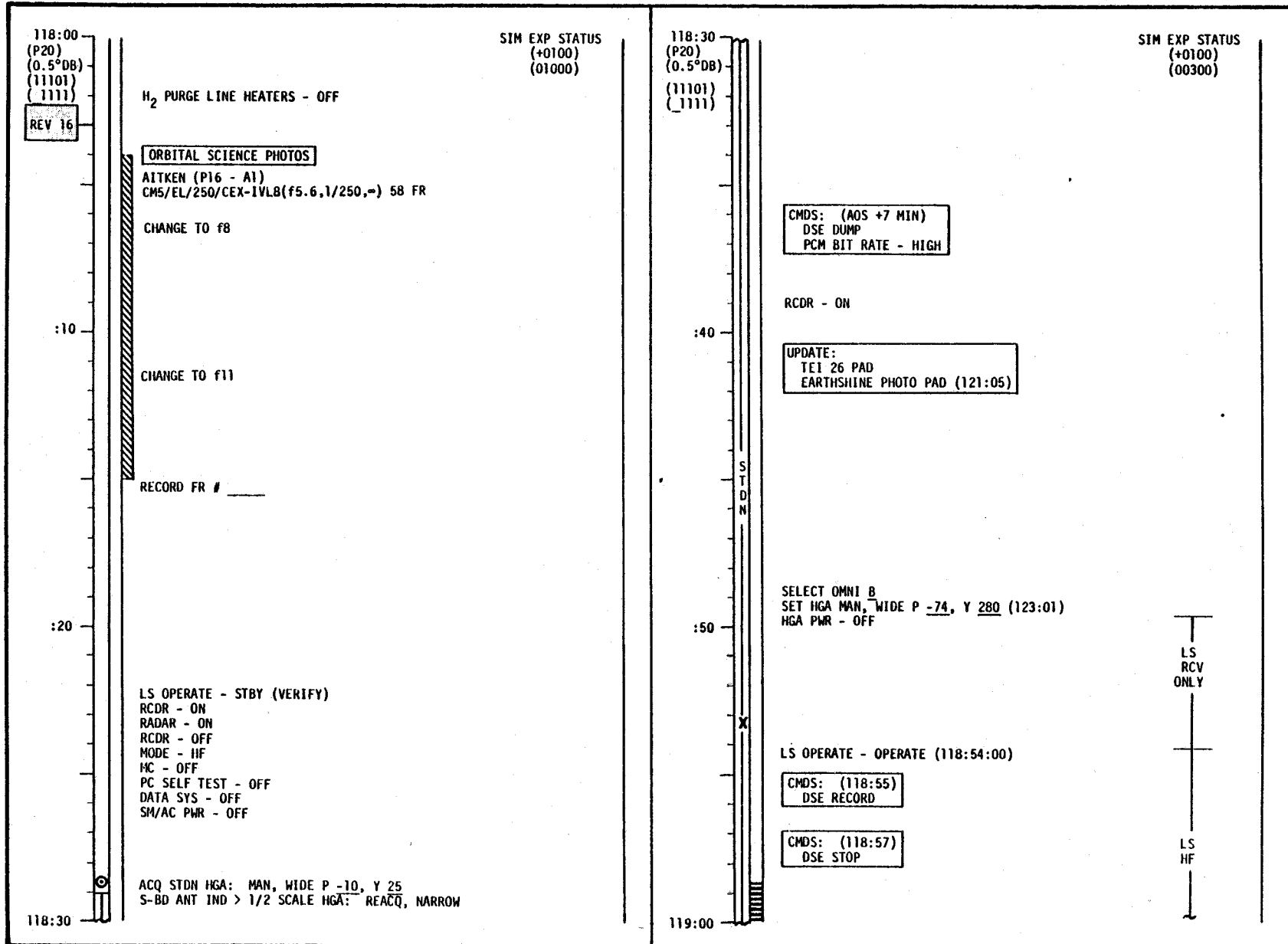
NOTES

118:00	T V	FLAG DEPLOY	LM INSPECTION	+1:20
		LRV LOADUP	ALSEP OFFLOAD	CSM REV 16
:10			FUEL RTG	+1:30
		ALSEP TRAVERSE	ALSEP TRAVERSE	+1:40
:20			ALSEP INTERCONNECT	+1:50
	S T D N	ALSEP INTERCONNECT	LSG DEPLOY	+2:00
:30			LSPE G/M DEPLOY	+2:10
		HFE DEPLOY	LMS DEPLOY	+2:10
:40	T V	DRILL PREP	CENTRAL STATION DEPLOY	+2:20
	X	DRILL FIRST PROBE HOLE		
:50				
119:00				

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



LM FLIGHT PLAN

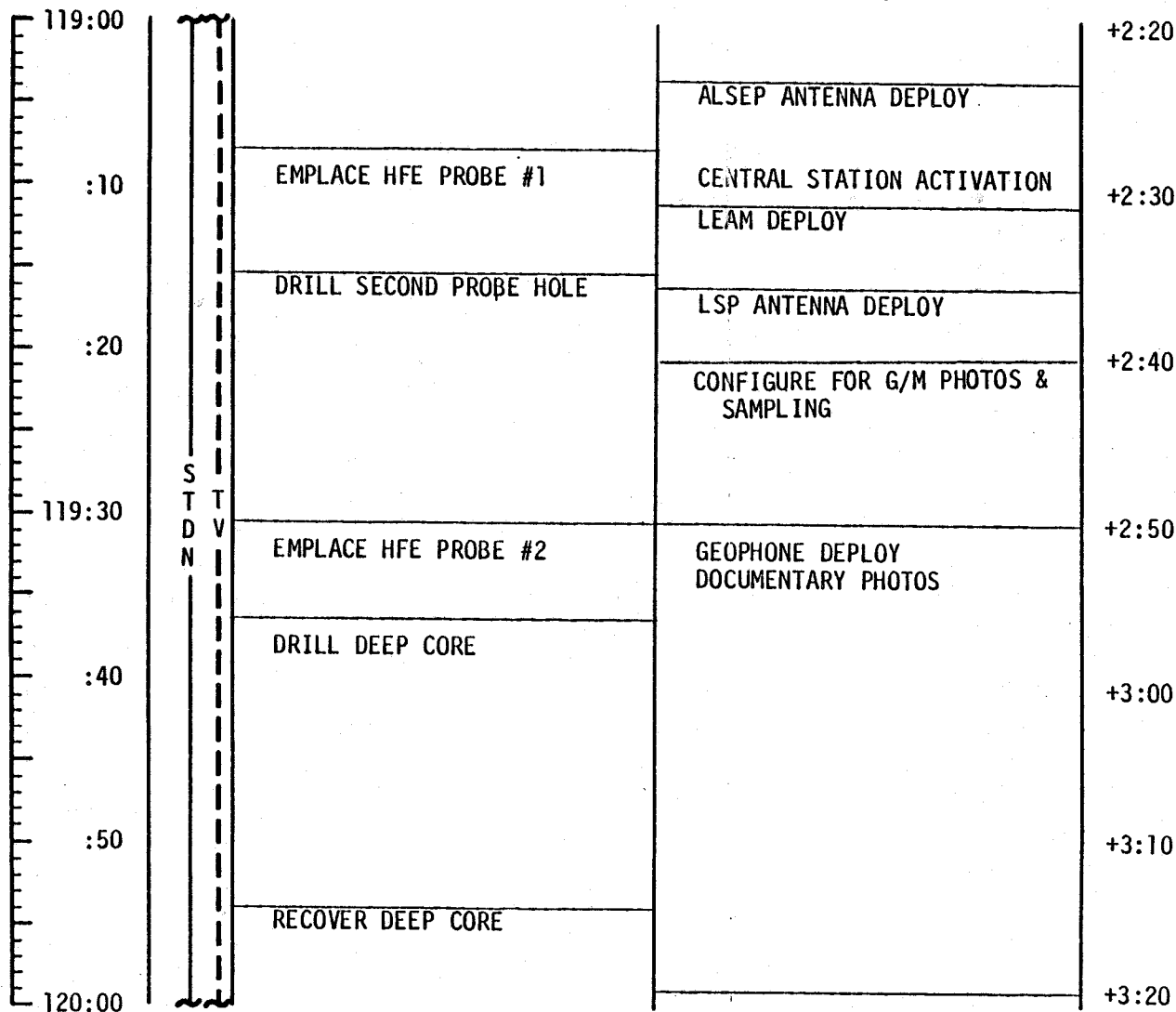
MCC-H

1953 CST

CDR

LMP

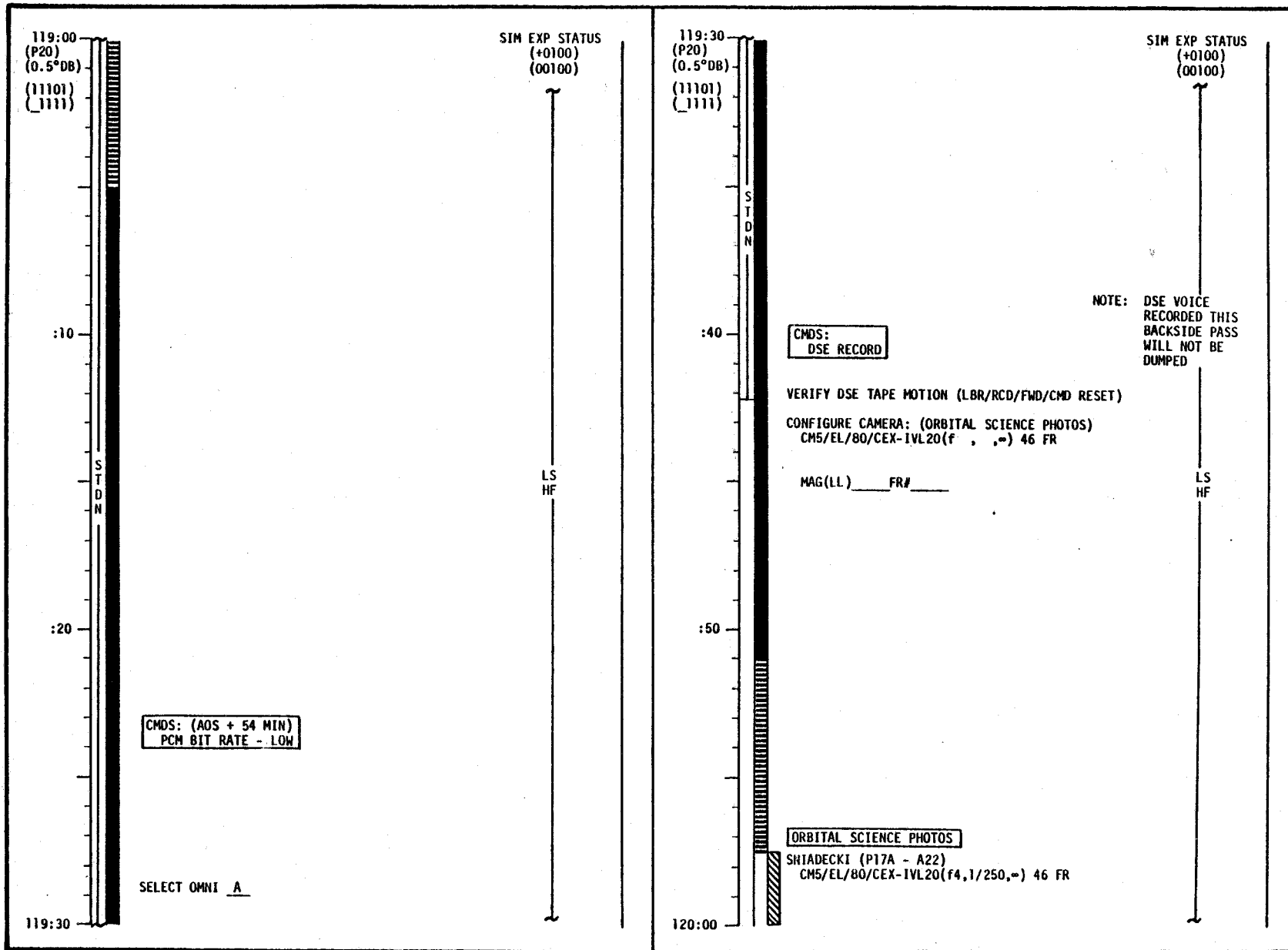
NOTES



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



LM FLIGHT PLAN

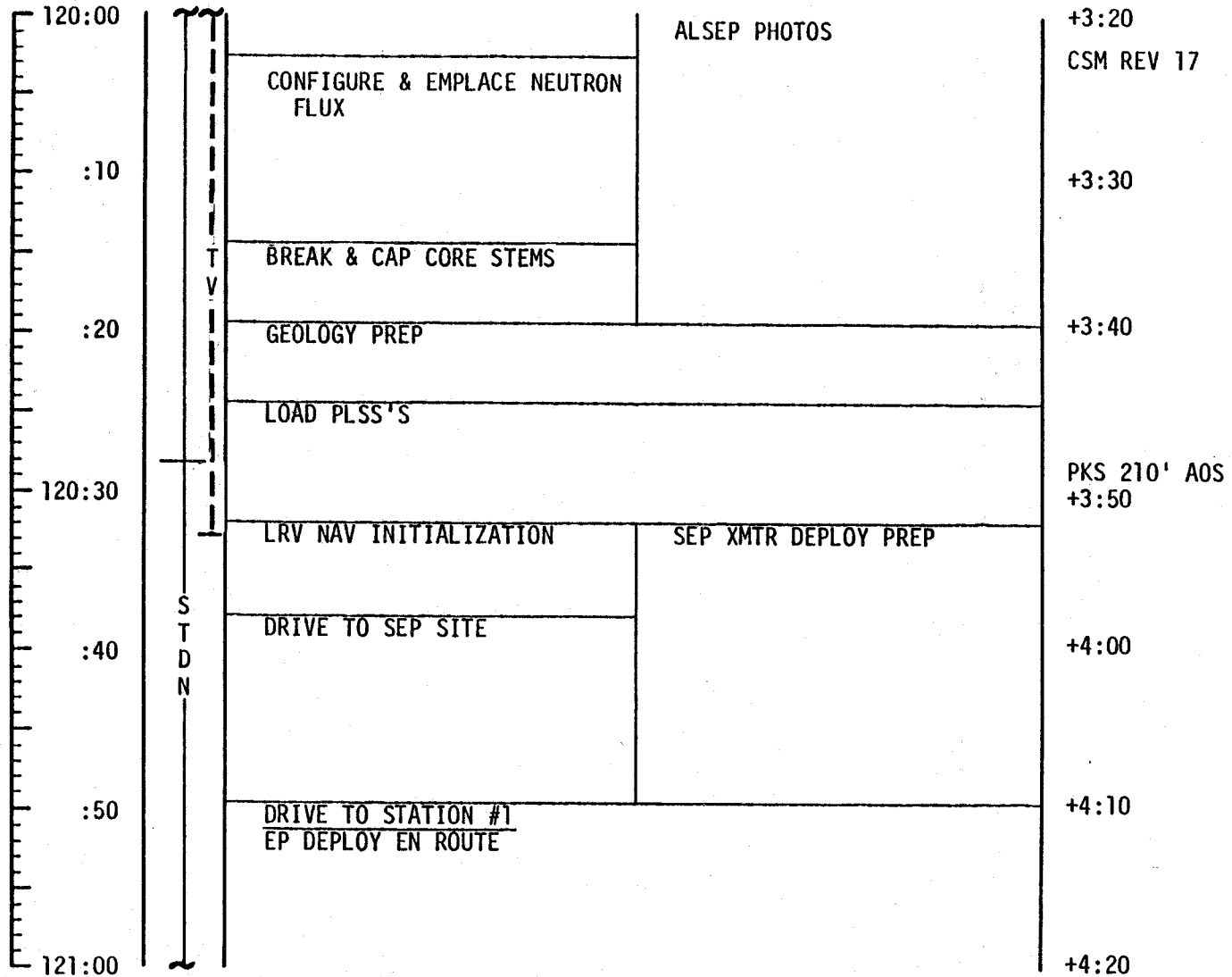
MCC-H

2053 CST

CDR

LMP

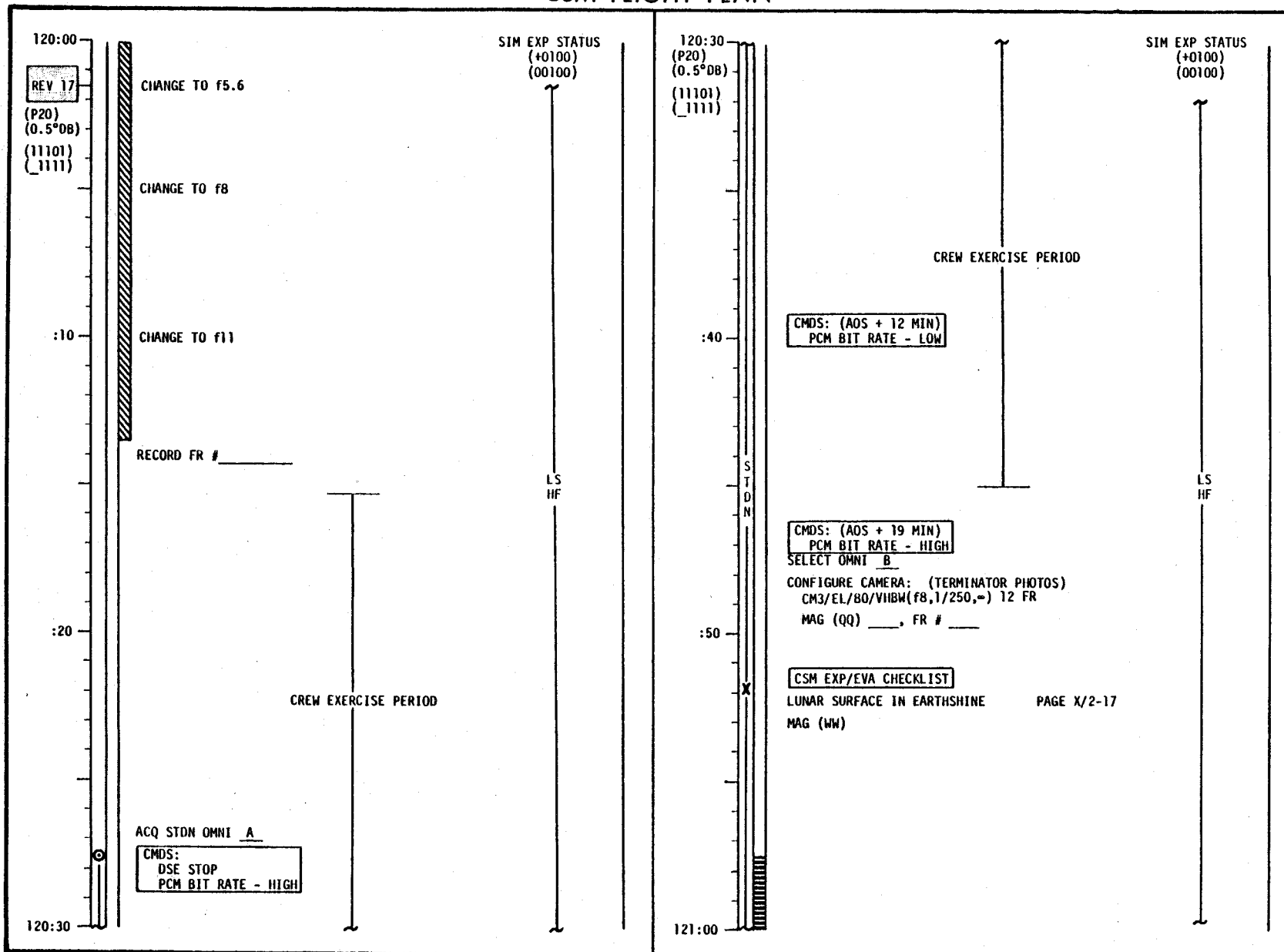
NOTES



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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-141

LM FLIGHT PLAN

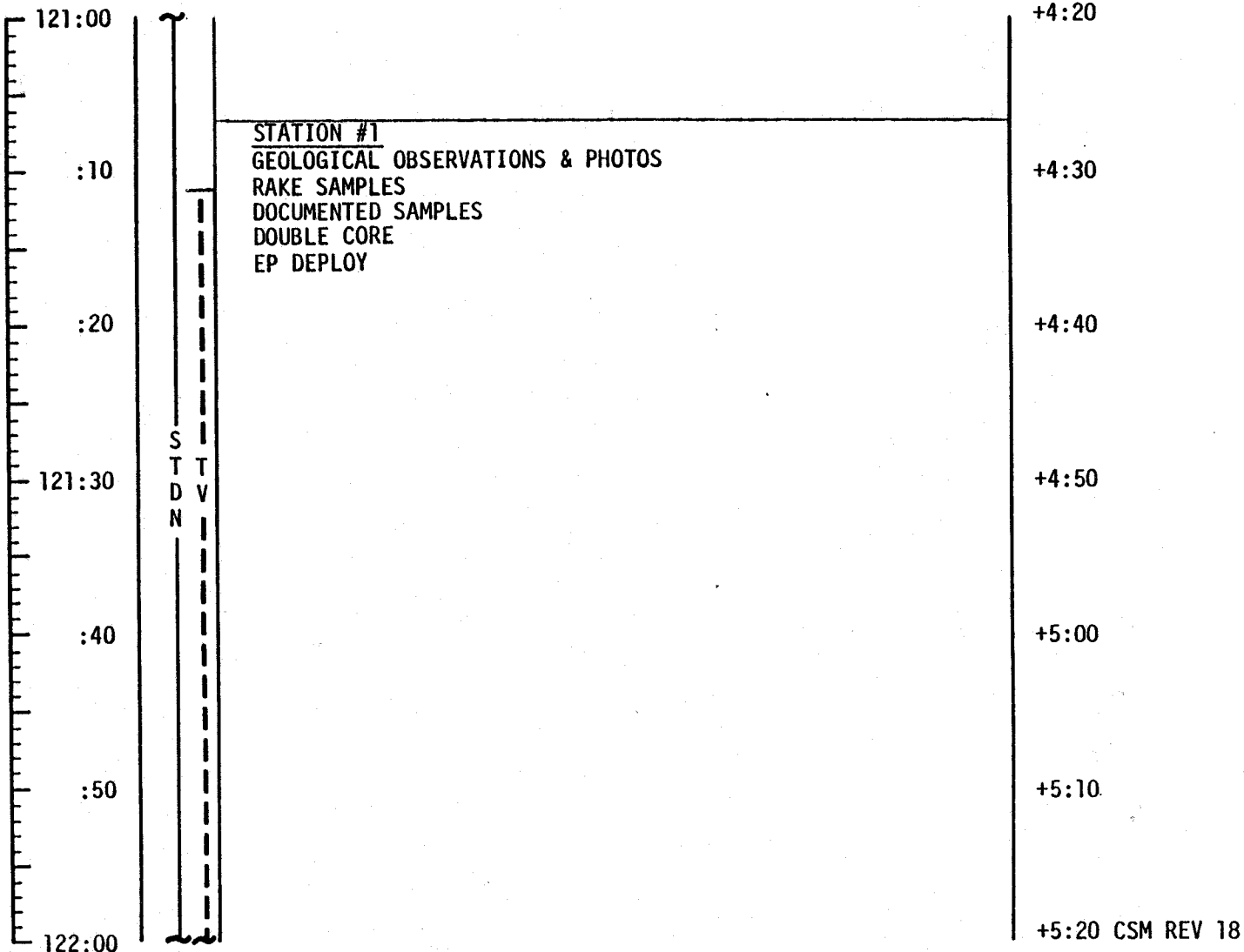
MCC-H

2153 CST

CDR

LMP

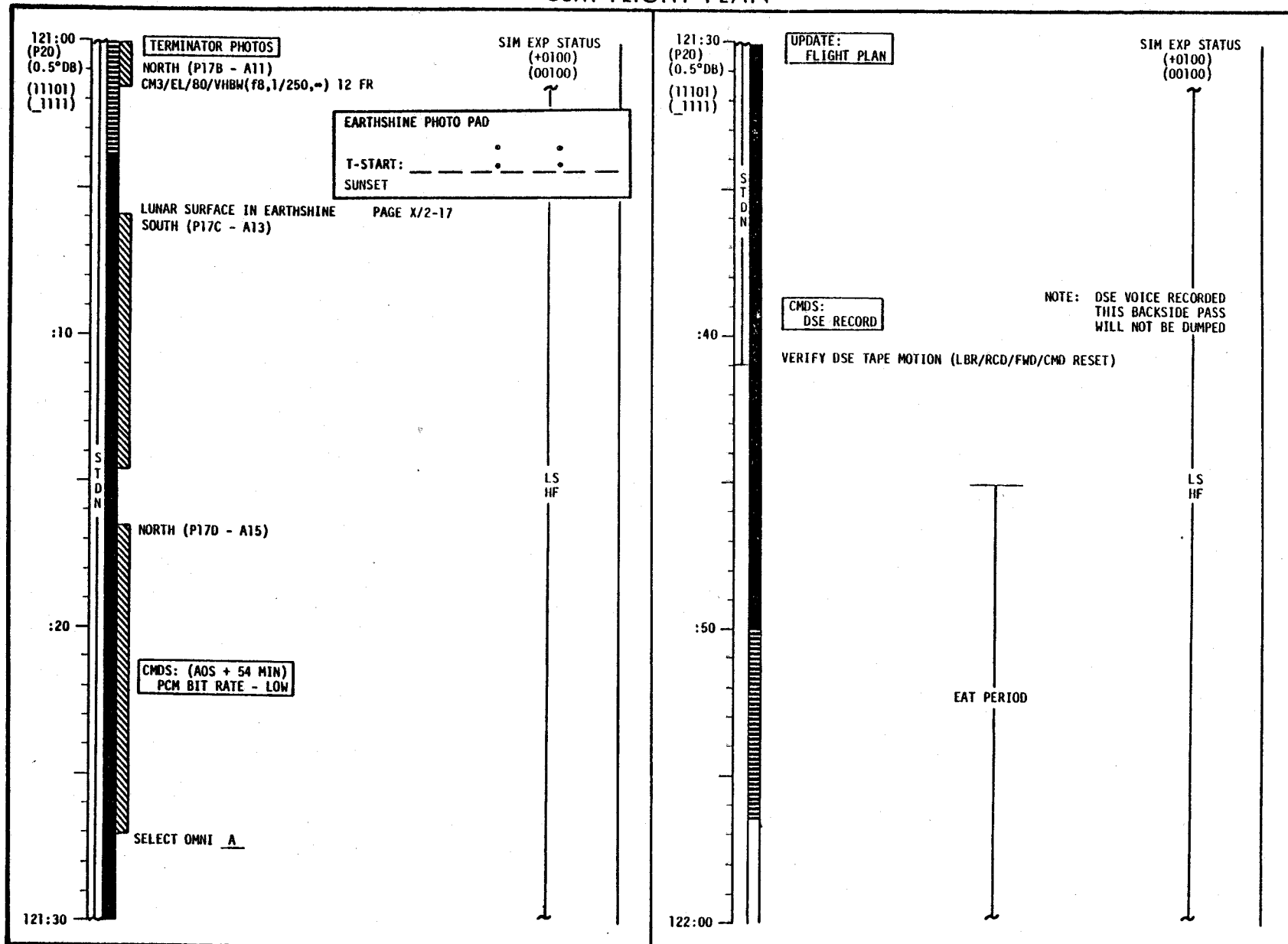
NOTES



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

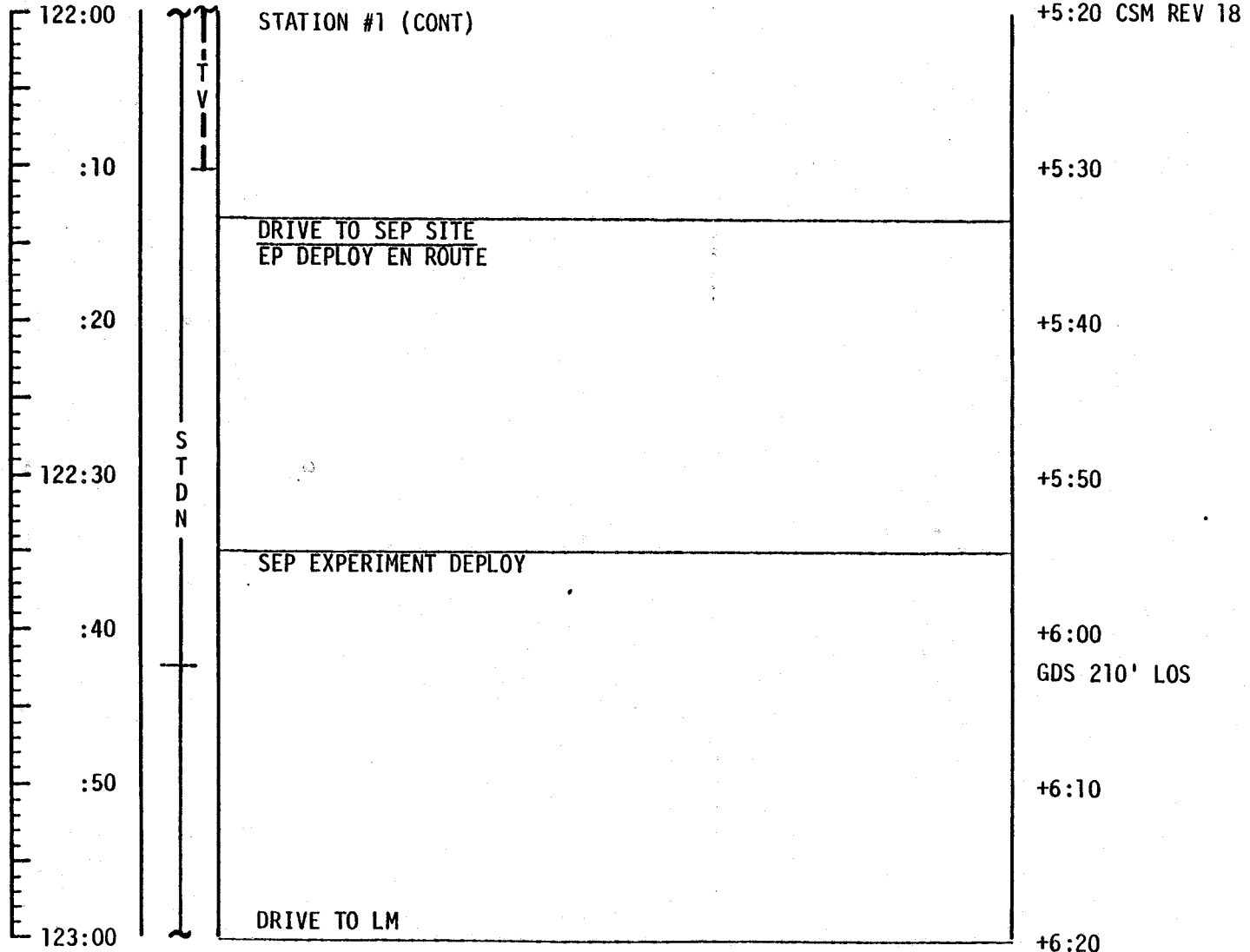
MCC-H

2253 CST

CDR

LMP

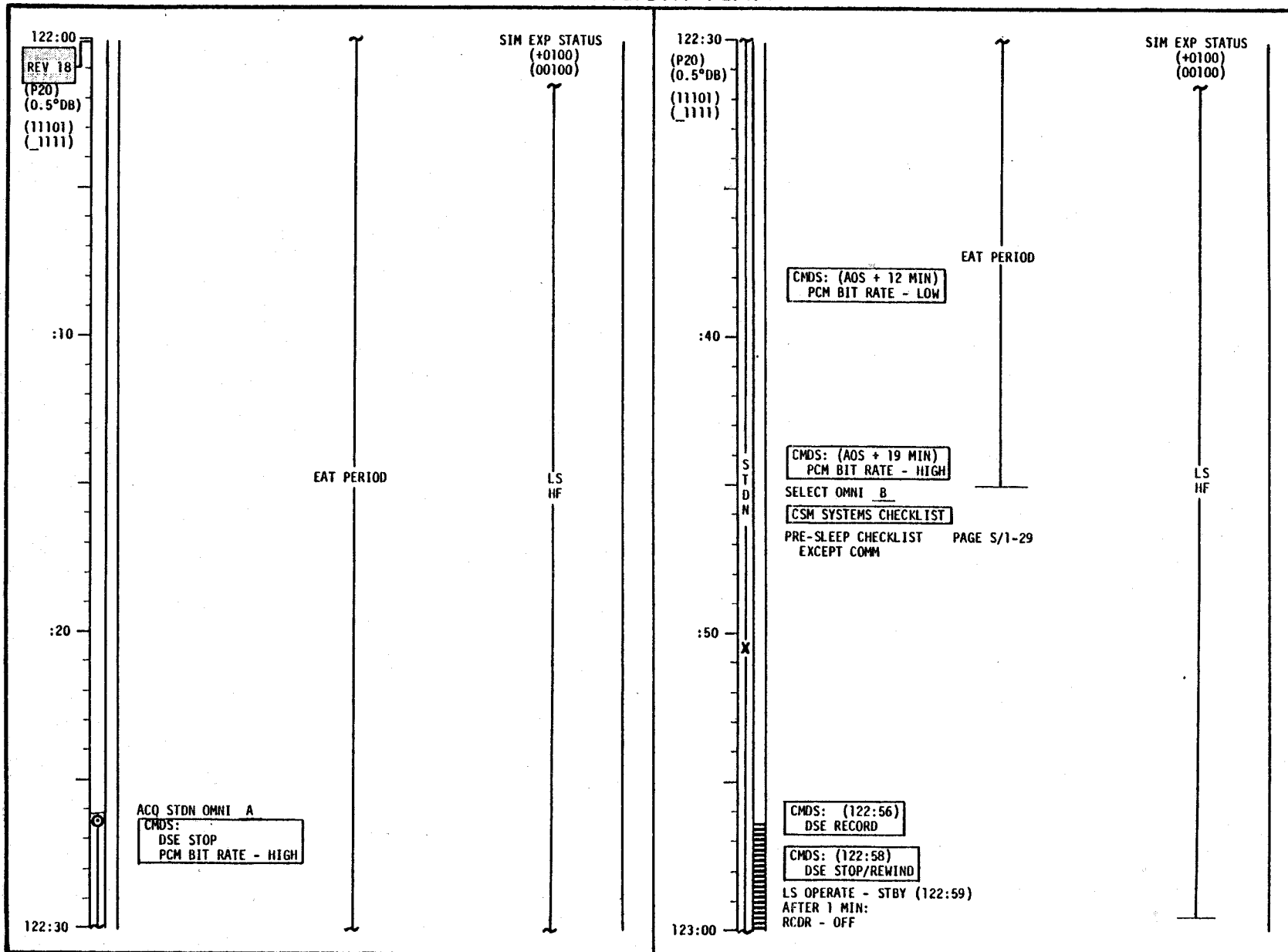
NOTES



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

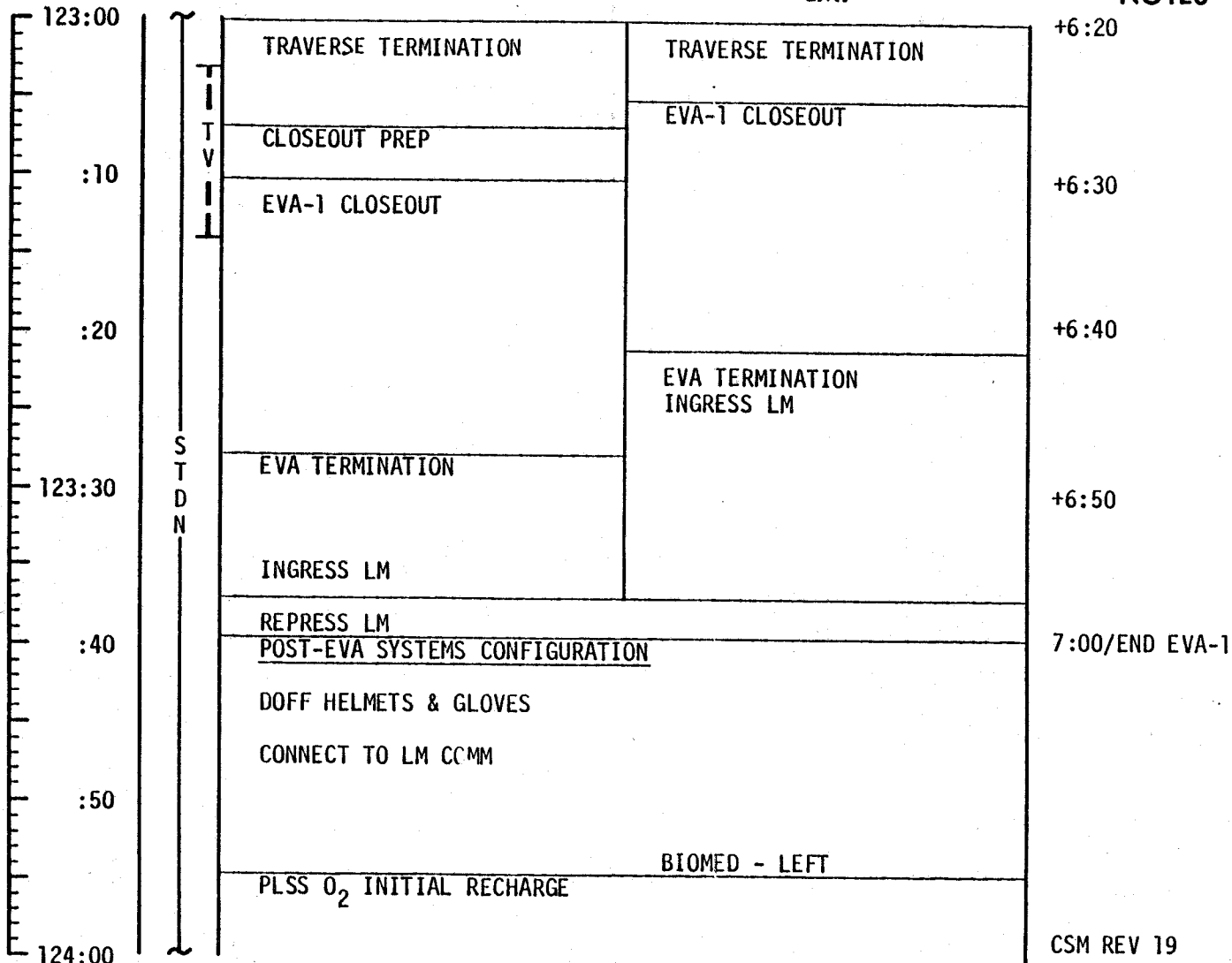
MCC-H

2353 CST

CDR

LMP

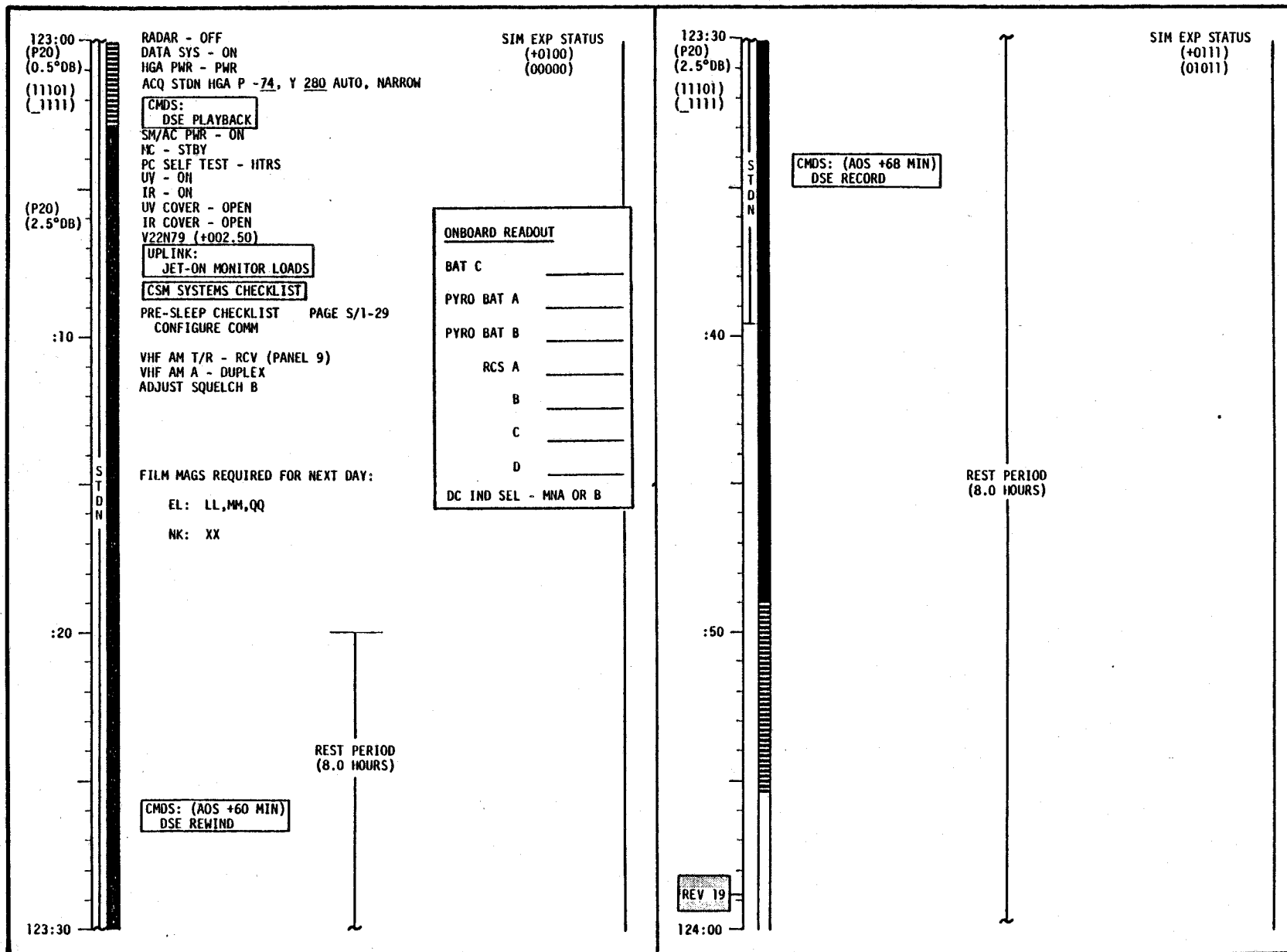
NOTES



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



LM FLIGHT PLAN

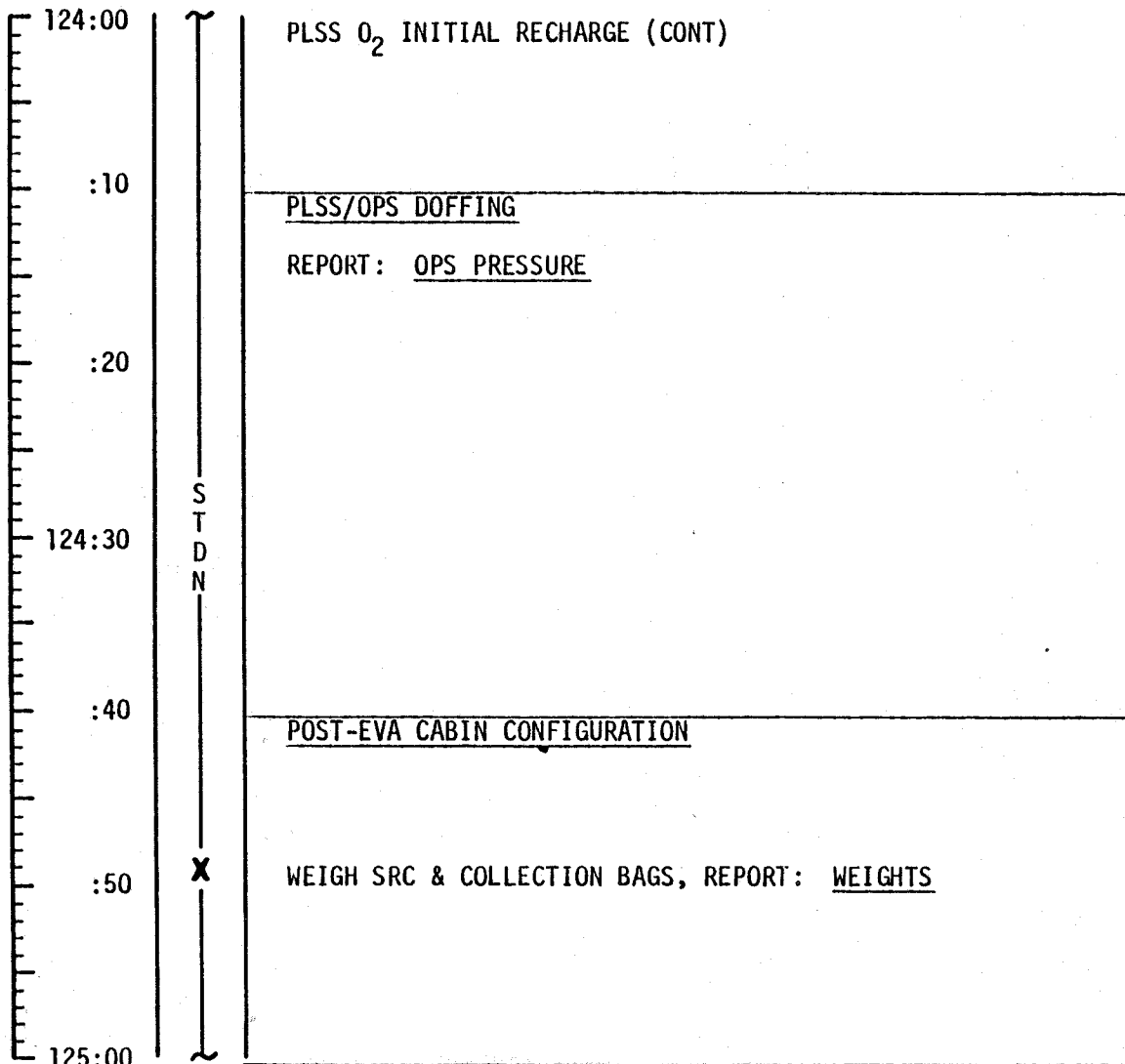
MCC-H

0053 CST, 12/12

CDR

LMP

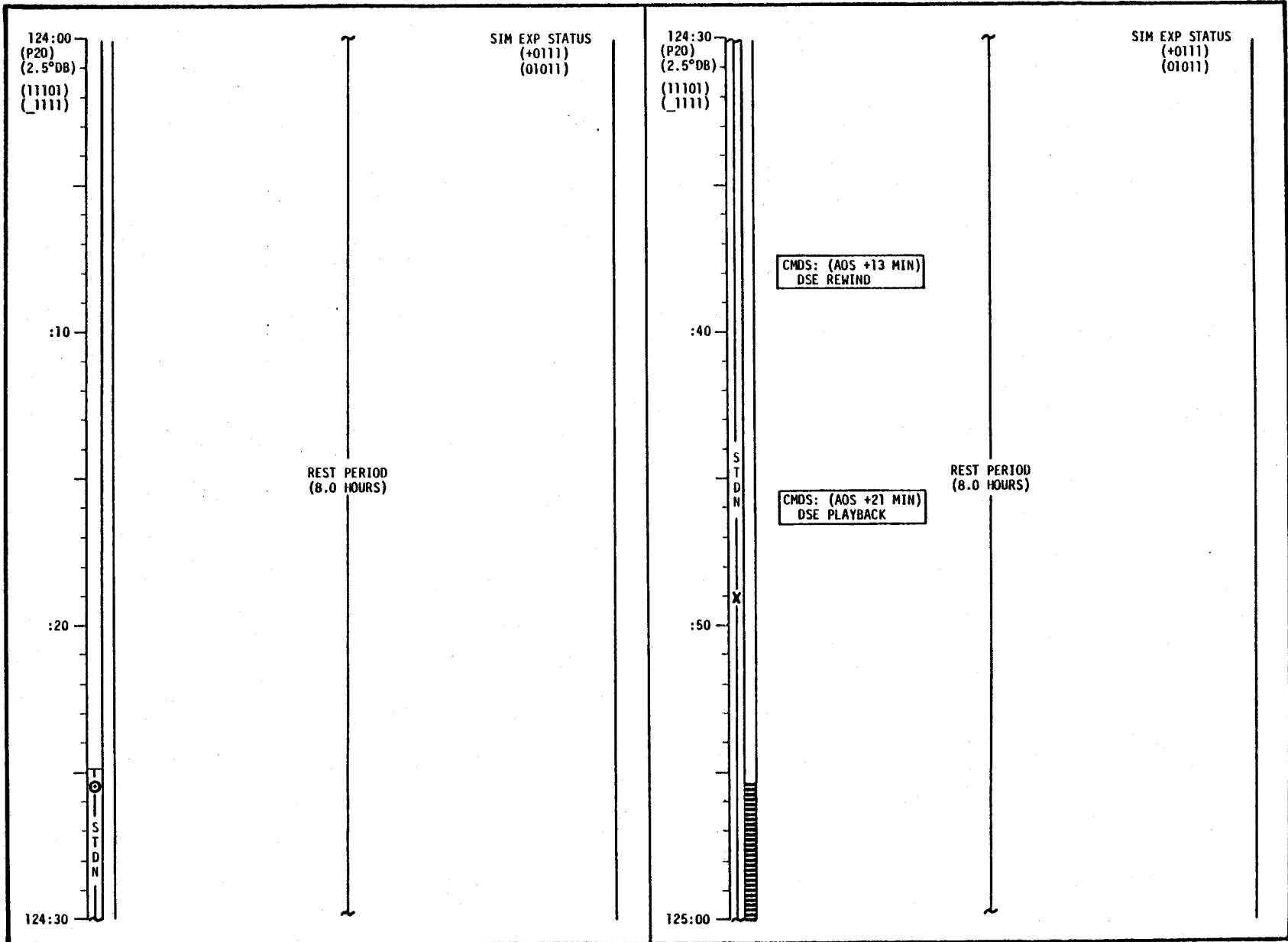
NOTES



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



124:00
(P20)
(2.5°DB)
(11101)
(1111)

SIM EXP STATUS
(+0111)
(01011)

124:30
(P20)
(2.5°DB)
(11101)
(1111)

SIM EXP STATUS
(+0111)
(01011)

:10

:40

CMDS: (AOS +13 MIN)
DSE REWIND

REST PERIOD
(8.0 HOURS)

STDN

CMDS: (AOS +21 MIN)
DSE PLAYBACK

REST PERIOD
(8.0 HOURS)

:20

:50

X

124:30

125:00

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-149

LM FLIGHT PLAN

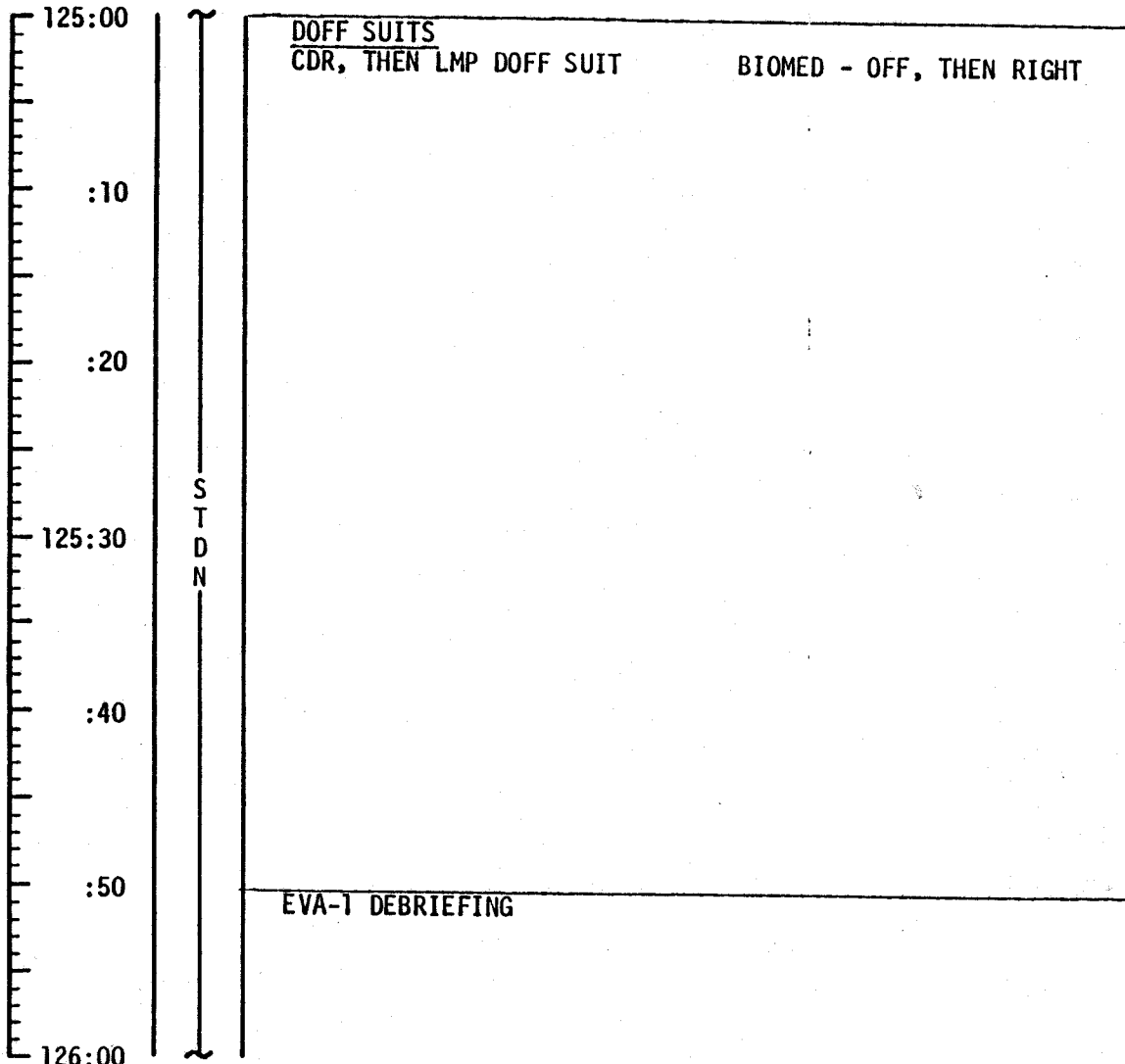
MCC-H

0153 CST

CDR

LMP

NOTES

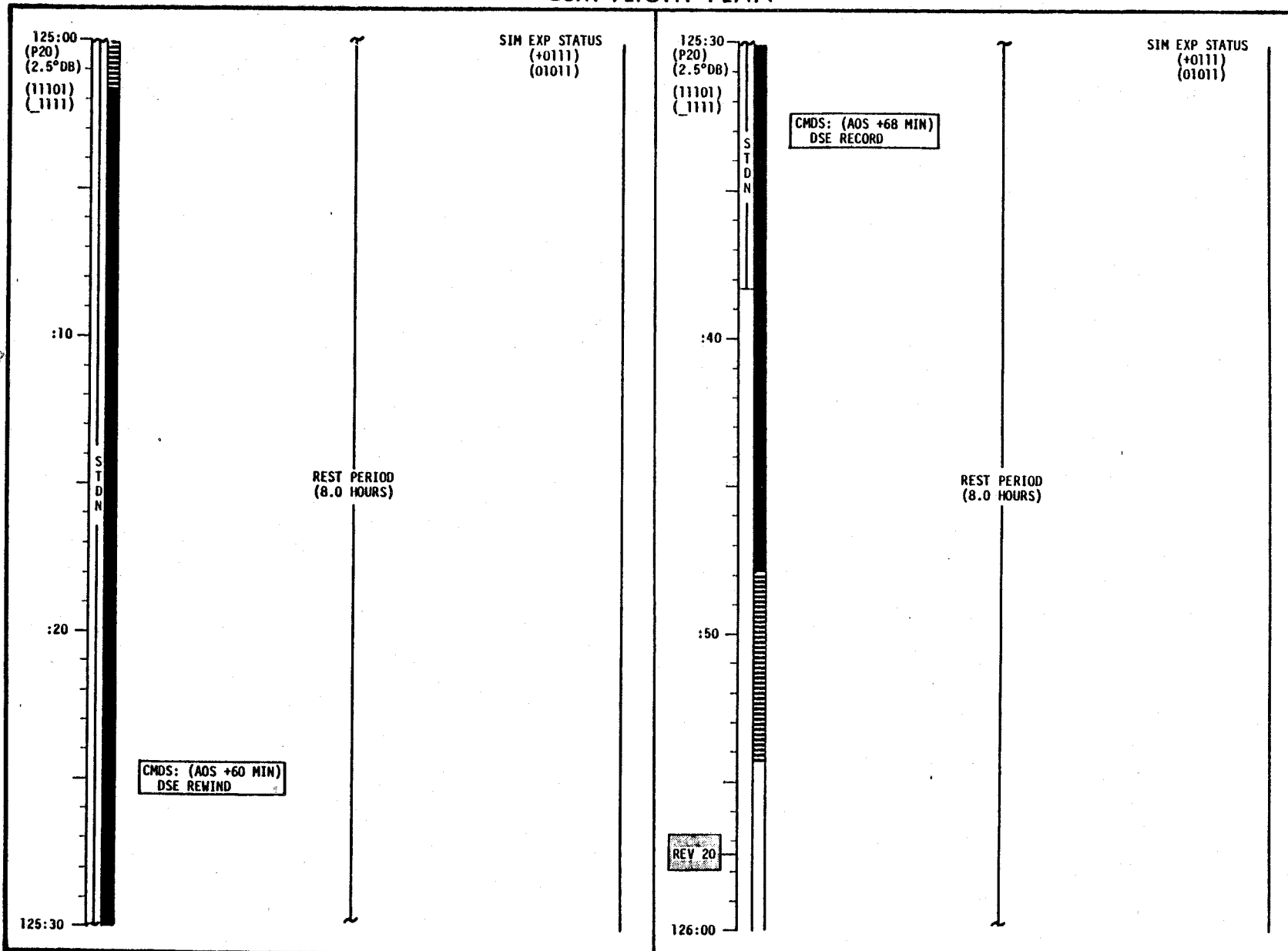


CSM REV 20

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

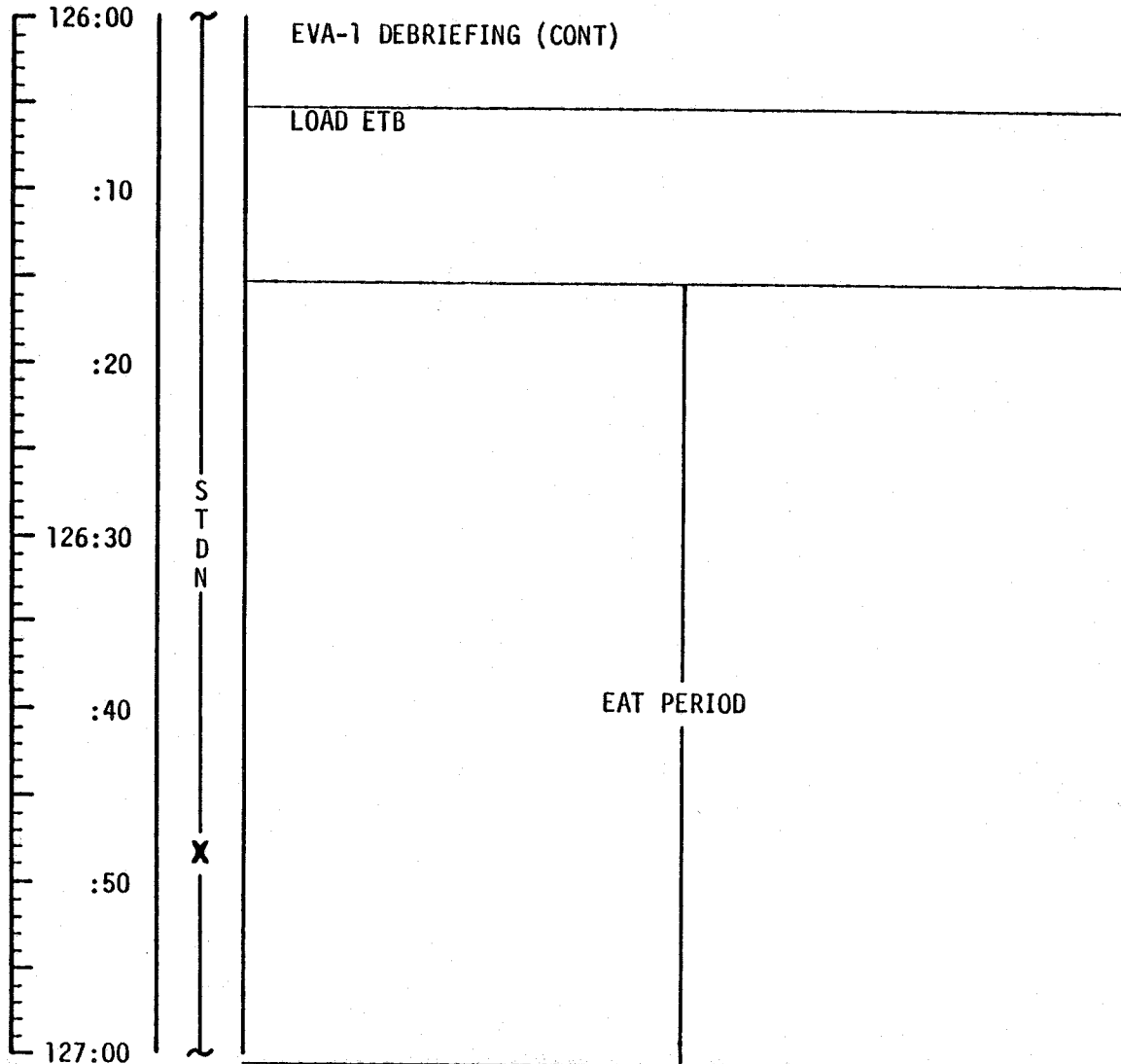
0253 CST

CDR

LMP

NOTES

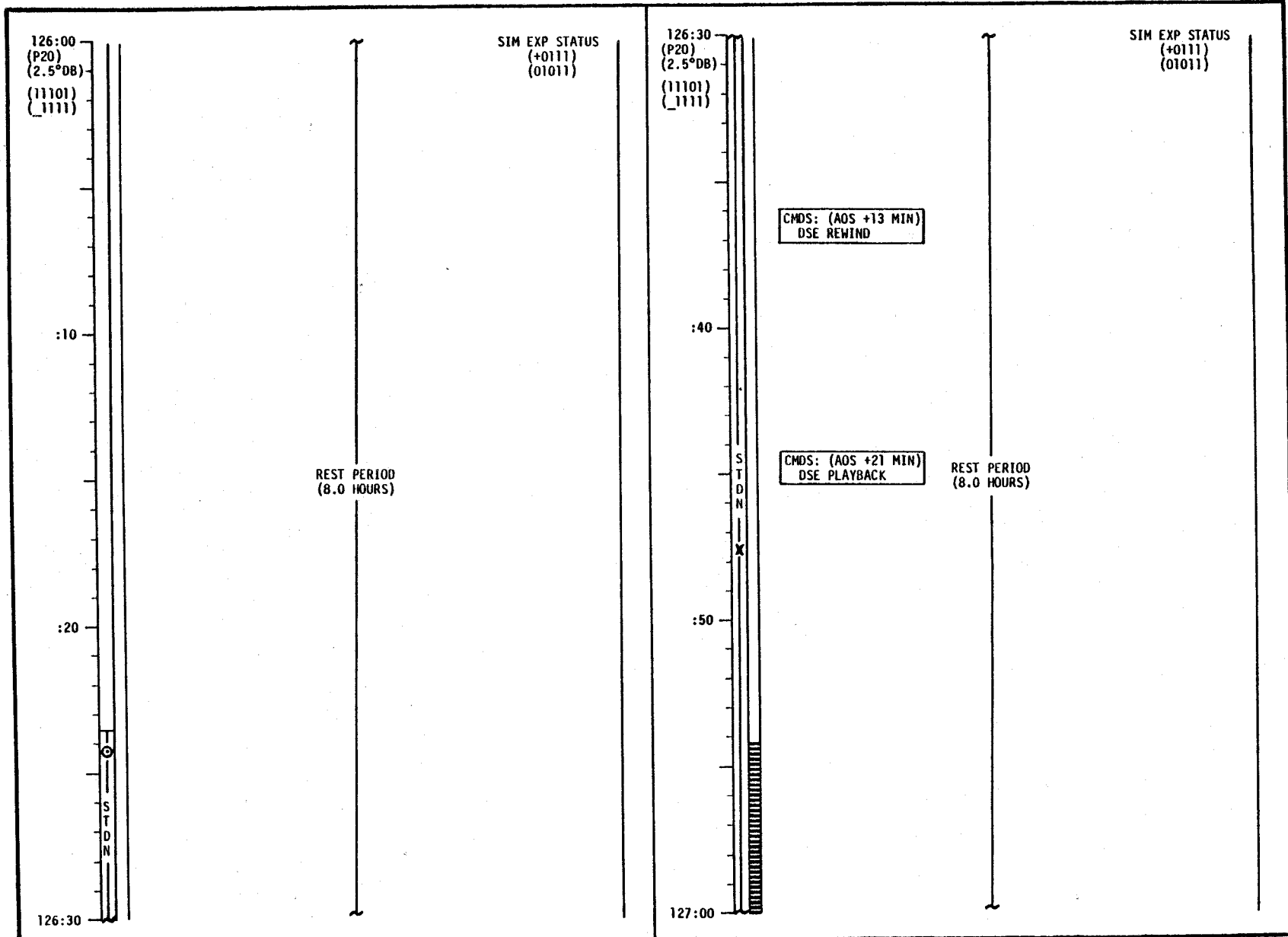
UPDATE TO LM
LIFT-OFF TIMES FOR
REVS 21-25



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

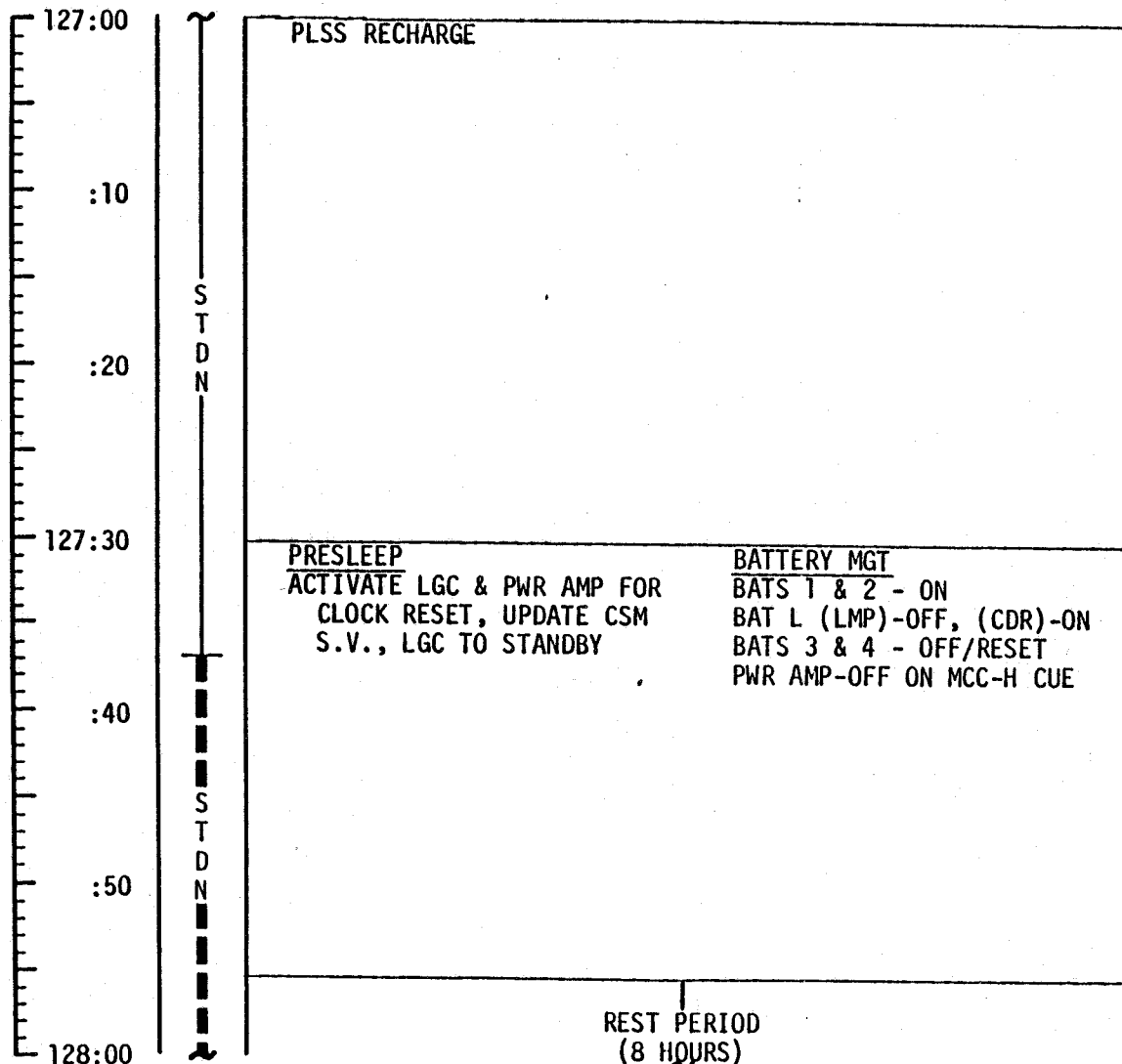
MCC-H

0353 CST

CDR

LMP

NOTES



UPLINK TO LM
CSM S.V. (155:15)

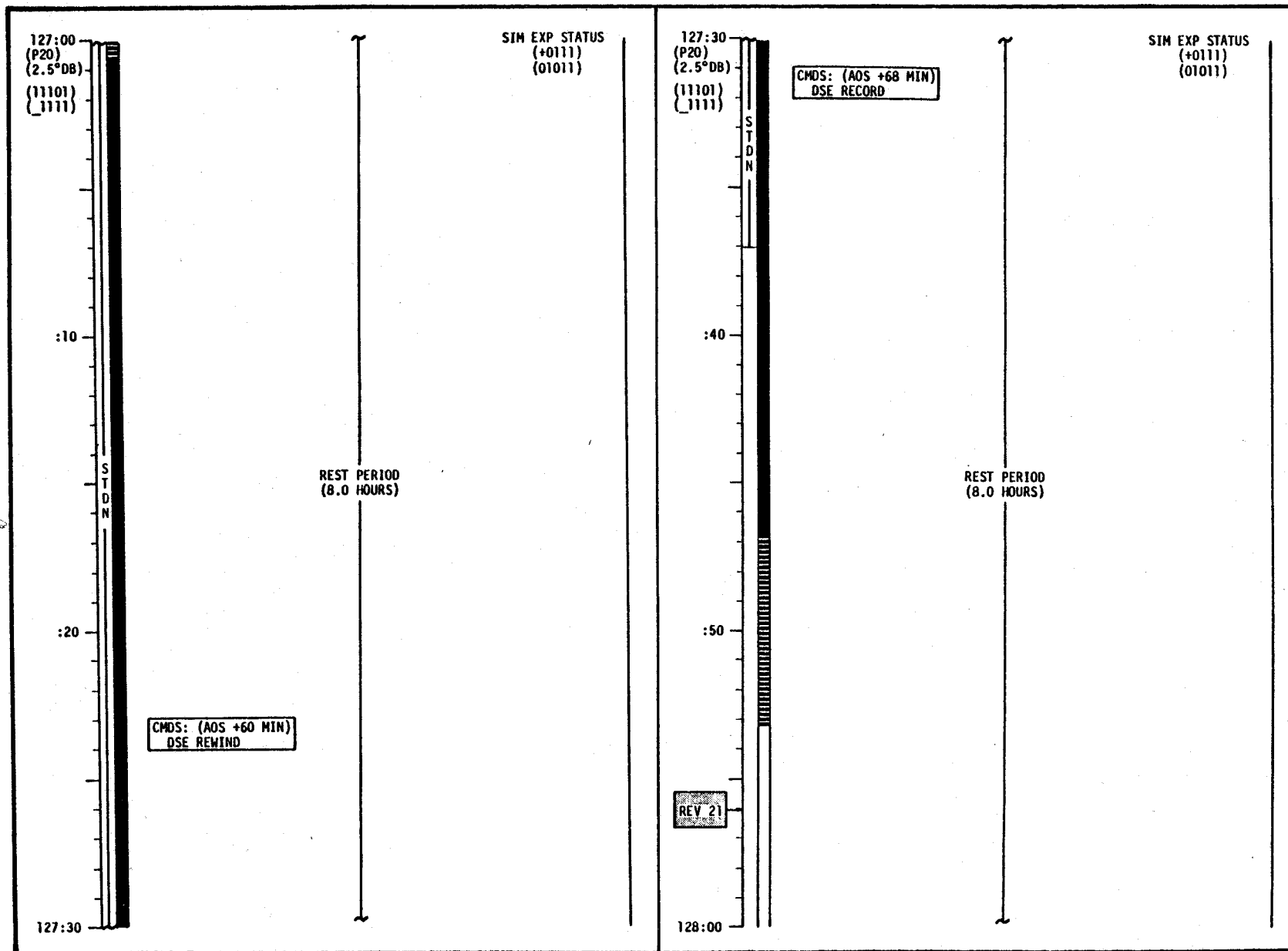
PKS 210' LOS

CSM REV 21

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

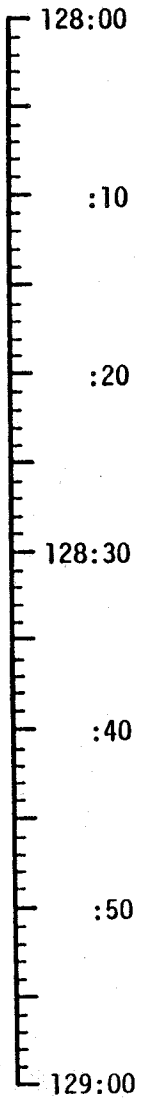
MCC-H

0453 CST

CDR

LMP

NOTES



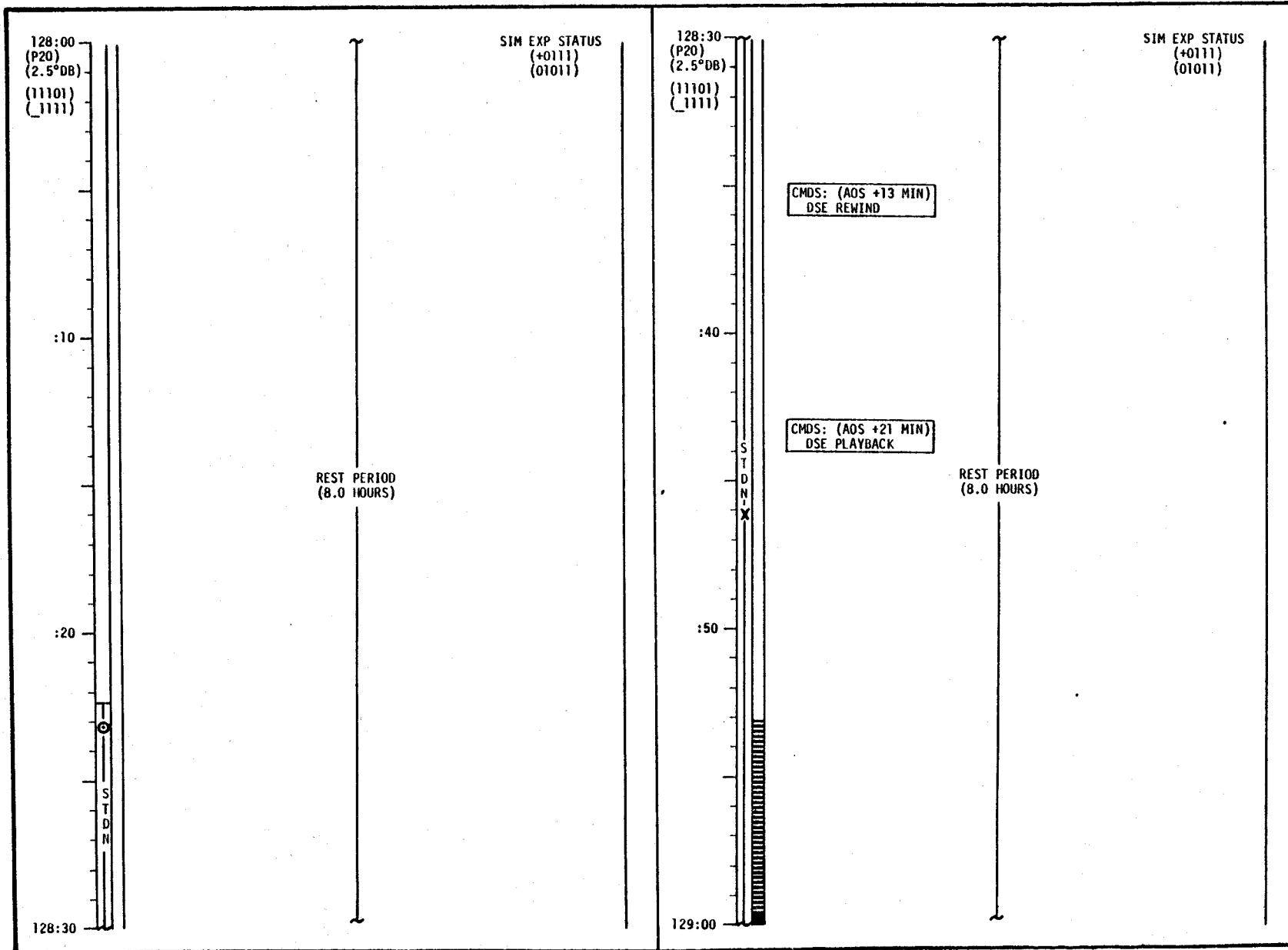
STDN
X

REST PERIOD
(8 HOURS)

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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-157

LM FLIGHT PLAN

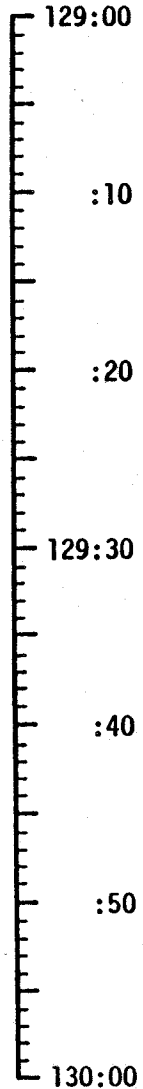
MCC-H

0553 CST

CDR

LMP

NOTES



S
T
D
N

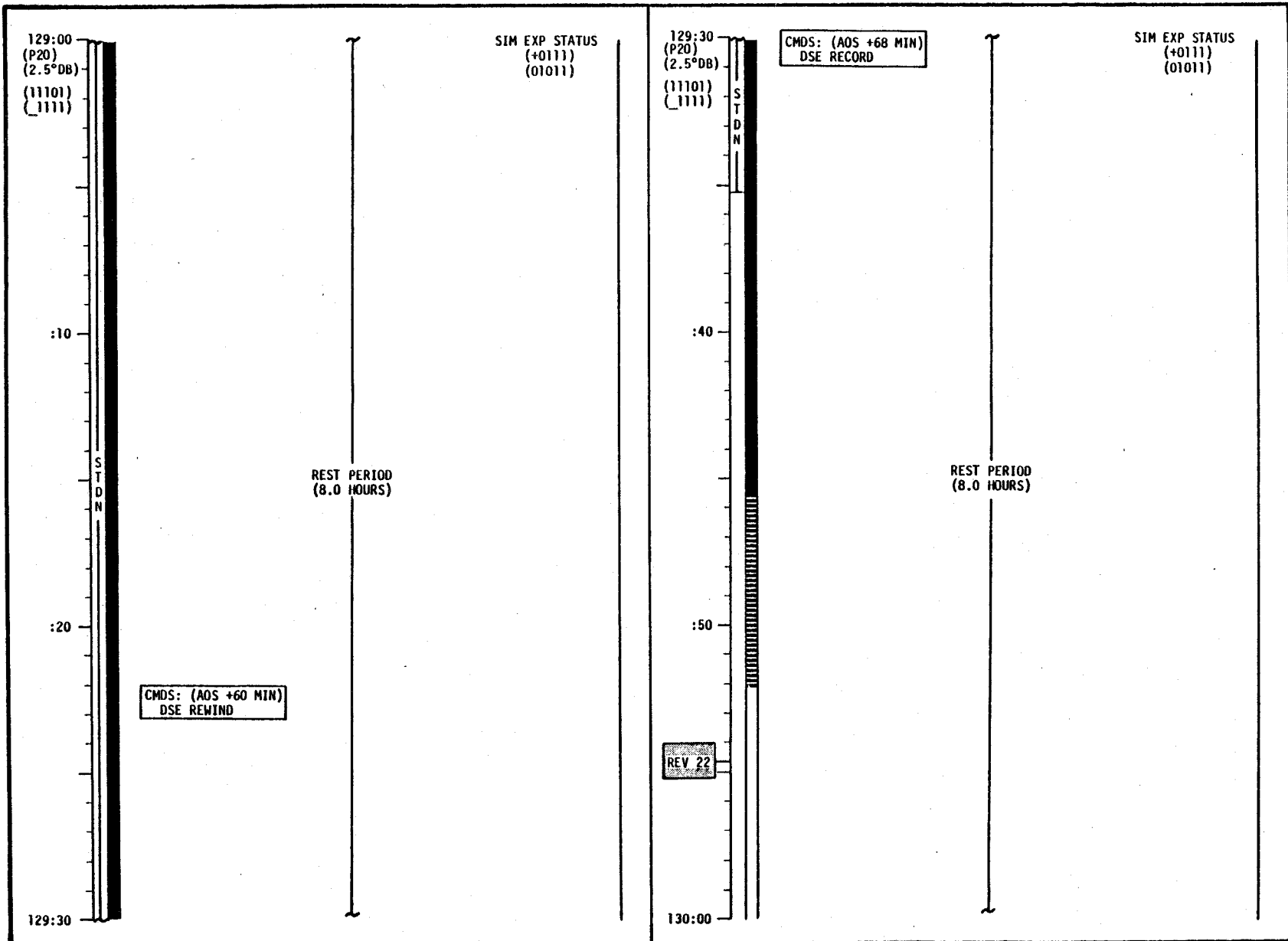
REST PERIOD
(8 HOURS)

CSM REV 22

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

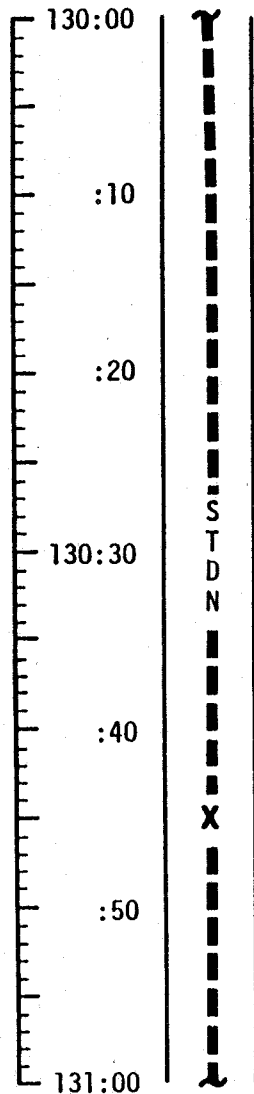
MCC-H

0653 CST

CDR

LMP

NOTES

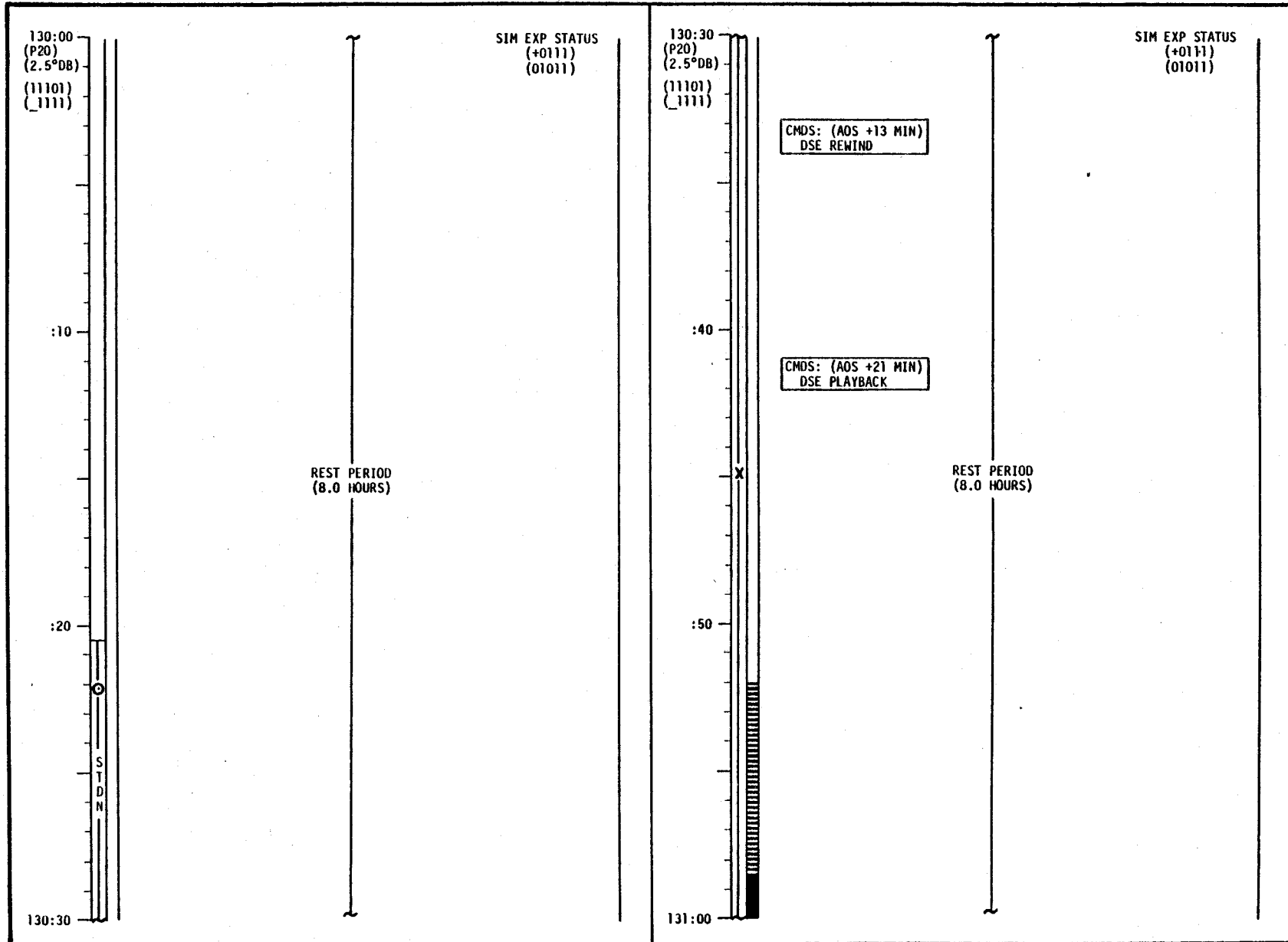


REST PERIOD
(8 HOURS)

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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-161

LM FLIGHT PLAN

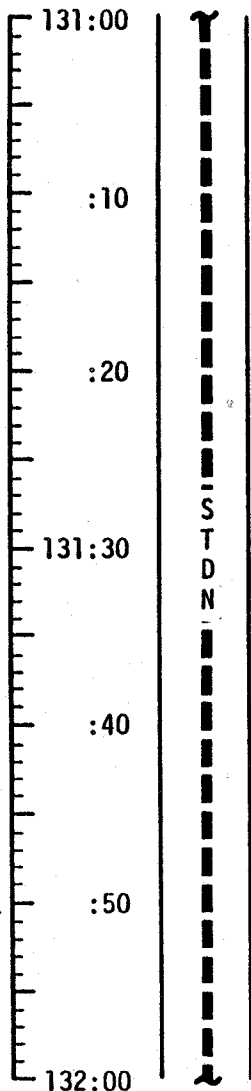
MCC-H

0753 CST

CDR

LMP

NOTES



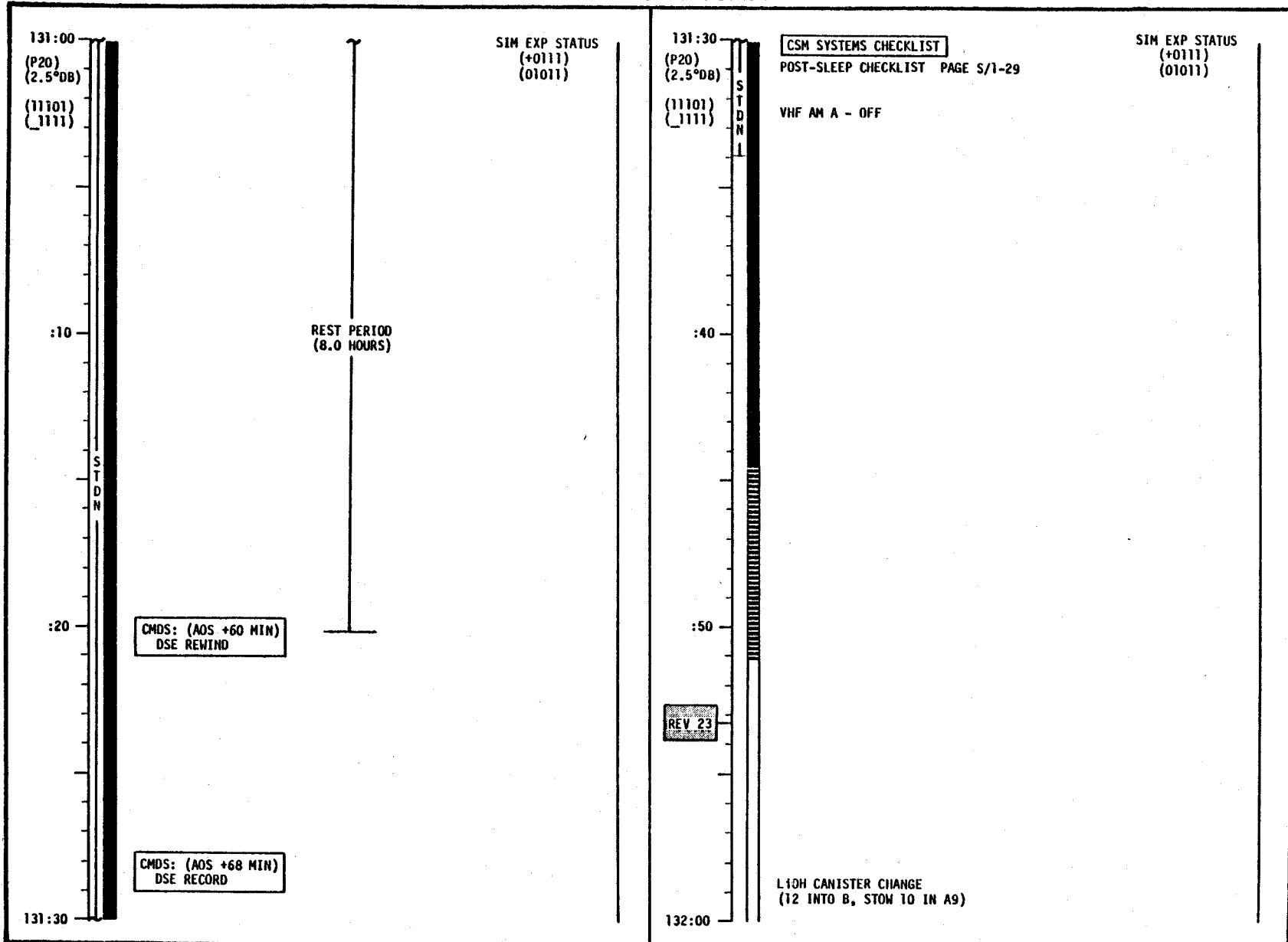
REST PERIOD
(8 HOURS)

CSM REV 23

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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-163

LM FLIGHT PLAN

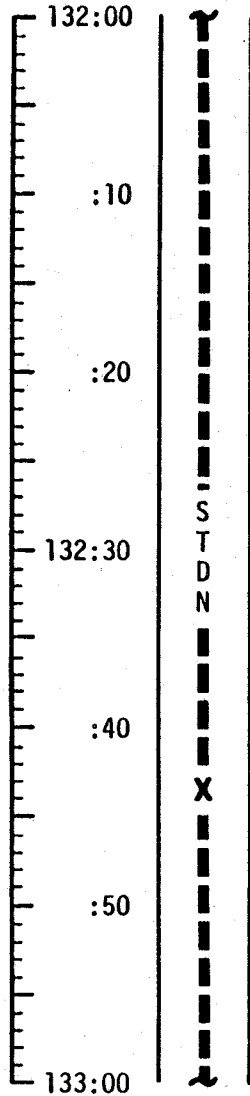
MCC-H

0853 CST

CDR

LMP

NOTES

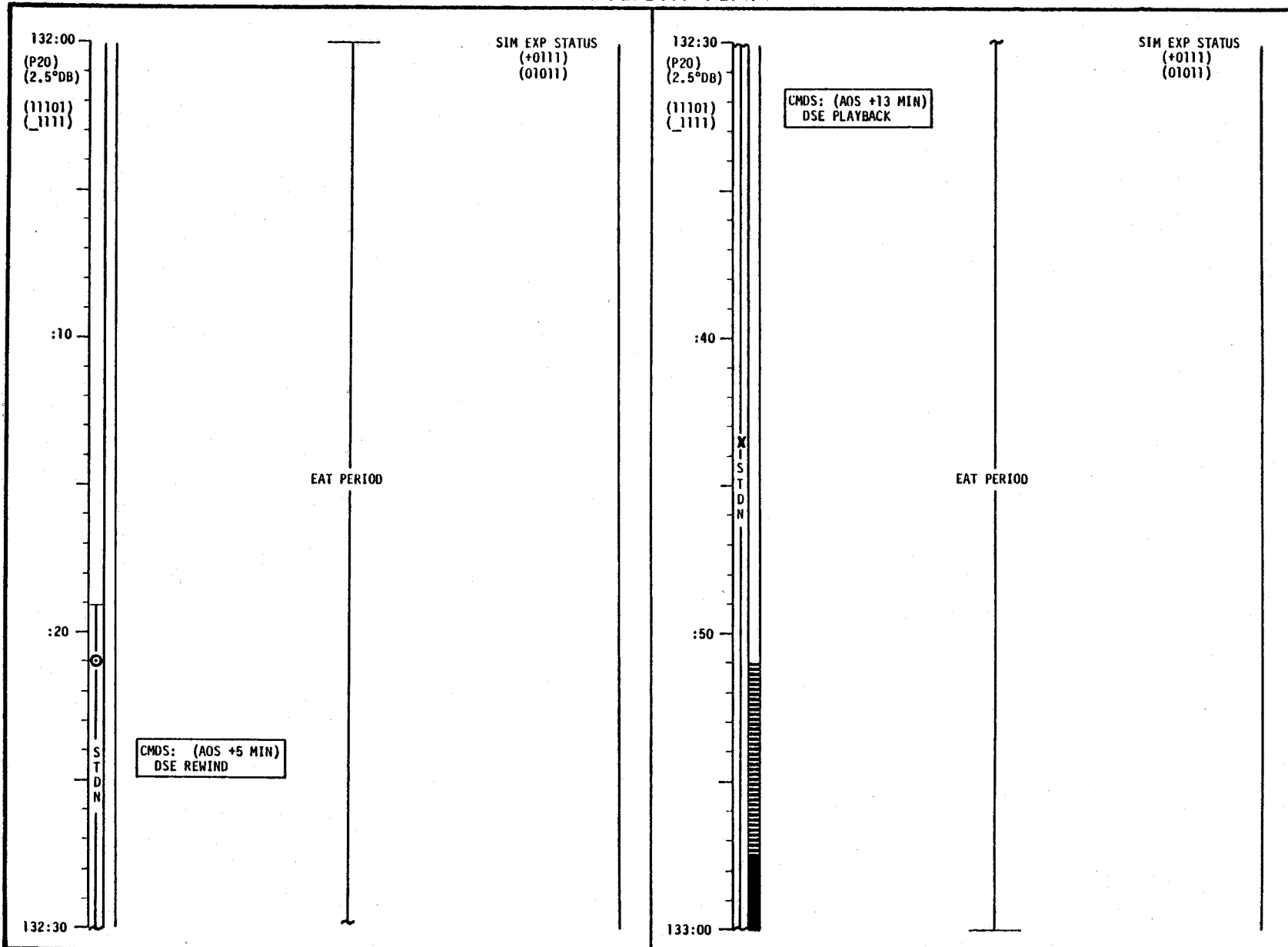


REST PERIOD
(8 HOURS)

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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (2/6)	10/23/72	3-165

LM FLIGHT PLAN

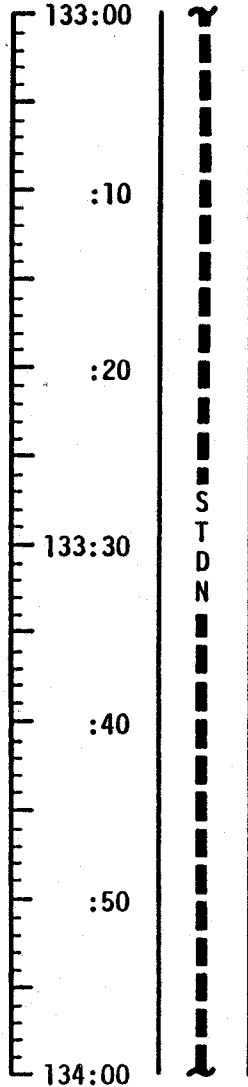
MCC-H

0953 CST

CDR

LMP

NOTES



REST PERIOD
(8 HOURS)

CSM REV 24

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

LM FLIGHT PLAN

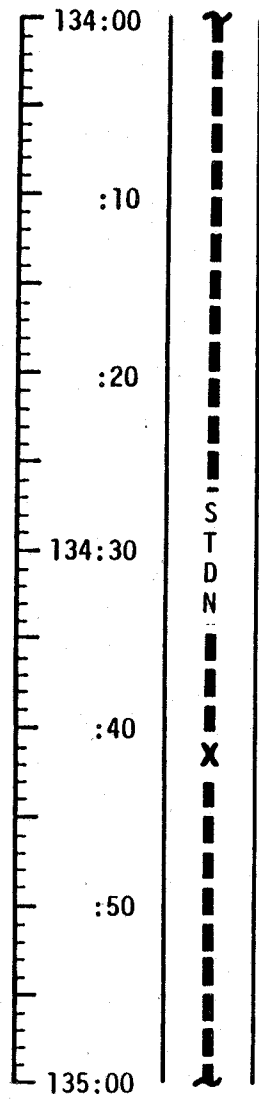
MCC-H

1053 CST

CDR

LMP

NOTES

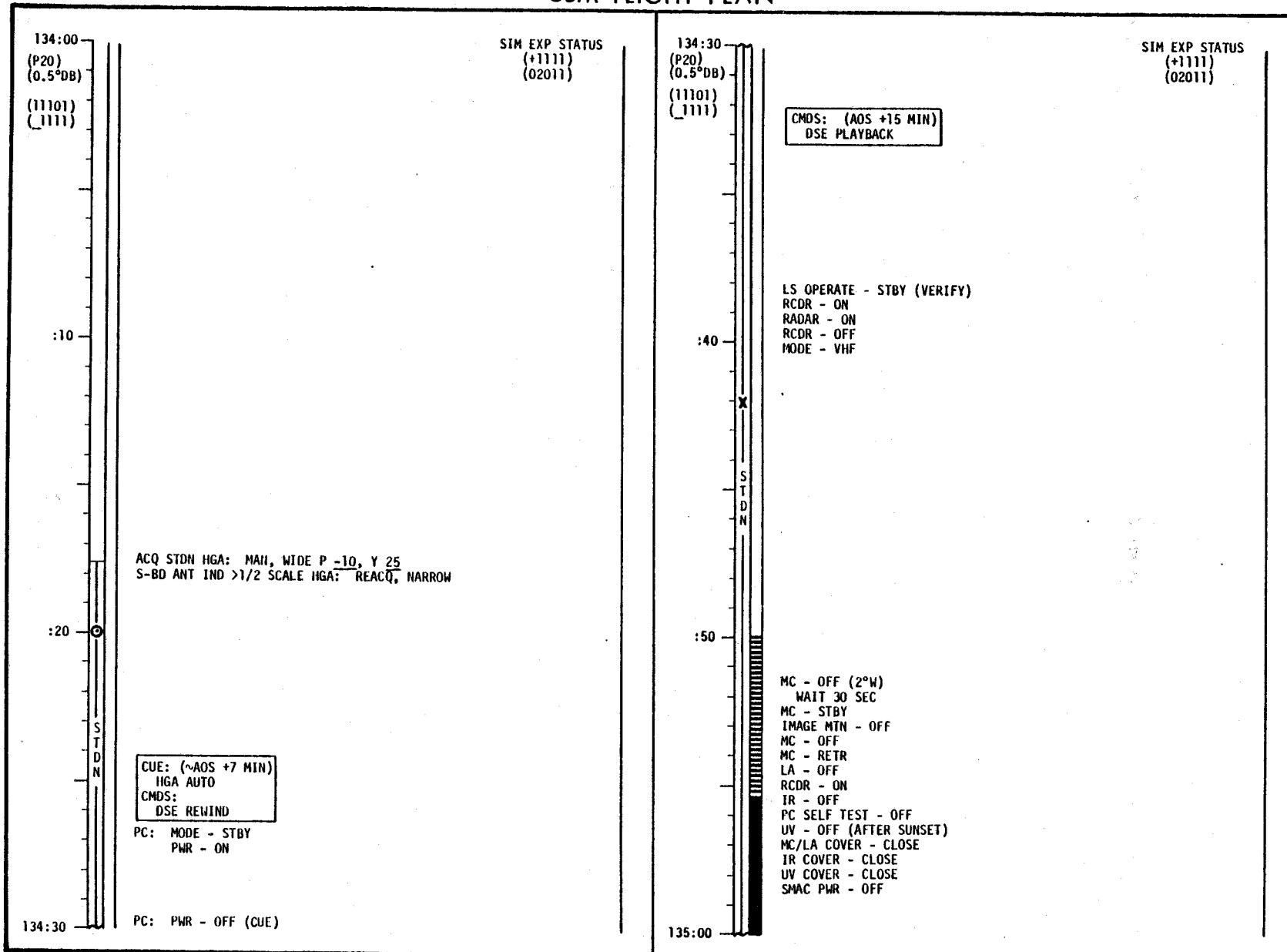


REST PERIOD
(8 HOURS)

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



MISSION	EDITION	DATE	PAGE
AP0110 17	FINAL (12/6)	10/23/72	2 of 4

LM FLIGHT PLAN

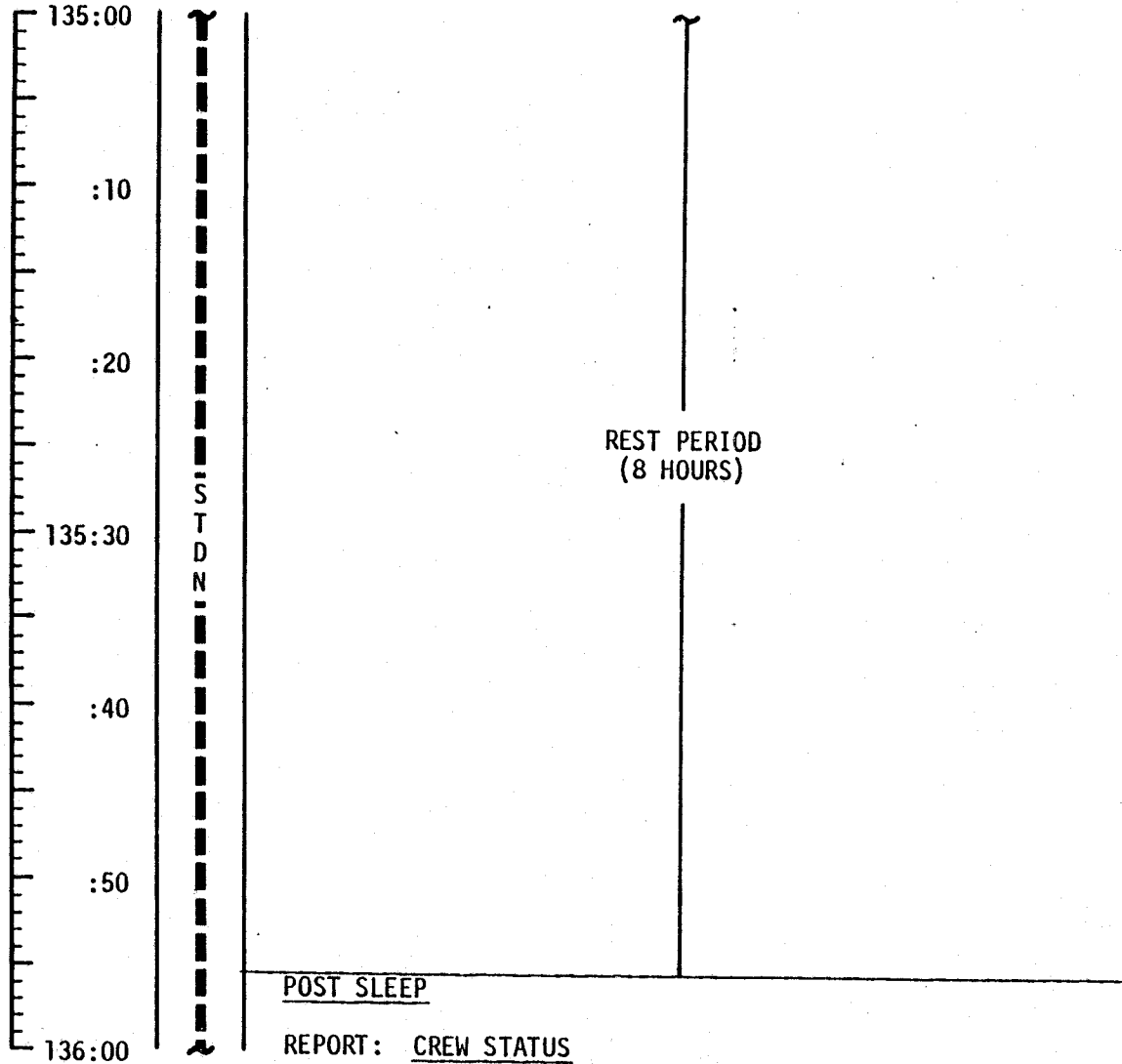
MCC-H

1153 CST

CDR

LMP

NOTES



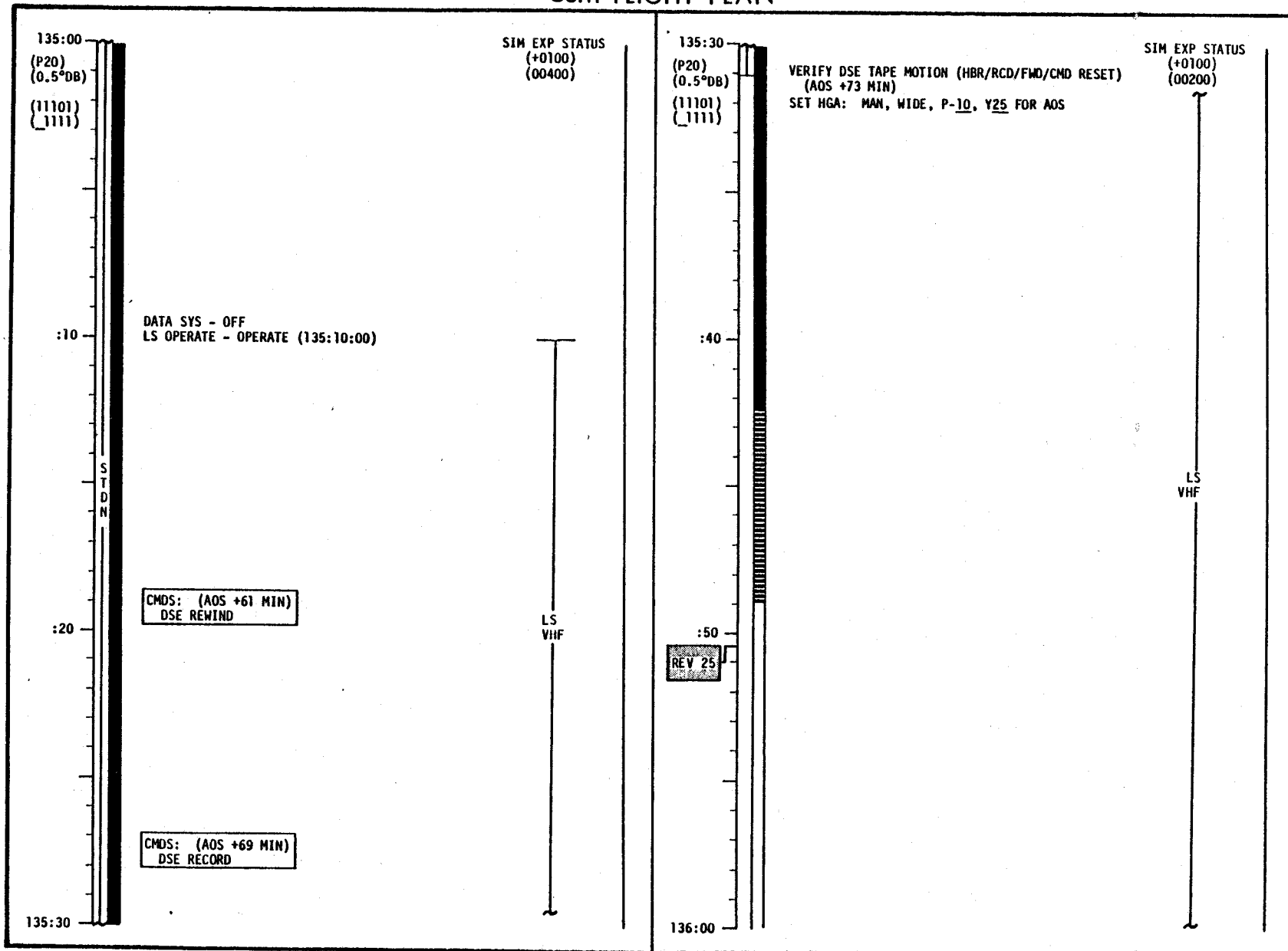
CSM REV 25

STAY/NO-STAY FOR
EVA-2

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 (10/6)	10/22/70	2/22

LM FLIGHT PLAN

MCC-H

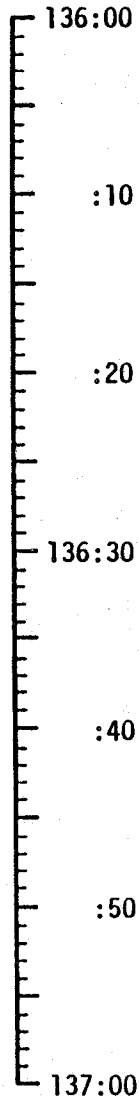
1253 CST

CDR

LMP

NOTES

UPDATE TO LM
LIFT-OFF TIMES FOR
REVS 26-32



Y
ST
D
N
X
↓

POST SLEEP (CONT)

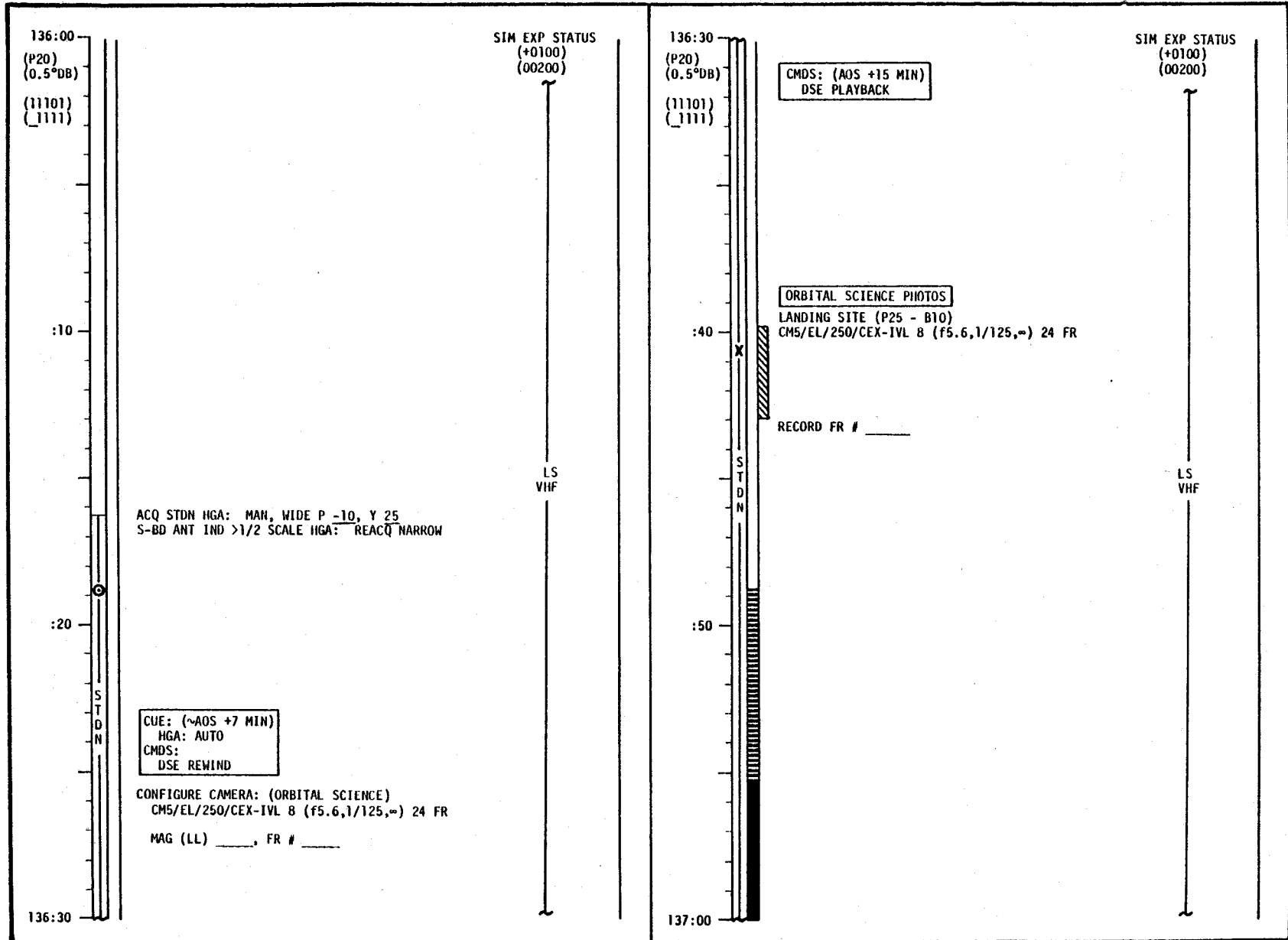
EAT PERIOD

GDS 210' AOS

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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-173

LM FLIGHT PLAN

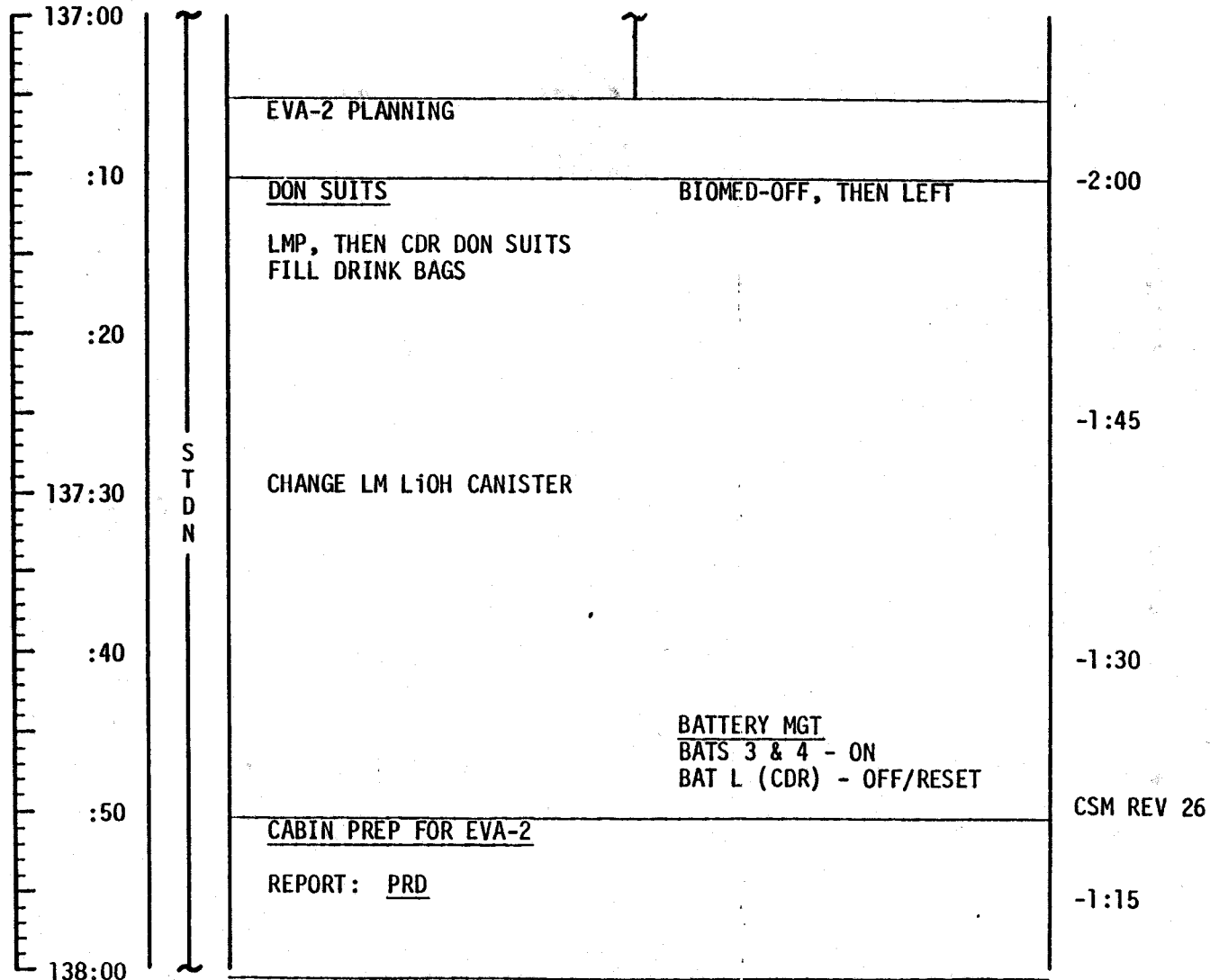
MCC-H

1353 CST

CDR

LMP

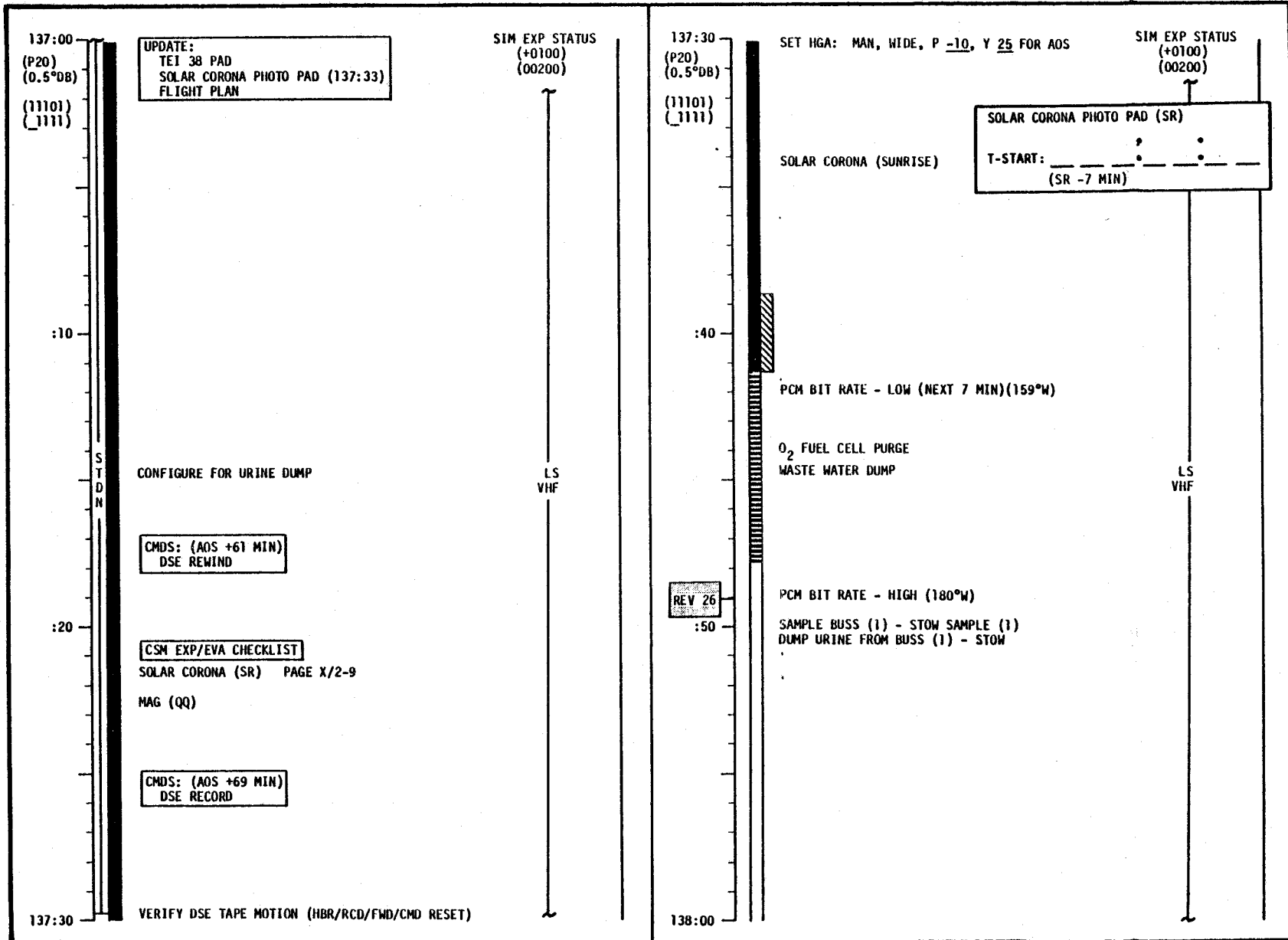
NOTES



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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-175

LM FLIGHT PLAN

MCC-H

1453 CST

CDR

LMP

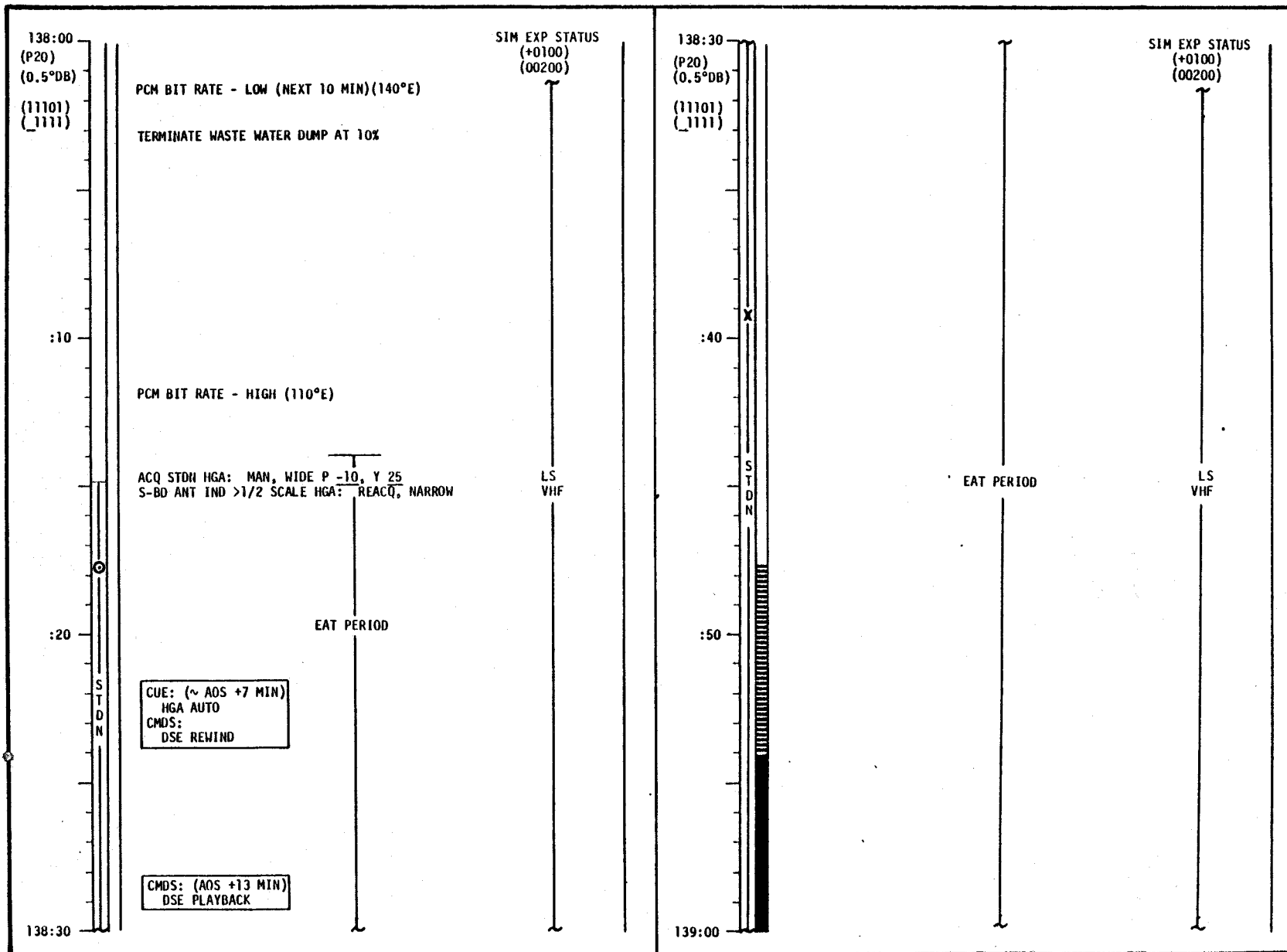
NOTES

138:00		EQUIPMENT PREP FOR EVA-2	
:10			-1:00
:20		PLSS DONNING	
138:30	S T D N		-0:45
:40	X	PLSS COMM CHECK CONFIGURE COMM FOR EVA RECORDER - ON REPORT: <u>PLSS O₂ QUANTITY</u>	-0:30
:50		OPS CONNECT	
139:00		HELMET/GLOVE DONNING	-0:15

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

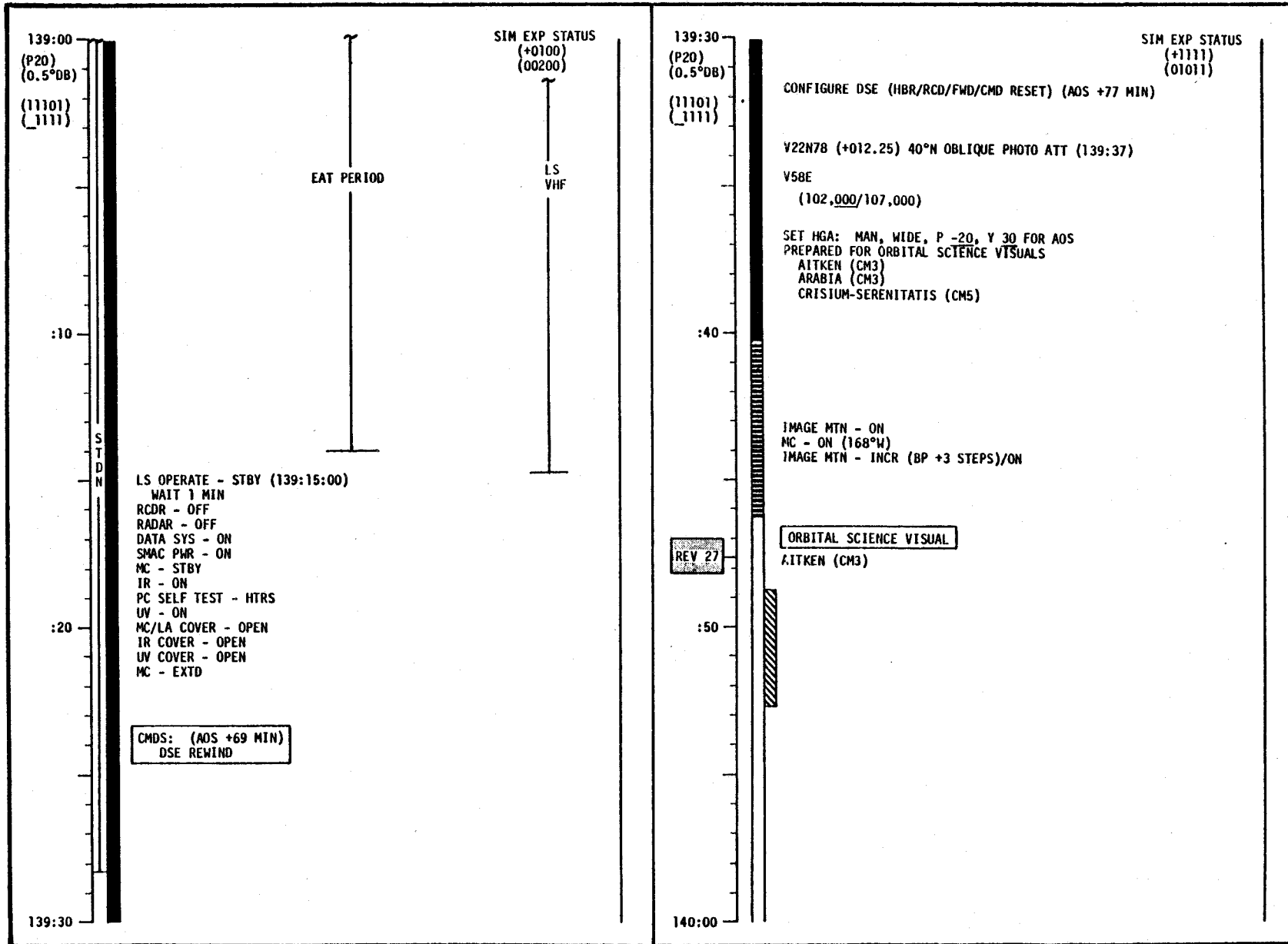
GO/NO-GO FOR
CABIN DEPRESS

139:00		HELMET/GLOVE DONNING (CONT)		
		PRESSURE INTEGRITY CHECK		
:10		CABIN DEPRESS START WATCHES @ 3.5 PSIA		0:00/START EVA-2
		FINAL EVA PREP		
:20		EGRESS	ASSIST CDR	+0:10
		DESCEND TO SURFACE	RECORDER - OFF EGRESS, CLOSE HATCH DESCEND TO SURFACE	
139:30	S T D N	POWER LCRU	LRV EQUIPMENT PREP	+0:20
		SRC-2 EQUIPMENT PREP	PHOTO PAN	
:40	T I V I	GEOLOGICAL PREP	GEOLOGICAL PREP	+0:30
		LRV POWER UP	SEP POWER UP	CSM REV 27 +0:40
:50		DRIVE TO SEP SITE		
140:00				+0:50

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



LM FLIGHT PLAN

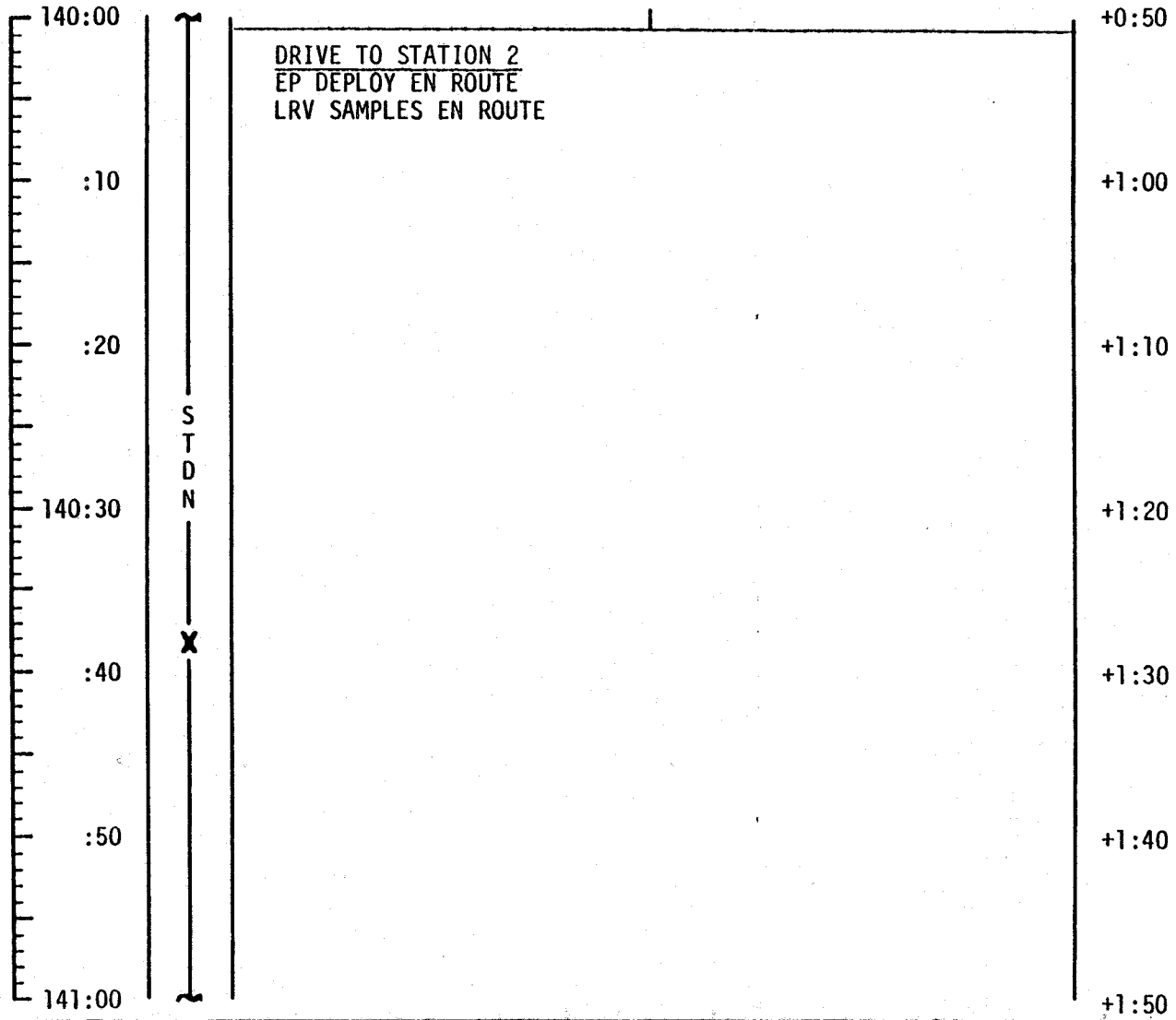
MCC-H

1653 CST

CDR

LMP

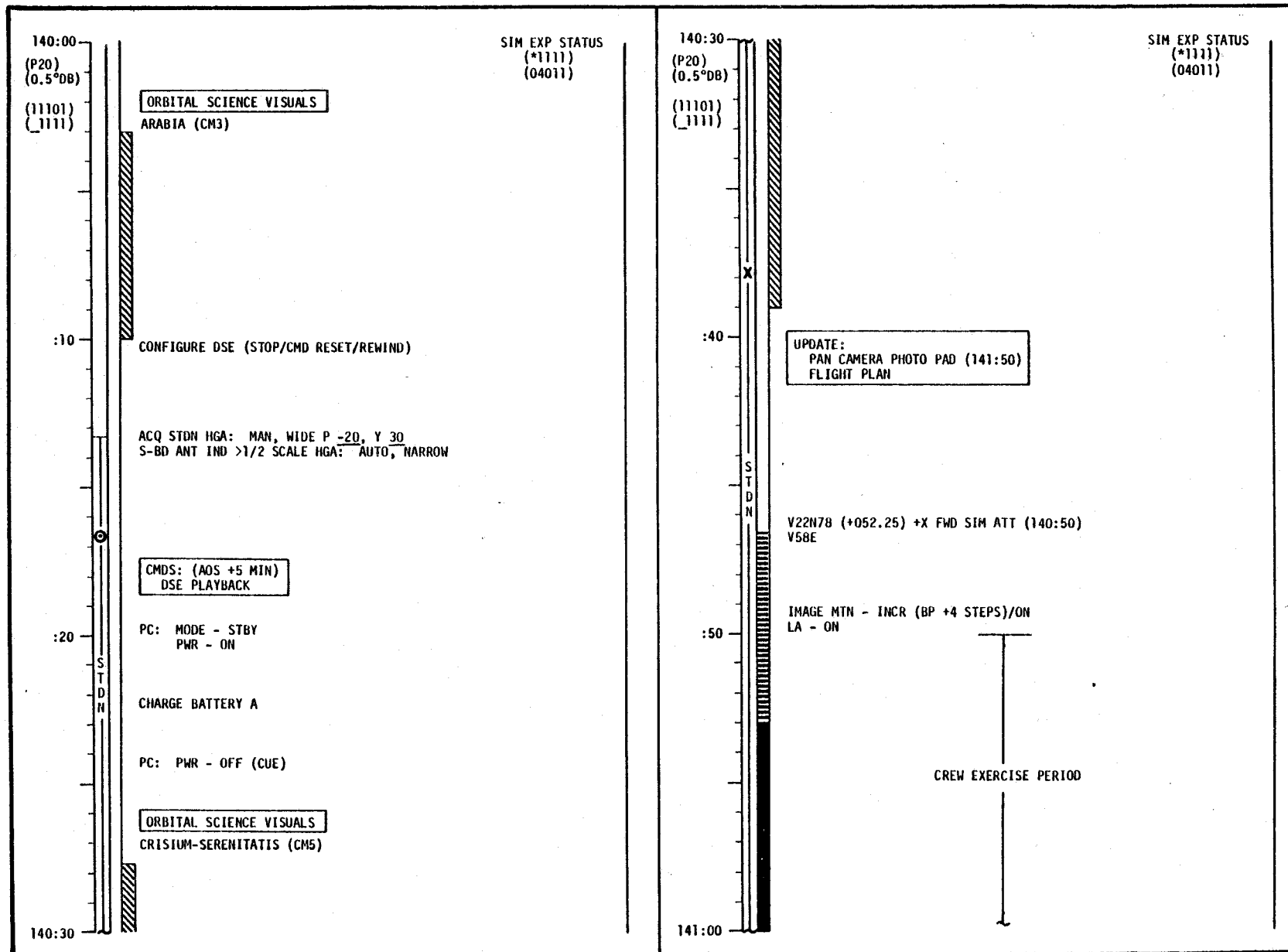
NOTES



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

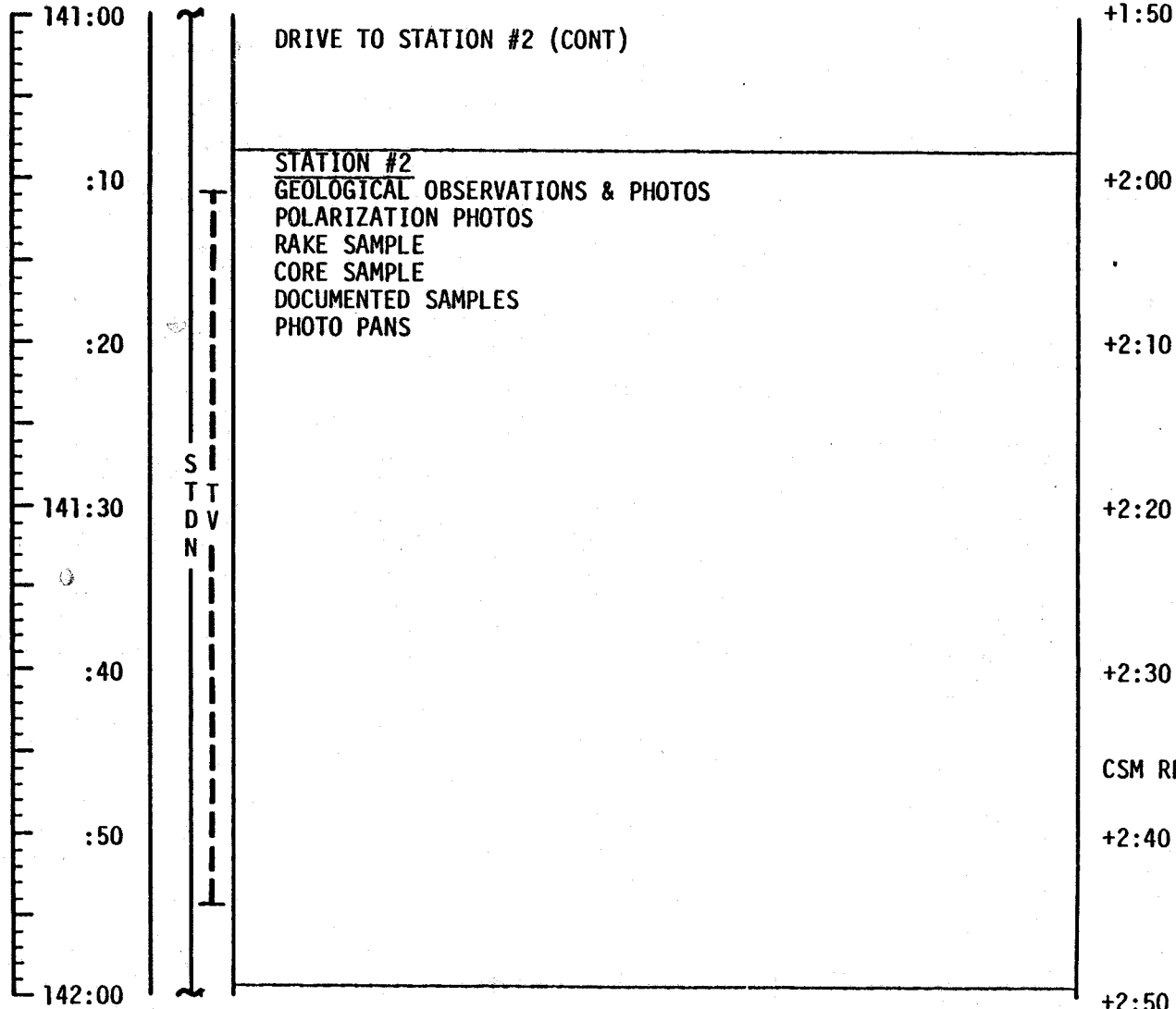
MCC-H

1753 CST

CDR

LMP

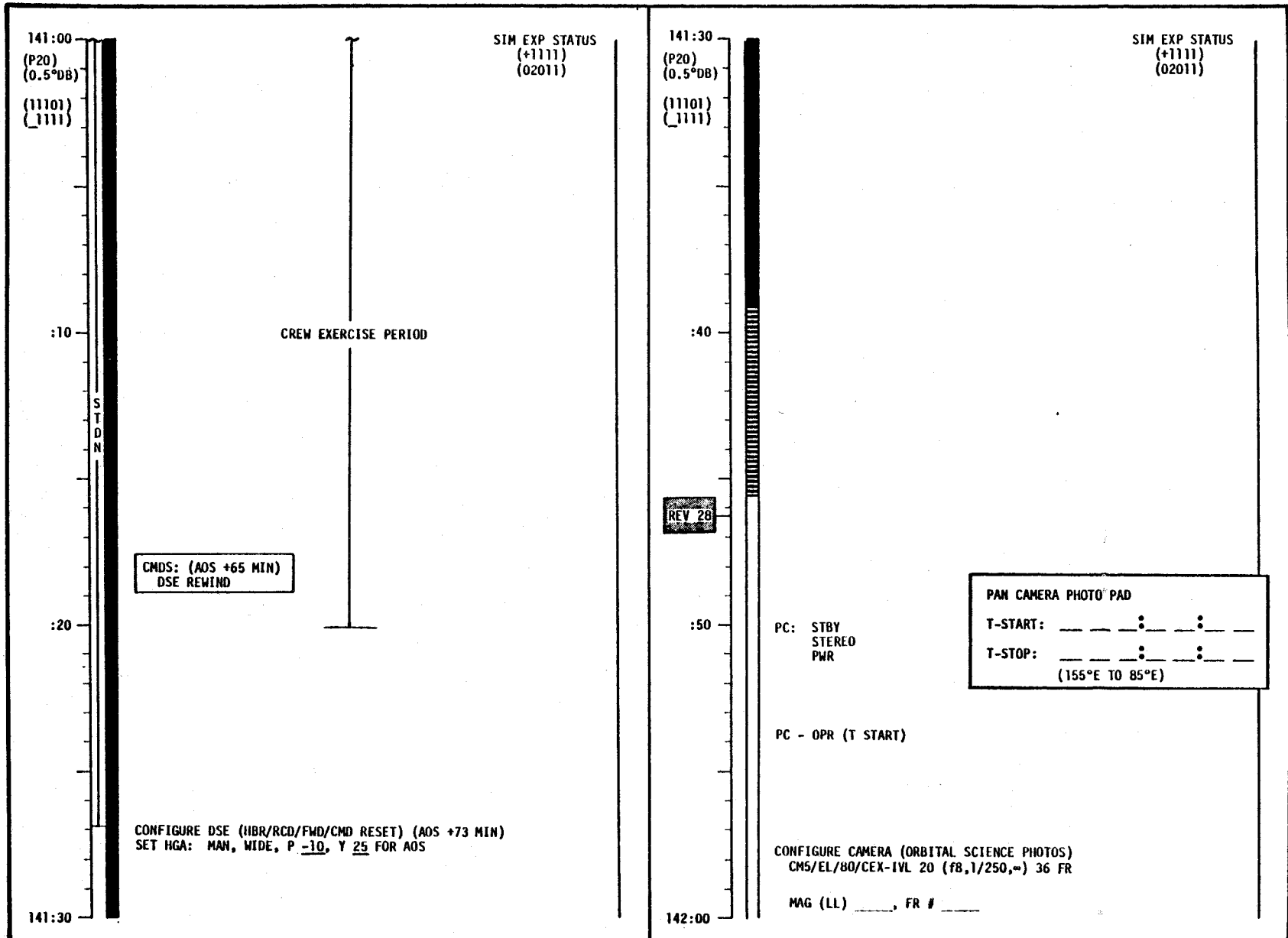
NOTES



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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-183

LM FLIGHT PLAN

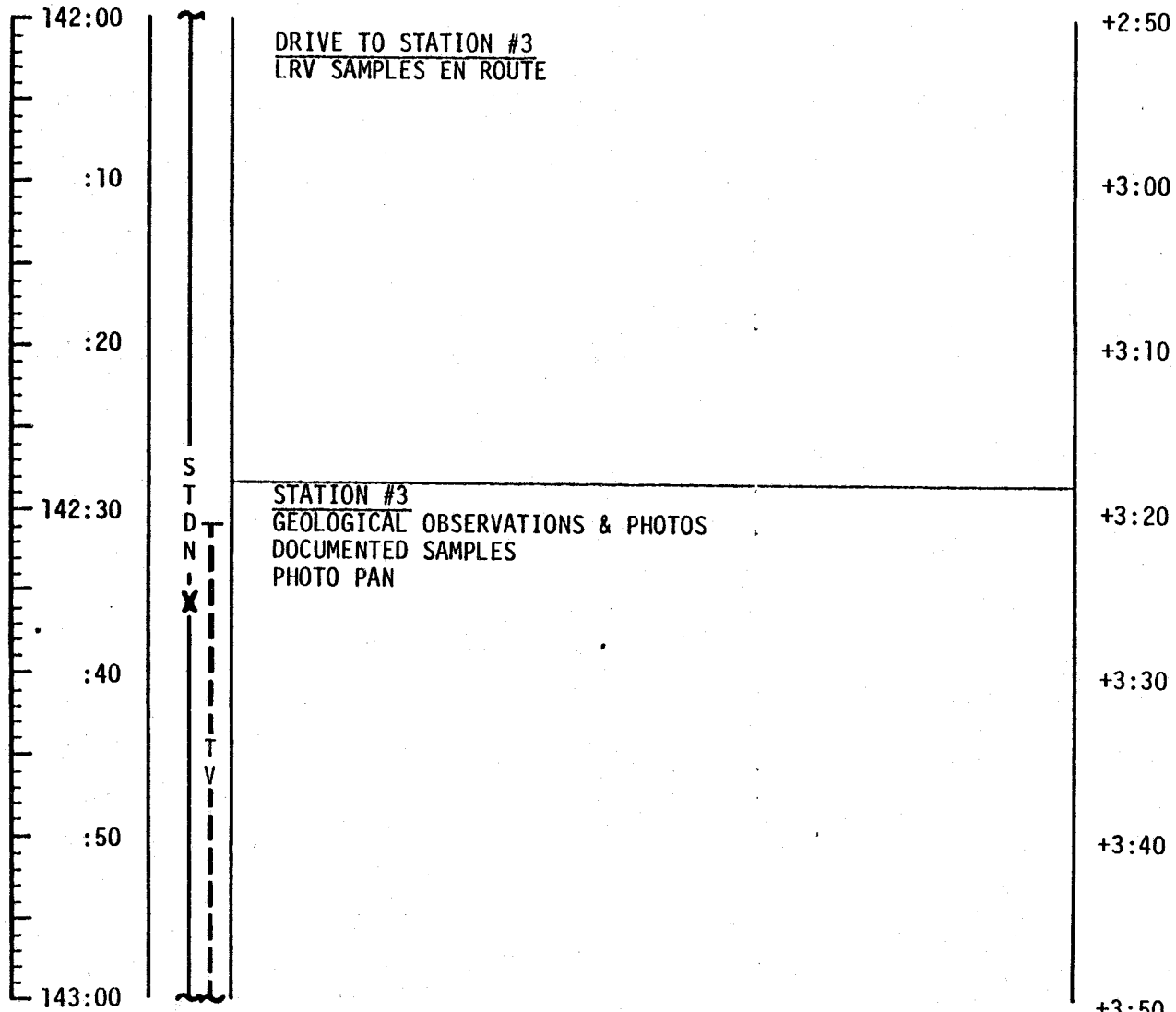
MCC-H

1853 CST

CDR

LMP

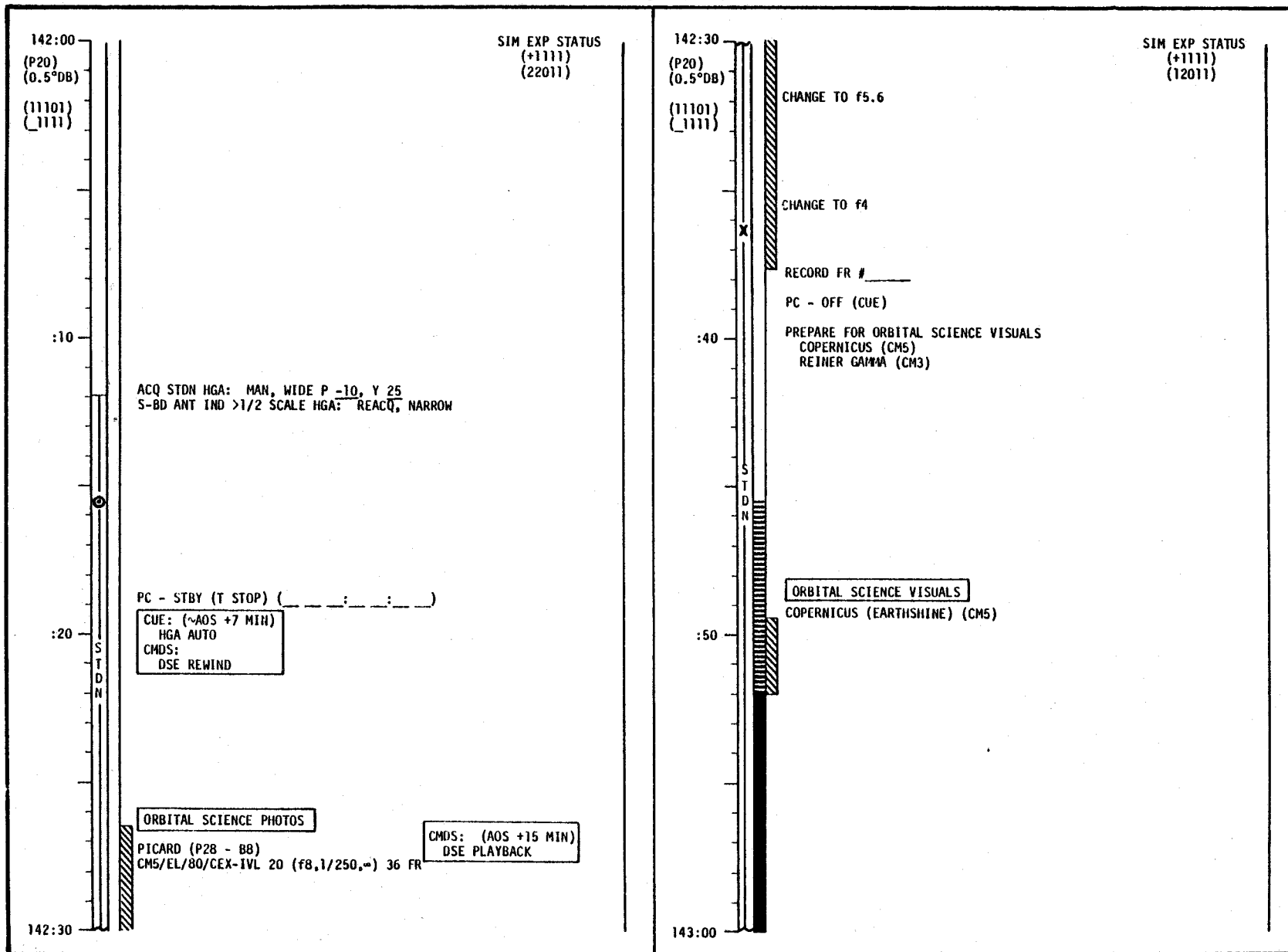
NOTES



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

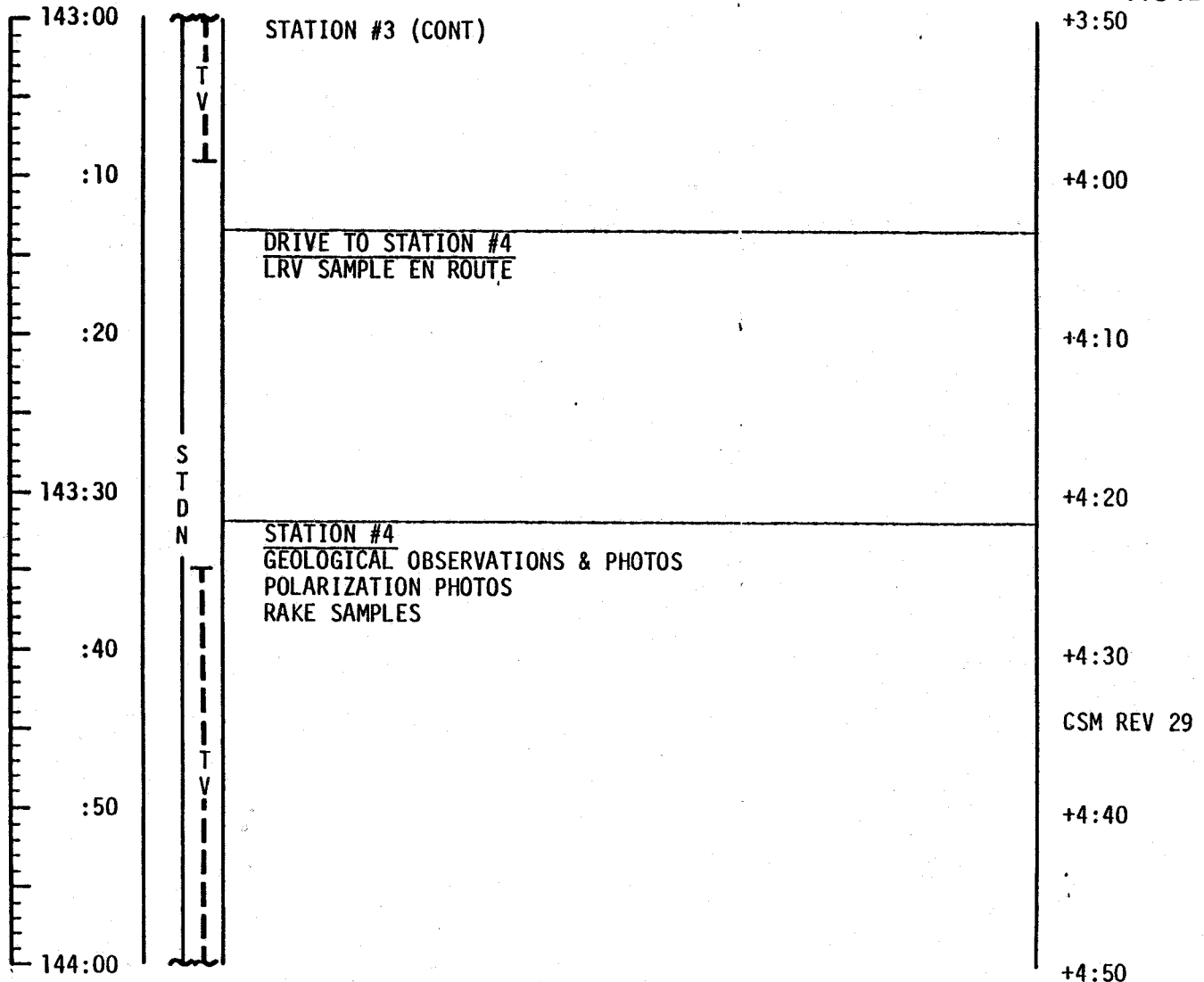
MCC-H

1953 CST

CDR

LMP

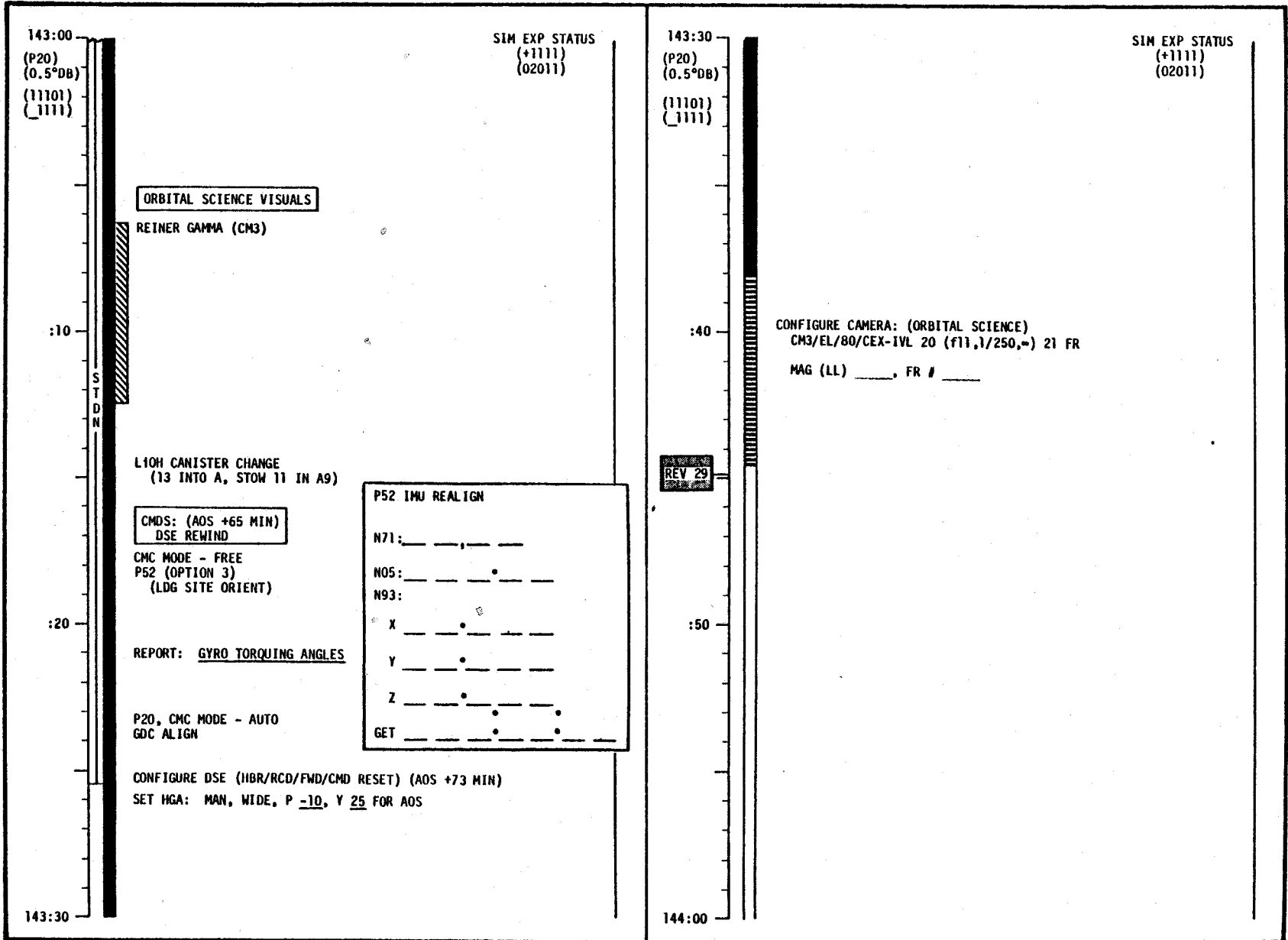
NOTES



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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-187

LM FLIGHT PLAN

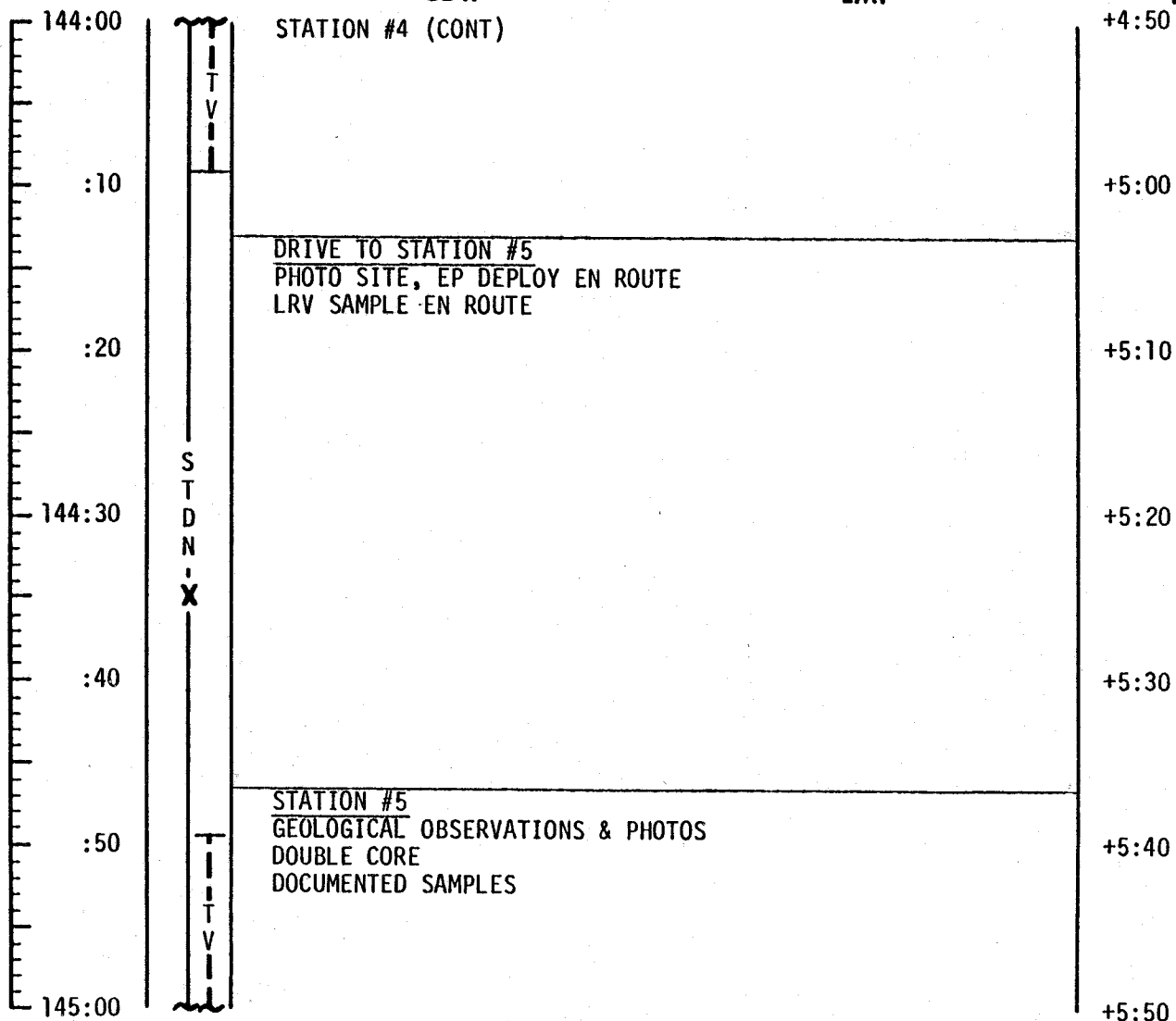
MCC-H

2053 CST

CDR

LMP

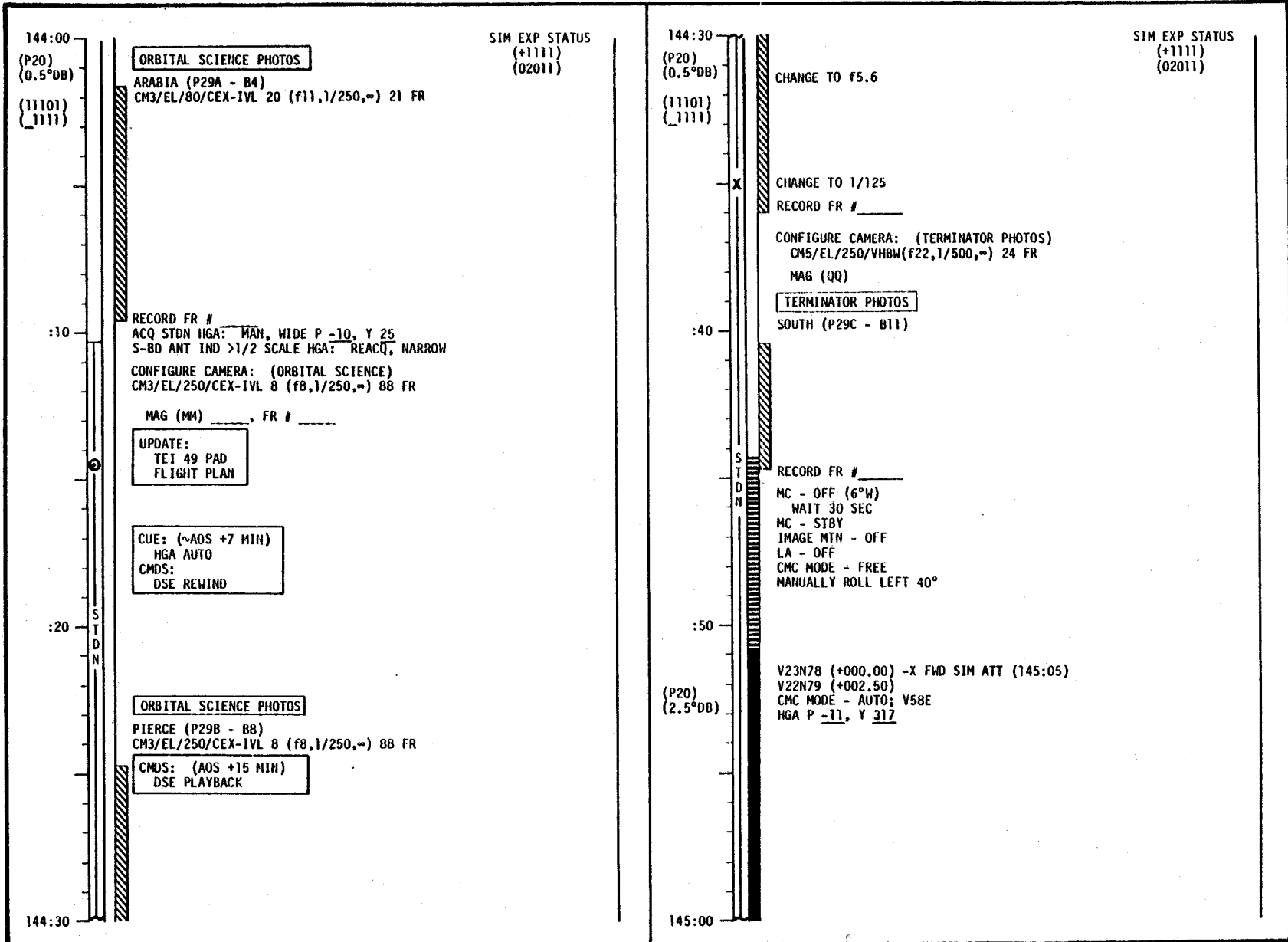
NOTES



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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-189

LM FLIGHT PLAN

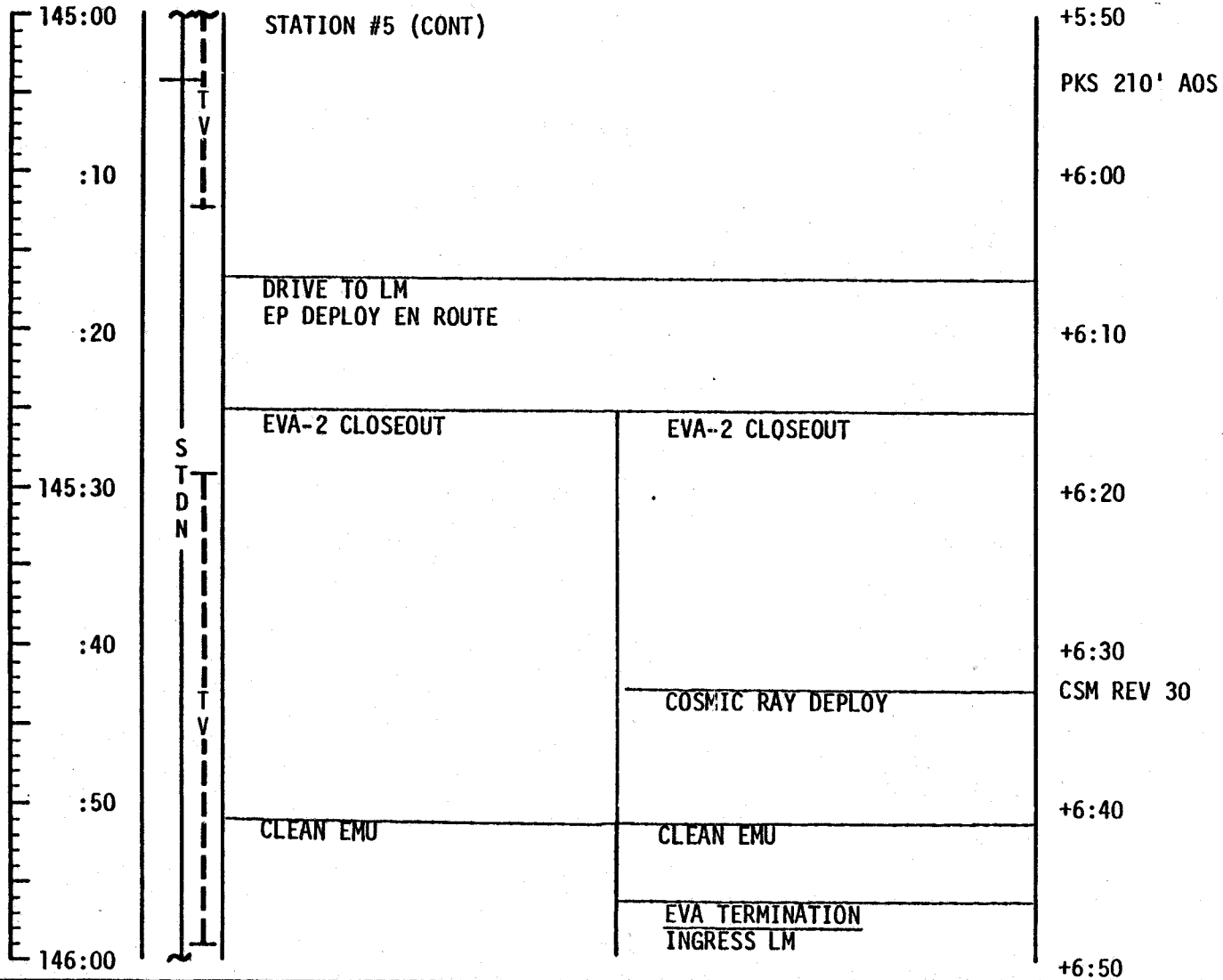
MCC-H

2153 CST

CDR

LMP

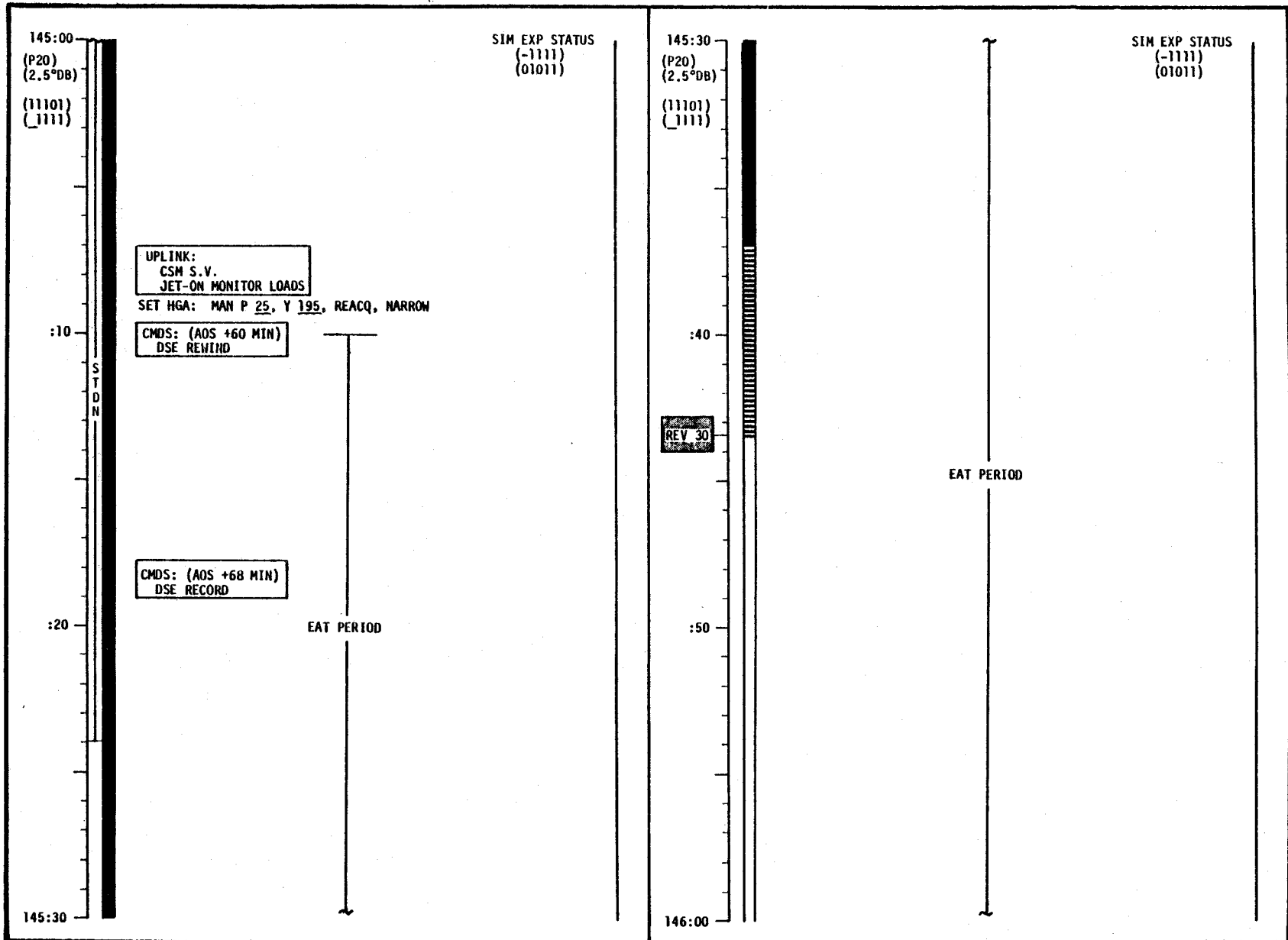
NOTES



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

MCC-H

2253 CST

LM FLIGHT PLAN

CDR

LMP

NOTES

146:00	S T D I X	INGRESS LM	TRANSFER PALLETS
:10		REPRESS LM	
		<u>POST-EVA SYSTEMS CONFIGURATION</u>	
		DOFF HELMETS & GLOVES	
:20		CONNECT TO LM COMM	
			BIOMED - RIGHT
146:30		PLSS O ₂ INITIAL RECHARGE	
:40		<u>PLSS/OPS DOFFING</u>	
		REPORT: <u>OPS PRESSURE</u>	
:50			
147:00			

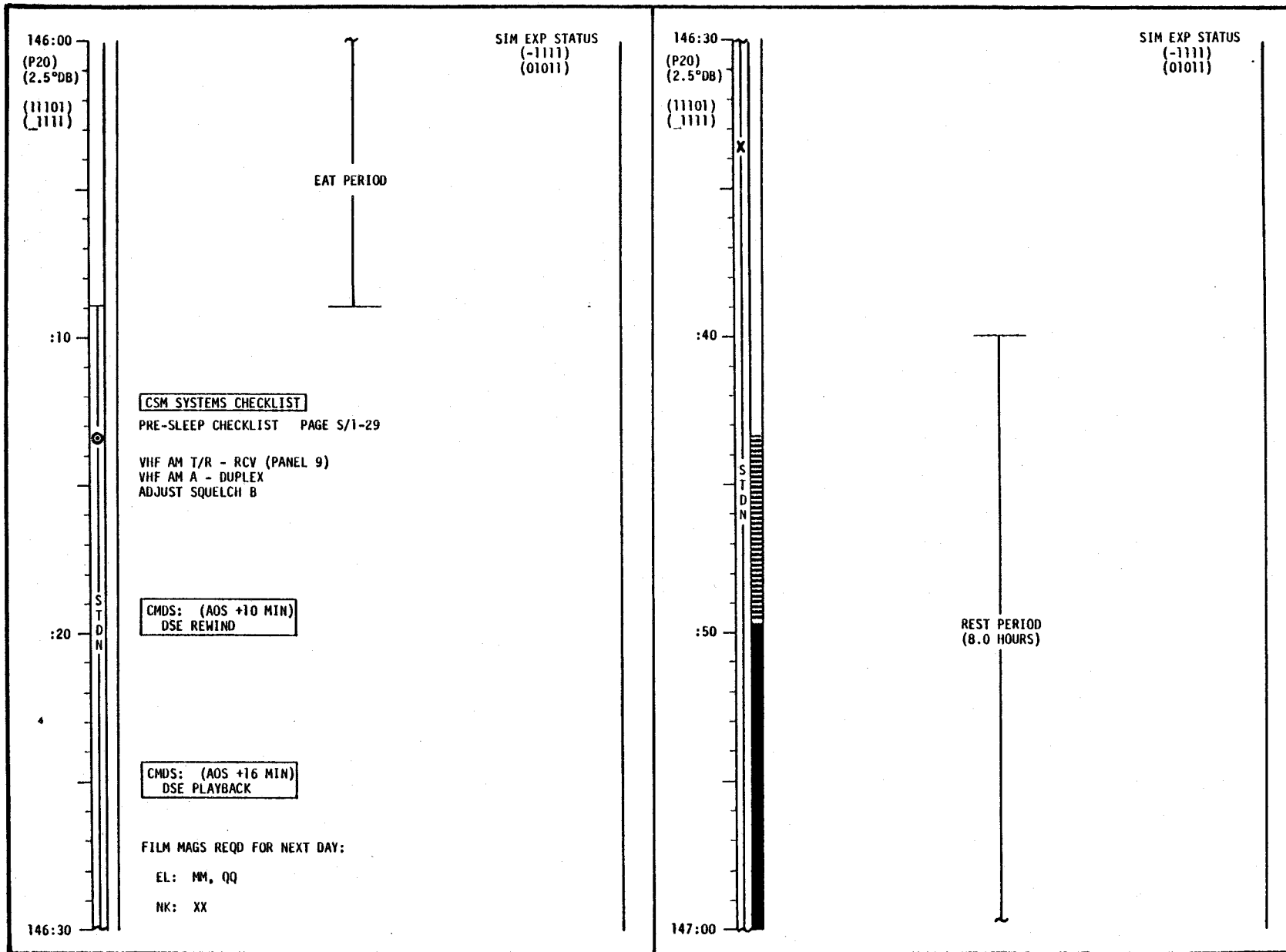
+6:50

7:00/END EVA-2

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



MCC-H

2353 CST

LM FLIGHT PLAN

CDR

LMP

NOTES

147:00
 :10
 :20
 147:30
 :40
 :50
 148:00

ST
 D
 N

PLSS/OPS DOFFING (CONT)

POST-EVA CABIN CONFIGURATION

BATTERY MGT

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

WEIGH SRC & COLLECTION BAGS, REPORT: WEIGHTS

GDS 210' LOS

DOFF SUITS

CDR, THEN LMP DOFF SUITS

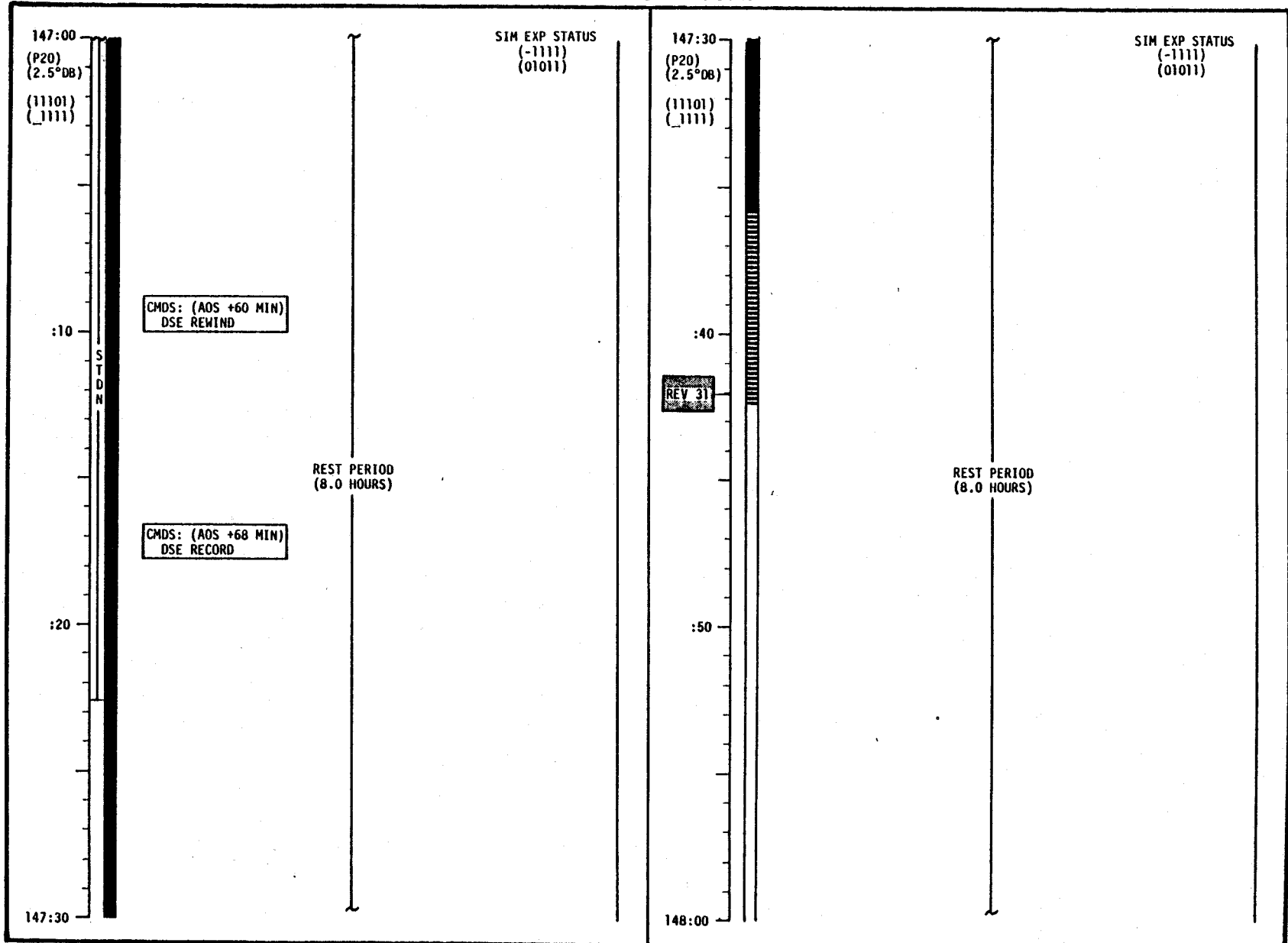
BIOMED - OFF, THEN LEFT

CSM REV 31

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	ETNM / 12/61	10/22/72	2/205

LM FLIGHT PLAN

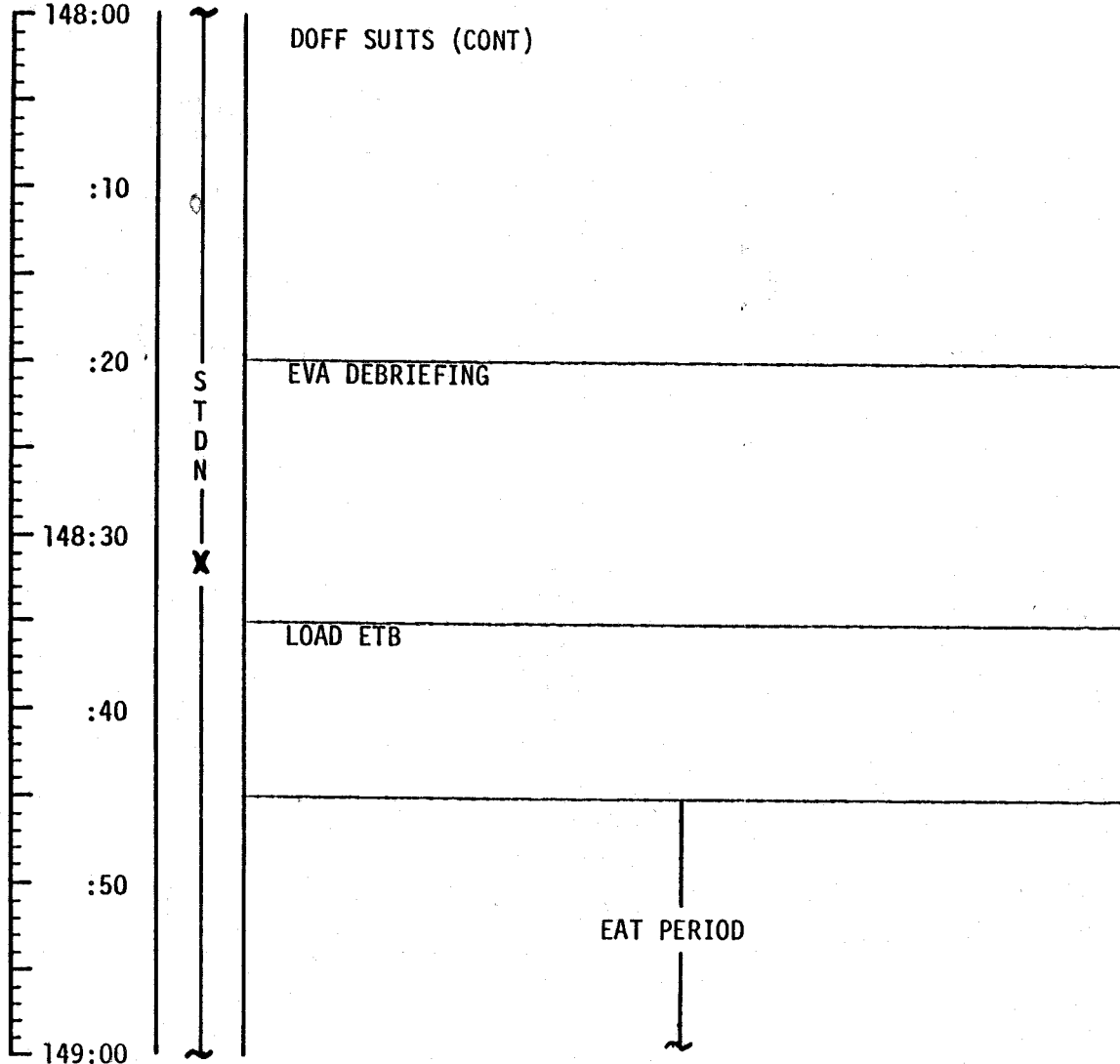
MCC-H

0053 CST, 12/13

CDR

LMP

NOTES

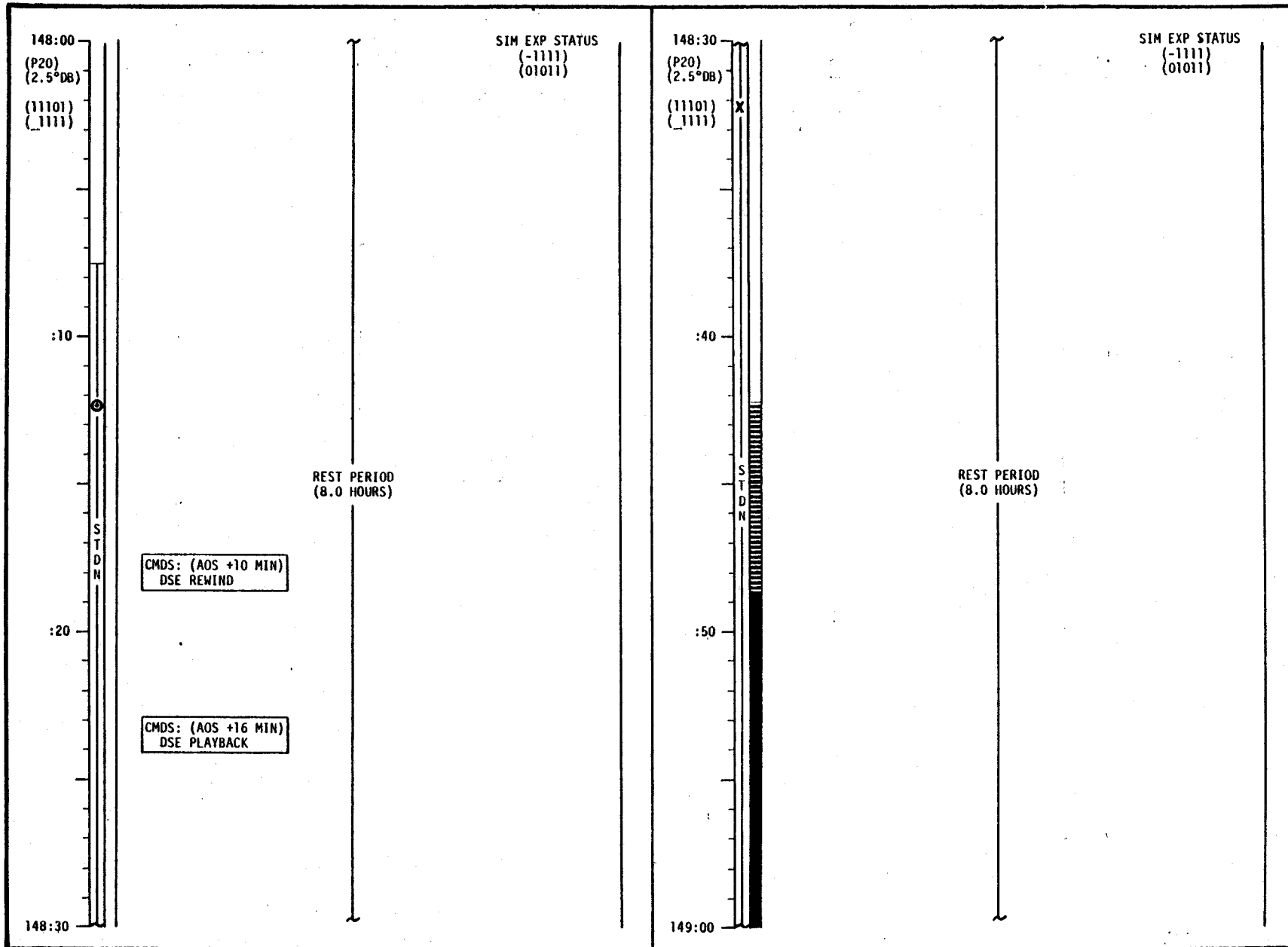


UPDATE TO LM
LIFT-OFF TIMES FOR
REVS 33-37

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

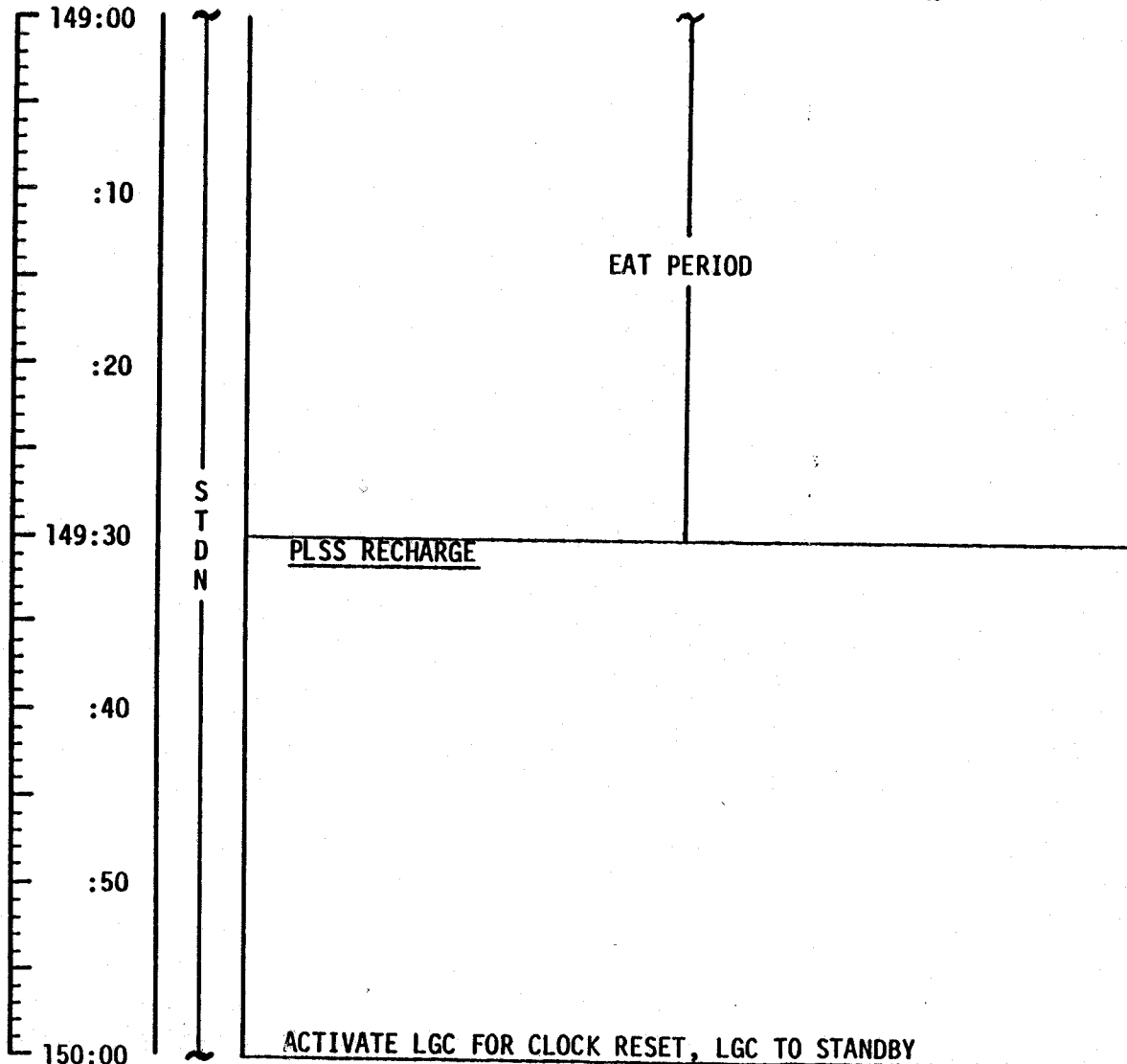
MCC-H

0153 CST

CDR

LMP

NOTES

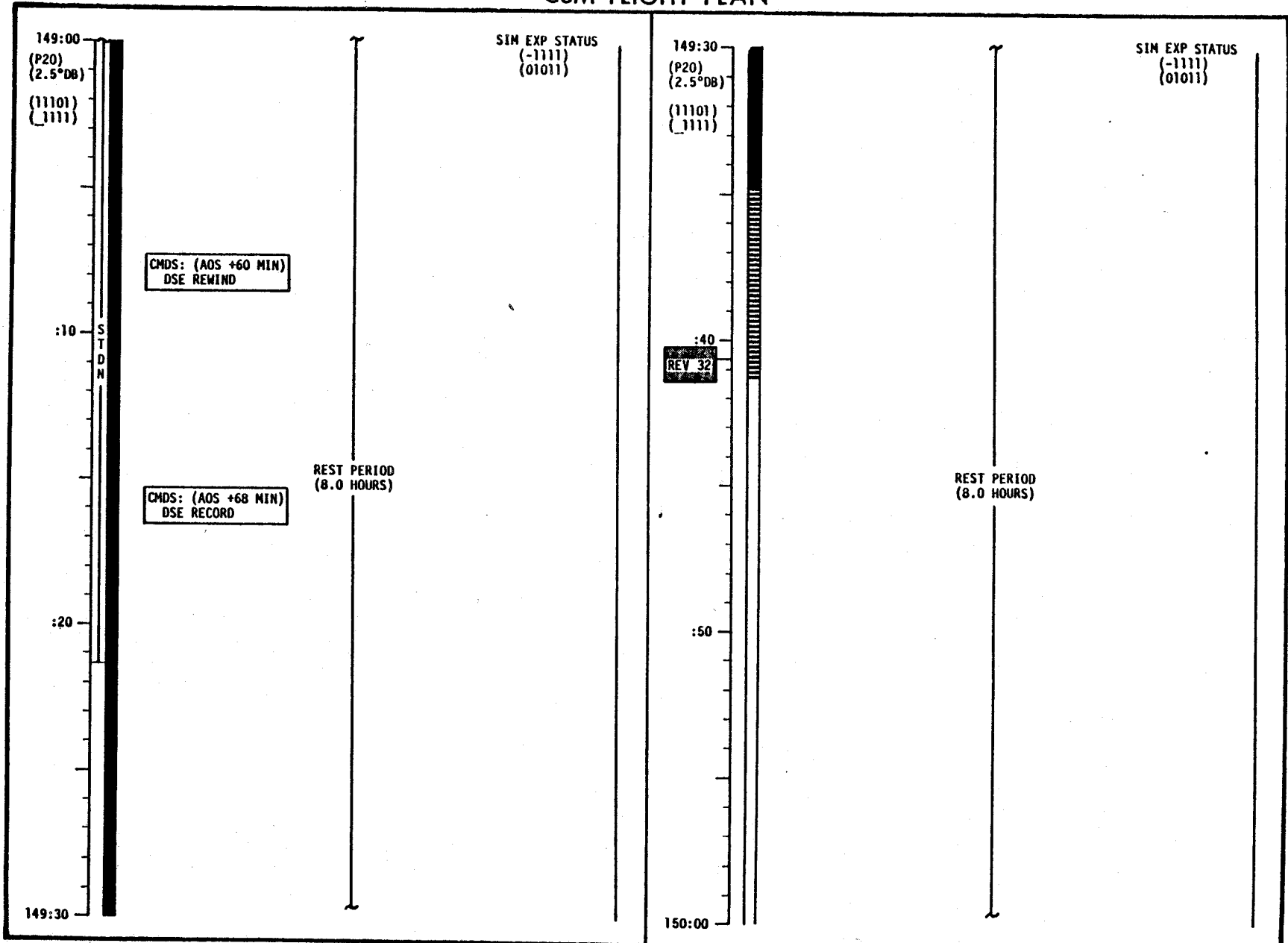


CSM REV 32

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



149:00
(P20)
(2.5°DB)
(11101)
(1111)

CMD5: (AOS +60 MIN)
DSE REWIND

:10
S
T
D
N

CMD5: (AOS +68 MIN)
DSE RECORD

:20

149:30

SIM EXP STATUS
(-1111)
(01011)

REST PERIOD
(8.0 HOURS)

149:30
(P20)
(2.5°DB)
(11101)
(1111)

:40
REV 32

:50

150:00

SIM EXP STATUS
(-1111)
(01011)

REST PERIOD
(8.0 HOURS)

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-199

LM FLIGHT PLAN

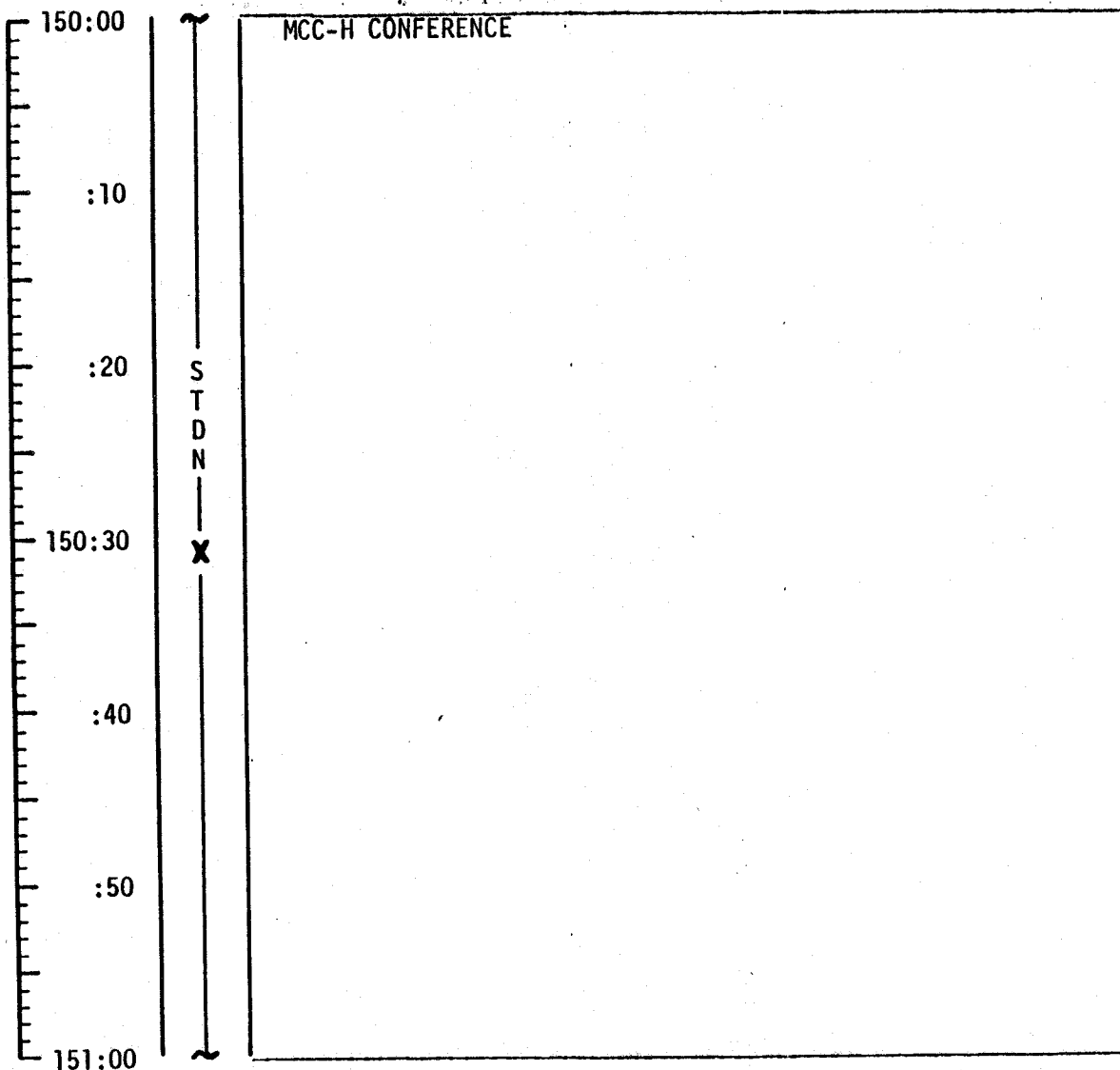
MCC-H

0253 CST

CDR

LMP

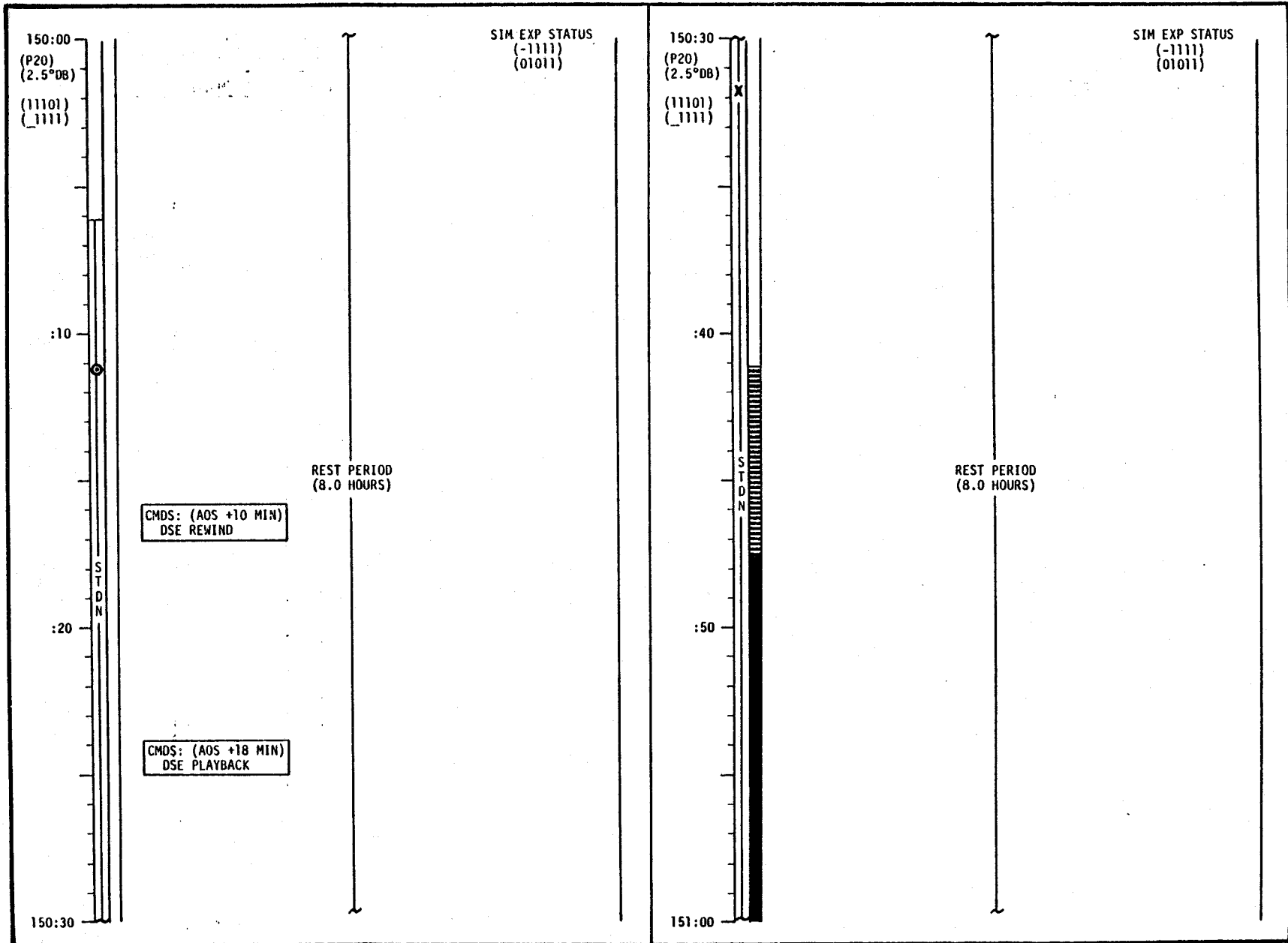
NOTES



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

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-201

LM FLIGHT PLAN

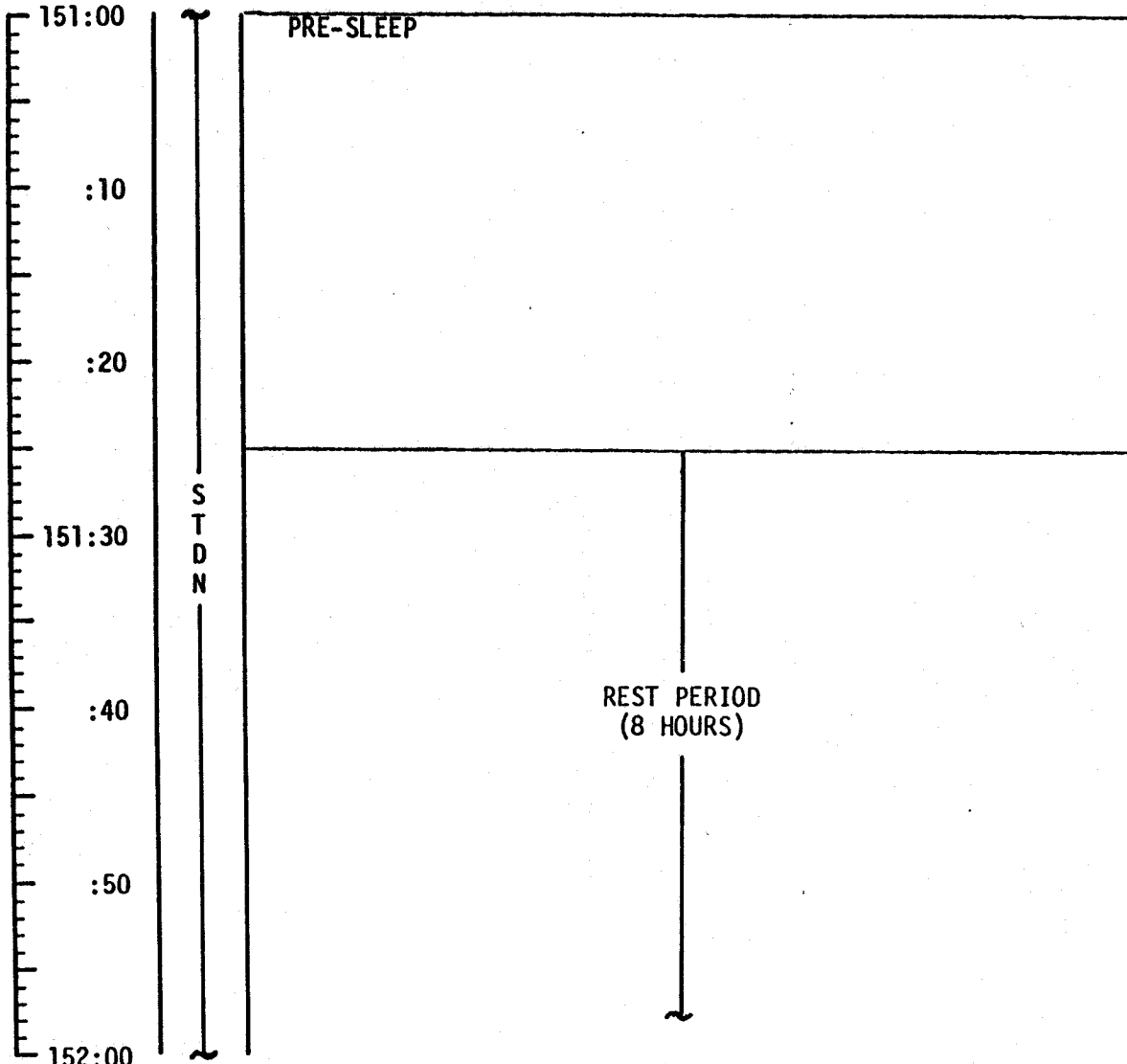
MCC-H

0353 CST

CDR

LMP

NOTES

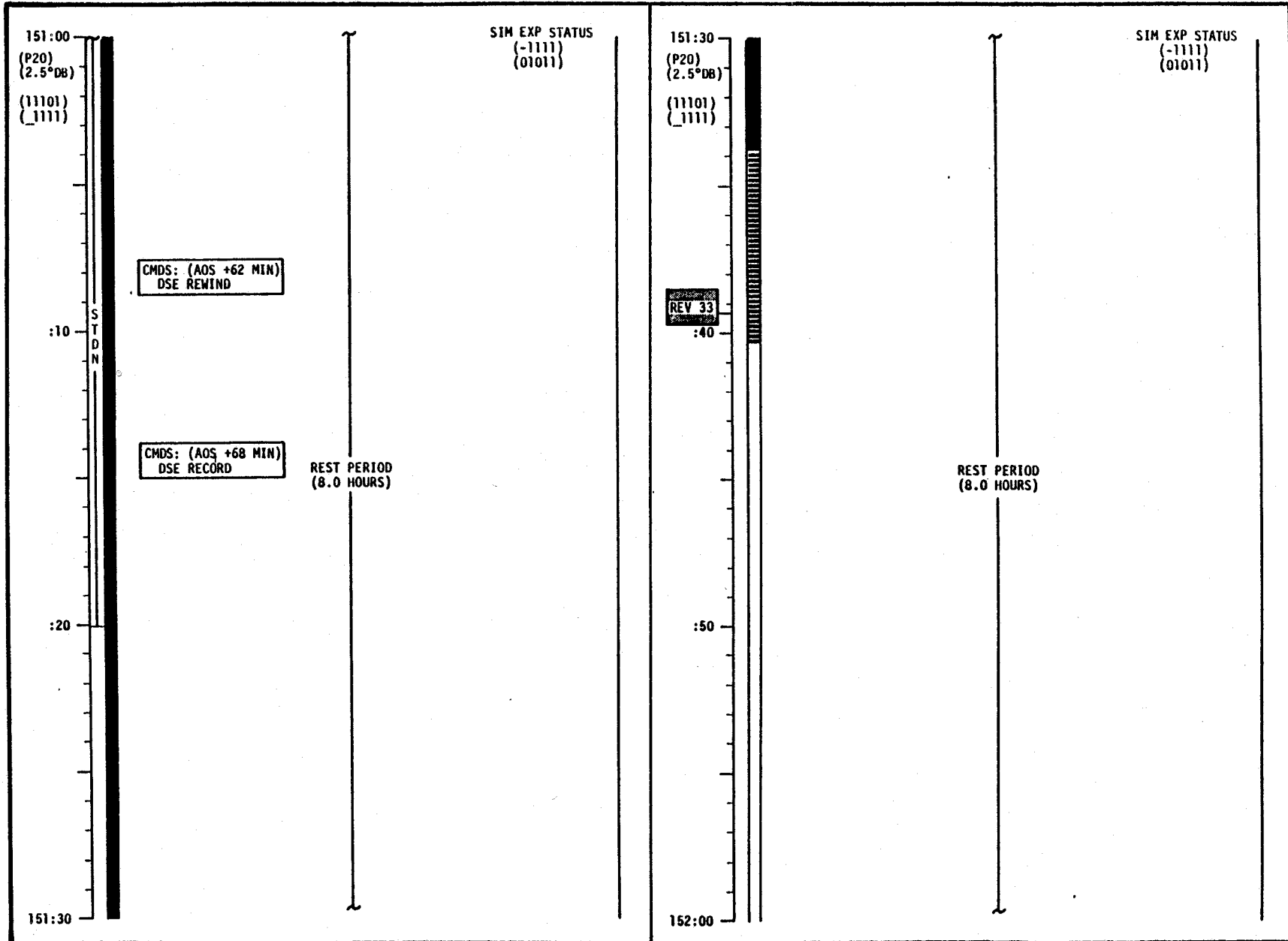


CSM REV 33

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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-203

LM FLIGHT PLAN

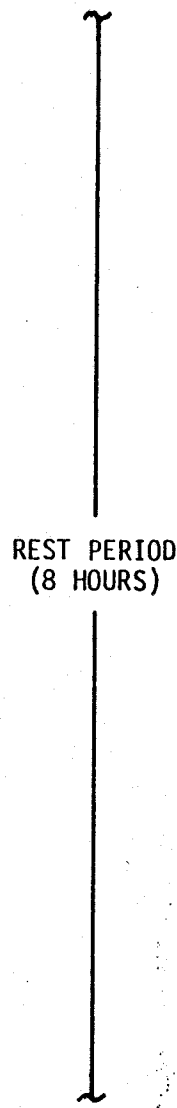
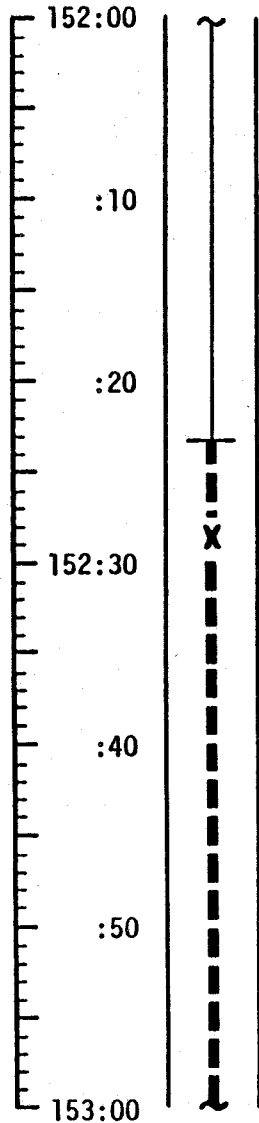
MCC-H

0453 CST

CDR

LMP

NOTES

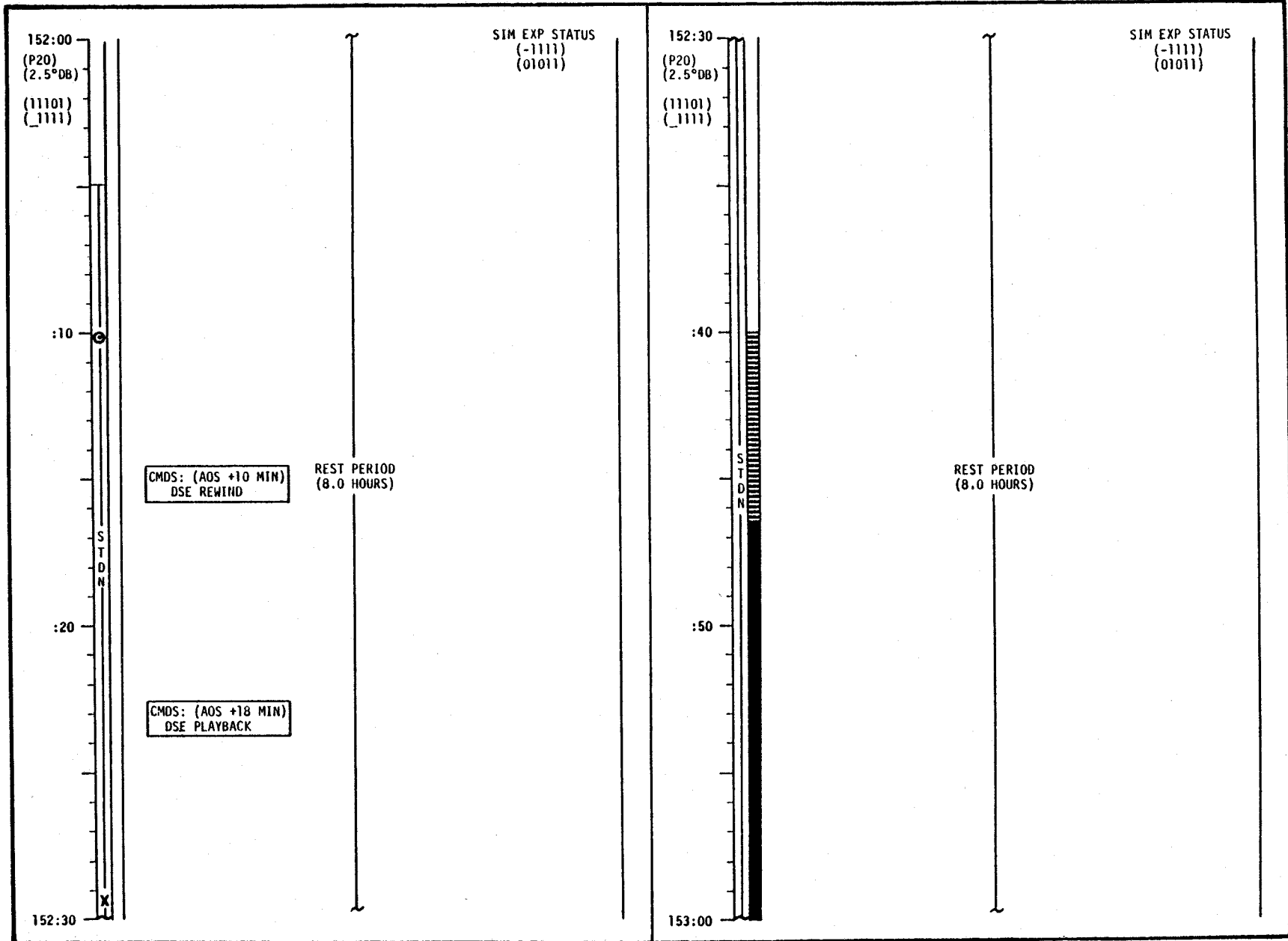


PKS 210' LOS

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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-205

LM FLIGHT PLAN

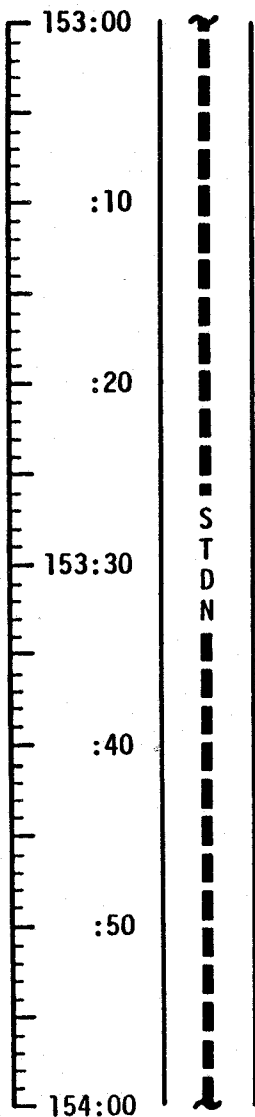
MCC-H

0553 CST

CDR

LMP

NOTES



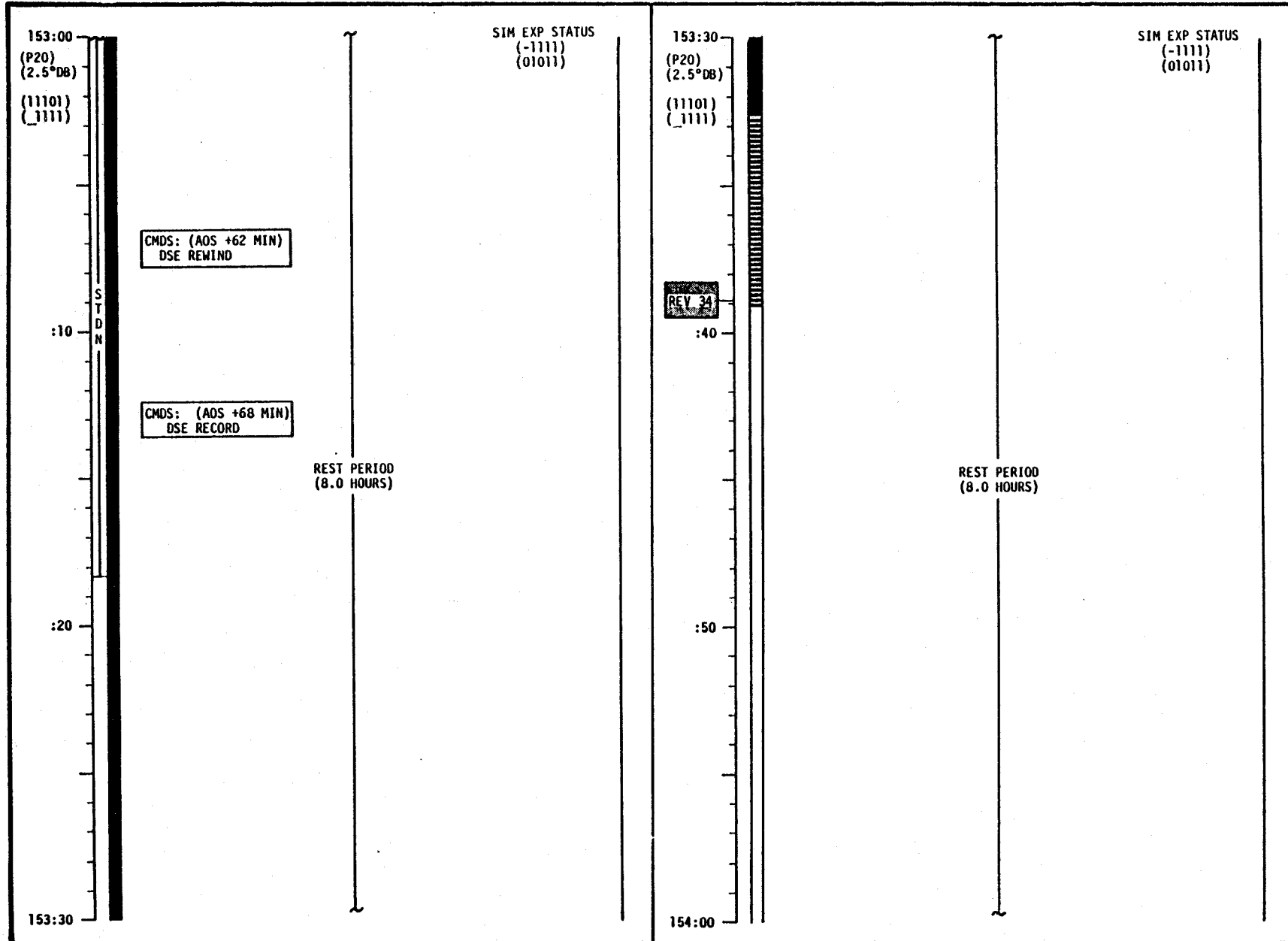
REST PERIOD
(8 HOURS)

CSM REV 34

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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-207

LM FLIGHT PLAN

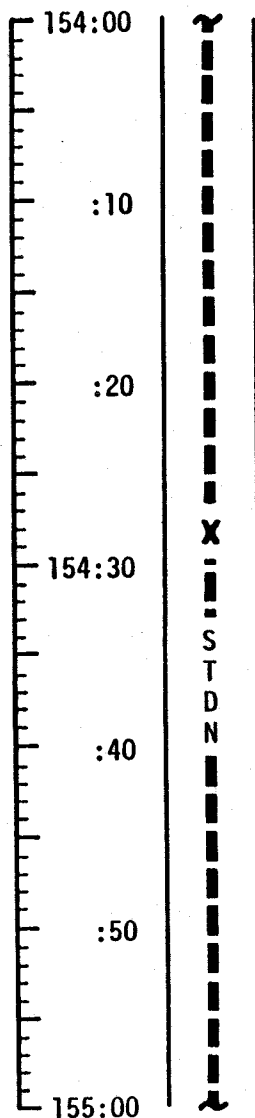
MCC-H

0653 CST

CDR

LMP

NOTES

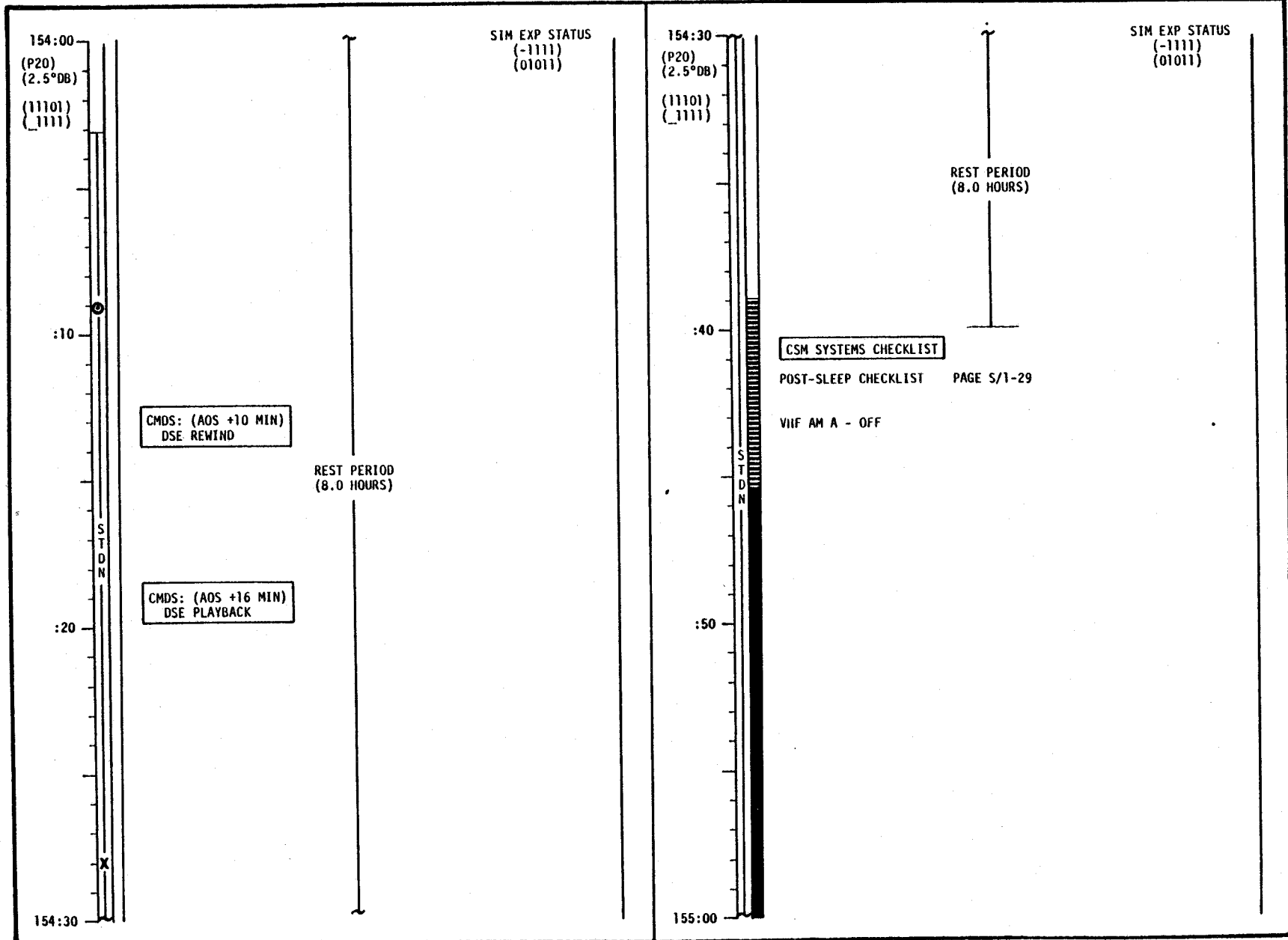


REST PERIOD
(8 HOURS)

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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-209

LM FLIGHT PLAN

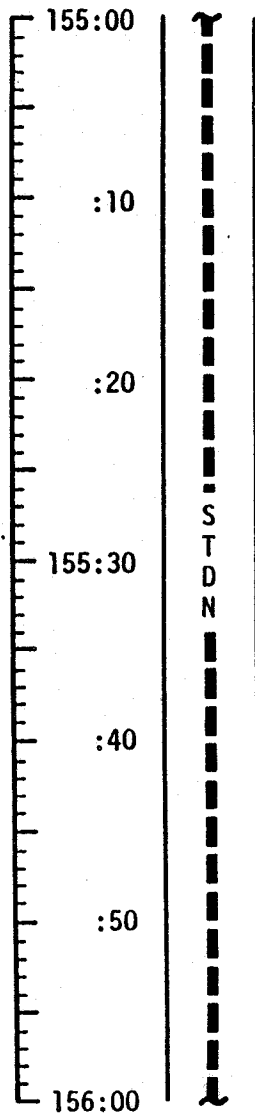
MCC-H

0753 CST

CDR

LMP

NOTES



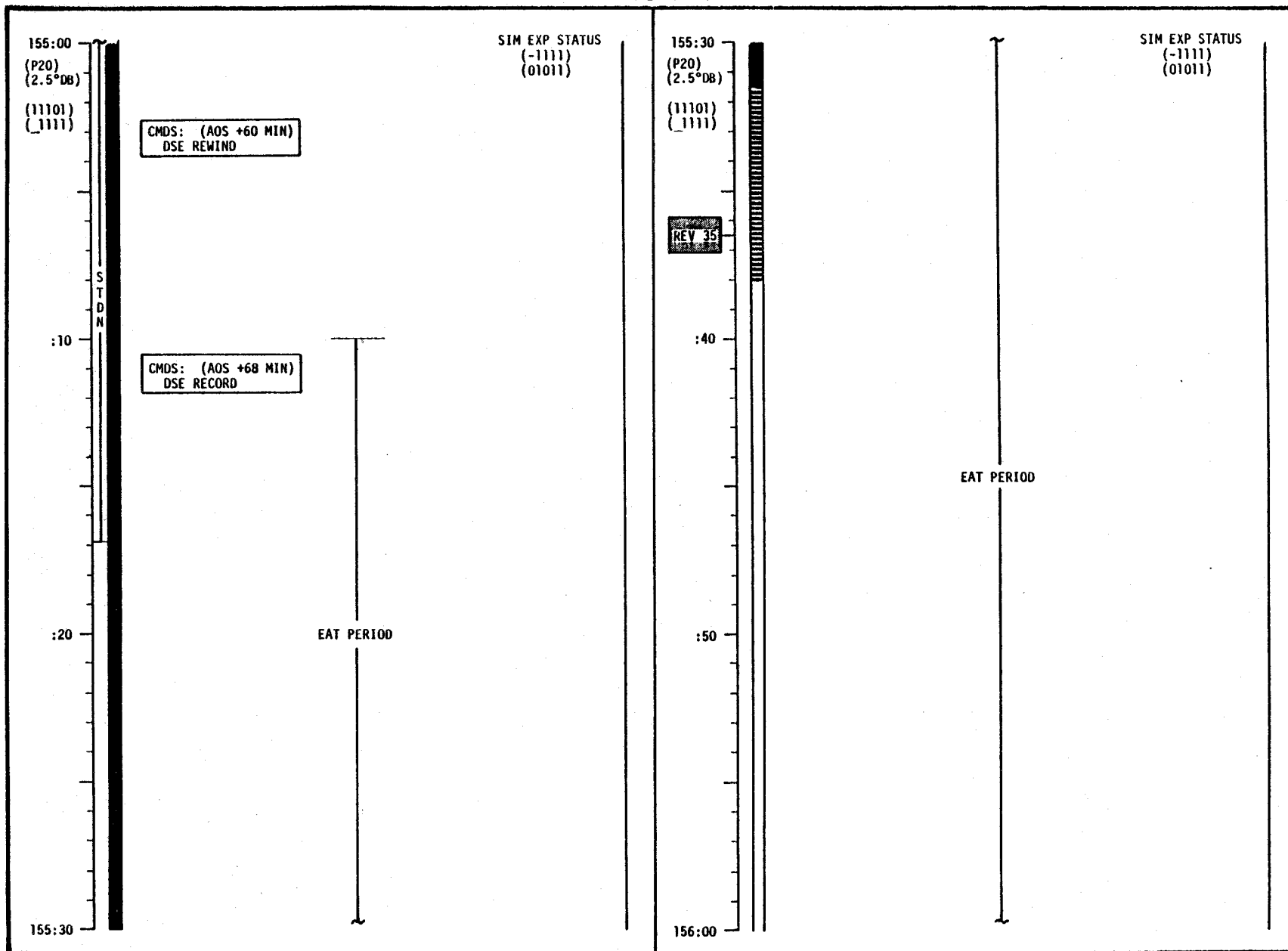
REST PERIOD
(8 HOURS)

CSM REV 35

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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-211

LM FLIGHT PLAN

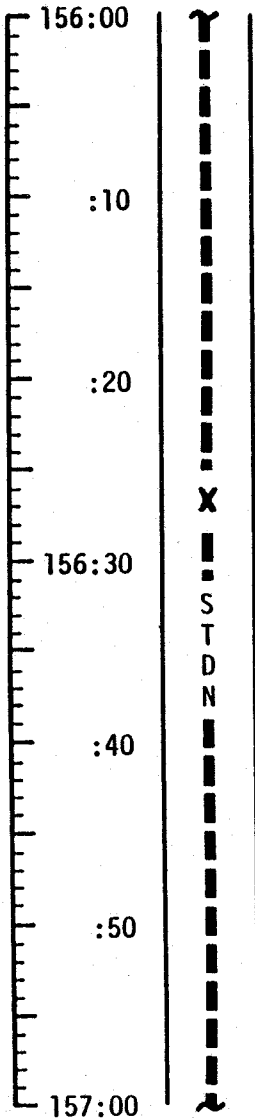
MCC-H

0853 CST

CDR

LMP

NOTES

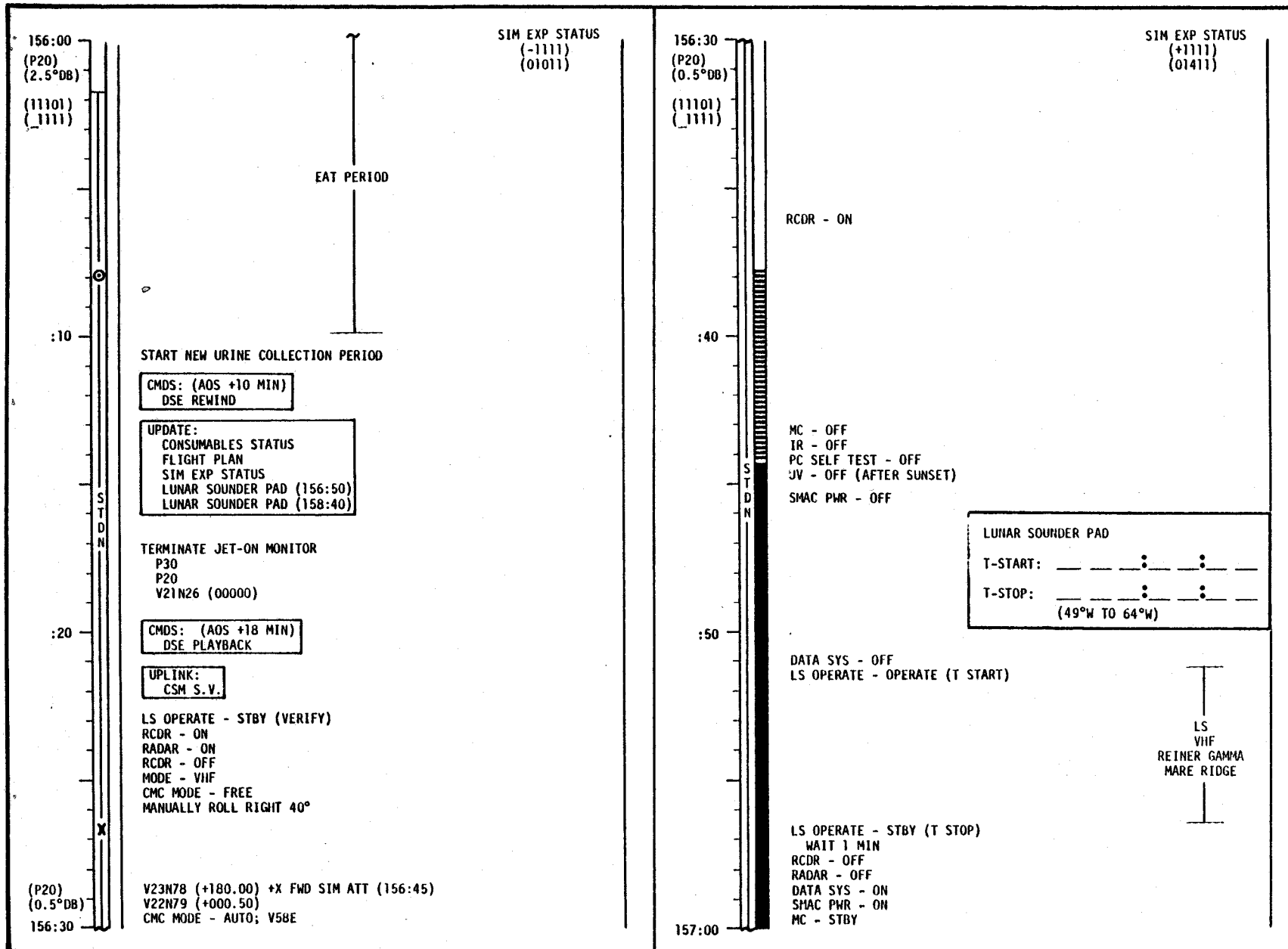


REST PERIOD
(8 HOURS)

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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-213

LM FLIGHT PLAN

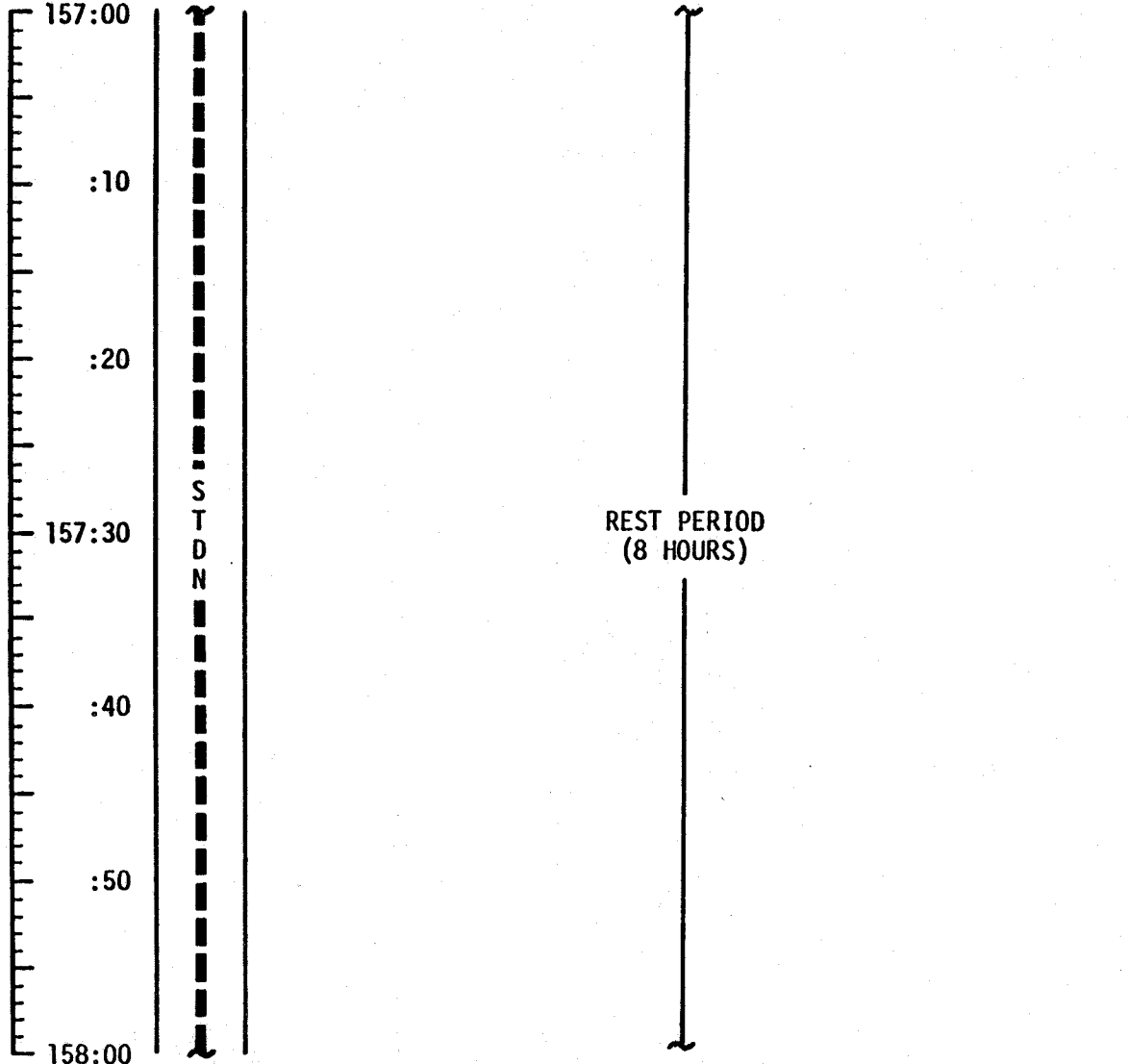
MCC-H

0953 CST

CDR

LMP

NOTES

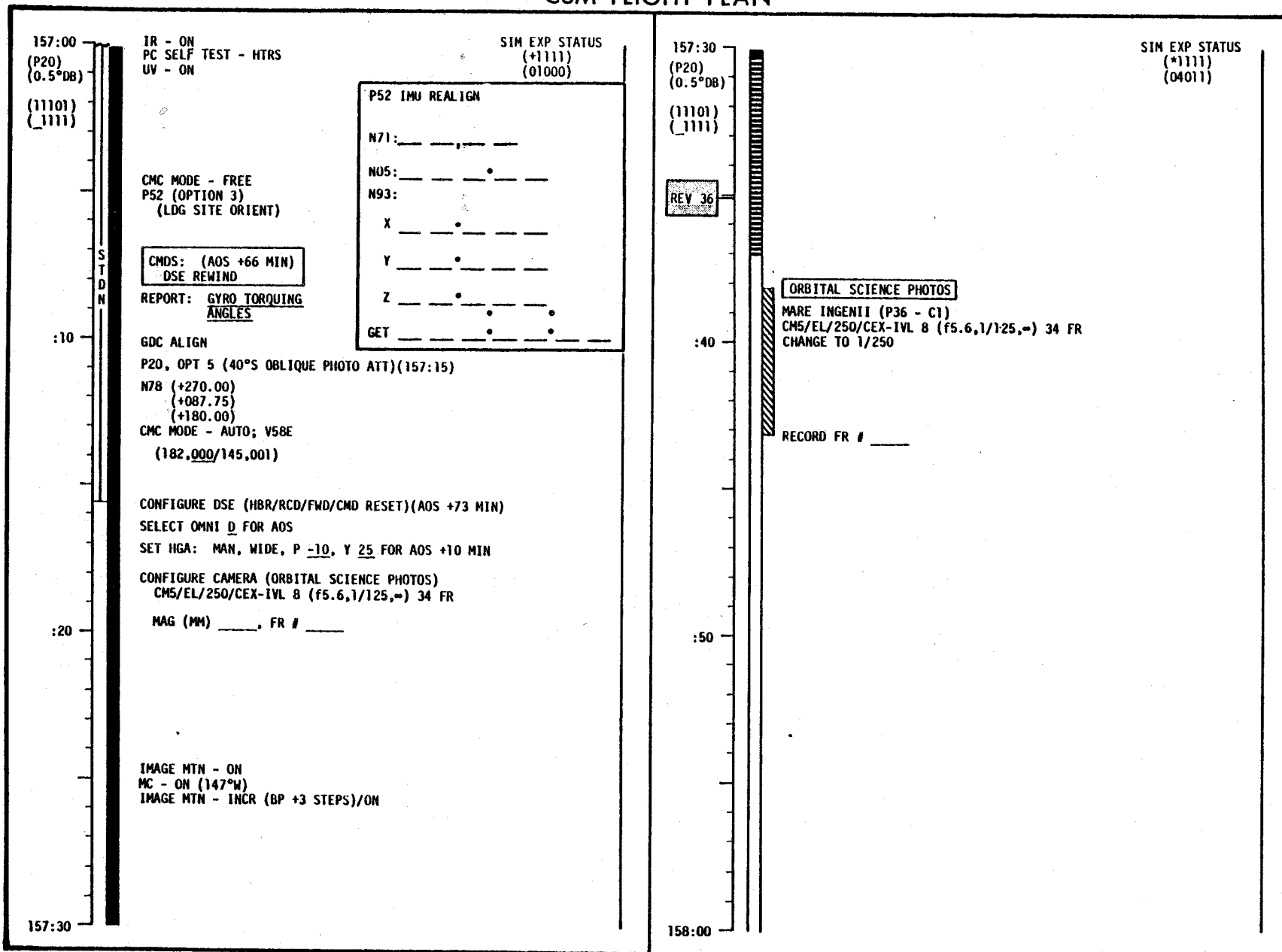


CSM REV 36

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



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

LM FLIGHT PLAN

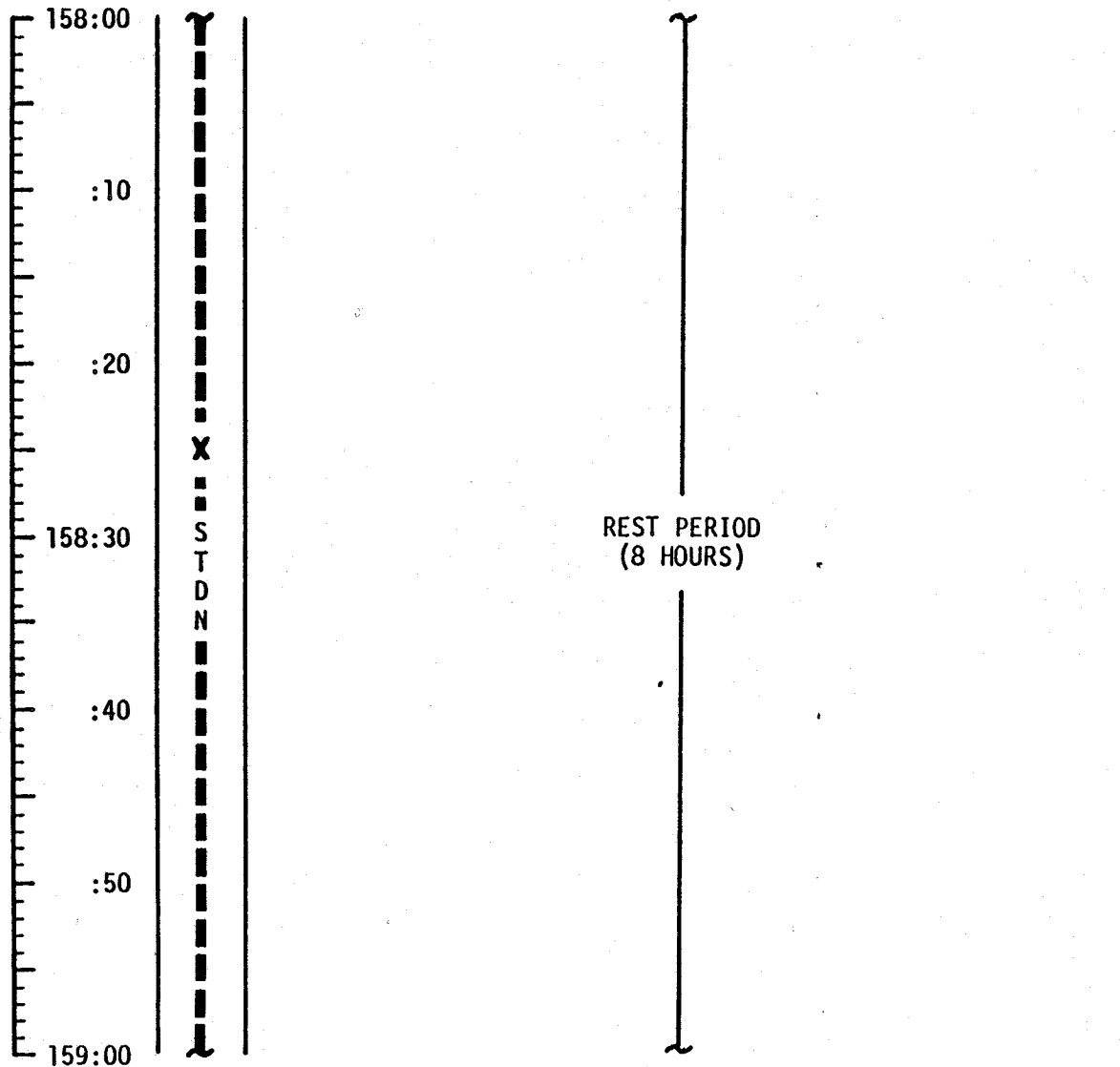
MCC-H

1053 CST

CDR

LMP

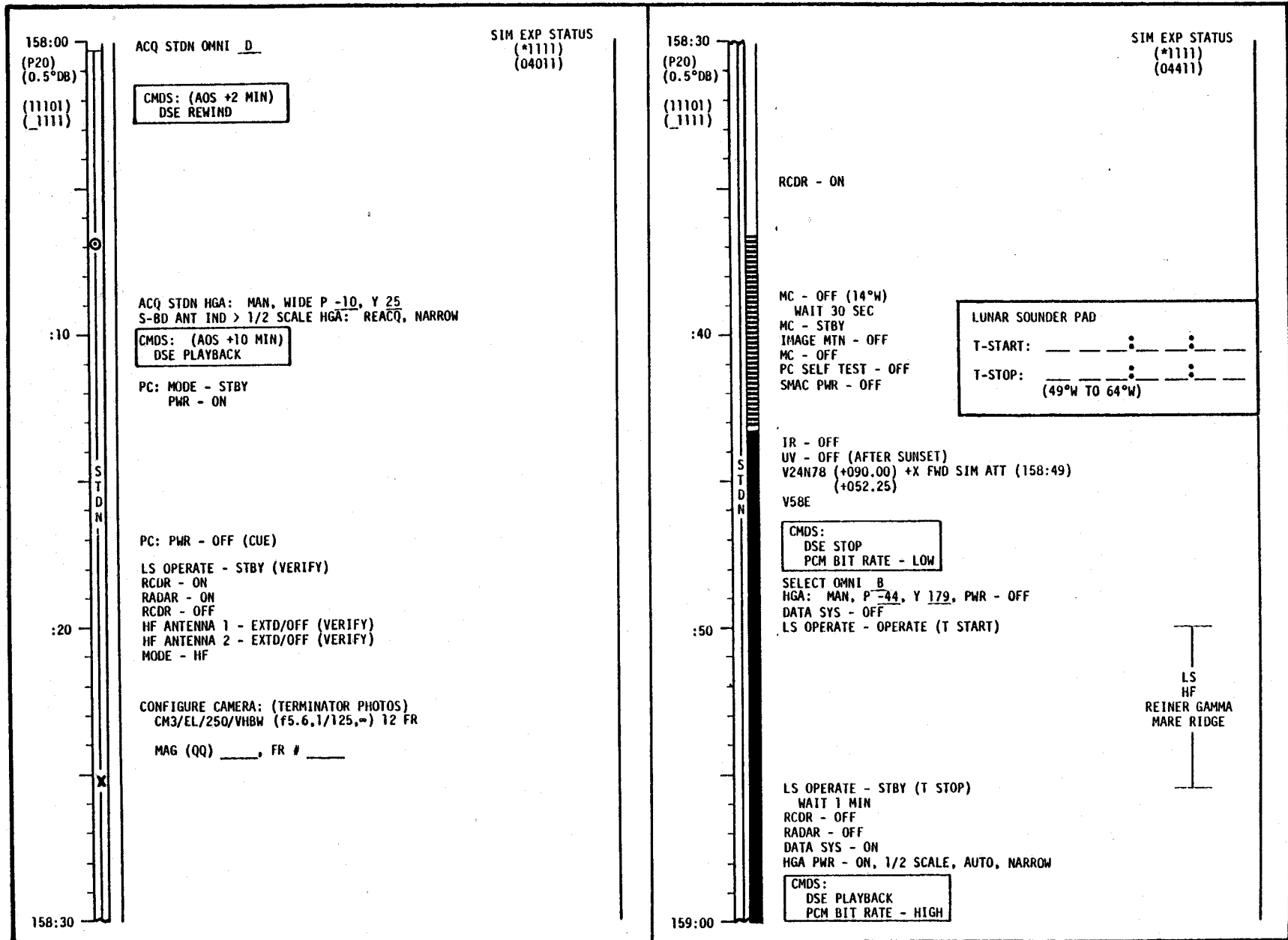
NOTES



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



LM FLIGHT PLAN

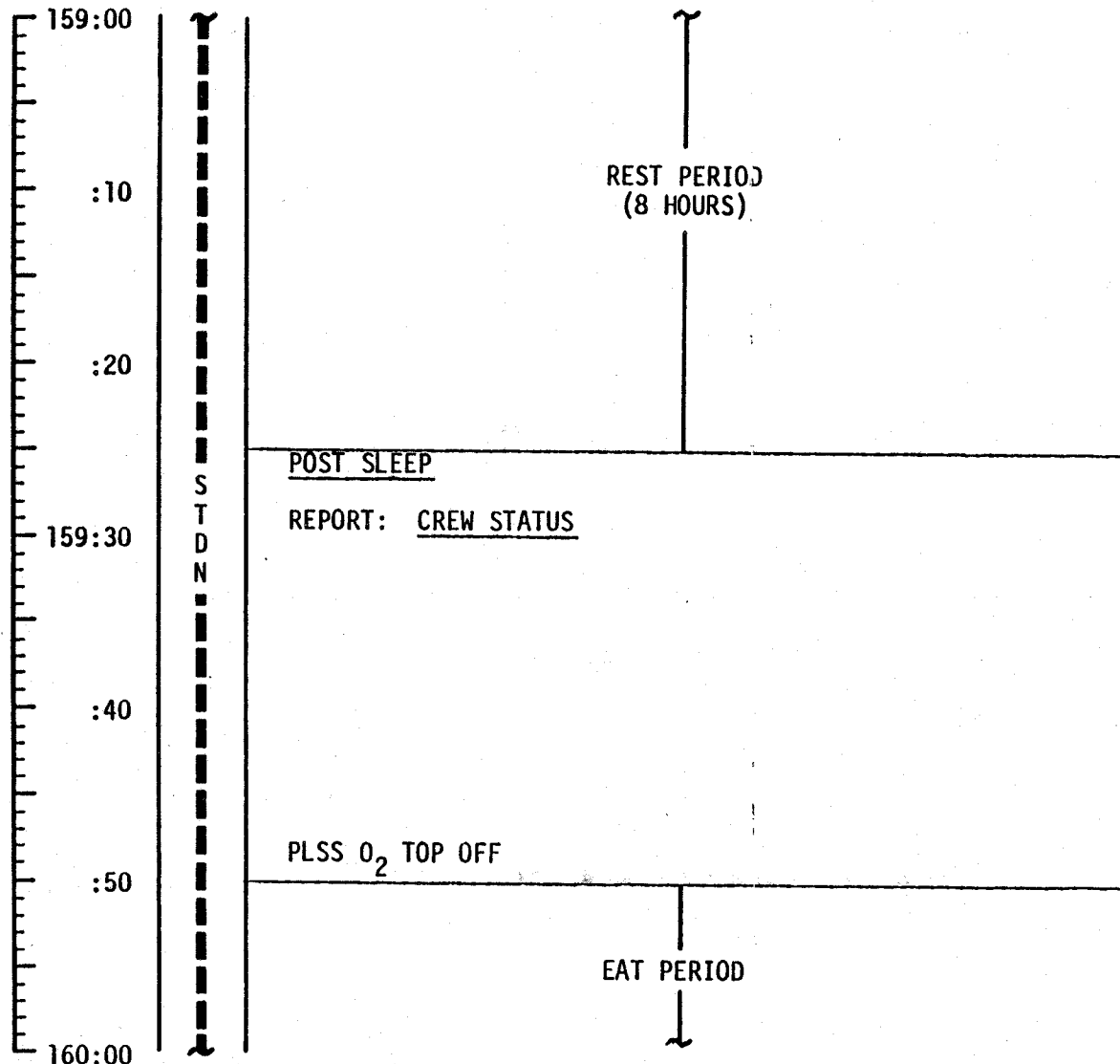
MCC-H

1153 CST

CDR

LMP

NOTES



STAY/NO-STAY FOR
EVA-3

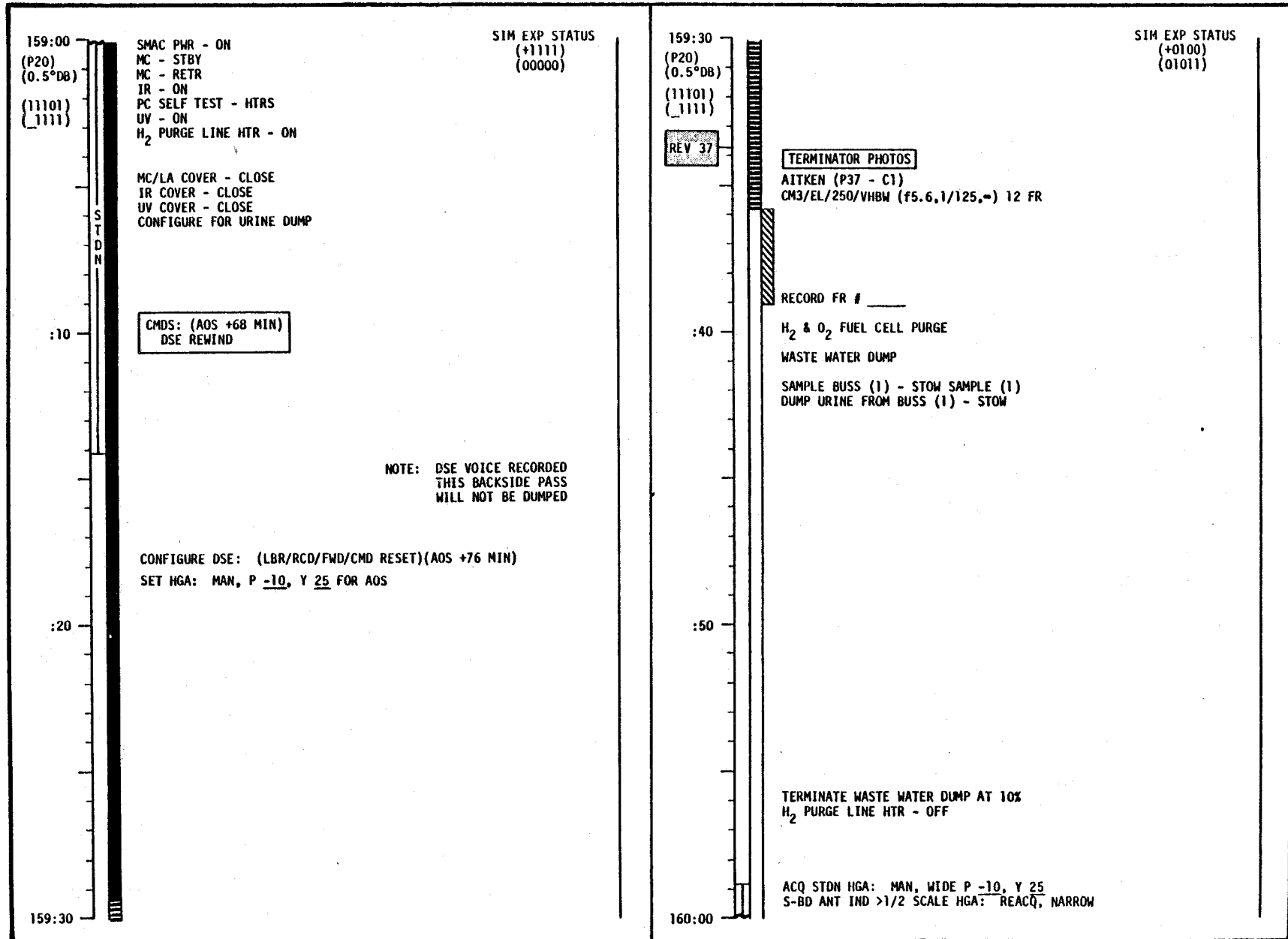
UPDATE TO LM
LIFT-OFF TIMES FOR
REVS 38-43

CSM REV 37

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



LM FLIGHT PLAN

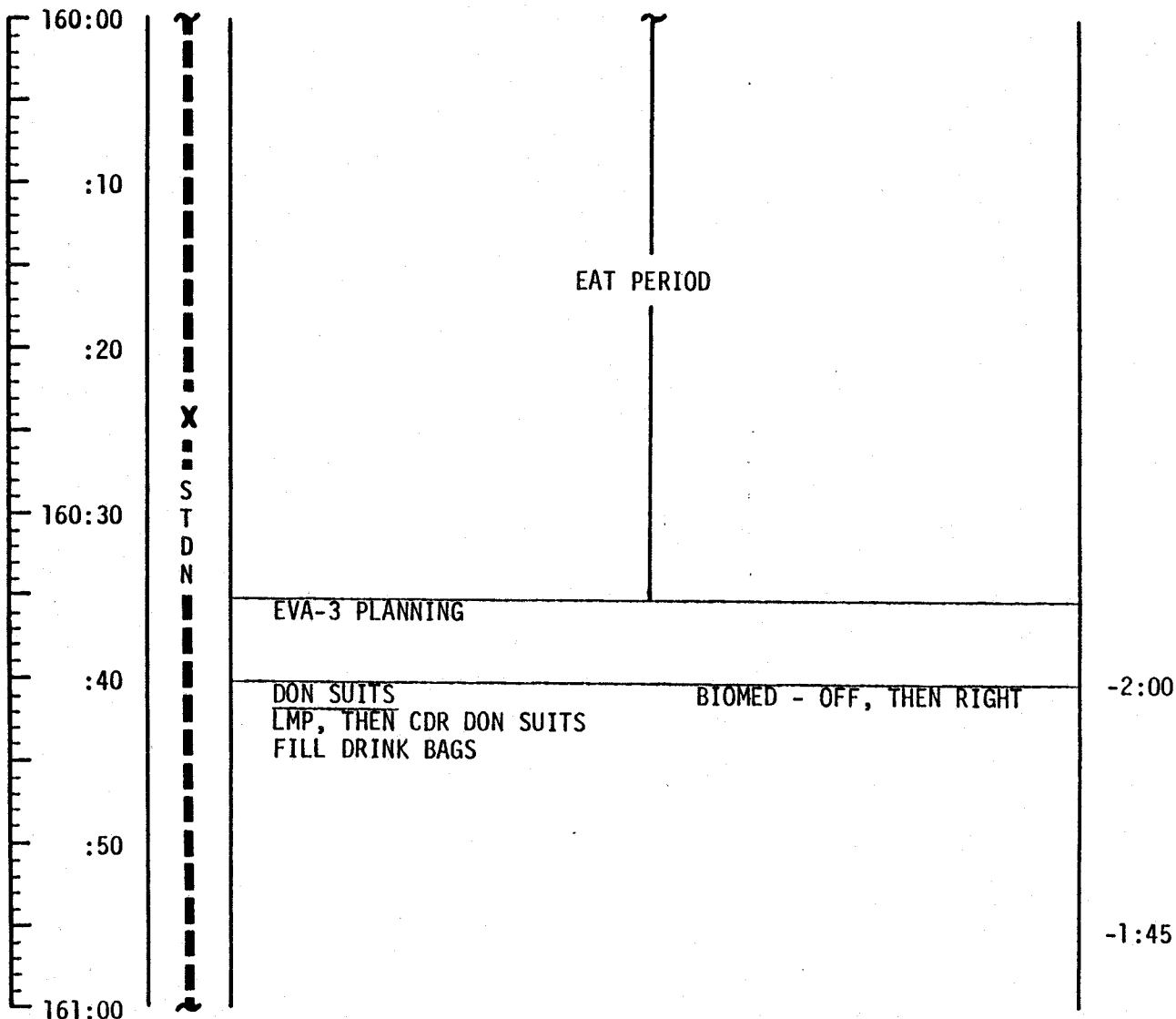
MCC-H

1253 CST

CDR

LMP

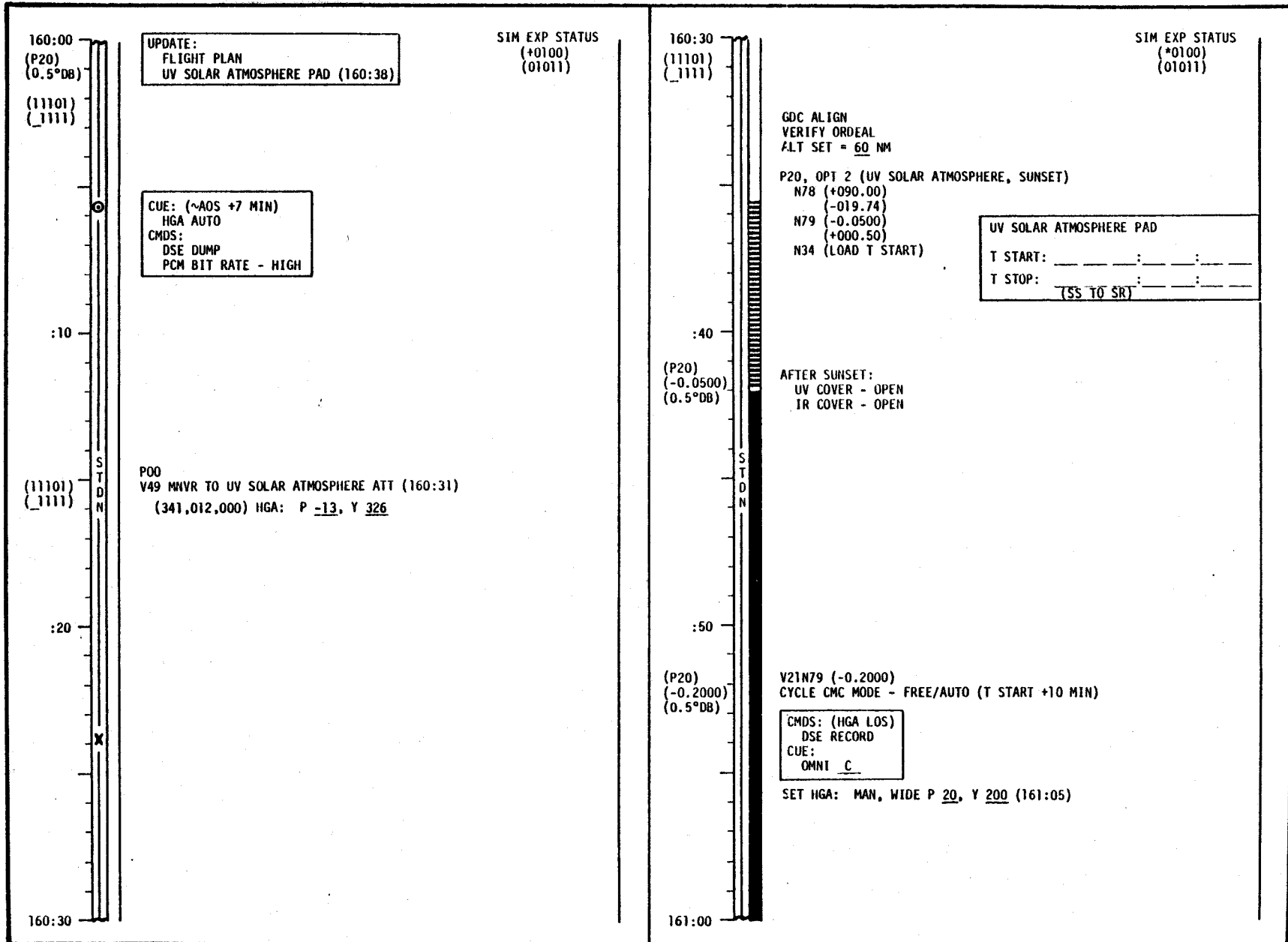
NOTES



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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-221

LM FLIGHT PLAN

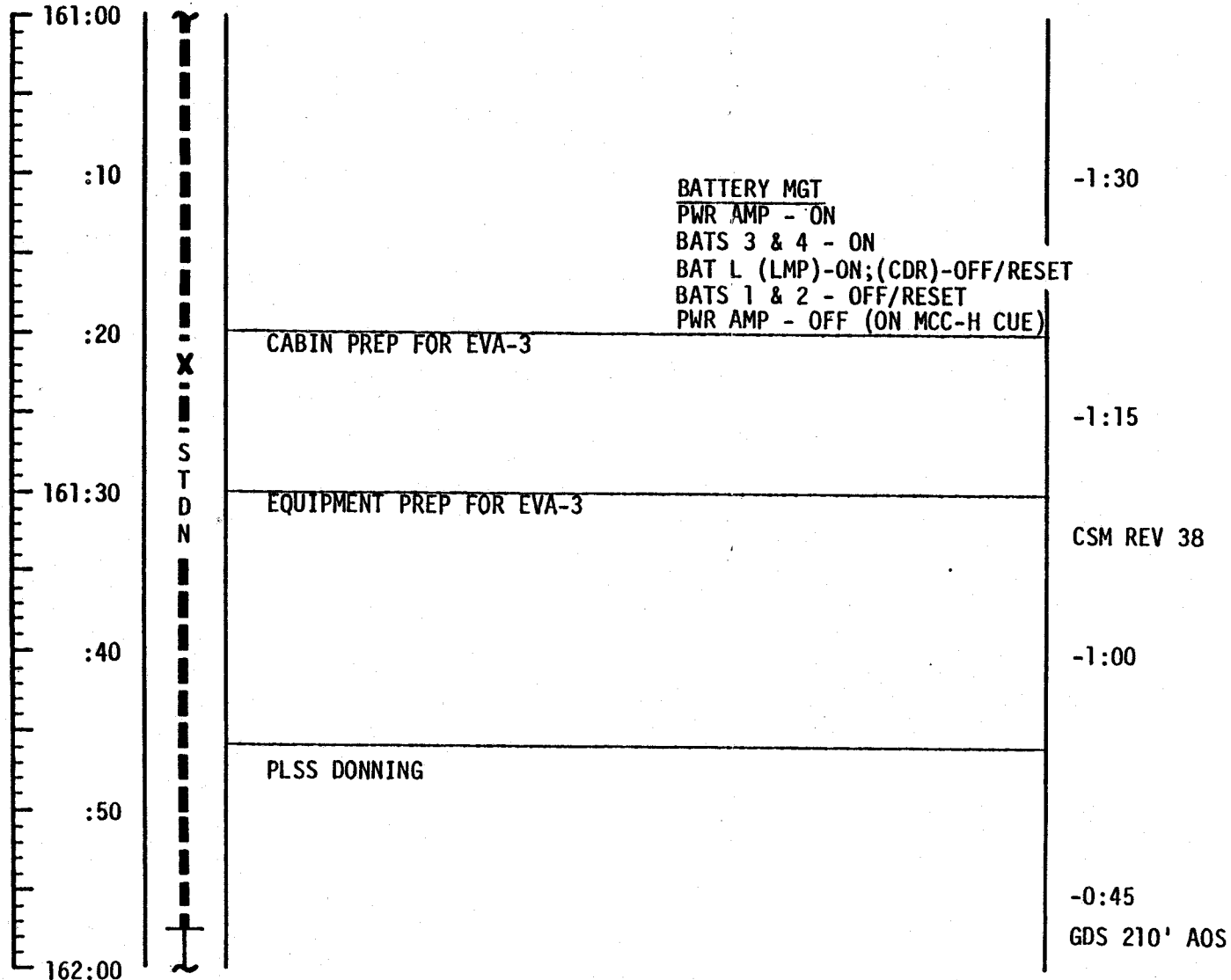
MCC-H

1353 CST

CDR

LMP

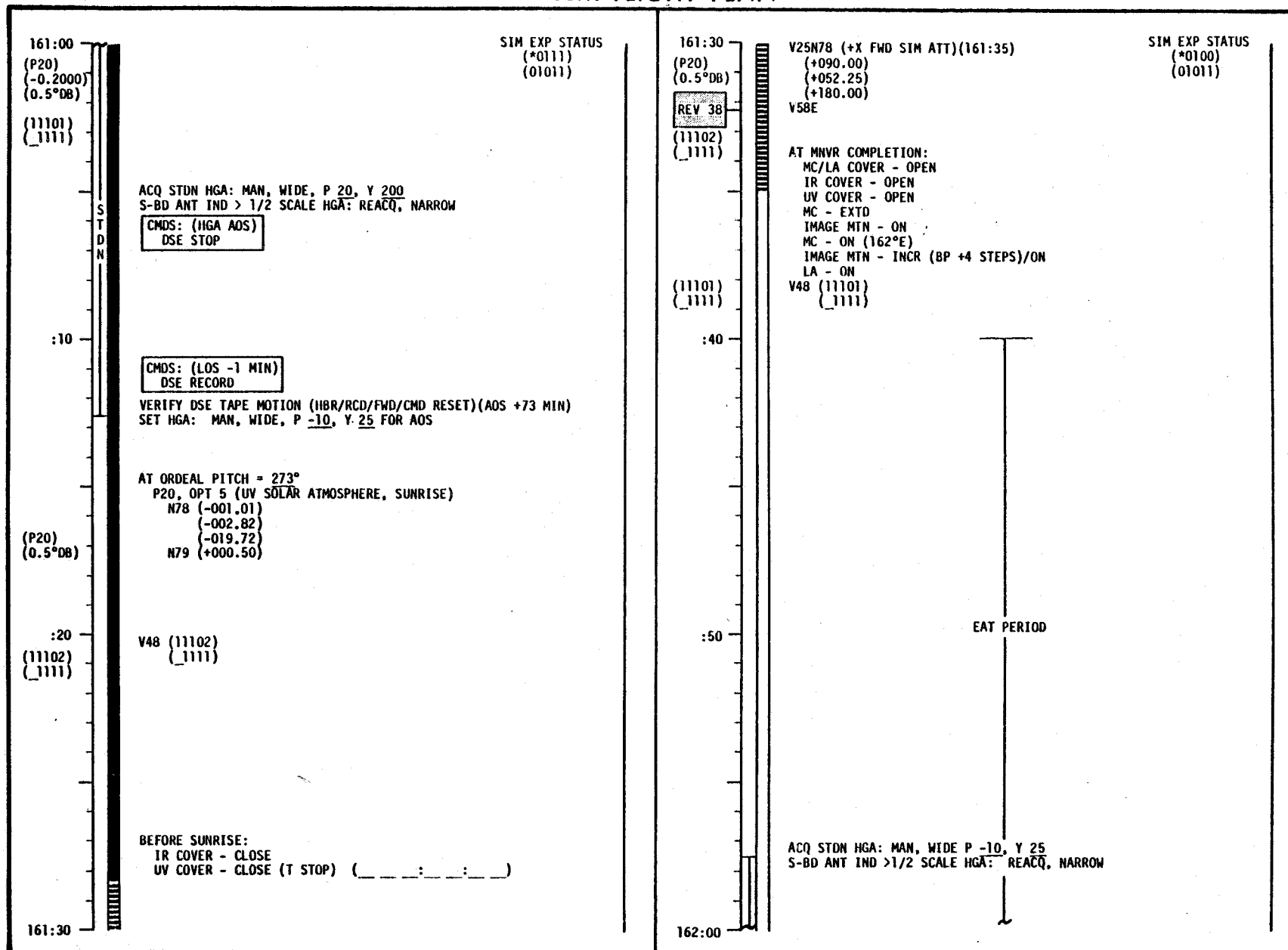
NOTES



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



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

LM FLIGHT PLAN

MCC-H

1453 CST

CDR

LMP

NOTES

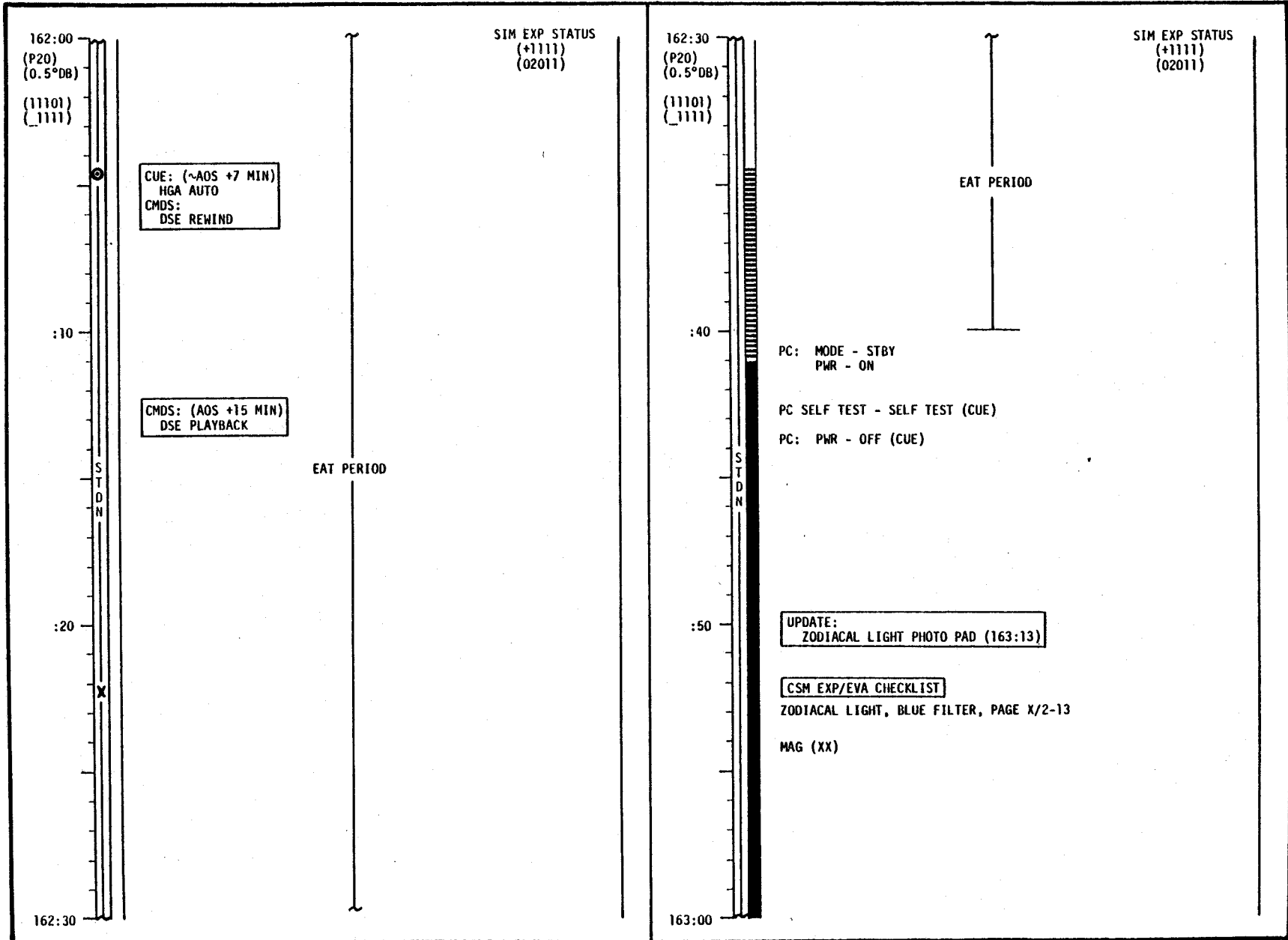
162:00			
:10		PLSS COMM CHECK CONFIGURE COMM FOR EVA RECORDER - ON REPORT: <u>PLSS O₂ QUANTITY</u>	-0:30
:20		OPS CONNECT	
162:30	X S T D N	HELMET/GLOVE DONNING	-0:15
:40		PRESSURE INTEGRITY CHECK	
:50		CABIN DEPRESS START WATCHES @ 3.5 PSIA FINAL PREP FOR EVA	0:00/START EVA-3
163:00		EGRESS LM DESCEND TO SURFACE	+0:10
		ASSIST CDR RECORDER - OFF EGRESS LM, CLOSE HATCH DESCEND TO SURFACE	+0:20

GO/NO-GO FOR
CABIN DEPRESS

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

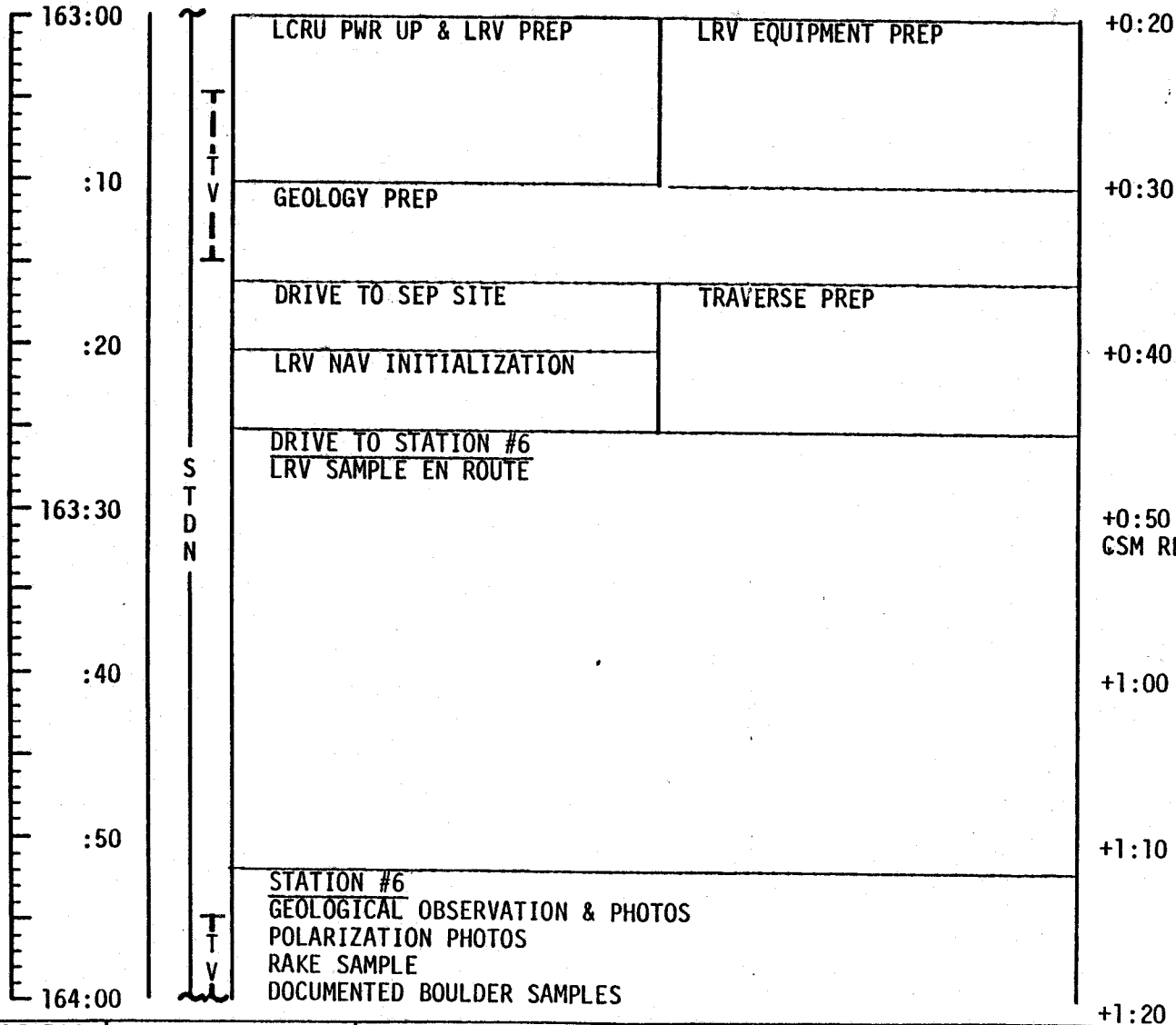
MCC-H

1553 CST

CDR

LMP

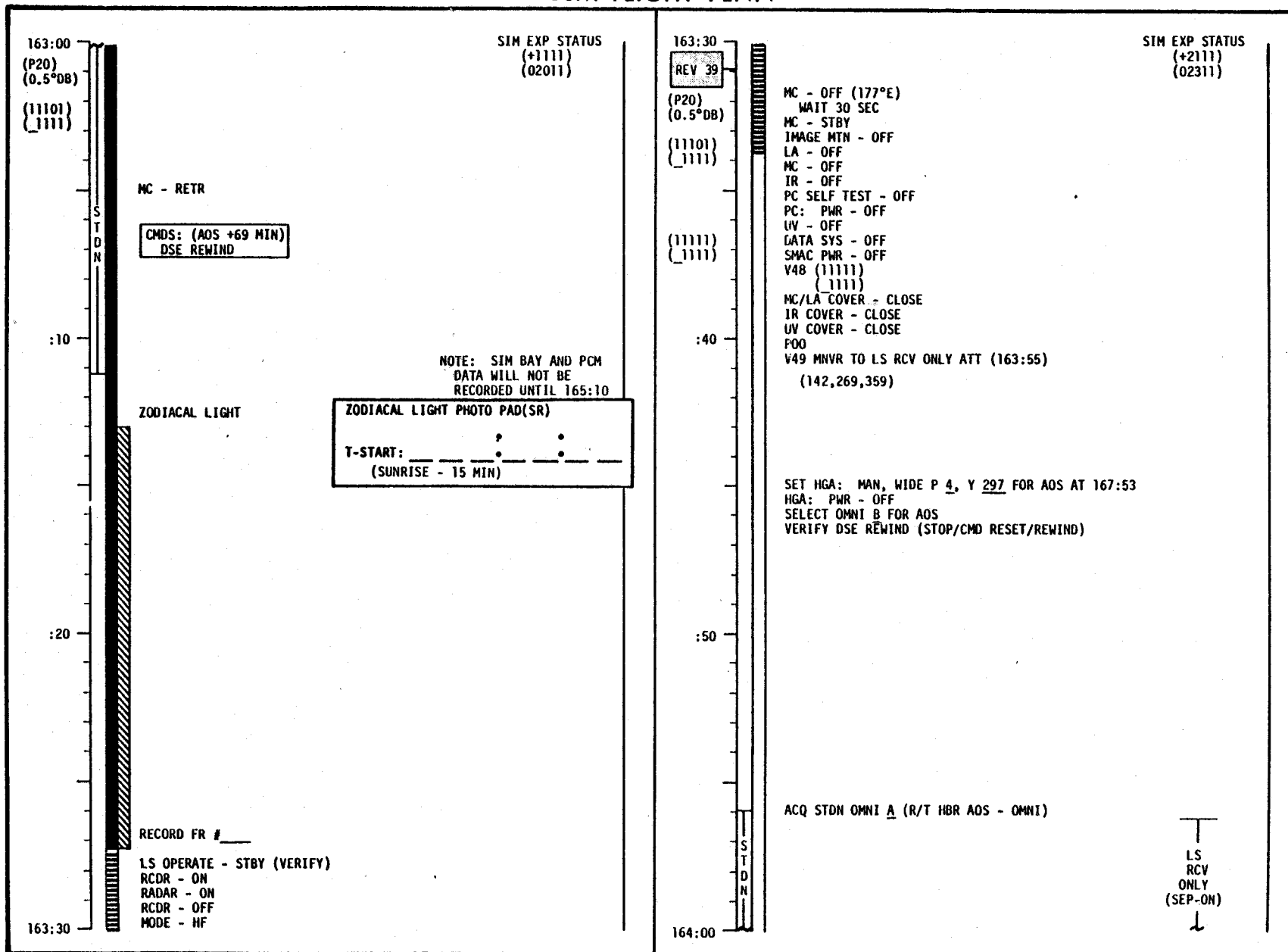
NOTES



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



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

LM FLIGHT PLAN

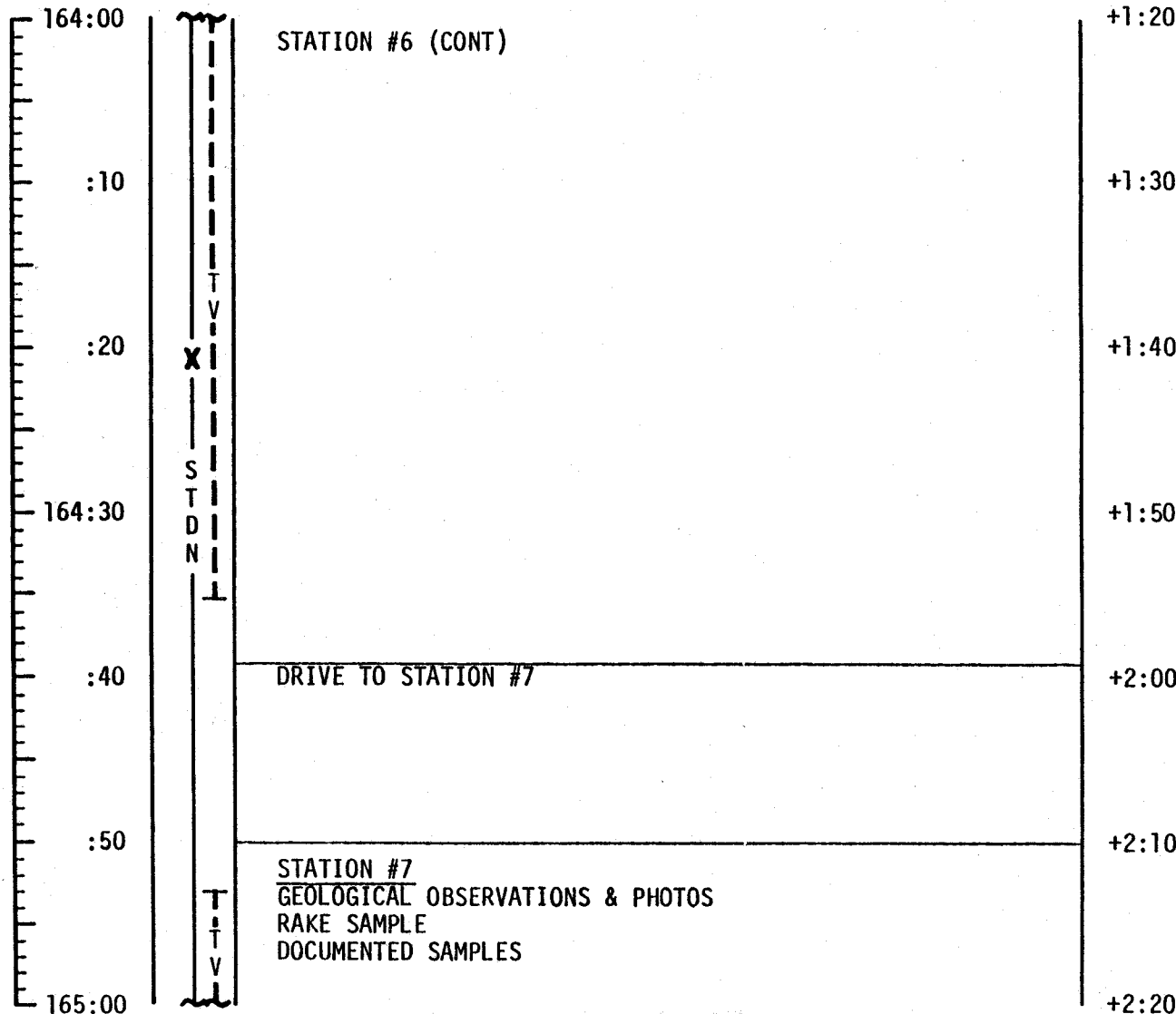
MCC-H

1653 CST

CDR

LMP

NOTES



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

164:00 (11111) (_1111)	<div style="border: 1px solid black; padding: 2px; margin-bottom: 10px;"> UPDATE: FLIGHT PLAN </div> CONFIGURE CAMERA: (ORBITAL SCIENCE PHOTOS) CM5/EL/80/CEX-IVL 20 (f4,1/250,-) 19 FR MAG (MM) ____, FR # ____	SIM EXP STATUS (+0100) (00300)	164:30 (11111) (_1111)	CHANGE TO 1/125 RECORD FR # ____	SIM EXP STATUS (+0100) (00300)
:10	S T D N	LS RCV ONLY (SEP-ON)	:40	S T D N	LS RCV ONLY (SEP-ON)
:20	X		:50		
164:30	ORBITAL SCIENCE PHOTOS		165:00		
	CHANGE TO f2.8				

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-229

LM FLIGHT PLAN

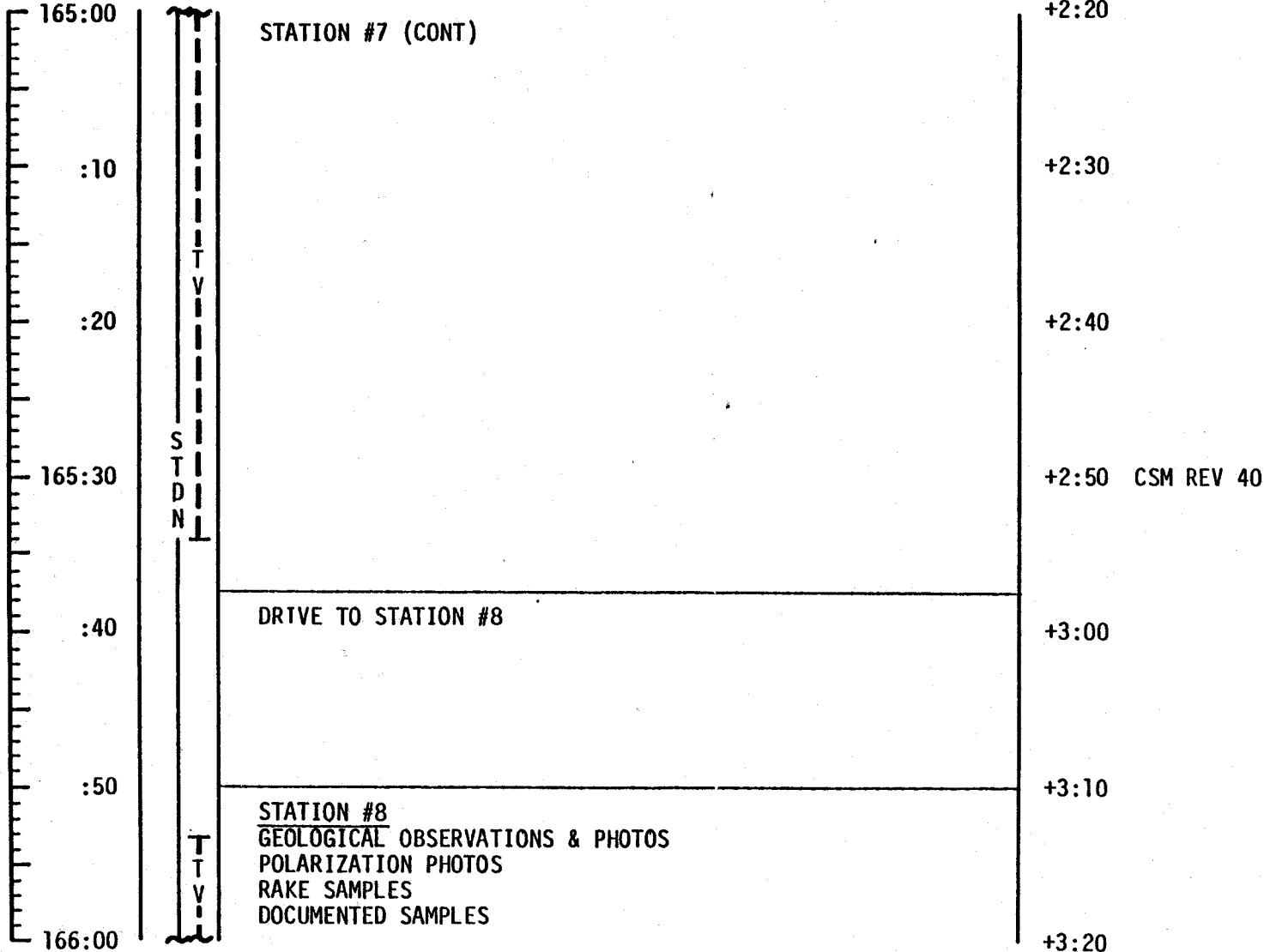
MCC-H

1753 CST

CDR

LMP

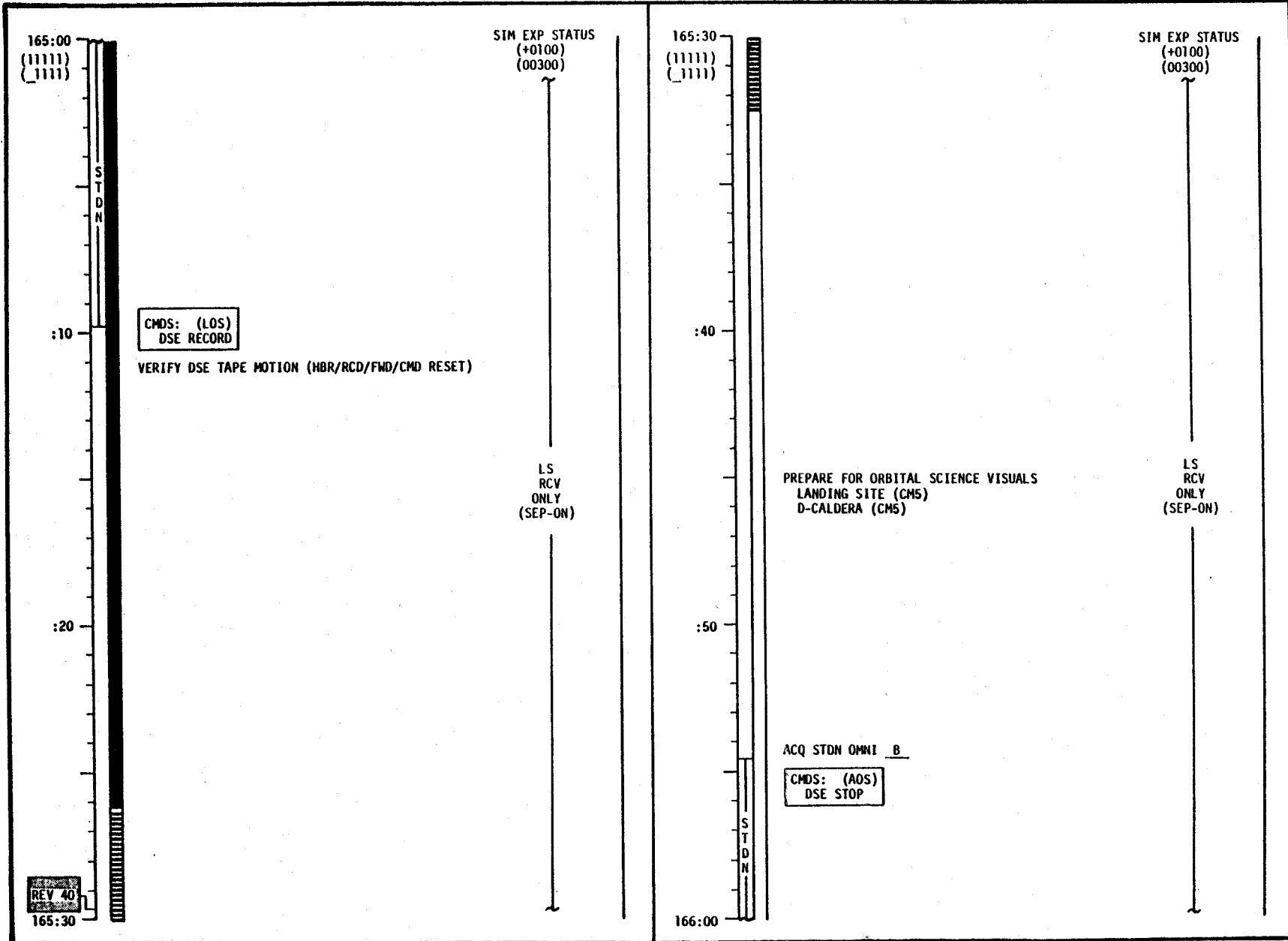
NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	165:00 - 166:00	8/39-40	3-230

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



REV 40
165:30

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-231

LM FLIGHT PLAN

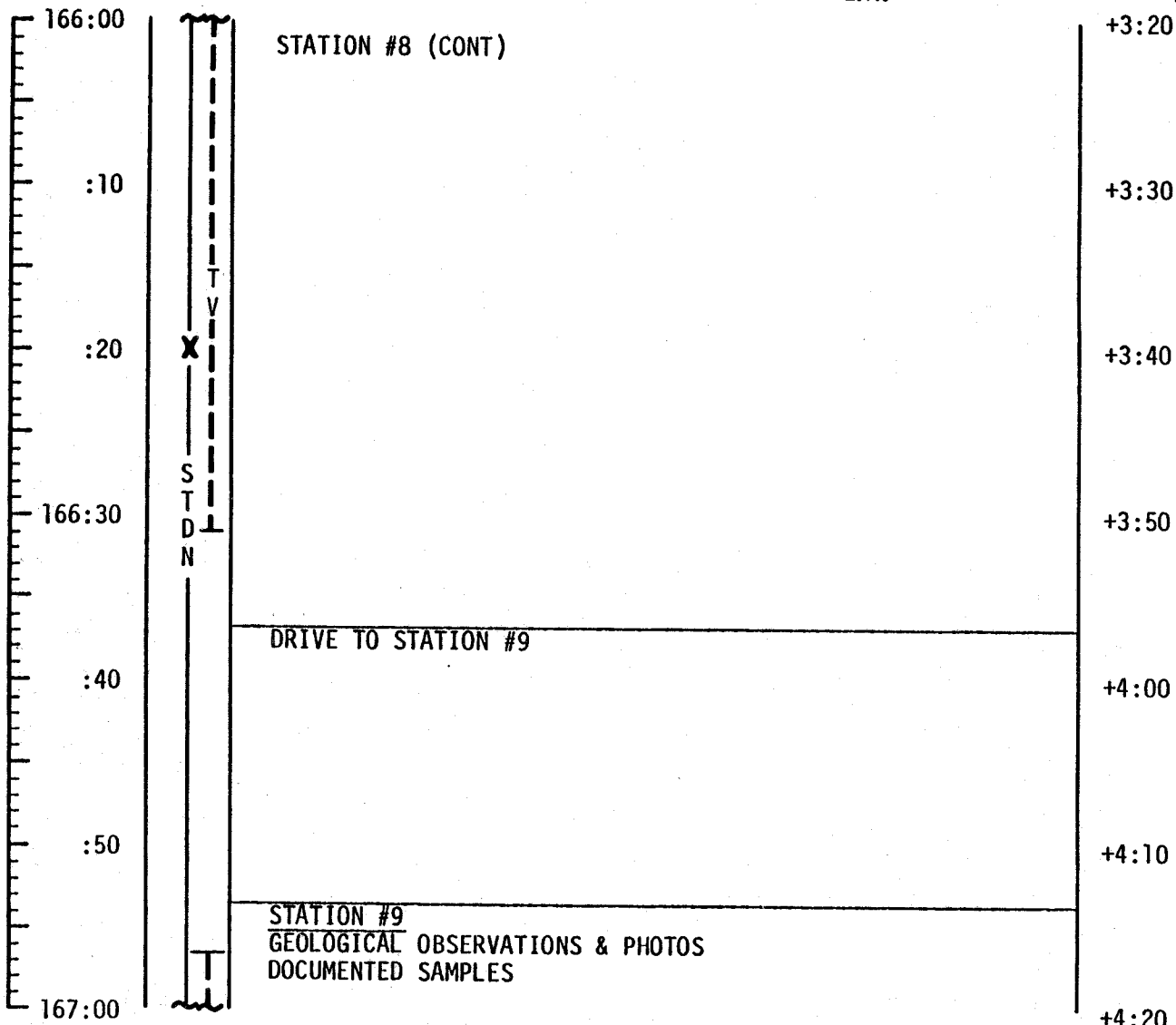
MCC-H

1853 CST

CDR

LMP

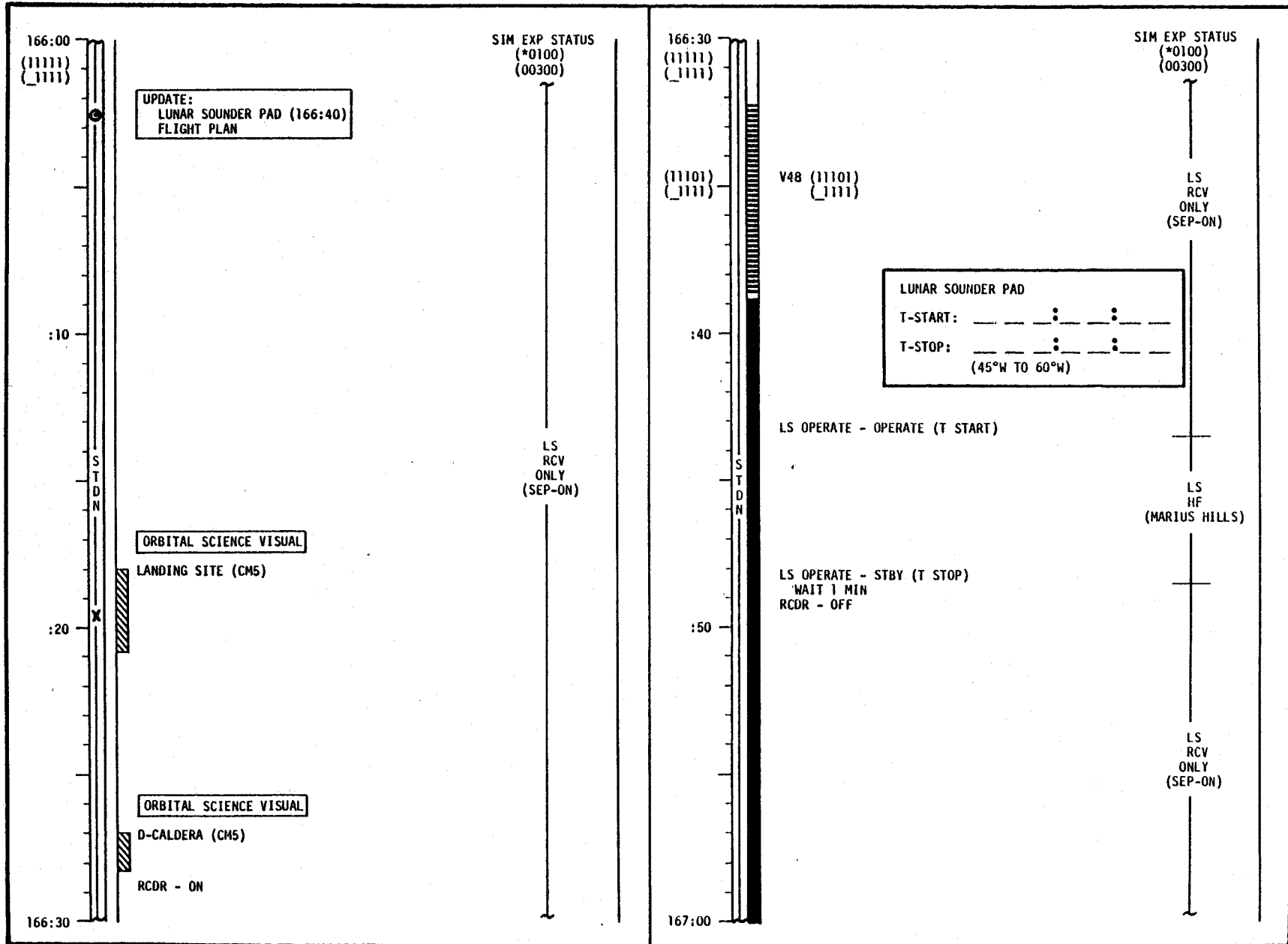
NOTES



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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-233

LM FLIGHT PLAN

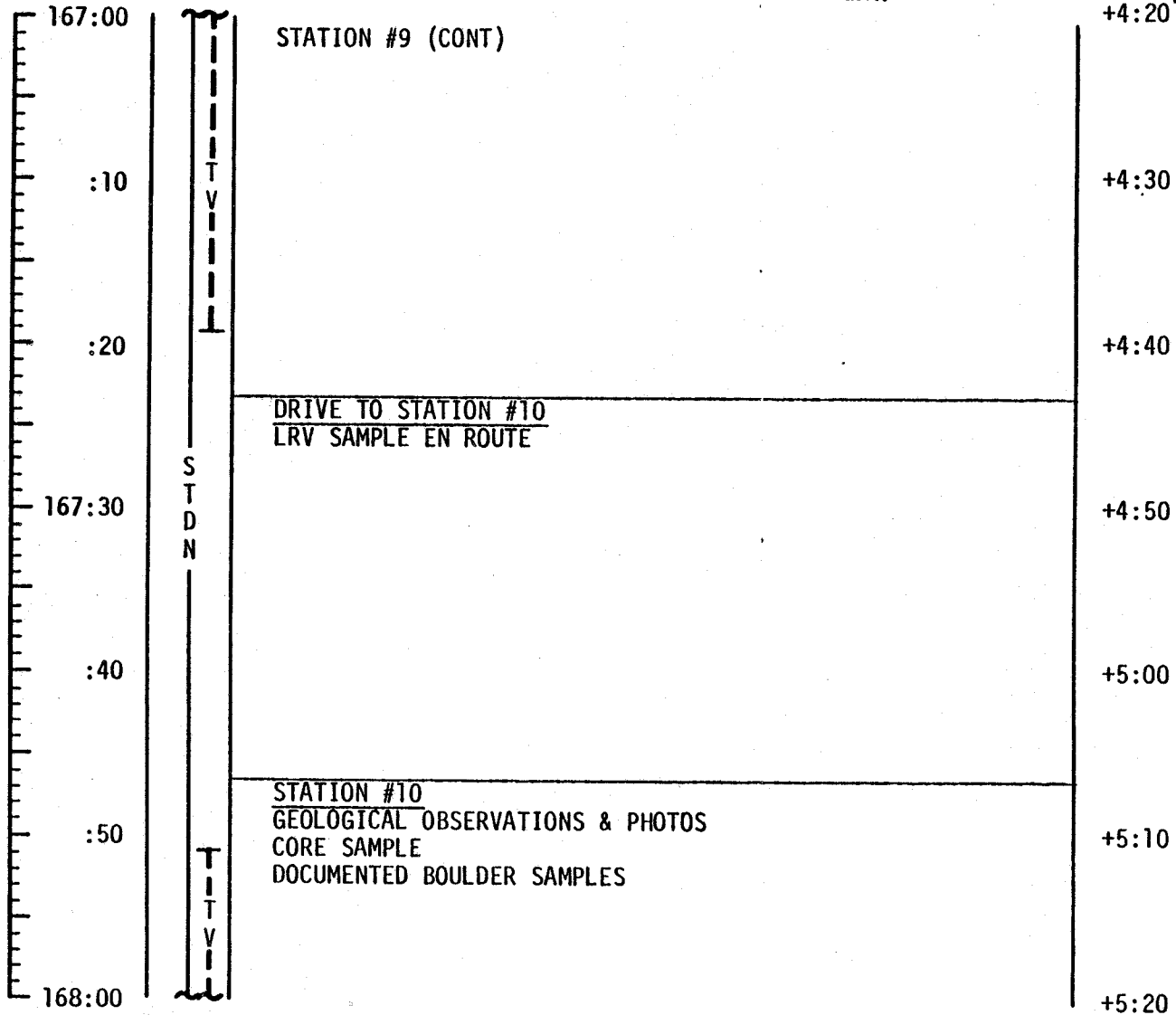
MCC-H

1953 CST

CDR

LMP

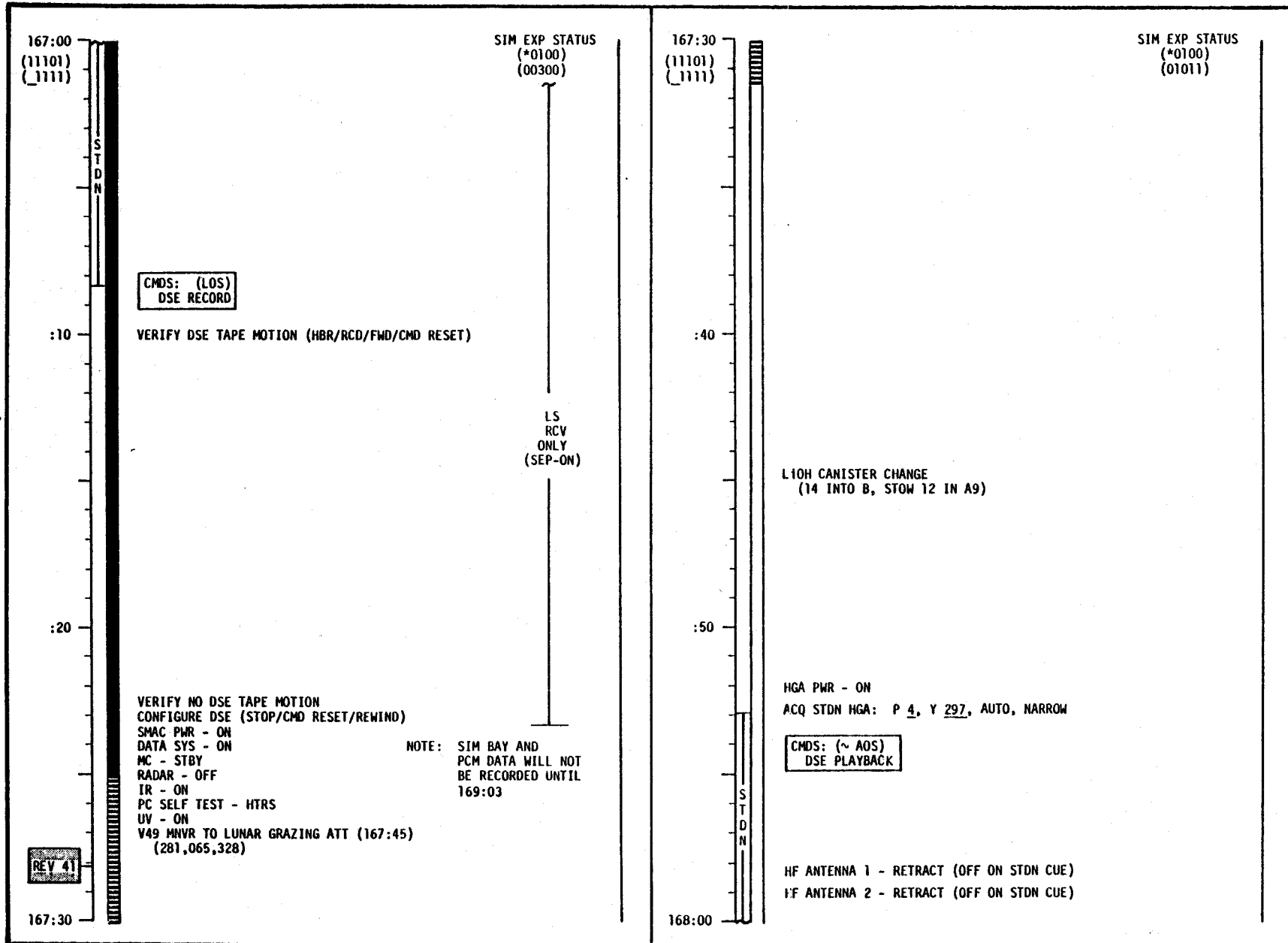
NOTES



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

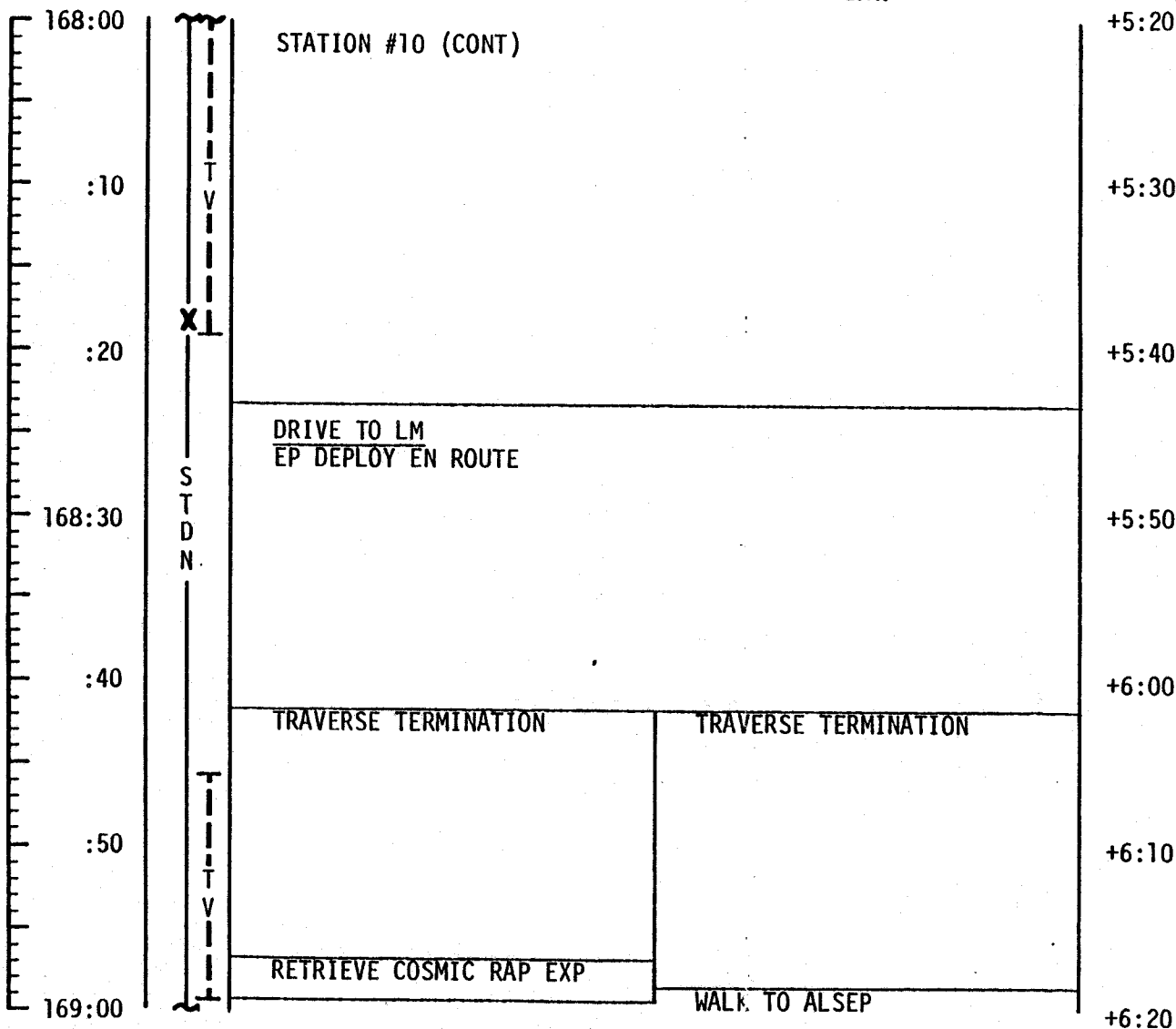
MCC-H

2053 CST

CDR

LMP

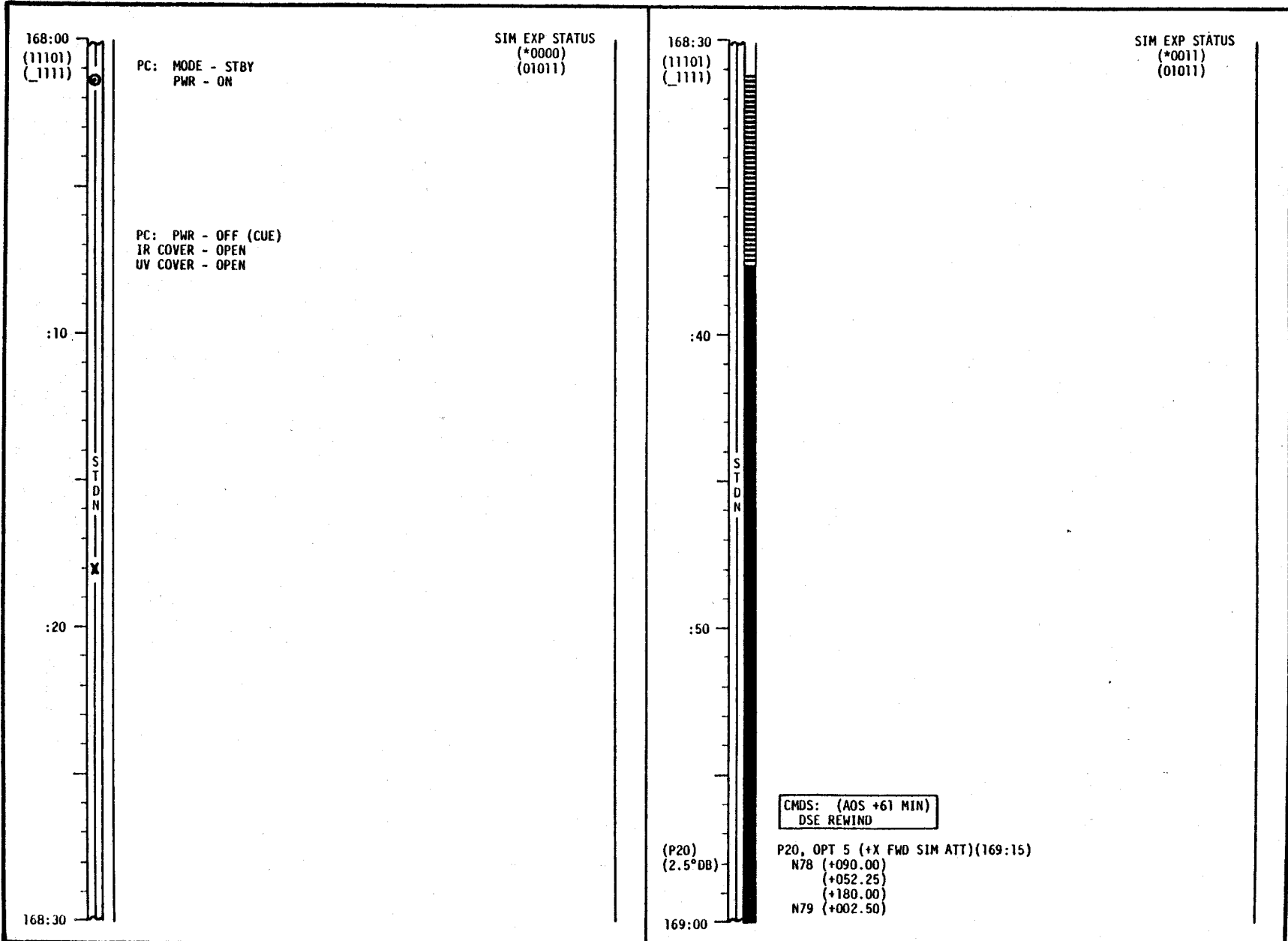
NOTES



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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-237

LM FLIGHT PLAN

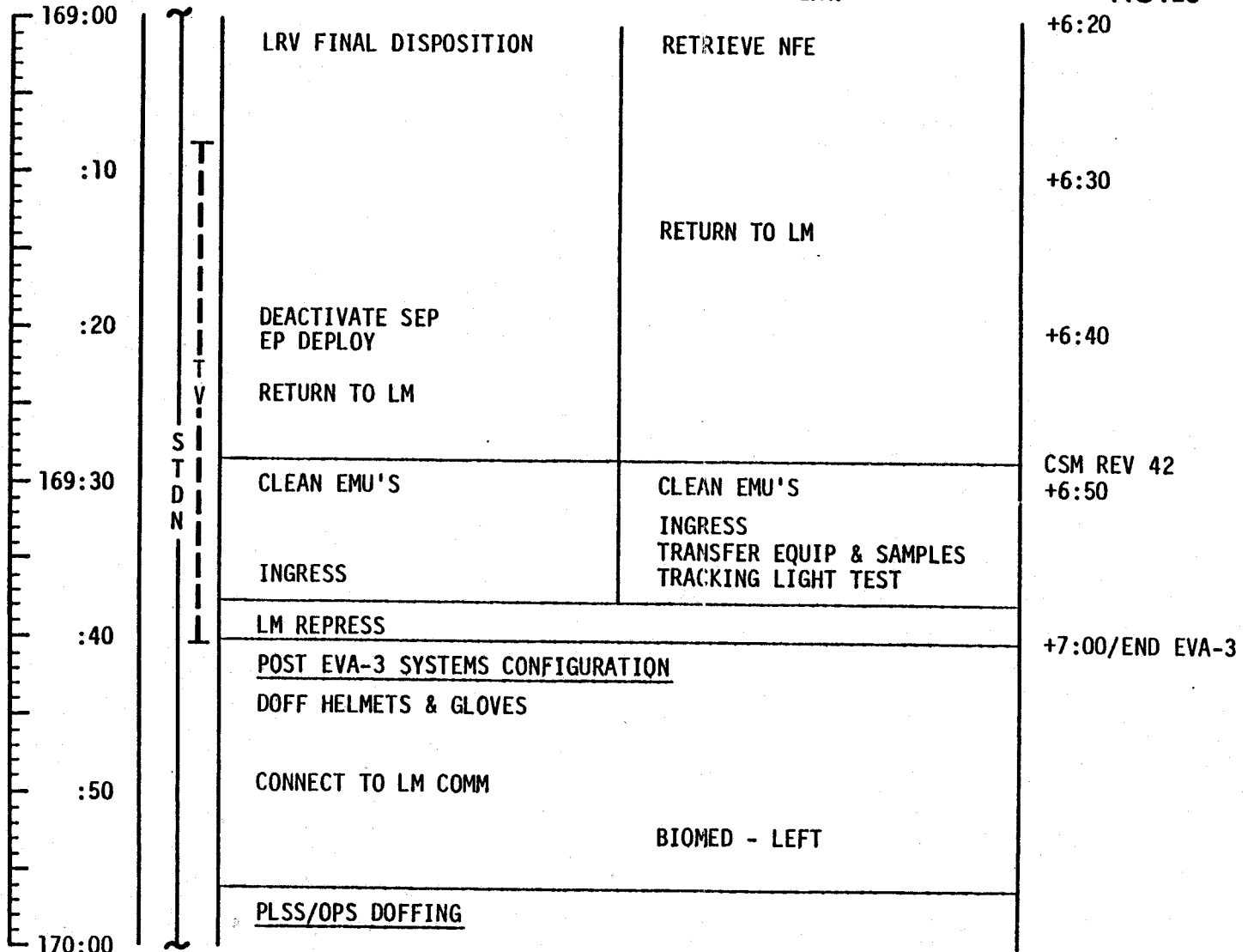
MCC-H

2153 CST

CDR

LMP

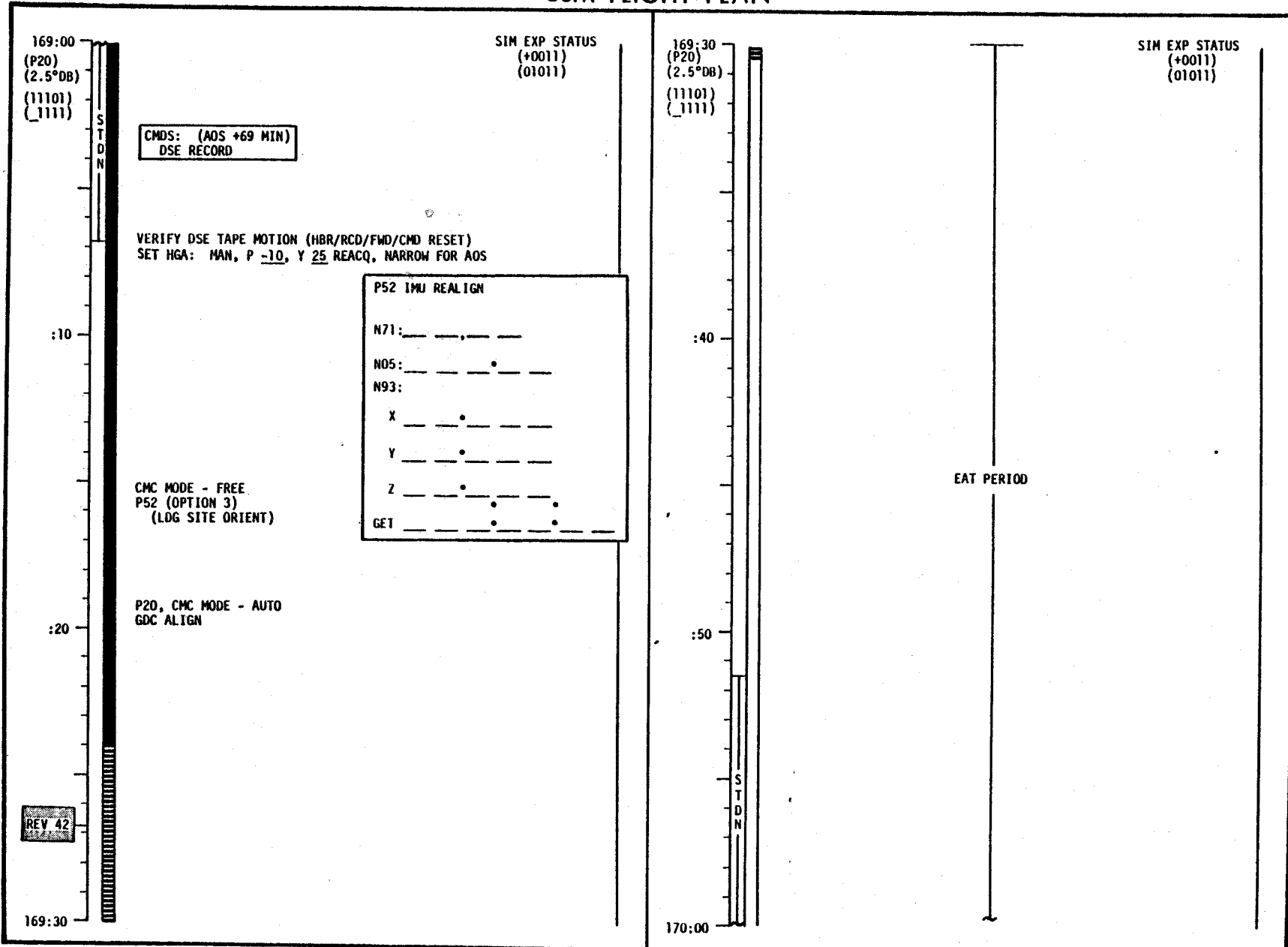
NOTES



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



REV 42

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-239

MCC-H

2253 CST

LM FLIGHT PLAN

CDR

LMP

NOTES

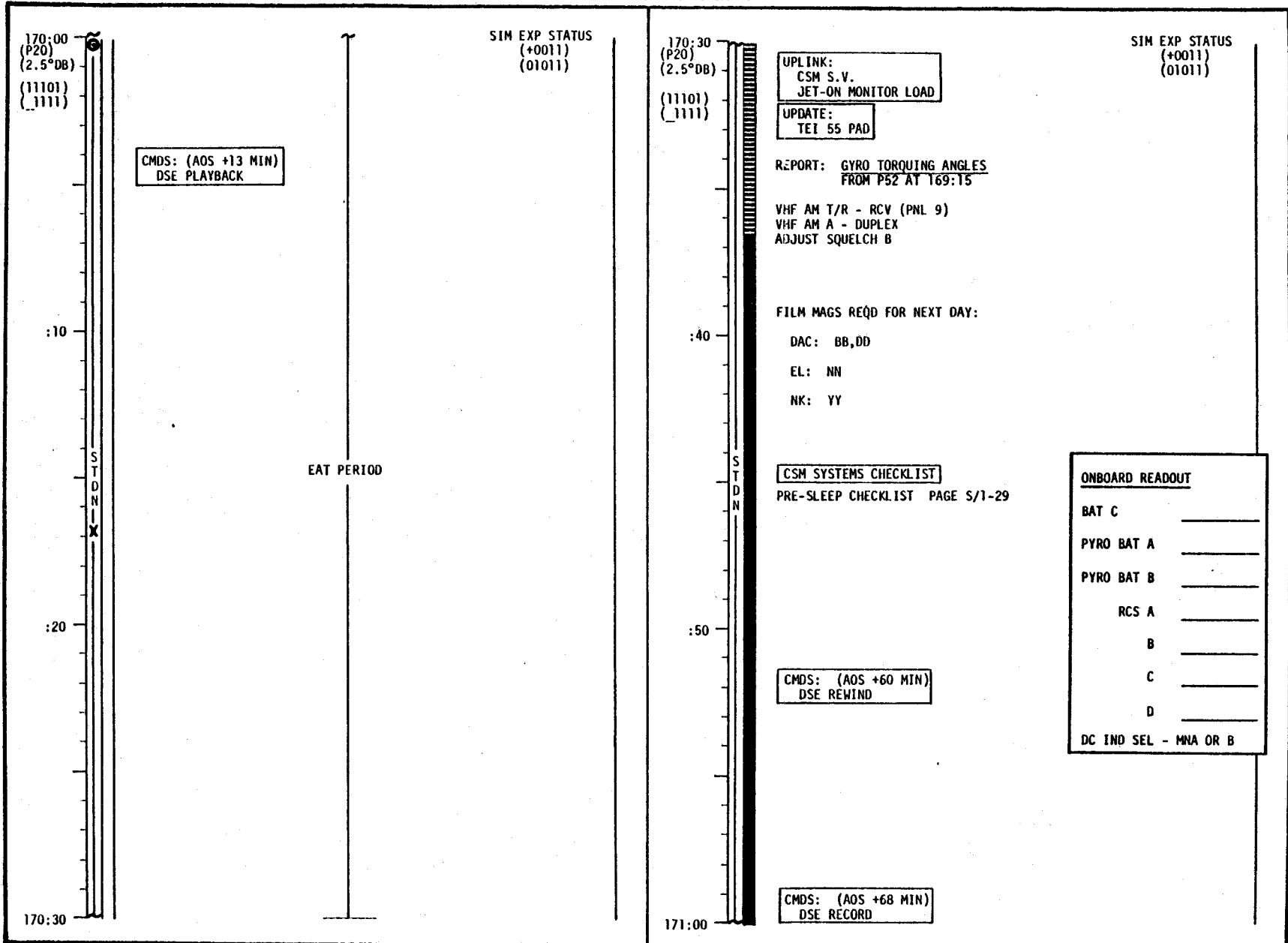
170:00	S T D N	REPORT: <u>OPS PRESSURE</u>	PKS 210' AOS
:10			
:20		<u>PREP FOR EQUIPMENT JETT</u>	
170:30		WEIGH ROCK BAG & COLLECTION BAGS, REPORT: <u>WEIGHTS</u>	
:40		DON GLOVES	
:50		RECORDER - ON/VOX	
171:00		PRESSURE INTEGRITY CHECK	
		CABIN DEPRESS	
		JETTISON #1	
		CABIN REPRESS	
	POST-EVA CABIN CLEANUP	RECORDER - OFF	

GO/NO-GO FOR DEPRESS

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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-241

MCC-H

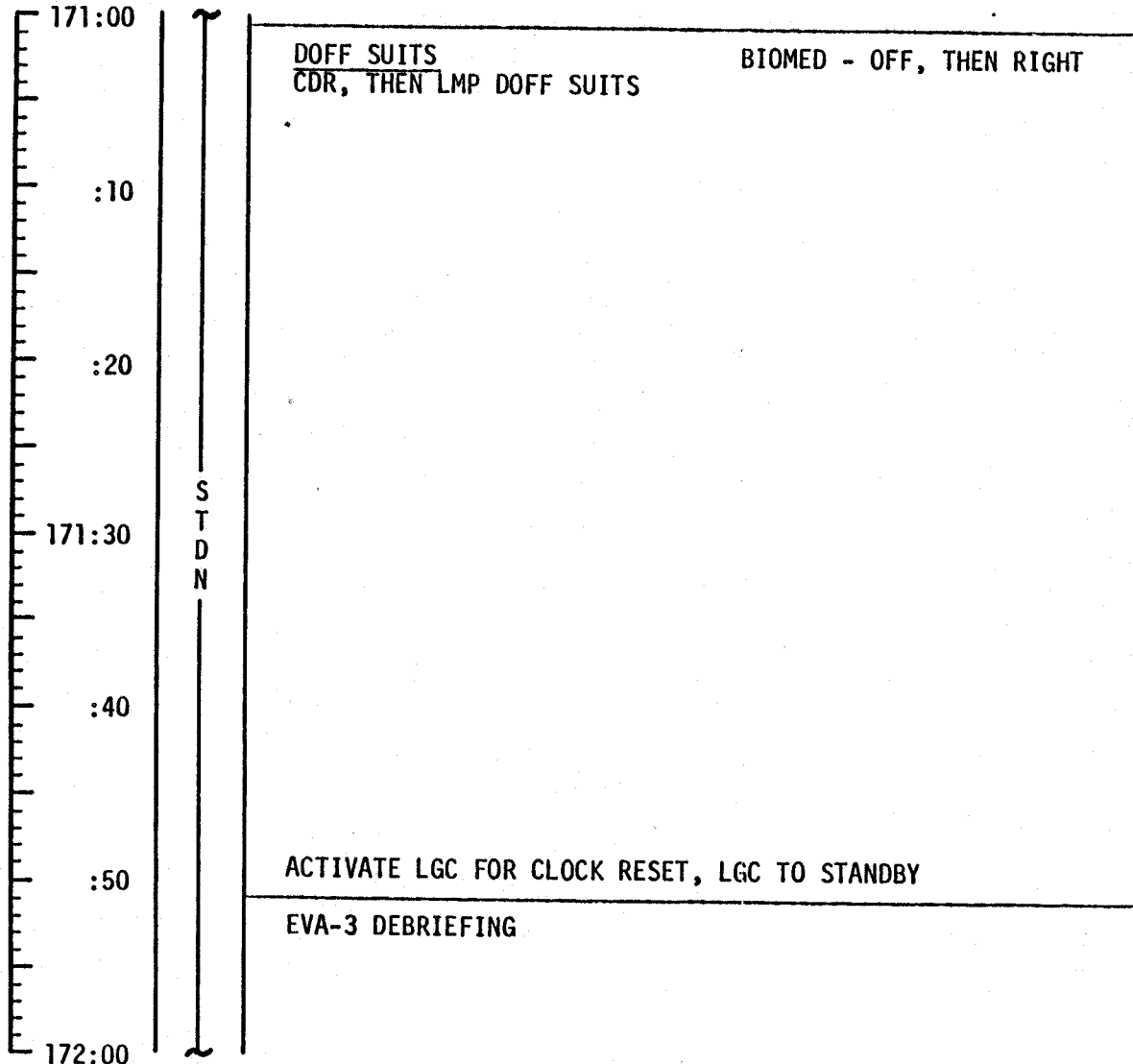
2353 CST

LM FLIGHT PLAN

CDR

LMP

NOTES



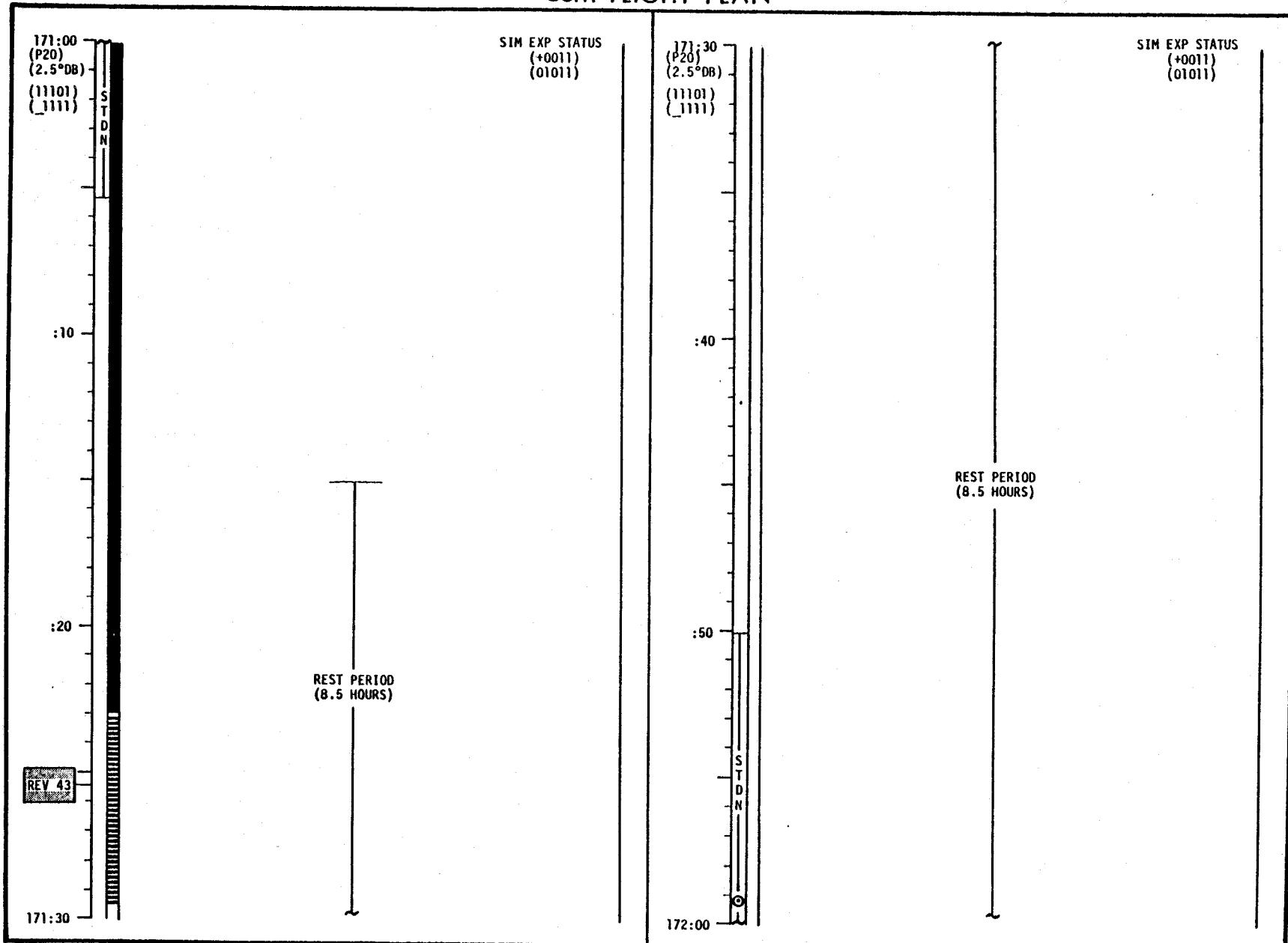
CSM REV 43

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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-243

LM FLIGHT PLAN

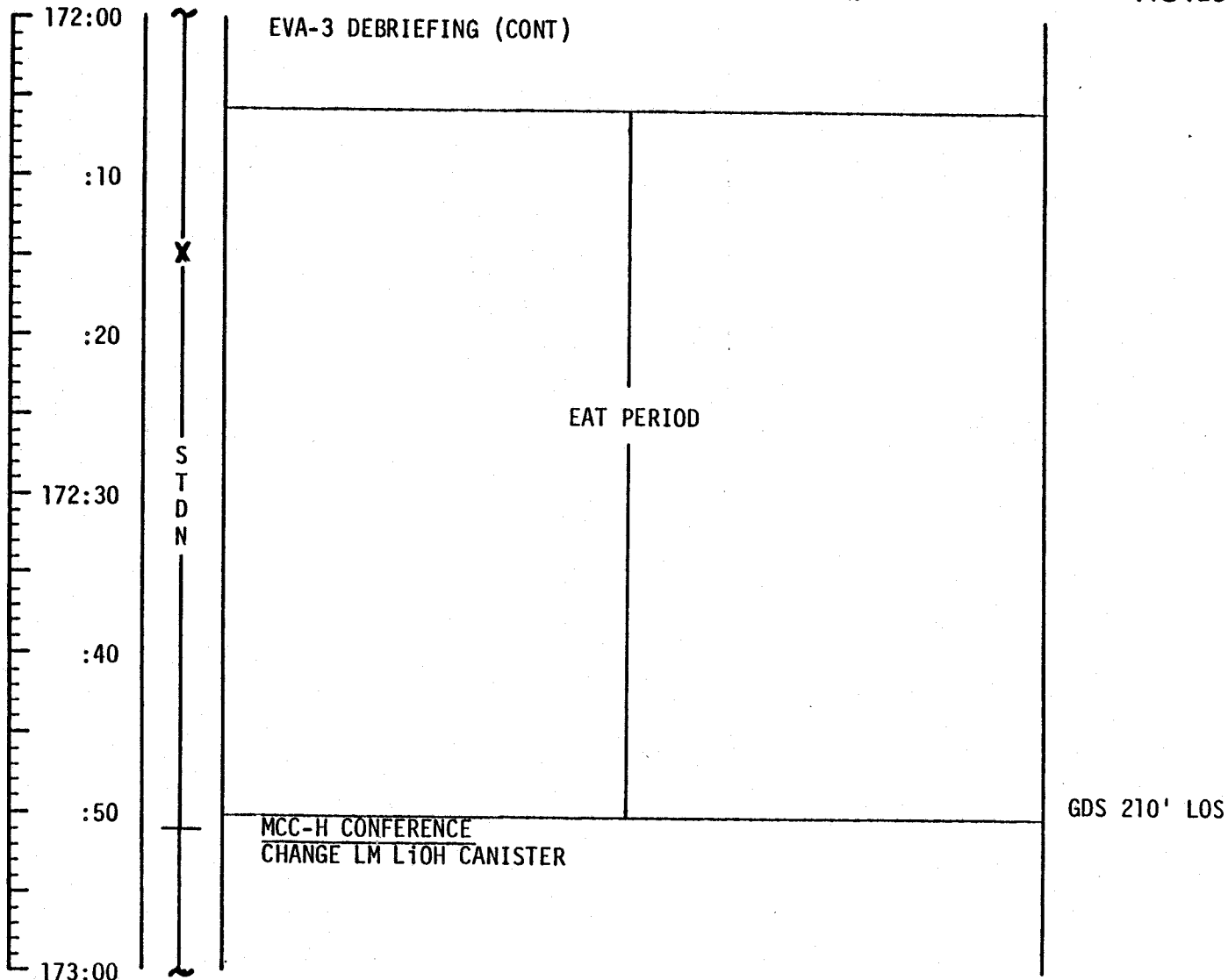
MCC-H

0053 CST, 12/14

CDR

LMP

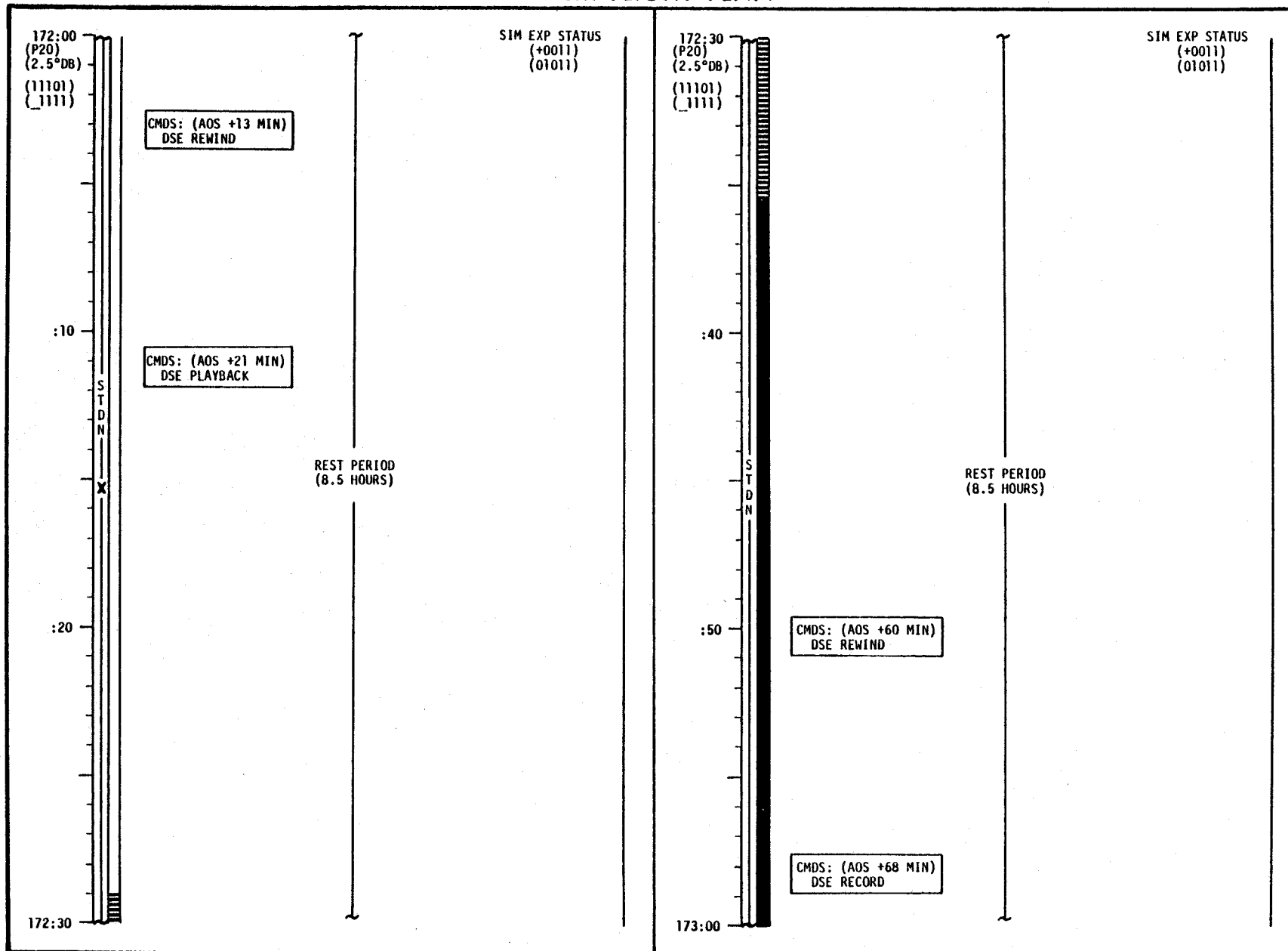
NOTES



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

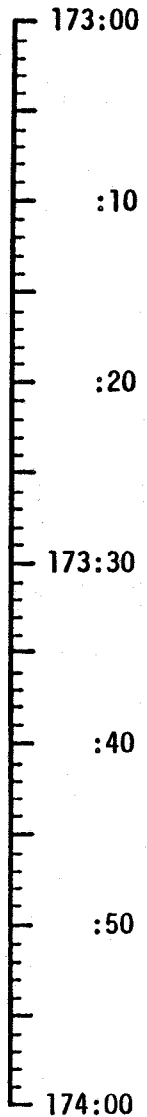
MCC-H

0153 CST

CDR

LMP

NOTES



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MCC-H CONF (CONT)

CSM REV 44

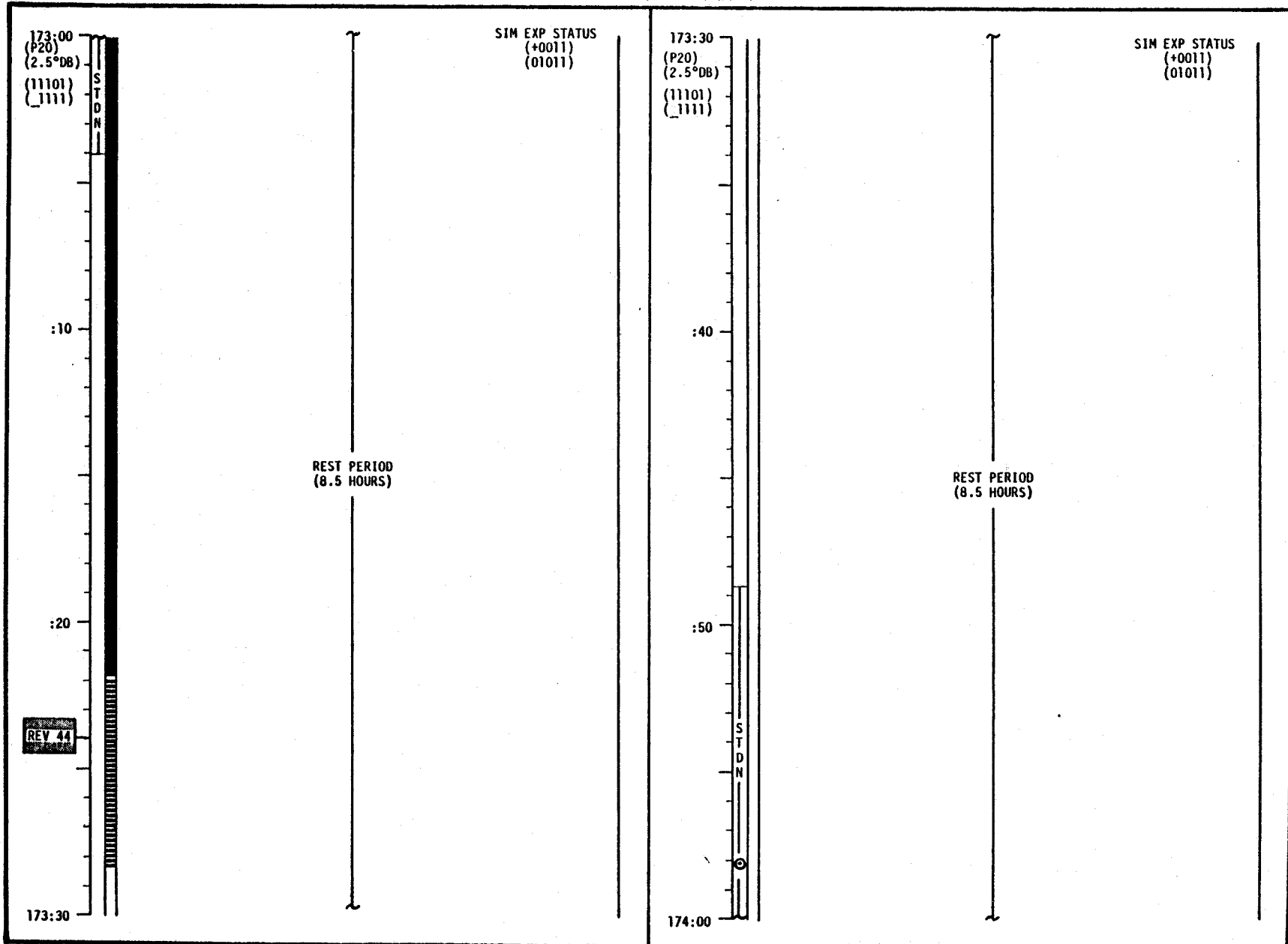
PRESLEEP

WEIGH ISA, REPORT: WEIGHT

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



REV 44

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-247

LM FLIGHT PLAN

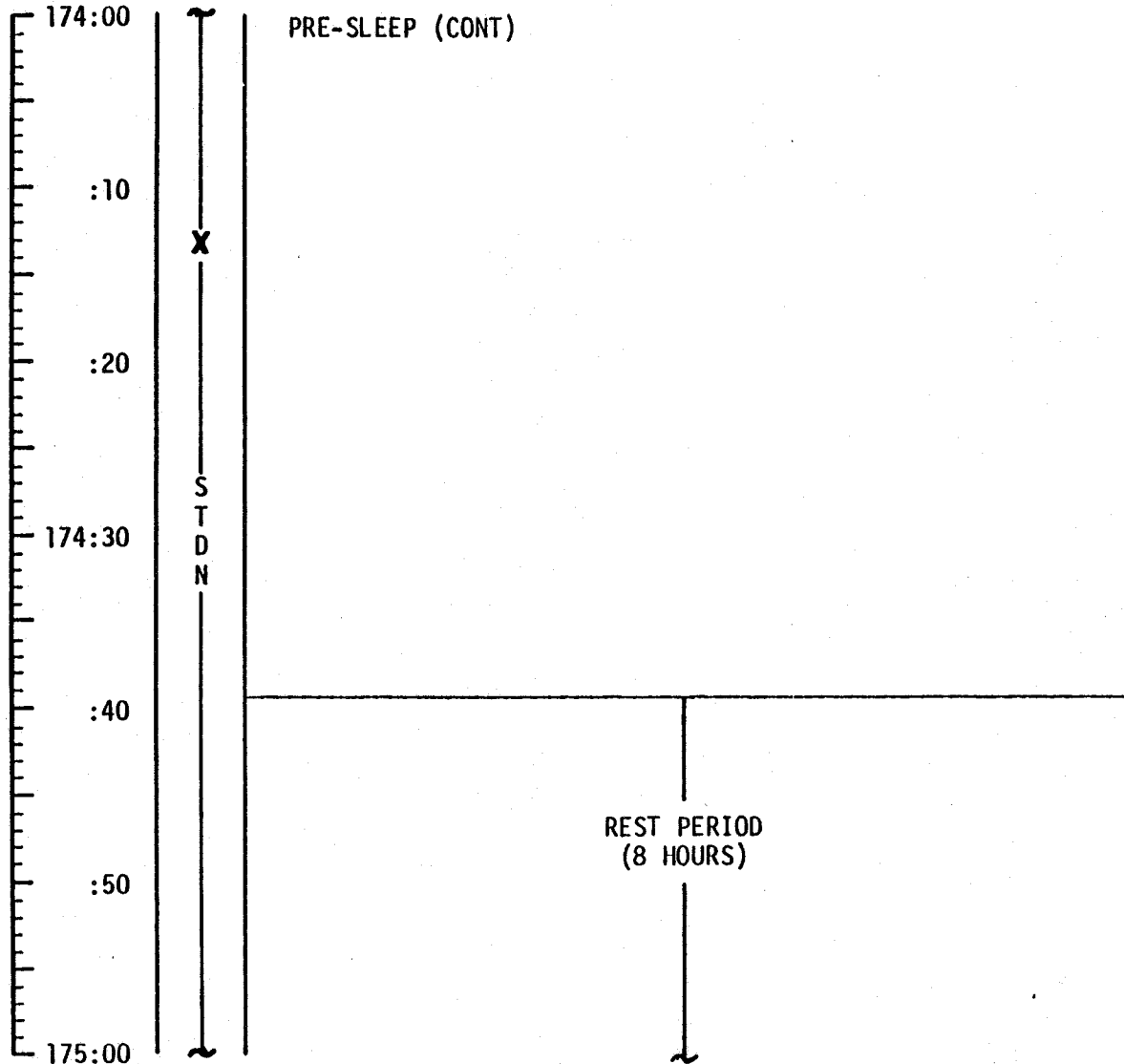
MCC-H

0253 CST

CDR

LMP

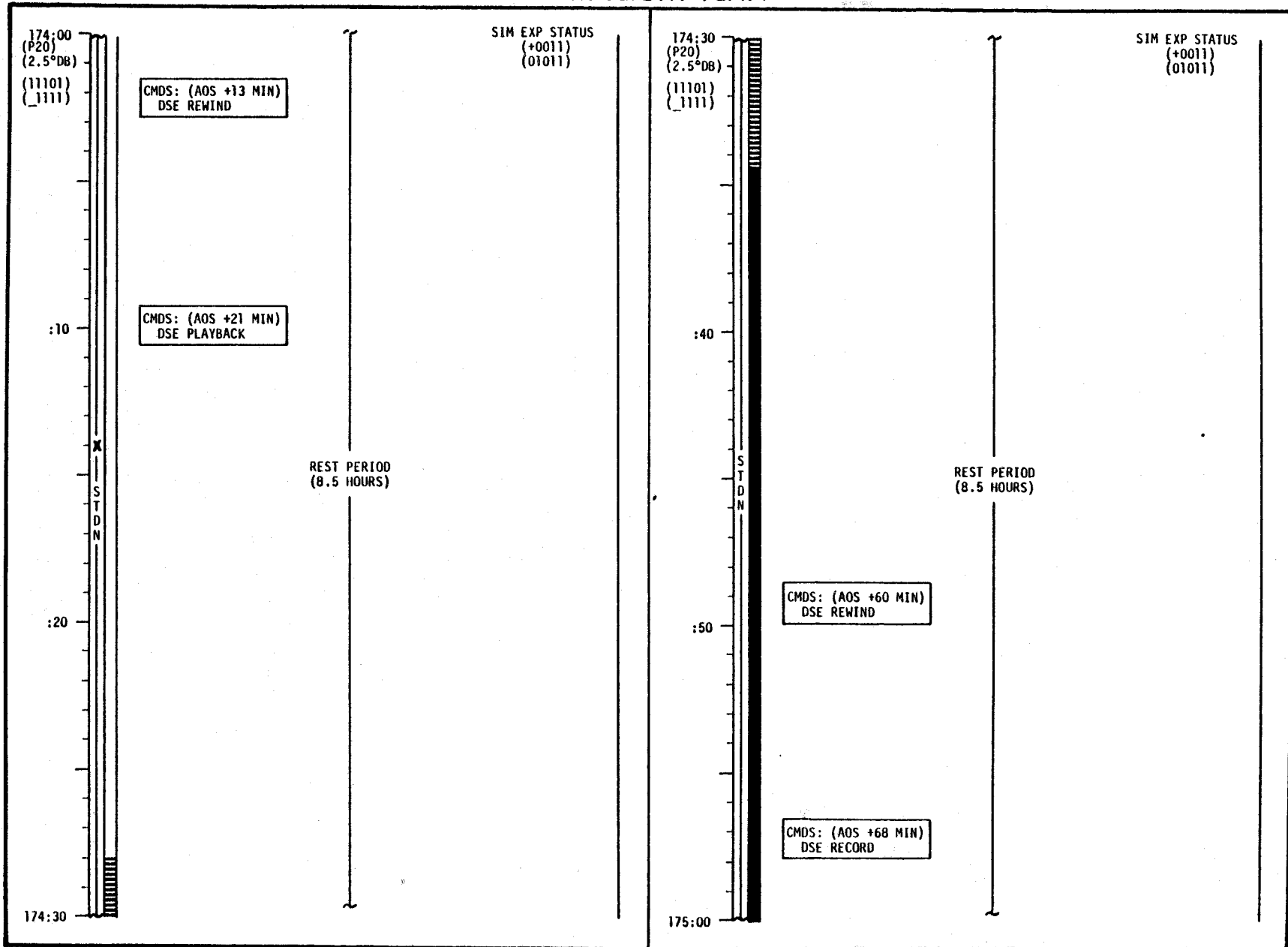
NOTES



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

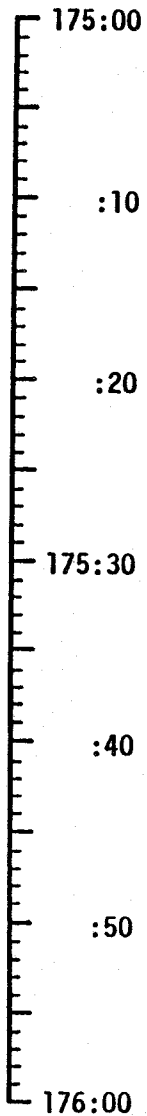
MCC-H

0353 CST

CDR

LMP

NOTES



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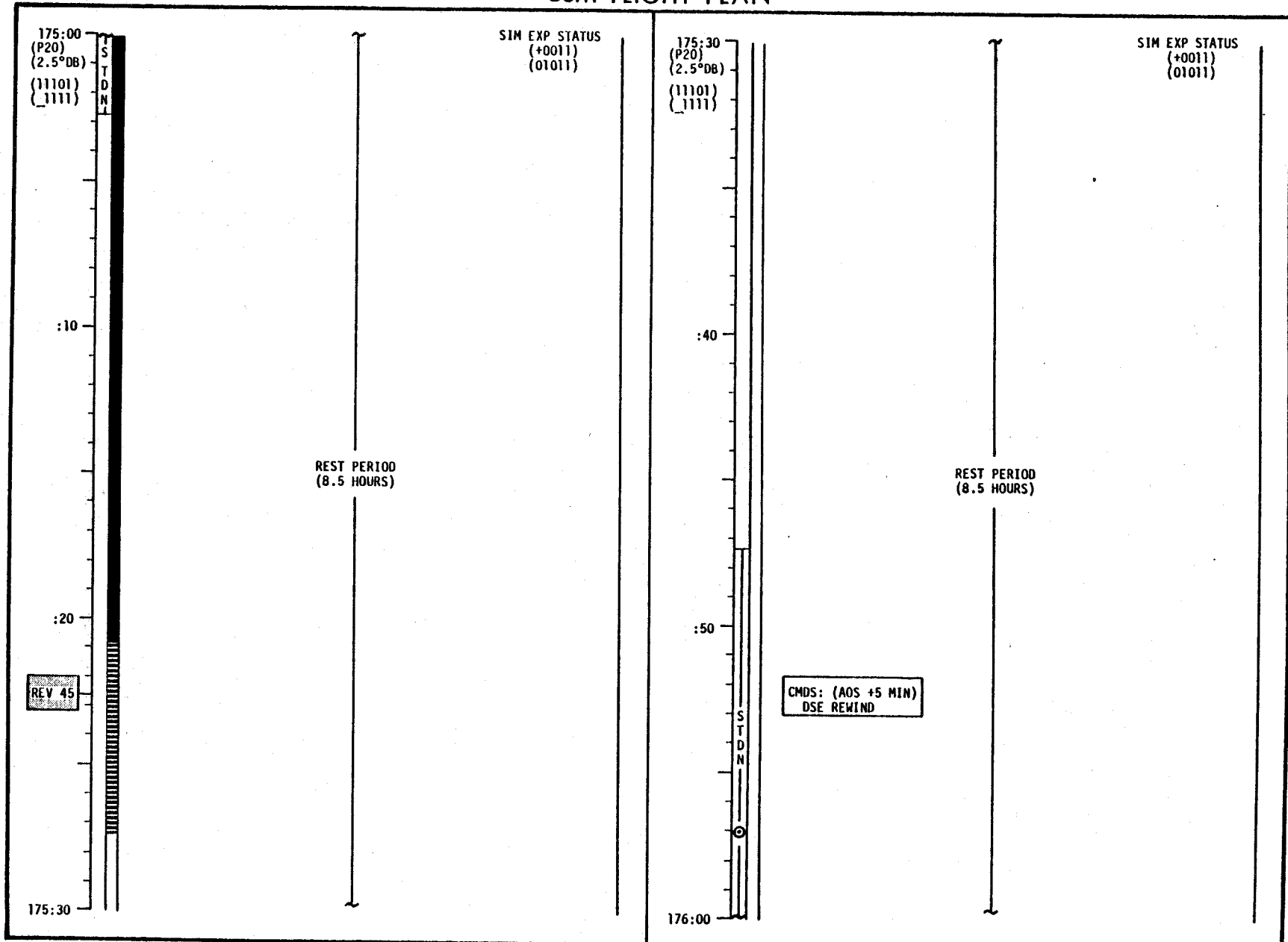
REST PERIOD
(8 HOURS)

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



175:00
(P20)
(2.5°DB)
(11101)
(1111)

SIM EXP STATUS
(+0011)
(01011)

175:30
(P20)
(2.5°DB)
(11101)
(1111)

SIM EXP STATUS
(+0011)
(01011)

:10

:40

REST PERIOD
(8.5 HOURS)

REST PERIOD
(8.5 HOURS)

:20

:50

REV 45

CMDS: (AOS +5 MIN)
DSE REWIND

175:30

176:00

LM FLIGHT PLAN

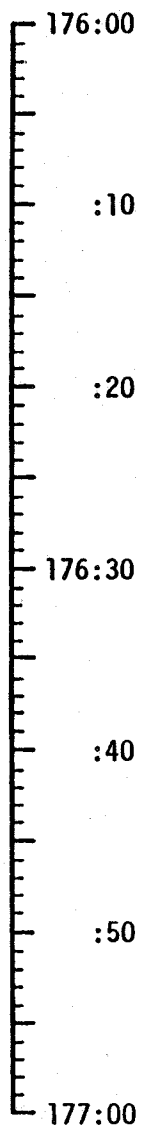
MCC-H

0453 CST

CDR

LMP

NOTES



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S
T
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N
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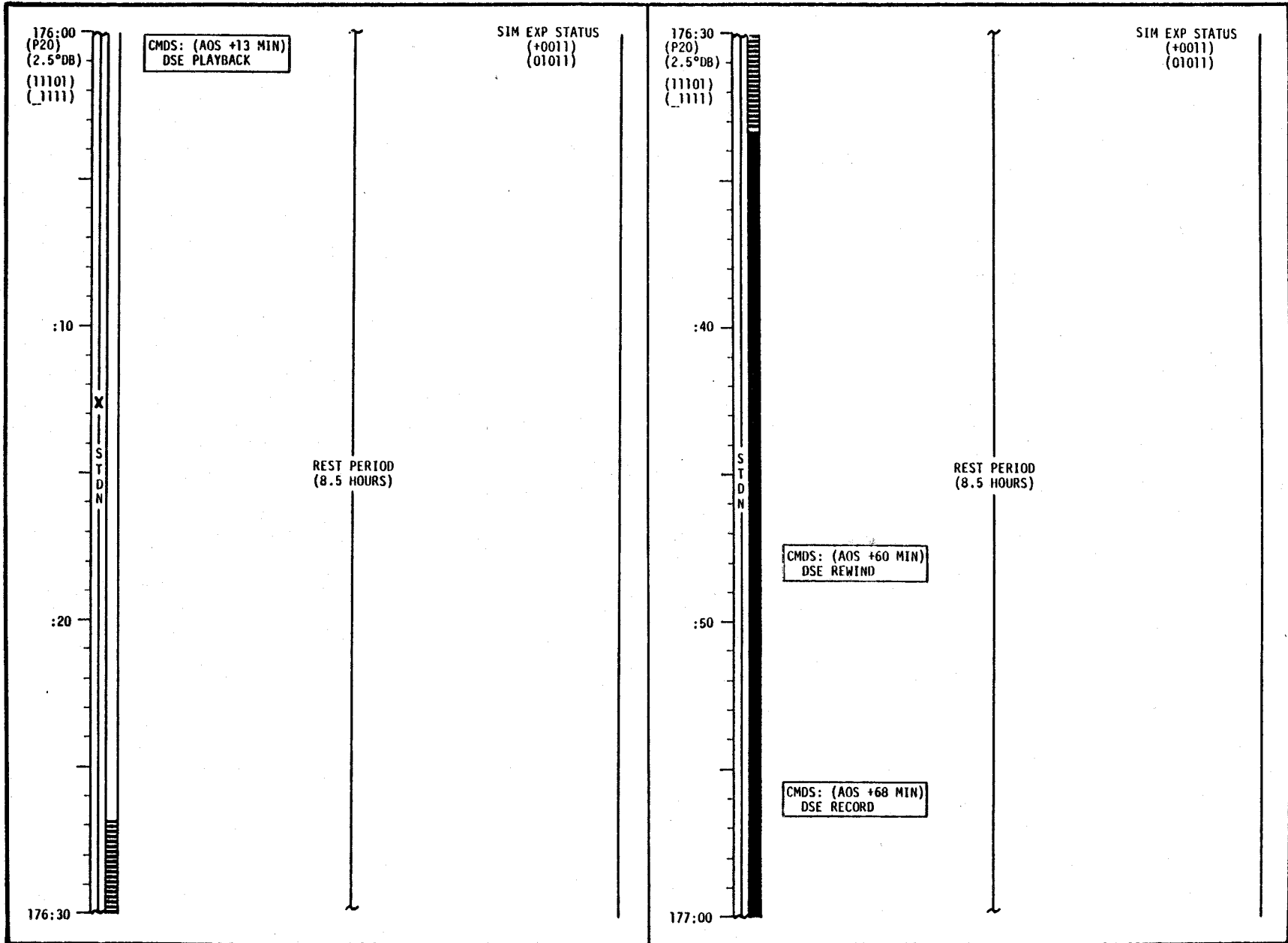
REST PERIOD
(8 HOURS)

PKS 210' LOS

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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-253

LM FLIGHT PLAN

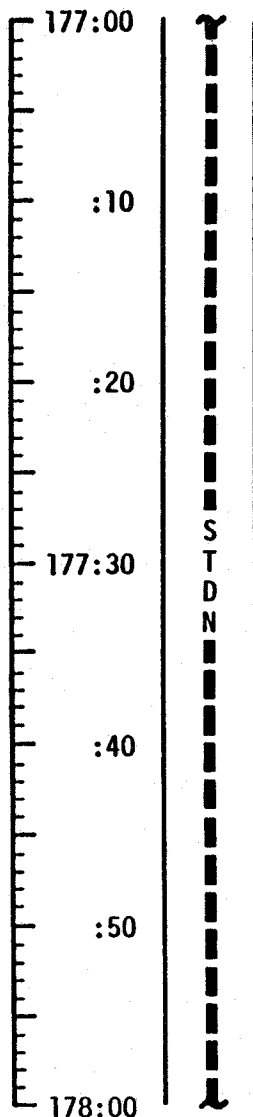
MCC-H

0553 CST

CDR

LMP

NOTES



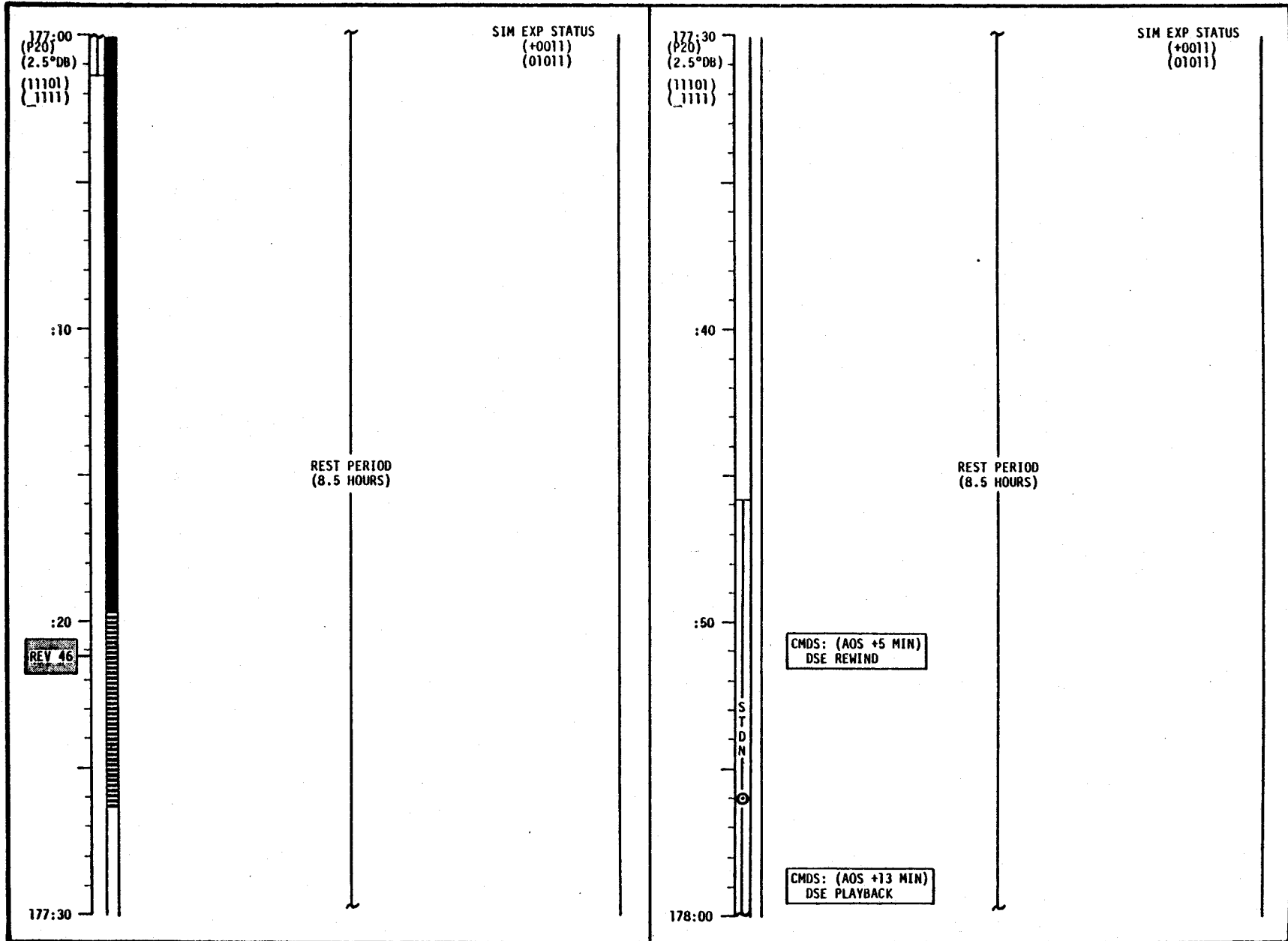
REST PERIOD
(8 HOURS)

CSM REV 46

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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-255

LM FLIGHT PLAN

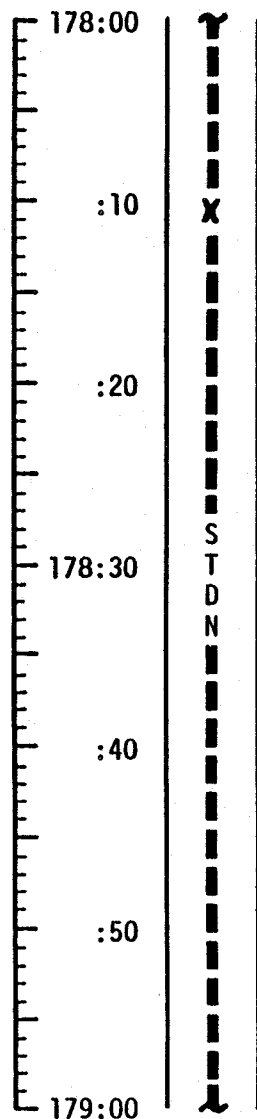
MCC-H

0653 CST

CDR

LMP

NOTES

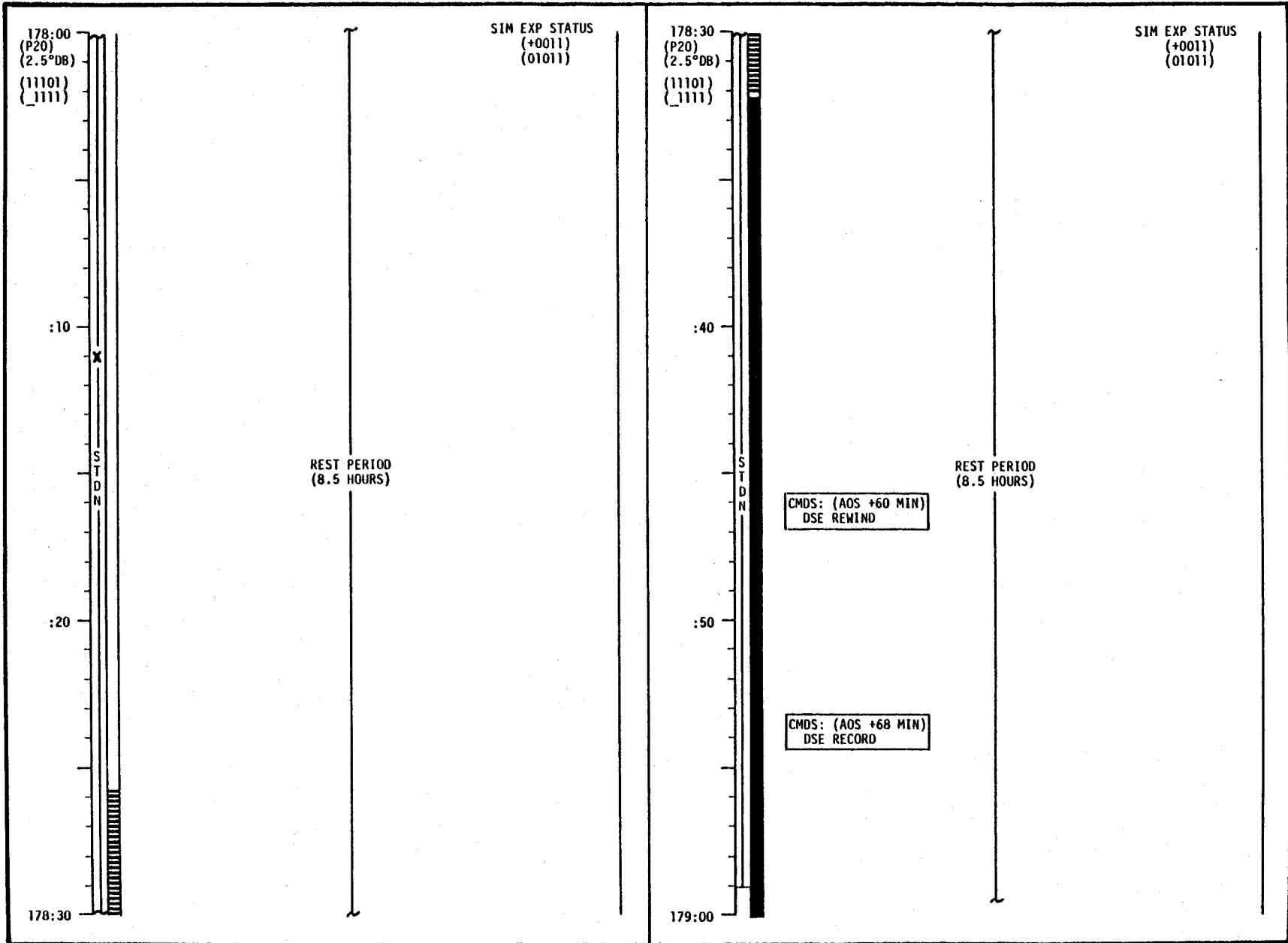


REST PERIOD
(8 HOURS)

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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-257

LM FLIGHT PLAN

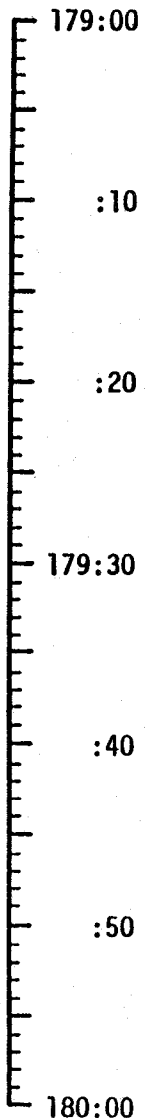
MCC-H

0753 CST

CDR

LMP

NOTES



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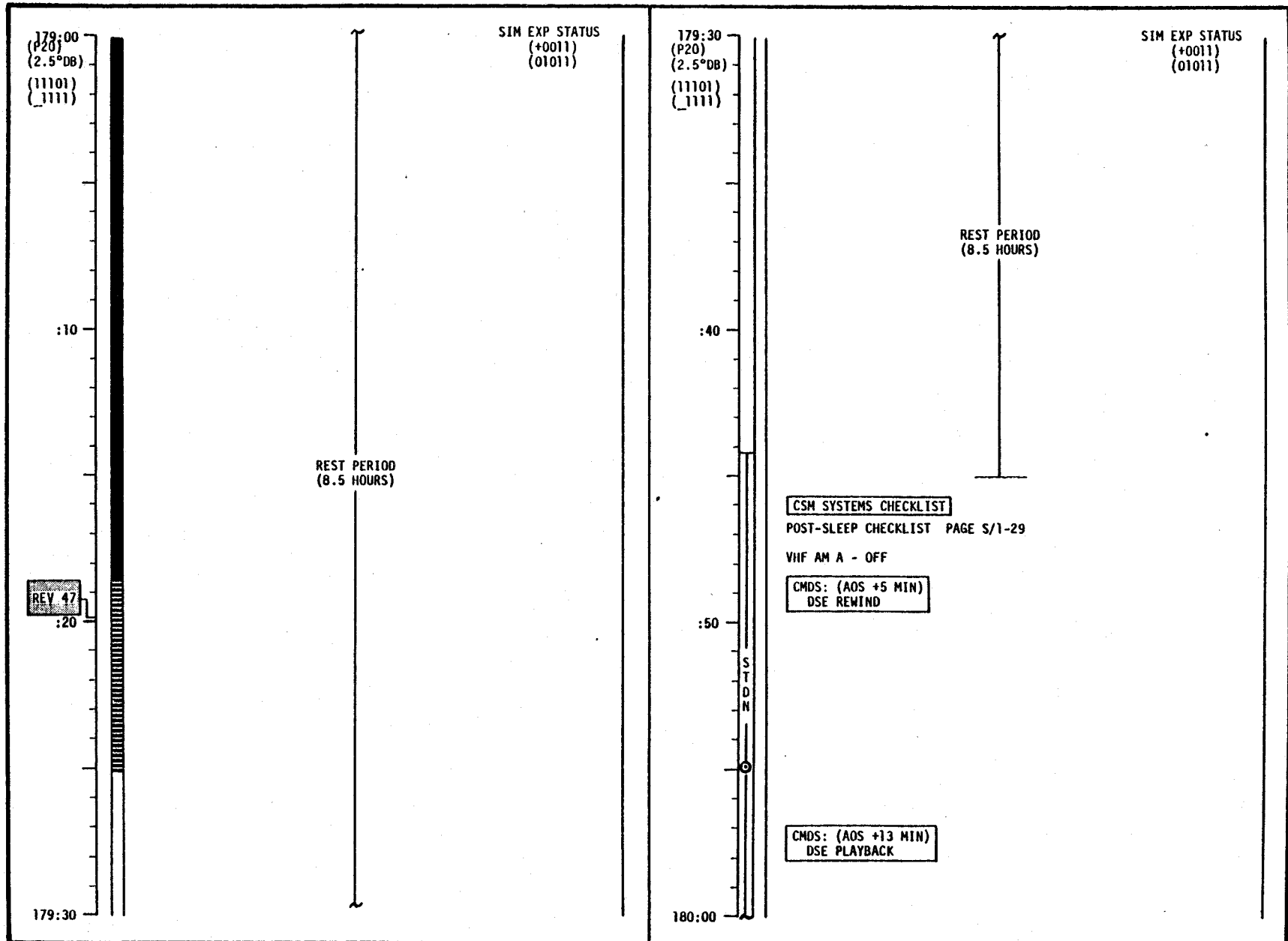
REST PERIOD
(8 HOURS)

CSM REV 47

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

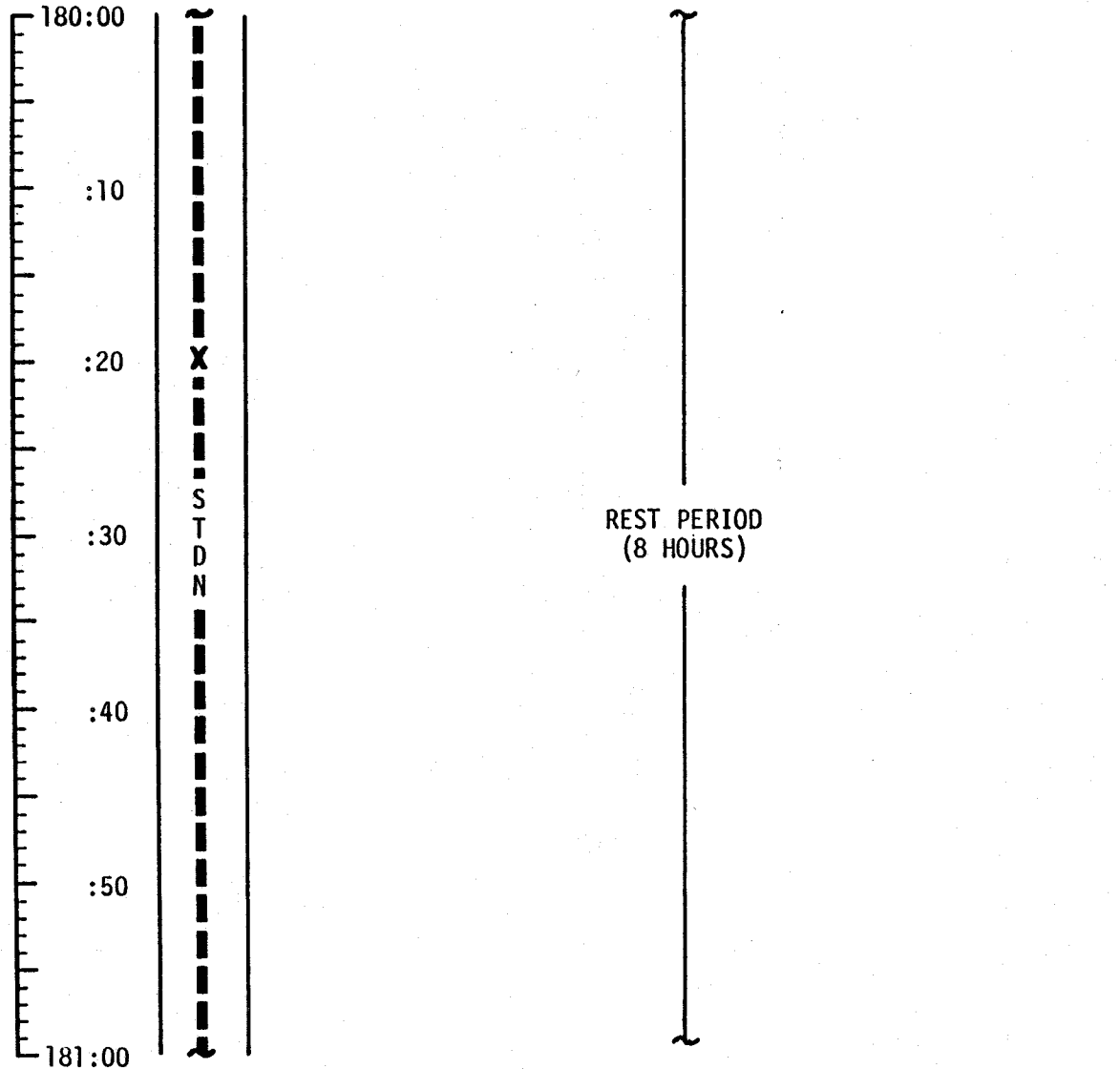
MCC-H

0853 CST

CDR

LMP

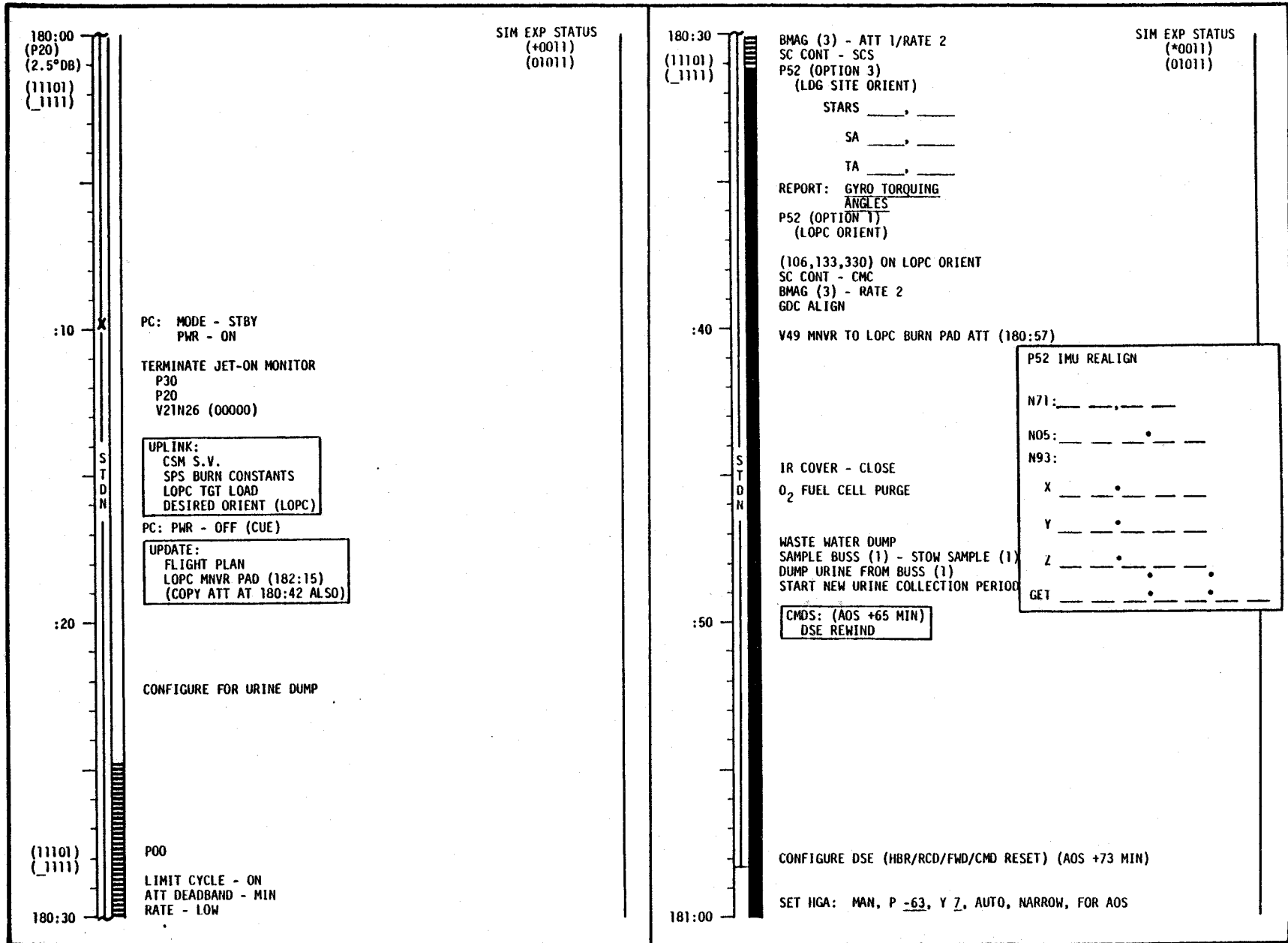
NOTES



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



LM FLIGHT PLAN

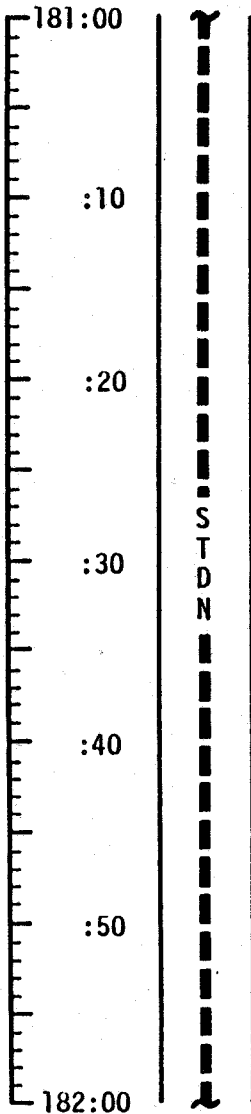
MCC-H

0953 CST

CDR

LMP

NOTES



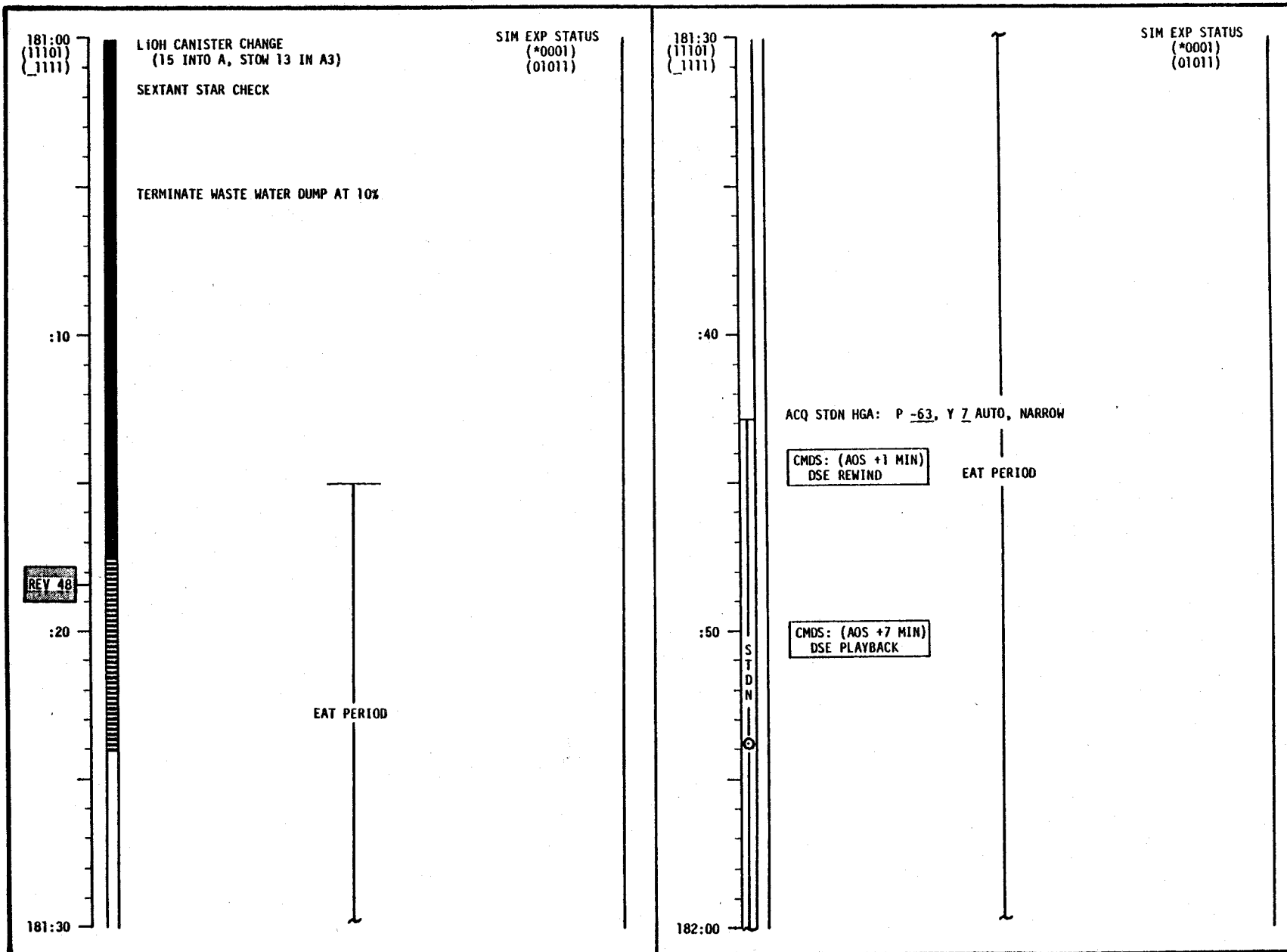
REST PERIOD
(8 HOURS)

CSM REV 48

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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-263

LM FLIGHT PLAN

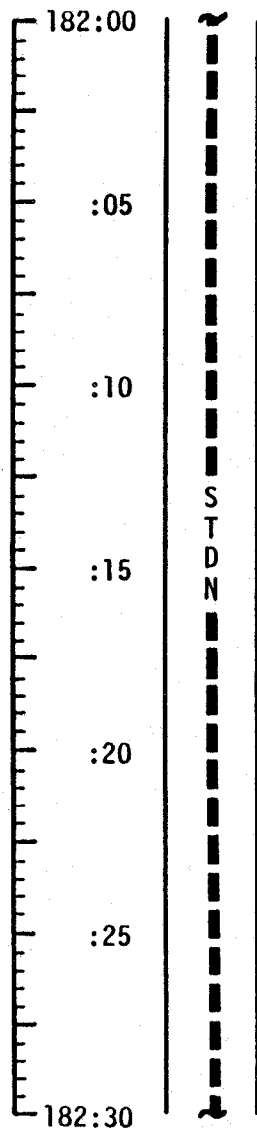
MCC-H

1053 CST

CDR

LMP

NOTES



REST PERIOD
(8 HOURS)

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)

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

ST
D
N

:10

:20
(P40)
(0.5°DB)

182:30

P30 MANEUVER

	L	O	P	C		PURPOSE
SET STARS	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 GET1
	+	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

LM FLIGHT PLAN

MCC-H

1123 CST

CDR

LMP

NOTES

182:30
:35
:40
:45
:50
:55
183:00

Y
ST
D
N

REST PERIOD
(8 HOURS)

POST SLEEP

REPORT: CREW STATUS

STAY/NO-STAY FOR
JETTISON #2

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
POO	ULLAGE: 4 JET 12 SEC
REPORT: <u>BURN STATUS</u>	ORBIT: 63.0 X 61.3

POST-SPS BURN SIM PREP (CUE CARD)

UPLINK:
DESIRED ORIENT (LIFT-OFF)
RLS (IF REQD)

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

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

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

(P20)
(0.5°DB)

:50

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

BURN STATUS REPORT				
X	X			ΔTIG
X	X			BT
				Vgx
TRIM				
X	X	X		R
X	X	X		P
X	X	X		Y
				Vgx
				Vgy
				Vgz
				ΔV _c
X				OX
X				FUEL
X				UNBAL

LM FLIGHT PLAN

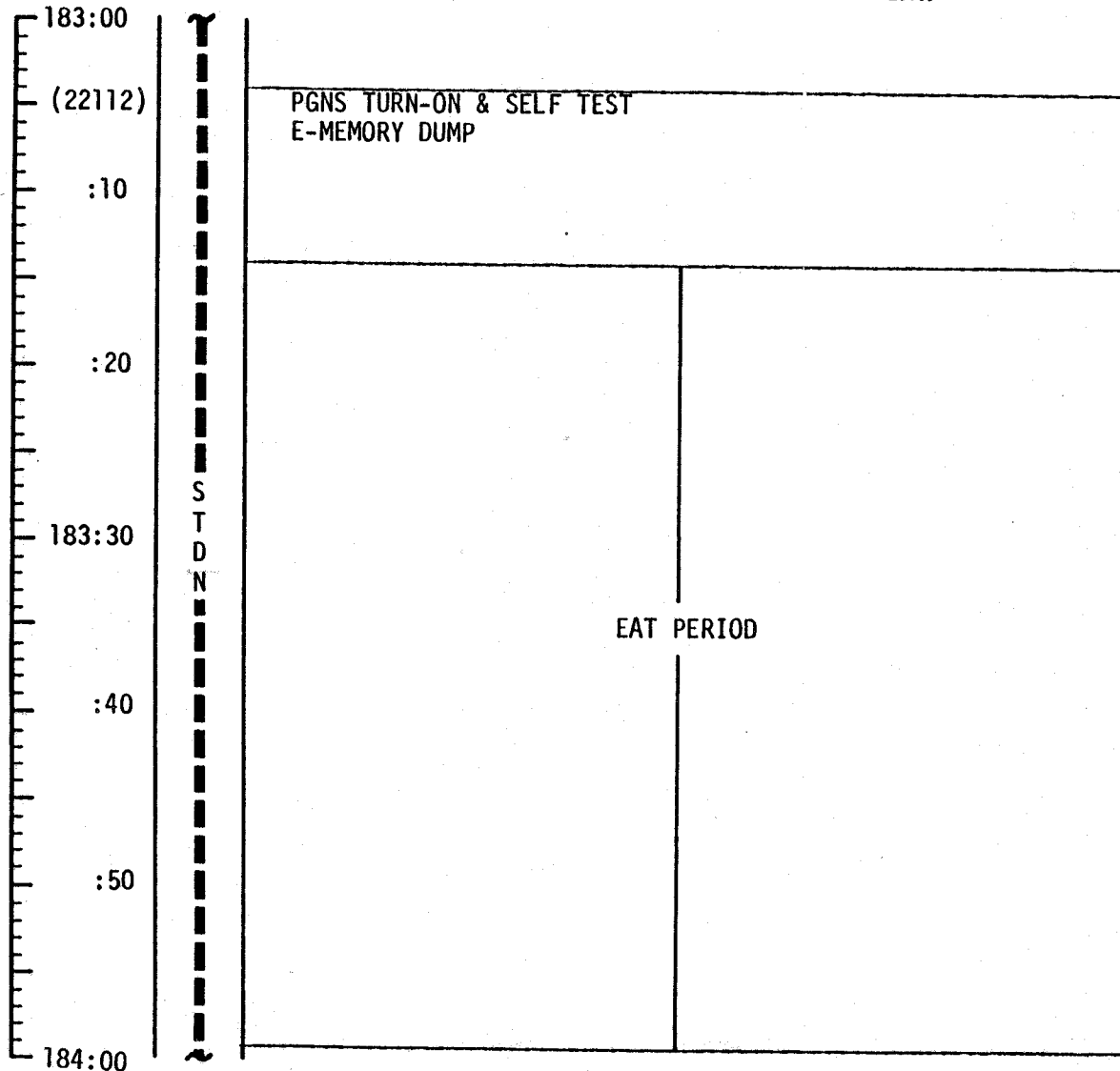
MCC-H

1153 CST

CDR

LMP

NOTES



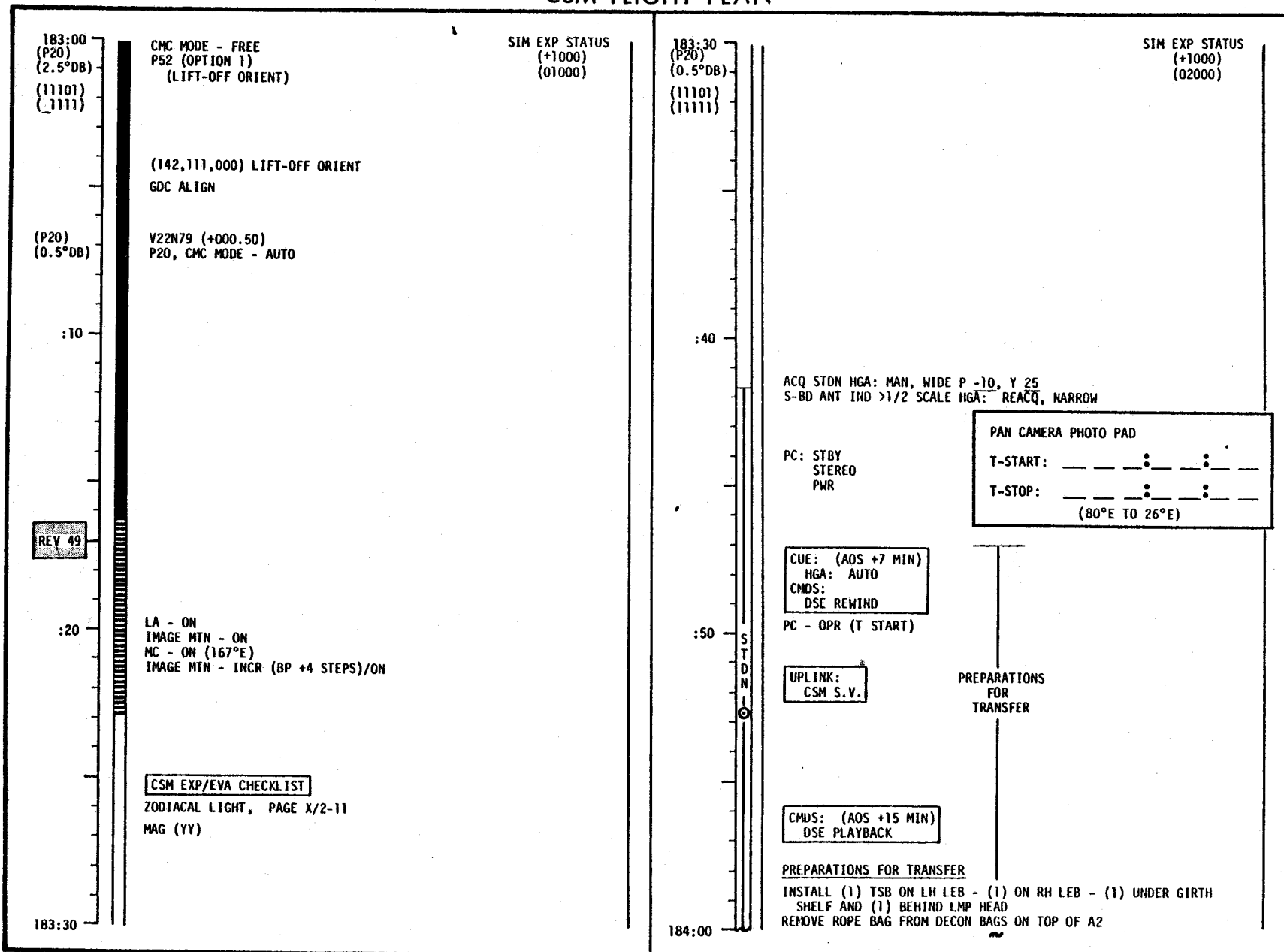
-5:00

CSM REV 49

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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-269

LM FLIGHT PLAN

MCC-H

1253 CST

CDR

LMP

NOTES

UPDATE TO LM
P57 LIFT-OFF TIME
P22 ACQ TIME (28°)
UPLINK TO LM
CSM S.V. (L/O)
RLS

184:00
(22112)
:10
:20
184:30
:40
:50
185:00

STDN

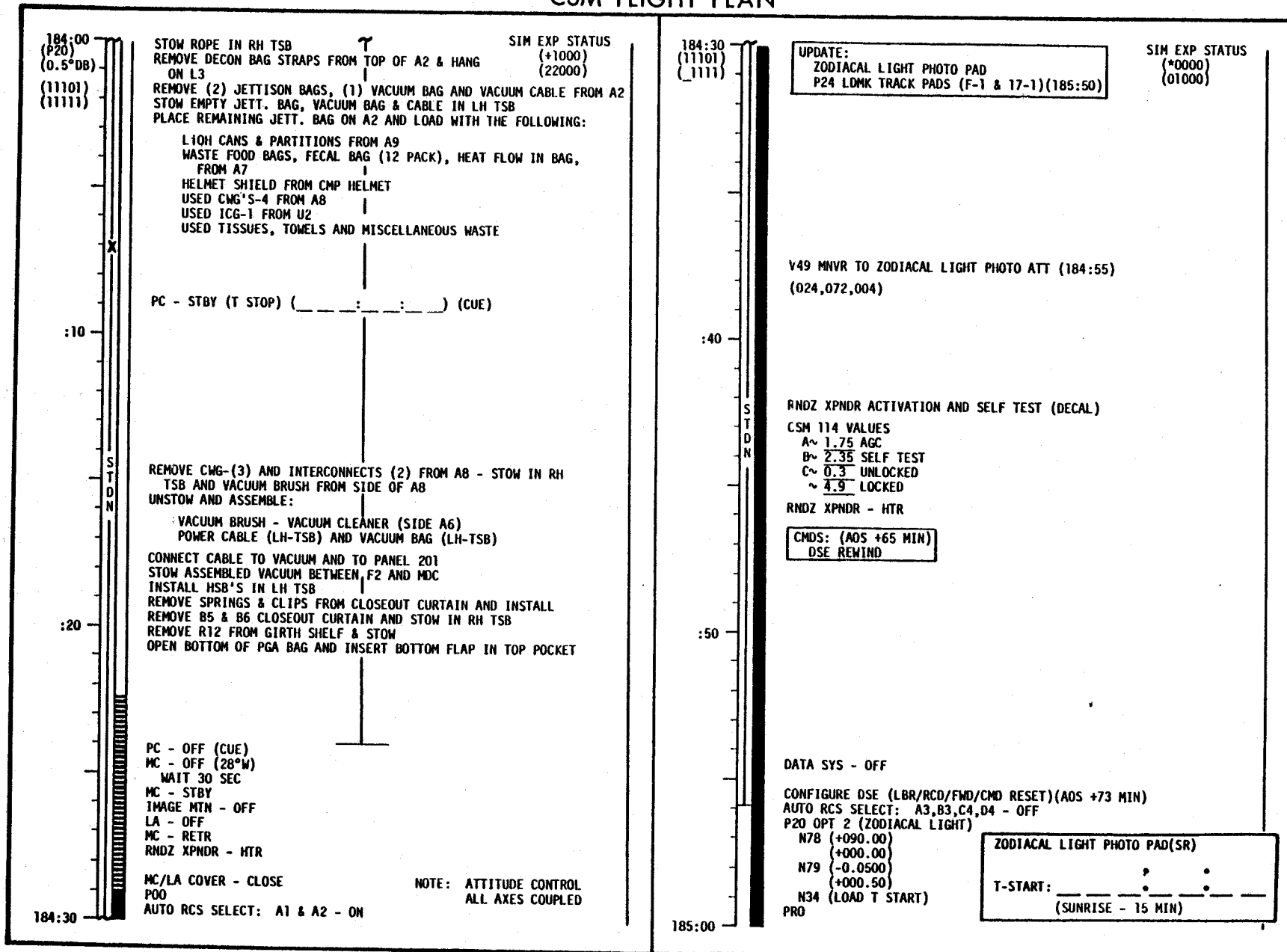
<u>P57 LUNAR SURFACE ALIGN</u> <u>OPTION 4 LANDING SITE</u> A/T 3, PLUS 4 STARS (LIFT-OFF ORIENT)	
<u>DON SUITS</u> LMP, THEN CDR DON SUITS	BIOMED-OFF, THEN LEFT

-4:00

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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-271

MCC-H

1353 CST

LM FLIGHT PLAN

CDR

LMP

NOTES

185:00
(22112)

:05

:10

:15

:20

:25

185:30

S
T
D
N

PREP FOR EQUIPMENT JETTISON

REPORT: PRD

HELMET/GLOVE DONNING

RECORDER - ON/VOX

PRESSURE INTEGRITY CK

CABIN DEPRESS

EQUIPMENT JETTISON #2

CABIN REPRESS

POST-JETTISON CABIN CLEANUP

RECORDER - OFF

-3:00

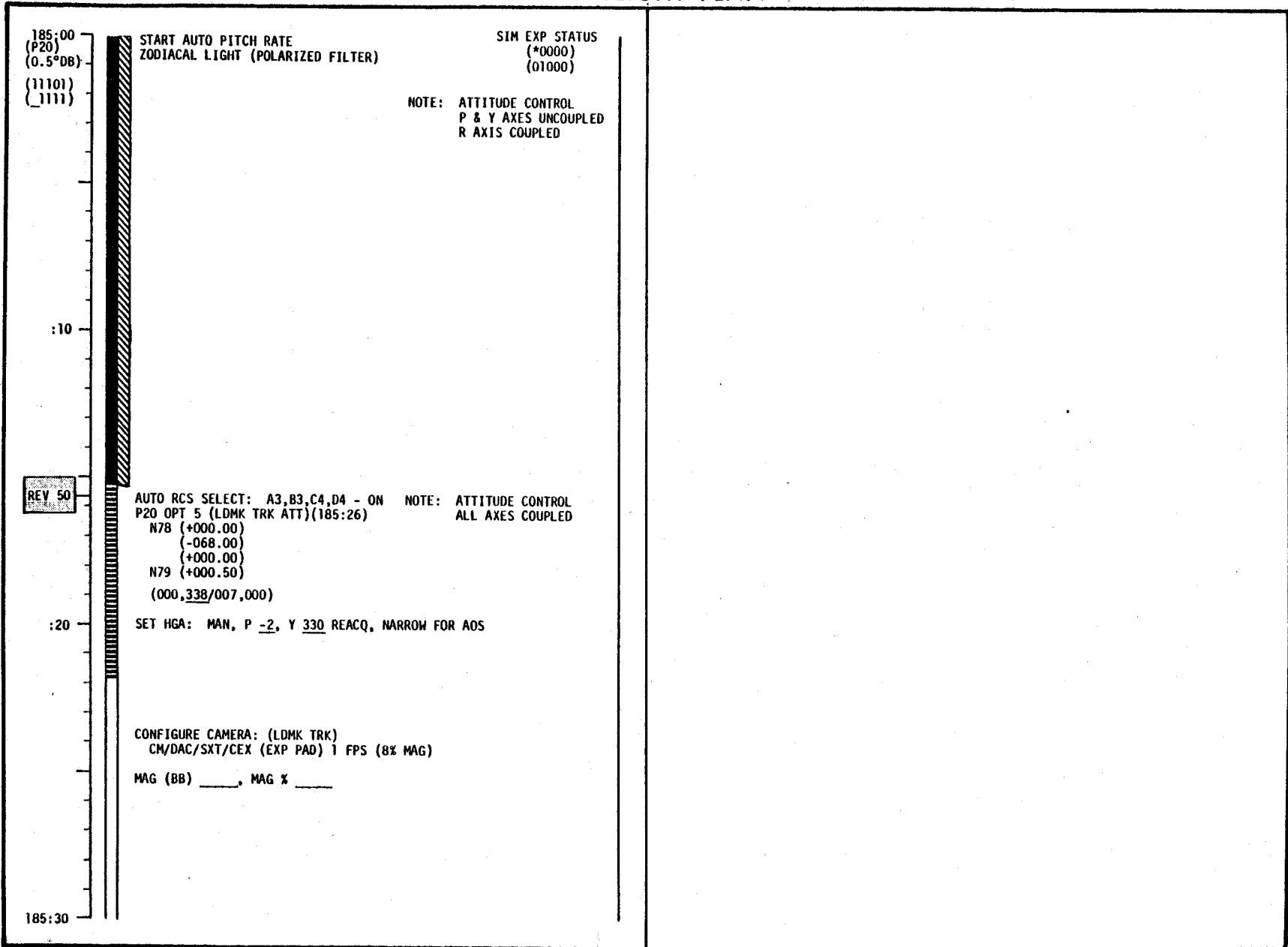
CSM REV 50

GO/NO-GO FOR
DEPRESS

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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-273

LM FLIGHT PLAN

MCC-H

1423 CST

CDR

LMP

NOTES

185:30
(22112)

:35

:40

:45

:50

:55

186:00

STDN
STDN
STDN

POST JETTISON CABIN CLEANUP (CONT)

P22 RR LUNAR SURFACE NAVIGATION

GDS 210' AOS

UPDATE TO LM
ASCENT PADS
CSI PAD
LM DAP WEIGHTS

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)

LOAD N89 FOR LDMK F-1

SIM EXP STATUS
(*0000)
(01000)

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

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

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
VHF ANT - RIGHT
ADJUST SQUELCH A

RNDZ XPNDR - PWR

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

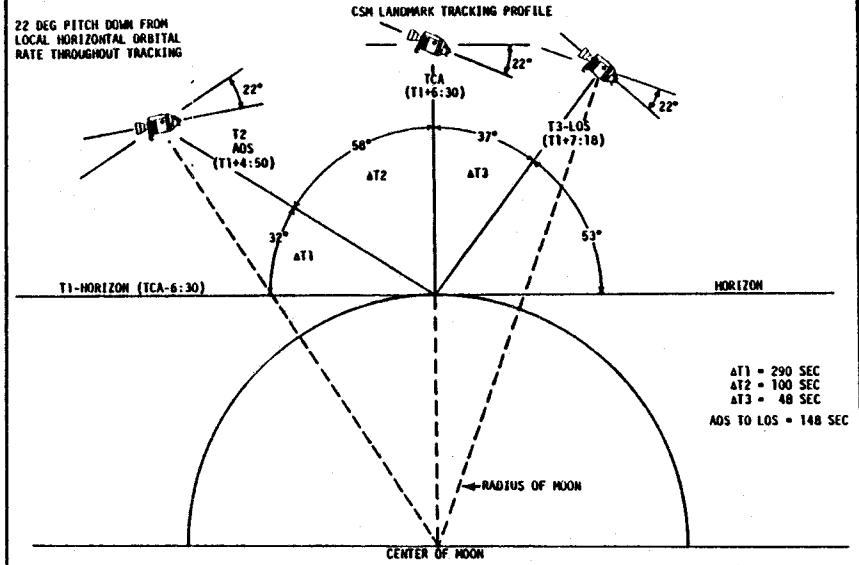
0:00 T1 (HORIZON) DET - RESET/START

:40

:50

S
T
D
N

186:00



P24 LDMK TRACKING

TGT: **F-1**

(1/250)

T₁ _____ : _____ : _____
T₂ _____ : _____ : _____
TCA _____ : _____ : _____
T₃ _____ : _____ : _____
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)

T₁ _____ : _____ : _____
T₂ _____ : _____ : _____
TCA _____ : _____ : _____
T₃ _____ : _____ : _____
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

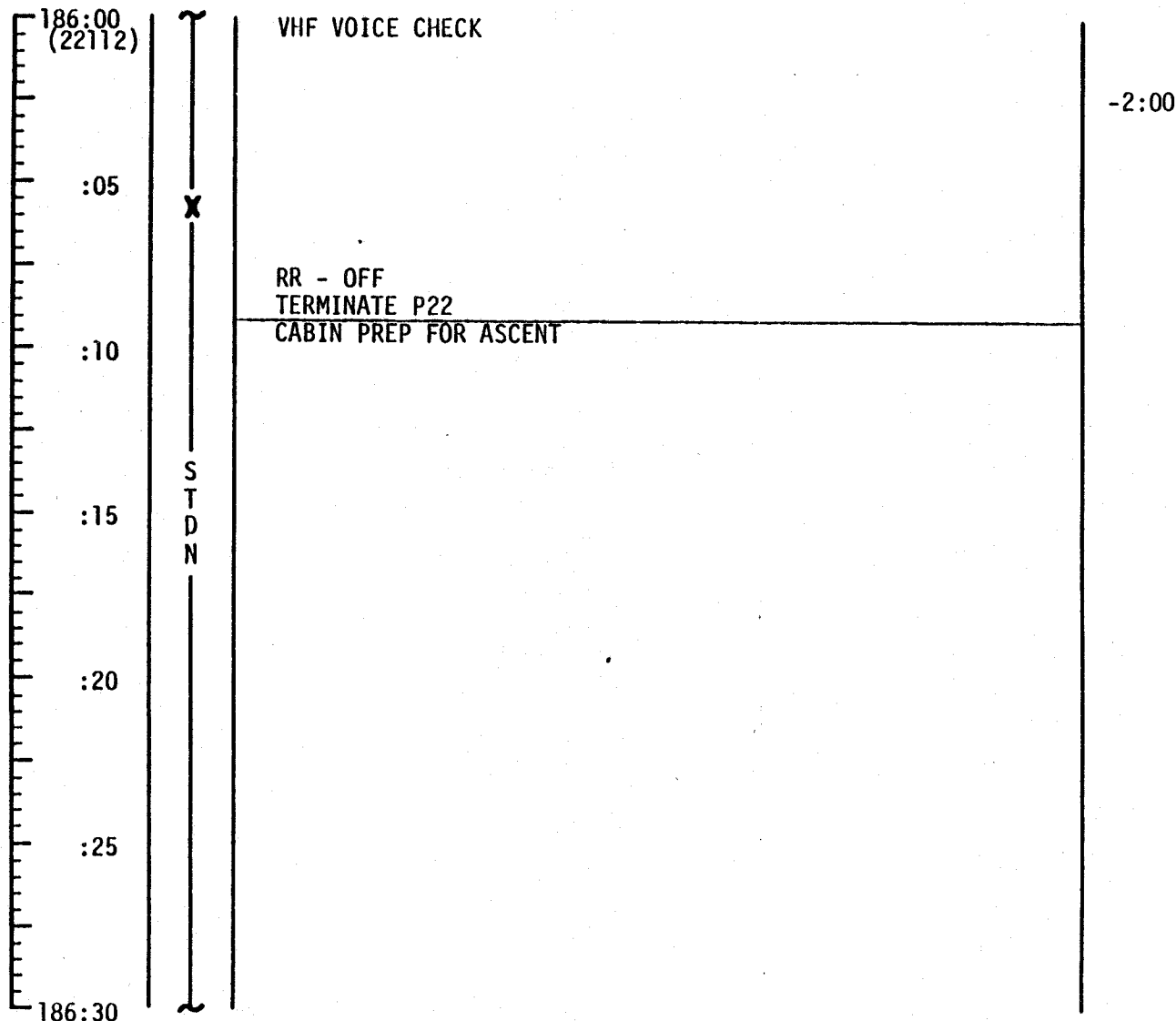
MCC-H

1453 CST

CDR

LMP

NOTES



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 XPDR - HTR

V48 (11102)
(1111)
V49 MNVR TO P52/COAS CAL ATT (186:18)
(180,244,341) HGA P -58, Y 52

UPLINK:
LM S.V. (INS +5)
CSM S.V. (L/O)
RESET SURFACE FLAG

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

:10

(11102)
(1111)

S
T
D
N

:20

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

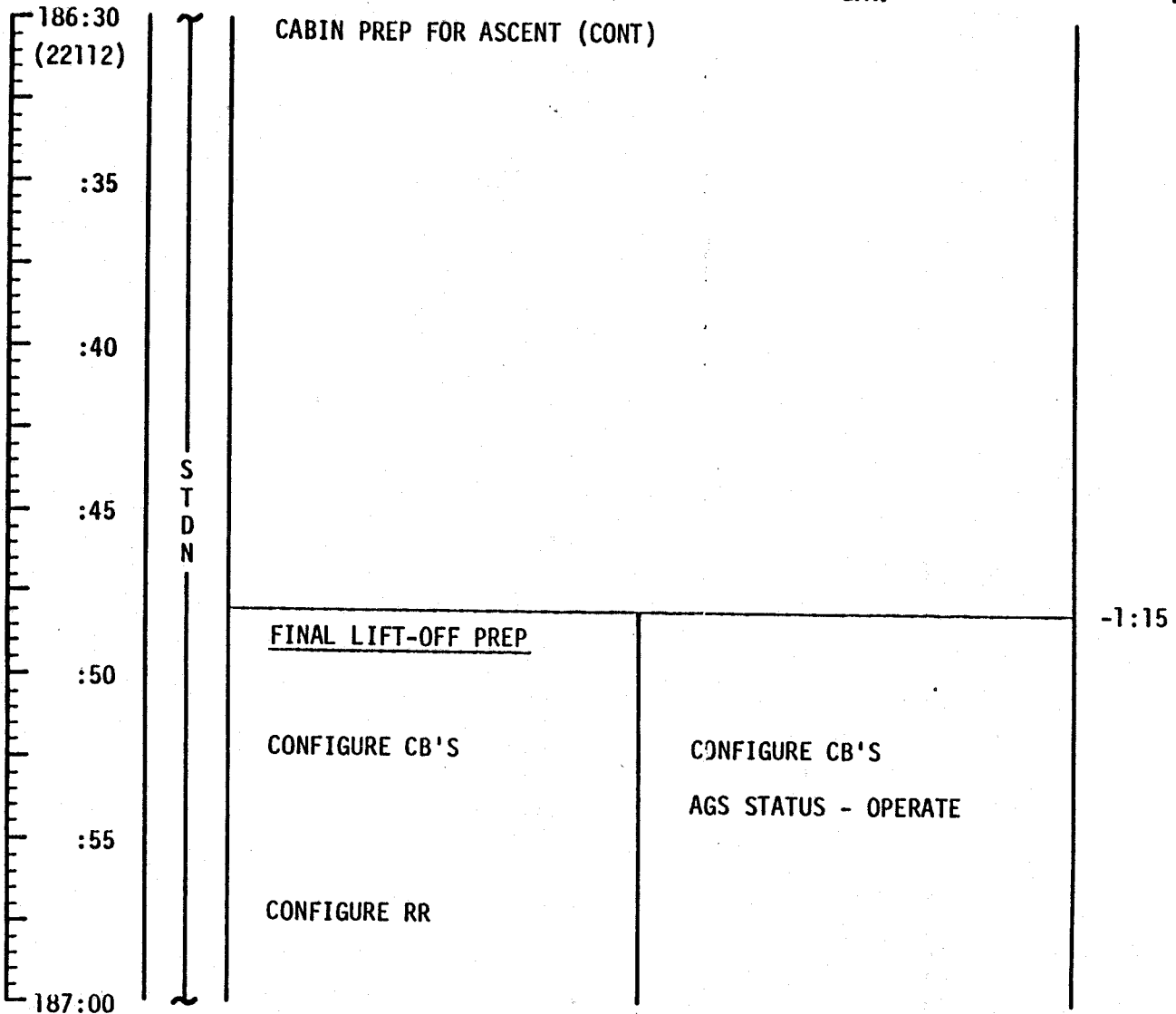
MCC-H

1523 CST

CDR

LMP

NOTES

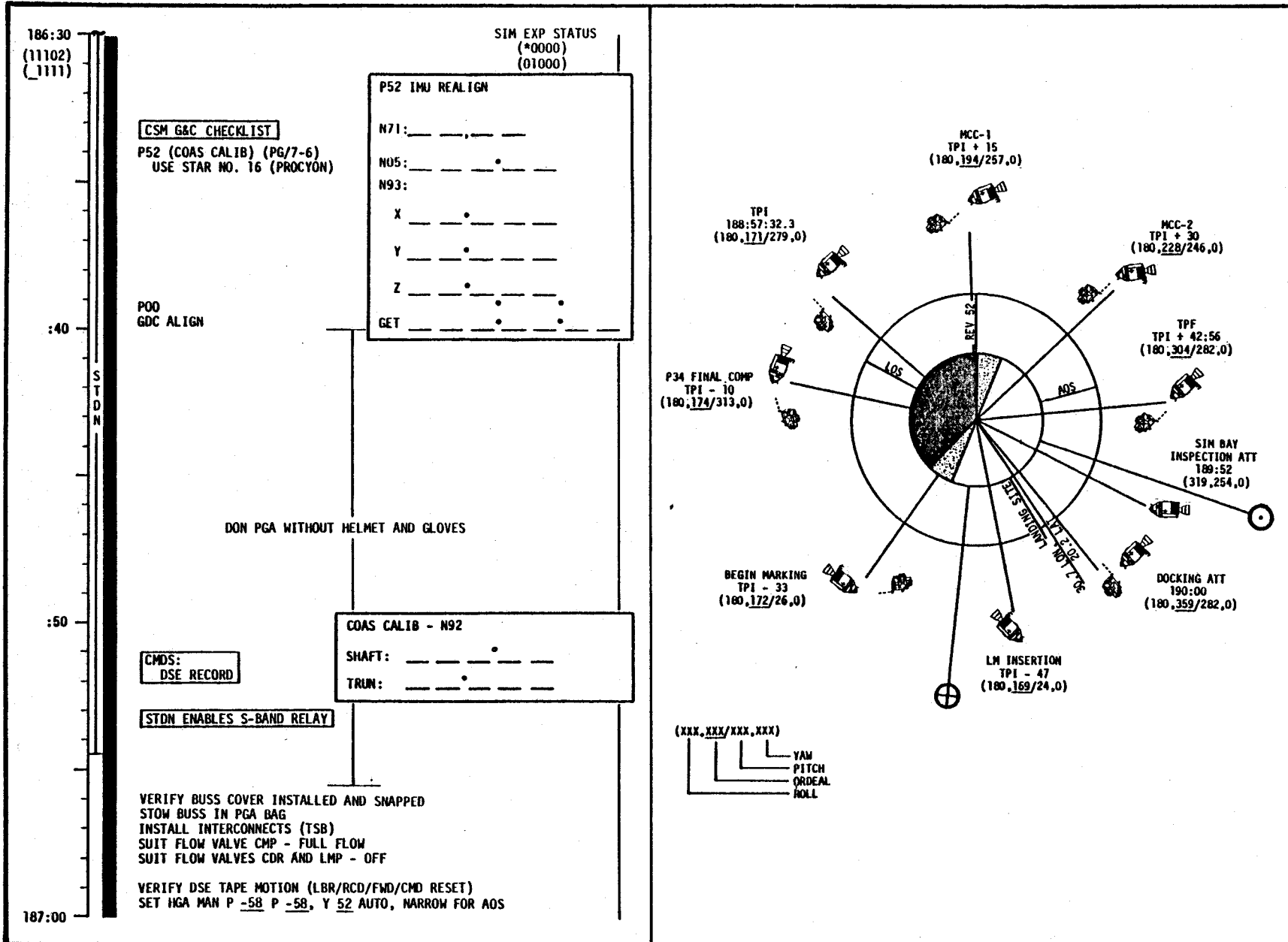


ENABLE STDN S-BAND RELAY

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)

SIM EXP STATUS
(*0000)
(01000)

CSM G&C CHECKLIST

P52 (COAS CALIB) (PG/7-6)
USE STAR NO. 16 (PROCYON)

P52 IMU REALIGN

N71: _____

N05: _____

N93: _____

X _____

Y _____

Z _____

GET _____

POO
GDC ALIGN

DON PGA WITHOUT HELMET AND GLOVES

COAS CALIB - N92

SHAFT: _____

TRUN: _____

CMDS:
DSE RECORD

STON 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

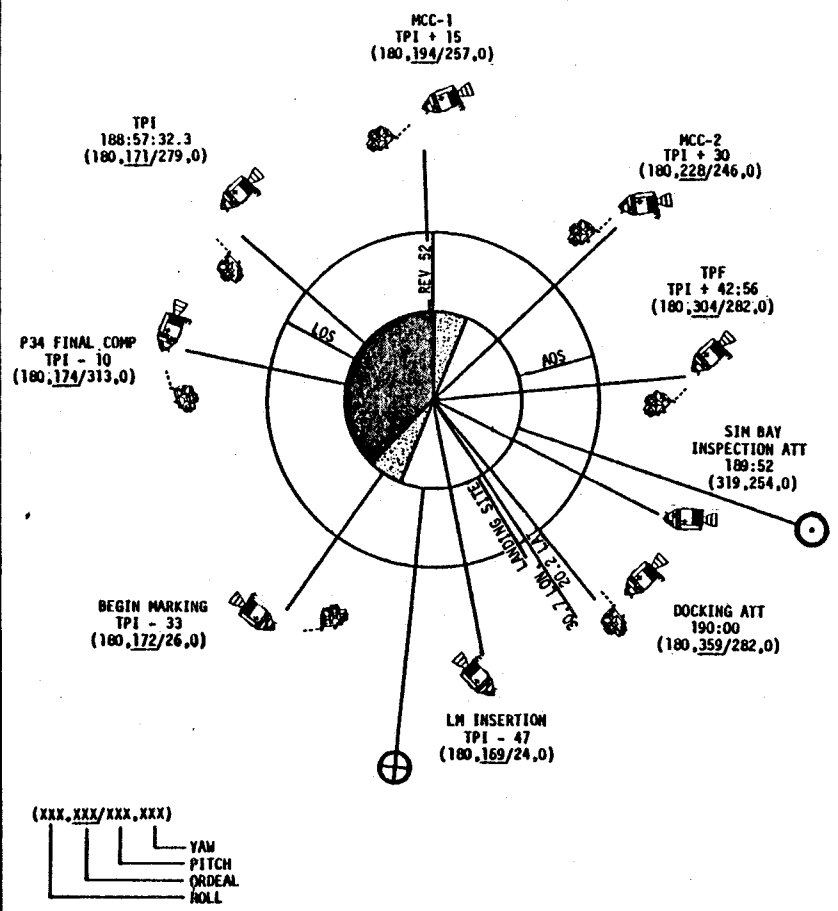
VERIFY DSE TAPE MOTION (LBR/RCD/FWD/CMD RESET)
SET HGA MAN P -58 P -58, Y 52 AUTO, NARROW FOR AOS

:40

STON

:50

187:00



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-279

MCC-H

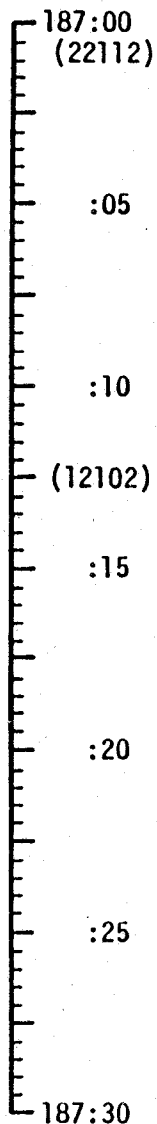
1553 CST

LM FLIGHT PLAN

CDR

LMP

NOTES



S
T
D
N

V63 RR SELF TEST (IF REQ)	AGS GYRO CALIBRATION
	LOAD AGS ASCENT TARGETING
RATE GYRO TEST	PGNS/AGS CLOCK SYNC
SET DAP RCS CHECKOUT	
P57 LUNAR SURFACE ALIGN OPT 4 LANDING SITE A/T 3 (LIFT-OFF ORIENT)	
LOAD DAP, LM WEIGHT	BATS 586-ON, 1&3-OFF/RESET

-1:00

CSM REV 51

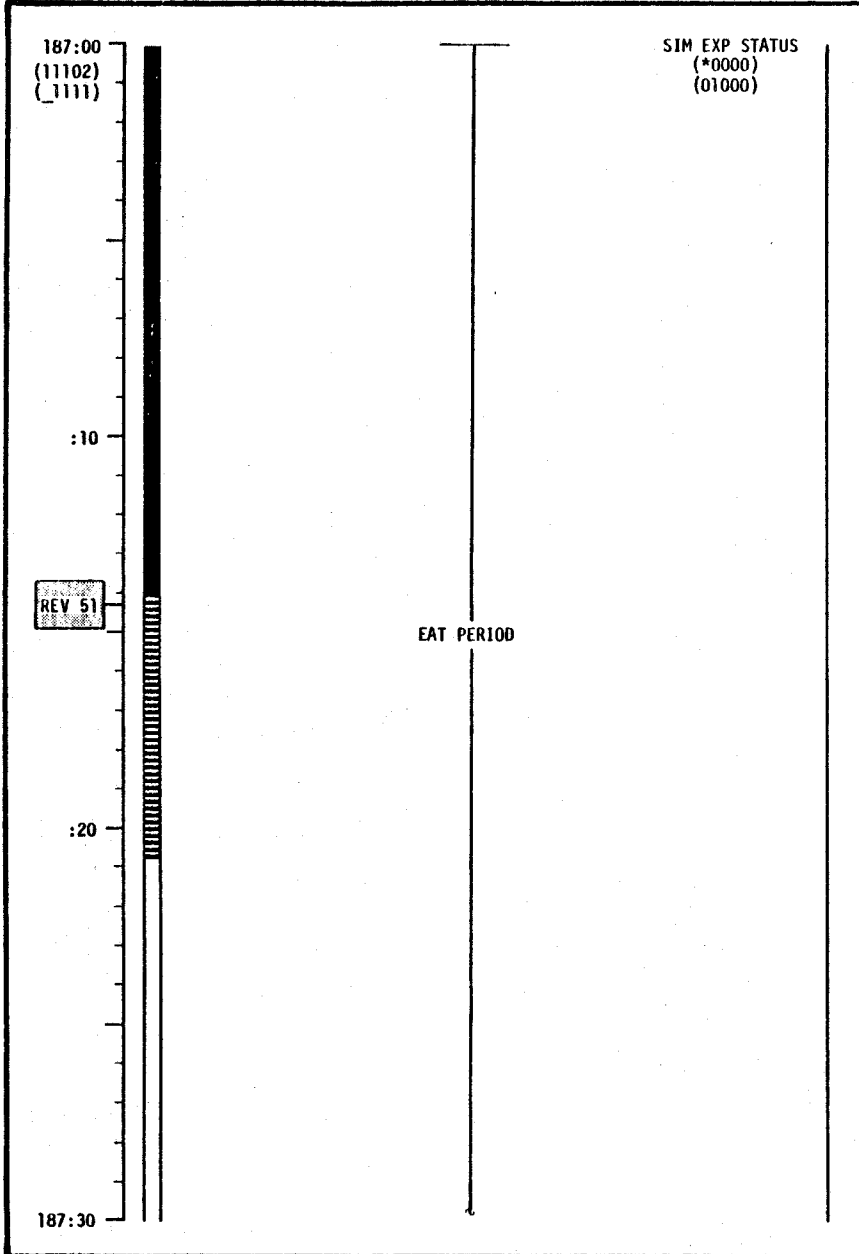
-0:45

UPLINK TO LM
ZERO POS/NEG CELLS
CSM S.V. (L/O)
(IF REQ)
RLS (IF REQ)

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

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

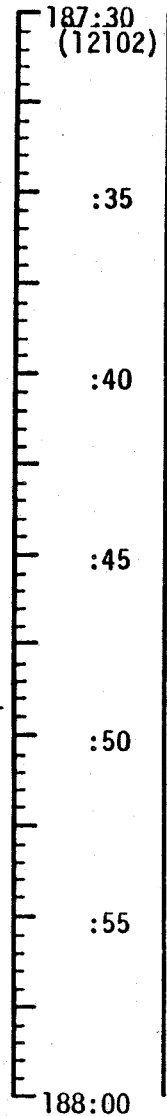
1623 CST

CDR

LMP

NOTES

UPDATE TO LM
AGS K-FACTOR
AGS 047 & 053
LGC GYRO COMP
(IF REQ)
PIPA BIAS (IF REQ)



P12 POWERED ASCENT

COPY & LOAD AGS 047, 053
SET CAMERA: LM3/DAC

-0:30

PRELAUNCH SWITCH CHECKS

AGS LUNAR ALIGN

DON HELMETS & GLOVES

V47 SET AGS BIAS
LIFT-OFF COMM, RECORDER - ON

GUIDANCE RECOMMEN-
DATION FOR ASCENT

BATS 2 & 4 - OFF/RESET
DES BATS - DEADFACE

-0:15

APS PRESSURIZATION

GO/NO-GO FOR
LIFT-OFF

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)

EAT PERIOD

SIM EXP STATUS
(*0000)
(01000)

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/TY-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 XPDR - PWR

* IF VHF VOICE REQ:
* VHF AM T/R-T/R (PNL 9) *

UPDATE:
GO/NO-GO FOR LM LIFT-OFF

GDC ALIGN

188:00

EVENT	CONTINGENCY MARKING SCHEDULES															
	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
INSERTION																
UPLINK																
P34																
-30																
-20																
-10																
FINAL COMP																
0																
TPI P35																
+10																
FINAL COMP																
MCC-1 P35																
+20																
FINAL COMP																
+30																
MCC-2																

*(1) SXT MARKS ARE TAKEN BY MANEUVERING SPACECRAFT TO USE COAS VARIANCE (MUST BE DONE PRIOR TO EACH MARKING PERIOD)
 (2) V25 N7E, 76E, 20000E, 0E, V21 N1E, 301E, 3777E
 (IF MARK REJECT BUTTON INADVERTANTLY PUSHED: BEFORE PROCEEDING ON F51: V21 N1E, 1336E, 31264E)

MCC-H

1653 CST

LM FLIGHT PLAN

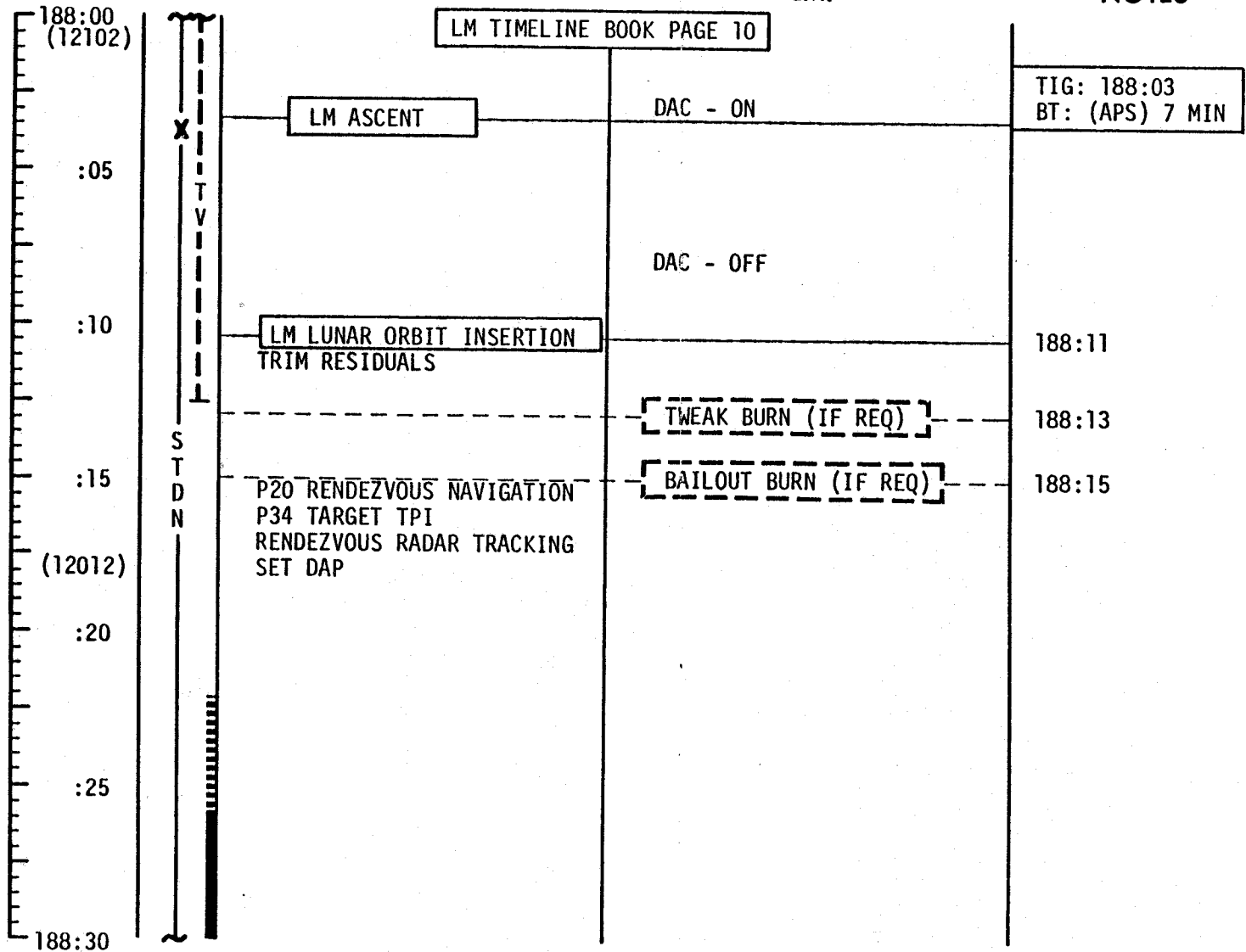
CDR

LMP

NOTES

LM TIMELINE BOOK PAGE 10

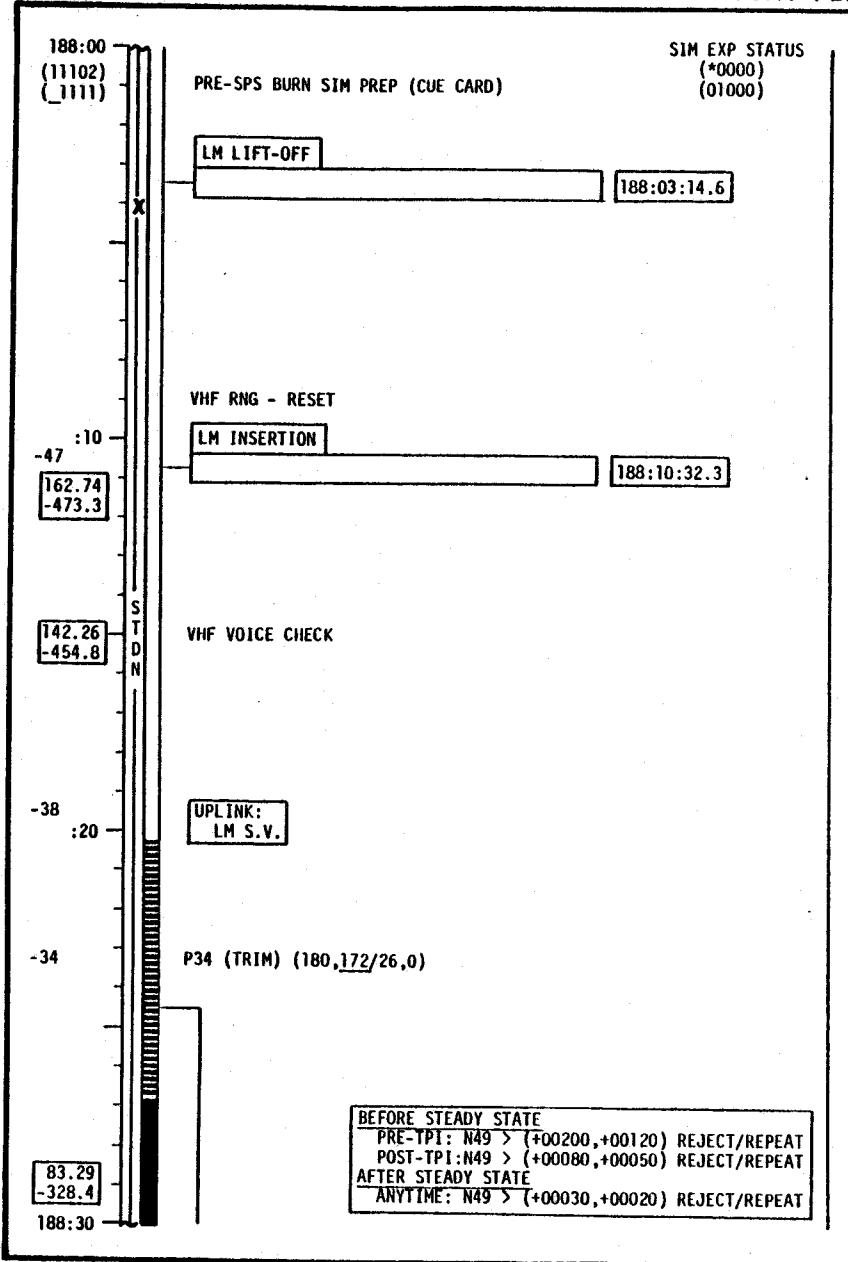
UPDATE TO LM
TWEAK OR BAILOUT
INSTRUCTION
(IF REQ)



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



188:13:32.3 (INS +3) TWEAK
 188:15:32.3 (INS +5) LM B/O
 188:22:32.3 (INS +12) CSM B/O

P30 MANEUVER

N/A SET STARS	C	S	M	B	/	O	PURPOSE
	S	P	S	G	&	N	PROP/GUID
	+			N	/	A	IT N47
R ALIGN N / A		O	O	N	/	A	P TRIM N48
P ALIGN N / A		O	O	N	/	A	Y TRIM
Y ALIGN N / A	+	O	O				HRS GETI
	+	O	O	O			MIN N33
	+	O					SEC
ULLAGE							ΔV_x N81
4 JET, 11 SEC							ΔV_y
							ΔV_z
	X	X	X				R
	X	X	X				P
	X	X	X				Y
ΔVC	+			N	/	A	H_A N44
				N	/	A	H_P

*IF LM BAILOUT REQ: *IF CSM BAILOUT REQ:

* COPY P76 DATA FROM LM *

* * * * *

*33 : : *

* * * * *

*84 . . . *

* * * * *

*GO TO RESCUE BOOK PG 4 *UPDATE:

***** * CSM BAILOUT P30 PAD

* * * * *

* * * * *

* * * * *

* * * * *

* * * * *

* * * * *

* * * * *

* * * * *

* * * * *

* * * * *

P34 INPUT

37	LM GETI-TPI	:	:	:
55	INTEG OPT +00000	ELEVATION +00000	TRANSFER +130.00	

LM FLIGHT PLAN

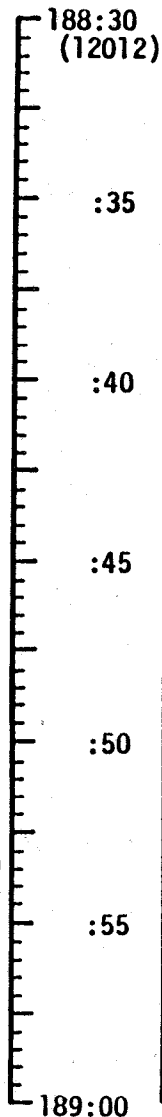
MCC-H

1723 CST

CDR

LMP

NOTES



DISABLE STDN S-BAND RELAY

P42 APS THRUSTING

CONFIGURE S-BD FOR LOS
PCM - HI

MANUAL ULLAGE

LM TPI

NULL RESIDUALS
P35 TARGET MCC-1

TIG: 188:58
BT: (APS) 2.7 SEC
ULLAGE: 4 JET, 10 SEC

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

188:30
(11102)
(1111)
83.29
-328.4

SIM EXP STATUS
(*0000)
(31000)

-20

P34 RECYCLE

:40

S
T
D
N

46.66
-167.7

COMPARISON LIMITS: VGX=3, VGY=7, VGZ=9
(LM VGX + 1.0, LM VGZ -2.0)
PRIORITIES: LGC, AGS, CMC
VHF/RR COMPARISON LIMIT:
R
 $\Delta R = 100 + 0.5 (\Delta R \geq 1.0) NM$

-10

P34 FINAL COMP

-8

P40 (27°) (180,152/279,0)

:50

CMDS:
DSE RECORD

COMPARE SOLUTIONS; SPS BURN CUE CARD
VHF AM T/R-T/R (PNL 9)
VERIFY DSE TAPE MOTION (LBR/RCD/FWD/CMD RESET)
SET HGA MAN P -35, Y +37 AUTO, NARROW FOR AOS

STDN DISABLES S-BAND RELAY

-6

29.37
-129.0
189:00

TPI

P76

P35 (TRIM) (180,176/277,0)

188:57:32.3
LM +75.1, -0.5, +14.1
CSM -76.1, +0.5, -12.1
(180,171/279,0)

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	LM TPI ΔV-LV .	.	.

P76

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-287

LM FLIGHT PLAN

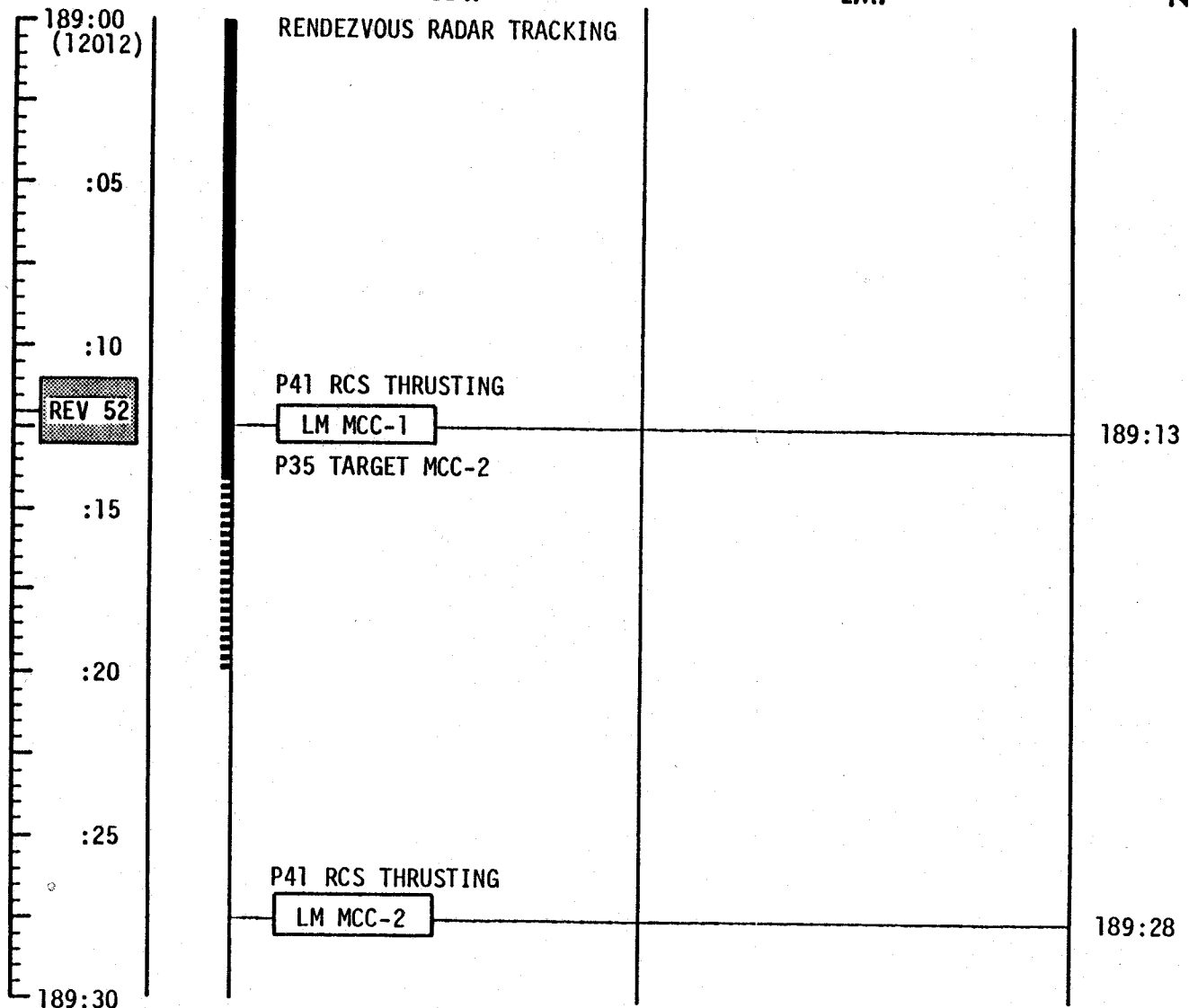
MCC-H

1753 CST

CDR

LMP

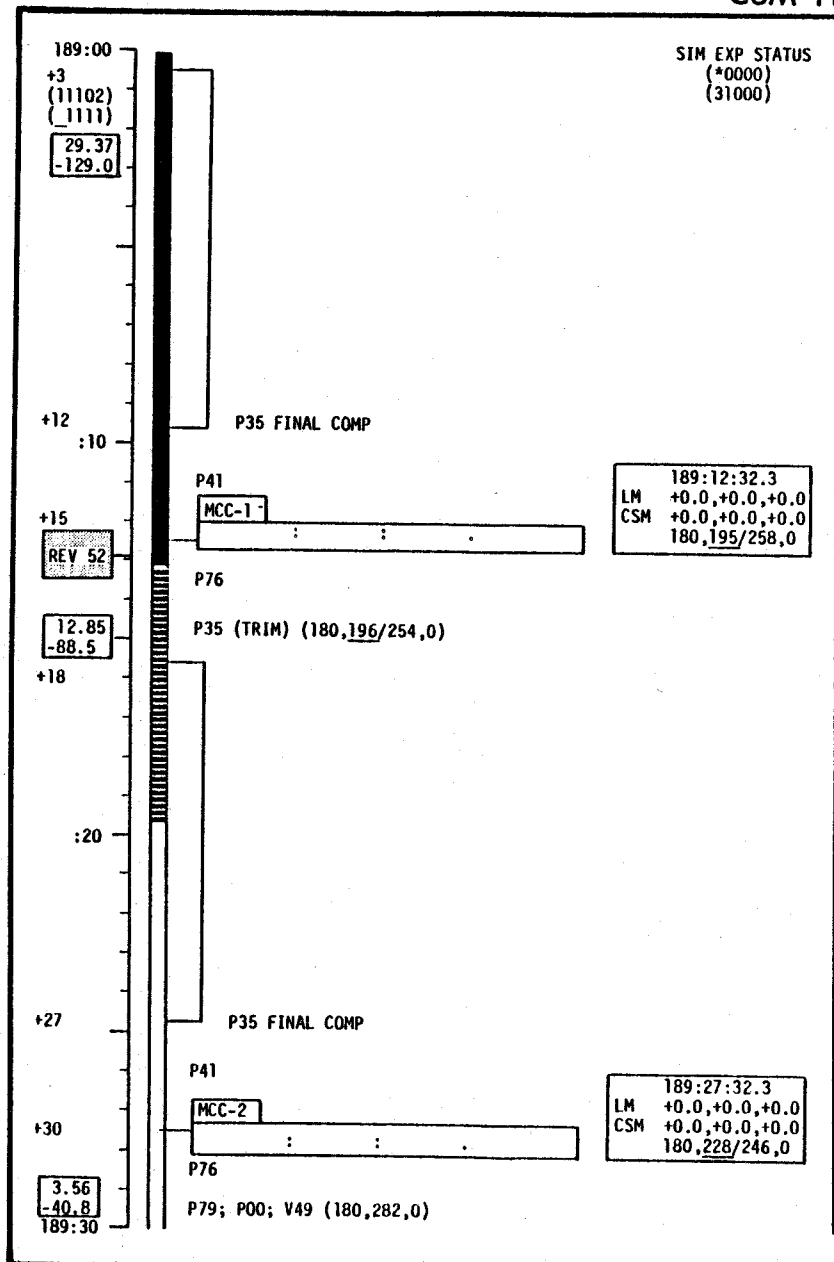
NOTES



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			
81	MCC1 ΔV-LV		
84	LM MCC1 ΔV-LV	•	•
84	LM MCC1 ΔV-LV	•	•
P76		•	•

 * IF CSM ACTIVE & N58 TPF ΔV >55 FPS *
 * GO TO PRE-BRAKING SPS BURN PROCEDURES *
 * (SEE RESCUE BOOK PG 40) *

P35 FINAL COMP			
81	MCC2 ΔV-LV		
84	LM MCC2 ΔV-LV	•	•
84	LM MCC2 ΔV-LV	•	•
P76		•	•

MCC-H

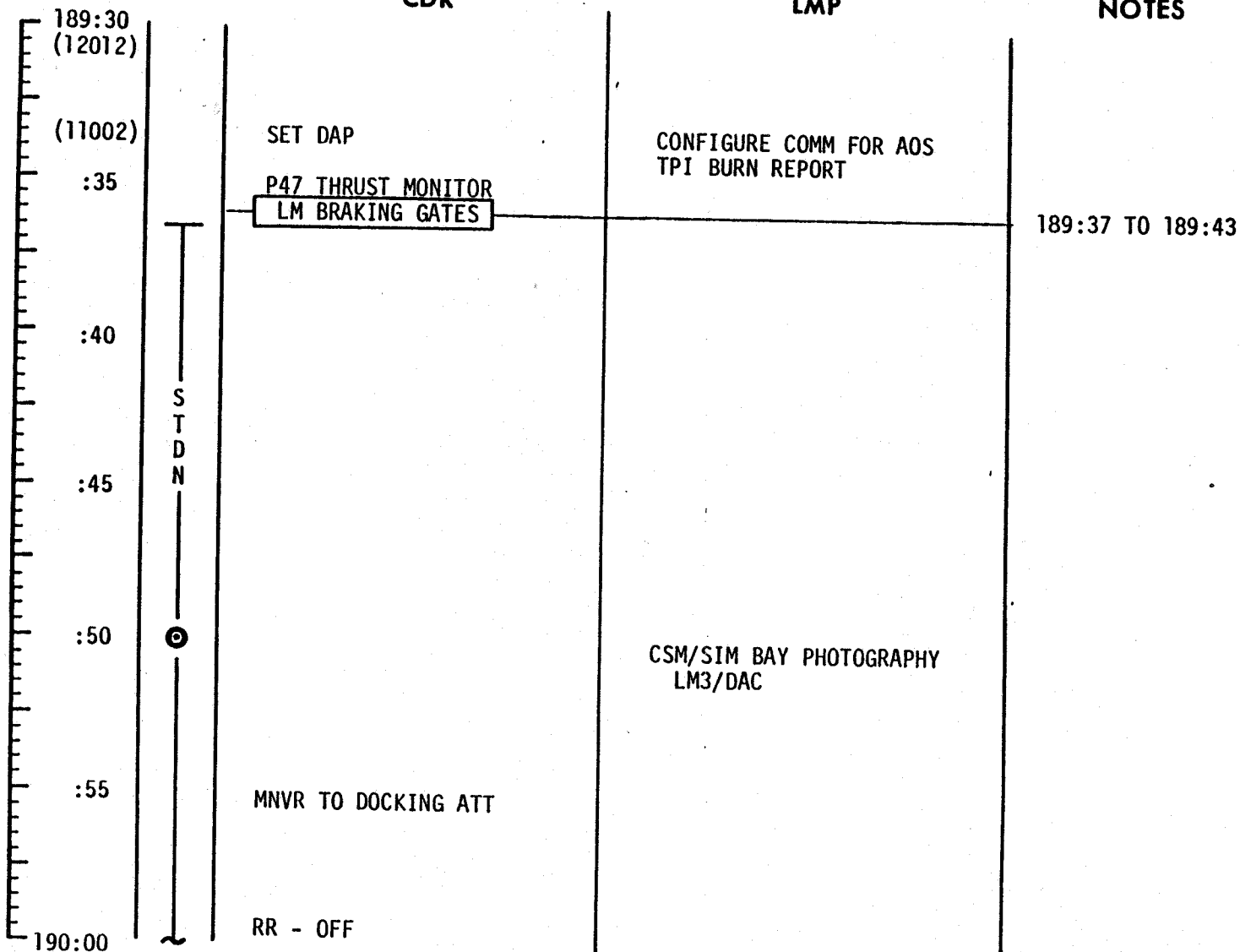
1823 CST

LM FLIGHT PLAN

CDR

LMP

NOTES



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

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

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

SECS PYRO ARM (2) - ON (UP)

189:40:28.1
LM 31.5 (TOTAL)
CSM 33.6 (TOTAL)
180,304/282,0

PRE-DOCK CHECKLIST

<p>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</p>	<p>CB DOCK PROBE (2) - CLOSE PROBE RETRACT (2) - OFF (VERIFY) PROBE EXT/REL - RETRACT PROBE EXT/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)</p>
---	---

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

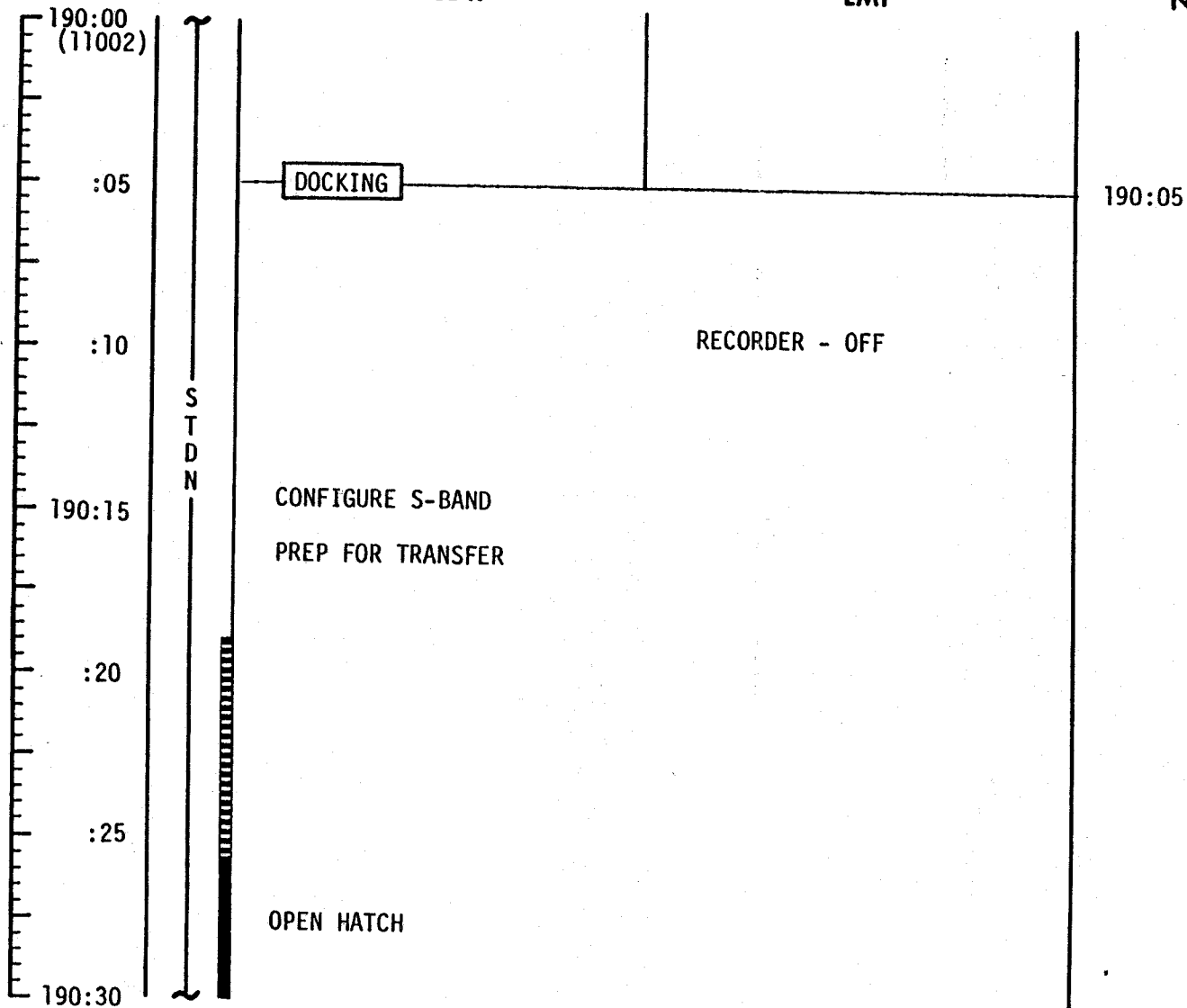
MCC-H

1853 CST

CDR

LMP

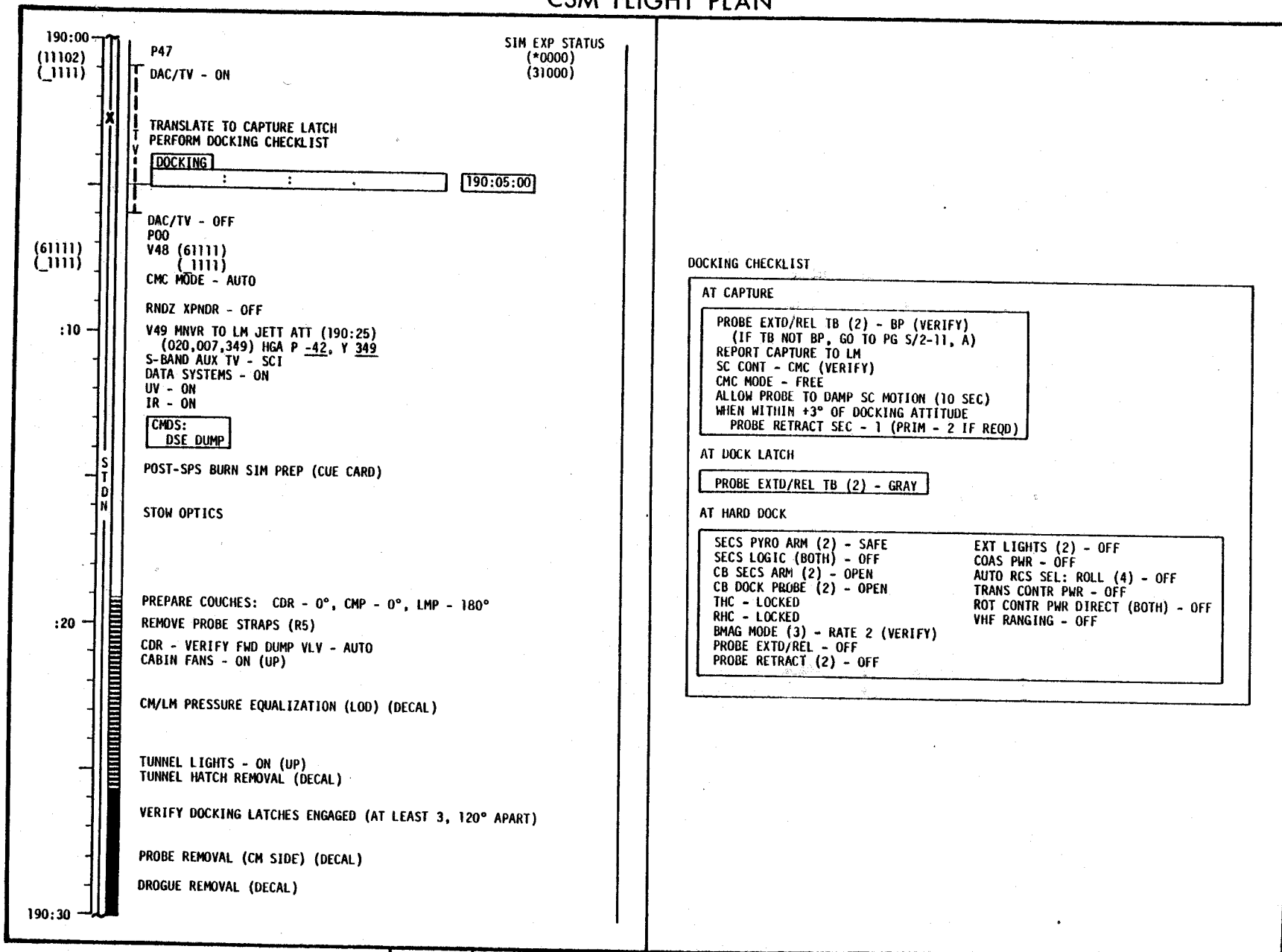
NOTES



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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-293

LM FLIGHT PLAN

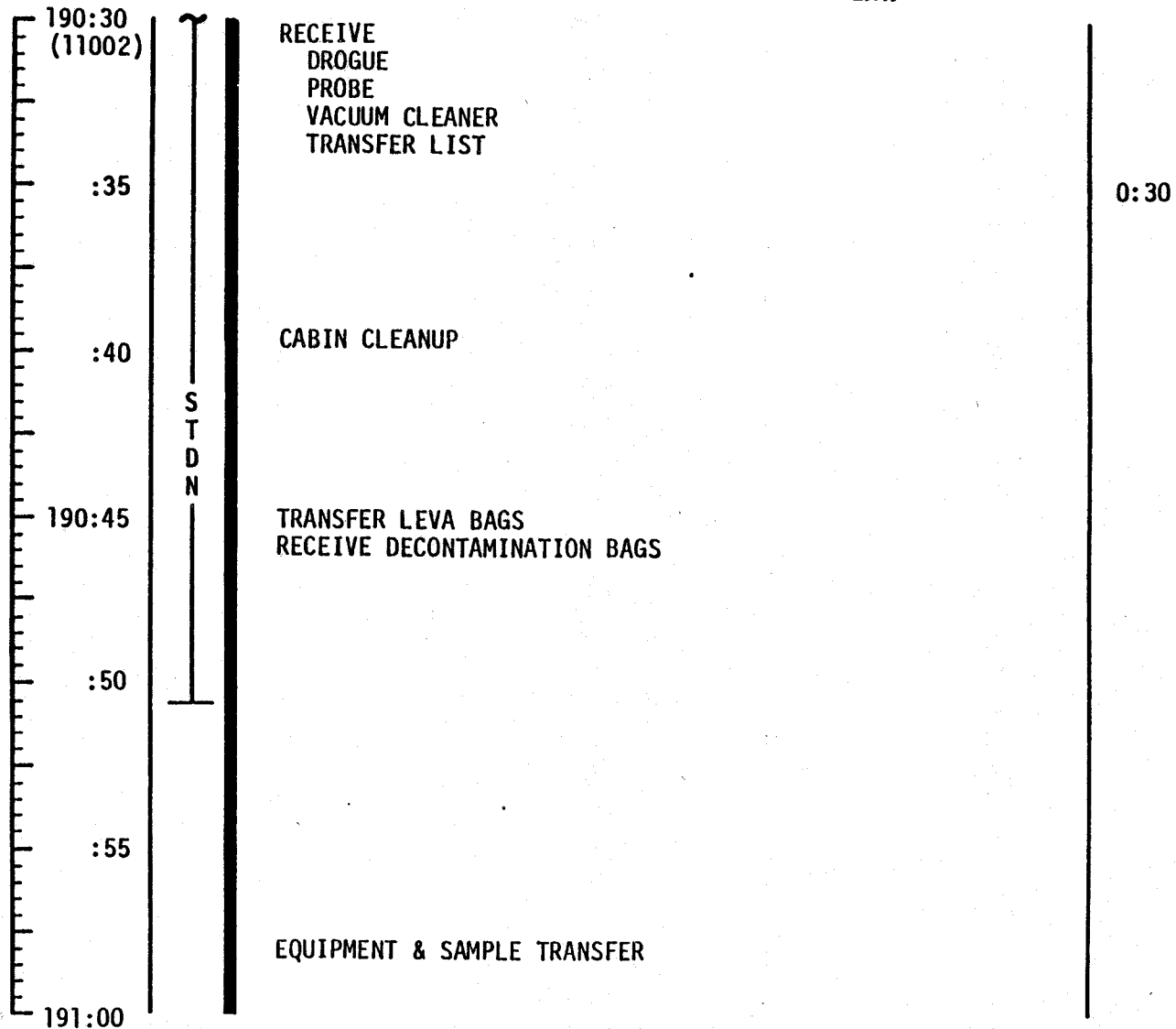
MCC-H

1923 CST

CDR

LMP

NOTES



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

<p>190:30 (61111) (1111)</p>	<p>TRANSFER TO CDR AT HIS REQUEST: PROBE DROGUE VACUUM CLEANER (ASSEMBLED) LM TO CM TRANSFER LIST</p>	<p>SIM EXP STATUS (*0000) (01011)</p>	
<p>:40</p>	<p>S T O P</p>		
<p>:50</p>	<p>RECEIVE LEVA BAGS</p> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 5px auto;"> <p>CMDS: DSE RECORD</p> </div> <p>TRANSFER TO CDR: DECONTAMINATION BAGS</p>		
<p>191:00</p>	<p>VERIFY DSE TAPE MOTION (HBR/RCD/FWD/CMD RESET) SET HGA MAN P <u>-42</u>, Y <u>349</u> AUTO, NARROW FOR AOS</p> <p>RECEIVE ITEMS FROM LM AND STOW (LM TO CM TRANSFER LIST)</p>		

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-295

MCC-H

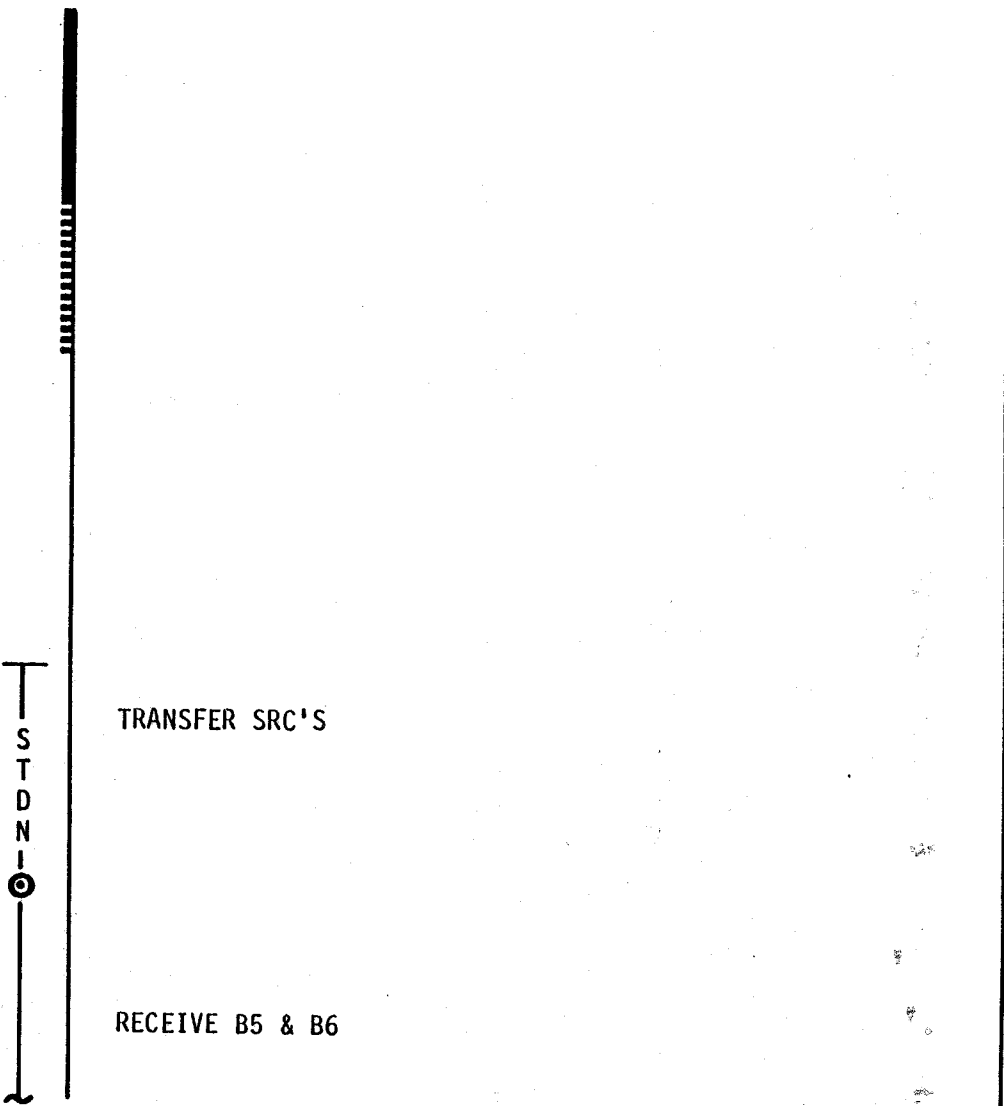
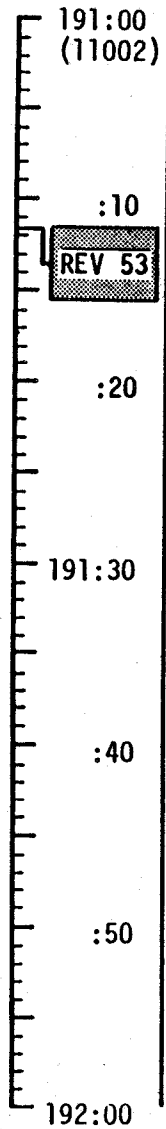
1953 CST

LM FLIGHT PLAN

CDR

LMP

NOTES



1:00

1:30

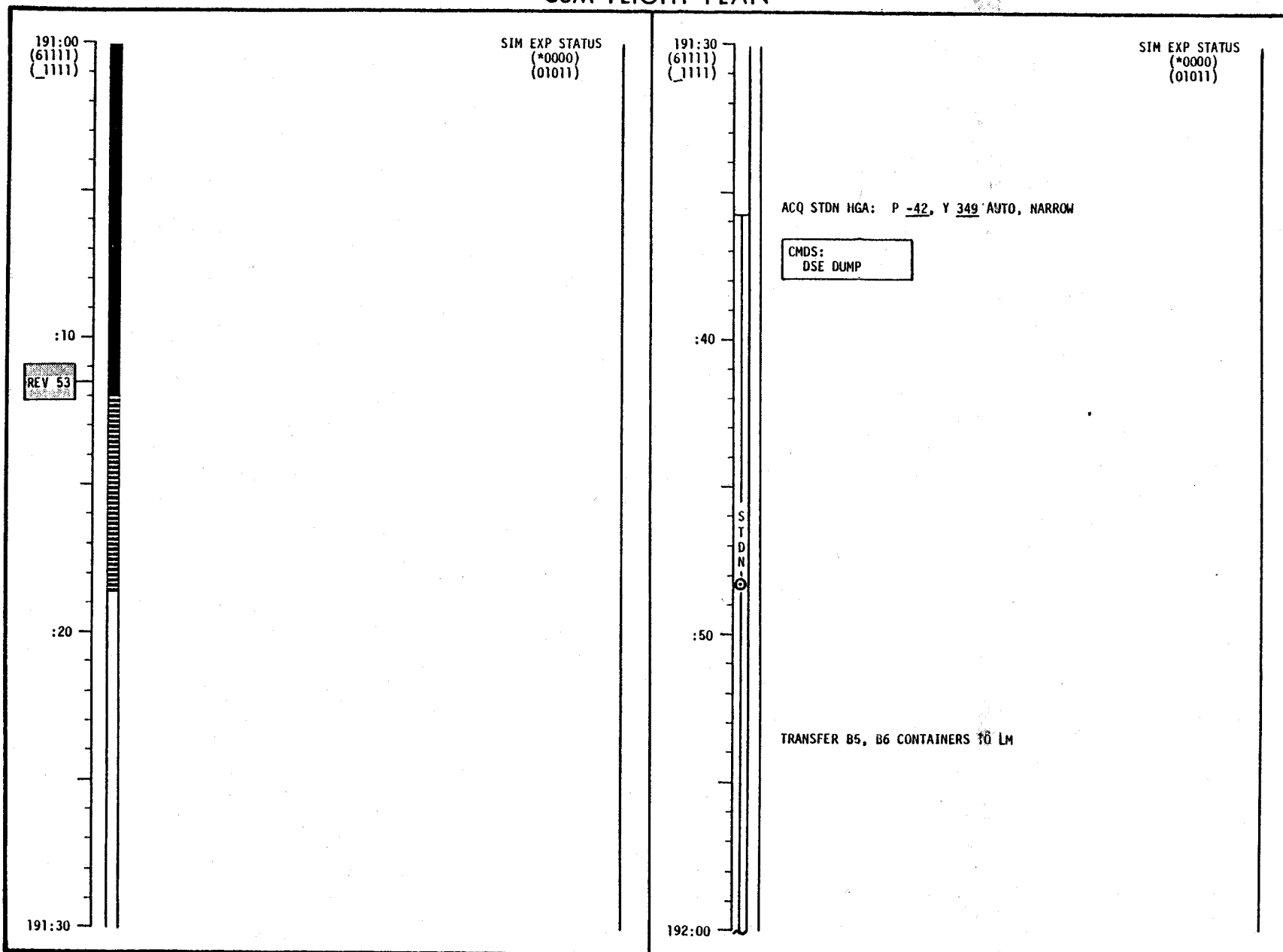
TRANSFER SRC'S

RECEIVE B5 & B6

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



LM FLIGHT PLAN

MCC-H

2053 CST

CDR

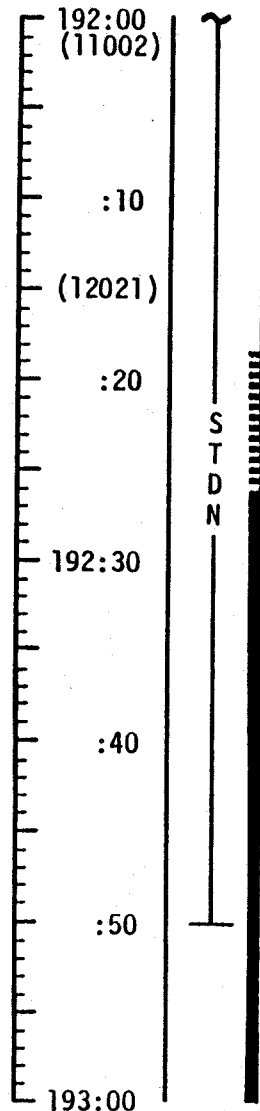
LMP

NOTES

UPLINK TO LM
LM S.V. (TIG-10)
P30 TARGET LOAD
P99 LM DEORBIT

UPDATE TO LM
DAP LOAD (WEIGHTS)
DEORBIT BURN PAD

GO/NO-GO FOR LM
CLOSEOUT



192:00
(11002)

:10

(12021)

:20

192:30

:40

:50

193:00

S
T
D
N

SET DAP
P30 TARGET PGNS

CONFIGURE AGS

CONFIGURE LM FOR JETTISON

CONFIGURE VHF FOR CLOSEOUT

TRANSFER JETTISON ITEMS

2:00

2:30

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)

:10

:20
(61101)
(1111)

192:30

SIM EXP STATUS
(*0000)
(01011)

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)

V48 (61101)
(1111)
CONTINUE EQUIP & SAMPLE TRANSFER

LM JETTISON PAD				HRS	GET1
+	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
(61101)
(1111)

:40

:50

193:00

SIM EXP STATUS
(*0000)
(01011)

UPDATE:
GO/NO-GO FOR LM CLOSEOUT

CMDS:
DSE RECORD

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

TRANSFER CM JETTISON ITEMS TO LM

NOTICE
NO URINE/FECES
ALL OPEN FOOD MUST
BE TREATED AND
STORED IN BETA BAG

LM FLIGHT PLAN

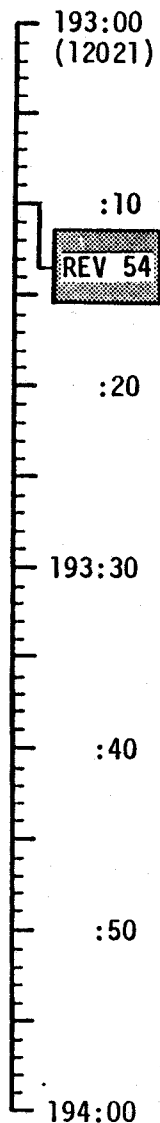
MCC-H

2153 CST

CDR

LMP

NOTES



IVT TO CSM

CLOSE HATCH, IVT TO CSM

3:00

LM CLOSEOUT

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

<p>193:00 (61101) (1111)</p> <p style="text-align: right;">SIM EXP STATUS (*0000) (01011)</p> <p>CDR & LMP IVT TO CSM VHF AM B - OFF (CTR)</p> <p style="text-align: center;">:10</p> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 5px auto;">REV 54</div> <p>LMP - CLOSE LM HATCH</p> <p>STOW INTERCONNECTS - A8 SUIT FLOW VALVE (3) - SUIT FULL FLOW HATCH INSTALLATION (DECAL)</p> <p>HATCH INTEGRITY CHECK (DECAL)</p> <p style="text-align: center;">:20</p> <p>CONFIGURE CAMERA FOR LM JETTISON PHOTOS CM2/DAC/18/CEX - BRKT_MIR(T8,1/250,7) 12 fps (50% MAG)</p> <p>MAG (DD) _____, MAG % _____ UTILITY PWR - ON</p> <p>193:30</p>	<p>193:30 (61101) (1111)</p> <p style="text-align: right;">SIM EXP STATUS (*0000) (01011)</p> <p>P30; N33: LM JETTISON TIG +5 MIN N81 (+2.0, +0.0, +0.0)</p> <p>LM PWR - OFF (VERIFY) cb SECS PYRO ARM (2) - CLOSE</p> <p>ACQ STDN HGA: P -42, Y 349 REACQ, NARROW</p> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 5px auto;">CMDS: DSE DUMP</div> <p>CUE STDN FOR LOGIC ARM SECS LOGIC (2) - ON (UP)</p> <p>REPORT: LM/CM ΔP DON HELMETS AND GLOVES</p> <p style="text-align: center;">:40</p> <p>SUIT CKT INTEGRITY CHECK (DECAL)</p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: 80%;"> <p style="text-align: center; margin: 0;">PRE-JETTISON CHECKLIST</p> <p>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</p> </div> <p style="text-align: center;">:50</p> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 5px auto;">UPDATE: GO/NO-GO FOR PYRO ARM</div> <p>LOAD ΔV IN EMS TO +100.0 CHECK NULL BIAS GDC ALIGN</p> <p>PRE-JETTISON CHECKLIST V48 (11102) (1111)</p> <p>SECS PYRO ARM (2) - ARM</p> <p>P47 (JETT -1 MIN) EMS MODE - NORMAL (JETT -30 SEC) DAC - ON (JETT -25 SEC)</p> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px;">LM JETTISON</div> <div style="border: 1px solid black; padding: 2px;">193:58:30</div> </div> <div style="border: 1px solid black; padding: 2px; margin-top: 5px; width: 80%; margin-left: auto;">: : : (020,090/007,349)</div> <p>HOLD P47 FOR STDN P00</p> <p>194:00</p>
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CSM FLIGHT PLAN

194:00
(11102)
(1111)

:10

(11101)
(1111)
(P20)
(2.5°DB)

:20

194:30

PRE-SEPARATION CHECKLIST

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 CMG'S

DOFF PGA'S

UPLINK:
CSM S.V. & V66

CDR, CMP DOFF BIOMED HARNESS

SIM EXP STATUS
(*0000)
(01011)

PRE-SEPARATION CHECKLIST

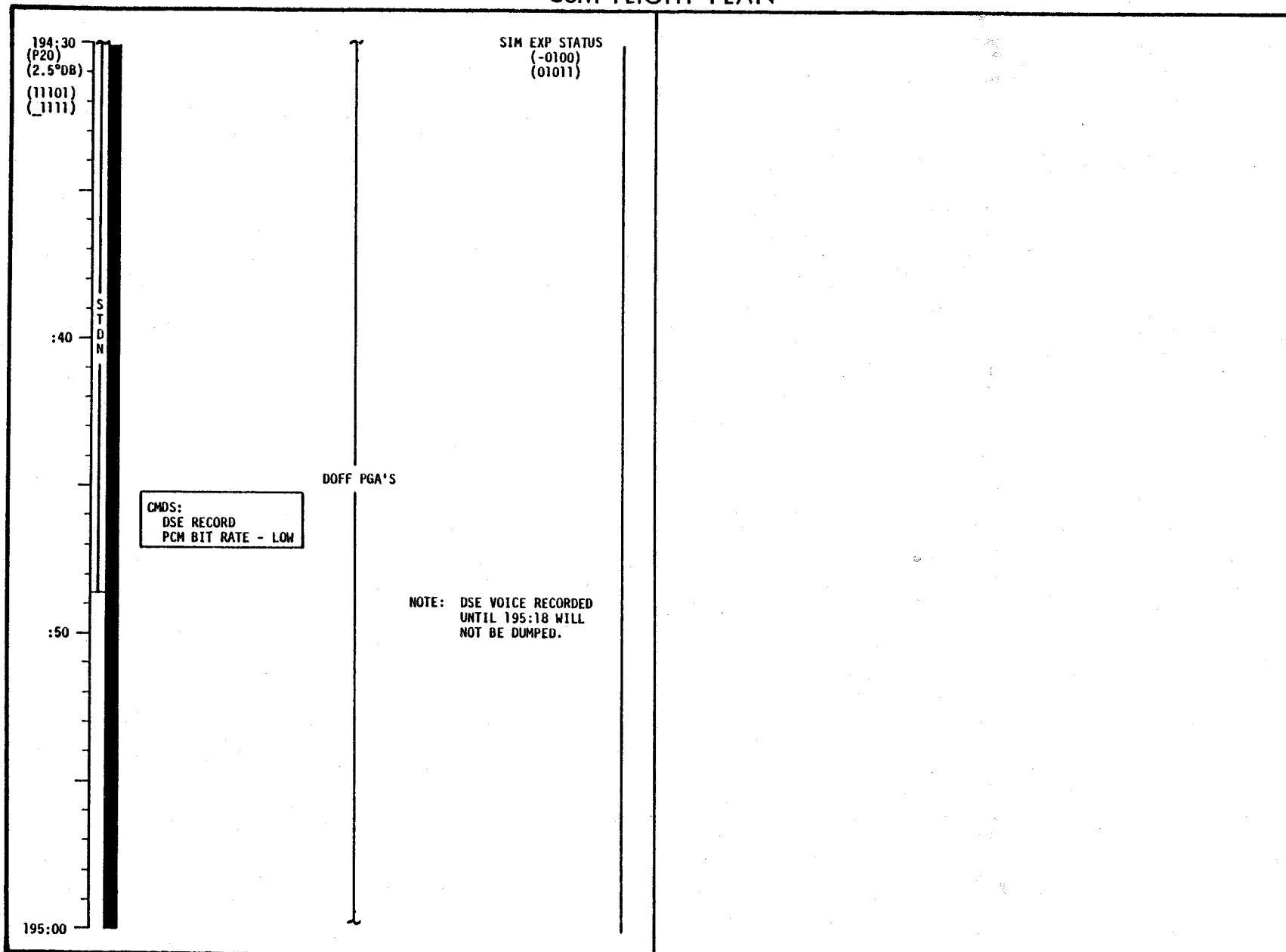
EMS MODE - STBY
SC CONT - CMC
BMAG MODE (3) - RATE 2
V49 MNVR RIGHT 90°
(110,007,349)
DAC - OFF
AUTO RCS SEL (16) - MNA/MNB
SECS PYRO ARM (2) - SAFE
SECS LOGIC (2) - OFF
cb SECS PYRO ARM (2) - OPEN
cb CSM/LM FINAL SEP (2) - OPEN
P41 (BYPASS MNVR)
EMS MODE - NORMAL (SEP -30 SECS)

NOTE:

LM JETTISON MAY BE
DONE IN LM JETTISON
ATTITUDE UNTIL LOS (194:48)

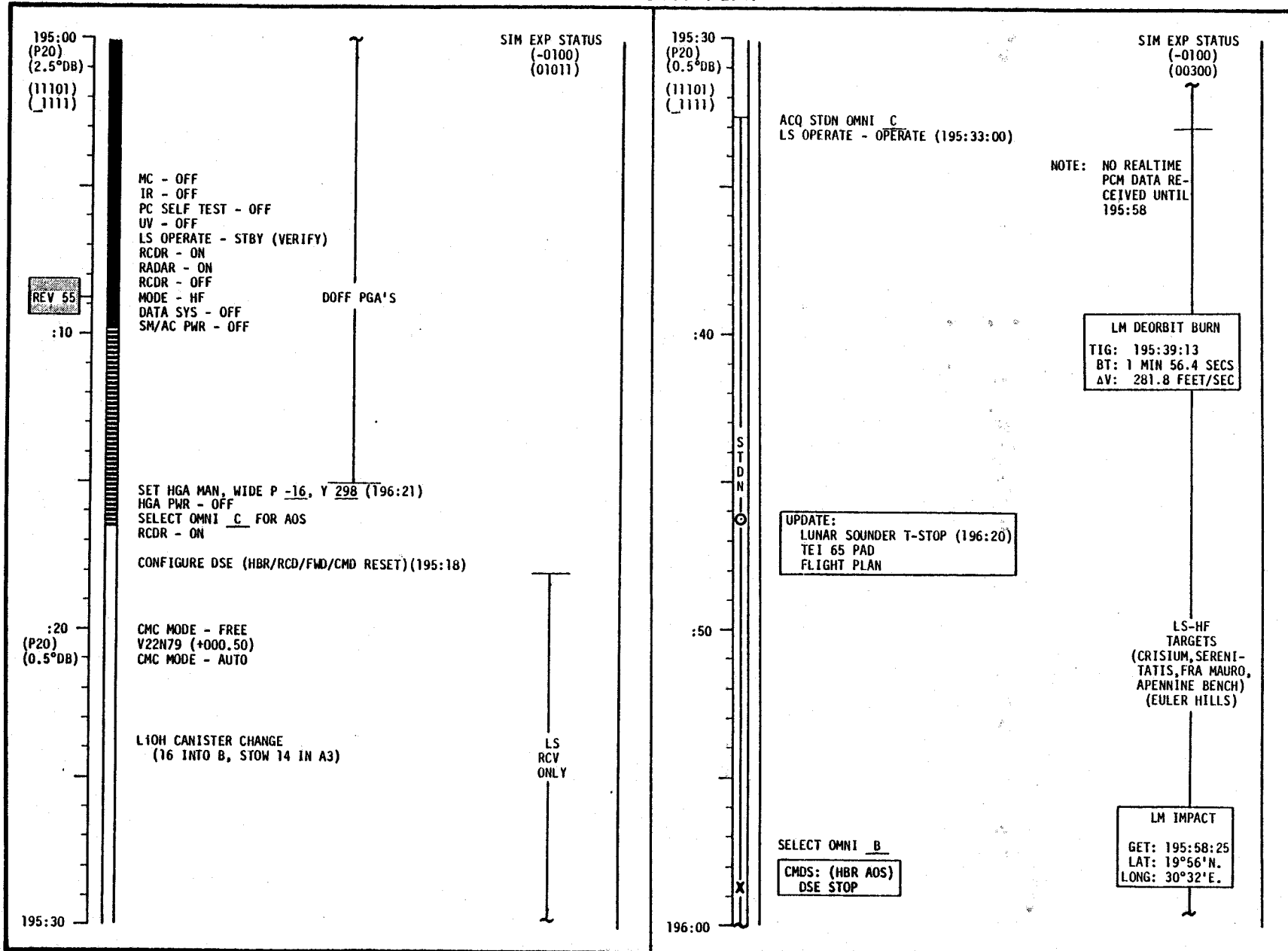
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-302

CSM FLIGHT PLAN



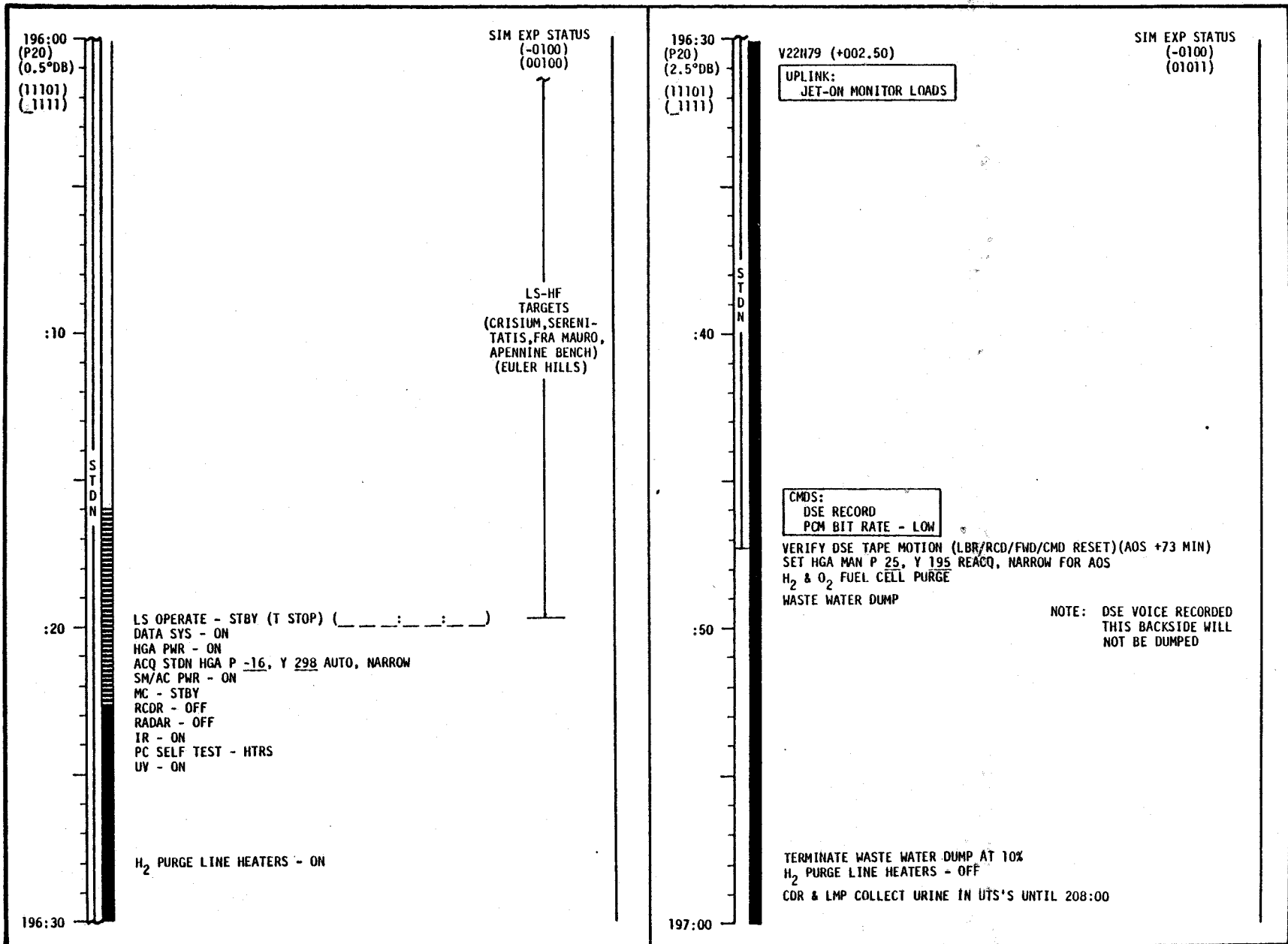
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-303

CSM FLIGHT PLAN

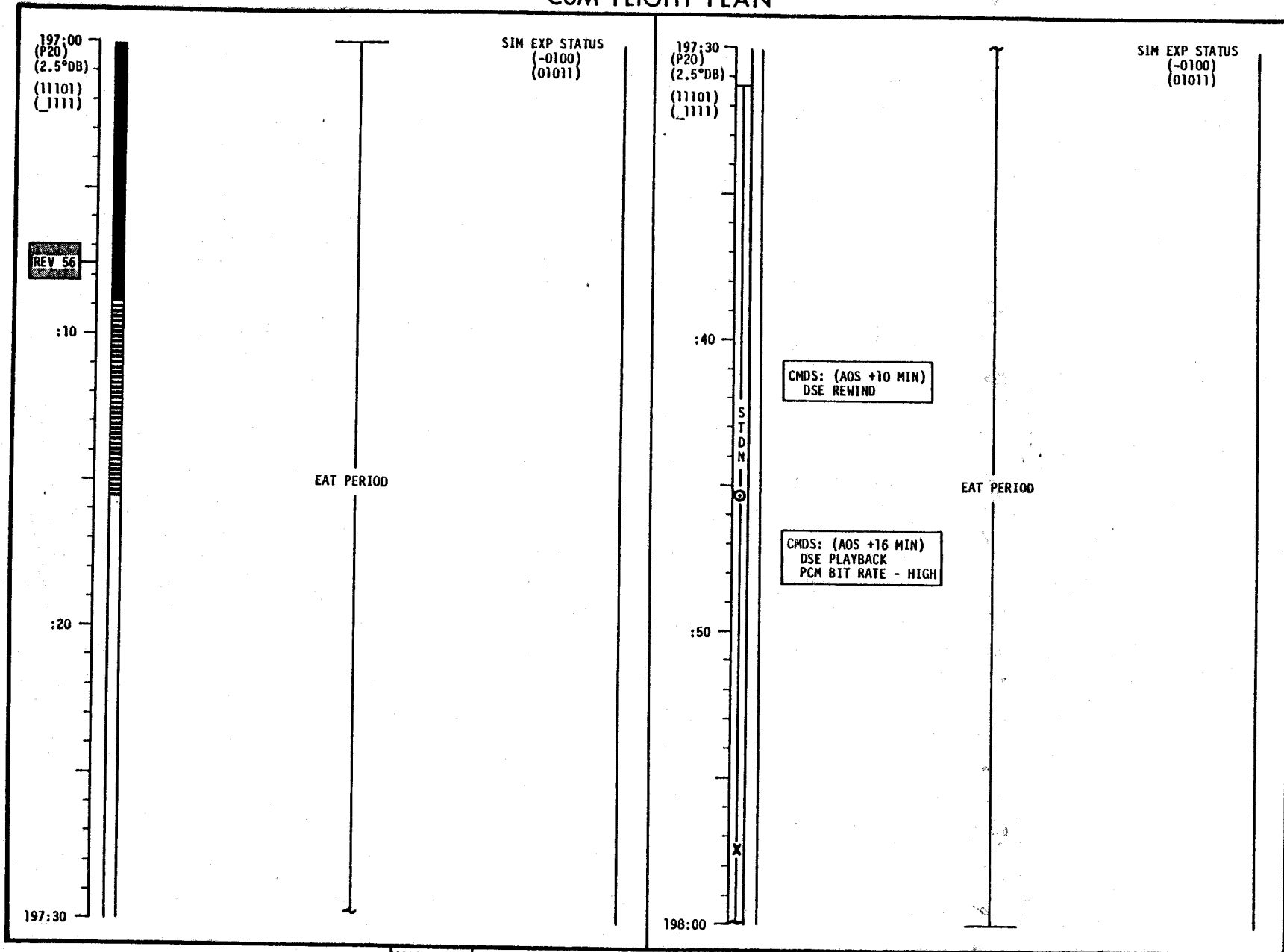


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-304

CSM FLIGHT PLAN

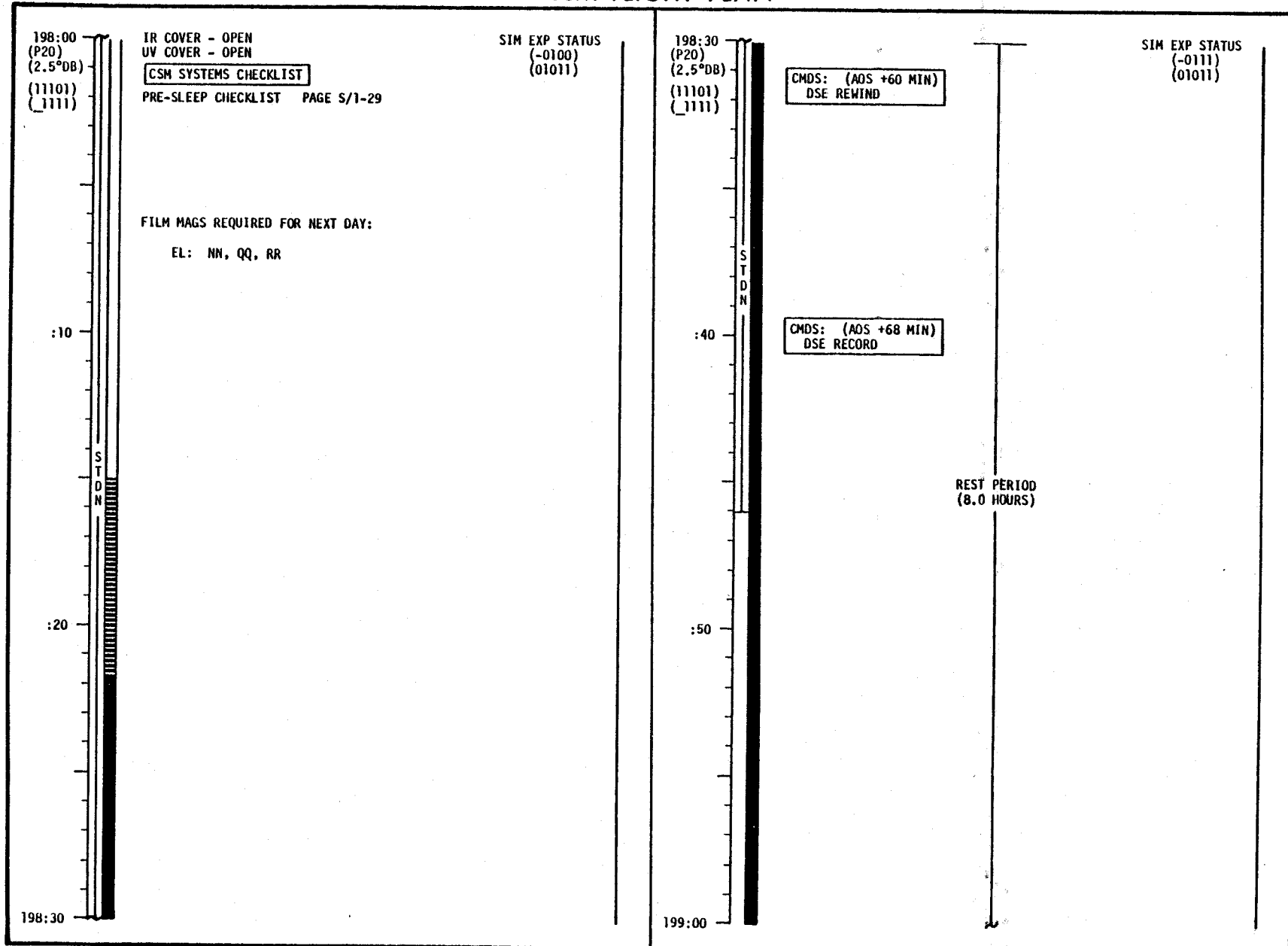


CSM FLIGHT PLAN



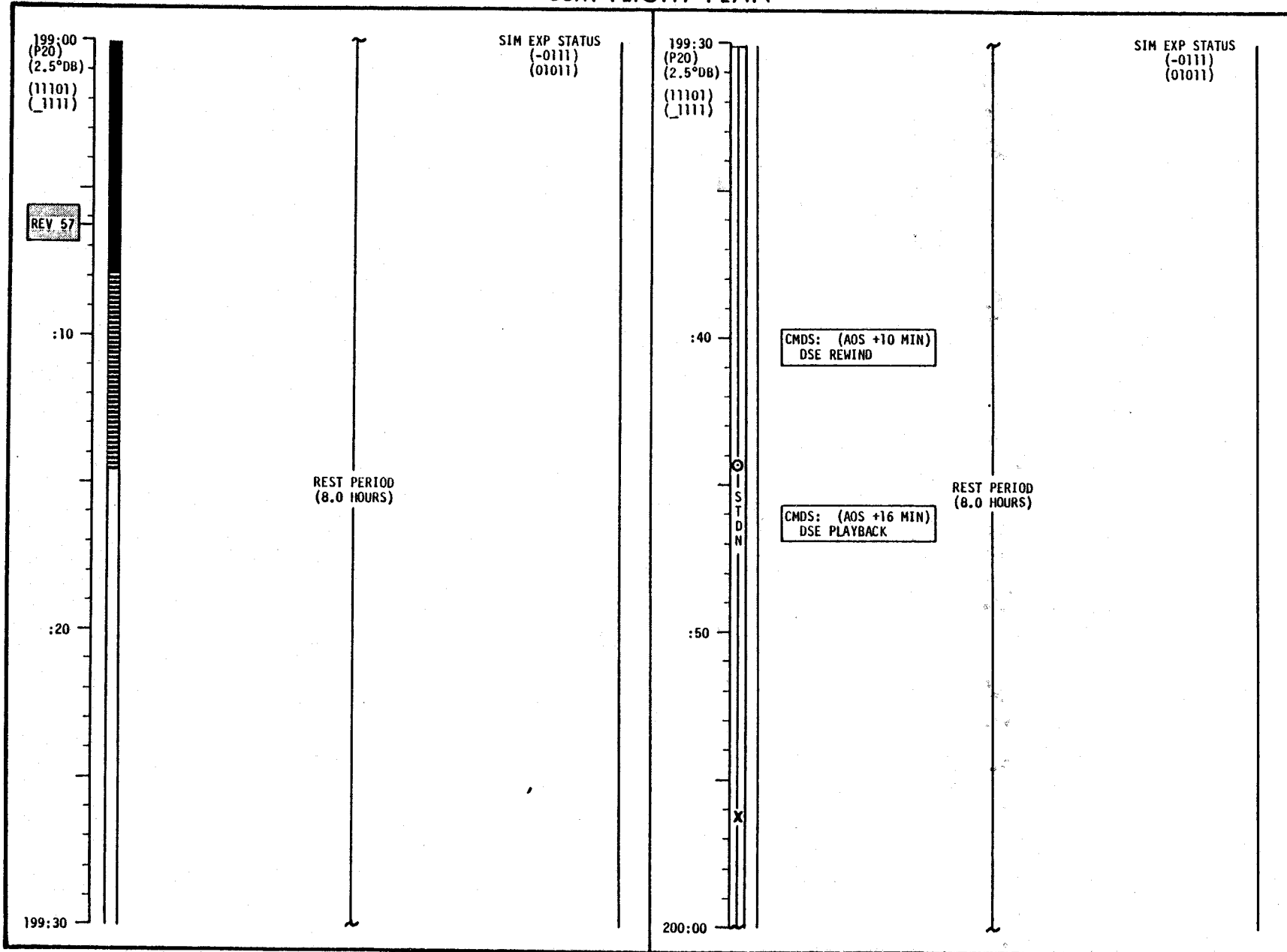
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-306

CSM FLIGHT PLAN



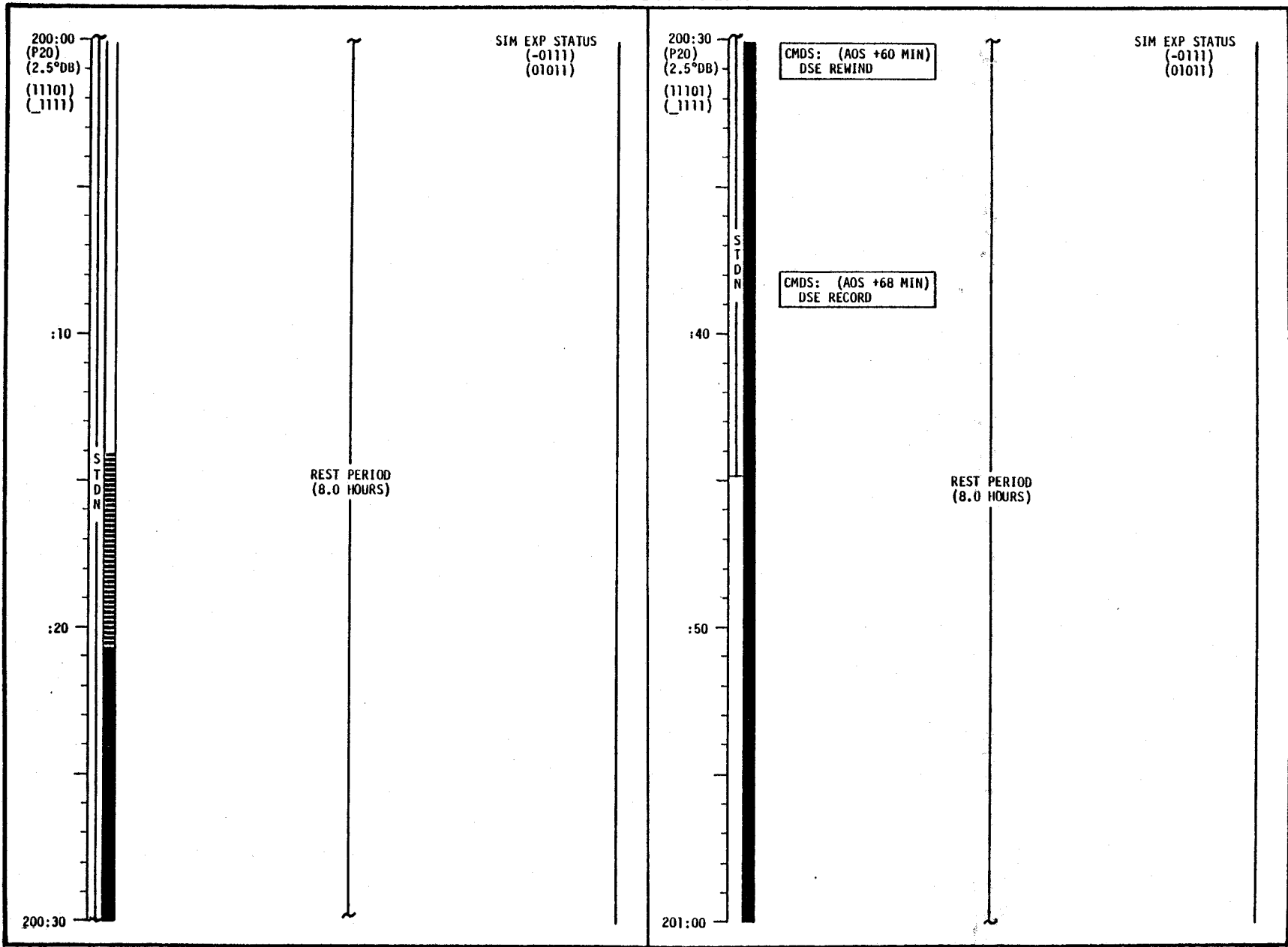
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-307

CSM FLIGHT PLAN



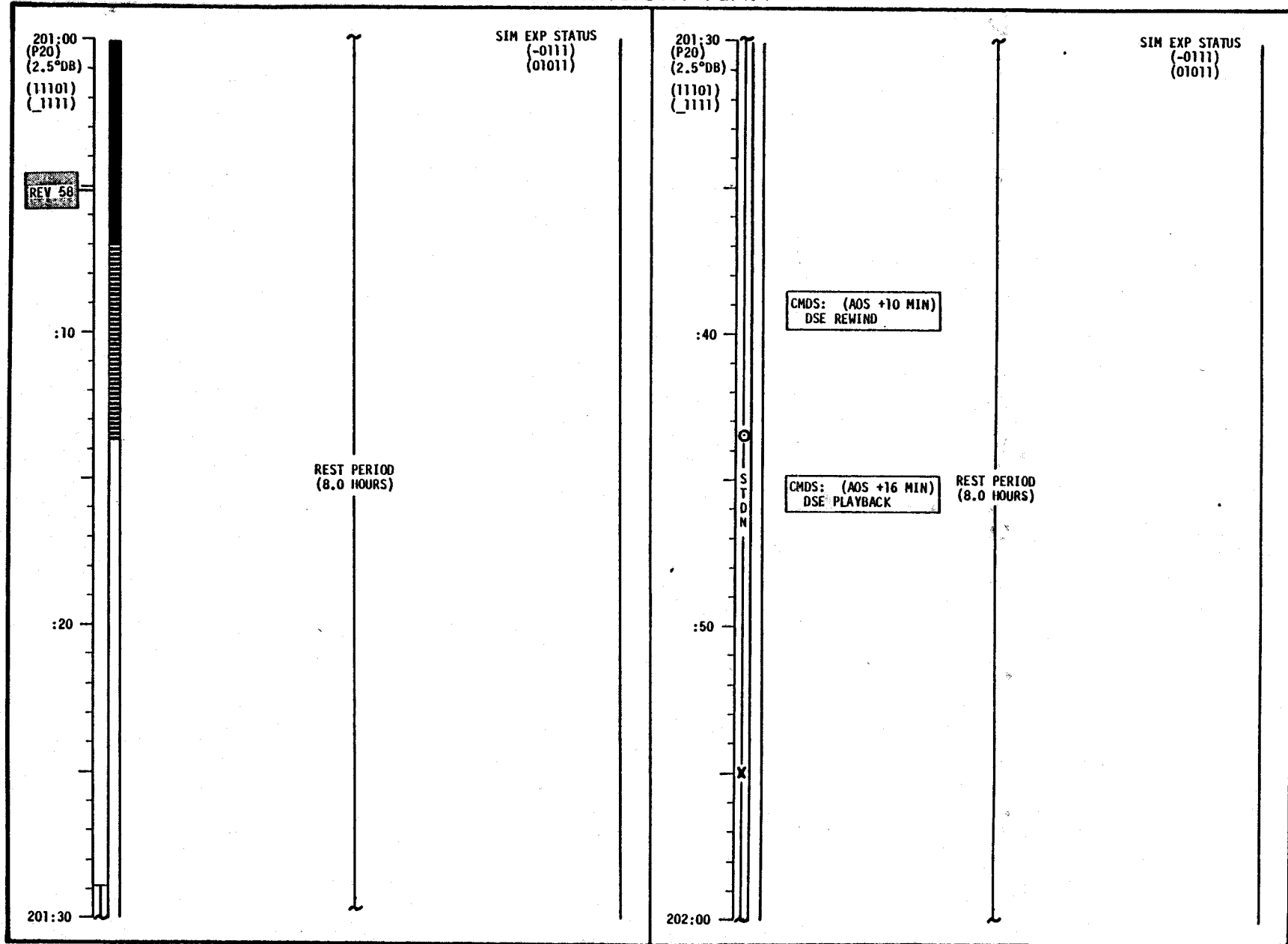
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-308

CSM FLIGHT PLAN



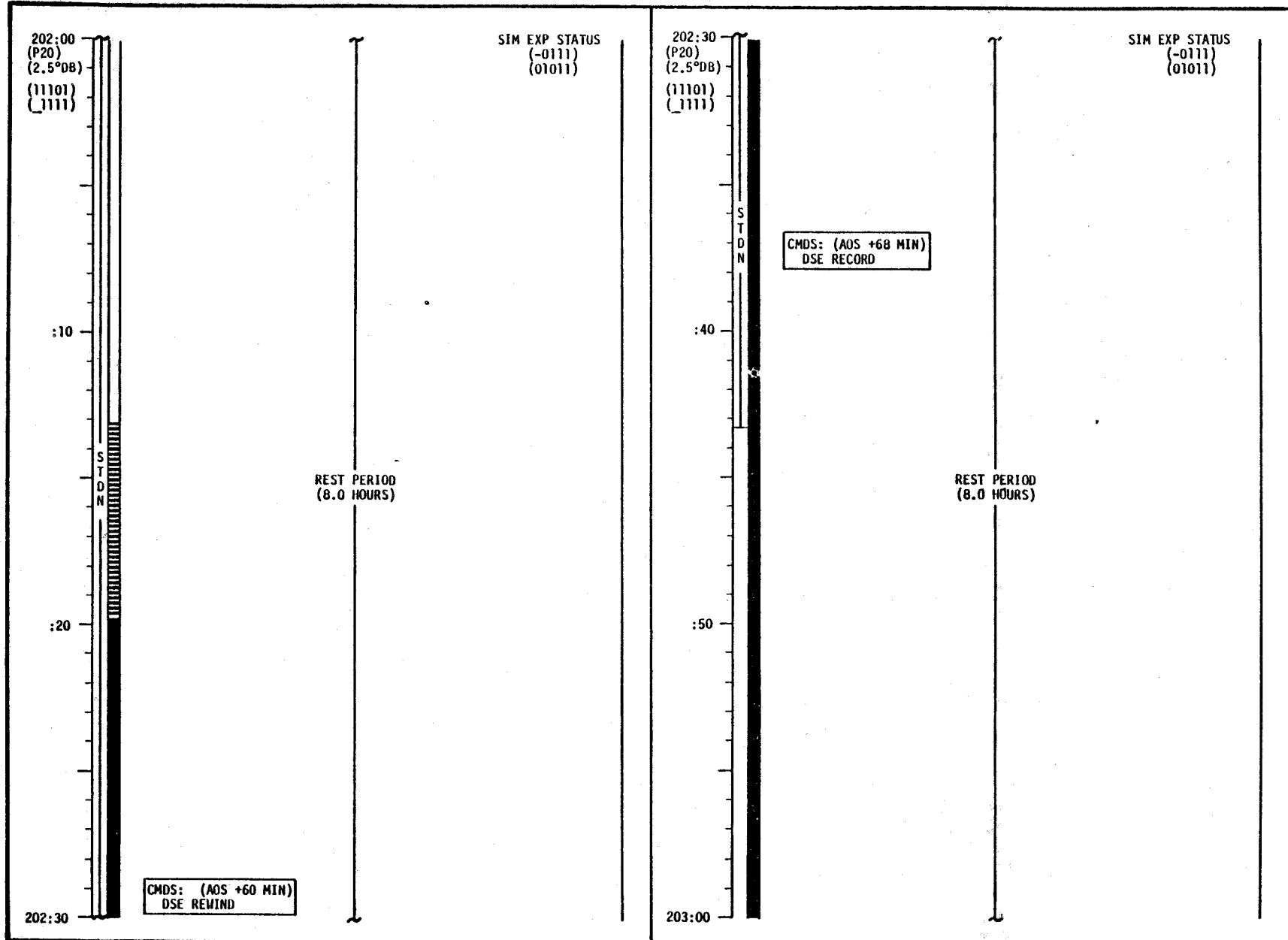
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-309

CSM FLIGHT PLAN



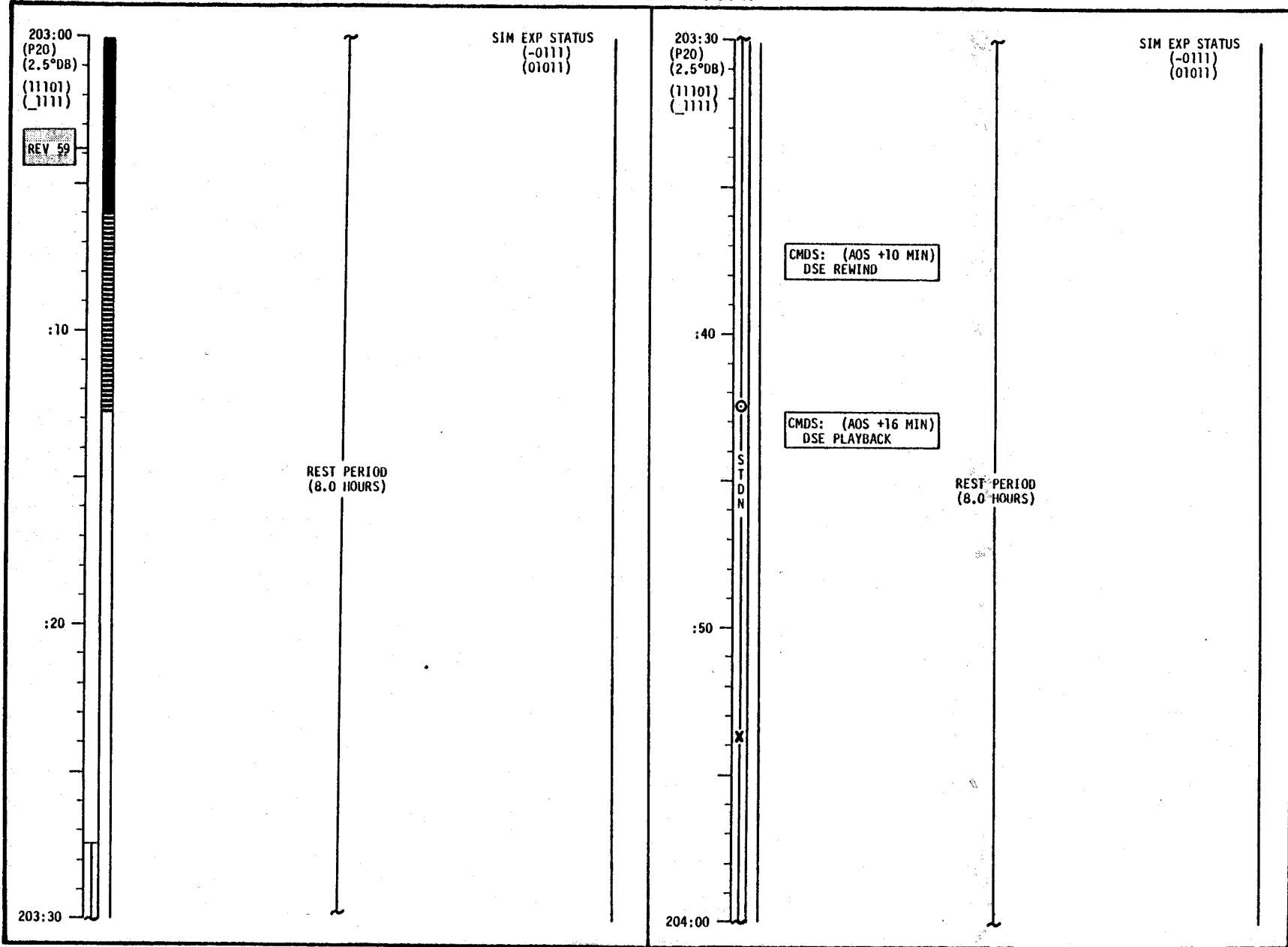
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-310

CSM FLIGHT PLAN



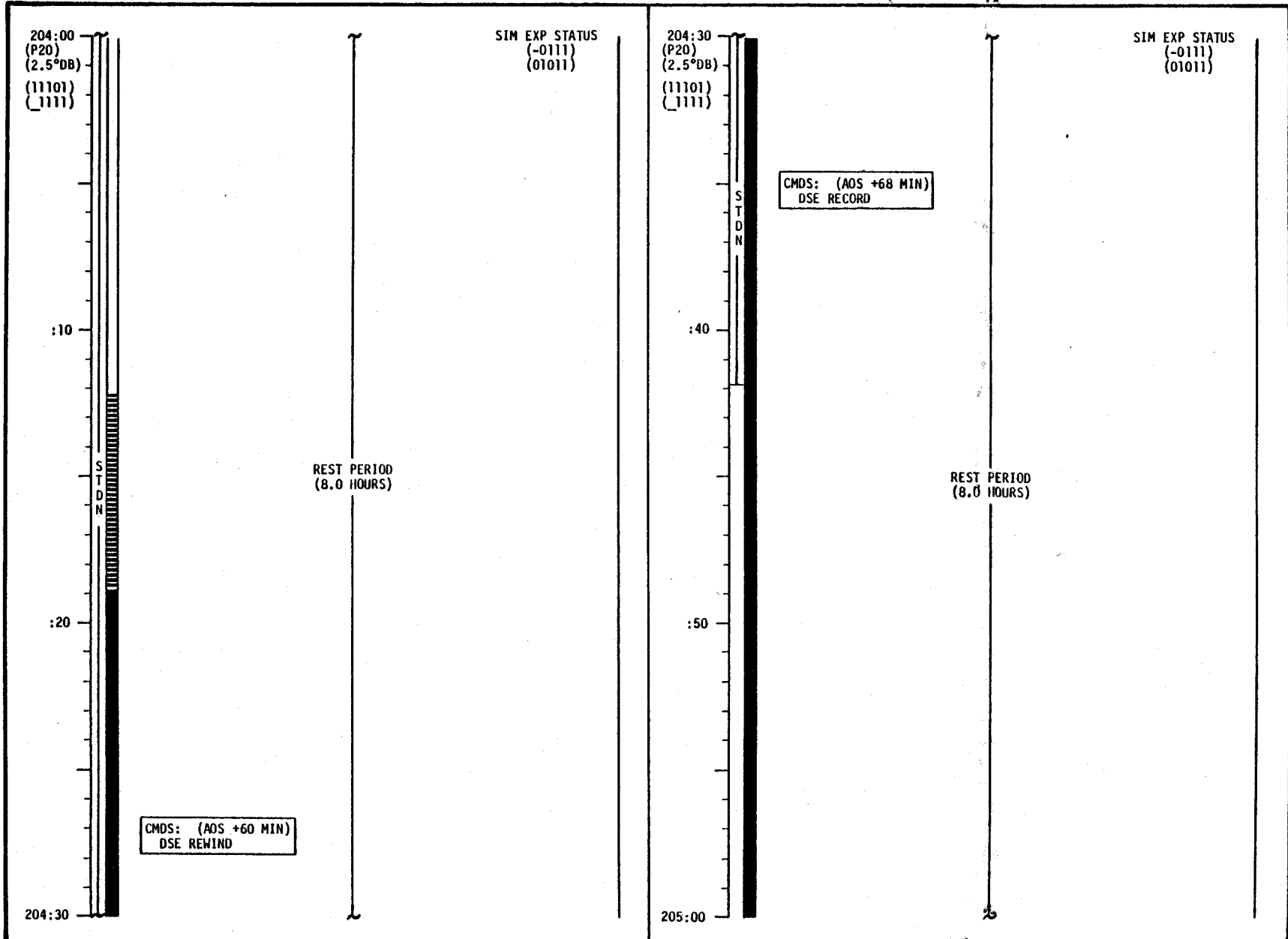
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-311

CSM FLIGHT PLAN



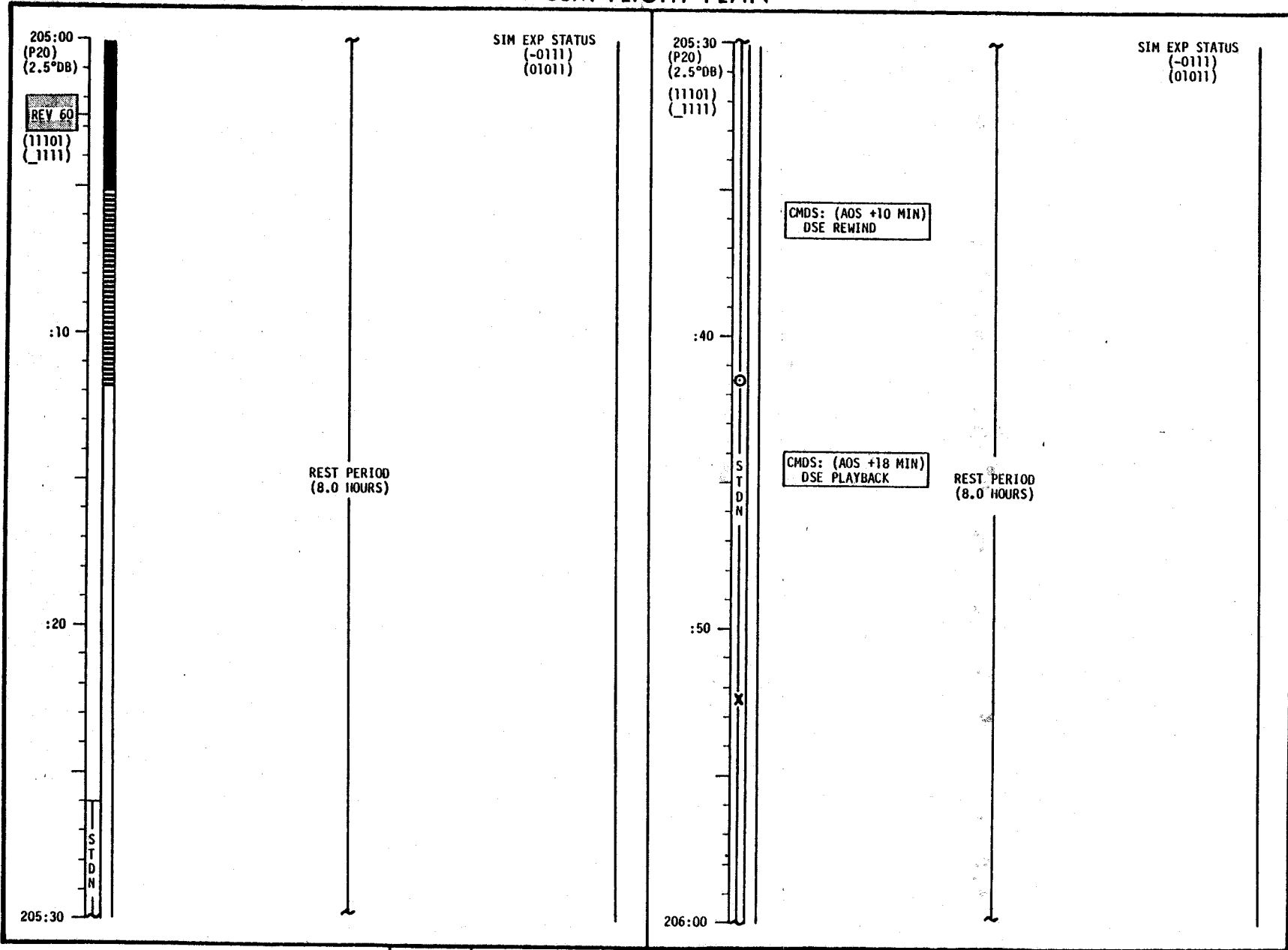
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-312

CSM FLIGHT PLAN



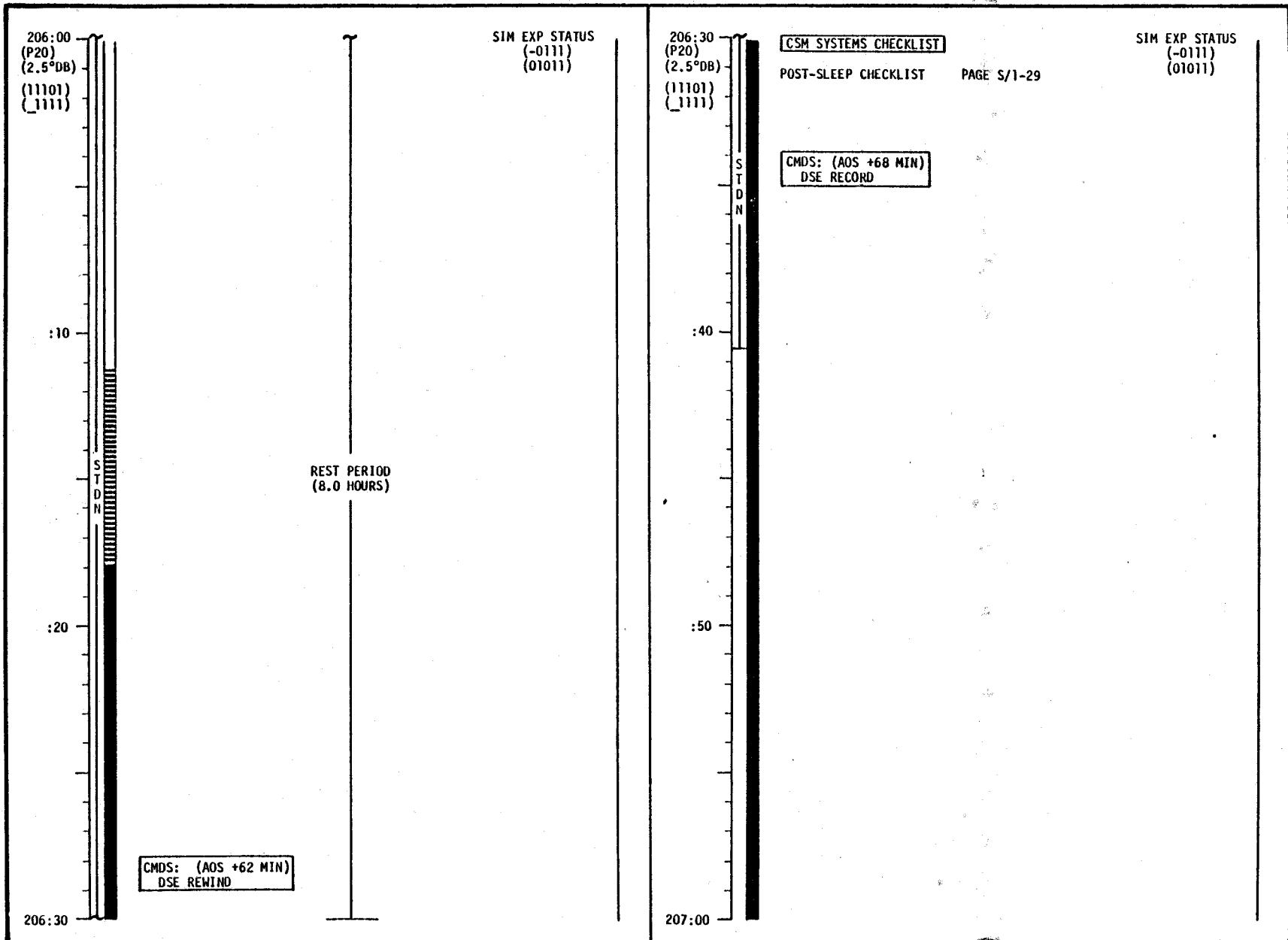
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-313

CSM FLIGHT PLAN



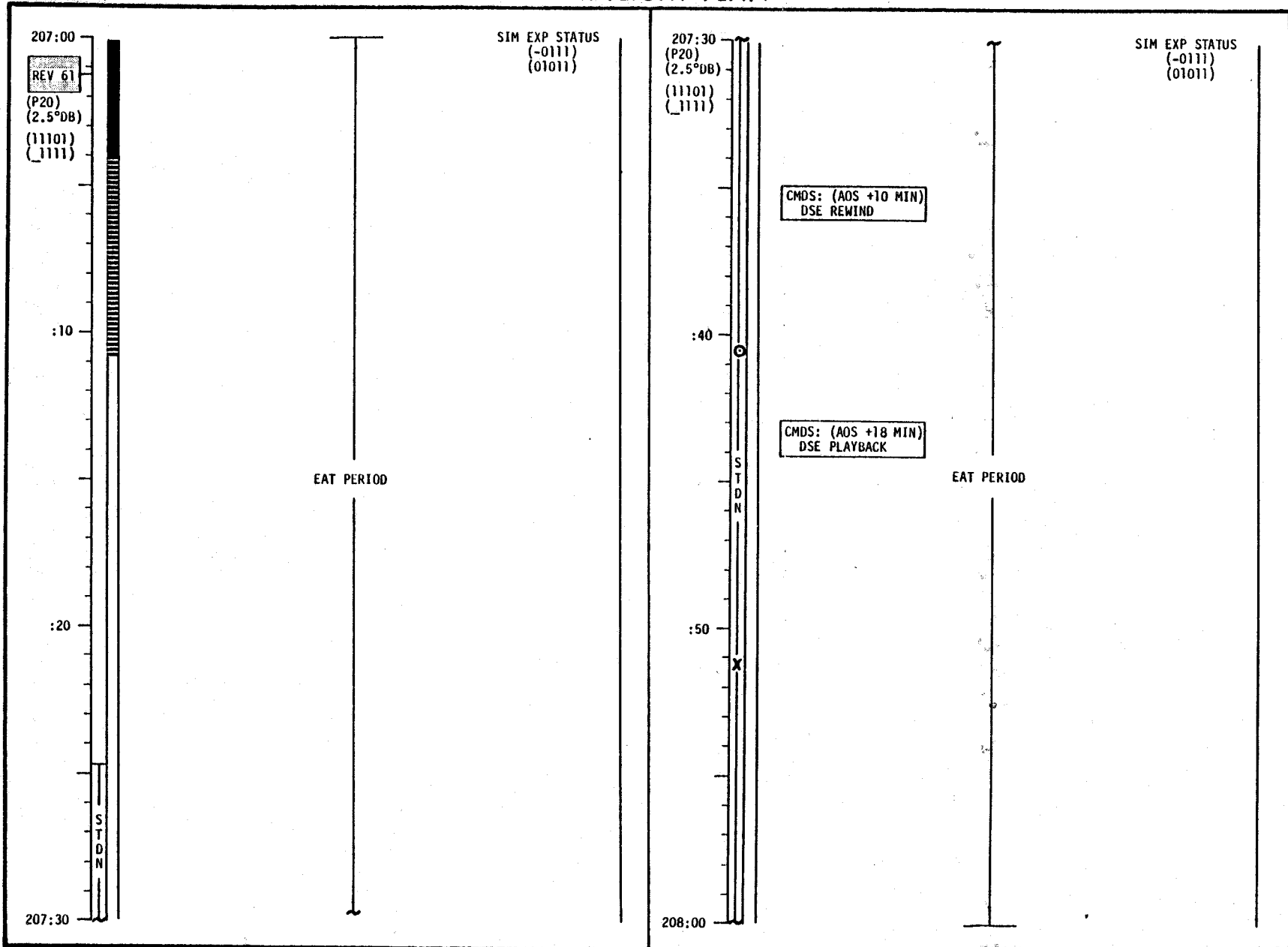
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-314

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-315

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)

S
T
D
N

:10

S
T
D
N

:20

208:30

UPDATE:

FLIGHT PLAN
SOLAR CORONA PHOTO PAD
PAN CAMERA PHOTO PAD (209:15)

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)

SOLAR CORONA (SUNSET) SOLAR CORONA PHOTO PAD (SS)

T-START: _____
(SS - 5 MIN)

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)

SIM EXP STATUS
(-0111)
(01011)

208:30
(P20)
(2.5°DB)
(11101)
(1111)

S
T
D
N

:40

S
T
D
N

:50

(P20)
(0.5°DB)

209:00

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
POD
V49 MNVR TO UV SCAN ATT (208:49)
(003,222,000)
CMC MODE - AUTO
UV COVER - OPEN

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/VIIBW (F5.6,1/250,[∞]) 18 FR

MAG (RR) _____, FR # _____

SIM EXP STATUS
(-0100)
(01011)

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-317

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

TERMINATOR PHOTOS
GAGRIN (PG2A - D3)
CM3/EL/80/VHBM (f5.6,1/250,-) 18 FR

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)

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 (T STOP)

ORBITAL SCIENCE VISUAL
MARE SMITHII (CM5)

209:30

SIM EXP STATUS
(+1101)
(01011)

209:30
(P20)
(0.5°DB)
(11101)
(1111)

CUE: (~AOS +7 MIN)
HGA AUTO

CMDS: (AOS +10 MIN)
DSE PLAYBACK

PC - MONO

UPLINK:
CSM S.V. & V66
LIFT-OFF TIME (IF REQD)

SYNCHRONIZE MISSION TIMER
TO CMC CLOCK (IF REQD)
VOSNOIE,1706E (T EPHEM VERI-
FICATION BY STDN, COPY FROM DSKY
ON STDN CUE)(COPY T EPHEM
IN F.P. SUPPLEMENT)

UPDATE:
FLIGHT PLAN
CONSUMABLES STATUS
SIM EXP STATUS
PAN CAMERA PHOTO PAD

T EPHEM UPDATE

OID	LOAD B
03	_____
04	_____
05	_____

NOTE: LIFT-OFF TIME WILL BE
UPDATED IF THE TIME
OF REV 66 MERIDIAN
CROSSING DIFFERS MORE
THAN +2 MIN FROM
216:55:05

PAN CAMERA PHOTO PAD

T-START: : :

T-STOP: : :

(33°E TO 27°E)

PC - OPR (T START)

ORBITAL SCIENCE VISUAL
LANDING SITE (CM3)

PC - STBY (T STOP)

PC - OFF (CUE)

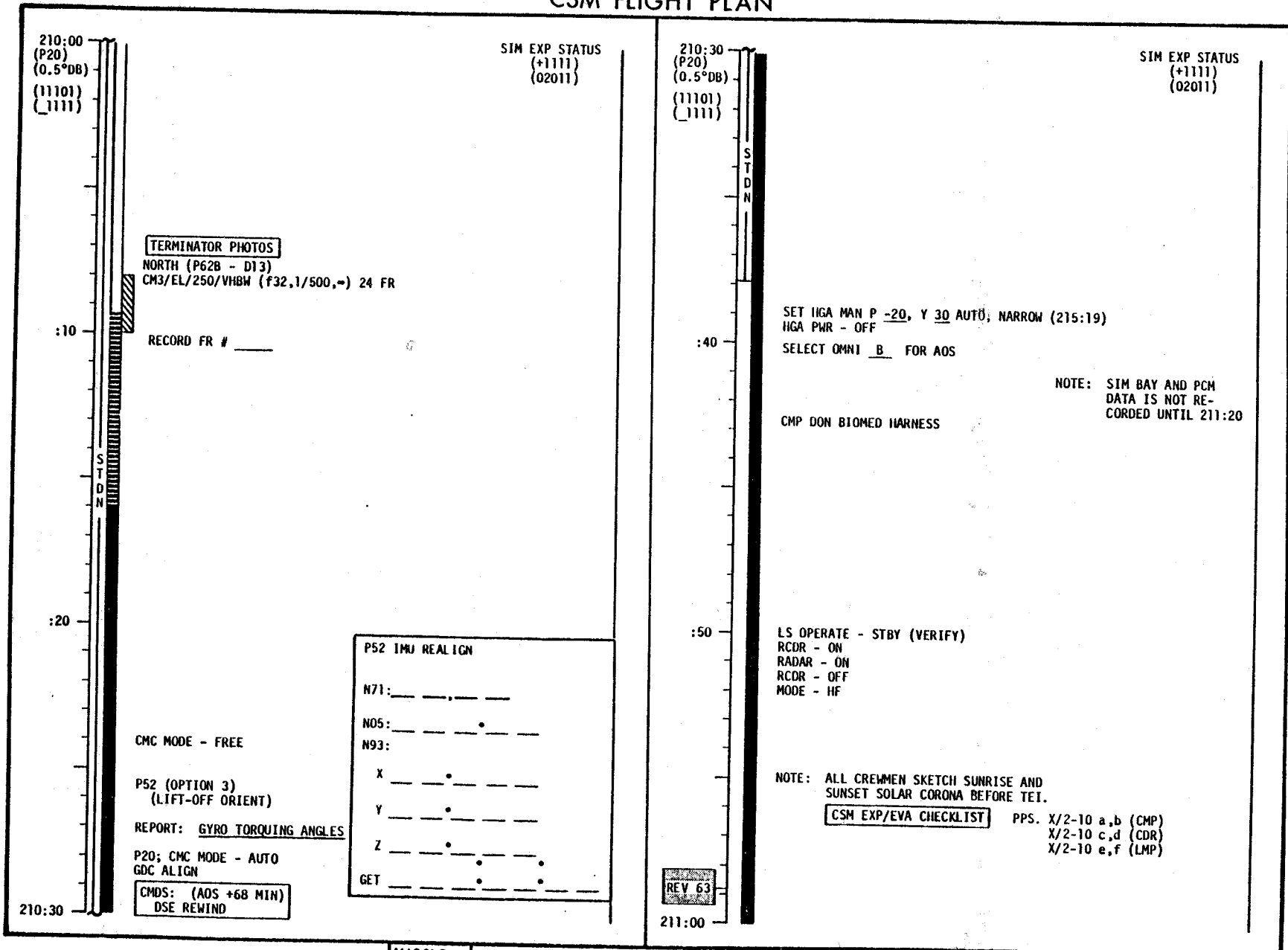
CONFIGURE CAMERA (TERMINATOR PHOTOS)
CM3/EL/250/VHBM (f32,1/500,-) 24 FR

MAG (RR) _____, FR # _____

210:00

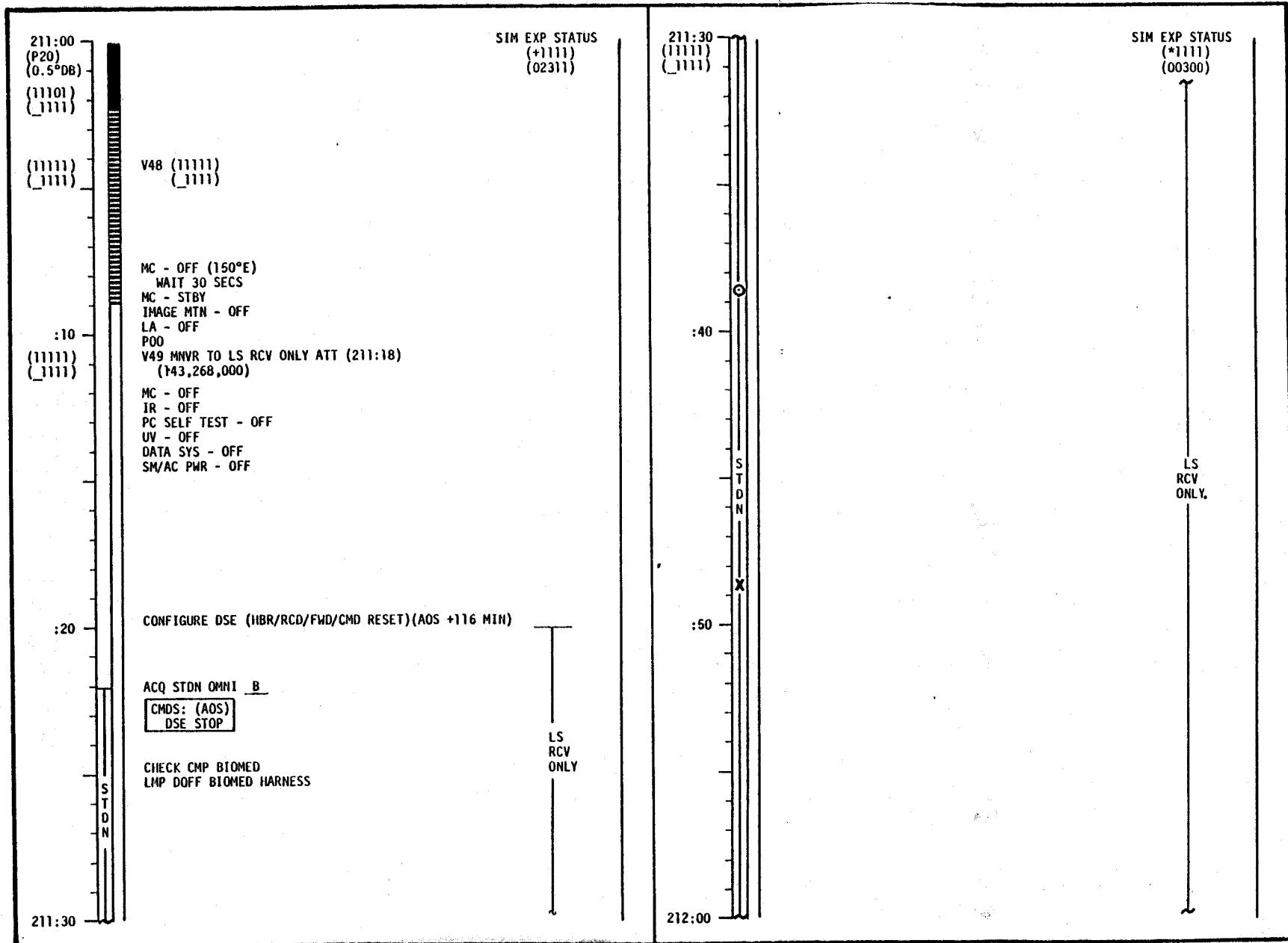
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-318

CSM FLIGHT PLAN



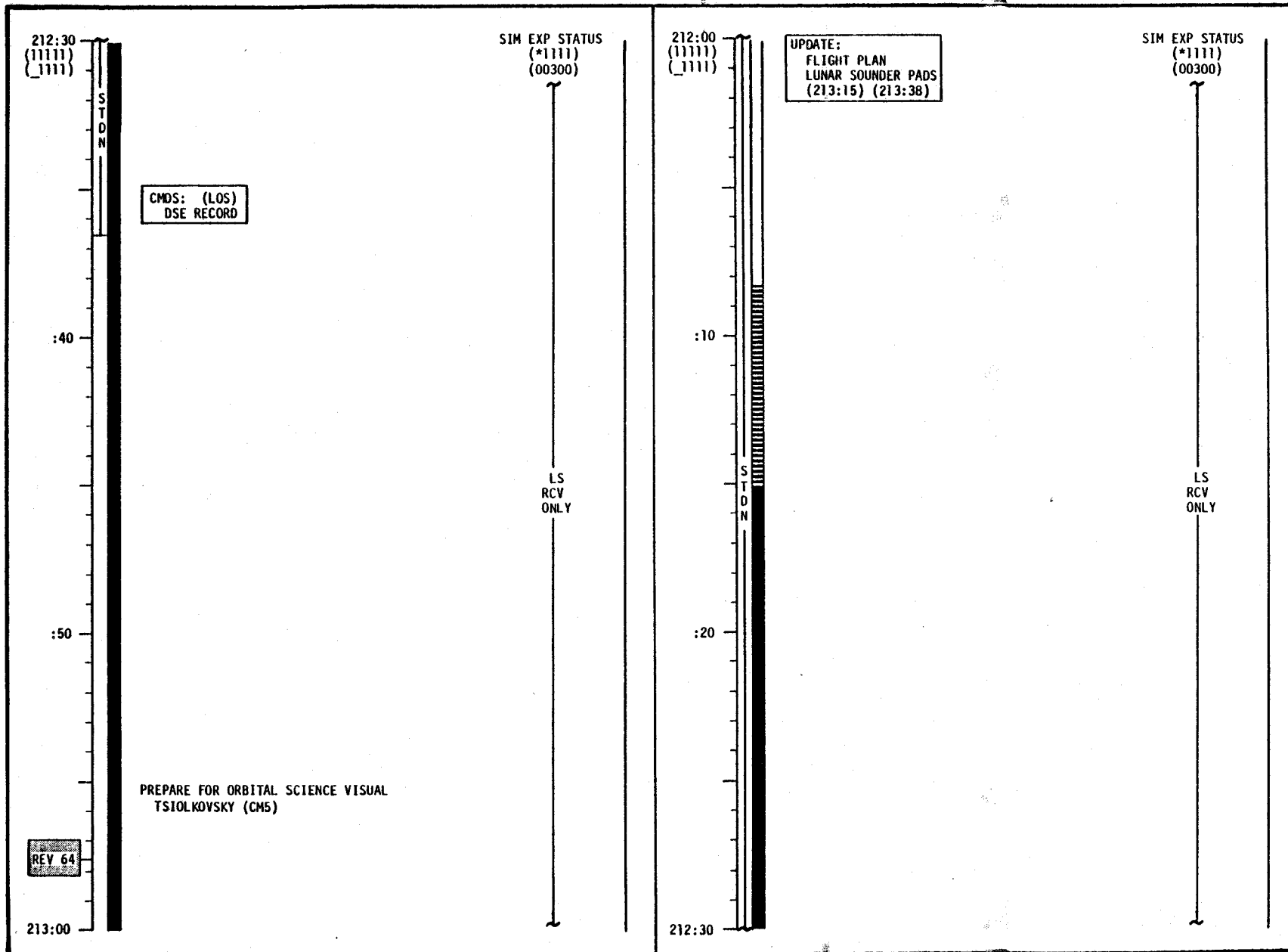
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-319

CSM FLIGHT PLAN



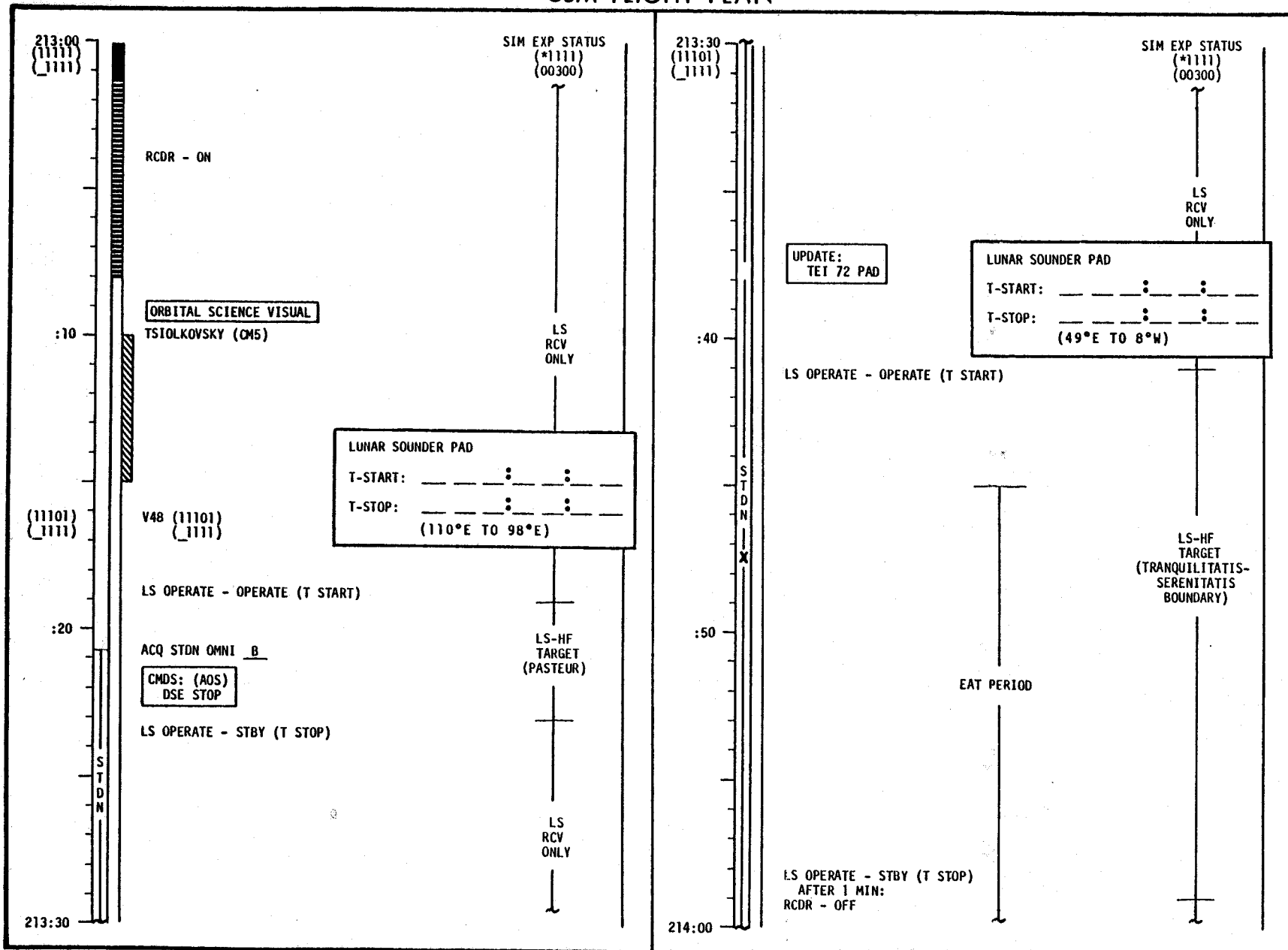
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-320

CSM FLIGHT PLAN



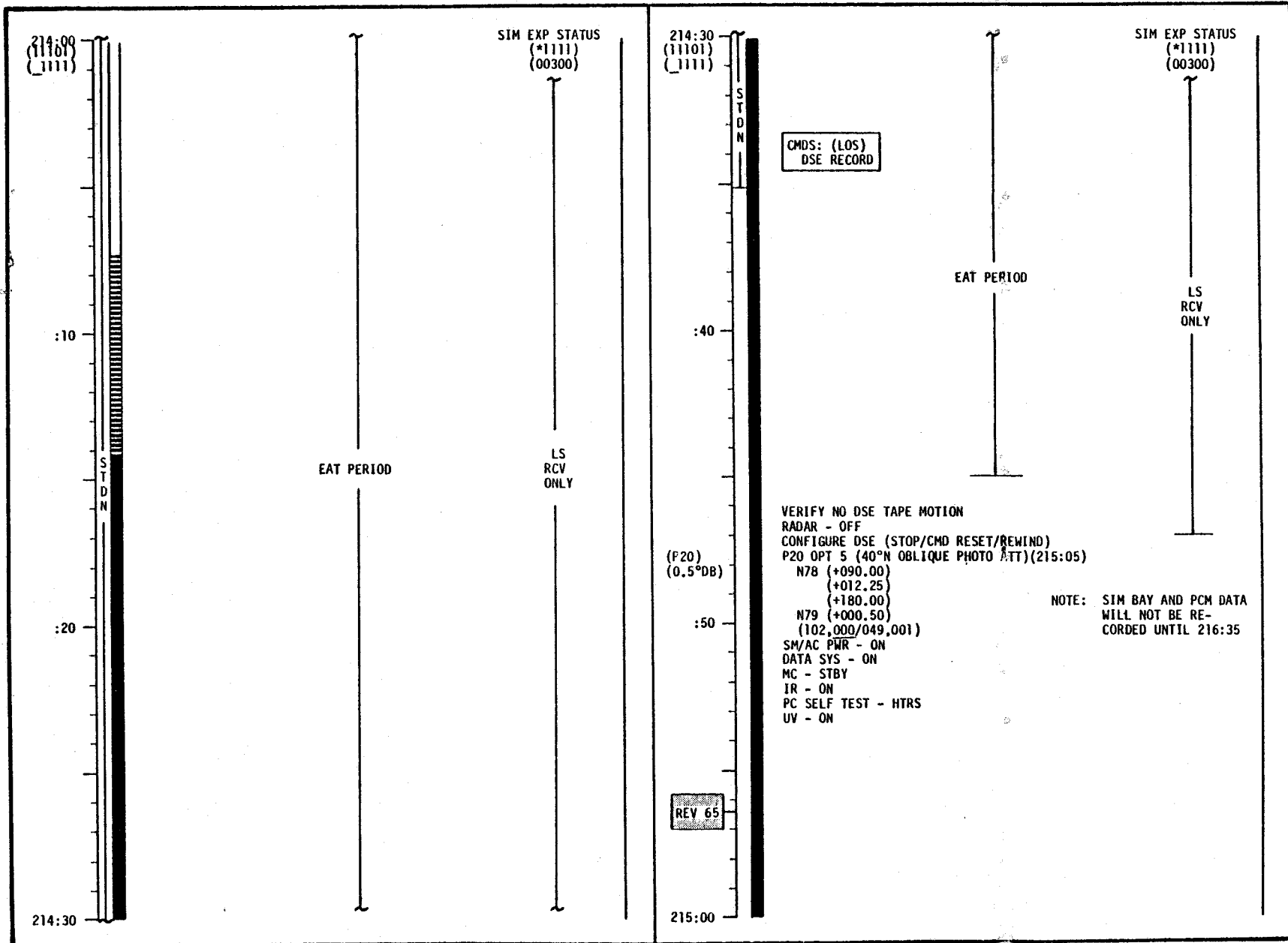
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-321

CSM FLIGHT PLAN



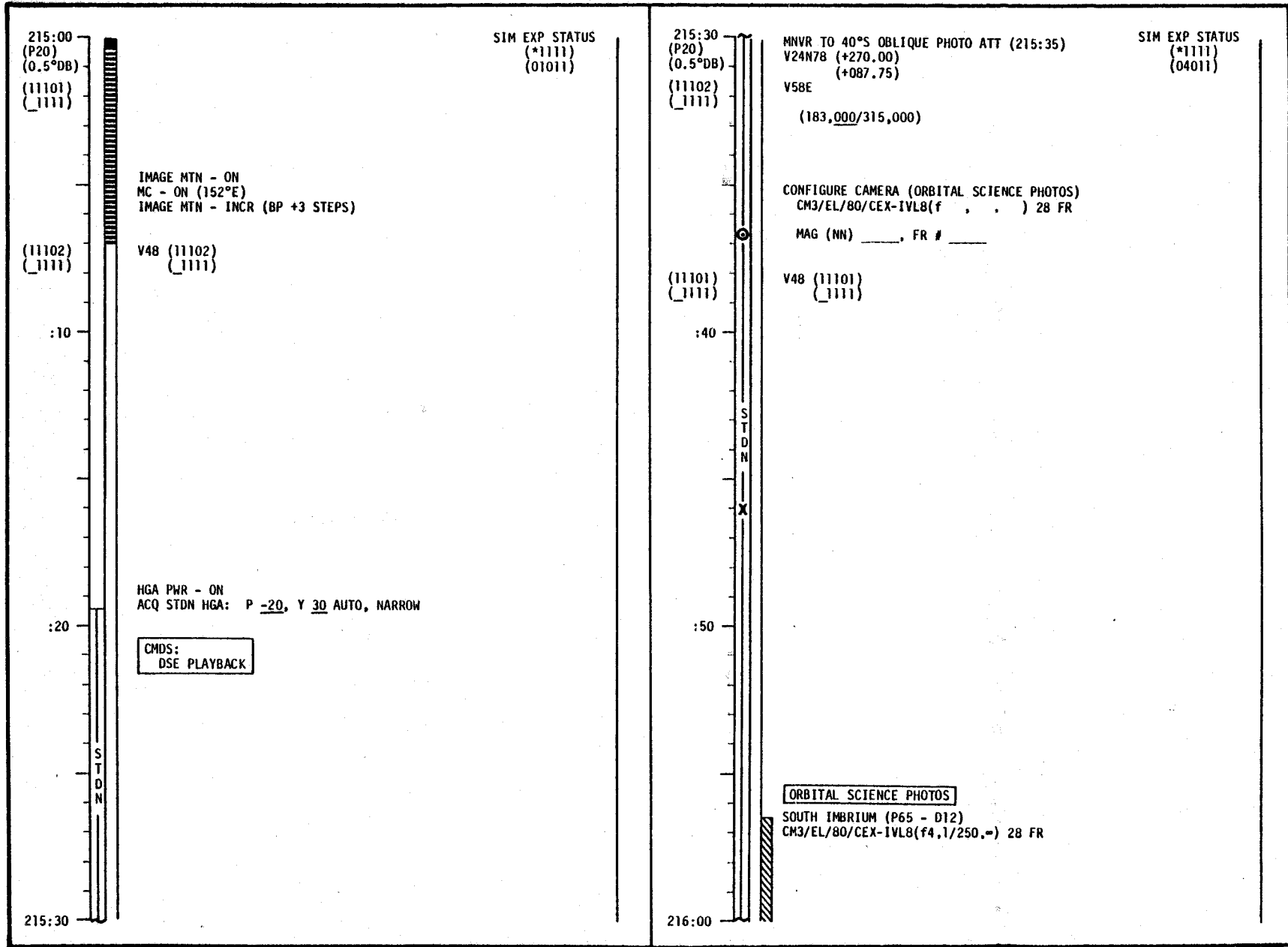
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-322

CSM FLIGHT PLAN



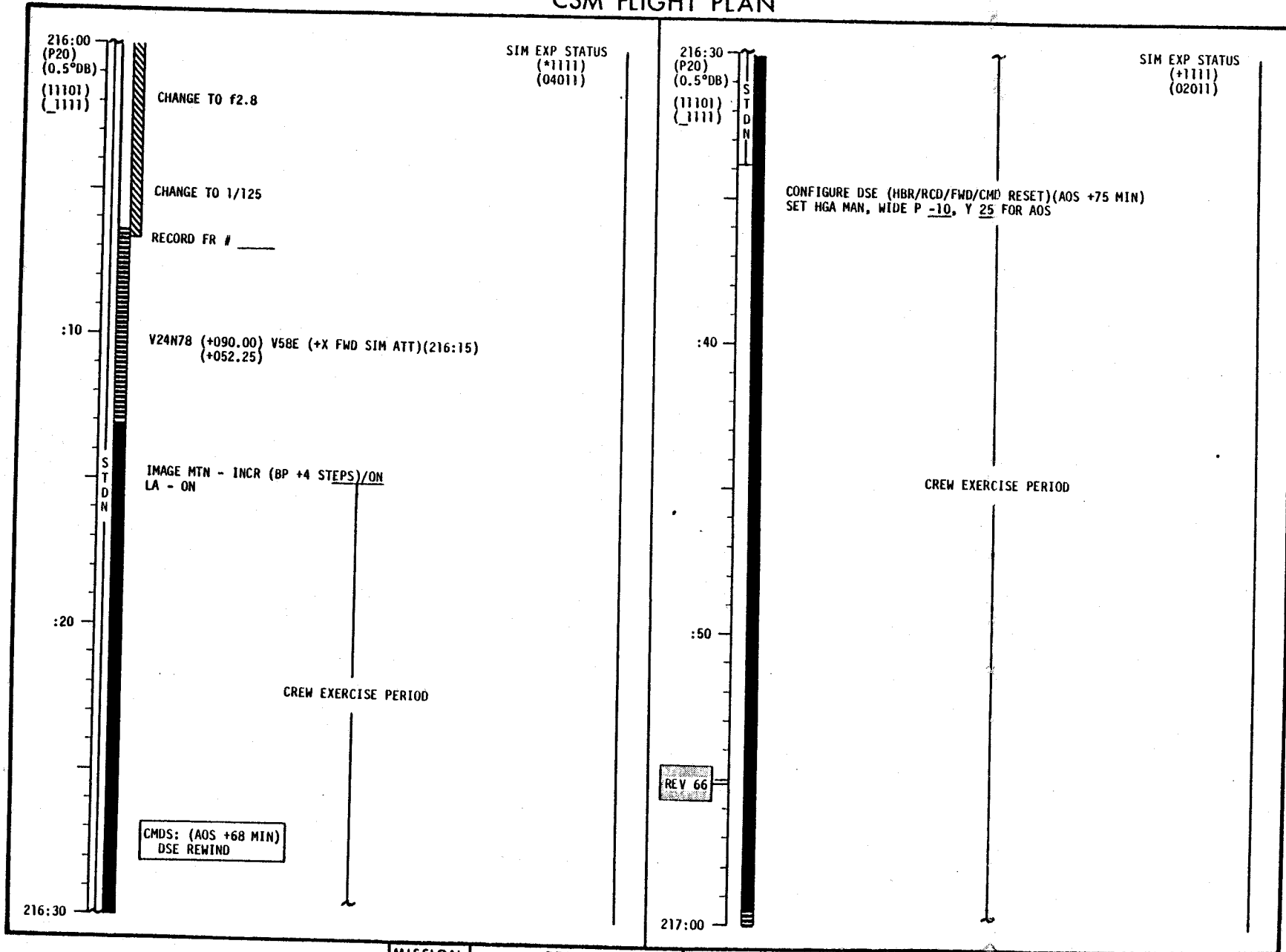
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-323

CSM FLIGHT PLAN



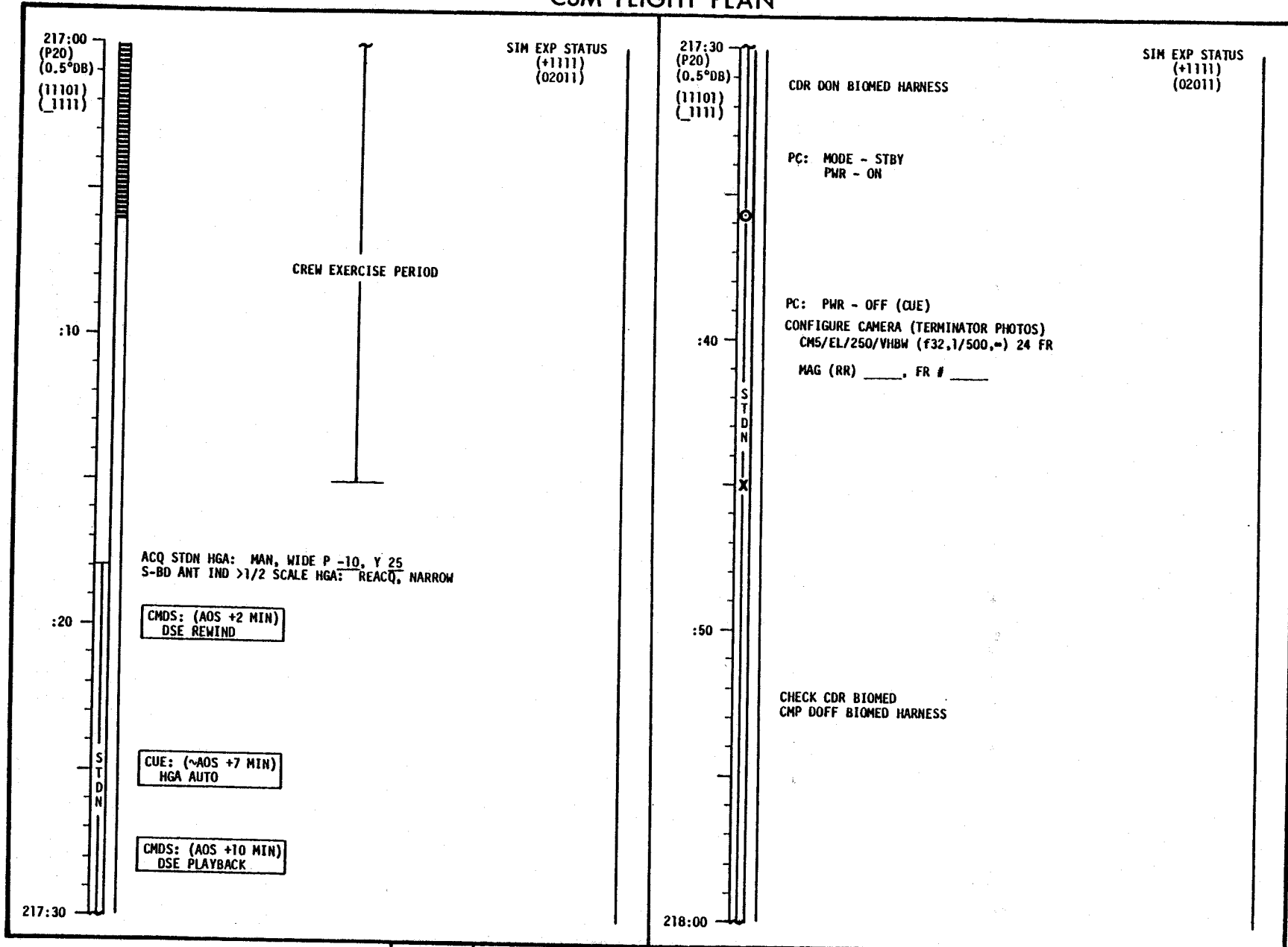
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-324

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-325

CSM FLIGHT PLAN



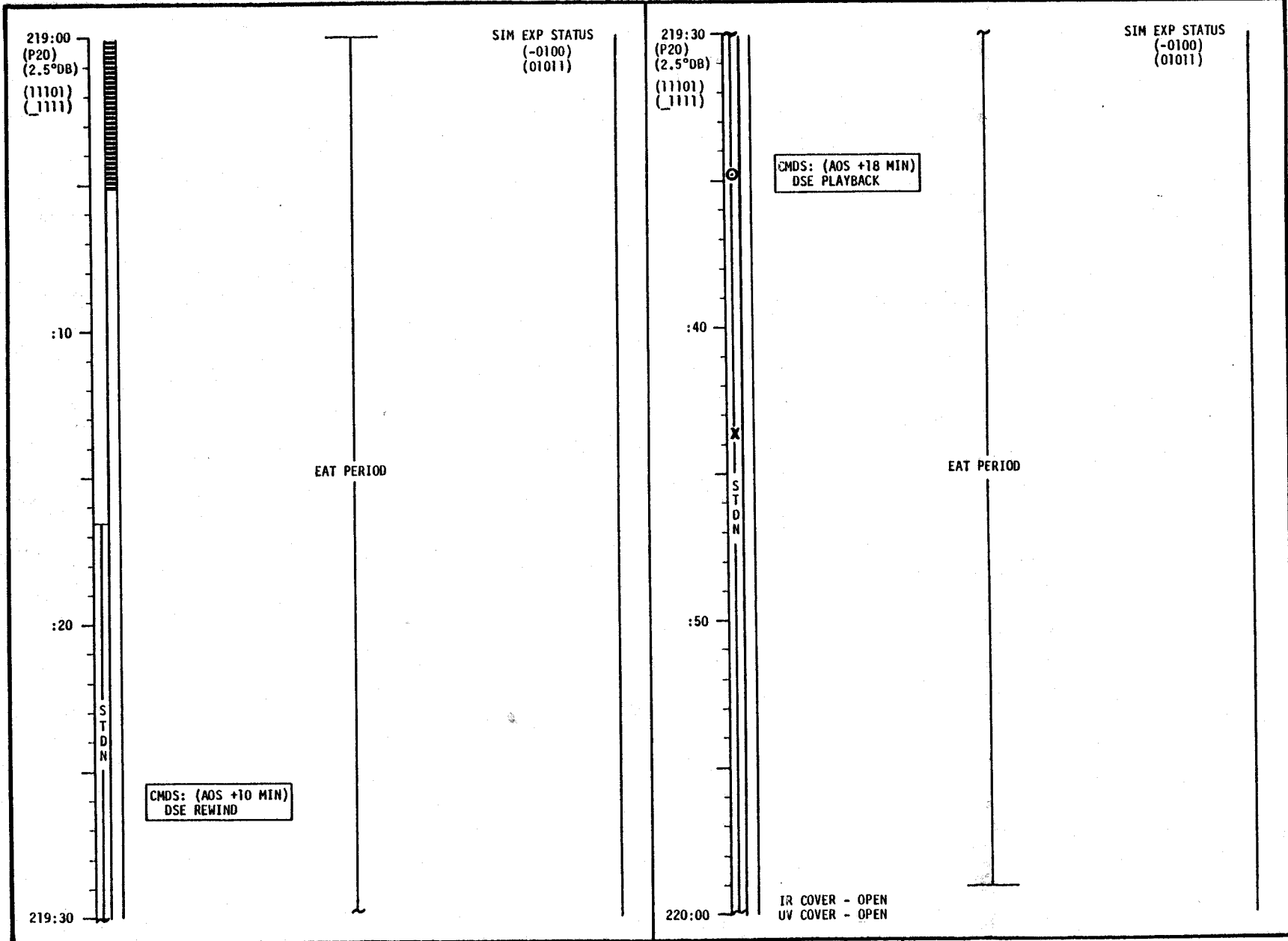
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-326

CSM FLIGHT PLAN

218:00 (P20) (0.5°DB) (11101) (1111)	<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> UPDATE: FLIGHT PLAN </div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> TERMINATOR SOUTH (P66 - D14) CMS/EL/250/VHBW (F32,1/500,-) 24 FR </div> <p>RECORD FR # MC - OFF (41°W) WAIT 30 SEC MC - STBY IMAGE MTN - OFF LA - OFF MC - RETR</p> <p>V22N79 (+002.50)</p> <p>L10H CANISTER CHANGE (18 INTO B, STOW 16 IN A3)</p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: 80%;"> <p style="text-align: center; margin: 0;">P52 IMU REALIGN</p> <p>N71: _____</p> <p>N05: _____</p> <p>N93: _____</p> <p>X _____</p> <p>Y _____</p> <p>Z _____</p> <p>GET _____</p> </div> <p>CMC MODE - FREE P52 (OPTION 3) (LIFT-OFF ORIENT) REPORT: <u>GYRO TORQUING</u> <u>ANGLES</u></p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> CMDS: DSE REWIND </div> <p>P20; CMC MODE - AUTO GDC ALIGN</p>	SIM EXP STATUS (+1111) (02011)	218:30 (P20) (2.5°DB) (11101) (1111)	<p>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 O₂ FUEL CELL PURGE WASTE WATER DUMP</p> <p>CMC MODE - FREE MANUALLY ROLL LEFT 40°</p> <p>V23N78 (+000.00) -X FWD SIM ATT (218:53) CMC MODE - AUTO, V58E</p> <p>TERMINATE WASTE WATER DUMP AT 10%</p>	SIM EXP STATUS (+2111) (01011)
:10 (P20) (2.5°DB)			:40		
:20			:50		
218:30			219:00		

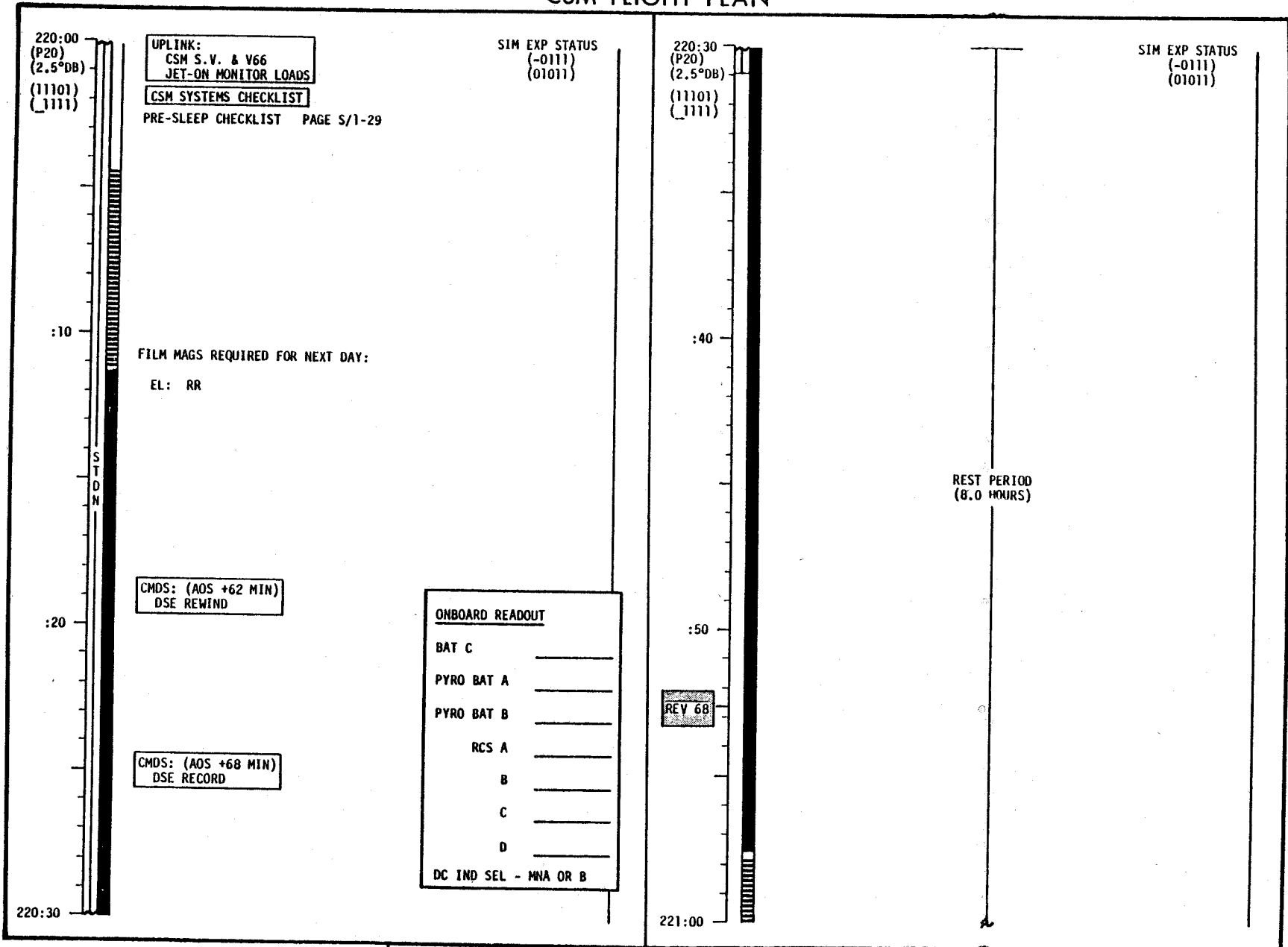
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-327

CSM FLIGHT PLAN



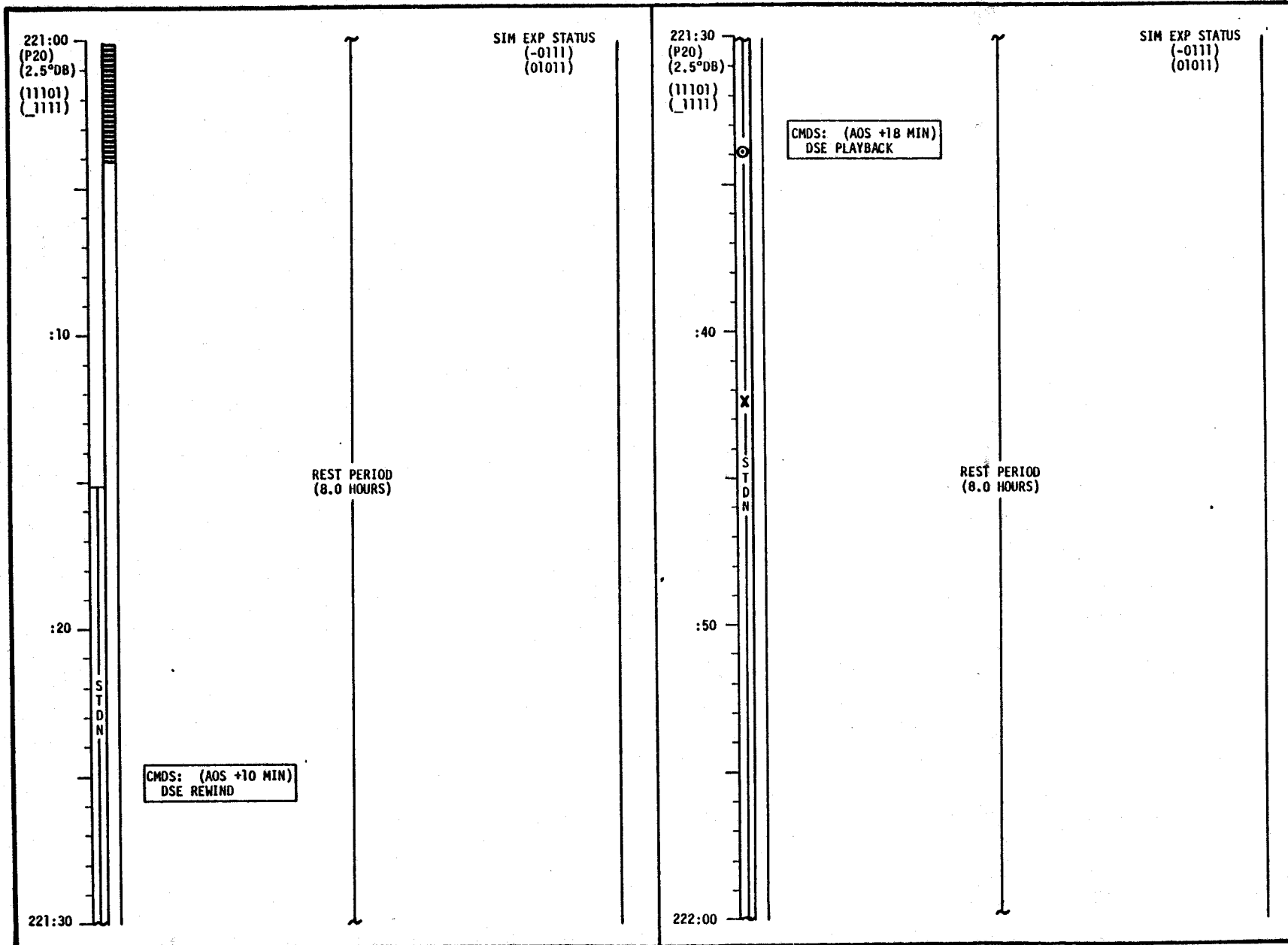
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-328

CSM FLIGHT PLAN



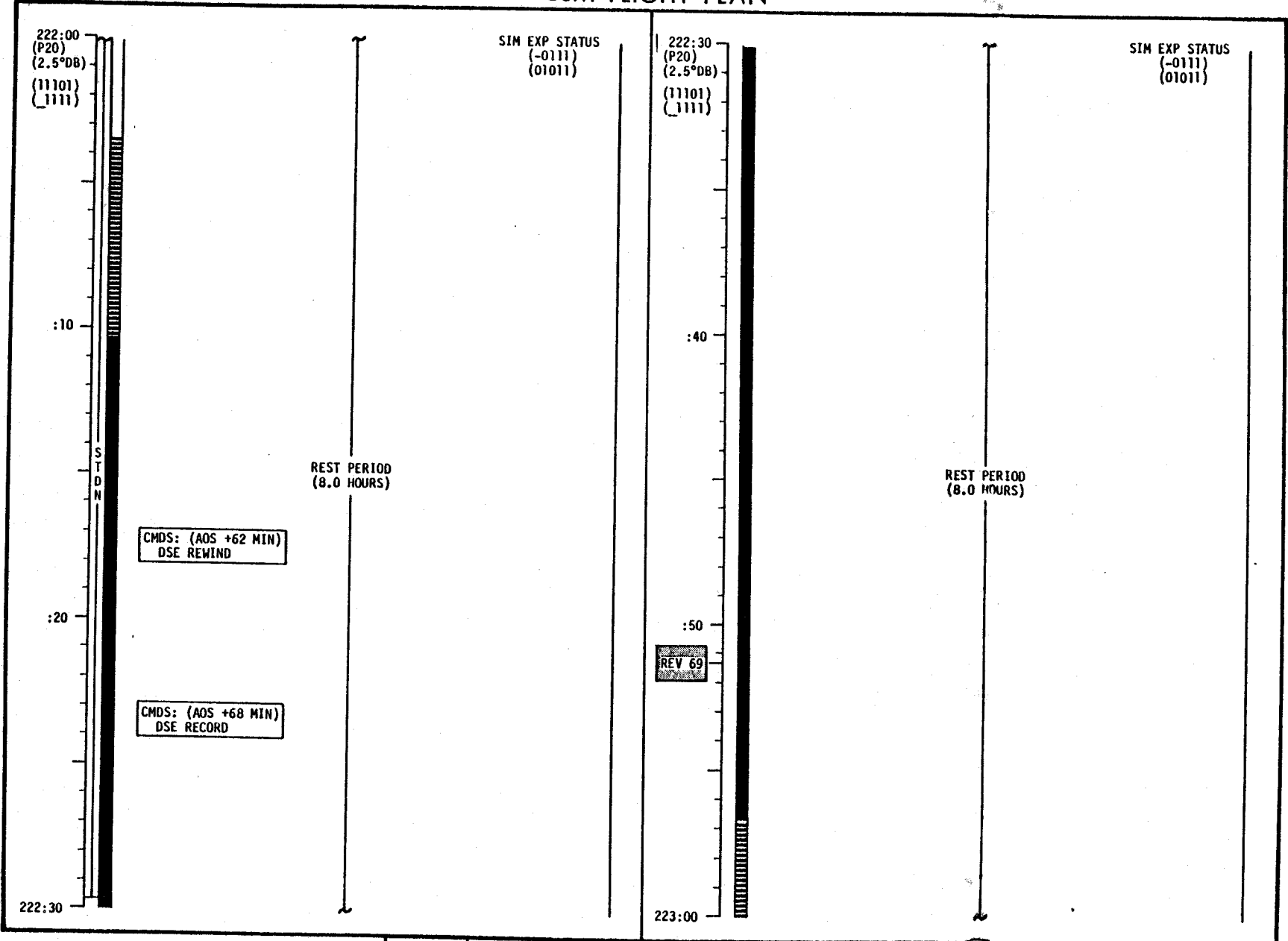
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-329

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-330

CSM FLIGHT PLAN



222:00
(P20)
(2.5°DB)
(11101)
(1111)

SIM EXP STATUS
(-0111)
(01011)

222:30
(P20)
(2.5°DB)
(11101)
(1111)

SIM EXP STATUS
(-0111)
(01011)

:10

S
T
D
N

REST PERIOD
(8.0 HOURS)

CMDS: (AOS +62 MIN)
DSE REWIND

:20

CMDS: (AOS +68 MIN)
DSE RECORD

222:30

:40

REST PERIOD
(8.0 HOURS)

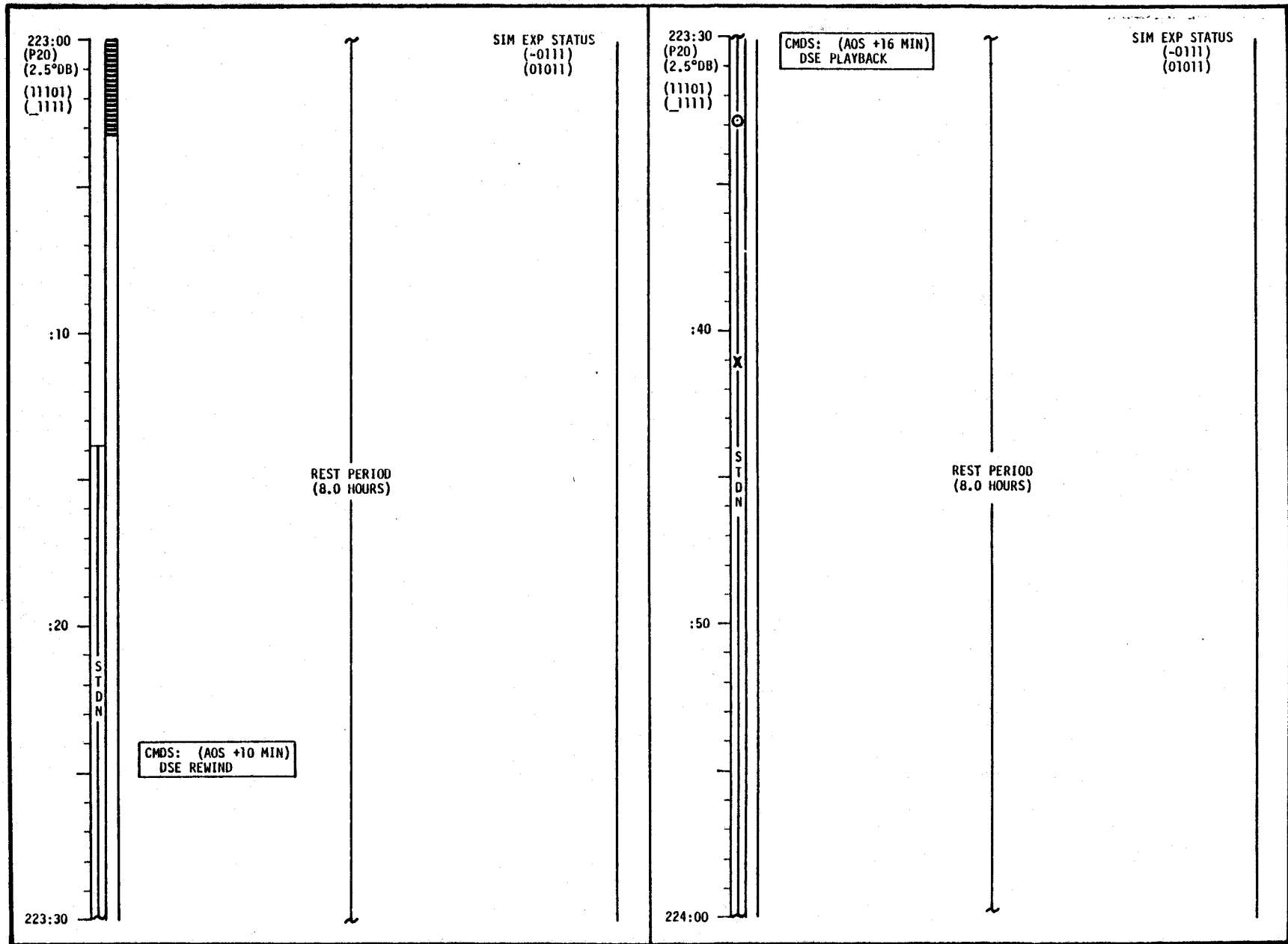
:50

REV 69

223:00

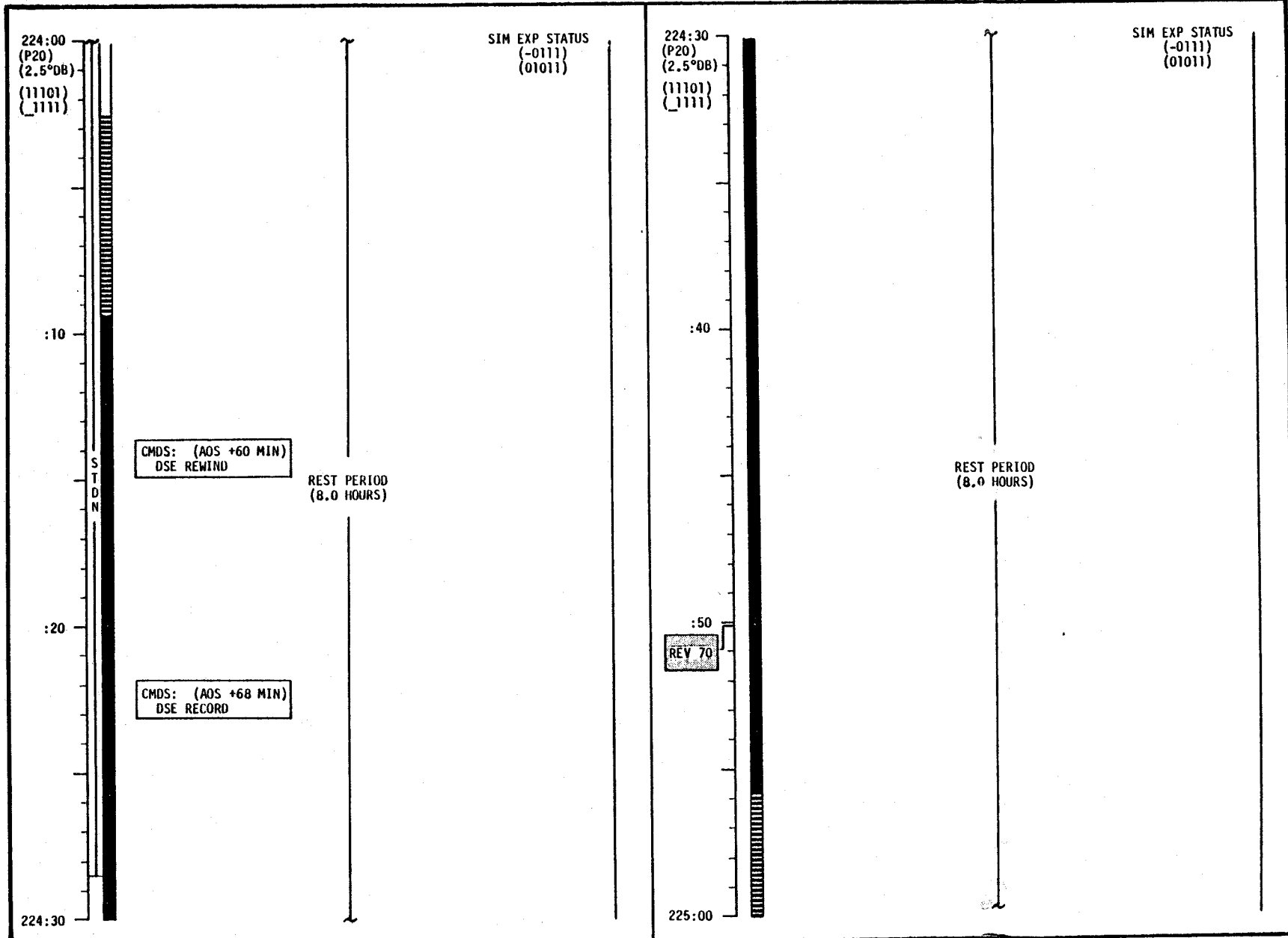
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-331

CSM FLIGHT PLAN



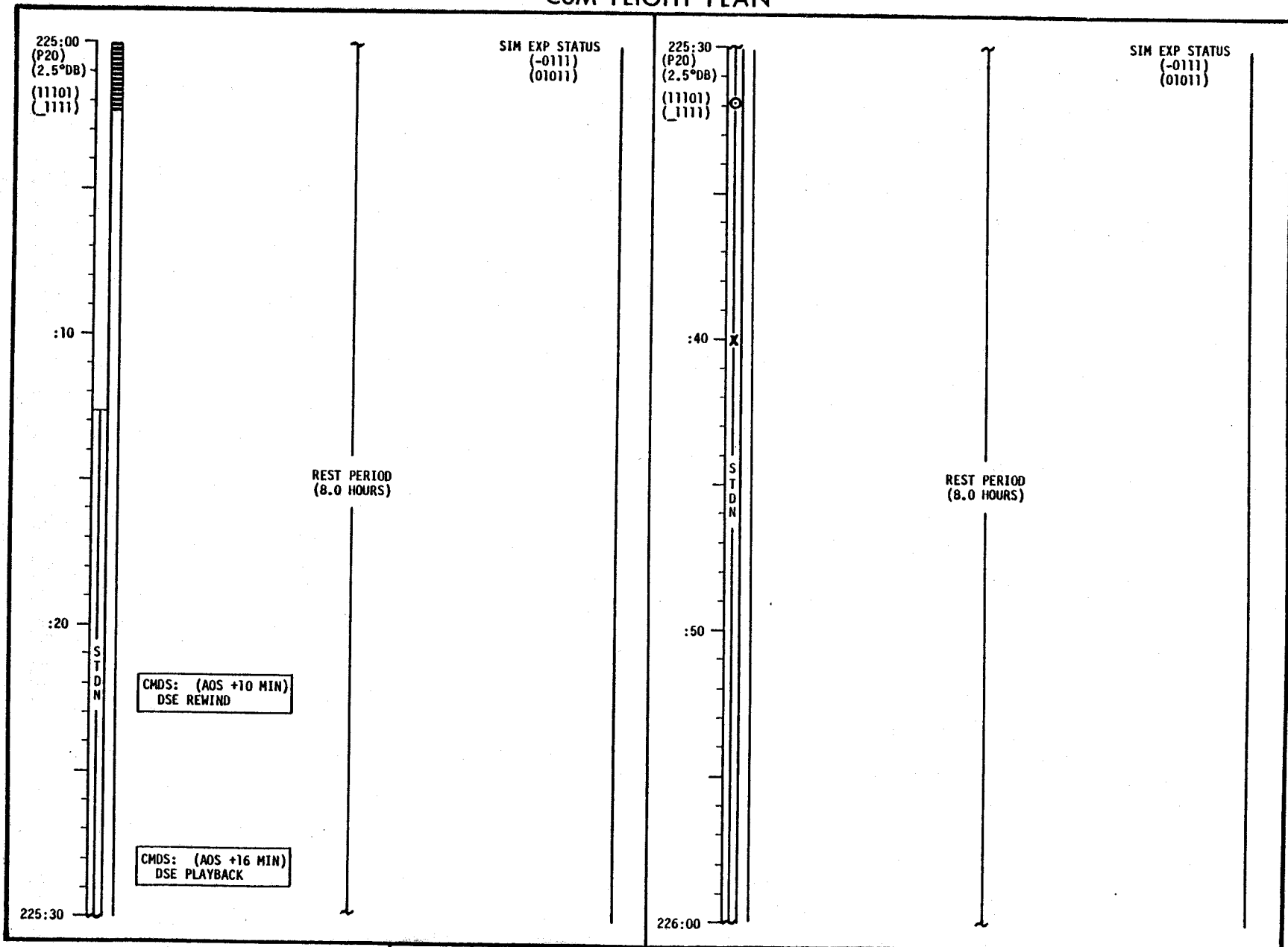
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-332

CSM FLIGHT PLAN



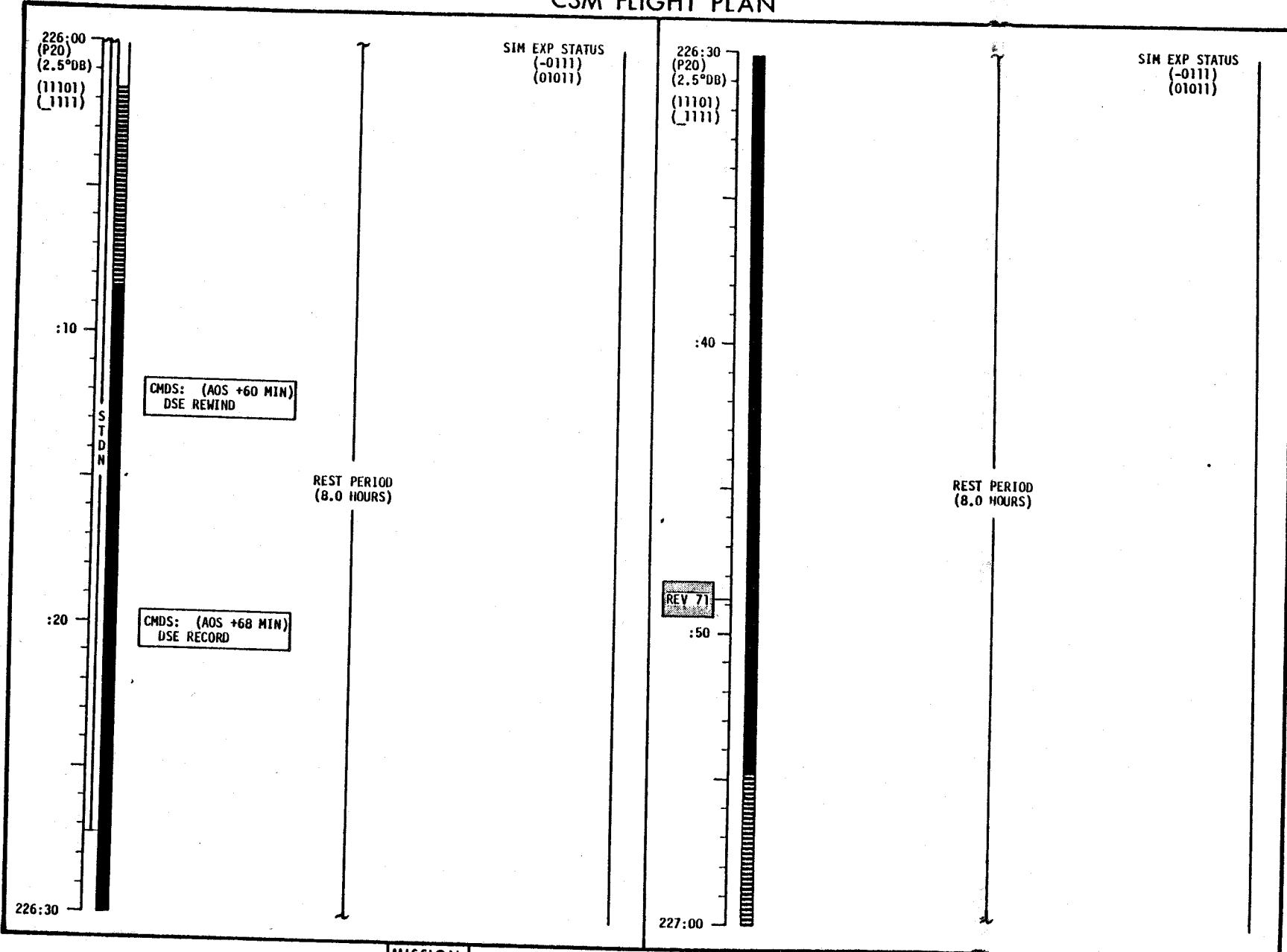
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-333

CSM FLIGHT PLAN



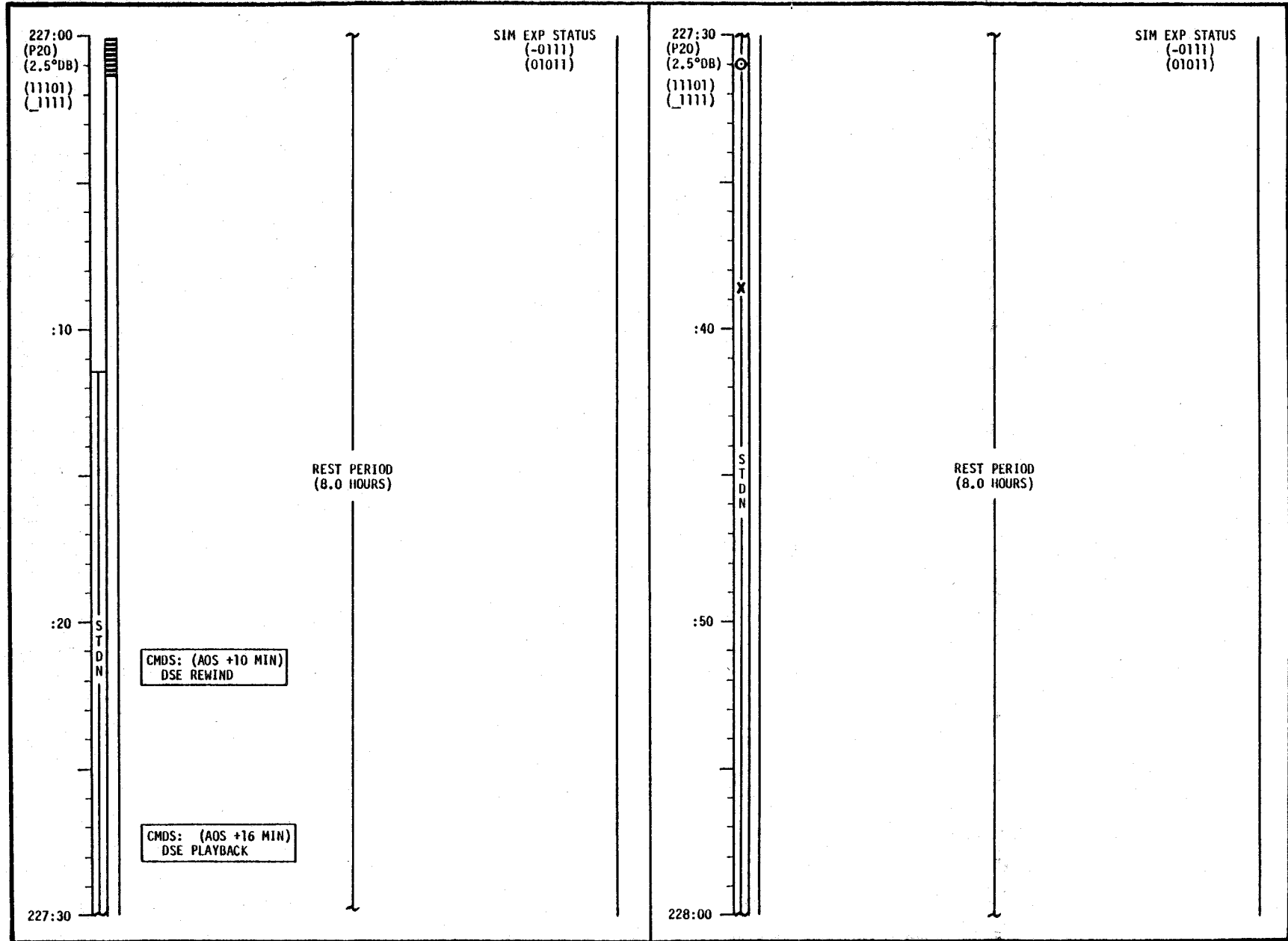
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-334

CSM FLIGHT PLAN



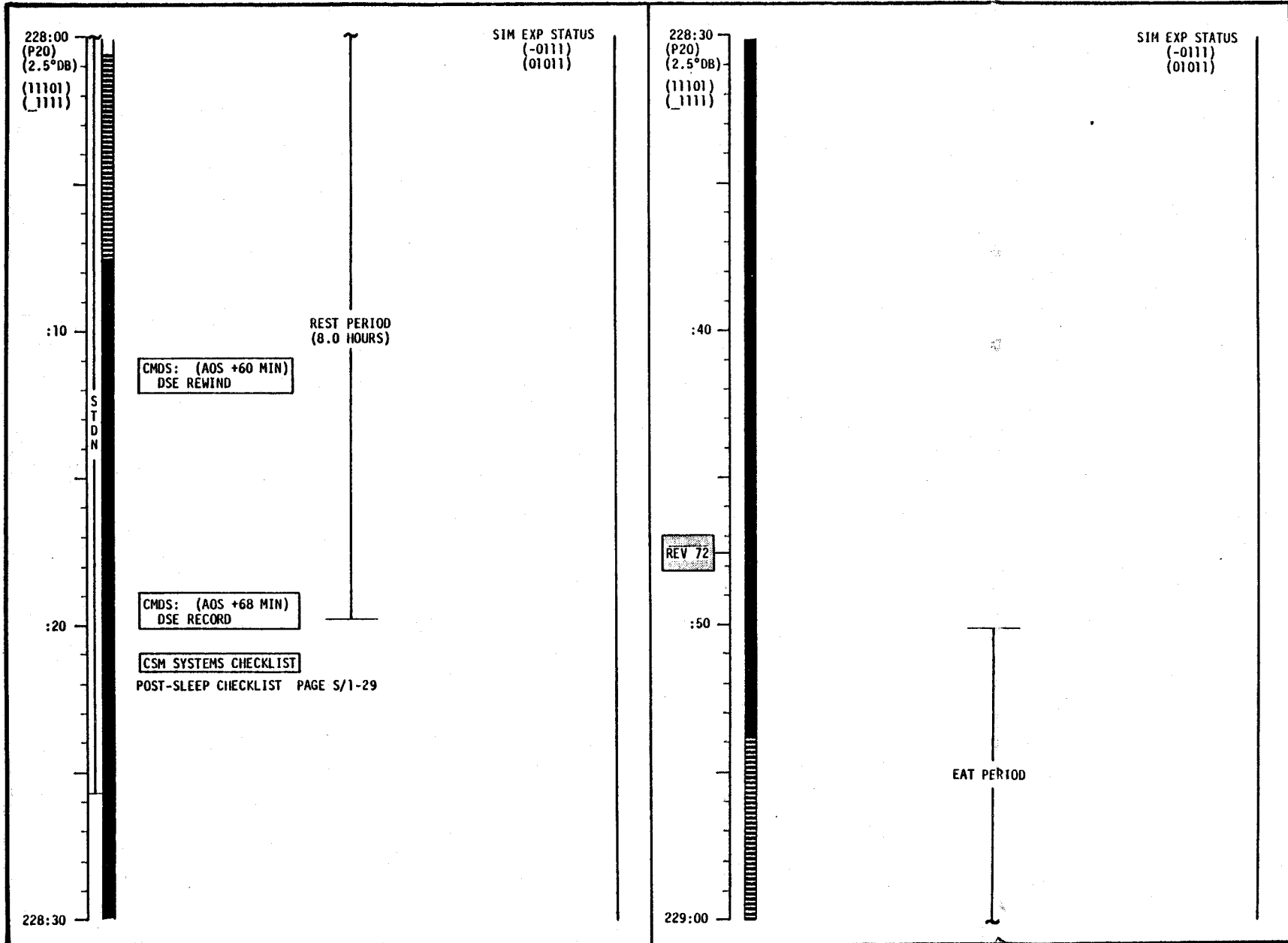
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-335

CSM FLIGHT PLAN



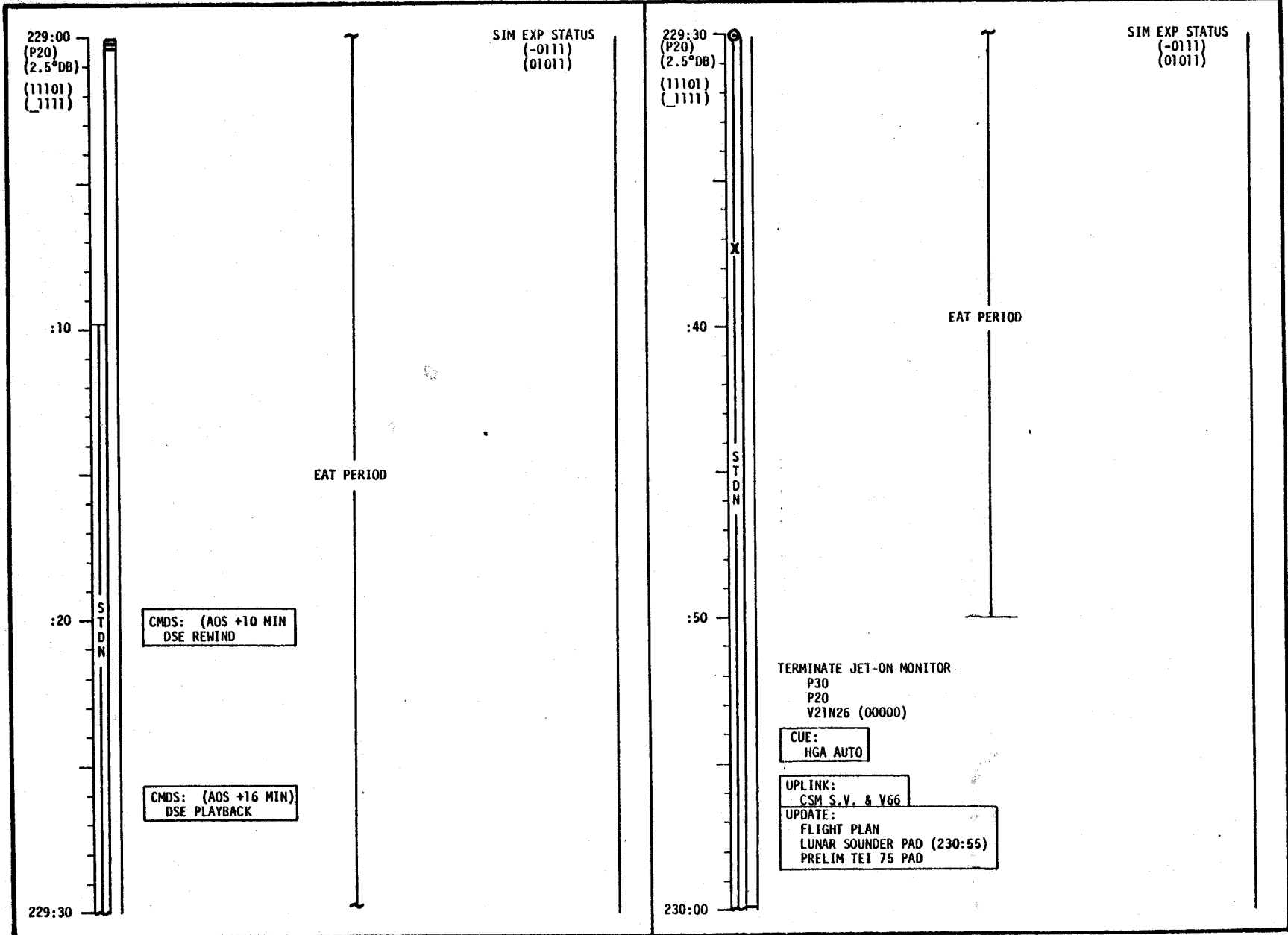
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-336

CSM FLIGHT PLAN



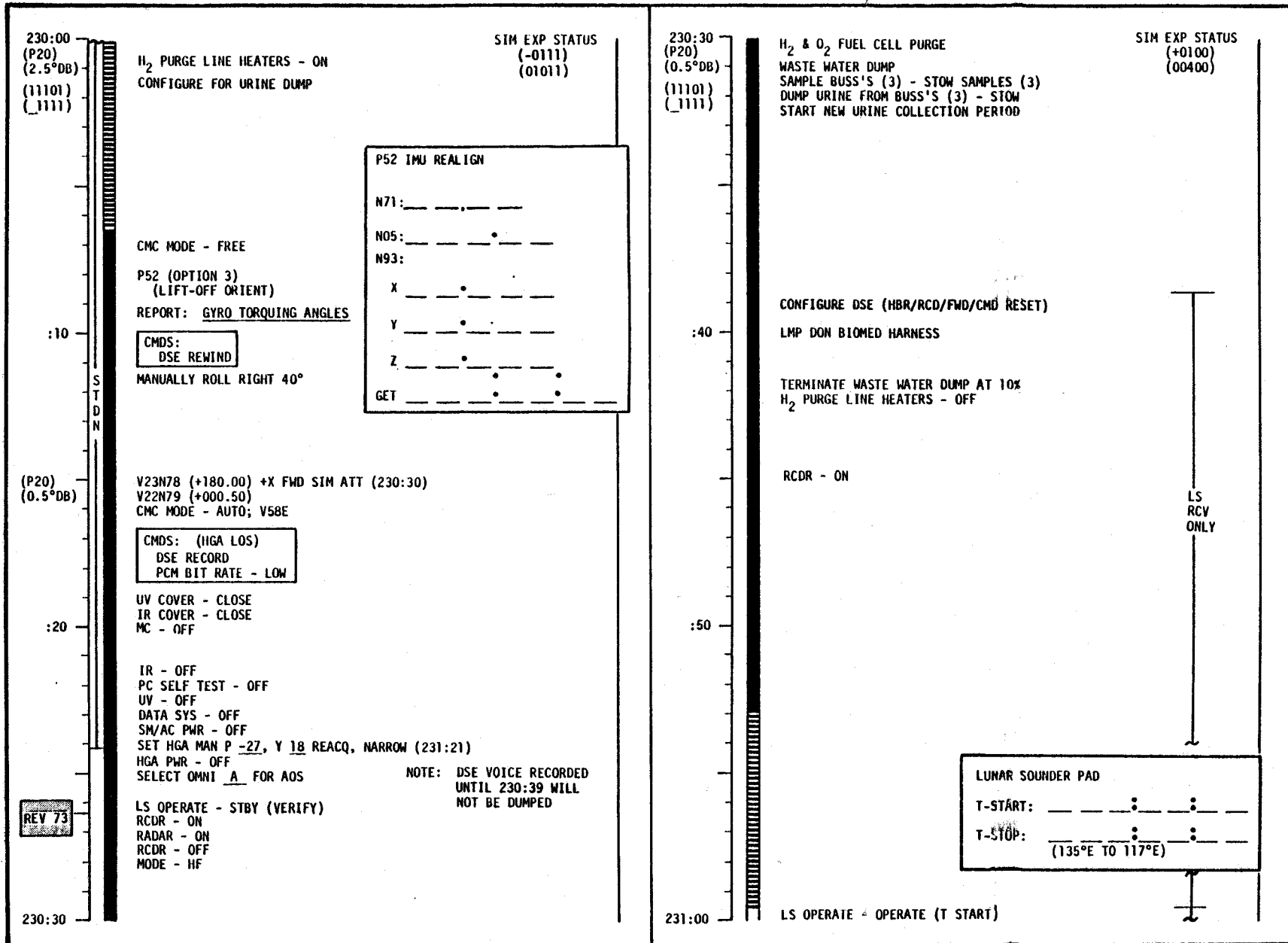
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-137

CSM FLIGHT PLAN

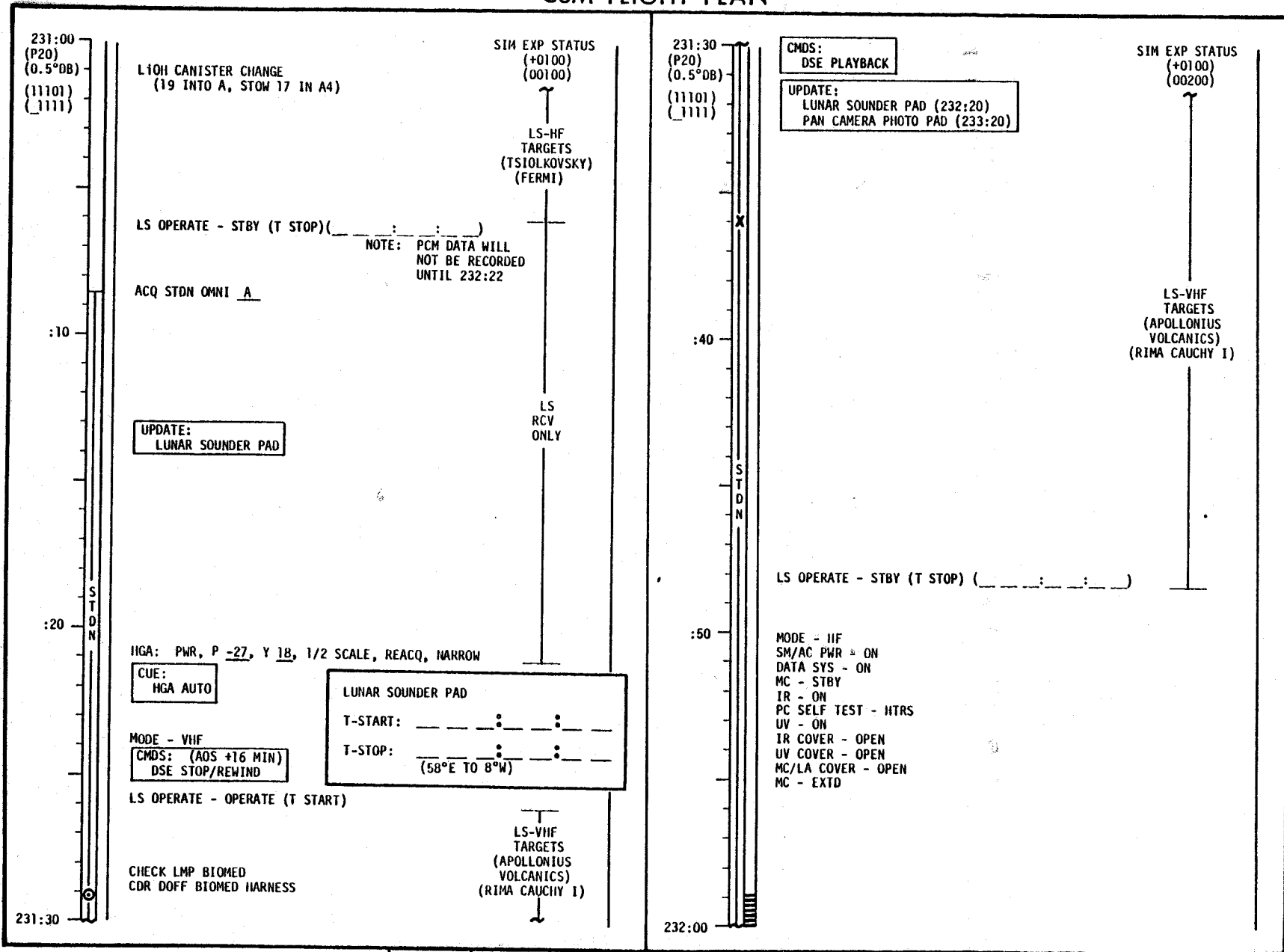


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-338

CSM FLIGHT PLAN

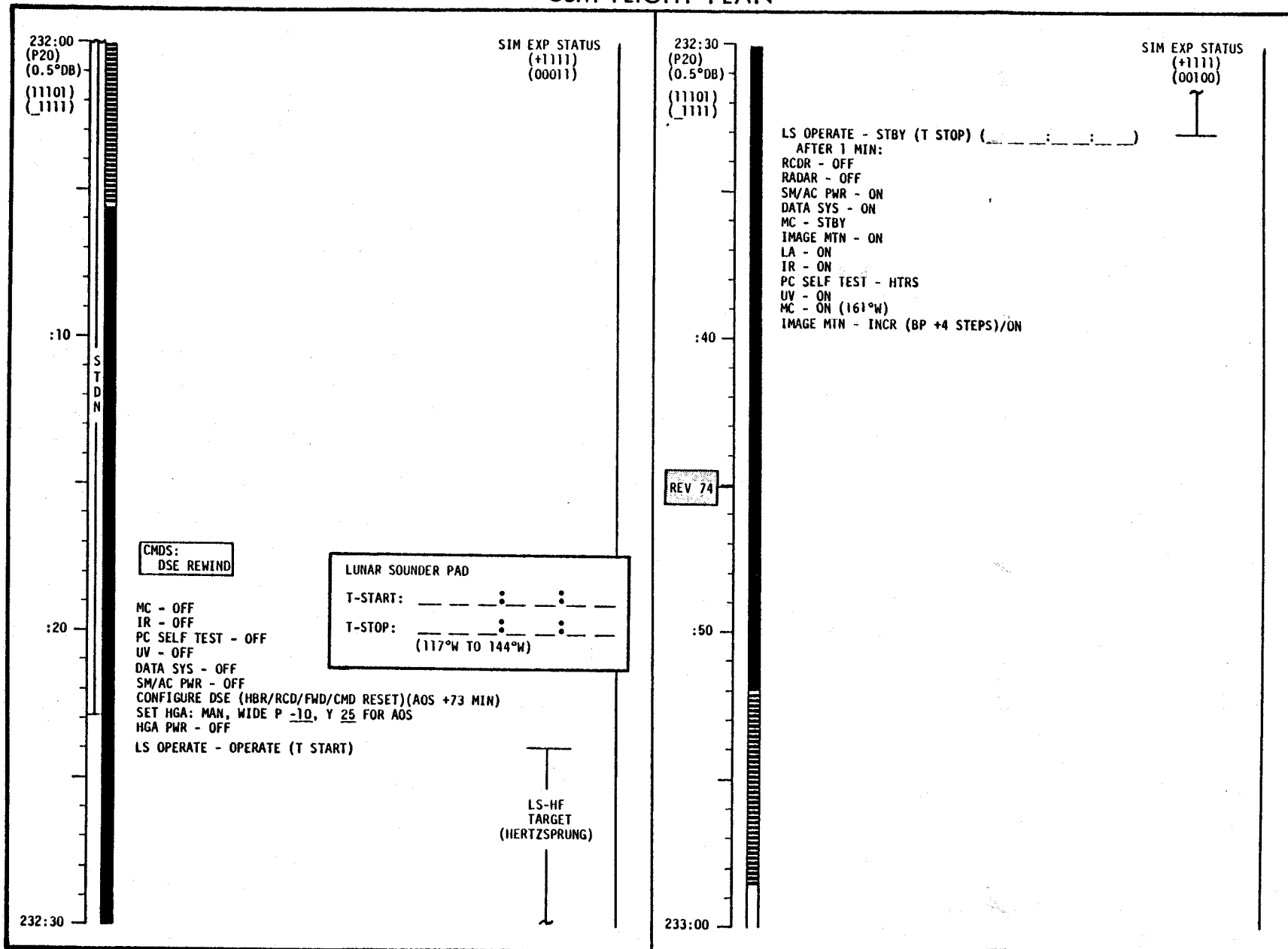


CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-340

CSM FLIGHT PLAN

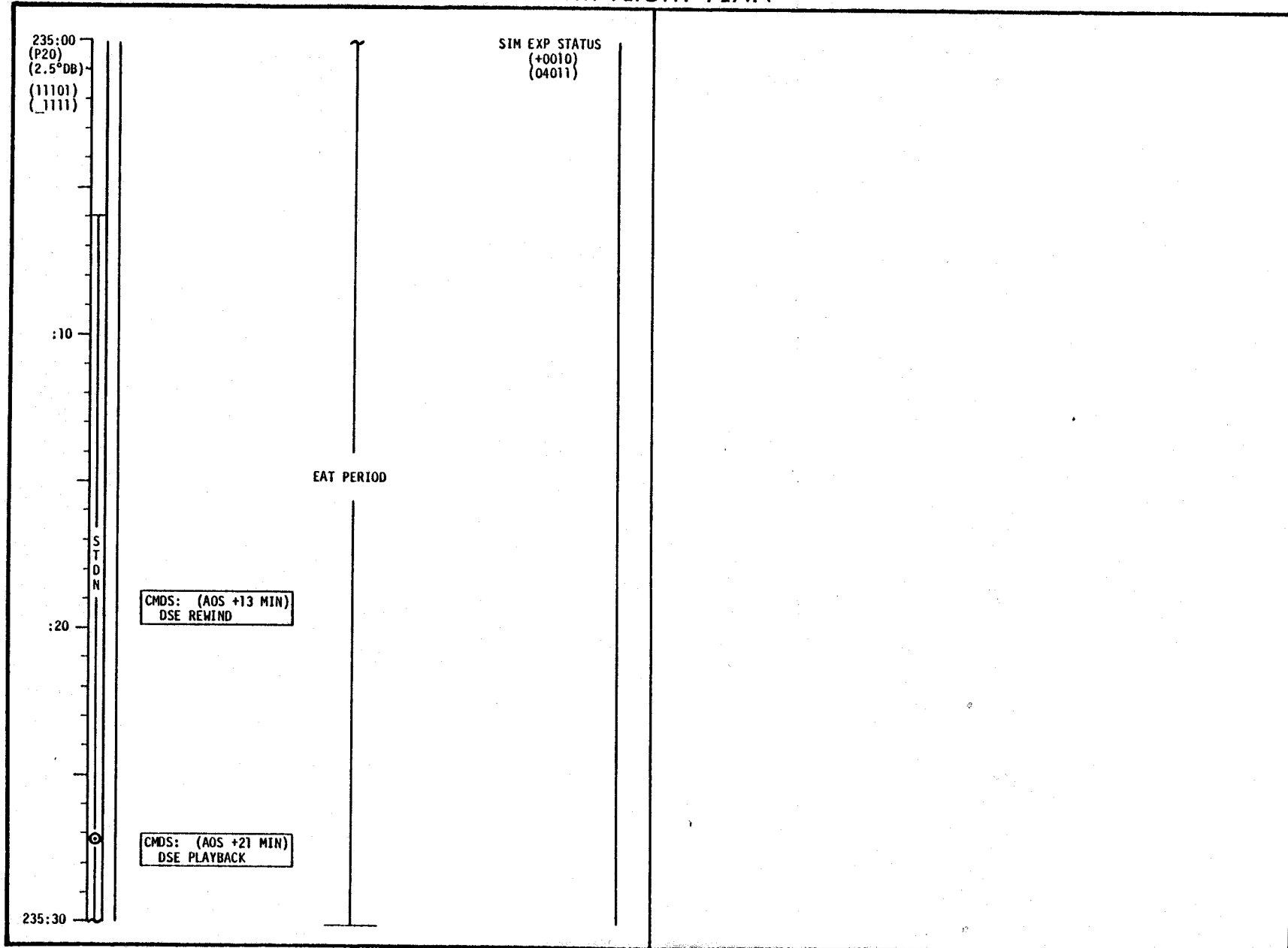


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-341

CSM FLIGHT PLAN

234:00 (P20) (0.5°DB) (11101) (11111)	SIM EXP STATUS (+1010) (12011)	234:30 (P20) (2.5°DB) (11101) (11111)	SIM EXP STATUS (+0010) (04011)
:10 S T D N	MC - RETR PC - OFF (CUE) LA - OFF MC/LA COVER - CLOSE CMC MODE - FREE P52 (OPTION 3) (LIFT-OFF ORIENT) REPORT: <u>GYRO TORQUING ANGLES</u> P52 (OPTION 1) (TEI ORIENT) CMDS: (AOS +64 MIN) DSE REWIND V22N79 (+002.50) P20; CMC MODE - AUTO GDC ALIGN cb O ₂ TANK 50 WATT HEATERS (3) - OPEN cb O ₂ TANKS 1&2 100 WATT HEATERS - CLOSE	:40 REV 75	EAT PERIOD
:20 (11101) (11111)	P52 IMU REALIGN N71: _____ N05: _____ N93: _____ X _____ Y _____ Z _____ GET _____ R 142 P 097 Y 000 (ON TEI ORIENT)	:50	
234:30	CONFIGURE DSE (HBR/RCD/FWD/CMD RESET)(AOS +73 MIN) SET HGA MAN P -10, Y 25 REACQ, NARROW FOR AOS ENABLE ALL JETS NOTE: ALL AXES COUPLED FOR ATTITUDE CONTROL	235:00	

CSM FLIGHT PLAN



235:00
(P20)
(2.5°DB)
(11101)
(1111)

SIM EXP STATUS
(+0010)
(04011)

:10

EAT PERIOD

S
T
A
N
D

:20

CMDS: (AOS +13 MIN)
DSE REWIND

CMDS: (AOS +21 MIN)
DSE PLAYBACK

235:30

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-344

CSM FLIGHT PLAN

235:30
(P20)
(2.5°DB)
(11101)
(1111)

UPLINK:
CSM S.V. & V66
TEI 75 TGT LOAD

SIM EXP STATUS
(+0010)
(04011)

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

:40

STON

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
POO
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

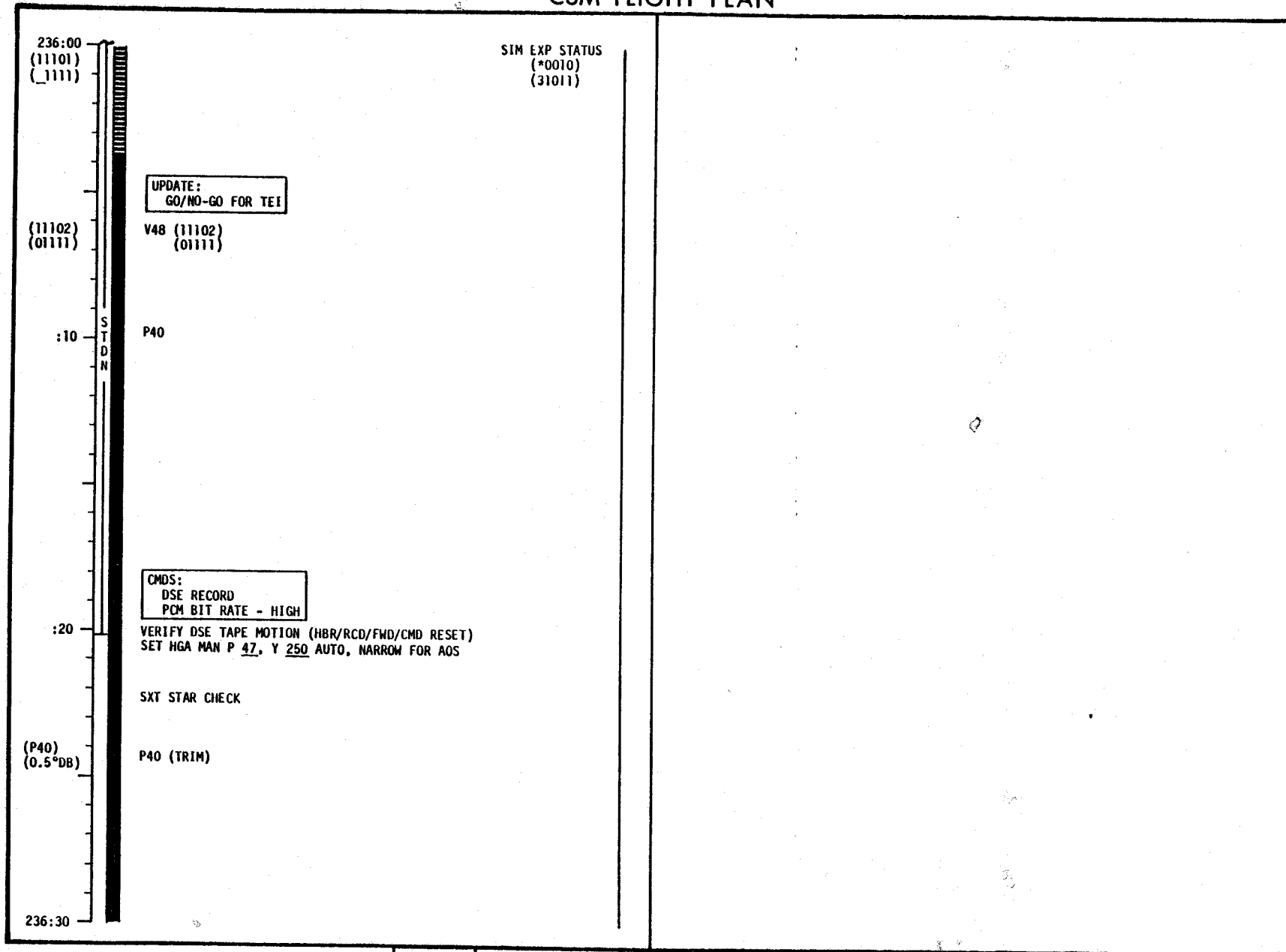
(11101)
(1111)

236:00

P30 MANEUVER

	T	E	I			PURPOSE
	S	P	S	G	& N	PROP/GUID
SET STARS	+					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

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)

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

REV 76
(11102)
(01111)

:40

:50

237:00

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

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

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

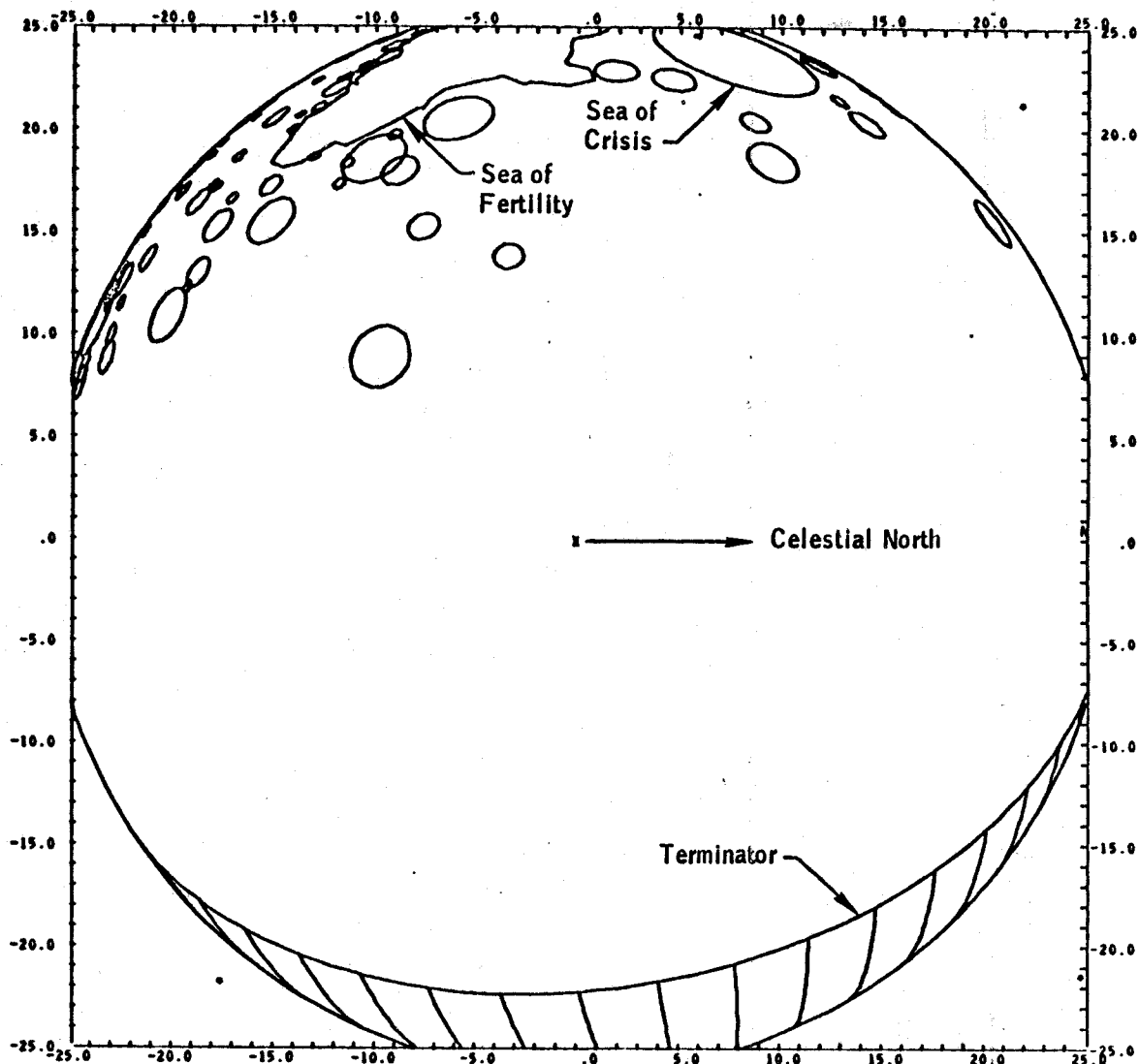
MAP UPDATE REV 76

AOS WITHOUT BURN _____ : _____ : _____
AOS WITH BURN _____ : _____ : _____

Longitude = 96.24°

Latitude = -13.32°

Radius = 2121.73 n. mi.



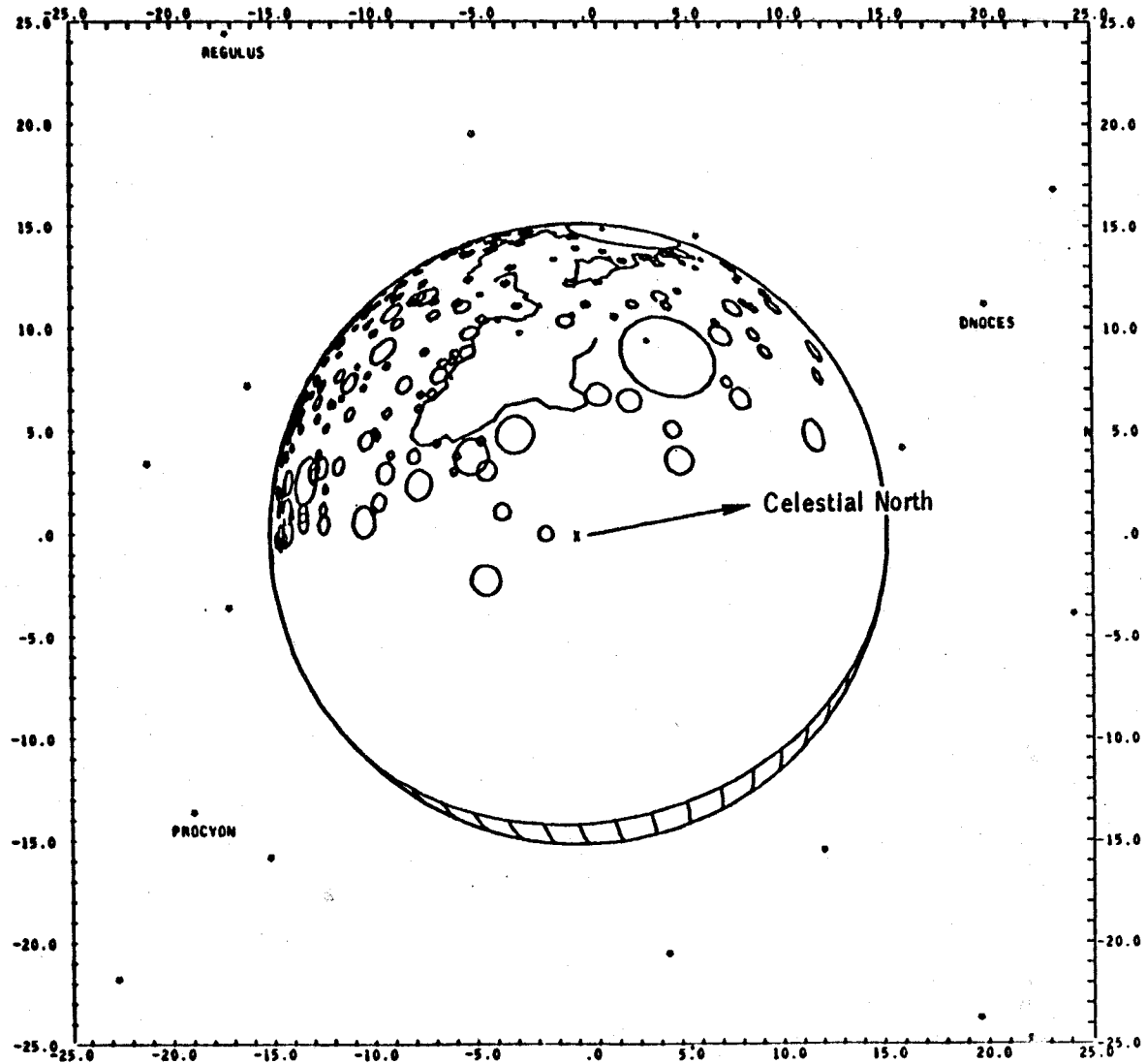
GET=237:10

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	V	7	1	V	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 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 X		
	NAV CHECK SEC	X X				X X		
N43	LAT	0				0		
	LONG							
	ALT	+ 0				+ 0		

FLIGHT PLAN

MCC-H

1753 CST

NOTES

237:00
(11102)
(01111)

(11101)
(01111)
:10

:20

237:30

:40

:50

238:00

T
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N

PC - STBY AT (tb - bp)

V48 (11101)(01111)

S-BD AUX TV - SCI

PC - OFF (STDN CUE)

V49 MNVR TO UV STELLAR TGT ATT (LY α MIN) (237:45)

(137,189,000) HGA: P -72, Y 309

COPY CSM S.V. FROM DSKY

UV
IR

UV
IR

UV
LY α MIN

IR

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"

CMD
DSE REWIND

UPDATE
FLIGHT PLAN

CMD
DSE PLAYBACK

UPLINK
DESIRED ORIENT
(PTC)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	237:00 - 238:00	11/TEC	3-351

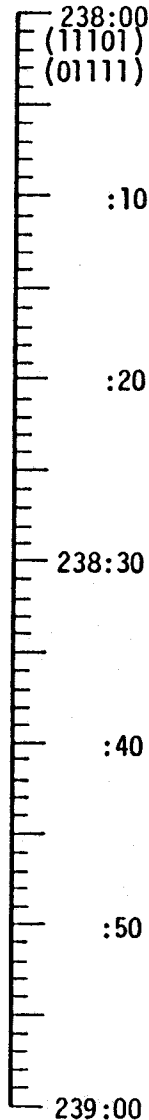
FLIGHT PLANNING BRANCH

MCC-H

1853 CST

FLIGHT PLAN

NOTES



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LIMIT CYCLE - ON
 ATT DEADBAND - MIN
 RATE - LOW STARS _____,
 BMAG (3) - ATT 1/RATE 2 SA _____,
 SCS CONT - SCS TA _____,
 P52 (OPTION 3)
 (TEI ORIENT)

REPORT: GYRO TORQUING ANGLES
 P52 (OPTION 1)
 (PTC ORIENT) PTC REFSMMAT ATT.
 GDC ALIGN R 070, P 015, Y 351
 SC CONT - CMC
 BMAG (3) - RATE 2
 CMP DON BIOMED HARNESS

CHECK CMP BIOMED
 LMP DOFF BIOMED HARNESS
 V49 MNVR TO UV STELLAR TGT ATT (EARTH) (239:00)
 (248,331,342) OMNI D

SIM EXP STATUS
 (*1011)
 (04011)

UV
 LY α MIN
 IR

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

SPACECRAFT REAL TIME
 DATA IS NOT AVAILABLE
 UNTIL 240:00

CMD
DSE REWIND

CMD
DSE RECORD

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

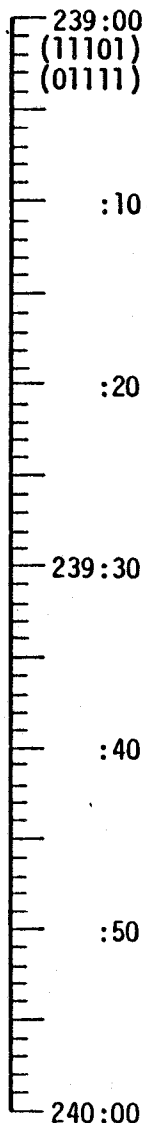
MCC-H

1953 CST

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°

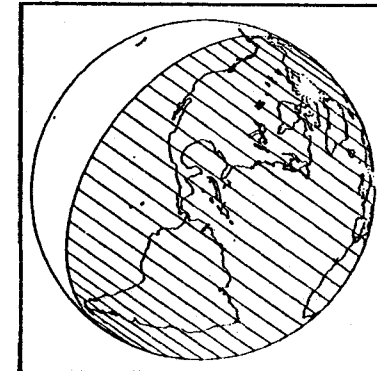


EXERCISE PERIOD

UV
 EARTH
 IR

V49 MNVR TO UV STELLAR TGT ATT (MOON) (240:00)
 (071,355,320) HGA: P -46, Y 347

GET = 239:00 FOV = 3°



CMD
 DSE REWIND

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	239:00 - 240:00	11/TEC	3-353

FLIGHT PLAN

MCC-H

2053 CST

NOTES

CMD
DSE PLAYBACK

240:00
(11101)
(01111)

SIM EXP STATUS
(*1011)
(04011)

UPDATE
FLIGHT PLAN

:10

:20

UV
MOON

UV OPTICAL AXIS
POINTED AT RA 6:58,
DEC +22° CSM + X
AXIS AT RA 11:20
DEC +4°

240:30

S
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LIQH 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

IR

:40

CSM G&C CHECKLIST

UPLINK
CSM S.V. & V66

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

AFTER STDN CUE

V49 TO UV/PTC SLEEP ATT

:50

(N20,357,335)

P20 OPT 2, X-AXIS

N78 (0,0,0)

N79 (-0.4200, +000.50)

N34 (0,0,0)

D1,B2,A3,C4,B3 AND
D4 WILL BE USED FOR
PTC RATE DAMPING,
B2 & D2 FOR PTC
SPINUP

COMM: HGA REACQ, NARROW P -40, Y 90

CMD
DSE REWIND

241:00

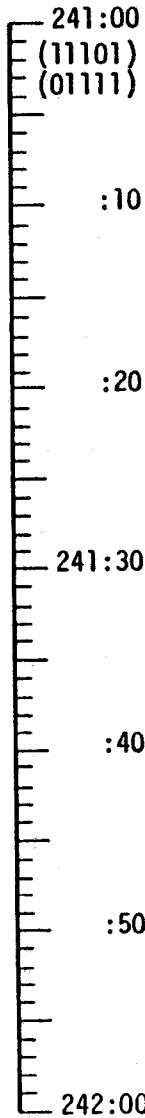
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	240:00 - 241:00	11/TEC	3-354

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2153 CST



S
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EAT PERIOD

UV/PTC
GALACTIC SCAN

NOTES

SIM EXP STATUS
(*0001)
(01001)

DURING UV/PTC GALACTIC
SCAN THE CSM +X AXIS
WILL BE POINTED
AT RA 10:25, DEC
+07°

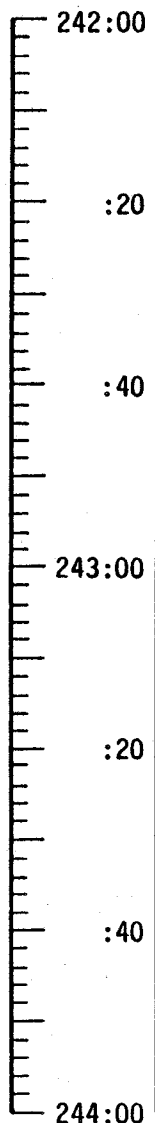
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	241:00 - 242:00	11/TEC	3-355

MCC-H

2253 CST

FLIGHT PLAN

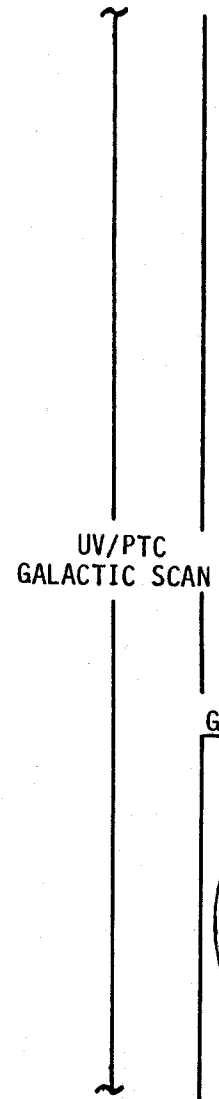
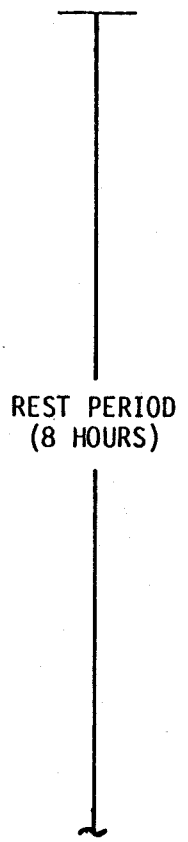
NOTES



S
T
D
N

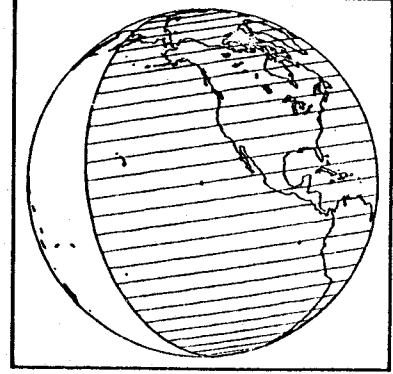
CSM SYSTEMS CHECKLIST

PRE-SLEEP CHECKLIST PAGE S/1-29
 COMM: HGA
 FILM MAGS REQUIRED FOR NEXT DAY
 DAC: FF



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

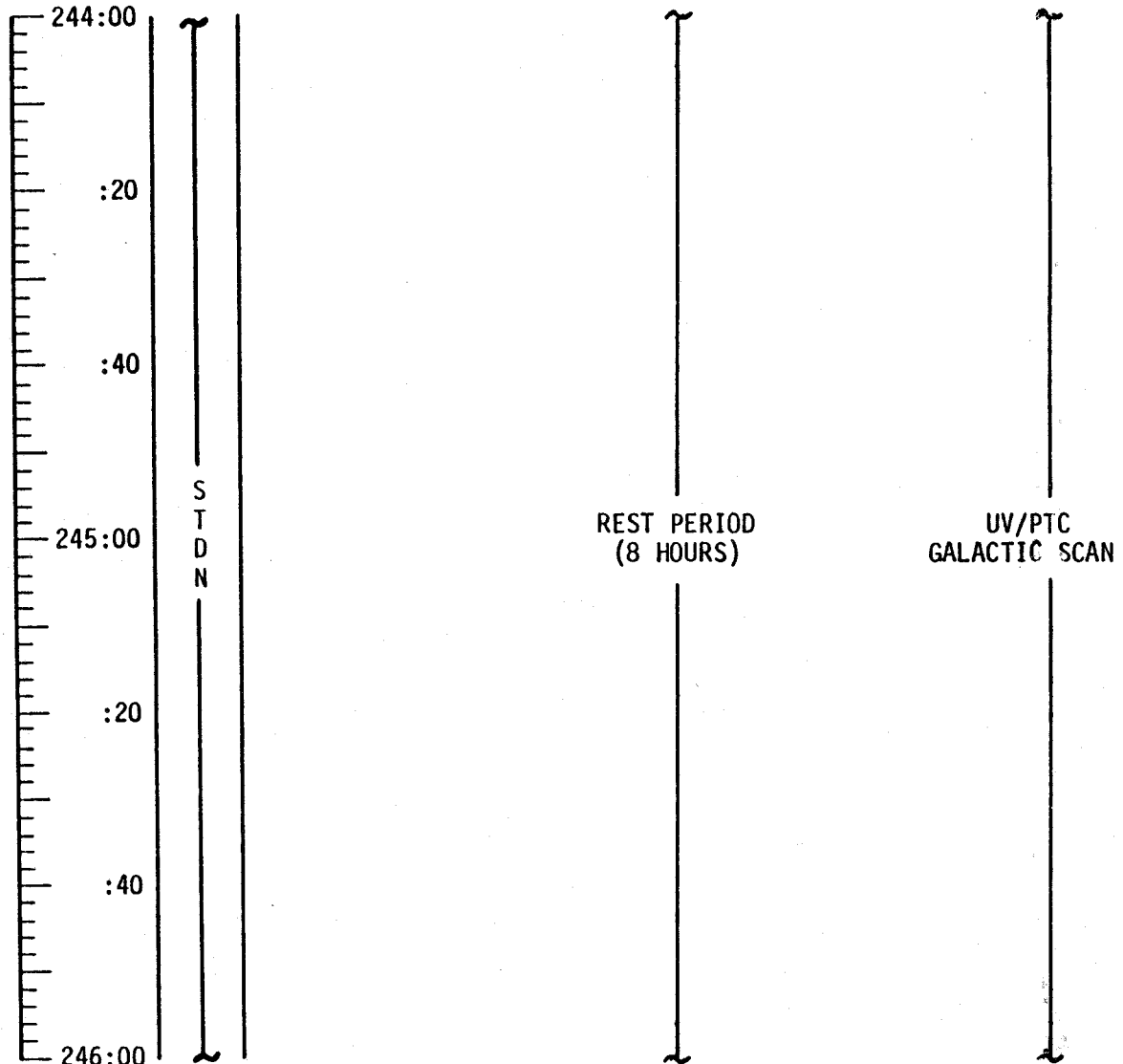
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0053 CST

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

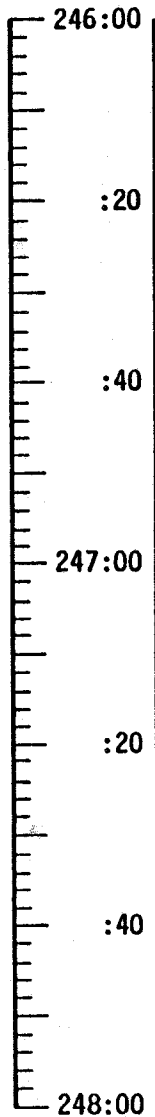
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0253 CST

NOTES



S
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N

REST PERIOD
(8 HOURS)

UV/PTC
GALACTIC SCAN

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

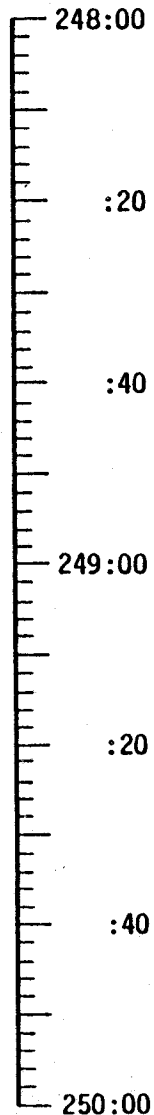
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0453 CST

NOTES



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REST PERIOD
(8 HOURS)

UV/PTC
GALACTIC SCAN

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

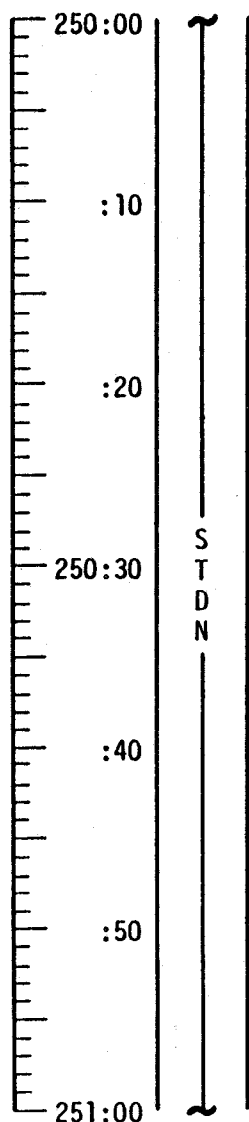
FLIGHT PLANNING BRANCH

MCC-H

0653 CST

FLIGHT PLAN

NOTES



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D
N

REST PERIOD
(8 HOURS)

CSM SYSTEMS CHECKLIST

POST-SLEEP CHECKLIST PAGE S/1-29

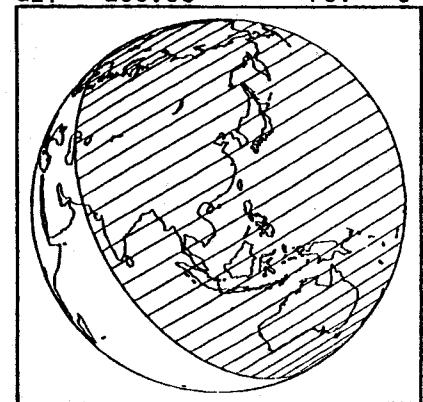
UV/PTC
GALACTIC SCAN

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

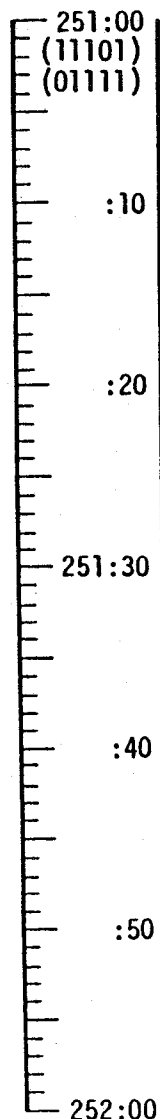
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0753 CST

NOTES



S
T
D
N

EAT PERIOD

UV/PTC
GALACTIC SCAN

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

NOTES

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

S
T
D
N

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

O₂ 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

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	____: ____: ____

IR

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 $\Delta V_c = 0$	TRIM X AXIS ONLY TO 0.2 FPS
IP CONTROL	TIGHT	10°/SEC TERMINATE	±10° TERMINATE	DELAY NO RESTART	BT + 1 SEC AND $\Delta V_c = 0$	*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.

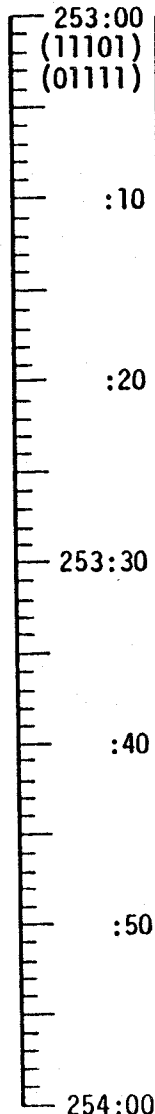
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	N/A	12/TEC	3-364

FLIGHT PLAN

MCC-H

0953 CST

NOTES



- *LOGIC PWR (2) - OFF
- *P40 SPS THRUSTING OR
- *P41 RCS THRUSTING

TERMINATE WASTE WATER DUMP AT 10% LEVEL

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

TEI +17 HR

MCC-5

TIG: 253:40
BT: NOM ZERO
ΔVT: NOM ZERO
ULLAGE: NOM ZERO

- *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

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	253:00 - 254:00	12/TEC	3-365

FLIGHT PLAN

MCC-H

1053 CST

NOTES

254:00
 (11101)
 (01111)

:10

:20

254:30

:40

:50

255:00

S
T
D
N

TV AND DAC PREP
 MAG (FF)

I
R

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

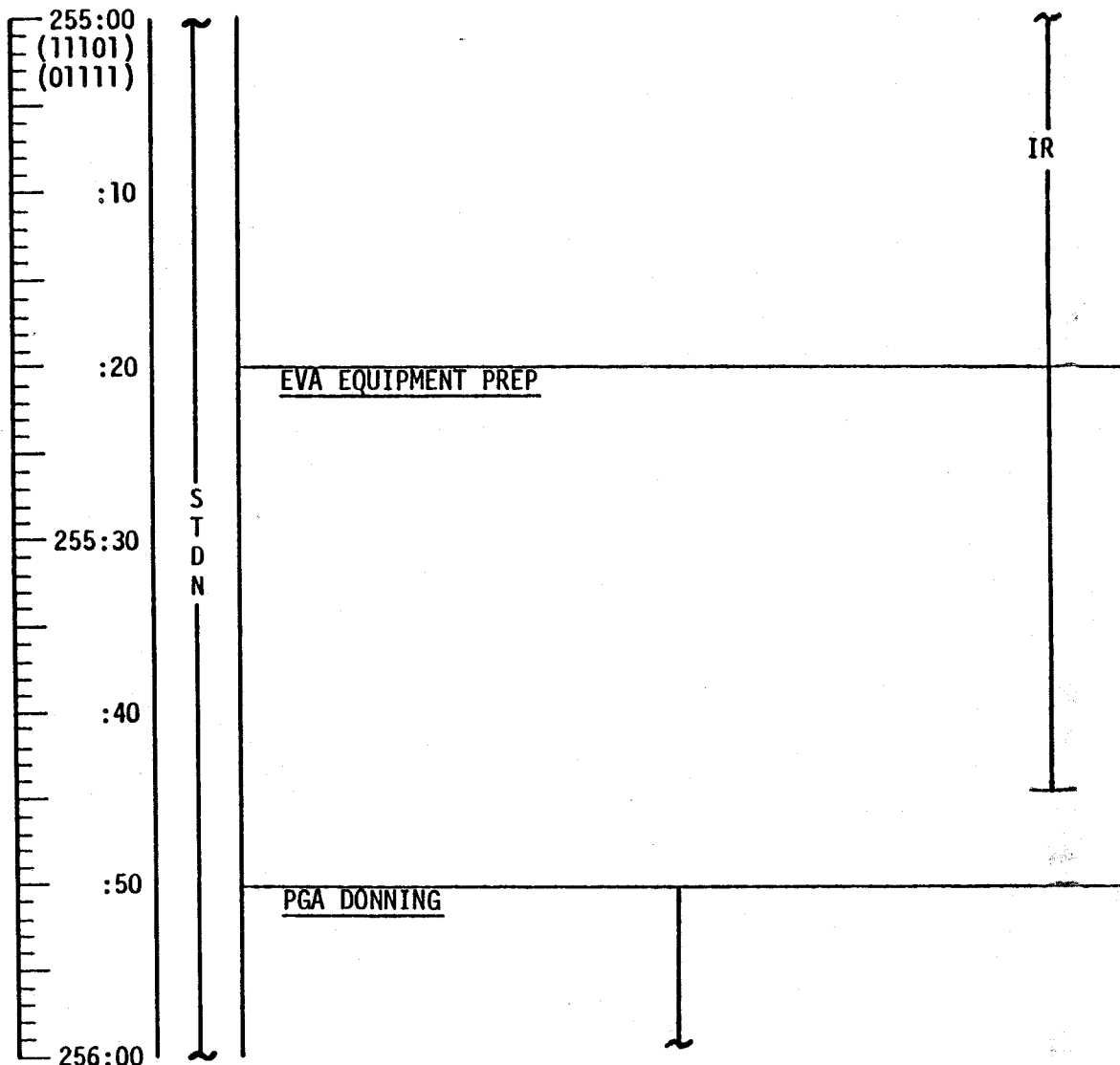
FLIGHT PLANNING BRANCH

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

MCC-H

1253 CST

FLIGHT PLAN

NOTES

256:00
 (11101)
 (01111)

:10

:20

256:30

(10101)
 (10011)

:40

:50

257:00

S
T
D
N

PGA DONNING
 V49 MNVR TO EVA ATT (256:30)
 (310,356,009) HGA P 43, Y 262

PRESS GAGE STATIC CHECK

COMM CHECK

SYSTEMS PREP FOR DEPRESS

V48 (10101)(10011)

INHIBIT ALL JETS EXCEPT:

C1, C2, C3, C4, D3, & D4 AT CONCLUSION OF MNVR

O₂ HEATERS 3 - AUTO

CMP EVA EQUIP DONNING

OPS DONNING

SIM EXP STATUS
 (*0000)
 (00000)

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

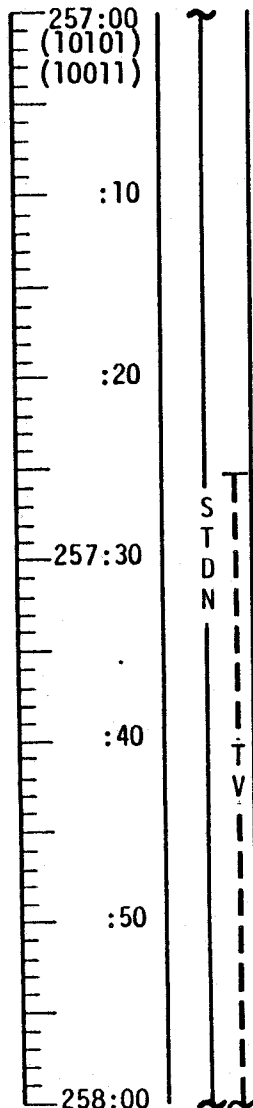
FLIGHT PLAN

MCC-H

1353 CST

NOTES

UPDATE
CONFIRM GO
FOR DEPRESS



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

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

NOTES

258:00
 (10101)
 (10011)

:10

:20

258:30

:40

:50

259:00

S
T
D
N

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

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

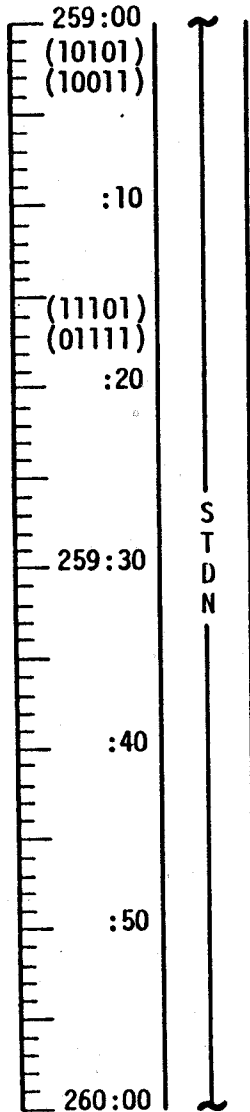
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1553 CST

NOTES



SIM EXP STATUS
(*0000)
(00000)

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
O₂ HEATERS 3 - OFF

CONTINUE POST EVA

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

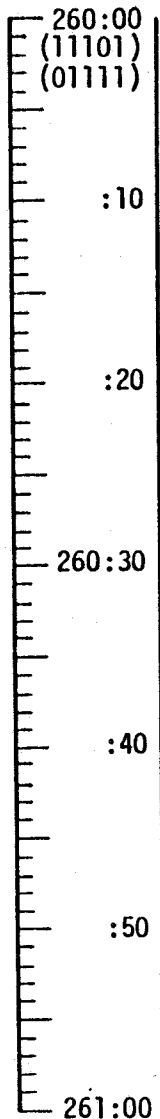
FLIGHT PLANNING BRANCH

MCC-H

1653 CST

FLIGHT PLAN

NOTES



S
T
D
N

EAT PERIOD

UV
COMA CLUSTER

IR

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

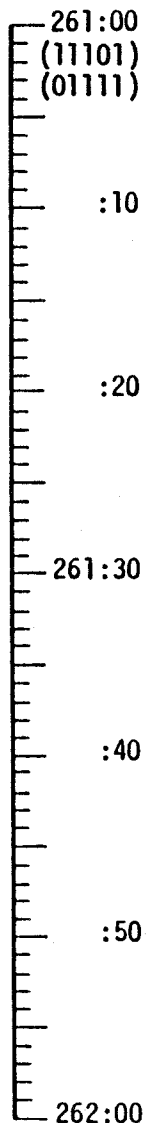
FLIGHT PLAN

MCC-H

1753 CST

NOTES

CMD
DSE REWIND



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

SIM EXP STATUS
 (*0011)
 (00011)

CMD
DSE PLAYBACK

UV
 STELLAR CAL
 IR

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	261:00 - 262:00	12/TEC	3-373

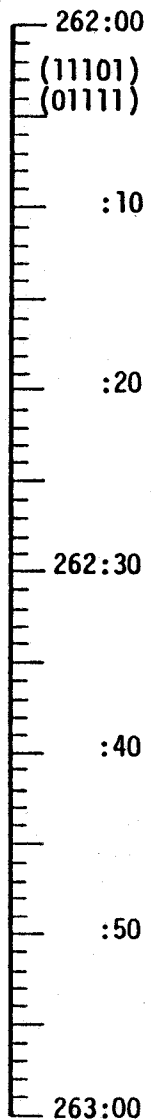
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1853 CST

NOTES



S
T
D
N

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

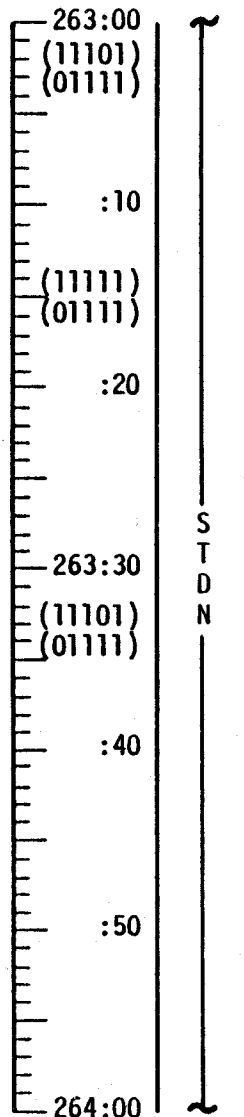
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

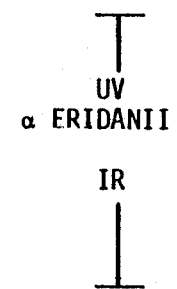
1953 CST

NOTES



V49 MNVR TO UV STELLAR TGT ATT (α ERIDANII) (263:15)
 (014,192,333) HGA P -5, Y 296

V48 (11111)(01111) CREW EXERCISE PERIOD



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

SIM EXP STATUS
 (*0011)
 (00011)

UV OPTICAL AXIS
 POINTED AT RA
 01:38:33.0, DEC
 $-58^{\circ}10'28''$
 WITH CSM +X
 AXIS AT RA 19:00,
 DEC -33^{\circ}

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

MCC-H

2053 CST

FLIGHT PLAN

NOTES

264:00
 (11101)
 (01111)

:10

:20

264:30

:40

:50

265:00

S
T
D
N

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

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

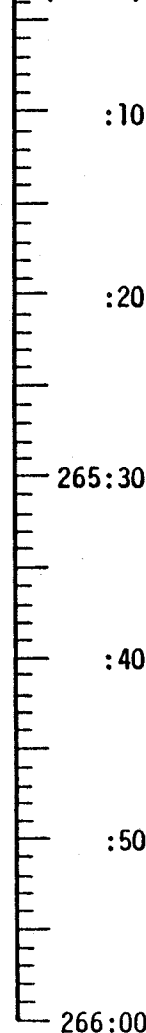
MCC-H

2153 CST

NOTES

UPDATE
FLIGHT PLAN

265:00
(11101)
(01111)



S
T
D
N

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

MCC-H

2253 CST

FLIGHT PLAN

NOTES

266:00
(11101)
(01111)

:10

:20

266:30

:40

:50

267:00

S
T
D
N

EAT PERIOD

CSM SYSTEMS CHECKLIST

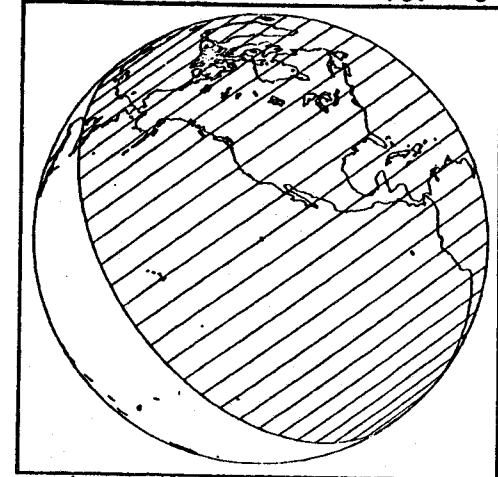
PRE-SLEEP CHECKLIST PAGE S/1-29
COMM - HGA

NO FILM MAGS REQD FOR NEXT DAY

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

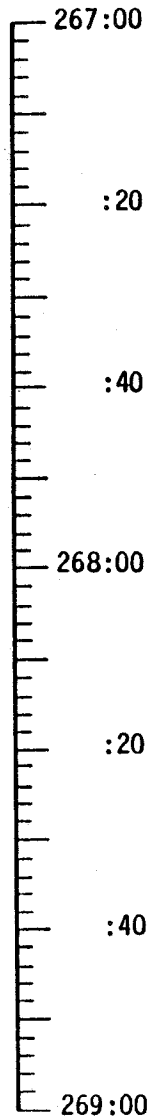
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	266:00 - 267:00	12/TEC	3-378

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2353 CST



S
T
D
N

REST PERIOD
(8 HOURS)

UV/PTC
GALACTIC SCAN

NOTES

SIM EXP STATUS
(*0001)
(00001)

DAP LOAD STATUS
(11101)(01111)

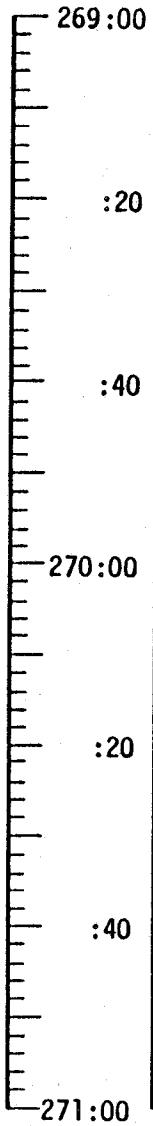
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	267:00 - 269:00	12/TEC	3-379

MCC-H

0153 CST

FLIGHT PLAN

NOTES



S
T
D
N

REST PERIOD
(8 HOURS)

UV/PTC
GALACTIC SCAN

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

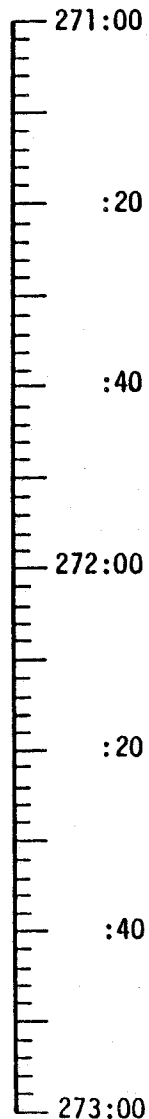
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0353 CST

NOTES



S
T
D
N

REST PERIOD
(8 HOURS)

UV/PTC
GALACTIC SCAN

SIM EXP STATUS
(*0001)
(00001)

DAP LOAD STATUS
(11101)(01111)

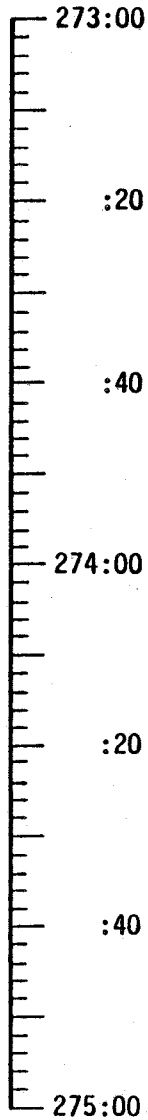
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	271:00 - 273:00	12/TEC	3-381

MCC-H

0553 CST

FLIGHT PLAN

NOTES



S
T
D
N

REST PERIOD
(8 HOURS)

UV/PTC
GALACTIC SCAN

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

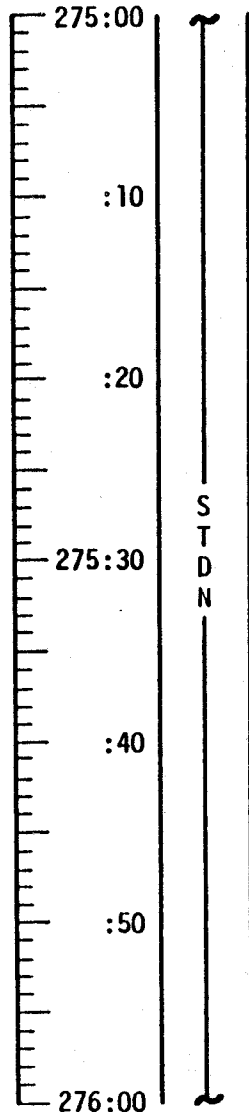
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0753 CST

NOTES



CSM SYSTEMS CHECKLIST

POST-SLEEP CHECKLIST PAGE S/1-29

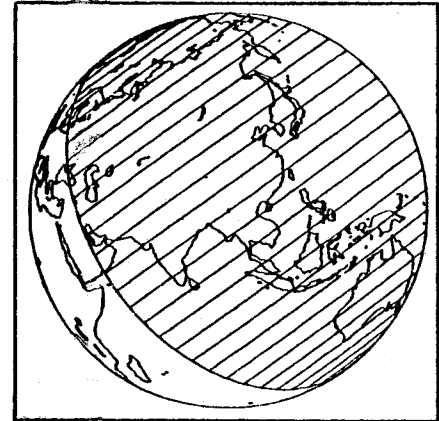
SIM EXP STATUS
(*0001)
(00001)

DAP LOAD STATUS
(11101)(01111)

EARTH DISTANCE
~ 121,855 NM

GET = 275:00

FOV = 4°



EAT PERIOD

UV/PTC
GALACTIC SCAN

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

MCC-H

0853 CST

FLIGHT PLAN

NOTES

SIM EXP STATUS
(*0001)
(00001)

276:00
(11101)
(01111)

:10

:20

276:30

:40

:50

277:00

STDN

EAT PERIOD

UV/PTC
GALACTIC SCAN

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 6/8-3
 H₂ PURGE LINE HEATER - ON
 P52 (OPTION 3)
 (PTC ORIENT)
 CONFIGURE FOR URINE DUMP
 REPORT: GYRO TORQUING ANGLES
 GDC ALIGN
 IR COVER - OPEN (BEFORE DUMP)
 H₂ & O₂ 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
 H₂ PURGE LINE HEATER - OFF

P52 IMU REALIGN

N71: ____ . ____

N05: ____ . ____

N93: ____ . ____

X ____ . ____

Y ____ . ____

Z ____ . ____

GET ____ : ____ : ____

UV
IR

UPDATE
 CONSUMABLES STATUS
 FLIGHT PLAN
 SIM EXP STATUS
 WASTE WATER DUMP
 PERCENTAGE

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

NOTES

277:00
(11101)
(01111)

V49 MNVR TO UV STELLAR TGT ATT (DARK NORTH) (277:15)
(212,172,316) OMNI D

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'

CMD
DSE RECORD

:10

:20

277:30

S
T
D
N

STOWAGE
FOR
ENTRY

UV
IR

UV
DARK NORTH

IR

:40

:50

278:00

CMD
DSE STOP
PCM BIT RATE - LOW

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

MCC-H

1053 CST

NOTES

V49 MNVR TO THERMAL ATT (278:15)
(265,037,011) OMNI C

SIM EXP STATUS
(*0011)
(00011)

CMD
PCM BIT RATE - HIGH
DSE RECORD

:10

:20

CMD
DSE REWIND
PCM BIT RATE - LOW

278:30

:40

:50

279:00

S
T
D
N

CREW EXERCISE PERIOD

UV
DARK NORTH

IR

SPACECRAFT REAL TIME
PCM IS NOT
AVAILABLE UNTIL
278:30

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	278:00 - 279:00	13/TEC	3-386

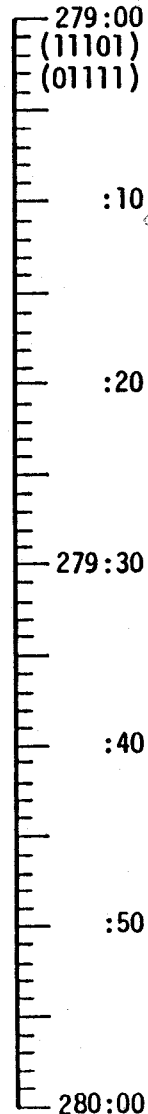
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1153 CST

NOTES



S
T
D
N

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

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

L
I
G
H
T
F
L
A
S
H
O
B
S

SIM EXP STATUS
(*0011)
(00011)

UV OPTICAL AXIS
POINTED AT RA 19:00,
DEC +78° WITH CSM
+X AXIS AT RA 17:55,
DEC +11°

U
V
N
E
P

I
R

CMD
DSE PLAYBACK
PCM BIT RATE - HIGH

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

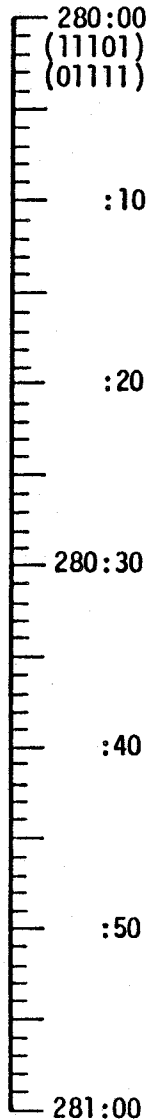
NOTES

SIM EXP STATUS
 (*0011)
 (00011)

CUE
 WHEN 60 MIN
 FLASH OBS IS
 COMPLETE

CMD
 DSE REWIND

UPLINK
 CSM S.V. & V66



S
T
D
N

LIGHT
 FLASH
 OBS

UV
 NEP
 IR

LiOH CANISTER CHANGE
 (23 INTO A, STOW 21 IN A5)

ENTRY CHECKLIST

EMS ENTRY CHECK PAGE E/1-3

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

NOTES

UPDATE
ENTRY PAD
FLIGHT PLAN

281:00
(11101)
(01111)

:10

CMD
DSE RECORD

:20

281:30

S
T
D
N

CMD (HGA AOS)
DSE DUMP

:40

:50

282:00

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

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

STOP PITCH RATE AT 146°

UV
ATMOSPHERE
CAL

IR

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

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	281:00 - 282:00	13/TEC	3-389

FLIGHT PLAN

MCC-H

1453 CST

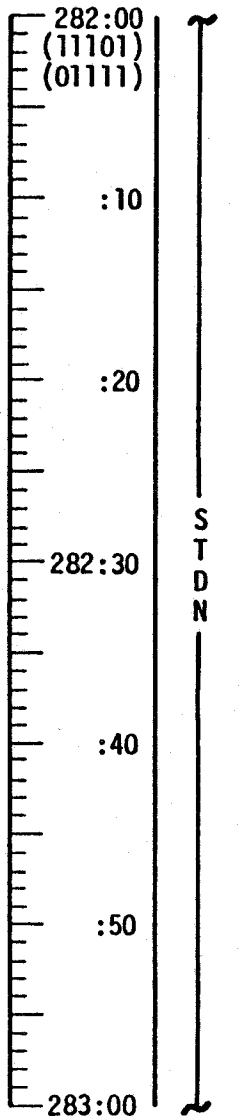
NOTES

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°

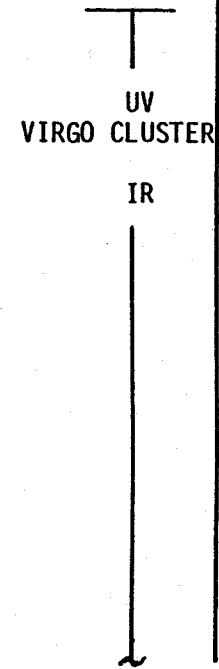
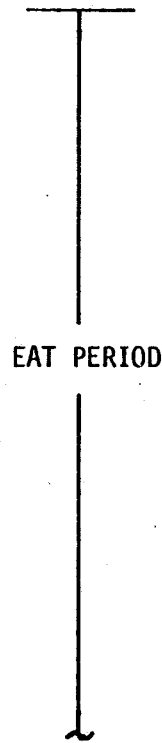
CMD
DSE RECORD
EI -22 HRS



ON STDN CUE

V49 MNVR TO UV STELLAR TGT ATT (VIRGO CLUSTER)(282:25)

(253,018,017) OMNI D



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

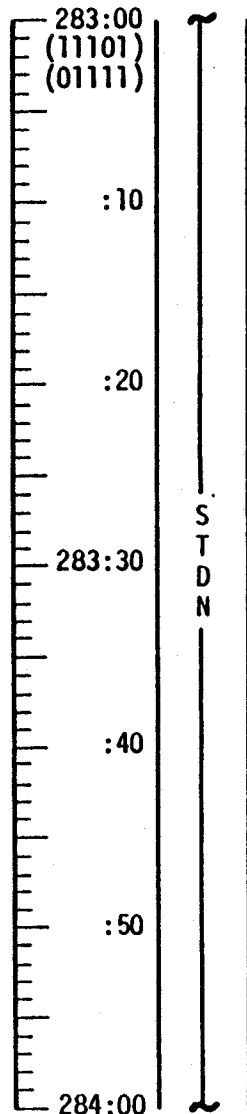
FLIGHT PLAN

MCC-H

1553 CST

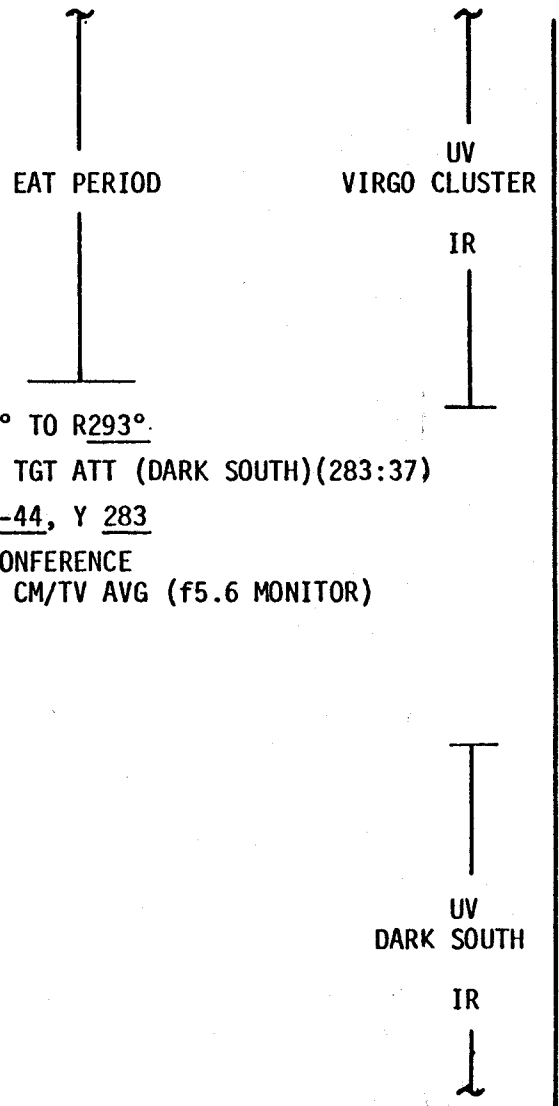
NOTES

SIM EXP STATUS
(*0011)
(00011)



CMD
DSE STOP/REWIND
PCM BIT RATE LOW

CMD
PCM BIT RATE HIGH
DSE PLAYBACK



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

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	283:00 - 284:00	13/TEC	3-391

FLIGHT PLAN

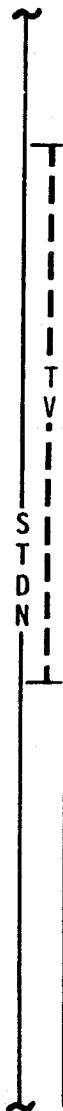
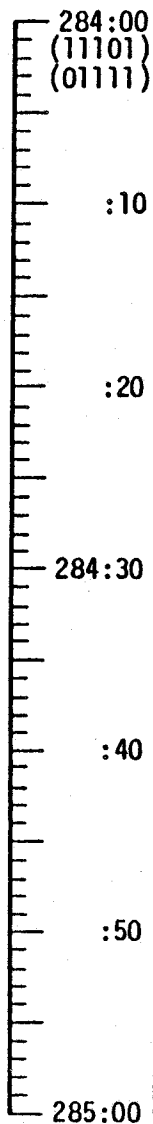
MCC-H

1653 CST

NOTES

CMD
DSE STOP

CMD
DSE PLAYBACK



TEC PRESS CONFERENCE

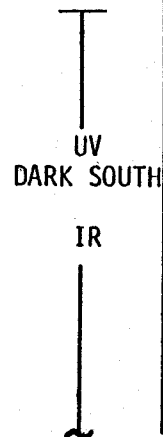
S-BD AUX TV - TV

S-BD AUX TV - SCI



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

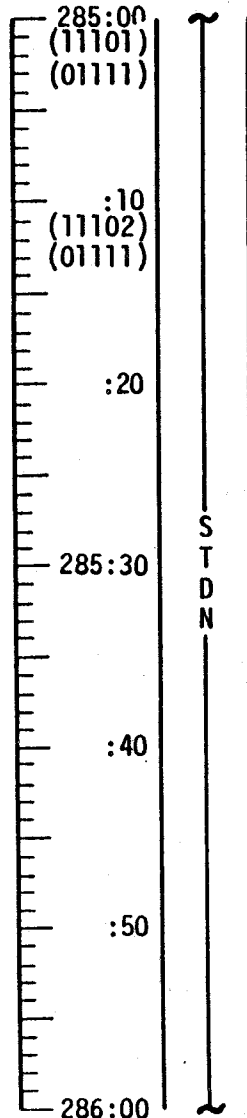
MCC-H

1753 CST

NOTES

UPDATE
FLIGHT PLAN

CMD
DSE REWIND



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

SIM EXP STATUS
(*0011)
(00011)

UV/PTC
NEP, PEG

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

MCC-H

1853 CST

FLIGHT PLAN

NOTES

286:00
(11102)
(01111)

:10

:20

286:30
(11112)
(01111)

:40

(11102)
(01111)

:50

287:00

S
T
D
N

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, Y PEG

UV
SPICA

IR

UV
SPICA, NUMA
IR

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°

CMD
DSE RECORD

CMD
DSE DUMP

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	286:00 - 287:00	13/TEC	3-394

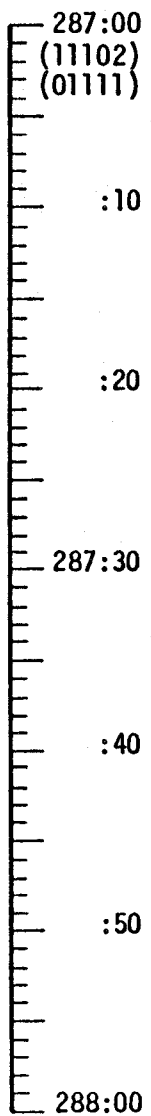
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1953 CST

NOTES



S
T
D
N

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)

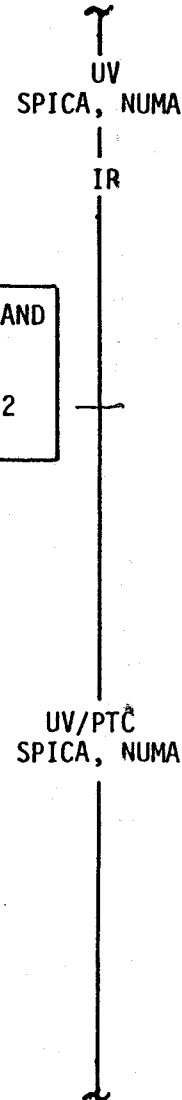
COMM: HGA REACQ NARROW

P -40, Y 90

D1, B2, A3, C4, B3 AND
D4 WILL BE USED
FOR PTC RATE
DAMPING, B2 & D2
FOR PTC SPINUP

CHECK CMP BIOMED
LMP DOFF BIOMED HARNESS

L10H CANISTER CHANGE
(24 INTO B, STOW 22 IN A5)



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

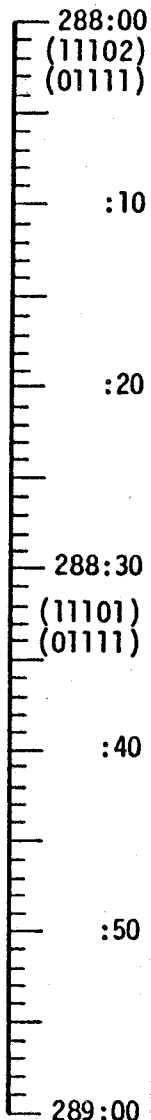
MCC-H

2053 CST

FLIGHT PLAN

NOTES

UPDATE
FLIGHT PLAN



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 (TT101)(01111)

D1, B2, A3, C4, B3 AND
 D4 WILL BE USED
 DAMPING, B2 & D2
 FOR PTC SPINUP

UV/PTC
SPICA, NUMA

SIM EXP STATUS
 (*0001)
 (00001)

P52 IMU REALIGN

N71: ____ . ____

N05: ____ . ____

N93:

X ____ . ____

Y ____ . ____

Z ____ . ____

GET ____ : ____ : ____

EAT PERIOD

UV/PTC
GALACTIC SCAN

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

S
T
D
N

EAT PERIOD

CSM SYSTEMS CHECKLIST

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

FILM MAGS REQUIRED FOR NEXT DAY

DAC: GG

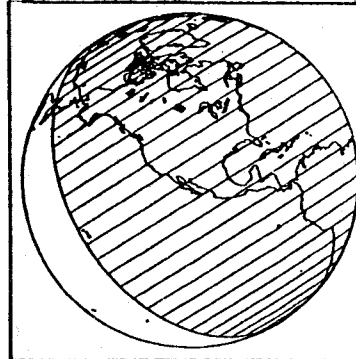
NOTES

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

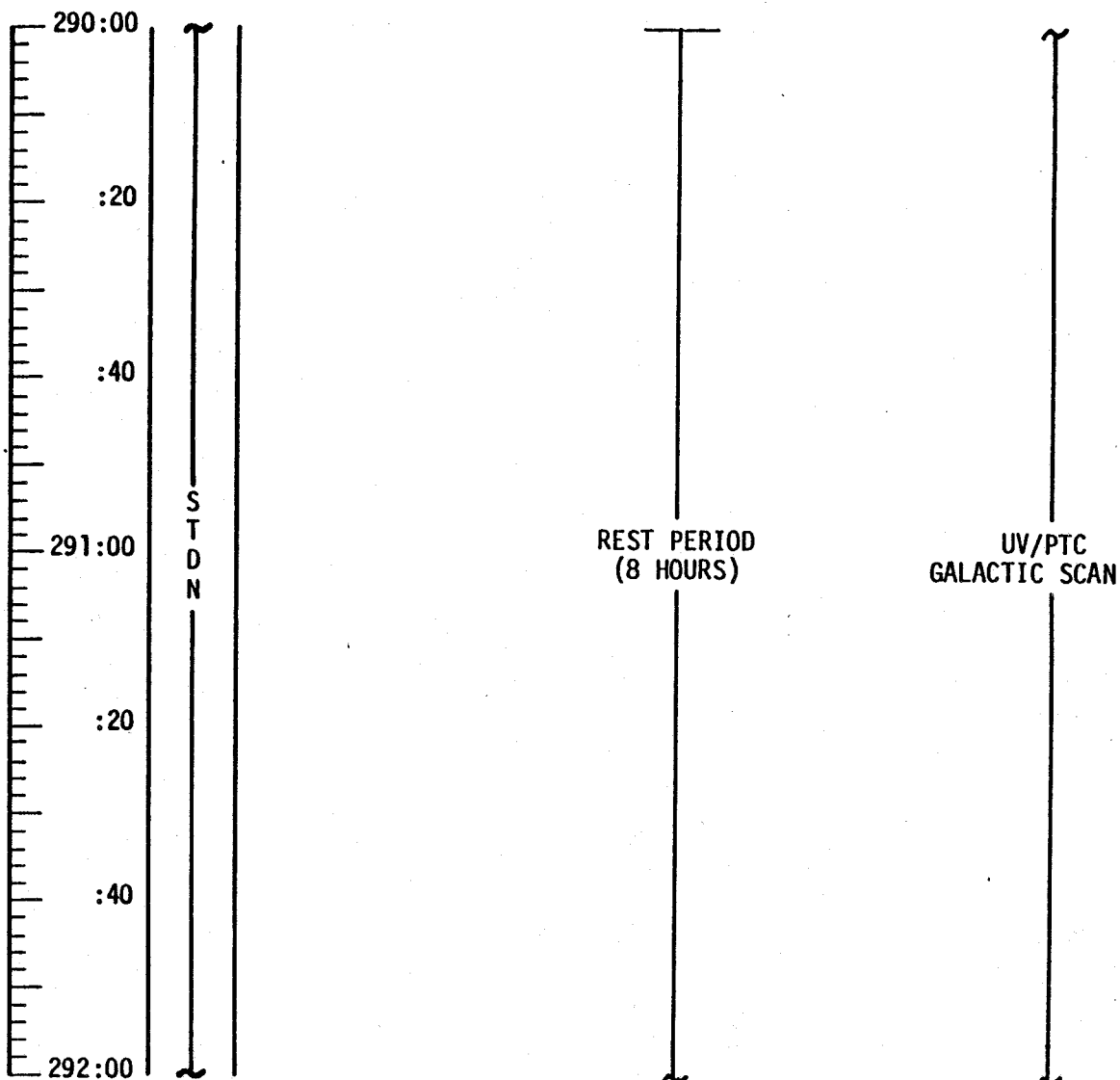
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2253 CST

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

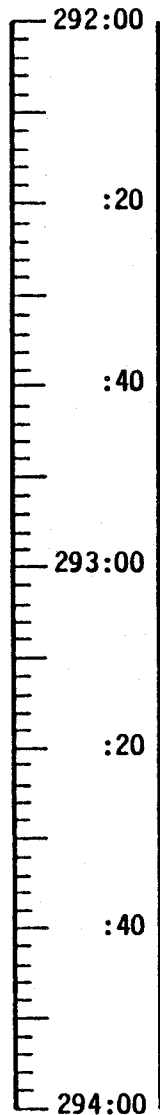
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0053 CST

NOTES



STDN

REST PERIOD
(8 HOURS)

UV/PTC
GALACTIC SCAN

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

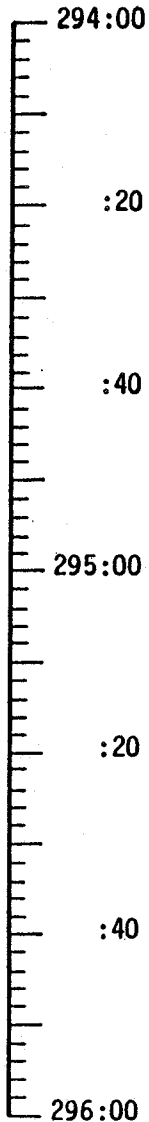
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0253 CST

NOTES



S
T
D
N

REST PERIOD
(8 HOURS)

UV/PTC
GALACTIC SCAN

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

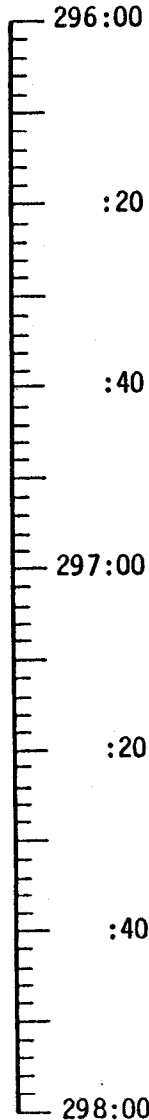
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0453 CST

NOTES



S
T
D
N

REST PERIOD
(8 HOURS)

UV/PTC
GALACTIC SCAN

SIM EXP STATUS
(*0001)
(00001)

DAP LOAD STATUS
(11101)(01111)

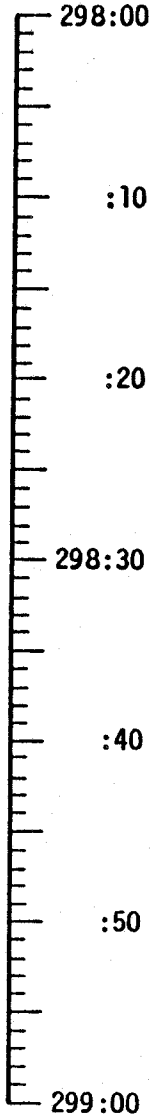
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	296:00 - 298:00	13/TEC	3-401

FLIGHT PLAN

MCC-H

0653 CST

NOTES



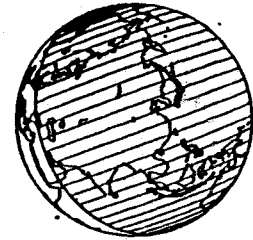
CSM SYSTEMS CHECKLIST

POST-SLEEP CHECKLIST PAGE S/1-29

SIM EXP STATUS
(*0001)
(00001)
DAP LOAD STATUS
(11101)(01111)

UV/PTC
GALACTIC SCAN

GET = 299:00 FOV = 20°



EAT PERIOD

EARTH DISTANCE
~ 38,615

EI - 6 HRS

S
T
D
N

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

299:30

:40
(11102)
(01111)

:50

300:00

S
T
D
N

EAT PERIOD

UV/PTC
GALACTIC SCAN

SIM EXP STATUS
(*0001)
(00001)

EI - 5 HRS

UPDATE
CONSUMABLE STATUS
FLIGHT PLAN
GO/NO-GO FOR
MCC-7

UPLINK

DESIRED ORIENT
(ENTRY)

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

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

UV

IR

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	299:00 - 300:00	14/TEC	3-403

MCC-H

0853 CST

FLIGHT PLAN

NOTES

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
 O2 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

SIM EXP STATUS
 (*0011)
 (00011)

EVAP H2O CONT SEC VLV - AUTO
 SUIT HEAT EXCH SEC GLY - FLOW
 MARK DIRECT O2 "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 $\Delta V_c = 0$	TRIM X AXIS ONLY TO 0.2 FPS

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)		N/A	14/TEC	3-406

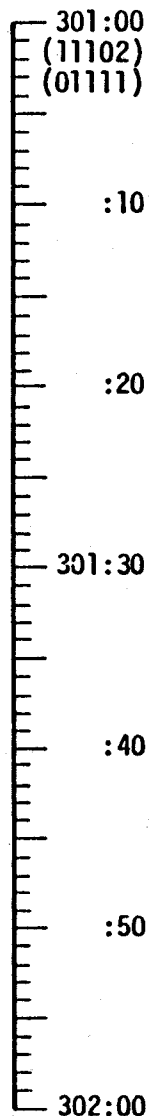
FLIGHT PLAN

MCC-H

0953 CST

NOTES

EI -3 HR



S
T
D
N

*P40 SPS THRUSTING OR
*P41 RCS THRUSTING

MCC-7

TIG: 301:18
BT: NOM ZERO
 Δ VT: 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)

SIM EXP STATUS
(*0011)
(00011)

*PERFORM IF MCC-7
IS REQUIRED

UV
IR

BURN STATUS REPORT					
X	X			•	ATIG
X	X			•	BT
				•	V _{gx}
					TRIM
X	X	X			R
X	X	X			P
X	X	X			Y
				•	V _{gx}
				•	V _{gy}
				•	V _{gz}
				•	Δ V _c
X	X	X			FUEL
X	X	X			OX
X	X	X			UNBAL

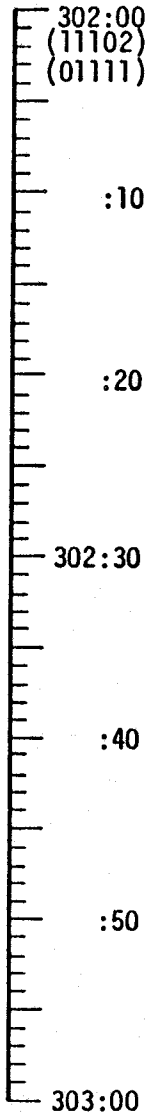
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	301:00 - 302:00	14/TEC	3-407

FLIGHT PLAN

MCC-H

1053 CST

NOTES



S
T
D
N

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

P52 (OPTION 3) PAGE E/1-2
 (ENTRY ORIENT)

SIM EXP STATUS
 (*0011)
 (00011)

EI -2 HR

UPDATE
 GO/NO-GO FOR
 PYRO ARM
 SEQUENCE

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

SIM EXP STATUS
(*0000)
(00000)

303:00
(11102)
(01111)

:10

:20

303:30

:40

:50

304:00

S
T
D
N

REPORT: GYRO TORQUING ANGLES

GDC ALIGN PAGE E/1-3
V49 MNVR TO HORIZON CHECK ATT
BORESIGHT & SXT STAR CHECK

EMS ENTRY CHECK PAGE E/1-3
PRI & SEC WATER EVAP ACTIVATION PAGE E/1-4

CONFIGURE CAMERA EQUIP FOR FIREBALL & CHUTES PHOTOS
CM RCS PREHEAT (IF REQUIRED)

FINAL STOWAGE PAGE E/1-5

CONFIGURE FOR VHF A SIMPLEX VOICE CHECK

TERMINATE RCS PREHEAT
PYRO BATT CHECK
SYSTEMS TEST PANEL CONFIGURATION PAGE E/1-6
CONFIGURE PNL 8

P27 & ENTRY PAD UPDATE

EMS INITIALIZATION PAGE E/2-1

RSI ALIGNMENT
CM RCS CHECK

SEPARATION CHECKLIST PAGE E/2-2

P61 ENTRY PREP PAGE E/2-2

P62 CM/SM SEP & PRE-ENTRY MNVR PAGE E/2-3
P63 ENTRY INIT PAGE E/2-4

EI -1 HR

UPDATE
GO/NO-GO FOR
PYRO ARM
ENTRY PAD
RECOVERY PAD

UPLINK
CSM S.V. & V66

EI -30 MIN

VHF-A SIMPLEX
COMM CHECK

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	303:00 - 304:00	14/TEC	3-409

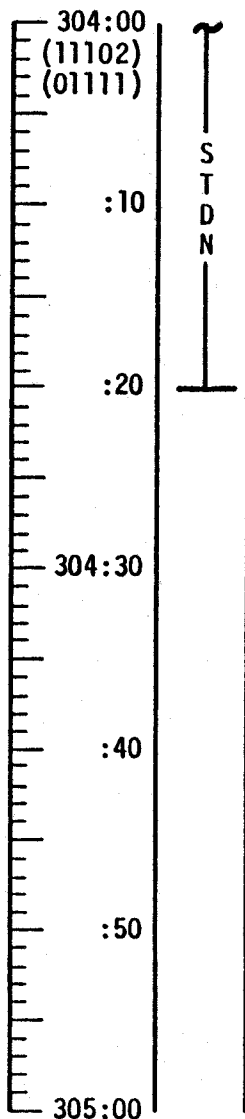
FLIGHT PLAN

MCC-H

1253 CST

NOTES

EI -15 MIN



CM/SM SEP 304:03

ENTRY ATT
(000,152,000)

EI 304:18

SPLASHDOWN 304:31

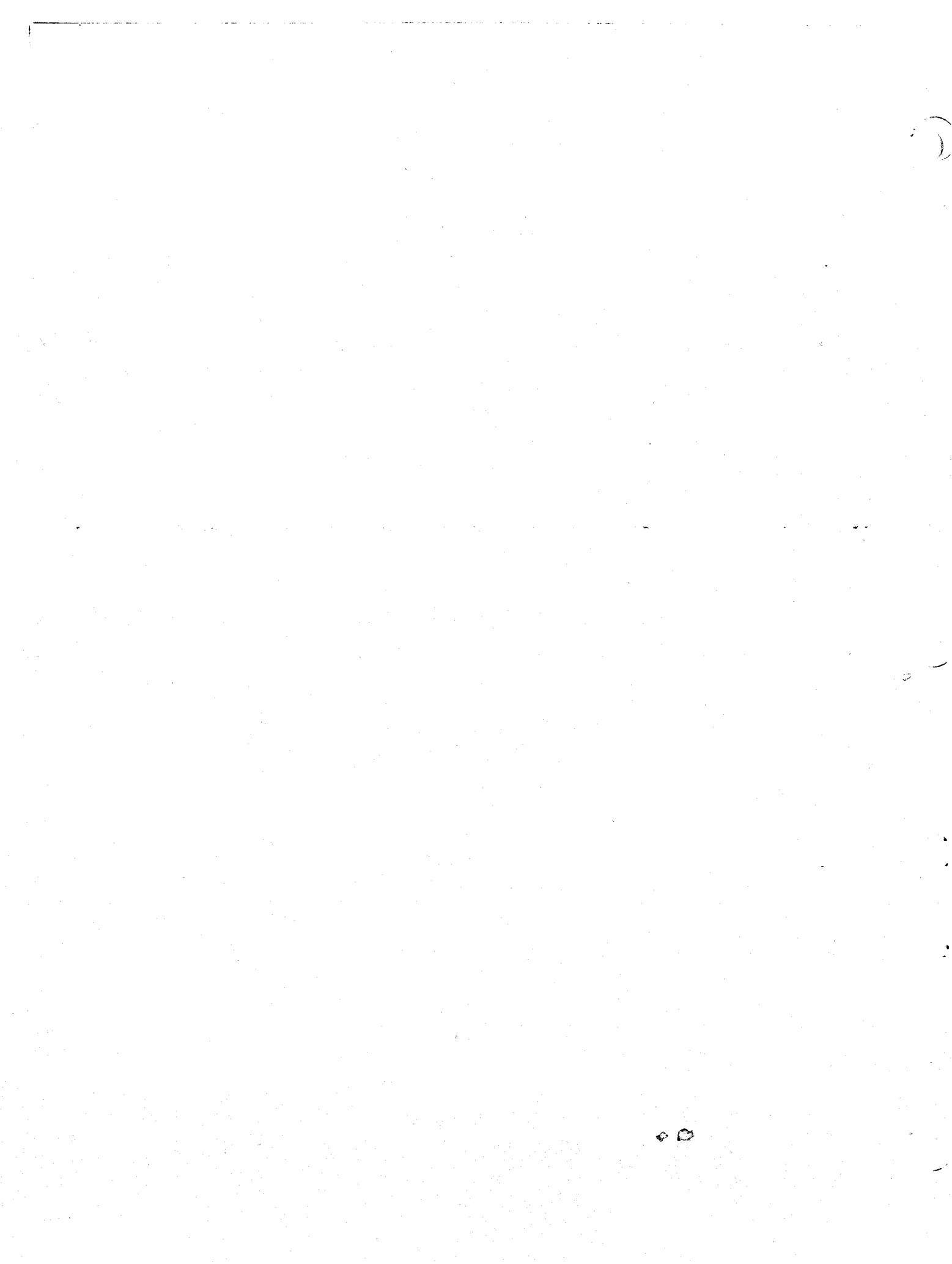
TIME FROM 400K FT	
TRAJECTORY EVENTS	MIN:SEC
400K FT (GET 304:18:00.5)	00:00
ENTRY S-BAND BLACKOUT	00:17
0.05G	00:29
KA-INITIATE CONSTANT DRAG	00:52
MAX HEATING RATE	01:12
RDOT = -700 FPS	01:20
PEAK G (FIRST)	01:23
SUBCIRCULAR VELOCITY	02:06
P64 TO P67	02:02
EXIT S-BAND BLACKOUT	03:36
PEAK G (SECOND)	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

SECTION IV



10/23/72

4-1

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.

10/23/72

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.

SM RCS budget

Mission profile dependent

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 ($0.2^\circ/\text{sec}$) 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

10/23/72

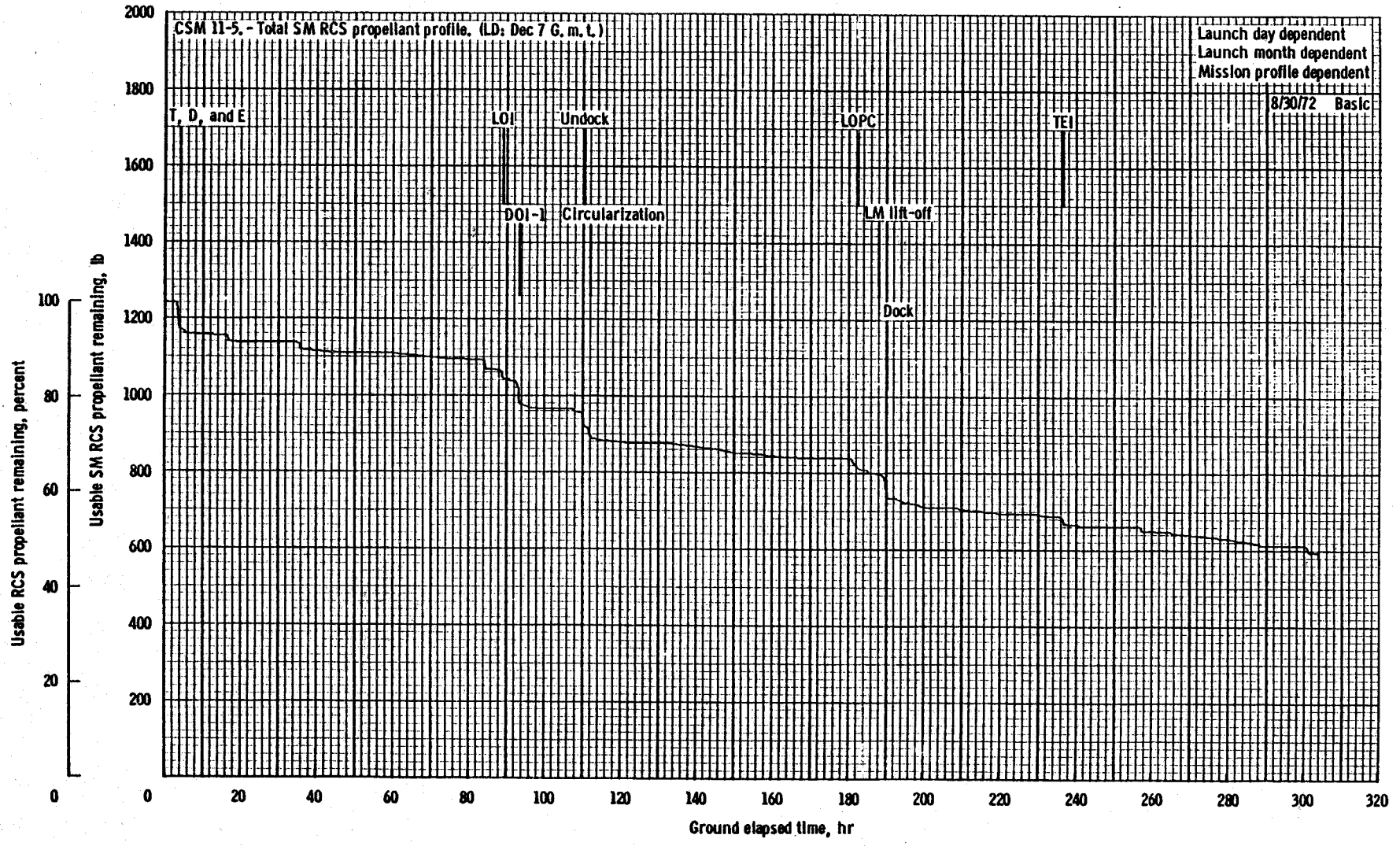
Mission profile dependent
8/29/72 Basic

SM RCS PROPELLANT TRANSLATION COST

APOLLO 17

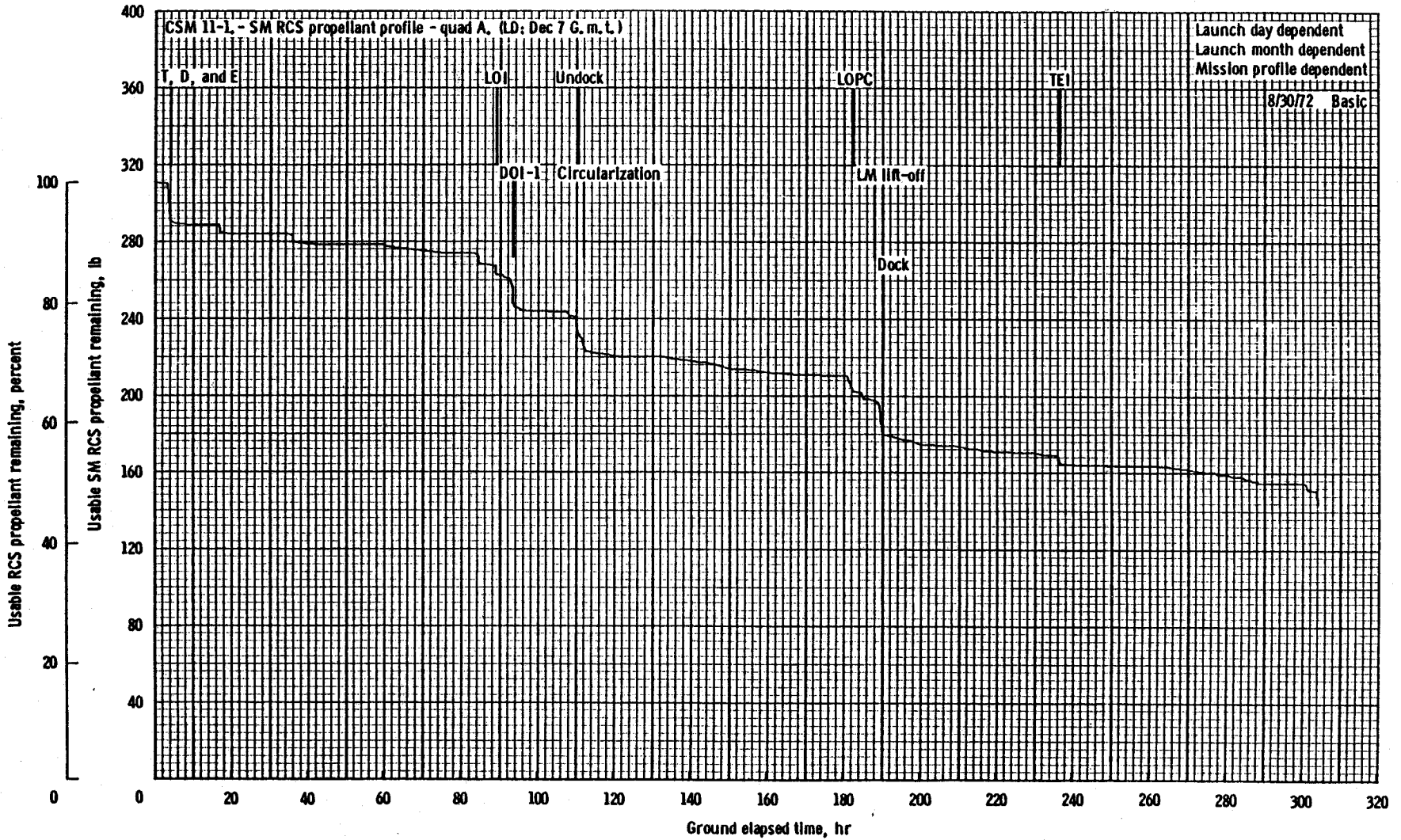
(CSM 114/LM-12)

Mission phase	Typical S/C weight (1b)	+X 4 jet G&C (1b/fps)	+X 4 jet SCS (1b/fps)	+X 2 jet A/C G&C (1b/fps)	+X 2 jet A/C SCS (1b/fps)	+X 2 jet B/D G&C (1b/fps)	+X 2 jet B/D SCS (1b/fps)	+Y or +Z G&C (1b/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

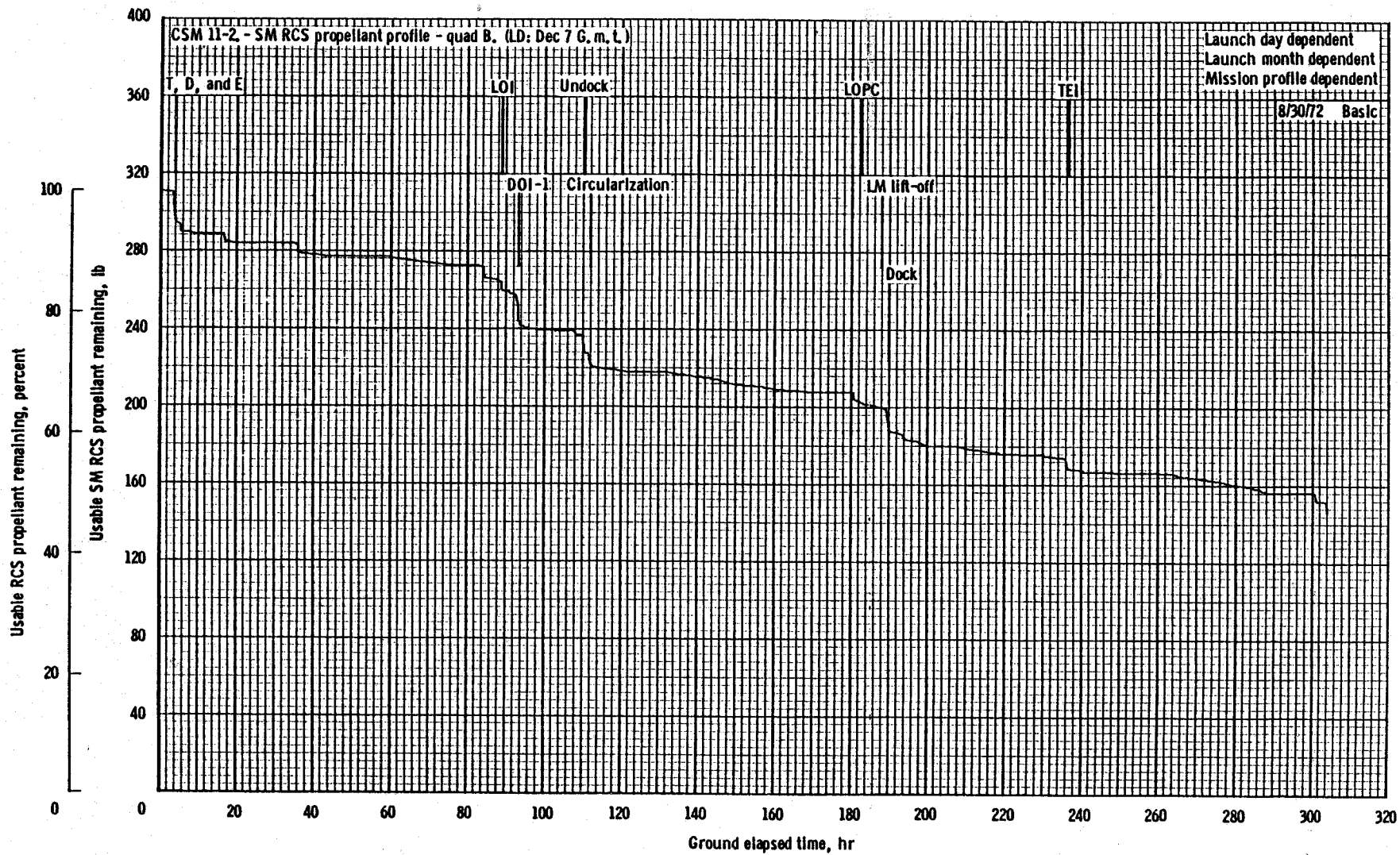


Total SM RCS propellant usage profile.

10/23/72

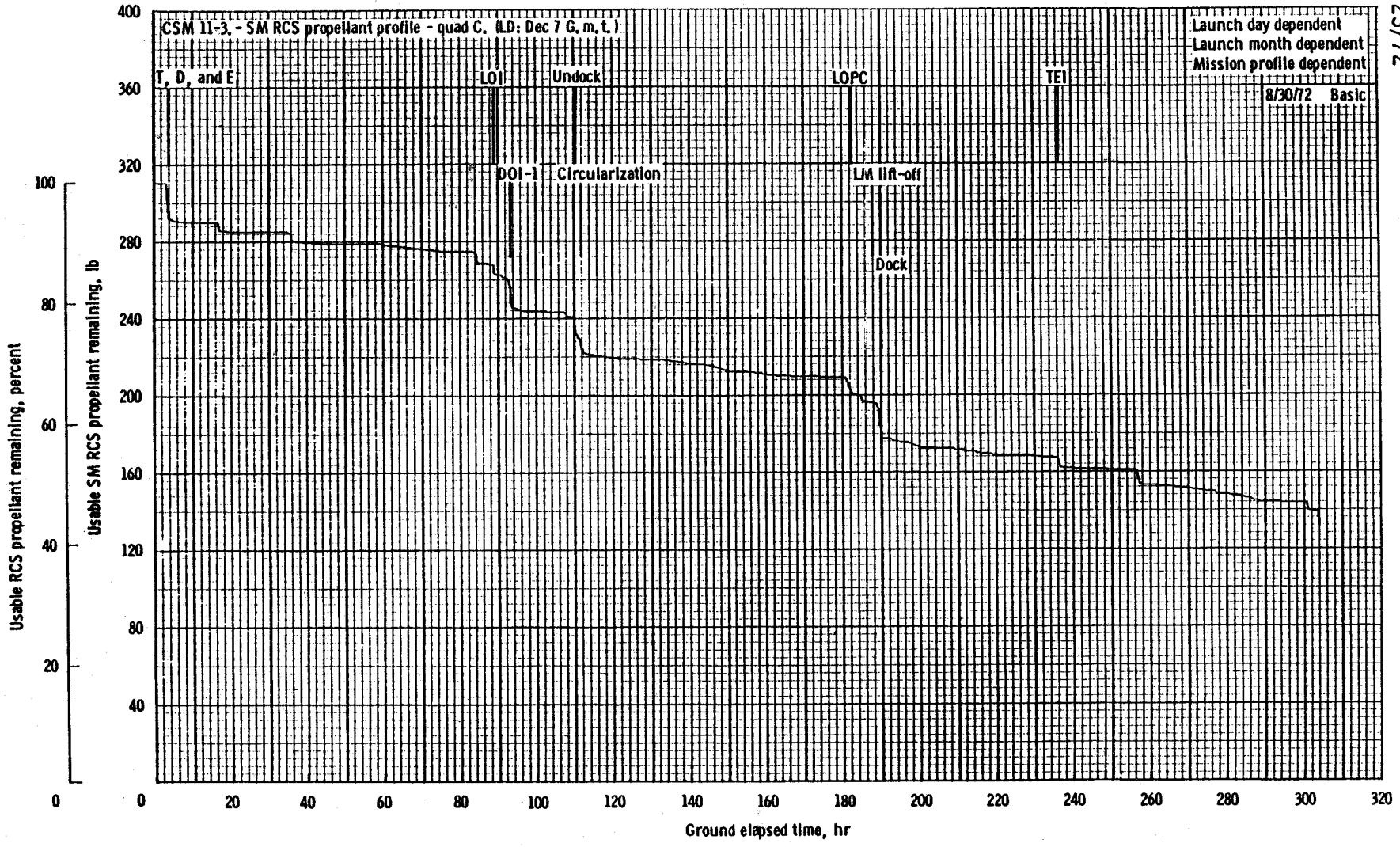


SM RCS propellant profile - quad A.

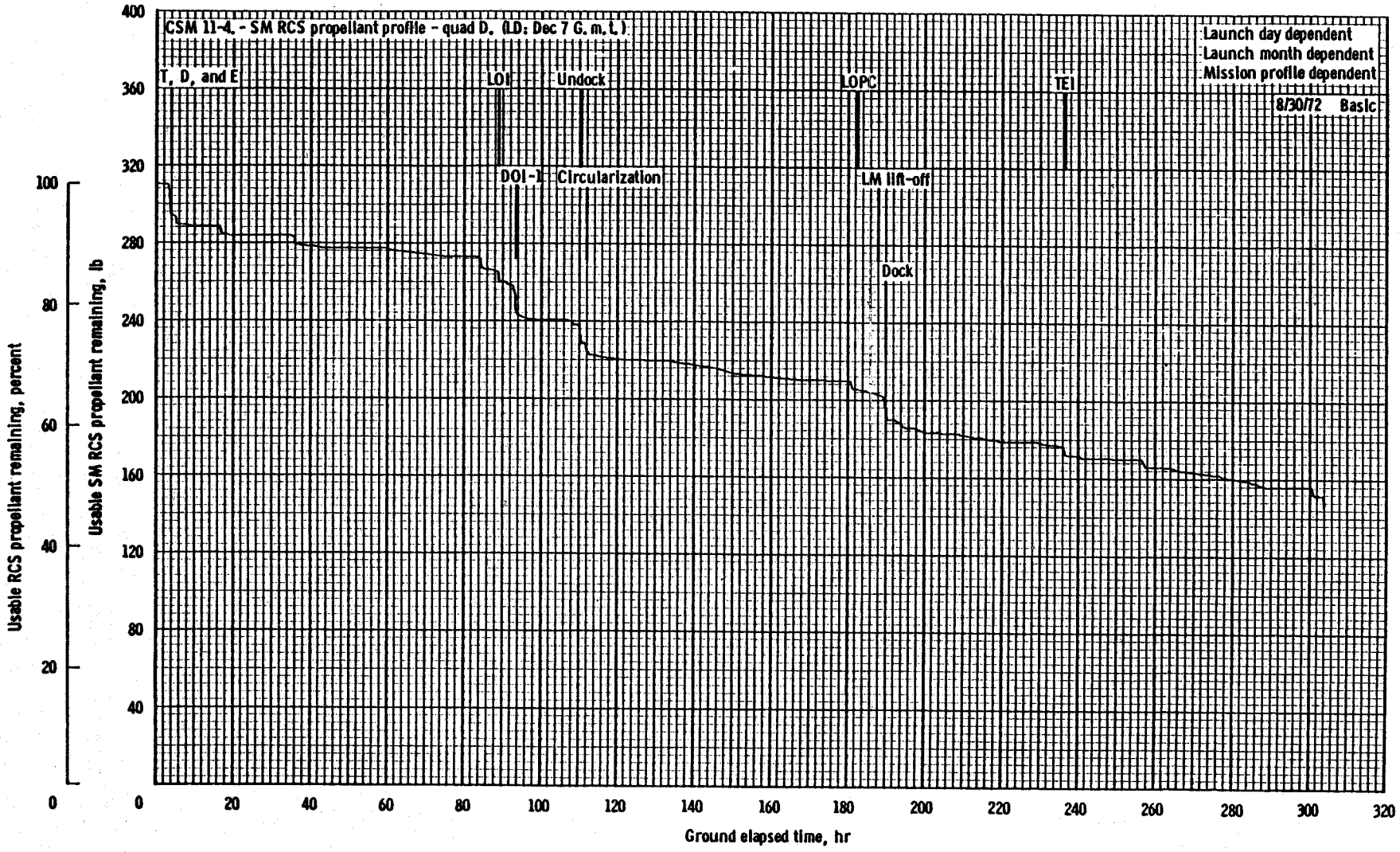


SM RCS propellant profile - quad B.

10/23/72



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.

Mission profile dependent
8/30/72 Basic

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			

^aO₂ 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 O₂ tanks.

^bSwitch to 50-watt heaters in O₂ tanks 1, 2 at this time.

^cSwitch to 100-watt heaters in O₂ tanks 1, 2 and 3 at this time.

The CSM consumables summary (table 5-I) shows that a significant H₂ and O₂ margin exists at the end of the mission. This is reflected in the H₂ and O₂ 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.

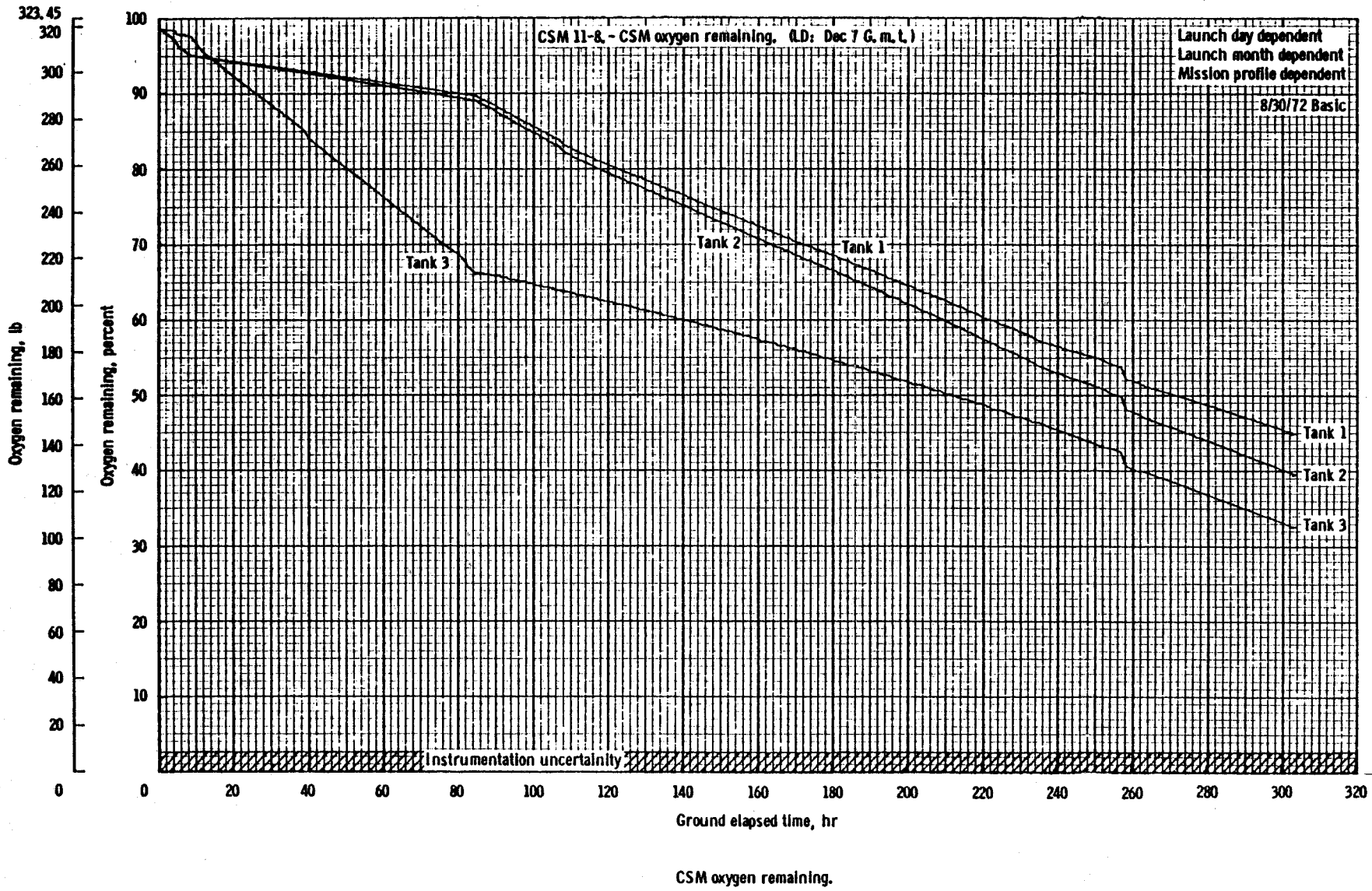
10/23/72

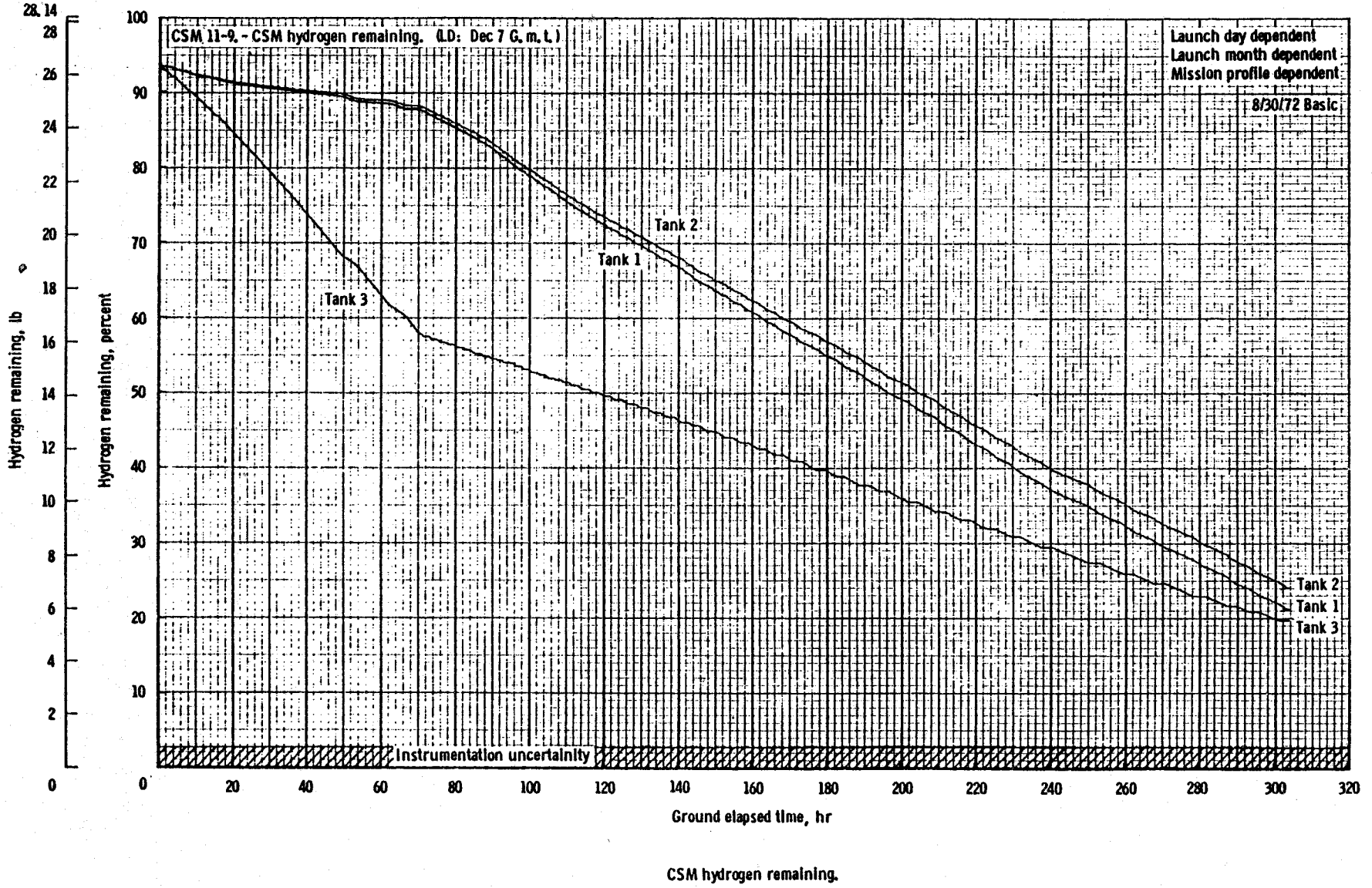
Mission profile dependent
8/30/72 Basic

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	<u>2.3</u>	<u>26.0</u>
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	<u>--</u>	<u>11.9</u>
	60.5	576.9
Nominal reserves		
EPS uncertainty (2.5%)	1.5	12.0
ECS uncertainty (.08 #/hr)	<u>--</u>	<u>24.3</u>
	1.5	36.3
Total requirement	67.7	658.0
Margin T = 0 (fill/launch)	14.4	286.5

*Supplied by KSC.





10/23/72

4-17

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 $36\,733.5 \pm 39.3$ pounds.
- b. Integrated average I_{sp} is 305.1 ± 1.8 seconds.
- c. Mixture ratio is $1.5999 \pm .012$.
- 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, $\Delta V = 7099.3$ 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 ($\Delta MR = +.0097$ or $-.0183$)	-22.8
Balanced couples on	-39.2
Half-degree out of plane (18 fps)	-10.7
Margin	46.3

^aThe total TPI ΔV is 76.6 fps. It is assumed that 22 fps is obtained by a 10-sec, 4-jet ullage.

10/23/72

4-21

Mission profile dependent
8/29/72 Basic

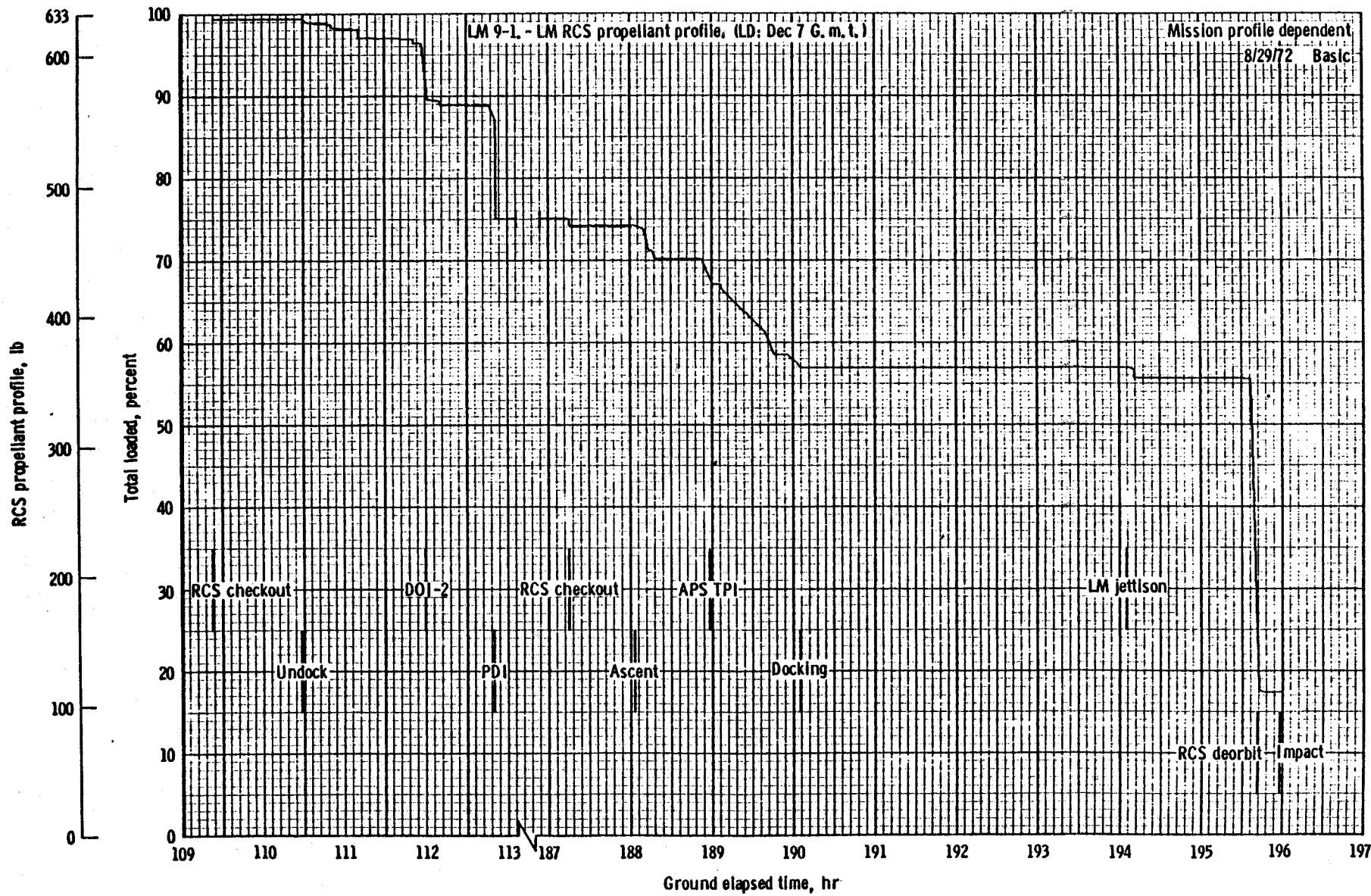
ASSUMPTIONS AND GROUND RULES FOR THE LM RCS ANALYSIS

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 inverter 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.

10/23/72

4-25

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

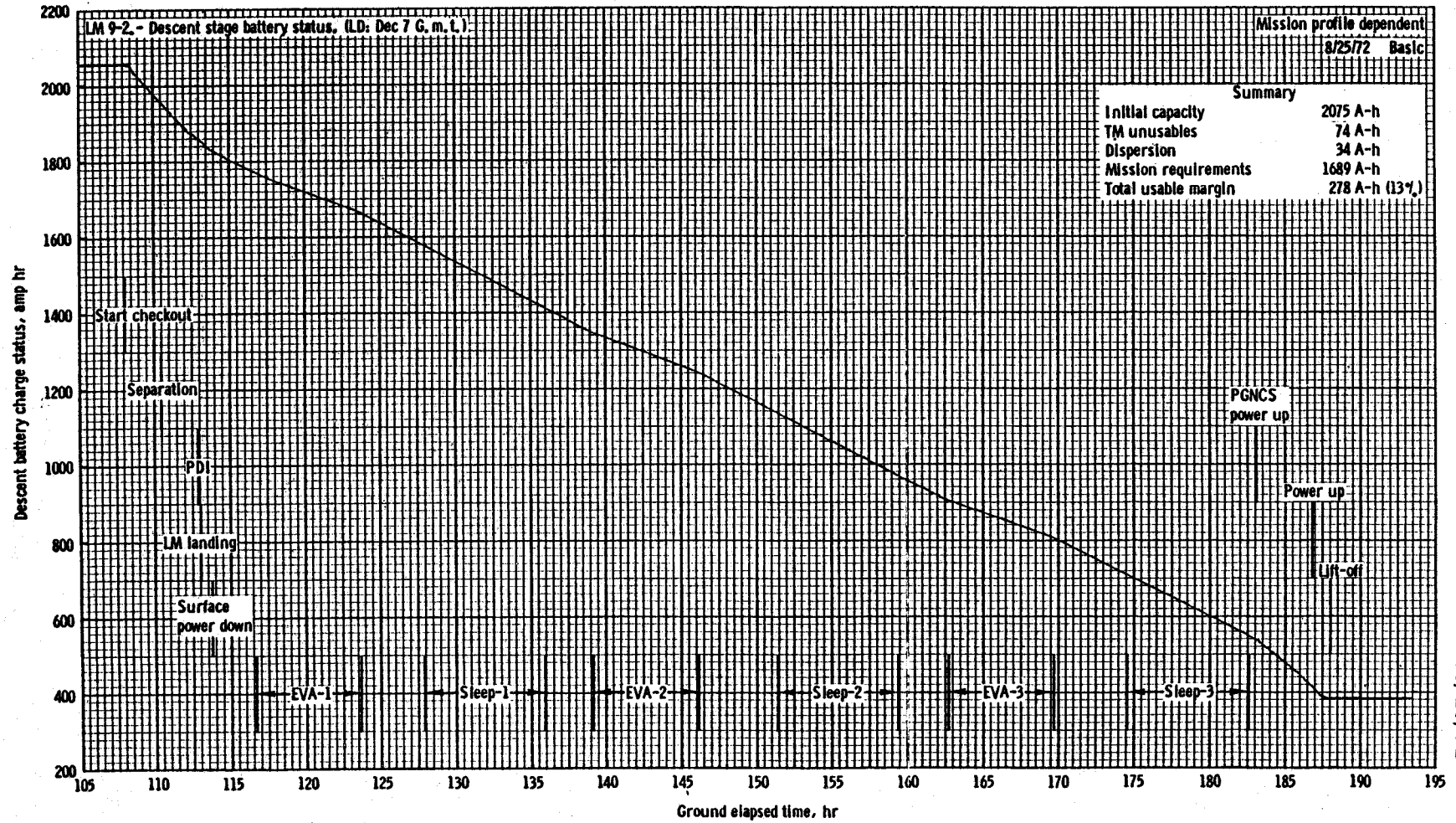
ASCENT STAGE EPS SUMMARY

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

10/23/72



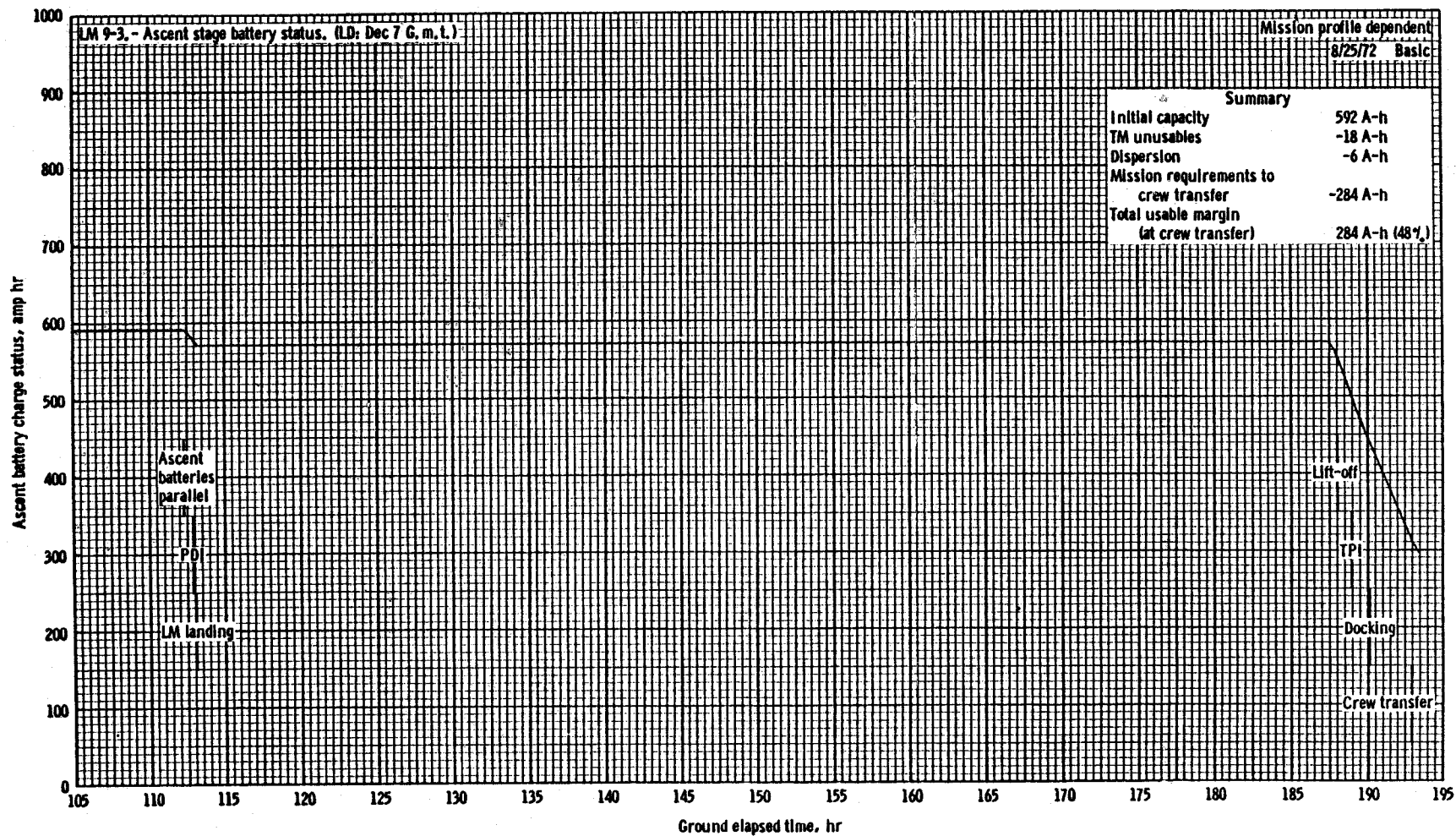
Apollo 17 total LM spacecraft current.



Apollo 17 descent electrical energy remaining.

10/23/72

10/23/72



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 lost 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

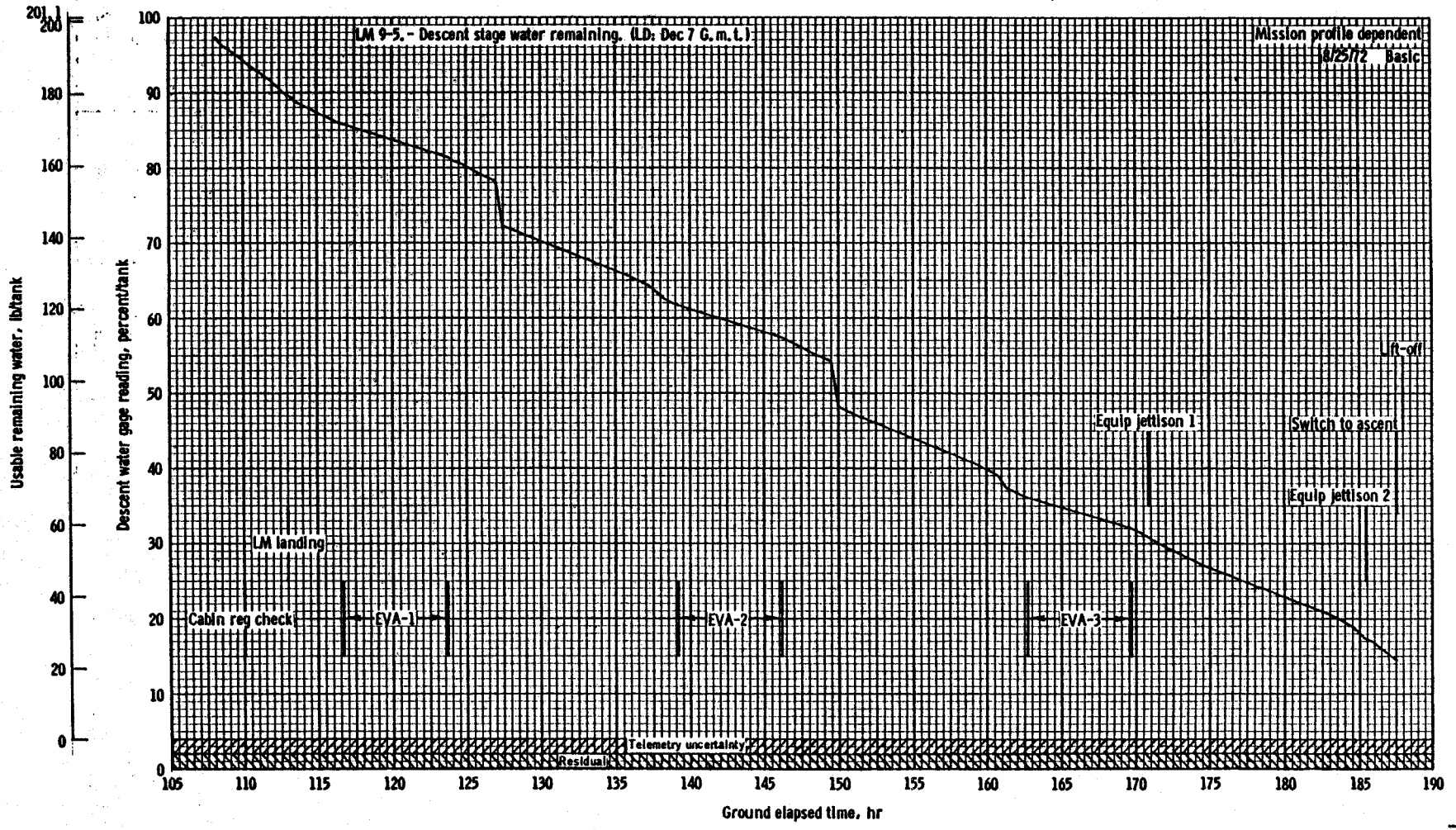
LM ECS SUMMARY

(a) Water

Description	Descent, 1b	Ascent, 1b
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

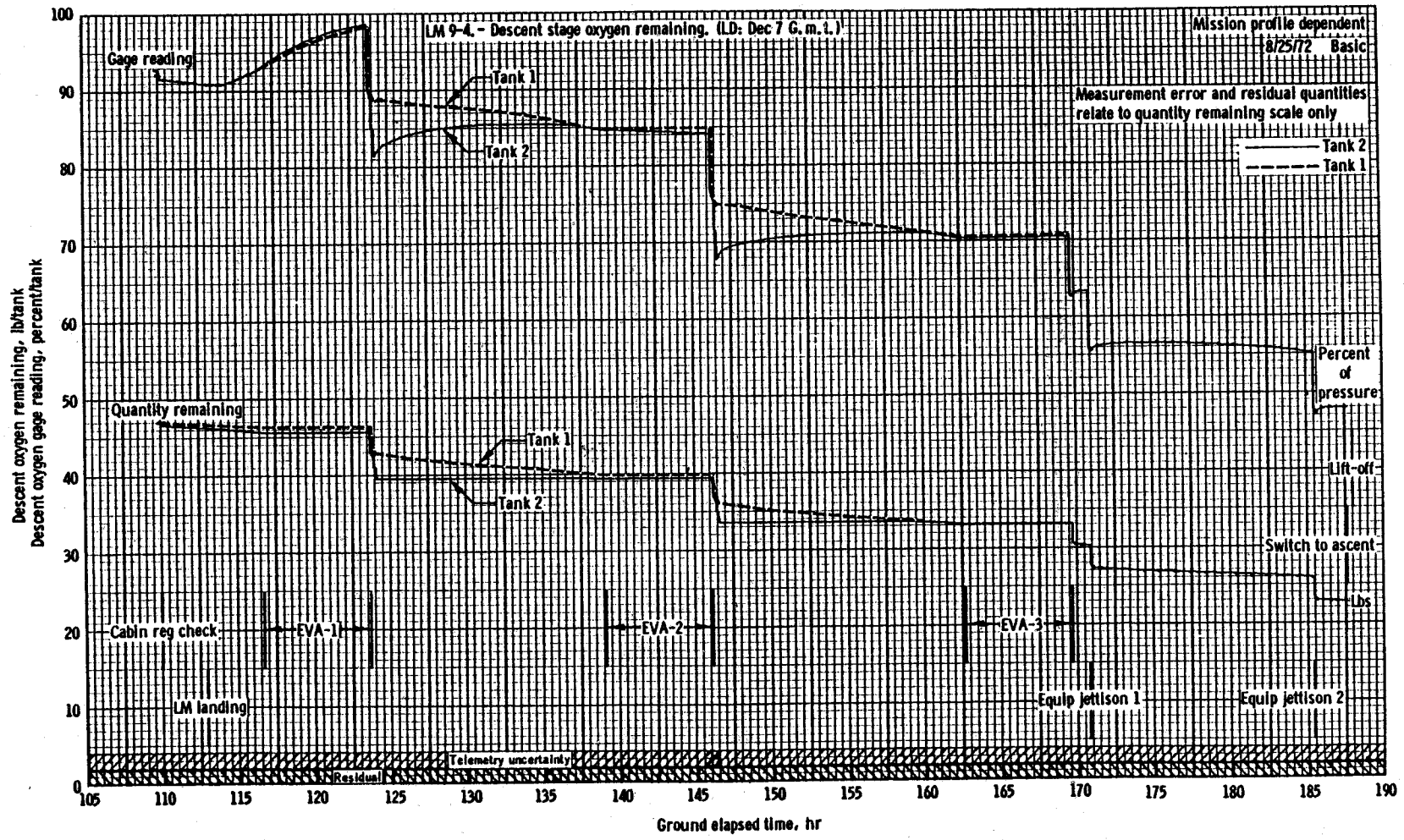
(b) Oxygen

Description	Descent, 1b	Ascent 1, 1b	Ascent 2, 1b
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

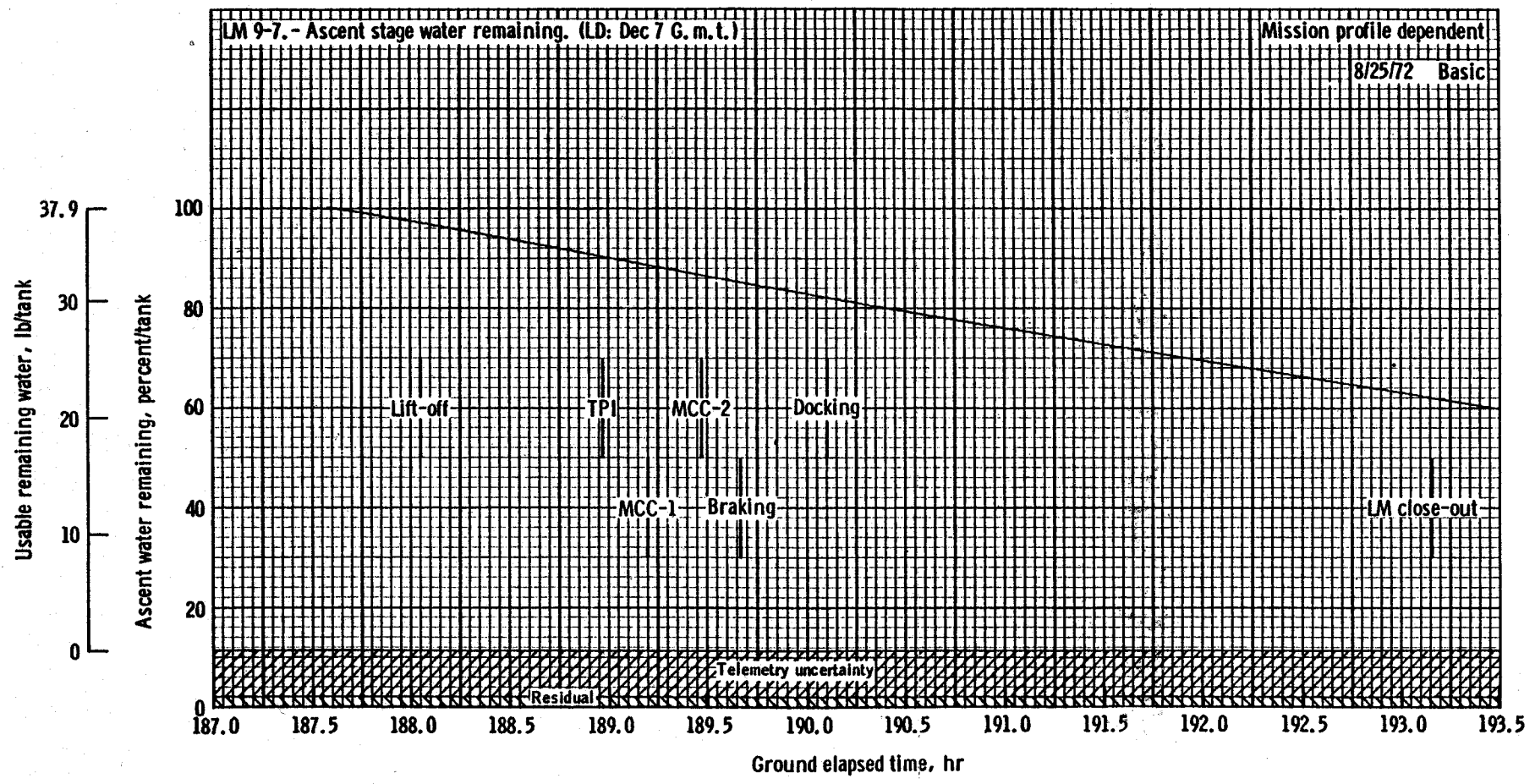


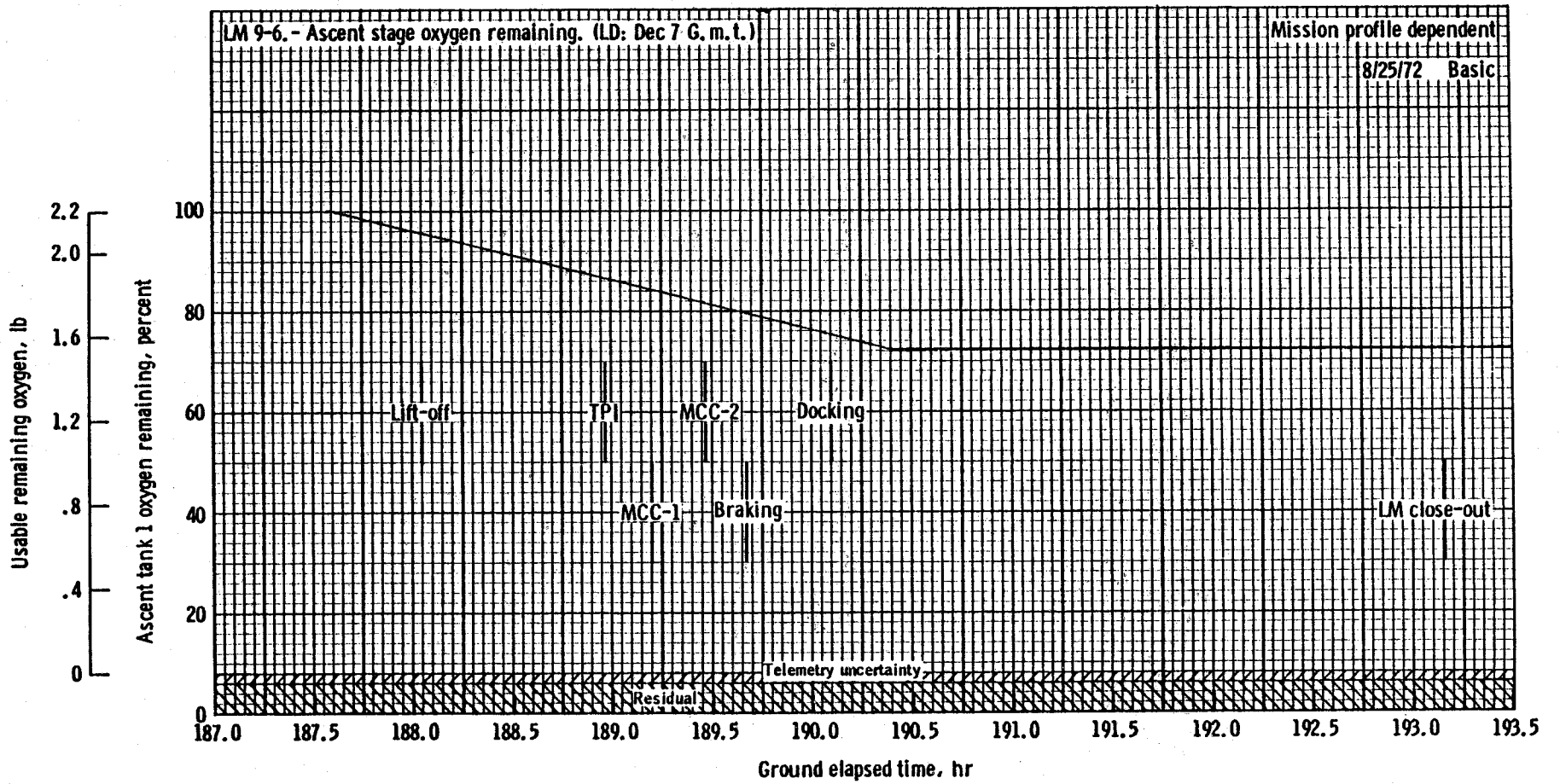
Descent stage water remaining.

10/23/72



Descent stage oxygen remaining.



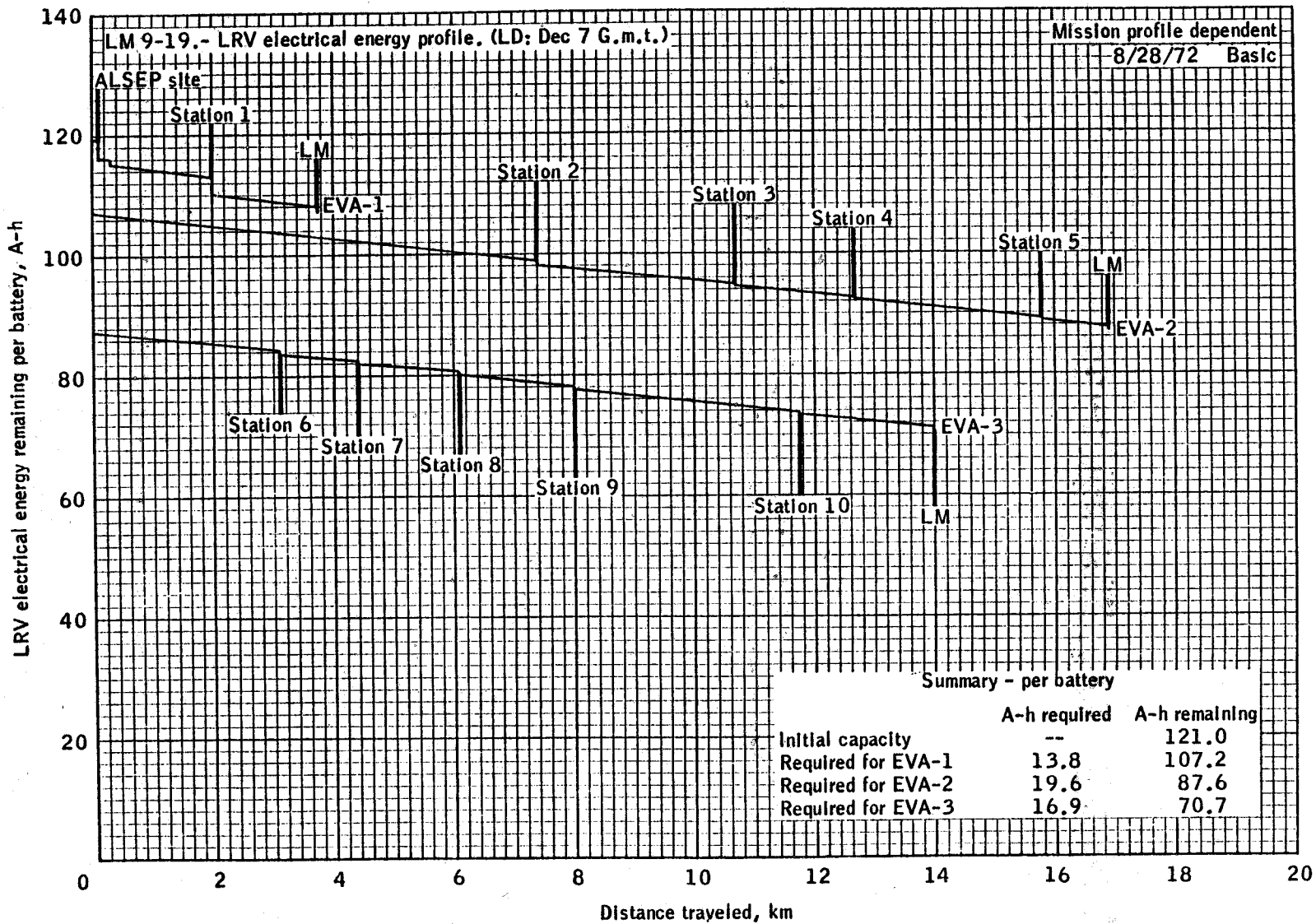


Ascent tank 1 oxygen remaining.

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 PMI/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.

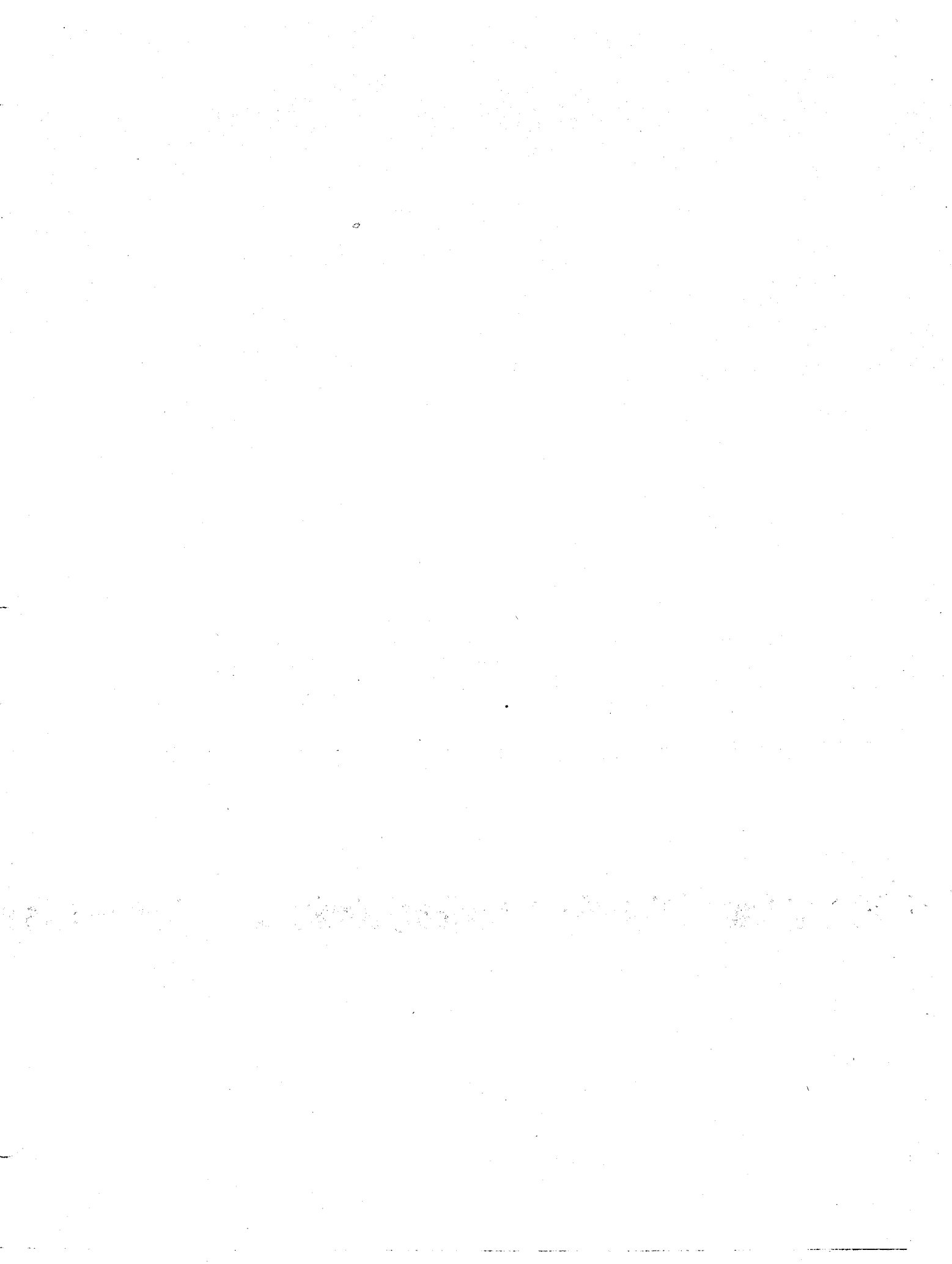


LRV electrical energy profile.



SECTION 5 - SUMMARY TIMELINE

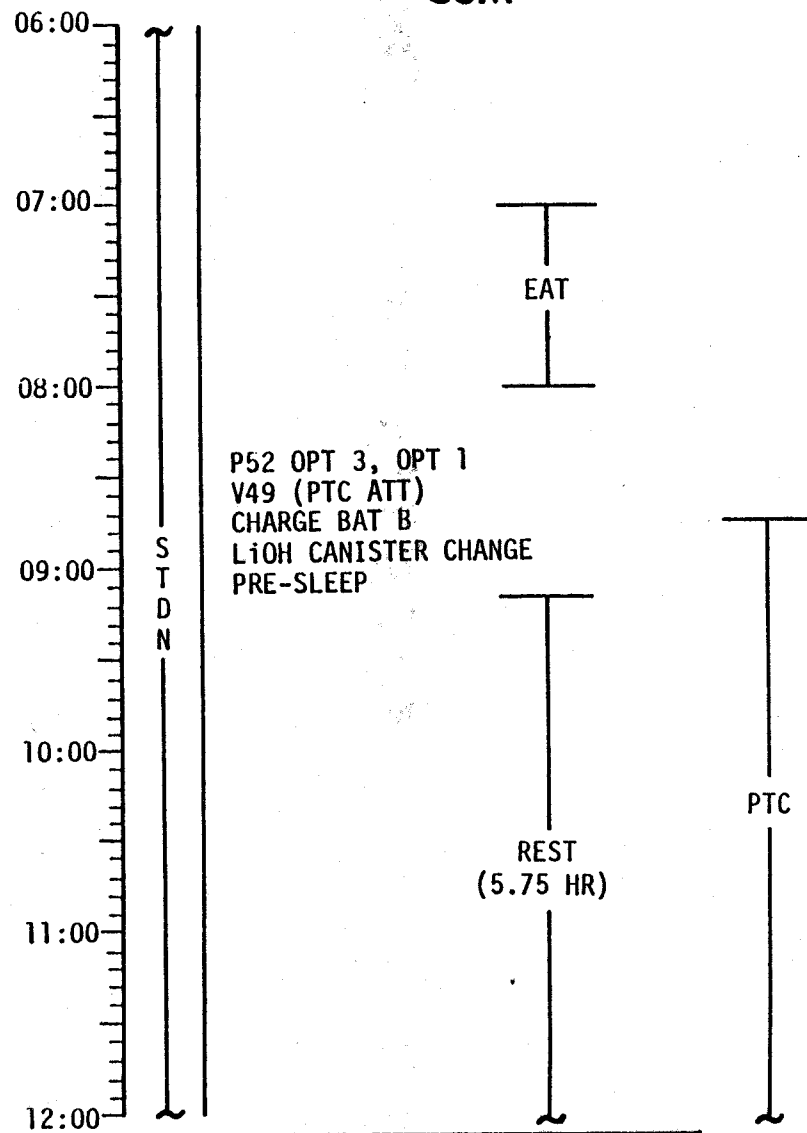
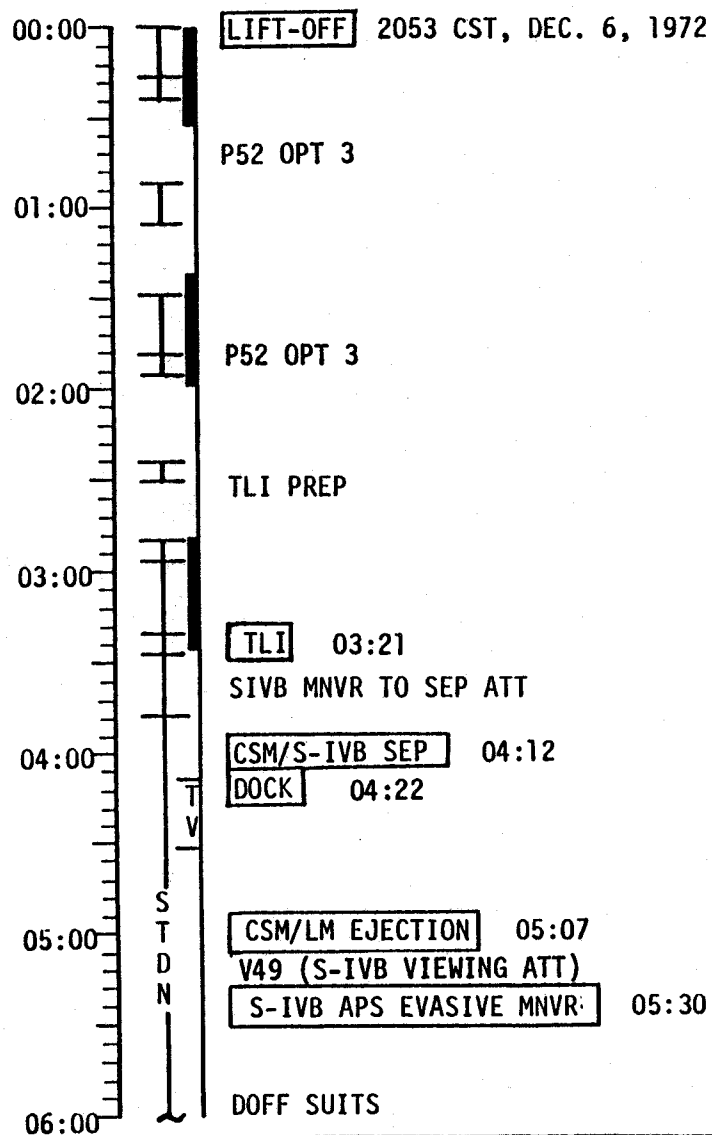
CONFIDENTIAL



FLIGHT PLAN

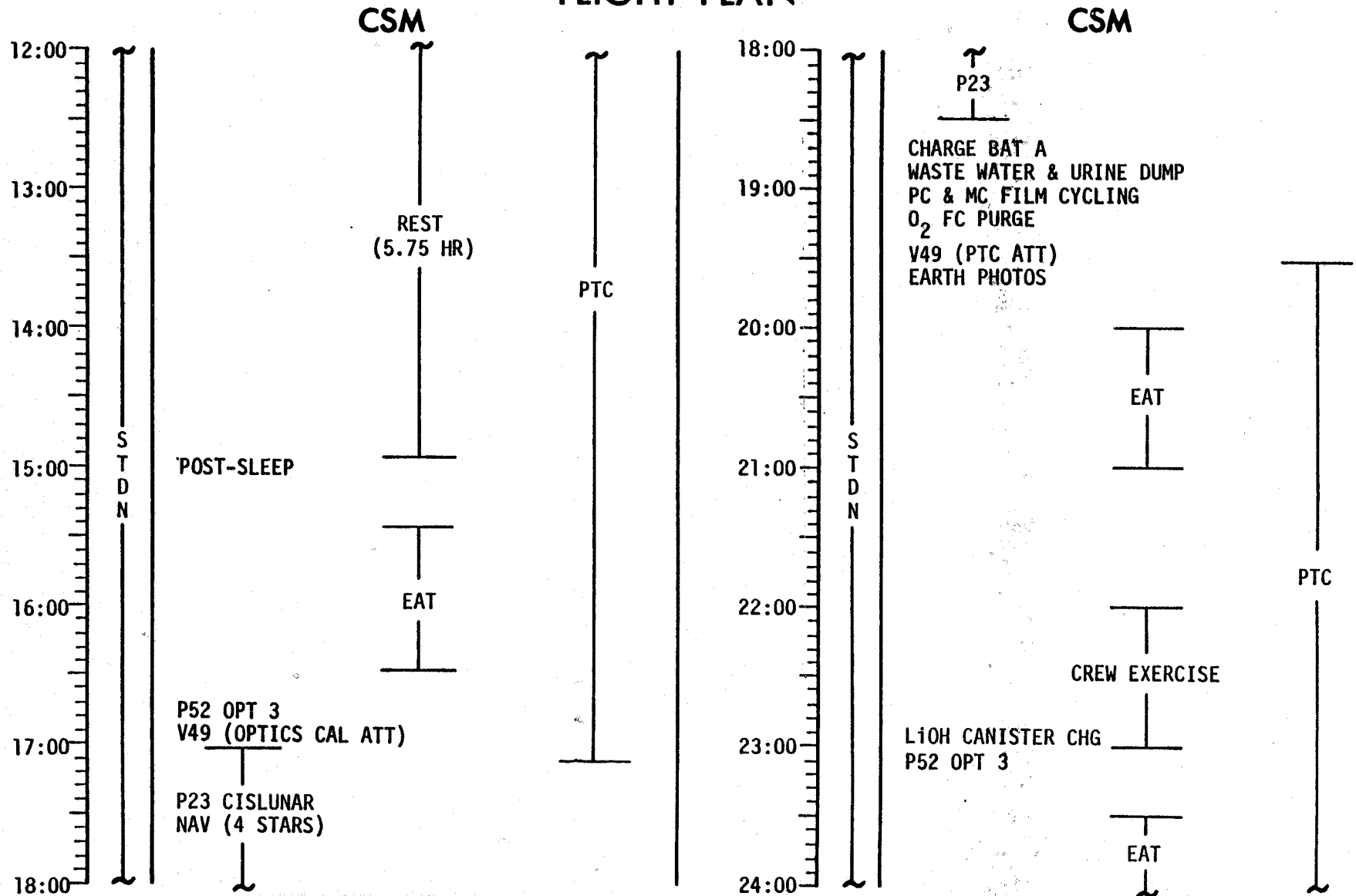
CSM

CSM



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	00:00 - 12:00	1/E0-TLC	5-1

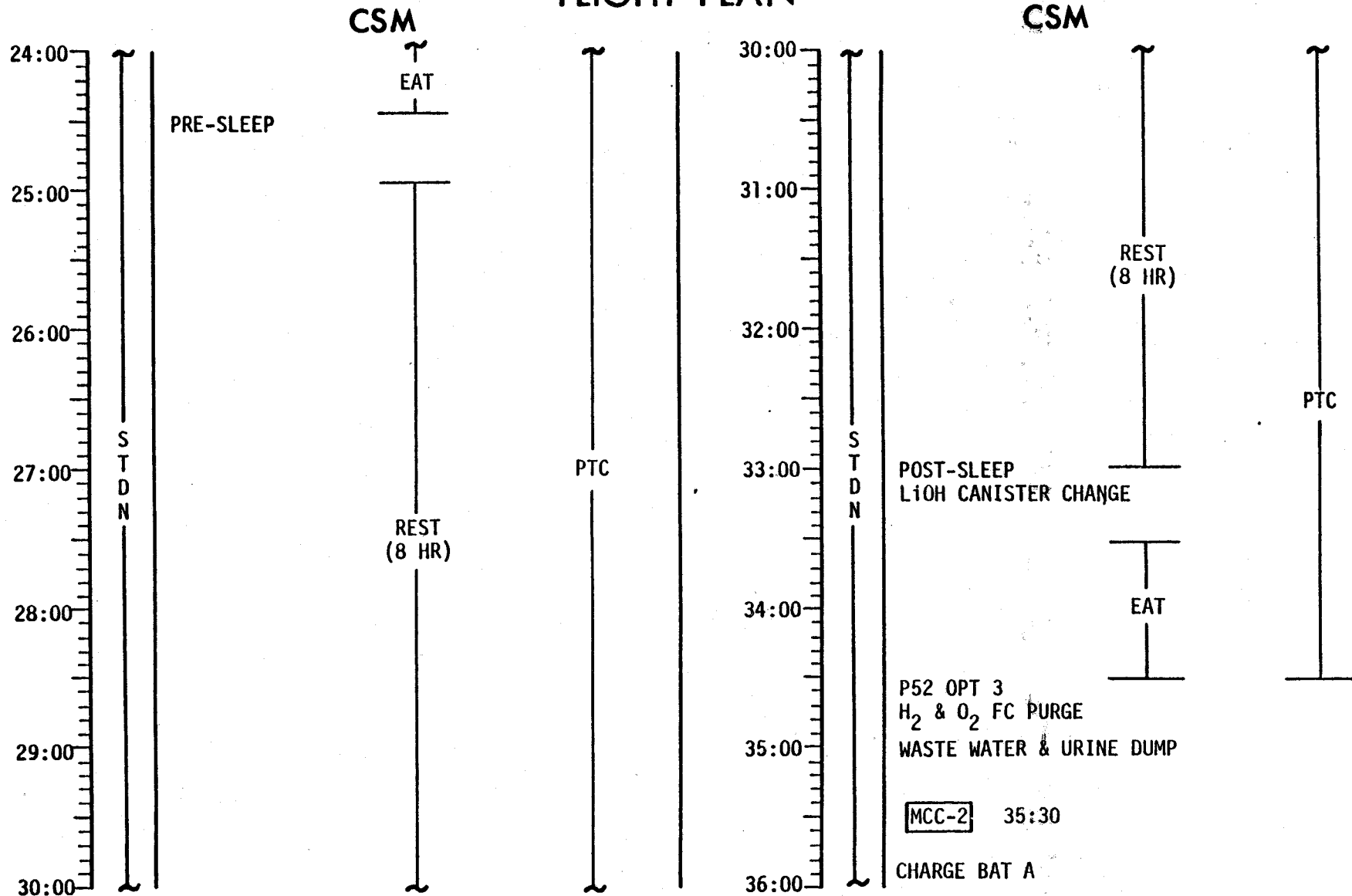
FLIGHT PLAN



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

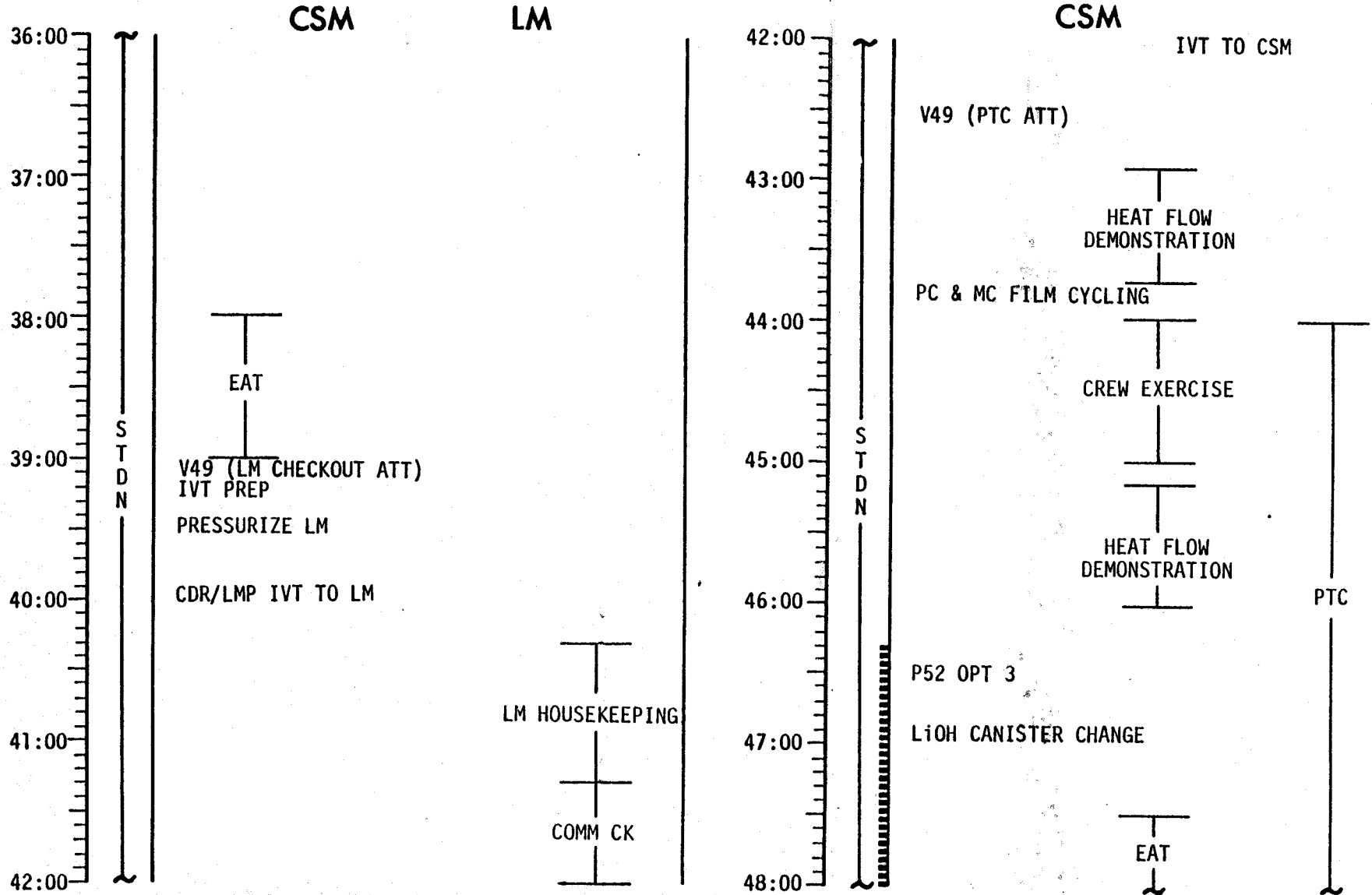
FLIGHT PLAN



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

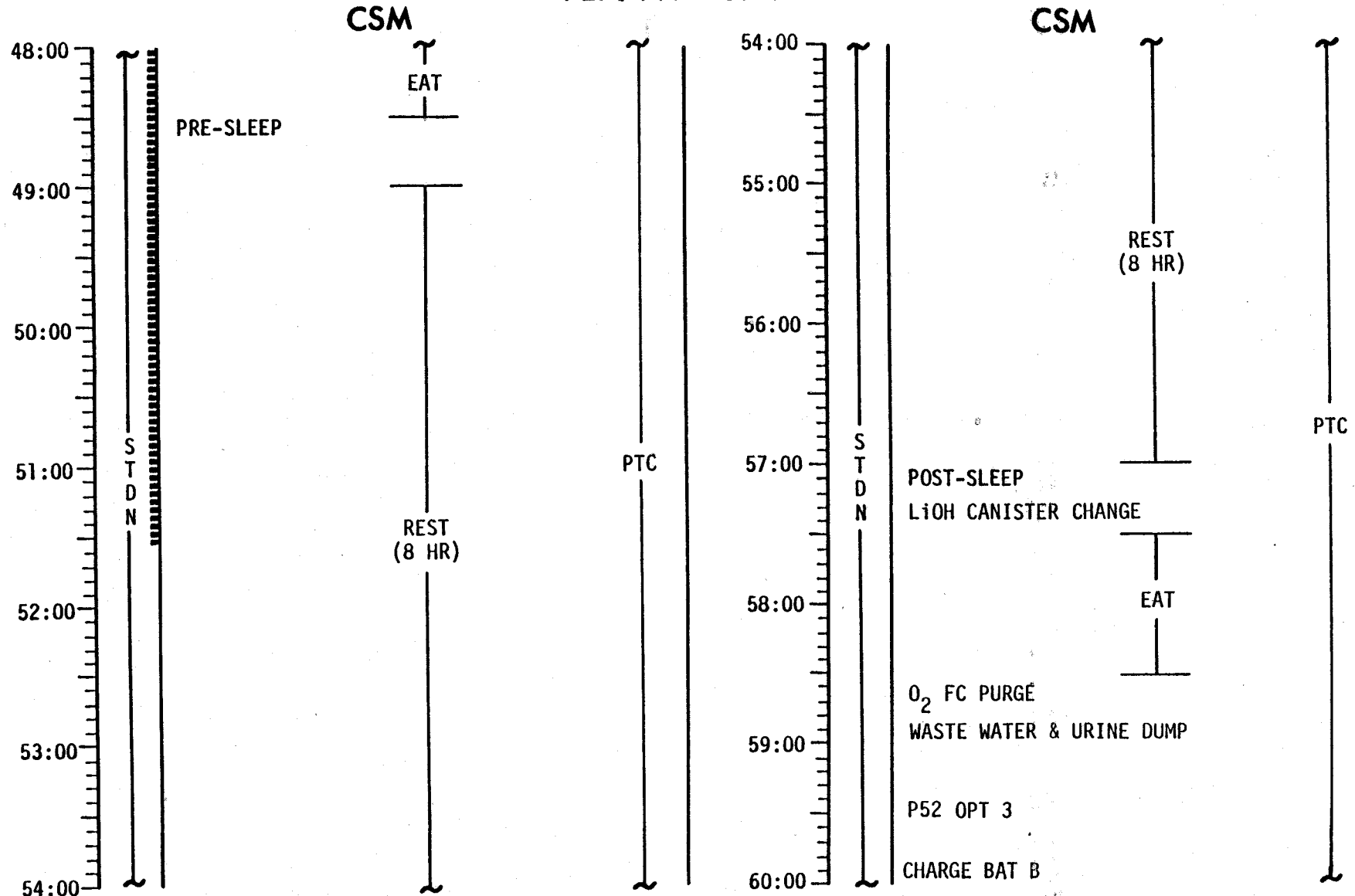
FLIGHT PLAN



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

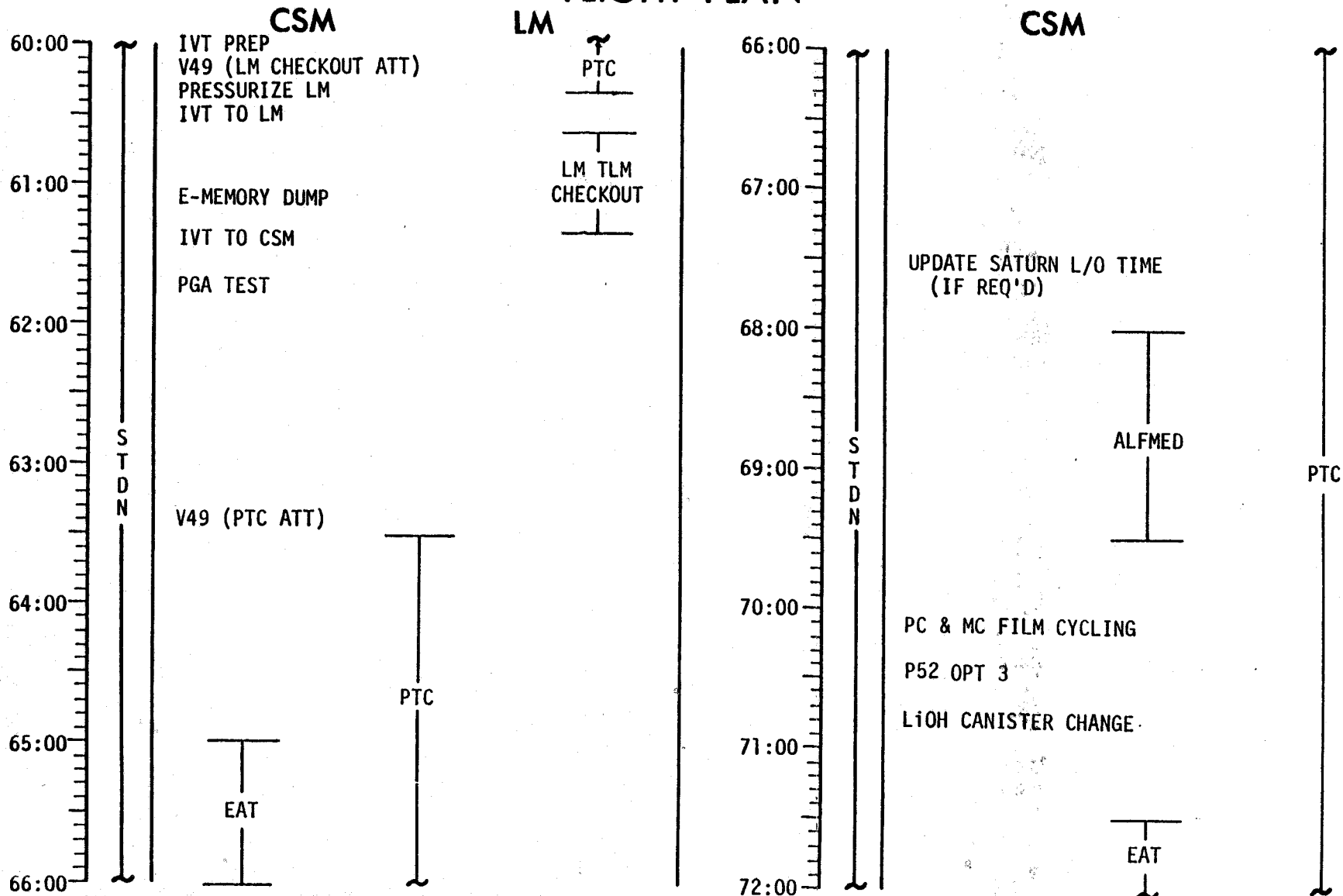
FLIGHT PLAN



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

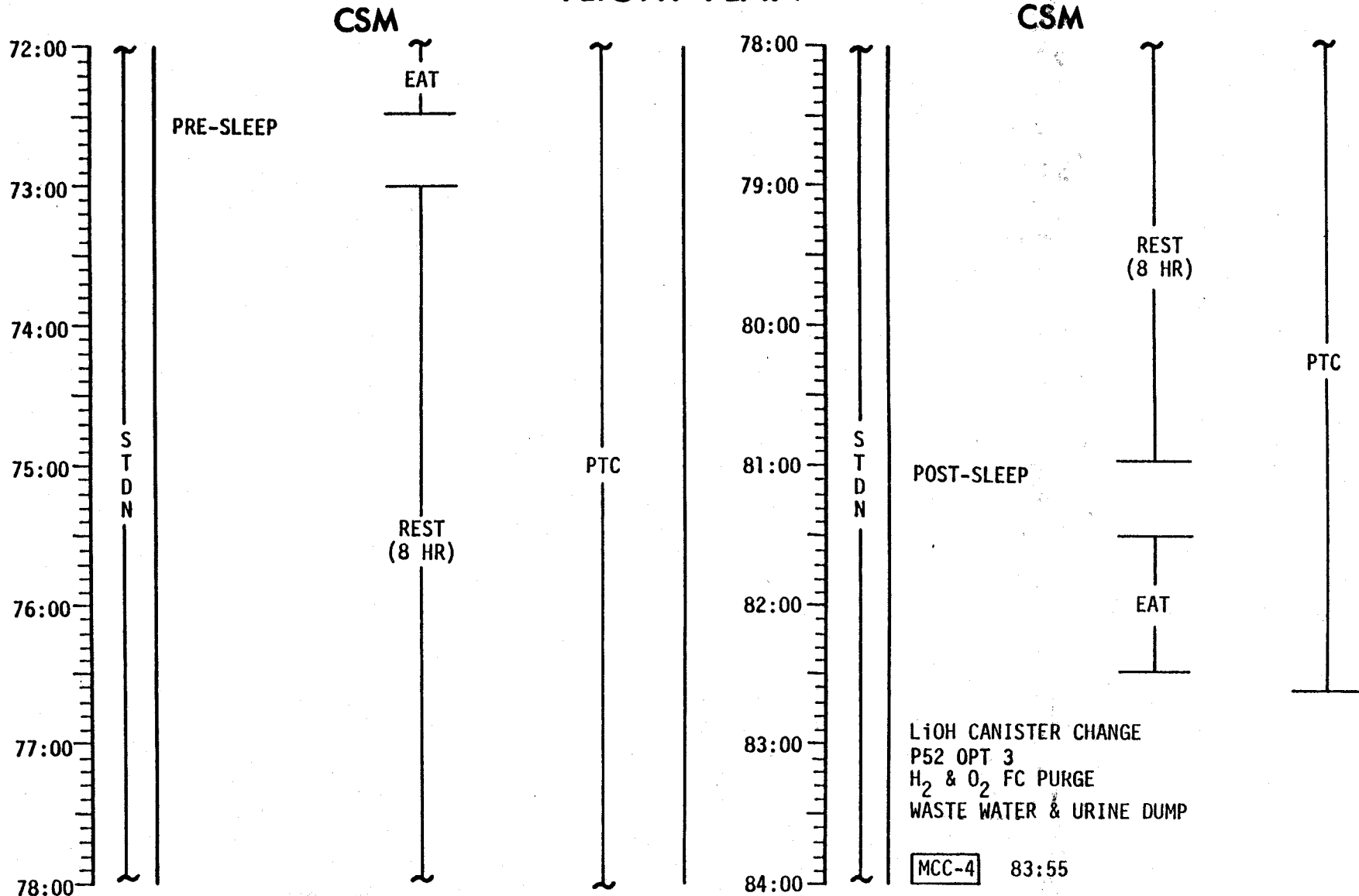
FLIGHT PLAN



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

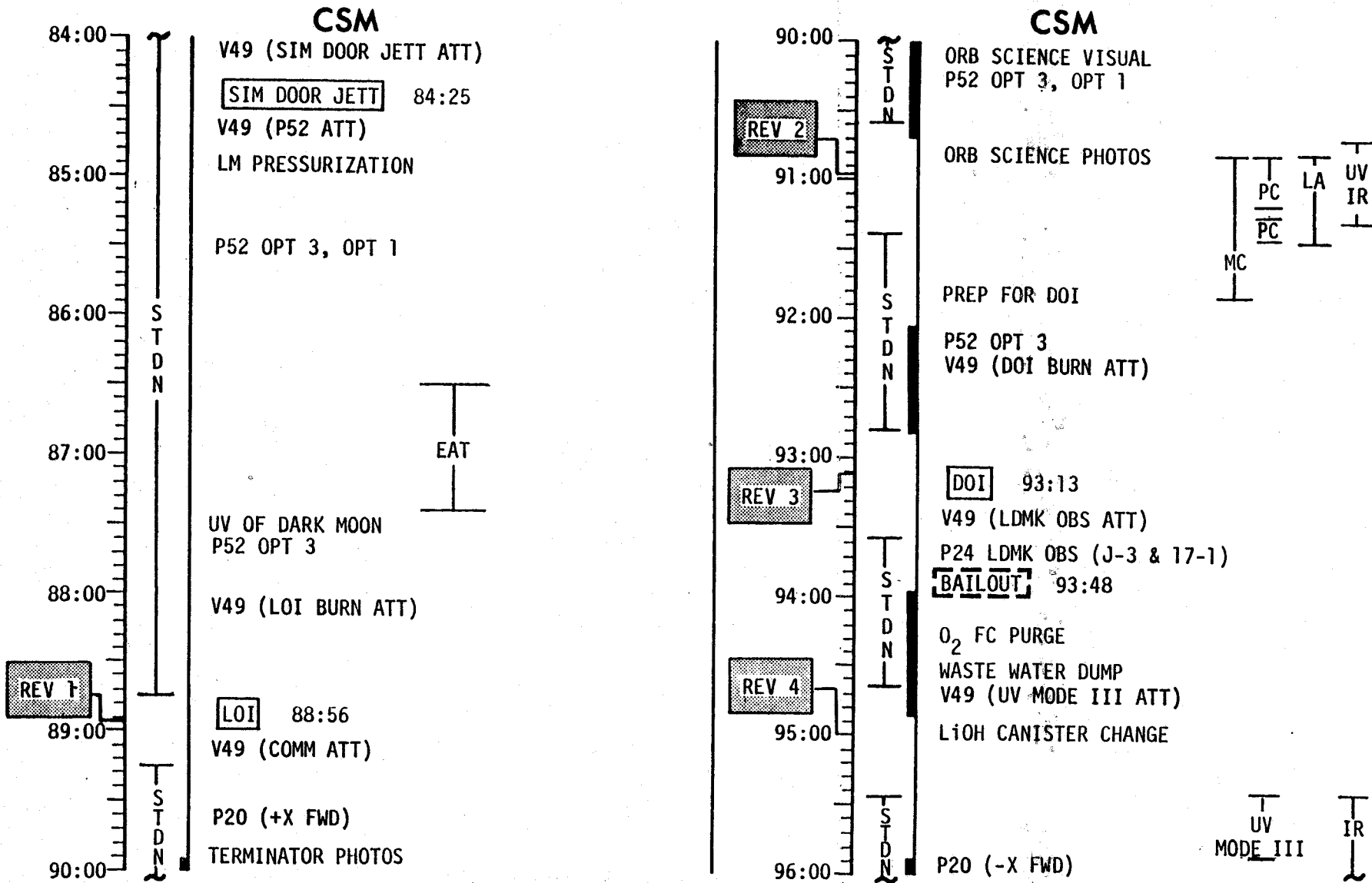
FLIGHT PLAN



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

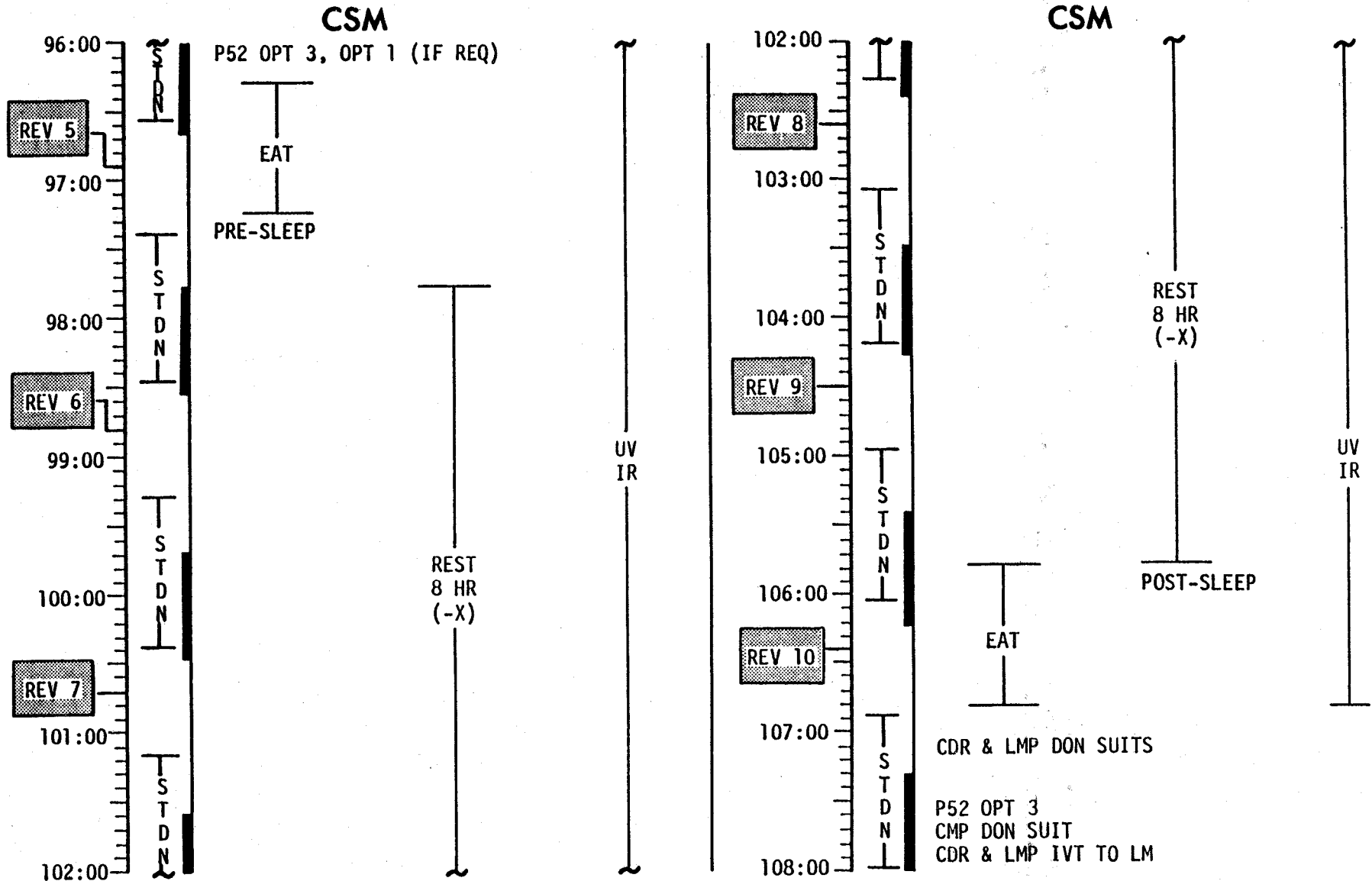
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	84:00 - 96:00	5/TLC-4	5-8

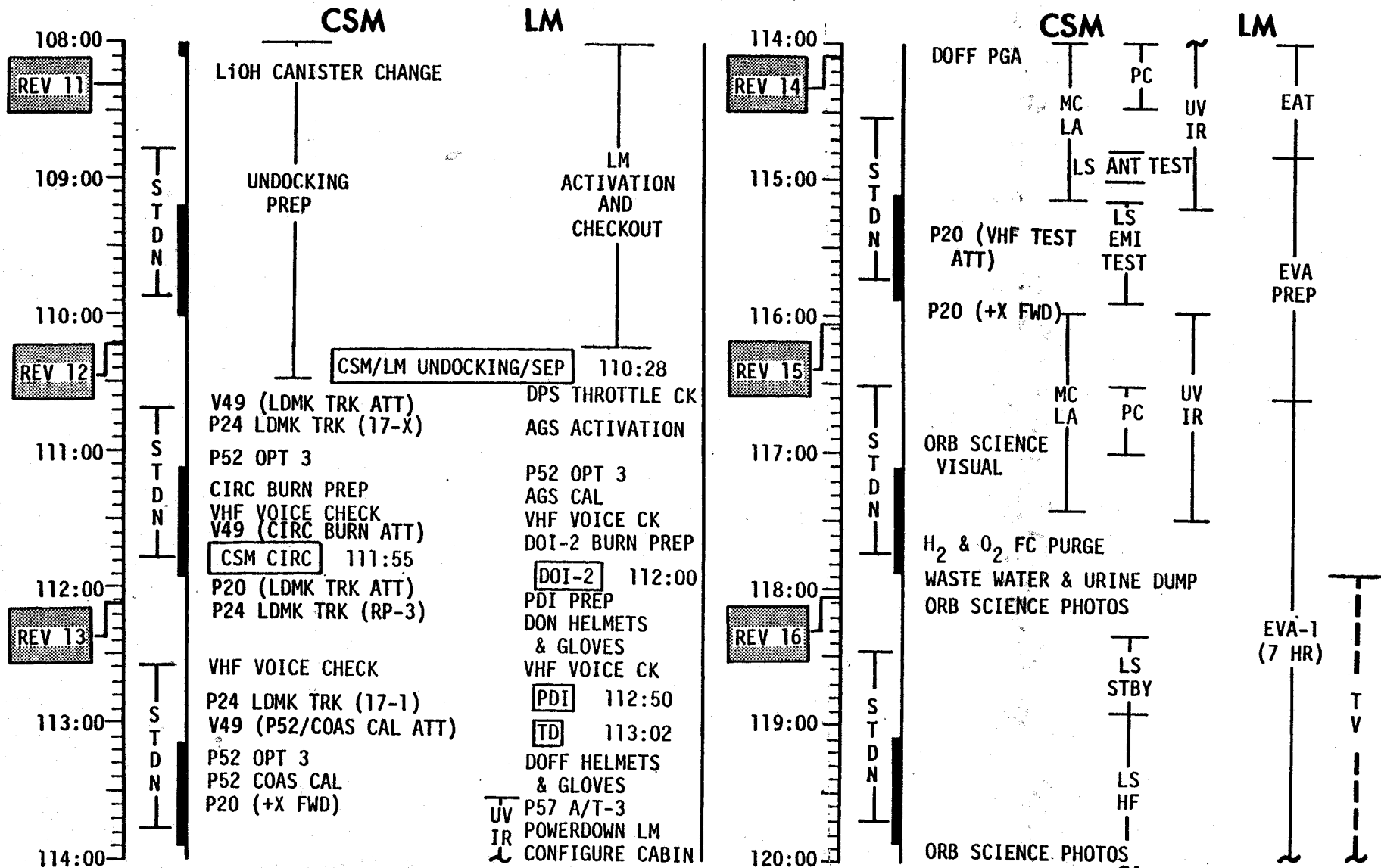
FLIGHT PLANNING BRANCH

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

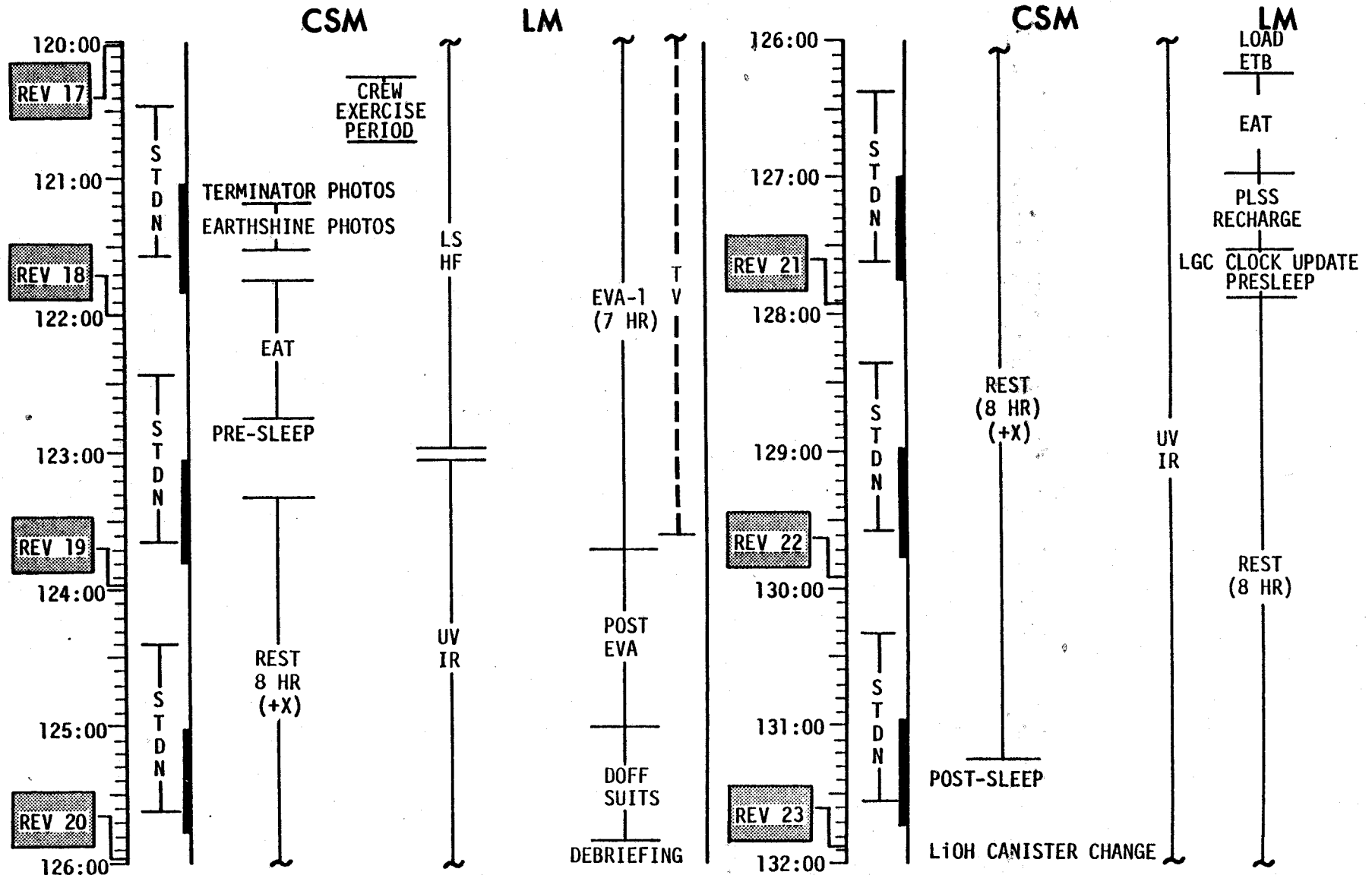
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	108:00 ~ 120:00	6 /11-16	5-10

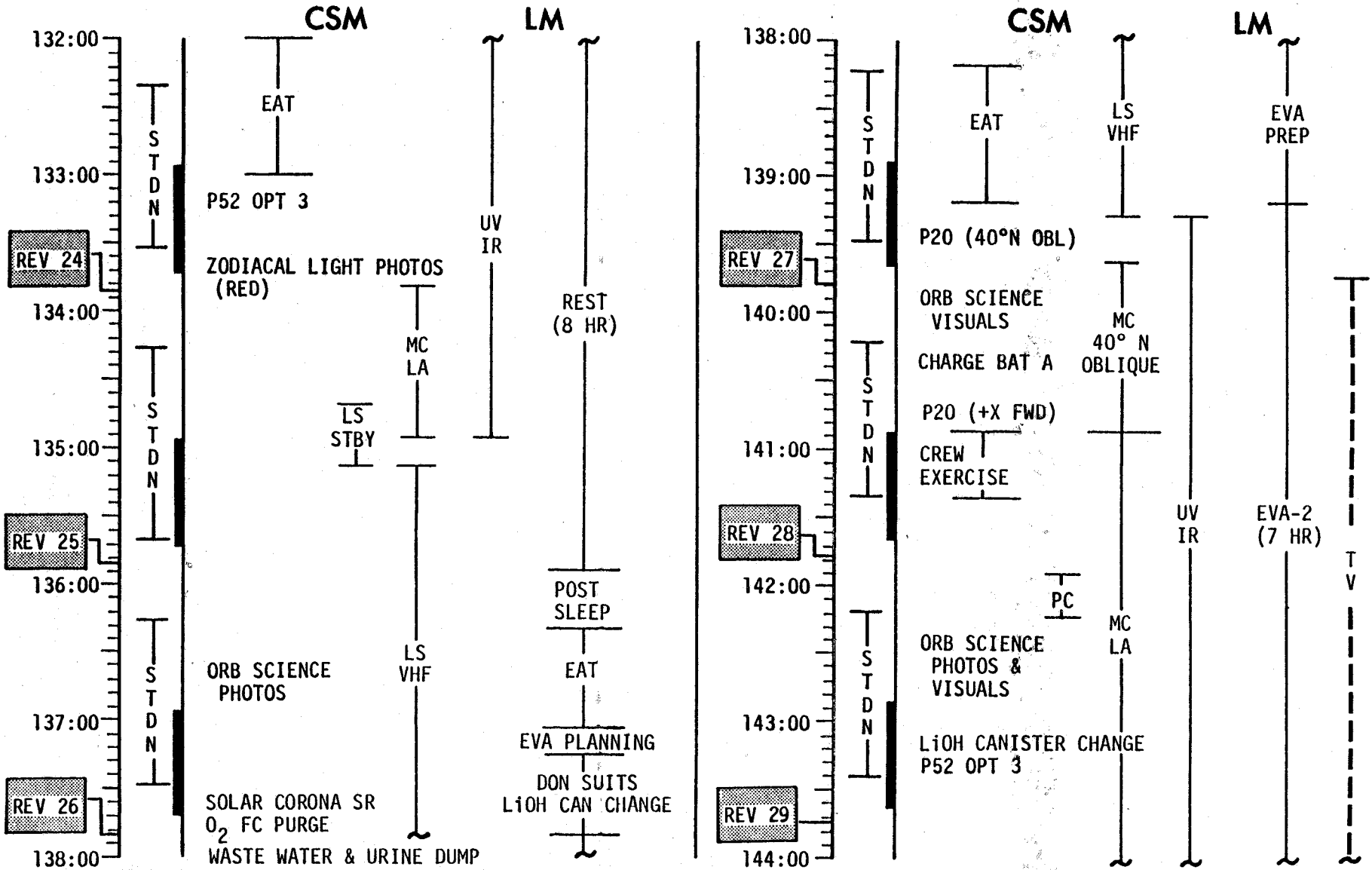
FLIGHT PLANNING BRANCH

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

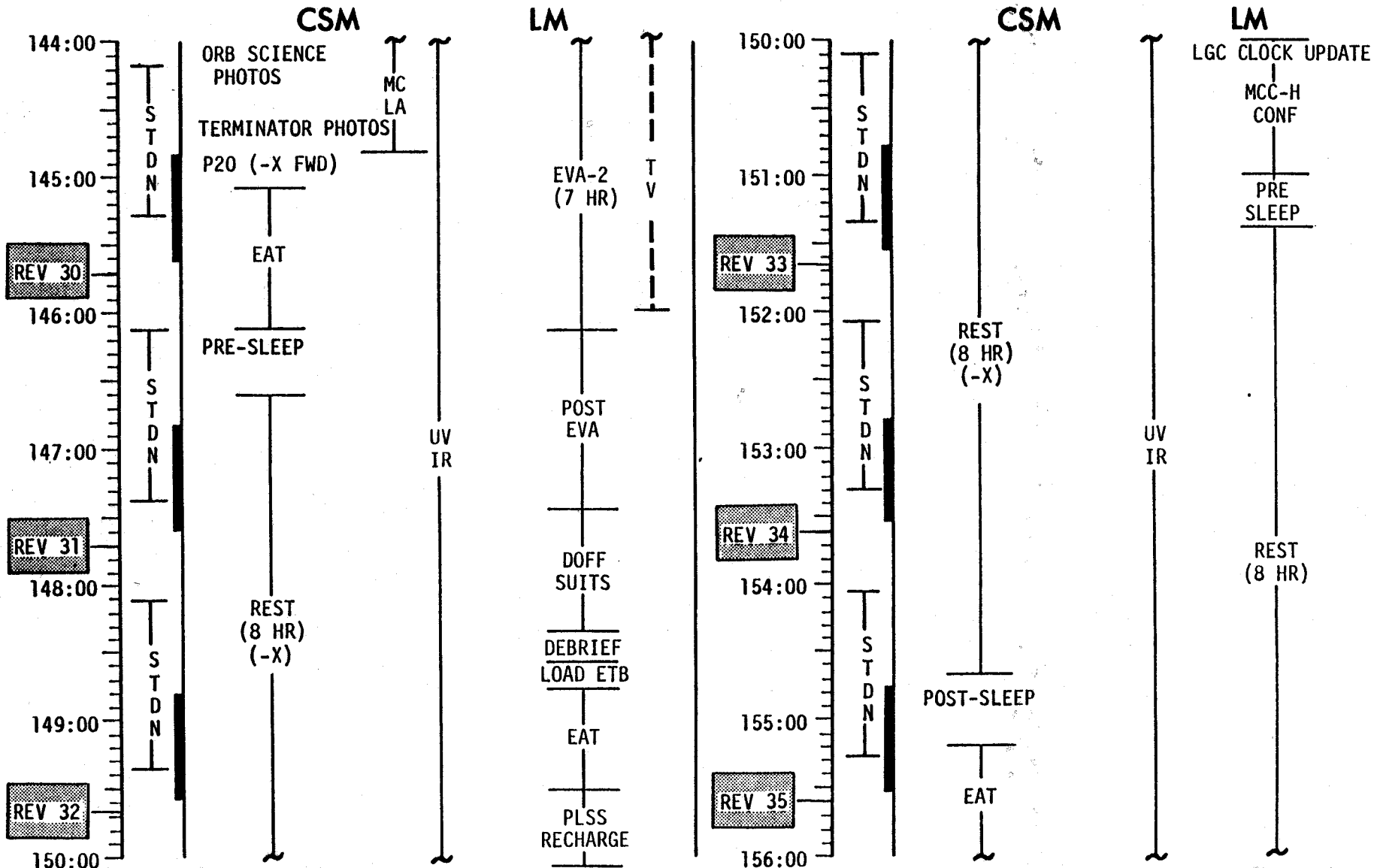
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	132:00 - 144:00	7/24-29	5-12

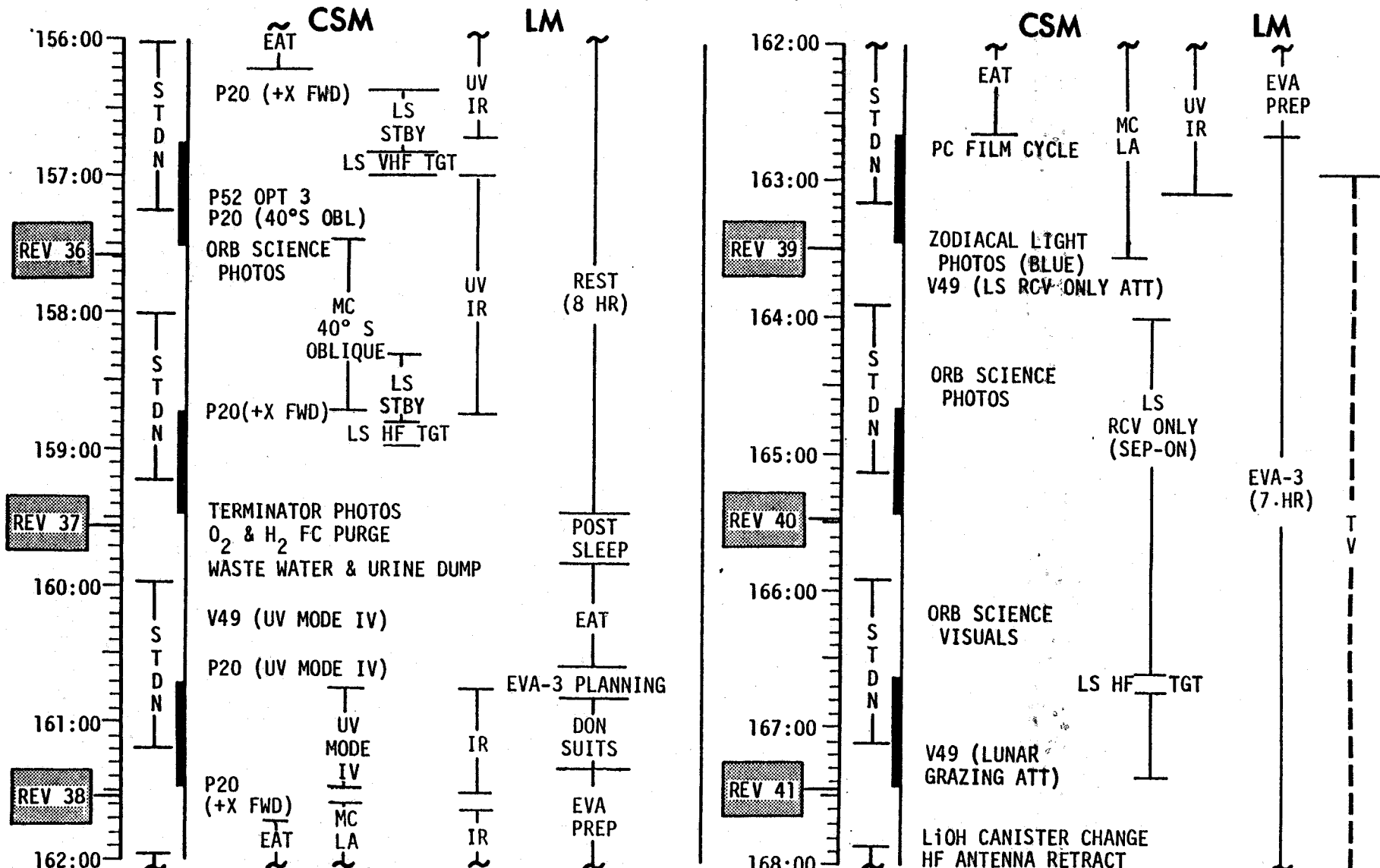
FLIGHT PLANNING BRANCH

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

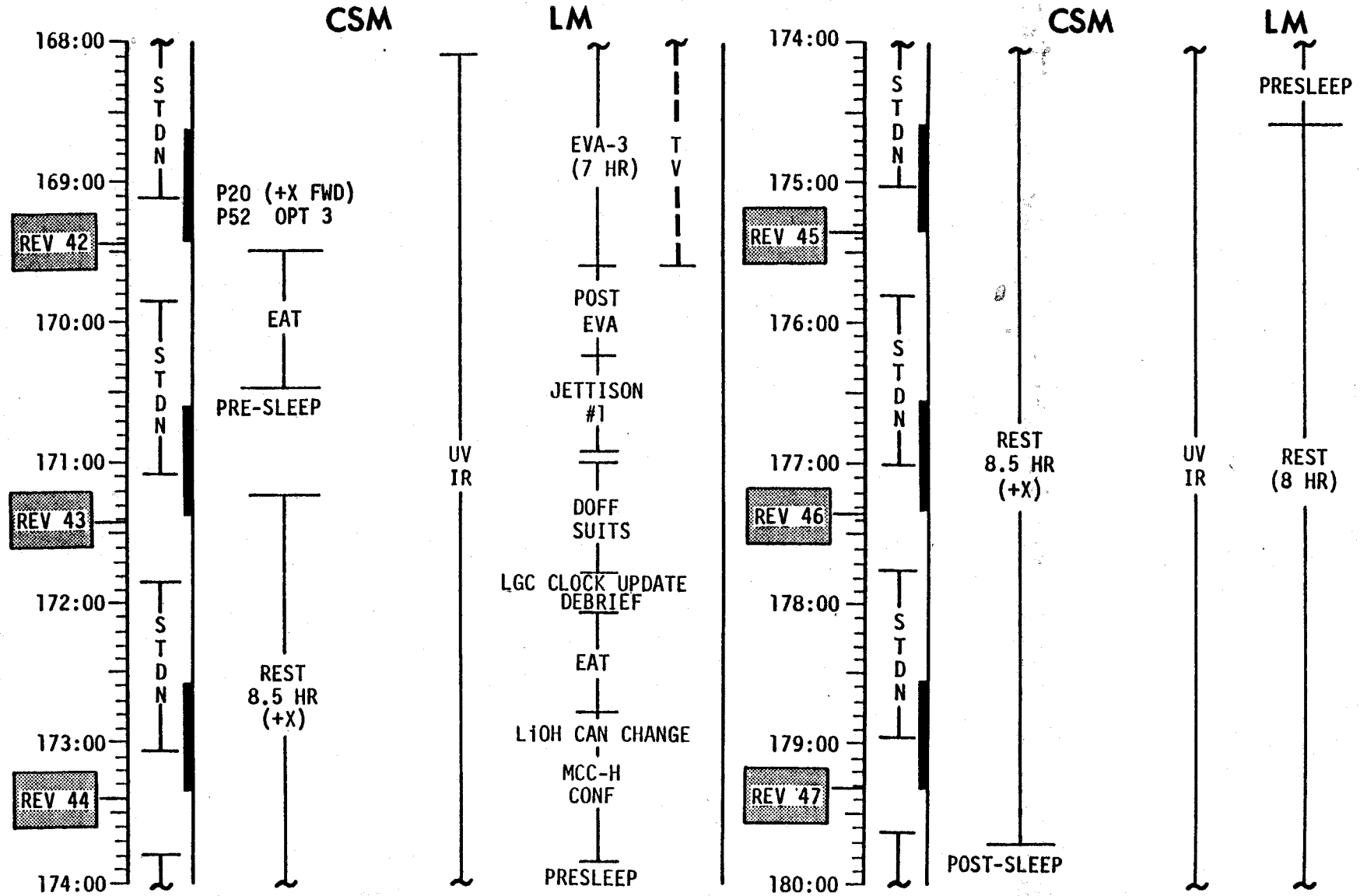
FLIGHT PLAN



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

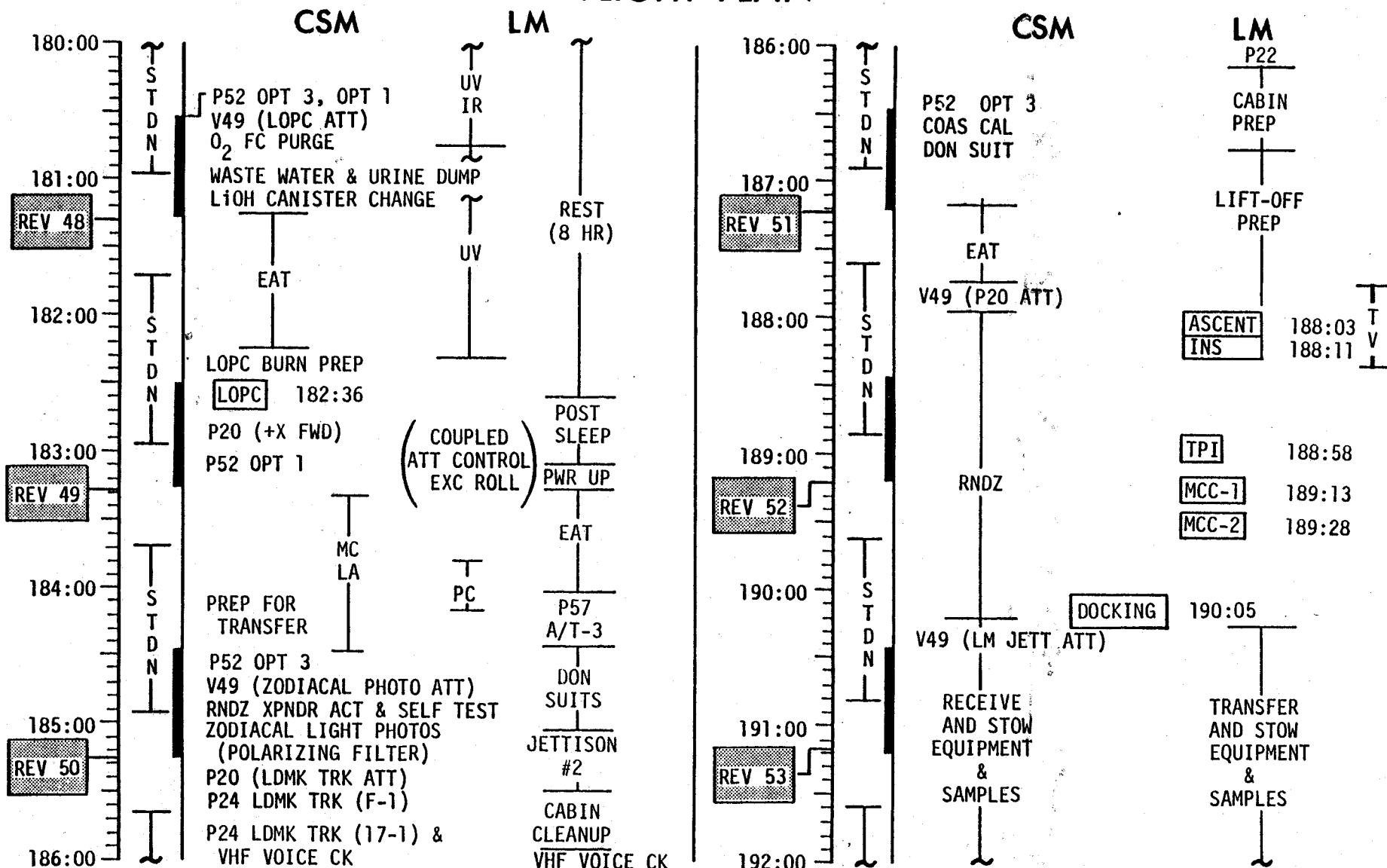
FLIGHT PLAN



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

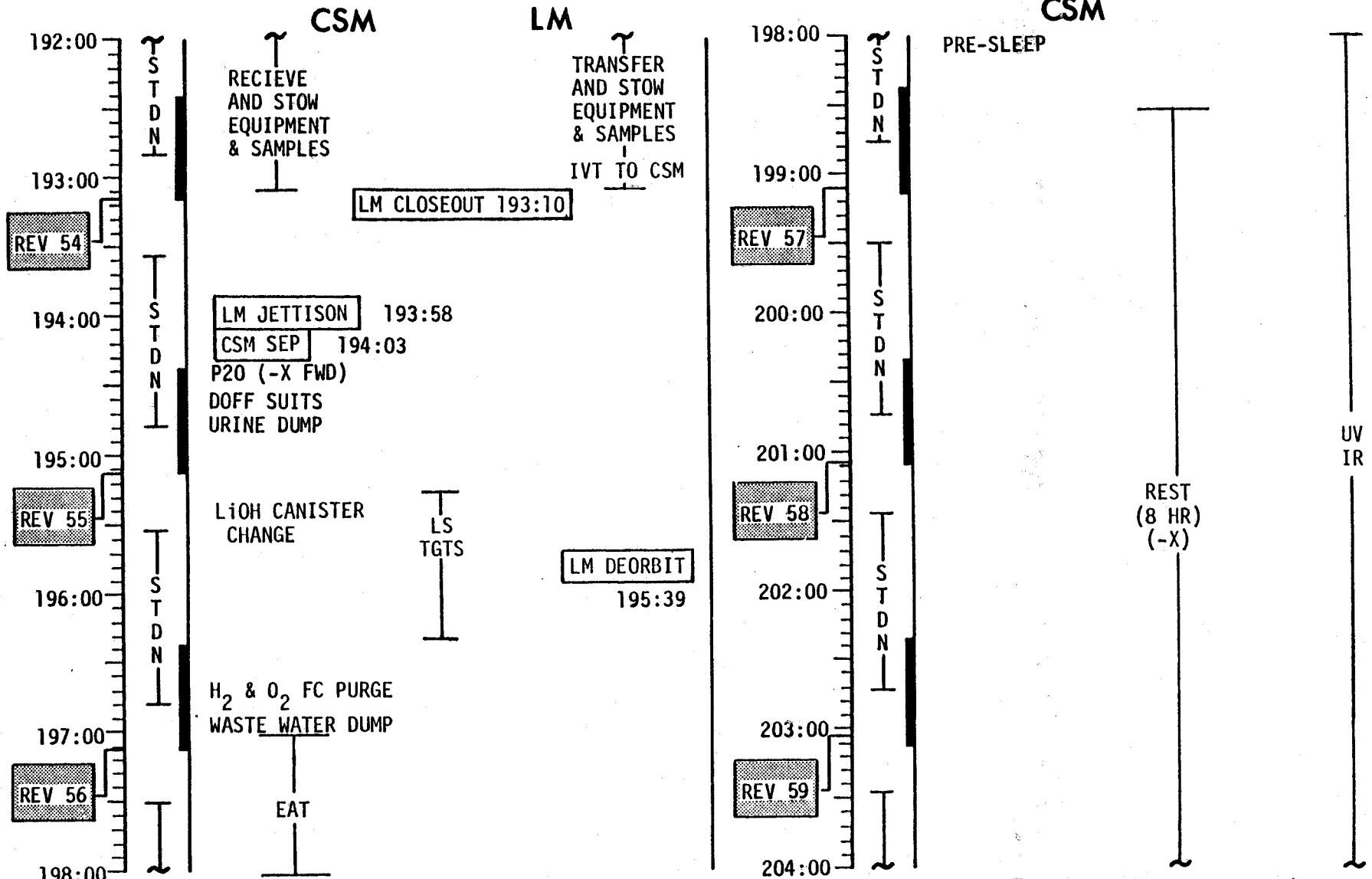
FLIGHT PLAN



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

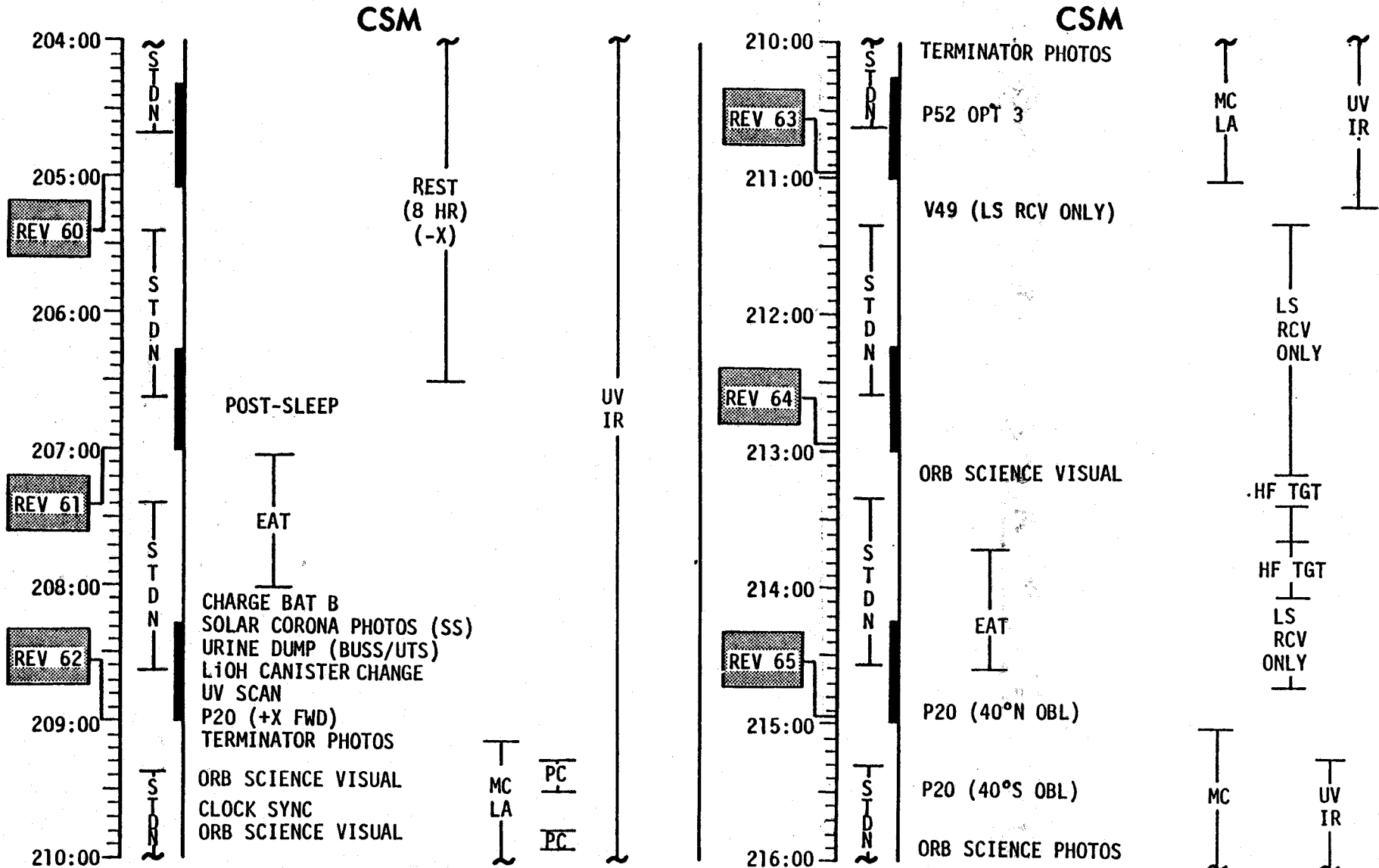
FLIGHT PLAN



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

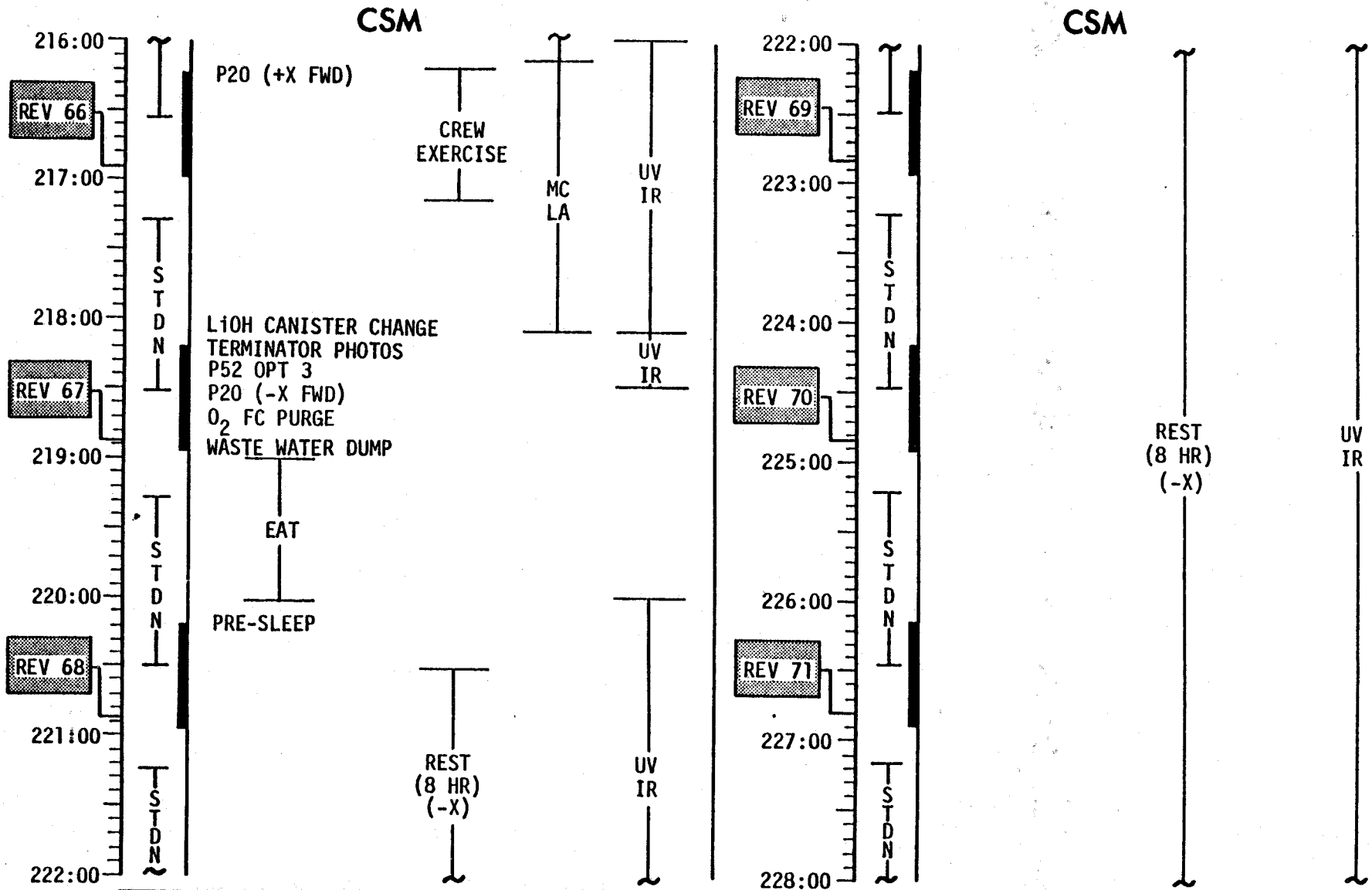
FLIGHT PLAN



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

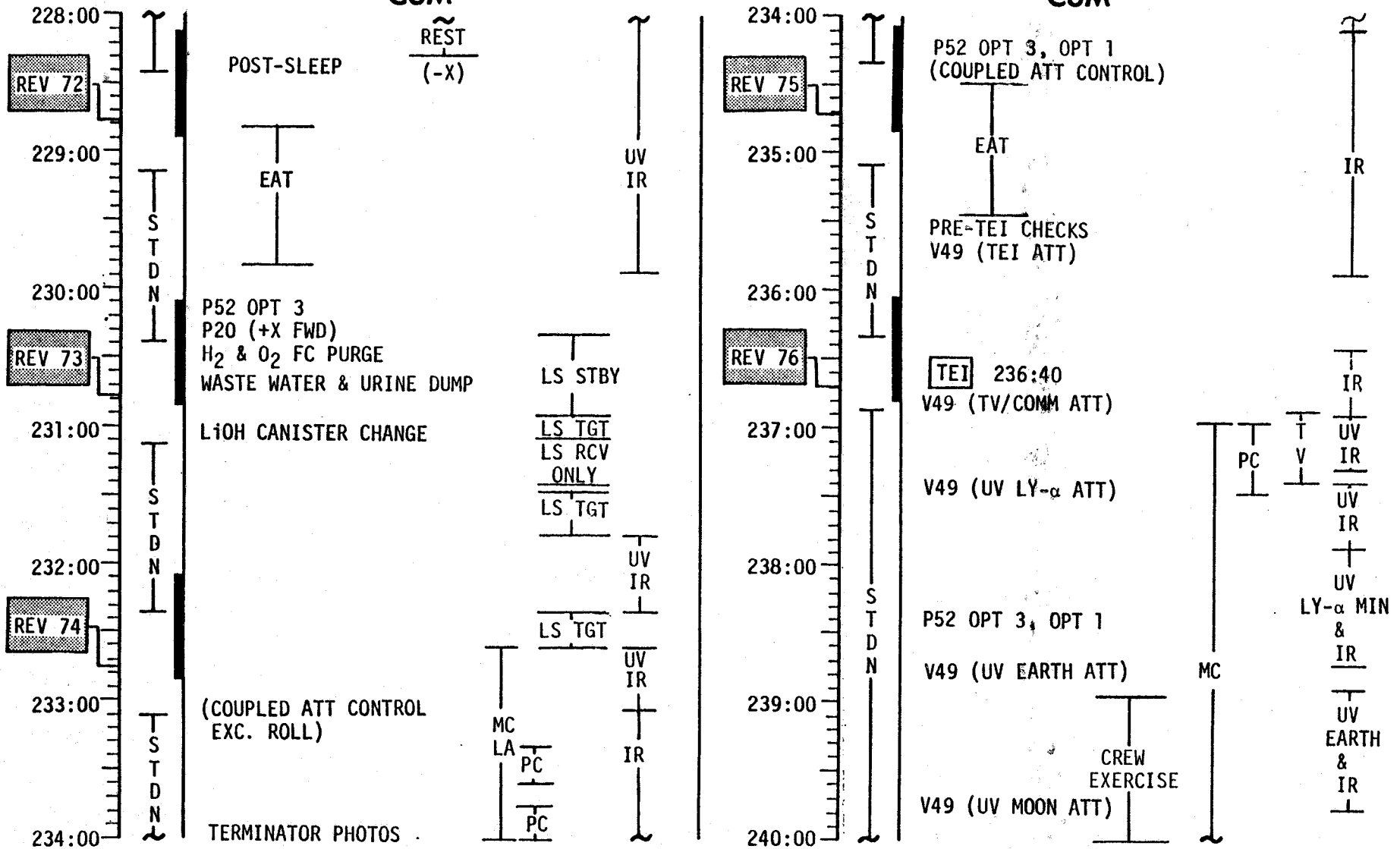


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	216:00 - 228:00	10/66-71	5-19

FLIGHT PLAN

CSM

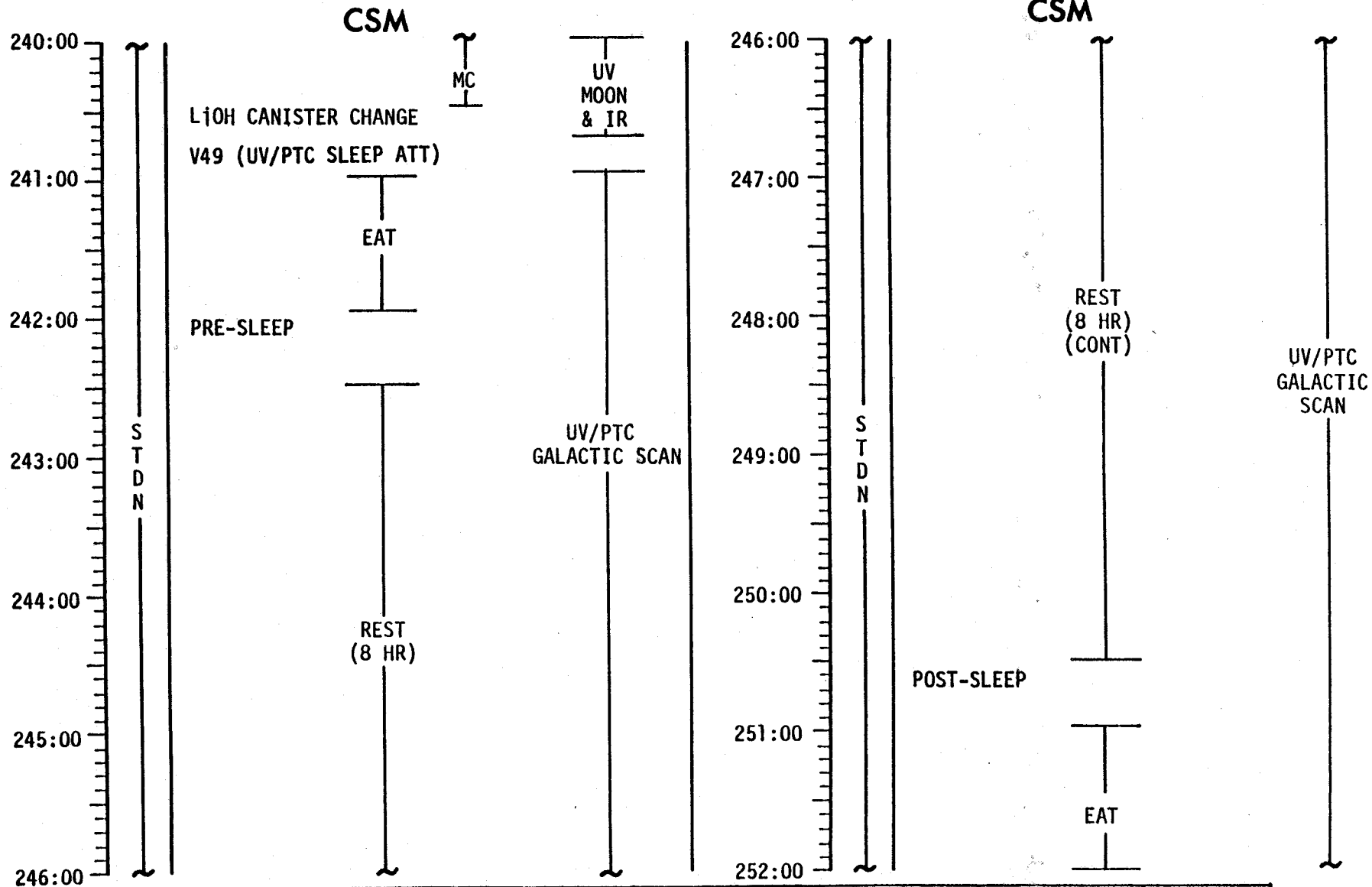
CSM



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

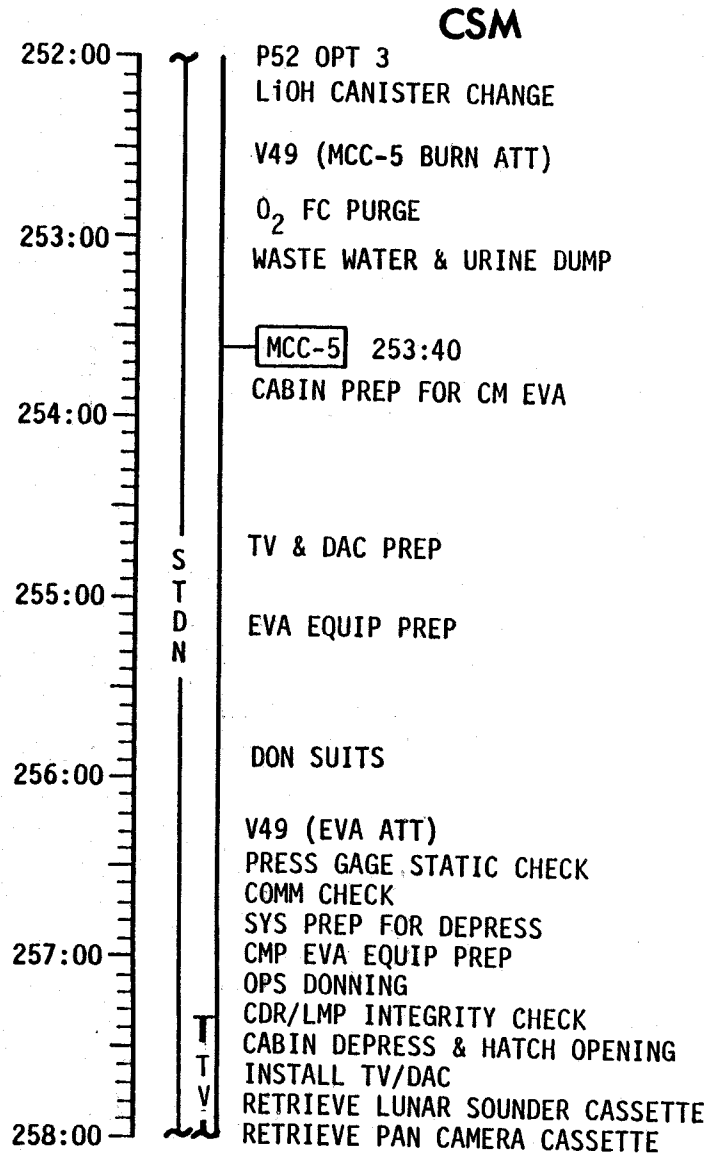
FLIGHT PLANNING BRANCH

FLIGHT PLAN



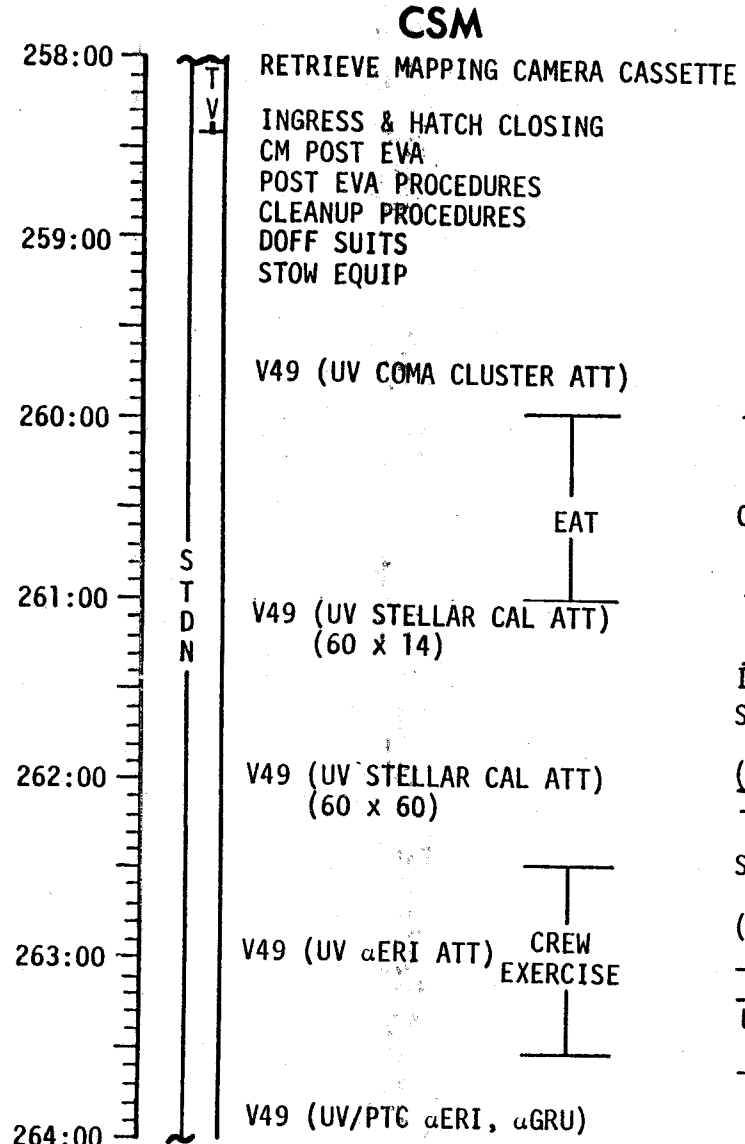
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	240:00 - 252:00	11-12/TEC	5-21

FLIGHT PLAN



UV/PTC

IR



UV
COMA
CLUSTER
&
IR

IR & UV
STELLAR
CAL
(60x14)

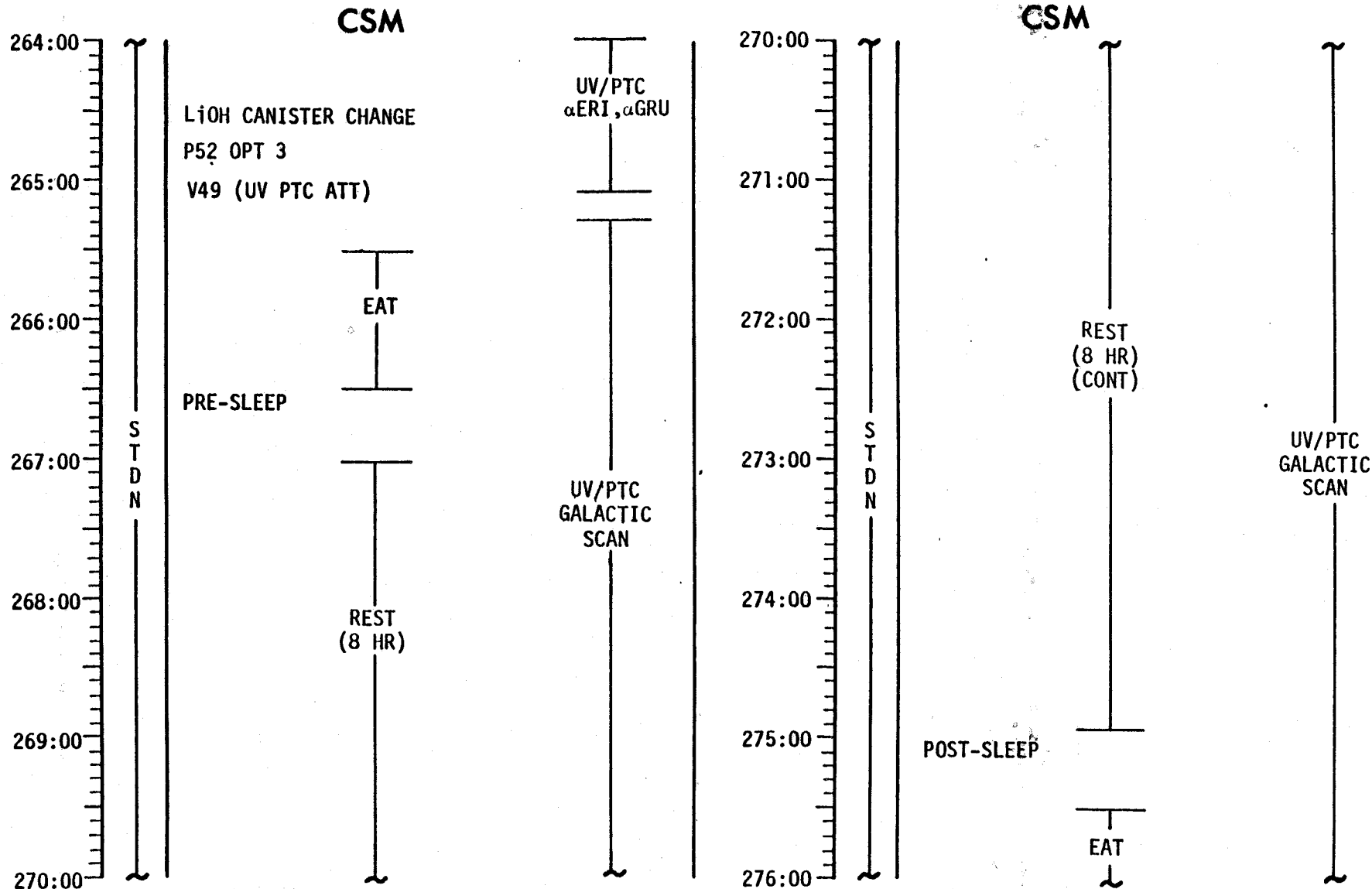
UV
STELLAR
CAL
(60x60)
& IR

UVαERI
& IR

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	252:00 - 264:00	12 /TEC	5-22

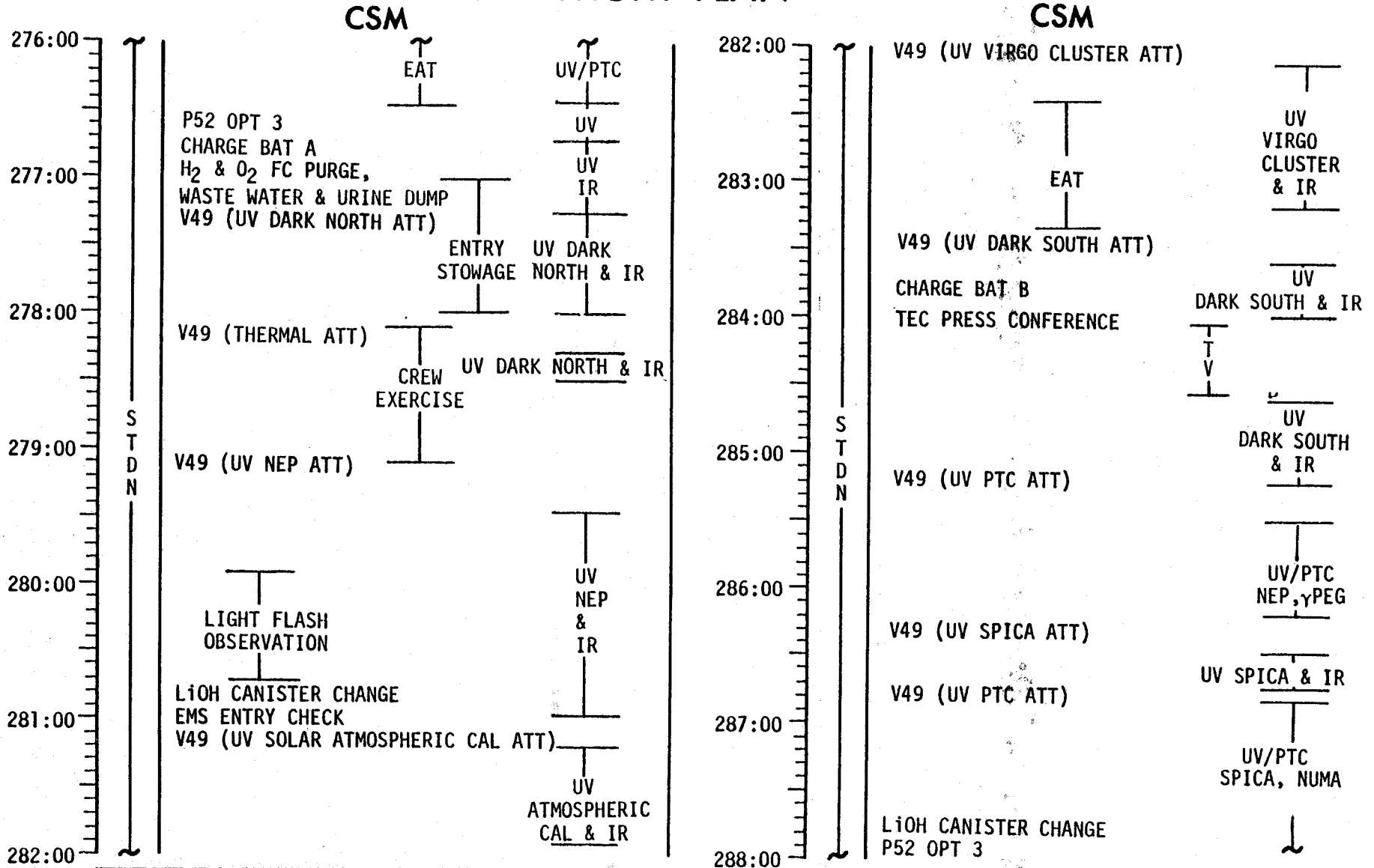
FLIGHT PLANNING BRANCH

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

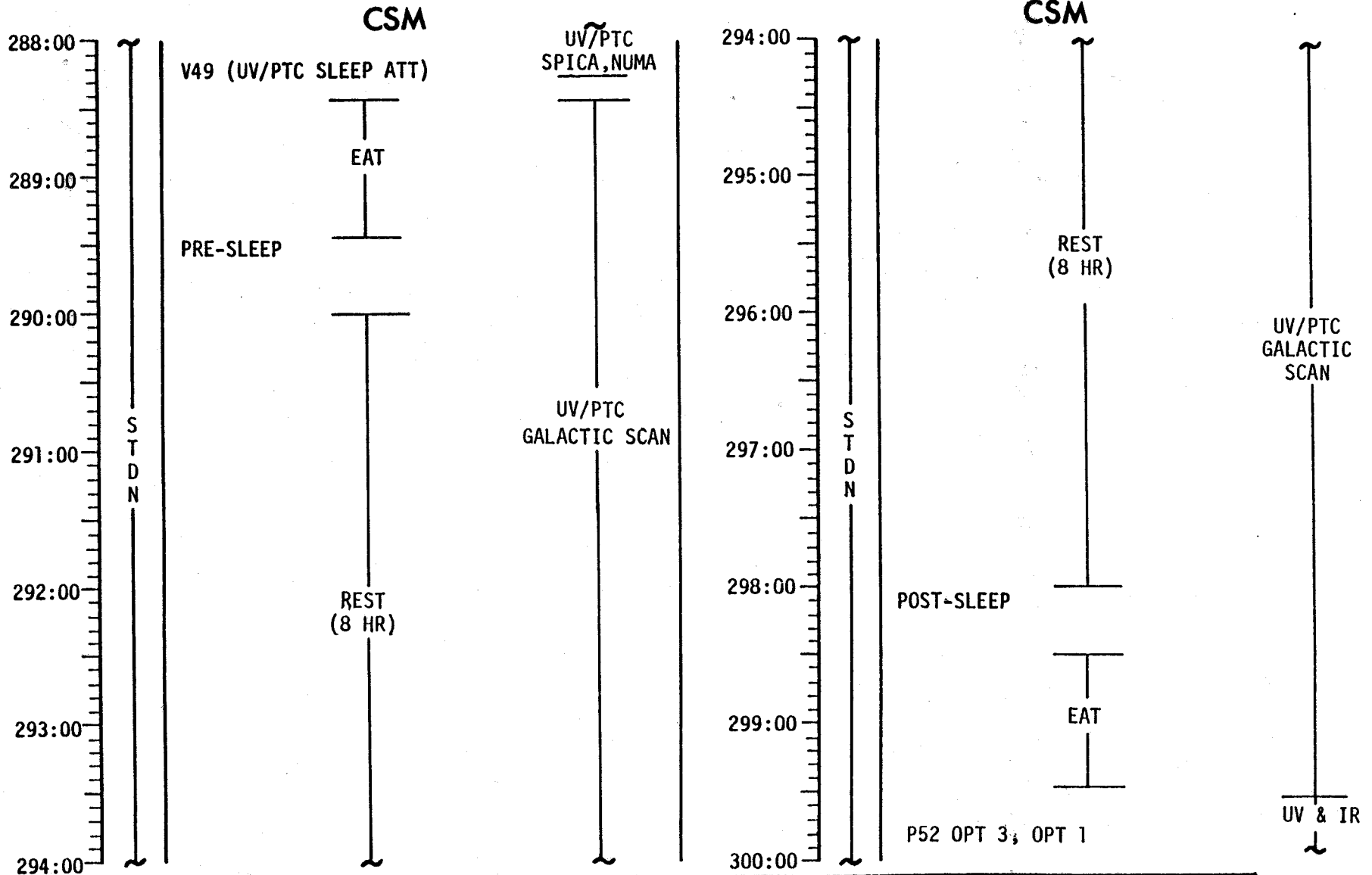
FLIGHT PLAN



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

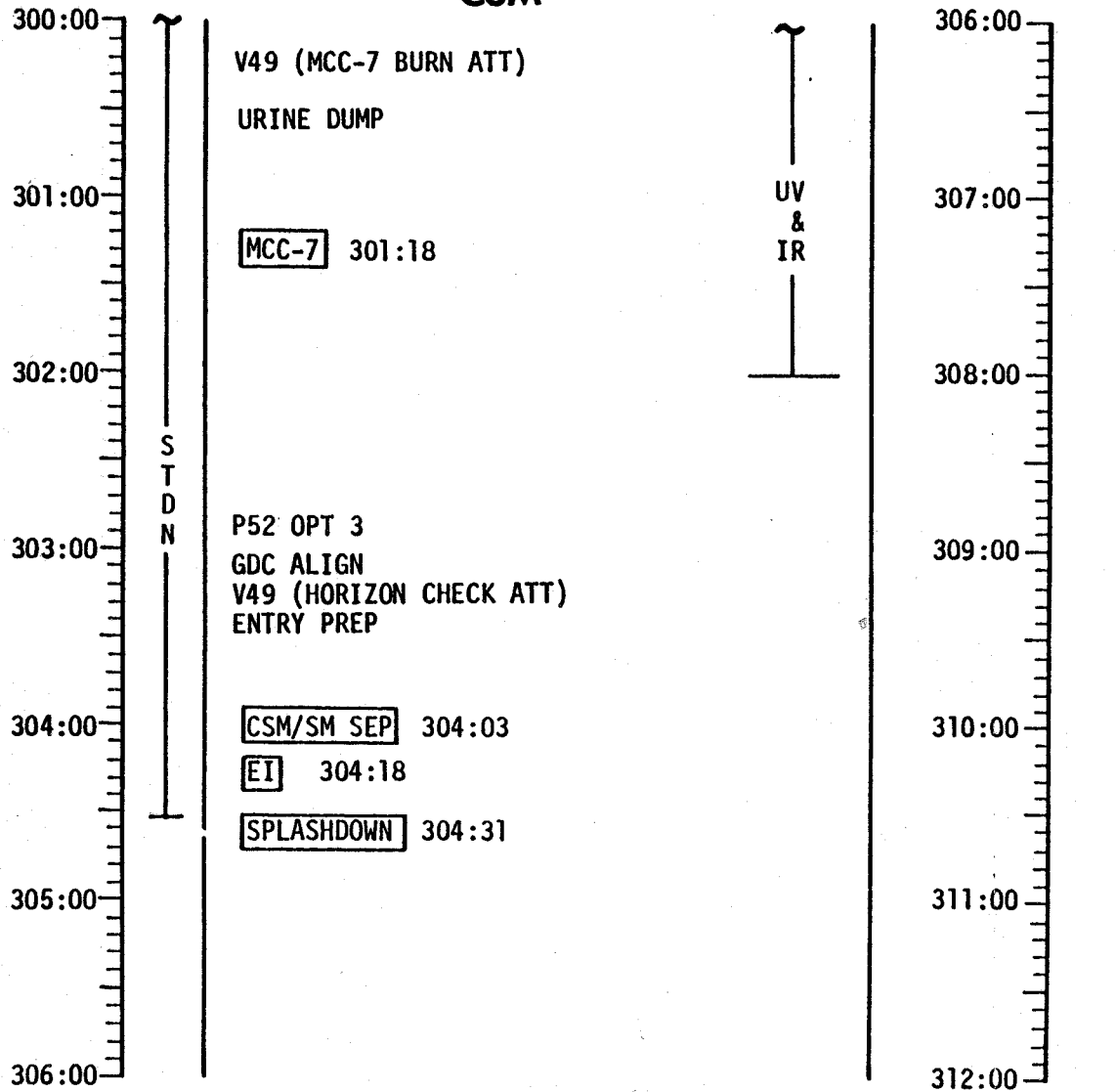


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	288:00 - 300:00	13-14/TEC	5-25

FLIGHT PLANNING BRANCH

FLIGHT PLAN

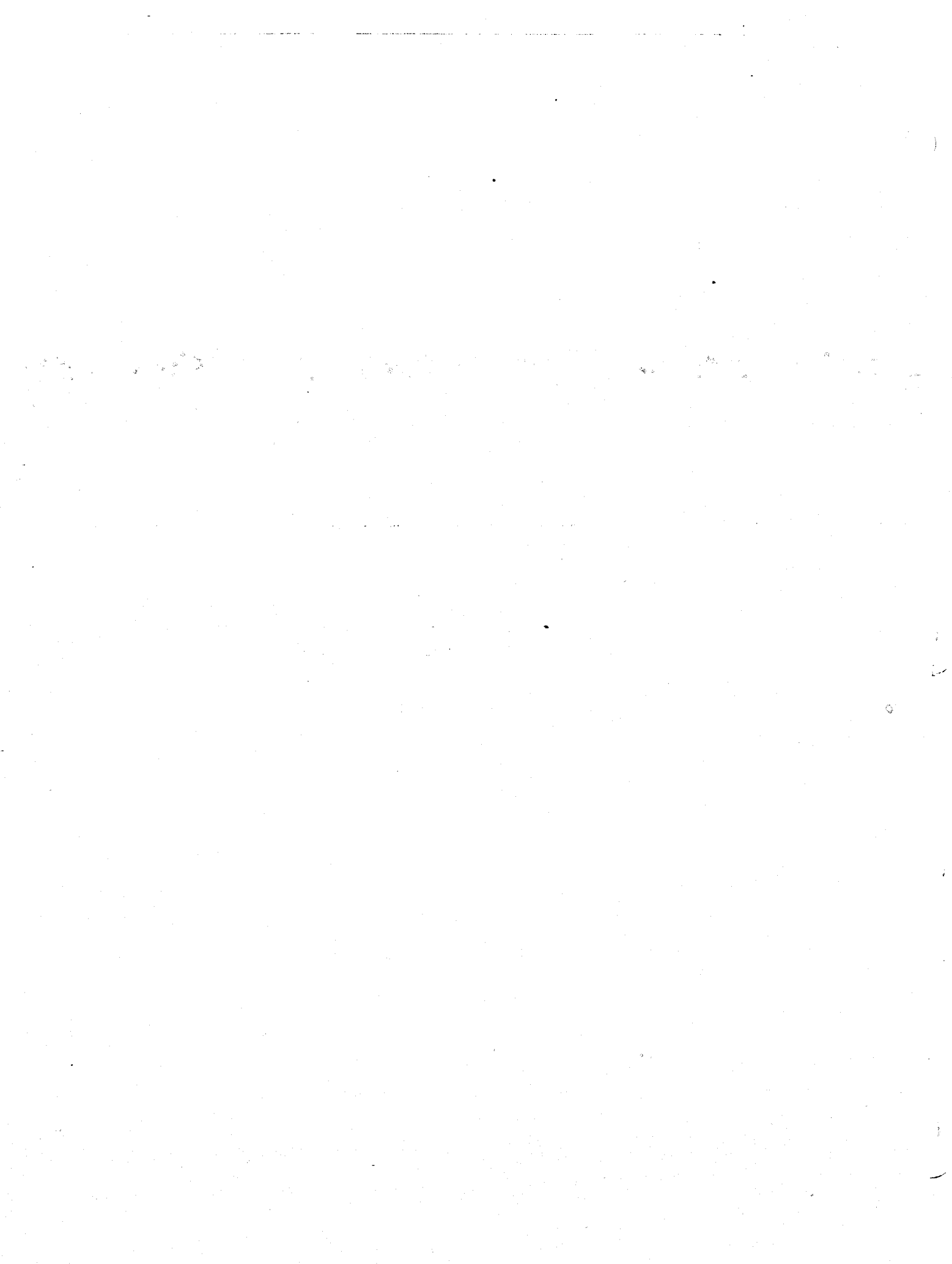
CSM



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.

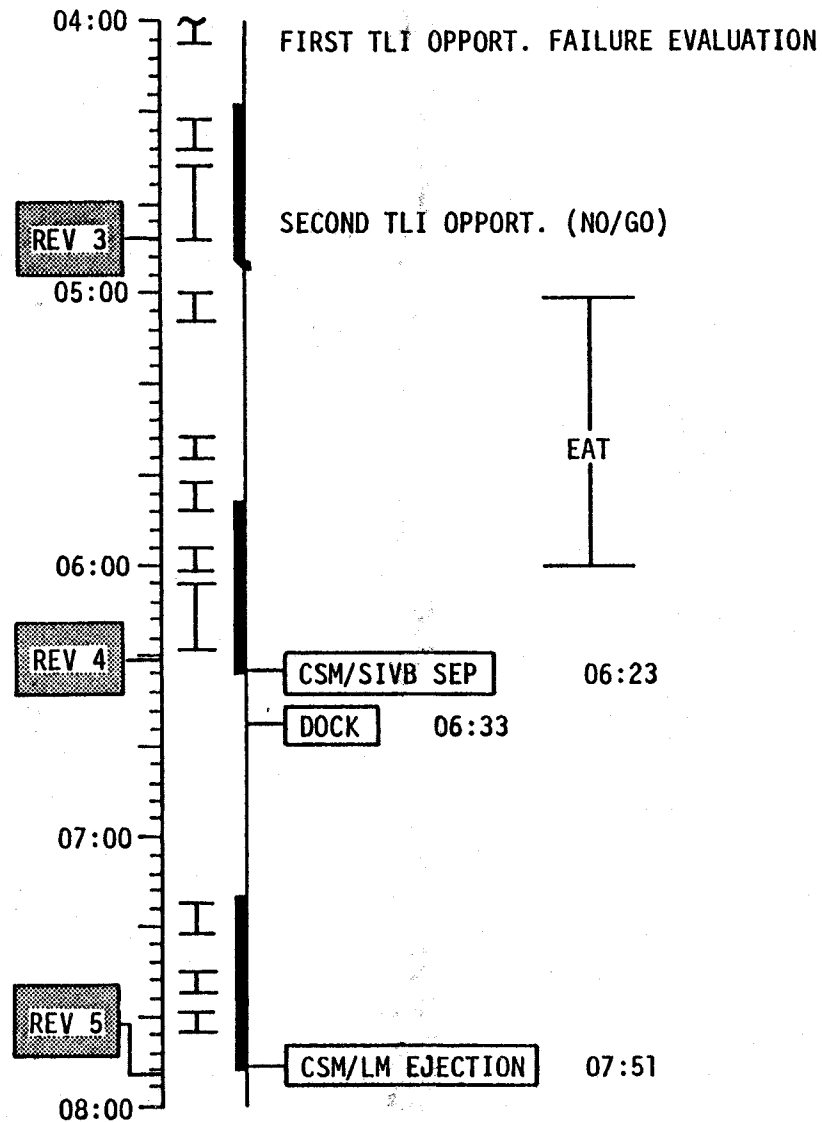
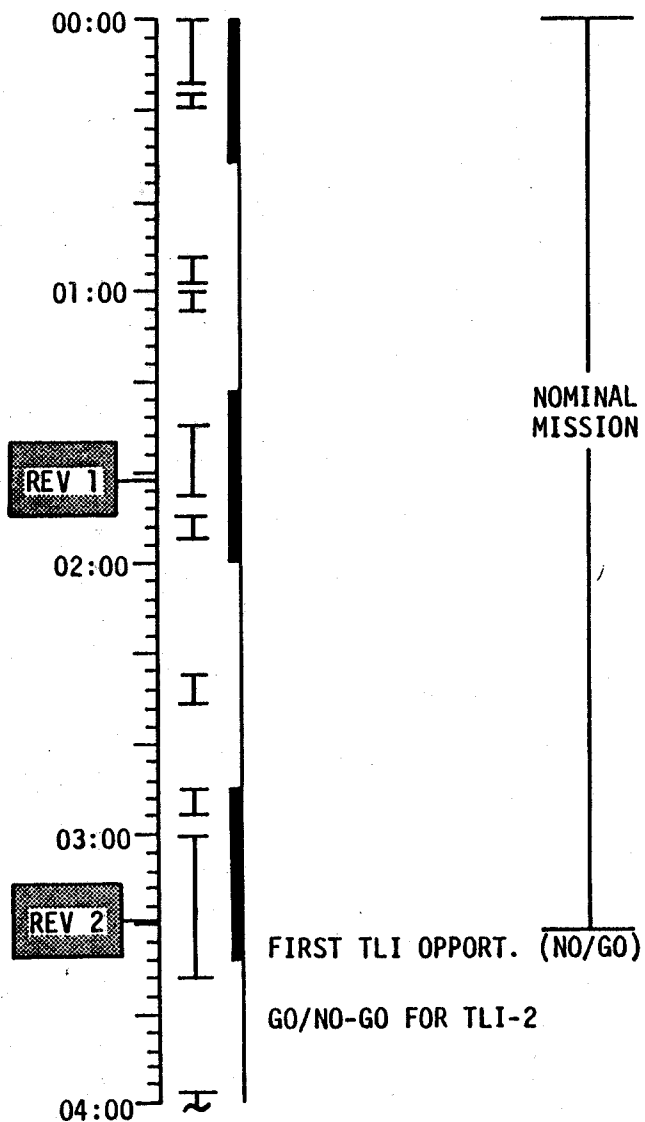
The mission is open ended but for flight planning purposes, a seven-day mission is planned.

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FLIGHT PLAN

EARTH ALTERNATE

2053 CST

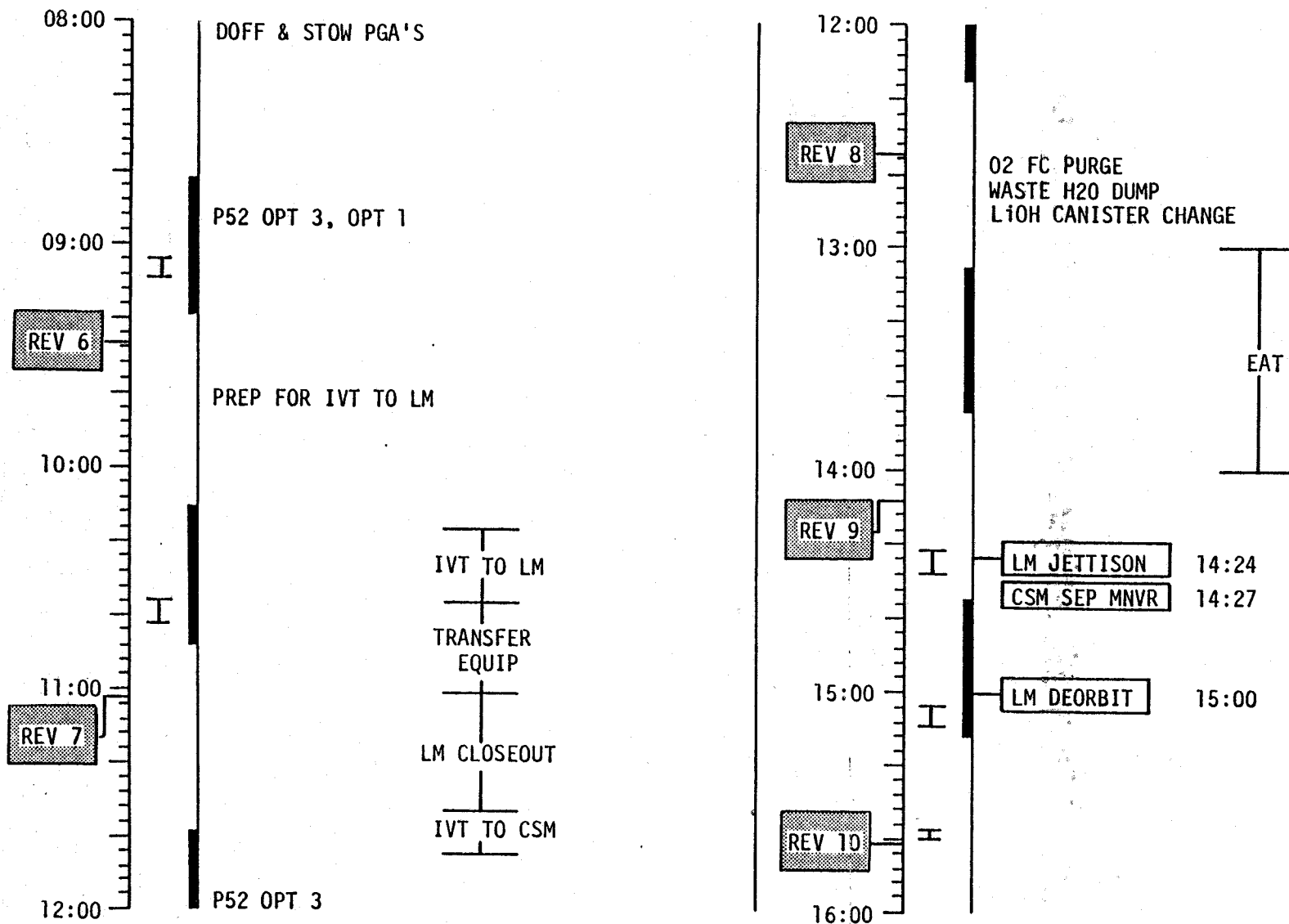


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	00:00 - 08:00	1/1-5	6-3

FLIGHT PLAN

EARTH ALTERNATE

0453 CST



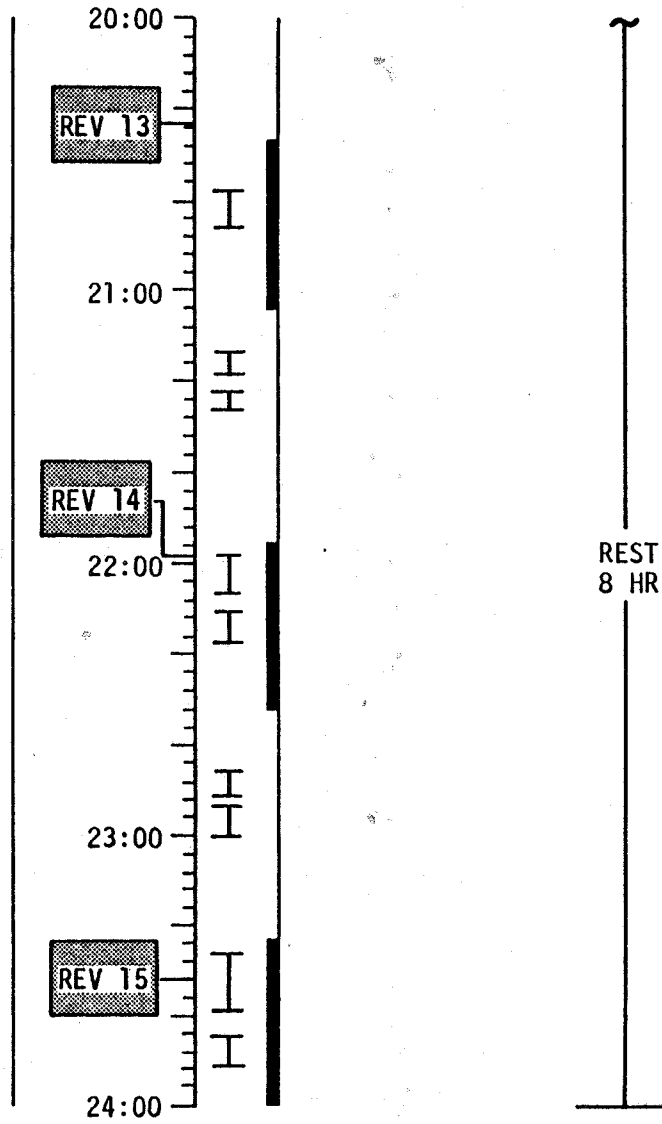
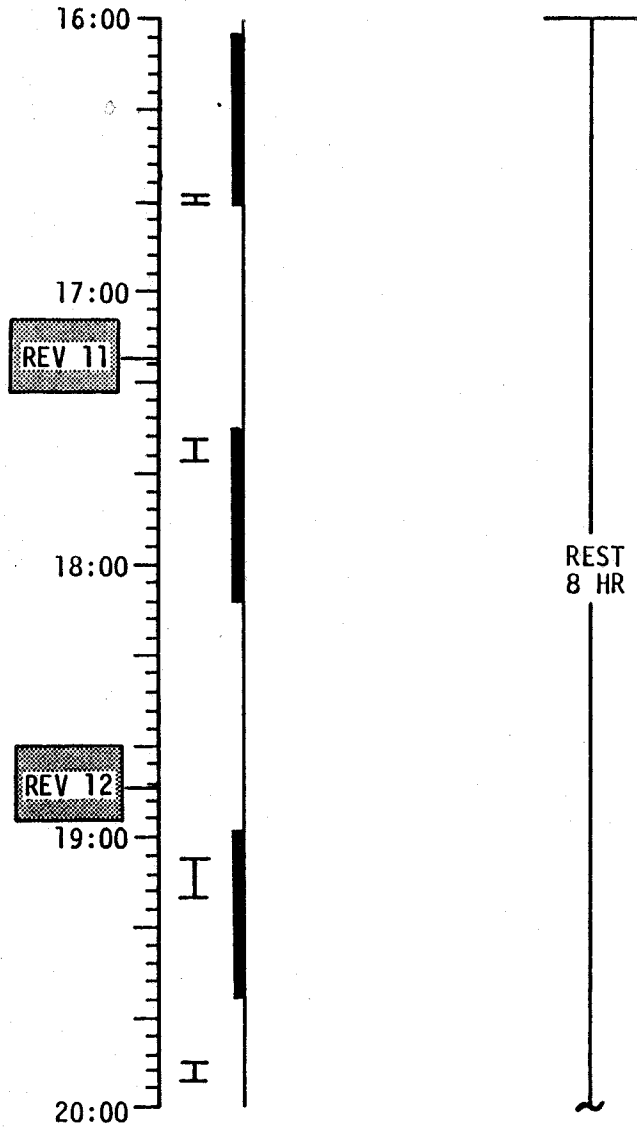
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	08:00 - 16:00	1/5-10	6-4

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE

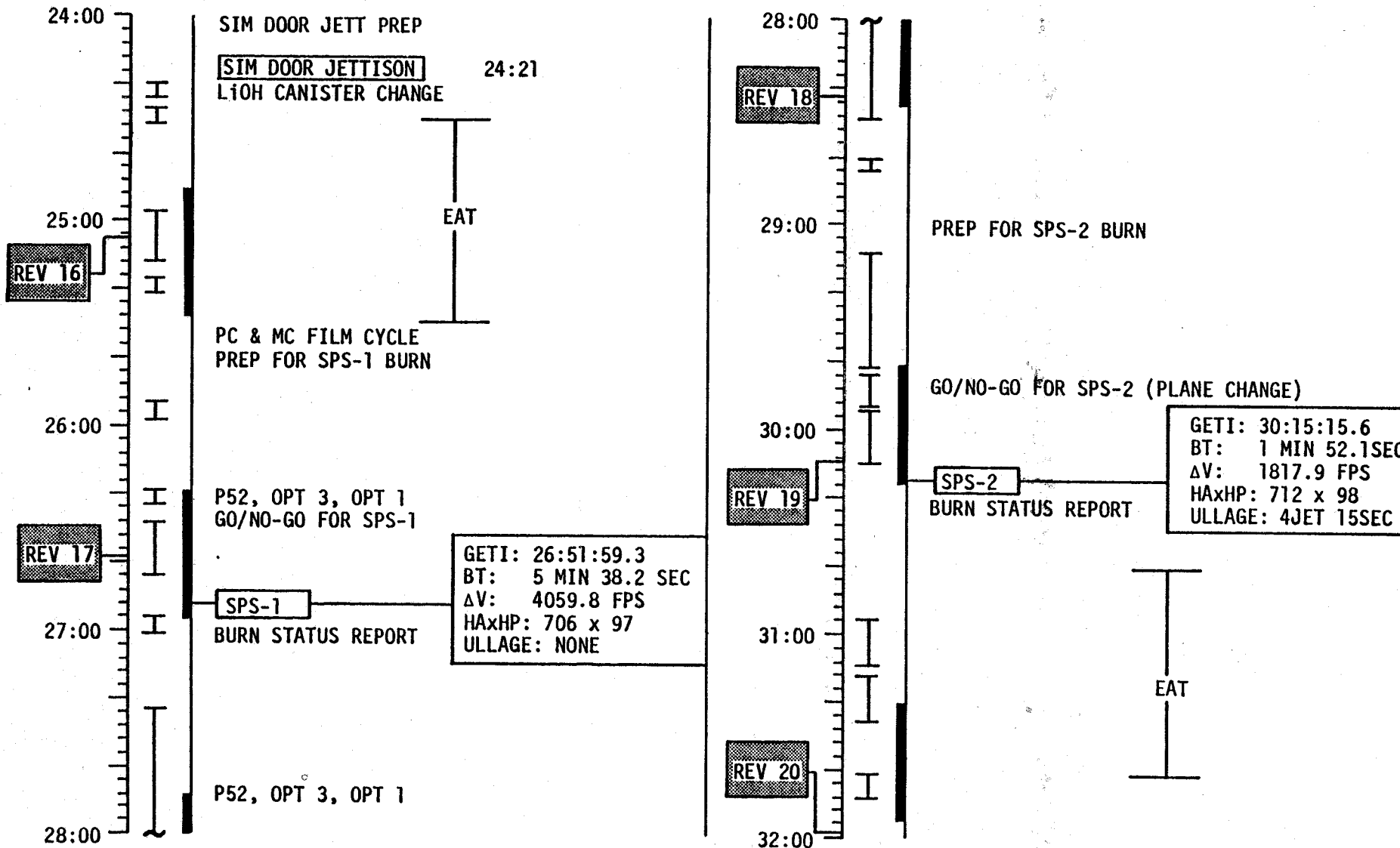
1253 CST



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 PLAN

2053 CST

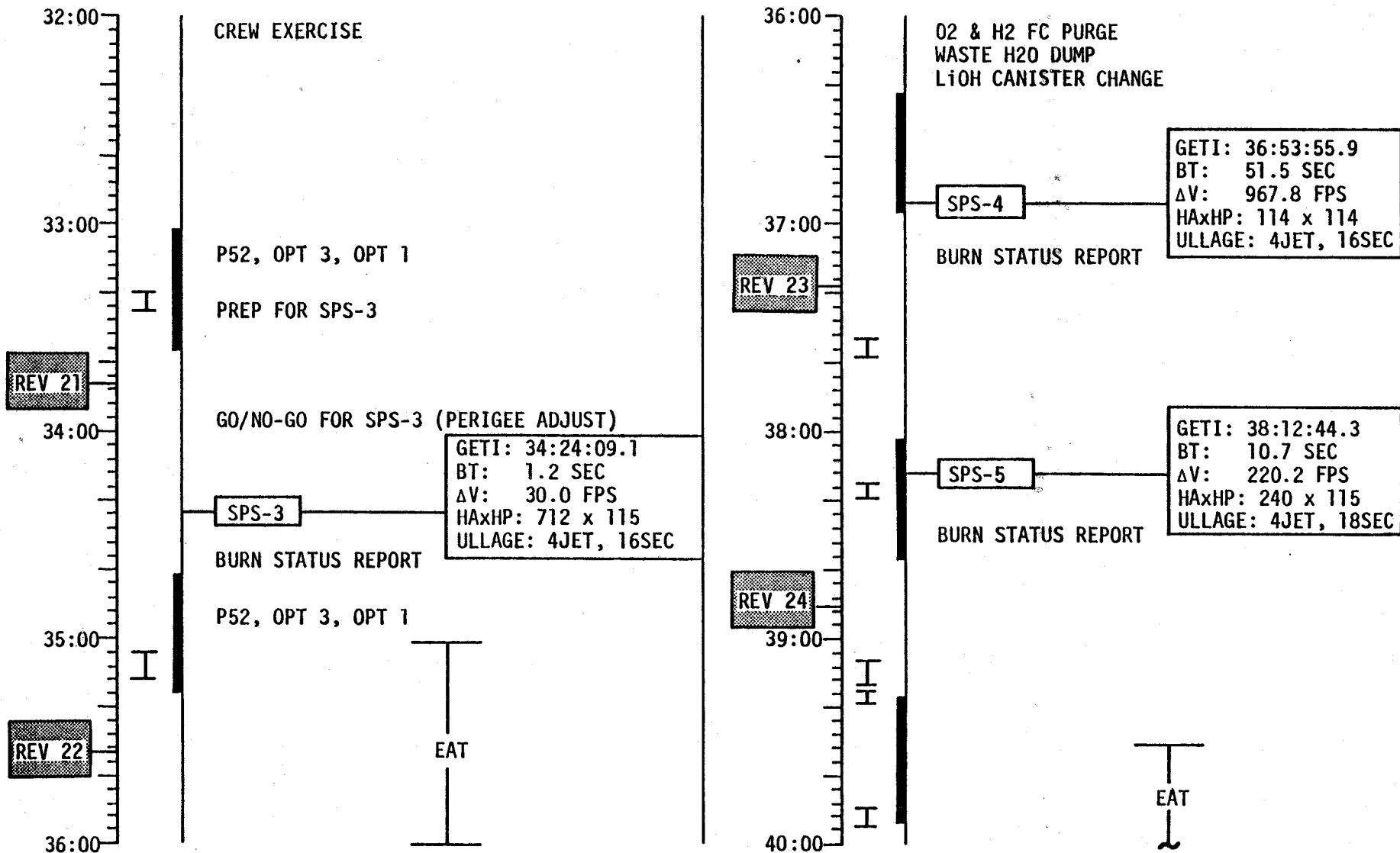


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	24:00 - 32:00	2/15-20	6-6

FLIGHT PLAN

EARTH ALTERNATE

0453 CST



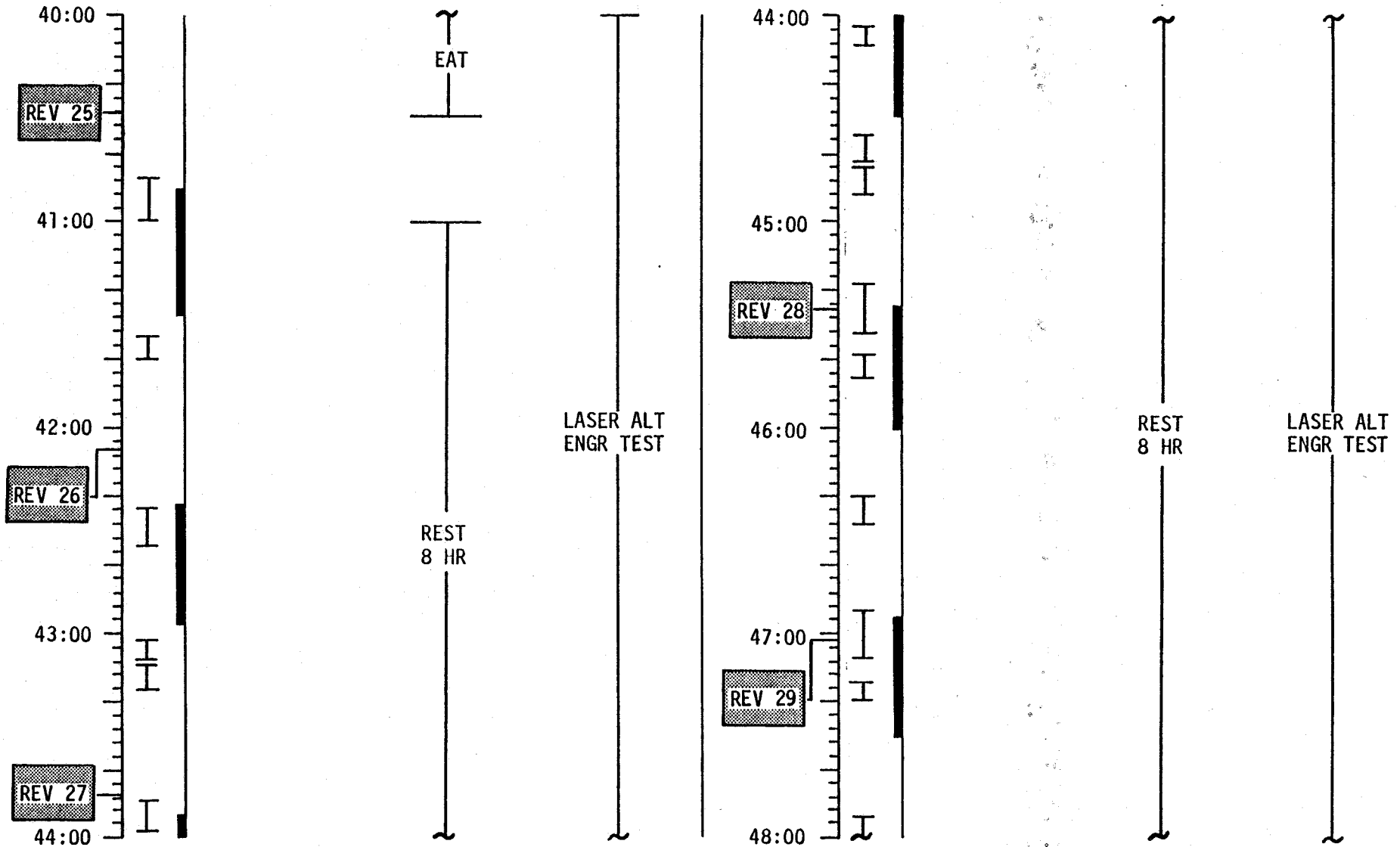
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	32:00 - 40:00	2/20-24	6-7

FLIGHT PLANNING BRANCH

EARTH ALTERNATE

FLIGHT PLAN

1253 CST

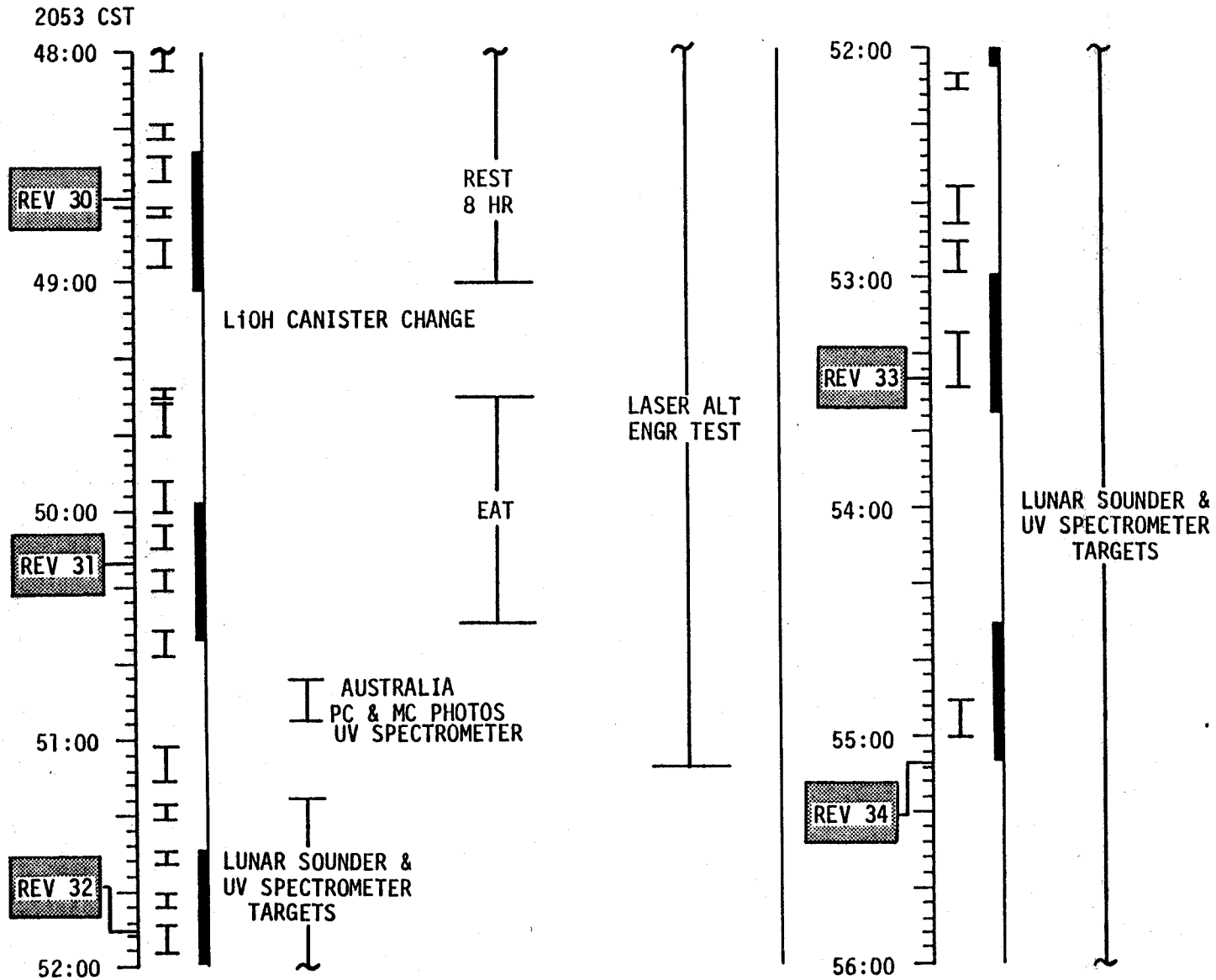


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	40:00 - 48:00	2/25-29	6-8

FLIGHT PLANNING BRANCH

EARTH ALTERNATE

FLIGHT PLAN

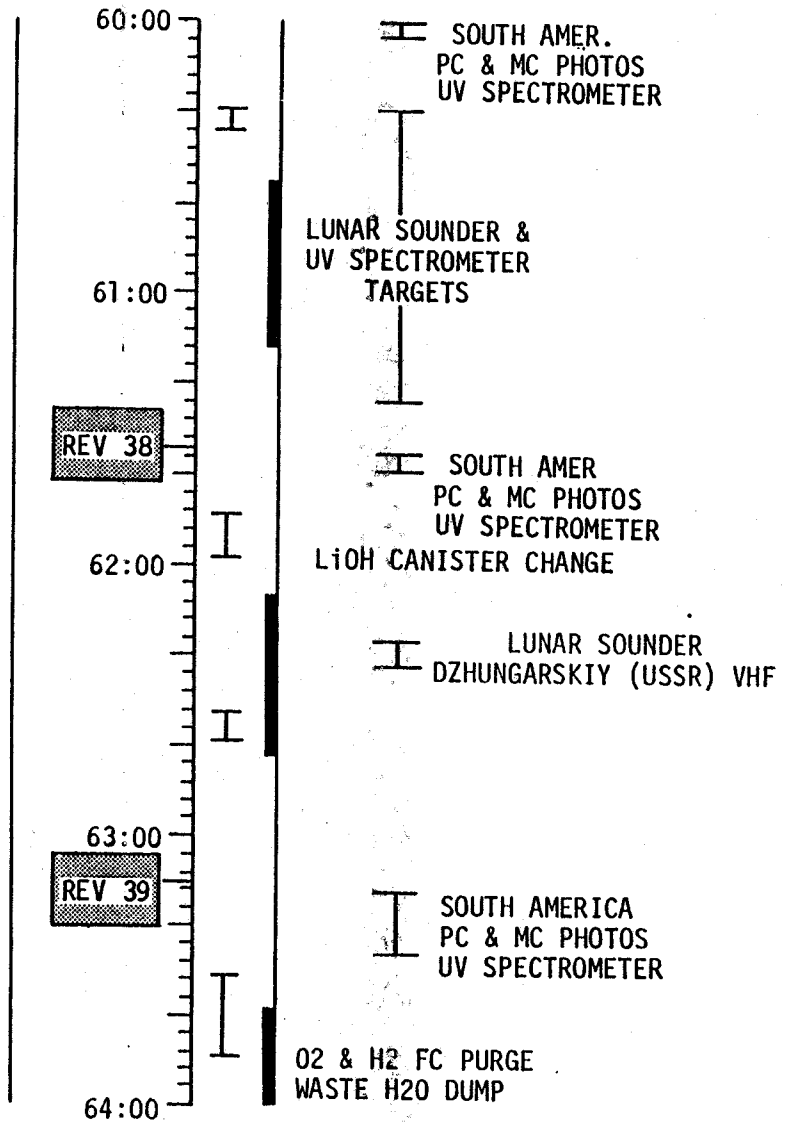
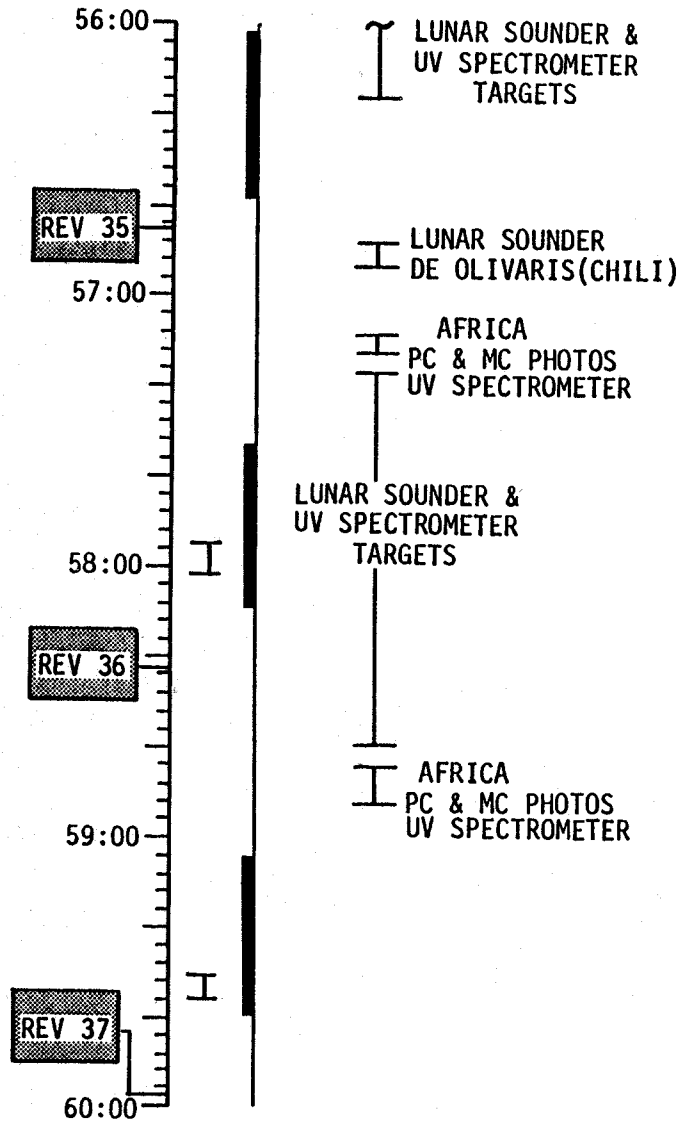


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	48:00 - 56:00	3/30-34	6-9

EARTH ALTERNATE

FLIGHT PLAN

0453 CST



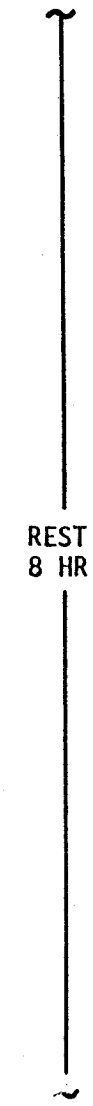
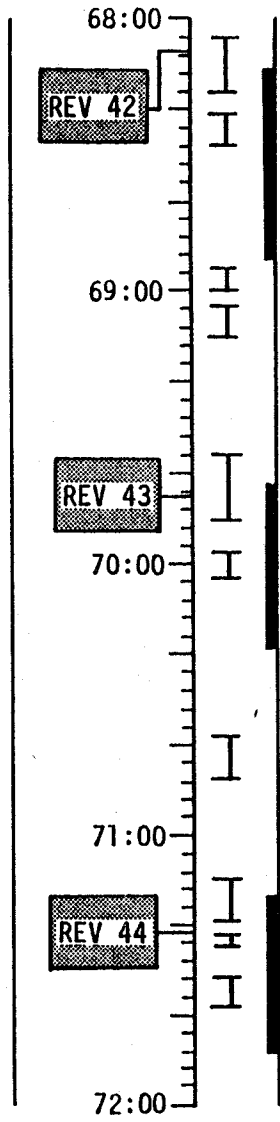
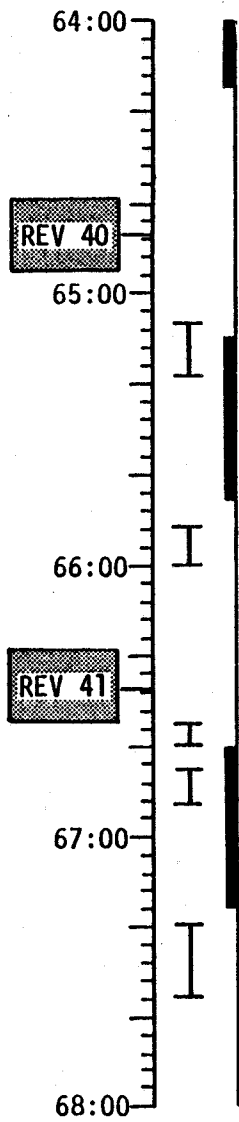
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	56:00 - 64:00	3/35-39	6-10

FLIGHT PLANNING BRANCH

EARTH ALTERNATE

FLIGHT PLAN

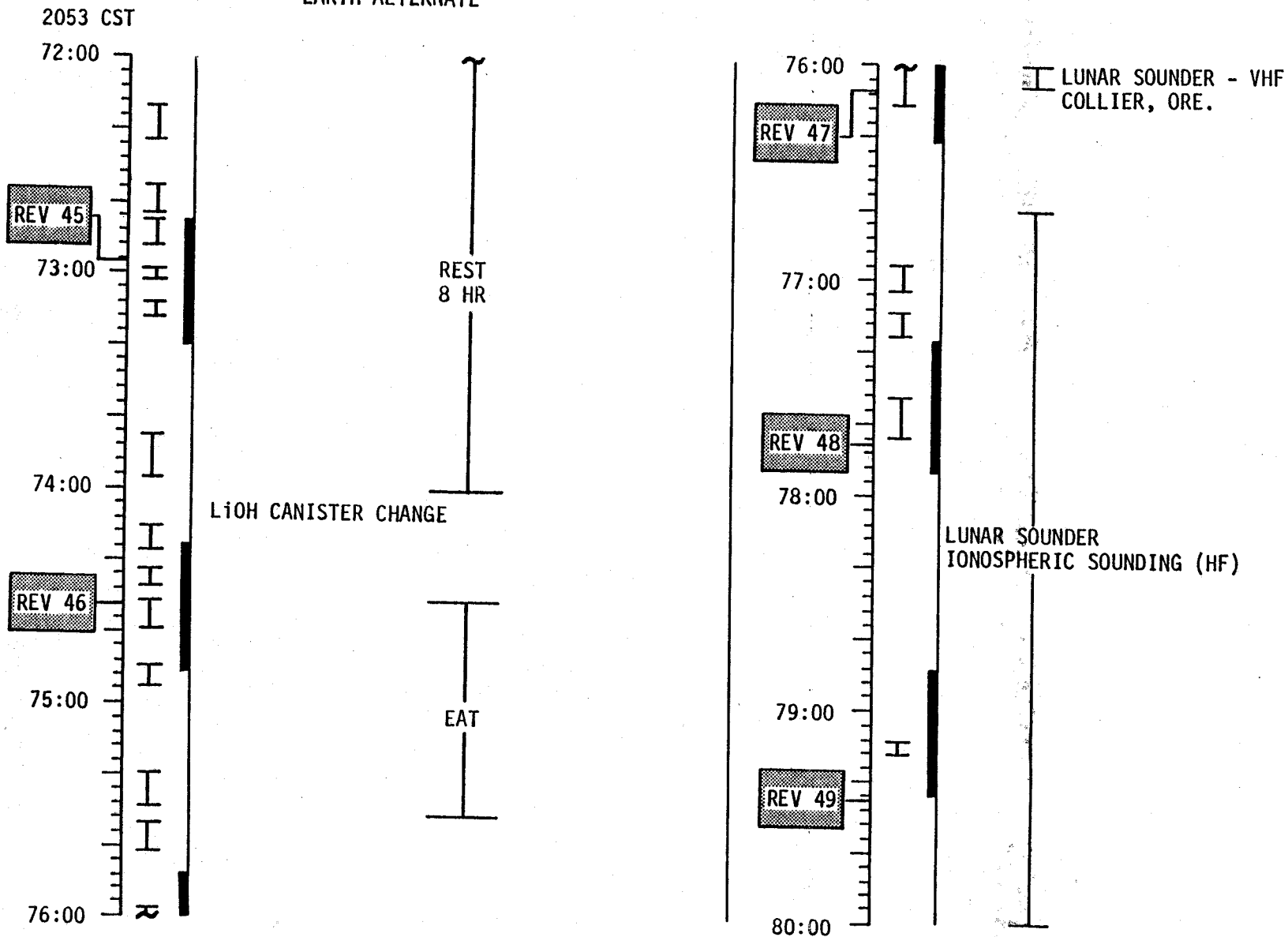
1253 CST



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 PLAN

EARTH ALTERNATE

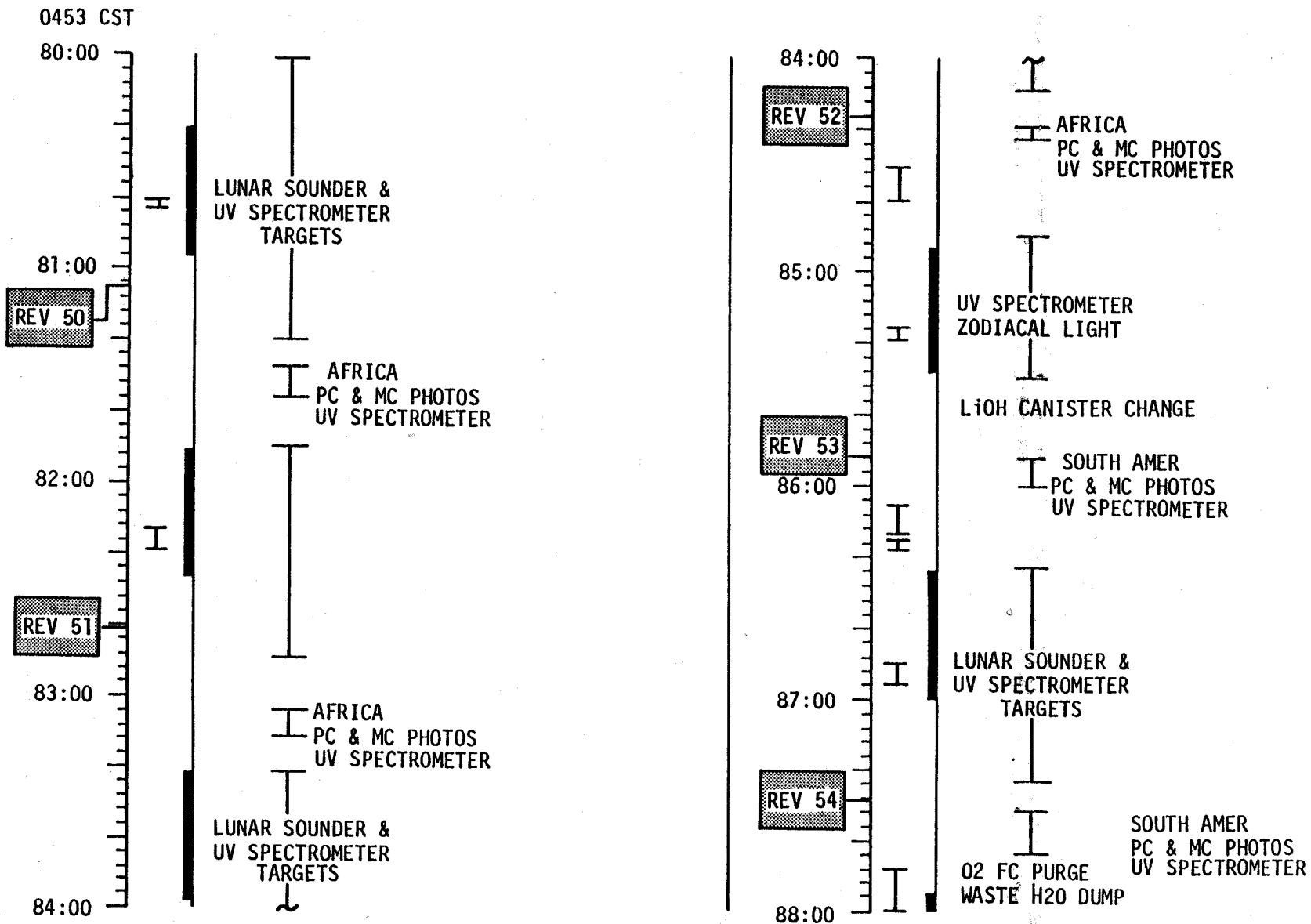


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	72:00 - 80:00	4/45-49	6-12

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE



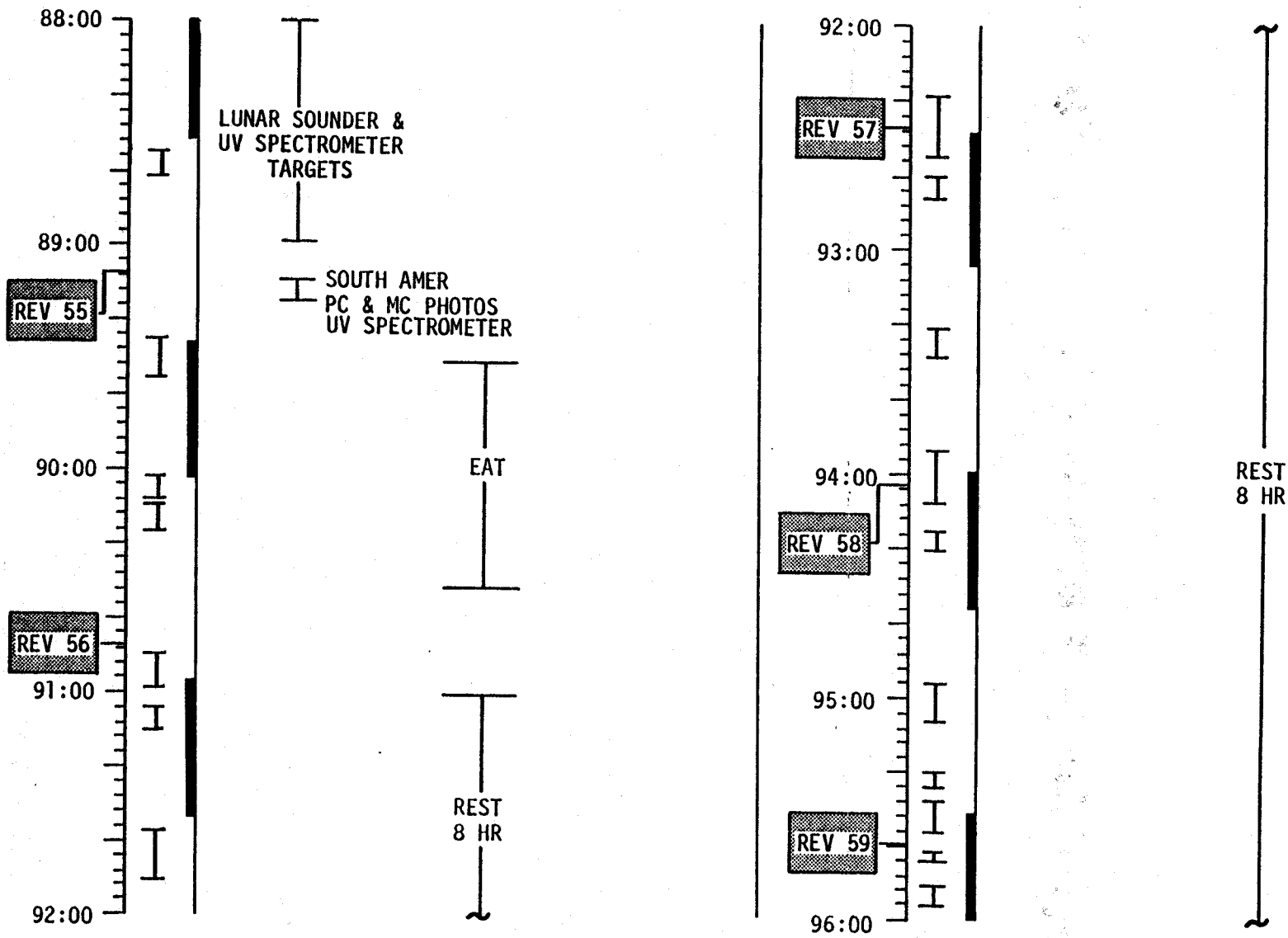
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	80:00 - 88:00	4/50-54	6-13

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE

1253 CST

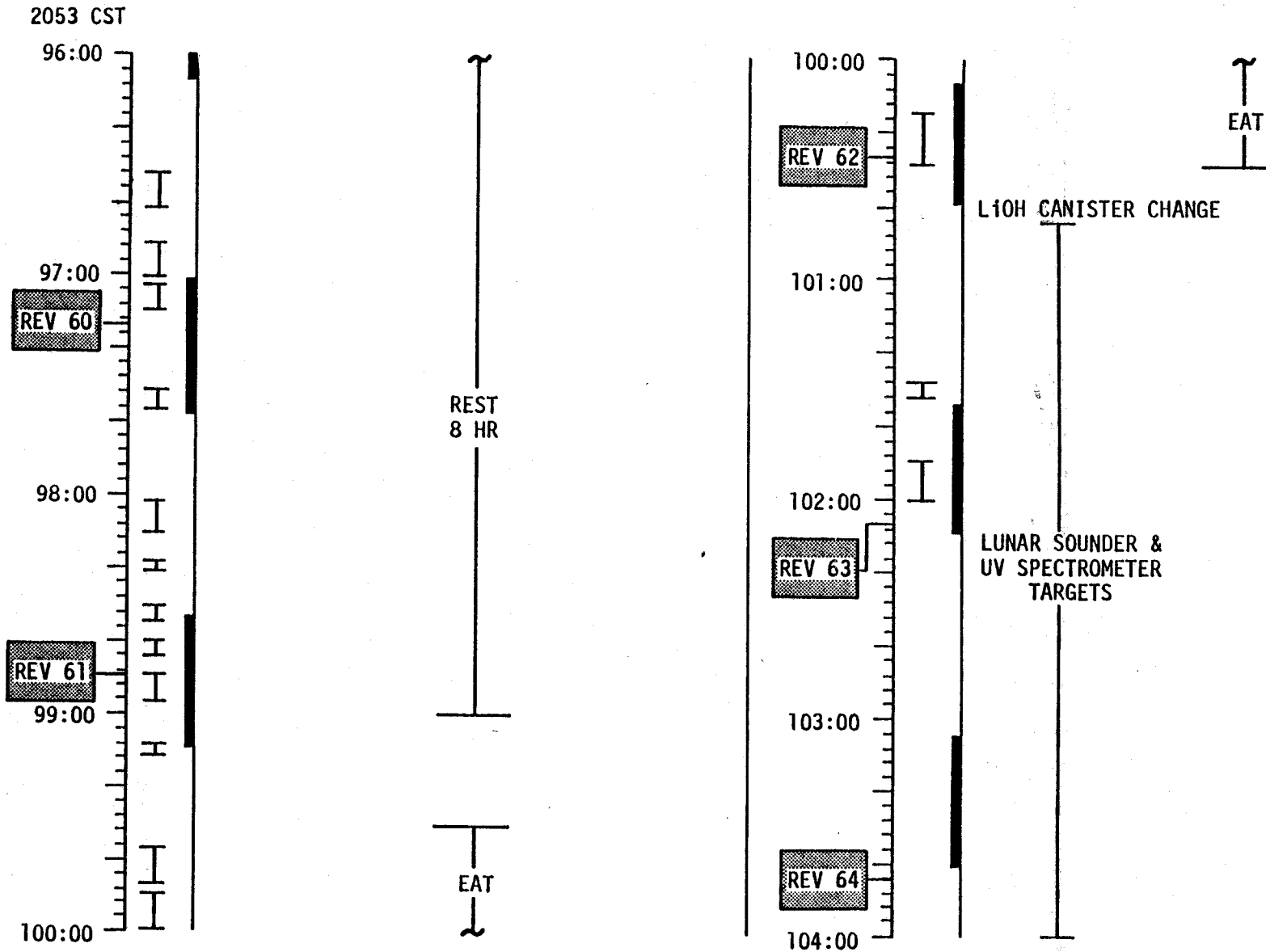


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	88:00 - 96:00	4/55-59	6-14

FLIGHT PLANNING BRANCH

EARTH ALTERNATE

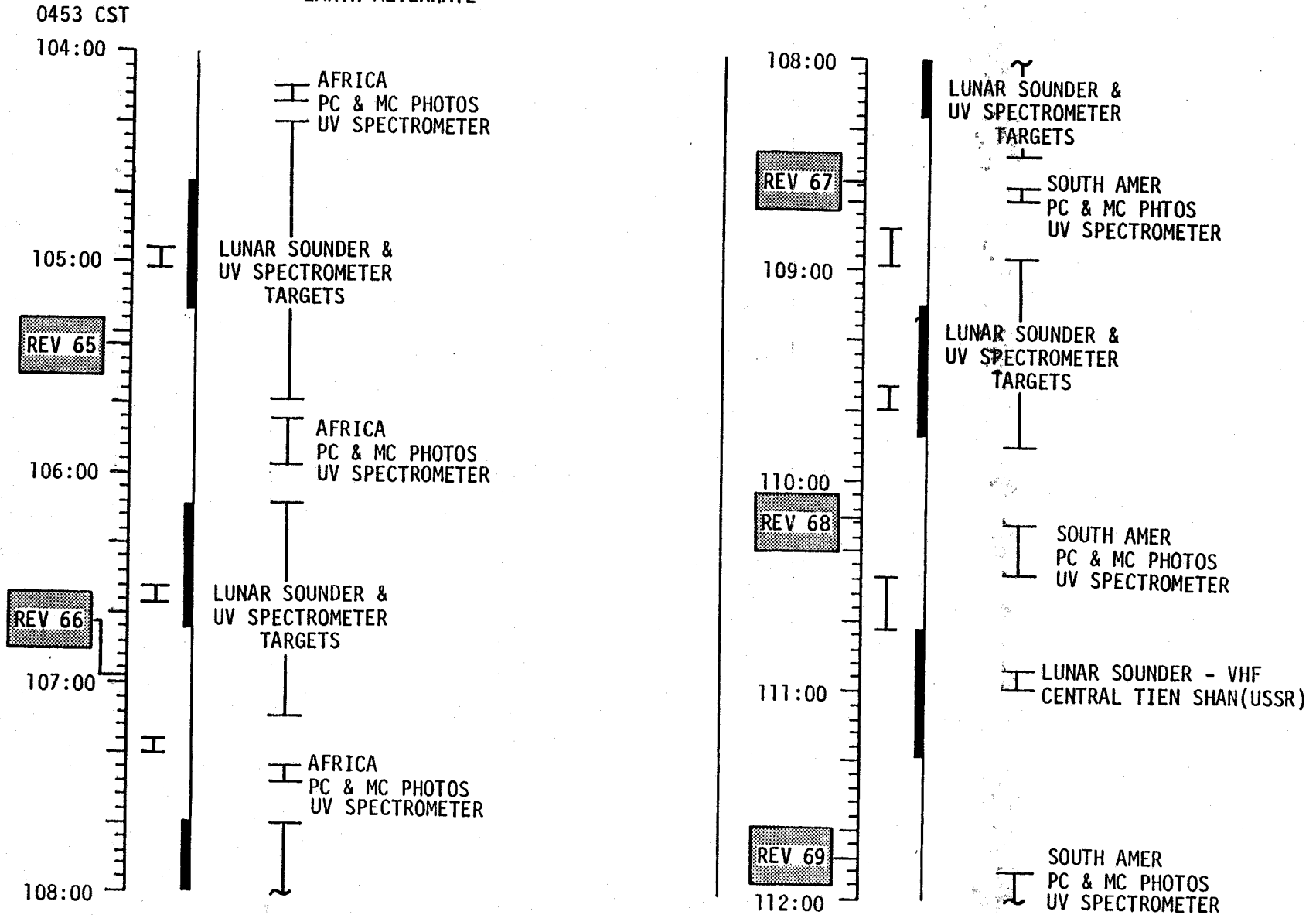
FLIGHT PLAN



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 PLAN

EARTH ALTERNATE

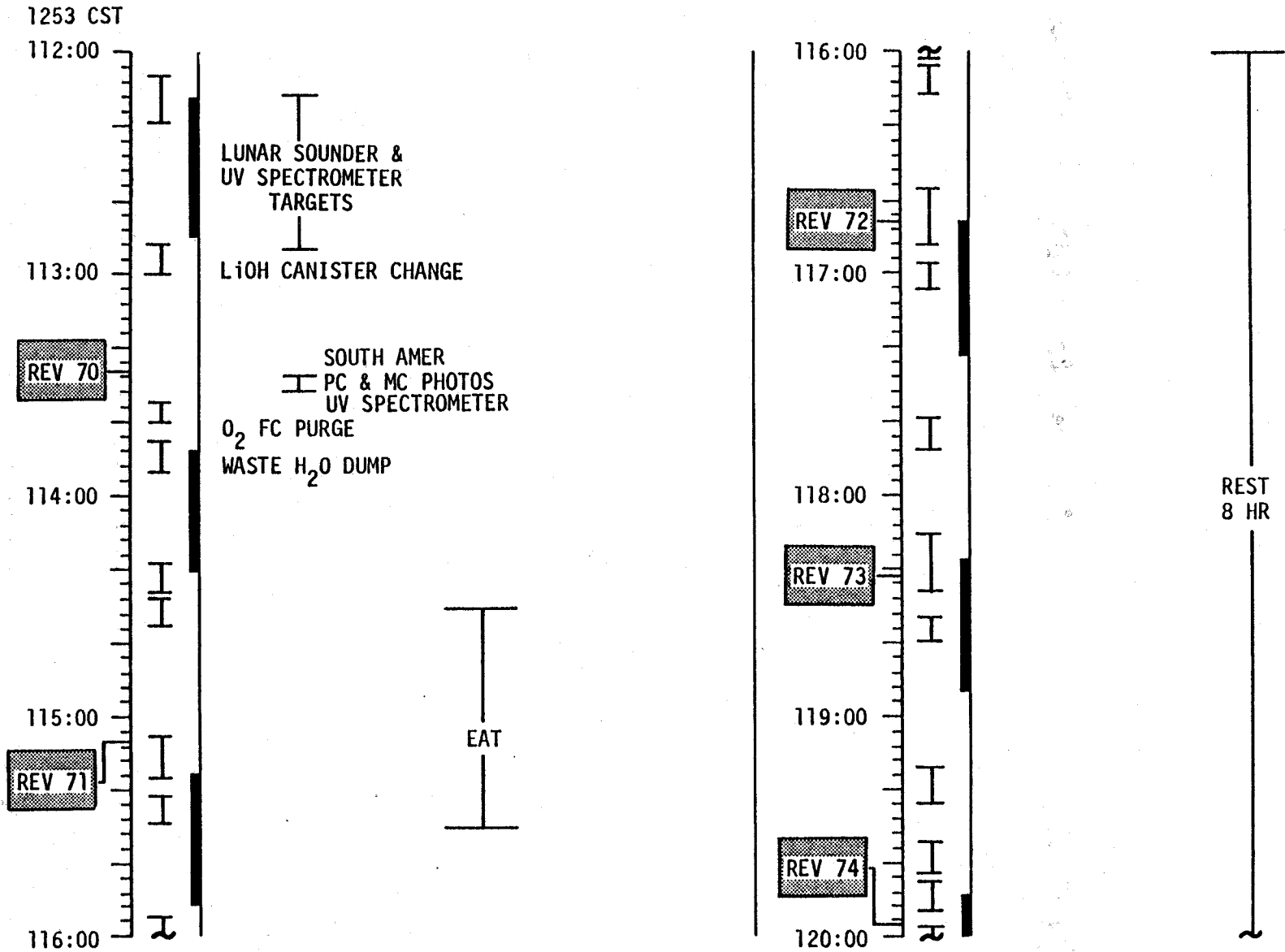


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	104:00 - 112:00	5/65-69	6-16

FLIGHT PLANNING BRANCH

FLIGHT PLAN

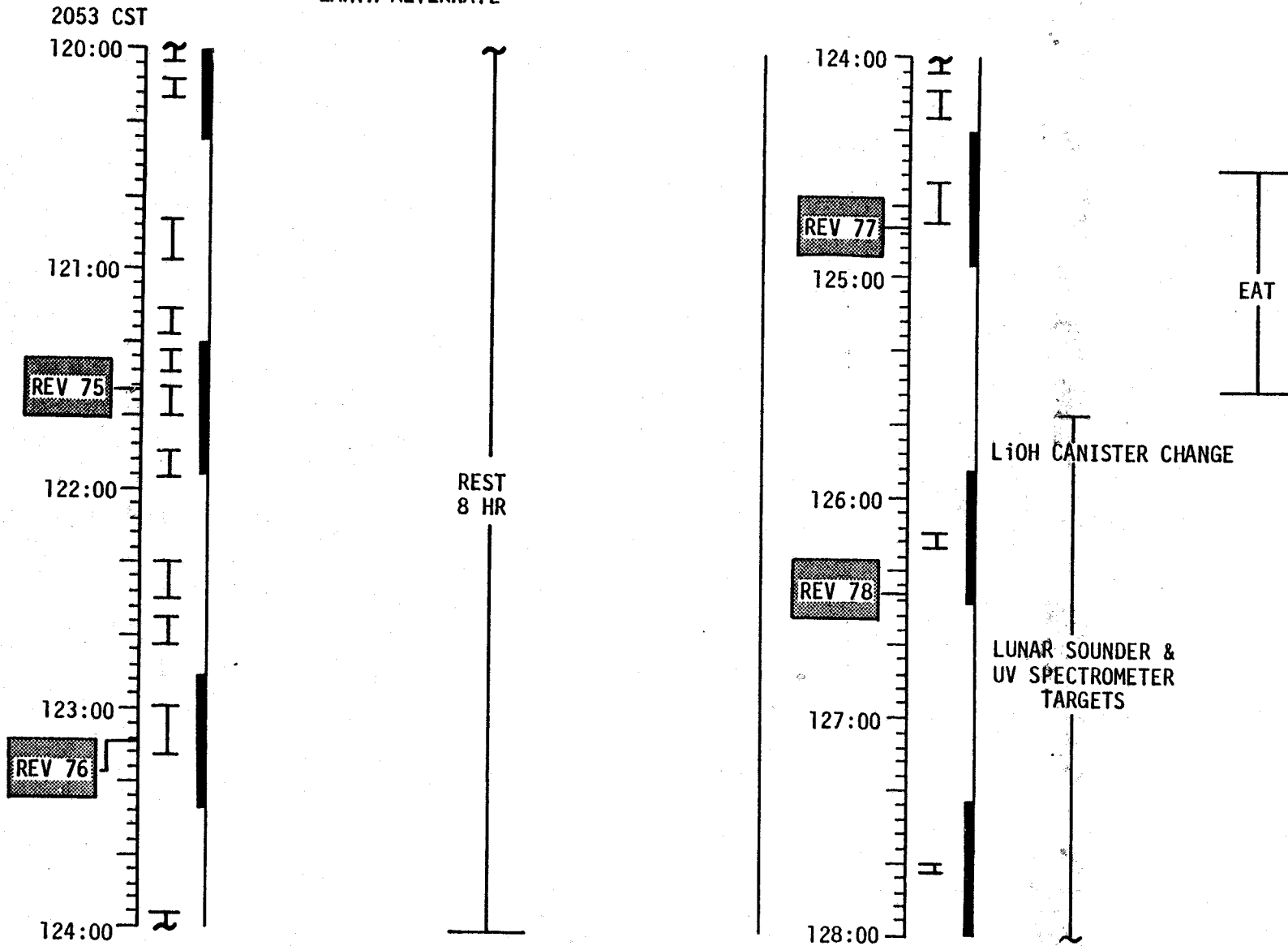
EARTH ALTERNATE



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 PLAN

EARTH ALTERNATE



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	120:00 - 128:00	6/7 ^c -78	6-18

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE

0453 CST

128:00

REV 79

129:00

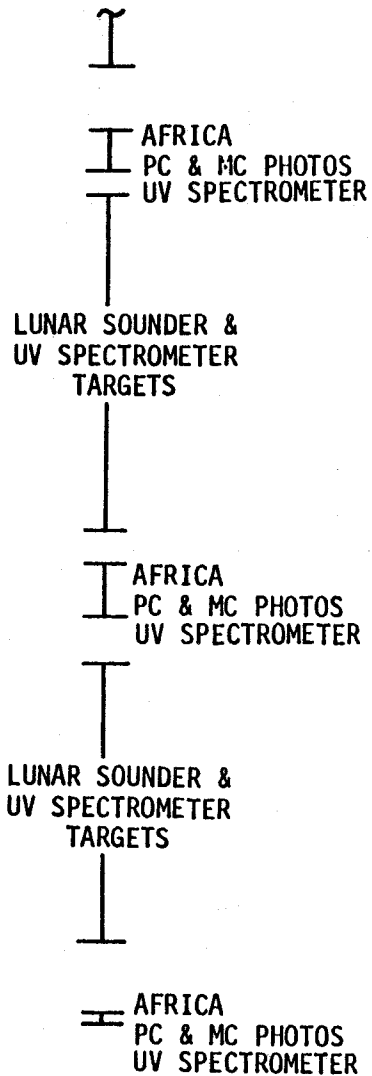
REV 80

130:00

131:00

REV 81

132:00



132:00

REV 82

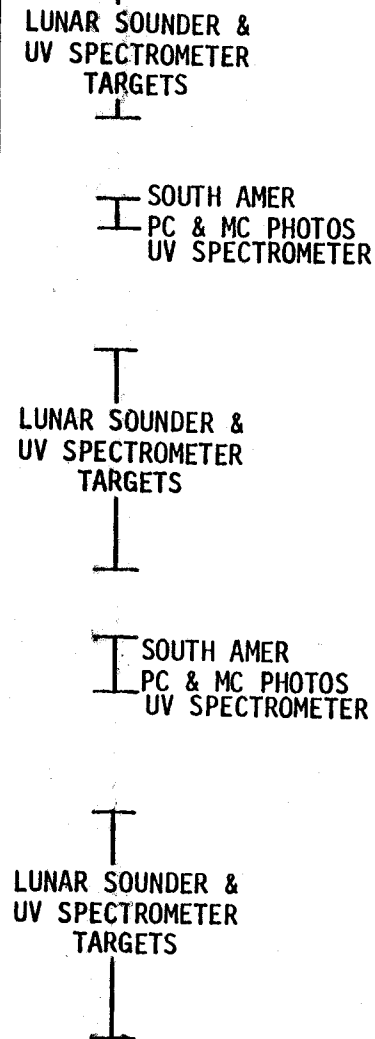
133:00

134:00

REV 83

135:00

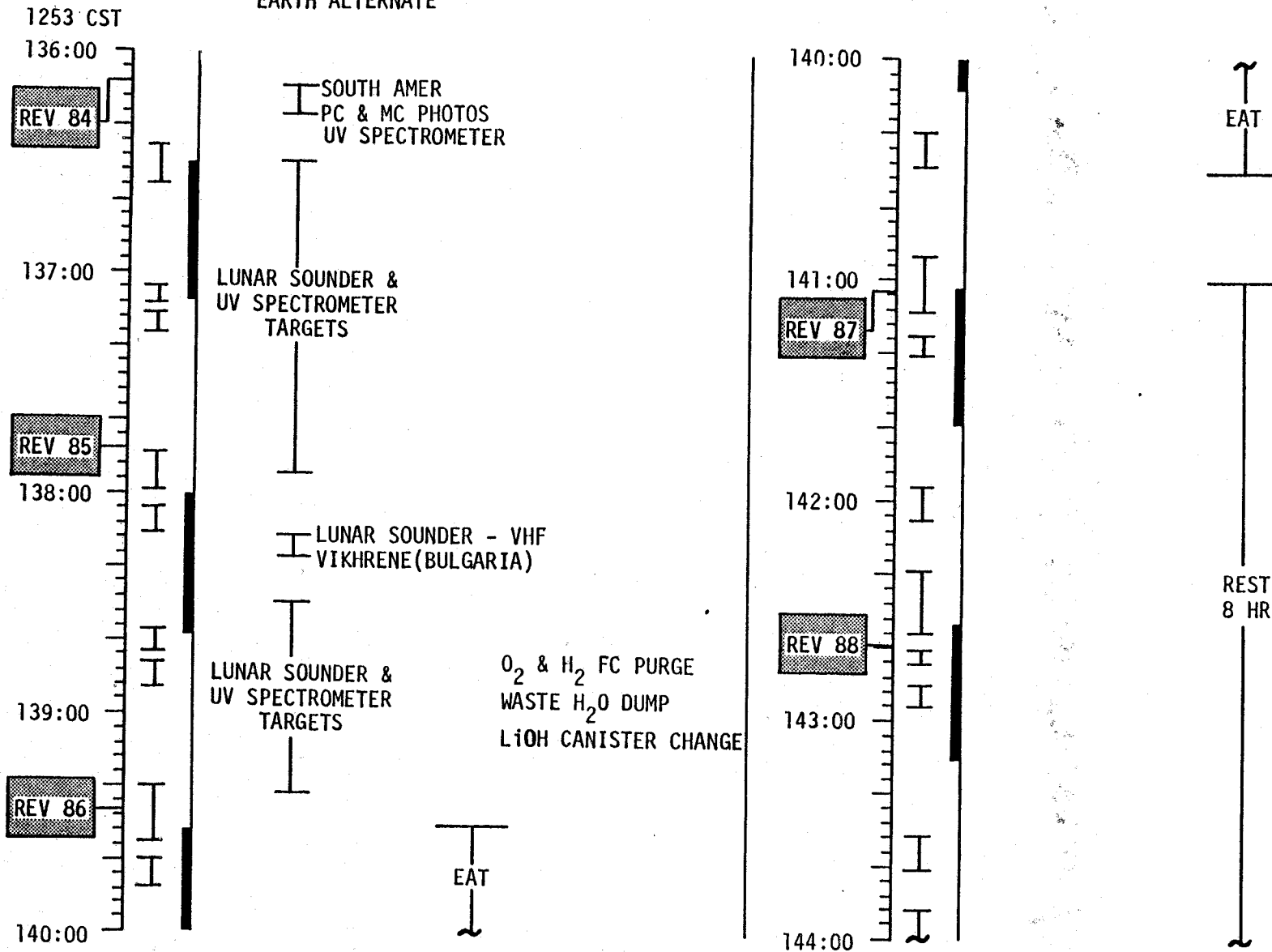
136:00



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 PLAN

EARTH ALTERNATE

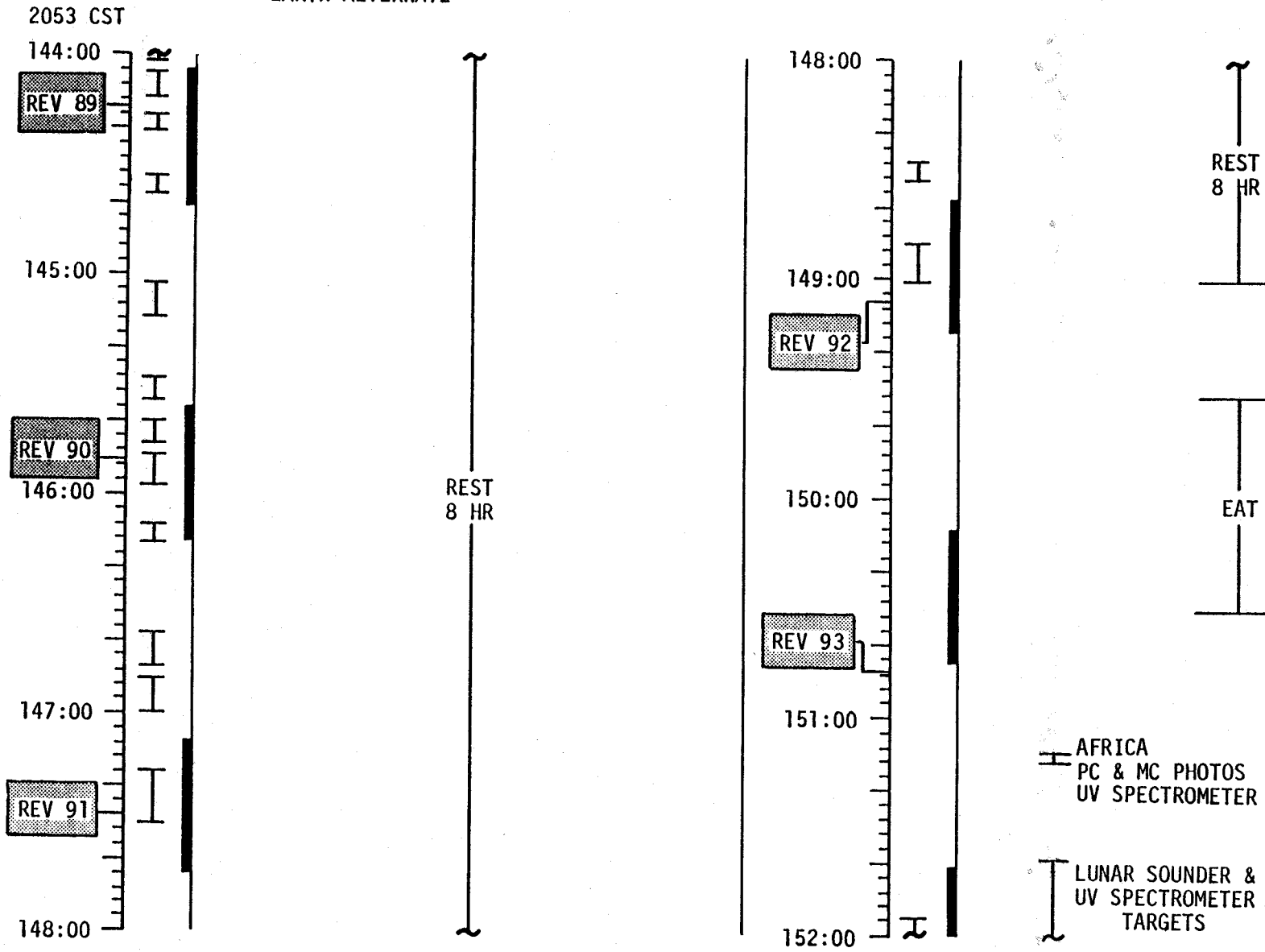


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	136:00 - 144:00	6/84-88	6-20

FLIGHT PLANNING BRANCH

FLIGHT PLAN

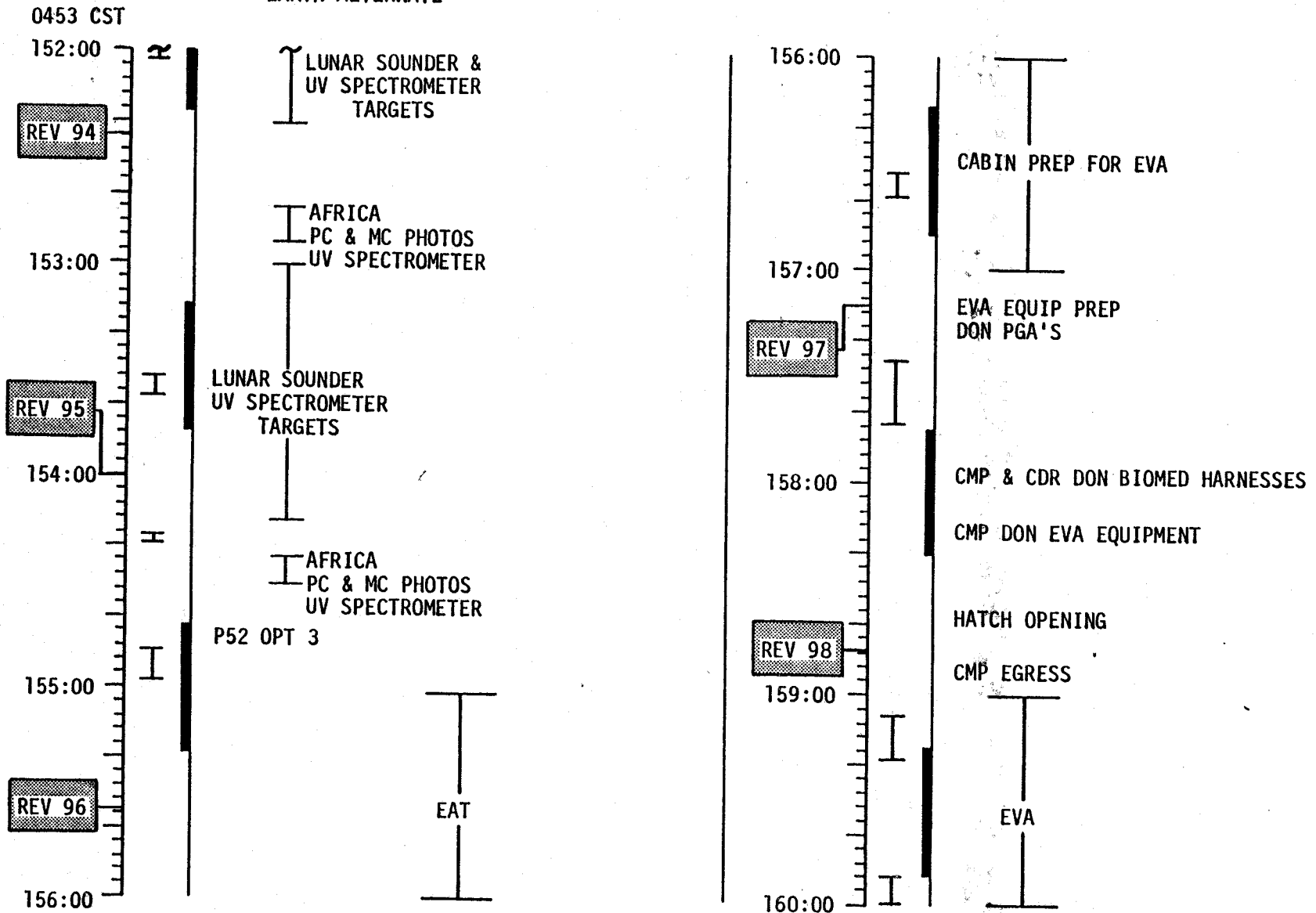
EARTH ALTERNATE



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 PLAN

EARTH ALTERNATE

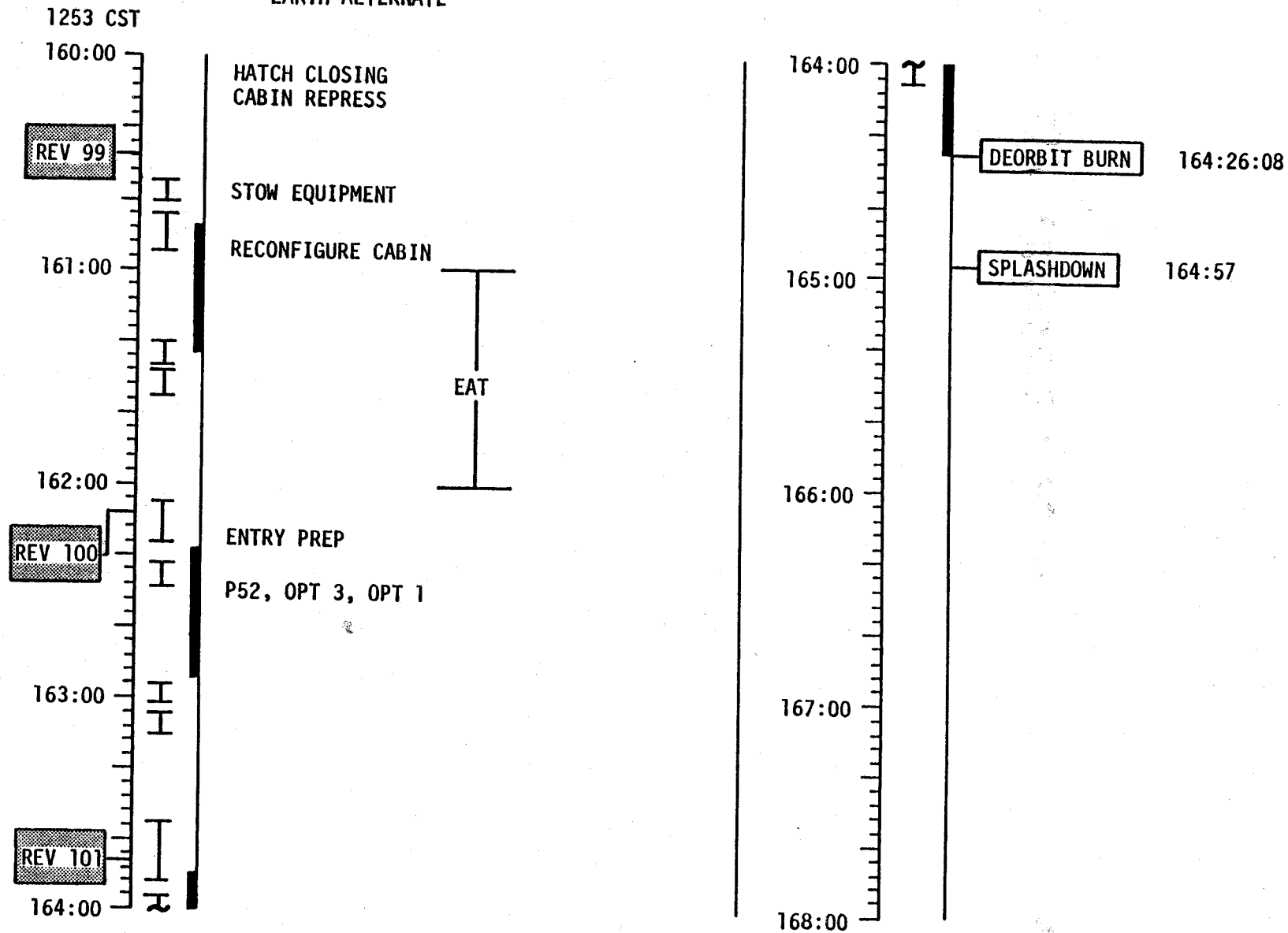


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	152:00 - 160:00	7/94-98	6-22

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	160:00 - 168:00	7/99-101	6-23

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APOLLO 17

FINAL (12/6)

10/23/72

6-24

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 occurs at approximately the nominal time.

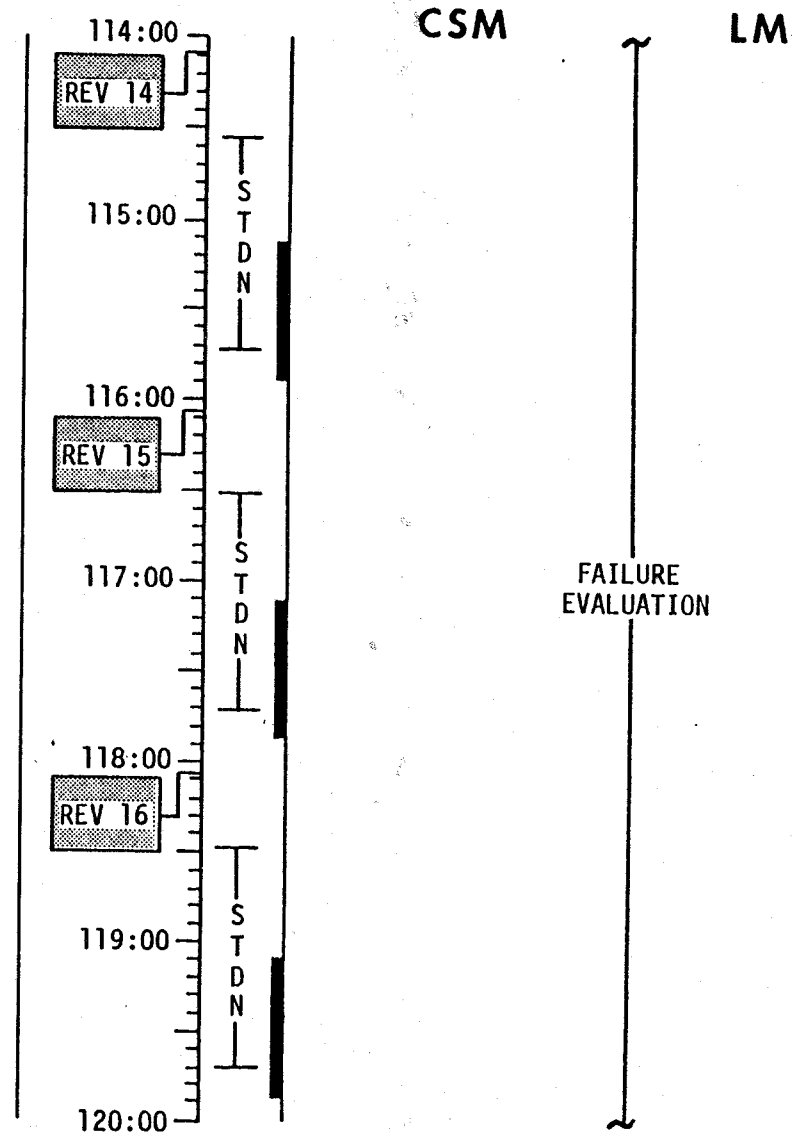
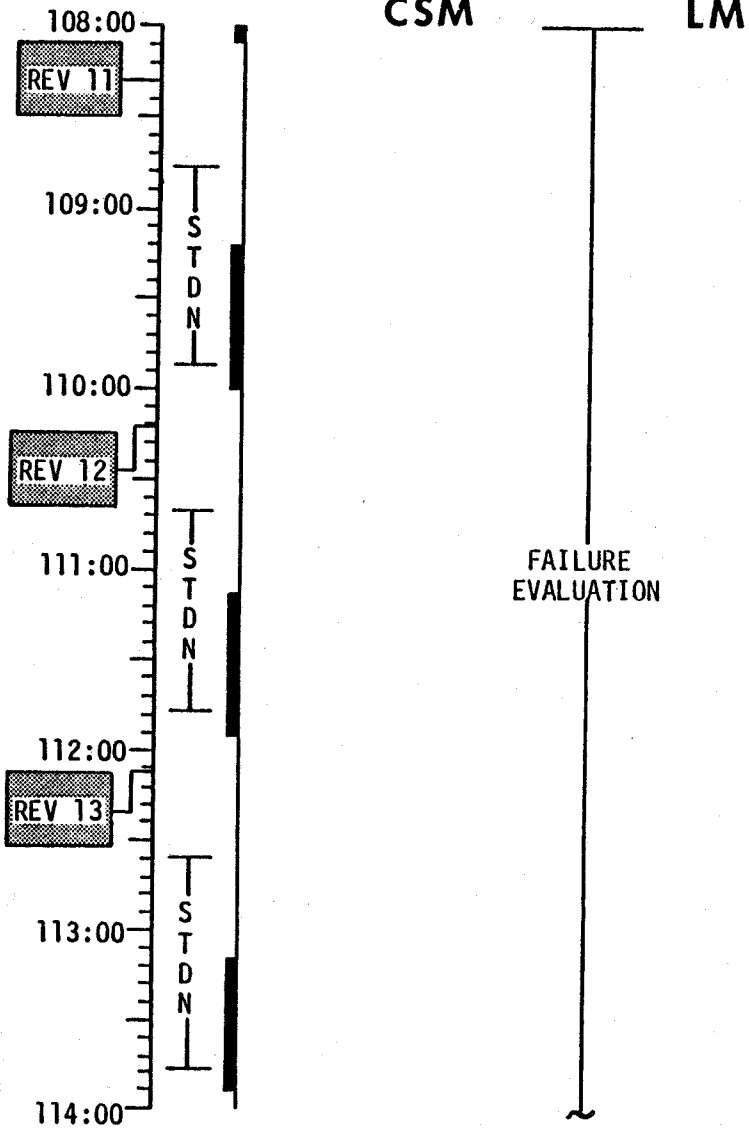
6-26

10/23/72

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FLIGHT PLAN

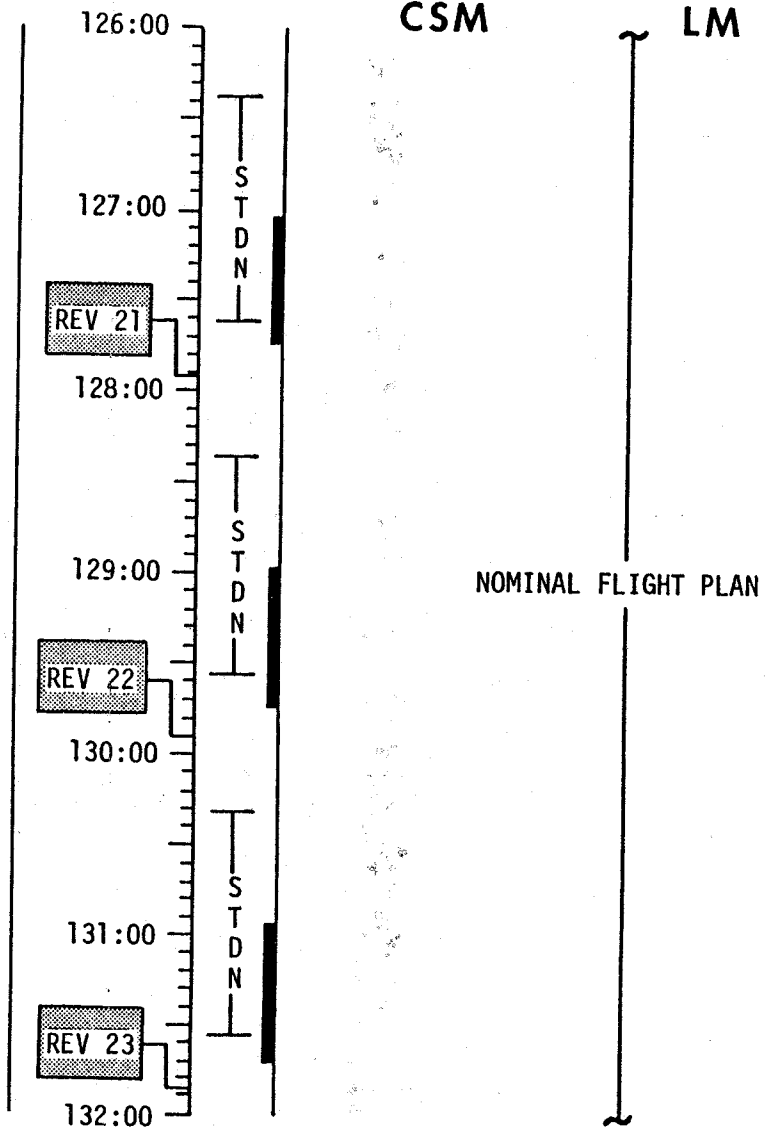
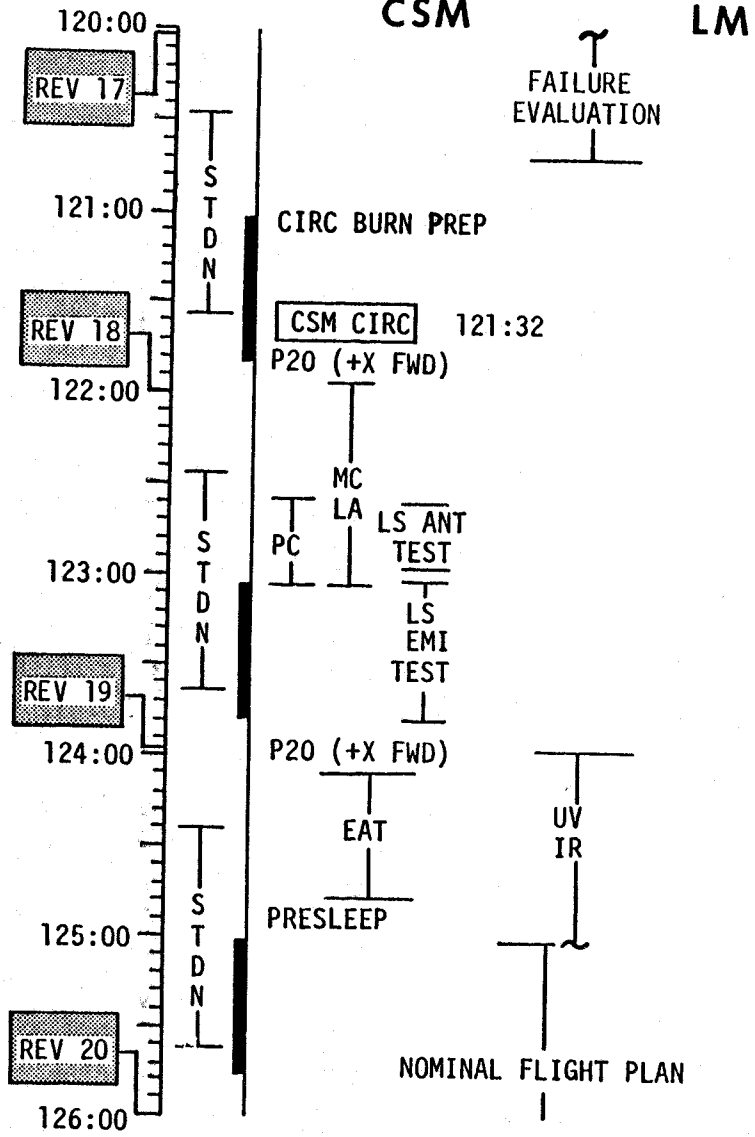
CSM/LM ALTERNATE MISSION



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 PLAN

CSM/LM ALTERNATE MISSION

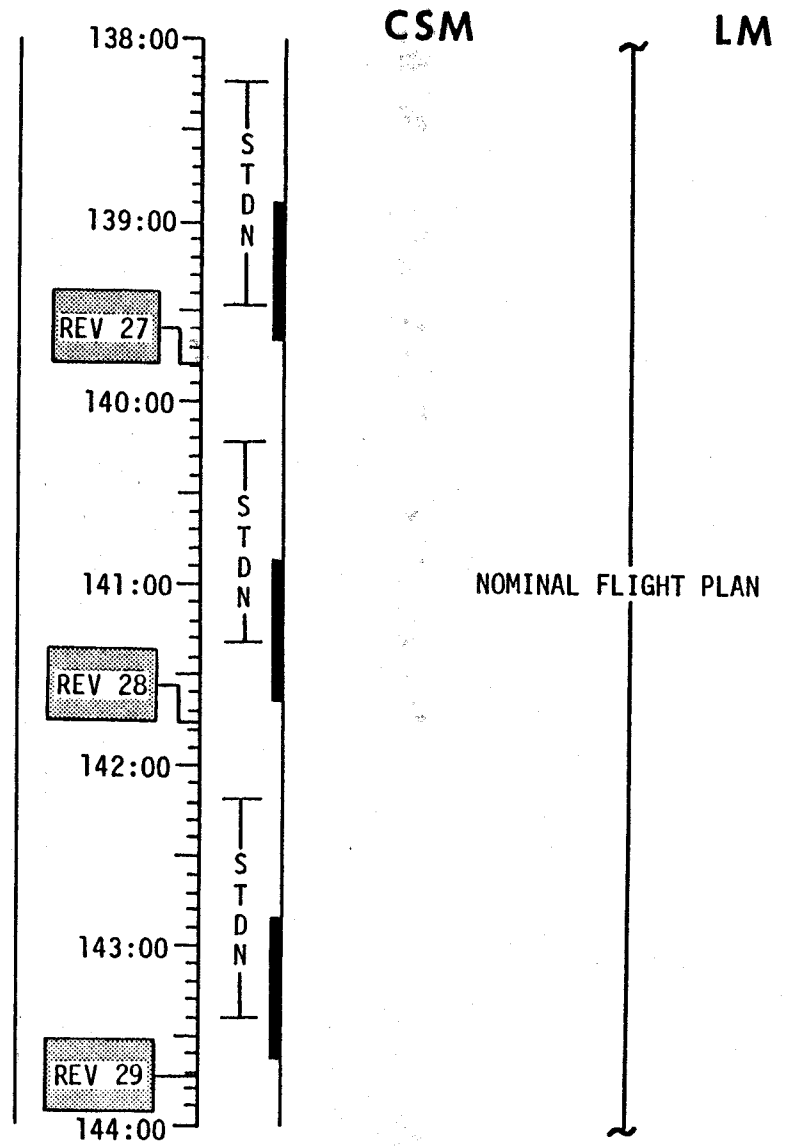
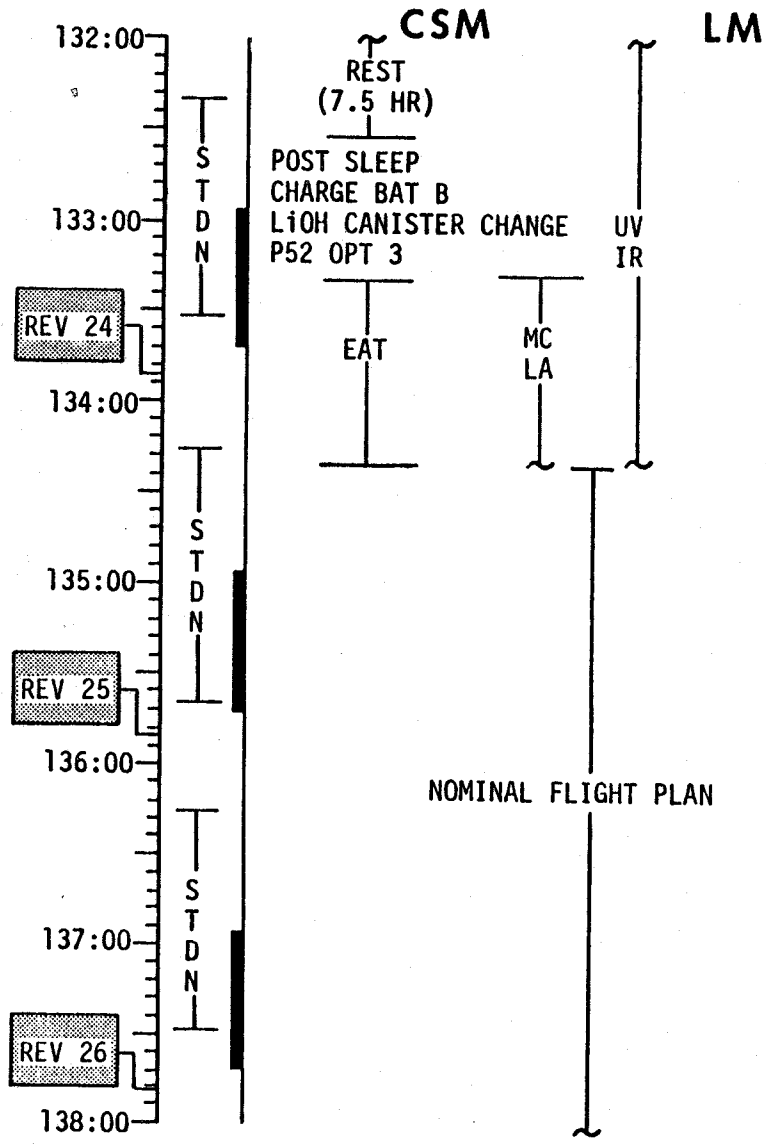


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	120:00 - 132:00	6-7/17-23	6-28

FLIGHT PLANNING BRANCH

FLIGHT PLAN

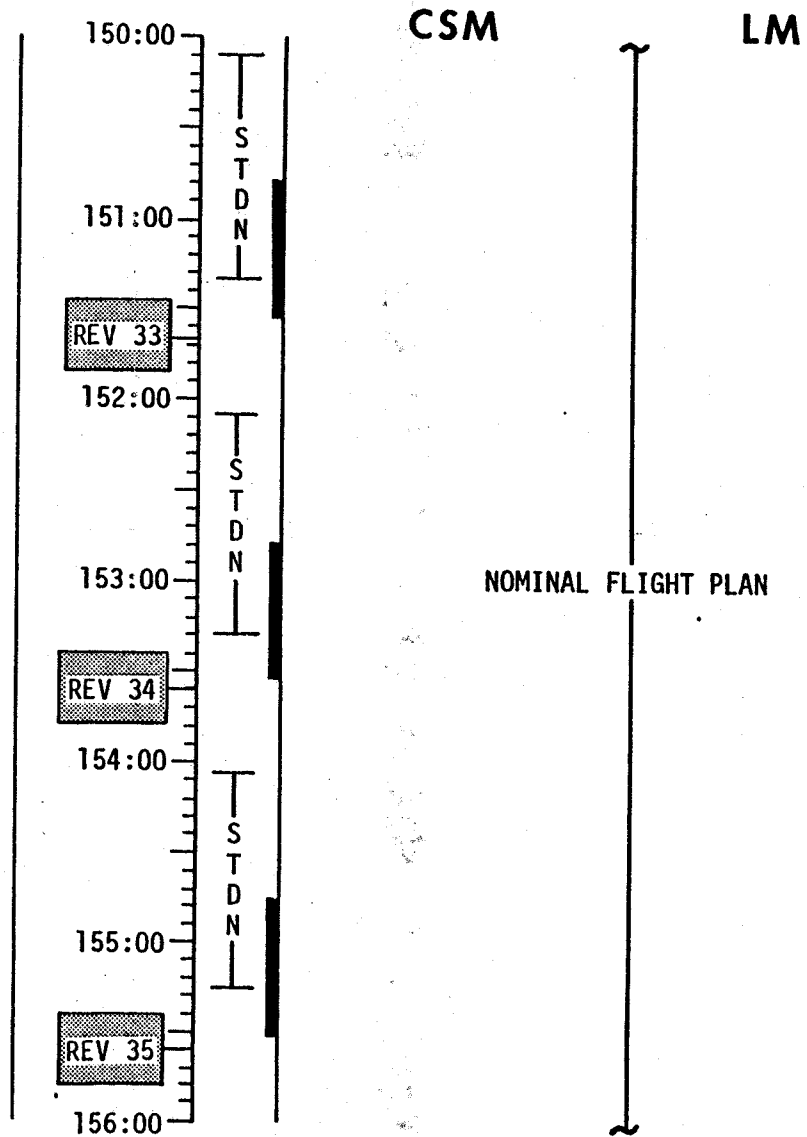
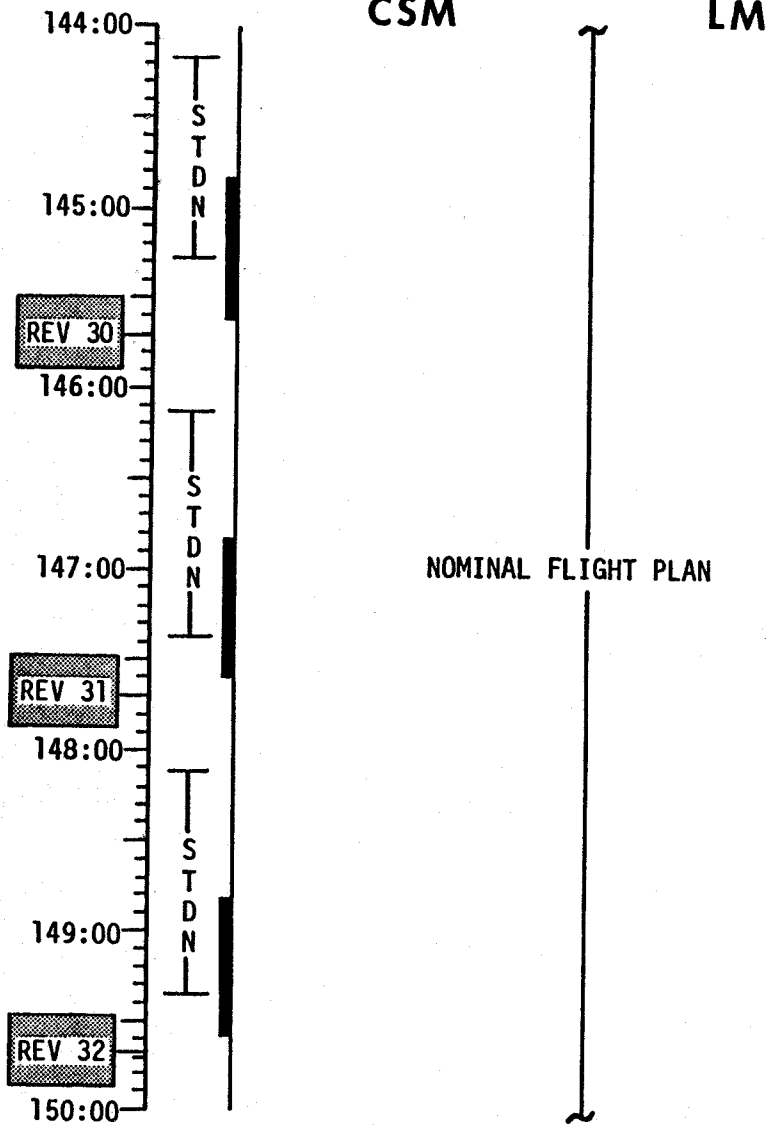
CSM/LM ALTERNATE MISSION



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 PLAN

CSM/LM ALTERNATE MISSION



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

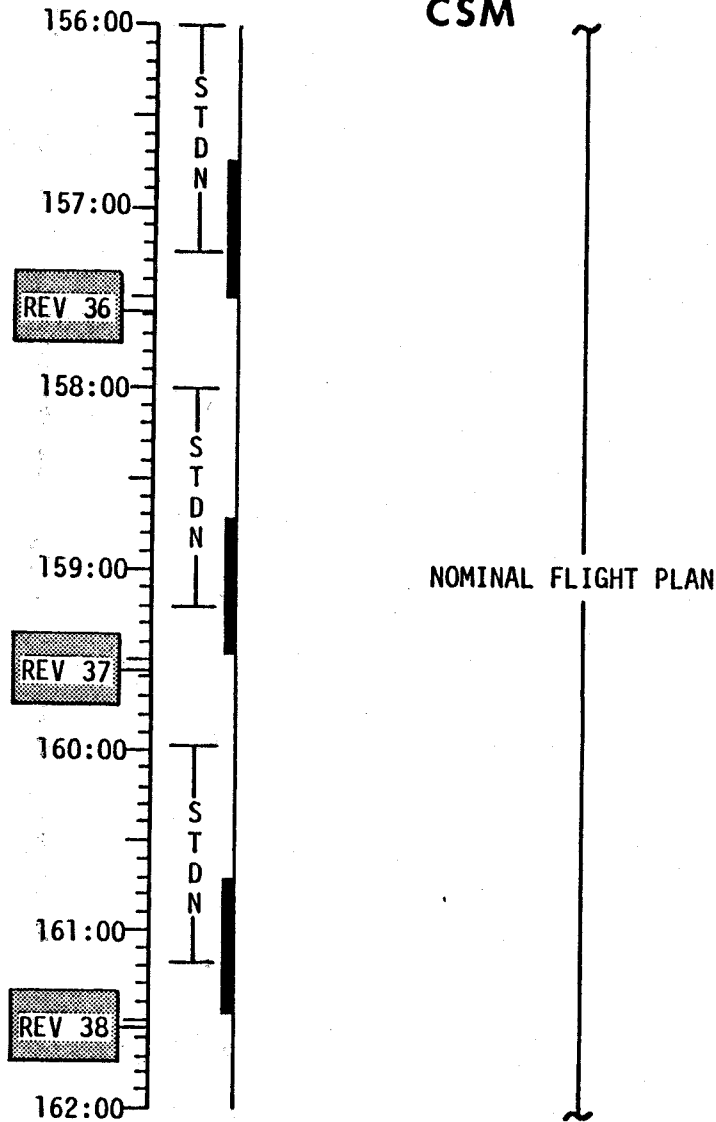
FLIGHT PLANNING BRANCH

FLIGHT PLAN

CSM/LM ALTERNATE MISSION

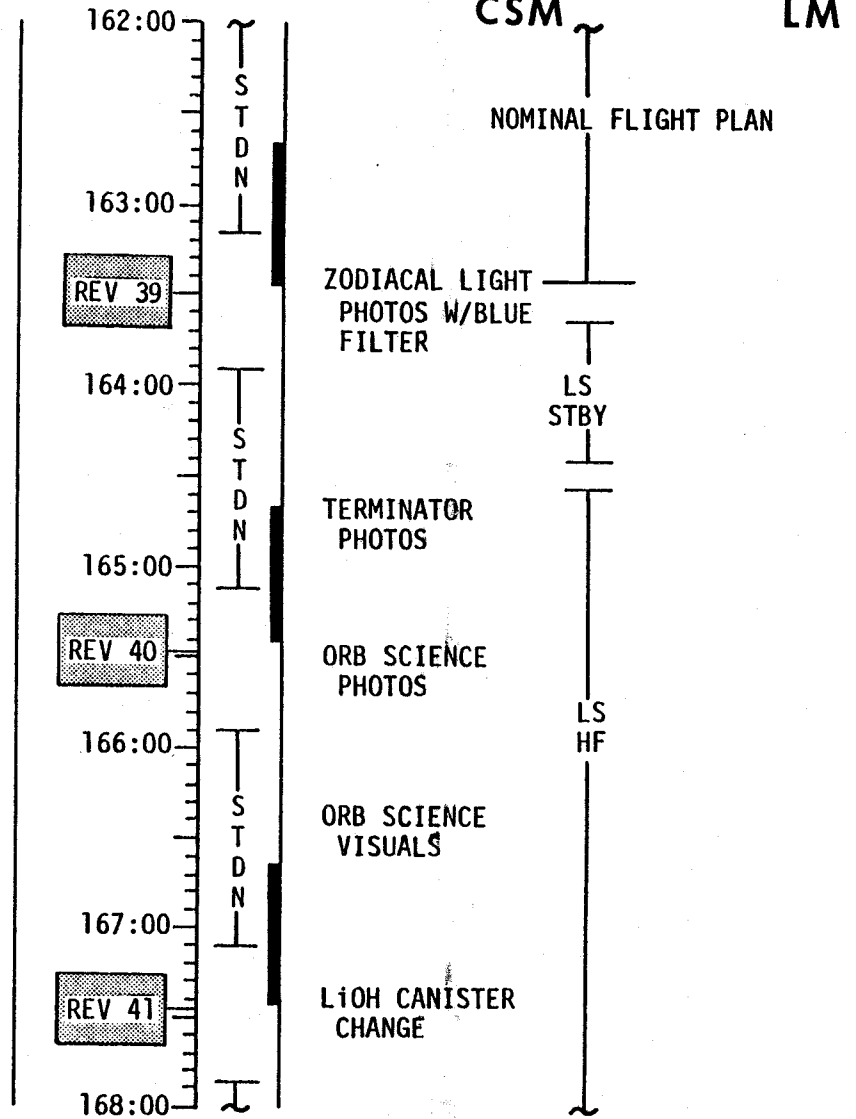
CSM

LM



CSM

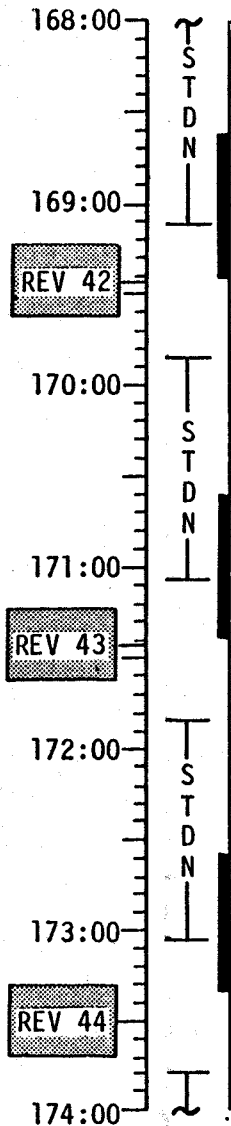
LM



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 PLAN

CSM/LM ALTERNATE MISSION



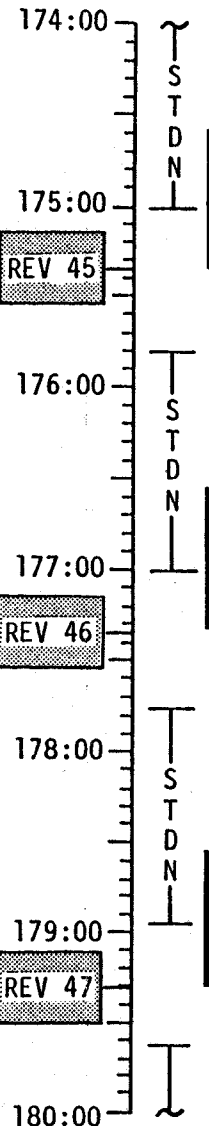
ORB SCIENCE
VISUAL
TERMINATOR
PHOTOS
P52, OPT 3

CSM

LS
HF

LM

NOMINAL FLIGHT PLAN



CSM

LM

NOMINAL 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	6-32

FLIGHT PLANNING BRANCH

FLIGHT PLAN

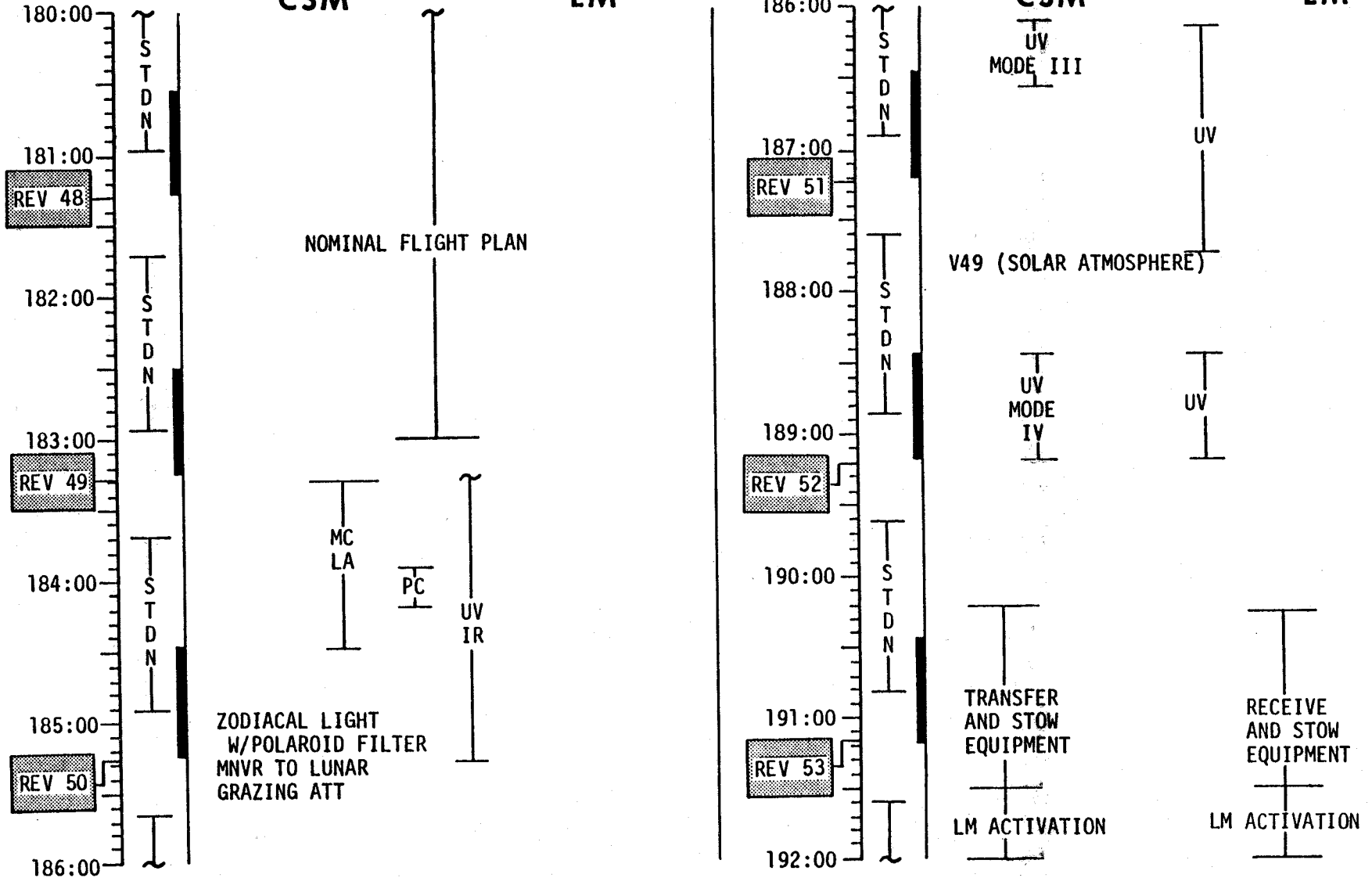
CSM/LM ALTERNATE MISSION

CSM

LM

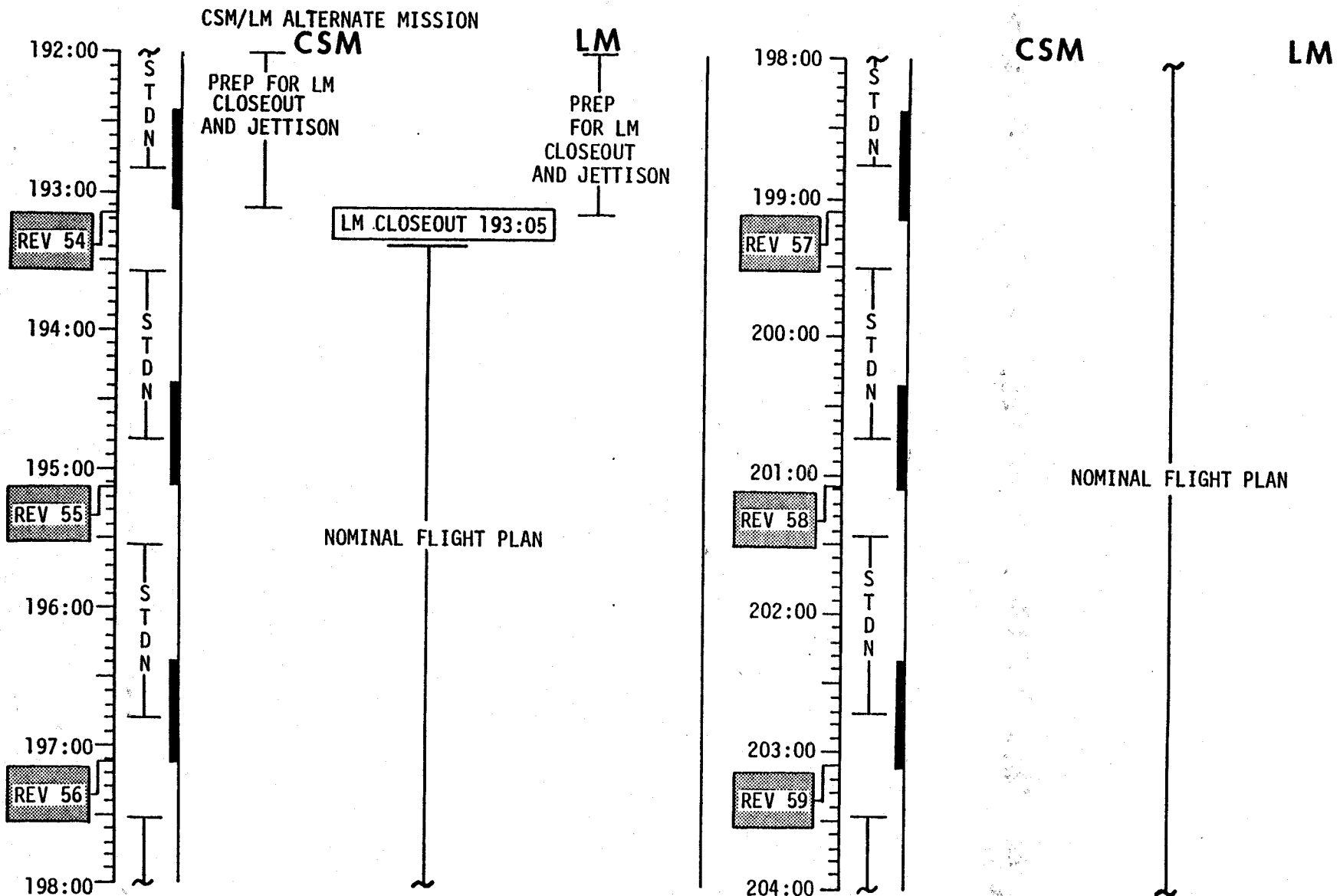
CSM

LM



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 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

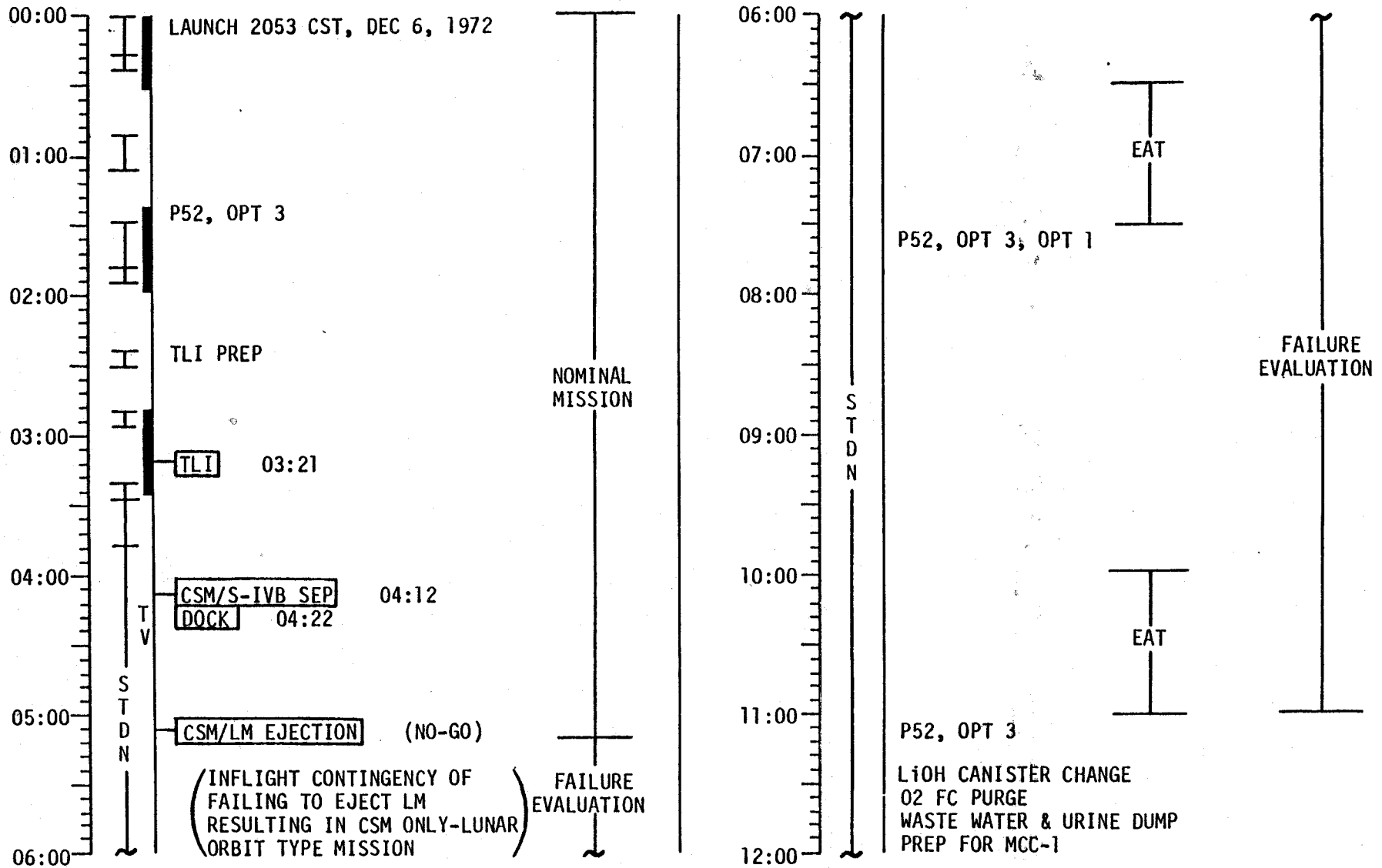
- 1) SPS midcourse burn to return to a free return trajectory.
- 2) Maintain any rev TEI Capability.
- 3) Obtain sim bay experiments data.

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.

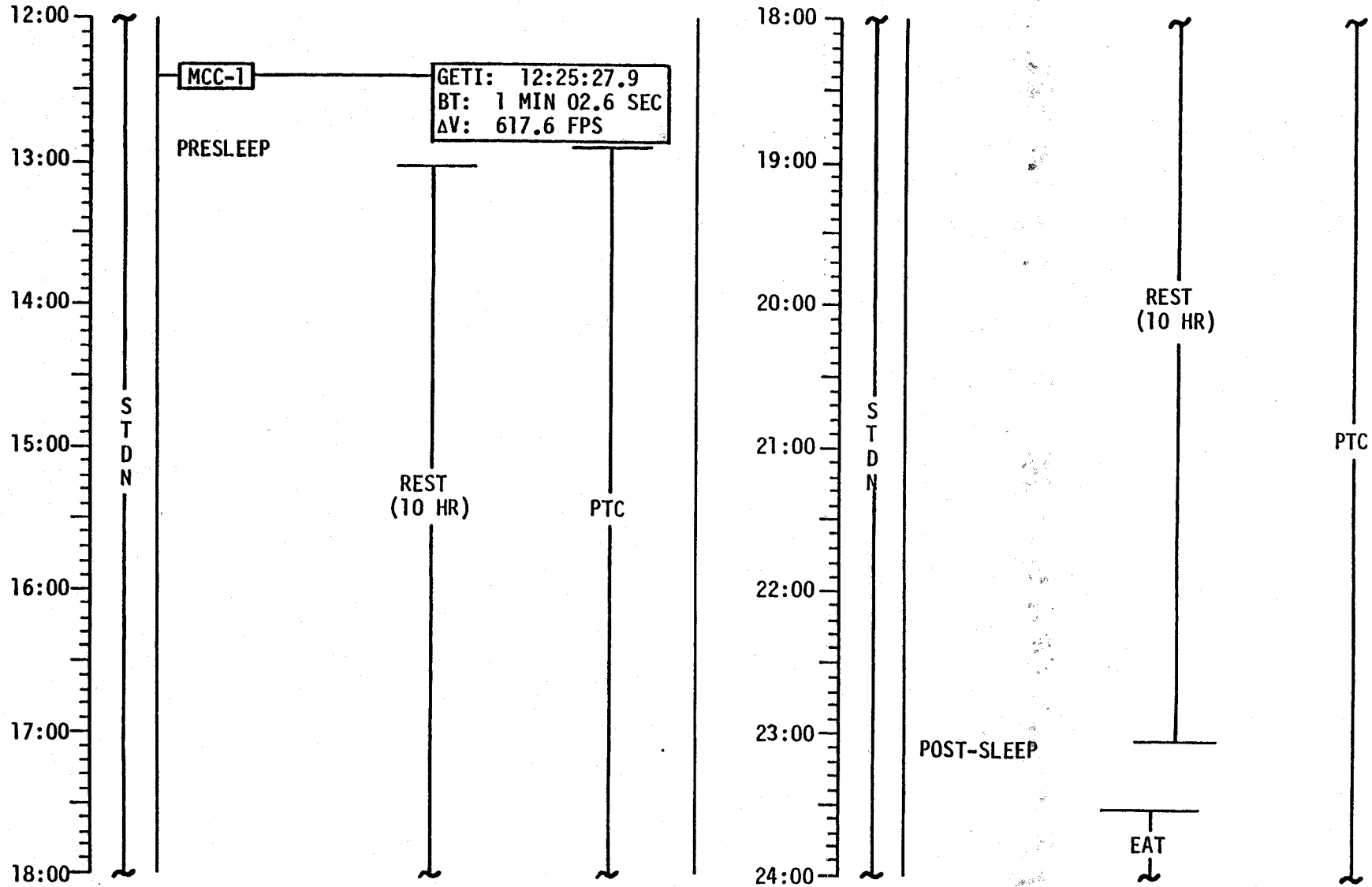
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FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	00:00 - 12:00	1/TLC	6-37

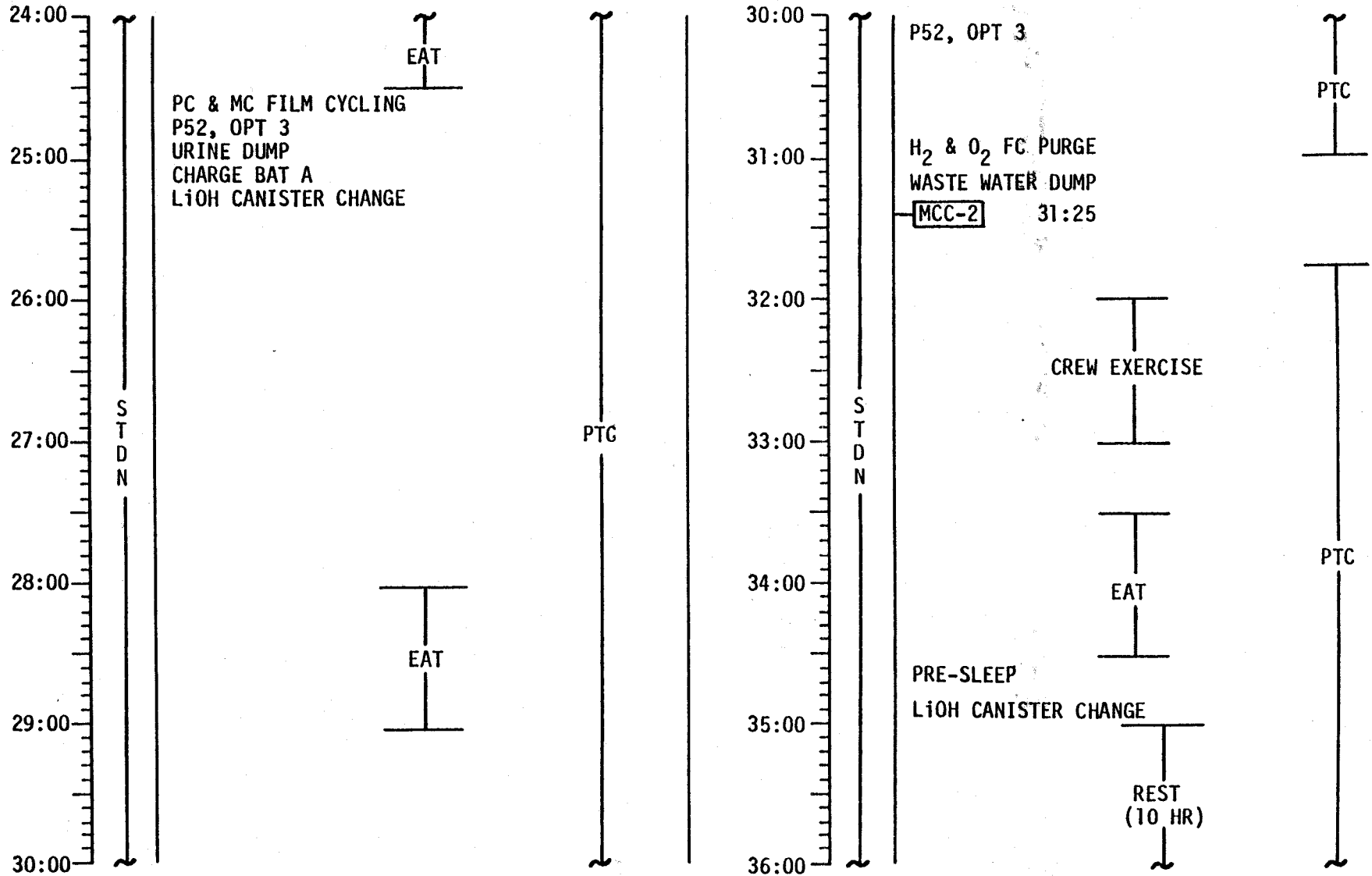
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	12:00 - 24:00	1/TLC	6-38

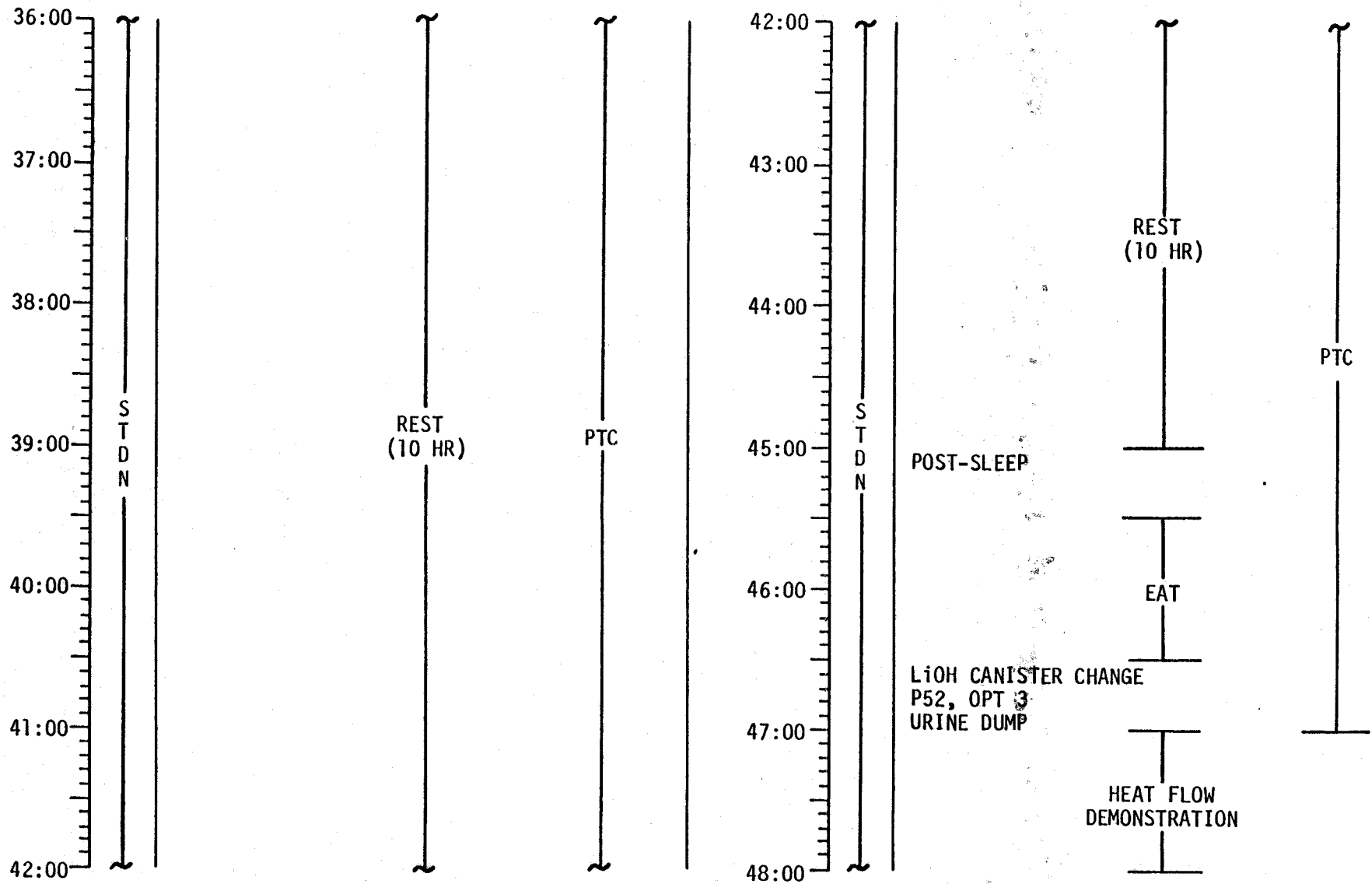
FLIGHT PLANNING BRANCH

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

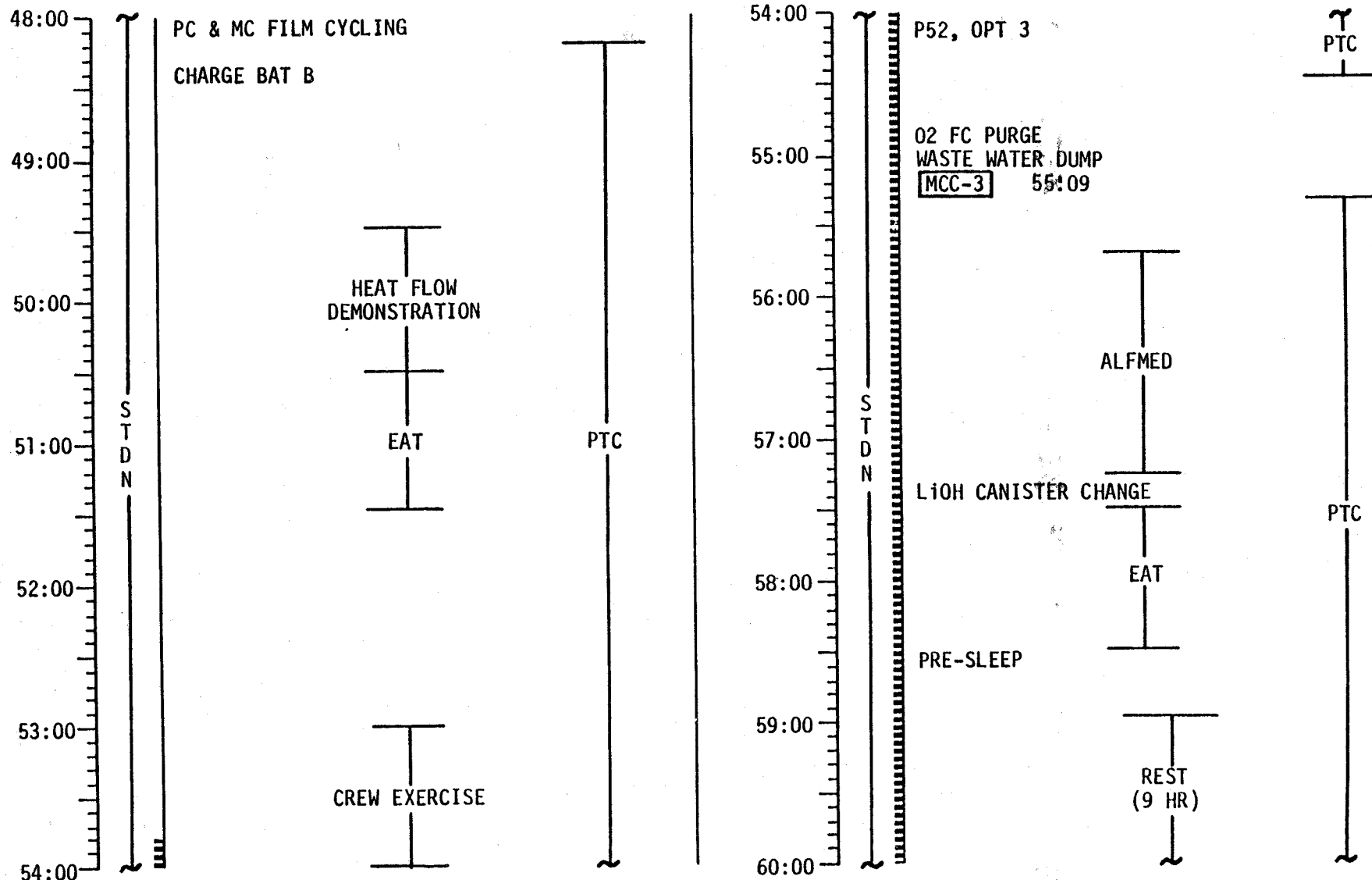
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	36:00 - 48:00	2/TLC	6-40

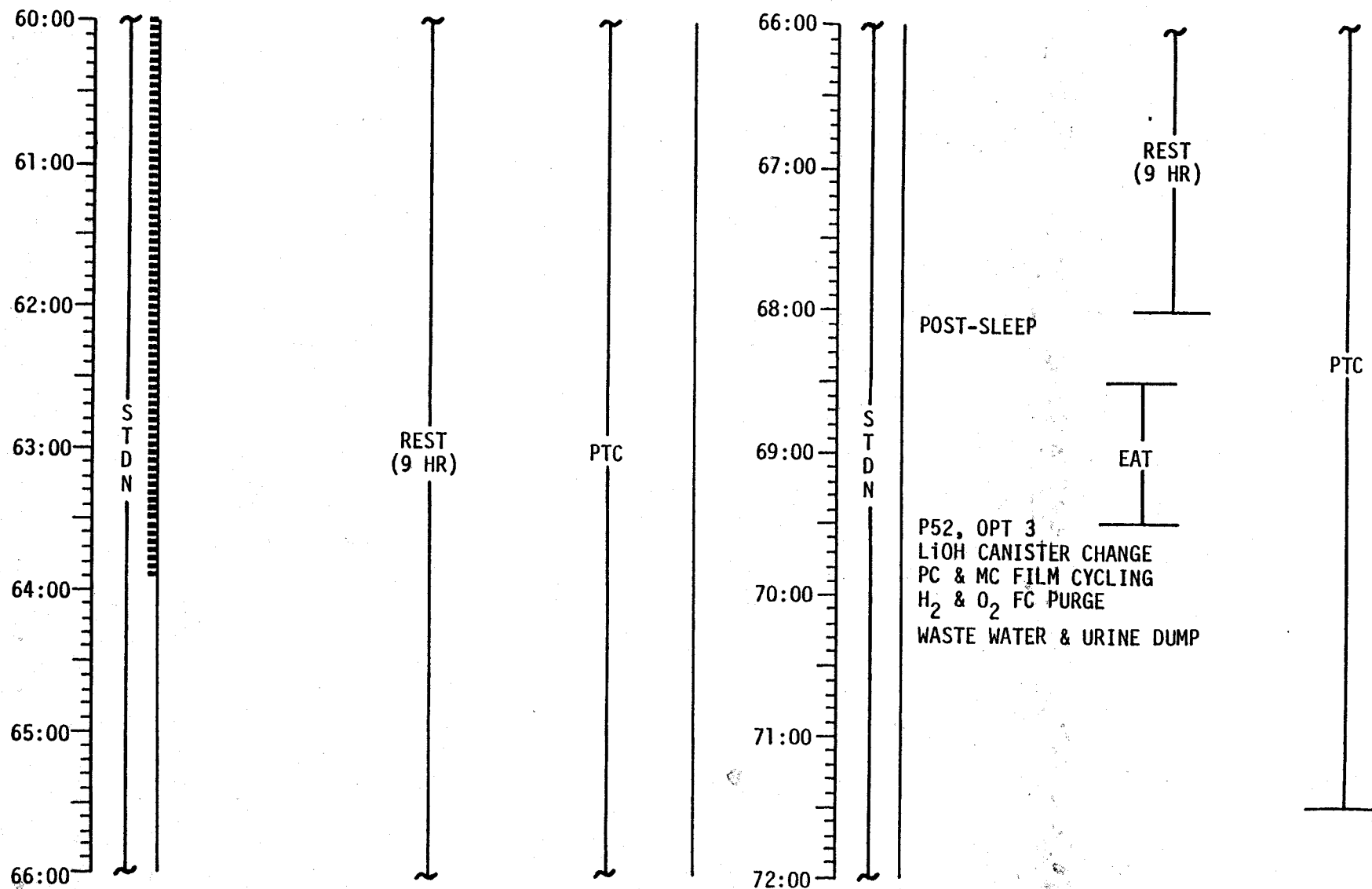
FLIGHT PLANNING BRANCH

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

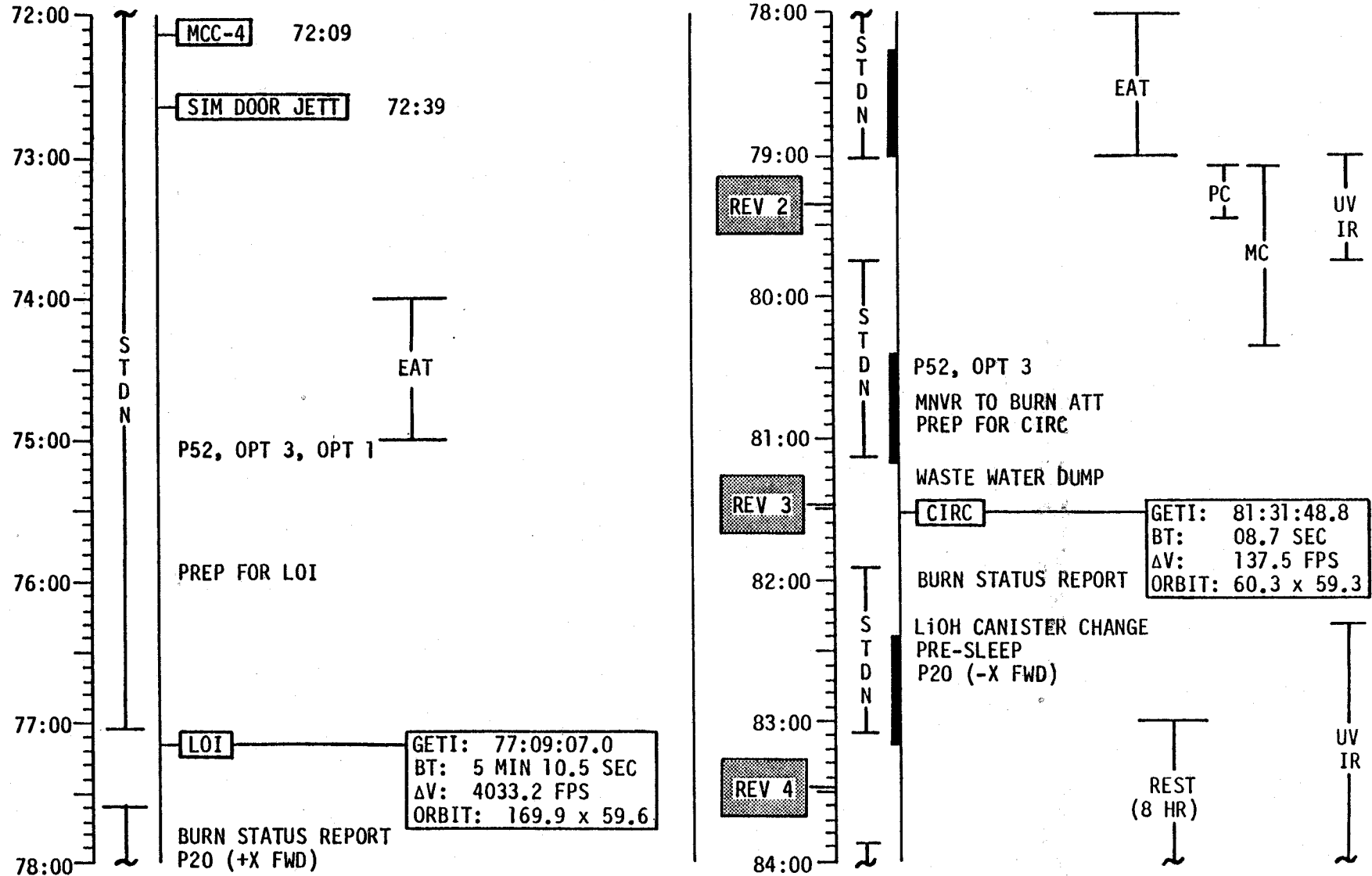
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	60:00 - 72:00	3/TLC	6-42

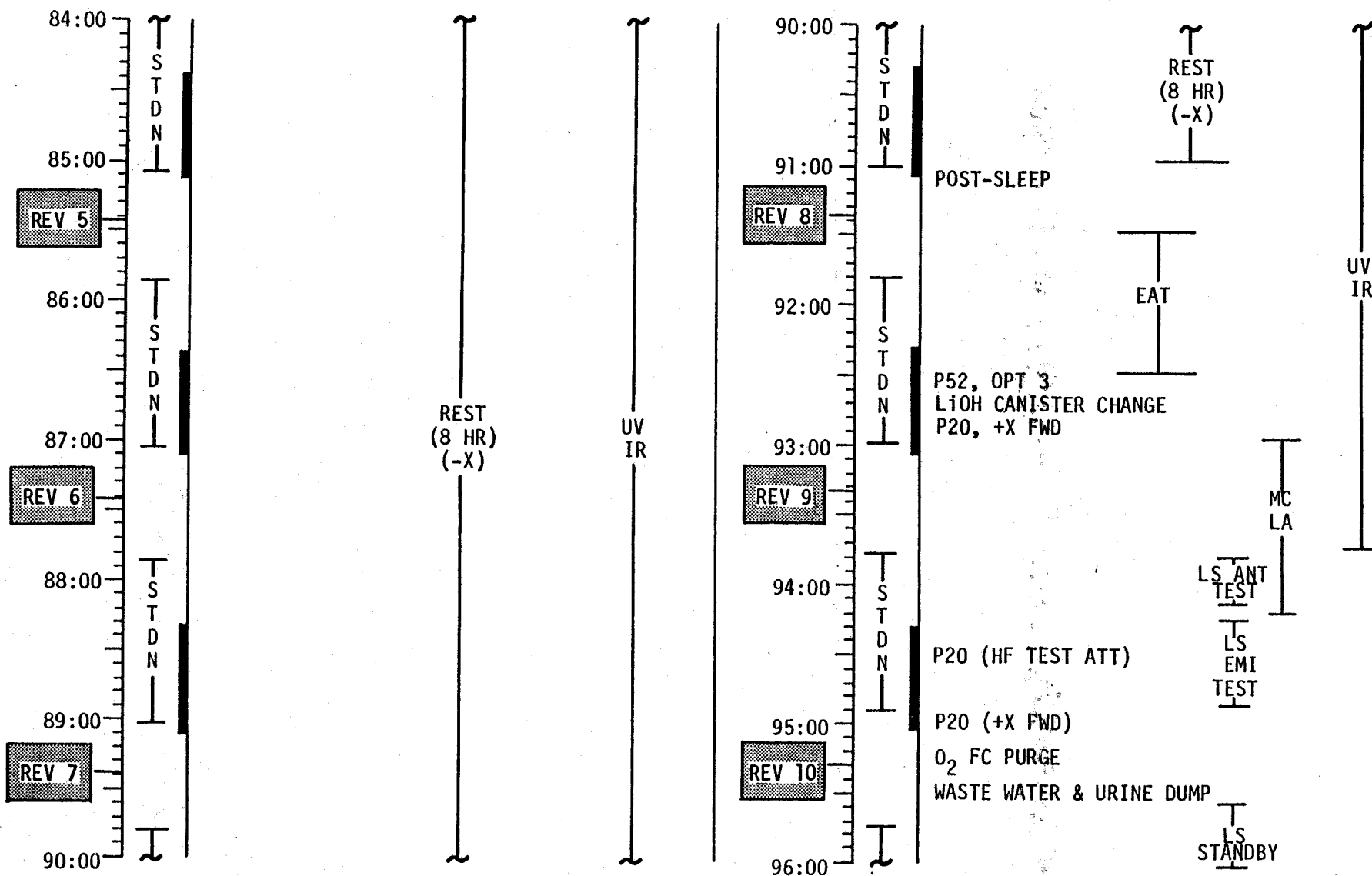
FLIGHT PLANNING BRANCH

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

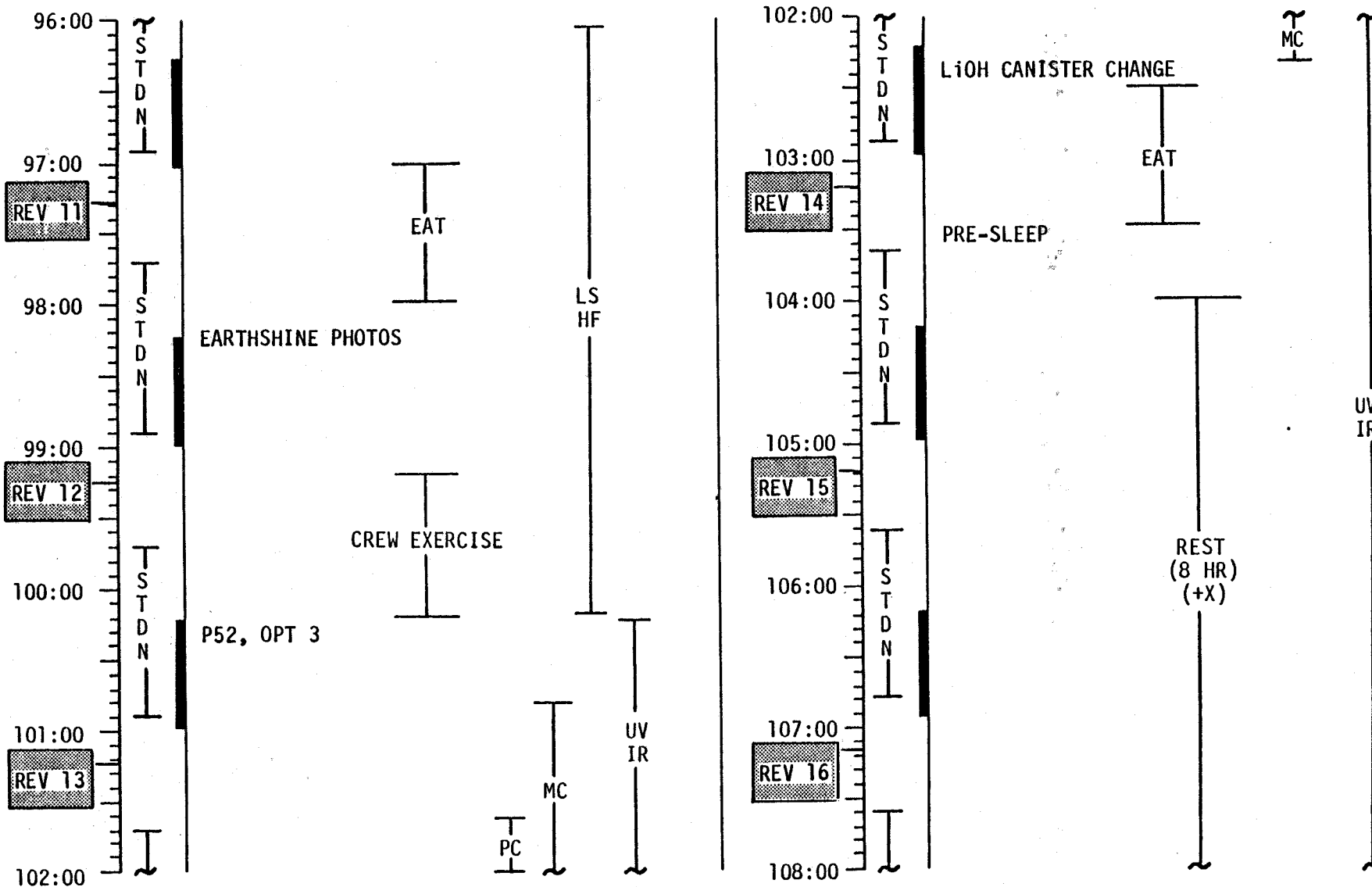
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	84:00 - 96:00	4/4-10	6-44

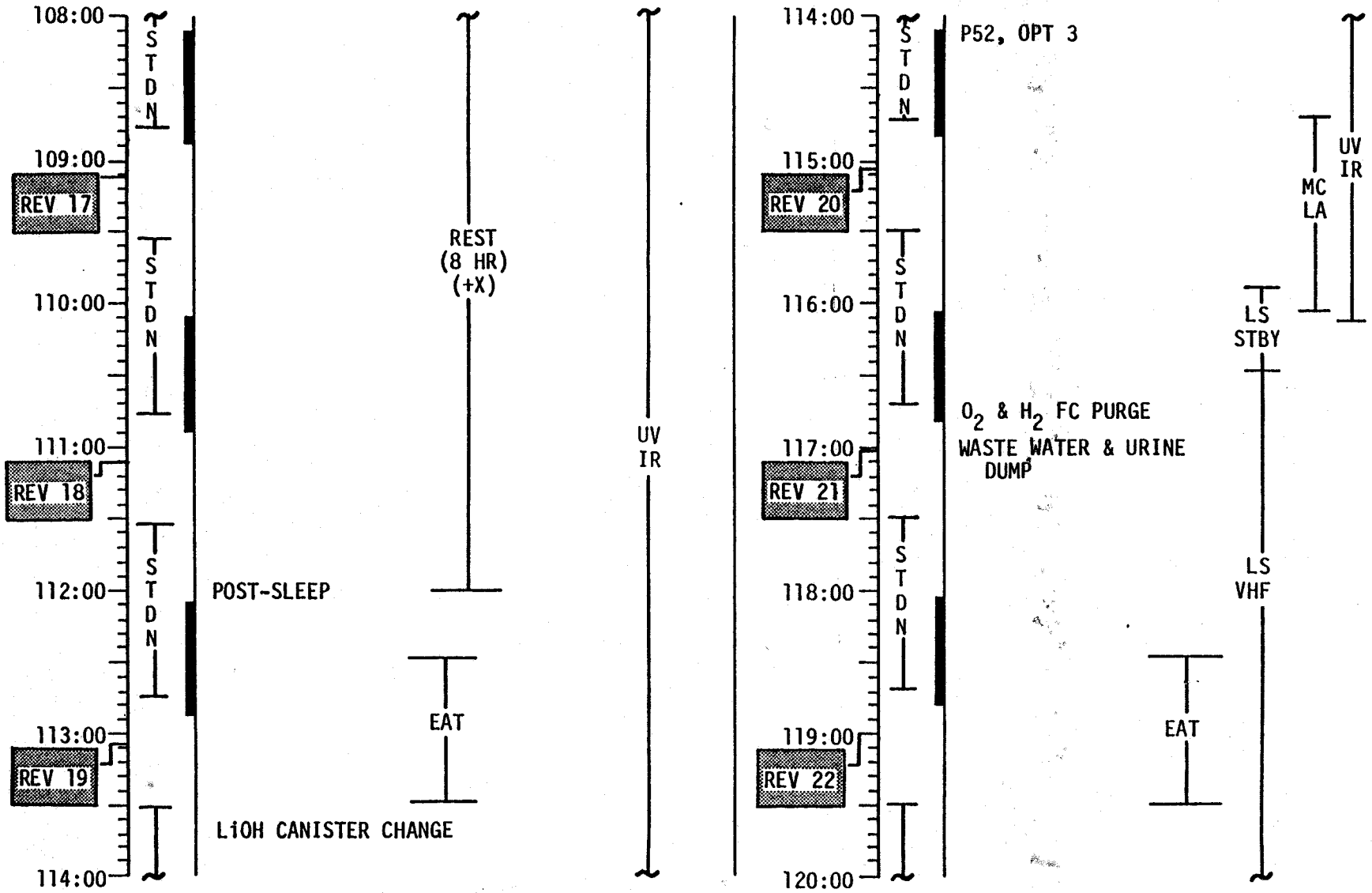
FLIGHT PLANNING BRANCH

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

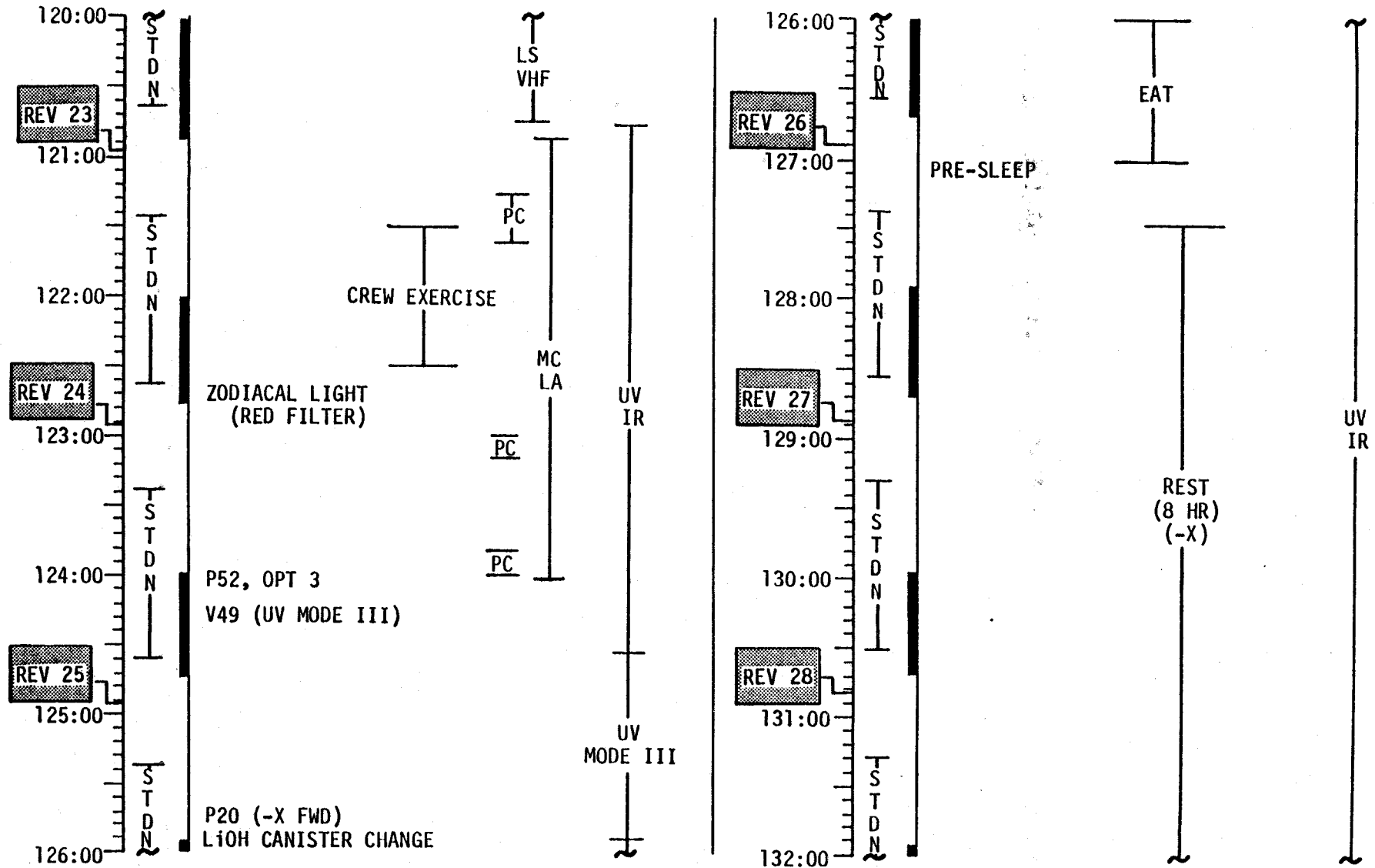
FLIGHT PLAN



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

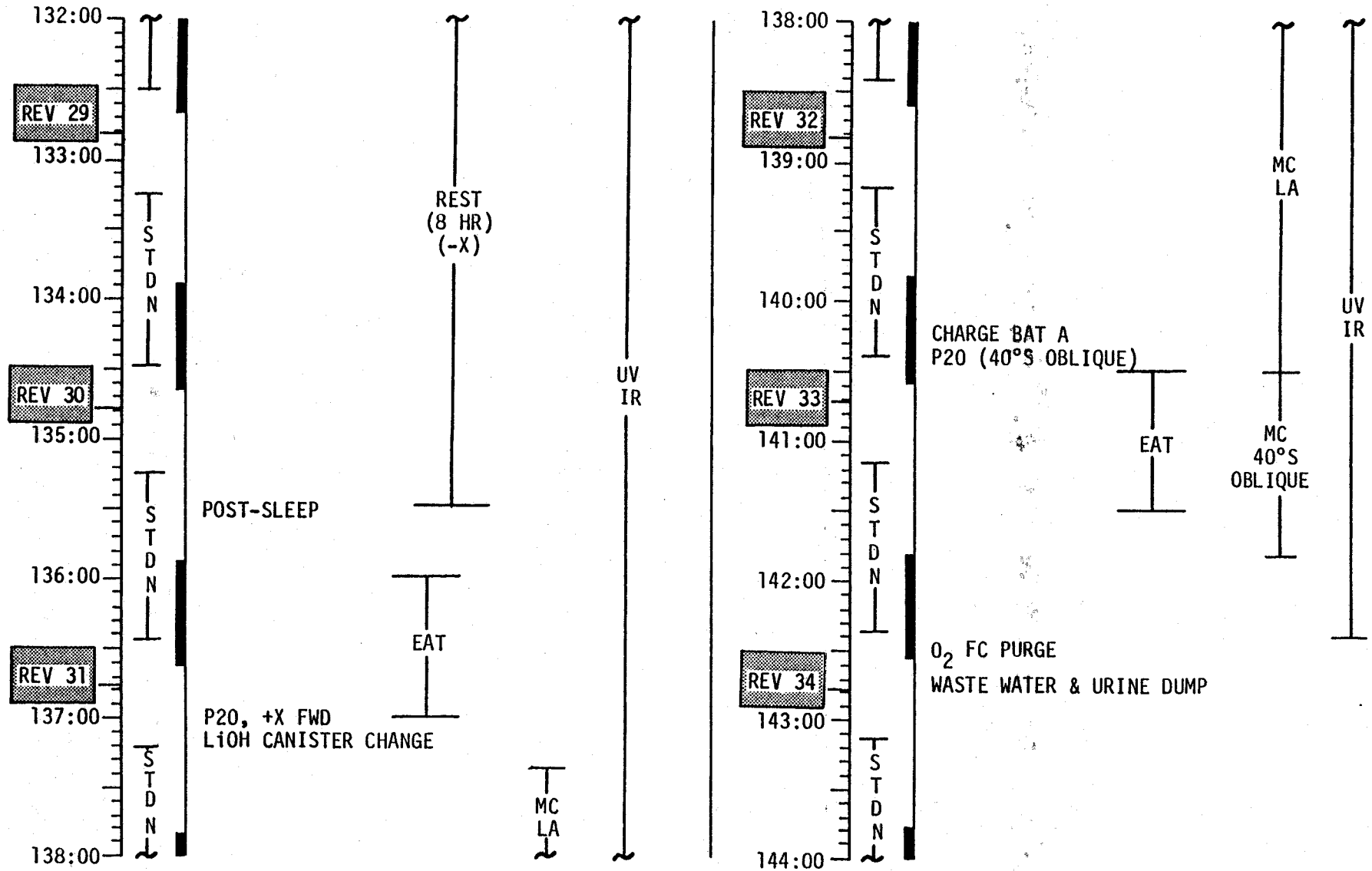
FLIGHT PLANNING BRANCH

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

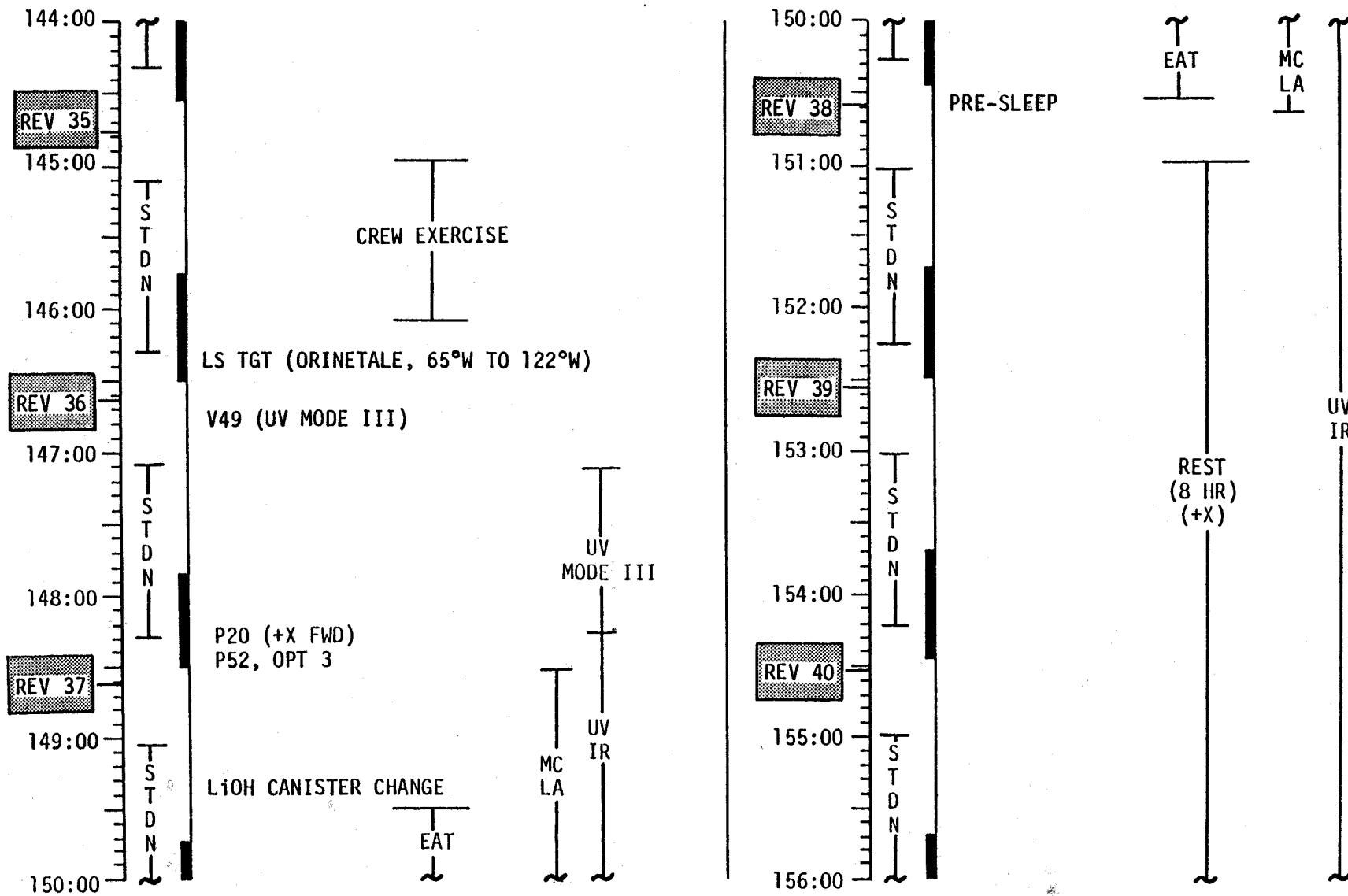
FLIGHT PLAN



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

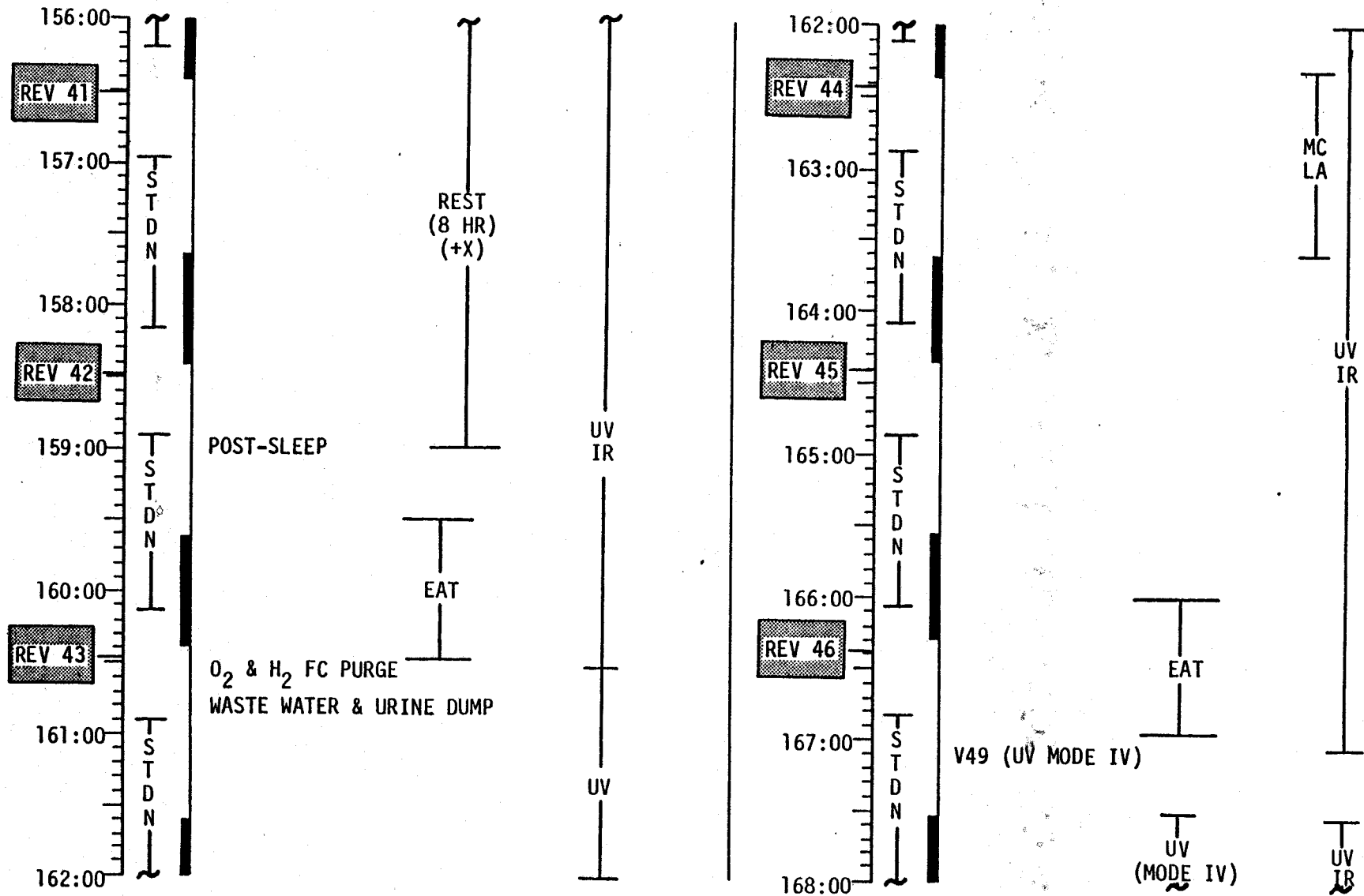
FLIGHT PLANNING BRANCH

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

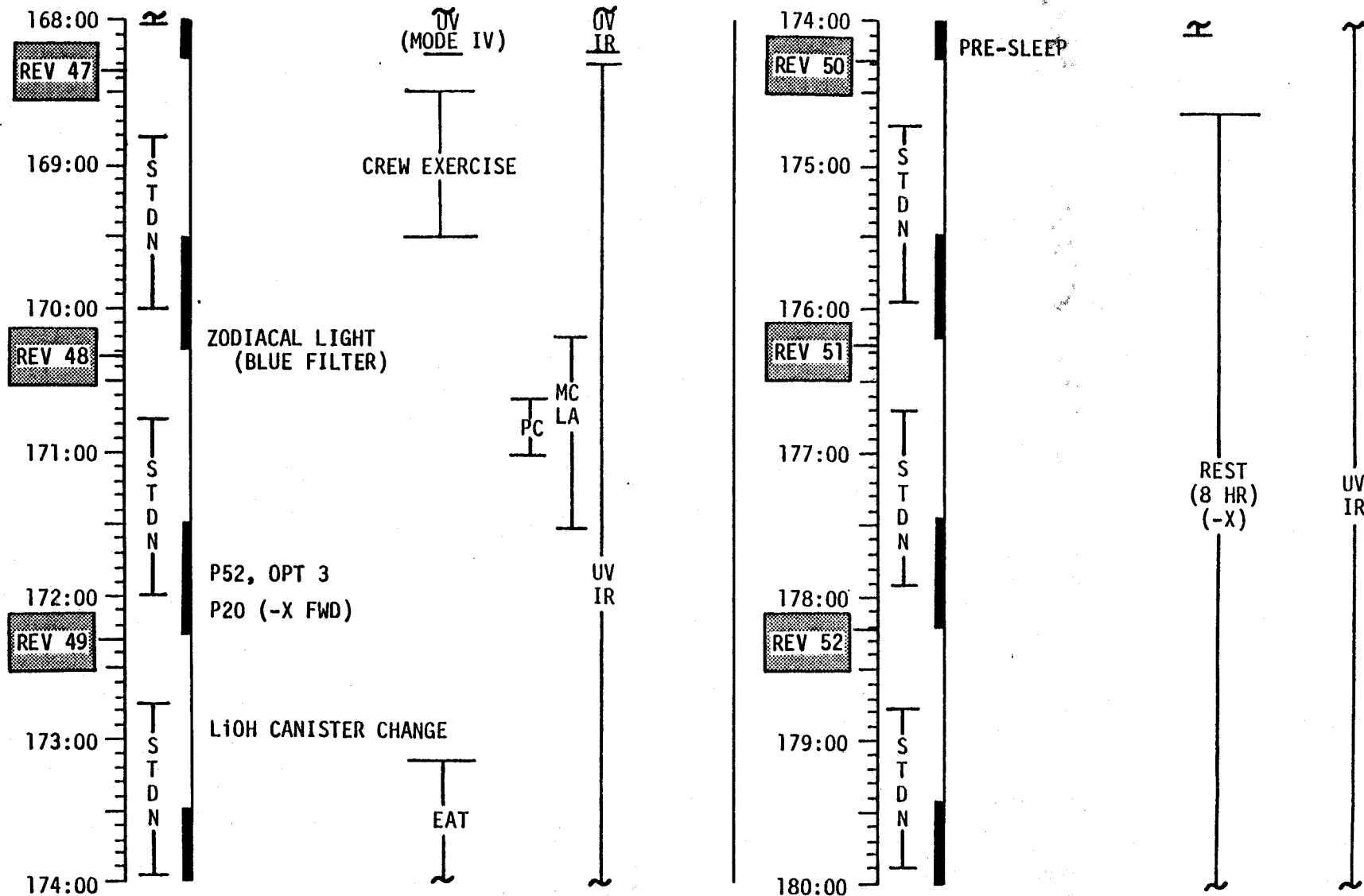
FLIGHT PLAN



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

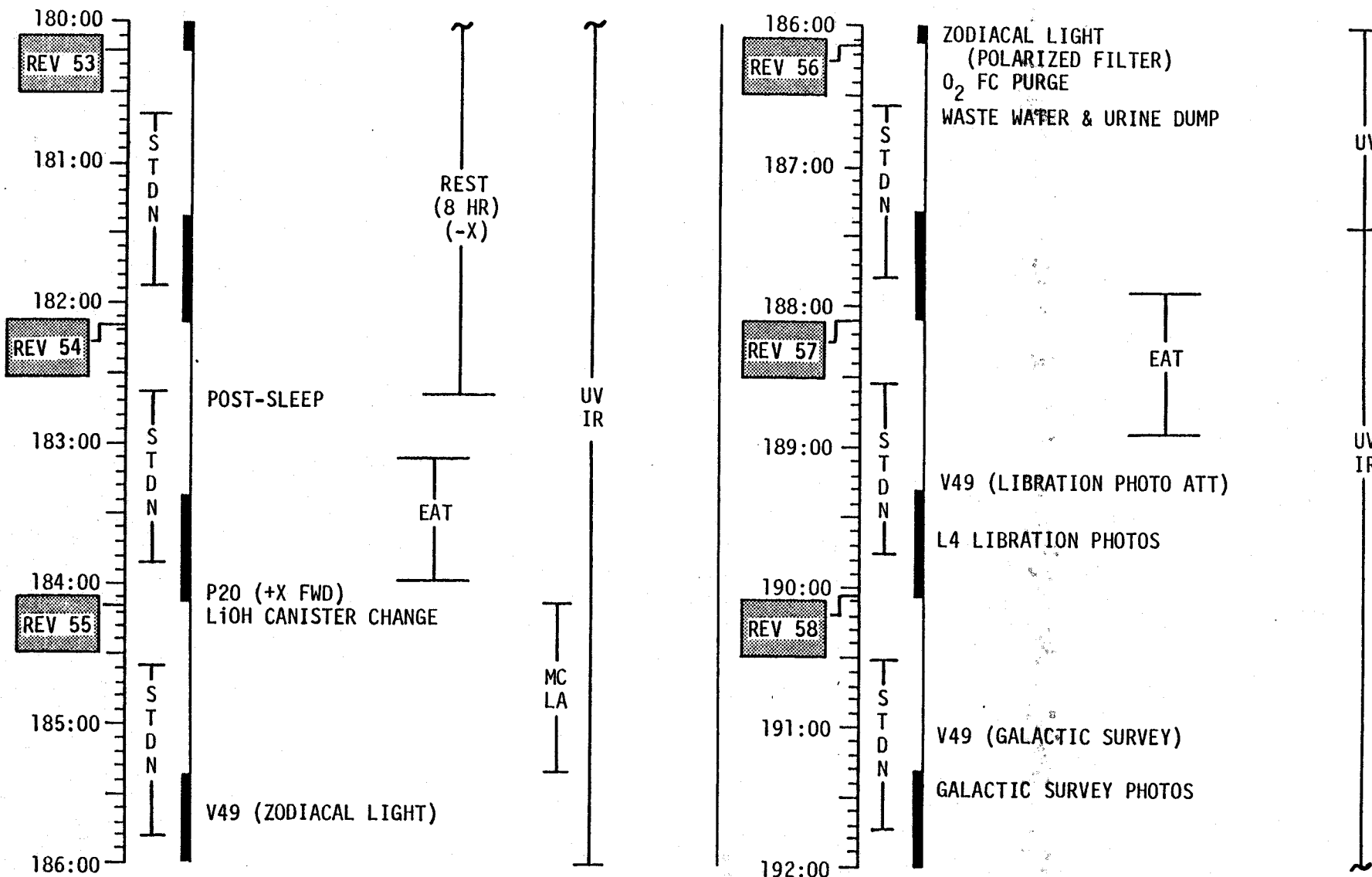
FLIGHT PLANNING BRANCH

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

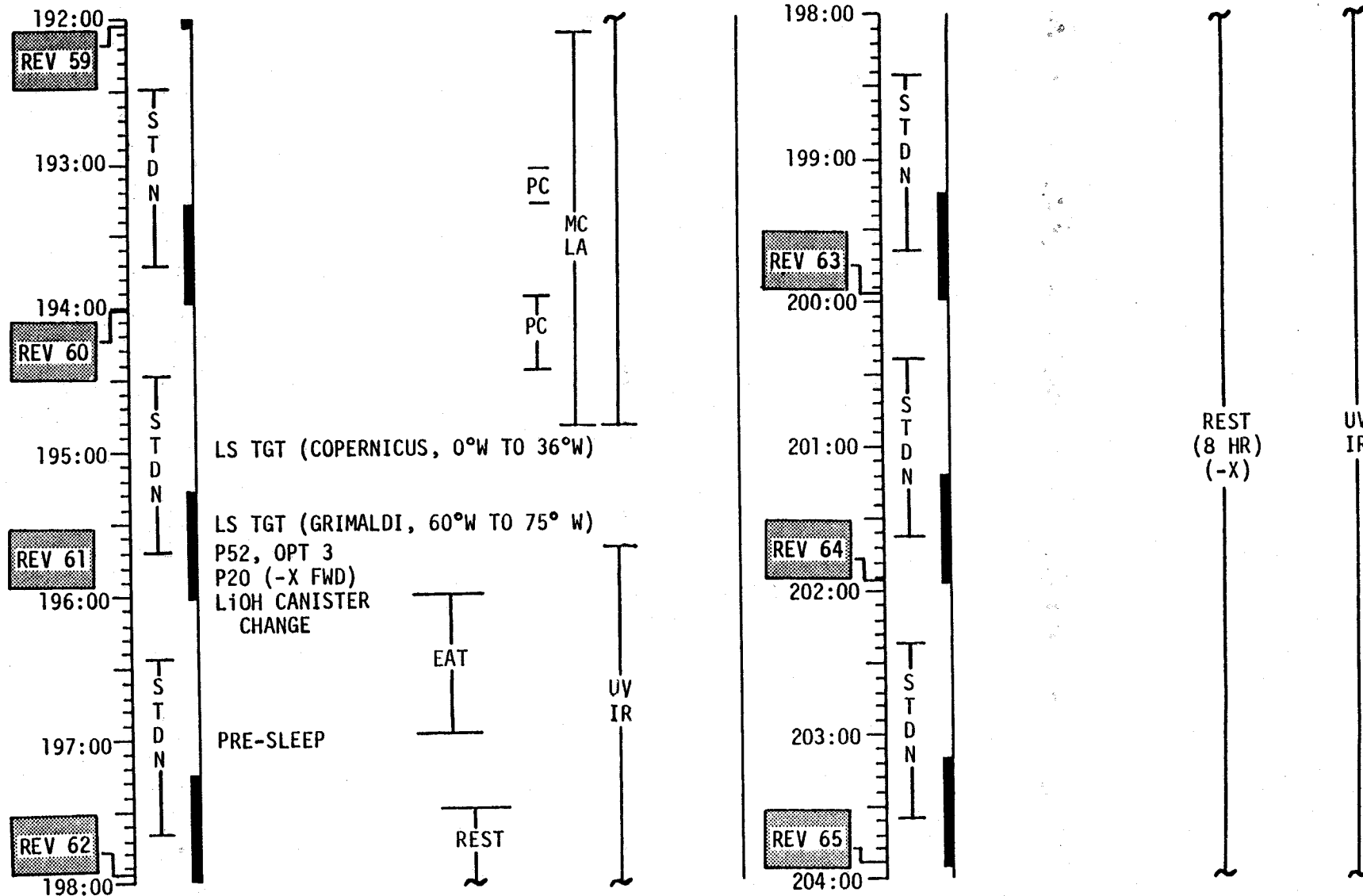
FLIGHT PLAN



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

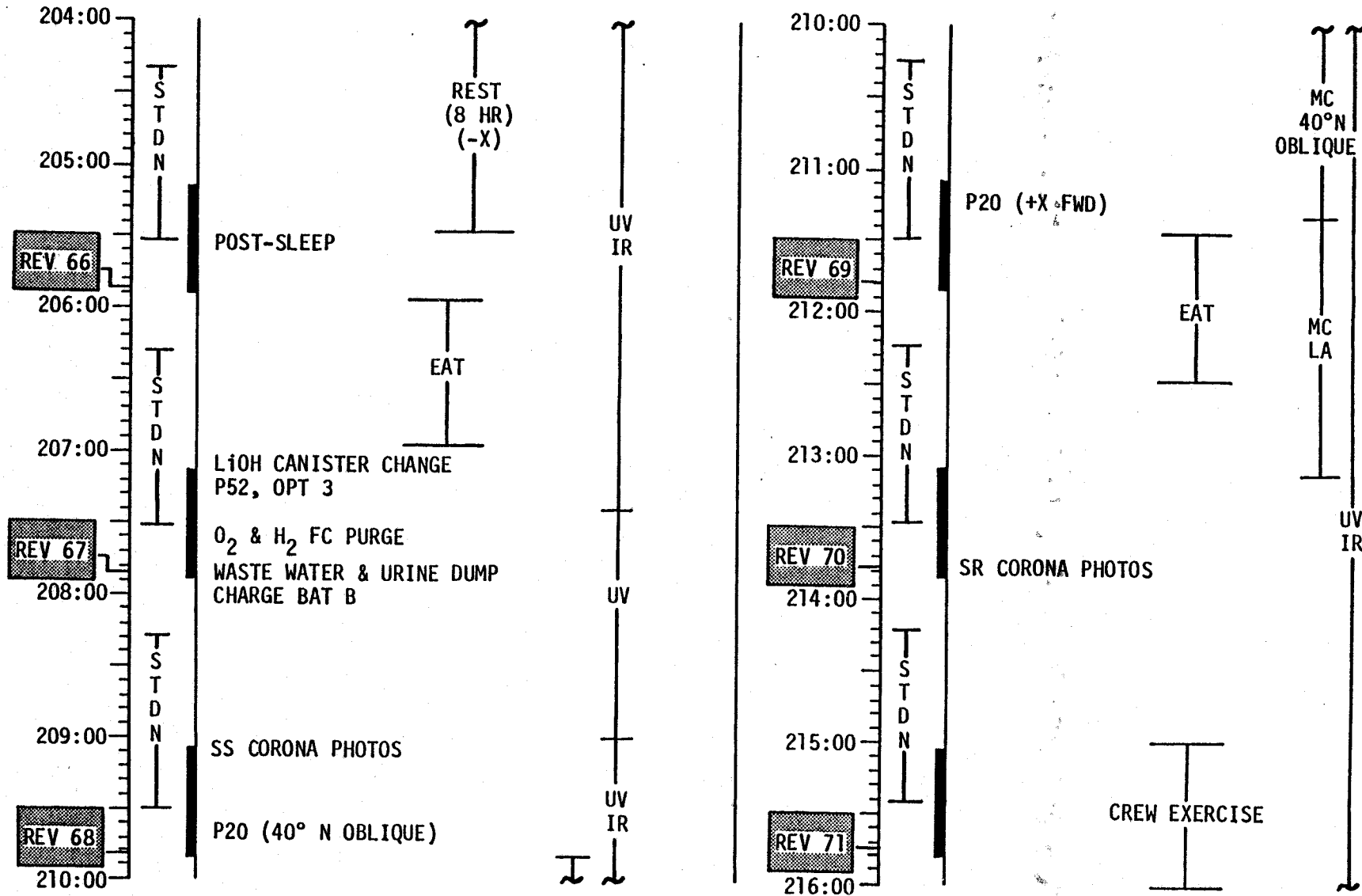
FLIGHT PLANNING BRANCH

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

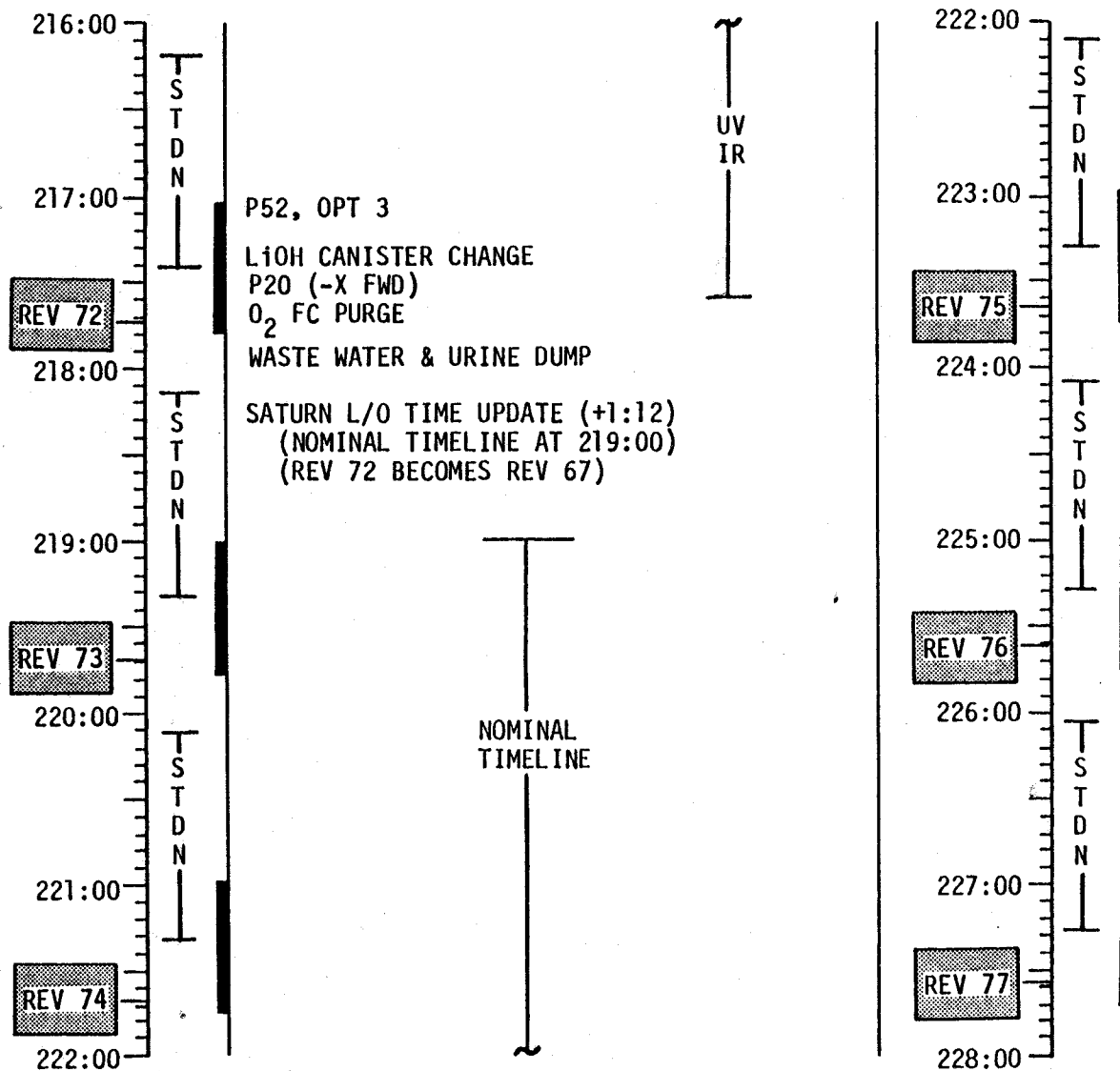
FLIGHT PLAN



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

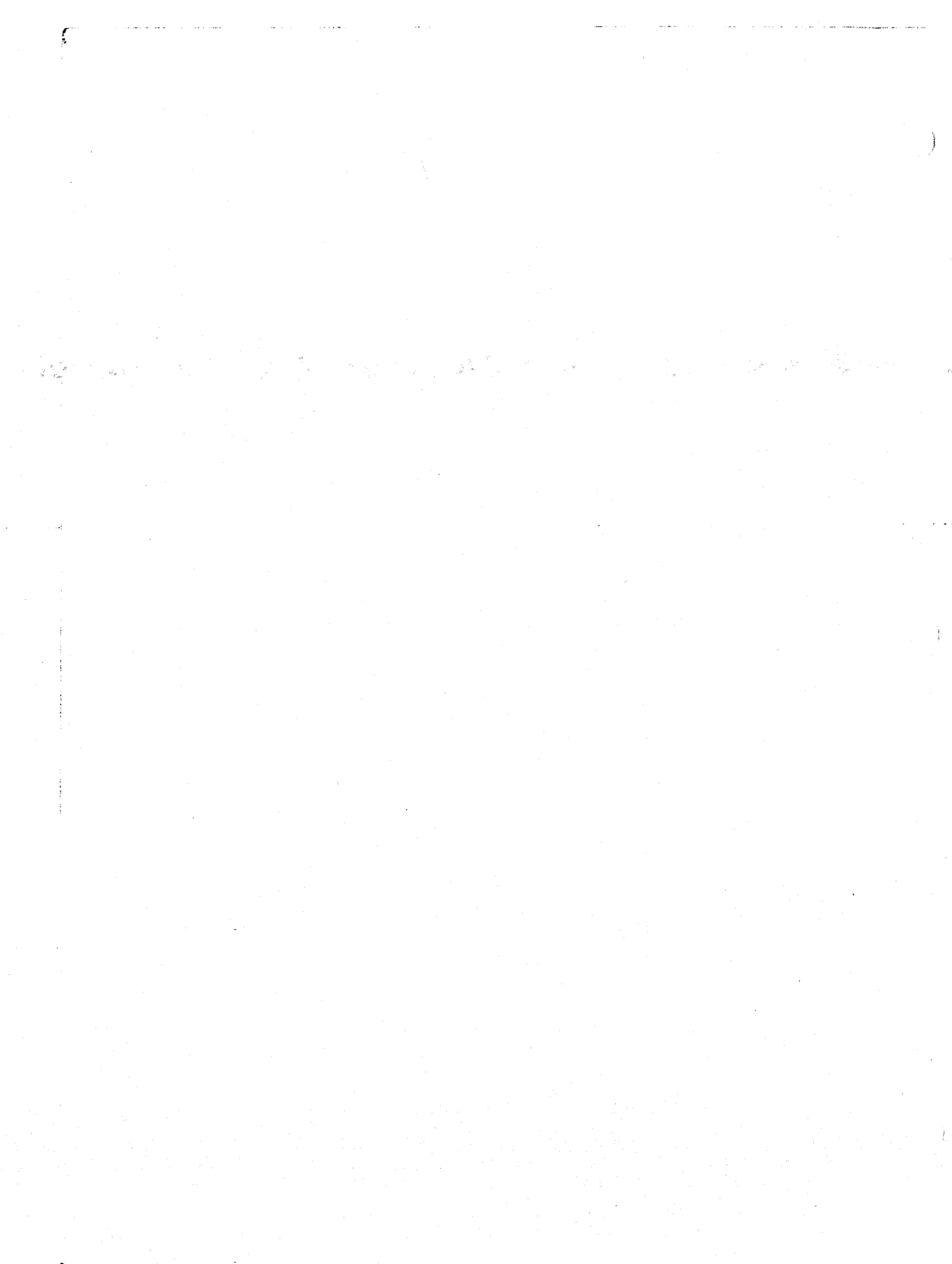
FLIGHT PLAN



NOTE: SATURN L/O TIME WILL
BE UPDATED POST-TEI
IN ORDER TO USE THE
NOMINAL TEC TIMELINE

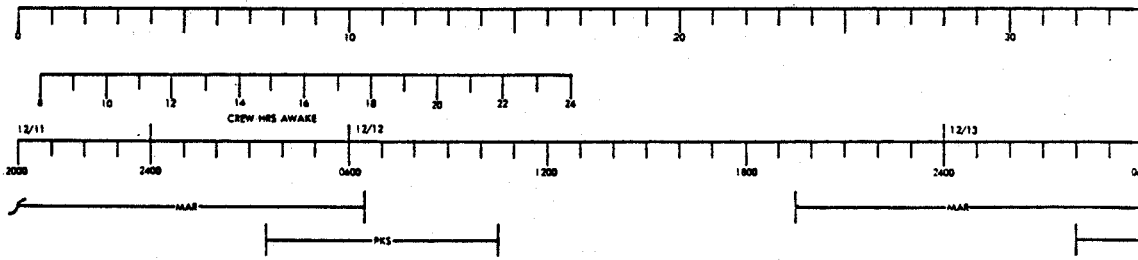
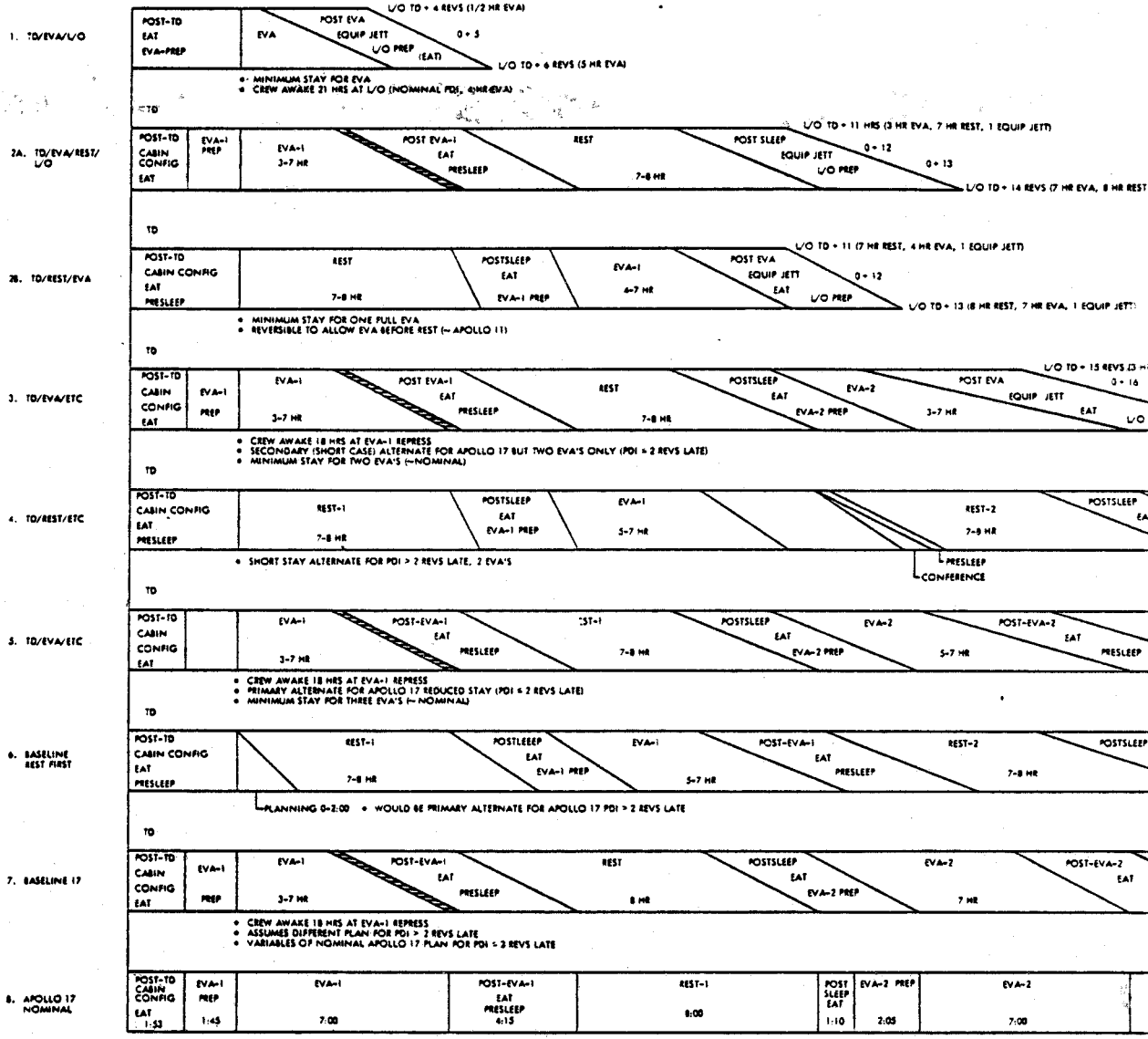
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	216:00 - 228:00	10/71-72	6-55

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10/23/72

• ALL PLANS ASSUME L/O AT NEXT BEST OPPORTUNITY
 • 18 HRS SINCE CREW WAKEUP

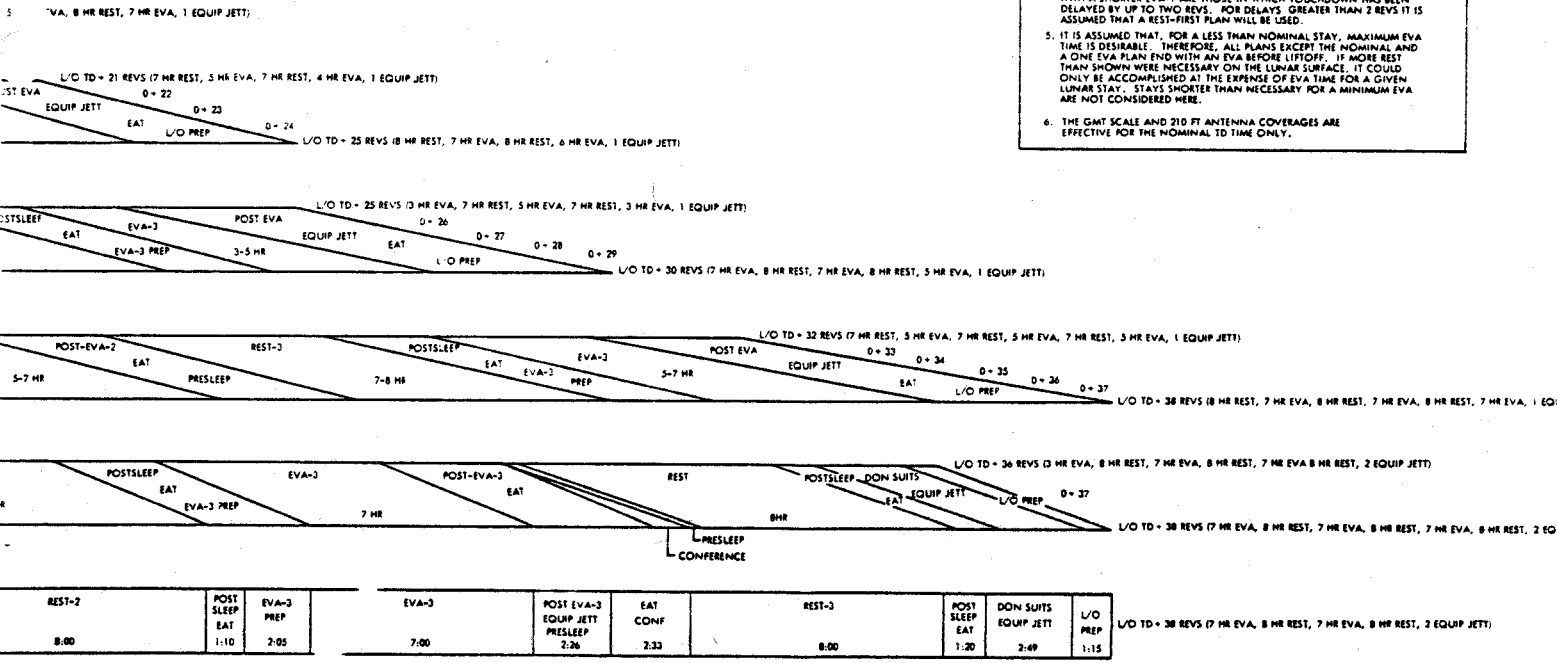


APOLLO 17
LUNAR SURFACE ALTERNATE MISSIONS

SEPTEMBER 21, 1972

LUNAR SURFACE ALTERNATE PLANS NOTES:

1. THIS CHART IS INTENDED AS A GUIDELINE FOR DETERMINING THE MOST EFFICIENT 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 16 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.



REST-2 8:00	POST SLEEP EAT 1:10	EVA-3 PREP 2:05	EVA-3 7:00	POST EVA-3 EQUIP JETT PRESLEEP 2:26	EAT CONF 2:33	REST-3 8:00	POST SLEEP EAT 1:20	DON SUITS EQUIP JETT 2:49	L/O PREP 1:15
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