



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

APOLLO 17

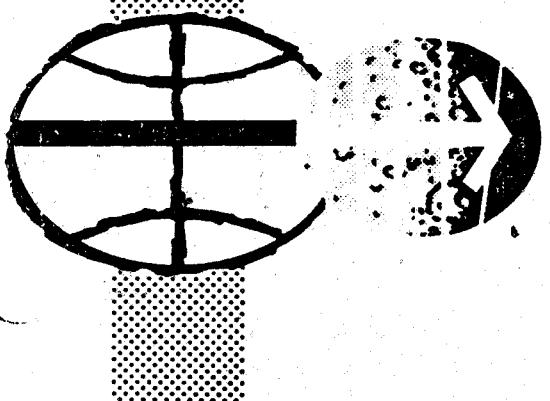
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FINAL
FLIGHT PLAN

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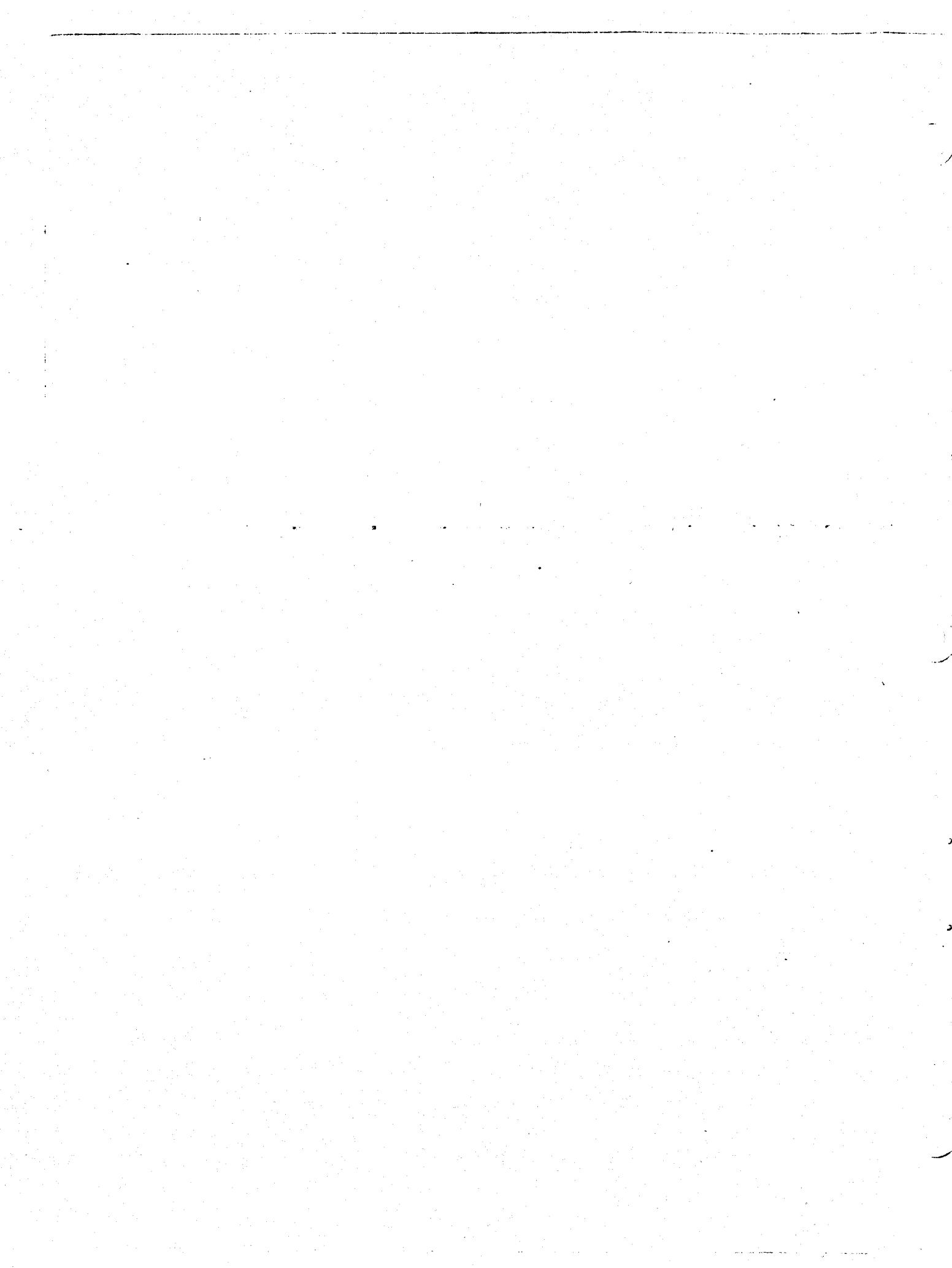
PREPARED BY

FLIGHT PLANNING BRANCH
CREW PROCEDURES DIVISION



MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

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APOLLO 17

FINAL

FLIGHT PLAN

OCTOBER 28, 1972

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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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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

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BW	black and white (Film 3400)
BW1	black and white (Film 3401)
CAP COM	capsule communicator
CAL	calibration
CAMR or CAM	camera
CARR	carrier
CB or cb	circuit breaker
CCGE	cold cathode gage experiment
CCIG	cold cathode ion gage
CCU	comm carrier umbilical
CCW	counter clockwise
CDH	constant delta altitude
CDR	Commander
CDU	coupling data unit
CEX	color exterior (SO-368)
CIN	color interior (SO-168)
CIRC	circulation
CK	check
CKT	circuit
C/L	centerline or checklist
CM	command module
CMC	command module computer
CMD	command
CMP	Command Module Pilot
CNTL	control
C/O	check out
COAS	crew optical alignment sight
COMM	communications
CONFIG	configuration
COMP	compare or compensate
CONT	continue or contingency
CP	control point
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
CSV	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

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

GBI	Grand Bahama Islands
GBM	Grand Bahama (STDN)
GDC	gyro display coupler
GDS	Goldstone, California
GET	ground elapsed time
GETI	ground elapsed time of ignition
GETIL	ground elapsed time of landing for TIG time of abort burn
GLY	glycol
GMT	Greenwich mean time
G&C	guidance and control
G&N	guidance and navigation
GNCS	guidance, navigation and control system (CSM)
GR	gamma ray spectrometer
GWM	Guam
GYM	Guaymas, Mexico
H ₂	hydrogen
HA	apogee altitude
HAW	Hawaii
HBR	high bit rate (TLM)
HBW	high speed black and white film
HD	highly desirable
HDC	hasselblad data camera
HFE	heat flow experiment
HGA	high-gain antenna
HI	high (switch position)
HOR	horizon
H 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

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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
LBL	low bit rate (TLM)
LB or 1b	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

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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 outgassing
MTN	motion
MTVC	manual thrust vector control
MULT	multiplier
N ₂	nitrogen
NAV	navigation
NEG	negative
NK	Nikon camera
NM	nautical miles
NO.	number
NOM	nominal
NXX	Noun XX
O ₂	oxygen
OBS	observation
O/F	oxidizer to fuel ratio
OGA	outer gimbal angle
OID	octal identifier
OMNI	omnidirectional antenna
OPR	operate
OPS	oxygen purge system
OPT	option
ORB	orbital
ORDEAL	orbit rate display earth and lunar
ORIENT	orientation
OVBD	overboard
OVHD	overhead
P	pitch or program
PAD	voice update
PAN	panoramic
PART	particle
PCM	pulse code modulation
PC	plane change or chamber pressure
PDI	powered descent initiation

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

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

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

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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	XPNDRtransponder
Y	yaw
YDOT	rate of change along the Y-axis
ZDOT	rate of change along the Z-axis
ZPN	impedance pneumogram

ΔAz	azimuth change (difference)
ΔH	altitude change (difference)
ΔP	pressure change (difference)
ΔR	position change (difference)
ΔV	velocity change (difference)
ΔV_C	velocity change at engine cutoff
ΔV_T	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, IVL 8 (f5.6,1/250, ∞) 10 FR

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

CAMERA LOCATIONSCOMMAND 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 MOUNTSCSM

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

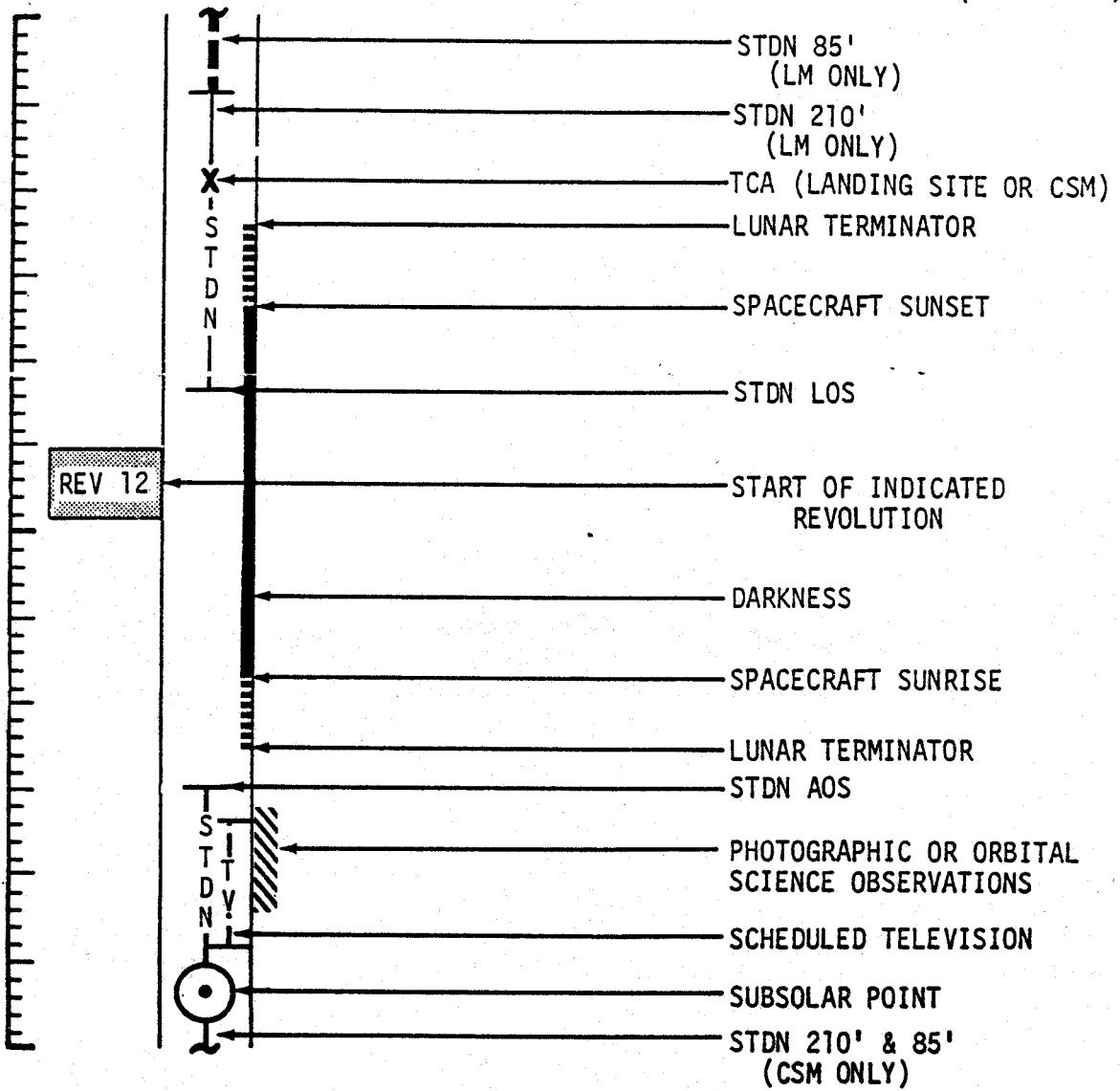
parallel to +X axis

+X axis +30° (in X-Z plane)

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SYMBOL NOMENCLATURE

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



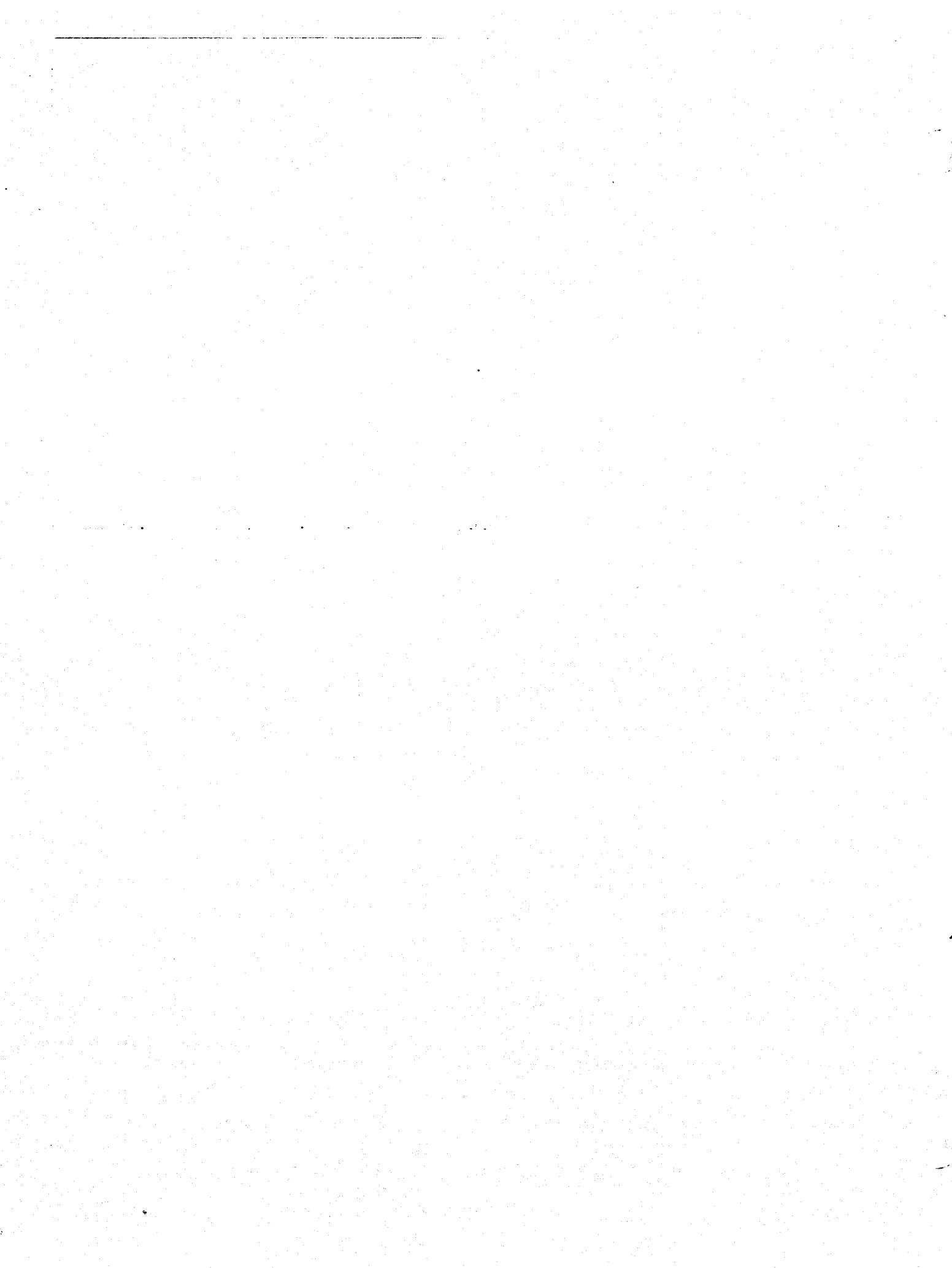
SCIENTIFIC INSTRUMENT MODULE
EXPERIMENT STATUS CODE

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

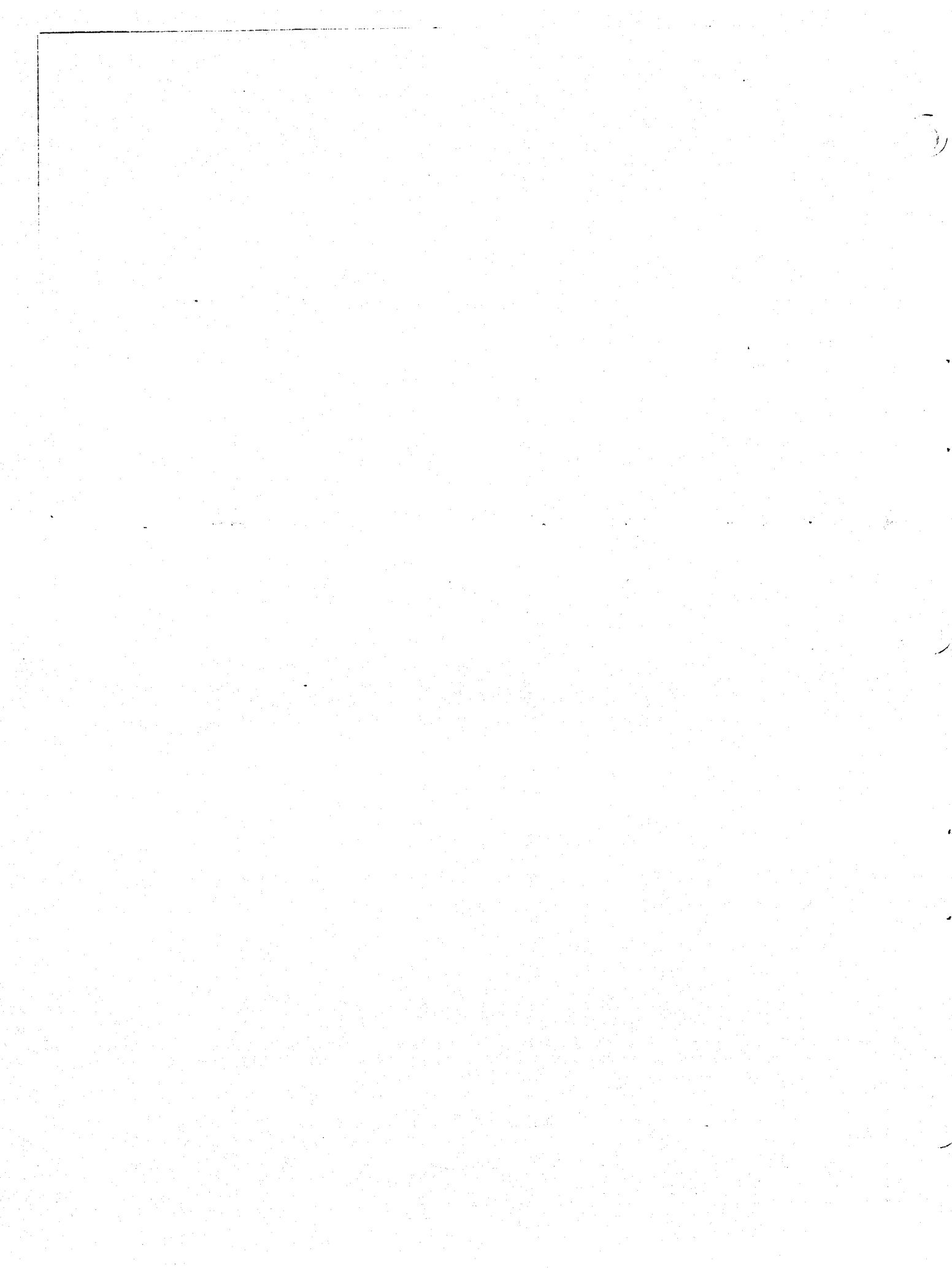
USUAL CONFIGURATIONS

PRE - SPS BURN PREP (*00000)
(31000) or (31011) SLEEP {±0011} or (±0111)
(01011) MIN POWER {0000}

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



SECTION 1 - FLIGHT PLAN NOTES



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 CO_2 absorber filter (LiOH canister) is changed at a time. Table 2-7 lists the LiOH canister change schedule. There are 26 filters on board.
 4. At lift-off, the cabin contains 60% O_2 and 40% N_2 . The CM is purged after launch. The purge is terminated prior to LM pressurization after TLI. After the LM is configured for ejection, it is isolated and the CM is purged for eight more hours. The purge is stopped for a sleep period and reinitiated after sleep.
 5. CSM O_2 pressurizes the LM after transposition and docking; and repressurizes the LM before TLC LM entry(s), MCC-4 and LM activation.

E. Guidance and Navigation

1. REFSMMAT Definitions

- (a) The "Launch Pad" REFSMMAT is used for launch, TLI, and TD&E. This REFSMMAT places the IMU X-axis along the launch azimuth at the pad and the Z-axis along the negative radius vector.
- (b) The "PTC" REFSMMAT is used for all midcourse maneuvers (except MCC-7) and for other operations during TLC and TEC. This REFSMMAT places the X-axis in the ecliptic plane and perpendicular to the earth-moon line projection in the ecliptic plane at the average time of transearth injection for the monthly launch window and azimuth range. The Z-axis is perpendicular to the ecliptic and directed south. At the beginning of the PTC Mode the spacecraft maneuvers to an FDAI display of pitch 90° or 270° .
- (c) A "Preferred" REFSMMAT is used by the CSM for LOI, Lunar-Orbit Plane Change, and TEI. The CSM IMU X-axis aligns normally with the spacecraft X-body axis (except LOPC) at the vehicle attitude for ignition with the thrust directed through the center of gravity. At burn ignition, the FDAI displays roll 0° , pitch 0° , and yaw 0° , except roll 180° for TEI. A yaw of 315° is used for LOPC, which places the X-axis 45° from the IMU X-axis.
- (d) The "Landing Site" REFSMMAT is used for DOI, PDI, landing, and CSM lunar orbit activities up to the first plane change. This REFSMMAT places the CSM and LM IMU X-axis along the positive lunar radius vector at the landing site at the predicted landing time and places the Z-axis in the direction of flight parallel to the CSM orbital plane. At nominal touchdown, the LM FDAI displays roll 0° , pitch 0° , and yaw 0° .
- (e) The "Lift-Off" REFSMMAT is used for all lunar activities after Plane Change, until transearth injection. This REFSMMAT places the CSM and LM IMU X-axis along the positive lunar radius vector at the landing site at predicted lift-off time, with the Z-axis down range parallel to the CSM orbital plane. At nominal lift-off time, the LM FDAI displays roll 0° , pitch 0° , and yaw 0° with slight differences reflecting actual touchdown yaw and slope tilt angles.

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- (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 FDAO 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 FDAO after the maneuver has been completed.
 4. CSM/LM and CSM attitude maneuvers are normally performed at the rate of 0.2°/sec unless other rates are required. LM maneuvers are normally performed at 2°/sec unless otherwise specified.
 5. The SIM Bay RCS configuration provides single jet control authority in each axis to eliminate contamination of the SIM experiments. Table 2-8 identifies the periods when the CSM RCS is in an uncoupled configuration.
 6. Undocking is done radially, CSM below, using the soft undocking procedure. The probe is extended its full length with the LM held on by the capture latches. When the rates are nulled, the CSM releases the LM. The separation maneuver is then performed immediately.
 7. LM jettison is done radially, CSM below, with final sep pyros providing approximately 0.4 foot per second radial thrust. The separation burn is performed five minutes after jettison, providing 2 foot per second posigrade thrust.
 8. The standard register load for nouns 78 and 70 for SIM bay experiment pointing using the Universal Tracking Program P20, option 5 is:
N78 (+090.00)
(+052.25)
(+180.00) +X-axis forward
or (+000.00) -X-axis forward
N70 (00050)

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

F. Propulsion Systems

1. In order to conserve SM RCS, the SPS engine is used to "back-up" all LM rendezvous burns requiring a ΔV greater than 12 FPS. The SPS gimbal motors are not turned on during the normal maneuver preparation.
2. The SPS always is started using a single bank, however, the other bank will be opened 2 to 5 seconds after ignition for burns longer than 10 seconds. DOI will be performed on a single bank.
3. Table 2-9 lists the CSM propulsion burns.

G. Scientific Instruments Module

1. The panoramic and mapping cameras will be placed in the boost and standby modes, respectively, during launch through TD&E, rendezvous, and all SPS thrusting maneuvers.
2. The following switches may be left in their command position between uses in order to keep track of SIM Bay experiment status:
 - a) Mapping Camera Track
 - b) Mapping Camera/Laser Cover
 - c) IR Cover
 - d) UV Cover

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

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

III. LM Systems

A. Communications

1. The preferred S-Band communications are:
 - (a) Uplink Mode 7 (Voice, Updata)
 - (b) Downlink Mode 2 (Voice, TLM-HBR, PRN, BIOMED)
2. The LM DSEA schedule is shown in Table 2-10.

B. ECS

1. The LM contains ambient air at lift-off. During launch the pressure bleeds to zero psia. CSM O_2 pressurizes the LM after T&D. The LM is isolated after T&D and after each entry and allowed to bleed down via leakage. Before the first entry into the LM, the LM is vented to at least 2.7 PSID and repressurized with CSM O_2 in order to enrich the LM atmosphere. CSM O_2 is used to repressurize the LM for the second and third entries.
2. LM O_2 is used to pressurize the LM five times; after EVA-1, EVA-2, EVA-3, and two equipment jettison periods.
3. Table 2-7 lists the LiOH canister change schedule.

C. Guidance Systems

1. The LGC and CMC use the same landing site and lift-off REFSMMATS.
2. The AGS is placed in standby after the "GO" is given for lunar stay for T3.

3. The IMU platform is oriented so that all PIPA output axes are normal to the gravity vector, then powered down and the LGC placed in standby approximately 1 hour after TD until approximately 5 hours prior to lift-off. The LGC is placed in OPERATE several times to update the computer clock.
4. To prevent overheating of the antenna, the rendezvous radar is pointed away from the sun and turned off when no functional use is required.
5. The LM tracking light is operated continuously during rendezvous.

D. Propulsion Systems

1. The APS/RCS interconnect is used during the lunar lift-off and ascent only.
2. Table 2-11 lists the LM propulsion burns.

E. Electrical Power System

1. The LM is powered down to a minimum level to conserve battery consumables on the lunar surface from PDI +1:00 to lift-off -5:00 hours.
2. LM battery management is scheduled on the lunar surface to equalize the usage of the five descent stage batteries. Table 2-6 contains the LM battery management schedule.

IV. Procedures

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

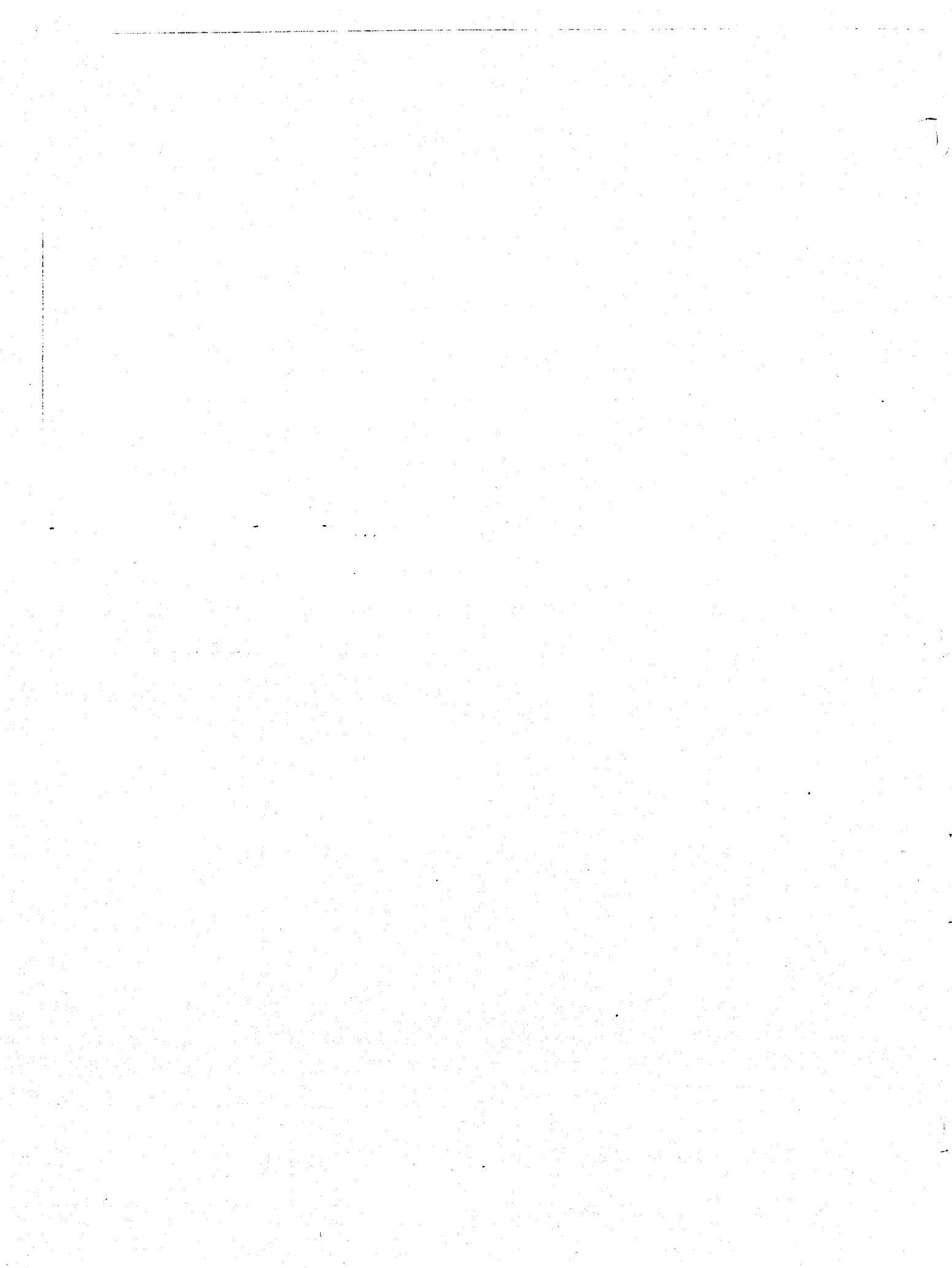
V. Synchronization of Ground Elapsed Time (GET)

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

VI. Miscellaneous

- A. Table 2-12 contains a schedule of the return to earth block data updates.
- B. Table 2-13 is the landmark tracking and landing site data.
- C. Table 2-14 contains the cryo management schedule.
- D. Table 2-15 contains the Lunar Sounder Schedule.
- E. Table 2-16 contains the Apollo 17 Film Budget.
- F. Table 2-17 contains MC, LA and PC schedules.
- G. Charts 2-1,2,3,4 & 5 identify principal LUNAR SOUNDER Rev activities.

SECTION 2 - CHARTS & TABLES



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2-1

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.

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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

	GOLDSTONE (GDS)	*PARKS (PKS)		HONEYSUCKLE (HSK)		MADRID (MAD)		*GOLDSTONE (MAR)	
	AOS	LOS	AOS	LOS	AOS	LOS	AOS	LOS	AOS
EARTH ORBIT	01:29	01:33			01:00	01:05			
	03:00	03:06			04:05	08:26			03:01
	15:17	25:09			19:35	33:27	07:54	16:59	15:52
TRANSLUNAR COAST		22:15	30:58			22:15	30:58		24:34
	39:28	49:41	46:40	55:08	44:06	57:35	32:07	41:52	40:00
	63:30	73:54	70:50	79:11	68:18	81:36	56:09	66:10	64:02
TEI (236:40)	87:28	88:44			242:38	252:30	80:08	88:44	87:59
			245:42	249:33				236:52	247:40
	256:25	272:24	270:22	272:53	266:52	276:17	250:45	265:01	258:56
TRANSEARTH COAST								274:34	289:38
									282:50
	282:17	297:25			291:48	299:12			296:43
EI (304:18)							298:15	303:49	

* 210 FT DISH ANTENNA

TABLE 2-3 (CONT)

REF NO.	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
1	88:56	89:17	90:41			92:27	92:49			89:17	90:16
2	90:59	91:25	92:49			93:35	94:41			91:25	92:49
3	93:07	93:35	94:41			95:29	96:35			93:35	94:41
4	95:01	95:29	96:35			98:29	98:29			95:29	96:35
5	96:55	97:23	98:15			99:23	99:23			97:23	97:41
6	98:49			99:17	100:23	100:17	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	105:34	104:59	106:05		
10	106:25							106:33	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							116:31	117:44
16	118:01	118:30	119:42							118:30	119:42
17	120:02	120:28	121:41							120:28	121:41
18	122:00	122:27	123:16							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	138:28					138:15	139:29	138:5	139:28
27	139:48	140:14	141:27					140:14	140:23	140:14	141:27
28	141:46	142:13	143:26							142:13	143:26
29	143:45	144:11	145:24							144:11	145:24
30	145:43	146:10	147:23							146:10	147:23
31	147:42	148:08	148:16								
32	149:41			150:06	151:20	150:06	151:20				
33	151:39			152:05	152:23	152:05	153:19			153:11	
34	153:38					154:04	154:50			155:17	
35	155:37							156:02		157:15	
36	157:35									158:01	
37	159:34	160:50	161:12					159:59		161:13	
38	161:32	161:58	163:11					161:58		161:58	
39	163:31	163:56	165:10					163:57		163:56	
40	165:30	165:55	167:08							165:55	167:08
41	167:28	167:54	169:07							167:54	169:07

* 210 FT ANTENNA

TABLE 2-3 (CONT)

REF	GET AT START OF REV	GOLDSTONE (GDS)		*PARKS (PKS)		HONEYSUCKLE (HSK)		MADRID (MD)		*GOLDSTONE (MAR)	
		AOS	LOS	AOS	LOS	AOS	LOS	AOS	LOS	AOS	LOS
L01	88:56			170:08	171:05	169:52	171:05			169:52	171:06
42	169:27	169:52	171:06	171:50	173:04	171:50	173:04			171:51	172:51
43	171:25	171:51	173:04	173:49	175:03	173:49	175:03				
44	173:24										
45	175:23										
46	177:21										
47	179:20										
48	181:18										
49	183:17										
50	185:16	185:40	186:54								
51	187:14	187:39	188:53								
52	189:13	189:38	190:52								
53	191:12	191:36	192:50								
54	193:10	193:35	194:49								
55	195:09	195:34	196:48	195:33	196:47	195:33	196:47				
56	197:08	197:32	198:28	197:32	198:46	197:32	198:46				
57	199:06			199:31	200:45	199:31	200:45				
58	201:05										
59	203:04										
60	205:03										
61	207:01										
62	209:00	209:52	210:38								
63	210:59	211:22	212:36								
64	212:58	213:21	214:35								
65	214:56	215:20	216:34								
66	216:55	217:19	218:33								
67	218:54	219:17	220:32								
68	220:53	221:16	222:30	221:15	222:30	221:15	222:30				
69	222:51	223:15	223:35	223:14	224:29	223:14	224:29				
70	224:50			225:13	225:34	225:13	226:27				
71	226:49										
72	228:48										
73	230:46										
74	232:45										
75	234:44	235:06	236:20								
TE1	236:43	236:53	248:11								

* 210 FT ANTENNA

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

LiOH CANISTER CHANGE SCHEDULE

CSM LiOH CANISTER CHANGE

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

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

TOTAL CSM LiOH CANISTERS AVAILABLE 26

*GET FROM LIFTOFF

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

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TABLE 2-9 (CONT)

CSM BURN/EVENT SCHEDULE

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

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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*</u> <u>(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/0 -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.

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TABLE 2-11
(12/6)

LM BURN/EVENT SCHEDULE

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

TABLE 2-12

(12/6)

APOLLO 17 RETURN TO EARTH BLOCK DATA SCHEDULE

DATA	GET UPDATE (HR:MIN)	GETI (HR:MIN)	PAD TYPE
TLI+90	01:30	04:50	COMPLETE P-30
L/0+9	01:30	09:00	P37
L/0+15	08:30	15:00	P37
L/0+25	08:30	25:00	P37
L/0+35	16:30	35:00	P37
L/0+45	16:30	45:00	P37
L/0+55	16:30	55:00	P37
L/0+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

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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 ($\lambda=166^\circ W$)
2. Pass FLYBY early if pericynthion is not clear of moon
3. The FLYBY and PER+2 maneuvers are docked. All other aborts are undocked.
4. TEI 4 assumes no DOI.
5. TEI 5 assumes DOI.
6. TEI 12 assumes no CIRC.
7. TEI 19 assumes CIRC.
8. TEI 49 assumes no LOPC.
9. TEI 55 assumes LOPC.

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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

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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 O_2 tanks 1 & 2Open 50W cb in O_2 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 Y & MARE RIDGE VHF MODE	156:51	156:56	49°W	64°W	0:05
36	REINER Y & 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".

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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

APOLLO 17 FILM BUDGET

CSM					
CAMERA:	DAC	FILM:	VHBN	MAGAZINE:	JJ
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
0:00		UN SCHEDULED	0%	100%	
CAMERA:	EL	FILM: CEX	MAGAZINE: KK	CAPACITY: 160 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
19:35 90:51 110:27 118:04	TL 01 12 16	EARTH AITKEN UNDOCKING AITKEN	4 FR 58 FR 10 FR 73 FR	156 FR 98 FR 88 FR 15 FR	0S 0S 0S 0S
CAMERA:	EL	FILM: CEX	MAGAZINE: LL	CAPACITY: 160 FR	
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
119:57 136:39 142:26 144:02	17 25 28 29	SNADECKI LOG SITE PICARD ARABIA	46 FR 24 FR 36 FR 21 FR	114 FR 90 FR 54 FR 33 FR	0S 0S 0S 0S

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CSM					
CAMERA:	EL	FILM: CEX	MAGAZINE: MM	CAPACITY: 160 FR	REF
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
144:24 157:35 164:26	25 36 39	PIERCE MARE INGENI D-CALDERA	88 FR 34 FR 19 FR	72 FR 38 FR 19 FR	0S 0S 0S
CAMERA:	EL	FILM: CEX	MAGAZINE: MM	CAPACITY: 160 FR	REF
GET	REV	TARGET	FILM USED	FILM REMAINING	REF
4:20 5:07 190:01 215:56	TL TL 52' 6:	UNDOCK S4BLM LM EJECTION DOCKING IMBRUM(S)	10 FR 5 FR 10 FR 28 FR	150 FR 145 FR 135 FR 107 FR	0PS 0PS 0PS 0S
CAMERA:	EL	FILM: CEX	MAGAZINE: MM	CAPACITY: 160 FR	REF
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						CSM											
CAMERA:		EL	FILM:	VIBW	MAGAZINE:	QQ	CAPACITY:	115 FR	CAMERA:		NK	FILM:	VIBW	MAGAZINE:	WW	CAPACITY:	40 FR
GET	REV	TARGET	FILM USED	FILM REMAINING	REF				GET	REV	TARGET	FILM USED	FILM REMAINING			REF	
89:41 121:00	01 17	LOG SITE (NORTH)	12 FR 12 FR	103 FR 91 FR	NST NST				0:00		DIM LT BU	40 FR	0 FR			CAL	
137:34 144:42	25 29	SR CORONA (SOUTH)	9 FR 24 FR	82 FR 58 FR	X9 NST												
159:36 208:17	37 61	AITKEN SS CORONA	12 FR 9 FR	46 FR 37 FR	FST X7												
									121:06	17	EARTHSHINE	40 FR	0 FR			X17	
CAMERA:		EL	FILM:	VIBW	MAGAZINE:	RR	CAPACITY:	115 FR	CAMERA:		NK	FILM:	VIBW	MAGAZINE:	XX	CAPACITY:	40 FR
GET	REV	TARGET	FILM USED	FILM REMAINING	REF				GET	REV	TARGET	FILM USED	FILM REMAINING			REF	
209:09 210:09	62 62	GAGARIN (N) (NORTH)	18 FR 24 FR	97 FR 73 FR	FST NST				133:29	23	200 LT RED	13 FR	27 FR	X13			
218:08 233:58	66 74	(SOUTH) (SOUTH)	24 FR 12 FR	49 FR 37 FR	NST NST				163:12	38	200 LT BLUE	13 FR	14 FR	X13			
CAMERA:		NK	FILM:	CIN	MAGAZINE:	SS	CAPACITY:	70 FR	CAMERA:		NK	FILM:	VIBW	MAGAZINE:	YY	CAPACITY:	40 FR
GET	REV	TARGET	FILM USED	FILM REMAINING	REF				GET	REV	TARGET	FILM USED	FILM REMAINING			REF	
68:00	TL	ALFMED	6 FR	64 FR	X1				185:00	49	200 LT POL	24 FR	16 FR	X11			
CAMERA:		NK	FILM:	CIN	MAGAZINE:	TT	CAPACITY:	70 FR	CAMERA:		NK	FILM:	VIBW	MAGAZINE:	ZZ	CAPACITY:	40 FR
GET	REV	TARGET	FILM USED	FILM REMAINING	REF				GET	REV	TARGET	FILM USED	FILM REMAINING			REF	
0:00		UNSCHEDULED	0 FR	70 FR					0:00		UN_SCHEDULED	0 FR	40 FR				
CAMERA:		NK	FILM:	VIBW	MAGAZINE:	UU	CAPACITY:	40 FR	CAMERA:		NK	FILM:	VIBW	MAGAZINE:	WW	CAPACITY:	40 FR
GET	REV	TARGET	FILM USED	FILM REMAINING	REF				0:00	PREFLT CAL	40 FR	0 FR				CAL	

TABLE 2-16

APOLLO 17 FILM BUDGET

LM										LM										
CAMERA:	DCL	FILM:	CEX	MAGAZINE:	A	CAPACITY:	160 FR		CAMERA:	DCL	FILM:	HBW	MAGAZINE:	J	CAPACITY:	170 FR				
GET	REV	TARGET	FILM USED	FILM REMAINING	REF	GET	REV	TARGET	FILM USED	FILM REMAINING	REF	GET	REV	TARGET	FILM USED	FILM REMAINING	REF			
110:30	12	LW/CM SEP	10 FR	150 FR	OPS	139:20	LS	EVA-2	161 FR	9 FR										
110:35	12	CABIN (OPT)	5 FR	145 FR	OPS	CAMERA:	DCL	FILM:	HBW	MAGAZINE:	K	CAPACITY:	170 FR							
111:00	12	LGD SITE	5 FR	140 FR	OPS	GET	REV	TARGET	FILM USED	FILM REMAINING	REF	GET	REV	TARGET	FILM USED	FILM REMAINING	REF			
112:35	13	EARTHRISE	5 FR	135 FR	OPS	139:20	LS	EVA-2	135 FR	35 FR										
116:40	LS	EVA-1	95 FR	40 FR		CAMERA:	DCL	FILM:	HBW	MAGAZINE:	L	CAPACITY:	170 FR							
CAMERA:	DCC	FILM:	CEX	MAGAZINE:	B	CAPACITY:	160 FR													
GET	REV	TARGET	FILM USED	FILM REMAINING	REF	GET	REV	TARGET	FILM USED	FILM REMAINING	REF	GET	REV	TARGET	FILM USED	FILM REMAINING	REF			
116:40	LS	EVA-1	94 FR	66 FR		163:40	LS	EVA-3	154 FR	16 FR										
CAMERA:	DCC	FILM:	CEX	MAGAZINE:	C	CAPACITY:	160 FR		CAMERA:	DCL	FILM:	HBW	MAGAZINE:	M	CAPACITY:	170 FR				
GET	REV	TARGET	FILM USED	FILM REMAINING	REF	GET	REV	TARGET	FILM USED	FILM REMAINING	REF	GET	REV	TARGET	FILM USED	FILM REMAINING	REF			
139:20	LS	EVA-2	155 FR	5 FR		163:40	LS	EVA-3	165 FR	5 FR										
CAMERA:	DCC	FILM:	CEX	MAGAZINE:	D	CAPACITY:	160 FR		CAMERA:	DAC	FILM:	CEX	MAGAZINE:	N	CAPACITY:	170 FR				
GET	REV	TARGET	FILM USED	FILM REMAINING	REF	GET	REV	TARGET	FILM USED	FILM REMAINING	REF	GET	REV	TARGET	FILM USED	FILM REMAINING	REF			
139:20	LS	EVA-2	94 FR	66 FR		163:40	LS	EVA-3	127 FR	43 FR										
CAMERA:	DCC	FILM:	CEX	MAGAZINE:	E	CAPACITY:	160 FR		CAMERA:	DAC	FILM:	CEX	MAGAZINE:	O	CAPACITY:	100%				
GET	REV	TARGET	FILM USED	FILM REMAINING	REF	GET	REV	TARGET	FILM USED	FILM REMAINING	REF	GET	REV	TARGET	FILM USED	FILM REMAINING	REF			
163:40	LS	EVA-3	151 FR	9 FR		110:30	1/2	LW/CM SEP	6%	94%	OPS									
CAMERA:	DCC	FILM:	CEX	MAGAZINE:	F	CAPACITY:	160 FR		CAMERA:	DAC	FILM:	CEX	MAGAZINE:	P	CAPACITY:	100%				
GET	REV	TARGET	FILM USED	FILM REMAINING	REF	110:35	1/2	CABIN (OPT)	13%	81%	OPS									
163:40	LS	EVA-3	99 FR	61 FR		111:00	1/2	LOG SITE	6%	75%	OPS									
CAMERA:	DCL	FILM:	HBW	MAGAZINE:	G	CAPACITY:	170 FR		CAMERA:	DAC	FILM:	CEX	MAGAZINE:	Q	CAPACITY:	100%				
GET	REV	TARGET	FILM USED	FILM REMAINING	REF	112:50	1/3	DESCENT	75%	0%	OPS									
116:40	LS	EVA-1	130 FR	40 FR		113:02	LS	SURFACE OPT	100%	0%										
CAMERA:	DCL	FILM:	HBW	MAGAZINE:	H	CAPACITY:	170 FR		CAMERA:	DAC	FILM:	CEX	MAGAZINE:	R	CAPACITY:	170 FR				
GET	REV	TARGET	FILM USED	FILM REMAINING	REF	188:03	51	ASCEND	100%	0%										
139:20	LS	EVA-2	128 FR	42 FR		CAMERA:	DCS	FILM:	HBW	MAGAZINE:	S	CAPACITY:	170 FR							
CAMERA:	DCL	FILM:	HBW	MAGAZINE:	I	CAPACITY:	170 FR		GET	REV	TARGET	FILM USED	FILM REMAINING	REF	GET	REV	TARGET	FILM USED	FILM REMAINING	REF
GET	REV	TARGET	FILM USED	FILM REMAINING	REF	163:40	LS	EVA 3	50 FR	120 FR										
139:20	LS	EVA-2	162 FR	8 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 \pm 2 MIN/6°

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

POST TEI

*LA OFF AT 91:28 TO AVOID ALTITUDE PROBLEMS

**RETR, CLOSE COVER AT 234:05

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

PC OPERATIONS

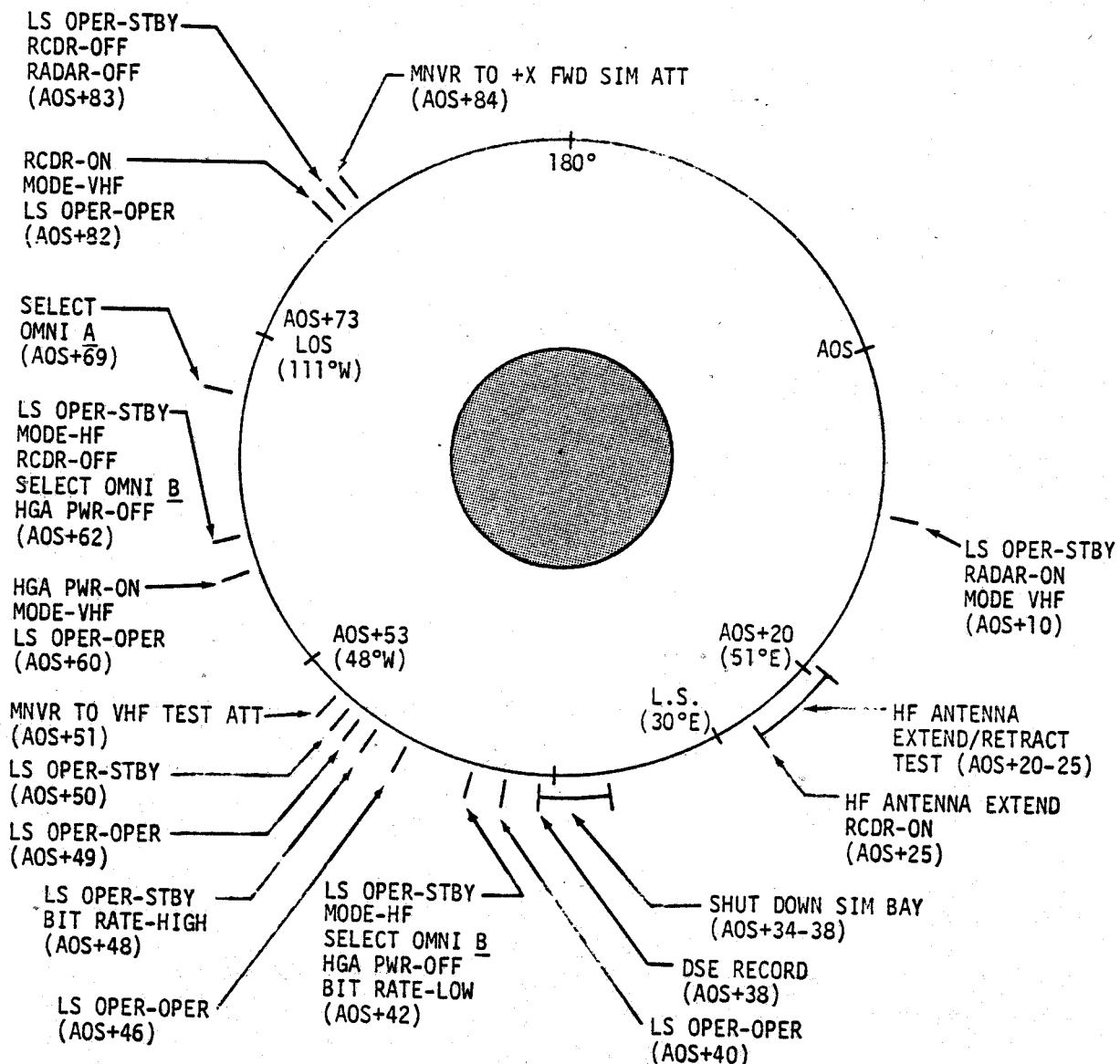
REV	T START	T STOP	TYPE	LONG(START)	LONG(STOP)	DEG	HR/MIN
1/2	90:51	91:11	STEREO	152°W	144°E	58°	0:20
2	91:18	91:28	STEREO	123°E	95°E	28°	0:10
13/14	114:03	114:33	STEREO	172°W	100°E	88°	0:30
15	116:31	117:00	STEREO	102°E	14°E	88°	0:29
28	141:54	142:19	STEREO	155°E	85°E	70°	0:25
49	183:50	184:09	STEREO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

514° 2:57

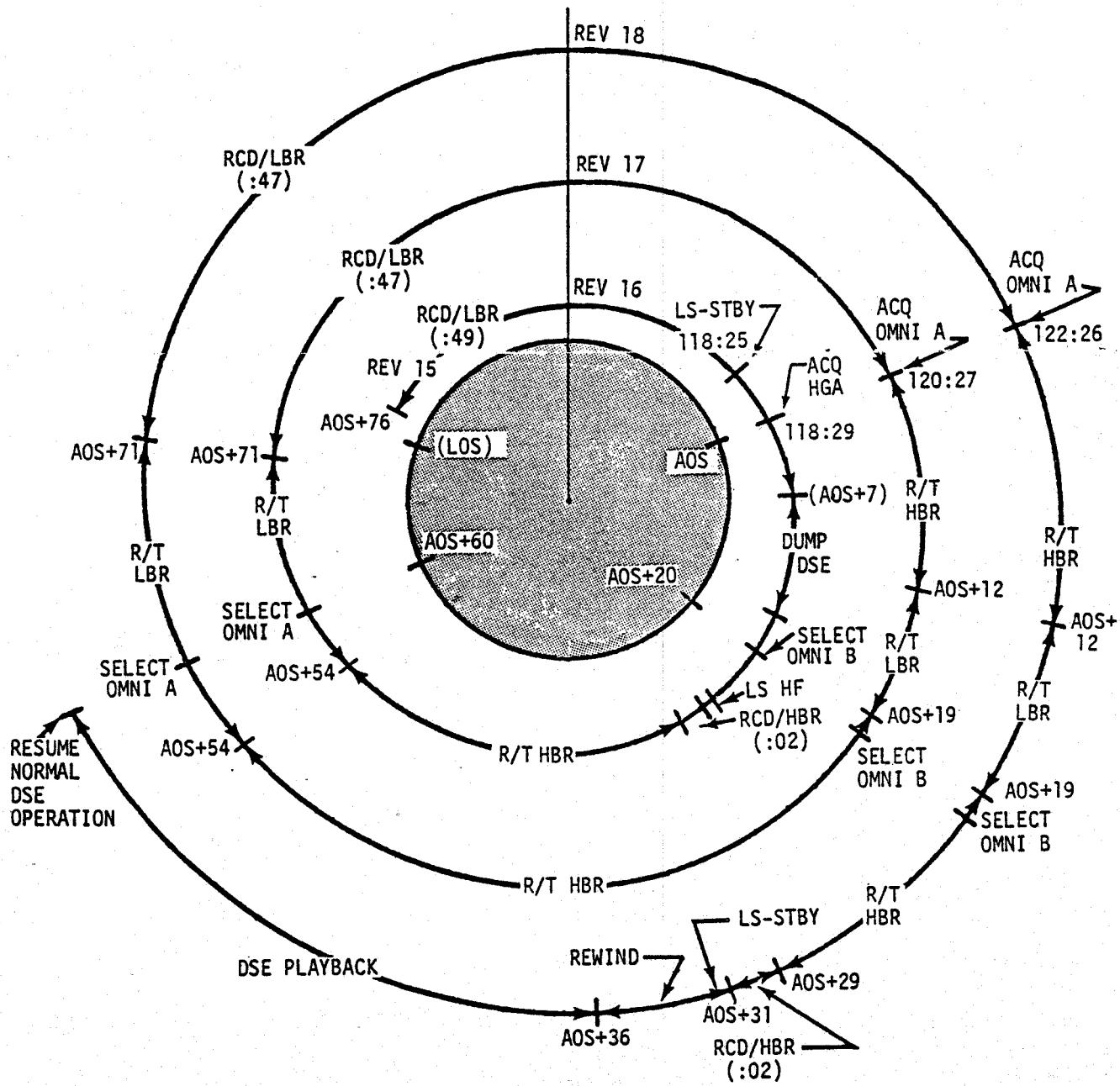
2-26

10/23/72

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CHART 2-1
(12/6)LUNAR SOUNDER EMI TEST
REV 14
FILM USED: 5 MIN

(12/6)
LUNAR SOUNDER HF MODE
 REVS 16, 17, 18
 FILM USED - 245 MIN



10/23/72

CHART 2-3

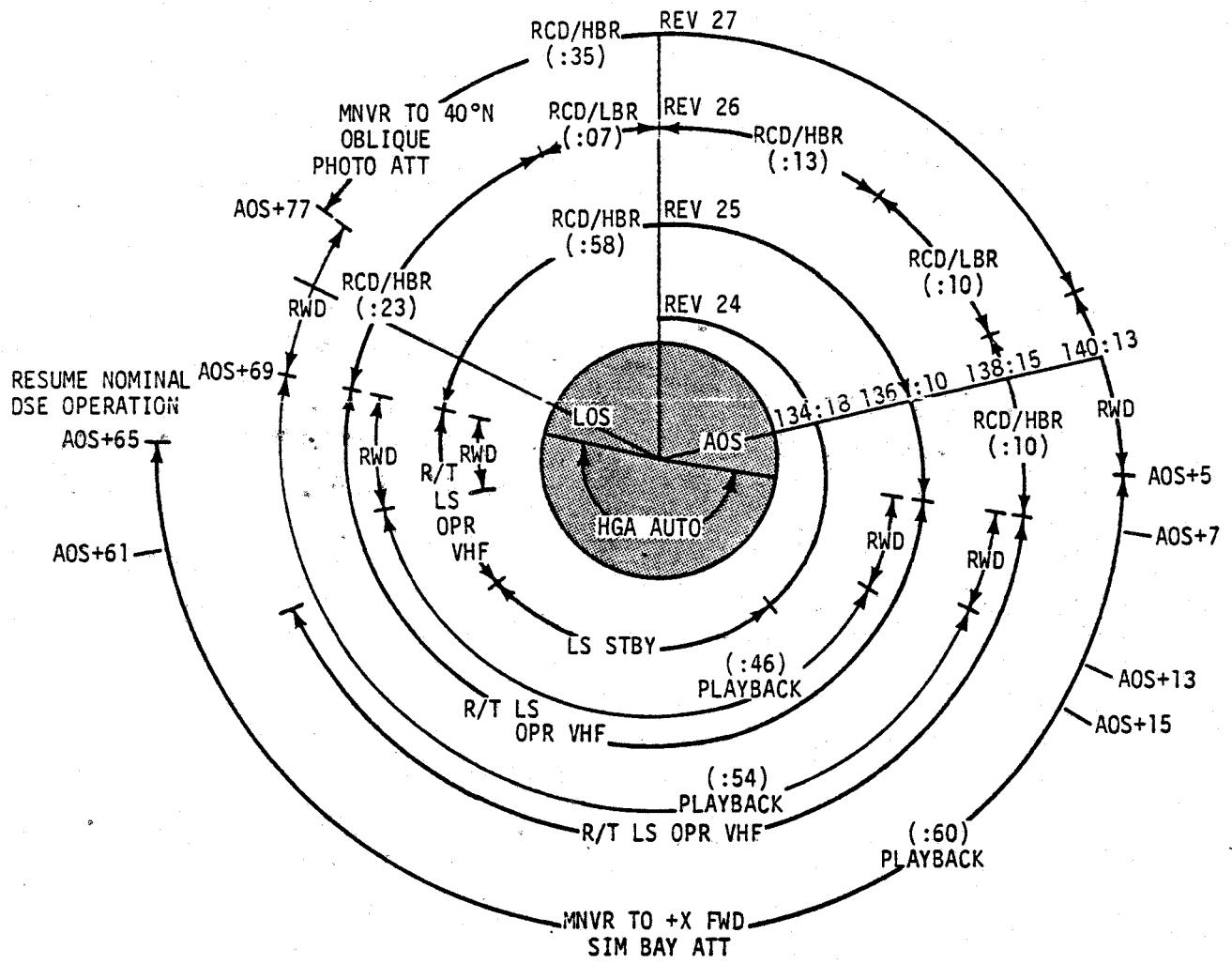
2-29

(12/6)

LUNAR SOUNDER VHF MODE

REVS 24, 25, 26, 27

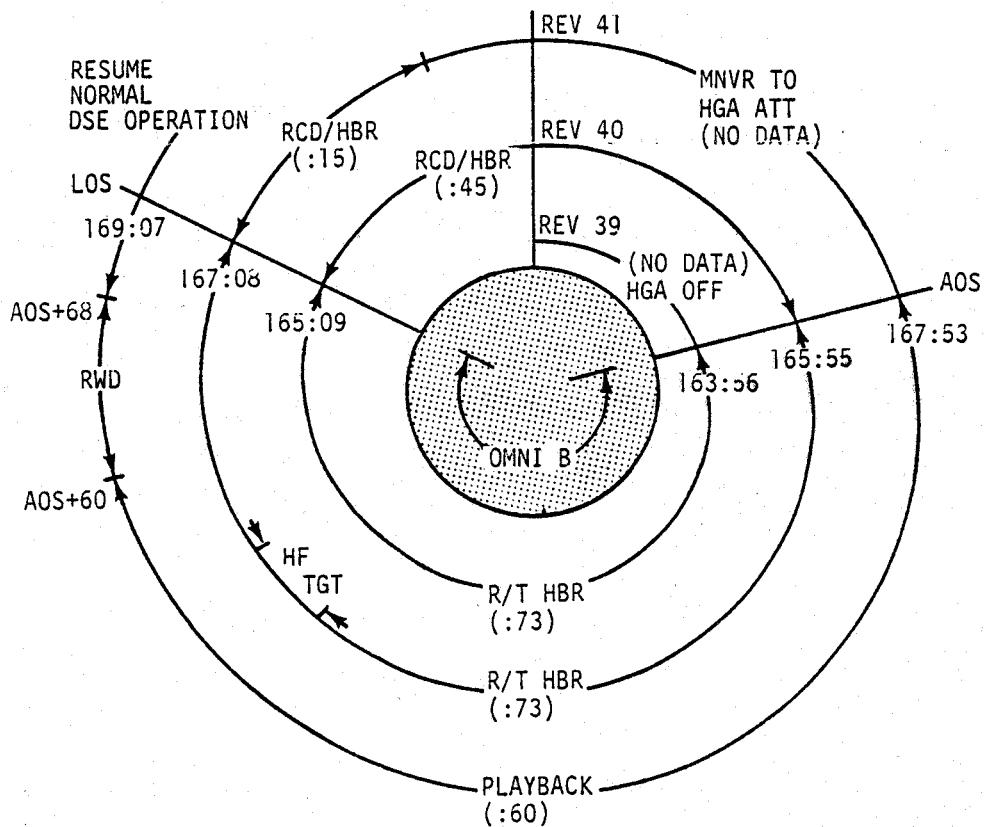
FILM USED - 245 MIN



2-30

10/23/72

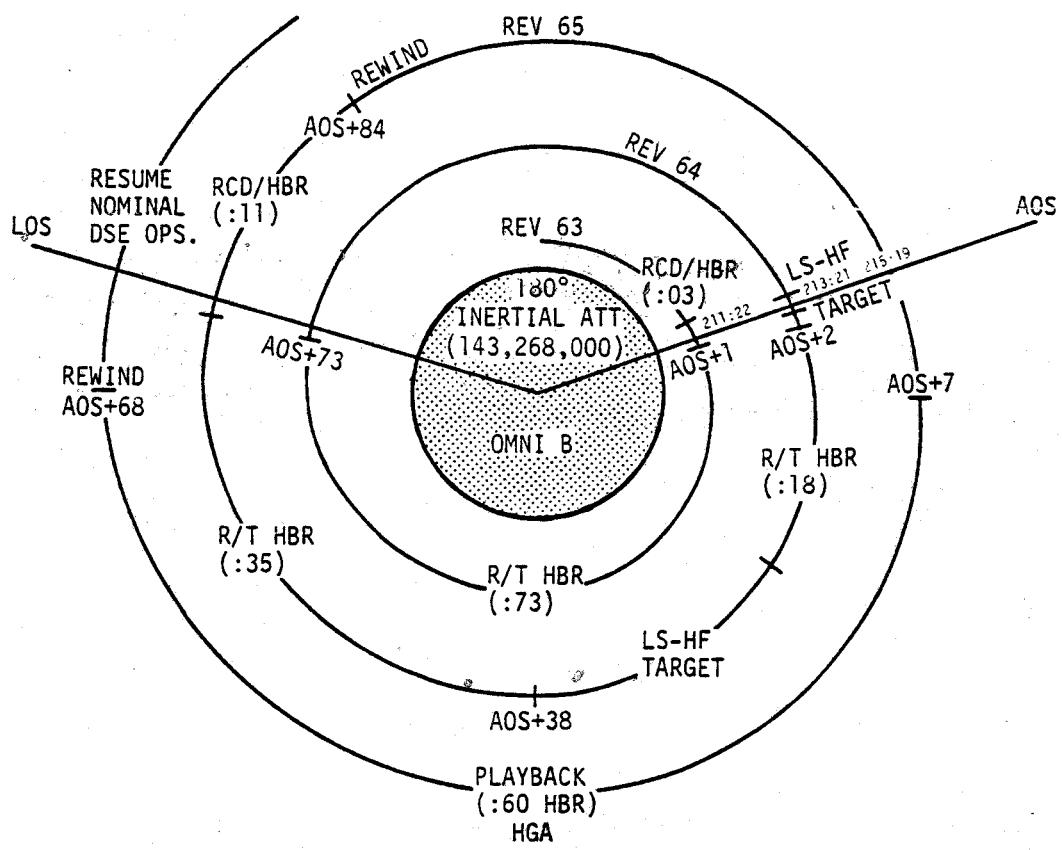
CHART 2-4
(12/6)
LUNAR SOUNDER RECEIVE ONLY (SEP-ON)
REVS 39, 40, 41

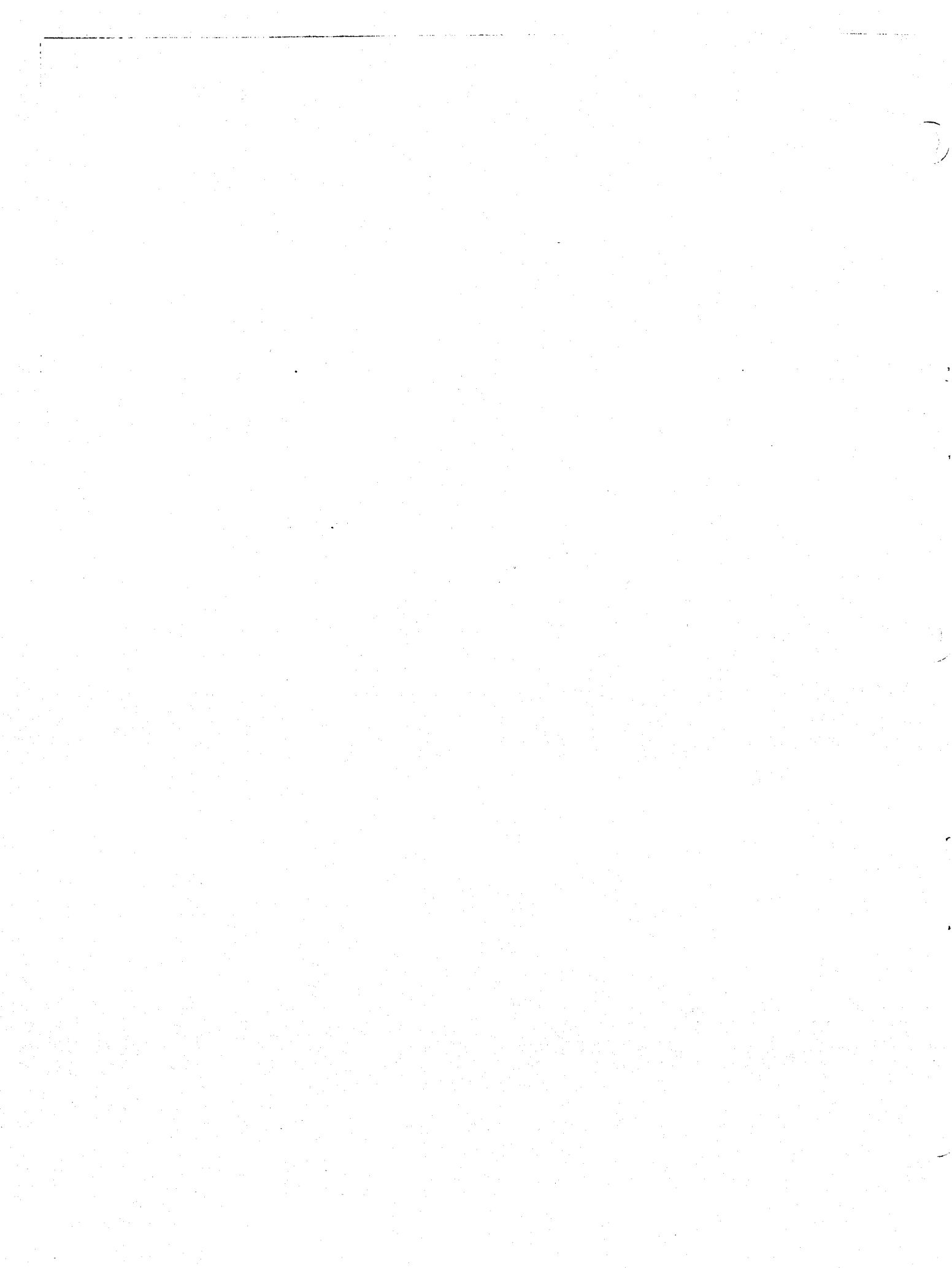


10/23/72

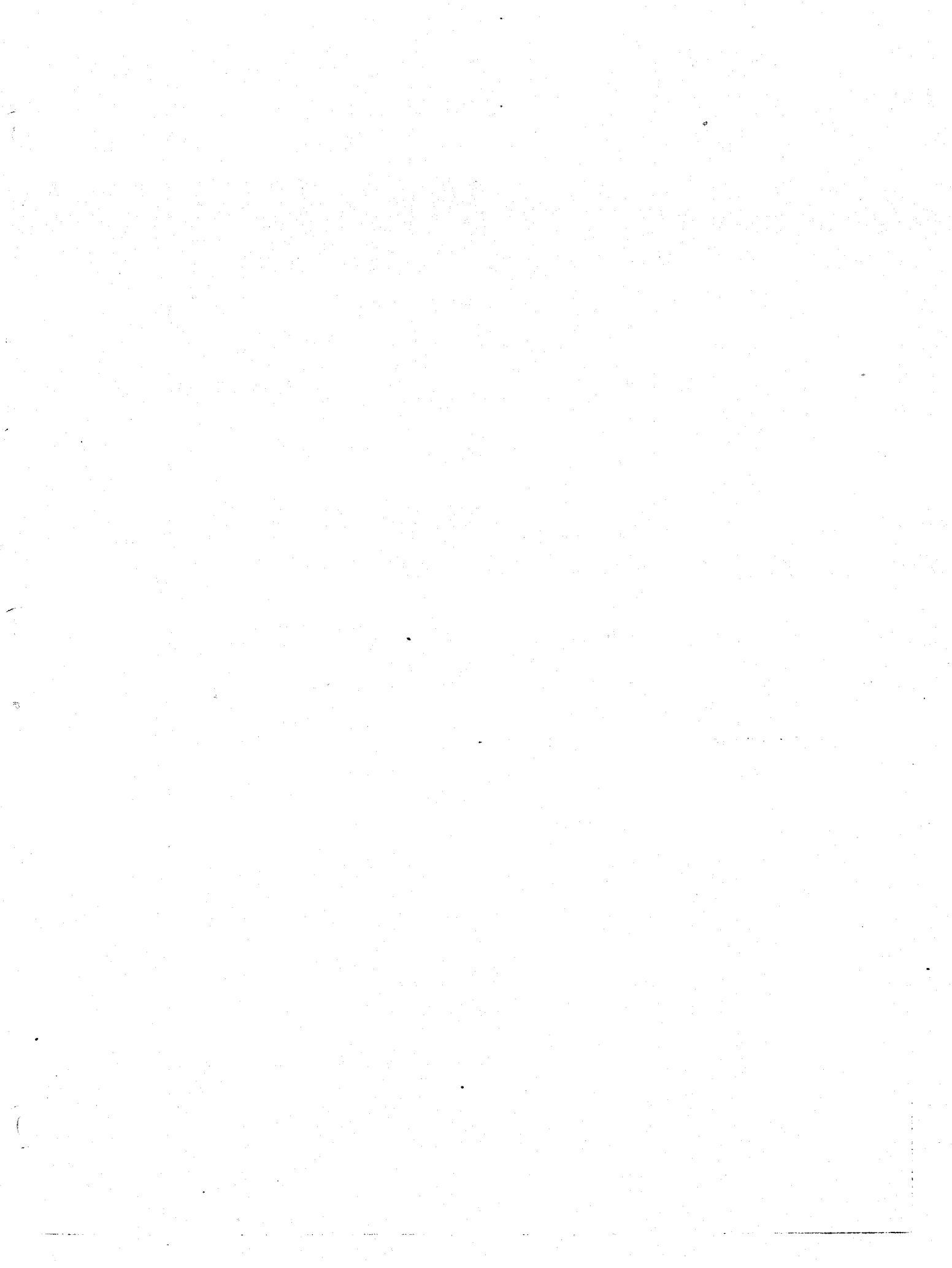
2-31

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





SECTION 3 - DETAILED TIMELINE



MCC-H

FLIGHT PLAN

NOTES

AT SEC0+20 SEC, S-IVB
MVRS TO LH AND
INITIATES ORB RATE
(HEADS DOWN)

2053 CST

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

UPDATE
Z TORQUING ANGLE

:10 | T | S | T | D | N | C | Y | I |

:20

00:30

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

P52 (OPTION 3)
(LAUNCH ORIENT)

:50

CRO

GDC ALIGN

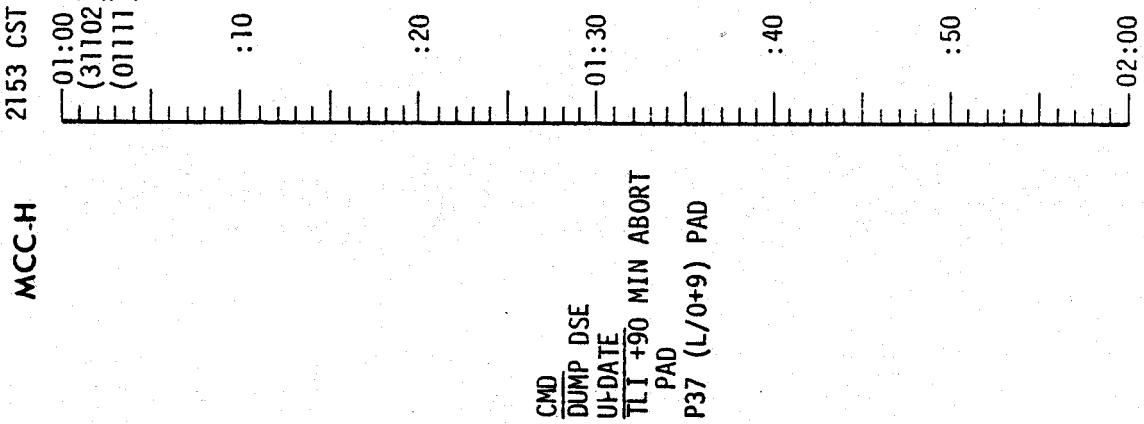
REPORT: GYRO TORQUING ANGLES
TWO WAY S-BAND VOICE CHECK
SCS ATT REF COMPARISON CHECK PAGE L/2-17 - C-4

01:00

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

FLIGHT PLAN

MCC-H



NOTES

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

NOTES

2253 CST

02:00
(31102)
(01111)

:10

:20

T CRO T

02:30

:40

T HAW T

03:00

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.0.	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

APOLLO 17 FINAL (12/6)

10/23/72

E.O./TLC

3-4

MCC-H

2353 CST

FLIGHT PLAN

NOTES

UPDATE GO/NO-GO FOR T&D

:10 TB6 3:11:41

GO/NO-GO FOR TLI

OMNI C

TLI

OMNI D

P00

V66

SET CSM S.V. INTO LM, S.V.

TLI BURN STATUS REPORT

CDR - TRANS TO CENTER COUCH, CMP - LEFT COUCH

NORMAL SC/BOOSTER SEPARATIONS PAGE L/3-1

DIRECT 02 VLV - OPEN, UNTIL CABIN IS 5.7 PSI, THEN CLOSE

V48 (1103)(01111)

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

(002,310,041) OMNI D

UPDATE GO/NO-GO FOR T&D

:50

S

T

D

N

J

04:00

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

AT SEC0: S-IVB INERTIAL
AT SEC0 +2 MIN 31 SEC:
S-IVB TO LOCAL
HORIZONTAL, ORB RATE
HEADS DOWN

T&D MNVR
+X FOR 3 SEC (Δ V ~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 (Δ V ~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

MCC-H

NOTES

0053 CST

04:00
 (11103)
 (01111)

:10

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-PROPELLIVE VENT START 4:27:05

TUNNEL HATCH REMOVAL (DECAL)

DOCKING LATCH VERIFICATION (DECAL)

LM UMBILICAL CONNECTIONS (DECAL)

HATCH INSTALLATION (DECAL)

S-IVB NON-PROPELLIVE VENT COMPLETE 4:42:05
 PRE LM SEP & EJECTION

V48 (21101)(1111)
 GO/NO-GO FOR PYRO ARM (CUE STDN)
 LOGIC ON
 PYRO ARM

:40

(21101)
 (1111)
 :50

05:00

**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

APOLLO 17

10/23/72

FINAL(12/6)

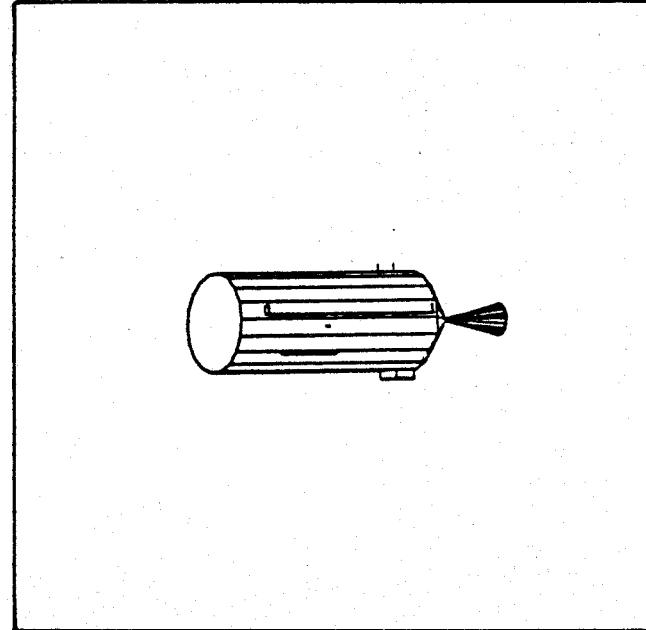
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3-7

FLIGHT PLAN

GET 05:10

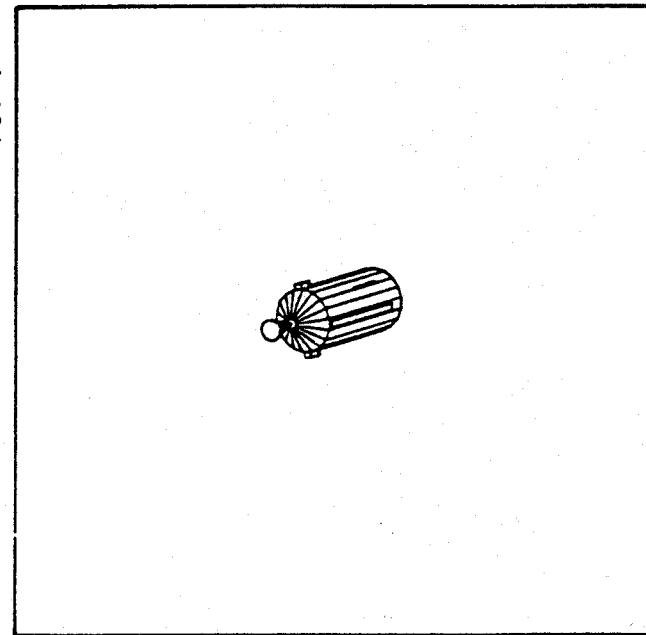
FOV 5°



S-IVB APS EVASIVE INITIATION

GET 05:31

FOV 1°



S-IVB LOX DUMP INITIATION

APOLLO 17 FINAL (12/6)

10/23/72

1/TLC

3-8

FLIGHT PLAN

MCC-H 0153 CST
 05:00 (21101)
 (1111)

TLI CUTOFF +
 1 HR 40 MIN

UPDATE
GO FOR S-IVB YAW
MNVR INITIATION

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

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

CSM/LM EJECTION 05:07

P00, V66 SET CSM S.V. INTO LM S.V.
 REPORT: GOOD EJECTION

V49 MNVR TO VIEW S-IVB IN HATCH WINDOW BY 05:16

REPORT: GO FOR S-IVB YAW MNVR
 (270.0, 129.8, 004.3) HGA P -1, Y 273

REPORT: GO FOR S-IVB YAW MNVR
 VISUALLY INSPECT S-IVB/TU THERMAL SHROUD

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

REPORT: GO FOR S-IVB EVASIVE BURN

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.

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 MNVR'S 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 CMG
 CMP & LMP DOFF BIOMED HARNESS
 DUMP UCTA

NOTES

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

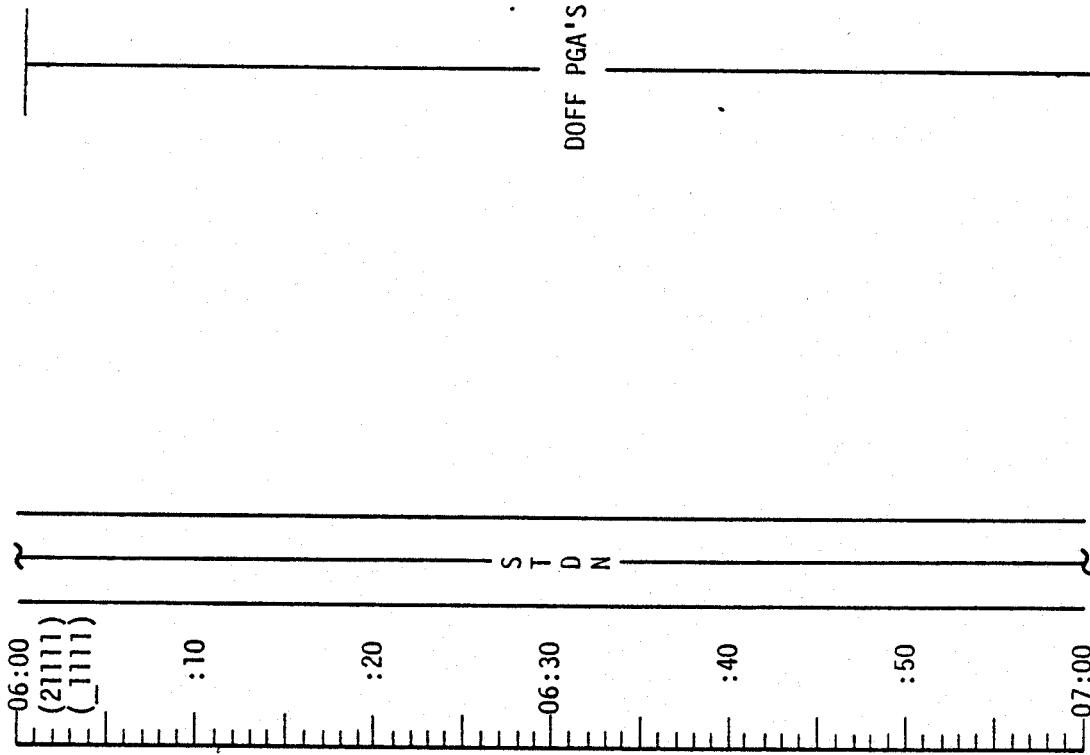
LOX DUMP ΔV ~28 FPS

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

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

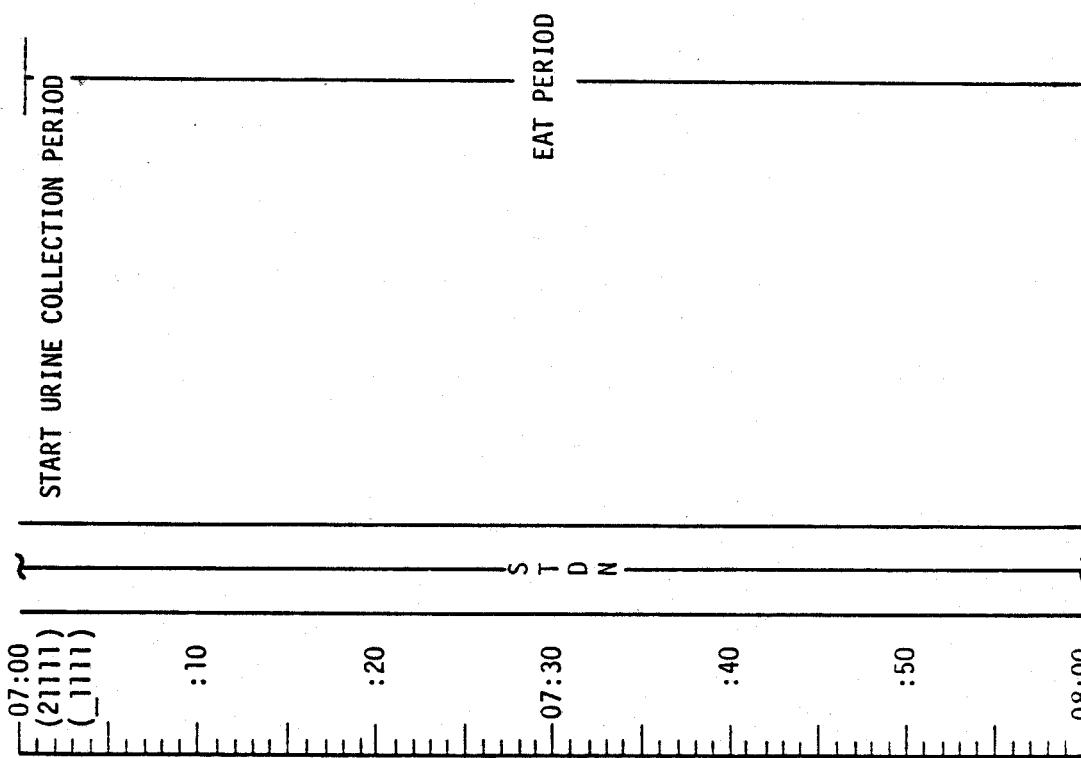
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	06:00 - 07:00	1/TLC	3-10

FLIGHT PLANNING BRANCH

MCC-H

FLIGHT PLAN

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

UPLINK
ZERO TRUNNION BIAS
DESIRED ORIENT (PTC)
(21101)
(111)

WASTE STOWAGE VENT VALVE - CLOSE

LIMIT CYCLE - ON

ATT DEADBAND - MIN

RATE - LOW

BMAG (3) - ATT 1/RATE 2

SC CONT - SCS

P52 (OPTION 3)

(LAUNCH ORIENT)

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)(111)

CSM G&C CHECKLIST

PASSIVE THERMAL CONTROL (G&N)

PAGE 6/8-2

V49 MNVR TO PTC ATTITUDE

(N20,90,000)

H2 HEATERS 1 & 2 - AUTO (VERIFY)

H2 FANS 3 - AUTO

02 HEATERS 1 & 2 - OFF

02 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
COMM - OMNI
PAGE S/1-29

NOTES

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

MAG (II) _____, FR # _____

PTC REFSMMAT ATT
R 196, P 169, Y 055

P52 IMU REALIGN

N71: _____, _____
N05: _____, _____

N93:

X _____, _____
Y _____, _____
Z _____, _____

GET _____, _____

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

DAP LOAD STATUS
(21101)(1111)

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

NOTES

DAP LOAD STATUS
(21101)(1111)

MCC-H

09:00

CHARGE BATTERY B

:20

FILM MAGS REQUIRED FOR NEXT DAY

EL: KK

:40

10:00

S

T

D

N

:40

REST PERIOD
(5.75 HOURS)

PTC

:20

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

:40

11:00

MISSION EDITION DATE

DAY/REV

PAGE

APOLLO 17 FINAL (12/6) 10/23/72

09:00 - 11:00

1/1LC

3-13

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCCC-H

NOTES

DAP LOAD STATUS
(21101)(_111)

0753 CST

11:00

:20

:40

12:00

REST PERIOD
(5.75 HOURS)

S T D N

:20

:40

13:00

PTC

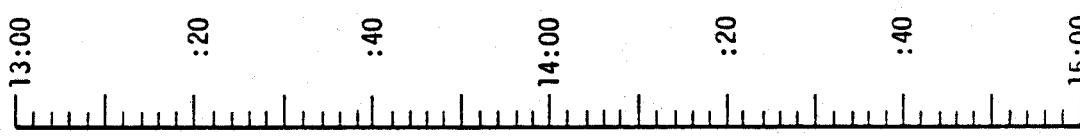
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	11:00 - 13:00	1/TLC	3-14

FLIGHT PLANNING BRANCH

MCC-H

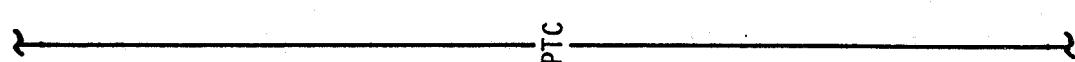
FLIGHT PLAN

0953 CST



NOTES

DAP LOAD STATUS
(21101)(_1111)



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

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCCC-H 1153 CST

15:00

POST-SLEEP CHECKLIST

H₂ HEATERS 1&2 - OFF

10

20

15:30

40

50

16:00

NOTES

DAP LOAD STATUS
(21101)(1111)

EARTH DISTANCE
~66,783 NM

- PTC -

GET=15:00

FOV=7°

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

MCC.CH

FLIGHT PLAN

1253 CST

16:00
(21101)
(1111)

:10

:20

16:30

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

:40

:50

17:00

EAT PERIOD

S T D N

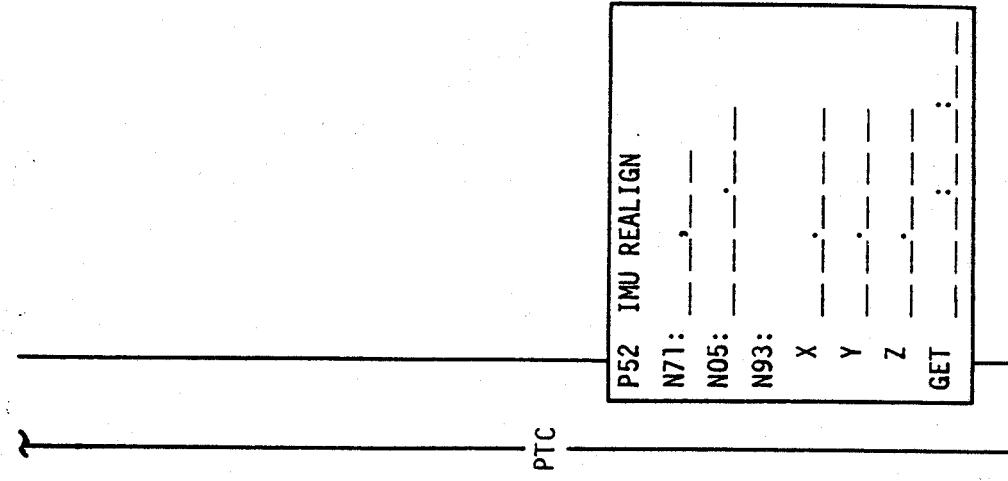
P52 (OPTION 3)
(PTC ORIENT)

REPORT: GYRO TORQUING ANGLES
GDC ALIGN

CSM G&C CHECKLIST

EXIT G&N PTC PAGE 6/8-3
WASTE STOWAGE VENT VLV - OPEN

NOTES



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

FLIGHT PLAN

MCC-H

NOTES

1353 CST

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

P23 CISLUNAR NAVIGATION
 OPTICS CALIBRATION STAR N70 (00022)
 P00
 V49 MNVR TO SIGHTING ATTITUDE (17:17)
 (204,313,340) HGA P -55, Y 357
 V67 (+80000) (+00070) (+00003)
 P23 CISLUNAR NAVIGATION
 5 MARKS ON EACH STAR, UPDATE STATE VECTOR
 1. N70 (00000) (00000) (00110)
 N88 (-53277)(+14235)(+83420)

17:30

:50

:50

:50

17:00
 {
 2|10|
 1|11|

:10

:20

:40

18:00

T
 D
 N

55 BETELGEUSE
 (EFH)

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

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

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

MCC-H

FLIGHT PLAN

NOTES

- 106 MENKALINAN
(EFH)
-
4. N70 (00000) (00000) (00120)
N88 (+00780)(+70773)(+70644)

18:00
(2101)
(1111)
:10

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

18:30 D N S T :20 :40

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

CMD DATA SYS - OFF

19:00

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

FLIGHT DIARIES BY RANDI

FLIGHT PLAN

MCC.C-H

NOTES

1953 CST
E (21101)
(11111)

:10

UPDATE QUADS TO ENABLE FOR PTC SPINUP FLIGHT PLAN

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

[CSM G&C CHECKLIST]

PASSIVE THERMAL CONTROL PAGE 6/8-2

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)

S T
CHECK LMP BIOMED
CDR DOFF BIOMED HARNESS

EARTH PHOTOS

CM/EL/250-CEX(f8,1/250, ∞) 4 FR

MAG (KK) _____, FR # _____

PTC

:50

20:00

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

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1653 CST
20:00
(2110)
1111

:10

:20

20:30

S T D N

:40

:50

21:00

EAT PERIOD

PTC

NOTES

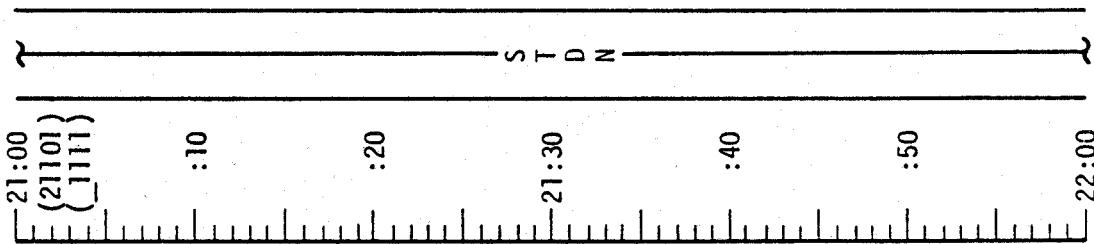
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	20:00 - 21:00	2/TLC	3-21

FLIGHT DRAWMNGS DRAWN BY

FLIGHT PLAN

MCC-H

1753 CST



NOTES

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

MCC-H

FLIGHT PLAN

1853 CST

22:00
(2110)
(1111)

:10

:20

UPDATE
FLIGHT PLAN

22:30

S T D N

:40

:50

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

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

FLIGHT PLANNING BRANCH

NOTES

PTC

CREW EXERCISE PERIOD

FLIGHT PLAN

MCC-H

NOTES

1953 CST
 (21101)
 (1111)

P52 OPTION 3
 (PTC ORIENT)

:10 REPORT: GYRO TORQUING ANGLES
 GDC ALIGN

:20

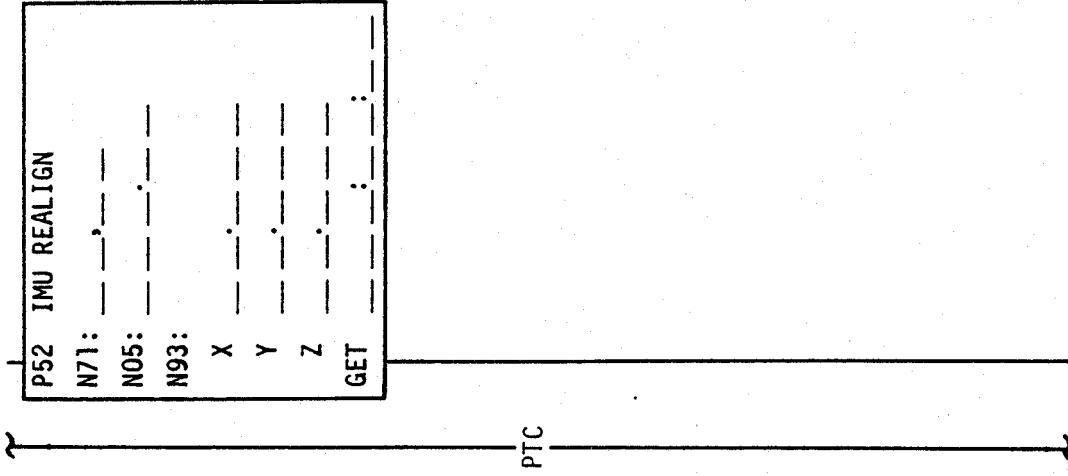
23:30

S T D N

:40

24:00

EAT PERIOD



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

MCC-H

FLIGHT PLAN

2053 CST

24:00
(21101)
{1111}

:10

:20

24:30

:40

:50

25:00

EAT PERIOD

S

T

D

N

CSM SYSTEMS CHECKLIST

PRE-SLEEP CHECKLIST PAGE S1-29
COMM - OMNI
FILM MAGS REQUIRED FOR NEXT DAY

DAC: HH

NOTES

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

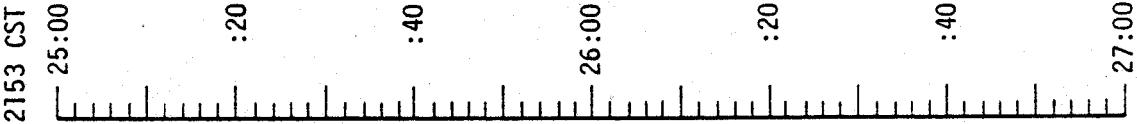
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	24:00 - 25:00	2/TLC	3-25

FLIGHT PLAN

MCC.C.H

NOTES

DAP LOAD STATUS
(21101)(_1111)



REST PERIOD
(8 HOURS)

PTC

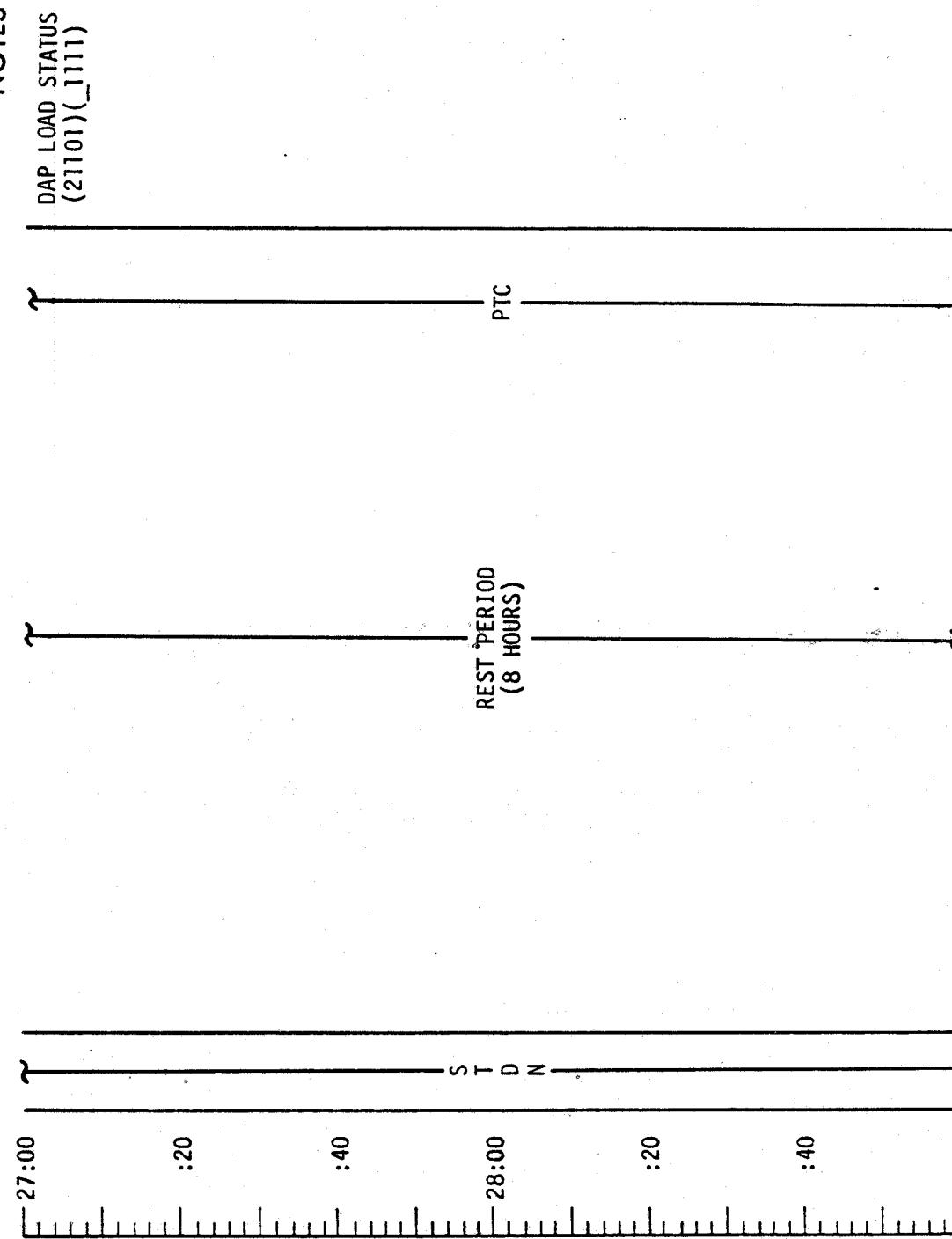
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	25:00 - 27:00	2/TLC	3-26

FLIGHT PLANNING BRANCH

MCC-H

FLIGHT PLAN

2353 CST



NOTES

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

29:00

:20

:40

30:00

S T D N

:20

:40

31:00

NOTES

DAP LOAD STATUS
(21101)(_1111)

PTC

REST PERIOD
(8 HOURS)

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

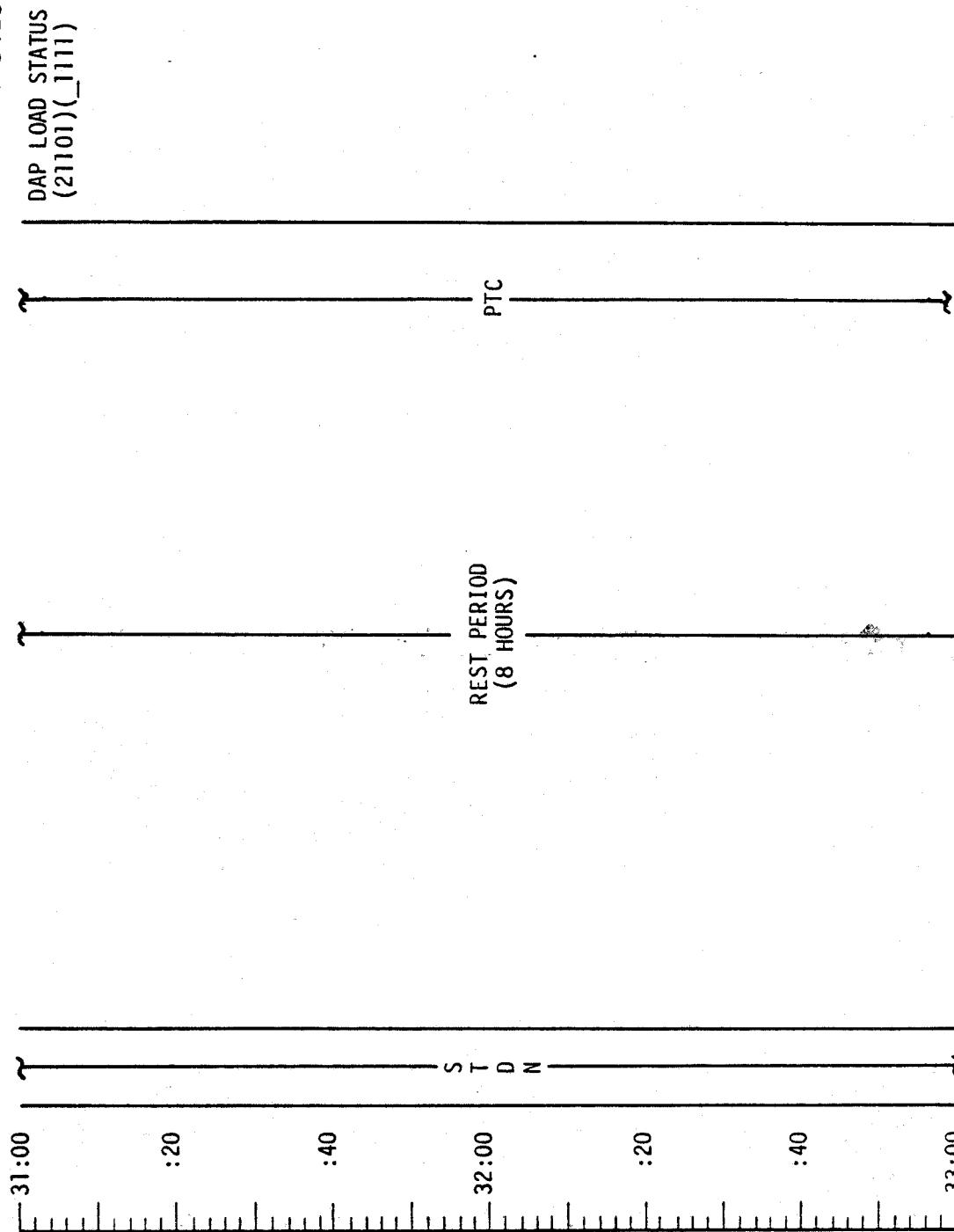
FLIGHT PLANNING BRANCH

MCC-H

FLIGHT PLAN

0353 CST

DAP LOAD STATUS
(21101)(1111)



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

FLIGHT PLANNING RANCH

FLIGHT PLAN

MCC-H

0553 CST

CSM SYSTEMS CHECKLIST

POST-SLEEP CHECKLIST PAGE S/1-29

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

:10

:20

**UPDATE
GO/NO-GO FOR MCC-2**

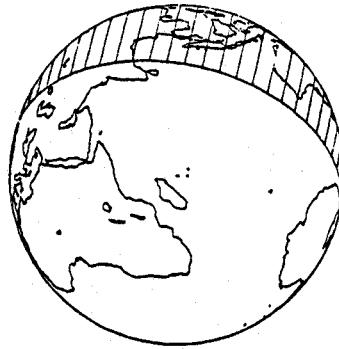
NOTES

DAP LOAD STATUS
(21101)(1111)
EARTH DISTANCE
~121,497 NM

*PERFORM IF MCC-2
IS REQUIRED

PTC

GET=33:00
 $V_1 = 428 \text{ ips}$
FOV=4°



PAGE 6/2-5

*** CSM G&C CHECKLIST**

* EMS AV TEST & NULL BIAS CHECK
* REPORT: BIAS

S T D N

33:30

EAT PERIOD

:40

:50

34:00

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

MCC-H

FLIGHT PLAN

0653 CST

34:00
[(21101)
{ 1111]

:10

EAT PERIOD

:20

CONFIGURE FOR URINE DUMP
 H_2 PURGE LINE HTRS-ON

34:30

S T D N

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

UPDATE
MCC-2 MNVR PAD
FLIGHT PLAN

:40

P52 (OPTION 3)
(PTC ORIENT)
REPORT: GYRO TORQUING ANGLES
GDC ALIGN
* CSM G&C CHECKLIST
* EXIT G&N PTC PAGE 6/8-3
* P30 EXTERNAL AV

35:00

*V49 MNVR TO PAD BURN ATTITUDE
*SXT STAR CHECK

NOTES

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

*PERFORM IF MCC-2
IS REQUIRED

PTC

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

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-2
BURN TABLE

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

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

APOLLO 17 FINAL (12/6)

10/23/72

3/TLC 3-32

PLAN

三
MCC-H

0753 CST

35:00

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

一

:10 :20

20

:40

111

50

CHARGE BATTERY A

NOTES
ON
Z

***PERFORM IF MCC-2
IS REQUIRED**

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

MCC-2

*V66 SET CSM S.V. INTO LM S.V.
*15 SDS MIDCOUNCIL DECODED
VILLAGE: NONE

III. 3rd MIDCOURSE PERFORMANCE:

FC = OFF

* SM/AC BWD = OFF

卷之三

*REPORT: BIBN STATUS

卷之三

REPORT: LM/CM AP

IF LM/CM AP <2.7 PSI

UNTIL AP >2.7 PSID.

UNTIL $\Delta P \geq 2.7$ PSID.

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

MCC-H

FLIGHT PLAN

NOTES

0853 CST

{21111} T
{11111} CMP DON BIOMED HARNESS

:10

:20
CHECK CMP BIOMED
LMP DOFF BIOMED HARNESS

S T D N
36:30

:40

:50

37:00

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

37:00
[(21111)
[(1111)

:10

:20

37:30
S T D N

:40

:50

38:00

NOTES

UPDATE
FLIGHT PLAN

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

FLIGHT PLANNING: RDANIC

FLIGHT PLAN

MCC-H

1053 CST

E
F
(2111)
1111

38:00

:10

:20

38:30

S
T
D
N

:40

:50

39:00

EAT PERIOD

NOTES

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

FLIGHT PLANNING BRANCH

CSM TO LM TRANSFER LIST (TLC)		
CSM LOCATION	ITEM	LM LOCATION
A2	JETTISON BAG	TEMP STOW
ICG	SCISSORS (1)	DATA FILE
CCU CABLE	CWG ELECT ADAPT W/CAP (2)	ON COMM CARRIER
ON CREW	COMM CARR (2)	ON CREW
R5	INFLIGHT STRAPS (4)	ON 02 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
A8	70MM MAG (3) IN BAG W/DOS	CAMR (0)
A8	70MM MAG (2) IN BAG	AFT ENG COVER(BW-J,K,R)
R3	LM ACTIVATION C/L (2)	RHSSC (BW-M,N)
A8	LGT WGT HEADSETS	DATA FILE
A8	CWG'S (2)	LHSSC
A7	APK	AFT ENG COVER AFT BLKHD

FLIGHT PLAN

MCCC H 1153 CST

NOTES

PREPARE ITEMS PER CSM TO LM TRANSFER LIST

PREPARE ITEMS PER CSM
02 HEATERS 1,2 - AUTO

•

V49 MNVR TO LM
CHECKOUT ATTITUDE
(39:30)

20

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

39:30

四

**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)
 O_2 HEATERS 1,2 - OFF
 0₂ 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 PLAN

CSM

CMP

REPORT: DOCKING
TUNNEL INDEX ANGLE

OPEN LM HATCH

LMP TRANSFER TO LM
TRANSFER ITEMS PER
LM ACTIVATION
CHECKLIST

LM

CDR

LM ACTIVATION CHECKLIST

PAGE 1-3

IVT TO LM

IVT TO LM

IVT TO LM

HOUSEKEEPING

1253 CST
40:00
[(21111)
[11111]
] _11111]

:10

:20

40:30

:40

:50

41:00

MCC-H

UPDATE TO CSM
LOT -5 HR FLYBY
FLIGHT PLAN

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

FLIGHT PLANNING BRANCH

FLIGHT PLAN

CSM

CMP

1353 CST

41:00

[(21111)
[1111]

LMP

LMP

LMP

:10

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)

COMM ACTIVATION

:20

S-BAND/VHF SIMPLEX VOICE TEST

:40

OPS PRESSURE C/0

:50 COMM DEACTIVATION

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

LMP & CDR IVT TO CSM PAGE 1-21

MCC-H

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

FLIGHT PLANNING BRANCH

MCC-H

FLIGHT PLAN

1453 CST

NOTES

LM TO CM TRANSFER LIST (TLC)		
LM LOCATION	ITEM	CM LOCATION
ON CREW	COMM CARR (2)	ON CREW
ON CREW	CNG 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

CLOSE LM HATCH
 INSTALL DROGUE (DECAL)
 INSTALL PROBE (DECAL)
 HATCH INSTALLATION (DECAL)
 LM TUNNEL VENT VALVE - LM/CM ΔP
 TUNNEL LIGHTS - OFF
 :10
 CYCLE CMC MODE - FREE/AUTO
 V48 (21101)(1111)

S

T

D

N

CSM G&C CHECKLIST

PASSIVE THERMAL CONTROL (G&N) PAGE 6/8-2
 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)

43:00

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

NOTES

1553 CST
43:00
(21101)
(1111)

:10

UPDATE
QUADS TO ENABLE
FOR PTC SPINUP

.20

43:30

S T D N

:40

CMD
DATA SYS - ON

:50

CMD
DATA SYS - OFF

44:00

*PERFORM HEAT FLOW AND
CONVECTION DEMONSTRATION

*REPEAT AT 45:20

CSM EXP/EVA CHECKLIST

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

OMNI A
SECURE HGA: MAN, WIDE P -52, Y 270
P20 OPT 2, X-AXIS (G&C PAGE 6/8-2)
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

MCC:H

FLIGHT PLAN

1653 CST

(21101)
(1111)

:10

:20

44:30

:40

:50

45:00

S T D N

CREW EXERCISE PERIOD

PTC

NOTES

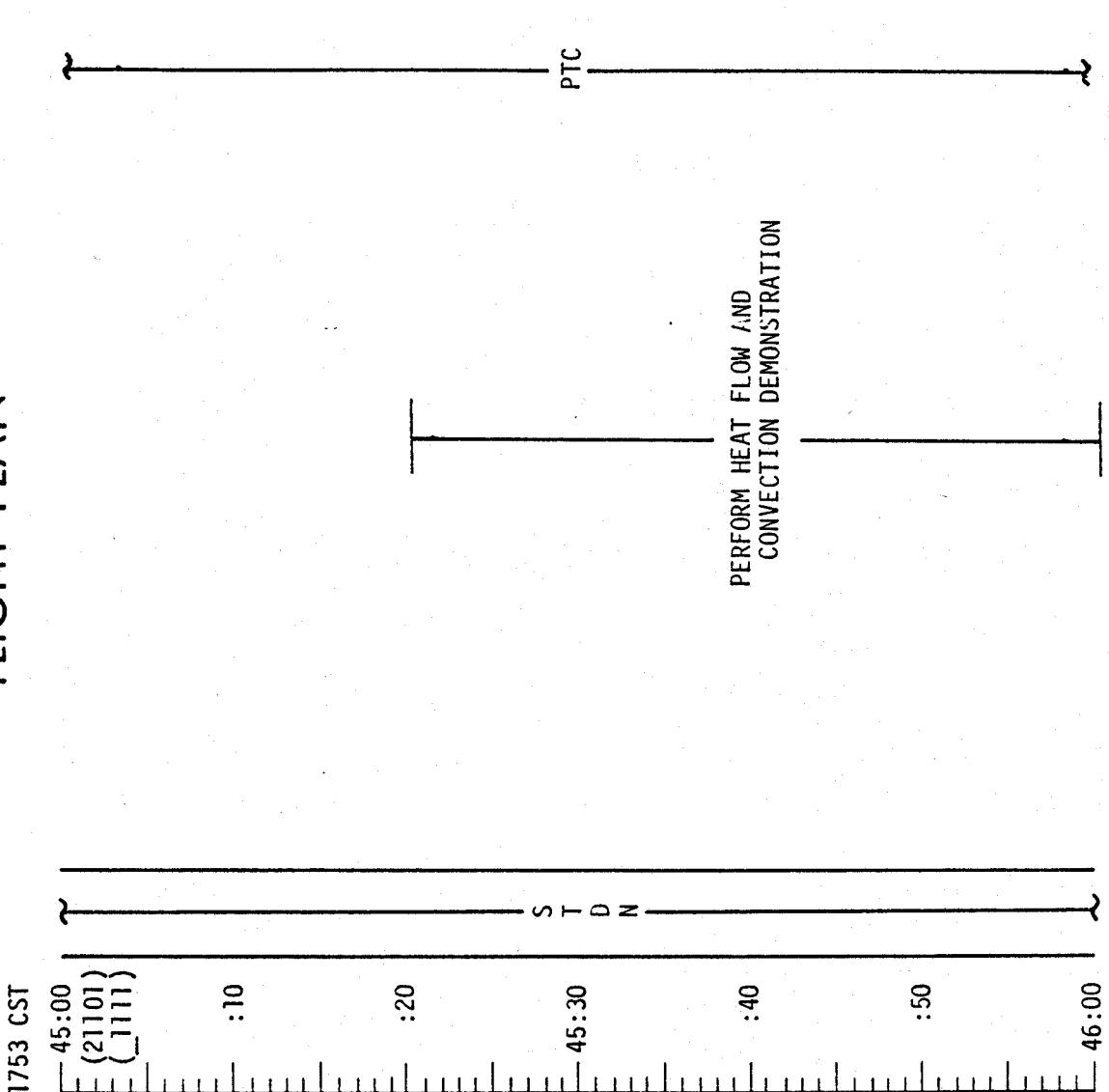
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	44:00 - 45:00	3/TLC	3-43

FLIGHT DIARIES AND AIRL

FLIGHT PLAN

MCC-H

NOTES



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

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

46:00

STOW HEAT FLOW EQUIPMENT

(2110)
{
1111}

:10

:20

UPDATE FLIGHT PLAN

46:30

P52 OPT 3
(PTC ORIENT)

S
T
D
N

:40

REPORT: GYRO TORQUING ANGLES
GDC ALIGN

:50

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

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

NOTES

ENTER LUNAR
PENUMBRA

P52 IMU REALIGN	
N71:	—, —, —.
N05:	—, —, —.
N93:	—, —, —.
PTC	X —, —, —. Y —, —, —. Z —, —, —. GET —, —, : —;

FLIGHT PLAN

MCC-H

1953 CST

NOTES

47:00 ~ CDR DON BIOMED HARNESS

{21101
11111}

:10

:20 CHECK CDR BIOMED
CMP DOFF BIOMED HARNESS

47:30

S T D N

:40

EAT PERIOD

:50

48:00

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

MCC-H

FLIGHT PLAN

2053 CST

(21101)
{
1111}

48:00

:10

:20

48:30

:40

:50

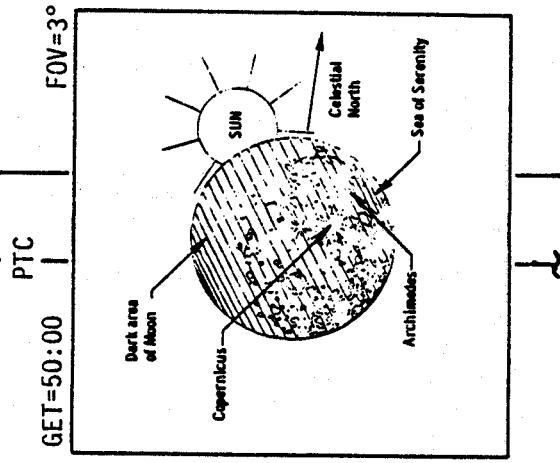
49:00

S T D N

CSM SYSTEMS CHECKLIST
PRE-SLEEP CHECKLIST PAGE S/1-29
COMM - OMNI
FILM MAGS REQUIRED FOR NEXT DAY
DAC: SS

NOTES

EAT PERIOD



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

49:00

50:00

51:00

52:00

53:00

54:00

55:00

56:00

57:00

58:00

59:00

60:00

61:00

62:00

63:00

64:00

65:00

66:00

67:00

68:00

69:00

70:00

71:00

72:00

73:00

74:00

75:00

76:00

77:00

78:00

79:00

80:00

81:00

82:00

83:00

84:00

85:00

86:00

87:00

88:00

89:00

90:00

91:00

92:00

93:00

94:00

95:00

96:00

97:00

98:00

99:00

NOTES

DAP LOAD STATUS
(21101)(1111)

PTC

REST PERIOD
(8 HOURS)

S T D N

:20

:40

51:00

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

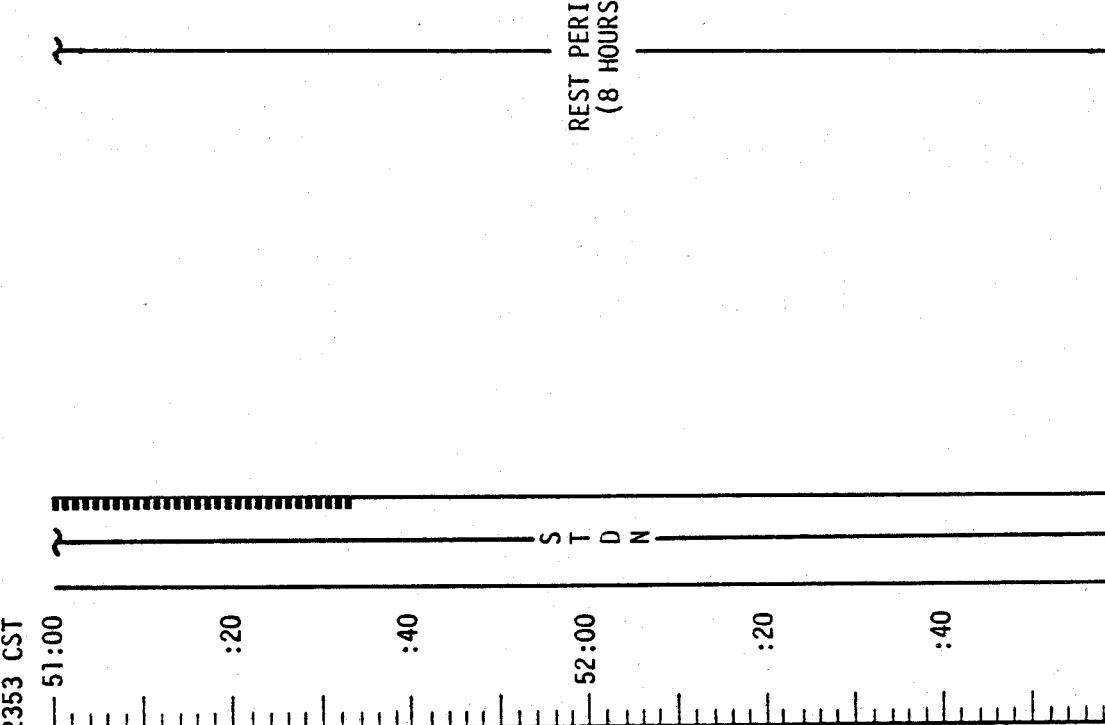
NOTES

DAP LOAD STATUS
(21101)(_1111)

EXIT LUNAR PENUMBRA

PTC

REST PERIOD
(8 HOURS)



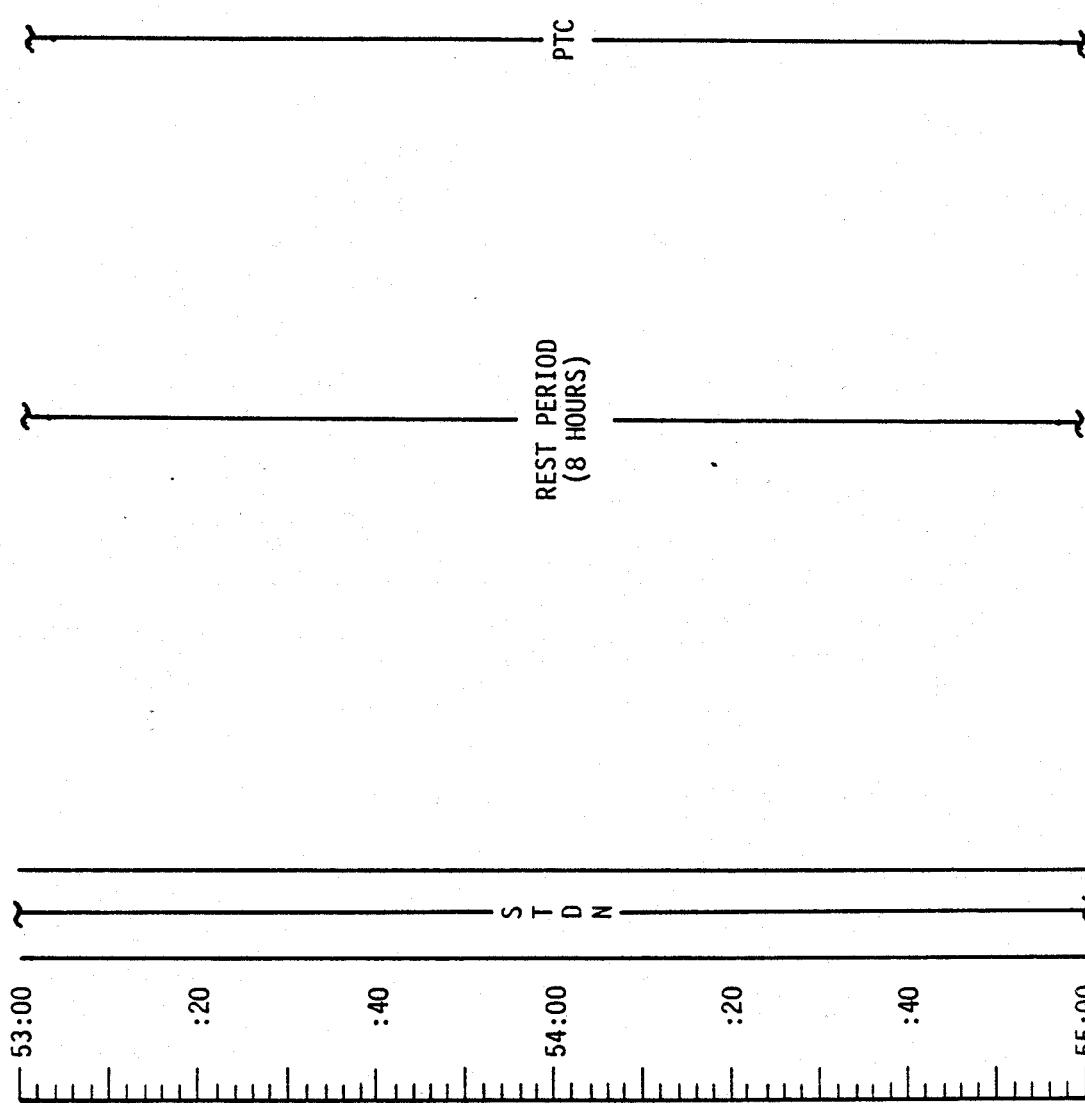
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	51:00 - 53:00	3/TLC	3-49

FLIGHT PLAN

MCC-H

NOTES

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

:20

:40

56:00

:20

57:00

REST PERIOD
(8 HOURS)

PTC

NOTES

DAP LOAD STATUS
(21101)(1111)

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

FLIGHT PLAN

MCC-H

0553 CST

CSM CHECKLIST

POST-SLEEP CHECKLIST

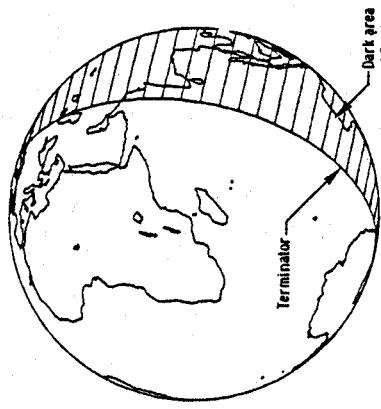
PAGE S/1-29

NOTES

DAP LOAD STATUS
(21101)(1111)
EARTH DISTANCE
~170,566 NM



GET=58:00 PTC FOV=3°
 $V_t = 2756 \frac{\text{ft}}{\text{s}}$



:10

:20

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

57:30



D



N

EAT PERIOD

:40

:50

58:00

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

MCC-H

FLIGHT PLAN

NOTES

DAP LOAD STATUS
(21101)(_1111)

0653 CST

:10

:20

58:30

:40

:50

59:00

EAT PERIOD

CONFIGURE FOR URINE DUMP

PTC

S T D N

UPDATE
CONSUMABLES STATUS
FLIGHT PLAN

SAMPLE BUSS's (3) - STOW SAMPLES (3)
DUMP URINE FROM BUSS's (3) - SLOW
START NEW URINE COLLECTION PERIOD
WASTE WATER DUMP TO 10 PERCENT
O₂ FUEL CELL PURGE

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

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0753 CST

59:00 ~ LMP DON BIOMED HARNESS

:10

CHECK LMP BIOMED
CDR DOFF BIOMED HARNESS

:20

S T D N

59:30

:40

P52 (OPTION 3)
(PTC ORIENT)

:50

REPORT: GYRO TORQUING ANGLES
GDC ALIGN

{21111}
{_11111}

V48 (21111)(11111)
CHARGE BATTERY B

60:00

NOTES

DAP LOAD STATUS
(21101)({_1111})

P52 IMU REALIGN

N71: _____, _____

N05: _____, _____

N93:

X _____, _____

Y _____, _____

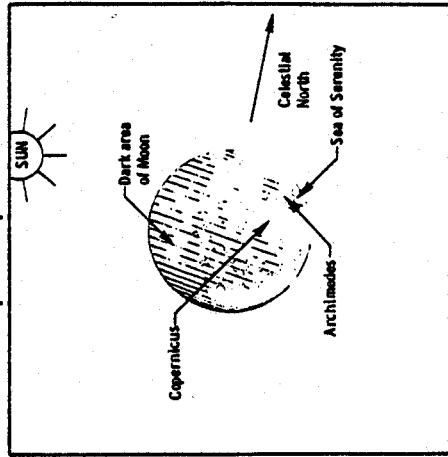
Z _____, _____

GET _____, _____

PTC

GET=60:00

FOV=5°



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

FLIGHT PLANNING BRANCH

MCC-H

FLIGHT PLAN

NOTES

0853 CST	60:00	REPORT: LM/CM AP IF AP > 2.4 PSTD: O ₂ 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 6/8-3	:20	V49 MNVR TO LM CHECKOUT ATTITUDE (66:30) (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 O ₂ HEATERS 1&2 - OFF (VERIFY) [LM]	60:30	S T D N	OPEN LM HATCH [LM ACTIVATION CHECKLIST] IVT TO LM PAGE 2-1	:40	(AT LM REQUEST) LM PWR - RESET/OFF REPORT: GET _____ : _____	61:00	SYS TEST - 7D SYS TEST IND = 0 VOLTS TLM ACTIVATION
----------	-------	---	-----	---	-------	------------------	--	-----	--	-------	---

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

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0953 CST

61:00
T
(2111)
{1111}

CSM

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

:10

:20

E-MEMORY DUMP

61:30 S T D N

:40

:50

62:00

LM

TLM DEACTIVATION

IVT TO CSM

LMP DON PGA WITHOUT
HELMET AND GLOVES

CDR DON PGA WITHOUT
HELMET AND GLOVES

NOTES

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

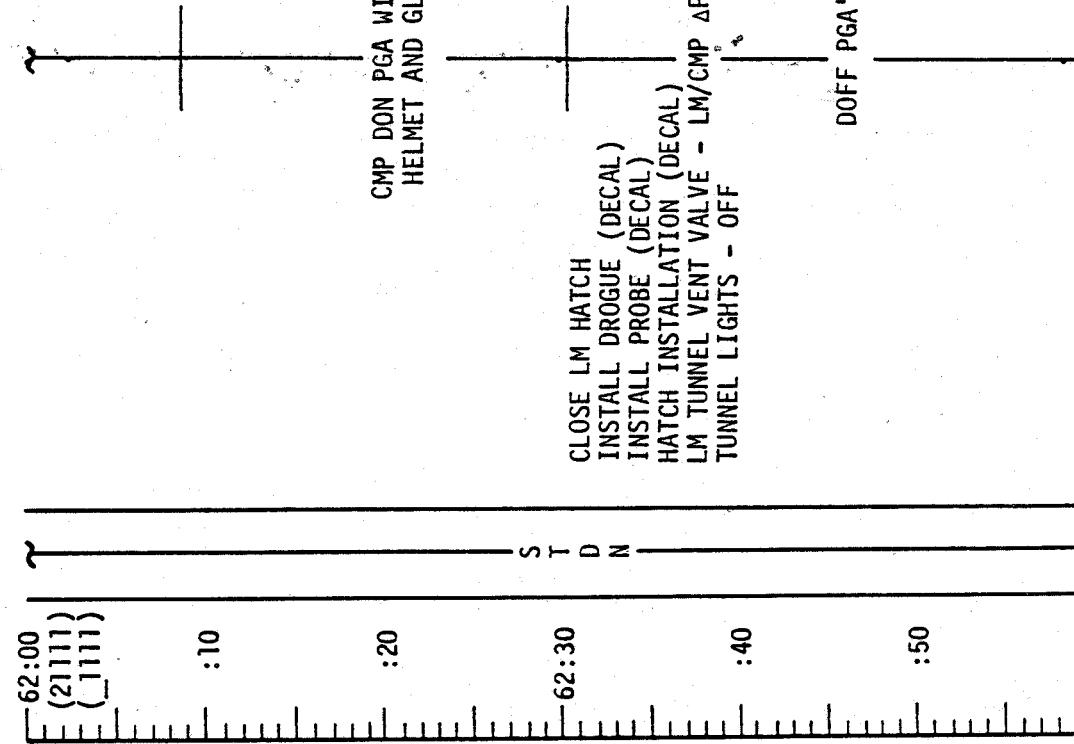
FLIGHT PLANNING BRANCH

MCC-H

1053 CST

FLIGHT PLAN

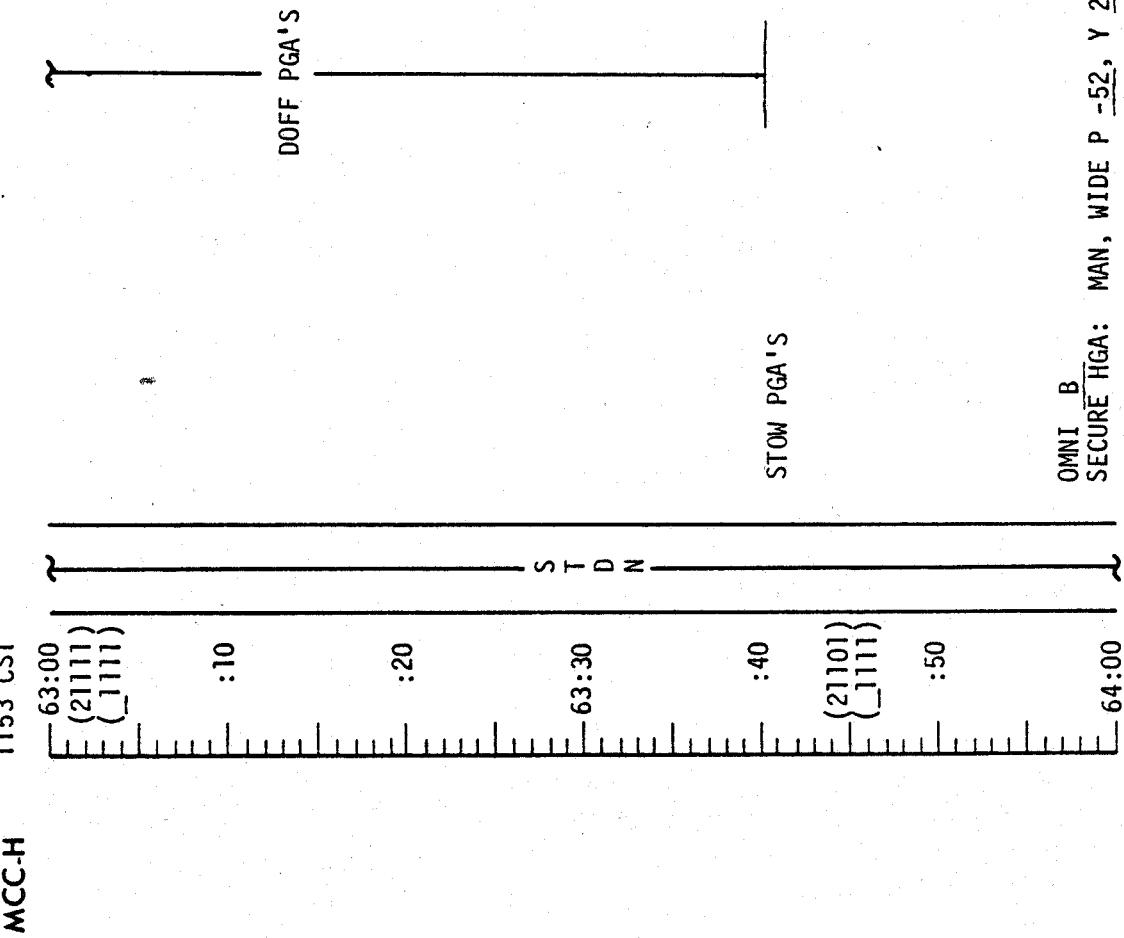
NOTES



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

FLIGHT PLAN

MCC-H



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

MCC-H

FLIGHT PLAN

1253 CST

UPDATE
FLIGHT PLAN
QUADS TO ENABLE
FOR PTC SPINUP

64:00
(21101)
{
1111}

CSM G&C CHECKLIST

PASSIVE THERMAL CONTROL (G&N)
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)

PAGE 6/8-2

:10

:20

S T D N

64:30

:40

:50

H2 HEATERS 1 & 2 - AUTO
H2 FANS 3 - OFF

65:00

PTC

NOTES

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

FLIGHT PLAN

MCC-H

NOTES

1353 CST
65:00
[(21101)
 (1111)]

:10

:20

65:30

:40

:50

66:00

EAT PERIOD

PTC

S T D N

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	65:30 - 66:00	4/TLC	3-60

FLIGHT PLANNING BRANCH

MCC-H

FLIGHT PLAN

1453 CST

66:00
(2110)
1111

:10

:20

66:30

S T D N

:40

:50

67:00

PRC

L0I -22 HOURS

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

NOTES

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

FLIGHT PLANNING RANCH

FLIGHT PLAN

NOTES

MCC-H

UPDATE
FLIGHT PLAN

1553 CST

67:00

(21101)
(1111)

:10

:20

67:30

S T D N

:40

:50

68:00

UPLINK
LIFT-OFF TIME
(IF REQUIRED)

T EPHEM UPDATE	
	LOAD B
01D	
03	— — — — —
04	— — — — —
05	— — — — —

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

PTC

SYNCHRONIZE MISSION TIMER TO CMC CLOCK (IF REQUIRED)
V05NO1E, 1706E (T EPHEM VERIFICATION BY STDN,
COPY FROM DSKY ON STDN CUE).
COPY T-EPHEM IN FP SUPPLEMENT

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

68:00	CSM EXP/EVA CHECKLIST
(2110)	ALFMED PAGE X/2-1
(111)	MAG (SS)

:10

:20

68:30

CMD
DSE RECORD
PCM BIT RATE - LOW

:40

:50

69:00

PTC

ALFMED

NOTES

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

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

NOTES

1753 CST

69:00
 (21101)
 (1111)

:10

:20

69:30

S T D N

CMD
DSE REWIND

:40

:50

70:00

CHECK CMP BIOMED
 LMP DOFF BIOMED HARNESS

CMP DON BIOMED HARNESS

PTC

ALFMED

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

MCC-H

FLIGHT PLAN

NOTES

1853 CST

70:00
(21101)
{
1111}

:10

CMD
DATA SYS-ON

:20

DSE PLAYBACK

70:30

S T D N

S

ON STDN CUE:

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

:40

T

D

N

:50

S

T

D

N

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

71:00

CSM EXP/EVA CHECKLIST

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

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

PTC

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
71:00
(21101)
1111

UPDATE FLIGHT PLAN

:10

:20

71:30

:40

:50

72:00

S T D N

PTC

EAT PERIOD.

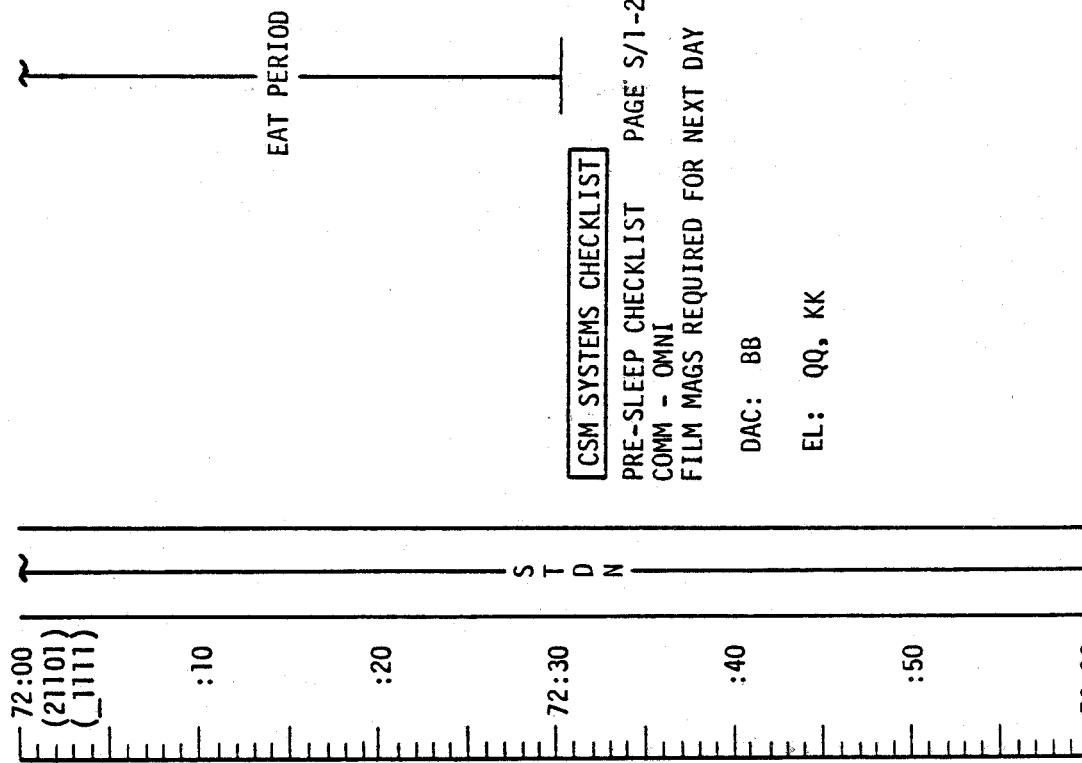
NOTES

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

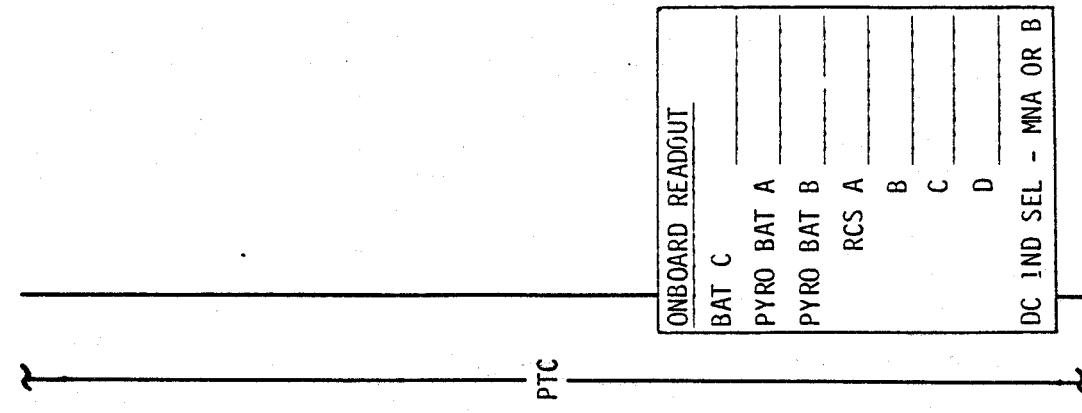
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H 2053 CST



NOTES



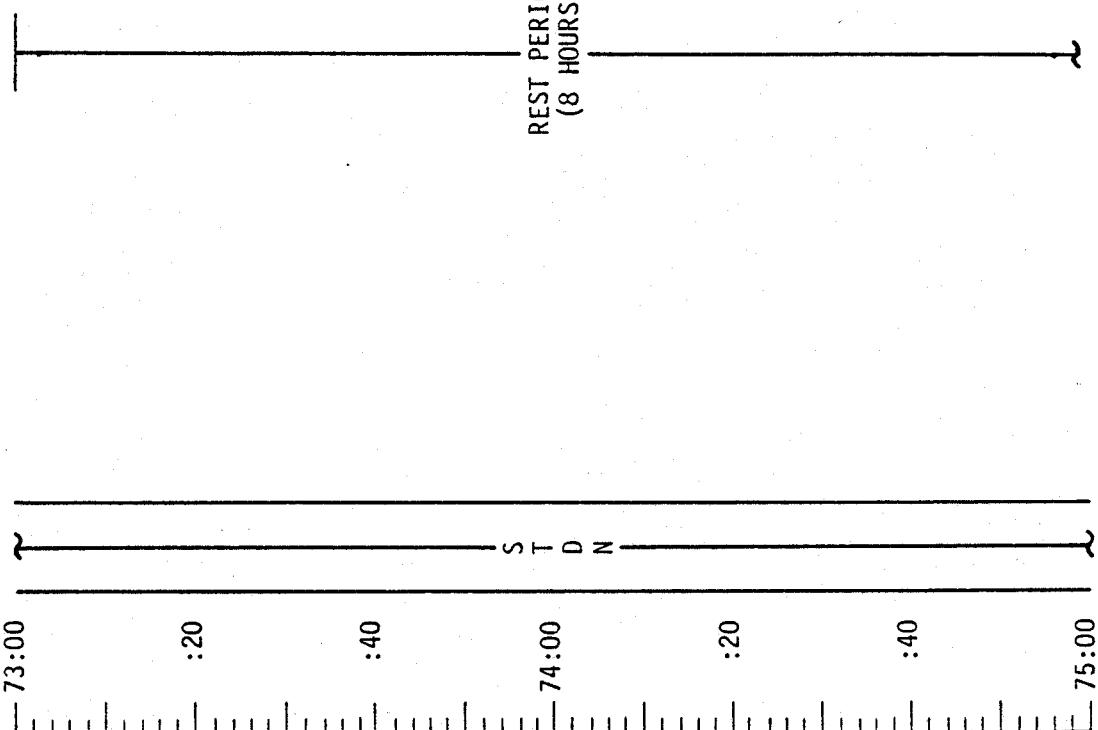
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	72:00 - 73:00	4/TLG	3-67

FLIGHT PLAN

MCC-H

NOTES

DAP LOAD STATUS
(21101)(_1111)



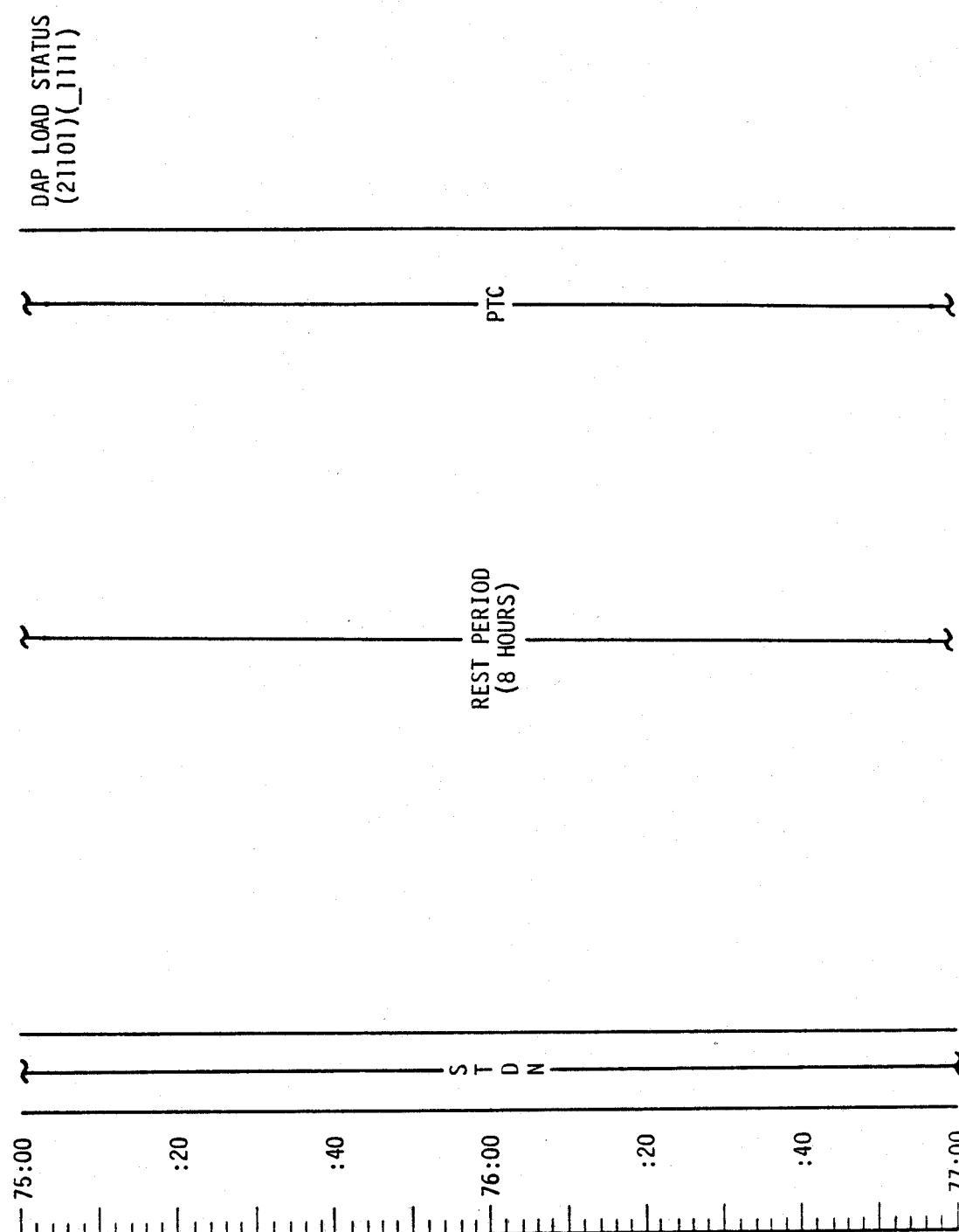
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	73:00 - 75:00	4/TLC	3-68

FLIGHT PLANNING BRANCH

MCC-H

FLIGHT PLAN

2353 CST



NOTES

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

MCCC-H

0153 CST

77:00

:20

:40

78:00

S T D N

:20

:40

79:00

NOTES

DAP LOAD STATUS
(21101)(1111)

PTC

REST PERIOD
(8 HOURS)

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

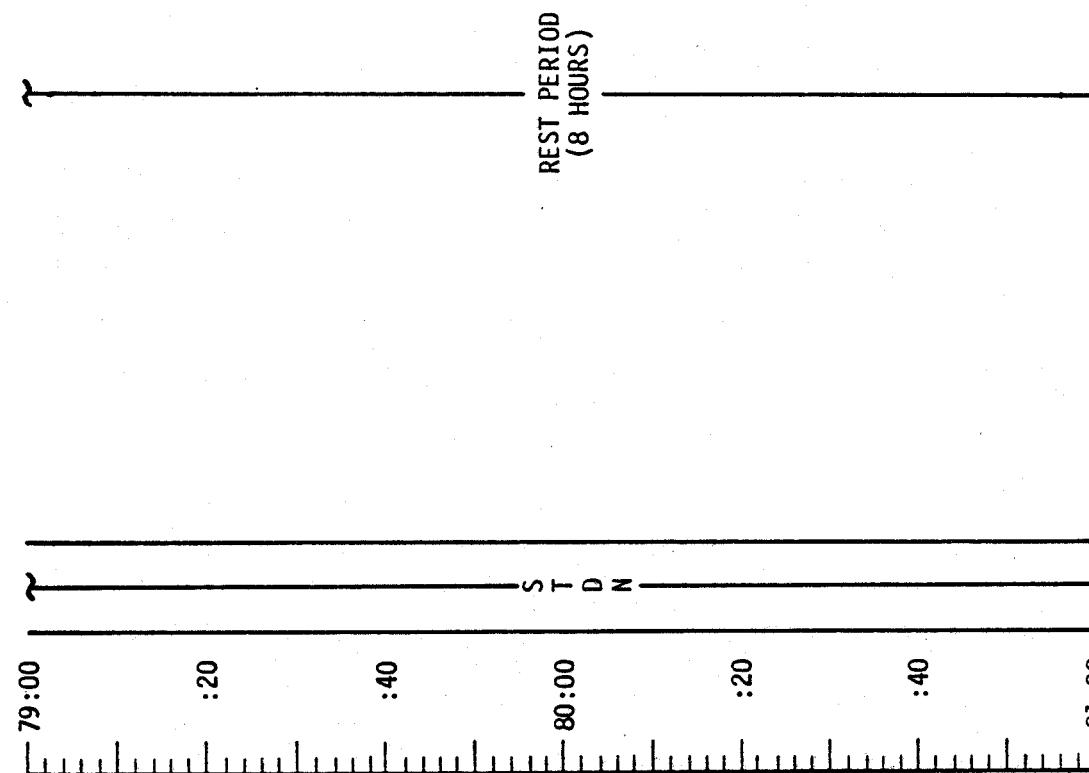
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0353 CST

NOTES
DAP LOAD STATUS
(21101)(1111)



PTC

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	79:00 - 81:00	4/1LC	3-71

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0553 CST

CSM SYSTEMS CHECKLIST
POST-SLEEP CHECKLIST PAGE S/1-29

:10

REPORT: LM/CM AP
IF $\Delta P > 2.4$ PSID:
 O_2 HEATERS 1&2 - AUTO
PRESSURIZE CSM TO 5.7 PSIA

UPDATE
GO/NO-GO FOR MCC-4

:20

CSM G&C CHECKLIST

S *EMS AV TEST & NULL BIAS CHECK PAGE 6/2-5 GET=82:00
T *REPORT: BIAS
D N

81:30

:40

EAT PERIOD

:50

82:00

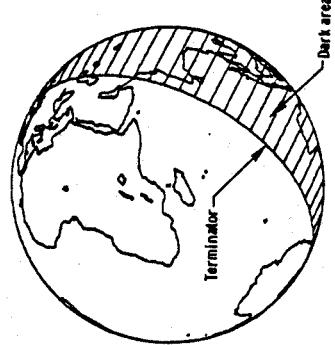
NOTES

DAP LOAD STATUS
(21101)(1111)
EARTH DISTANCE
~202,616 NM

*PERFORM IF MCC-4
IS REQUIRED

PTC

F0V=3°
 $V_t = 1.96 \text{ ps}$



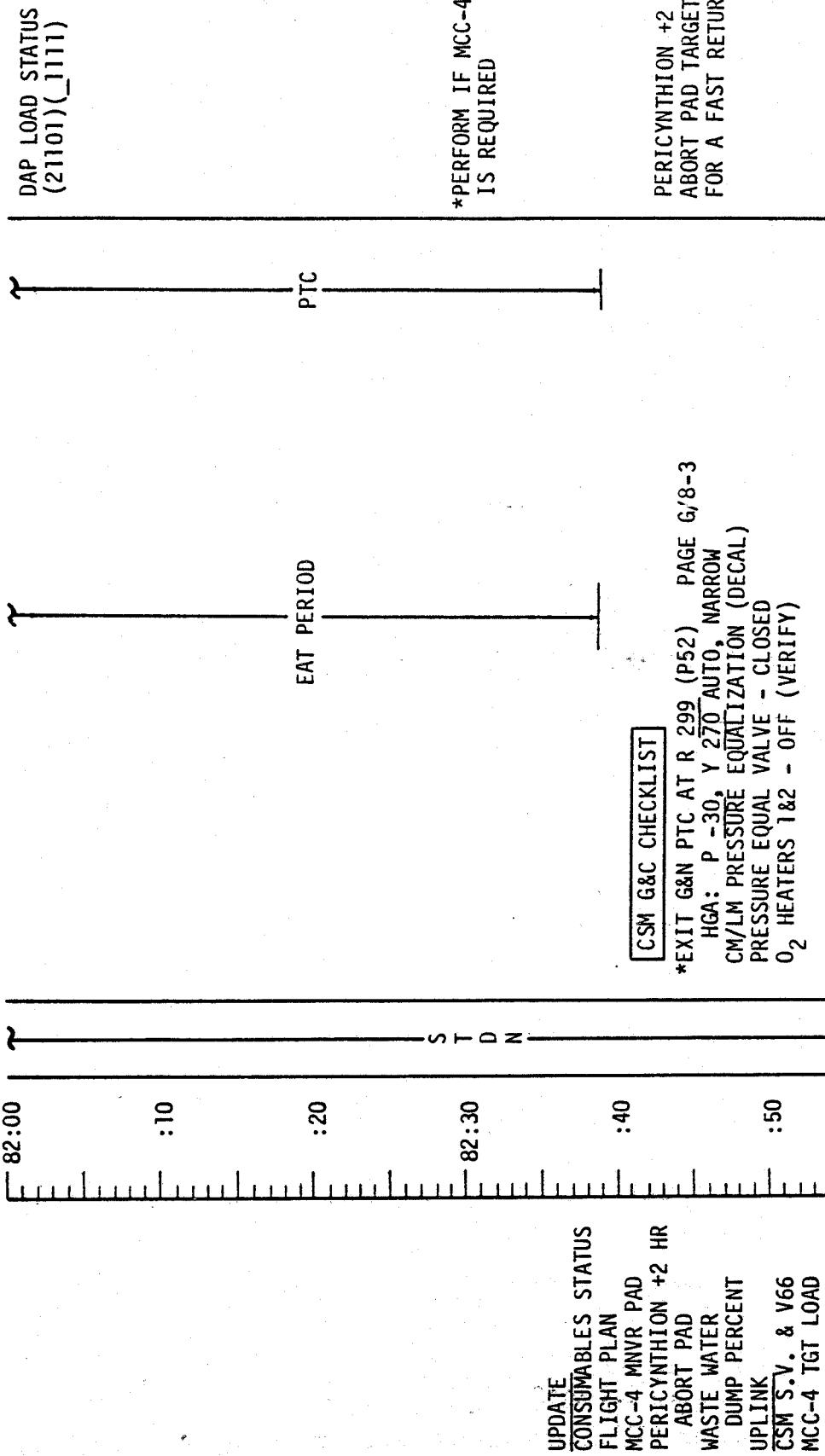
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	81:00 - 82:00	4/TLC	3-72

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0653 CST



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

MCC-H

FLIGHT PLAN

0753 CST

L10H CANISTER CHANGE
(9 INTO A, STOW 7 IN B6)
CONFIGURE FOR URINE DUMP
 H_2 PURGE LINE HTRS - ON

:10

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

:20

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

83:30

*SXT STAR CHECK

*P40 SPS THRUSTING OR P41 RCS THRUSTING

 H_2 & O_2 FUEL CELL PURGE

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

:40

MCC-4

:50

LOI -5 HR

84:00

NOTES

*PERFORM IF
MCC-4 IS REQD

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

SIM EXP STATUS
(*00000)(31000)

BURN STATUS REPORT			
X	X	ATIG	
X	X	BT	V gx
X	X	TRIM	R
X	X		P
X	X		Y
X	X		V gy
X	X		V gz
X	X		AV C
X	X		OX
X	X		FUEL
X	X		UNBAL

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

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

84:00
 {
 2101
 1111}

CMD
 DATA SYS - ON
 DSE RECORD

:10

UPDATE
GO/NO-GO FOR
SIM DOOR JETT

:20

84:30
 S T D N

:40

UPDATE
CUE FOR IR - OFF

85:00

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

:50

60/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 31

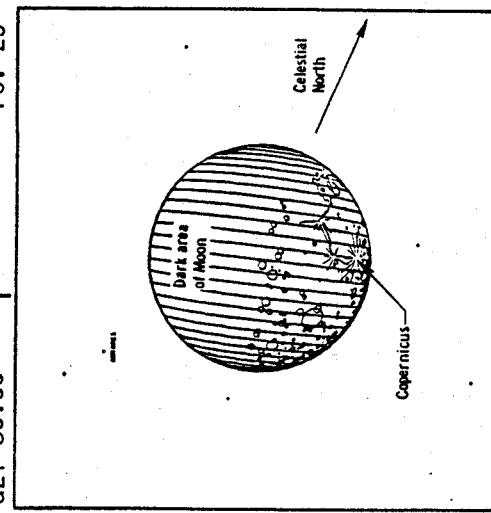
cb O₂ TK 100W HTRS (1 & 2) - OPEN
O₂ HEATERS 1 & 2 - AUTO
O₂ HEATER 3 - OFF

REPORT: LM/CM AP
 IF AP <0.2 PSID, LM TUNNEL VENT VLV - LM PRESS
 IF AP >0.2 PSID, PERFORM CM/LM PRESSURE EQUALIZATION (DECAL)
 PRESS EQUAL VALVE - CLOSE
 LM TUNNEL VENT VLV - LM PRESS
 CHECK MISSION TIMER AGAINST CMC CLOCK

NOTES

*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
 SIM EXP STATUS
 (*00000)
 (31000)

F0V=25°



GET=85:00

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

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

MCC-H

0953 CST

85:00
[2101]
[1111]

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

CSM G&C CHECKLIST

EMS AV TEST & NULL BIAS CHECK PAGE 6/2-5
REPORT: BIAS
CDR DON BIOMED HARNESS

FLIGHT PLAN

NOTES

SIM EXP STATUS
(*0000)
(31001)

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

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

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

LOI REFSMMAT ATT
R 351, P 128, Y 034

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

CHECK CDR BIOMED
CMP DOFF BIOMED HARNESS

:50
86:00

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

FLIGHT PLAN

MCC-H

1053 CST

86:00
|(21)01
|(_111)

:10

:20

86:30

:40

:50

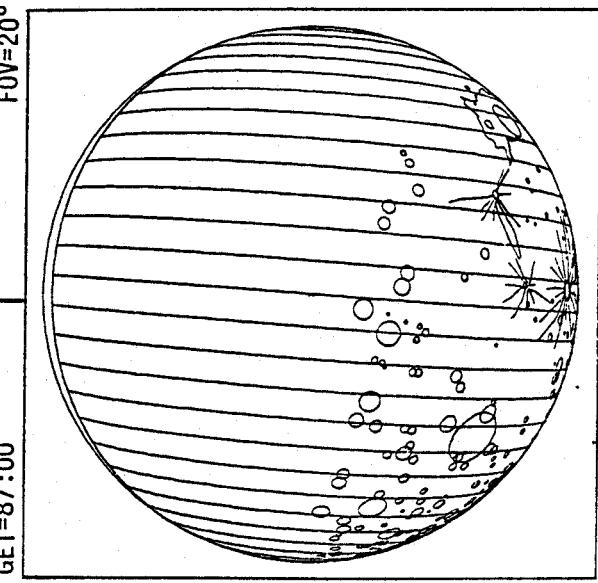
87:00

S T D N

CONFIGURE CABIN FOR LUNAR ORBIT

SIM EXP STATUS
(*0000)
(31001)

GET=87:00
FOV=20°



EAT PERIOD

NOTES

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

FLIGHT PLANNING BRANCH

MCC-H

FLIGHT PLAN

NOTES

{
 2101
 1111}

:10

EAT PERIOD

:20

CMC MODE - FREE
UV COVER-OPEN

87:30

UV COVER-CLOSE
CMC MODE - AUTO

S
T
D
N

:40

P52 (OPTION 3)
(LOI ORIENT)

REPORT: GYRO TORQUING ANGLES

88:00

GDC ALIGN

CSM SYSTEMS CHECKLIST

88:20

UPDATE
LOT MNVR PAD
MAP UPDATE REV 1

88:20

UPLINK
CSM S.V. & V66
LOT TGT LOAD

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)

SIM EXP STATUS
(*0000)
(31001)

P52 IMU REALIGN

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

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

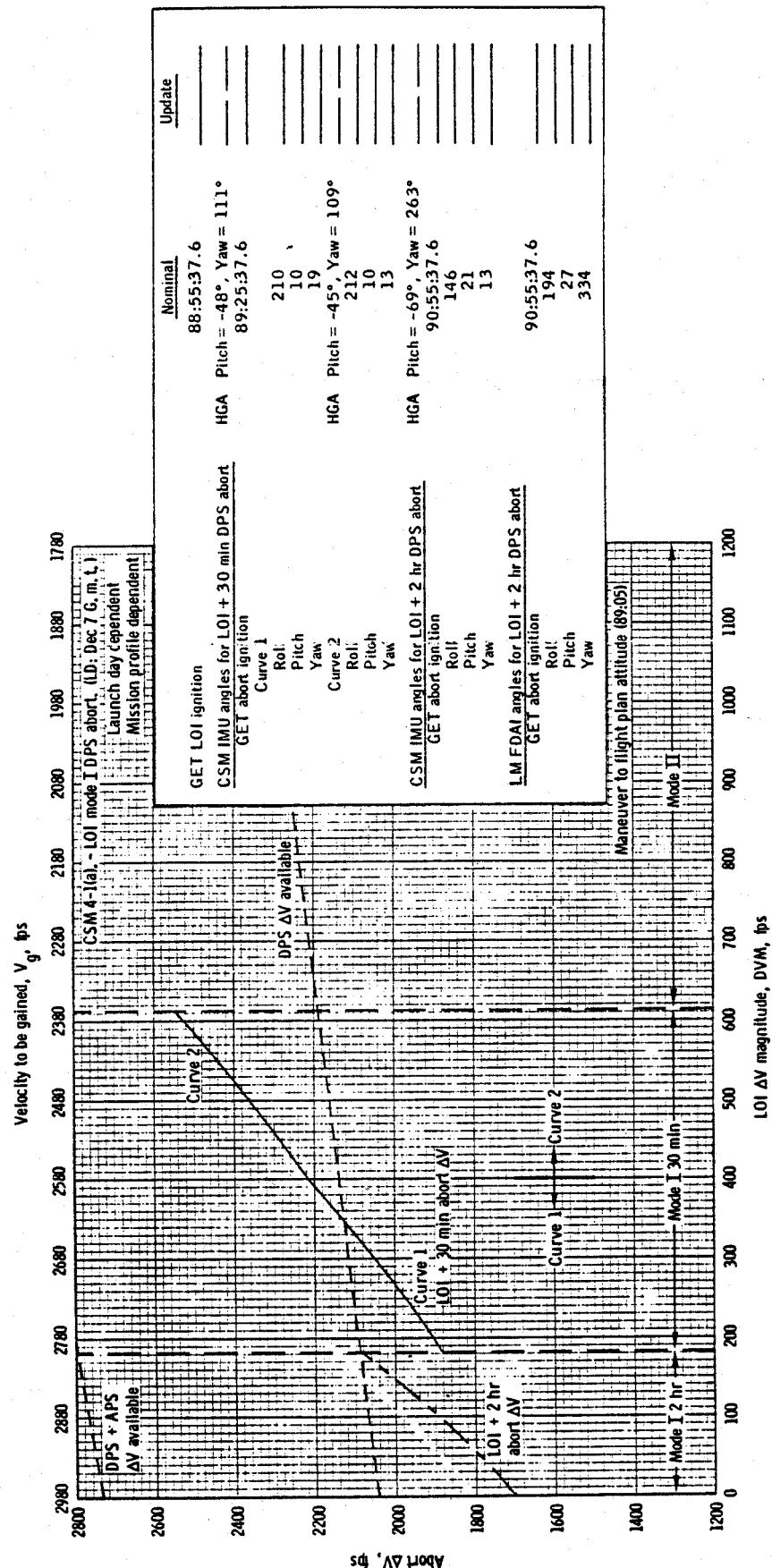
FLIGHT DIARIES RMANIC

P30 MANEUVER

SET STARS	L	O	I	PURPOSE		
	S	P	S/G & N	PROP/GUID		
R ALIGN	+			WT	N47	
P ALIGN		0	0	P TRIM	N48	
Y ALIGN		0	0	Y TRIM		
ULLAGE				HRS	GETI	
	+ 0	0	0	MIN	N33	
		+ 0	0	SEC		
				ΔV_X	N81	
				ΔV_Y		
				ΔV_Z		
		X	X	R (000)		
		X	X	P (000)		
		X	X	Y (000)		
	+ 0			H_A	N44	
				H_P		
HORIZON/WINDOW		X	X	ΔVT		
		X	X	BT		
				ΔVC		
		X	X	SXTS		
	+ 0	0	0	0 SFT		
		+ 0	0	0 0 TRN		
		X	X	BSS		
	X	X		SPA		
	X	X		SXP		

10/23/72

3-80



L01 made IDPS abort.

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 DPS abort. (LD: Dec 7 G. m. t.)

Launch day dependent
Mission profile dependent
9/26/72 Final

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

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

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

FLIGHT PLAN

MCC-H

88:00
 (21101)
 {1111}

P30 EXTERNAL ΔV

V49 MNVR TO PAD BURN ATTITUDE (88:20)

OMNI C

MAP UPDATE REV

AOS WITHOUT BURN — 4 9 : 0 2 : 4 6
 AOS WITH BURN — 6 9 : 1 3 : 2 9

:10

:20

S

SXT STAR CHECK

T

88:30
 (P40)
 (0.5°DB)

RECORD VG IMU DATA
 UPDATE
GO/NO-GO FOR LOI

:40

89:00
 :50

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

LOI

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

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

NOTES

SIM EXP STATUS
 (*0000)
 (31001)

BURN STATUS REPORT

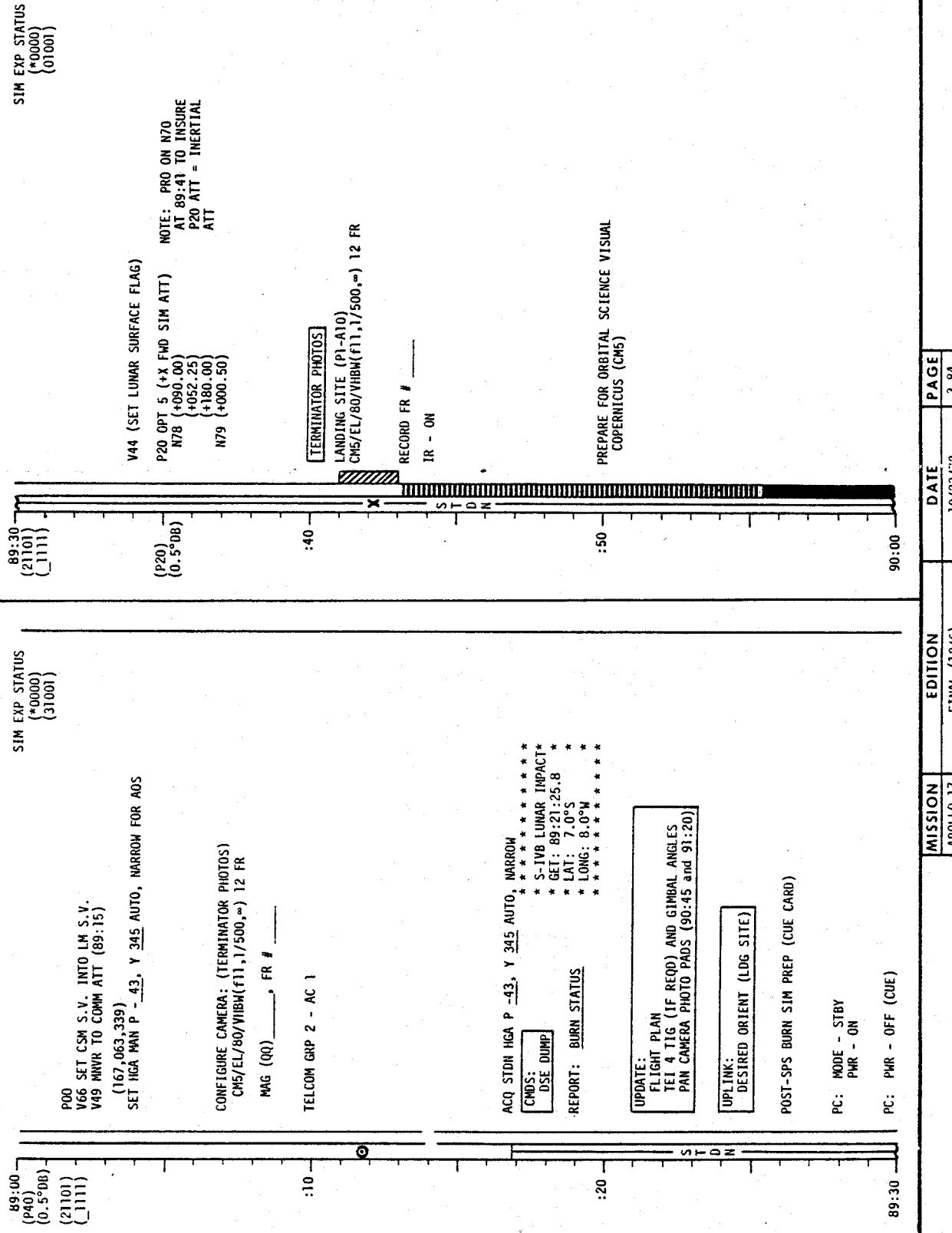
		ΔTIG	BT	V _{gx}	R	P	V _{gy}	V _{gz}	ΔV _c	OX	FUEL	UNBAL
X	X	.	.	.	X	X
X	X	.	.	.	X	X
X	X	.	.	.	X	X
X	X	.	.	.	X	X
X	X	.	.	.	X	X
X	X	.	.	.	X	X
X	X	.	.	.	X	X
X	X	.	.	.	X	X
X	X	.	.	.	X	X
X	X	.	.	.	X	X
X	X	.	.	.	X	X
X	X	.	.	.	X	X

ΔV_M —

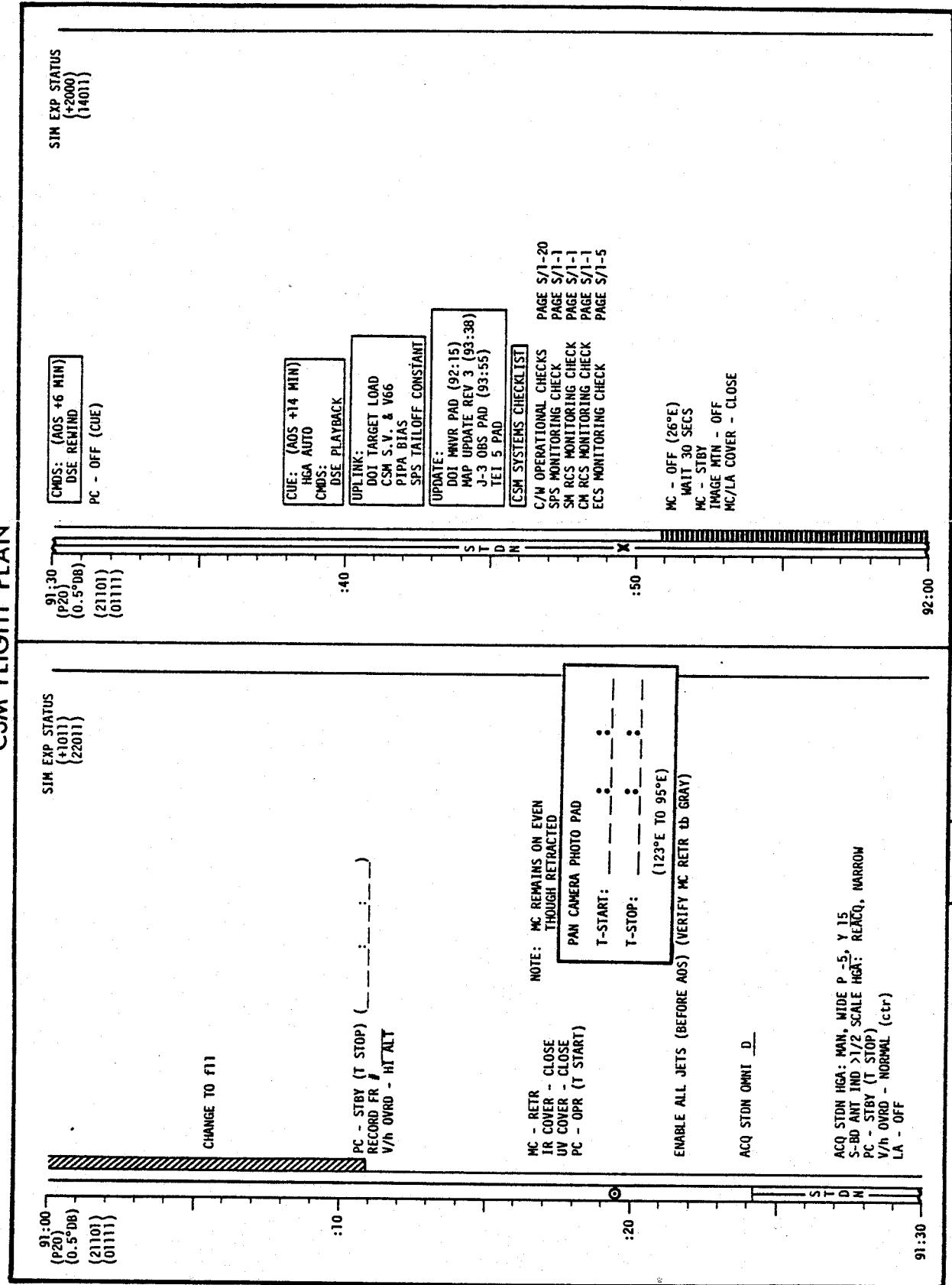
PREDICTED LOI SINGLE
 BANK BURN TIME:
 6 MIN 50 SEC

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

CSM FLIGHT PLAN



CSM FLIGHT PLAN



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

CSM FLIGHT PLAN

SIM EXP STATUS
01011
00000 (+)
1111 {
2101 } 92-00 000

P52 (OPTION 3)
(LDG SITE ORIENT)

F52 (OPTION 3) (LOG SITE ORIENT)	REPORT : GYRO TORQUING ANGLES GDC ALIGN	N71: _____ N65: _____ N93: _____ X _____ Y _____ Z _____	PRE-SPS BURN SIM PREP (CUE CARD)
---	--	---	---

P30: VERIFY DOI TIE AND AV'S

440
STDN RECORD:
#49 MAYR TO DOI PAD BURN ATT (92:31)
ACO STDN ONMT C
PBO

-20-

SIM EXP STATUS (+0000) (0101)	
N71:	— . — — —
N05:	— — — • — —
N93:	X — — — — Y — — — — Z — — — —
	G E T

SET STARS		D S	O P	I S	- G	1 & N	PURPOSE PROP/GUID
R ALIGN	—	+	0	0			WT N47
P ALIGN	—		0	0			P TRIM Y TRIM
Y ALIGN	—	+	0	0			HRS GETI
VILLAGE	—		+	0	0		MIN N33
			+	0			SEC
				+			
					X	N81	ΔV_X
					Y		ΔV_Y
					Z		ΔV_Z
				X	X	R (000)	
				X	X	P (225)	
				X	X	Y (000)	
					+		H _A N44
							H _P
			+				ΔV_T
				X	X	BT	
				X	X	AVC	
HGTZON/WINDON	—			X	X	SXTS	
					+		SFT
					+		0
						0	TRN
				X	X	BSS	
				X	X	SPA	
				X	X	SXP	
OTHER	—	0				LAT N61	
						LONG	
			+			RTGO EMS	
						VIO	
						GET 0.05G	

CSM FLIGHT PLAN

92:30
(2110)
(1111)

SIM EXP STATUS
(*0000)
(31011)

CMD: DSE REWIND

:40

SXT STAR CHECK

LOAD EMS WITH AVT

UPDATE: GO/NO GO FOR DOI

CMD: DSE RECORD

P40 (TRIM)

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

NOTE: DSE VOICE RECORDED
THIS BACKSIDE WILL
NOT BE DUMPED

(P40)
(0.5°DB)

:50

93-00

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]

SIM EXP STATUS
(*0000)
(3101)

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

:10 -

D01-1 (000,195/225,000) TIG: 93:13:08.5
 : BT: 22.9 SEC
 : AVT: 198.7 FEET/SEC
 : ULLAGE: 4 JET 15 SEC
 : ORBIT: 59 X 15 NM

DELAY POST-SPS BURN SIM
PREP UNTIL 94:10

V49 MNVR TO LDMK OBS ATT (93:34) * V49 MNVR TO BALLOUT 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

D01-1 BURN TABLE					MANUAL
SPS LIMITS	P OR Y RATES	ATT DEVIATIONS	SHUTDOWN TIME	RESIDUALS	
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 SP'S**

BALL VLV FAILURE - START ON SUSPECT BANK

330

EDITION	DATE	PAGE
FINAL (12/6)	10/23/72	3-89

MISSION **EDITION**
APOLLO 17 FINAL (12/6)

CSM FLIGHT PLAN

```

SIM EXP STATUS
(*0000)
(31011)

***** AOS-NO UP VOICE PROCEDURE *****
***** WAIT 30 SEC. CHECK 16A *****

```

SIM EXP STATUS
(*0000)
(3101)

*2. SELECT COMM C *
 *3. SELECT SEC XPNDR *
 *4. AFTER 3 MIN GO TO LOSS *
 * OF COMM CUE CARD *

ACQ STDN HGA P+9, Y 338 NOTE: IF UNABLE TO LOCK UP
HGA, GO TO OMNI C

DSE DUMP

LOAD N89 (J-3 OBS)

一〇

**UPDATE:
STAY/BAII OUT**

P2A (OBB MAX MONITOR | OME) (THERE WOULD)

(THIS PAGE IS FOR YOUR LUMIUS/IMAGE MARKS)

OPT ZERO - OFF	OPT MODE - CMC
OPT TEL TRUN - TEL SXT	OPT SLAVE - SLAVE TO SXT
OPT COUPLING - RSLV	OPT SPEED - HIGH
	* SC CONT - SCS

* P4 THRUST MONITOR
 * BAILOUT BURN (000.083/0002,000)
 * : : :
 * POO : :
 * V66 SET CSM TIG: 93:48:17
 S.V. INTO LM BT: 11.05 SEC
 S.V. ATCA AVG: 100.0 FEET/SEC
 ULLAGE: 4 JET 17 SEC
 ORBIT: 61.5 X 5.0 NM

LDMK ACQUISITION
 RELOAD P24
 LOAD N89 (17-1 OBS)

3

LDMK ACQUISITION
TCIA
RELOAD P24
RELOAD N89 (17-1 08
N89 (+20. 160)(+

100

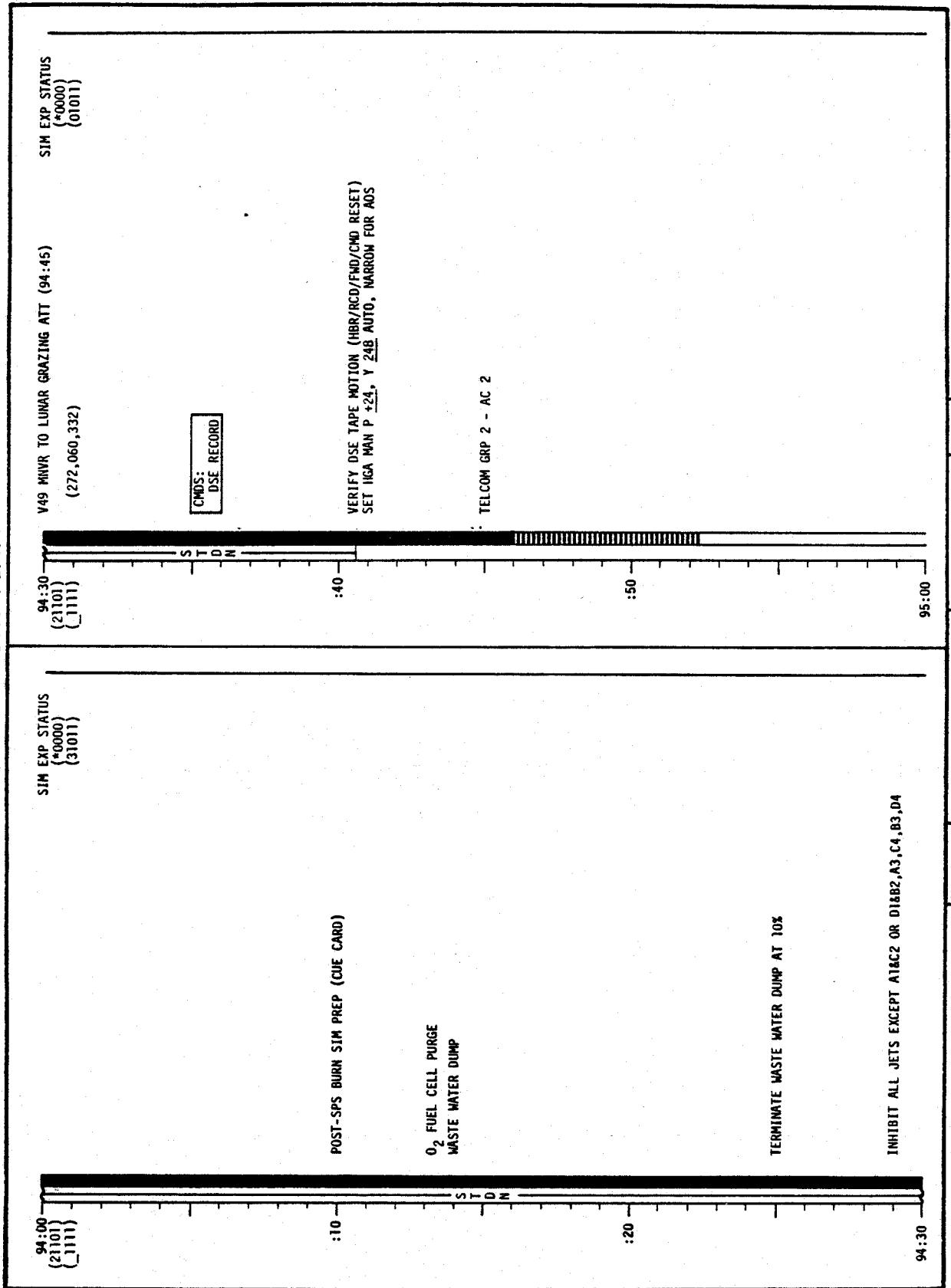
MAP UPDATE REV 3
AOS WITHOUT BURN
AOS WITH BURN

LDMK J-3 OBS	
T HOR	— : — : —
TCA -20 SEC	— : — : —
LAT:	+ 19.048
LONG/2:	+ 20.951
ALT:	+000.000

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

6:53

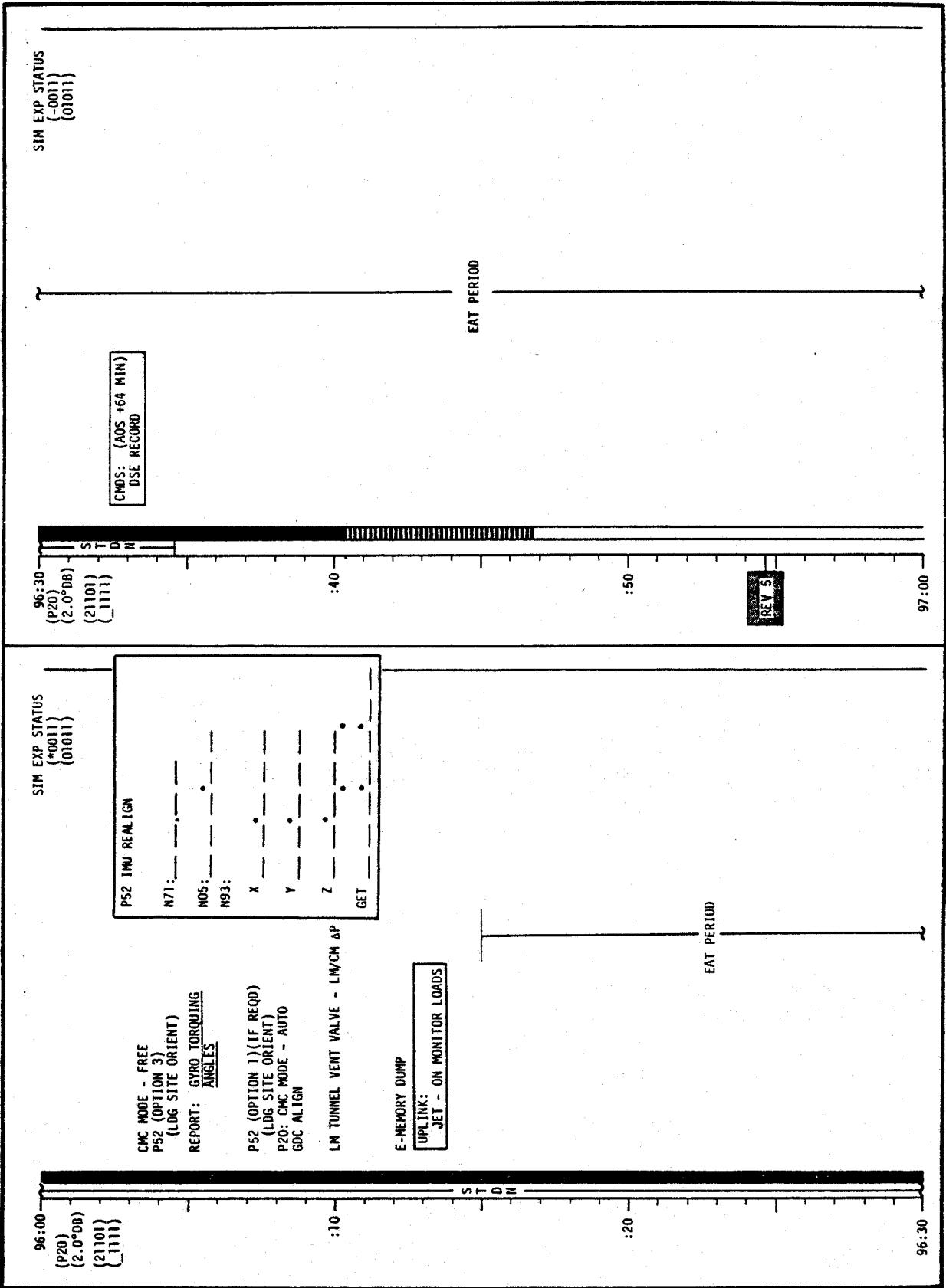
CSM FLIGHT PLAN



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

5 . 3

CSM FLIGHT PLAN



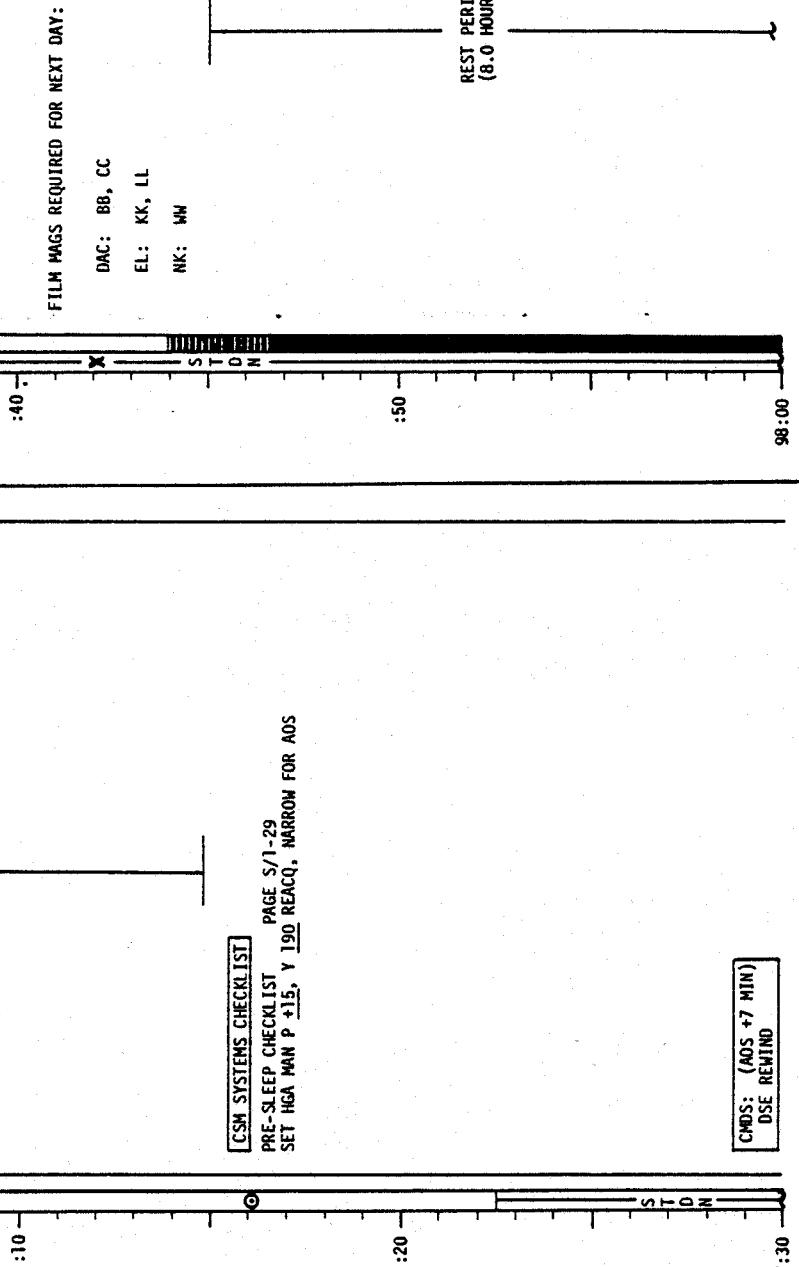
CSM FLIGHT PLAN

SIM EXP STATUS
(-0011)
(0101)

(P20)
(2.0°OB)
(21101)
(1111)

SIM EXP STATUS
(-0011)
(0101)

CMS: (AOS +13 MIN)
DSE PLAYBACK



CMS: (AOS +7 MIN)
DSE REWIND

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

CSM FLIGHT PLAN

SIM EXP STATUS
(-0011)
(0101)

SIM EXP STATUS
(P20)
(2.0°DB)
(2101)
(1111)

SIM EXP STATUS
(P20)
(2.0°DB)
(2101)
(1111)

:10

S

T

D

N

:20

98:30

REST PERIOD
(8.0 HOURS)

CMD: (AOS +54 MIN)
DSE REWIND

CMD: (AOS +62 MIN)
DSE RECORD

REST PERIOD
(8.0 HOURS)

REV 6

:50

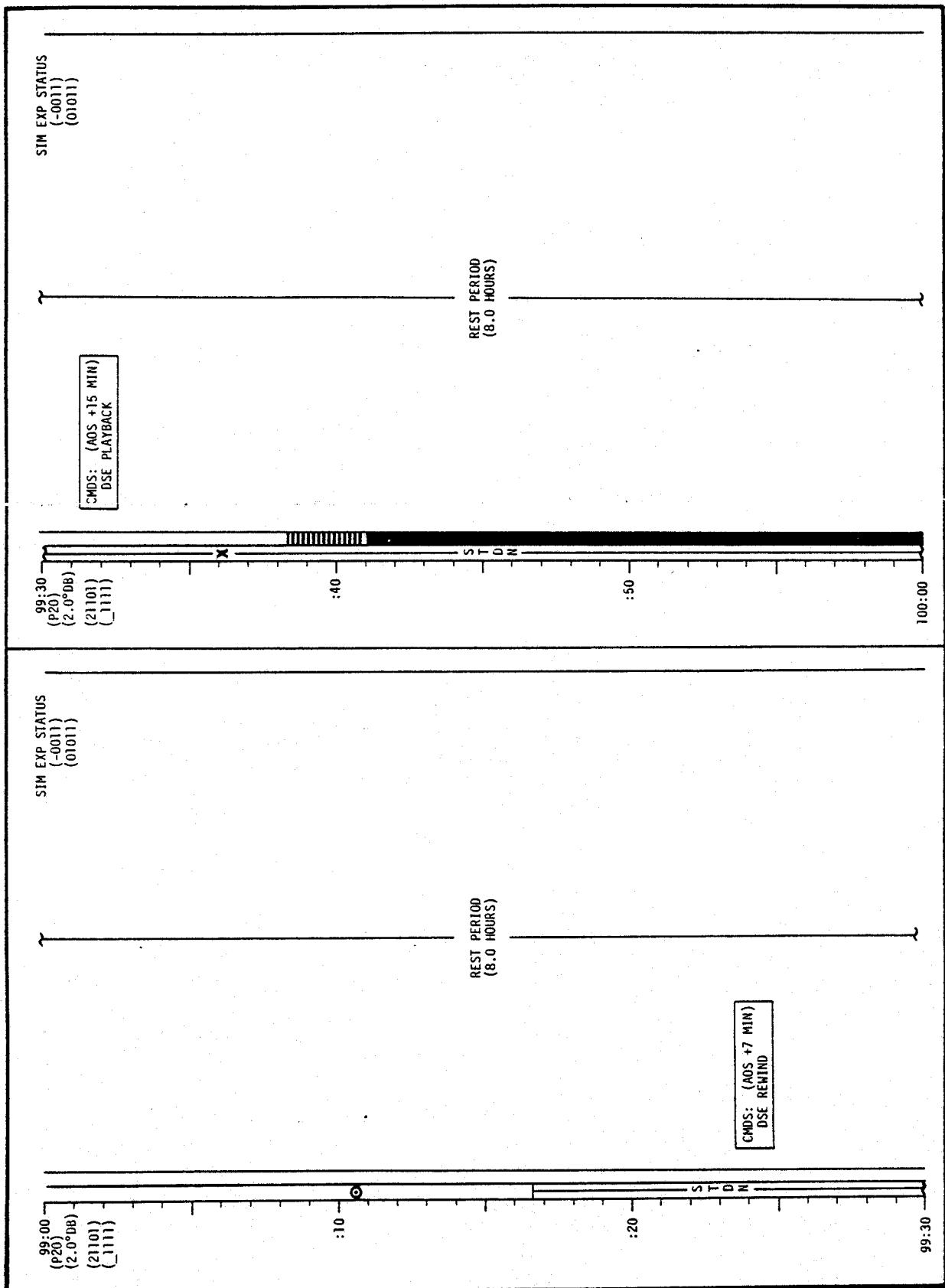
99:00

SIM EXP STATUS
(-0011)
(0101)

REST PERIOD
(8.0 HOURS)

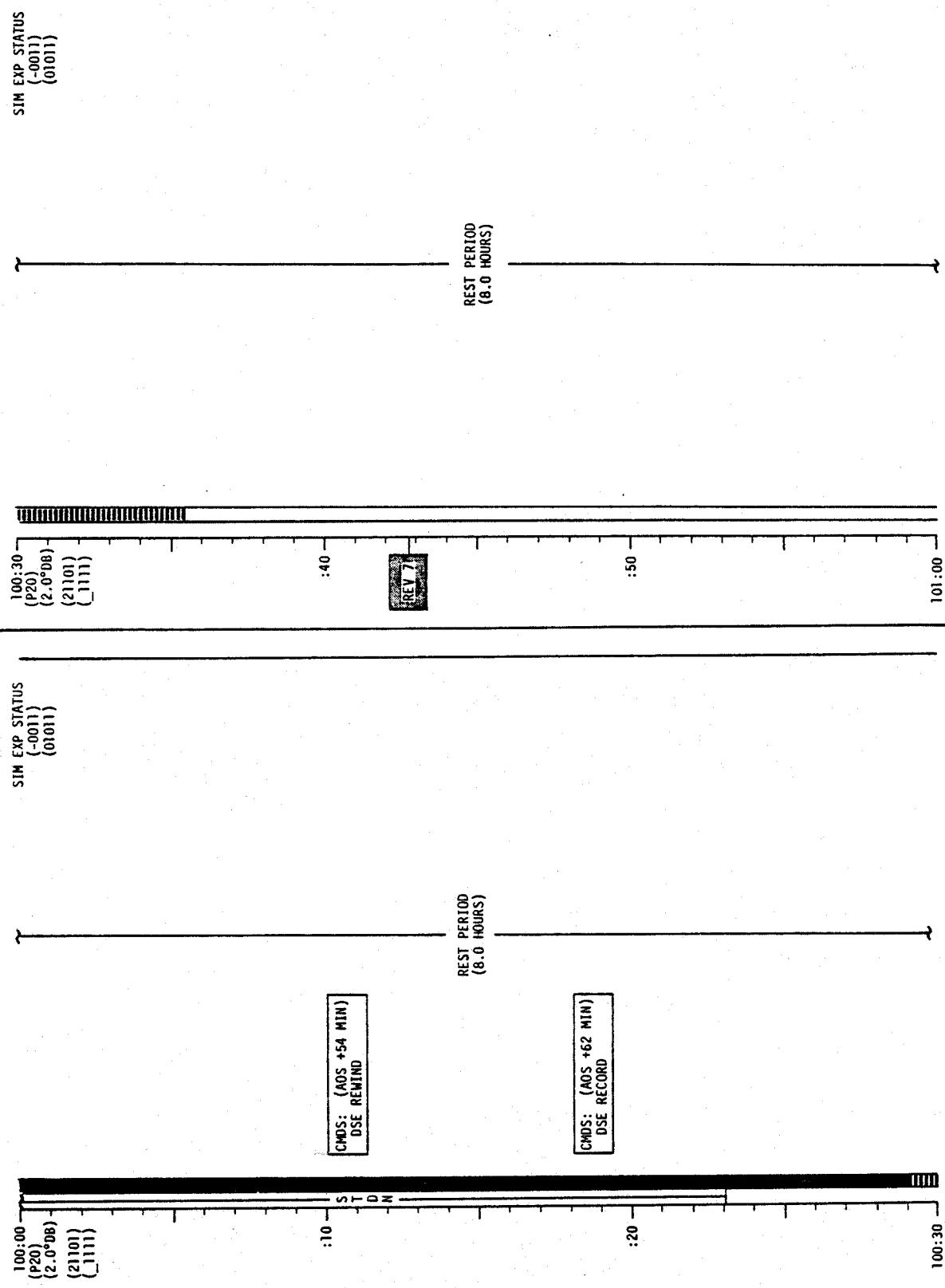
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-95

CSM FLIGHT PLAN



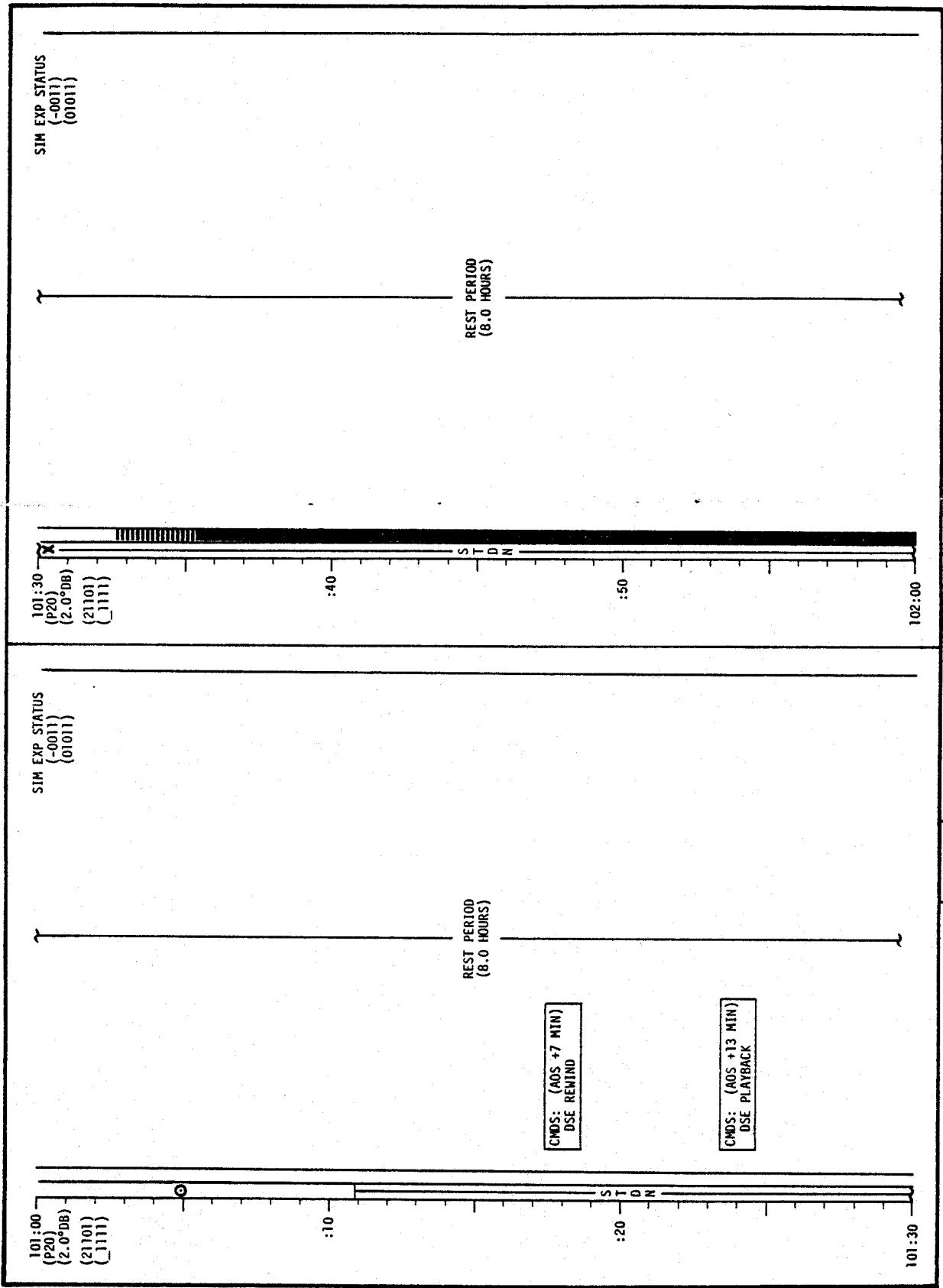
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-96

CSM FLIGHT PLAN



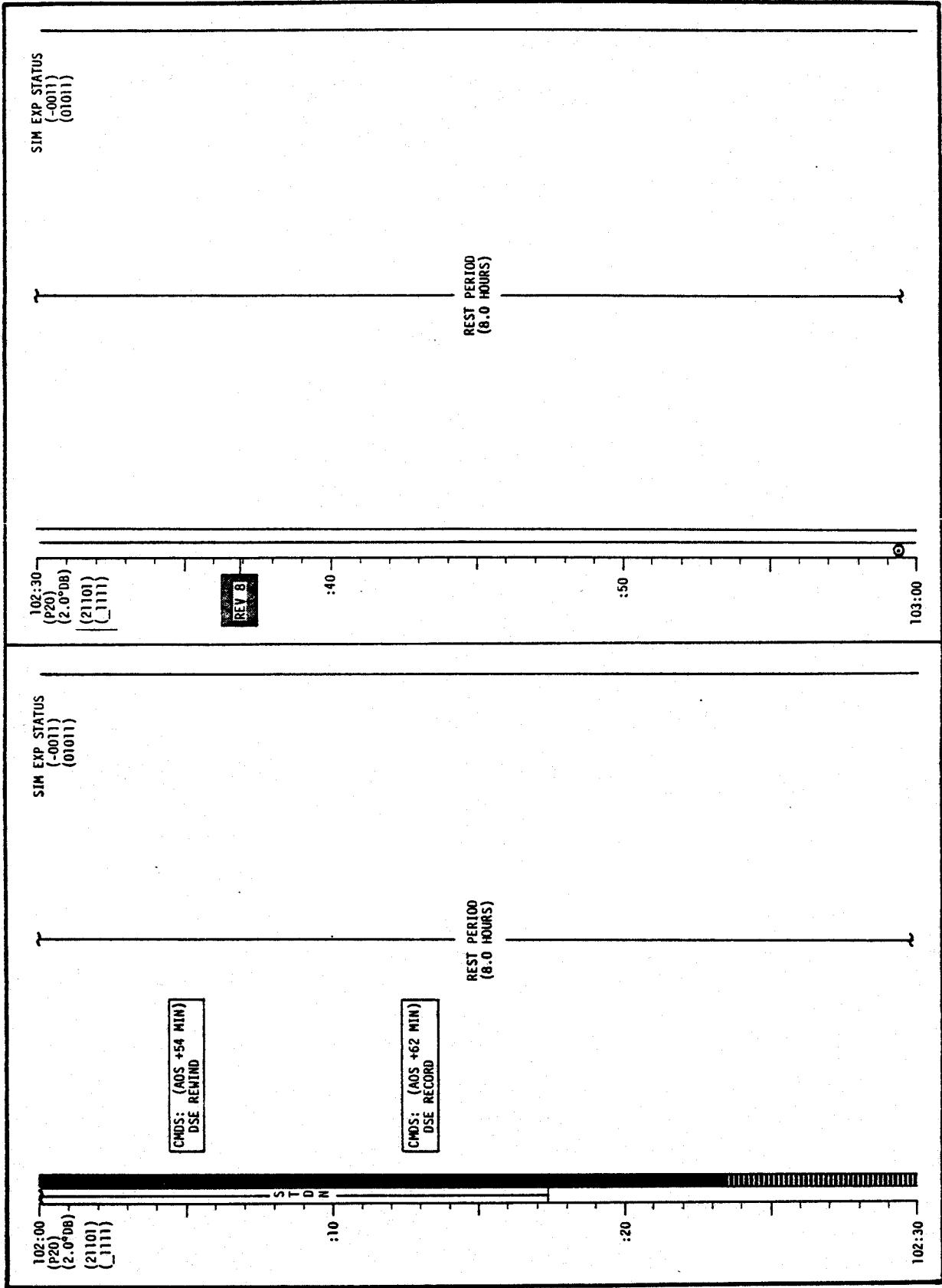
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-97

CSM FLIGHT PLAN

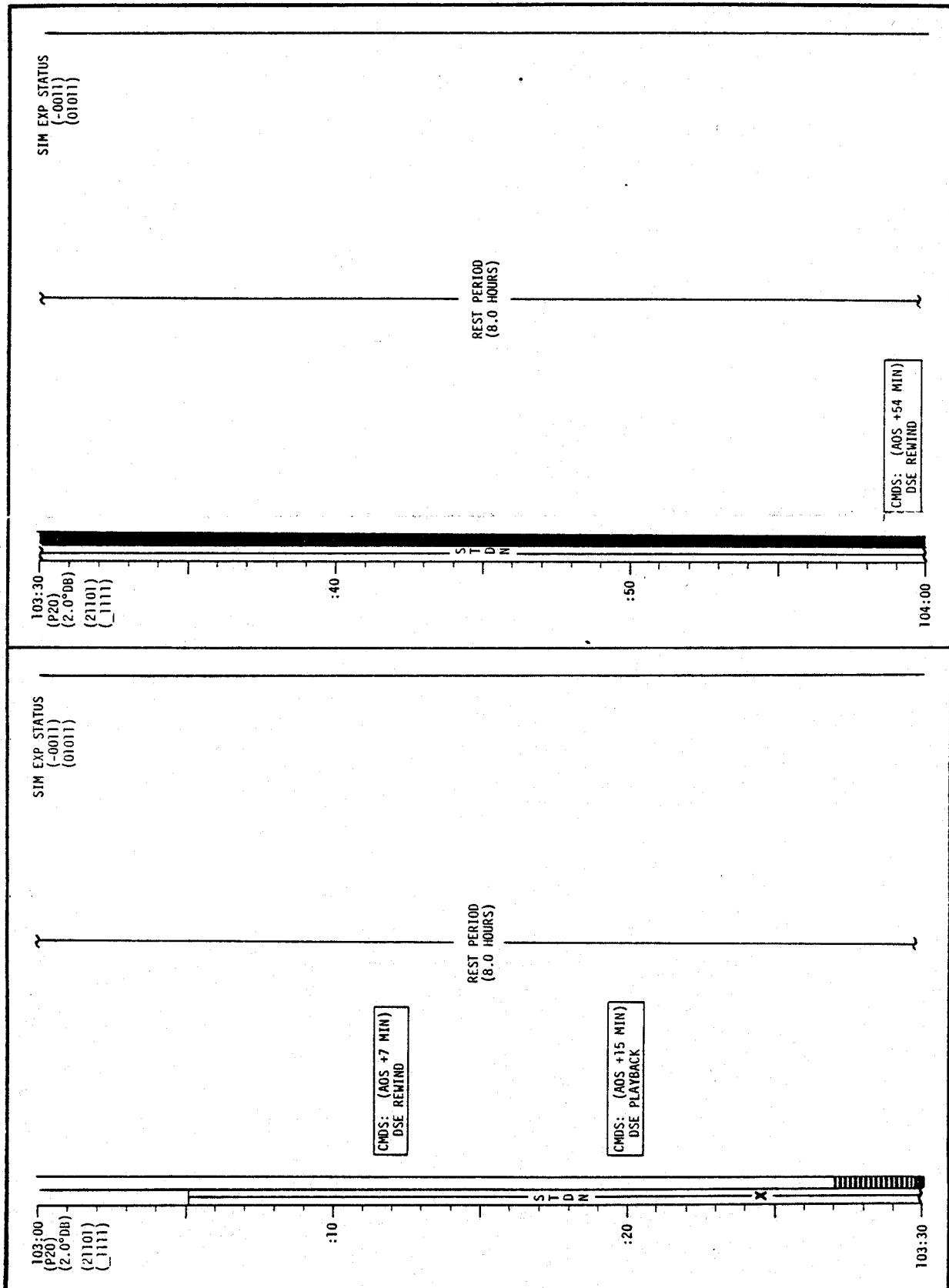


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-98

CSM FLIGHT PLAN

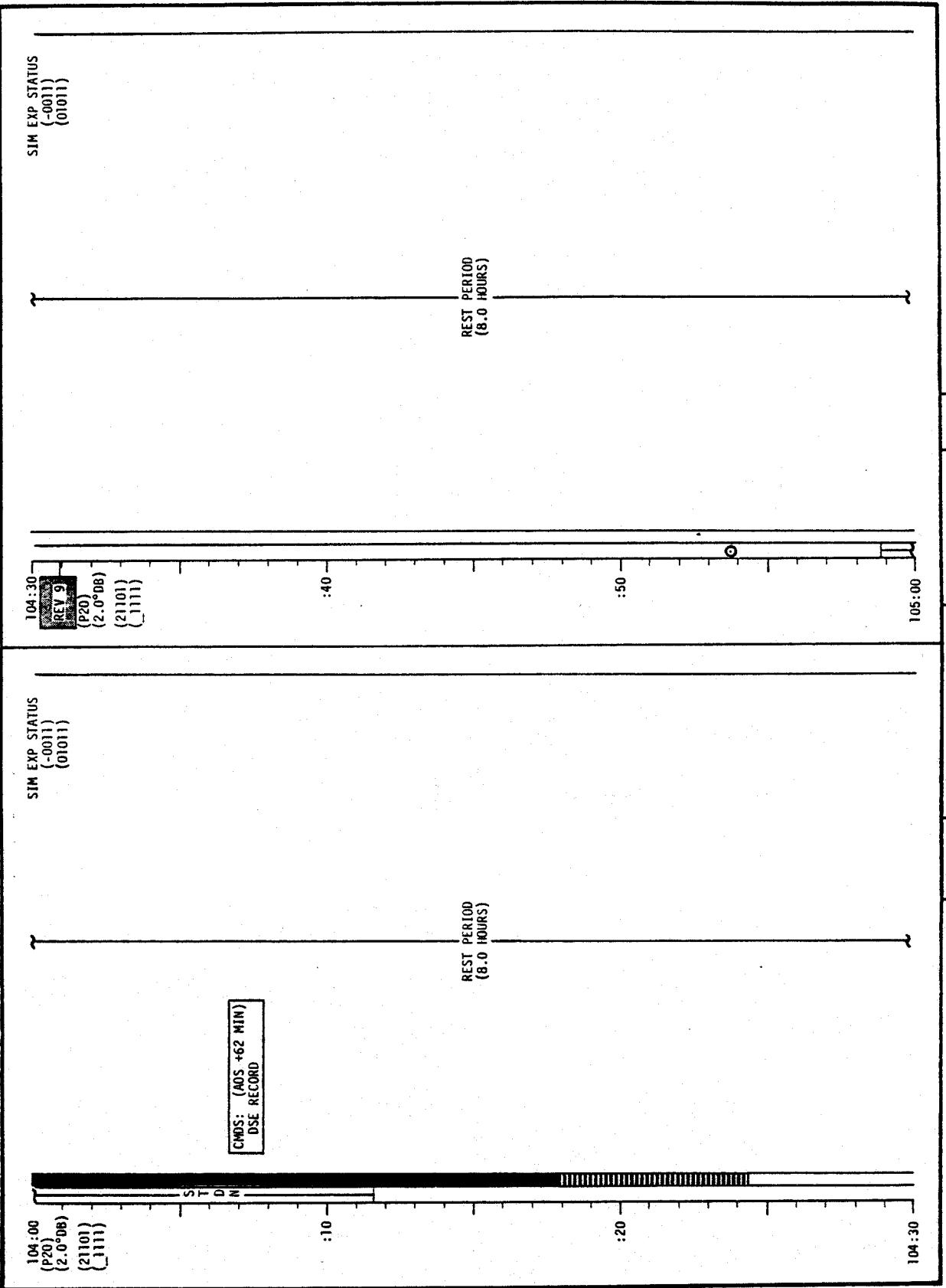


CSM FLIGHT PLAN

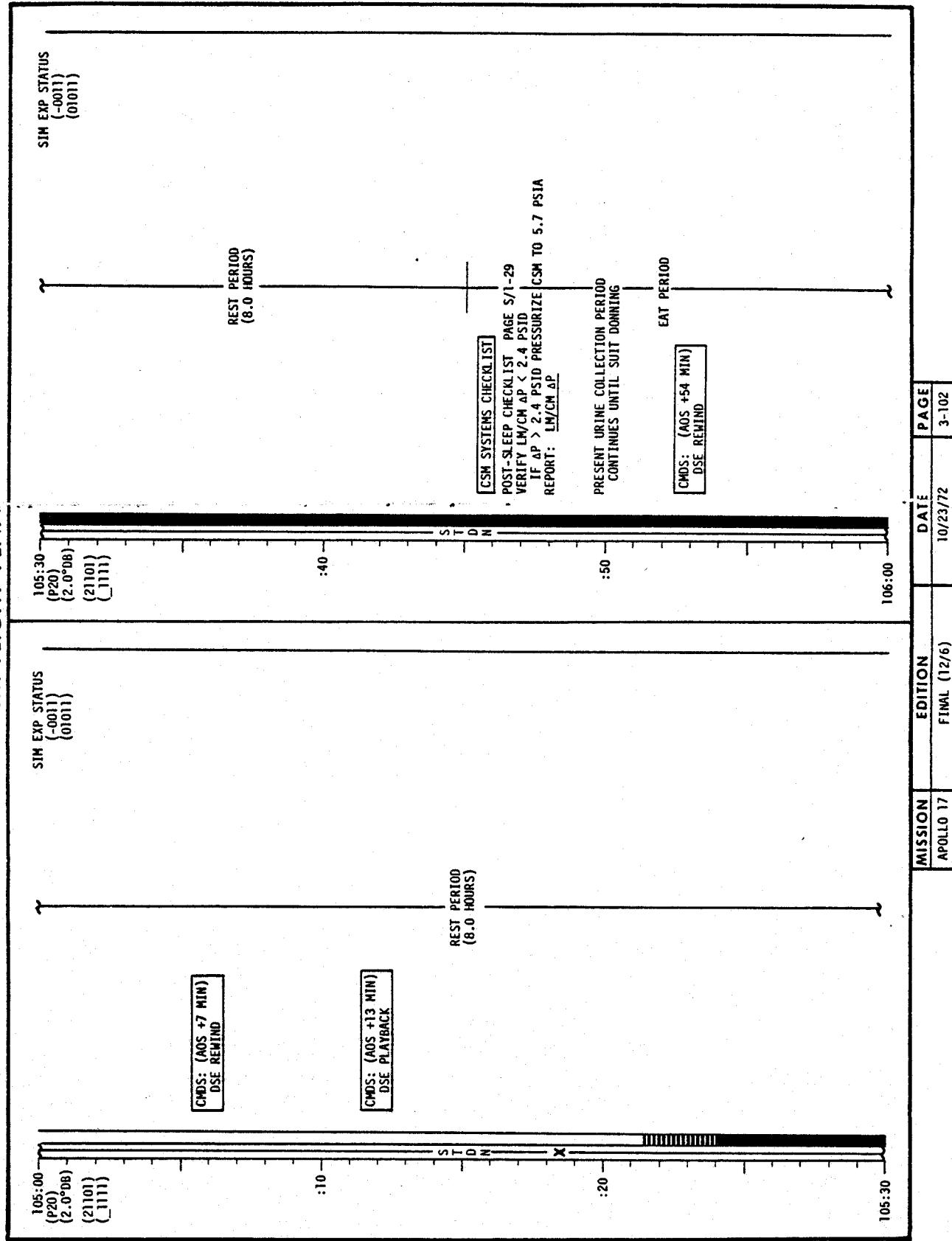


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-100

CSM FLIGHT PLAN

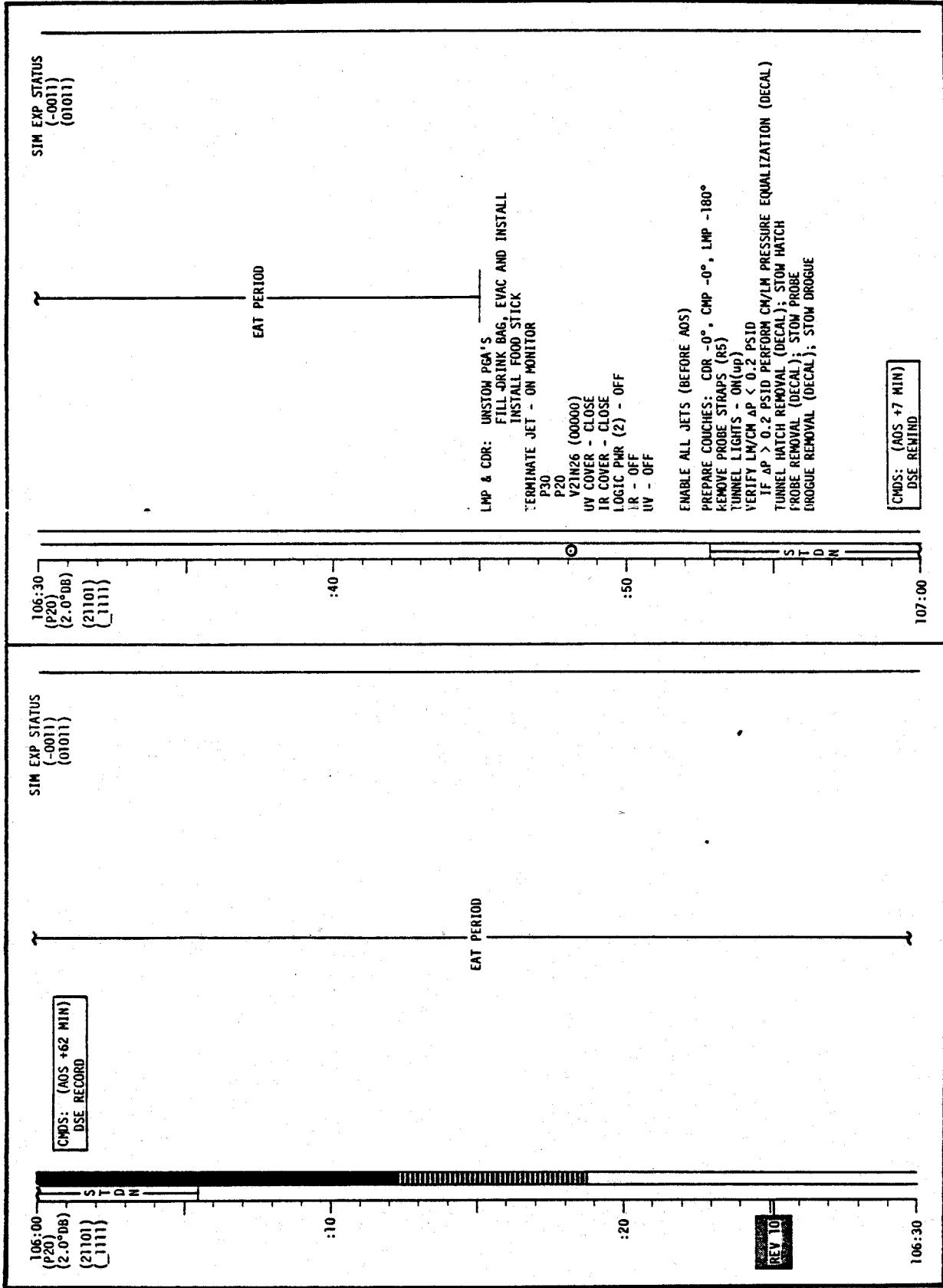


CSM FLIGHT PLAN



6 13

CSM FLIGHT PLAN



CSM FLIGHT PLAN

REPORT: DOCKING TUNNEL INDEX ANGLE
UPLINK: P20
(2.0 dB)
(2110)
(1111)

UPDATE: CSM S.V. AND Y66
TRAJECTORY STATUS
FLIGHT PLAN

LMP DON LCG AND PGA WITHOUT HELMET AND GLOVES

CMDS: (AOS +15 MIN)
DSSE PLAYBACK

:10

:20

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

107:30

SIM EXP STATUS
(-0000)
(01000)

X S T D N

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

3-105

10/23/72

FINAL (12/6)

APOLLO 17

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LM FLIGHT PLAN

CDR

NOTES

LMP

0823 CST
107:30

MCC-H

:35

:40

:45

:50

:55

108:00

S T D N

LM ACTIVATION CHECKLIST PAGE 3-1

IVT TO LM
OPEN HATCH
VERIFY DOCKING ANGLE

-2:30

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

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

107:30
 (P20)
 (2.0 DB)
 (21101)
 {1111}

SIM EXP STATUS
 (-0000)
 (01000)

V45 (RESET LUNAR SURFACE FLAG)
 P00

P52 (OPTION 3)
 (LDG SITE ORIENT)

:40 REPORT: GYRO TORNUING ANGLES
 GDC ALIGN
 V49 MNVR TO UNDOCK ATT (107:48)
 (000,105,000)
 HEA P -30, Y 202

P52 1MU REALIGN

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

CDS: (AOS +58 MIN)
 DSE REWIND
 PEA INTERCONNECTS - A8 TO TSB
 CMP DON BIOMED HARNESS, PEA WITHOUT
 HELMET AND GLOVES

:50 CDS: (AOS +66 MIN)
 DSE RECORD
 VERIFY DSE TAPE MOTION (LBR/TCD/FWD/CMD RESET)
 SET HGA MAN P -30, Y 202 AUTO, NARROW FOR AOS

CDR & LMP IVT TO LM

CDS: (AOS +66 MIN)
 DSE RECORD
 VERIFY DSE TAPE MOTION (LBR/TCD/FWD/CMD RESET)

SET HGA MAN P -30, Y 202 AUTO, NARROW FOR AOS

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/7)	10/23/77	2-107

LM FLIGHT PLAN

NOTES

CDR

10853 CST

108:00

LMP

TRANSFER POWER
LIGHTS ON
DES O₂ AND H₂O - OPEN

IVT TO LM

:10

EPS ACTIVATION
CONNECT TO LM COMM

:20

MISSION TIMER ACTIVATION

REV 11

PRIMARY GLYCOL LOOP ACT
CAUTION/WARNING CHECKOUT
ECS ACTIVATION & CHECKOUT

:20

CONNECT TO LM ECS
CB ACTIVATION
ACTIVATE RCS HEATERS

108:30

PAGNS TURN ON AND SELF TEST

:40

VHF CHECKOUT
RECORDER - ON

©

SUIT FAN/H₂O SEP CHECK
GLYCOL PUMP CHECK

:40

STEERABLE ANTENNA ACTIVATION
PRIM S-BAND CHECK
SEC S-BAND
BIOMED - RIGHT

109:00

LGC/CMC CLOCK SYNC
TEPHEM UPDATE

SET DAP
E-MEMORY DUMP
LDG GEAR DEPLOY

-1:30

MCC-H

108:00

UPDATE TO LM
AGS ABORT CONSTANTS
DOI-2 PAD
UPLINK TO LM
L/S REFSMMAT

(32022)

LM S.V. & V66
LGC ABORT CONST
LGC AT CLOCK SYNC
(IF REQ)

:50

108:00 - 109:00

TIME

10/23/72

DATE

108:00 - 109:00

DAY/REV

6/10-11

PAGE

3-108

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

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

108:00 [REDACTED] SIM EXP
 (21101) (*000)
 (1111) (010)
 AT LM REQUEST: LM PWR - RESET/OFF GET : : :
 (RECORD) : : :
 SYS TEST - 70 : : :
 SYS TEST Ind - 0 volts : : :
 DATA SYS - OFF : : :

CONFIGURE CAMERA: (UNDOCKING PHOTOS)
CM2/DAC/18/CEX-BRKT MIR (TH 1/250 7) 12 f/s (100% MAG)

MAG (CC) ____ MAG % ____
 PWR ON
 CM2/EL/80/CEX (f8,1/250,FOCUS) 10 FR
 MAG (KK) ____ FR # ____

LIOH CANISTER CHANGE
(1) INTO A, STOW 9 IN A9)

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

SIM EXP STATUS (*0000) (01000)	SIM EXP STATUS (*0000) (01000)	SIM EXP STATUS (*0000) (01000)
108:30 [21101] [1111] []	REMOVE AND STOW CSM/LM UMBILICAL INSTALL DROGUE AND PROBE (DECAL) PRE-LOAD PROBE (DECAL)	F1 or F2

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

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

LW CLOCK SYNC:
 VIGNSSE
 ON CDR MARK - V06N6SE

LW T EPHEM UPDATE:
 VOSNOTE, 1708E (T EPHEM)

ACQ STDN HGA P -30, Y 202 AUTO, NARROW
REPORT: LM PHR - RESET/OFF GET (FROM 108:00)

CHDS:	DSE DUMP
LM LANDING GEAR DEPLOY	
UPLINK:	CSM S.V. AND Y66
UPDATE:	- DAP DATA (110:05) UNDLOCK/SEP PAD COPY AT (110:25) P24 TRK PAD: (LDMK 17-X) (110:55) LM DOL-2 P76 PAD (112:10)

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-109

108:30

LM FLIGHT PLAN

CDR

0953 CST

E (32022)

二

20

109:30
(31022)

UPDATE TO LM
PIPA BIAS (IF REQ)

**GO/NO-GO FOR
UNDOCKING &
SEPARATION**

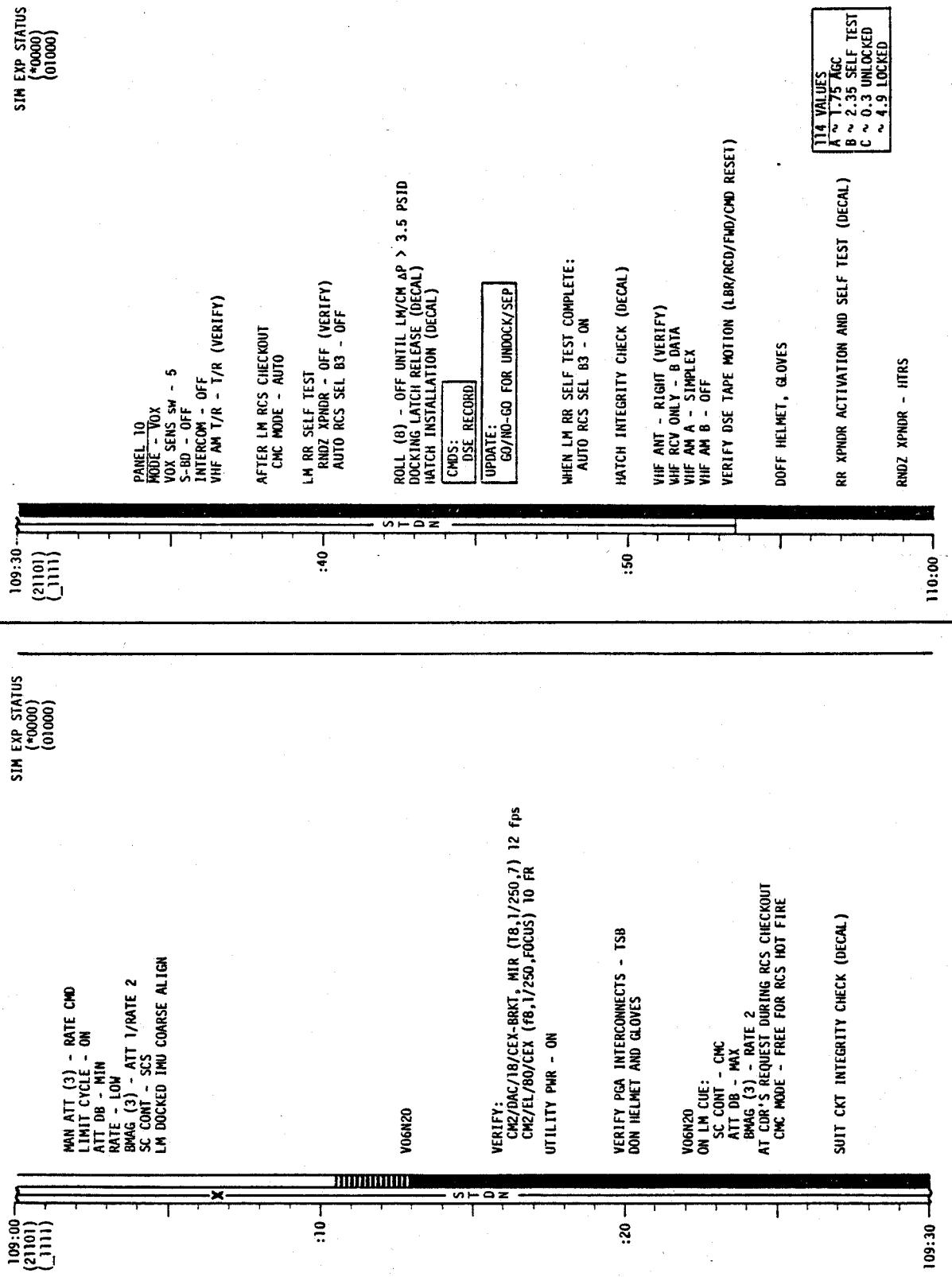
NOTES

LMP

109:00 (32022)	DOCKED IMU COARSE ALIGN		ASCENT BATTERY CHECKOUT	
:10	V06 N20			
	P52 IMU REALIGN OPTION 3, REFSMMAT LDG SITE ORIENT (CURSOR/SPIRAL TECHNIQUE) V06 N20		RCS PRESSURIZATION & CHECKOUT	
:20		S T D N	SET DAP	
			RR SELF TEST	VERIFY PROBE & DROGUE INSTALLATION CLOSE & SECURE HATCH
109:30 (31022)				DON HELMETS & GLOVES
:40				VHF B XMTR-DATA PCM-LO
:50				ADS/DCA ADDRESSIDE INTEGRITY CHECK

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

CSM FLIGHT PLAN



LM FLIGHT PLAN

CDR

NOTES

LMP

1053 CST
(31022)

:05

CABIN REGULATOR CHECK

RATE GYRO TEST

-0:20

PREP FOR UNDOCKING

:10

REV 12

:15

LM TIMELINE BOOK PAGE 1

-0:10

SET DAP
V06 N20

:20

P47 THRUST MONITOR
CSM/LM UNDOCKING & SEPARATION

110:27

YAW LEFT 60°, PITCH UP 90°

110:30

MCC-H

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

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

110:00
 (21101)
 (1111)

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

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

SIM EXP STATUS					
(*0000) (01000)		WT	N47	WT	N48
		P TRIM	Y TRIM	P TRIM	Y TRIM
		0 0	1	0 0	1
		0 0	1	0 0	1

P30; LOAD CSM SEP

SET DET COUNTING UP TO UNDOCK/SEP

LOAD AV IN EMS TO -100.0

CHECK NULL BIAS

VERIFY EMS -100.0/AV/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/FMD/CMD RESET)

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

59:30 PROBE EXT/REL - EXT/REL (NOM)
 VERIFY PROBE EXTENDED, LM ATTACHED
 ALLOW MOTION TO DAMP (5 SEC)
 PROBE EXT/REL - EXT/REL (HOLD) (< 20 SEC)
 00:00 XLAKE (4 JET) AFT
 FOR ~ 3 SEC (WGX 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 - CGC
 ATT DB - MAX
 AV CG - CSM
 BMAG (3) - RATE 2
 RHC PWR DIR - OFF
 ENS FUNC - AV SET/WHF RNG
 EMS MODE - WIF RNG
 PCE BIT RATE - LOW

UNDOCKING CHECKLIST

SET STARS	P30 MANEUVER						PURPOSE
	C	S	M	S	E	P	
R ALIGN	-	-	0	0	N /	A	PROP/GUID
P ALIGN	-	-	0	0	N /	A	WT
Y ALIGN	-	-	+	0	0	A	TRIM
			+	0	0	MIN	N47
				0	0	SEC	N48
ULLAGE	-	-	+	0	0	0	N81
			-	0	0	0	ΔV Z
				X	X	X	R (000)
				X	X	X	P (105)
				X	X	X	Y (000)

REV 12

P41 (TRIM)
 BMAG (3) - ATT 1/RATE 2
 SC CONT - SCS
 V48 (11102)
 (1111)
 RHC & THC - ARMED
 VON20E(AT LM REQUEST)
 UNDOCKING CHECKLIST

SEPARATION (000,000/105,000)	TIG: 110:27:55
:	BT: 3.3 SEC
:	AVT: 1.0 FPS
:	ULLAGE: N/A
DAC - OFF	ORBIT: 60.3 x 13.6
RECORD MAG %	FR #

110:30

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL	11/23/77	3-113

MCC-H

LM FLIGHT PLAN

CDR

NOTES

LMP

1123 CST
10:30
(22012)SEPARATION PHOTOGRAPHY
LM3/DAC & DCDOFF HELMETS & GLOVES
CONFIGURE CAMERAS FOR CABIN
PHOTOS, LM/DAC & DC

LDG RADAR CHECK

C

:35

:40

REPORT: V06N20 ANGLES & GET
DPS THROTTLE CHECKVHF B XMTR-OFF, BIOMED-LEFT
PCM-HI

DPS PRESSURIZATION & CHECKOUT

AGS ACTIVATION

LOAD AGS ABORT CONSTANTS

V47 AGS INITIALIZATION
ALIGN AGS TO PGNS

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}
 {11111}

V49 MNVR TO LOW ALT LDMK TRK PAD ATT (110:40)
 SET HGA MAN P+12, Y 334 REACQ, NARROW FOR AOS

SIM EXP STATUS
 {00000}
 {01000}

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

MAG (BB)
 UTILITY PWR - ON
 RR XPNDR - PWR

MAG % —
 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

CDS:
 DSE STOP
 TUE:
 HGA AUTO
 UPDATE:
 P24 T2 TIME (IF REQD)

: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

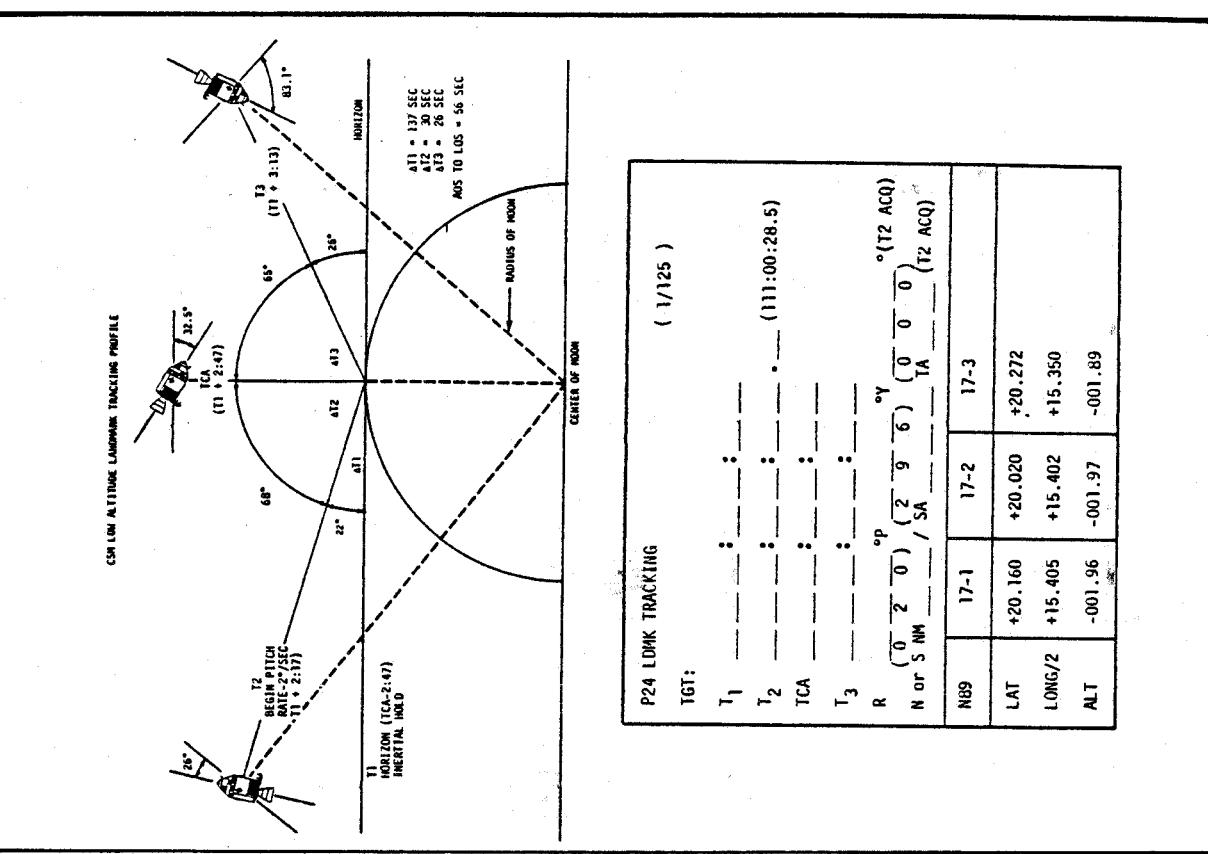
CDS:
 DSE STOP
 TUE:
 HGA AUTO
 UPDATE:
 P24 T2 TIME (IF REQD)

:50

P20 OPT 2 (LOW ALT LDMK TRK)
 N78 (+090.00)
 (LOAD LDMK PAD ROLL ANGLE)
 N79 (+000.50)
 (+000.50)
 N34 (LOAD T2 TIME)
 PRO
 CDS:
 DSE RECORD
 P24 (LDMK 17-X)
 OPT ZERO - OFF
 OPT MODE - CMC
 OPT TEL TRUN - SLAVE TO SXT
 OPT COUPLING - RSLV
 OPT SPEED - HI

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

111:00



P24 LDMK TRACKING (1/125)	
TGT:	
T ₁	:
T ₂	:
TCA	:
T ₃	:
R	^{°P} N or S NM / SA
N89	17-1
LAT	+20.160
LONG/2	+15.405
ALT	-001.96
	+20.020
	+15.402
	-001.97
	+20.272
	+15.350
	-001.89
	^{°Y} (0 2 0) / (2 9 6) (0 0 0) (T2 ACQ)
	(T2 ACQ)

LM FLIGHT PLAN

CDR

NOTES

MCC-H 1153 CST 111:00 (22012)

UPDATE TO LM
CSM CIRC P76 PAD
NO PDI+12 ABORT PAD
PDI PAD

PDI EARLY ABORT PAD
PDI LATE ABORT PAD :05

T2 ABORT
T3 TIG

SHe PRESSURE

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

:10

:15

:20

:25

111:30

S T D N

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)
 (0.5dB) X
 (1102)
 (1111)

2:17 - T2 (AUTO PITCH RATE BEGINS) OPT MODE - MAN, TAKE MARKS
 SIM EXP STATUS
 (*0000)
 (01000)

STOP PITCH RATE AT P 091
 VHF RNG - RESET, COMPARE RR AND VHF RANGE
 ACO STDN HGA P -69, Y 187
 RECORD MAG % _____, REMOVE & STOW DAC

P52 IMU REALIGN

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

N71

N05

N93

X

Y

Z

GET

P00

P52 (OPTION 3)

(LDG SITE ORIENT)

REPORT: GYRO TORQUING ANGLES

GDC ALIGN

DSE DUMP

UPDATE:

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

S

T

D

N

:20

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

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

P30: VERIFY CIRC TIG AND AV'S
 V49 MNVR TO CIRC BURN PAD ATT (111:34)
 HGA P -35, Y 207

SATIS

SFT

0

TRN

8SS

SPA

SXP

P30 MANEUVER

SET STARS	PURPOSE		
	C	I	R
S	P	S	G & N
+	0	0	PROPGUID
WT	N47		
R ALIGN	-----	0 0	P TRIM
P ALIGN	-----	0 0	Y TRIM
Y ALIGN	-----	+ 0 0	HRS GETI
U/LAGE	-----	+ 0 0	MIN N33
	0		SEC
		X	N81
		Y	ΔV Y
		Z	ΔV Z
			R (000)
			P (100)
			Y (358)
			H A N44
			H P
			AVT
		X X	BT
		X	ΔVC
			SATS
			SFT
			0
			TRN
			8SS
			SPA
			SXP

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-117

LM FLIGHT PLAN

MCC-H

1223 CST
111:30
(22012)

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

:35

:40

GO/NO-GO FOR DOI-2

:45

:50

:55

112:00

CDR

NOTES

MNVR TO AGS CAL ATT
VHF COMM CHECK W/CSM

AGS CALIBRATION

CONFIGURE VHF FOR LOS
VHF B XMTR-DATA

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
 (1102)
 (111)

SIM EXP STATUS
 (*0000)
 (01000)

GDC ALIGN
 ALT SET = 60 NM
 VHF COMM CHECK WITH LM
 PRE-SPS BURN SIM PREP (CUE CARD)
 V48 (1101)
 (1111)
 SET DET COUNTING UP TO CIRC
 PAO (TRIM)
 UPDATE:
 GO/NO-GO FOR CIRC

CMD:

DSE RECORD

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

CSM CIRCULARIZATION (000,004/100,358)	TIG: 111:56:22.7
:	BT: 4.0 SEC
:	AV: 70.1 FPS
P00	ULLAGE: 4 JET, 12 SEC

(1101)

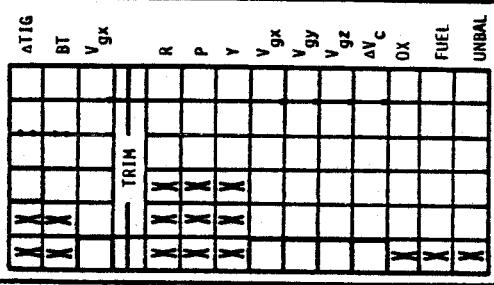
(1111)

:50
 112:00

CIRC BURN TABLE					
SPS LIMITS	P OR Y RATES	ATT DEVIATIONS	SHUTDOWN TIME	RESIDUALS	MANUAL
TIGHT	10°/SEC	+10°	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 OR (+)V ROLL LEFT AND USE -Z THRUSTERS	MANUAL START RESTART IF ΔVg>20 FPS

BALL VLV FAILURE - START ON SUSPECT BANK

BURN STATUS REPORT



CONTINGENCY COMMUNICATIONS

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

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-119

F8V277 MCC-H

LM FLIGHT PLAN

CDR

LMP

NOTES

112:00 (22012)	LM DOI-2
	P76 UPDATE CSM S.V.

:05

PREP FOR PDI

MNVR TO PDI ATTITUDE

:10

CHECK ECS, RCS, EPS, APS
CAMERA PREP FOR EARTHRISE
LM/DC

(22112)

SET DAP

:15

DON HELMETS & GLOVES

:20

CAMERA PREP FOR PDI
LM3/DAC

BATS 5 & 6 - ON
INVERTER-1

:25

112:30

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

TIG: 1112:01
BT: (RCS) 27 SEC

CSM FLIGHT PLAN

P20 OPT 5 (LDMK TRK ATT) (112:10)
 N78 (+051.05)
 (-053.41)
 (-012.20)
 N79 (+000.50)

SIM EXP STATUS
(*0000)
(31000)

LM DOI-2 (112:01)

INFIGURE CAMERA: (LDK TRK)
CM/DAC/SXT/CEX (EXP-PAD) 1 fps (3.8% MAG)
MAG (BD) MAG %
UTILITY POWER ON

REV 13

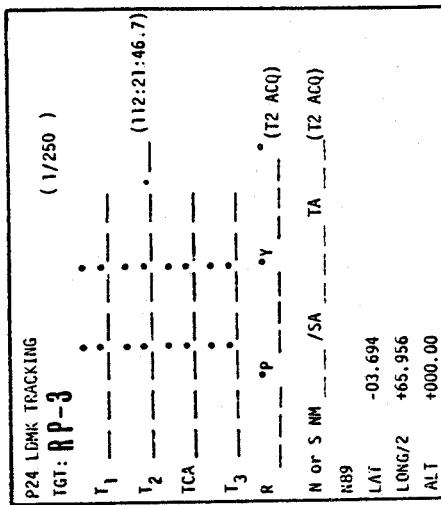
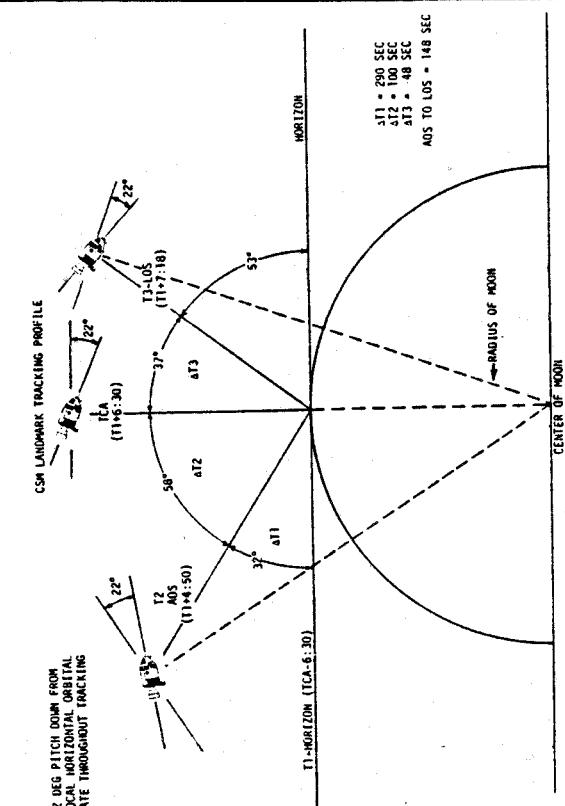
-10-

P76 (LM DOI-2)
 GDC ALIGN
 VERIFY ORDEAL
 ALT SET 70 NM
 P24 (LDLM RP -3)
 OPT ZERO - OFF
 OPT MODE - CMC
 OPT TEL TRUN - SLAVE TO SXT
 OPT COUPLING - RSLV
 OPT SPEED - MED
 0-0-0-0-11 (HORIZONTAL) DFT - RESET/START

3:50 - DAC - ON
 4:50 - T2 (LDNK ACQ) OPT MODE - MAN,
 TAKE MARKS 10 SEC APART
 6:30 - TCA
 7:18 - T3 (LDNK LOSS) DAC - OFF

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

UNSTOW CSM RESCUE 800X



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

LM FLIGHT PLAN

CDR

1323 CST
(22112)

MCC-H

NOTES

LMP

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

:35

UPDATE TO LM
N69 BACKUP RLS
(IF REQD)

:40

GO/NO-GO FOR PDI
N69 NOMINAL, DOWN
TRACK, CROSS
TRACK, RADIAL
(IF REQD)

P63 PDI

REPORT: ED BAT VOLTS
ASC BATS ON TIME

LR ON

:45

GO/NO-GO FOR PDI

:50

UPDATE TO LM
N69 NOMINAL, DOWN
TRACK, CROSS
TRACK, RADIAL
(IF REQD)

:55

X

113:00

PCM - HI
VHF B XMTR-OFF
AUDIO MODE - VOX
GDS 210' AOS
TARGET AGS FOR ABORT

VHF COMM CHECK

LM PDI

TIG: 112:50
BT: (DPS) 12 MIN

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

SIM EXP STATUS
(*0000)
(31000)

112:30
(P20)
(0.5°DB)
[11101]
[111]

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

REPORT: BURN STATUS

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)

40

22 DEG PITCH DOWN FROM
LOCAL HORIZONTAL ORBITAL
RATE THROUGHOUT TRACKING

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

REPORT: BUR
CMDs: NSF STOP

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

VHF COMM CHECK WITH LM
P24 (LDMK 17-1)
OPT ZERO - OFF
OPT MODE - CMC

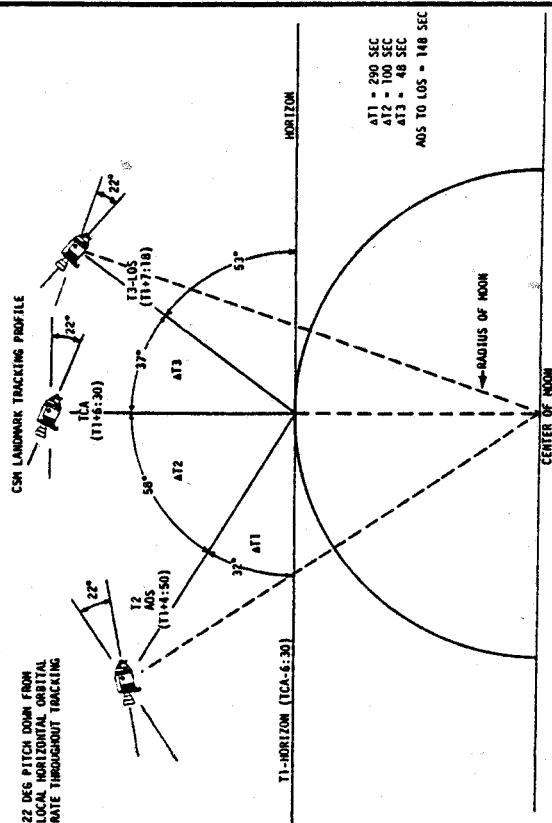
0:00 - 11. (HORIZON) DET = RESET/START

CMS:
DSE RECORD
3:50 - DAC - ON

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

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

卷之三



P24 LDMK TRACKING	
1GT: 17-1	(1/60)
T ₁ — — — — —	• • • • •
T ₂ — — — — —	• • • • •
TCA — — — — —	• • • • •
T ₃ — — — — —	• • • • •
R: — — — — —	*P — — — *Y — — —
N or S NM — — —	/SA — — — TA — — —
NS9	(T2 ACQ) (T2 ACQ)
LAT	+20.160
LONG/2	+15.405
ALT	-001.96

MISSION	EDITION	DATE	PAGE
APEN 017	EINAI (1/2/6)	10/23/72	3-123

LM FLIGHT PLAN

NOTES

LMP

CDR

1353 CST
(22112)

113:02

LM LUNAR TOUCHDOWN

STAY/NO-STAY FOR T1

:05

T1 STAY/NO-STAY
P12 POWERED ASCENT

UPDATE & ALIGN AGS

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

:10

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

TAPE RECORDER - OFF

113:15

S
T
D
N

VENT DPS PROPELLANTS
DOFF HELMETS, GLOVES,
& RESTRAINTS

LUNAR SURFACE CHECKLIST, PAGE 1-1
BATS 5 & 6 - OFF/RESET
INVERTER - 2
REPORT: DEDA 047, 053
544, 545, 546

:20

P57 LUNAR SURFACE ALIGN
OPT 3, REFSMMAT, A/T-3
(LDG SITE ORIENTATION)

AGS LUNAR SURFACE GYRO
CALIBRATION

:25

PARK IMU PLATFORM
ALIGN AGS TO PGNS

UPDATE TO LM
STAY/NO-STAY FOR T3
IMU PARK ANGLES

113:30

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

LM FLIGHT PLAN

CDR

1423 CST
113:30
(22112)

LM POWER DOWN
LGC - STANDBY, IMU - OFF

NOTES

LMP

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

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

CABIN CONFIGURATION FOR STAY

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

113:30
(P20)
(0.5°08)
{1101}
{1111}

POST-SPS BURN SIM PREP (CUE CARD)
VHF AM A - OFF (CTR)
VHF RCV ONLY - OFF
DATA SYS - ON
IR - ON
UV - ON
MC/LA COVER - OPEN
IR COVER - OPEN
UV COVER - OPEN
MC - EXTD

SIM EXP STATUS
(+0000)
(31000)

CDS: (AOS +68 MIN)
DSE RECORD

:40

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

:50

PC: STBY
STEREO
PWR

LA - ON
IMAGE MTN - ON
114:00

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-127

LM FLIGHT PLAN

MCC-H

CDR

NOTES

LMP

CABIN CONFIGURATION FOR STAY (CONT)

REPORT: PRD

CSM REV 4

114:00

:10

:20

114:30

:40

:50

115:00

S T D N

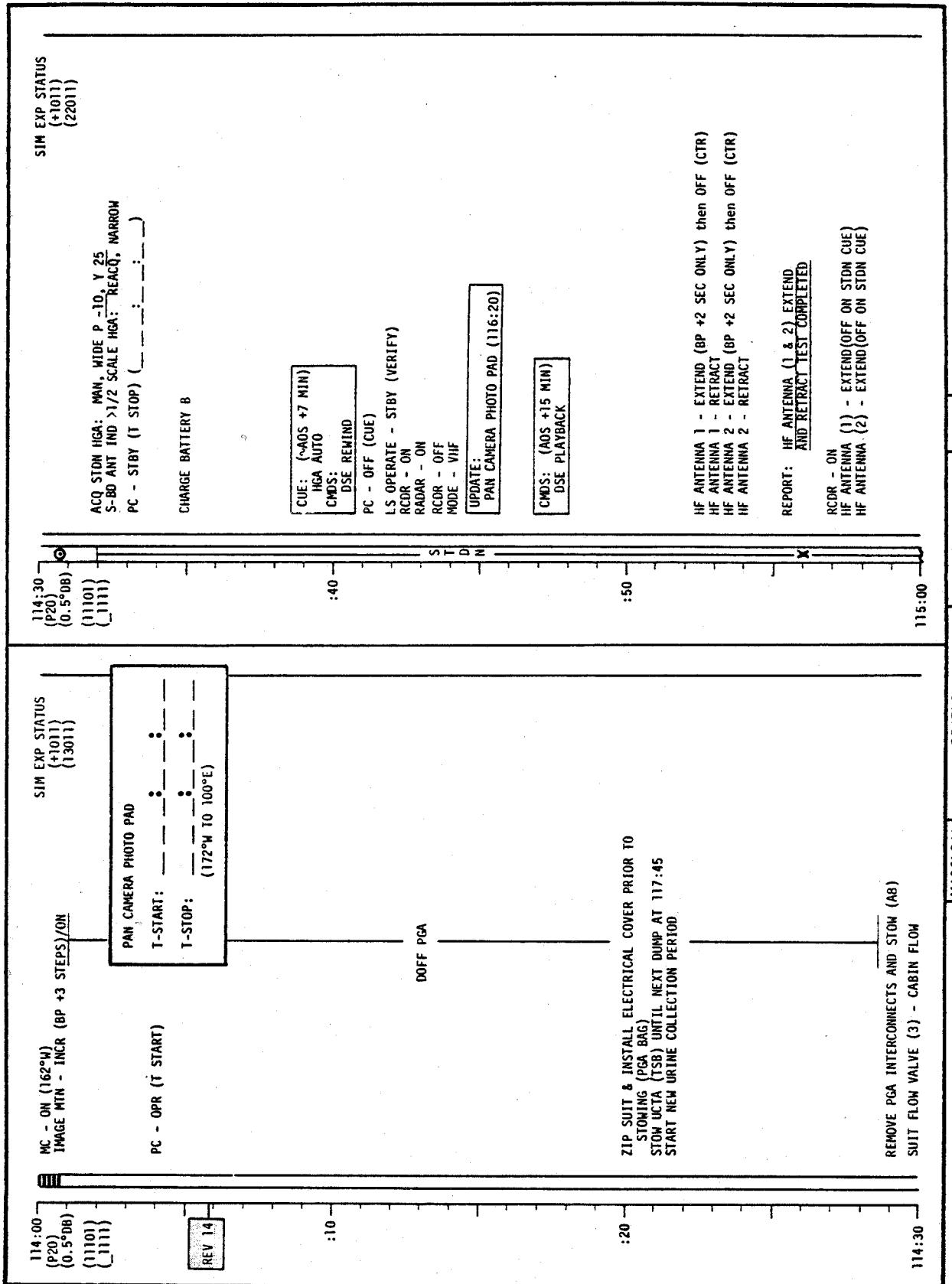
EAT PERIOD

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

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

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

CDR

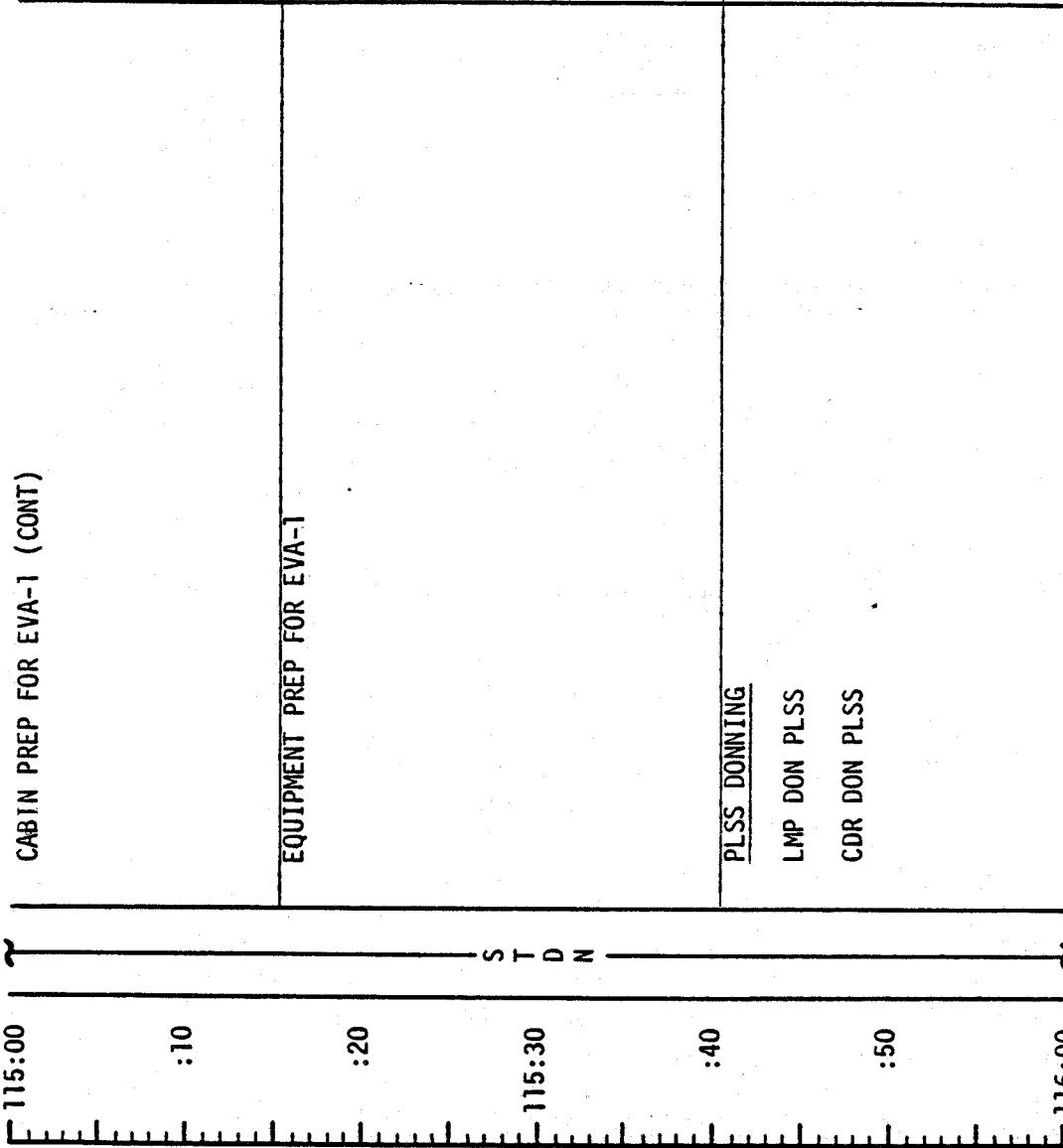
1553 CST

MCC-H

T CABIN PREP FOR EVA-1 (CONT)

NOTES

LMP



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

SIM EXP STATUS
 {(*1111)
 {00400}

HGA PWR - ON
 (P20)
 (0.5°0B)
 SET HGA: MAN, WIDE P -12, Y 211 AUTO, NARROW
MODE - VHF
RCDR - OFF
LS OPERATE - OPERATE (PULL FILM FOR 2 MIN)

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

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

VOICE MARGINAL
THRU LOS

CMDS:
DSE REMIND
PC SELF TEST - OFF
UV - OFF (AFTER SUNSET)
IR - OFF
IMAGE MTN - OFF
MC - OFF
DATA SYS - OFF
SM/AC PWR - OFF

DSE RECORD
LS OPERATE - OPERATE (PULL FILM FOR 2 MIN)

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

LS OPERATE - OPERATE (PULL FILM FOR 2 MIN)

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

LS OPERATE - STBY

V25N78 {+090.00} VHF TEST ATT (115:30)
 {-017.74}
 {+000.00}

V58E
 (072,000)/168,000)

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

LS OPERATE - STBY
AFTER 1 MIN:
RCDR - OFF
RADAR - OFF
V25N78 {+090.00} + X FWD SIM ATT (116:02)
 {+052.25}
 {+160.00)

VSBE
SM/AC PWR - ON
DATA SYS - ON

115:00 (P20) 115:30
 {+1111} {11101} {11111}
 {02411} {11111}
 {11111}

MC - OFF (7°E)
 WAIT 30 SEC
 MC - STBY
 LA - OFF
 IMAGE MTN - OFF
 MC - OFF
CMDS:
DSE REMIND
 PC SELF TEST - OFF
 UV - OFF (AFTER SUNSET)
 IR - OFF
 IMAGE MTN - OFF
 MC - OFF
 DATA SYS - OFF
 SM/AC PWR - OFF

:10 :20 :40 :50 116:00

LM FLIGHT PLAN

CDR

NOTES

MCC-H 1653 CST 116:00

	LMP	CDR	PLSS DONNING (CONT)	NOTES
			PLSS COMM CHECK CONFIGURE COMM FOR EVA RECORDER - ON REPORT: PLSS O ₂ QUANTITY	CSM REV 15
:10			OPS CONNECT	-0:30
:20			HELMET GLOVE DONNING	-0:15
116:30	S T D N		PRESSURE INTEGRITY CHECK	
:40			CABIN DEPRESS START WATCHES @ 3.5 PSIA	00:00/START EVA-1
			FINAL PREP FOR EVA	
:50			OPEN FWD HATCH	+0:10
117:00	X		EGRESS DEPLOY MESA SURFACE FAMILIARIZATION	RECODER - OFF EGRESS, CLOSE HATCH SURFACE FAMILIARIZATION
				+0:20

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

116:00 IR - ON
 (P20) UV - ON
 MC - STBY
 IMAGE MTN - ON
 MC - ON (164°W)
 IMAGE MTN - INCR (BP +4 STEPS)/ON
 LA - ON
 PC SELF TEST - 1HRS

REV 15

SIM EXP STATUS
 (+1111)
 (01000)

(0.5°DB)
 (11101)
 (1111)

PREPARE FOR ORBITAL SCIENCE VISUAL
 LANDING SITE (CMS)

:10-

:20-

:40-

:50-

116:30

SIM EXP STATUS
 (+1111)
 (22011)

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

CUE: (~10S +7 MIN)
 HGA: AUTO
 CMDS:
 DSE PLAYBACK

UPDATE:
 FLIGHT PLAN

S

T

D

N

ORBITAL SCIENCE VISUAL
 LANDING SITE (CMS)

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

CONFIGURE DSE (STOP/CMD RESET/REWIND)
 PC - OPR (T START)

PC - OPR (T START)

116:30

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

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

LM FLIGHT PLAN

CDR

NOTES

117:00

MCC-H

:20

117:30

+0:20

:10

118:00

+0:30

:40

118:00

+0:40

:50

118:00

+0:50

+1:10

118:00

S
T
D
N
V
Y

LRV TEST DRIVE
LRV FRONT CONFIGURATION

LRV ANTENNA CONFIGURATION
LRV TV CONFIGURATION
SRC 1 CONFIGURATION

LRV MISC EQUIP STOW

FLAG DEPLOY

LM AREA DESCRIPTION &
PHOTOS

LRV AFT CONFIGURATION

+1:00

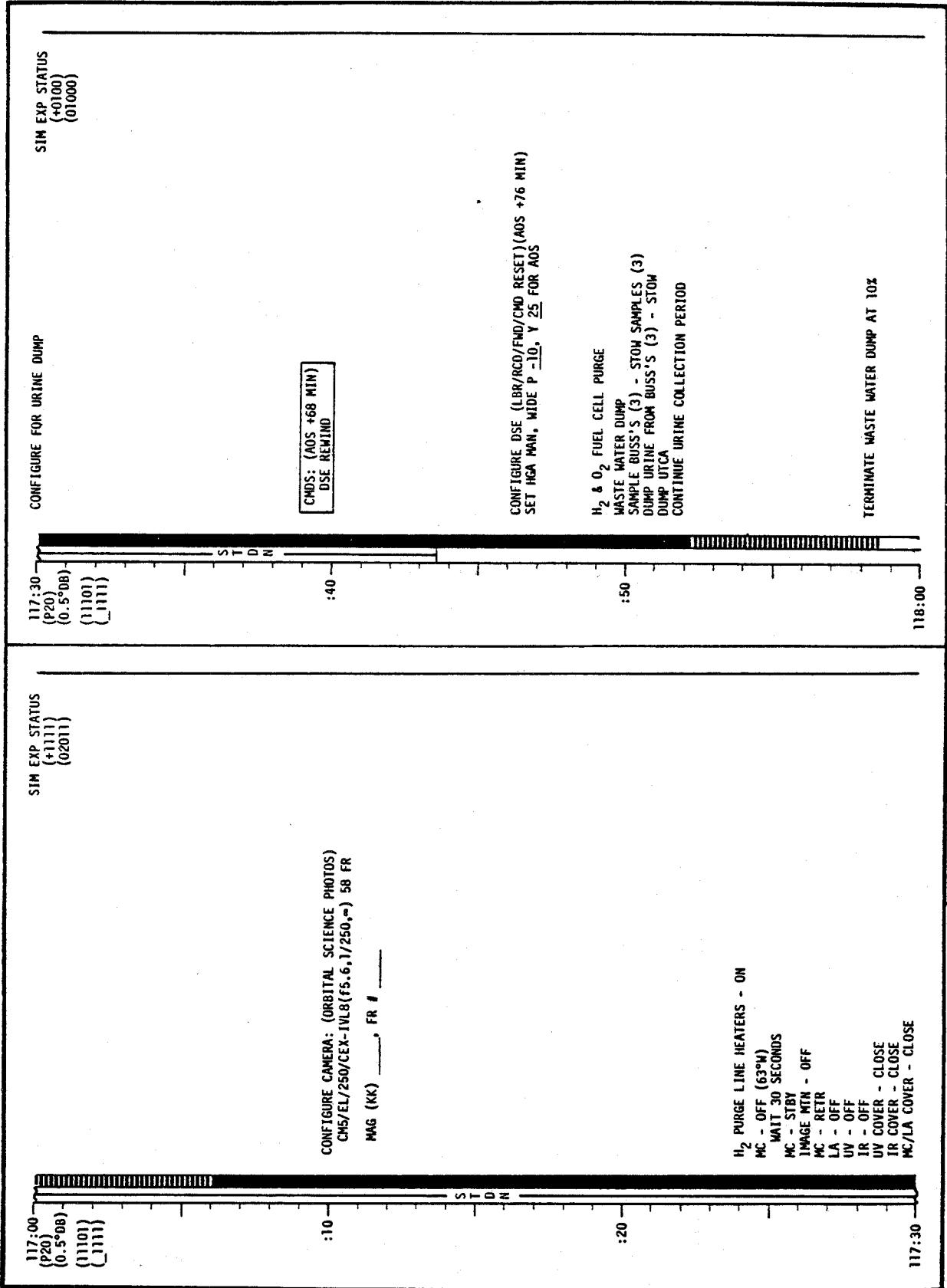
+0:20

LMP	NOTES
LRV DEPLOY	
LRV SETUP	
LRV TEST DRIVE	LM AREA DESCRIPTION & PHOTOS
LRV FRONT CONFIGURATION	LRV AFT CONFIGURATION
LRV ANTENNA CONFIGURATION	
LRV TV CONFIGURATION	
SRC 1 CONFIGURATION	
FLAG DEPLOY	

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



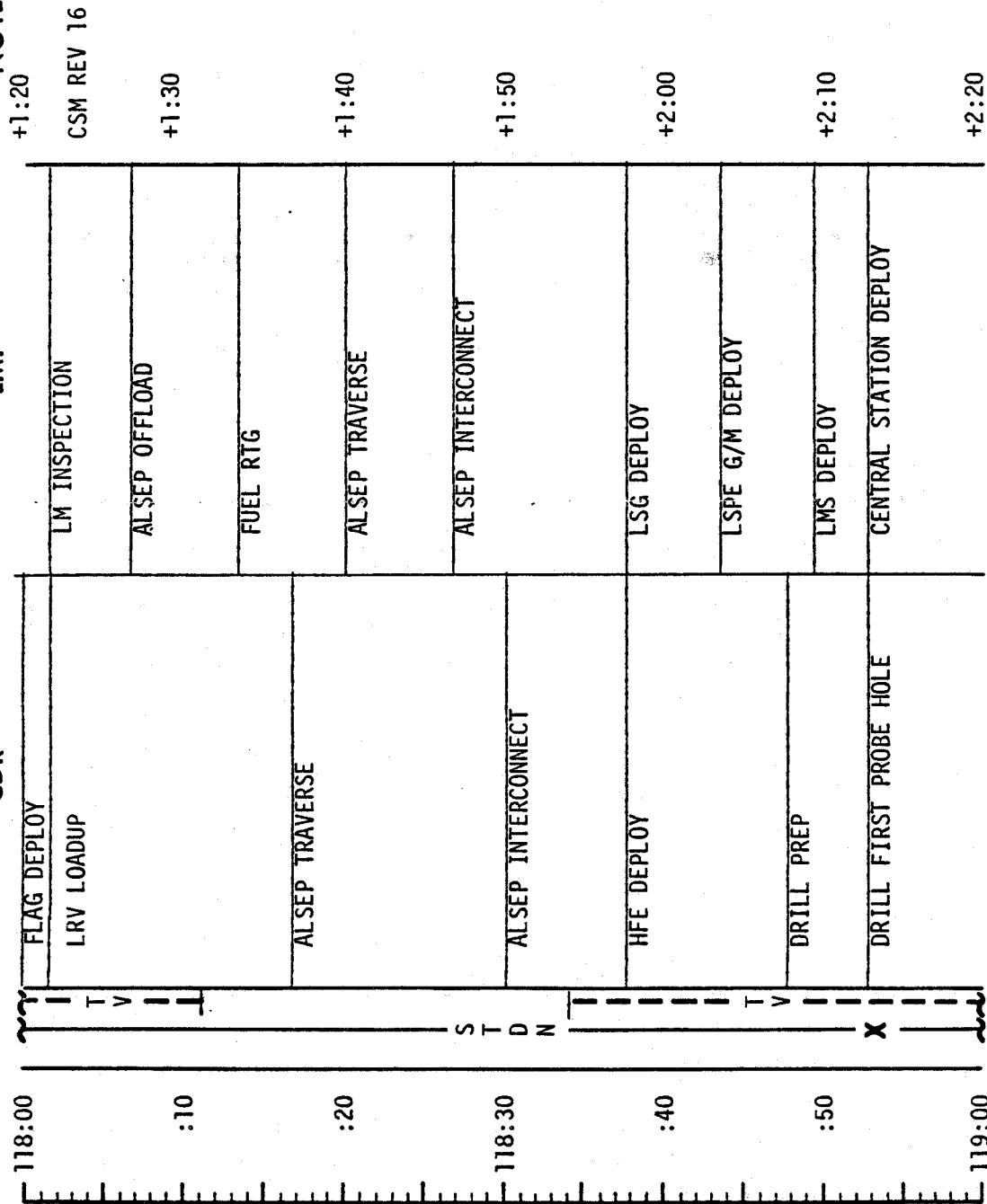
LM FLIGHT PLAN

CDR

NOTES

1853 CST

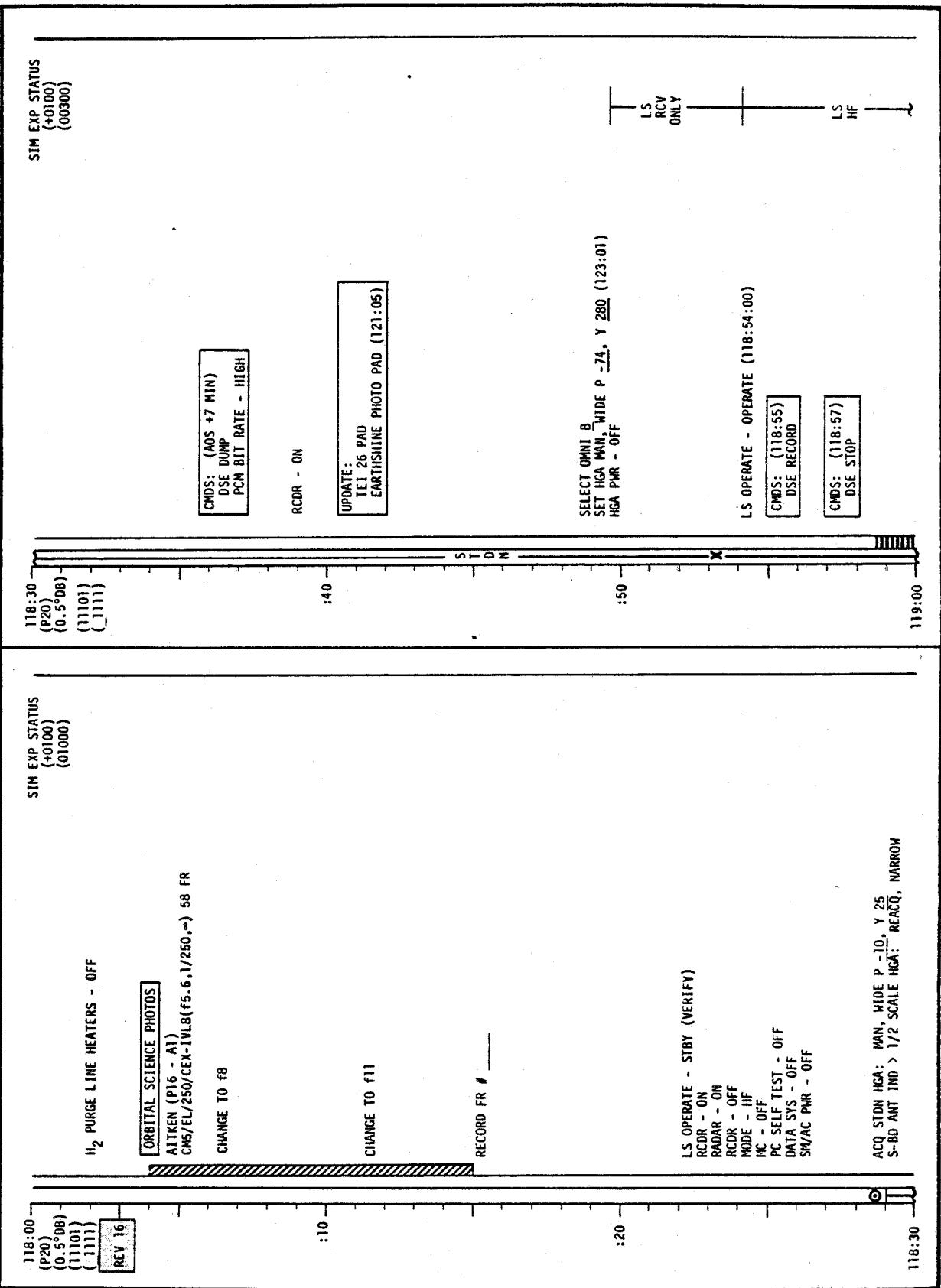
MCC-H



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

CDR

1953 CST

MCC-H

NOTES

+2:20

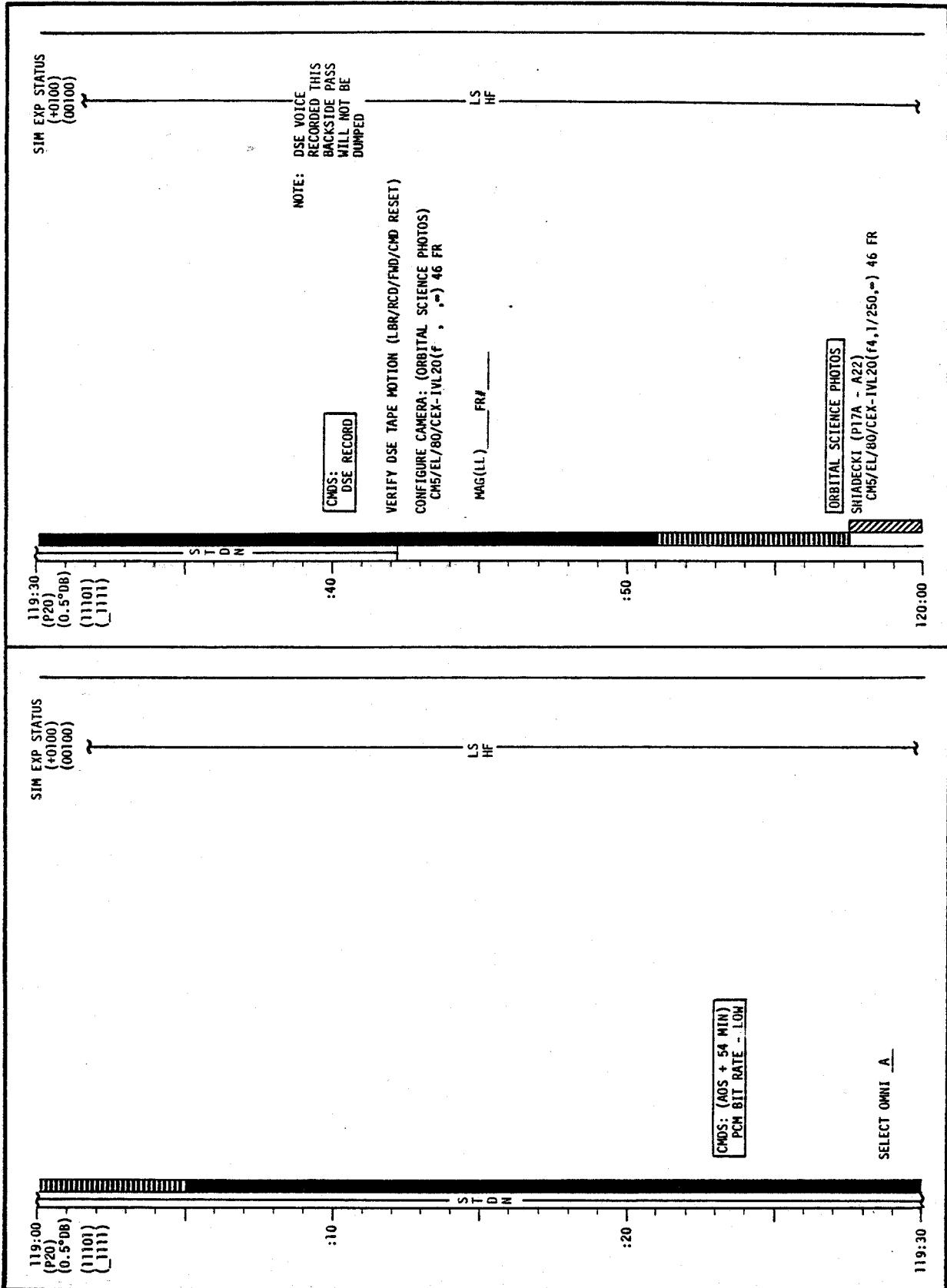
119:00

LMP	NOTES
	ALSEP ANTENNA DEPLOY
:10	EMPLACE HFE PROBE #1 CENTRAL STATION ACTIVATION LEAM DEPLOY
:20	DRILL SECOND PROBE HOLE LSP ANTENNA DEPLOY
:20	CONFIGURE FOR G/M PHOTOS & SAMPLING
:20	S T D V N
:20	EMPLACE HFE PROBE #2 GEOPHONE DEPLOY DOCUMENTARY PHOTOS
:20	DRILL DEEP CORE
:20	+3:00
:40	
:40	+3:10
:50	RECOVER DEEP CORE
:50	+3:20
120:00	

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

CDR

NOTES

2053 CST

+3:20

120:00

CSM REV 17

CONFIGURE & EMPLACE NEUTRON
FLUX

:10

+3:30

BREAK & CAP CORE STEMS

:20

+3:40

GEOLOGY PREP

:30

+3:50

LOAD PLSS'S

120:30

ALSEP PHOTOS

S
T
D
N

LRV NAV INITIALIZATION

SEP XMTR DEPLOY PREP

:40

+4:00

DRIVE TO SEP SITE

:50

+4:10

DRIVE TO STATION #1
EP DEPLOY EN ROUTE

121:00

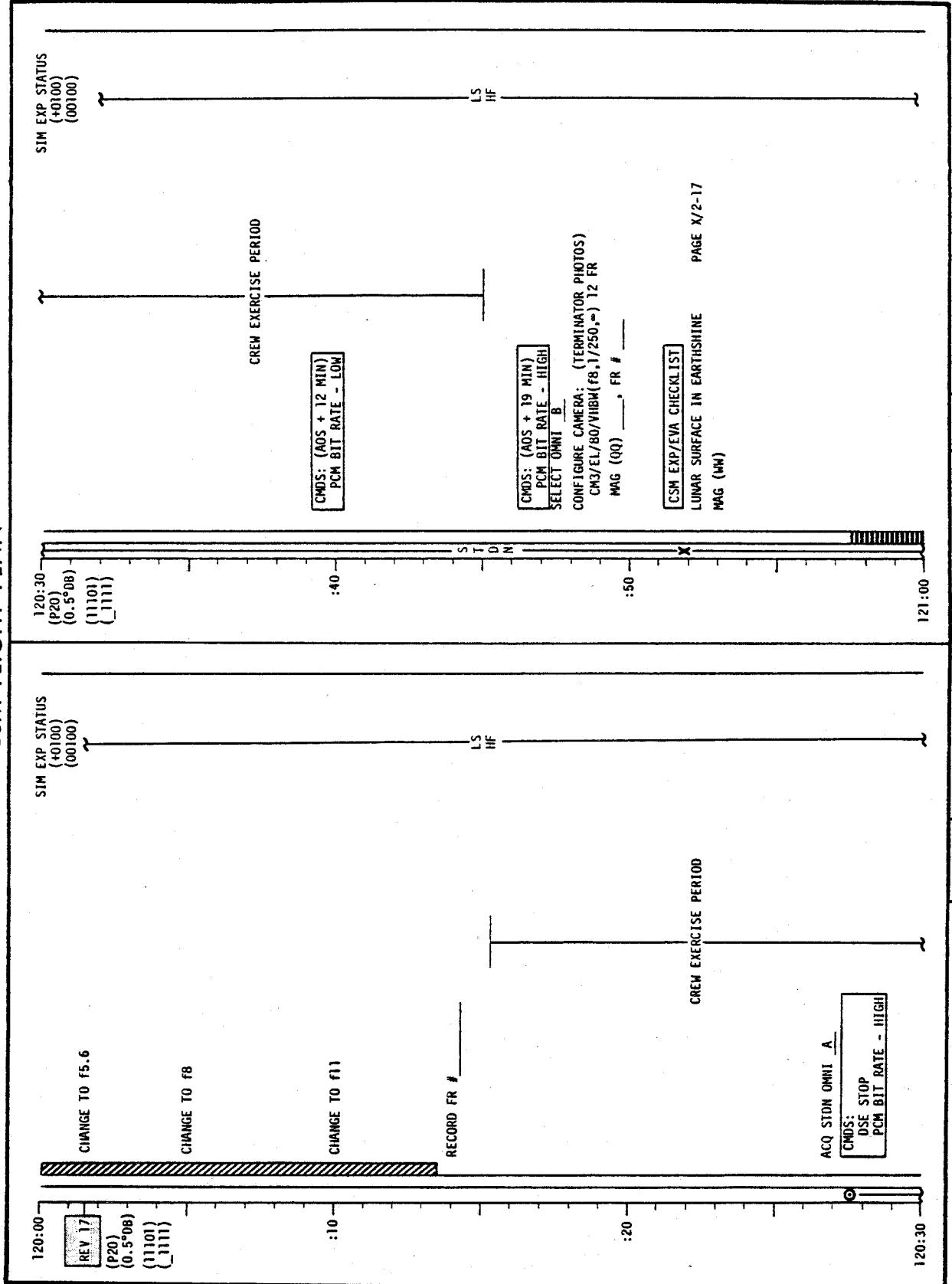
+4:20

MCC-H

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	PRELIM (8/28)	10/23/72	12C: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

+4:20

STATION #1
GEOLOGICAL OBSERVATIONS & PHOTOS
RAKE SAMPLES
DOCUMENTED SAMPLES
DOUBLE CORE
EP DEPLOY

:10

:20

121:30

:40

:50

122:00

+4:40

+4:50

+5:00

+5:10

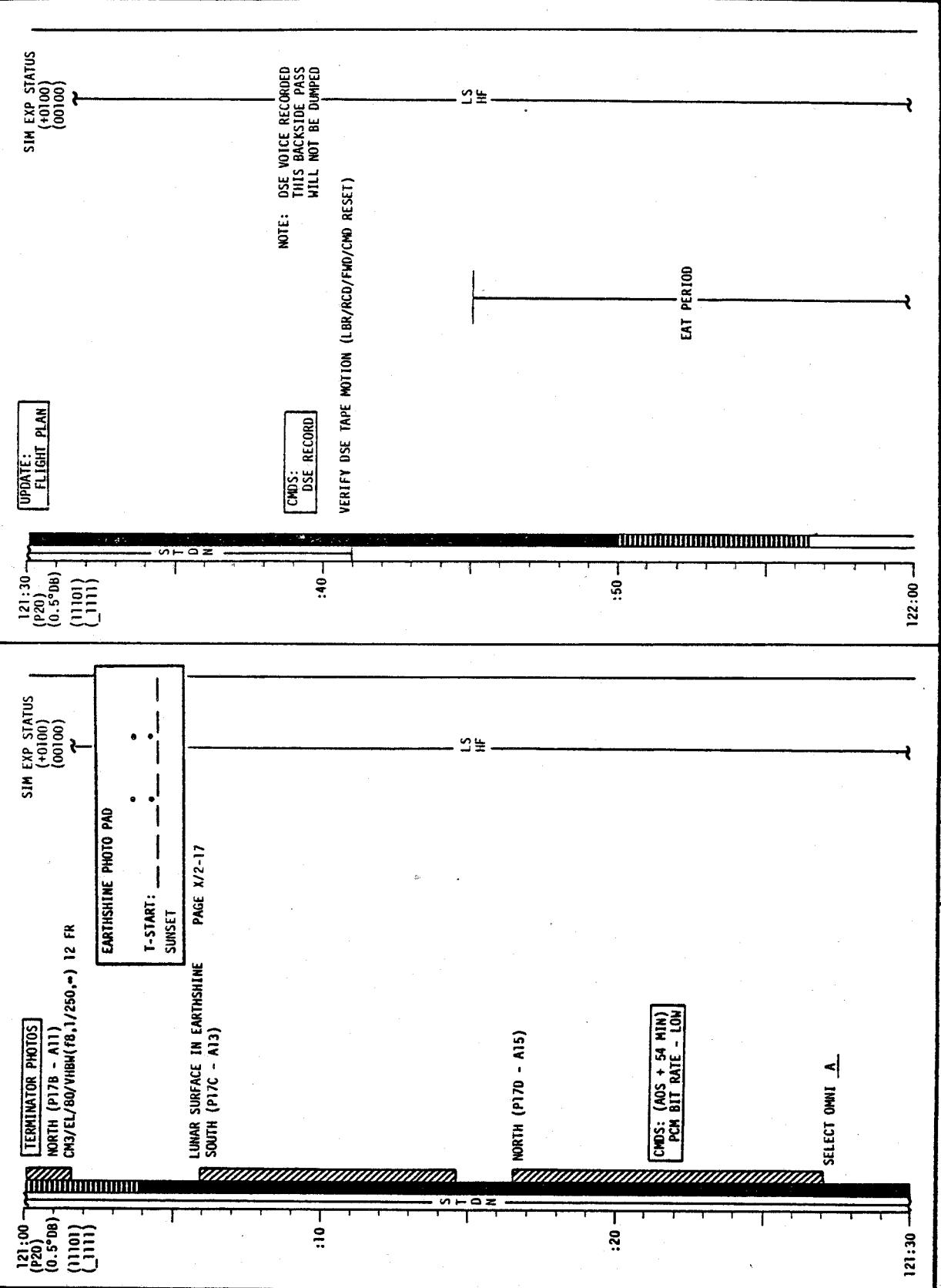
+5:20 CSM REV 18

S T T D V N

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

+5:20 CSM REV 18

STATION #1 (CONT)

122:00 :10

DRIVE TO SEP SITE
EP DEPLOY EN ROUTE

:20

122:30

S T D N

SEP EXPERIMENT DEPLOY

:40

:50

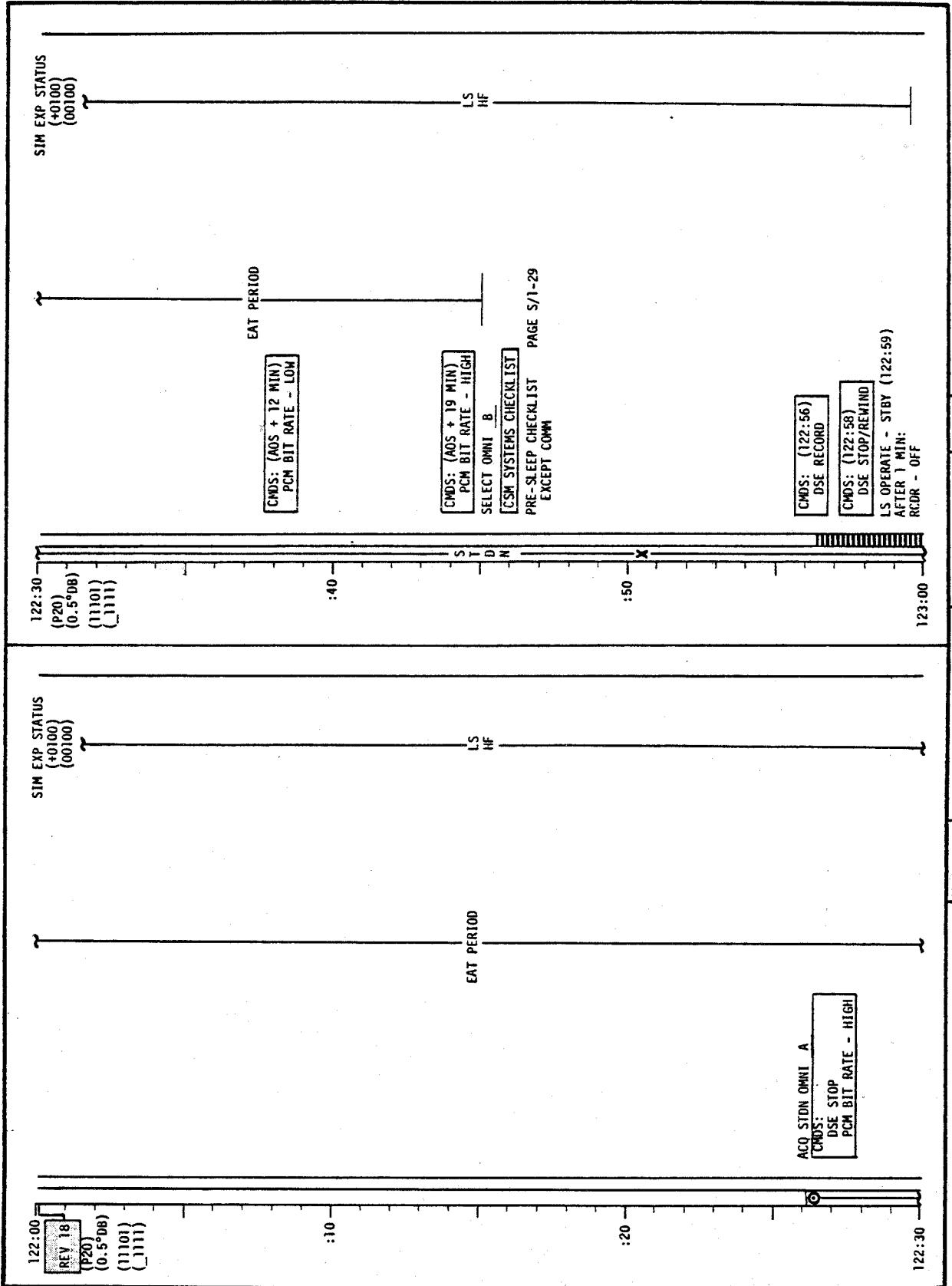
DRIVE TO LM

123:00

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

NOTES

+6:20

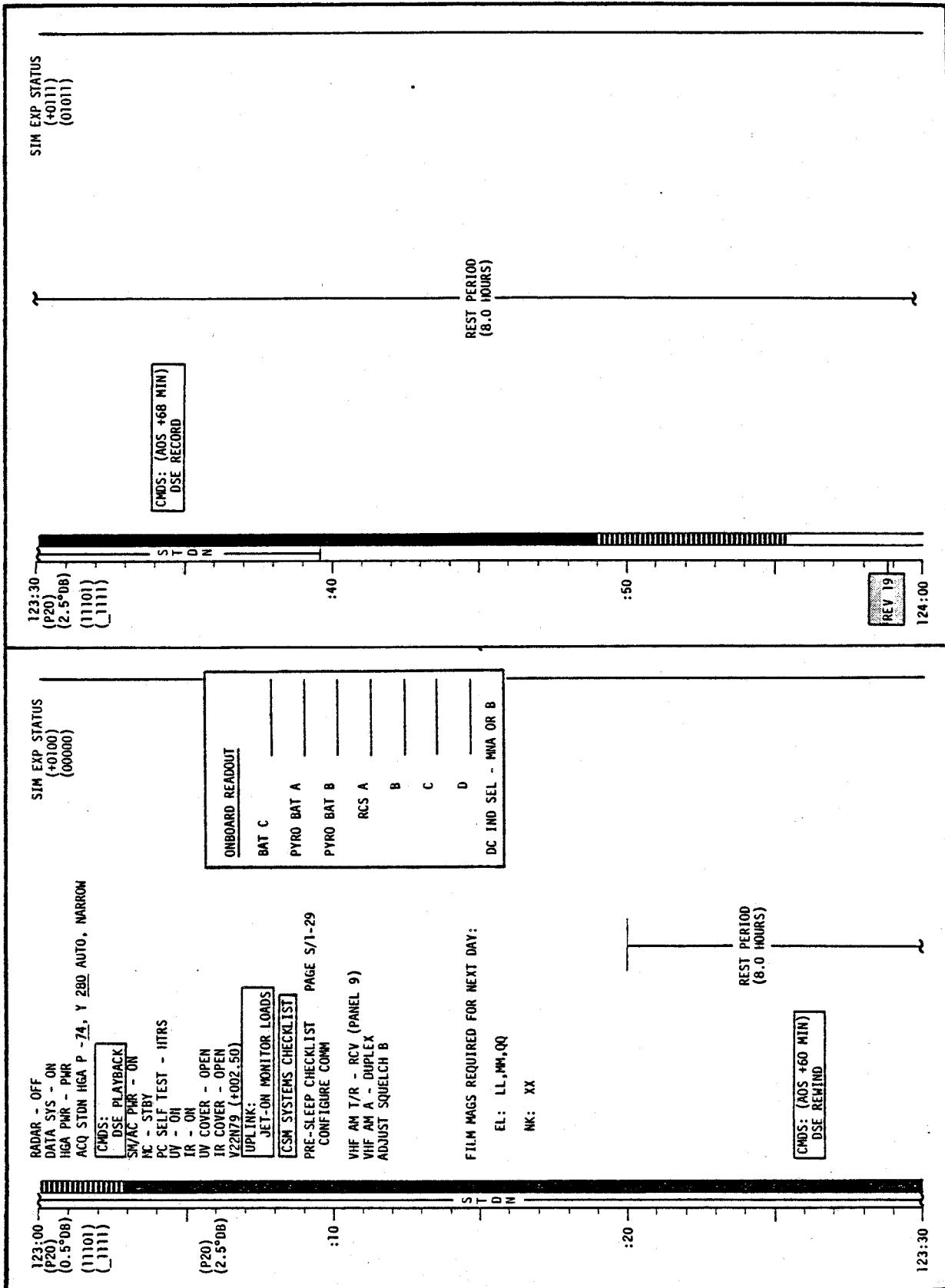
LMP	LMP	NOTES
123:00	TRAVERSE TERMINATION	
:10	CLOSEOUT PREP	EVA-1 CLOSEOUT
:20	EVA-1 CLOSEOUT	+6:30
123:30		
:40		+6:40
:50		+6:50
124:00		7:00/END EVA-1
		REPRESS LM POST-EVA SYSTEMS CONFIGURATION
		DOFF HELMETS & GLOVES
		CONNECT TO LM COMM
		PLSS O ₂ INITIAL RECHARGE
		BIOMED - LEFT

CSM REV 19

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

PLSS 0₂ INITIAL RECHARGE (CONT)

:10

PLSS/OPS DOFFING

REPORT : OPS PRESSURE

:20

S T D N

124:30

:40

POST-EVA CABIN CONFIGURATION

X

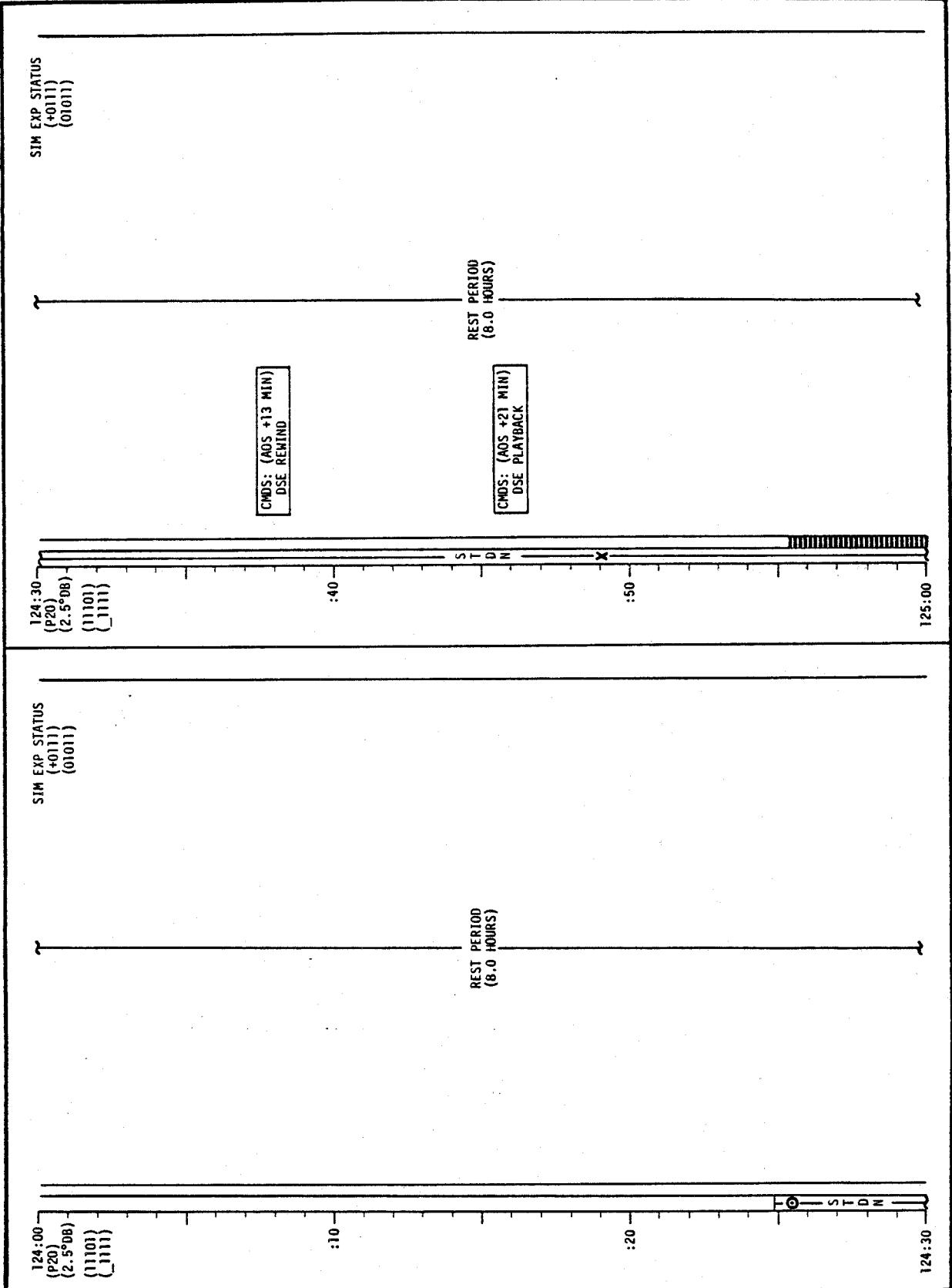
WEIGH SRC & COLLECTION BAGS, REPORT: WEIGHTS

125:00

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

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

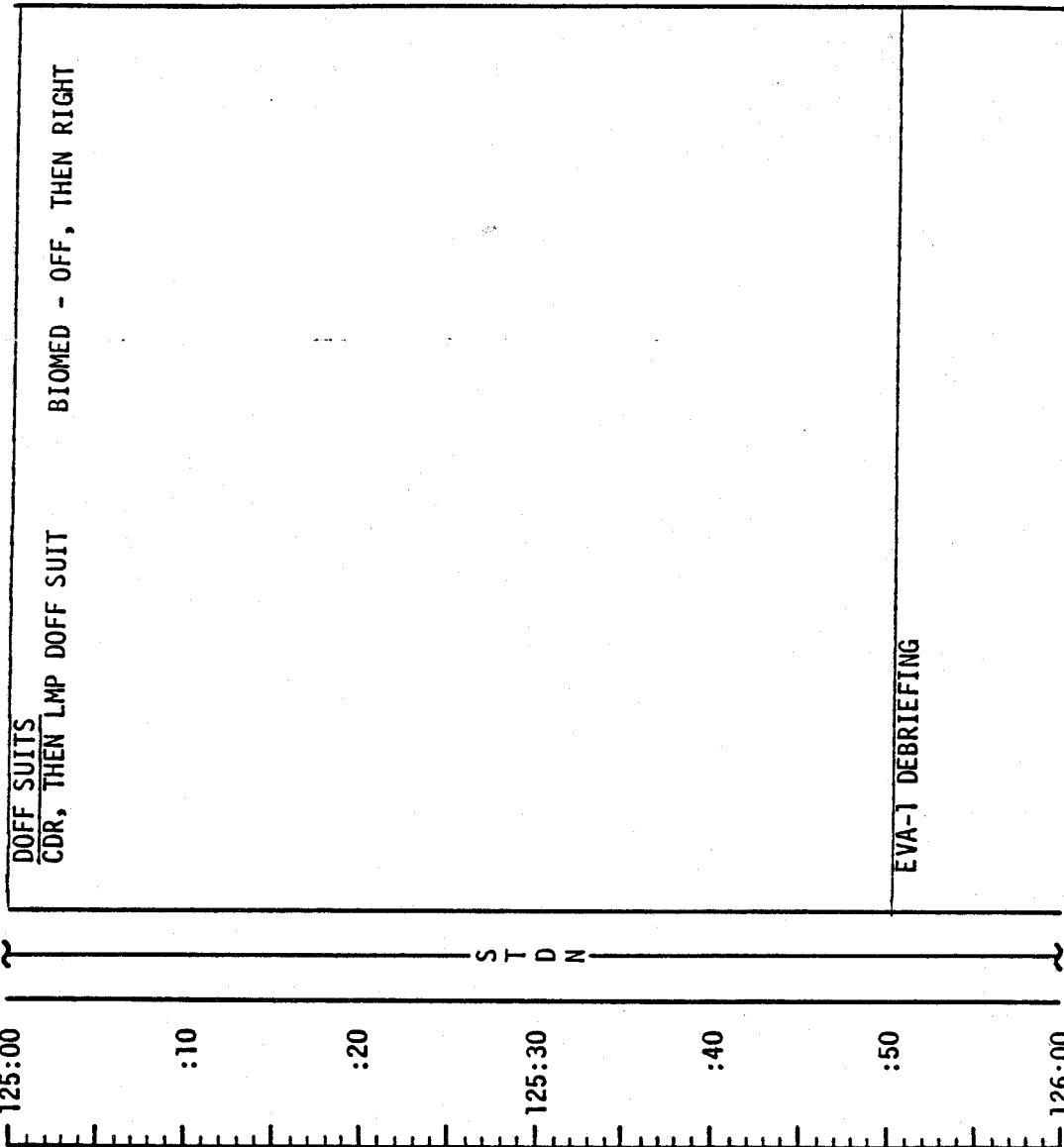
CDR

NOTES

0153 CST

MCC-H

LMP

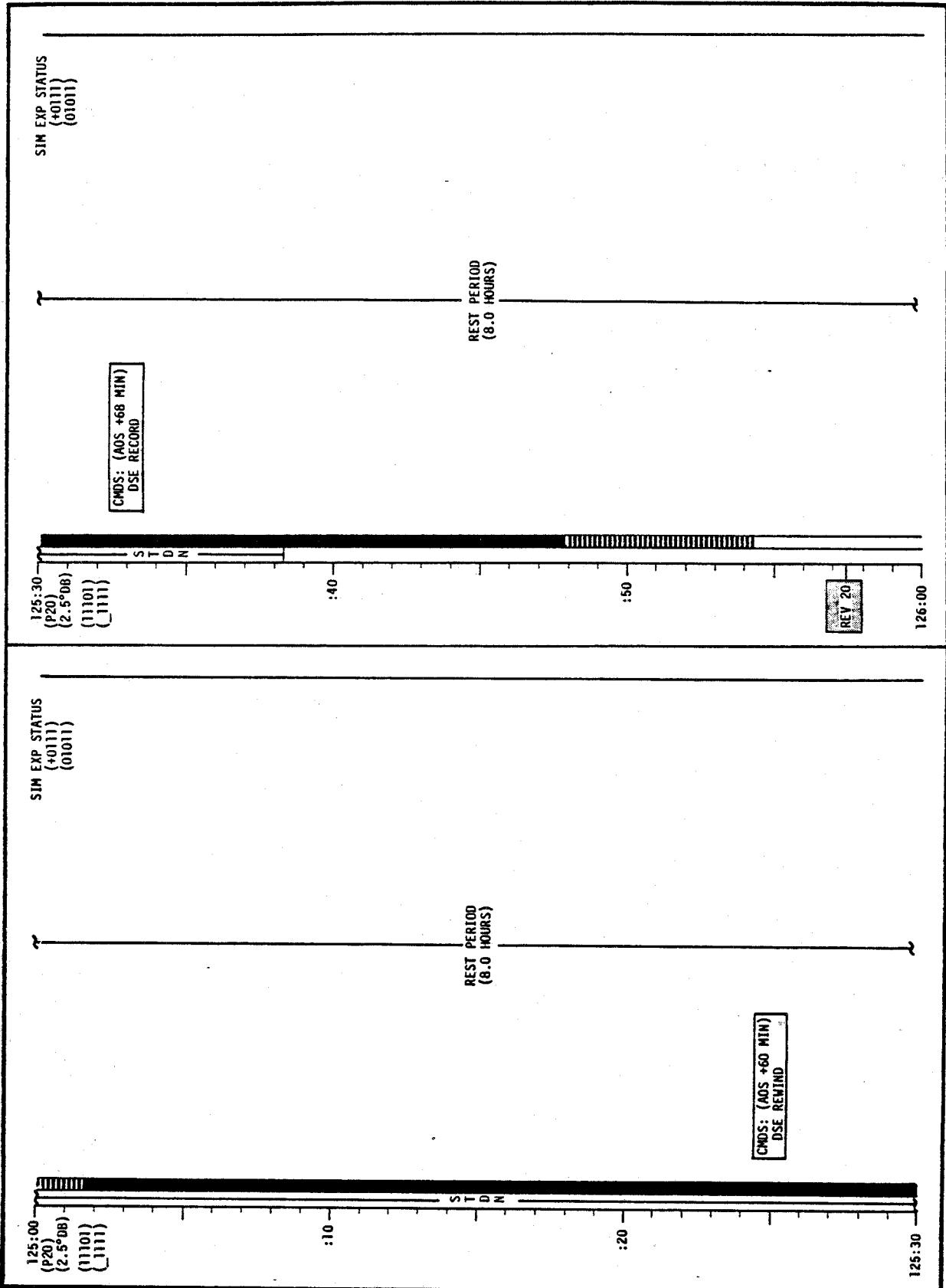


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	125:00 - 126:00	6/19-20	3-150

FLIGHT PLANNING BRANCH

CSM REV 20

CSM FLIGHT PLAN



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

LM FLIGHT PLAN

CDR

NOTES

0253 CST

MCC-H

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

EVA-1 DEBRIEFING (CONT)

LOAD ETB

:10

:20

126:30

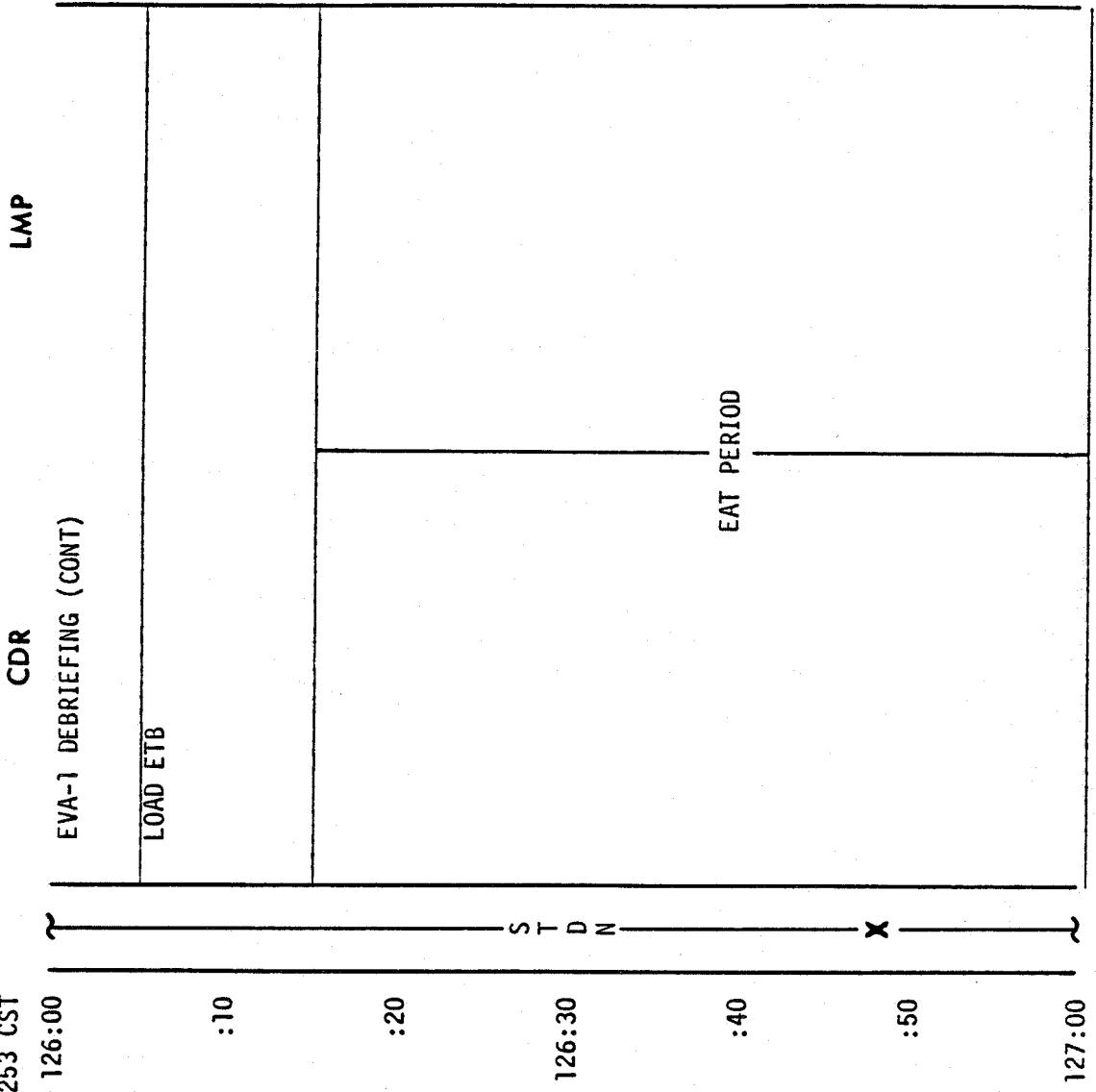
:40

:50

127:00

S T D N

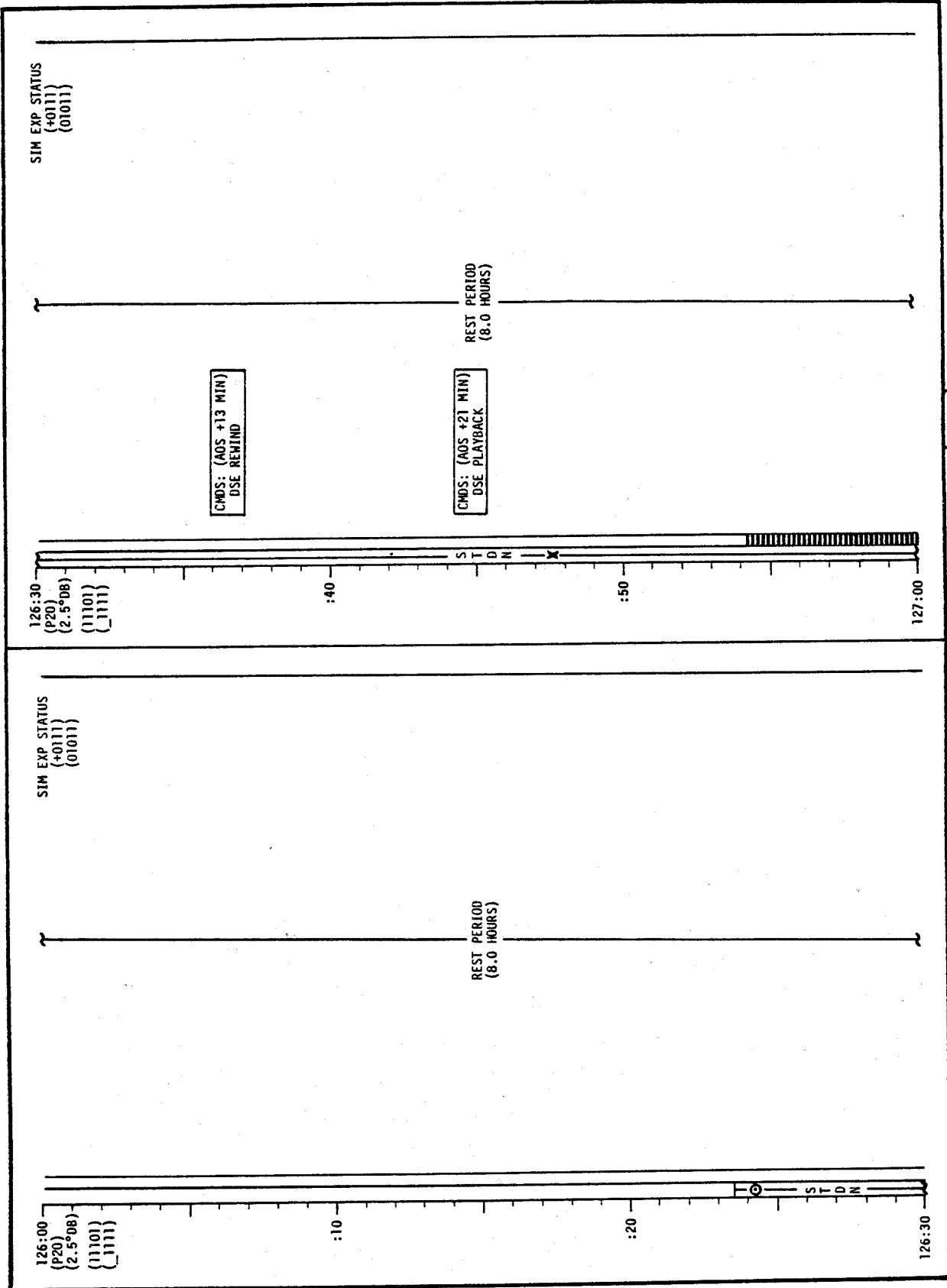
X



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

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
Apollo 17	FINAL (1704)	10/23/72	1-153

LM FLIGHT PLAN

CDR

NOTES

0353 CST

PLSS RECHARGE

LMP

MCC-H

127:00

:10

:20

127:30

:40

:50

128:00

S T D N

S T D N

S T D N

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

PRESLEEP
ACTIVATE LGC & PWR AMP FOR
CLOCK RESET, UPDATE CSM
S.V., LGC TO STANDBY
BATTERY MGT
BATS 1 & 2 - ON
BAT L (LMP) -OFF, (CDR) -ON
BATS 3 & 4 - OFF/RESET
PWR AMP -OFF ON MCC-H CUE

PKS 210' LOS

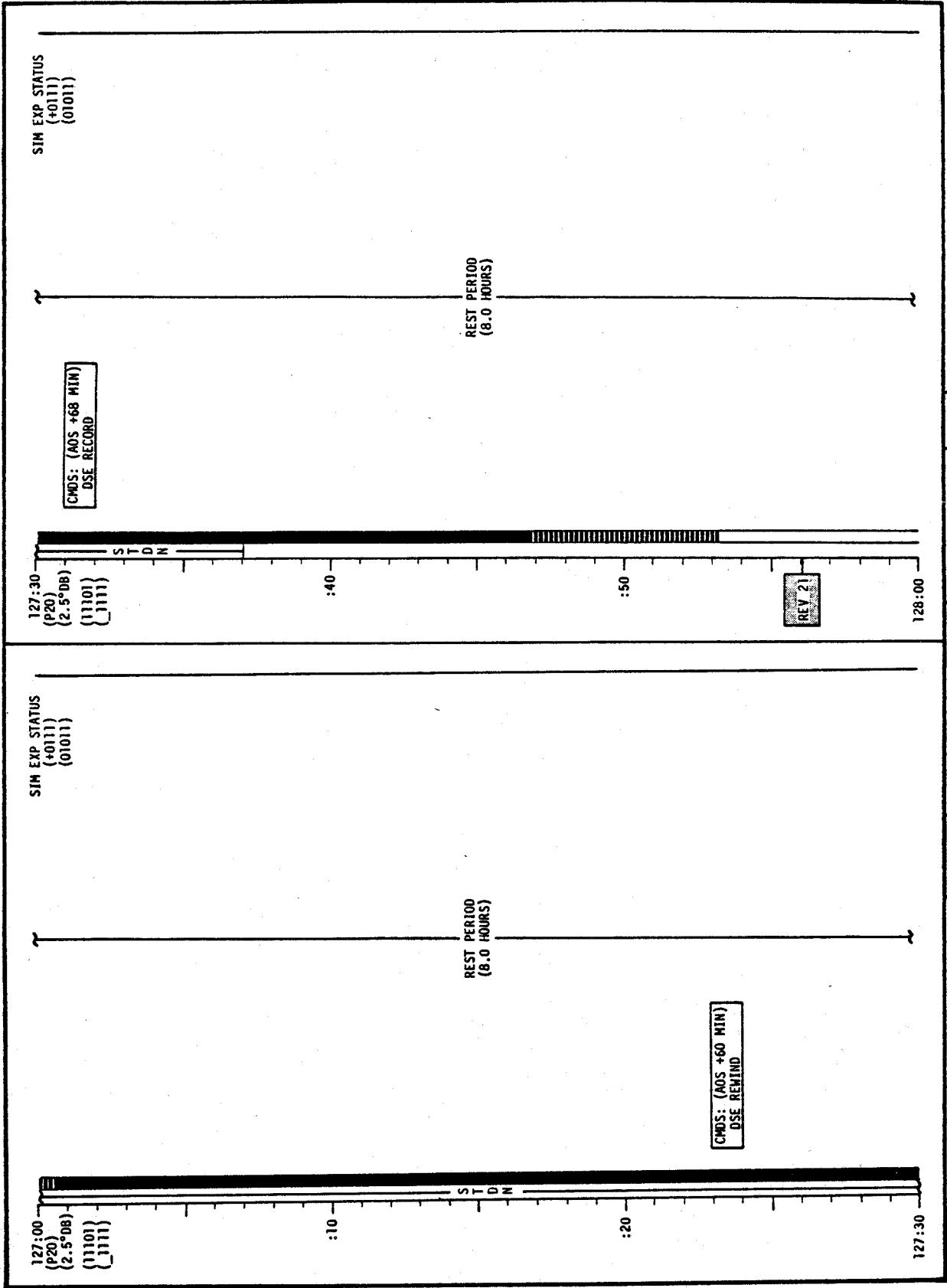
CSM REV 21

REST PERIOD
(8 HOURS)

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



MISSION	EDITION	DATE	PAGE
FTM11 11961	11961	10/13/65	2-145

LM FLIGHT PLAN

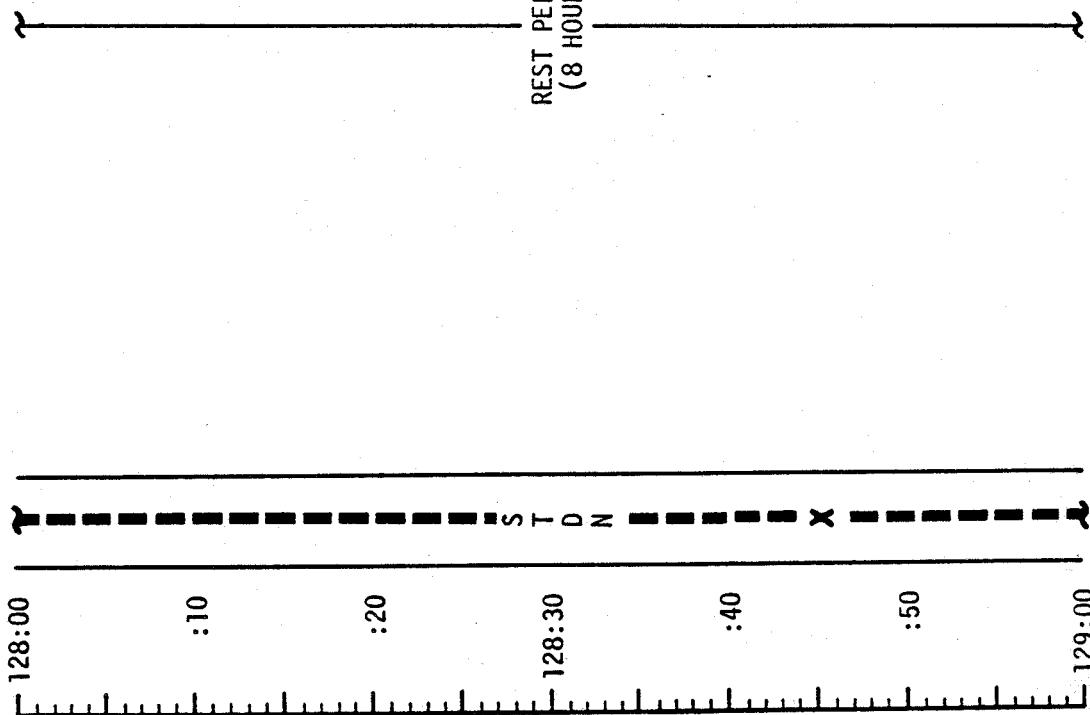
MCC-H

0453 CST

CDR

LMP

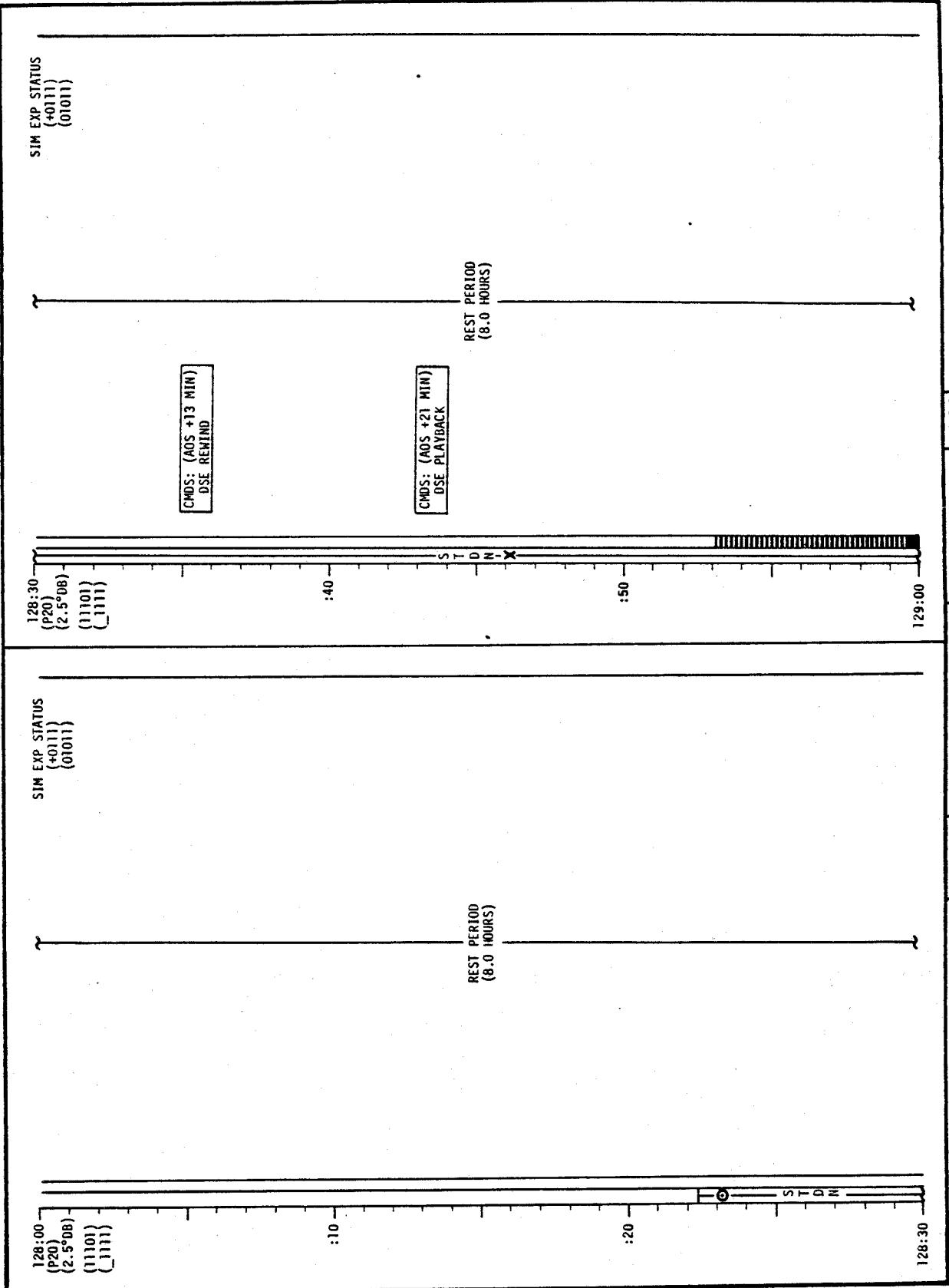
NOTES



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

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

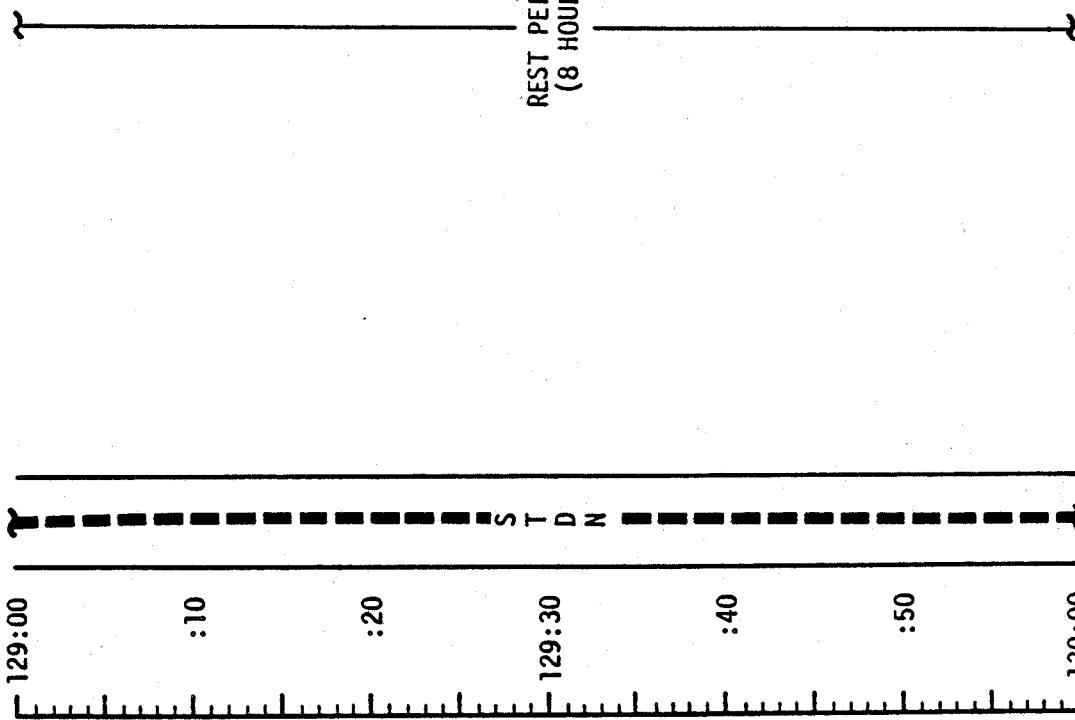
CDR

0553 CST

MCC-H

LMP

NOTES



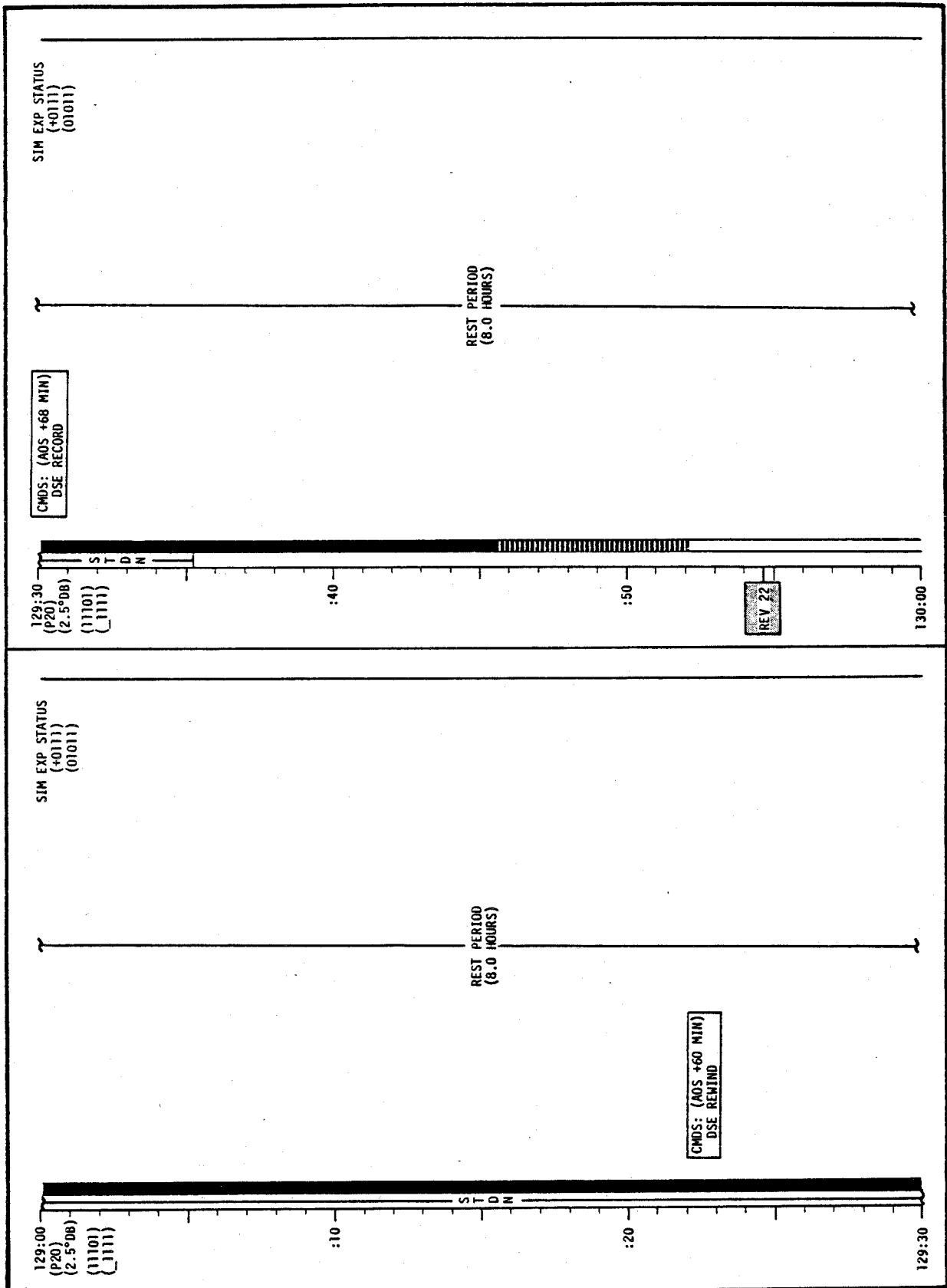
REST PERIOD
(8 HOURS)

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

CDR

NOTES

0653 CST
130:00

:10

:20

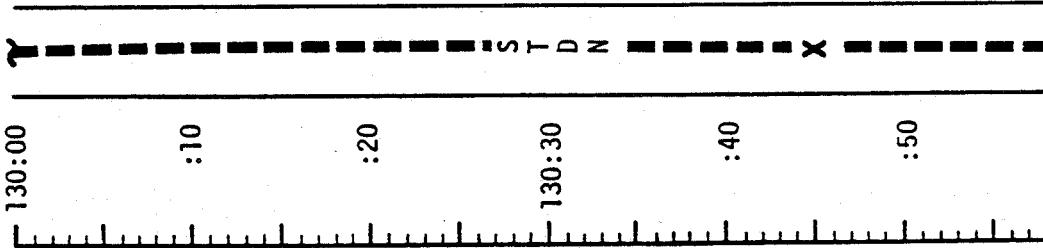
130:30

:40

:50

131:00

MCC-H



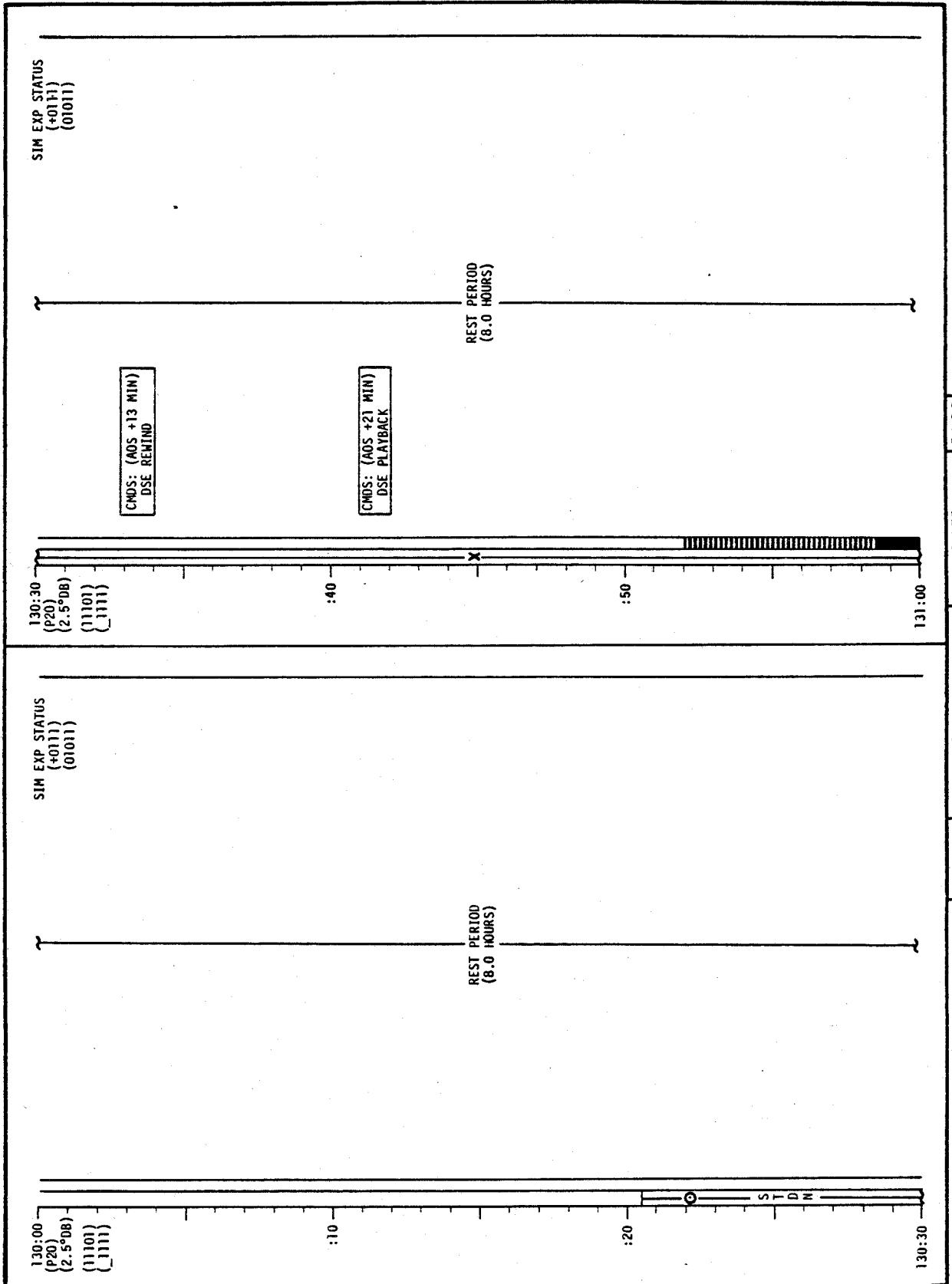
REST PERIOD
(8 HOURS)

LMP

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 (12/26)	10/23/72	3-161

LM FLIGHT PLAN

CDR

NOTES

LMP

0753 CST
131:00

:10

:20

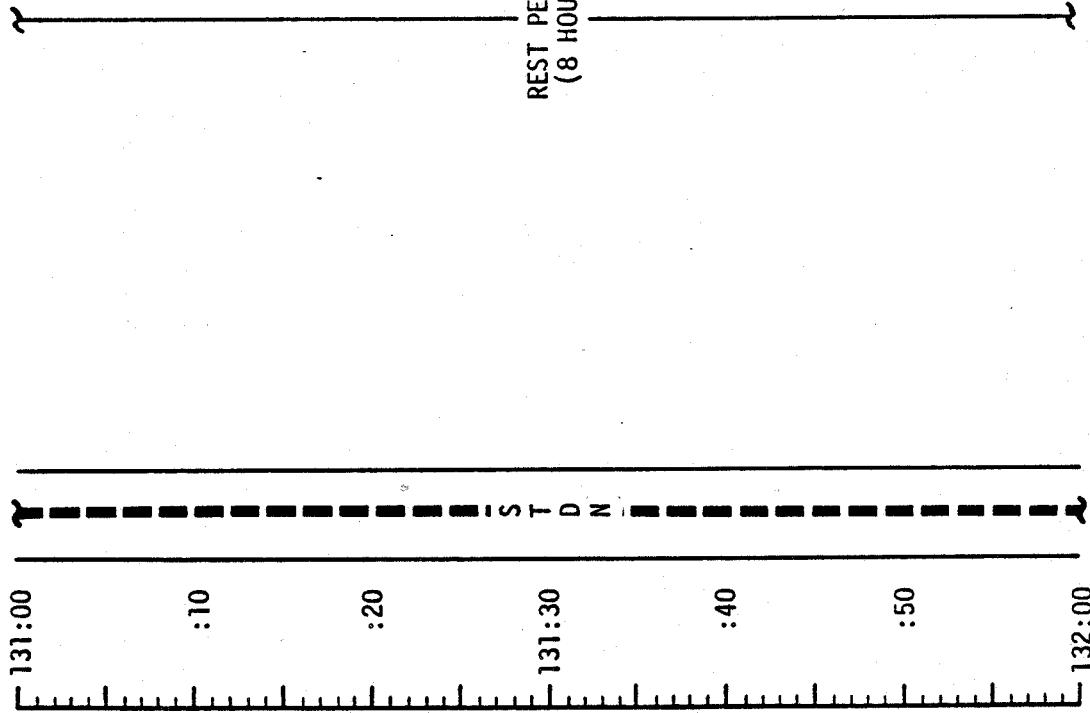
131:30

:40

:50

132:00

MCC-H

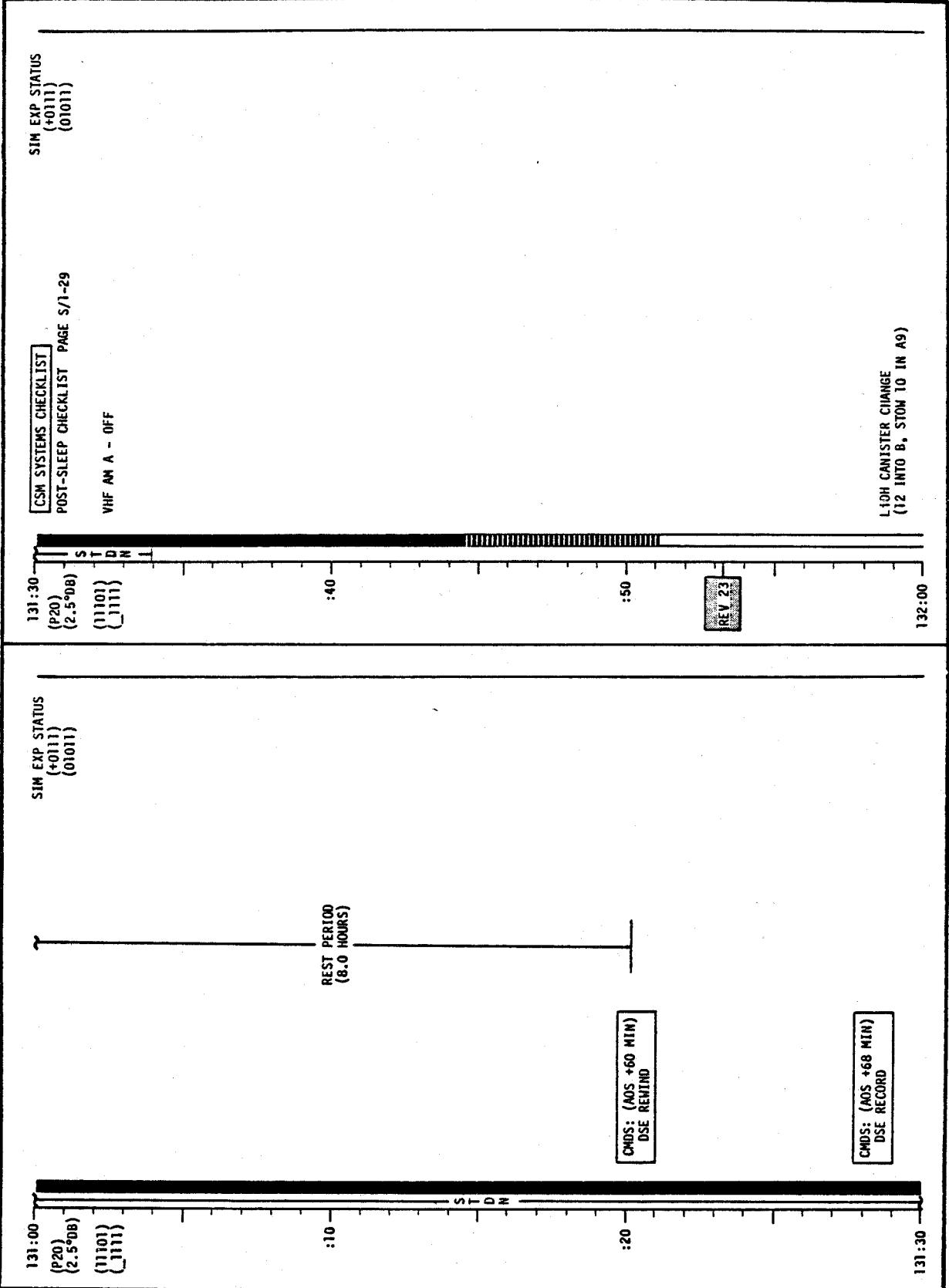
REST PERIOD
(8 HOURS)

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



LM FLIGHT PLAN

CDR

NOTES

LMP

0853 CST
132:00

:10

:20

132:30

:40

:50

133:00

MCC-H

REST PERIOD
(8 HOURS)

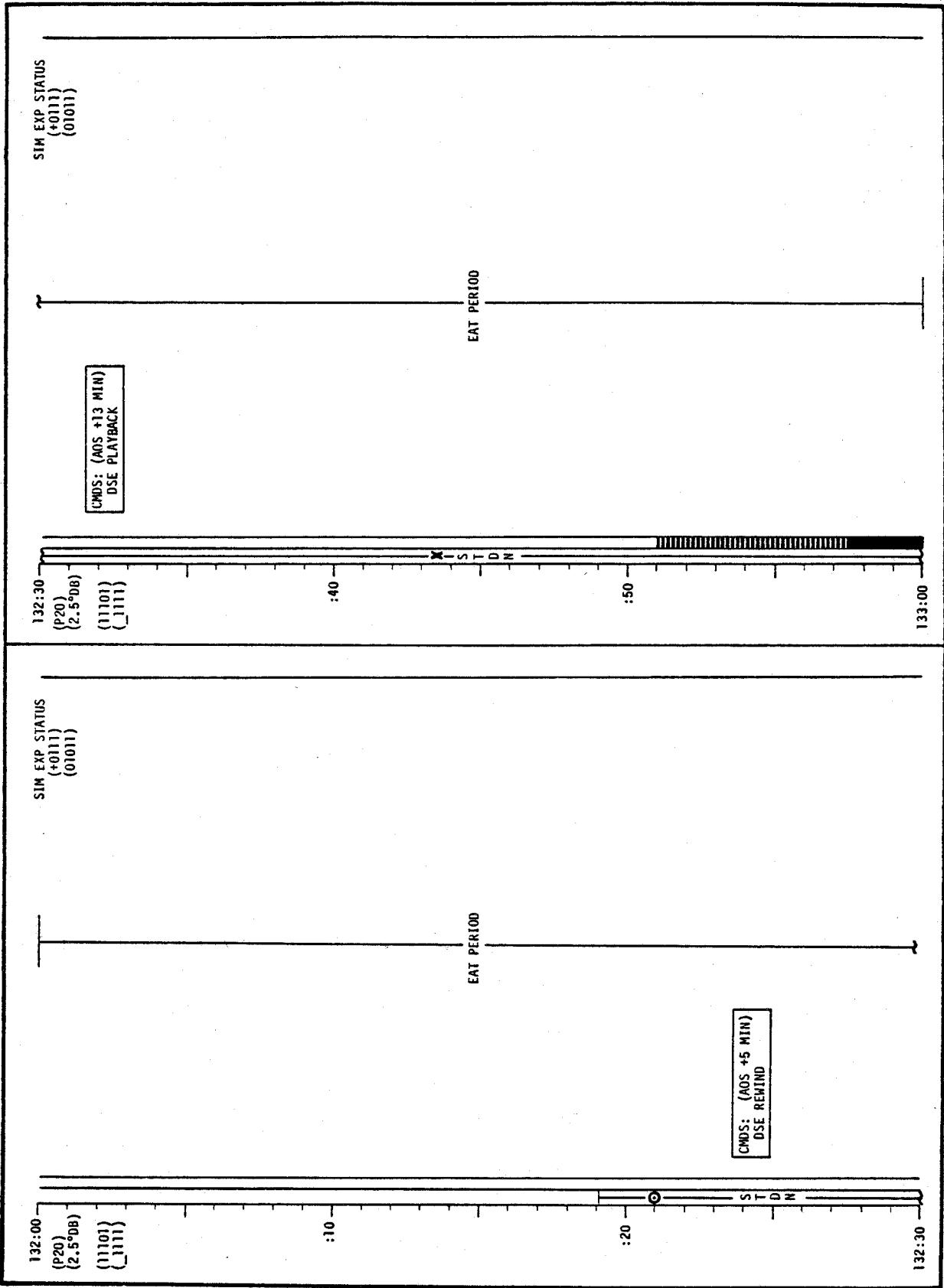
S T D N

X

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

CDR

NOTES

LMP

0953 CST

MCC.H

:10

:20

133:30

:40

:50

134:00

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

CSM FLIGHT PLAN

START NEW URINE COLLECTION PER 100
TERMINATE JET-ON MONITOR
P30
V21N26 (00000)
CMC MODE - FREE
PS2 (OPTION 3)
(LDG SITE ORIENT)

SIM EXP STATUS

**REPORT: GYRO TORQUING
ANGLES**

P20
Y22N79 (+000.50)
CMC MODE - AUTO
GDC ALIGN

MC/LA COVER - OPEN
MC - EXIT

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

UPLINK:
CSM S.V.
CMD/S: (AOS +60 MIN)
DSE REWIND

CSM EXP/EVA CHECKLIST
ZODIACAL LIGHT. RED FIL
MAG (xx)

SET HGA:: MAN:: WIDE P =10; Y 25; FOR AOS

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

50

REV 24

ZODIACAL LIGHT PHOTO PAD(SR)
T-START: ?
? : ?
(SUNRISE - 15 MIN)

WERE BIEF USE TAPE MOTION (HBR/RCO/FMD/CMD RESET)

ZODIACAL LIGHT

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

LM FLIGHT PLAN

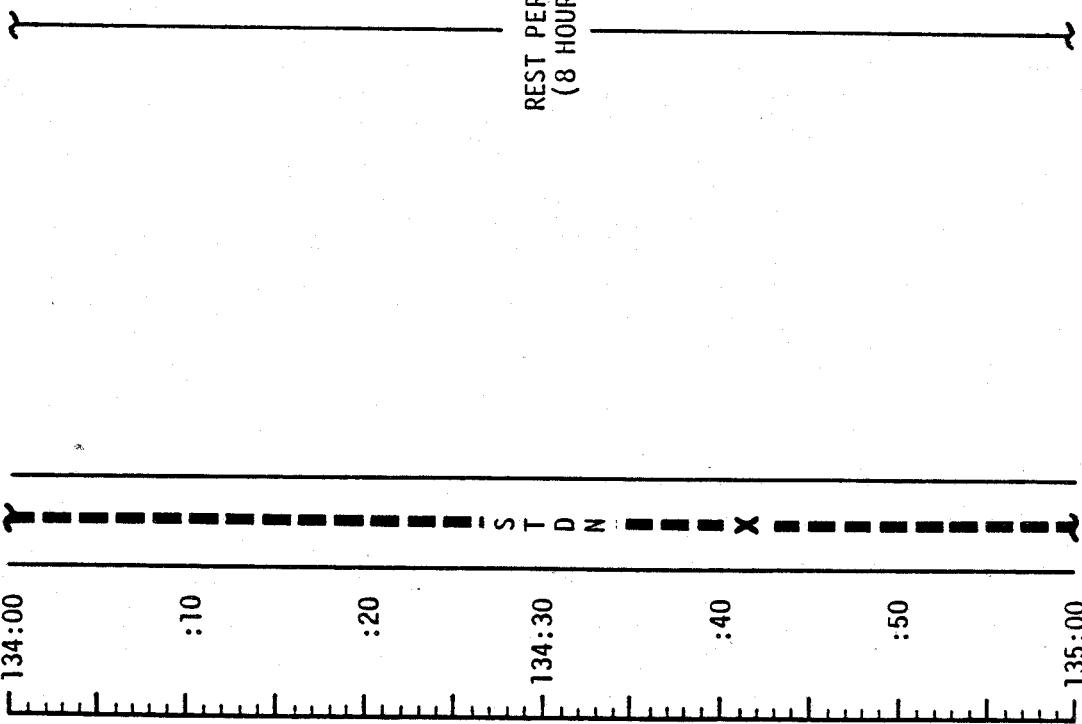
6

1033 S1

MCC.H

NOTES

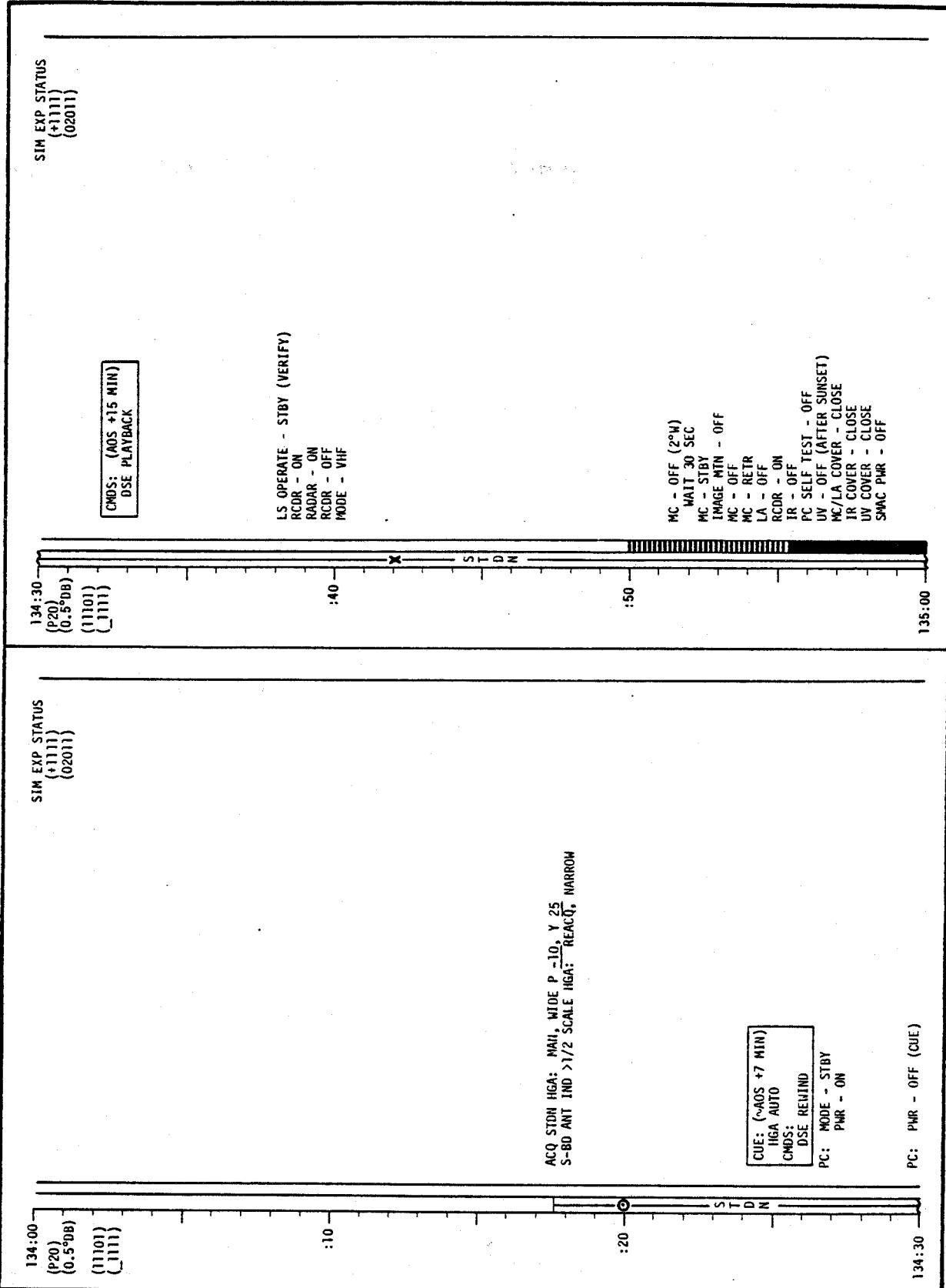
LMP



**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

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APRIL 10 17	FINAL (12/6)	10/23/17	2160

LM FLIGHT PLAN

CDR

1153 CST

135:00

:10

:20

135:30

:40

:50

MCC-H

135:00

S T D N

STAY/NO-STAY FOR
EVA-2

NOTES

LMP

REST PERIOD
(8 HOURS)

POST SLEEP

REPORT : CREW STATUS

MISSION

EDITION

DATE

TIME

DAY / REV

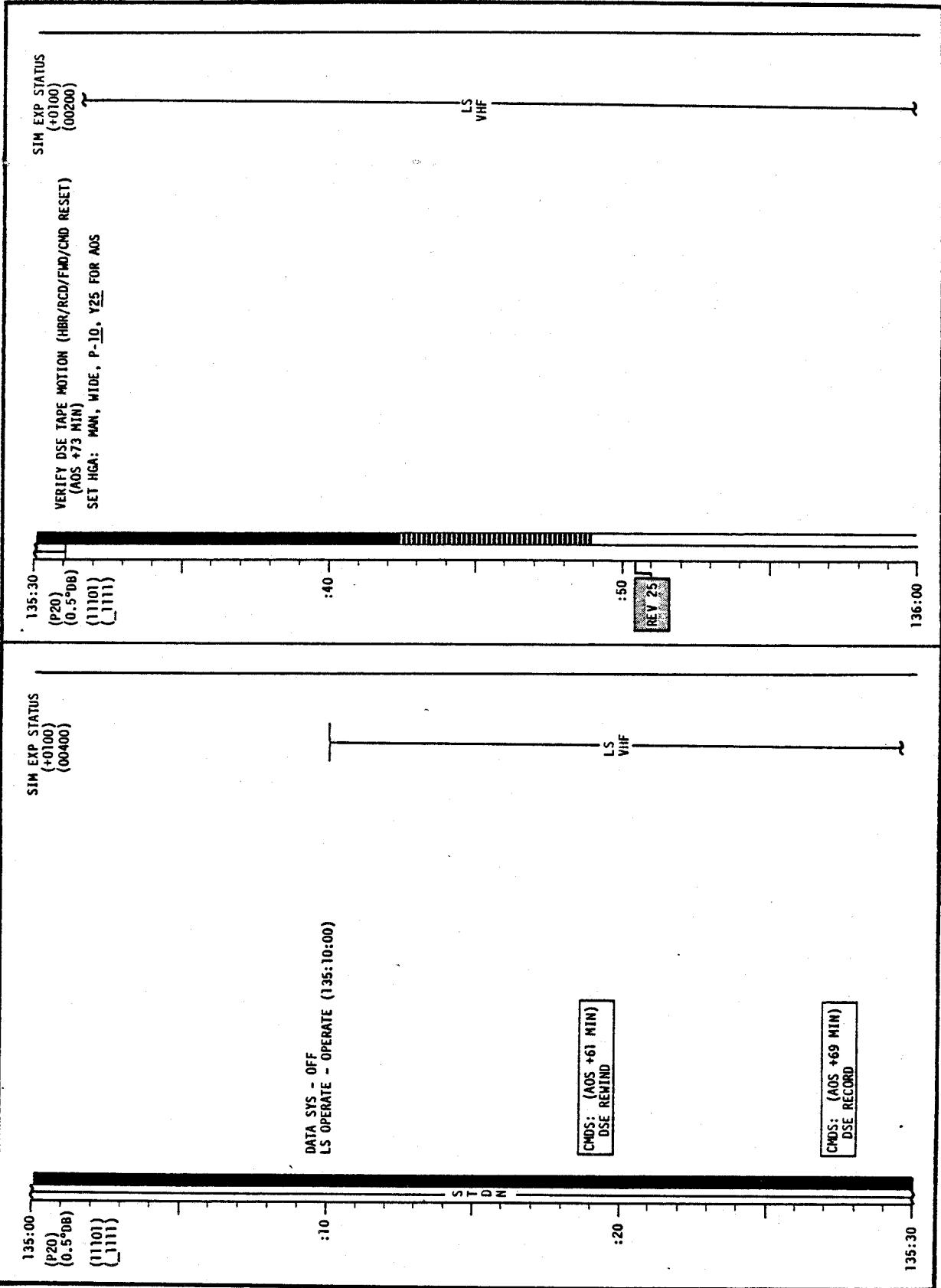
PAGE

APOLLO 17	FINAL (12/6)	10/23/72	135:00 - 136:00	7/24-25	3-170
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FLIGHT PLANNING BRANCH

CSM REV 25

CSM FLIGHT PLAN



LM FLIGHT PLAN

CDR

NOTES

LMP

1253 CST

136:00

POST SLEEP (CONT)

MCC-H

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

:10

:20

136:30

:40

:50

137:00

S T D N X

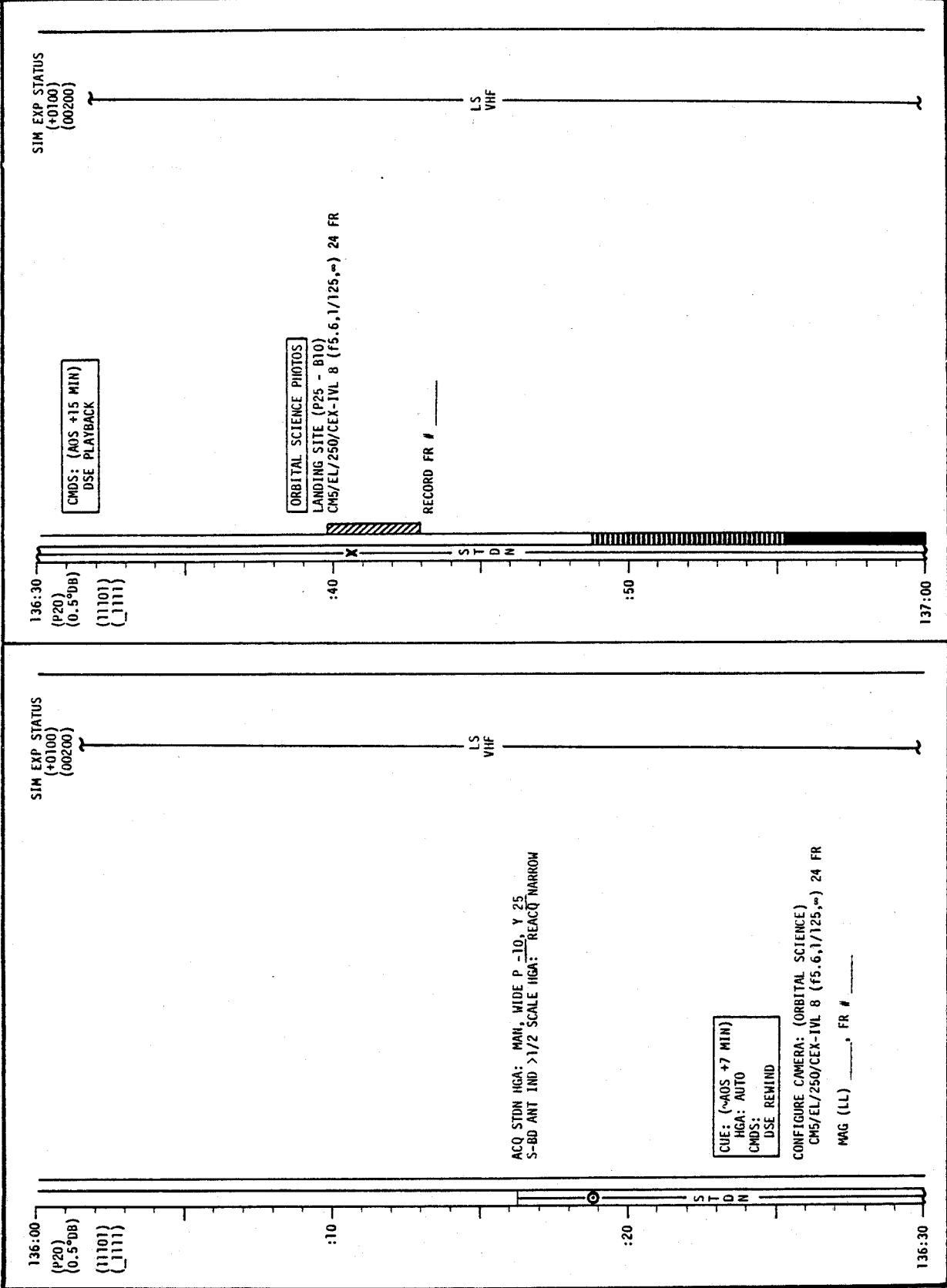
EAT PERIOD

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



LM FLIGHT PLAN

MCCH

1353 CST
137:00

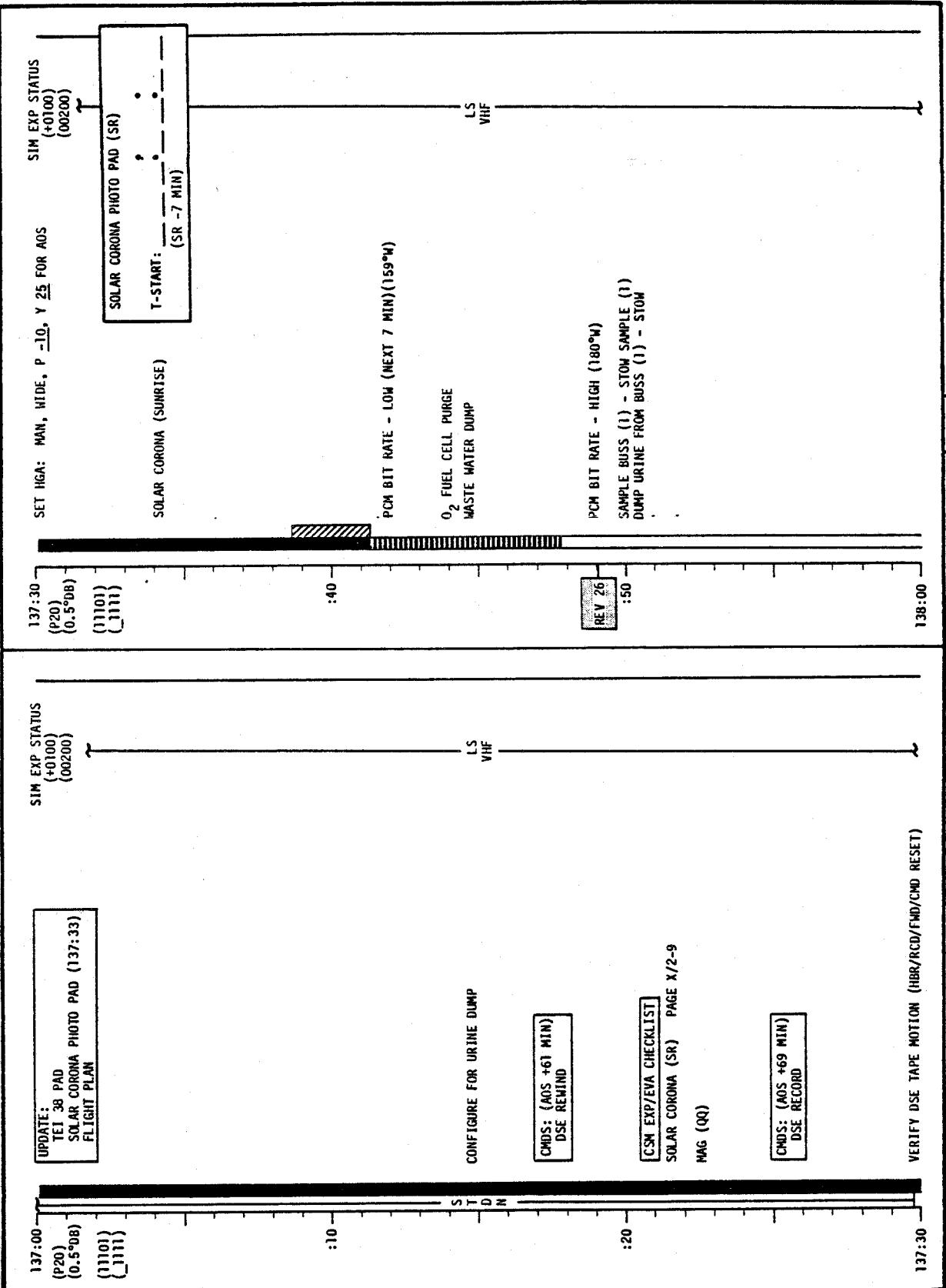
CDR

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

CSM FLIGHT PLAN



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

LM FLIGHT PLAN

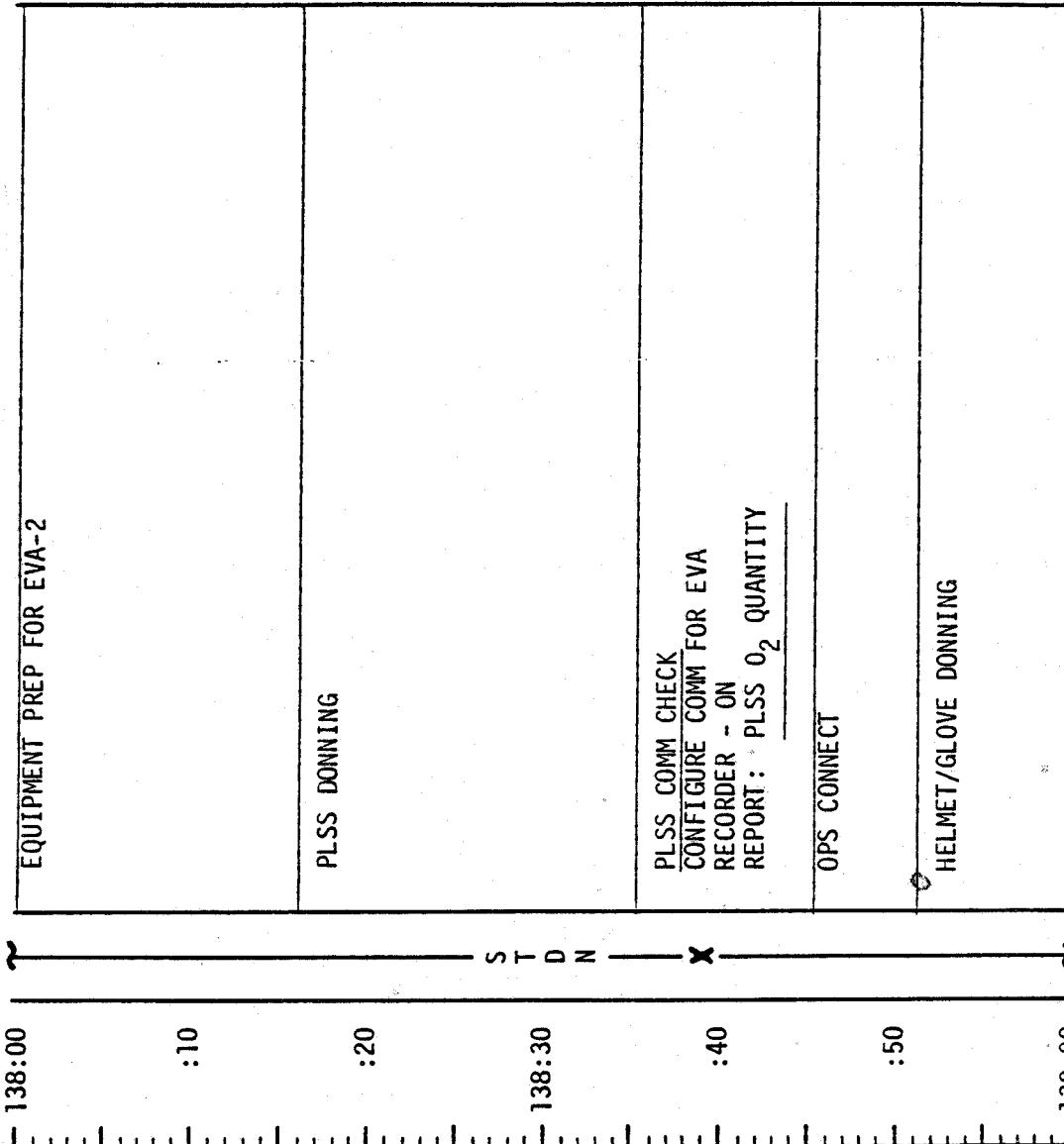
CDR

NOTES

1453 CST

MCC-H

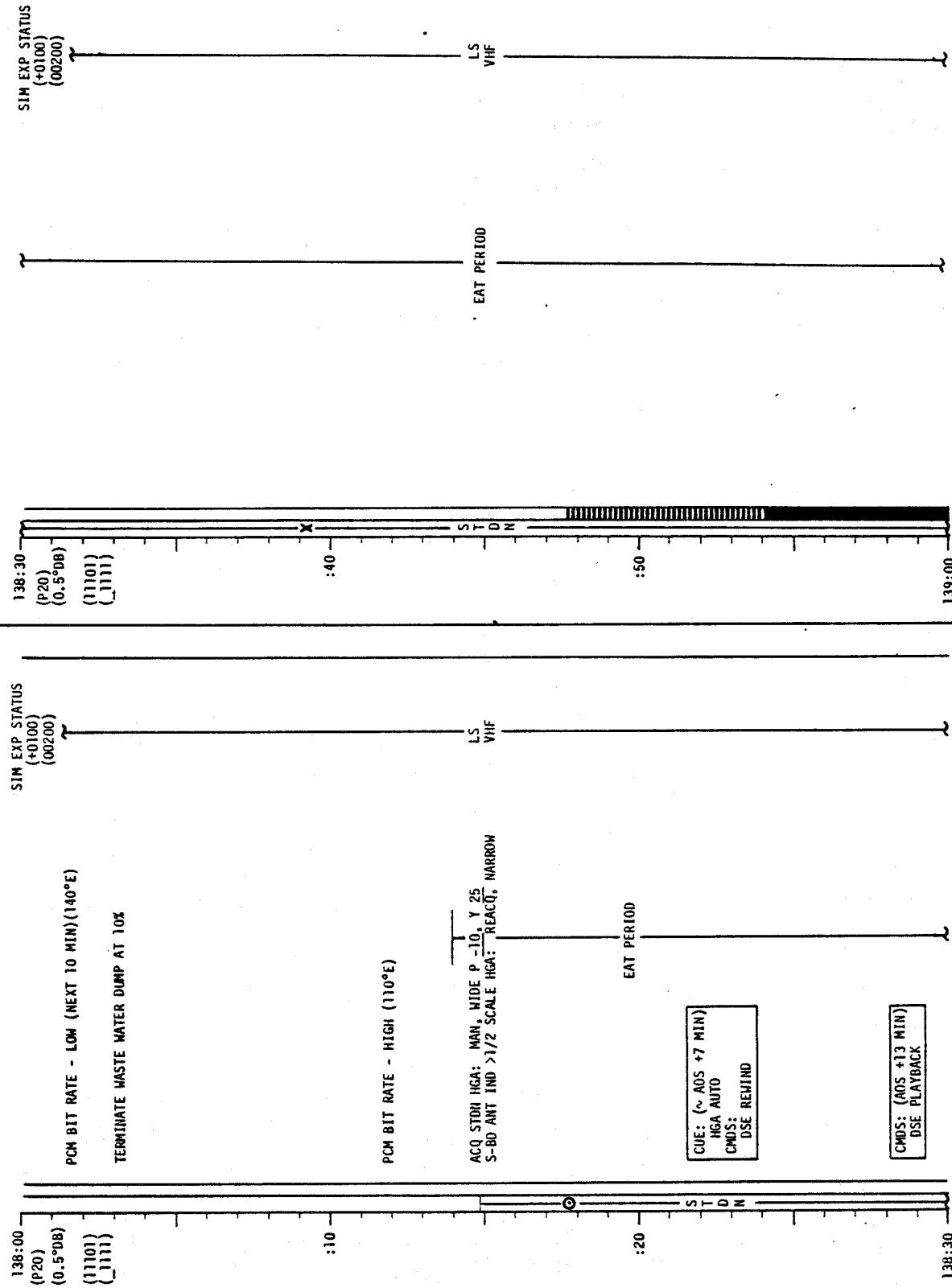
EQUIPMENT PREP FOR EVA-2



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

CDR

NOTES

1553 CST
139:00

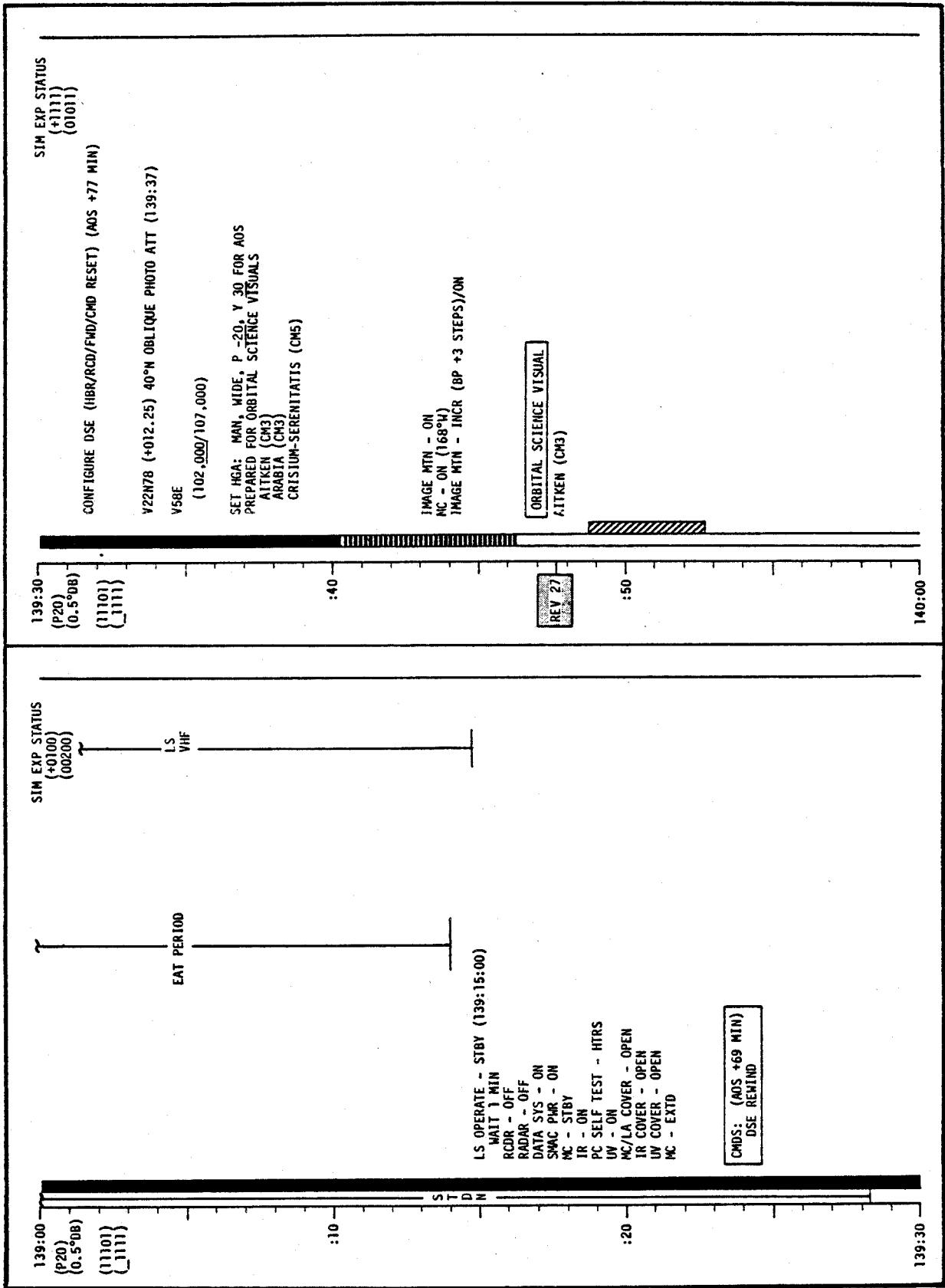
MCC-H

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

NOTES

LMP

+0:50

DRIVE TO STATION 2
EP DEPLOY EN ROUTE
LRV SAMPLES EN ROUTE

:10

:20

140:30

:40

141:00

S

T

D

N

X

+1:00

+1:10

+1:20

+1:30

+1:50

+1:40

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

CONFIGURE DSE (STOP/CMP RESET/REWIND)

**UPDATE:
PAN CAMERA PHOTO PAD (141:50)
FLIGHT PLAN**

ACQ STDN HGA: MAN, WIDE P -20, Y 30
S-BD ANT IND >1/2 SCALE HGA: AUTO, NARROW

CMD5: (AOS +5 MIN)
DSE PLAYBACK

PC: MODE - STBY
PWR - ON

PC: PWR - OFF (CUE)

ORBITAL SCIENCE VISUALS
CRISIUM-SERENITATIS (CM5)

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

CREW EXERCISE PERIOD

140:30

MISSION	EDITION	DATE	PAGE
APO1017	FINAL (12/6)	10/21/72	1-1R1

LM FLIGHT PLAN

CDR

LMP

+1:50

DRIVE TO STATION #2 (CONT)

1753 CST

MCC-H

:10

STATION #2
GEOLOGICAL OBSERVATIONS & PHOTOS
POLARIZATION PHOTOS
RAKE SAMPLE
CORE SAMPLE
DOCUMENTED SAMPLES
PHOTO PANS

:20

141:30

:40

:50

142:00

S

T

D

V

N

NOTES

+2:00

+2:10

+2:20

+2:30

CSM REV 28

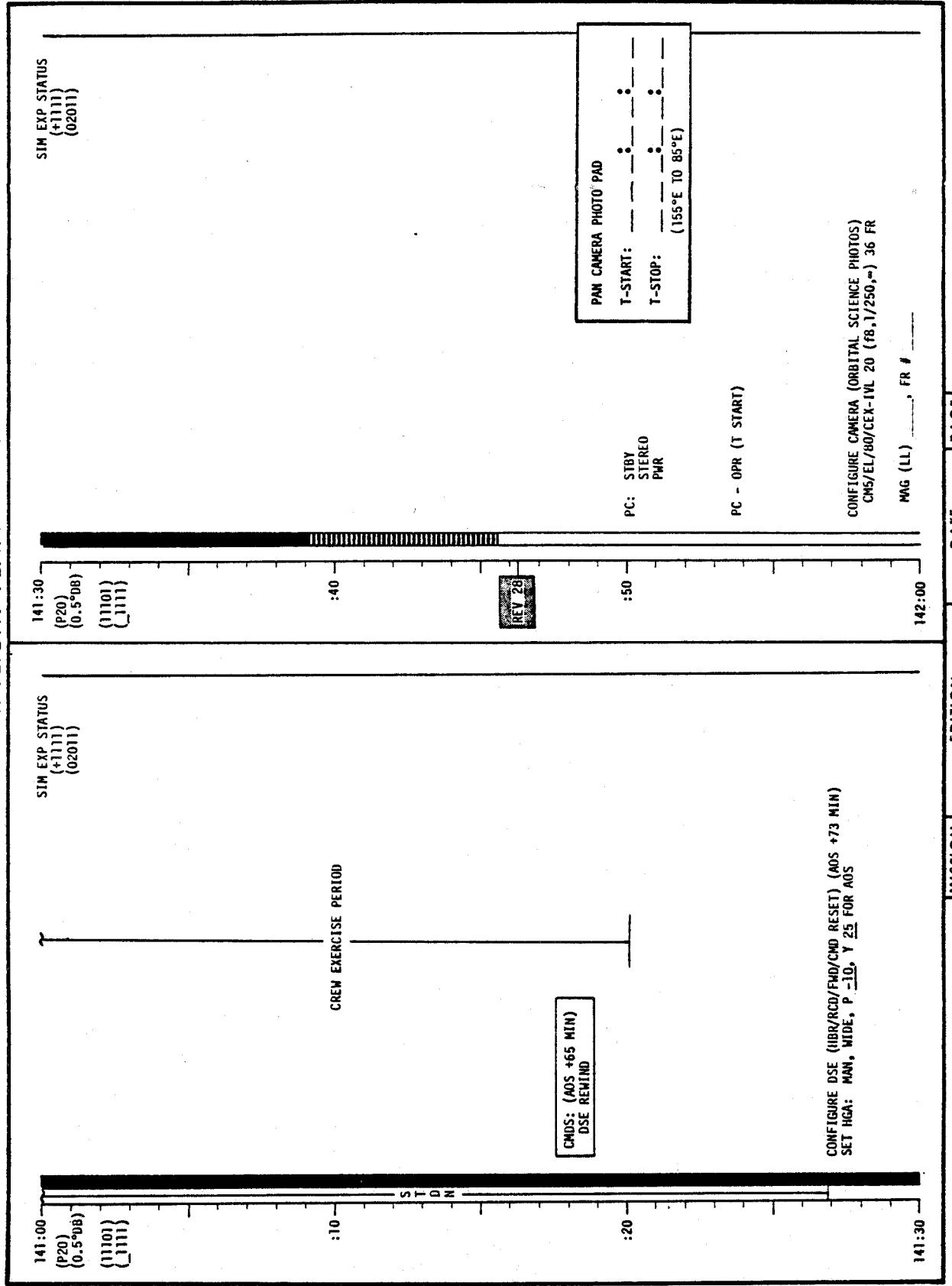
+2:40

+2:50

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

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

MCC-H

1853 CST

CDR

NOTES

142:00

DRIVE TO STATION #3
LRV SAMPLES EN ROUTE

+2:50

:10

:20

+3:00

142:30

STATION #3
GEOLOGICAL OBSERVATIONS & PHOTOS
DOCUMENTED SAMPLES
PHOTO PAN

+3:10

:40

+3:20

:50

+3:30

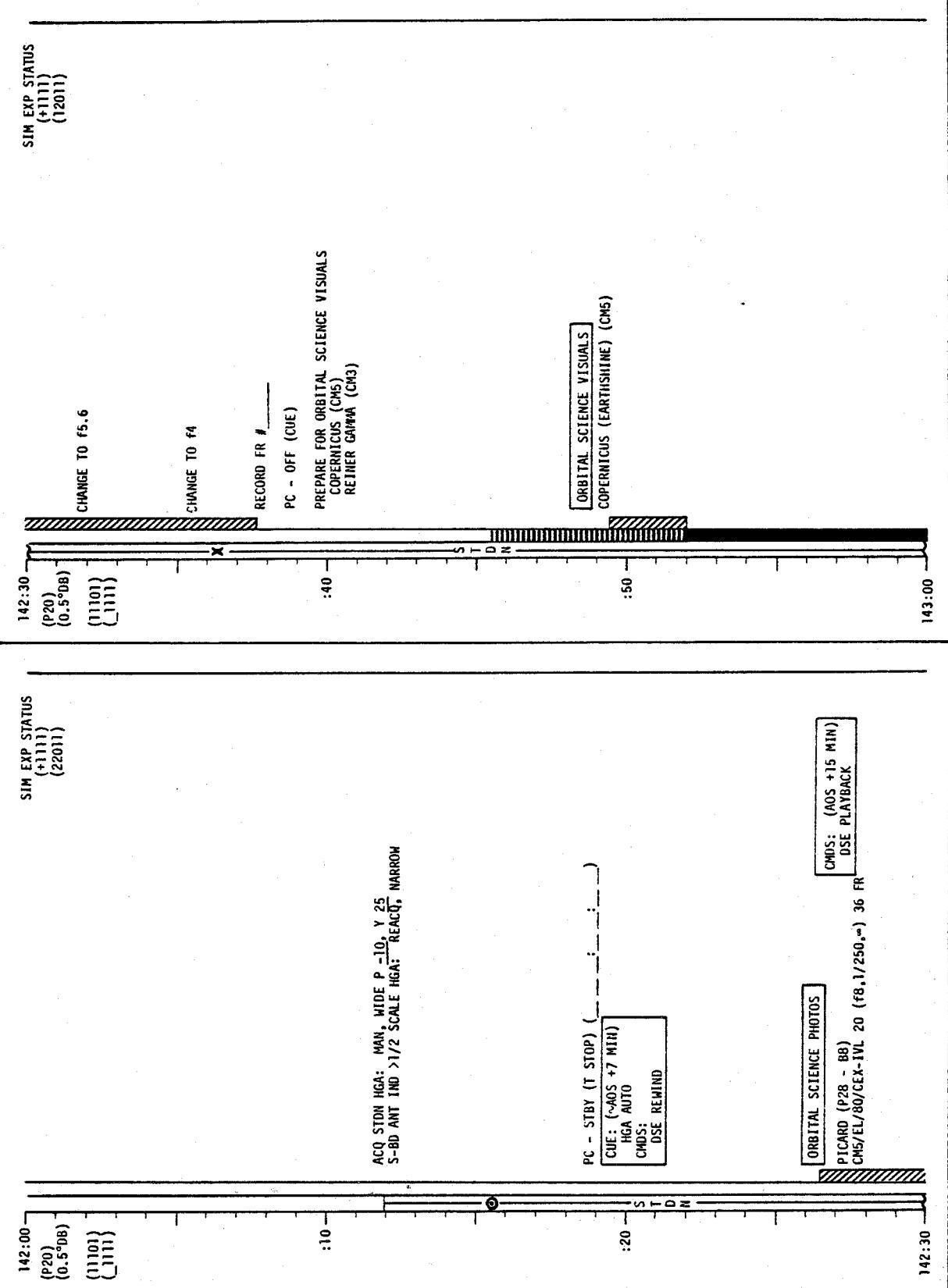
143:00

+3:40

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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-185

LM FLIGHT PLAN

MCC-H

1953 CST

CDR

LMP

LMP

NOTES

STATION #3 (CONT)

:10

+3:50

 T V - - - T

DRIVE TO STATION #4
LRV SAMPLE EN ROUTE

:20

+4:00

S T D N

STATION #4

GEOLOGICAL OBSERVATIONS & PHOTOS
POLARIZATION PHOTOS
RAKE SAMPLES

143:30

+4:10

:40

+4:20

 T V - - - T

CSM REV 29

:50

+4:40

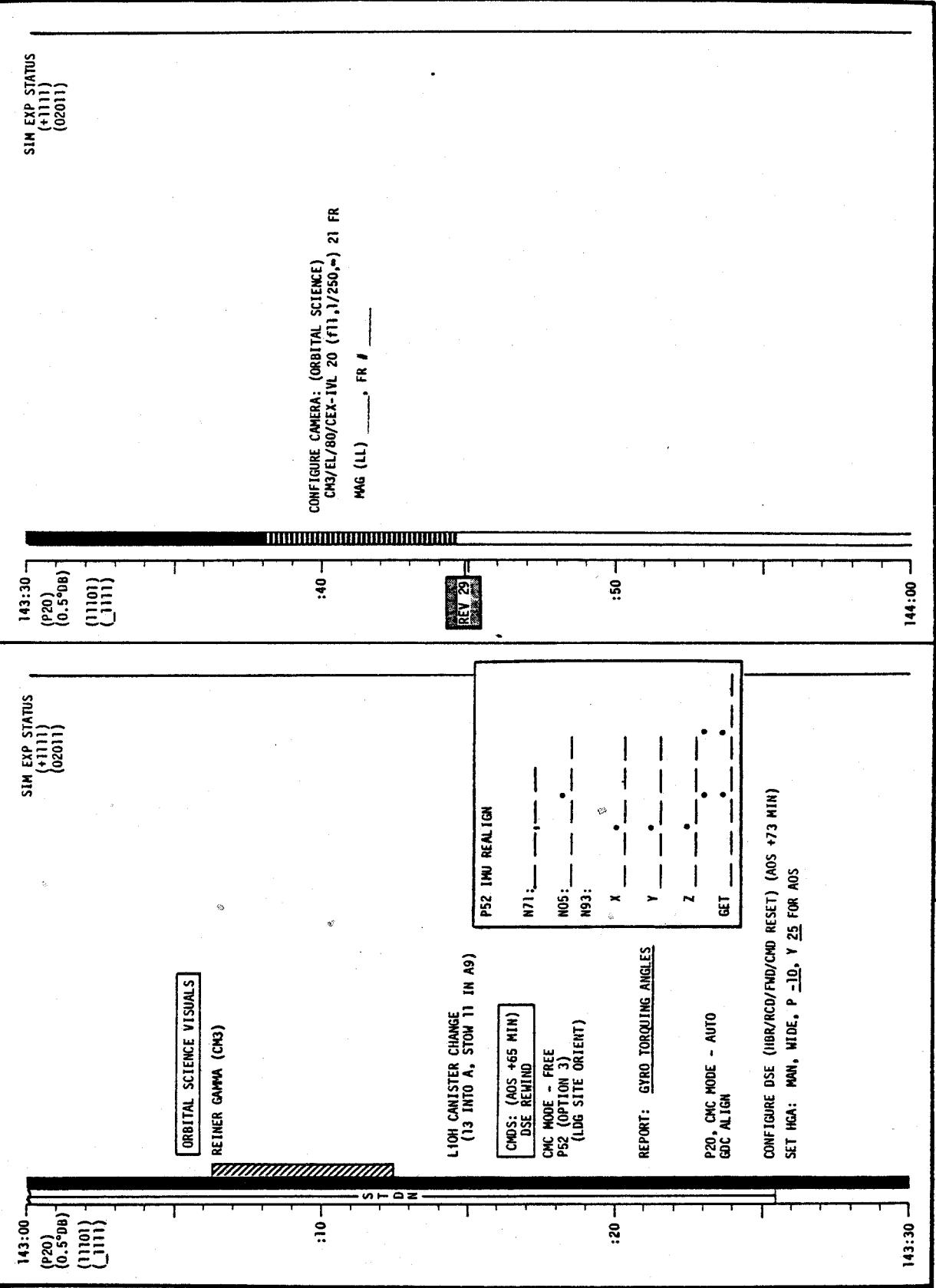
E 144:00

+4:50

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

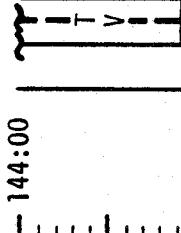
LM FLIGHT PLAN

MCC-H

2053 CST

CDR

STATION #4 (CONT)



LMP

NOTES

+4:50

:10

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

:20

+5:00

+5:10

+5:20

+5:30

+5:40

+5:50

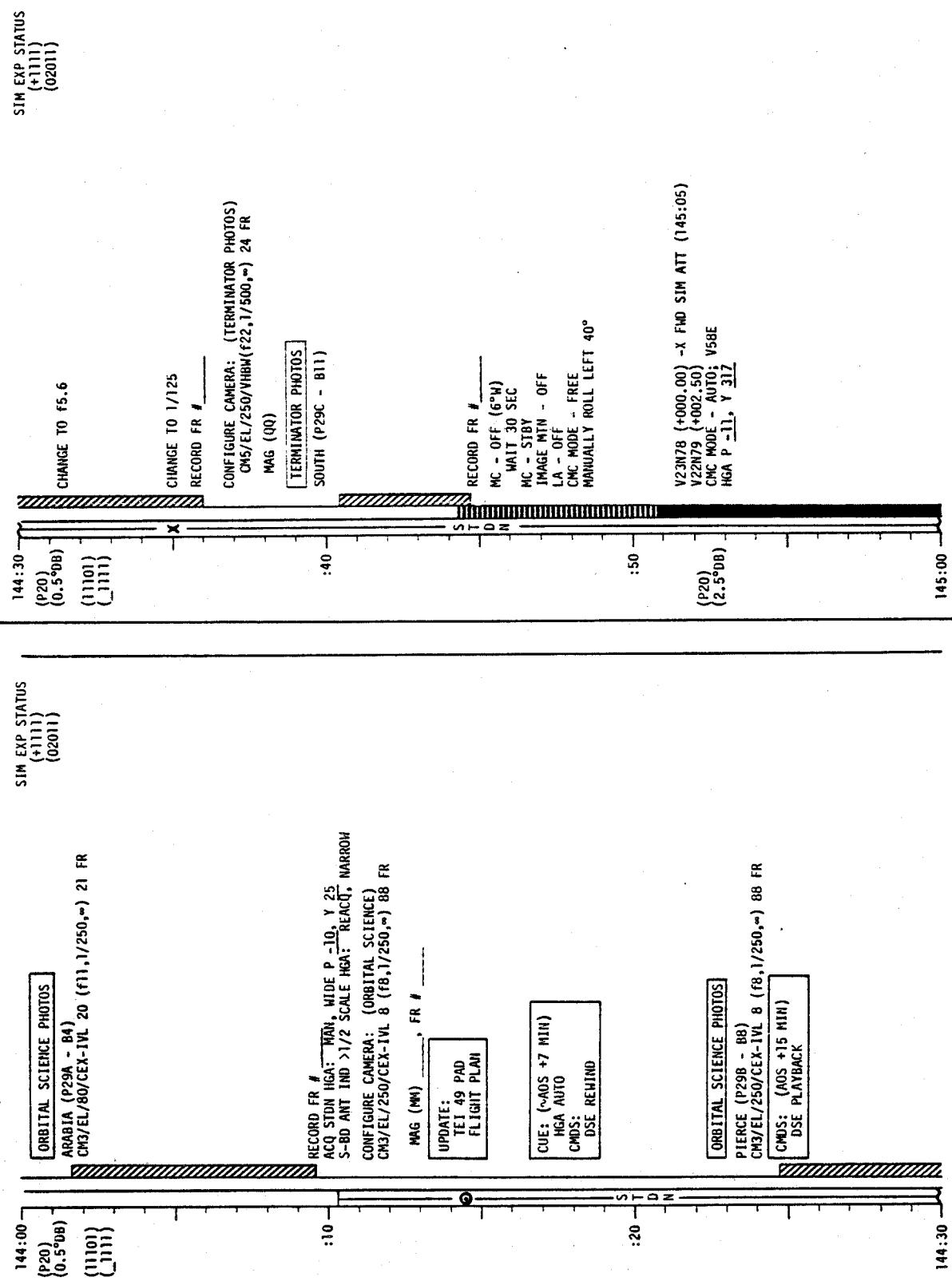
STATION #5
GEOLOGICAL OBSERVATIONS & PHOTOS
DOUBLE CORE
DOCUMENTED SAMPLES

+5:50

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

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



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

LM FLIGHT PLAN

CDR

LMP
NOTES

2153 CST

MCC-H

STATION #5 (CONT)

+5:50
PKS 210' AOS

+6:00
EP DEPLOY EN ROUTE

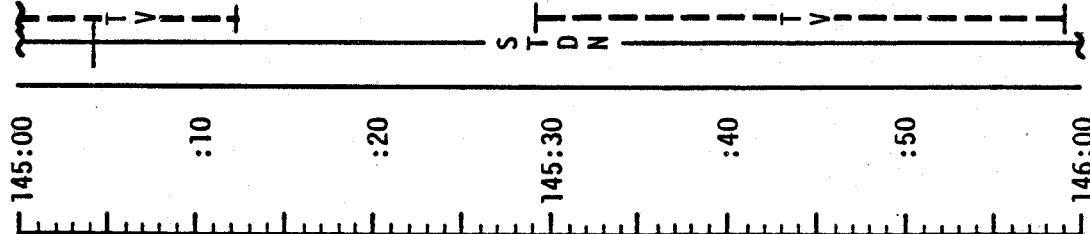
+6:10
DRIVE TO LM

+6:20
EVA-2 CLOSEOUT

+6:30
COSMIC RAY DEPLOY

+6:40
CLEAN EMU

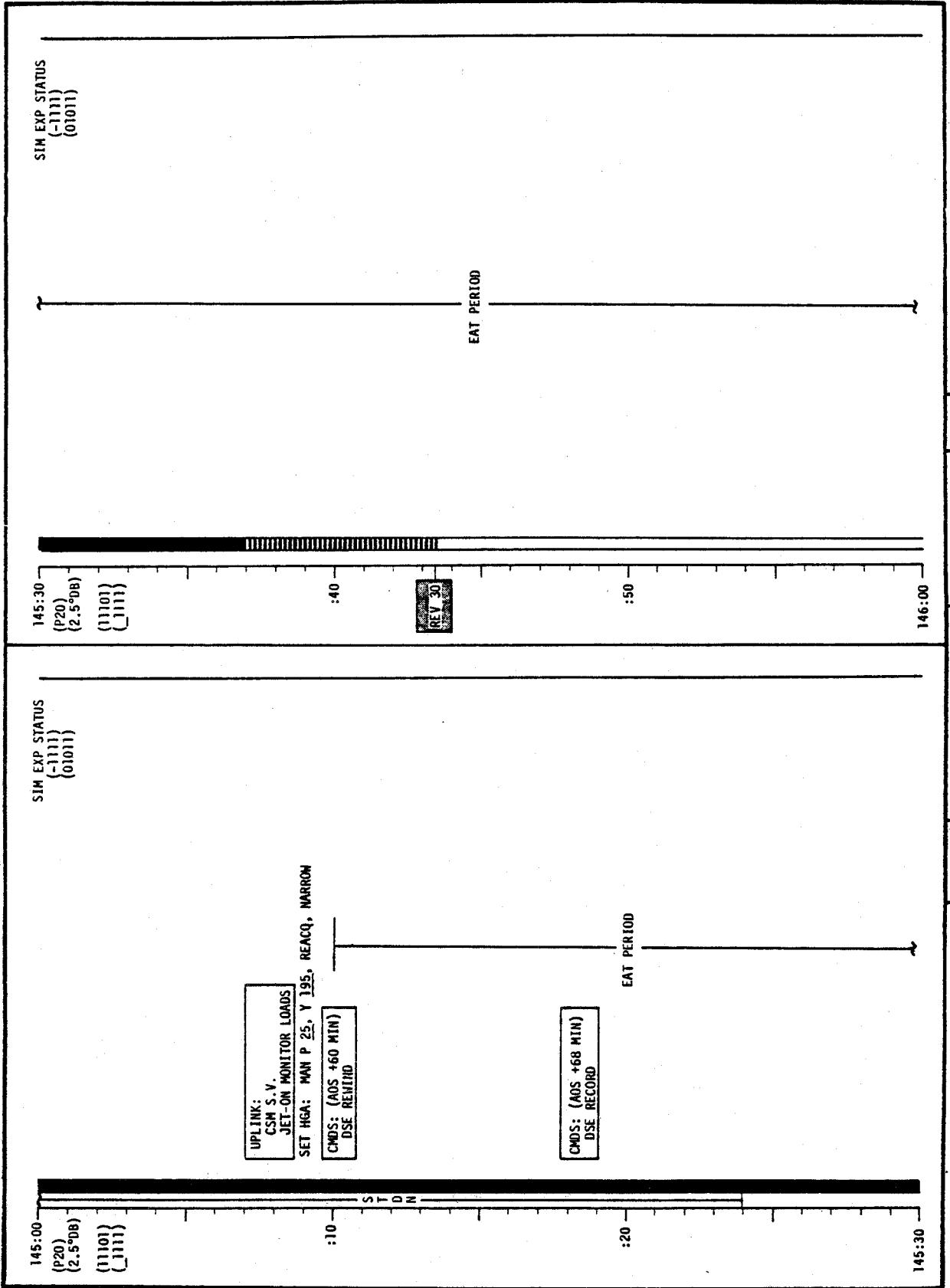
+6:50
EVA TERMINATION
INGRESS LM



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

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



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

LM FLIGHT PLAN

MCC-H

2253 CST

CDR

NOTES

+6:50

LMP

TRANSFER PALLETS

7:00/END EVA-2

INGRESS LM

REPRESS LM
POST-EVA SYSTEMS CONFIGURATION

DOFF HELMETS & GLOVES

CONNECT TO LM COMM

BIOMED - RIGHT

PLSS O₂ INITIAL RECHARGE

S T D N - X

:10

:20

146:30

:40

:50

147:00

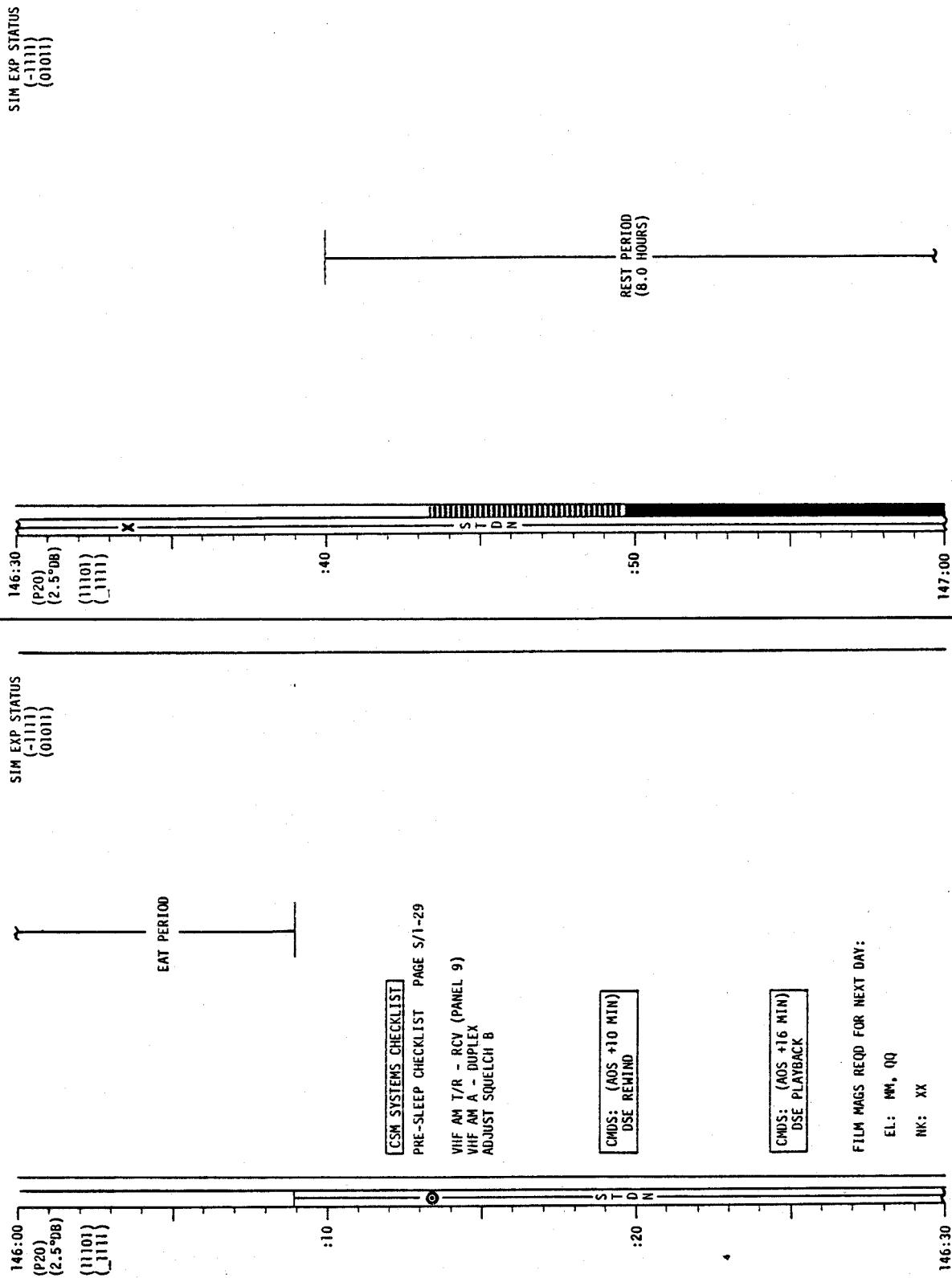
PLSS/OPS DOFFING

REPORT: OPS PRESSURE

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



MISSION	EDITION	DATE	PAGE
APN 10 17	FINAL	10/27/77	1-192

LM FLIGHT PLAN

CDR

LMP
NOTES

2353 CST

MCC-C

PLSS/OPS DOFFING (CONT)

:10

POST-EVA CABIN CONFIGURATION

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

WEIGH SRC & COLLECTION BAGS, REPORT: WEIGHTS

GDS 210' LOS

:20

147:30

DOFF SUITS
CDR, THEN LMP DOFF SUITS
BIOMED - OFF, THEN LEFT

S

T

D

N

:40

:50

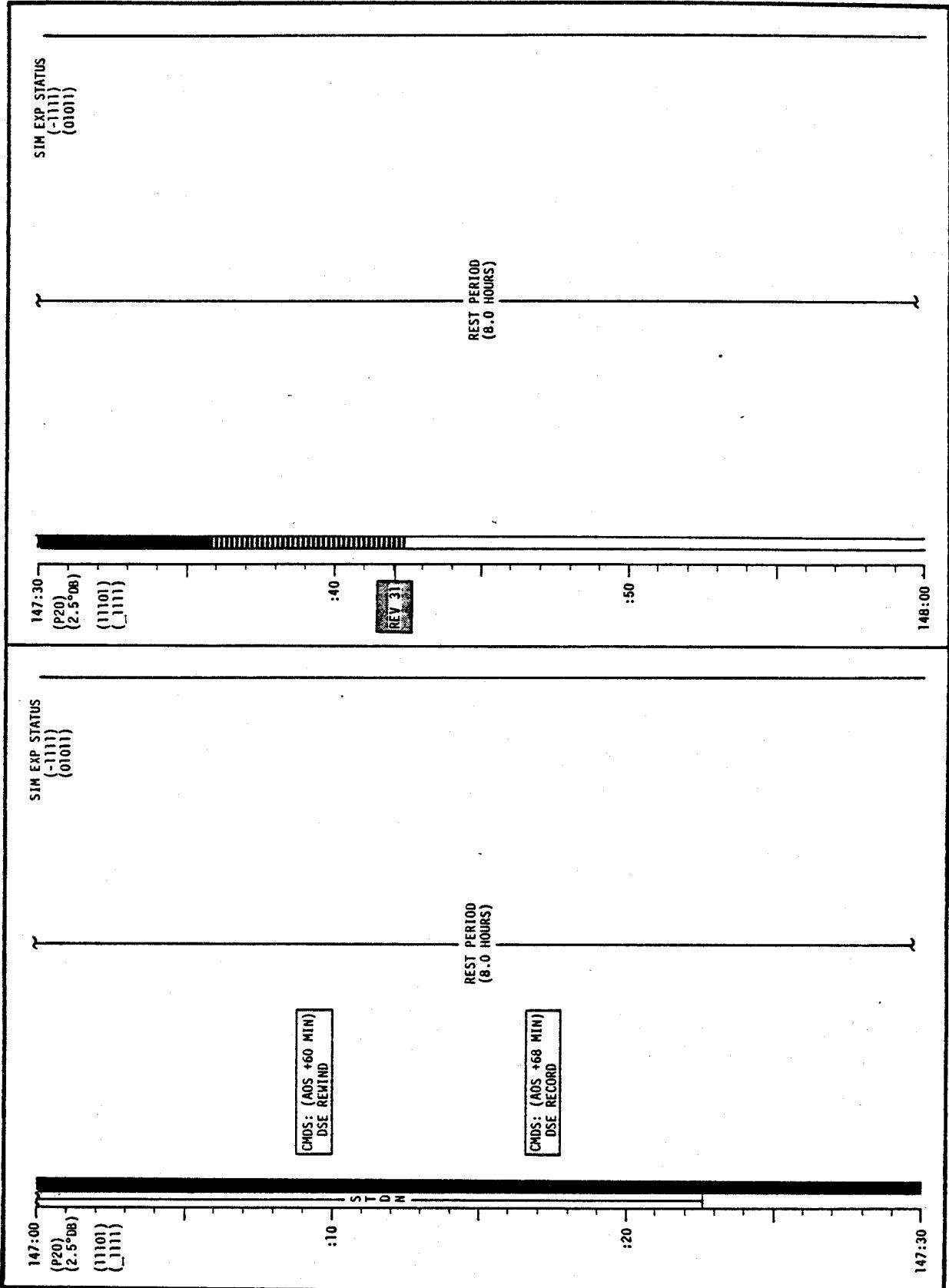
148:00

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



MCC-H

LM FLIGHT PLAN

CDR

0053 CST, 12/13

NOTES

LMP

DOFF SUITS (CONT)

148:00

:10

EVA DEBRIEFING

S
T
D
N

X

148:30

LOAD ETB

:40

:50

EAT PERIOD

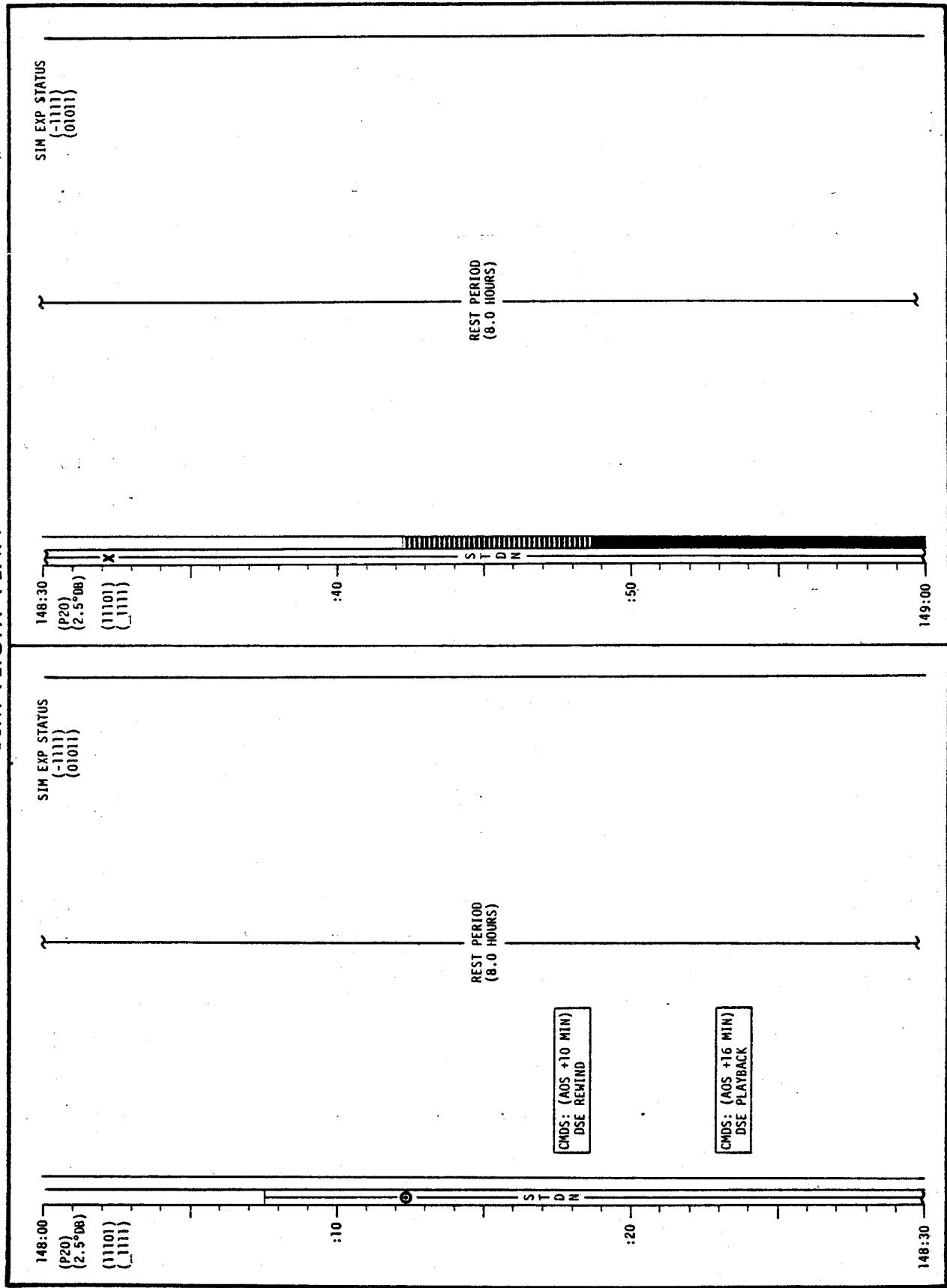
149:00

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



LM FLIGHT PLAN

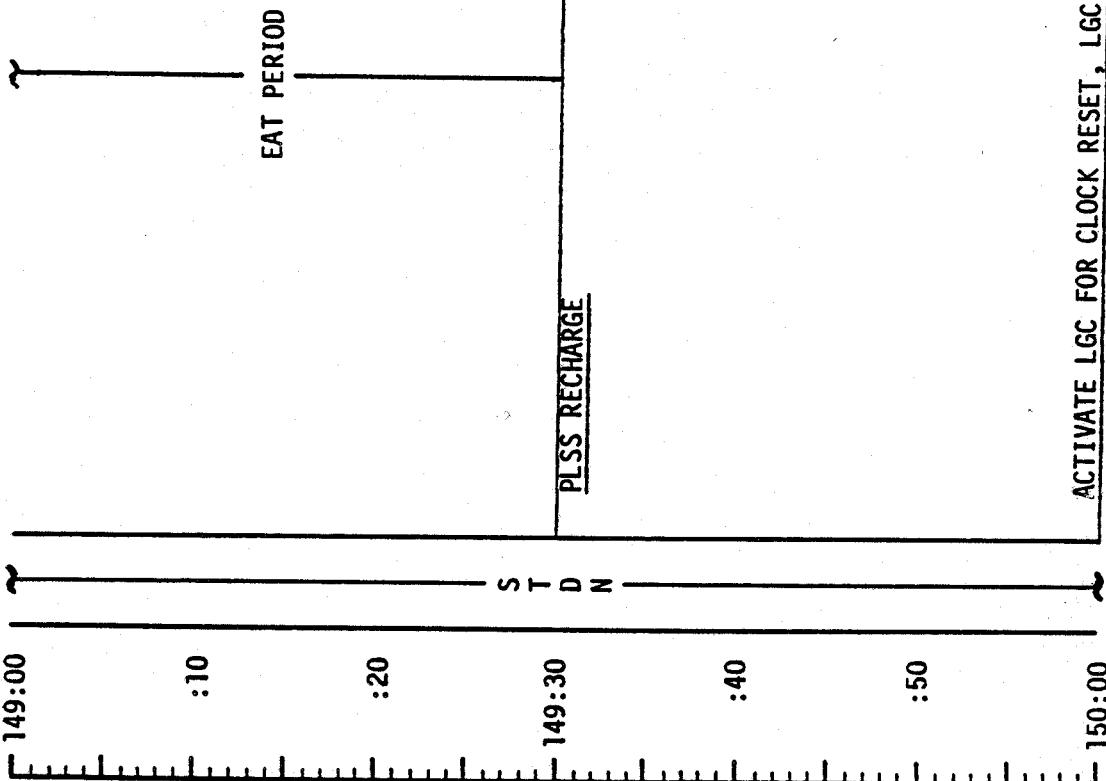
CDR

NOTES

LMP

0153 CST

MCC-H

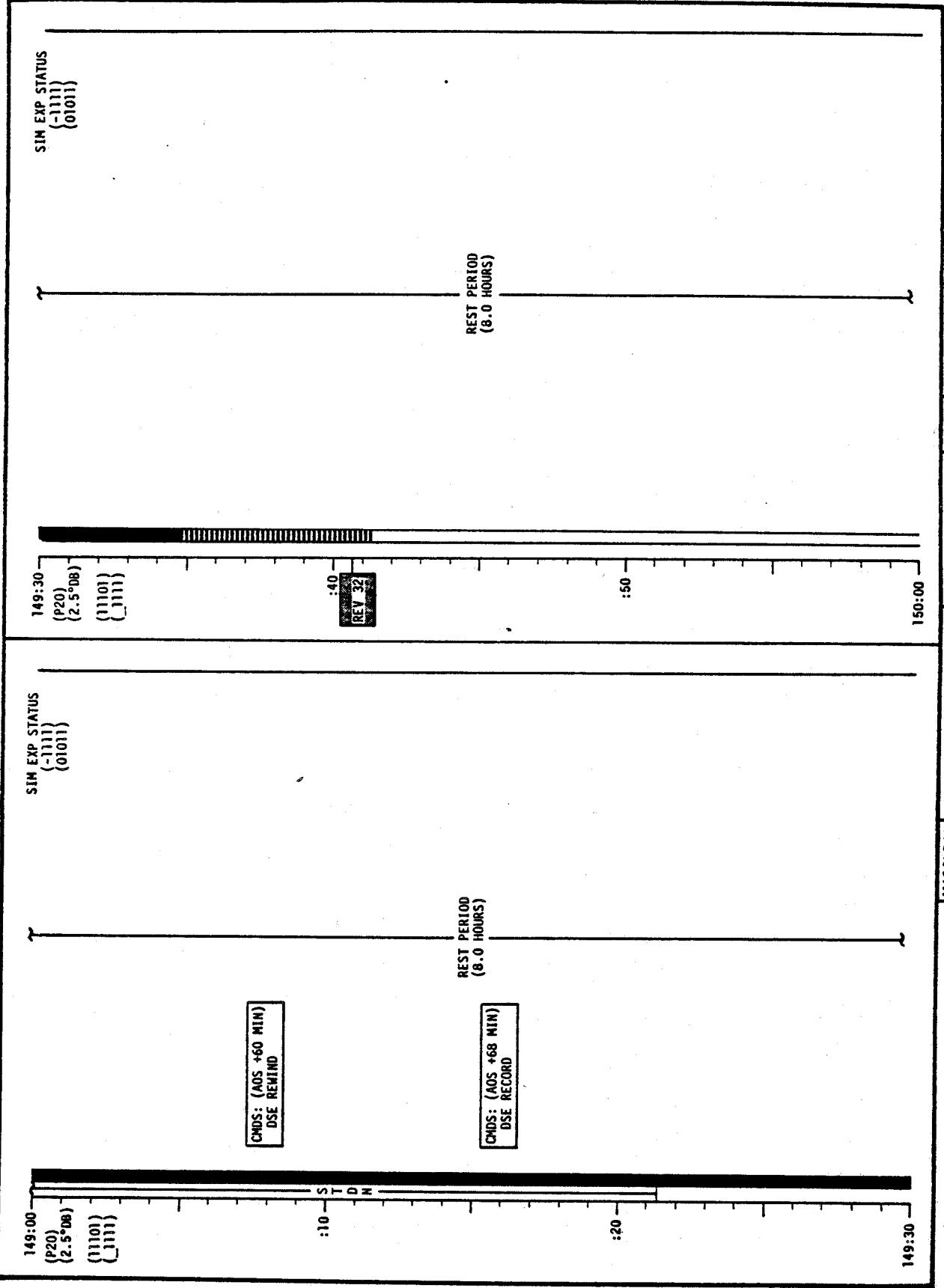


CSM REV 32

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



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

LM FLIGHT PLAN

CDR

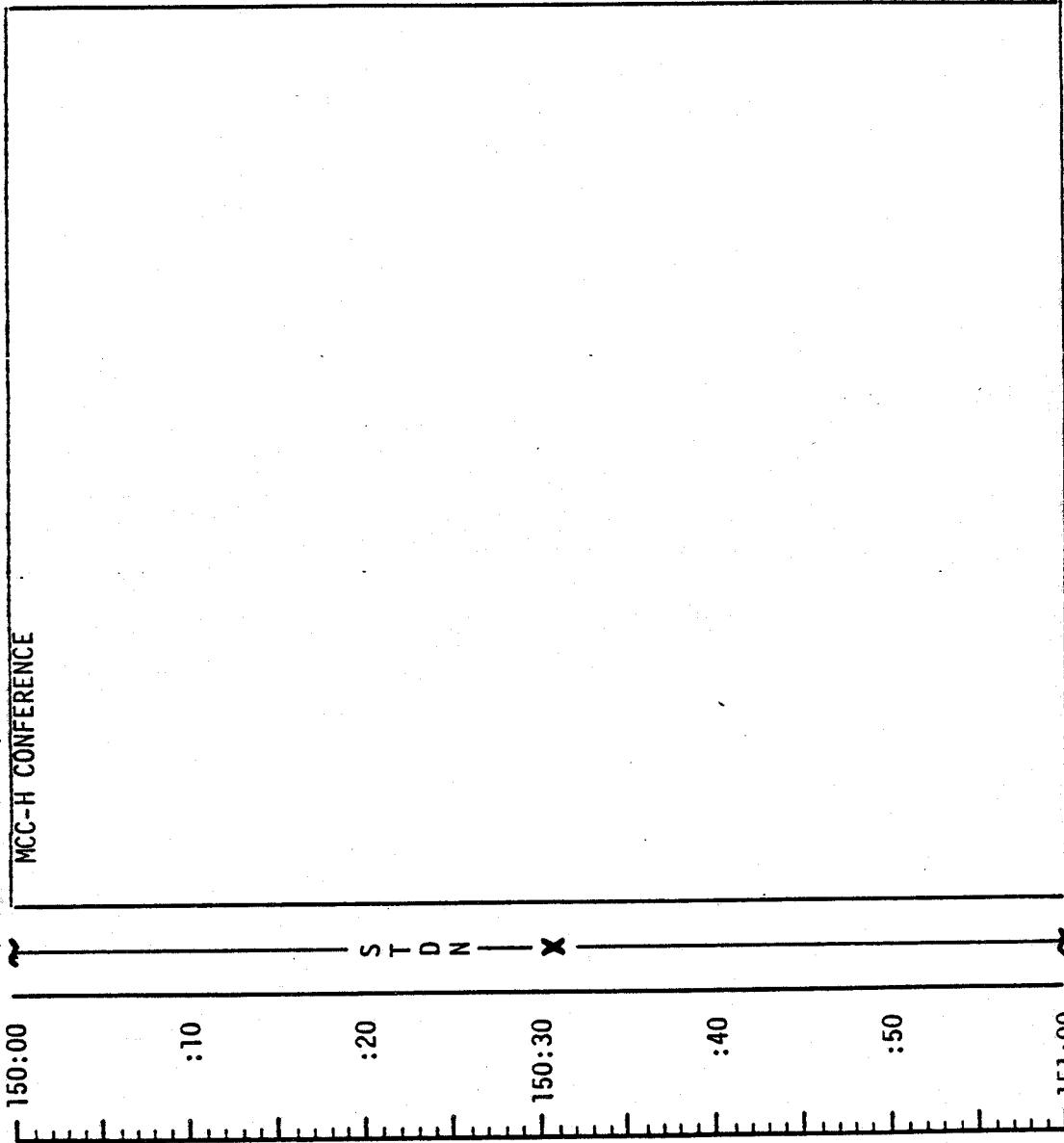
NOTES

LMP

MCC-H CONFERENCE

0253 CST

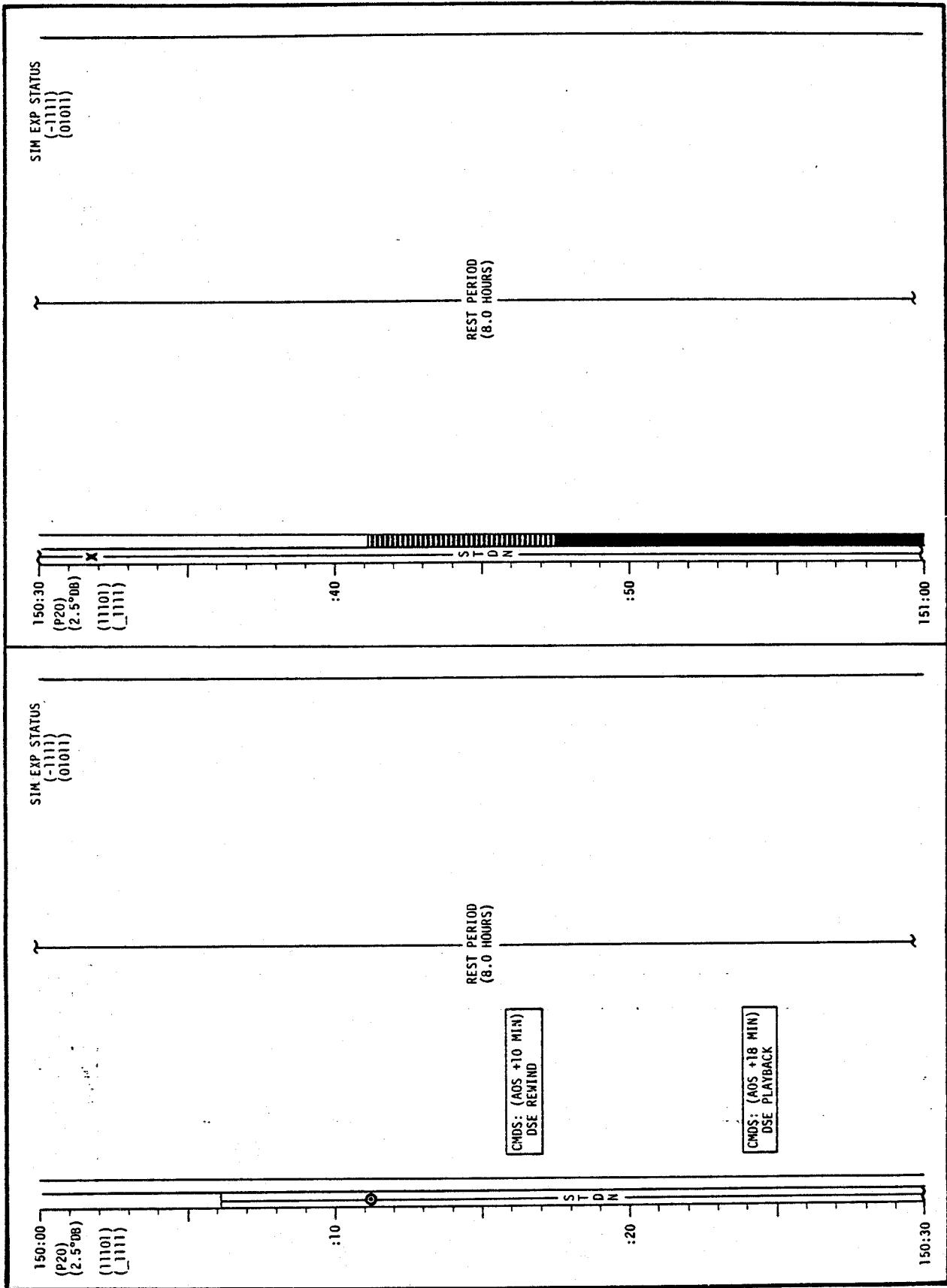
MCC-H



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

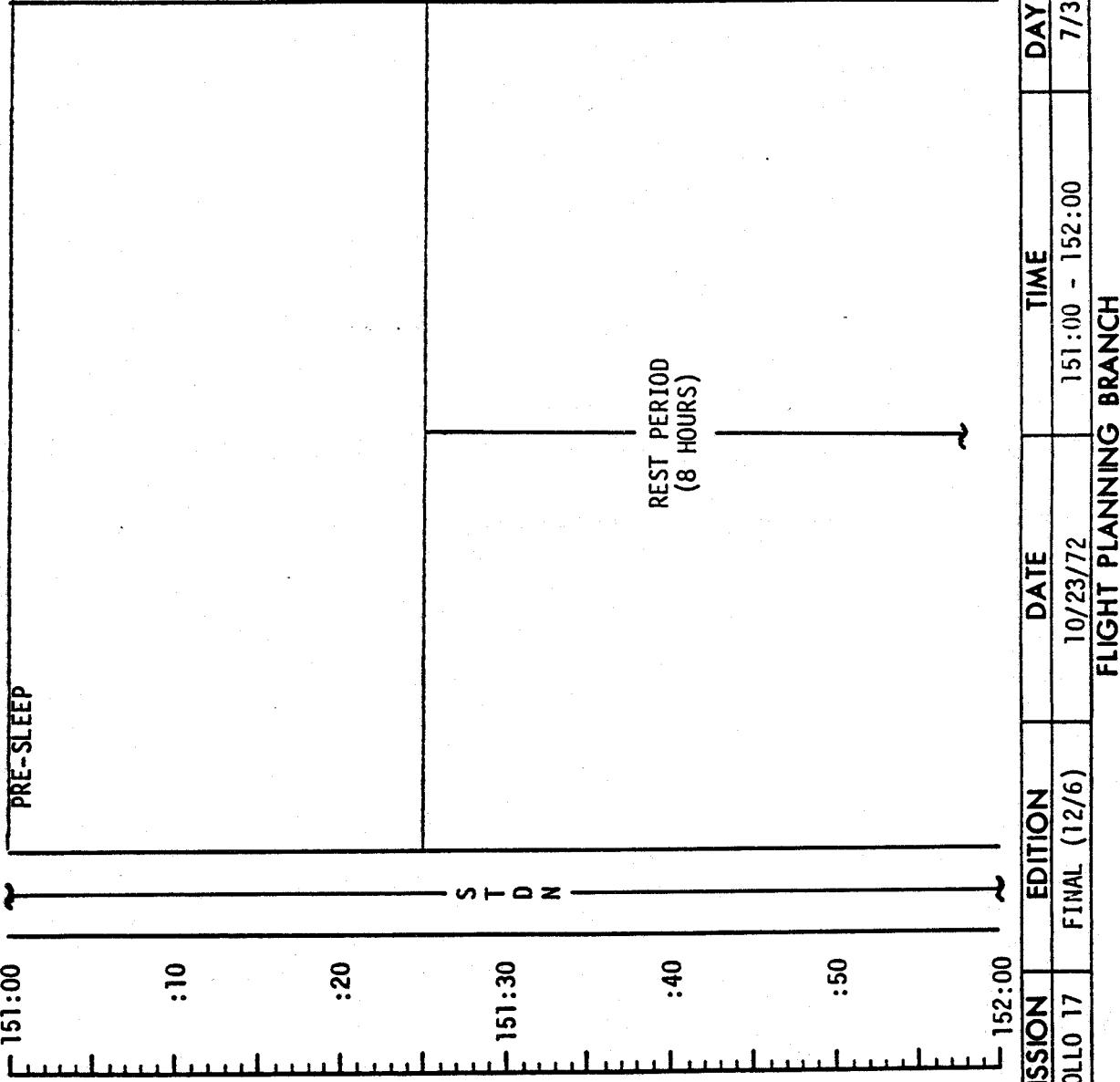
MCC-H

0353 CST

CDR

NOTES

LMP

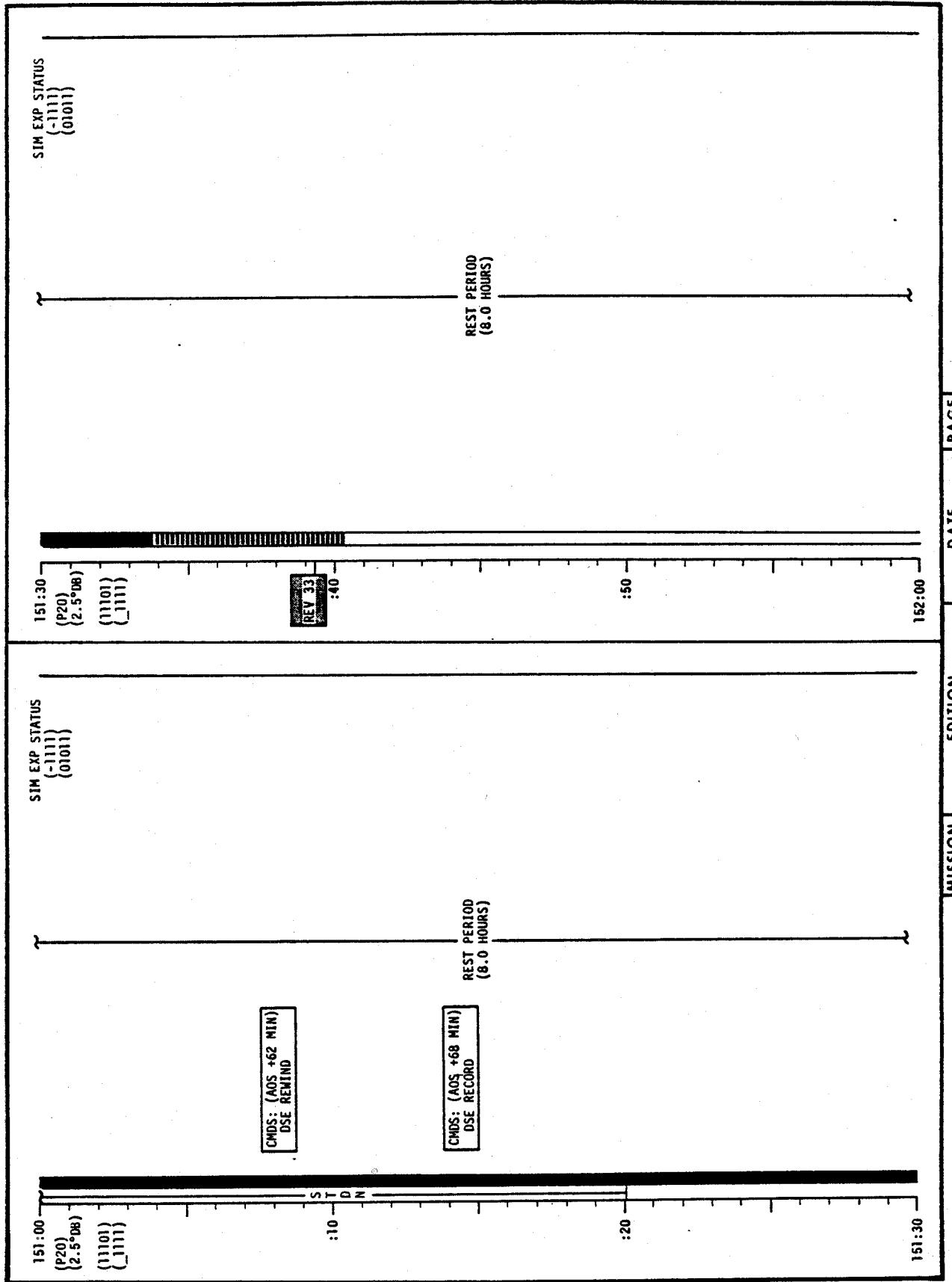


CSM REV 33

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



LM FLIGHT PLAN

MCC-H

0453 CST

CDR

NOTES

LMP

152:00

:10

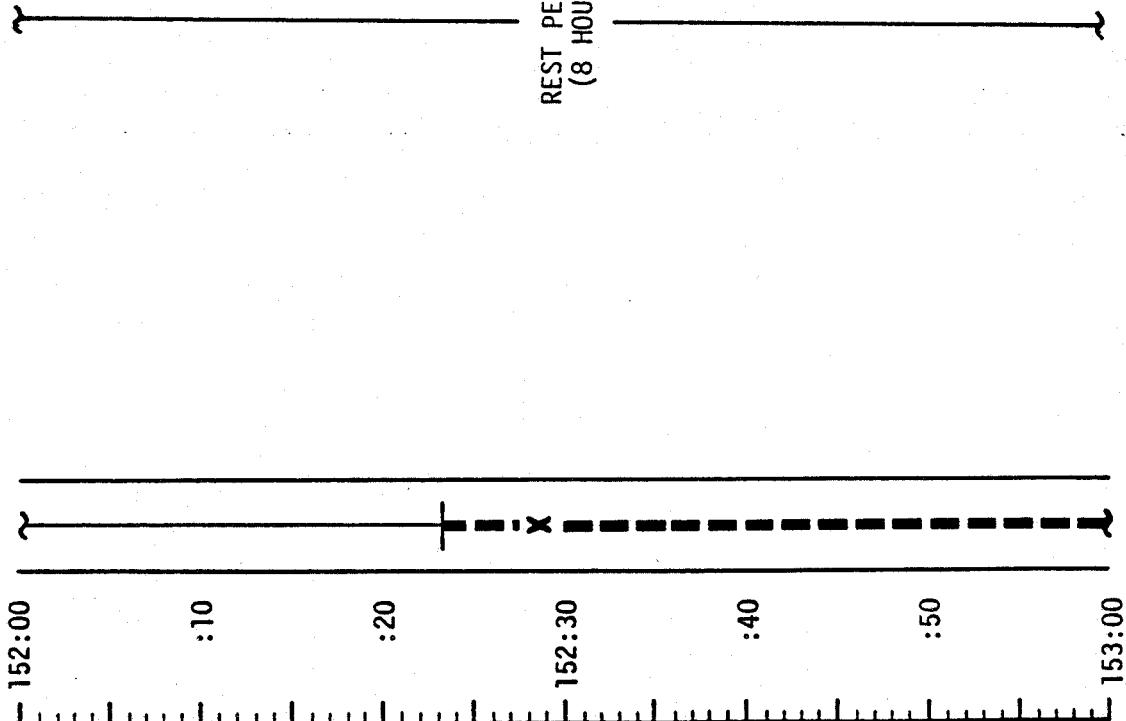
:20

152:30

:40

:50

153:00



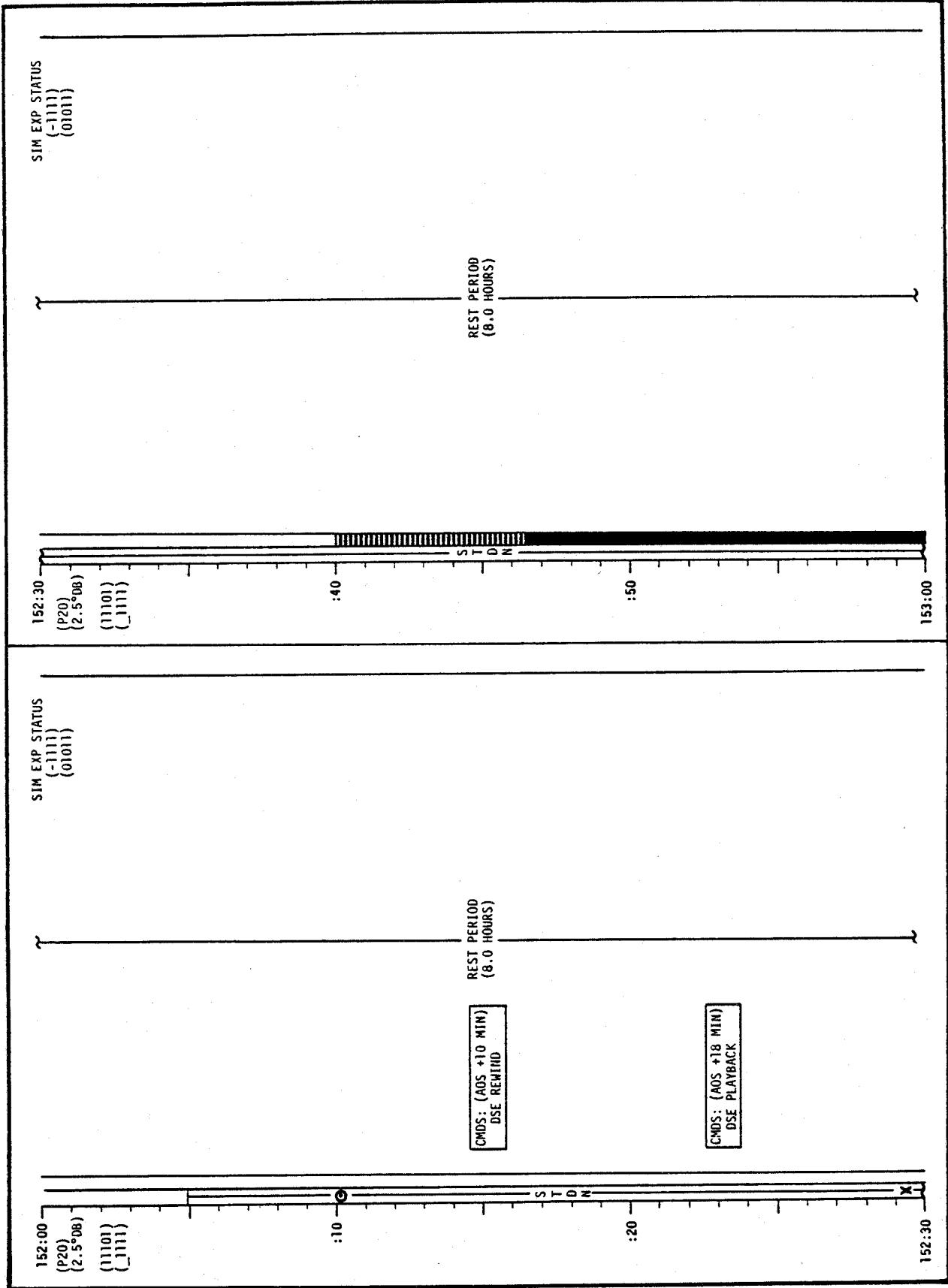
PKS 210' LOS

REST PERIOD
(8 HOURS)

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

CDR

0553 CST

153:00

:10

:20

153:30

:40

:50

154:00

NOTES

LMP

MCC-H

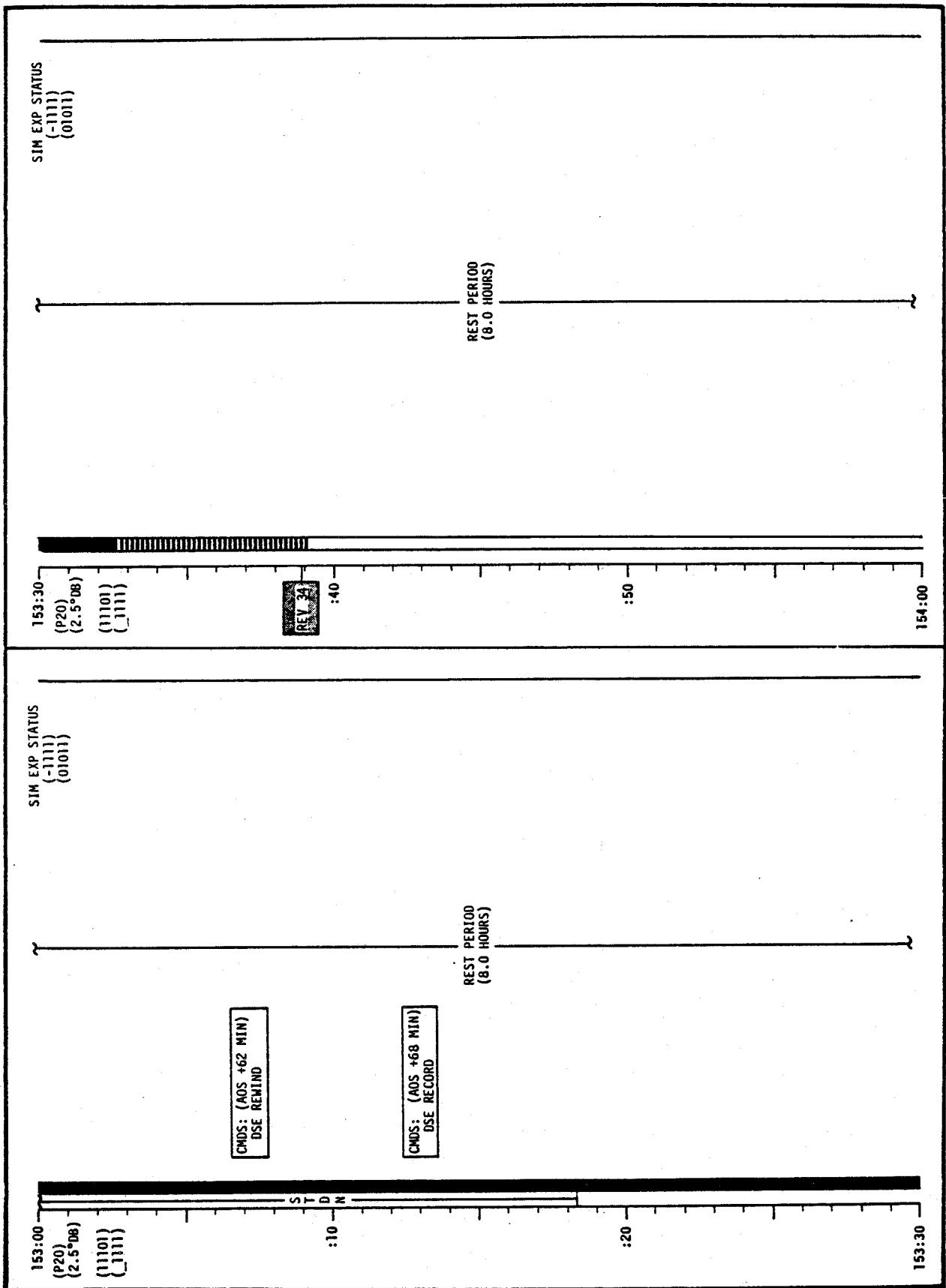
REST PERIOD
(8 HOURS)

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

CDR

NOTES

LMP

0653 CST

MCC-H

154:00

:10

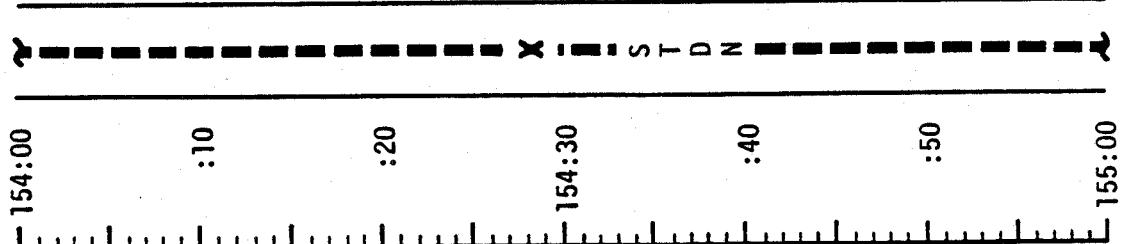
:20

154:30

:40

:50

155:00



REST PERIOD
(8 HOURS)

154:30

S

T

D

N

MISSION APOLLO 17

EDITION FINAL (12/6)

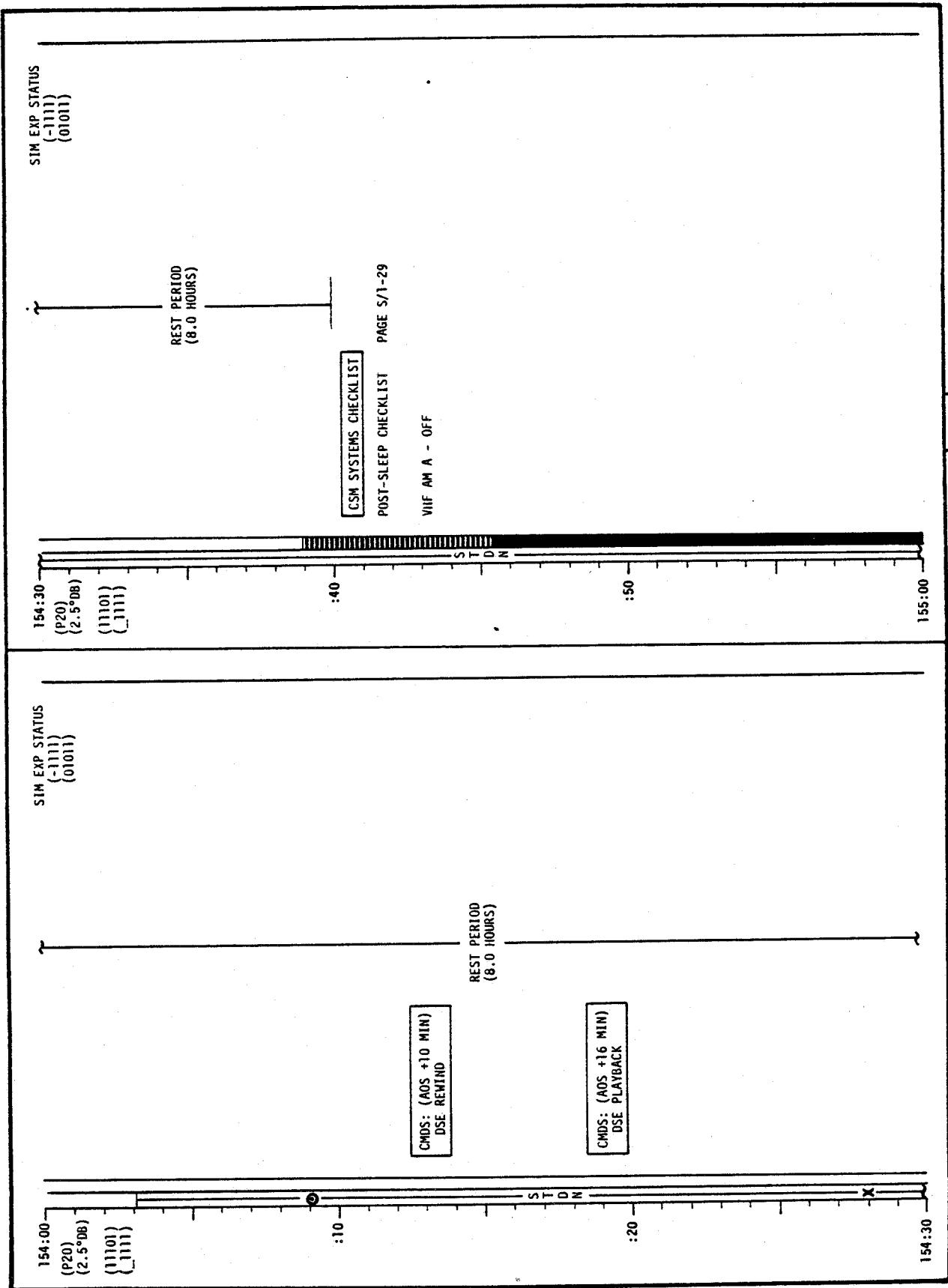
DATE 10/23/72

PAGE 3-208

DAY/REV 7-8/34

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

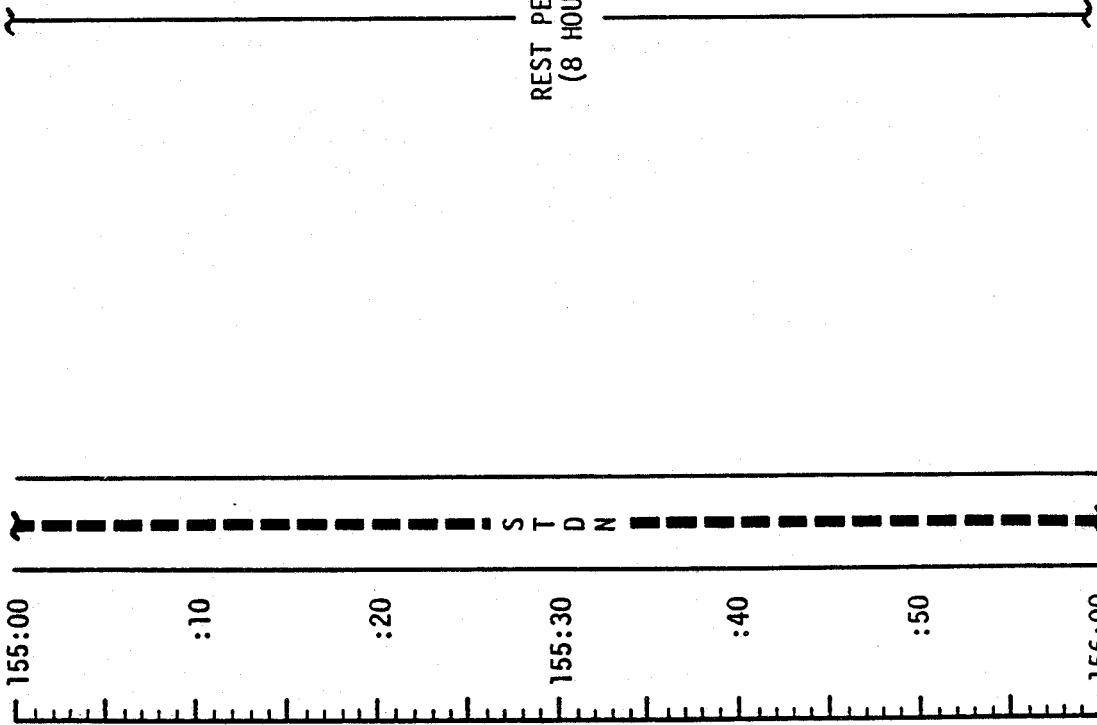
CDR

0753 CST

MCC-H

LMP

NOTES

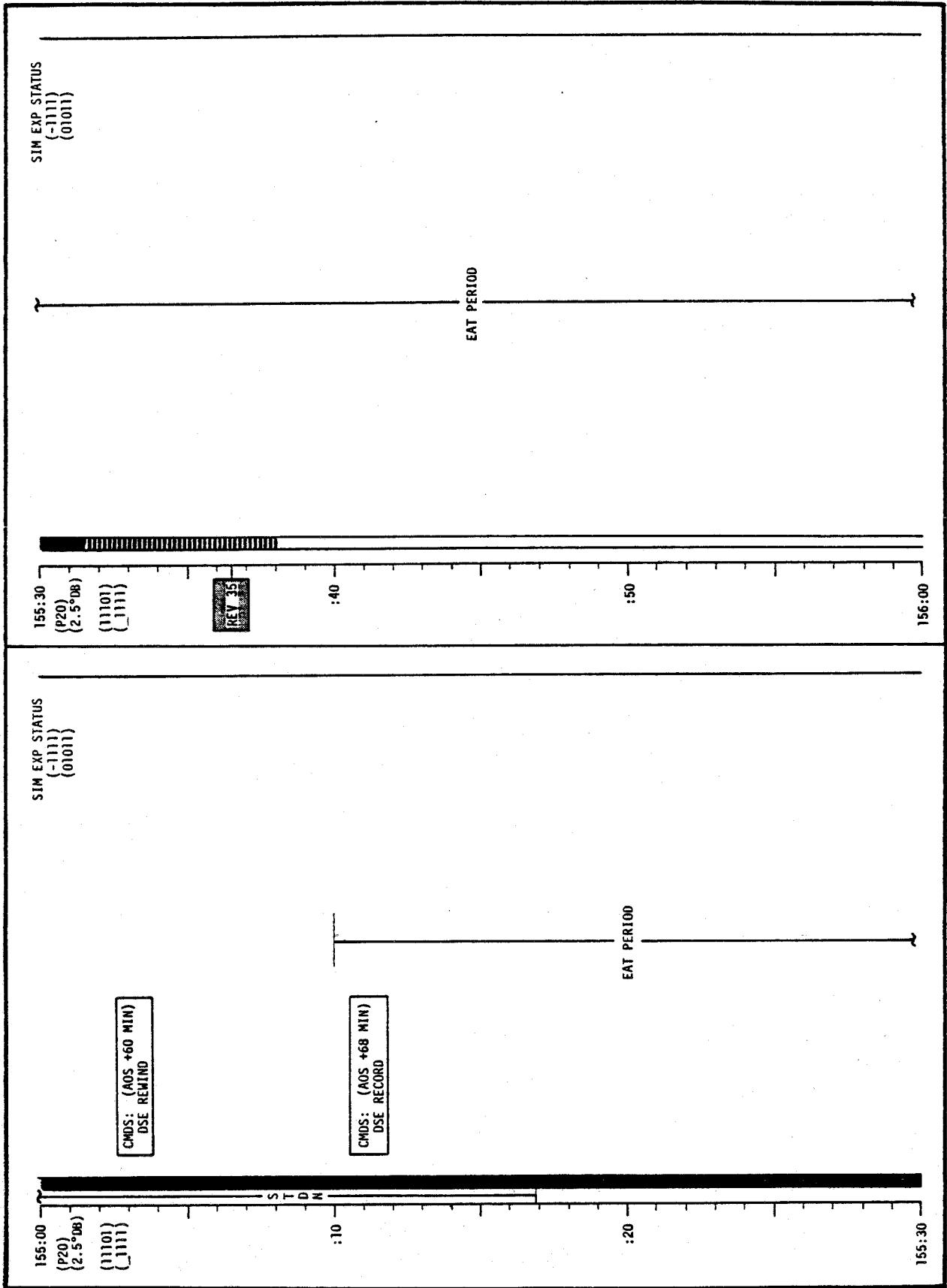


CSM REV 35

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)	10/03/72	3-211

LM FLIGHT PLAN

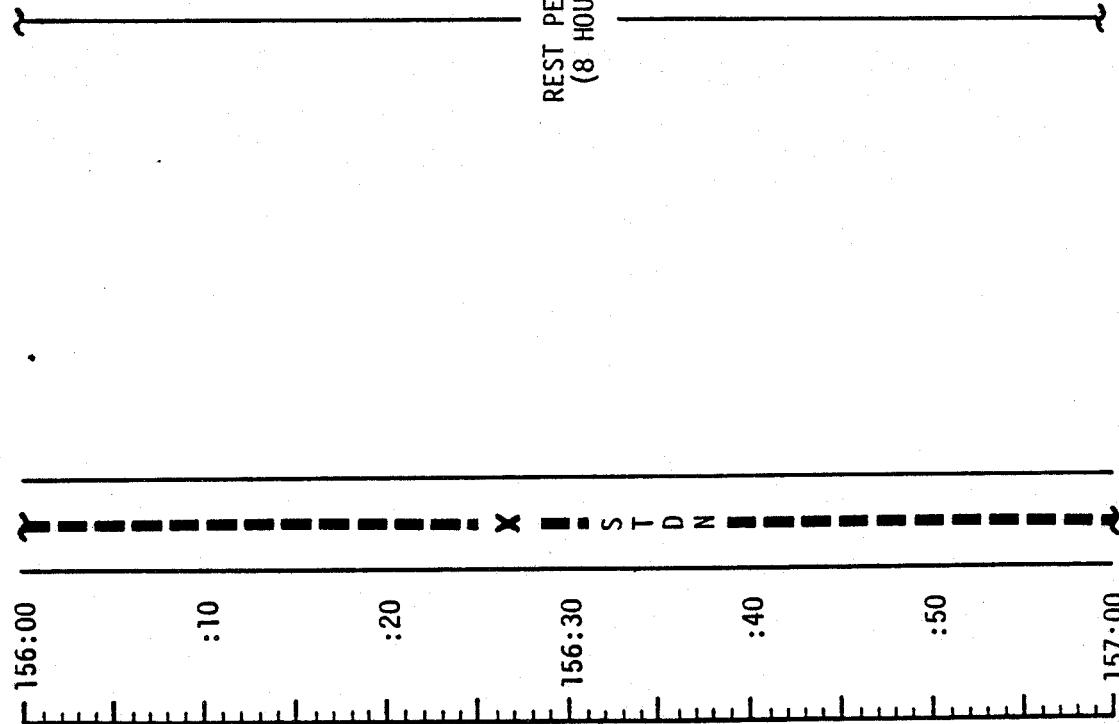
CDR

NOTES

LMP

0853 CST

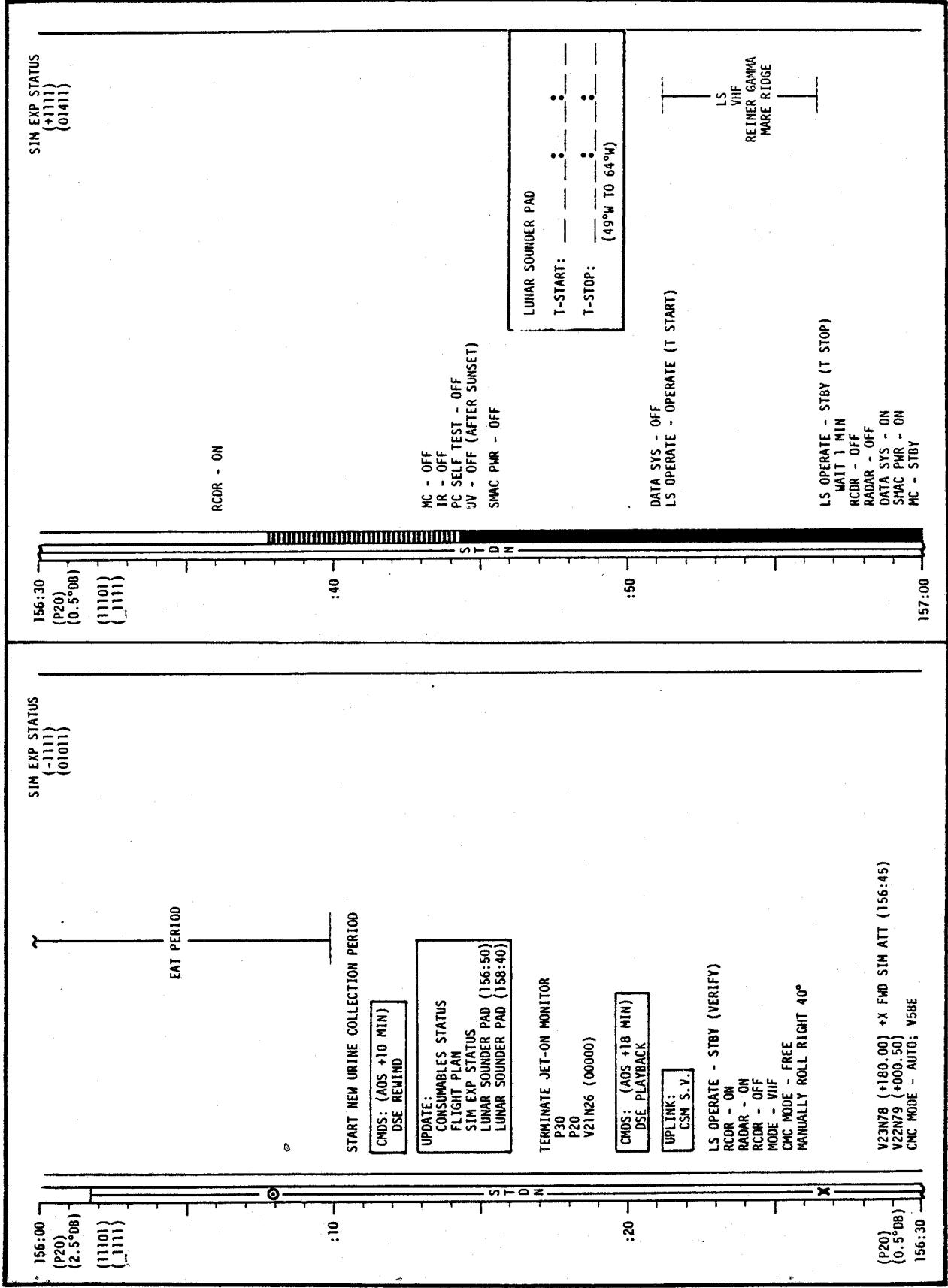
MCC-H



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

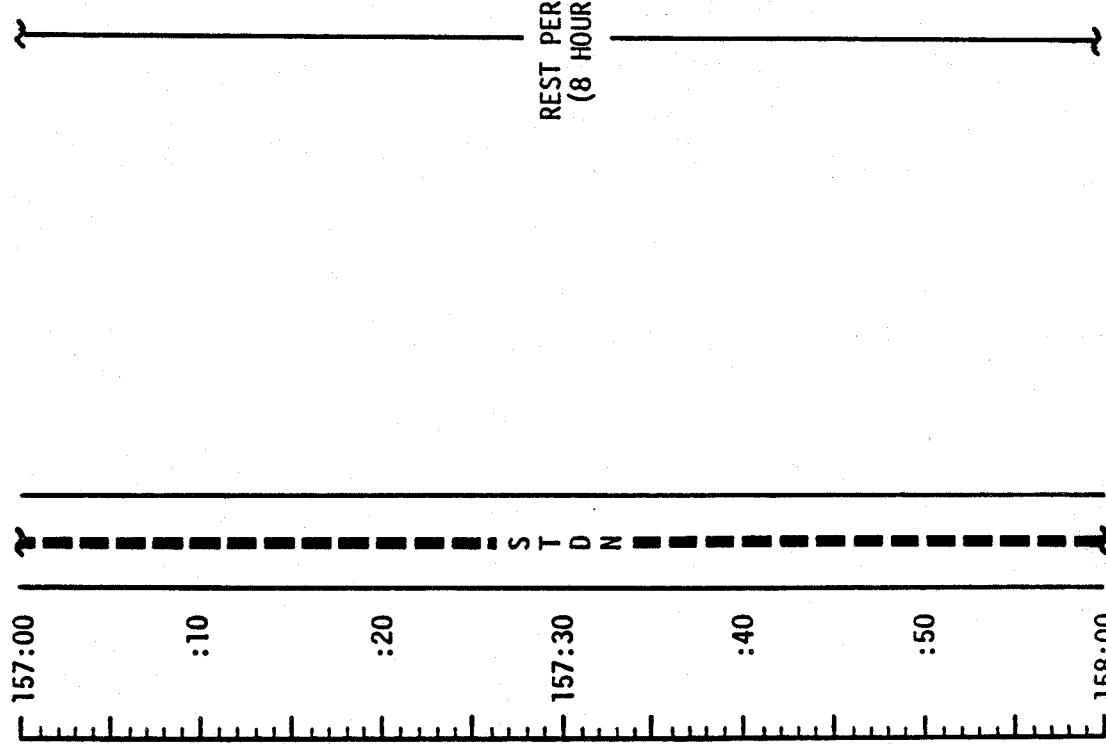
MCC-H

0953 CST

CDR

LMP

NOTES

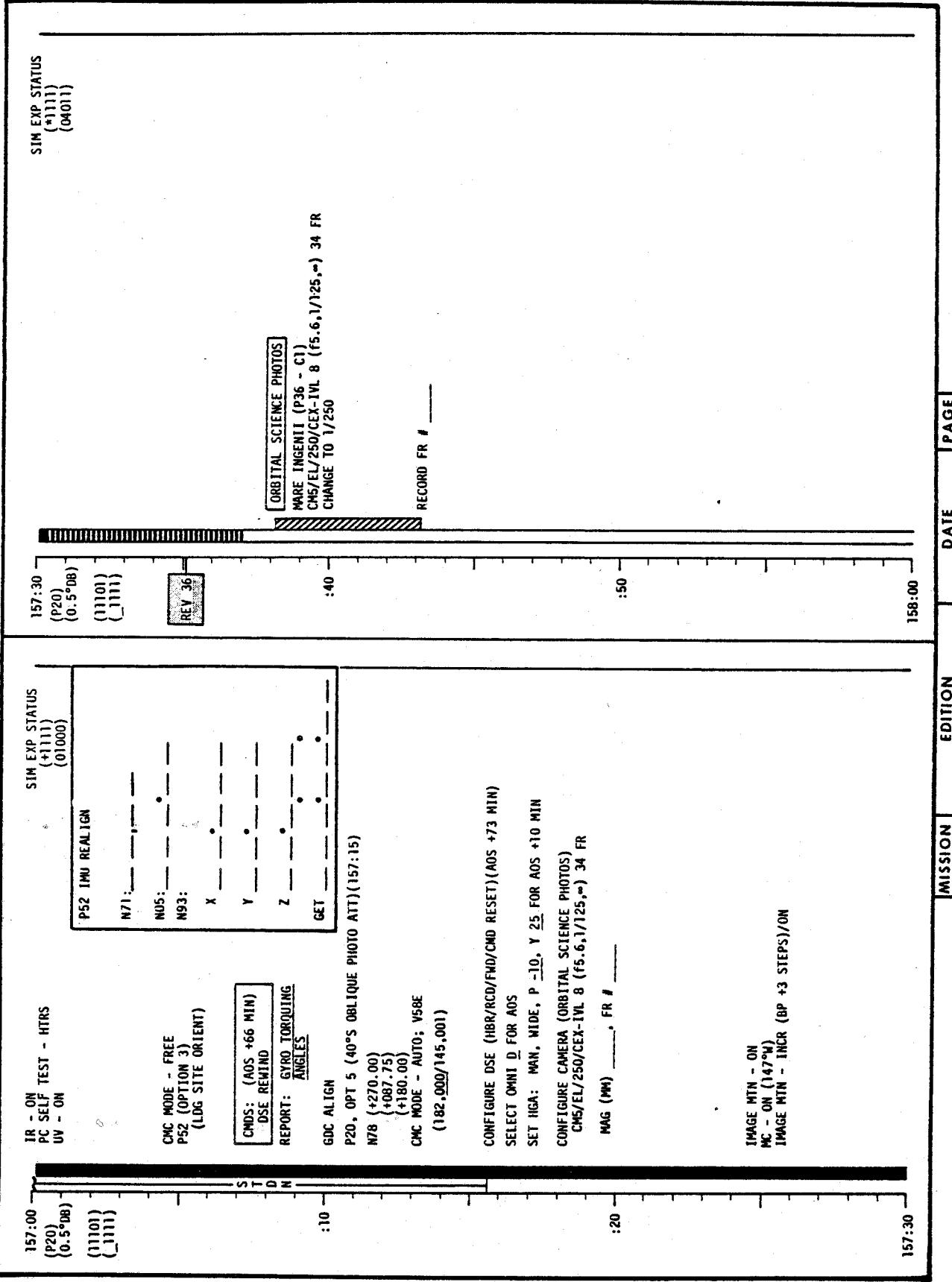


CSM REV 36

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

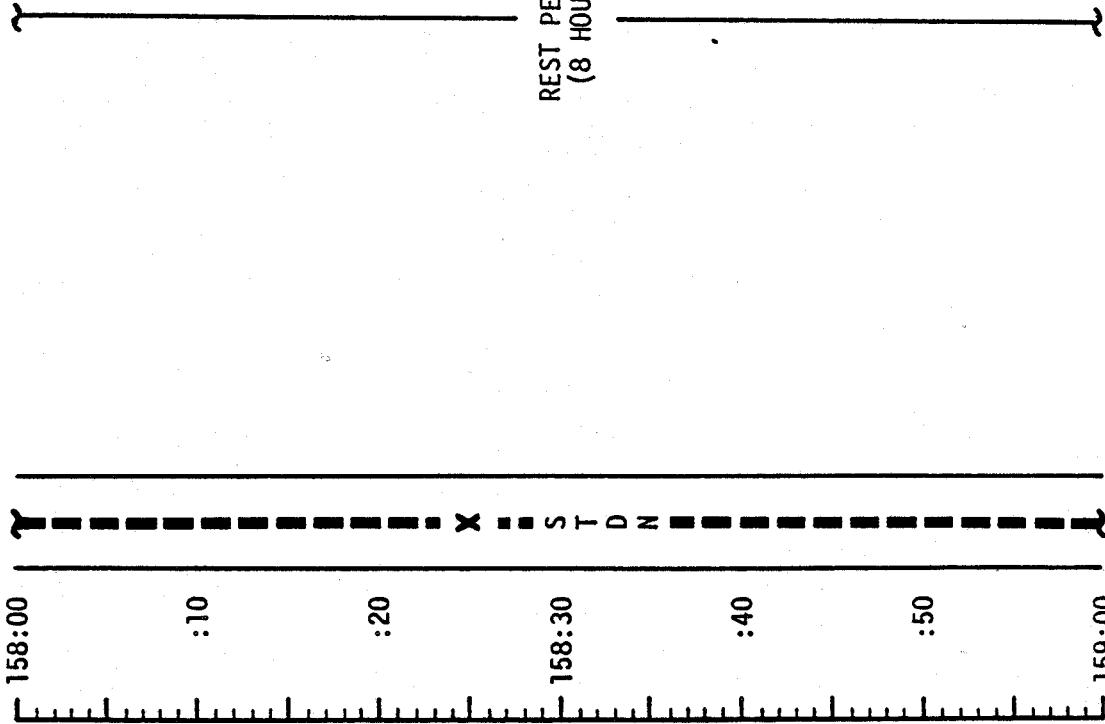
MCC-H

1053 CST
158:00

LMP

CDR

NOTES

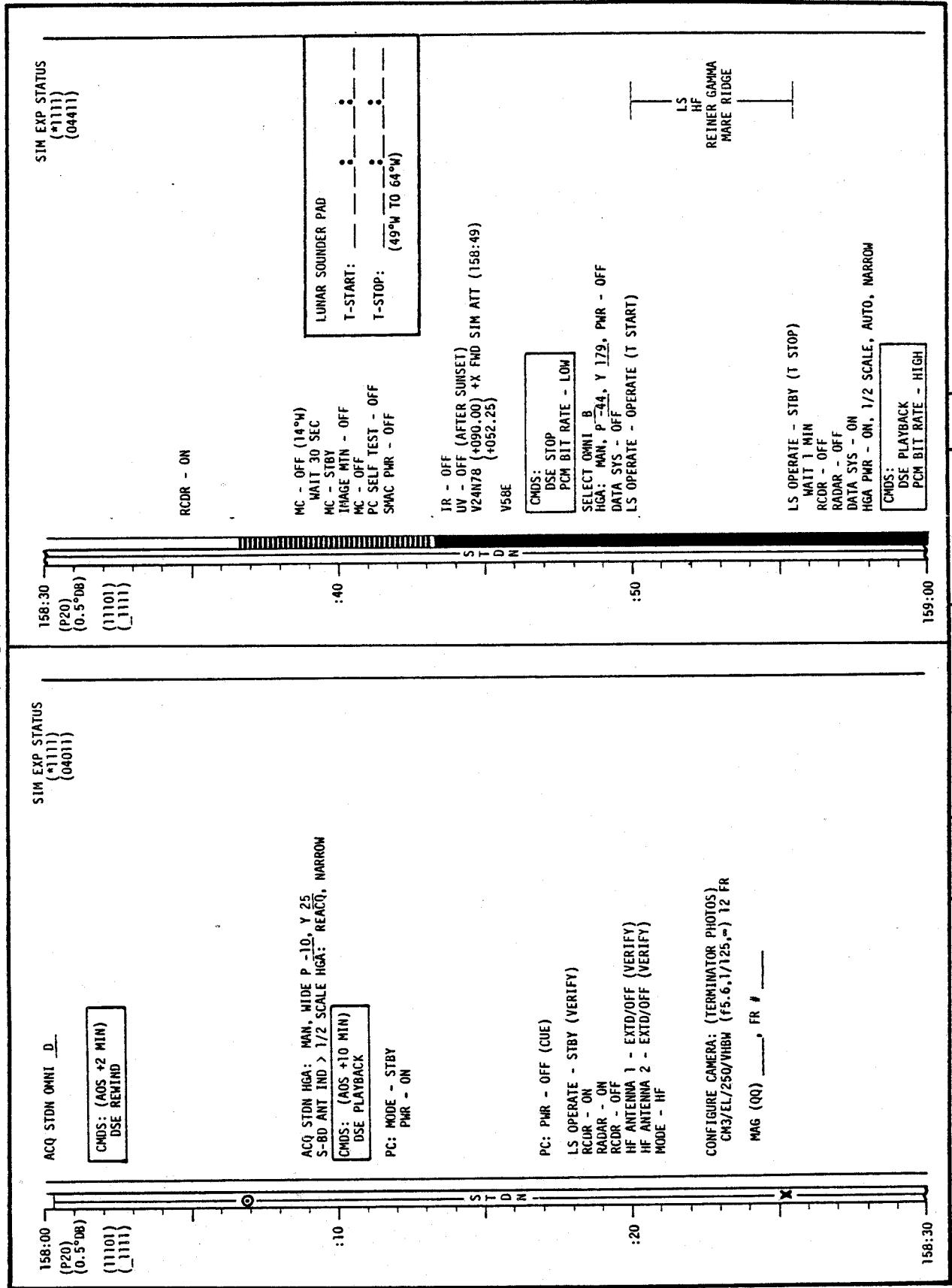


REST PERIOD
(8 HOURS)

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

NOTES

LMP

CDR

1153 CST

MCC-H

159:00

:10

:20

159:30

:40

:50

160:00

STAY/NO-STAY FOR
EVA-3

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

REST PERIOD
(8 HOURS)

POST SLEEP

REPORT: CREW STATUS

CSM REV 37

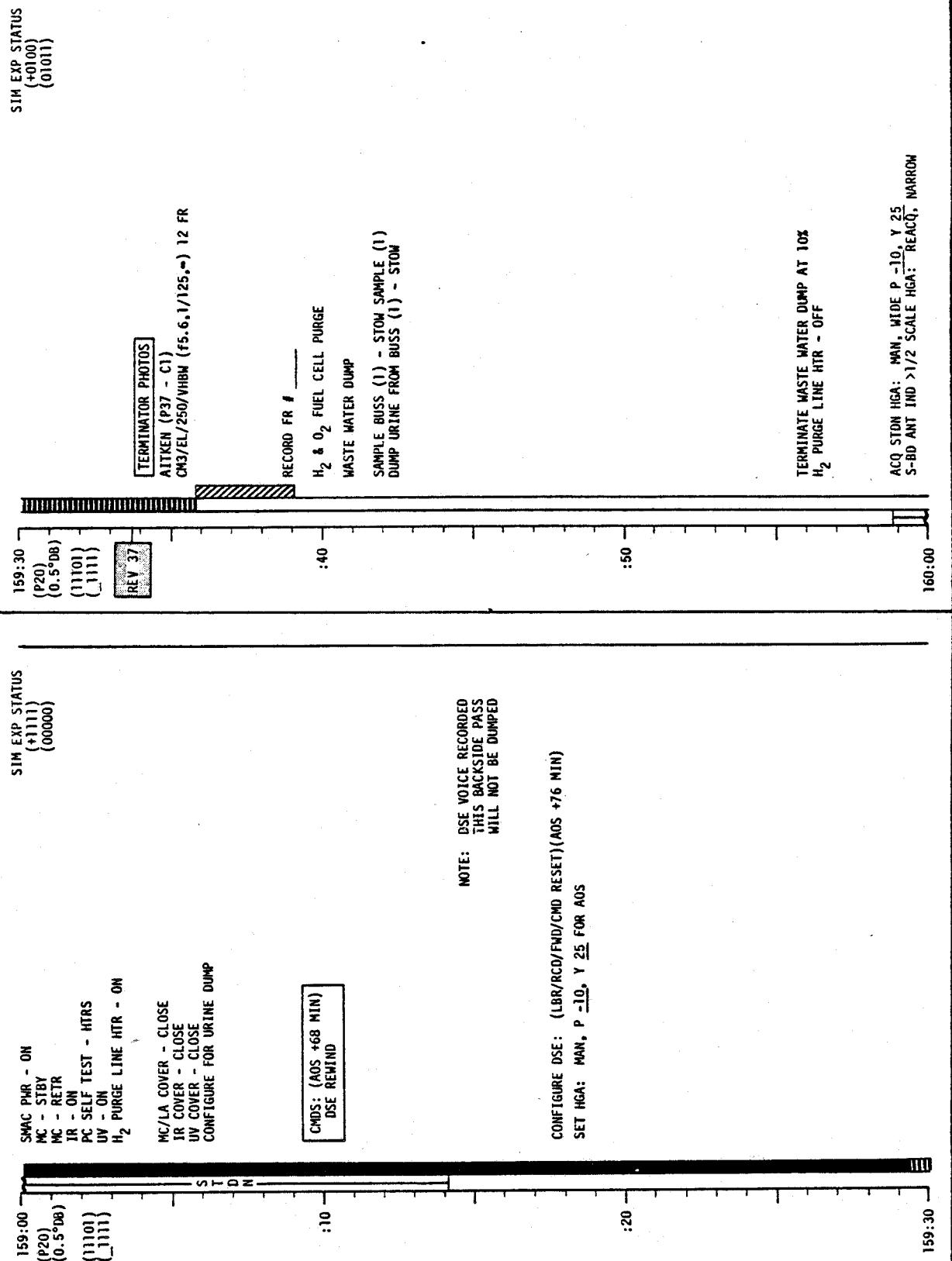
EAT PERIOD

PLSS O₂ TOP OFF

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



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-219

LM FLIGHT PLAN

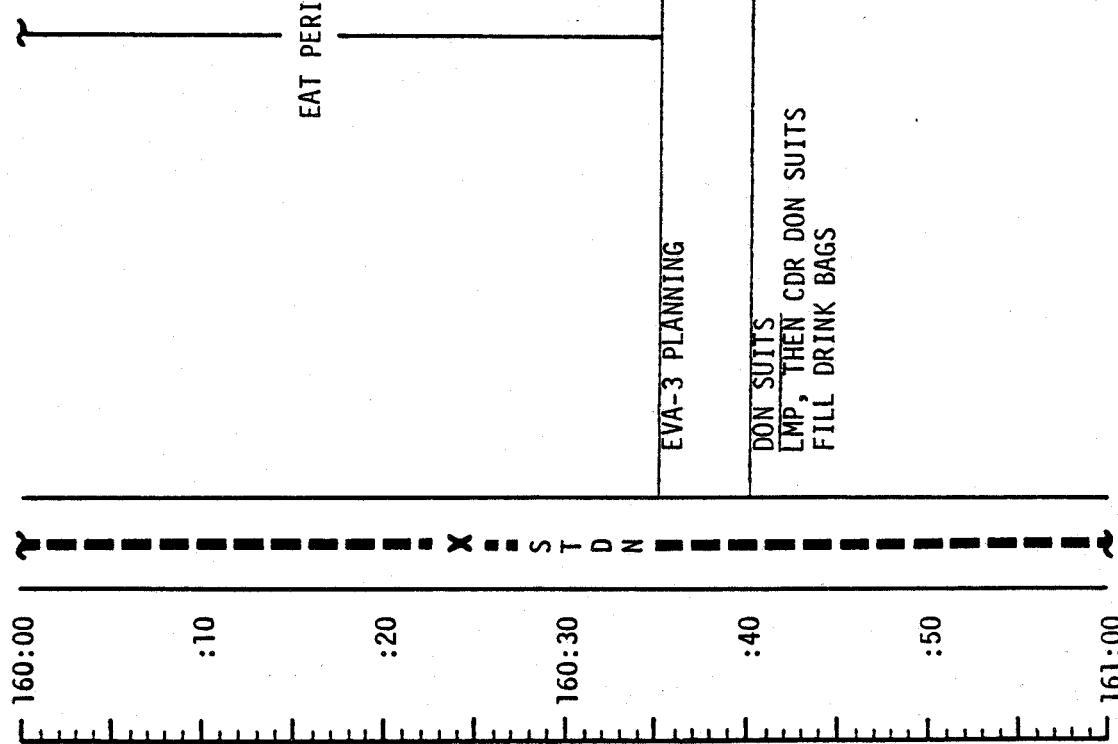
CDR

1253 CST

MCC-H

LMP

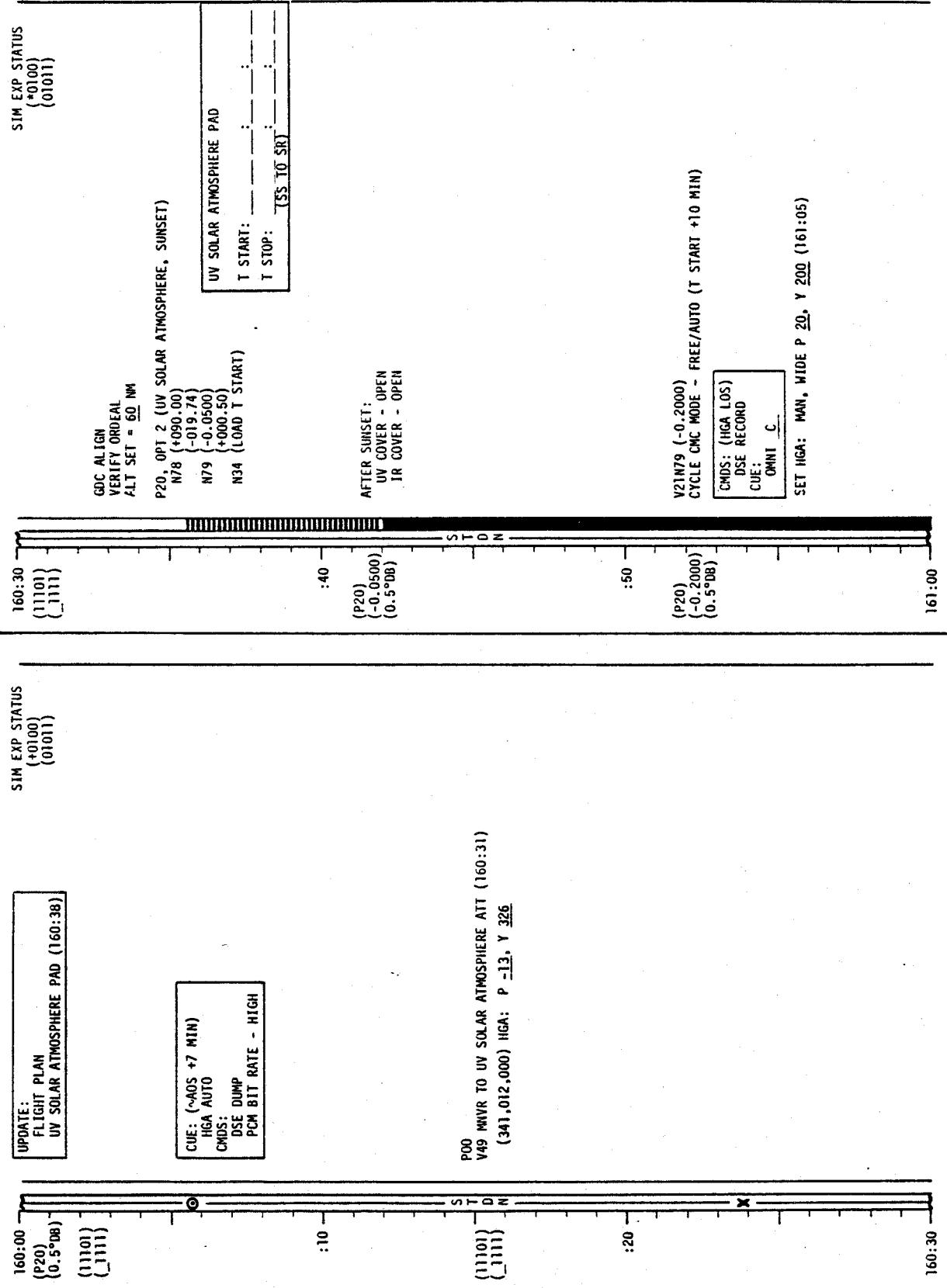
NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	160:30 - 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

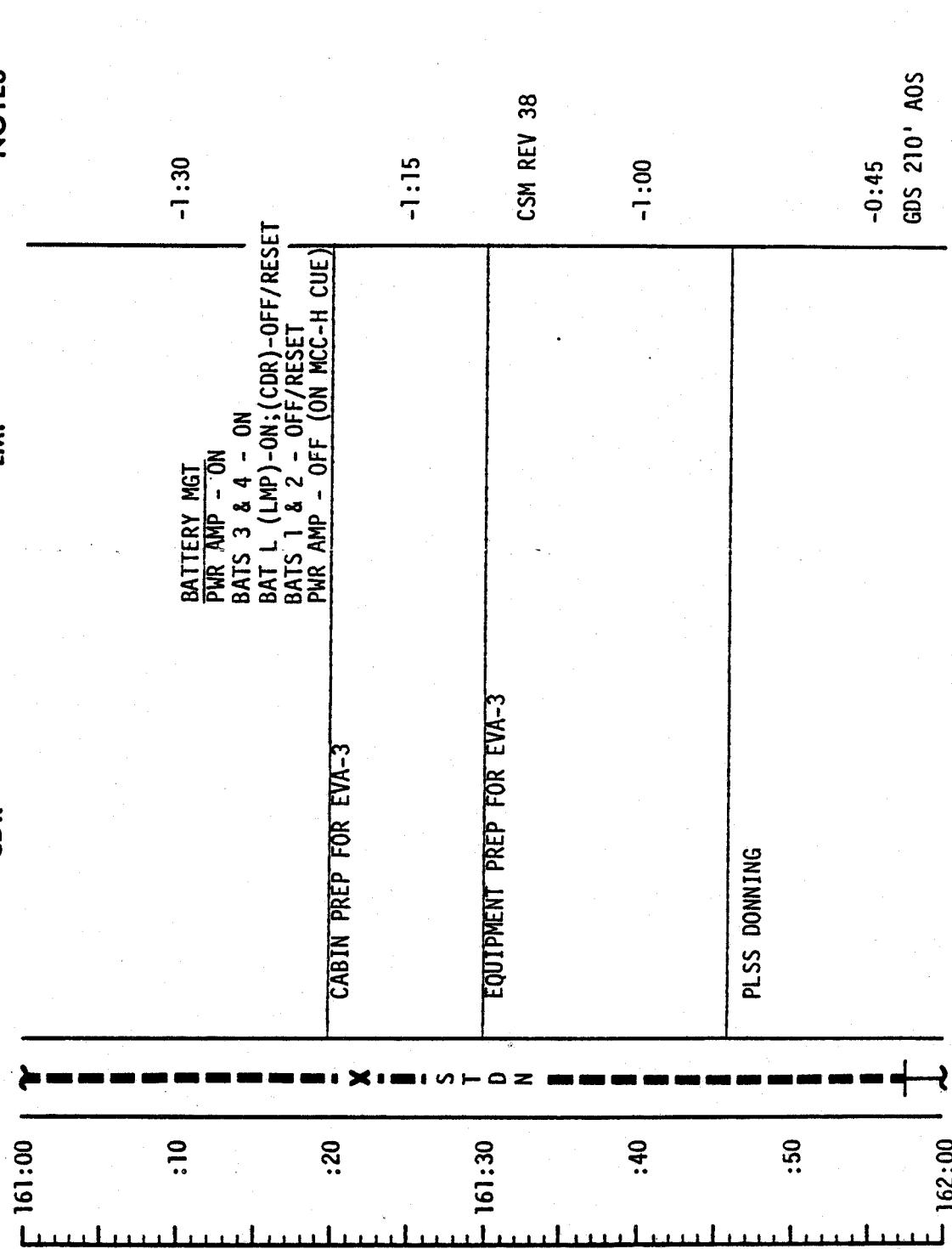
CDR

1353 CST

MCC-H

NOTES

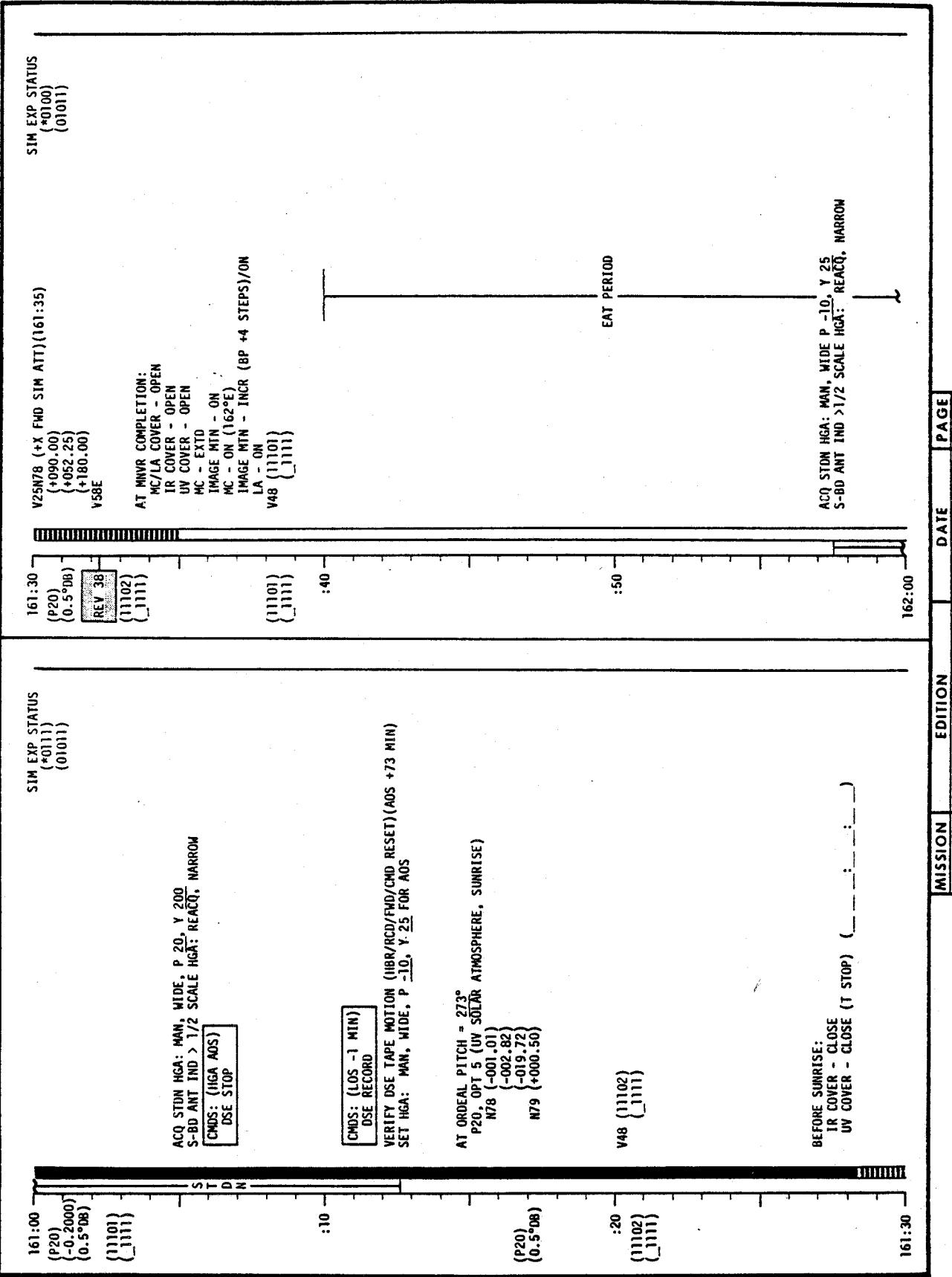
LMP



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

CDR

1453 CST

MCC-H

162:00



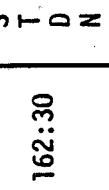
:10

PLSS COMM CHECK
CONFIGURE COMM FOR EVA
RECORDER - ON
REPORT: PLSS O₂ QUANTITY
OPS CONNECT

:20

HELMET/GLOVE DONNING

162:30



GO/NO-GO FOR
CABIN DEPRESS

:40

CABIN DEPRESS
START WATCHES @ 3.5 PSIA
FINAL PREP FOR EVA

:50

EGRESS LM

+0:10

DESCEND TO SURFACE

RECORDED - OFF
EGRESS LM, CLOSE HATCH
DESCEND TO SURFACE

163:00

MISSION

EDITION

DATE

TIME

PAGE

APOLLO 17

FINAL (12/6)

10/23/72

162:00 - 163:00

8/38

3-224

FLIGHT PLANNING BRANCH

NOTES

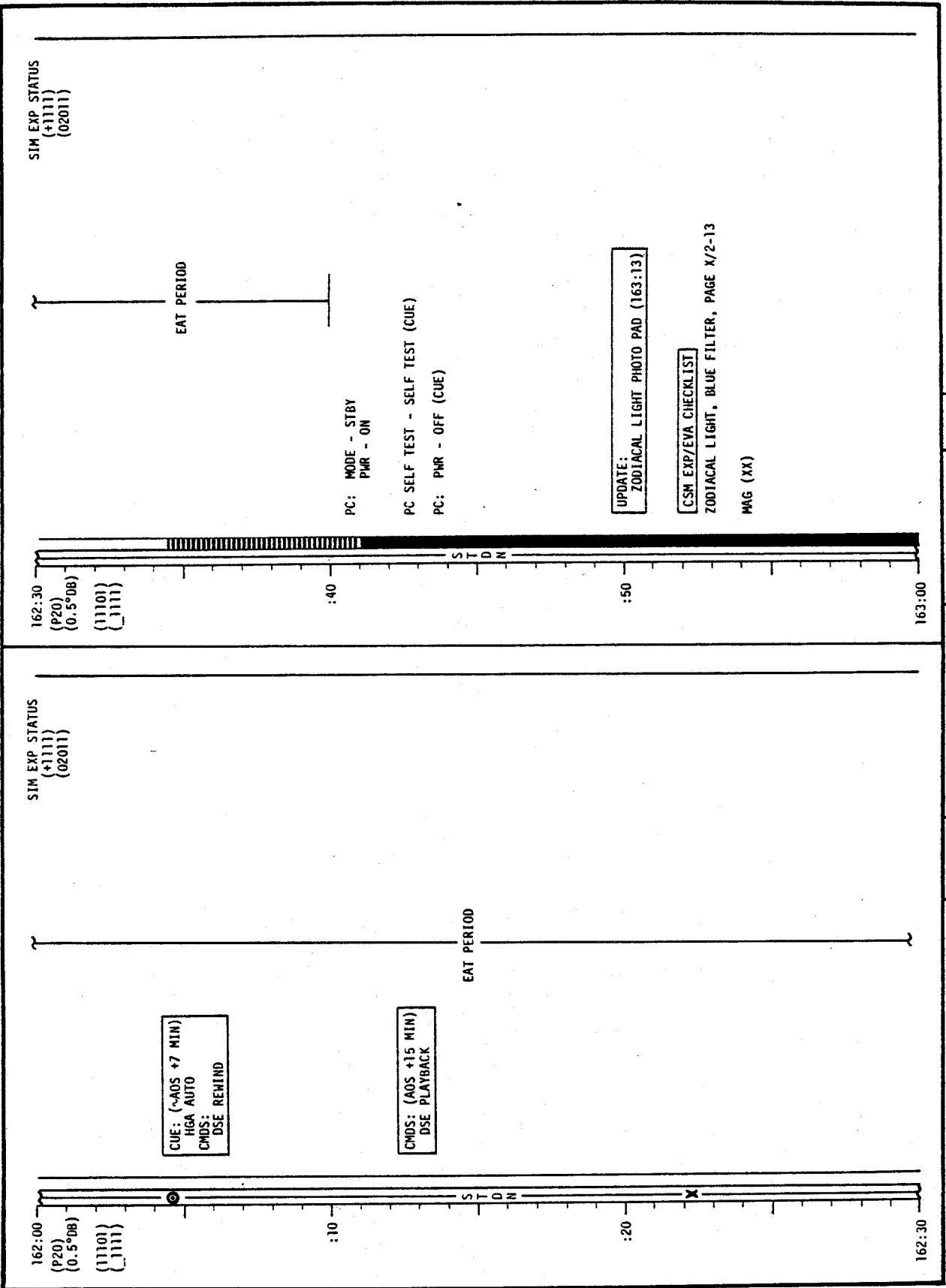
-0:30

-0:15

0:00/START EVA-3

+0:20

CSM FLIGHT PLAN



MCC-H

LM FLIGHT PLAN

1553 CST

CDR

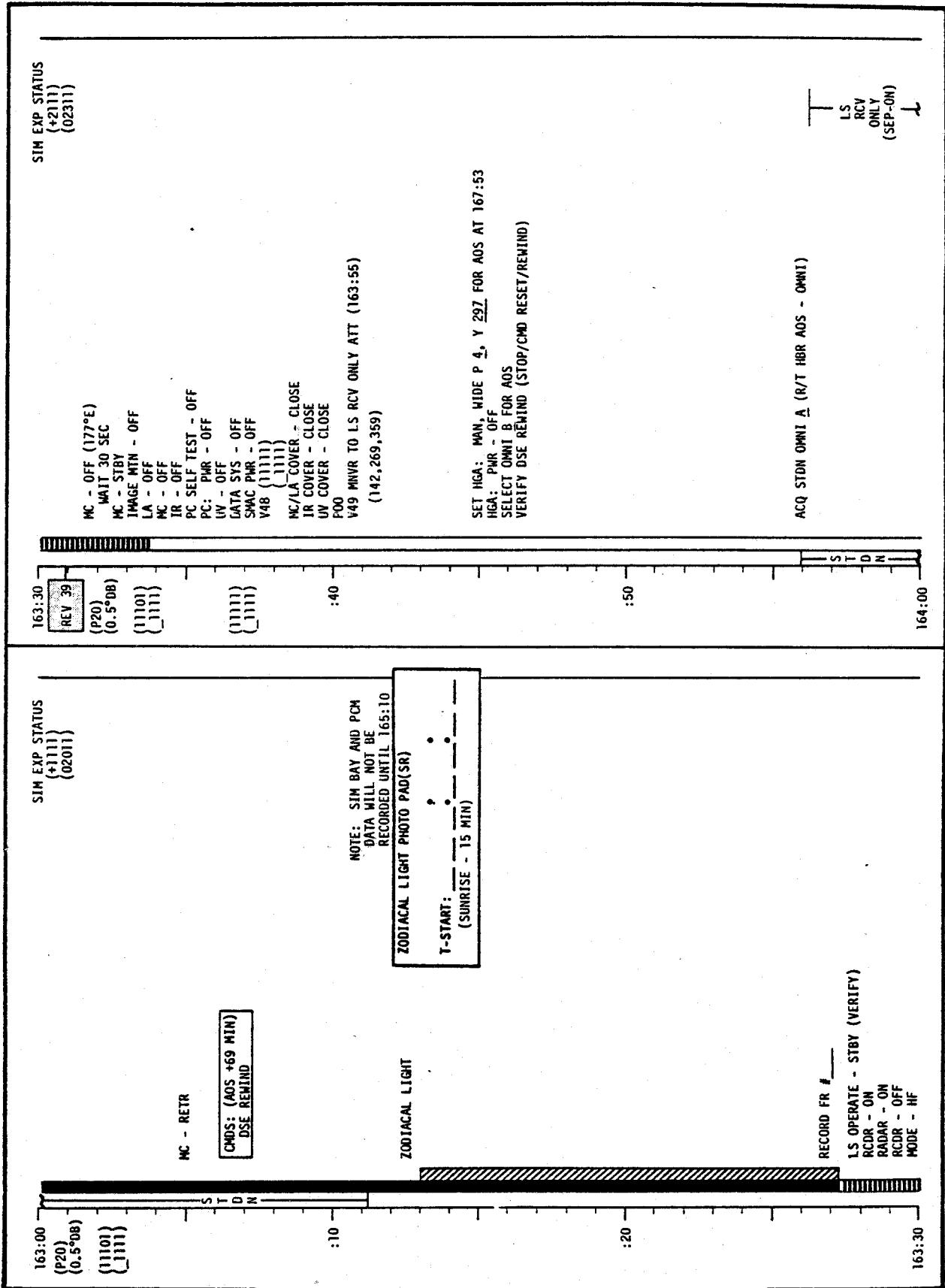
NOTES

LMP	CDR	NOTES
	LCRU PWR UP & LRV PREP	+0:20
	GEOLOGY PREP	
:10		+0:30
	DRIVE TO SEP SITE	
	TRaverse PREP	
:20	LRV NAV INITIALIZATION	+0:40
	DRIVE TO STATION #6	
	LRV SAMPLE EN ROUTE	
163:30	S T D N	+0:50 GSM REV 39
		+1:00
:40		
:50		+1:10
164:00	T V	+1:20
	STATION #6 GEOLOGICAL OBSERVATION & PHOTOS POLARIZATION PHOTOS RAKE SAMPLE DOCUMENTED BOULDER SAMPLES	

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



LM FLIGHT PLAN

MCC-H

CDR

LMP

NOTES

1653 CST

STATION #6 (CONT)

164:00

:10

:20

164:30

:40

:50

165:00

+1:20

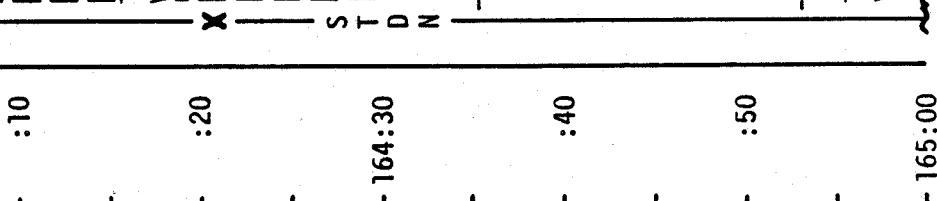
+1:30

+1:40

+1:50

+2:00

+2:20



STATION #7
GEOLOGICAL OBSERVATIONS & PHOTOS
RAKE SAMPLE
DOCUMENTED SAMPLES

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

UPDATE:
FLIGHT PLAN

164:00

CONFIGURE CAMERA: (ORBITAL SCIENCE PHOTOS)
CM5/EL/80/CEX-IVL 20 (f4, 1/250, ~) 19 FR
MAG (MM) : FR #

SIM EXP STATUS
(+0100) (00300)

RECORD FR #

CONFIGURE CAMERA: (ORBITAL SCIENCE PHOTOS)
CM5/EL/80/CEXX-IVL 20 (f4,1/250,∞) 19 FR

SIM EXP STATUS
(+0100) (00300)

RECORD FR #

CONFIGURE CAMERA: (ORBITAL SCIENCE PHOTOS)
CM5/EL/80/CEXX-IVL 20 (f4,1/250,∞) 19 FR

10

:40

-20-

-
:50

CHANGE TO f2.8

四

ORBITAL SCIENCE PHOTOS

D - CALDERA (P39 - C11)
CM5/EL/80/CEX-IVL 20 (f4, 1/250, ") 19 FR

卷之三

卷之三

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

LM FLIGHT PLAN

CDR

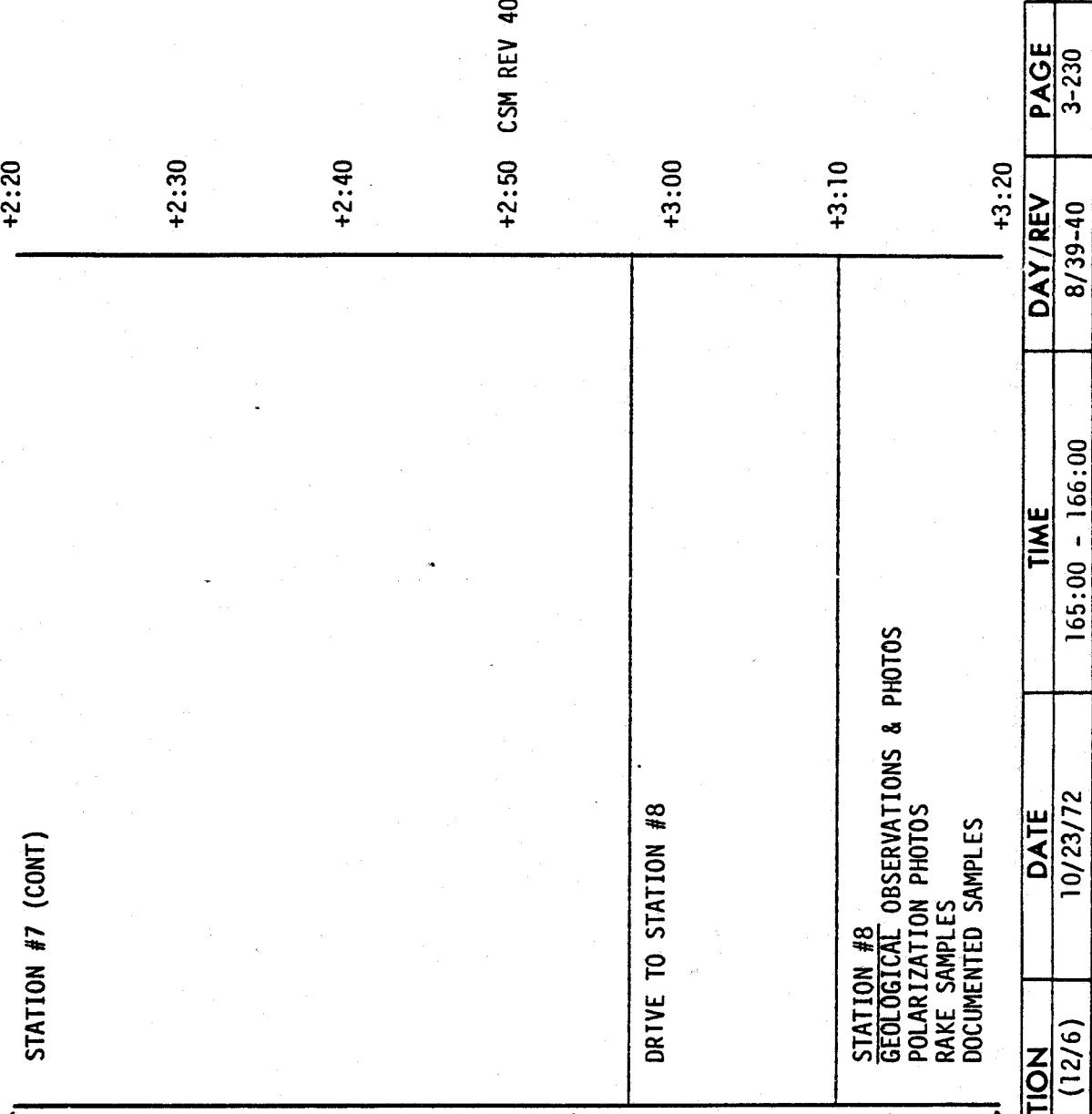
LMP

1753 CST

MCC-H

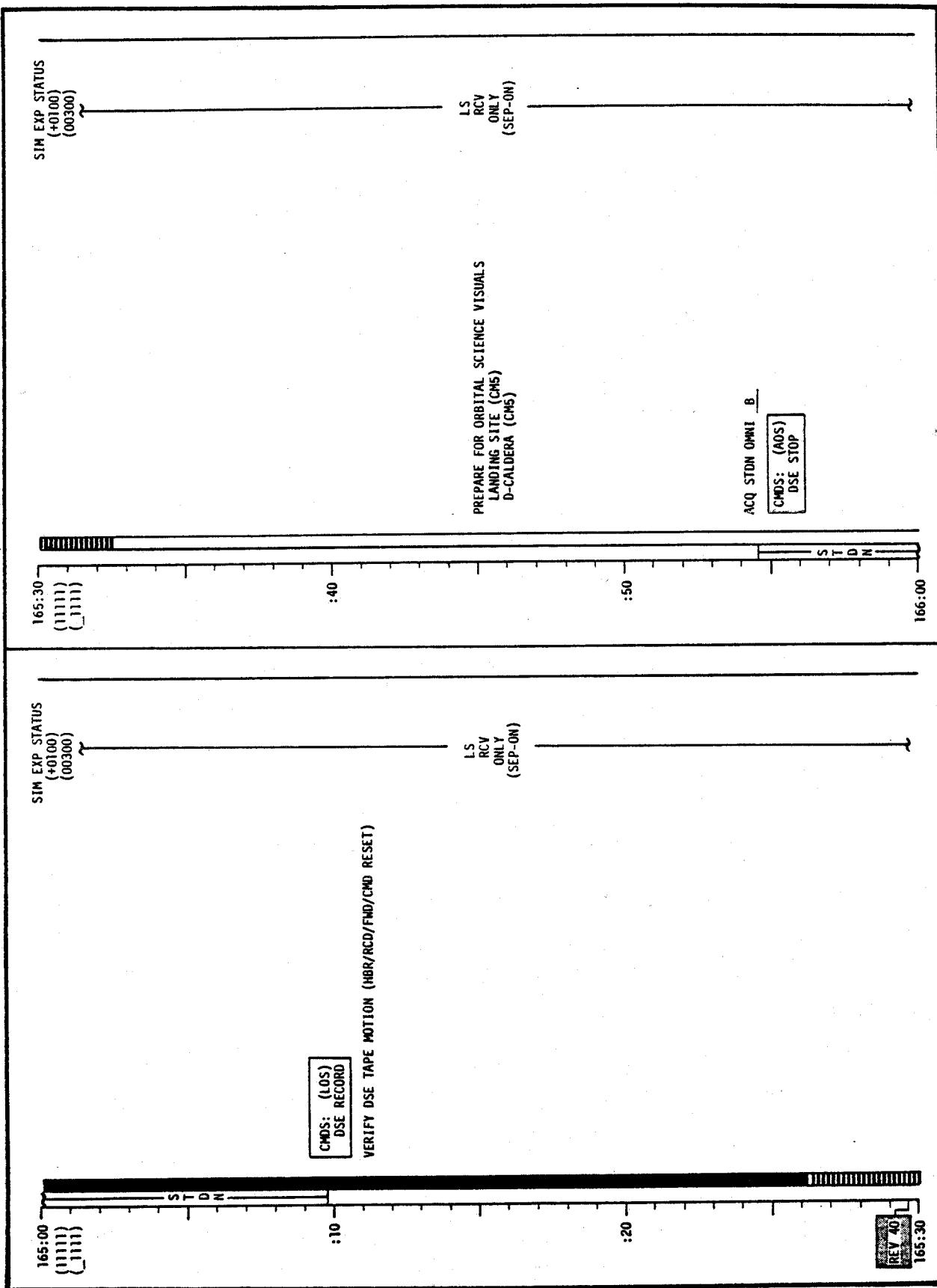
STATION #7 (CONT)

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



FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



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

LM FLIGHT PLAN

1853 CST

MCC-H

CDR

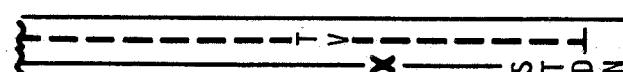
LMP

NOTES

STATION #8 (CONT)

+3:20

166:00



:10

:20

166:30

:40

:50

167:00

DRIVE TO STATION #9

+4:00

+4:10

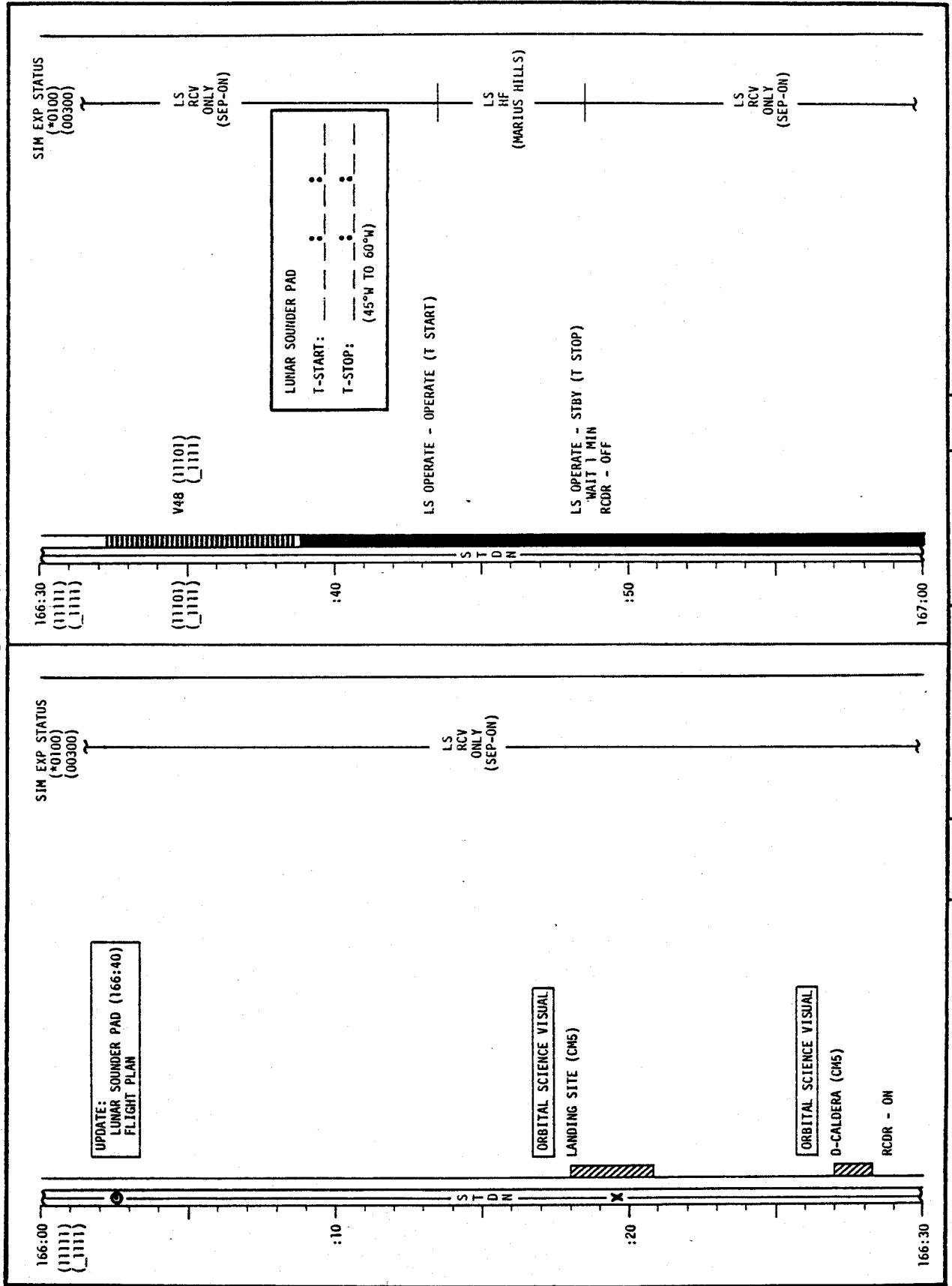
+4:20

STATION #9
GEOLOGICAL OBSERVATIONS & PHOTOS
DOCUMENTED SAMPLES

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

STATION #9 (CONT)

:10

:20

DRIVE TO STATION #10
IRV SAMPLE EN ROUTE

S

T

D

N

167:30

:40

:50

:50

168:00

+4:30

+4:40

+4:50 CSM REV 41

+5:00

+5:10

+5:20

STATION #10
GEOLOGICAL OBSERVATIONS & PHOTOS
CORE SAMPLE
DOCUMENTED BOULDER SAMPLES

TIME

TIME

TIME

TIME

TIME

TIME

CDM REV

DAY/REV

PAGE

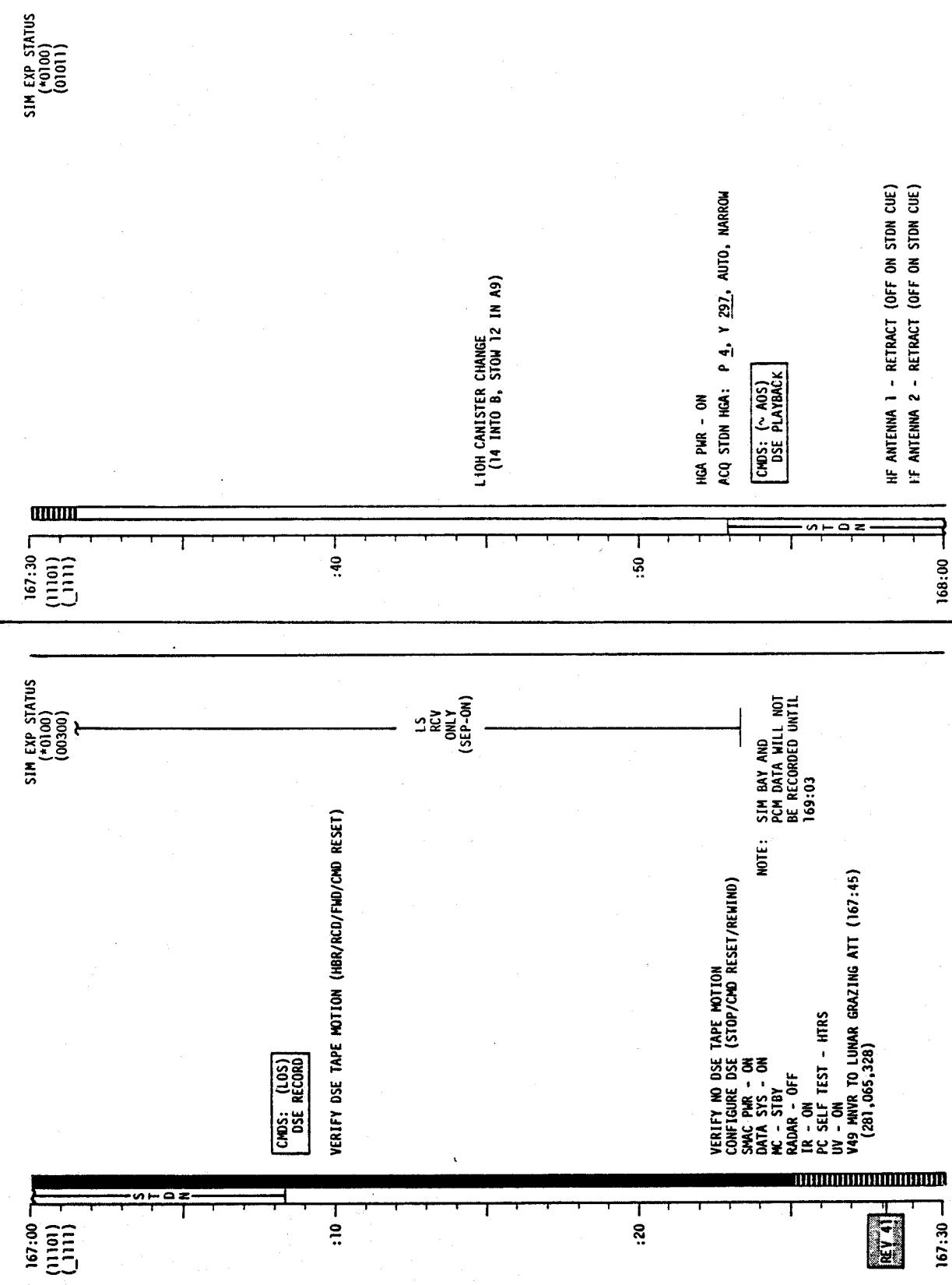
8/40-41

3-234

FLIGHT PLANNING BRANCH

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	167:00 - 168:00	8/40-41	3-234

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-235

LM FLIGHT PLAN

MCC-H

2053 CST

CDR

LMP

NOTES

STATION #10 (CONT)

+5:20

168:00

:10

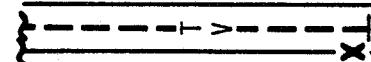
:20

168:30

:40

:50

169:00



DRIVE TO LM
EP DEPLOY EN ROUTE

TRAVERSE TERMINATION

RETRIEVE COSMIC RAP EXP

WALK TO ALSEP

+6:20

+6:00

+6:10

:10

:20

:50

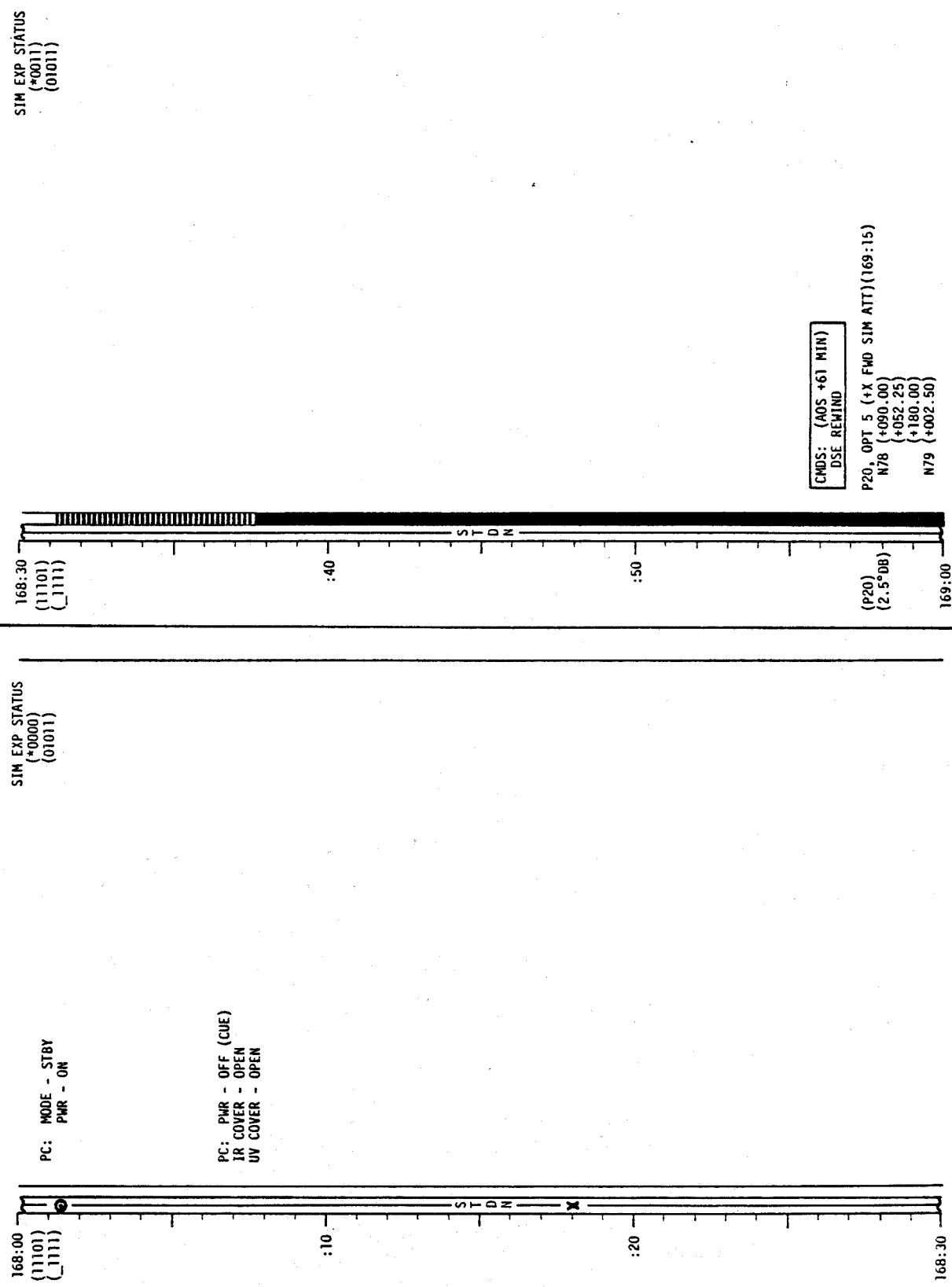
+6:00

+6:20

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	168:00 - 169:00	8/41	3-236

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

MCCH

2153 CST

CDR

RETRIEVE NFE | LRV FINAL DISPOSITION

00:601

RETRIEVE NEE

卷之三

+6:20

10

DEACTIVATE SEP
EP DEPLOY

•30

RETURN TO I.M.

CLEAN ENERGY

INGRESS

०५

50

170:00

17

17

169:00
10/23/12
FLIGHT PLANNING BRANCH

BIOMED - LEET

+7:00/END EVA-3

CSM REV 42
+6:50

+6:40

RETURN TO LM

+6.30

CLEAN EMU'S
INGRESS
TRANSFER EQU
TRACKING LIG

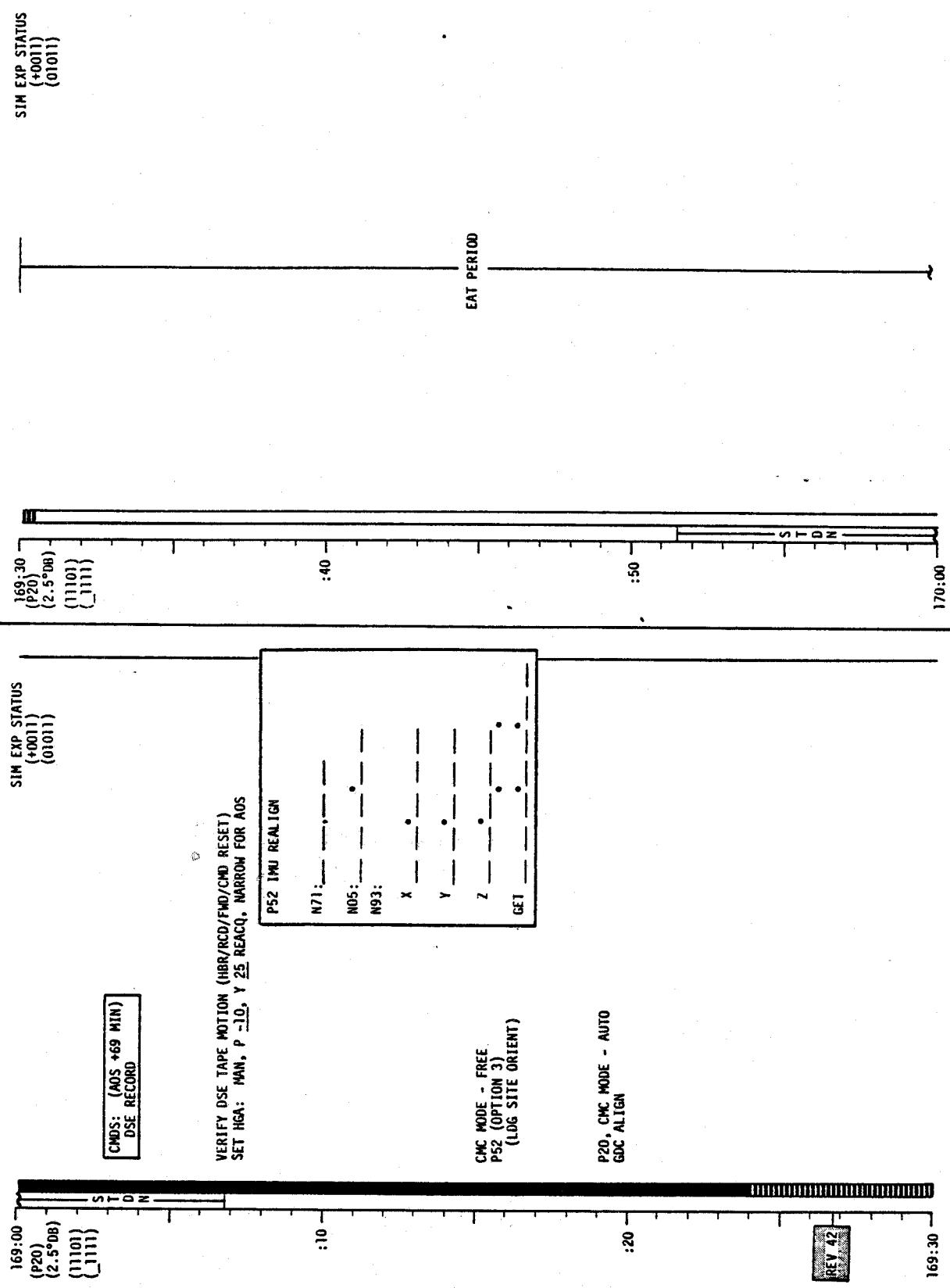
POST EVA-3 SYSTEMS CONFIGURATION

CONNECT TO IN COMM

PLSS/OPS DOFFING

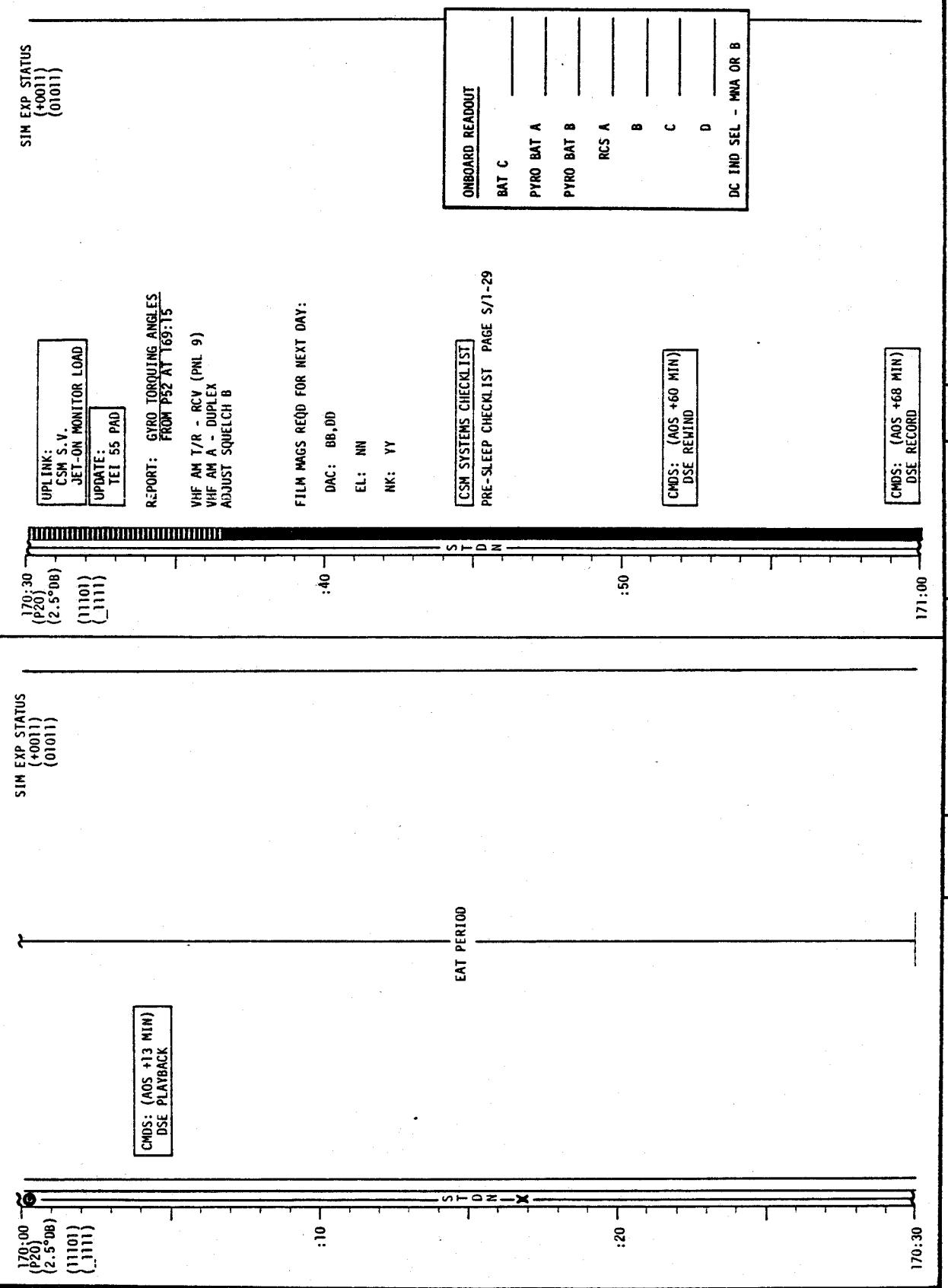
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	169:00 - 170:00	8/41-42	3-238

CSM FLIGHT PLAN



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

CSM FLIGHT PLAN



LM FLIGHT PLAN

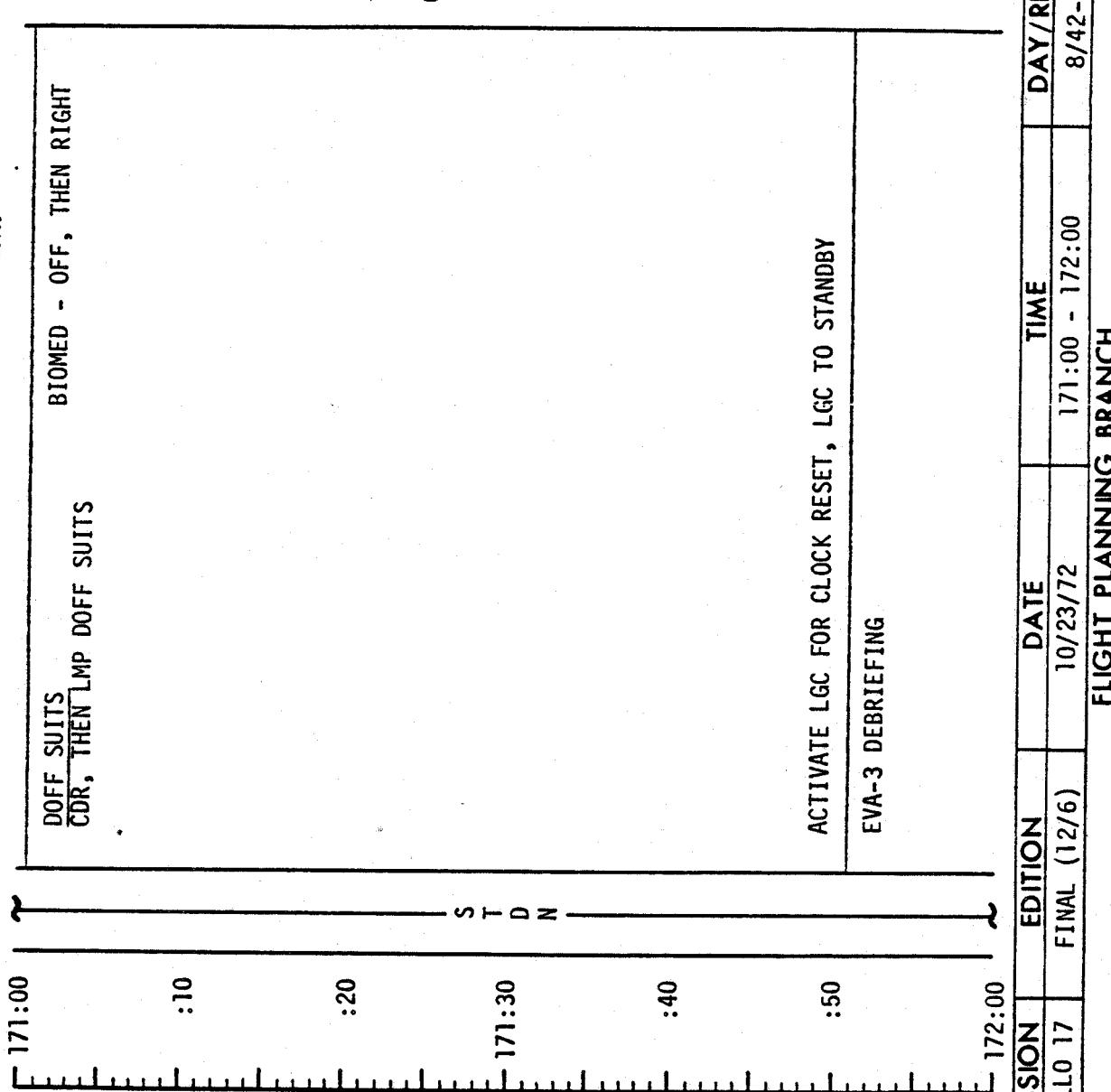
CDR

NOTES

LMP

2353 CST

MCC-H

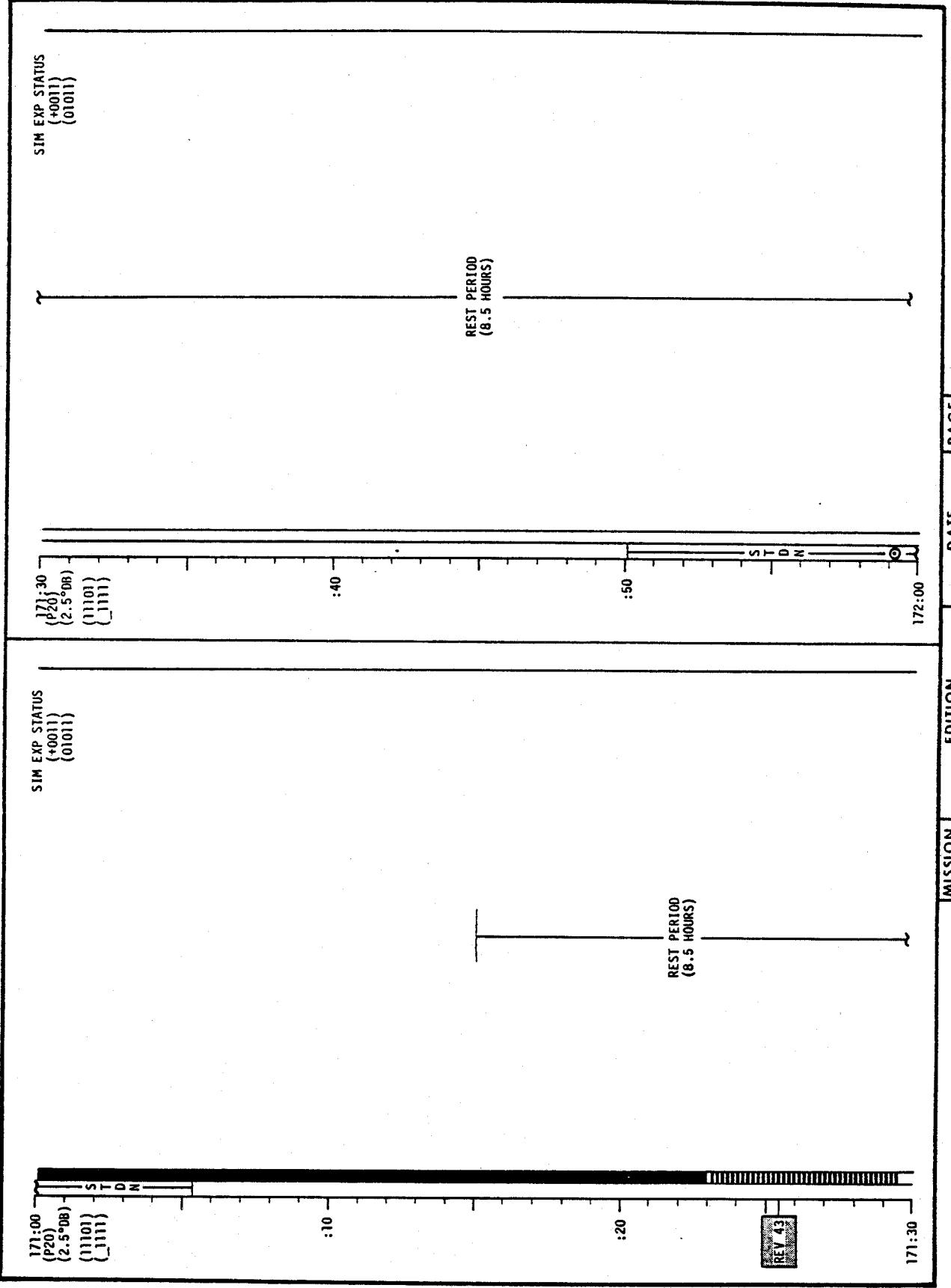


CSM REV 43

ACTIVATE LGC FOR CLOCK RESET, LGC TO STANDBY
EVA-3 DEBRIEFING

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

0053 CST, 12/14

CDR

LMP
NOTES

EVA-3 DEBRIEFING (CONT)

:10

:20

:40

173:00

:10

:20

:40

173:00

X

S

172:30

D

N

:40

173:00

EAT PERIOD

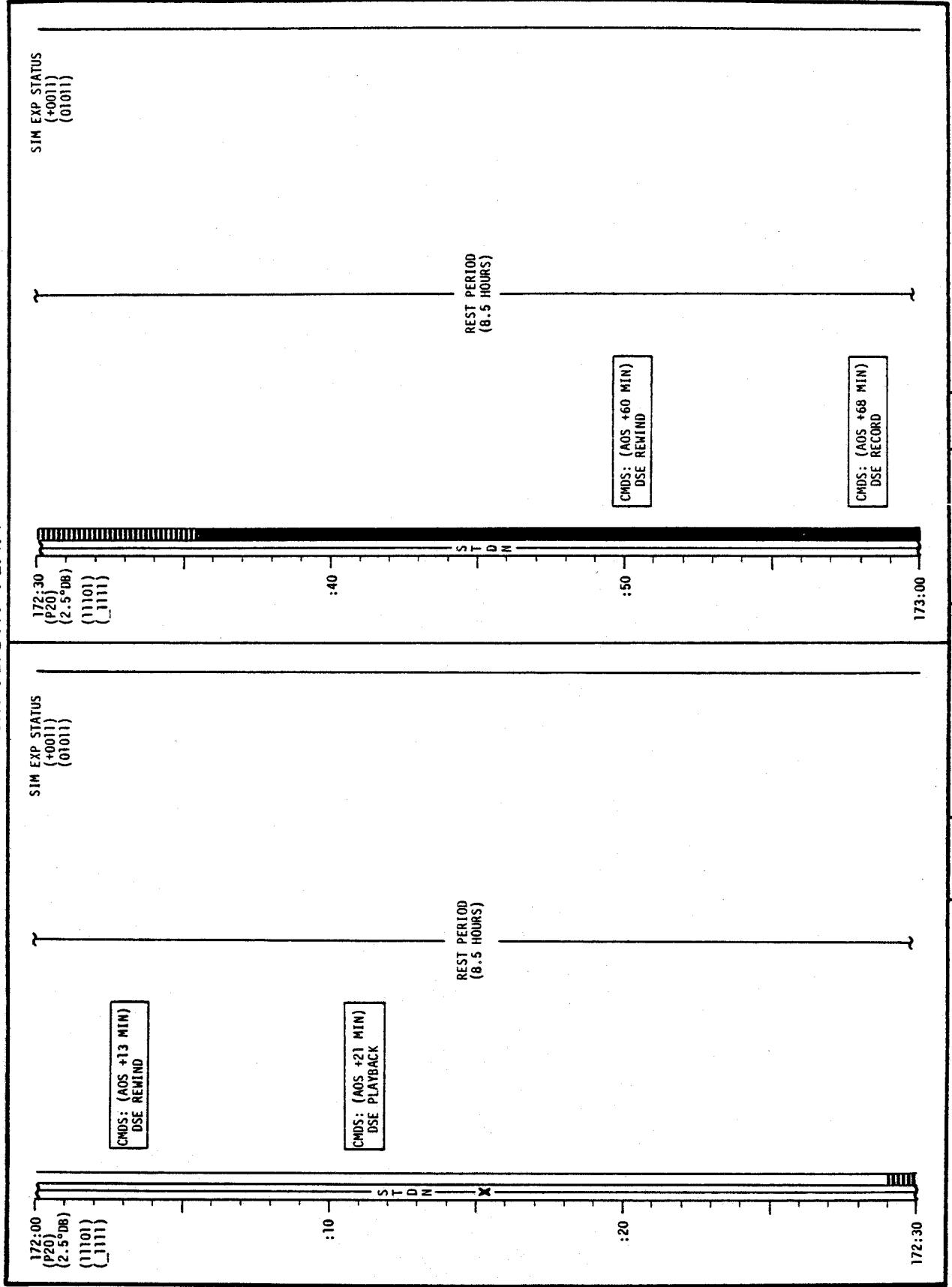
MCC-H CONFERENCE
CHANGE LM LIOH CANISTER

GDS 210' LOS

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	172:00 - 173:00	8/43	3-244

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-245

LM FLIGHT PLAN

CDR

0153 CST

MCC-H

MCC-H CONF (CONT)

173:00

:10

:20

173:30

S T D N

:40

:50

174:00

PRESLEEP

WEIGH ISA, REPORT: WEIGHT

NOTES

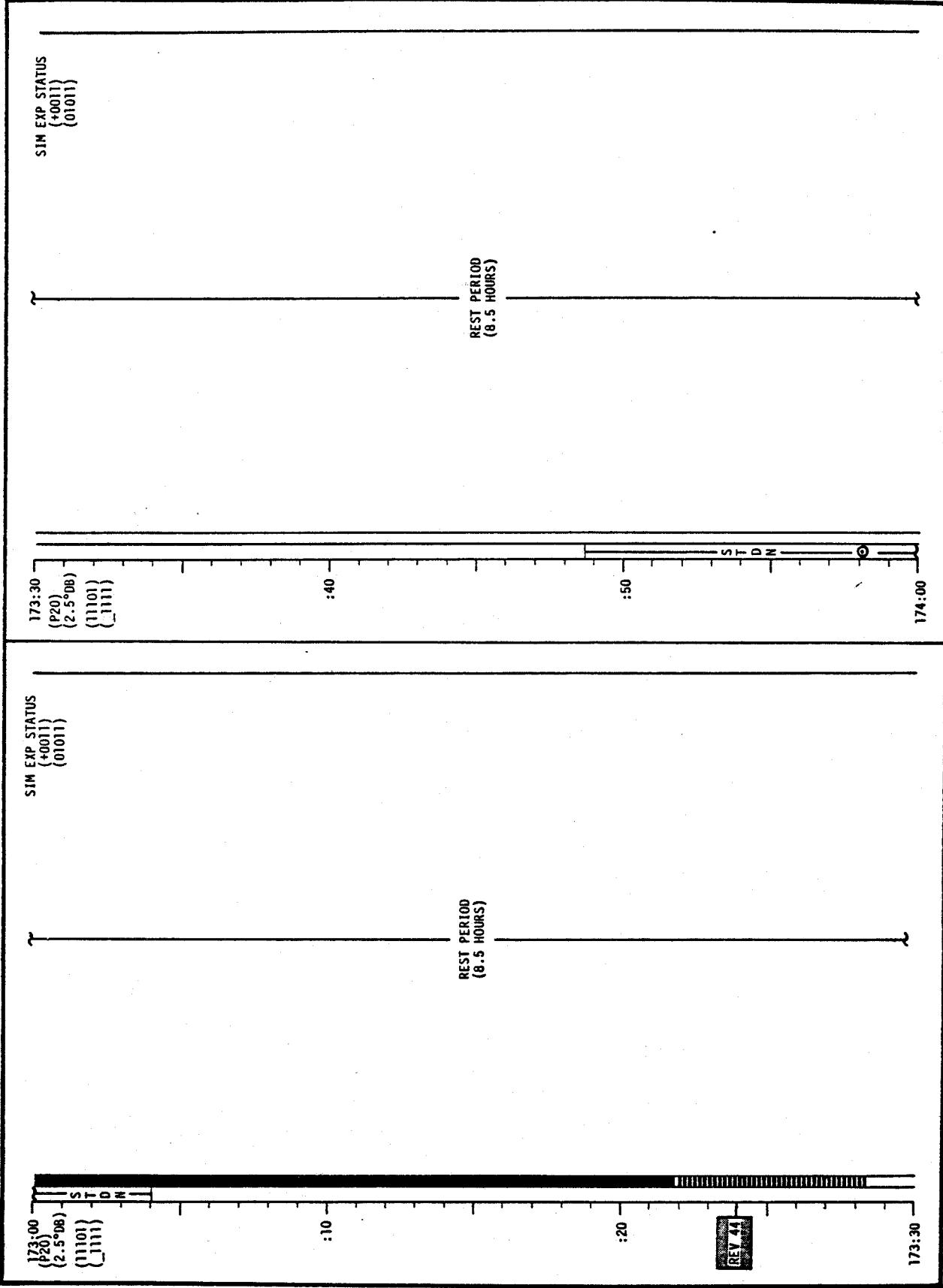
LMP

CSM REV 44

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	173:00 - 174:00	8/43-44	3-246

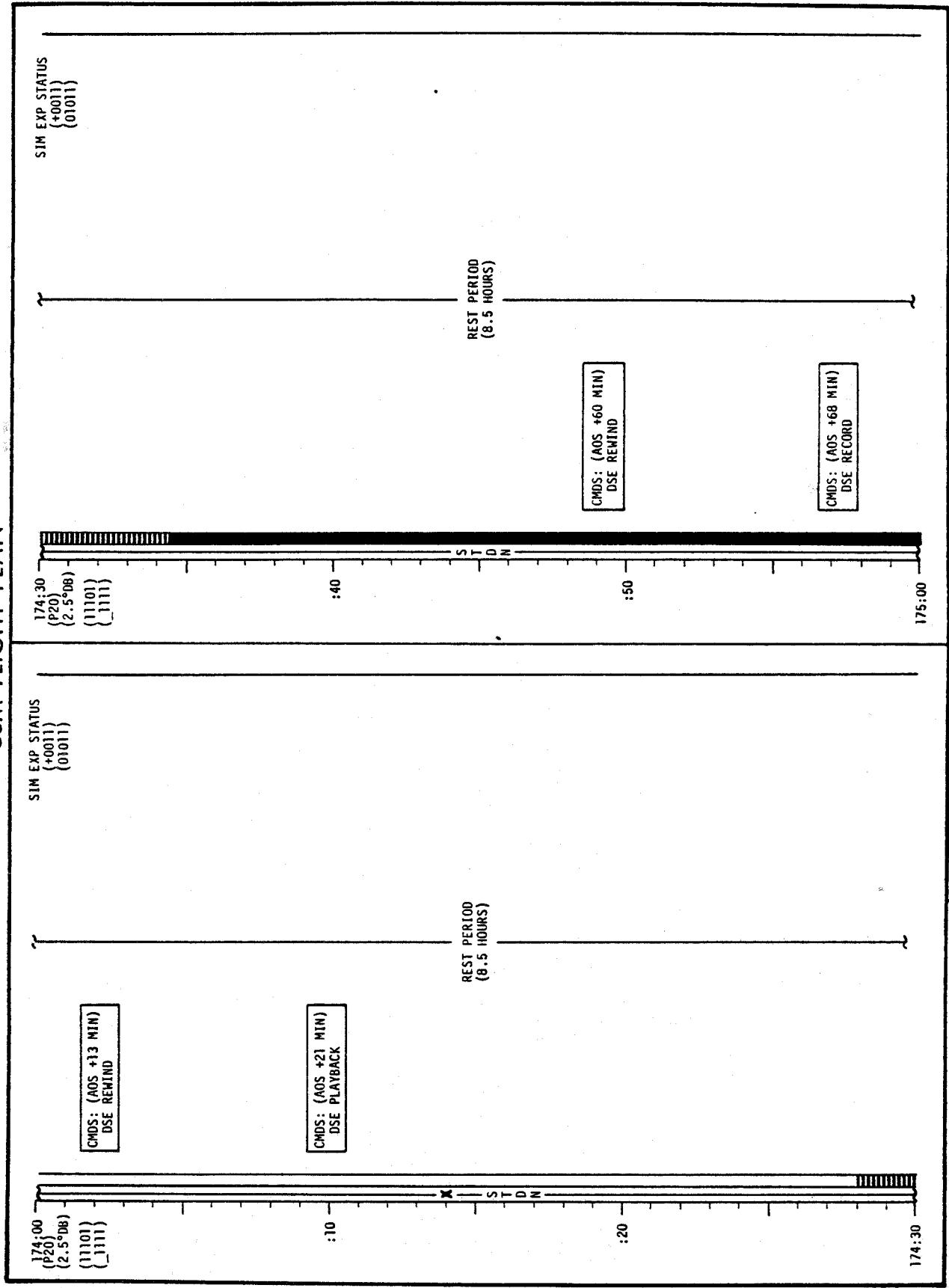
FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



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

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-249

LM FLIGHT PLAN

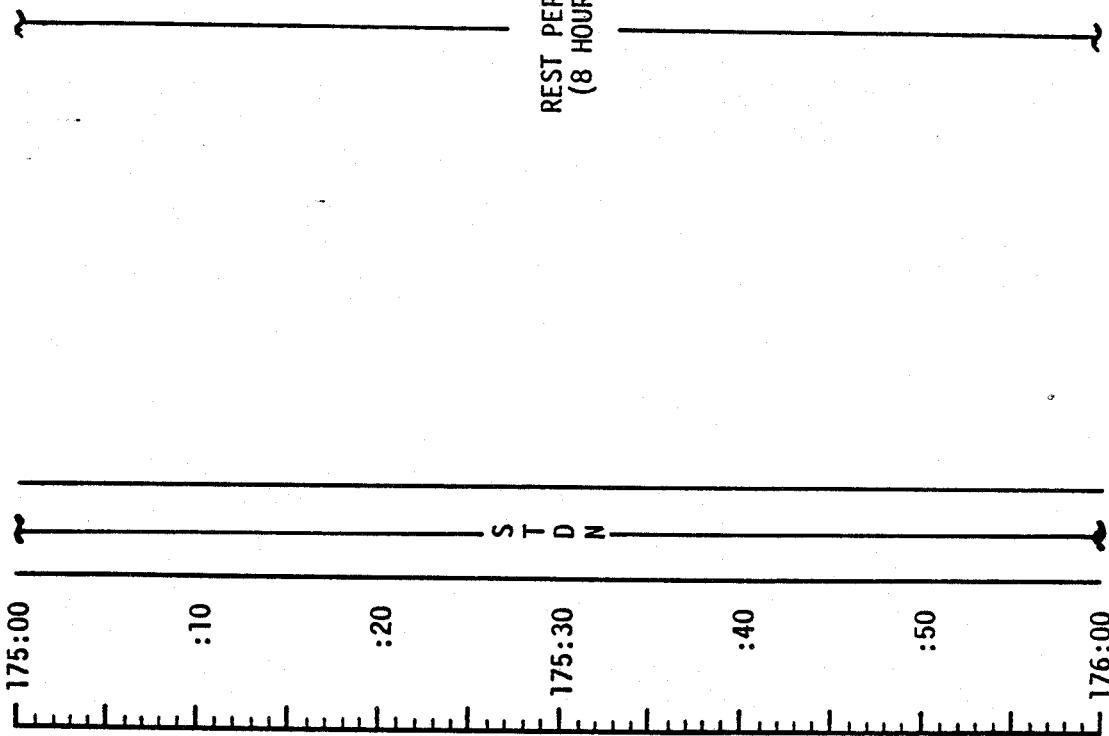
MCC-H

CDR

0353 CST

LMP

NOTES

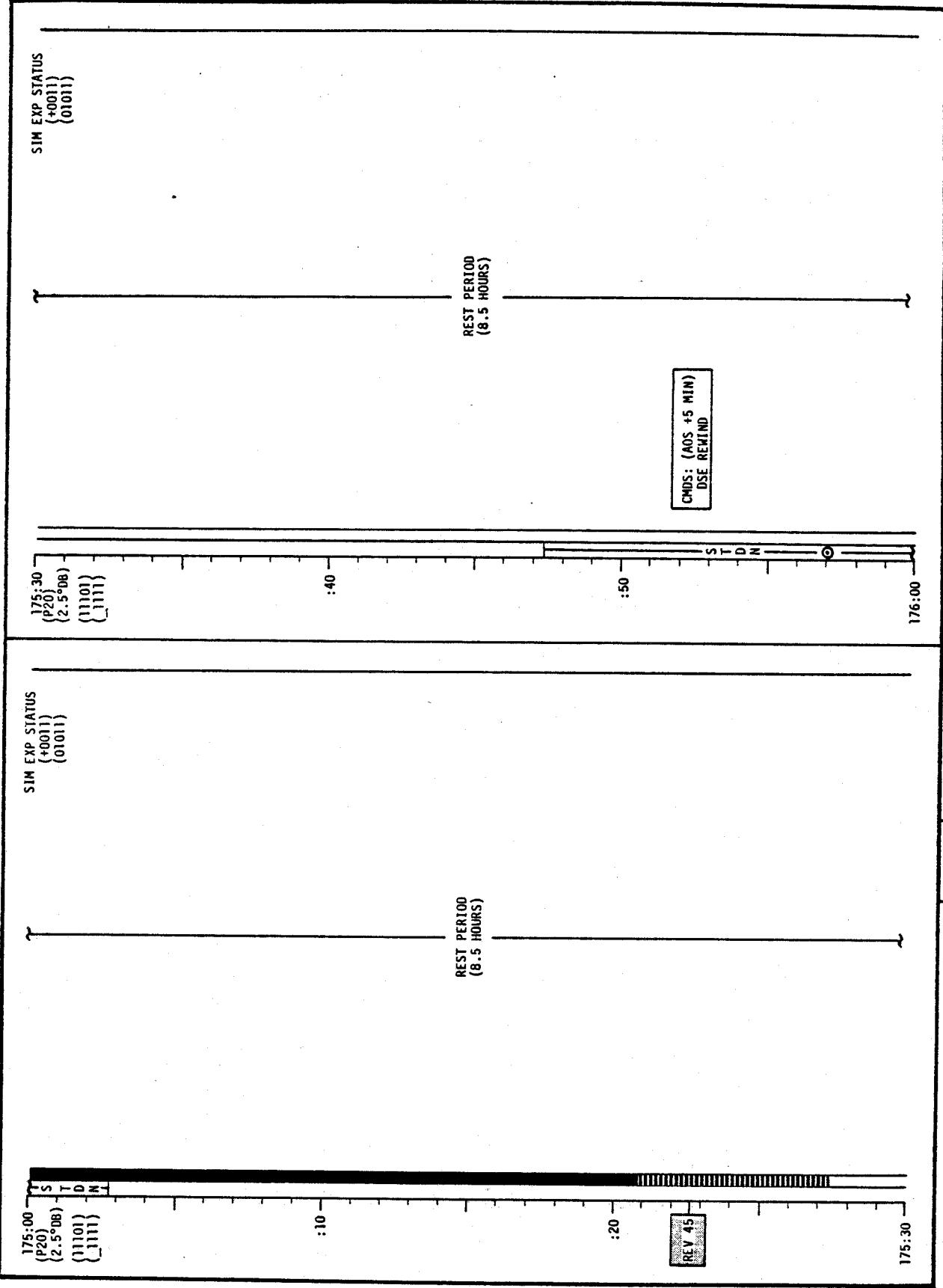


CSM REV 45

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



LM FLIGHT PLAN

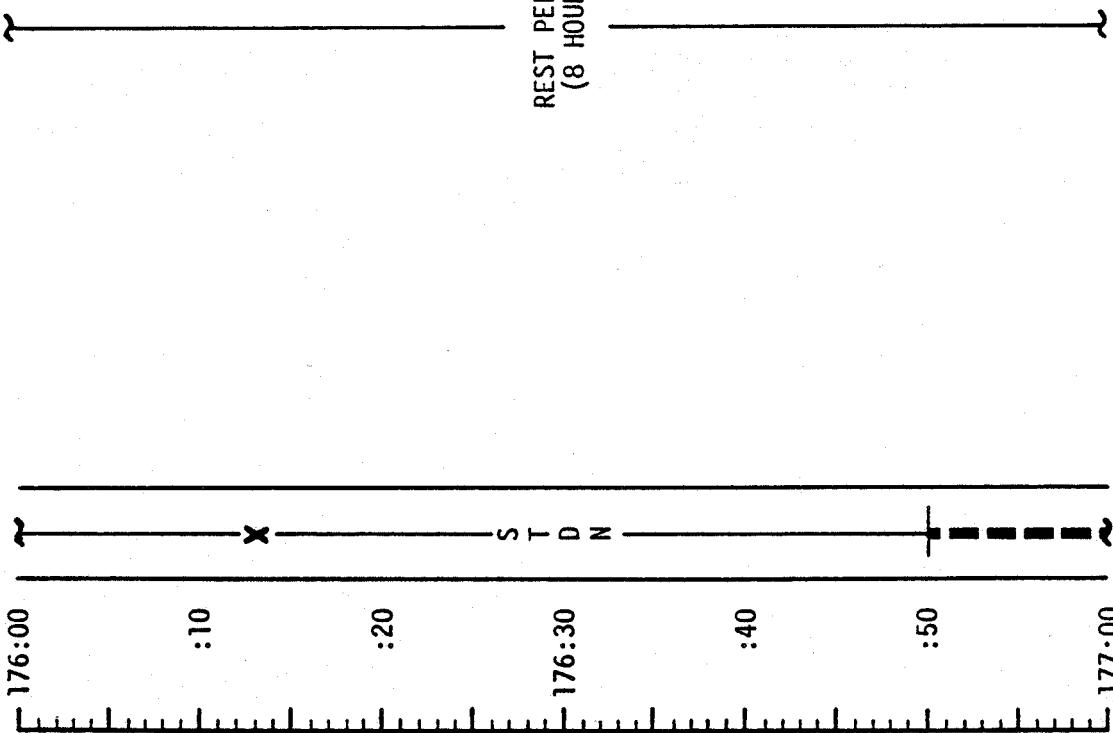
MCC-H

0453 CST

CDR

LMP

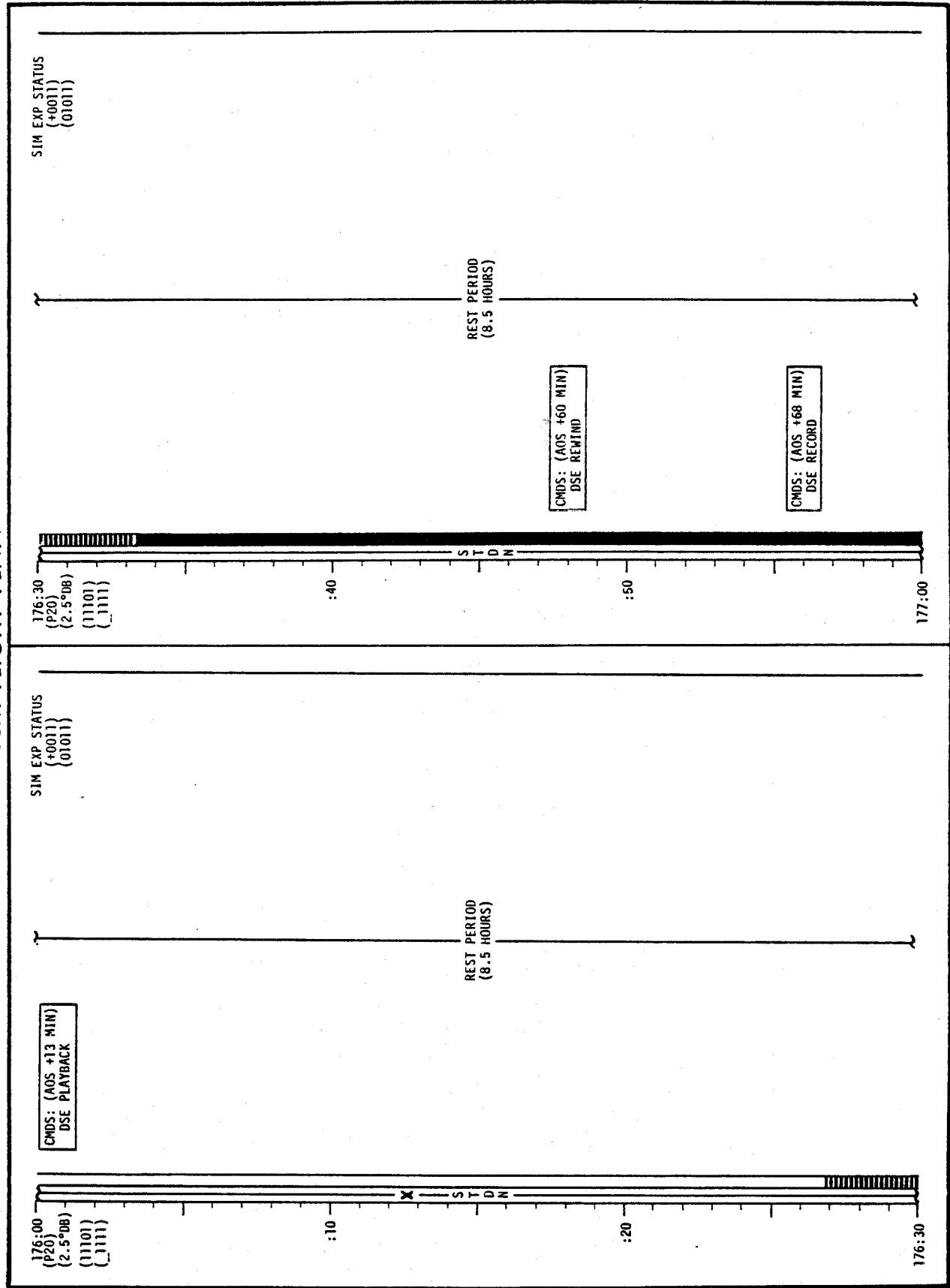
NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	176:00 - 177:00	8/45	3-252

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

MCC-H

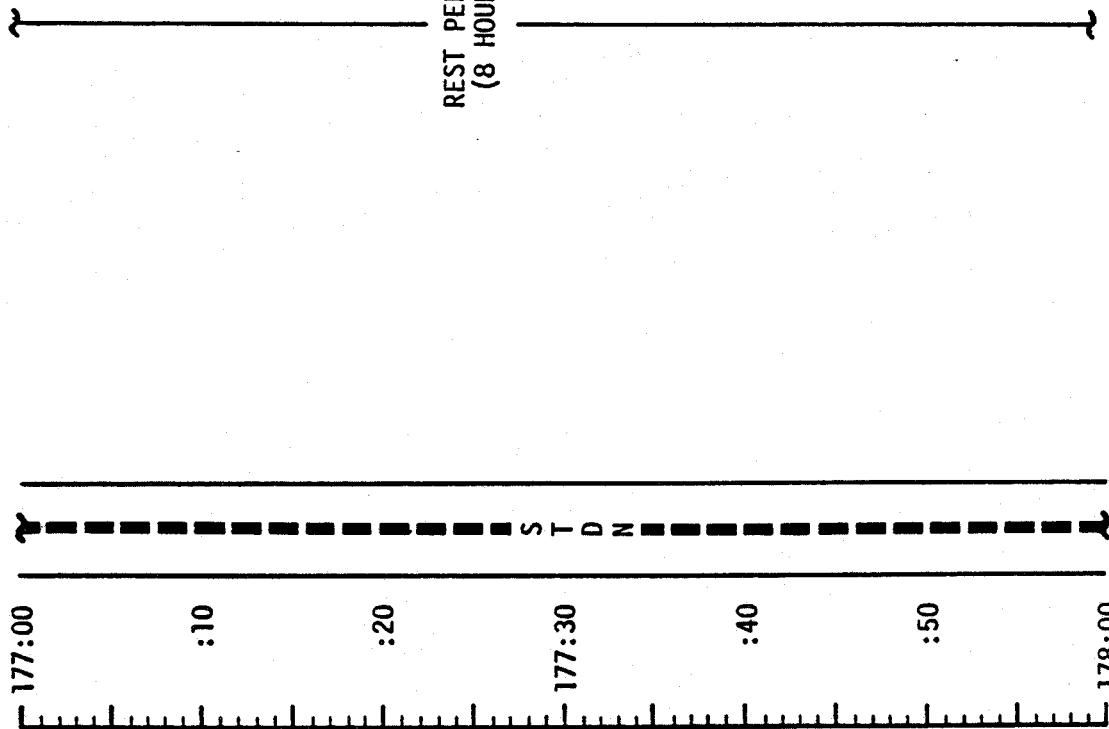
0553 CST

LMP

CDR

NOTES

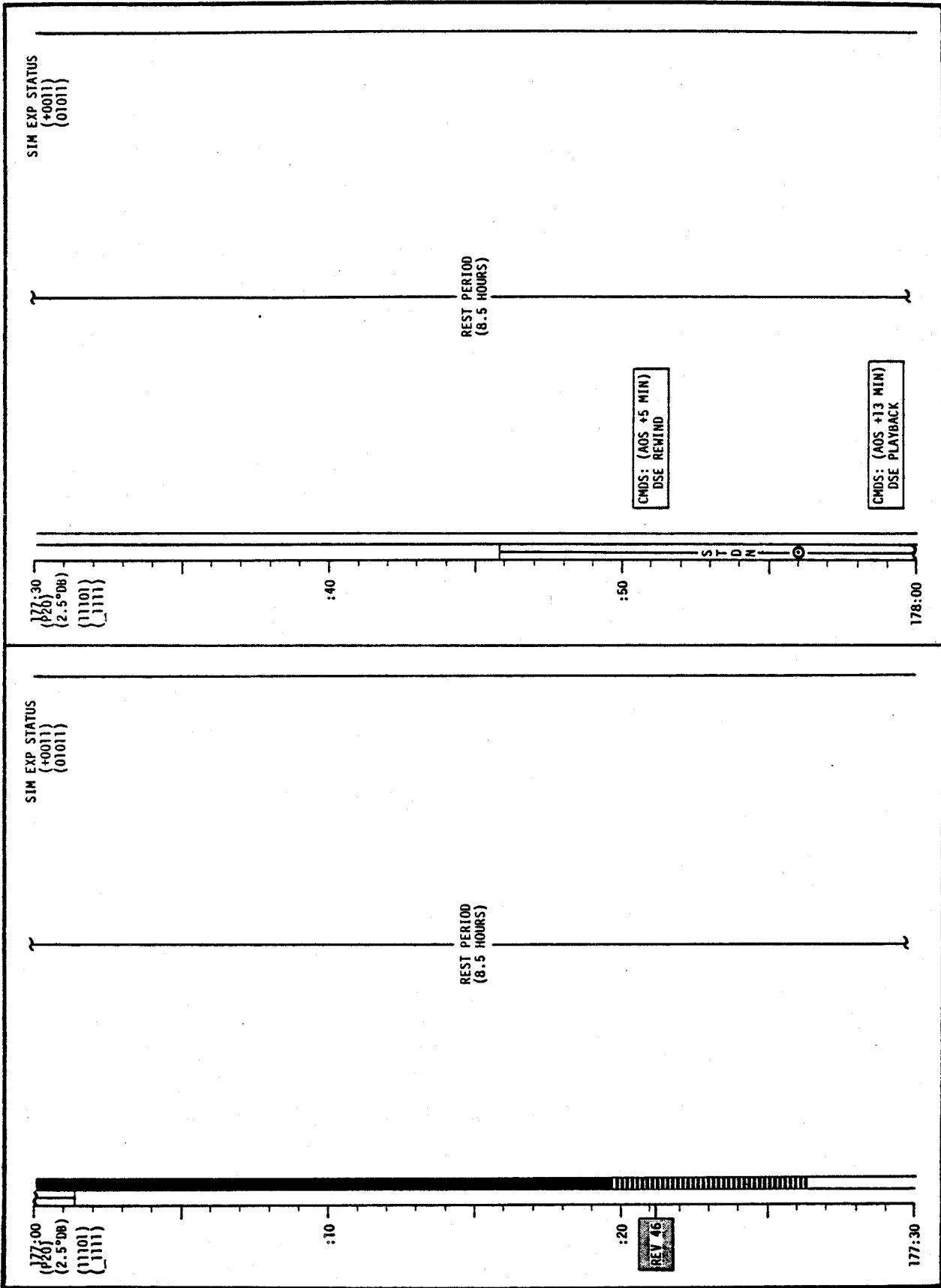
CSM REV 46



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

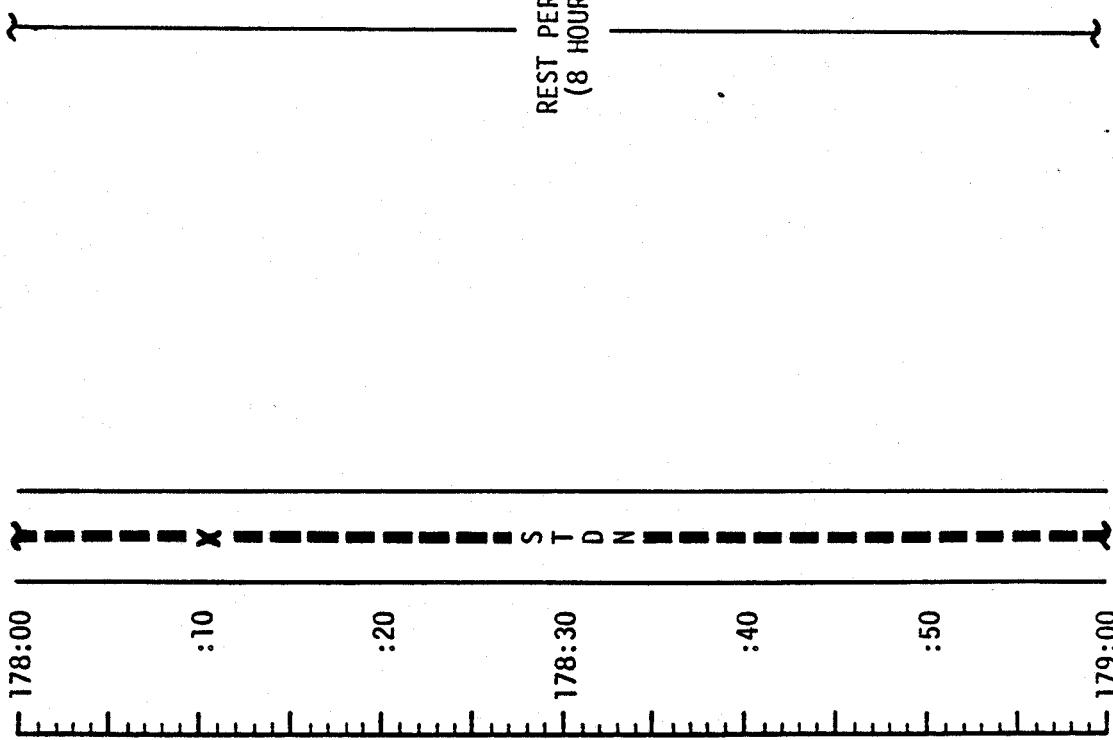
MCC-H

0653 CST

LMP

CDR

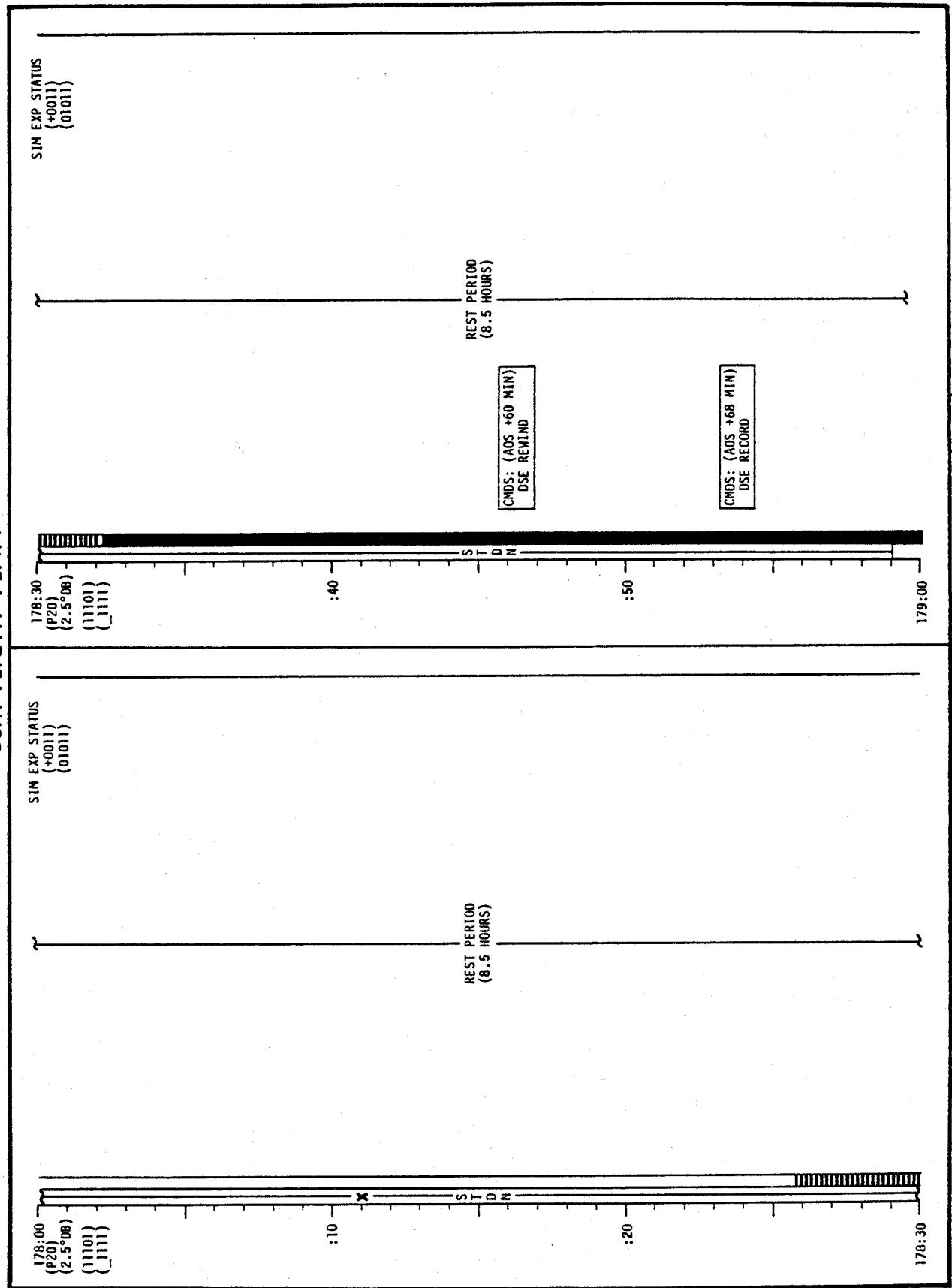
NOTES



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

CDR

NOTES

LMP

0753 CST
179:00

:10

:20

179:30

:40

:50

180:00

MCC-H

CSM REV 47

REST PERIOD
(8 HOURS)

S

T

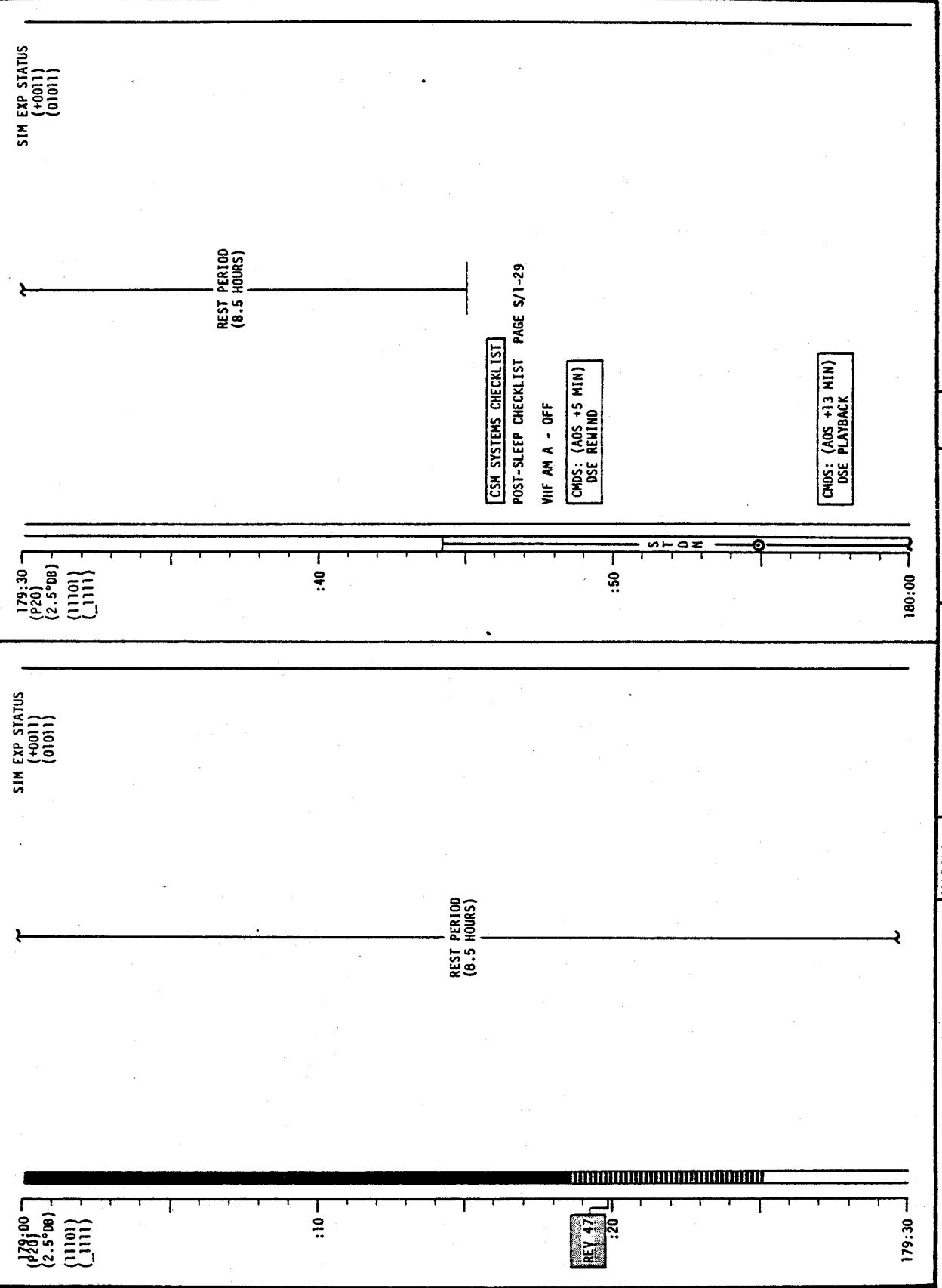
D

N

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



LM FLIGHT PLAN

CDR

NOTES

LMP

0853 CST

180:00

:10

:20

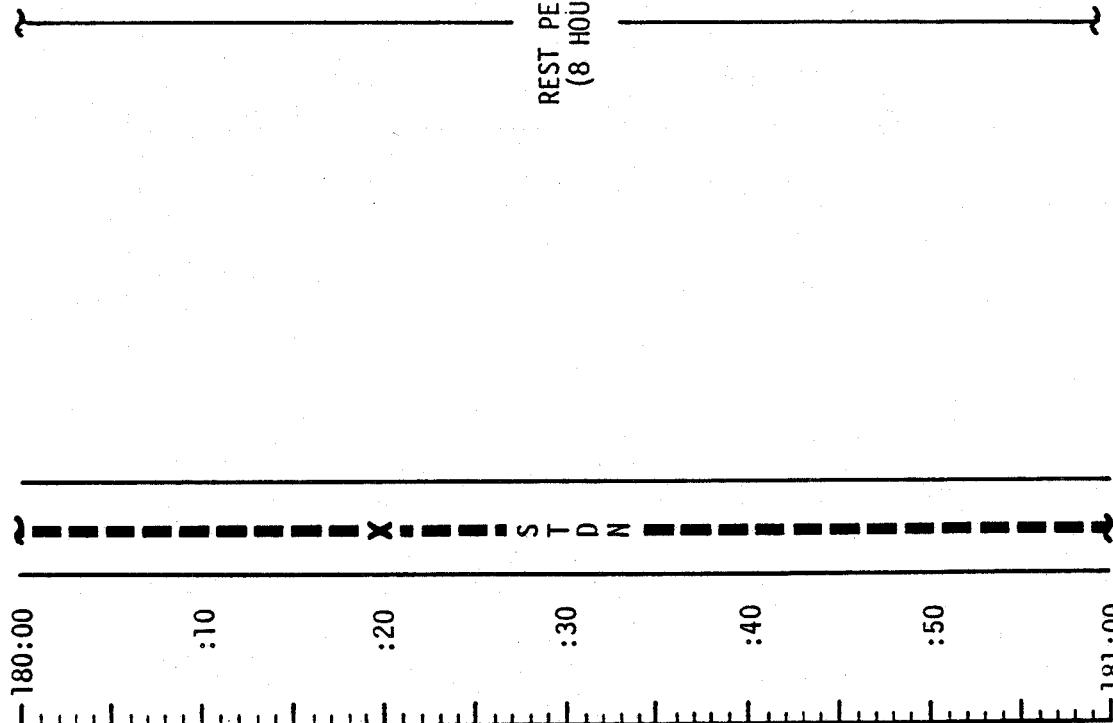
:30

:40

:50

181:00

MCC-H

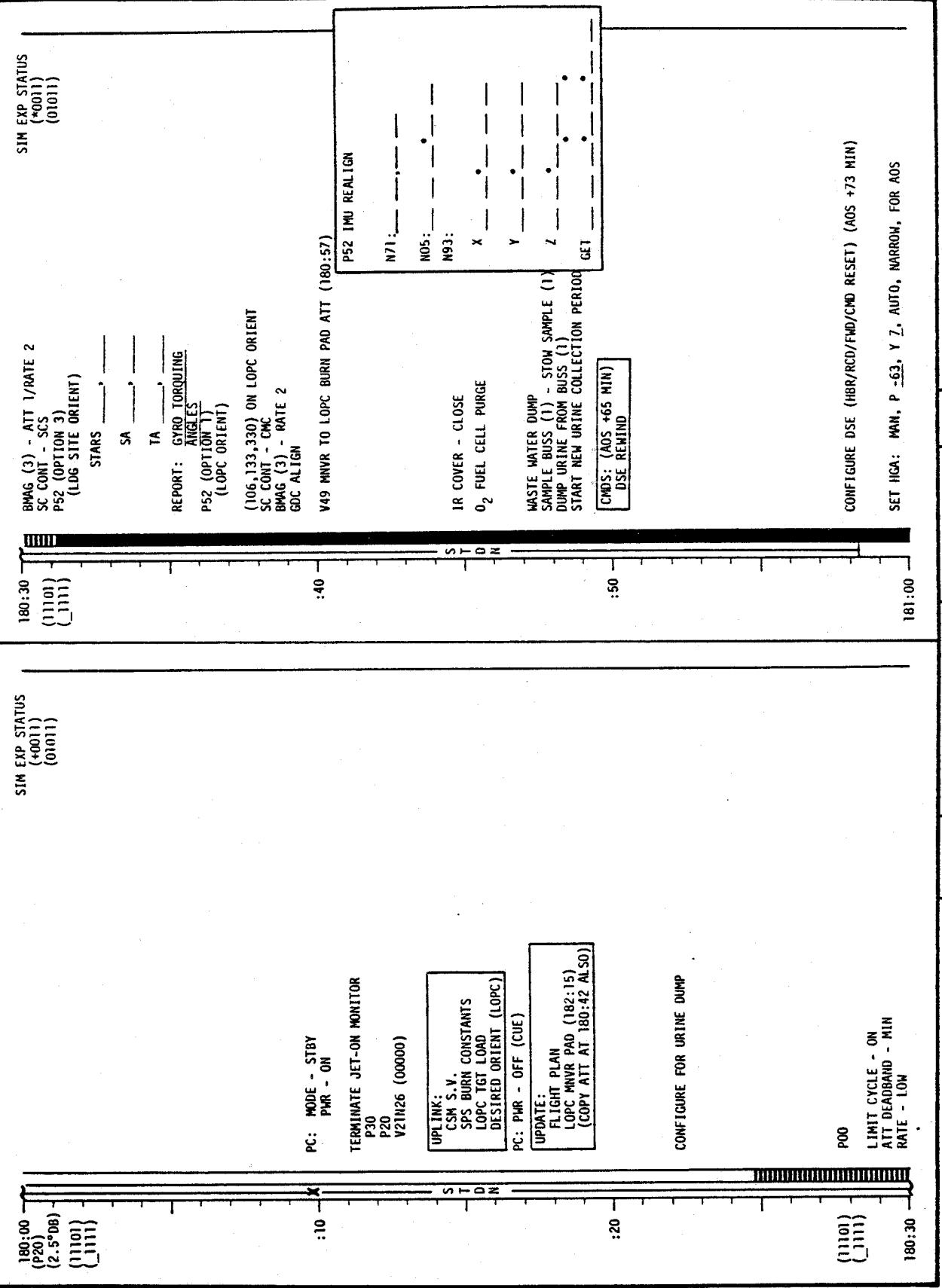


REST PERIOD
(8 HOURS)

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

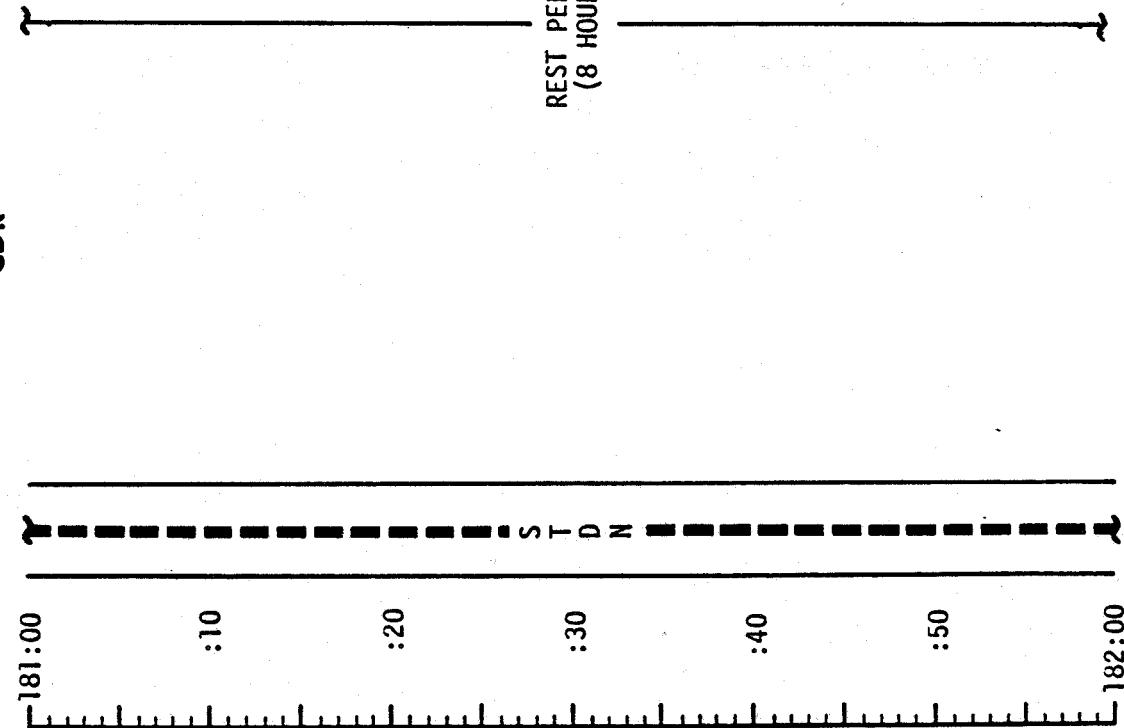
0953 CST

LMP

CDR

NOTES

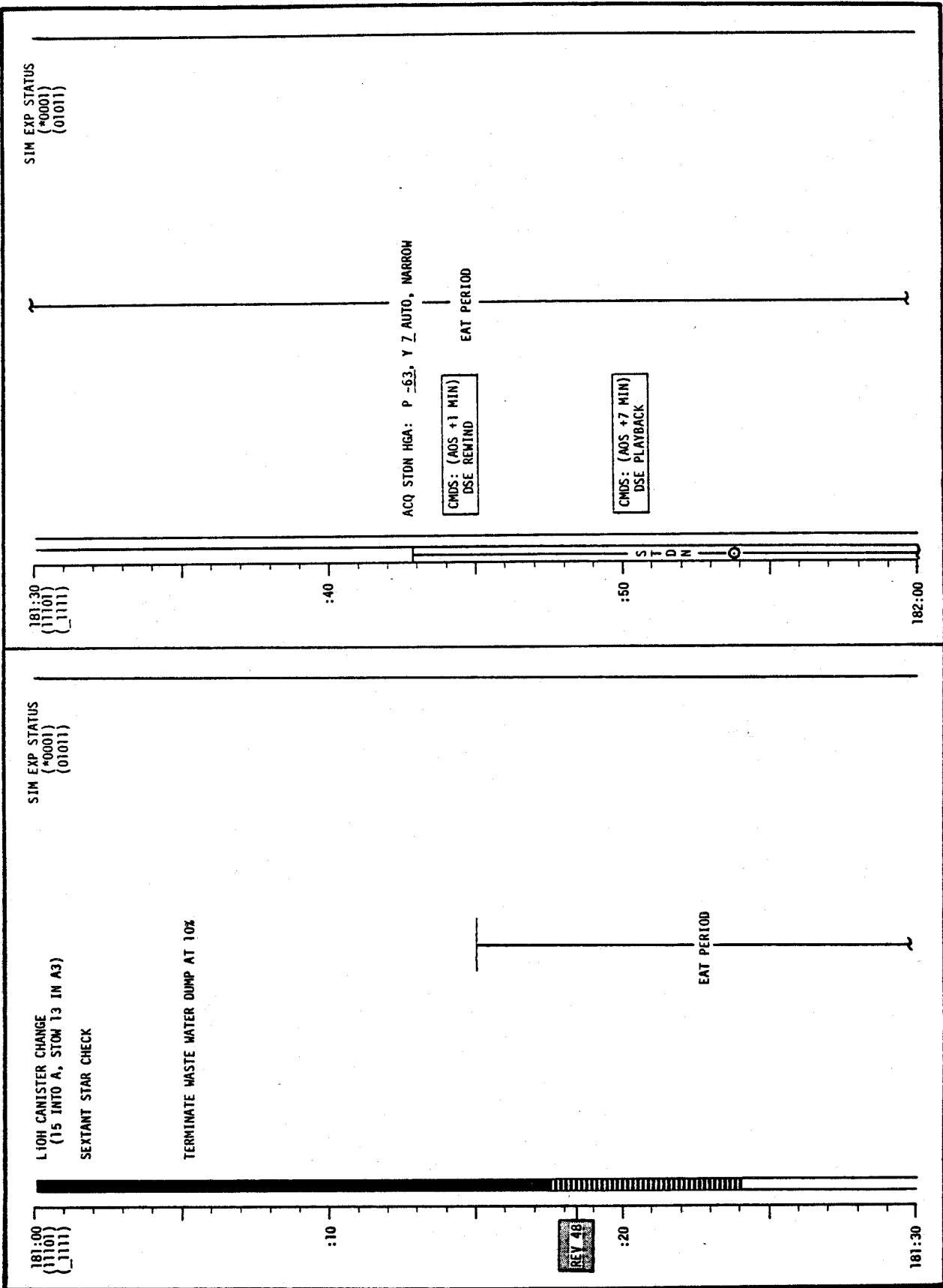
CSM REV 48



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

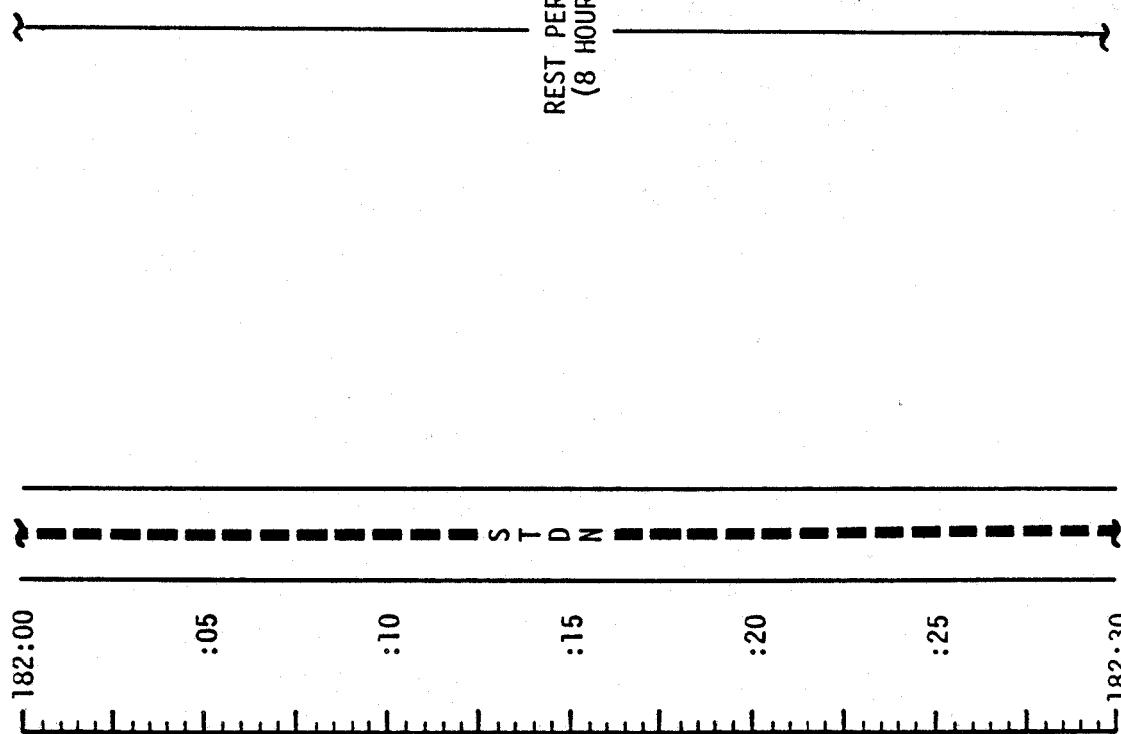
CDR

NOTES

LMP

1053 CST

MCC-H



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

SIM EXP STATUS
(*0001)
(01011)

182:00
(.1110)
(.1111)

10

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 AV
SET DET COUNTING UP TO LOPC

P40 (TRIM)

NOTE: PCM DATA WILL
NOT BE RECORDED
DURING LOPC

:20
P40
(0.5 DB)

182:30

P30 MANEUVER

	L	O	P	C	PURPOSE
SET STARS	*	S	P	S/G & N	PROP/GUID
R ALIGN	—	—	0	0	P TRIM N48
P ALIGN	—	—	0	0	Y TRIM
Y ALIGN	—	—	+ 0	0	HRS GETI
ULLAGE	—	—	+ 0	0	MIN N33
	—	—	+ 0	0	SEC
	—	—			AV 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
	—	X	X	X	AVT
	—	X	X	X	BT
	—	X	X	X	AVC
	—	X	X	X	SXTS
	—	X	X	X	SFT
	—	X	X	X	0
	—	+	0	0	0 TRN
	—	X	X	X	BSS
	—	X	X	X	SPA
	—	X	X	X	SXP
OTHER	—	0			LAT N61
	—	+			LONG
	—				RTGO EMS
	—				W10
	—				GET 0.05G

LM FLIGHT PLAN

CDR

NOTES

LMP

1123 CST

:35

██████████

████

REST PERIOD
(8 HOURS)

POST SLEEP

REPORT: CREW STATUS

S

T

D

N

:40

:45

:50

:55

██████████

████

MCC-H

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

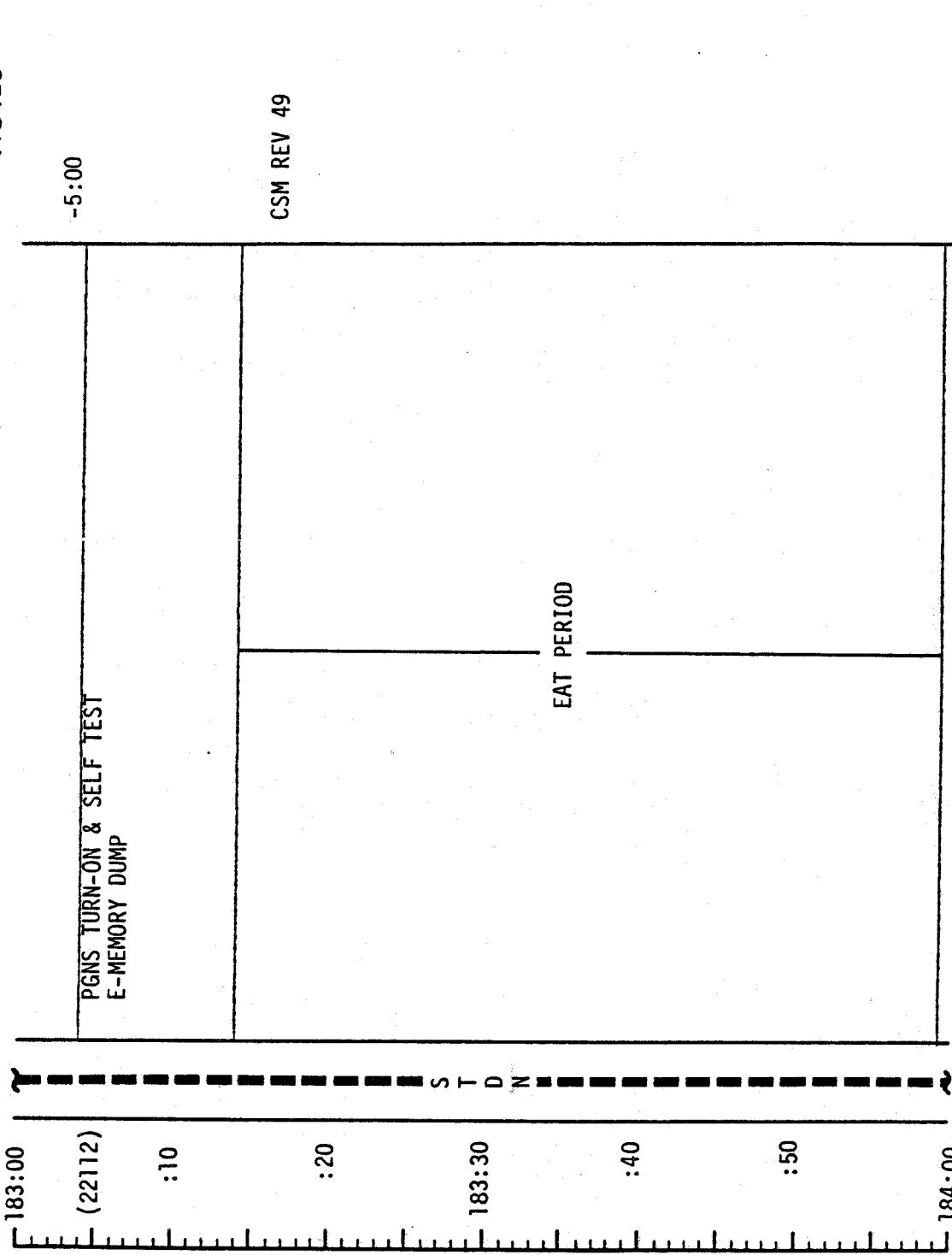
LM FLIGHT PLAN

CDR

1153 CST

MCC-H

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	183:00 - 184:00	9/48-49	3-268

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

(142,111,000) LIFT-OFF ORIENT
GDC ALIGN

V22N79 (+000.50)
P20. CMC MODE - AUTO
(P20)
(0.5dB)

9

REV. 49

LA - ON IMAGE MTIN - ON
MC - ON (167°E) IMAGE MTIN - INCR (BP + 4 STEPS) /ON

20

SIM EXP STATUS
(+1000)
(-02000)

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

PAN CAMERA PHOTO PAD
T-START: — — —
T-STOP: — — —
(80°F TO

PC: STBY
STEREO
PWR

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

PC - OPR (t START)

**UPLINK:
CSH S.V.**

PREPARATIONS
FOR
TRANSFER

ZODIACAL LIGHT. PAGE X/Z
MAG (YY)

CMDS: (AOS +15 MIN)
DSE PLAYBACK

PREPARATIONS FOR TRANSFER

INSTALL (1) TSB ON LH LEB - (1) ON RH LEB - (1) UNDER GIRTH SHELF AND (1) BEHIND LMP HEAD REMOVE ROPE BAG FROM DECON BAGS ON TOP OF A2

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

LM FLIGHT PLAN

CDR

1253 CST

MCC-H

UPDATE TO LM
P57 LIFT-OFF TIME (22112)
P22 ACQ TIME (28°)
UPLINK TO LM
CSM S.V. (L70)
RLS

P57 LUNAR SURFACE ALIGN
OPTION 4 LANDING SITE
A/T 3, PLUS 4 STARS
(LIFT-OFF ORIENT)

-4:00

NOTES

LMP

184:00

:20

184:30

:40

185:00

DON SUITS
LMP, THEN CDR DON SUITS

BIOMED-OFF, THEN LEFT

S
T
D
N

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

185:00
P20 [REDACTED]
(0.5°DB)
{1110}
{1111}

SIM EXP STATUS
{#0000}
(01000)

NOTE: ATTITUDE CONTROL
P & Y AXES UNCOUPLED
R AXIS COUPLED

:10

REV 50

AUTO RCS SELECT: A3,B3,C4,D4 - ON
P20 OPT 5 (LDMK TRK ATT)(185:26)
N78 (+000.00)
(-068.00)
(+000.00)
N79 (-000.50)

(000,338/007,000)
SET HGA: MAIN, P -2, Y 330 REACQ, NARROW FOR AOS

MAG (BB) _____ MAG X _____

CONFIGURE CAMERA: (LDMK TRK)
CM/DAC/SXT/CEX (EXP PAD) 1 FPS (8% MAG)
MAG (BB) _____ MAG X _____

185:30

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

LM FLIGHT PLAN

CDR

POST JETTISON CABIN CLEANUP (CONT)

LMP

1423 CST
185:30
(22112)

MCC-H

:35

:40

:45

:50

:55

186:00

T

S

T

D

N

S

T

D

N

GDS 210' AOS

P22 RR LUNAR SURFACE NAVIGATION

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

186:30 LOAD N89 FOR LDMK F-1
 (P20)
 (0.5 DB)
 {1101}
 {1111}

186:40 P24 (LDMK F-1)
 OPT ZERO - OFF
 OPT MODE - CNC

0:00 T1 (HORIZON) DET-RESET/START
 ACQ STDN HGA: P-2, Y 330 REACQ, NARROW

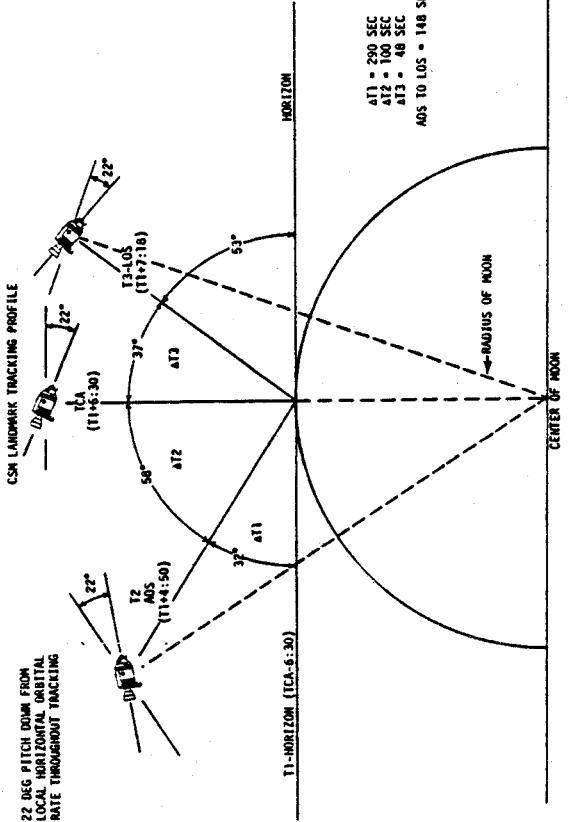
:40 3:50 - DAC - ON
 4:50 - T2 (LDMK ACQ) OPT MODE-MAN
 TAKE MARKS 10 SEC APART

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 - DUPERX
 VHF AM - T/R (PANEL 9)
 MODE - VOX
 VHF ANT - RIGHT
 ADJUST SQUELCH A

:50 RNDZ XPNDR - PHR

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

186:00



P24 LDMK TRACKING TGT: F-1	P24 LDMK TRACKING TGT: 17-1	P24 LDMK TRACKING TGT: 17-1
1	1	1
2	2	2
TCA	TCA	TCA
T3	T3	T3
R	*P	*Y
N or S NM	/ SA	/ SA
N89	(T2 ACQ)	(T2 ACQ)
LAT	+01.863	+20.160
LONG/2	+44.125	+15.405
ALT	000.00	-001.96

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-275

LM FLIGHT PLAN

MCC-H

1453 CST

CDR

NOTES

LMP

VHF VOICE CHECK

186:00
(2212)

-2:00

RR - OFF
TERMINATE P22
CABIN PREP FOR ASCENT

:05

:10

S
T
D
N

:15

:20

:25

186:30

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)
 {1101}
 {1111}

3:50 - DAC - ON

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

X 6:30 - TCA

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

P00
 VHF AM B - OFF (CTR)
 MODE - INTERCOM/PTT
 RNDZ XPNDR - HTR
 :10 -

V48 {1102}
 {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/0)
RESET SURFACE FLAG

UPDATE:
 CONSUMABLES STATUS
 CSM S.V.
 LM S.V. (INS +5)
 ASCENT PADS AND CSM WEIGHT (COPY AT 187:15)
 FLIGHT PLAN

CMD: DSE DUMP

P52 (OPTION 3)
 (LIFT-OFF ORIENT)
 REPORT: GTO TORQUING ANGLES
 186:30 -

P27 UPDATE

CSM			LM		
PURP	CSH (INS+1)	V	7	1	LM (INS+1)
GET	188 ± 11 ± 32	⋮	⋮	⋮	V
304	01	INDEX	2	1	INDEX
305	02	0	1	5	0
306	03	0	0	0	2
307	04	7	7	4	7
310	05	5	1	3	7
311	06	7	7	6	3
312	07	6	5	3	6
313	10	0	0	0	7
314	11	1	0	7	2
315	12	7	2	5	3
316	13	7	1	7	3
317	14	1	5	6	6
320	15	1	5	5	2
321	16	0	6	5	0
322	17	1	4	0	4
323	20	1	0	0	7
324	21	1	0	1	0
325	22				
326	23				
327	24				

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-277

LM FLIGHT PLAN

CDR

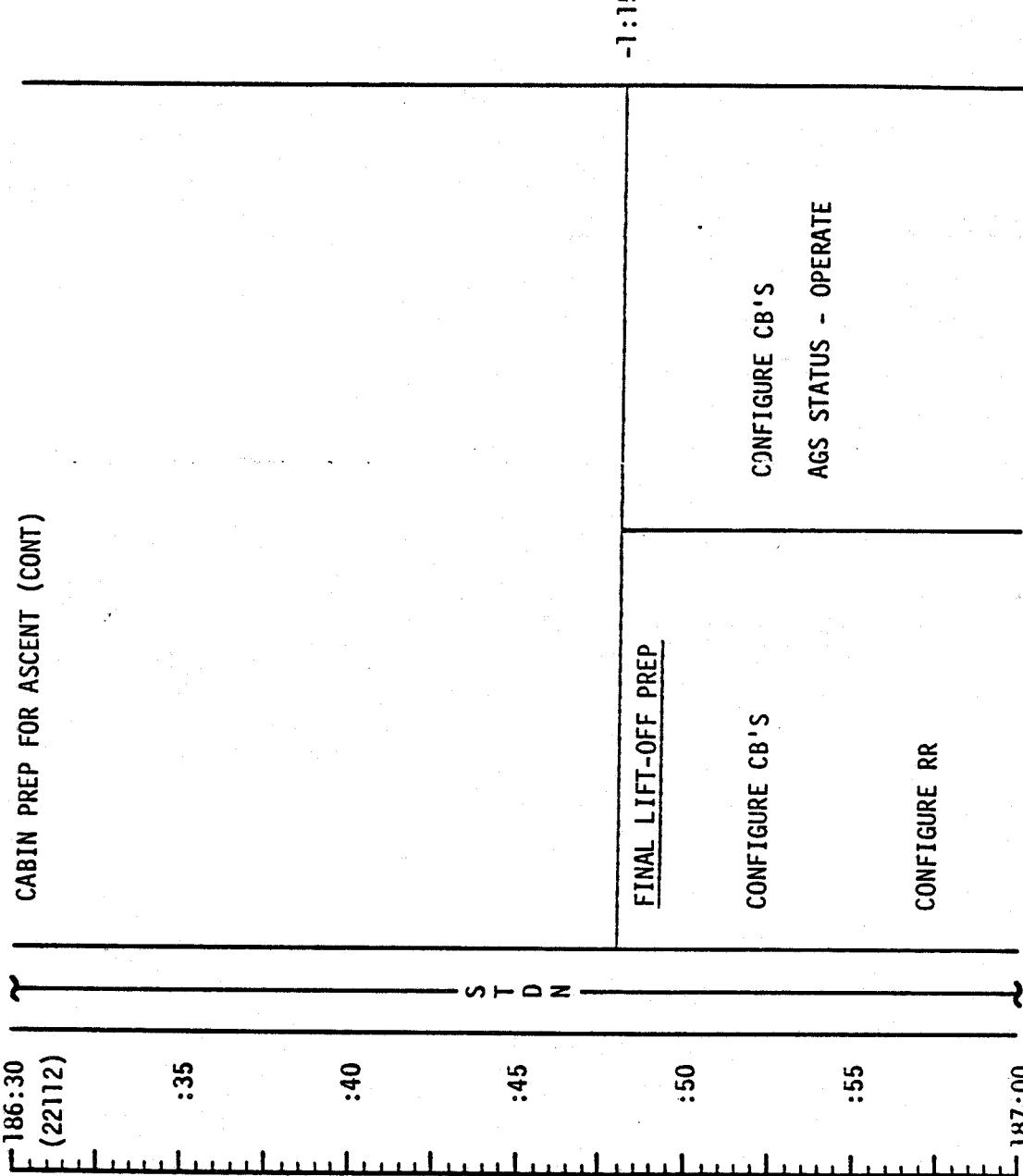
NOTES

LMP

1523 CST
(22112)

MCC-H

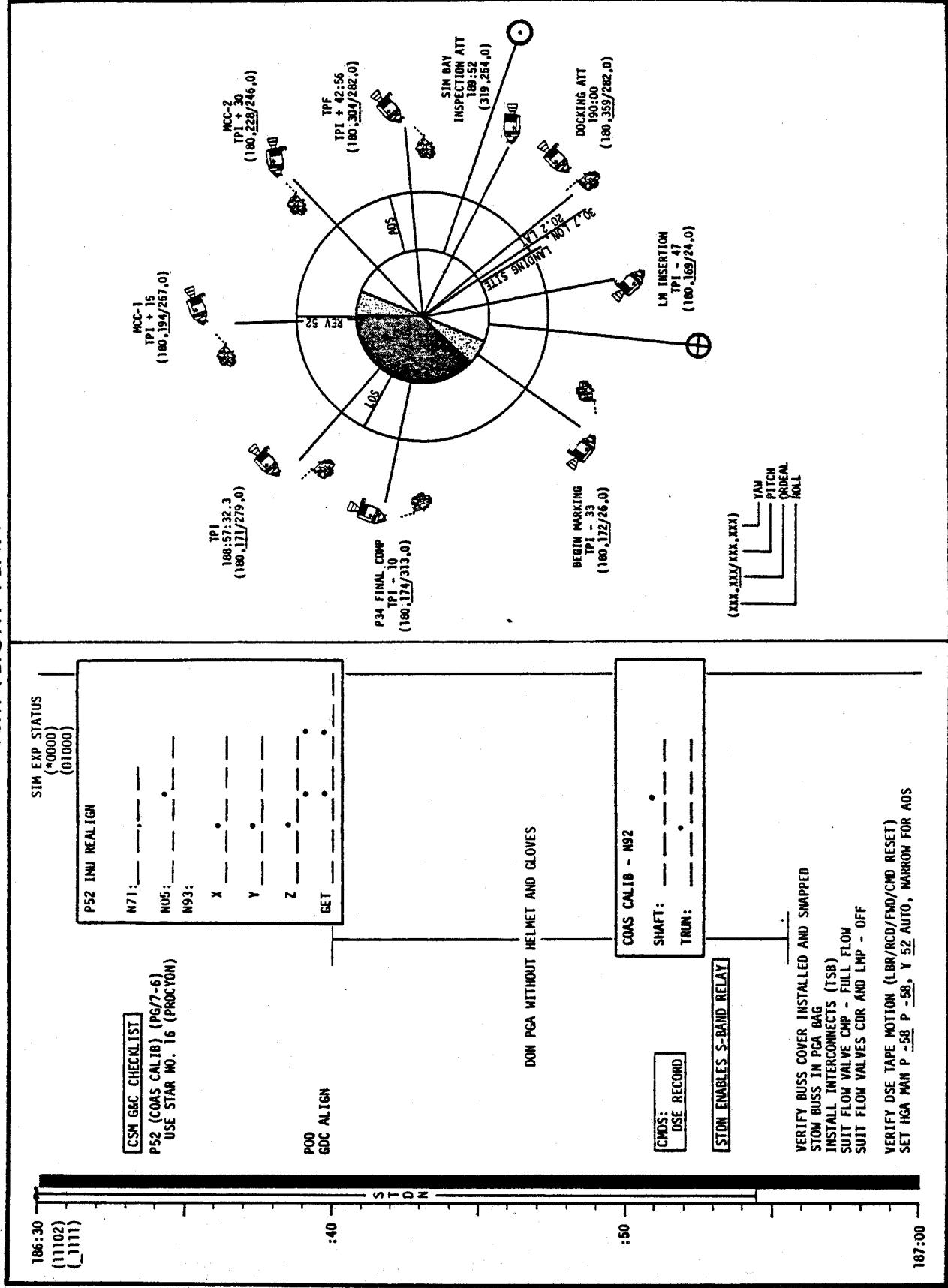
CABIN PREP FOR ASCENT (CONT)



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



LM FLIGHT PLAN

CDR

NOTES

1553 CST

187:00
(22112)

V63 RR SELF TEST (IF REQ)

:05

LOAD AGS ASCENT TARGETTING

-1:00

RATE GYRO TEST

(12102)

:10

SET DAP
RCS CHECKOUT

(12102)

:15

CSM REV 51

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

-0:45

P57 LUNAR SURFACE ALIGN
OPT 4 LANDING SITE A/T 3
(LIFT-OFF ORIENT)

:25

LOAD DAP, LM WEIGHT

187:30

BATS 5&6-ON, 1&3-OFF/RESET

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

187:00
 (11102)
 (1111)

SIM EXP STATUS
 (*0000)
 (01000)

:10 -

:20 -

187:30 -

REV 51

DIRECT ASCENT RNDZ PAD			UPDATE (IF REQ)		
GETI	HRS	0	0	+	0
LIFT-OFF	MIN	0	0	+	0
SEC	0	0	0	0	0
GETI	HRS	0	0	+	0
TPI	MIN	0	0	+	0
N37	SEC	0	0	+	0

CSM WT	+	0	5	9	3	5
LM WT	+	0	5	9	3	5

COELLIPTIC RNDZ PAD			UPDATE (IF REQ)		
GETI	HRS	0	0	+	0
LIFT-OFF	MIN	0	0	+	0
SEC	0	0	0	0	0
GETI	HRS	0	0	+	0
CSI	MIN	0	0	+	0
N11	SEC	0	0	+	0
GETI	HRS	0	0	+	0
TPI	MIN	0	0	+	0
N37	SEC	0	0	+	0

EAT PERIOD

LM FLIGHT PLAN

NOTES

MCC-H	1623 CST	CDR	LMP	NOTES
UPDATE TO LM AGS K-FACTOR AGS 047 & 053 LGC GYRO COMP (IF REQ) PIPA BIAS (IF REQ)	187:30 (12102)	P12 POWERED ASCENT	COPY & LOAD AGS 047, 053 SET CAMERA: LM3/DAC	
	:35	PRELAUNCH SWITCH CHECKS	AGS LUNAR ALIGN	-0:30
	:40	DON HELMETS & GLOVES		
	:45	S T D N	V47 SET AGS BIAS LIFT-OFF COMM, RECORDER - ON	
	:50	T V Y	BATS 2 & 4 - OFF/RESET DES BATS - DEADFACE	-0:15
	:55		APS PRESSURIZATION	
	188:00			
			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

LM FLIGHT PLAN

CDR

NOTES

LMP

MCC-H 1653 CST
188:00 (12102)

LM TIMELINE BOOK PAGE 10

LM ASCENT

DAC - ON

DAC - OFF

UPDATE TO LM
TWEAK OR BAILOUT
INSTRUCTION
(IF REQ)

LM LUNAR ORBIT INSERTION
TRIM RESIDUALS

TWEAK BURN (IF REQ)

BAILOUT BURN (IF REQ)

P20 RENDEZVOUS NAVIGATION
P34 TARGET TPI
RENDEZVOUS RADAR TRACKING
SET DAP

:10

:15

:20

:25

188:30

188:11

188:13

188:15

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	188:00 - 188:30	9/51	3-284

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

188:00 [] SIM EXP STATUS
[11102] [*0000] (01000)
[111] PRE-SPS BURN SIM PREP (CUE CARD)

LW LIFT-OFF

WHF RNG - RESET
LM INSERTION

VHF VOICE CHECK

**UPLINK:
LM S.V.**

34 (TRIM) (180,172/26,0)

34

```

*IF LM BALLOUT REQ:
*   *IF CSM BALLOUT REQ:
*     *IF CSM BALLOUT FROM LM
*       *COPY P76 DATA FROM LM
*       *333 : . . .
*       *84 : . . .
*       *GO TO RESCUE BOOK PG 4
*       *GO TO RESCUE BOOK PG 4
*       *SET UP EMS
*       *SPS BURN CUE CARD
*       *CSM BALLOUT BURN
*       *GO TO RESCUE BOOK PG 4

```

P34 INPUT				
	LN GETI-TPI			
37				•
55	INTEG OPT	ELEVATION	TRANSFER	+130.00
	+00000	+00000		

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-285

LM FLIGHT PLAN

CDR

NOTES

LMP

1723 CST

188:30
(12012)

:35

:40

:45

:50

:55

189:00

MCC-H

S T D N

DISABLE STDNN S-BAND
RELAY

CONFIGURE S-BD FOR LOS
PCM - HI

P42 APS THRUSTING

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)
 (11111)
 83.29
 -328.4

SIM EXP STATUS
 (*0000)
 (31000)

P34 RECYCLE

:40
 -10
 -8 :50

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
 $AR=100 + 0.5 (\Delta R \geq 1.0) \text{ NM}$

P40 (27°) (180,152/279,0)

CMDSS RECORD
 DSE RECORD

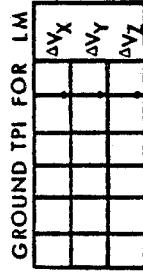
COMPARE SOLUTIONS; SPS BURN CUE CARD
 VHF AN TR-T/R (PNL 9)
 VERIFY DSE TAPE MOTION (LBR/RCD/FND/CMD RESET)
 SET HGA MAN P -35, V +37 AUTO. NARROW FOR AOS
 [STDN DISABLES S-BAND RELAY]

-10

0

29.37
 -129.0
 189.00

P34 RECYCLE			
	INTEG OPT	ELEVATION }	TRANSFER }
55	+00000	*	+130.00
58	PERILUNE ALT	TPI AV	TPF AV
	*	*	*
81	TPI AV-LV	*	*
	*	*	*
84	LM TPI AV-LV	*	*
	*	*	*



P34 FINAL COMP			
	INTEG OPT	ELEVATION }	TRANSFER }
55	+00000	*	+130.00
58	PERILUNE ALT	TPI AV	TPF AV
	*	*	*
81	TPI AV-LV	*	*
	*	*	*
84	LM TPI AV-LV	*	*
	*	*	*
84	LM TPI AV-LV	*	*
	*	*	*

188:57:32.3
 LM 475.1,-0.5,+14.1
 CSM -76.1,+0.5,-12.1
 (180,177/279,0)

P76

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

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

LM FLIGHT PLAN

MCC-H

CDR

RENDZVOUS RADAR TRACKING

LMP
NOTES

1753 CST
F 189:00
(12012)

:05

:10

:15

:20

:25

189:30

P41 RCS THRUSTING

LM MCC-1

P35 TARGET MCC-2

REV 52

P41 RCS THRUSTING

LM MCC-2

189:28

189:13

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

189.00
+3
(1102)
(1111)
29.37
-129.0

SIM EXP STATUS
(*0000)
(31000)

P35 FINAL COMP		
	MCC1	AV-LV
81		•
84	LM MCC1	AV-LV
84	LM MCC1	AV-LV
P76		•

P35 FINAL COMP

189.12:32.3
LM +0.0,+0.0,+0.0
CSM +0.0,+0.0,+0.0
180.,95,258.0

* IF CSM ACTIVE & NS8 TPF AV >55 FPS
* GO TO PRE-BRAKING SPS BURN PROCEDURES
* (SEE RESCUE BOOK PG 40)

P35 FINAL COMP

189.12:32.3
LM +0.0,+0.0,+0.0
CSM +0.0,+0.0,+0.0
180.,95,258.0

: : .

P41
MCC-1
REV 52
12.85
-88.5

P35 (TRIM) (180.96/254.0)

+10

+12

+15

+18

+20

+27

+30

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

P35 FINAL COMP

189.12:32.3
LM +0.0,+0.0,+0.0
CSM +0.0,+0.0,+0.0
180.,95,258.0

189.27:32.3
LM +0.0,+0.0,+0.0
CSM +0.0,+0.0,+0.0
180.,228./246.,0

: : .

P41
MCC-2
REV 52
12.85
-88.5

P35 FINAL COMP

P76

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-289

P79; P00; V49 (180.1,282.0)

3.56
-40.8
189.30

LM FLIGHT PLAN

MCC-H

1823 CST

189:30
(12012)

(11002)

:35

SET DAP
P47 THRUST MONITOR
LM BRAKING GATES

:40

S
T
D
N

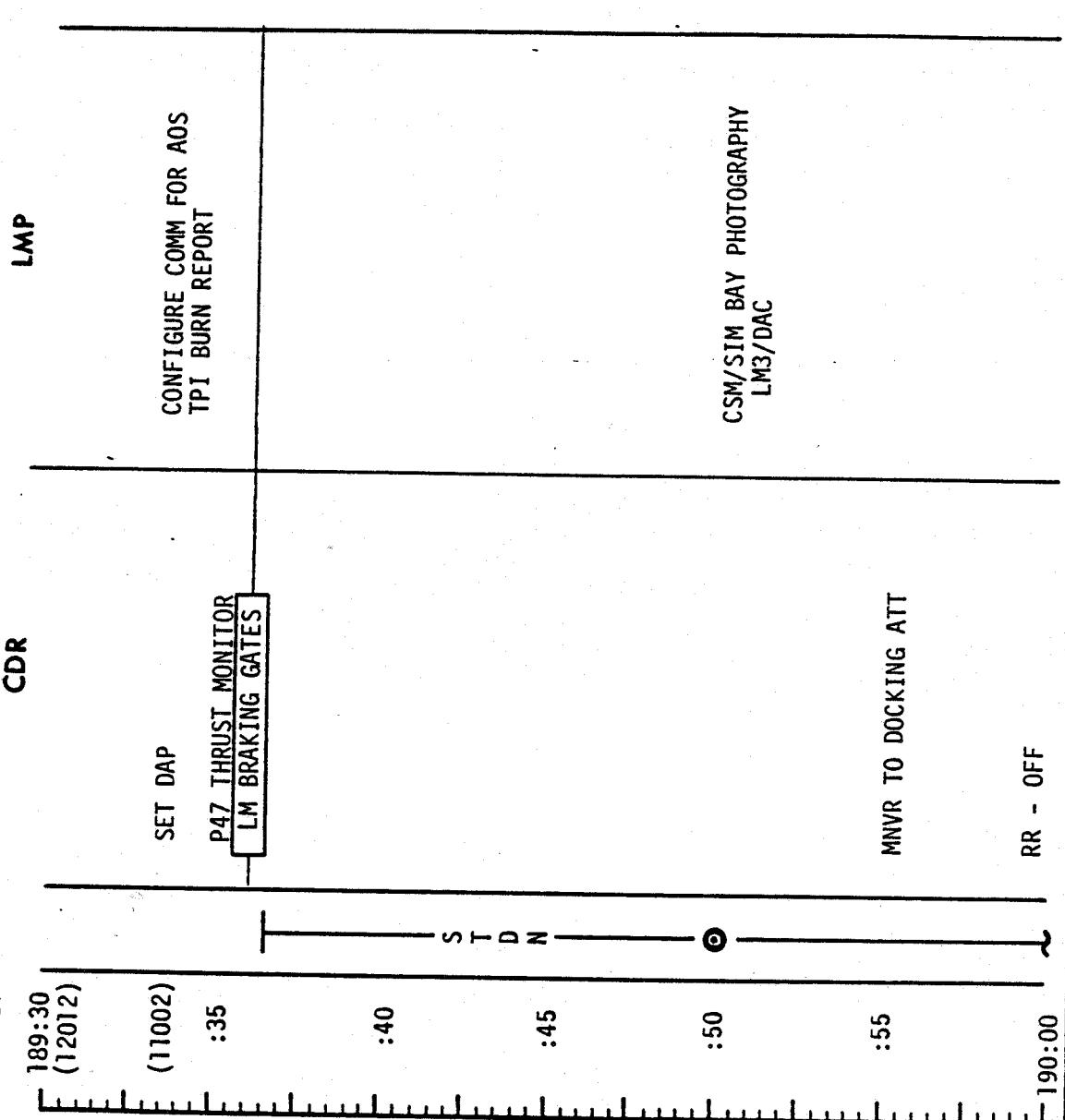
:45

:50

:55

RR - OFF

190:00



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

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-291

189:30

11102
11111

3.56
-40.8

PERFORM PRE-DOCK CHECKLIST

IF CSM ACTIVE:
P47 AT R=1.25 NM
SEC PRPLNT FUEL PRESS (4) - OPEN
V83E
NB3E
KEY REL

ACQ STDN HGA P =35, Y +37 AUTO. NARROW
UTILITY PWR - ON (VERIFY)
DAC/TV - ON
LN PHOTOS WITH DAC/TV

TPF : : :

ENS MODE - STBY
ENS FUNC - OFF
EXT LIGHT ANDZ - OFF

LH STATION KEEP
DAC/TV - OFF

V49 MNVR TO SIM BAY INSPECTION ATTITUDE (189:52)
(319,254,000) OMNI D

S T D N : 50 : 50

189:40:28.1
LM 31.5 (TOTAL)
CSM 33.6 (TOTAL)
180,304/282.0

SIM EXP STATUS
(*0000)
(31000)

PRE-DOCK CHECKLIST

MAN ATT (3)-RATE CMD (VERIFY)
LIMIT CYCLE - OFF (VERIFY)
ATT DB - MIN
RATE - LOW (VERIFY)
TRANS CONTR PAR - ON (UP)
ROT CONTR PAR DIRECT (BOTH) - MNVR/NBB
SC CONT - CMC (VERIFY)
AUTO RCS SEL (16) - MNVR/NBB

CB DOCK PROBE (2) - CLOSE
PROBE RETRACT (2) - OFF (VERIFY)
PROBE EXTD/REL - RETRACT
PROBE EXTD/REL TB (2) - GRAY (VERIFY)
(IF TB NOT GRAY, GO TO PG S12-13,E)
CB SEC'S LOGIC (2) - CLOSE (VERIFY)
CB SEC'S ARM (2) - CLOSE
EXT LIGHTS RUN/EVA - ON (UP) (VERIFY)
COAS PHR - ON (UP) (VERIFY)

BRACING 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
.03		2.70	300
.02		4.00	200
		8.50	100

V49 MNVR TO DOCKING ATT (190:00)
(180,282.0) HGA P =35, Y +37

CUE STDN FOR LOGIC ARM
SEC'S LOGIC (BOTH) - ON (UP)

UPDATE:
GO/NO GO FOR PYRO ARM
SEC'S PYRO ARM (2) - ON (UP)

190:00

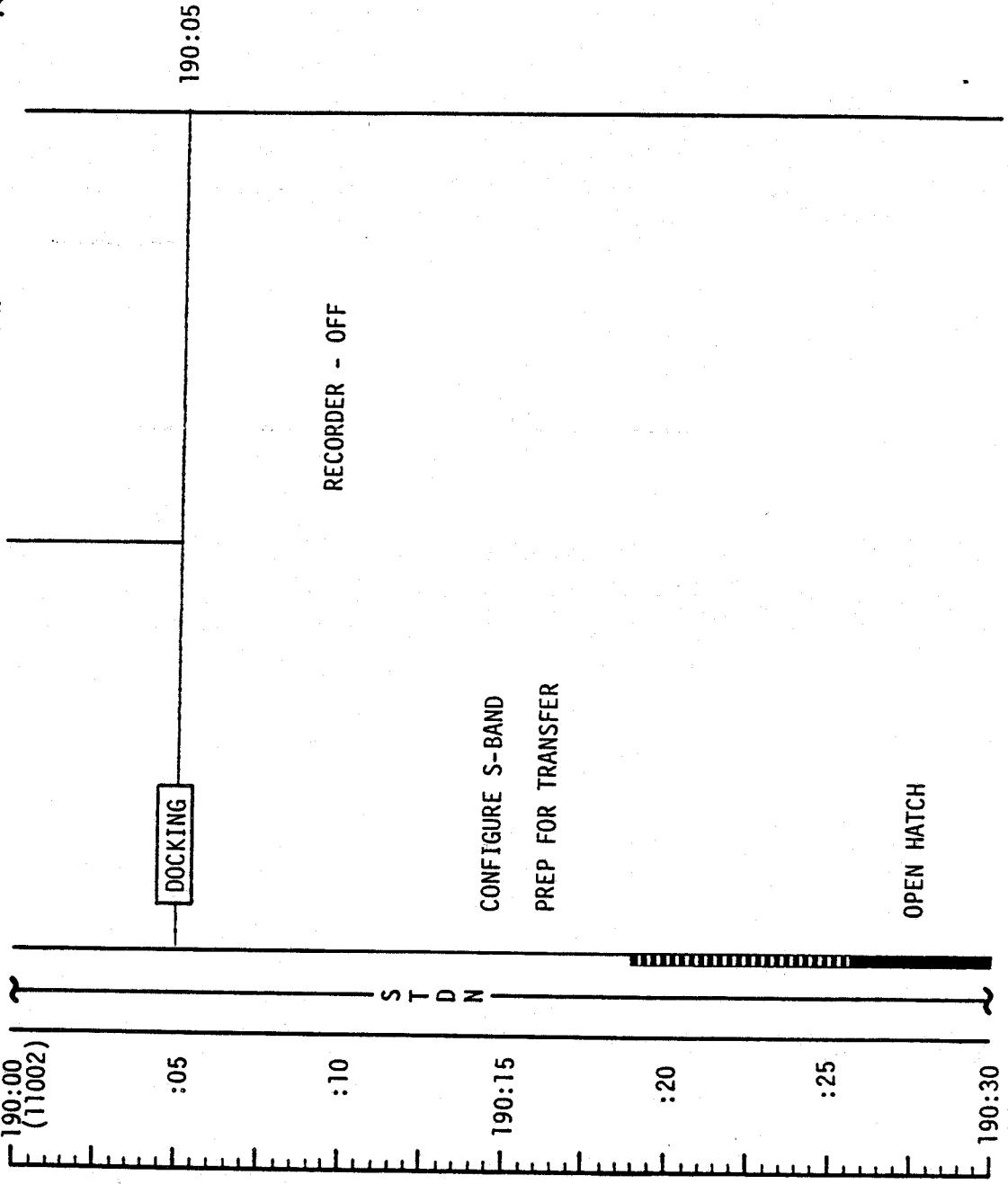
LM FLIGHT PLAN

MCC-H 1853 CST

NOTES

LMP

CDR



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	190:00 - 190:30	9/52	3-292

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

190:00 P47
 (1102) DAC/TV - ON
 (1111)

TRANSLATE TO CAPTURE LATCH
 PERFORM DOCKING CHECKLIST
 DOCKING : : : 190:05:00

P00
 VAB (61111)
 (11111)
 CMC MODE - AUTO

RNDZ XPNOR - OFF
 VAB MNVR TO LM JETT ATT (190:25)
 (020,007,349) HGA P -42, Y 349
 S-BAND/AUX TV - SCI
 DATA SYSTEMS - ON
 UV - ON
 IR - ON

CMDS: DSE DUMP

POST-SPS BURN SIM PREP (CUE CARD)

STOW OPTICS

:10 PREPARE COUCHES: CDR - 0°, CMP - 0°, LMP - 180°
 REMOVE PROBE STRAPS (R5)
 CDR - VERIFY FWD DUMP VLV - AUTO
 CABIN FANS - ON (UP)

CM/LM PRESSURE EQUALIZATION (1.00) (DECAL)

TUNNEL LIGHTS - ON (UP)
 TUNNEL HATCH REMOVAL (DECAL)

VERIFY DOCKING LATCHES ENGAGED (AT LEAST 3, 120° APART)

PROBE REMOVAL (CM SIDE) (DECAL)
 DROGUE REMOVAL (DECAL)

SIM EXP STATUS
 (*0000)
 (31000)

190:05:00

DOCKING CHECKLIST

AT CAPTURE

PROBE EXTD/REL TB (2) - BP (VERIFY)
 (IF TB NOT BP, GO TO PG S/2-11, A)
 REPORT CAPTURE TO LM
 SC CONT - CMC (VERIFY)
 CMC MODE - FREE
 ALLOW PROBE TO DAMP SC MOTION (10 SEC)
 WHEN WITHIN +3° OF DOCKING ATTITUDE
 PROBE RETRACT SEC - 1 (PRIM - 2 IF REQD)

AT DOCK LATCH

PROBE EXTD/REL TB (2) - GRAY

AT HARD DOCK

SECS PYRO ARM (2) - SAFE	EXT LIGHTS (2) - OFF
SECS LOGIC (BOTH) - OFF	COAS PWR - OFF
CB SECS ARM (2) - OPEN	AUTO RES SEL: ROLL (4) - OFF
CB DOCK PROBE (2) - OPEN	TRANS CONTR PWR - OFF
THC - LOCKED	ROT CONTR PWR DIRECT (BOTH) - OFF
RHC - LOCKED	VHF RANGING - OFF
Bmag MODE (3) - RATE 2 (VERIFY)	
PROBE EXTD/REL - OFF	
PROBE RETRACT (2) - OFF	

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

MCC-H

LM FLIGHT PLAN

CDR

NOTES

LMP

1923 CST
190:30
(11002)

RECEIVE
DROGUE
PROBE
VACUUM CLEANER
TRANSFER LIST

:35

CABIN CLEANUP

:40

S T D N

190:45

TRANSFER LEVA BAGS
RECEIVE DECONTAMINATION BAGS

:50

EQUIPMENT & SAMPLE TRANSFER

:55

191:00

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	190:30 - 191:00	9/52	3-294

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

190:30 — TRANSFER TO CDR AT HIS REQUEST:
PROBE
DROGUE
VACUUM CLEANER (ASSEMBLED)
LM TO CM TRANSFER LIST

(6111) [REDACTED] (1111)

SIM EXP STATUS
(*0000)
{0101}

:40

S T D N

RECEIVE LEVA BAGS

CMD'S:
DSE RECORD

TRANSFER TO CDR:
DECONTAMINATION BAGS

:50

VERIFY DSE TAPE MOTION (HBR/FCD/FWD/CMD RESET)
SET HGA MAN P -32, Y 319 AUTO. NARROW FOR AOS
(LM TO CM TRANSFER LIST)

RECEIVE ITEMS FROM LM AND STOW
(LM TO CM TRANSFER LIST)

191:00

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

LM FLIGHT PLAN

CDR

1953 CST
F (11002)

MCC-H

NOTES

LMP

1:00

:10



:20

191:30

TRANSFER SRC'S

:40

:50

RECEIVE B5 & B6

192:00

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

SIM EXP STATUS
(*0000)
(0101)

SIM EXP STATUS
(*0000)
{0101}

191:00

ACQ STDN HGA: P -42, Y 349 AUTO, NARROW

CMD5:
DSE DUMP

:10
REV 53

1-02-0

50

192:00

TRANSFER B5, B6 CONTAINERS TO LM

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-297

LM FLIGHT PLAN

CDR

NOTES

LMP

2053 CST

MCC-H

192:00
(11002)

UPLINK TO LM
LM S.V. (TTG-10)
P30 TARGET LOAD
P99 LM DEORBIT
UPDATE TO LM
DAP LOAD (WEIGHTS)
DEORBIT BURN PAD

:10

(12021)

:20

192:30

:40

GO/NO-GO FOR LM
CLOSEOUT

:50

TRANSFER JETTISON ITEMS

193:00

CONFIGURE LM FOR JETTISON

CONFIGURE VHF FOR CLOSEOUT

2:00

CONFIGURE AGS

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

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-299

192:00 (61111) {11111} X

S T D N

:10

UPDATE:
DAP LOAD - UPDATE WEIGHTS
LM JETTISON PAD
FLIGHT PLAN

V48 LOAD CSM & LM WEIGHTS

CSM WT	+			
LM WT	+			

192:30 (61101) {11111}

S T D N

:40

UPLINK:
CSM S.V. (CSM SEP-10)

V48 (61101) {11111}

CONTINUE EQUIP & SAMPLE TRANSFER

193:00 (61101) {11111}

S T D N

:50

UPDATE:
GO/NO-GO FOR LM CLOSEOUT

CMDs:
DSE RECORD

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

TRANSFER OR JETTISON ITEMS TO LM

NOTICE

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

193:30

SIM EXP STATUS
(*0000)
(01011)

SIM EXP STATUS
(*0000)
(01011)

LM FLIGHT PLAN

MCC-H

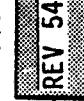
2153 CST
193:00
(12021)

CDR

LMP

NOTES

:10



:20

193:30

:40

:50

194:00

IVT TO CSM

LM CLOSEOUT

CLOSE HATCH, IVT TO CSM

3:00

T S T D N I O

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

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-301

193:00 (6101) [1111] :10 REV 54

LMP - CLOSE LM HATCH

STOW INTERCONNECTS - A8

SUIT FLOW VALVE (3) - SUIT FULL FLOW

HATCH INSTALLATION (DECAL)

HATCH INTEGRITY CHECK (DECAL)

193:30 (6101) [1111] :10

LM PWR - OFF (VERIFY)

CB SEC'S PYRO ARM (2) - CLOSE

ACQ STDN HGA: P -42, Y 349 REACQ, NARROW

CMOS: DSE DUMP

CUE STDN FOR LOGIC ARM

SEC'S LOGIC (2) - ON (UP)

REPORT: LM/CM AP

DON HELMETS AND GLOVES

193:30 (6101) [1111] :10

SUIT CKT INTEGRITY CHECK (DECAL)

194:00 194:00

PRE-JETTISON CHECKLIST

BMAG MODE (3) - ATT 1/RATE 2

RATE LOW

ATT DB - MIN

SC CONT - SCS

EMS FUNC - AV

THC PWR - ON

RHC PWR DIR - MNA/MNB

RHC - ARMED

CB CSM/LM FINAL SEP (2) - CLOSE

LOAD AV IN EMS TO +100.0

CHECK NULL BIAS

GDC ALIGN

UPDATE: GO/NO-GO FOR PYRO ARM

PRE-JETTISON CHECKLIST

V48 (1102) [1111] :10

SEC'S PYRO ARM (2) - ARM

P47 (JETT -1 MIN)

EMS MODE - NORMAL (JETT -30 SEC)

DAC - ON (JETT -25 SEC)

LM JETTISON

193:58:30

(020.090/007.349)

HOLD P47 FOR STDN

CSM FLIGHT PLAN

PRE-SEPARATION CHECKLIST
 194:00
 (1102)
 (1111)

CSM SEPARATION

TIG:	194:03:30
BT:	12.6 SECs
AVT:	2.0 FPS
ORBIT:	63.9x62.3NM

HOLD NSS FOR STDN
POO

CSM EXP STATUS
 (*0000)
 (0101)

PRE-SEPARATION CHECKLIST

ENS 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 PIRO ARM (2) - OPEN
 CB CSN/LM FINAL SEP (2) - OPEN
 P41 (BYPASS MNVR)
 ENS MODE - NORMAL (SEP -30 SECs)

ENS FUNC - OFF
 THG PUR - OFF
 RHC PUR DIR - OFF
 THG 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 ((1101))
 ((1111))
 P20 UP 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 (CNP'S) FROM PGA BAG
 ZIP SUITS & INSTALL ELECTRICAL COVERS PRIOR TO STOWING (PGA BAG)
 COR & 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 CHG'S

DOFF PGA'S

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

UPLINK:
 CSM S.V. & V66
 CDR, CNP DOFF BIOMED HARNESS

194:30

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

CSM FLIGHT PLAN

194:30
(P20)
(2.5 dB)
(11101)
(11111)

SIM EXP STATUS
{-0100}
(01011)

S
T
O
N

:40

DOFF PGA'S

CMOS:
DSE RECORD
PCM BIT RATE - LOW

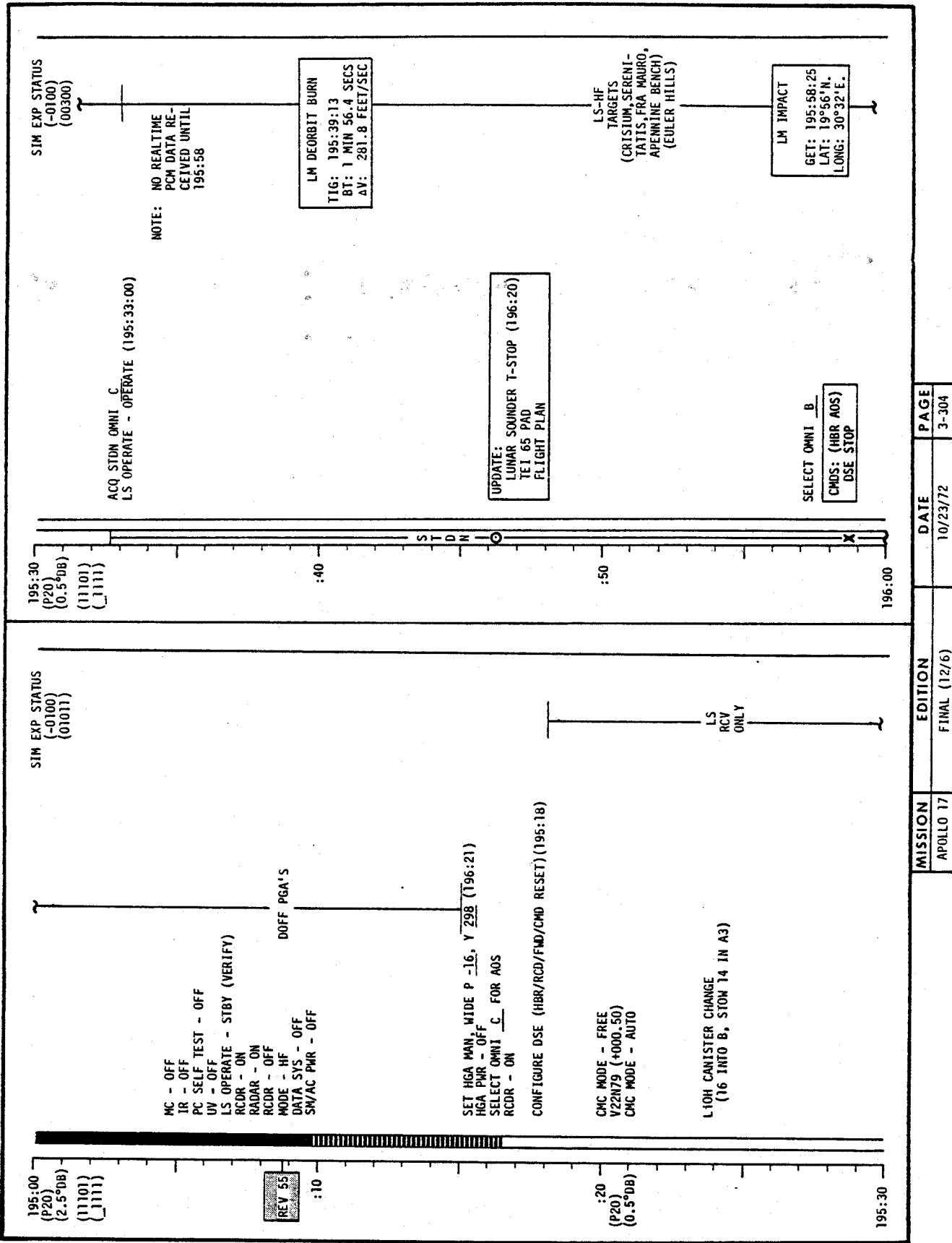
:50

NOTE: DSE VOICE RECORDED
UNTIL 195:18 WILL
NOT BE DUMPED.

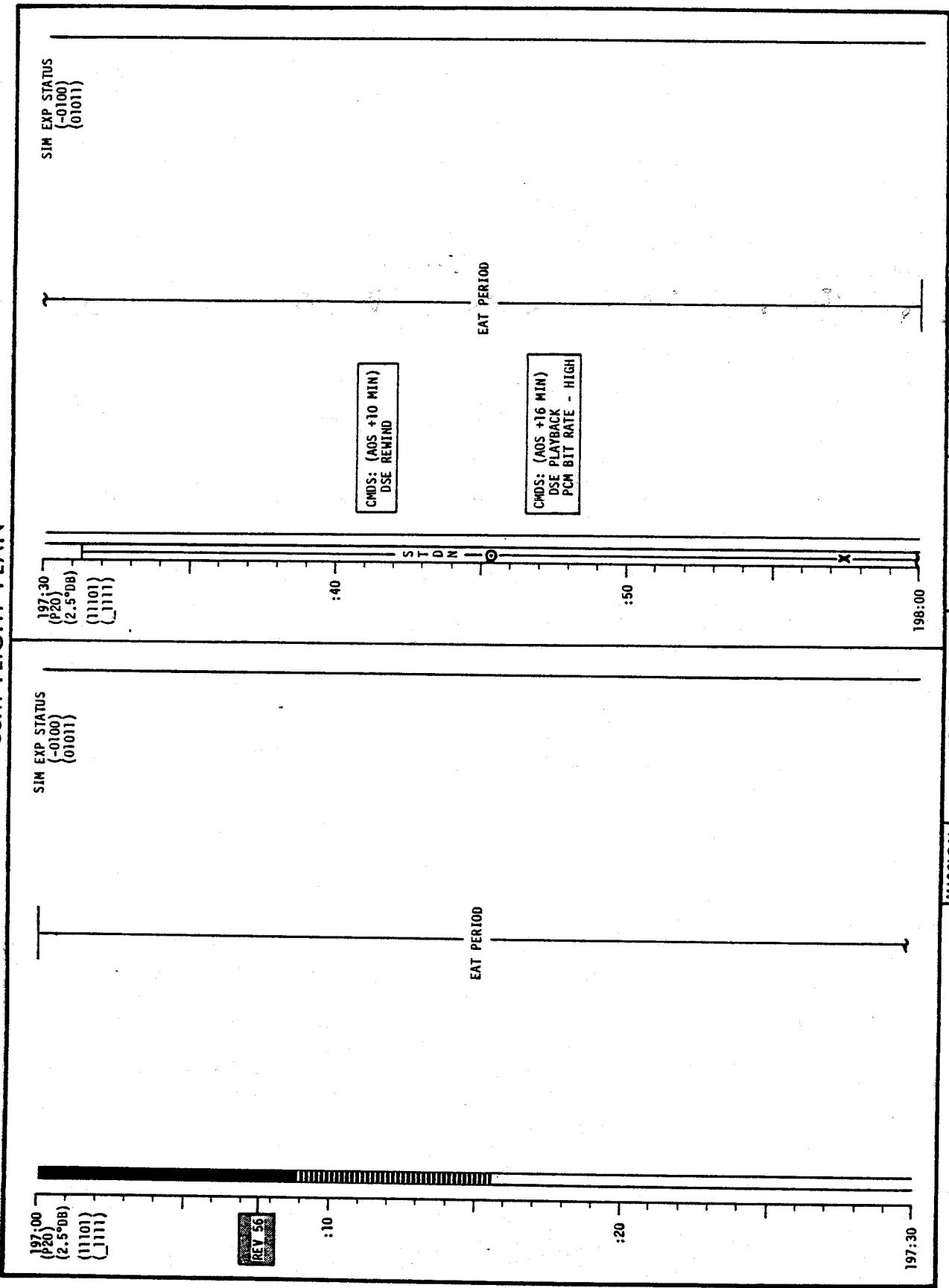
195:00

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

CSM FLIGHT PLAN



CSM FLIGHT PLAN



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

CSM FLIGHT PLAN

198:00 IR COVER - OPEN
 UV COVER - OPEN
 (P20)
 (2.5°DB)
 (11101)
 (11111)

CSM SYSTEMS CHECKLIST
 PRE-SLEEP CHECKLIST

PAGE 5/1-29

SIM EXP STATUS
 (-0100)
 (01011)

SIM EXP STATUS
 (-0100)
 (01011)

SIM EXP STATUS
 (-0100)
 (01011)

CMDS: (AOS +60 MIN)
 DSE REUND

CMDS: (AOS +68 MIN)
 DSE RECORD

FILM MAGS REQUIRED FOR NEXT DAY:

EL: NN, QQ, RR

:10

S T D N

:40

REST PERIOD
 (8.0
 HOURS)

:50

199:00

S T D N

:20

198:30

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

CSM FLIGHT PLAN

SIM EXP STATUS
(-0111)
(01011)

SIM EXP STATUS
(-0111)
(01011)

199:00
(P20)
(2.5 DB)
(11101)
(11111)

SIM EXP STATUS
(-0111)
(01011)

SIM EXP STATUS
(-0111)
(01011)

199:00
(P20)
(2.5 DB)
(11101)
(11111)

:40

:10

:20

:50

200:00

199:30

CMDs: (ADS +10 MIN)
DSE REWIND

REST PERIOD
(8.0 HOURS)

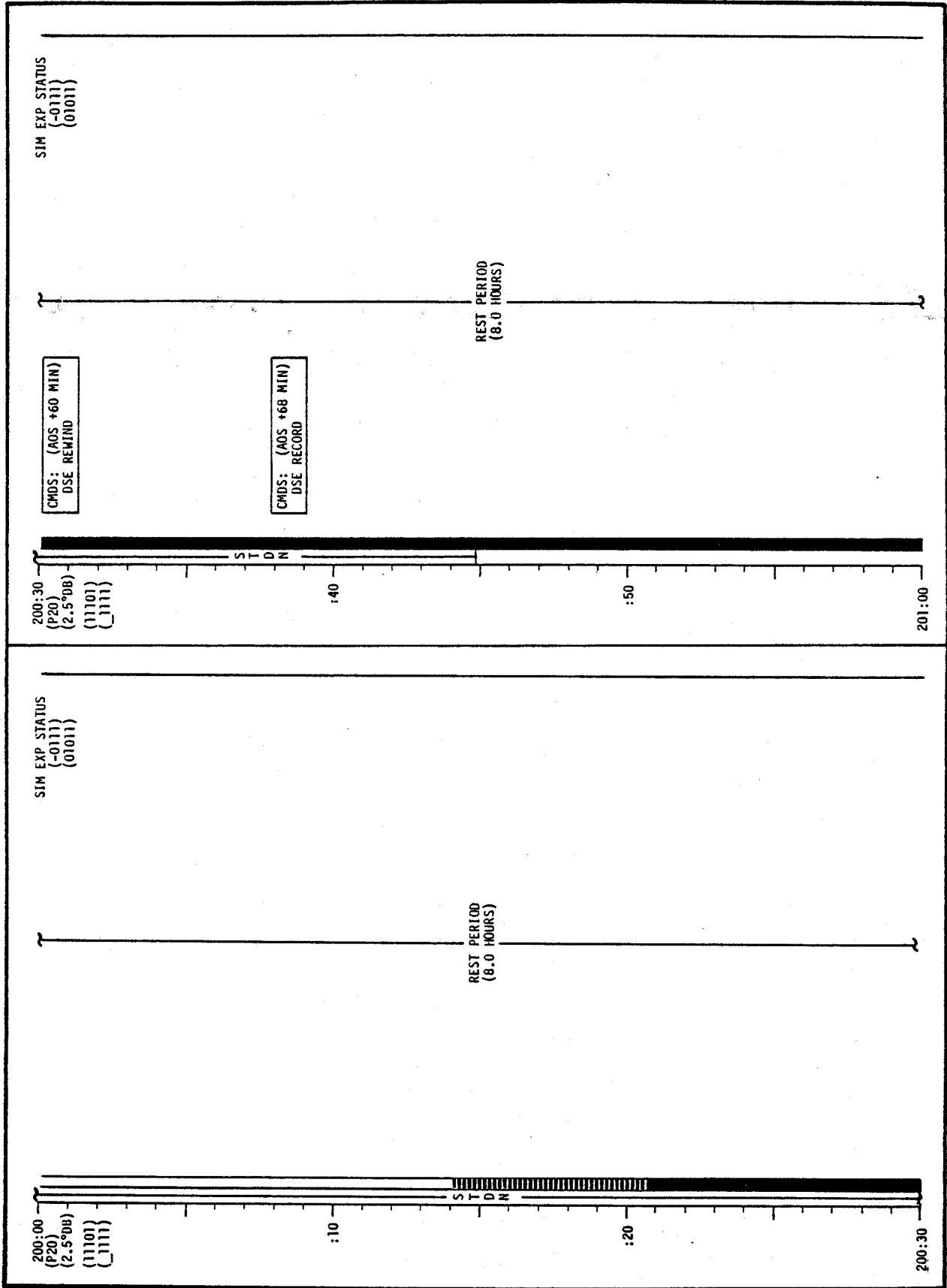
CMDs: (ADS +16 MIN)
DSE PLAYBACK

REST PERIOD
(8.0 HOURS)

REV 57

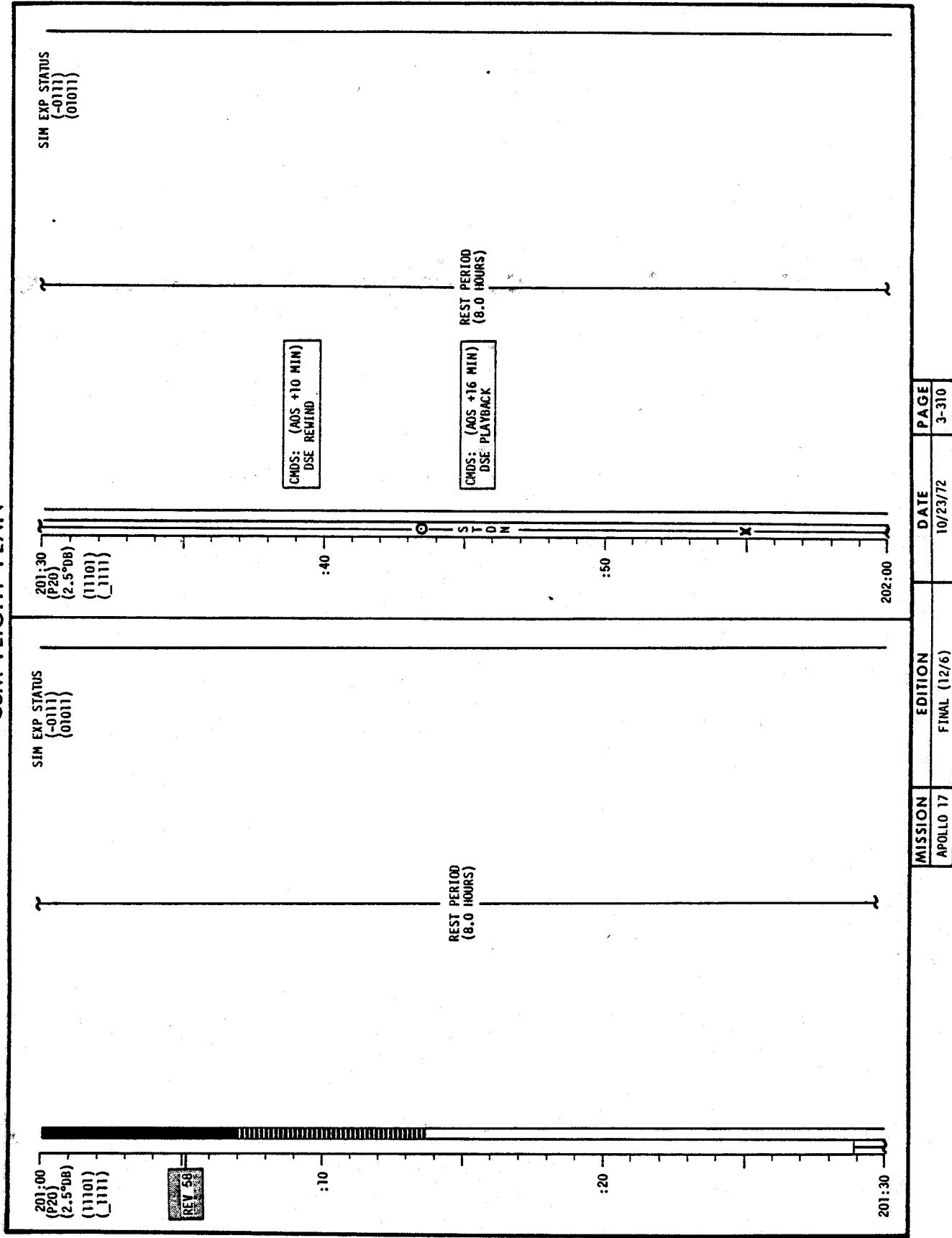
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-308

CSM FLIGHT PLAN

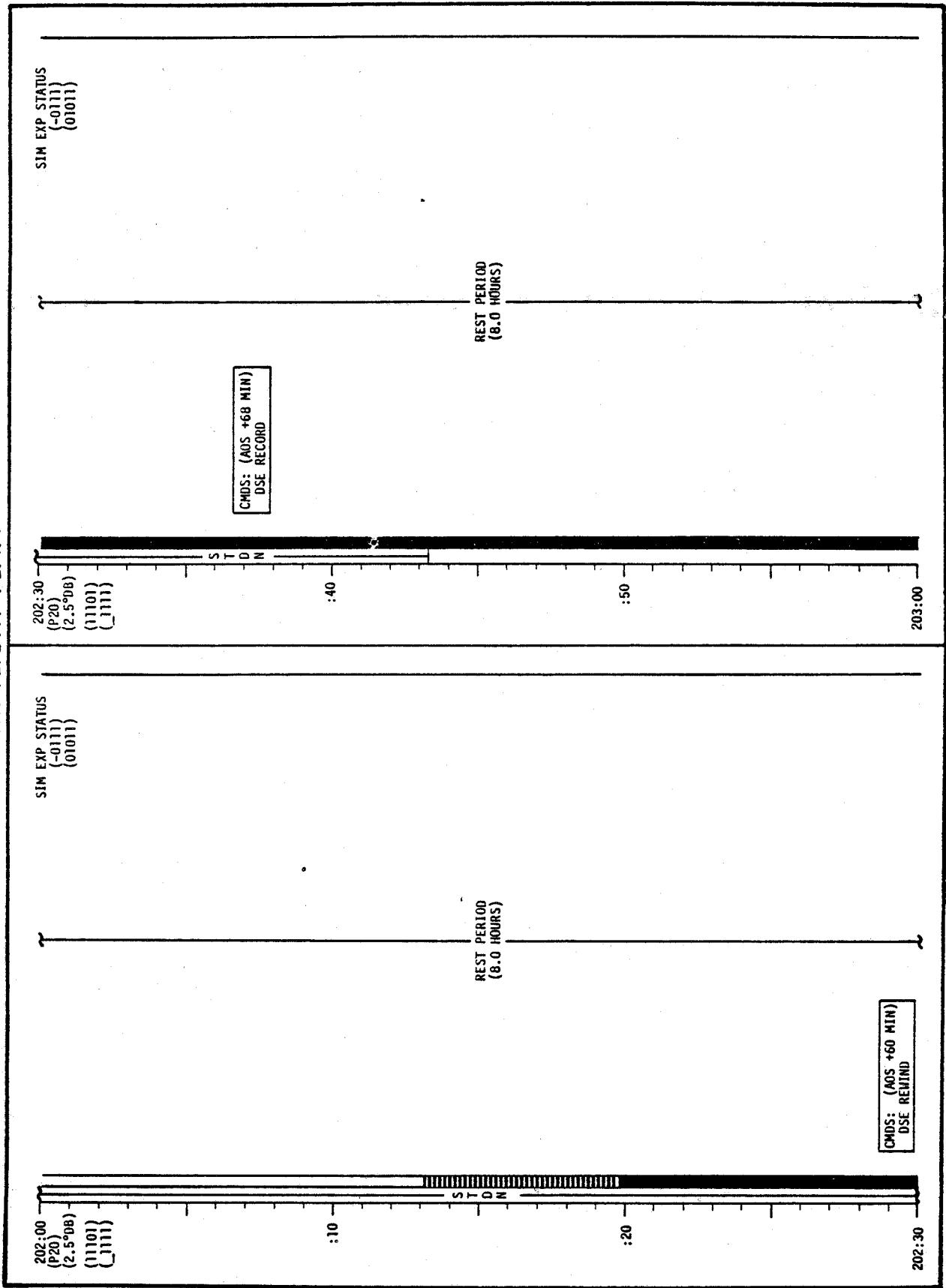


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-309

CSM FLIGHT PLAN

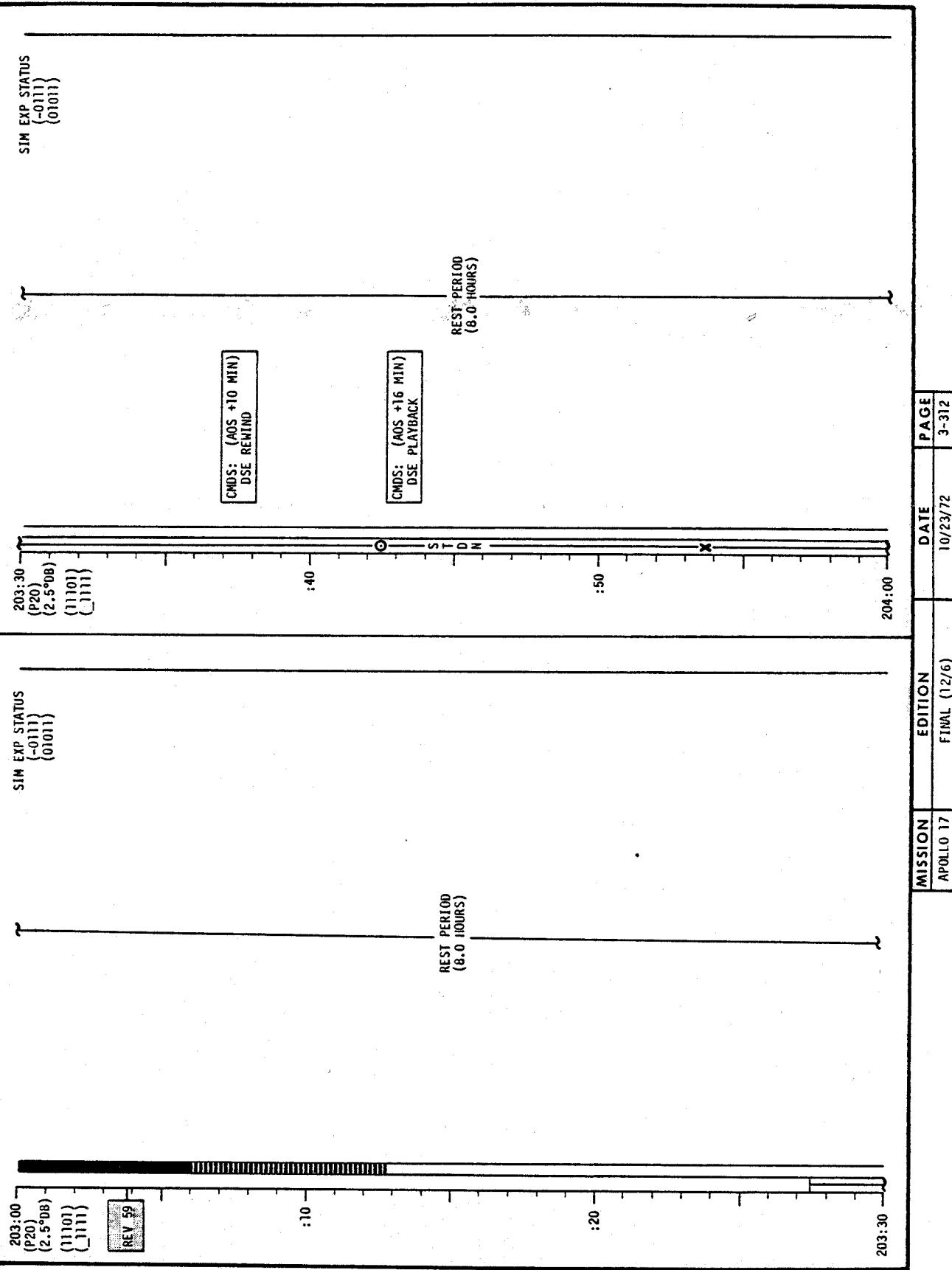


CSM FLIGHT PLAN

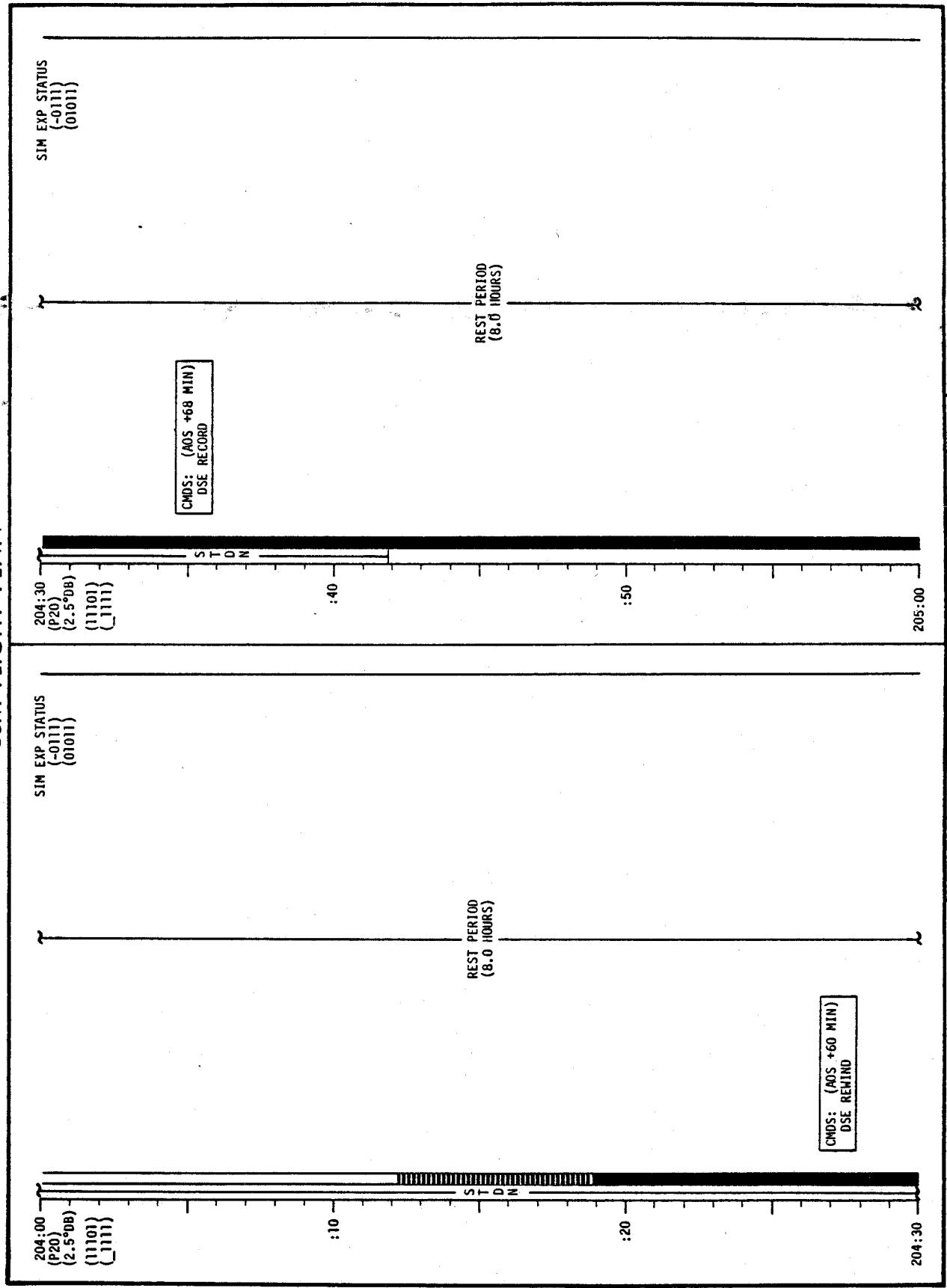


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-311

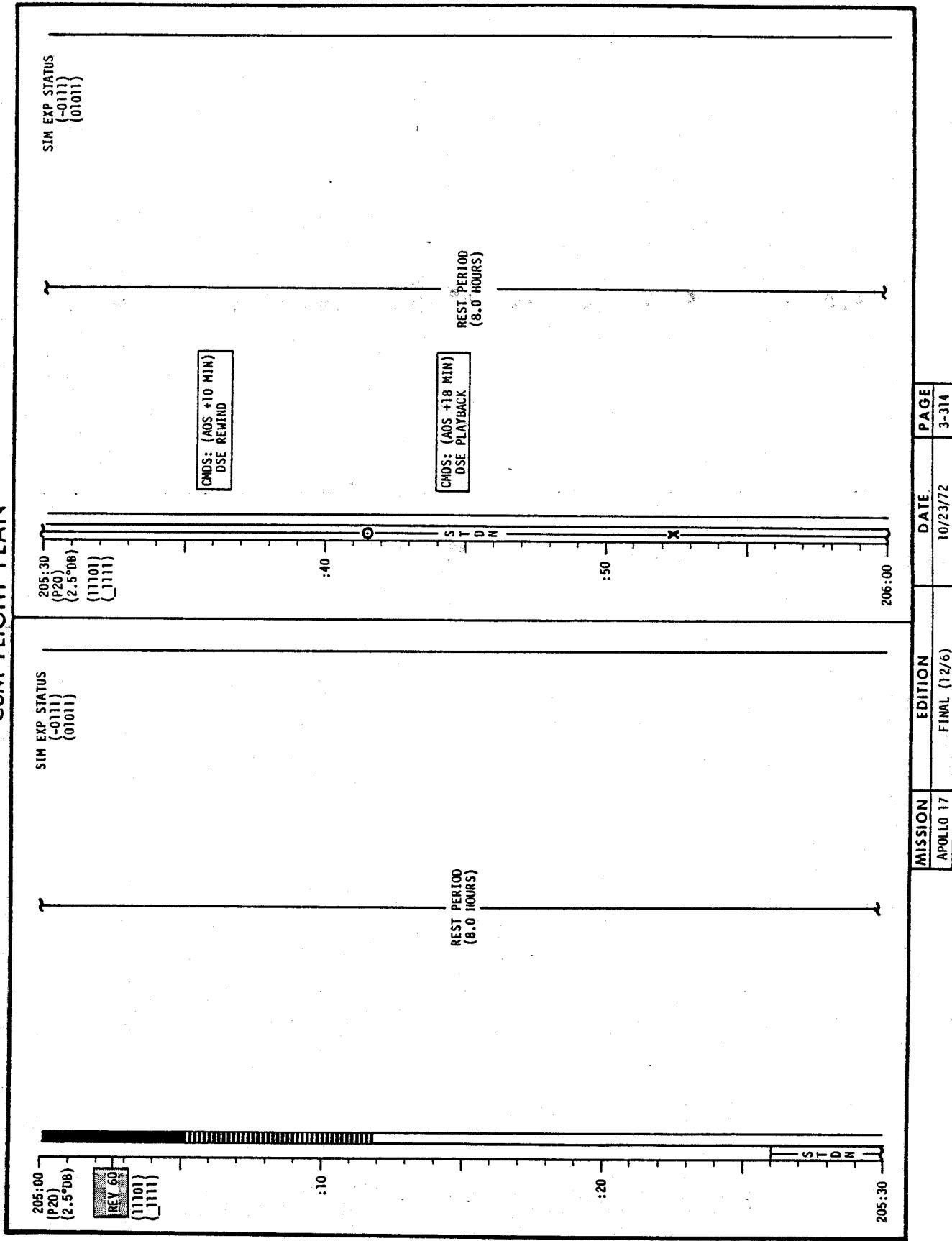
CSM FLIGHT PLAN



CSM FLIGHT PLAN

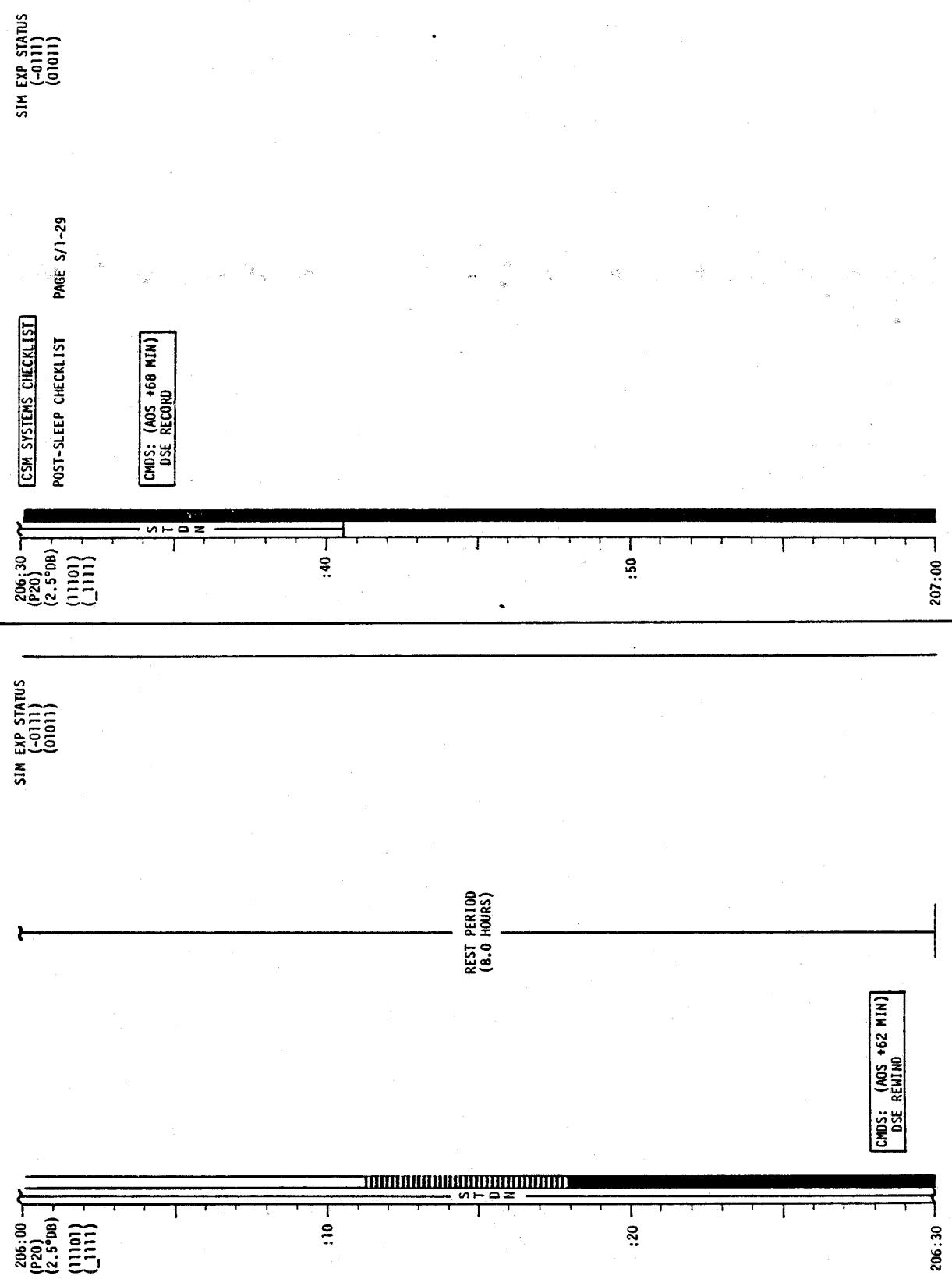


CSM FLIGHT PLAN



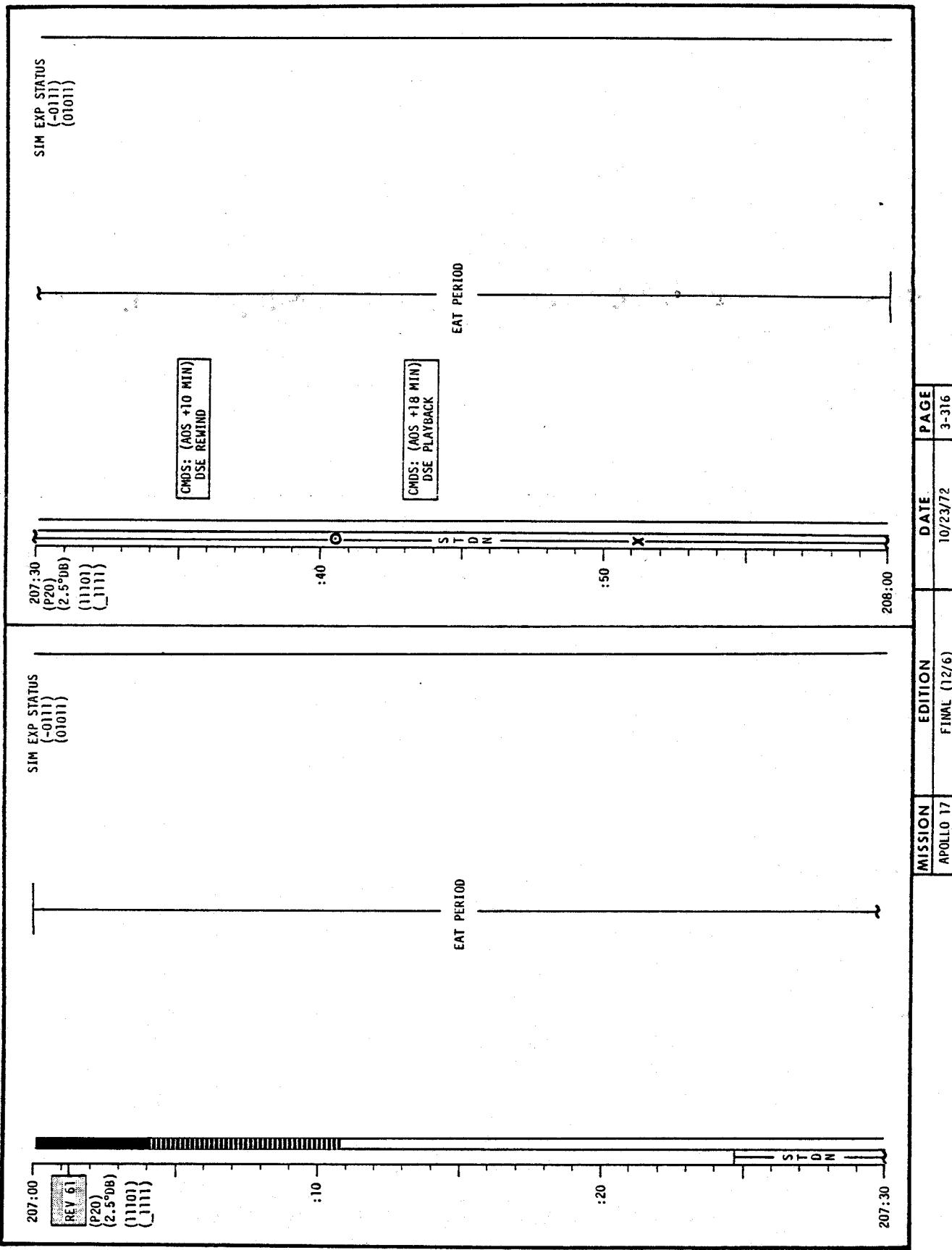
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-314

CSM FLIGHT PLAN

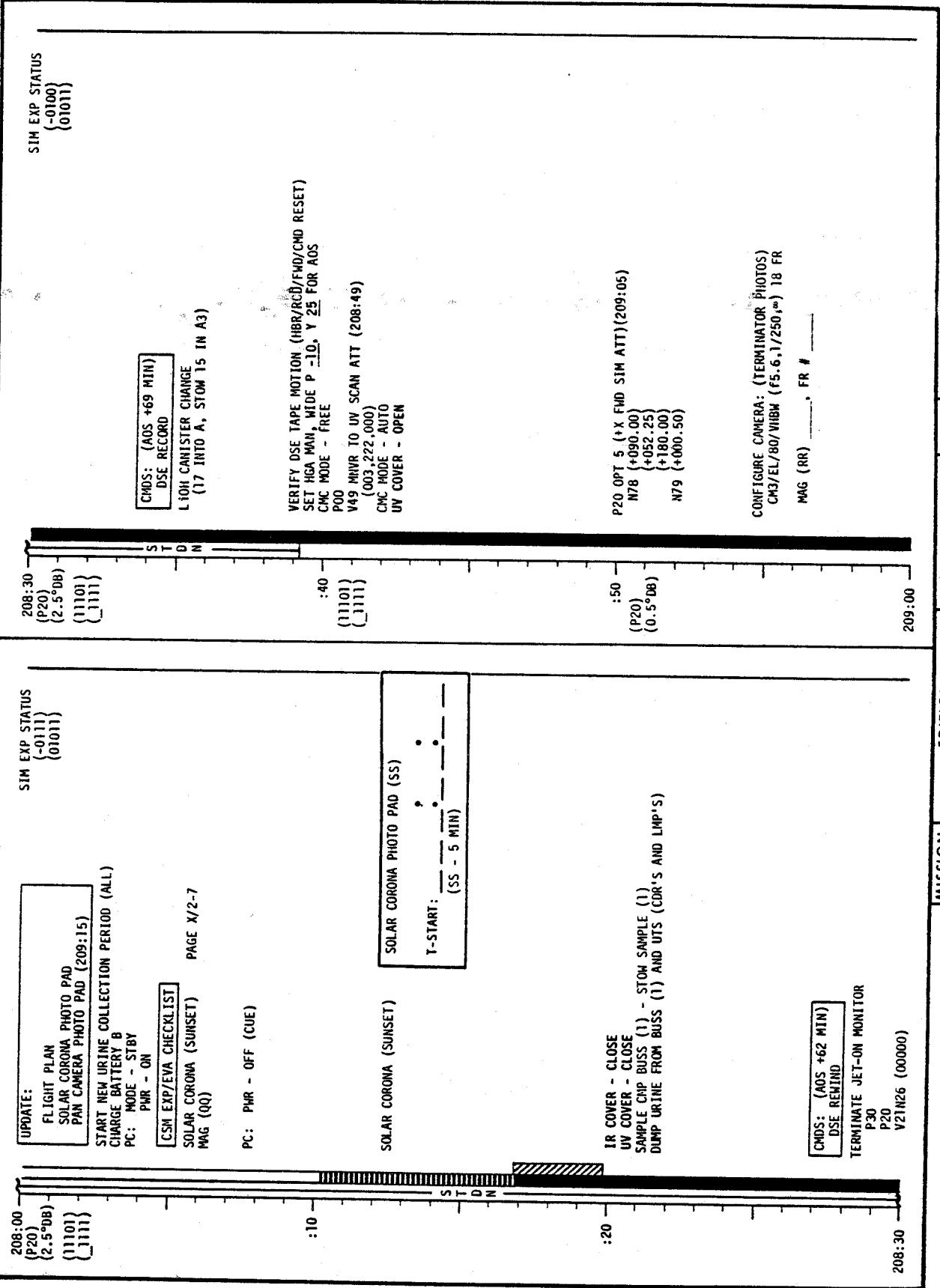


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-315

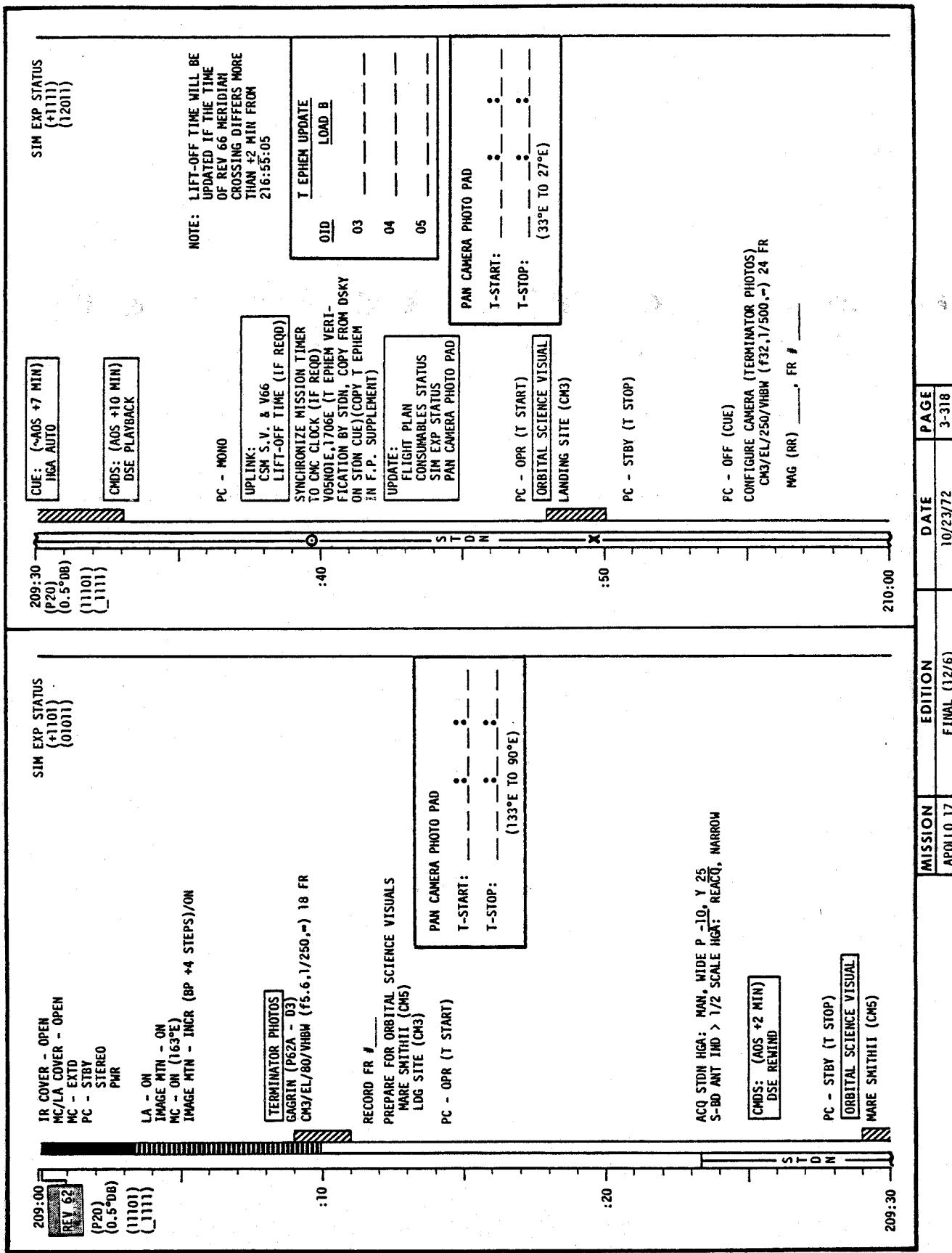
CSM FLIGHT PLAN



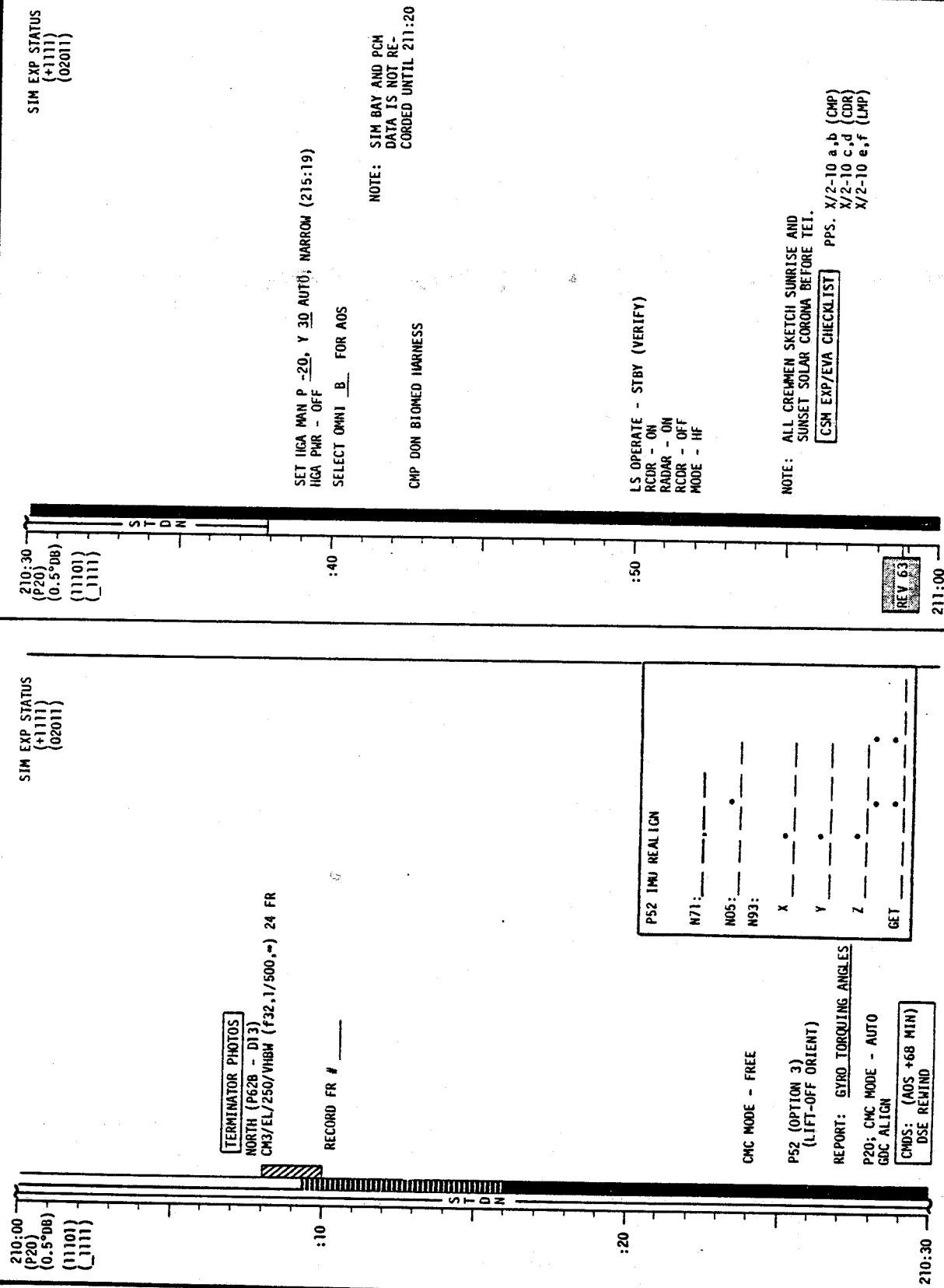
CSM FLIGHT PLAN



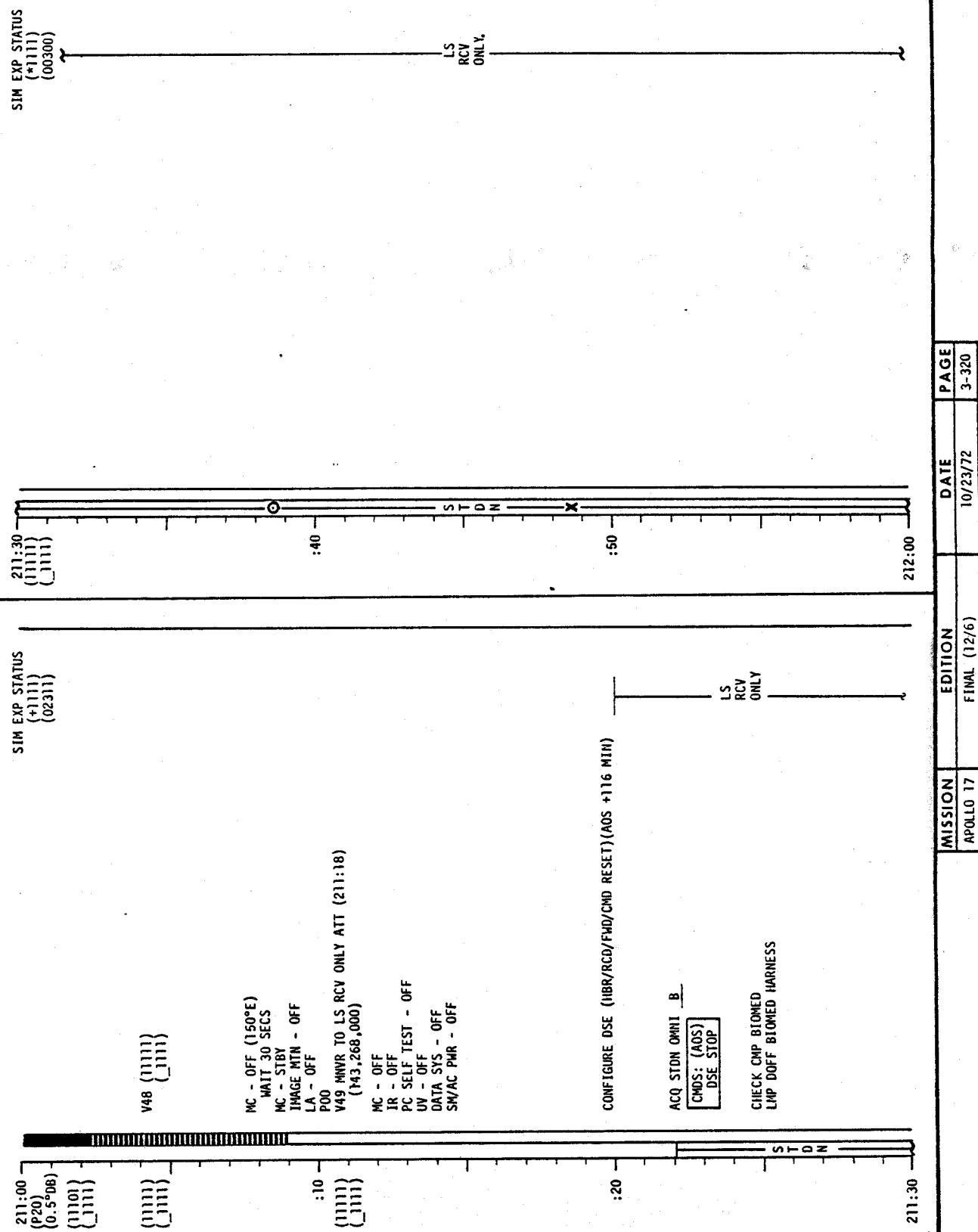
CSM FLIGHT PLAN



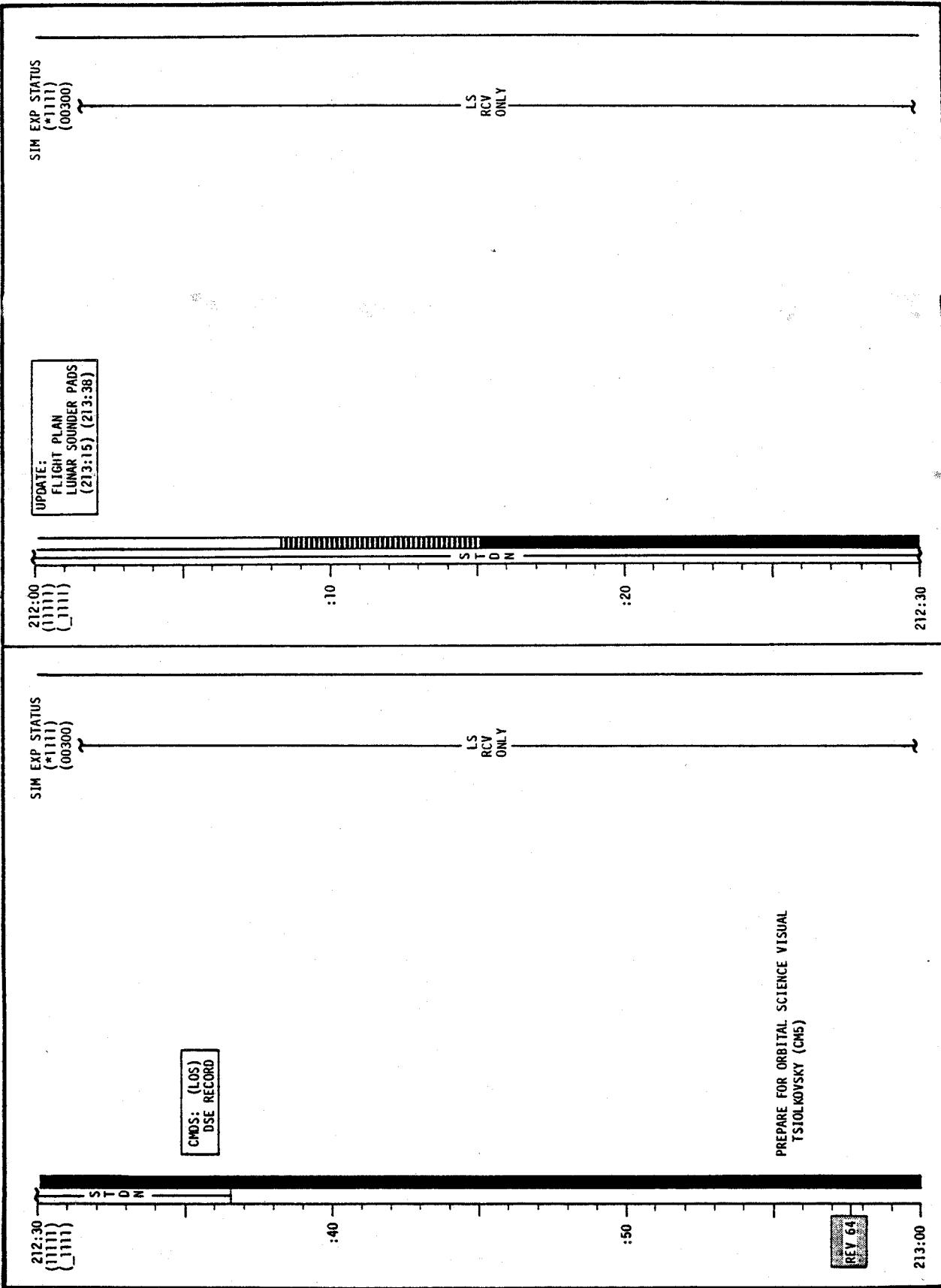
CSM FLIGHT PLAN



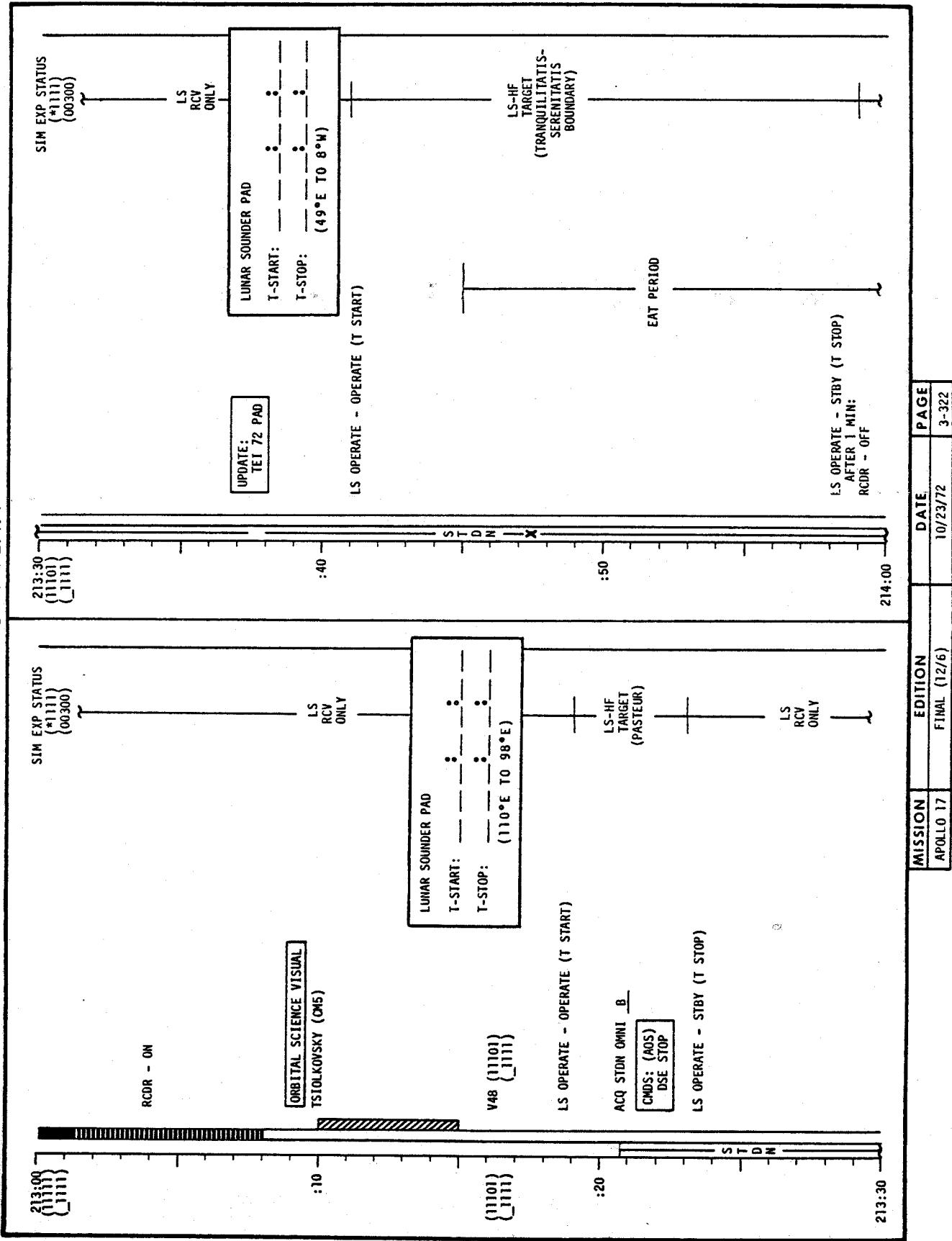
CSM FLIGHT PLAN



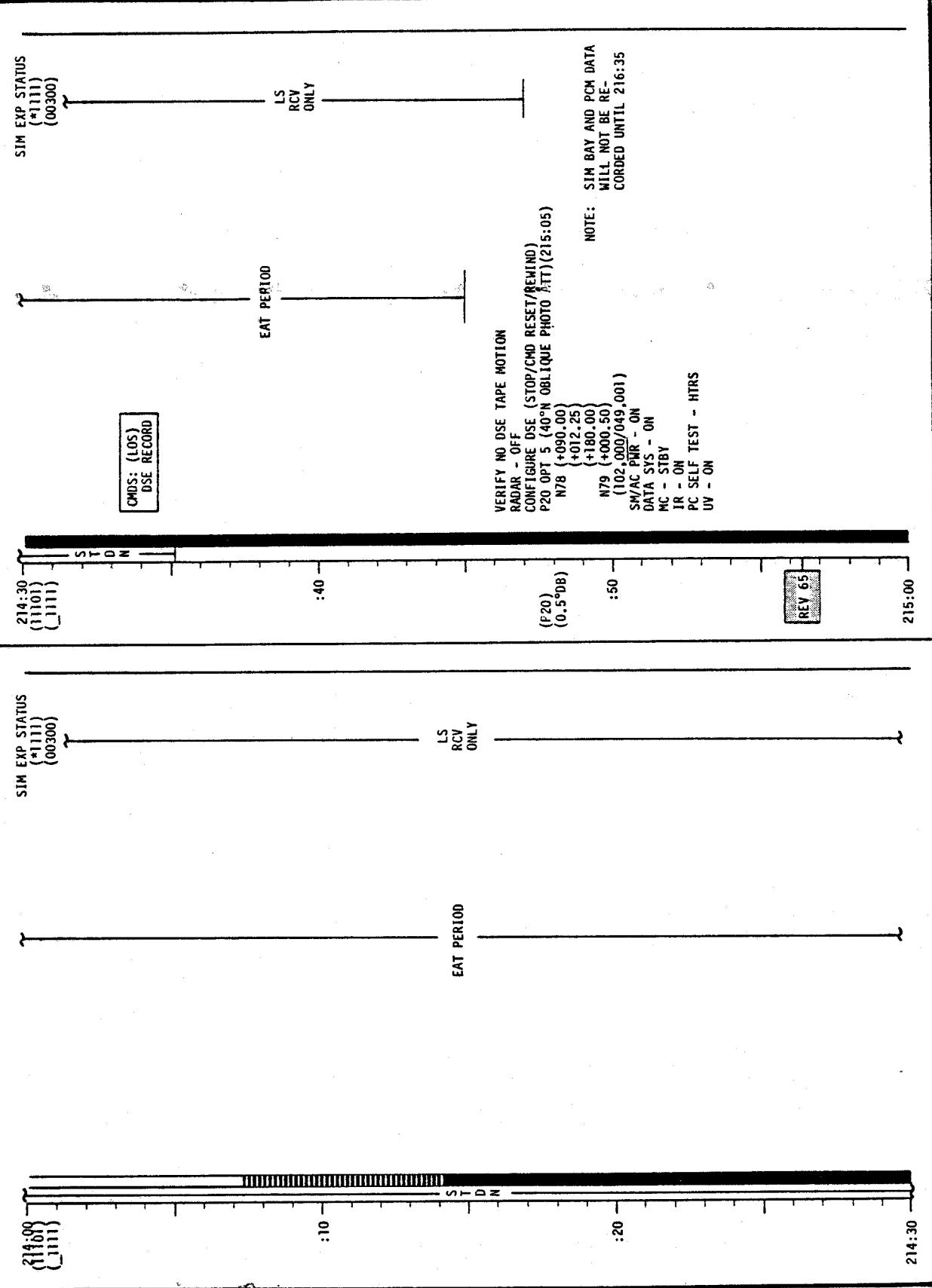
CSM FLIGHT PLAN



CSM FLIGHT PLAN



CSM FLIGHT PLAN



CSM FLIGHT PLAN

SIM EXP STATUS

215:00
IMAGE MTN - ON
 NC - ON (152° E)
IMAGE MTN - INCR (BP +3 STEPS)

(P20)
 (0.5°DB)

V48 {11102}
 {1111}

215:30
MNVR TO 40°S OBLIQUE PHOTO ATT (215:35)
 CM3/EL/80/CEX-IVL8(f⁺, f⁻) 28 FR

V2N78 (+270,00)
 (+087,75)

V58E
 {11101}
 {1111}

(183,000/315,000)

SIM EXP STATUS

(*1111)
 (01011)

215:30
CONFIGURE CAMERA (ORBITAL SCIENCE PHOTOS)
 CM3/EL/80/CEX-IVL8(f⁺, f⁻) 28 FR

MAG (MN) _____, FR # _____

V48 {11101}
 {1111}

215:35
HGA PHR - ON ACQ STDN HGA: P -20, Y 30 AUTO, NARROW

(11102)
 {1111}

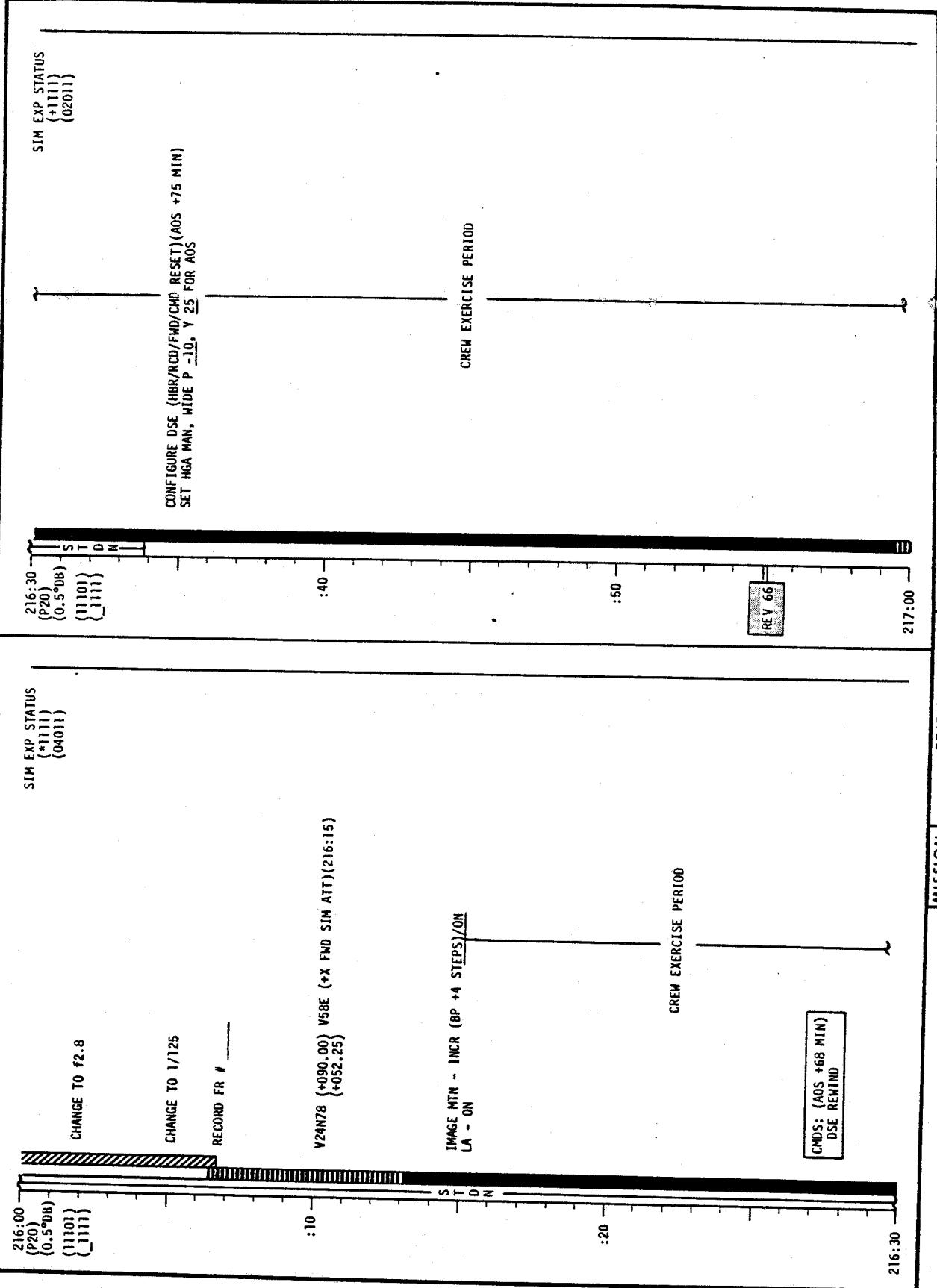
215:35
ORBITAL SCIENCE PHOTOS
 SOUTH IMBRIUM (P65 - 012)
 CM3/EL/80/CEX-IVL8(f4, f250,*) 28 FR

CMOS: USE PLAYBACK

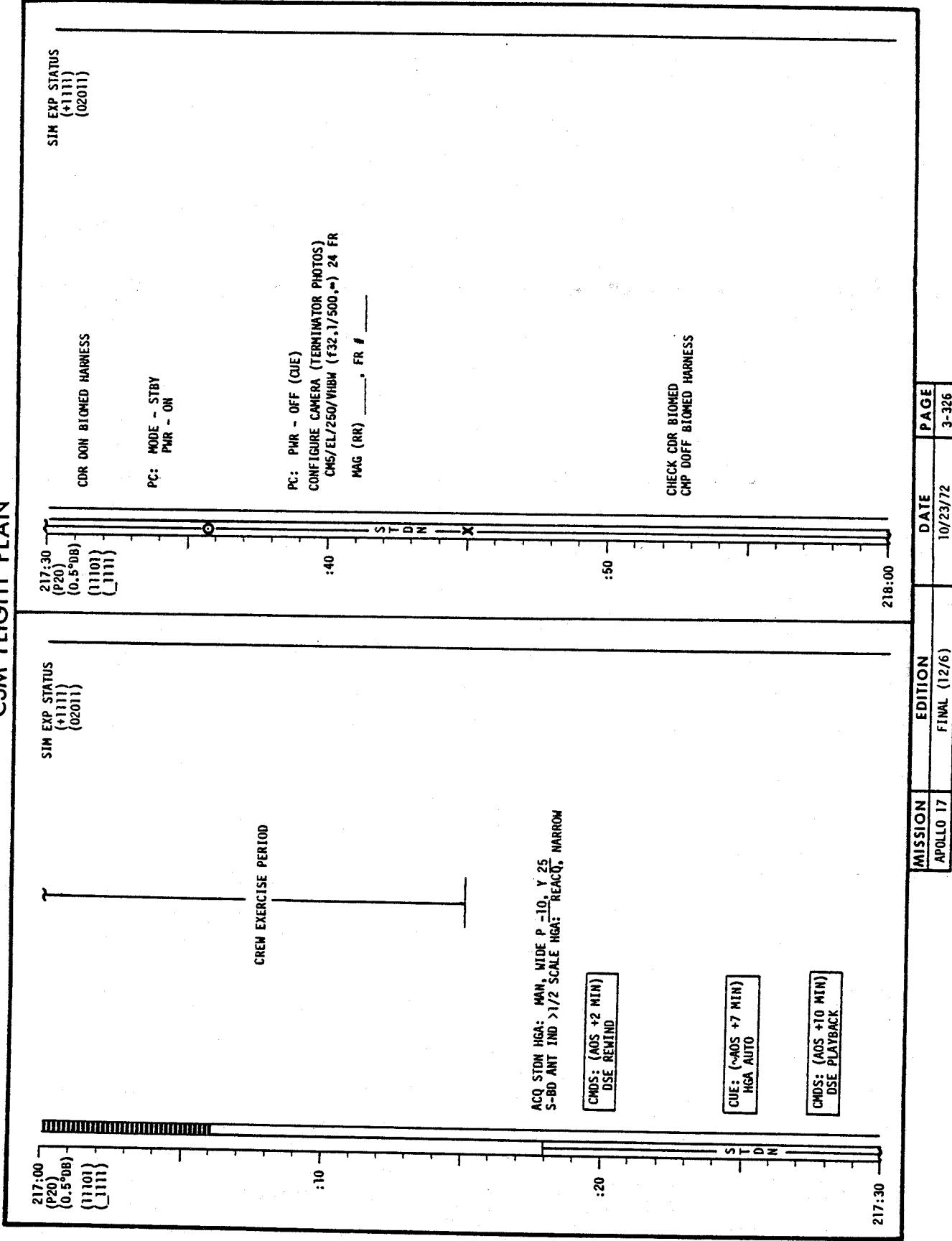
216:00

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

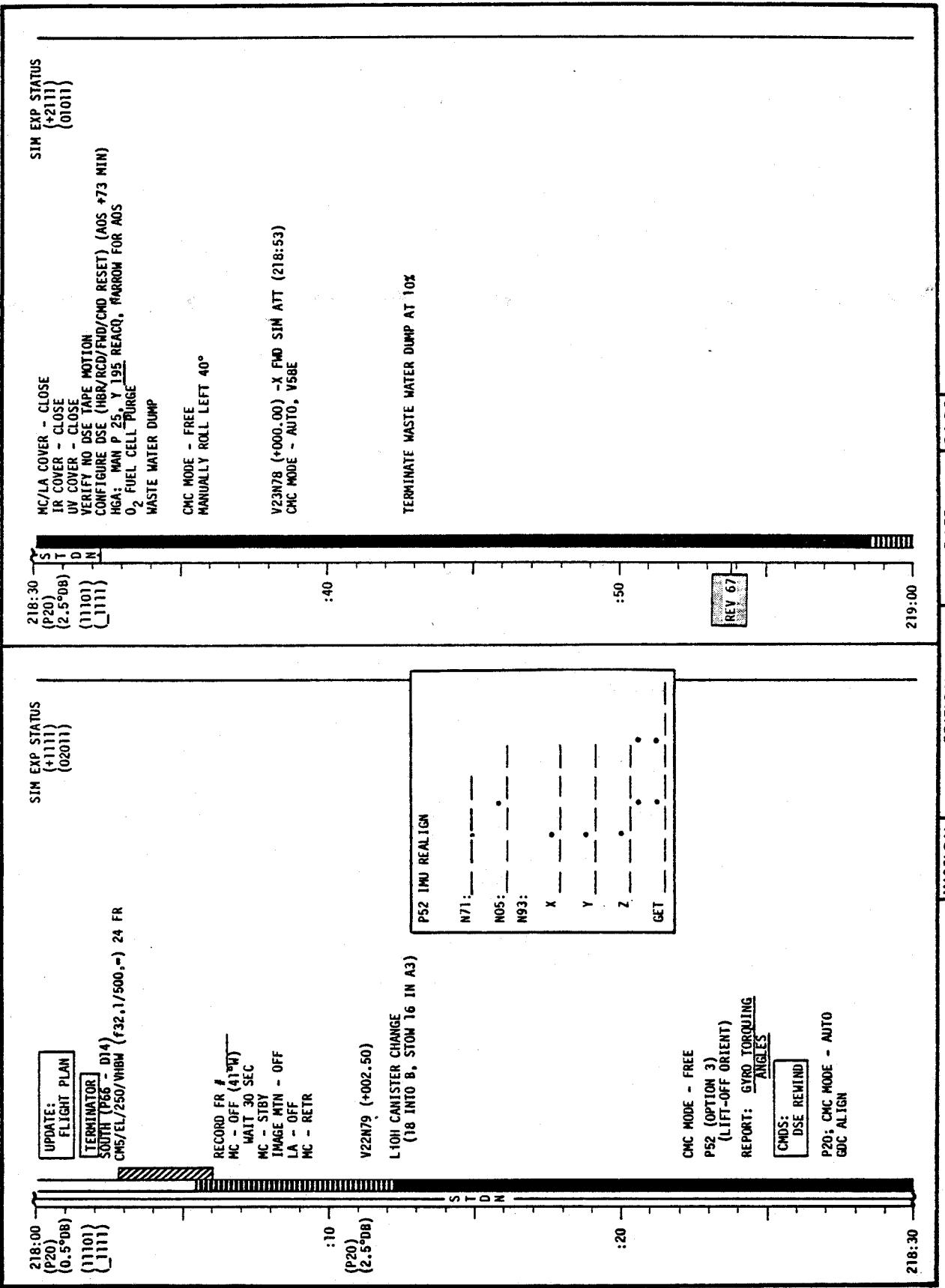
CSM FLIGHT PLAN



CSM FLIGHT PLAN



CSM FLIGHT PLAN



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

CSM FLIGHT PLAN

SIM EXP STATUS
(-0100)
(0101)

219:00
(P20)
(2.5°OB)
(11101)
(11111)

SIM EXP STATUS
(-0100)
(0101)

219:00
(P20)
(2.5°OB)
(11101)
(11111)

CMDs: (AOS +8 MIN)
DSE PLAYBACK

:40

EAT PERIOD

S T D N

:50

IR COVER - OPEN
UV COVER - OPEN

219:30

EAT PERIOD

S T D N

:20

CMDs: (AOS +10 MIN)
DSE REWIND

S T D N

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

CSM FLIGHT PLAN

UPLINK:
CSM S.V. & V66
JET-ON MONITOR LOADS
CSM SYSTEMS CHECKLIST
PRE-SLEEP CHECKLIST PAGE S/1-29

220:00 (P20) SIM EXP STATUS (-0111)
(2.5 dB) {01011} (01011)

220:30 (P20) SIM EXP STATUS (-0111)
(2.5 dB) {01011} (01011)

:10 FILM MAGS REQUIRED FOR NEXT DAY:

EL: RR

:10

S T O N

CMD: (AOS +62 MIN)
DSE REMIND

CMD: (AOS +68 MIN)
DSE RECORD

:20

ONBOARD READOUT

BAT C _____

PYRO BAT A _____

PYRO BAT B _____

RCS A _____

B _____

C _____

D _____

DC IND SEL - MIA OR B

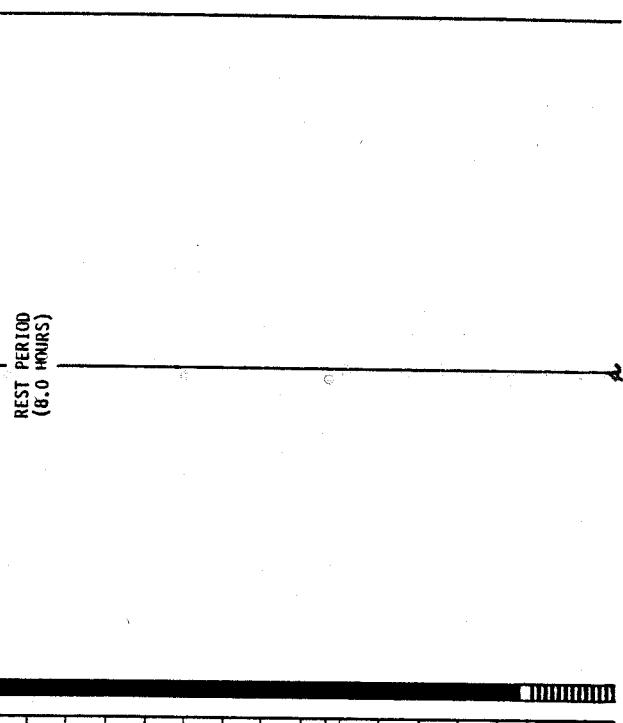
220:30

221:00

REST PERIOD
(8.0 HOURS)

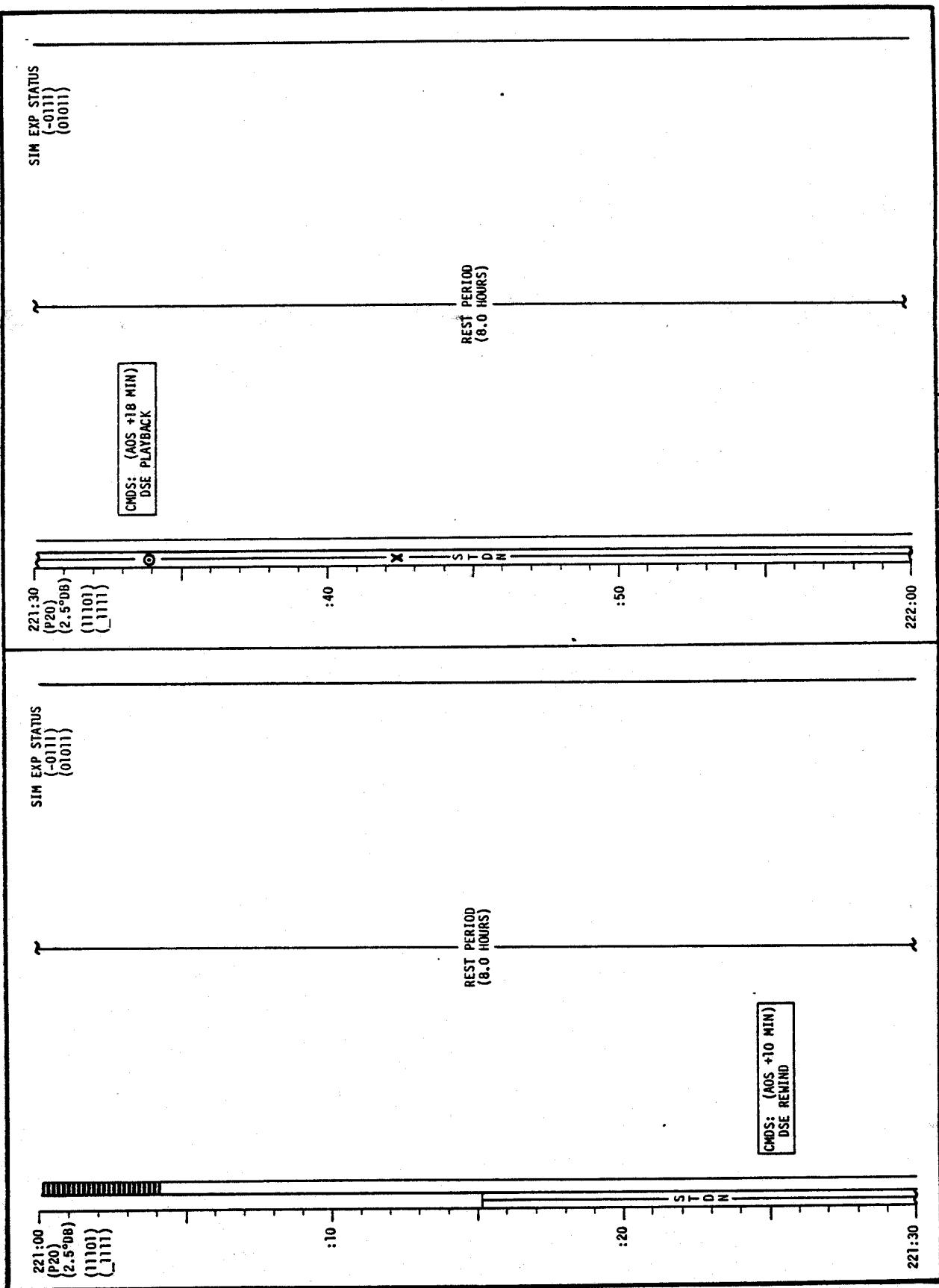
:40

REV 68



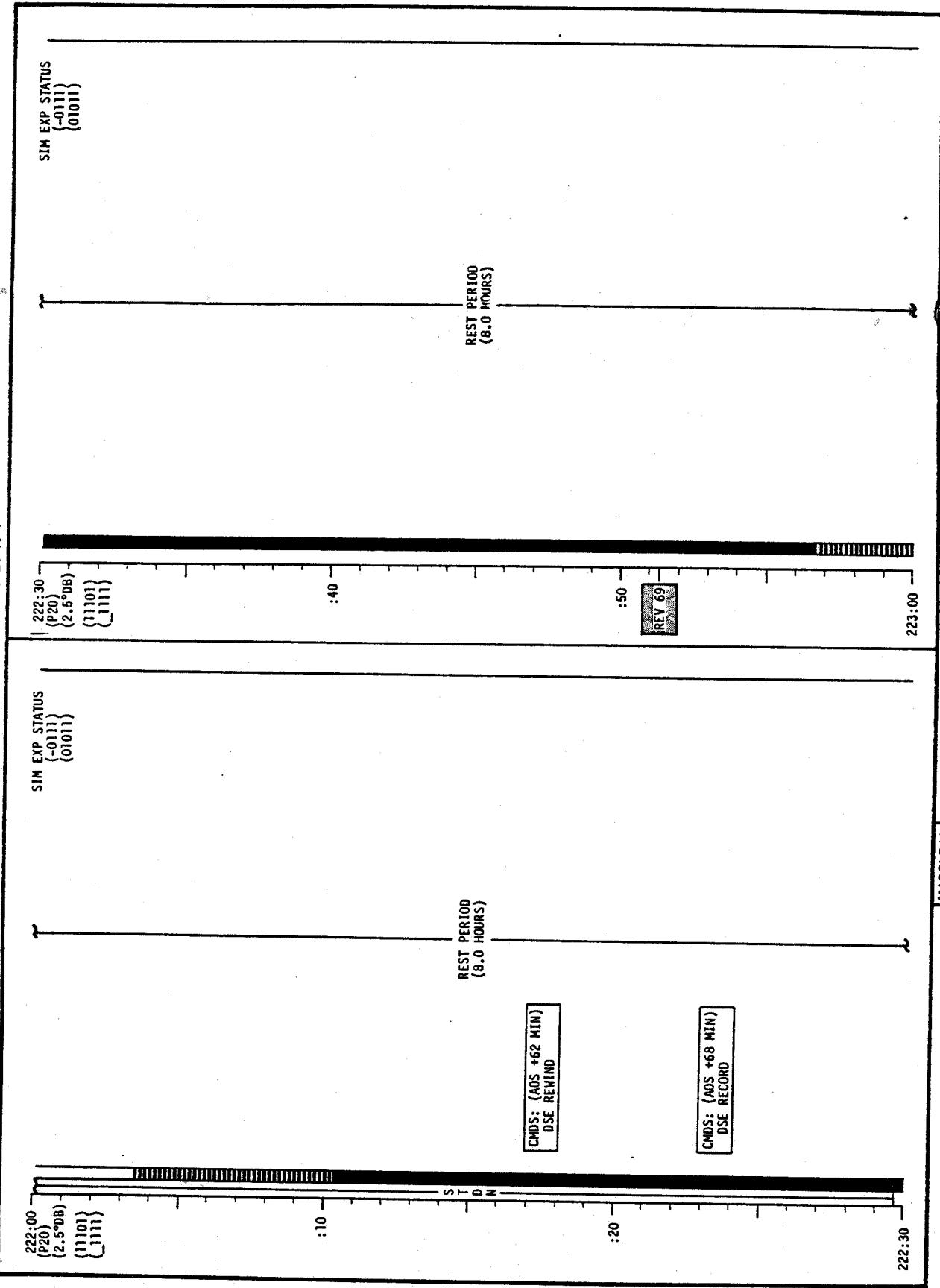
MISSION	EDITION	DATE	PAGE
APOLO 17	FINAL (12/6)	10/23/72	3-329

CSM FLIGHT PLAN

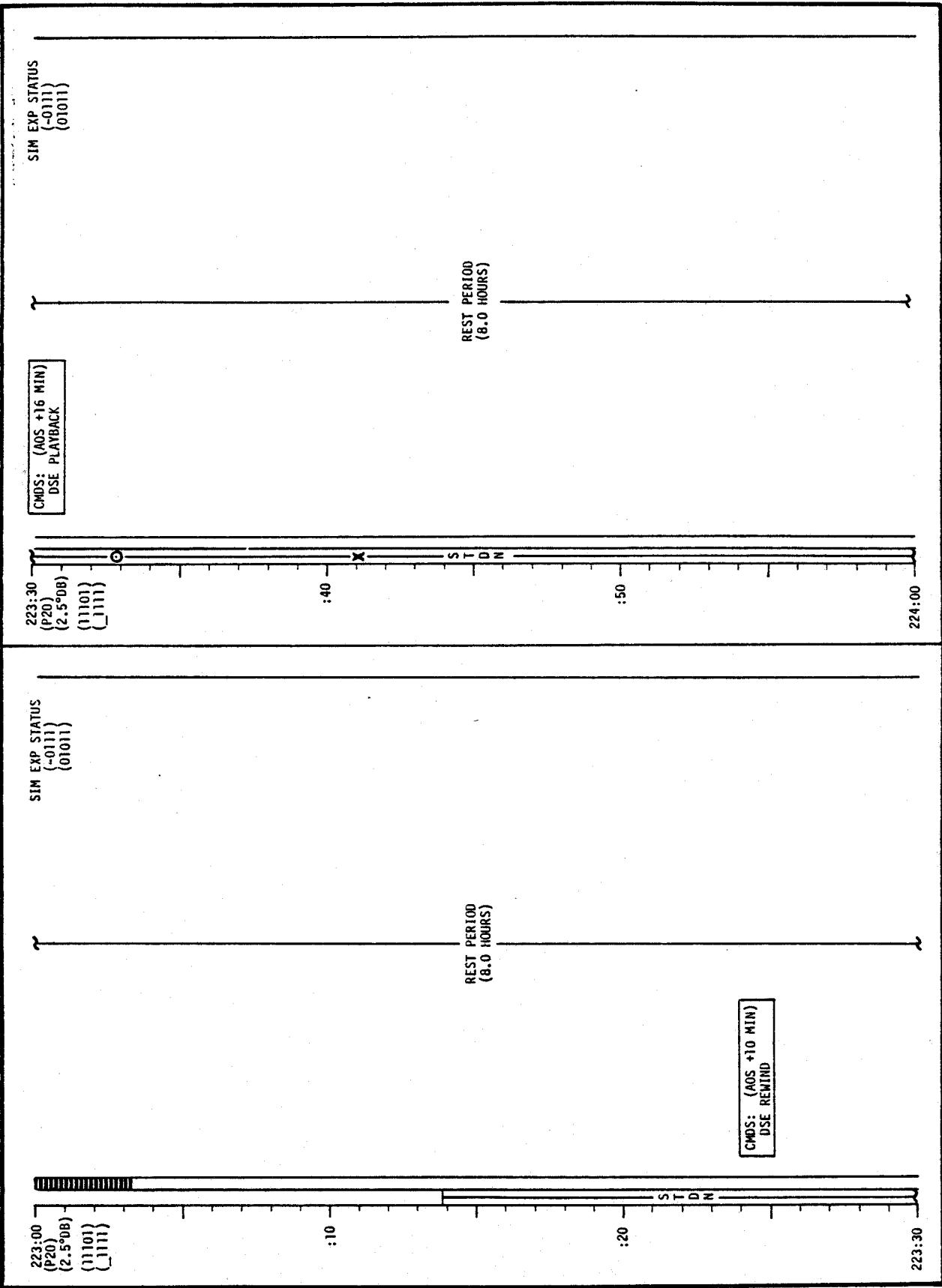


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-330

CSM FLIGHT PLAN

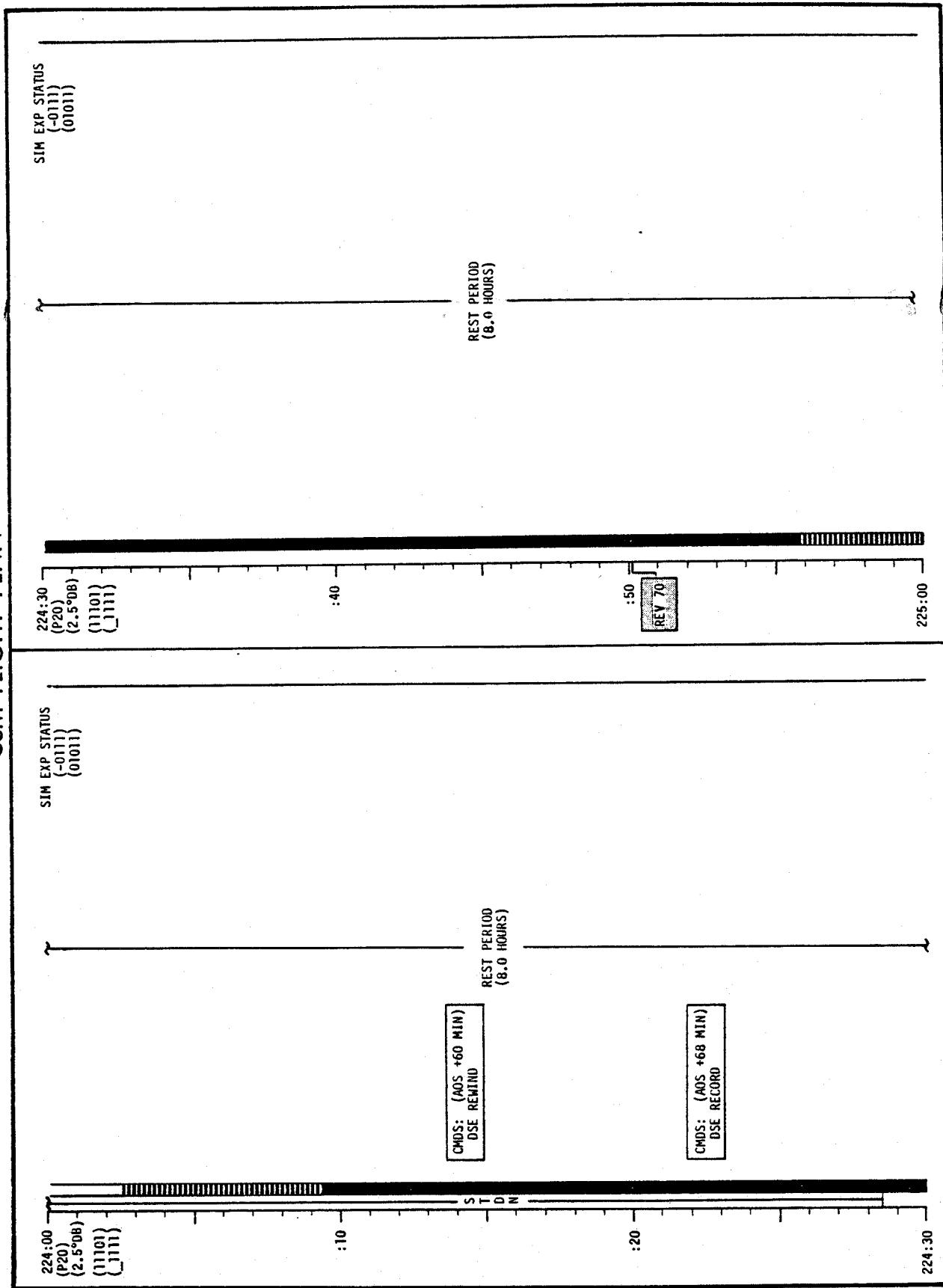


CSM FLIGHT PLAN



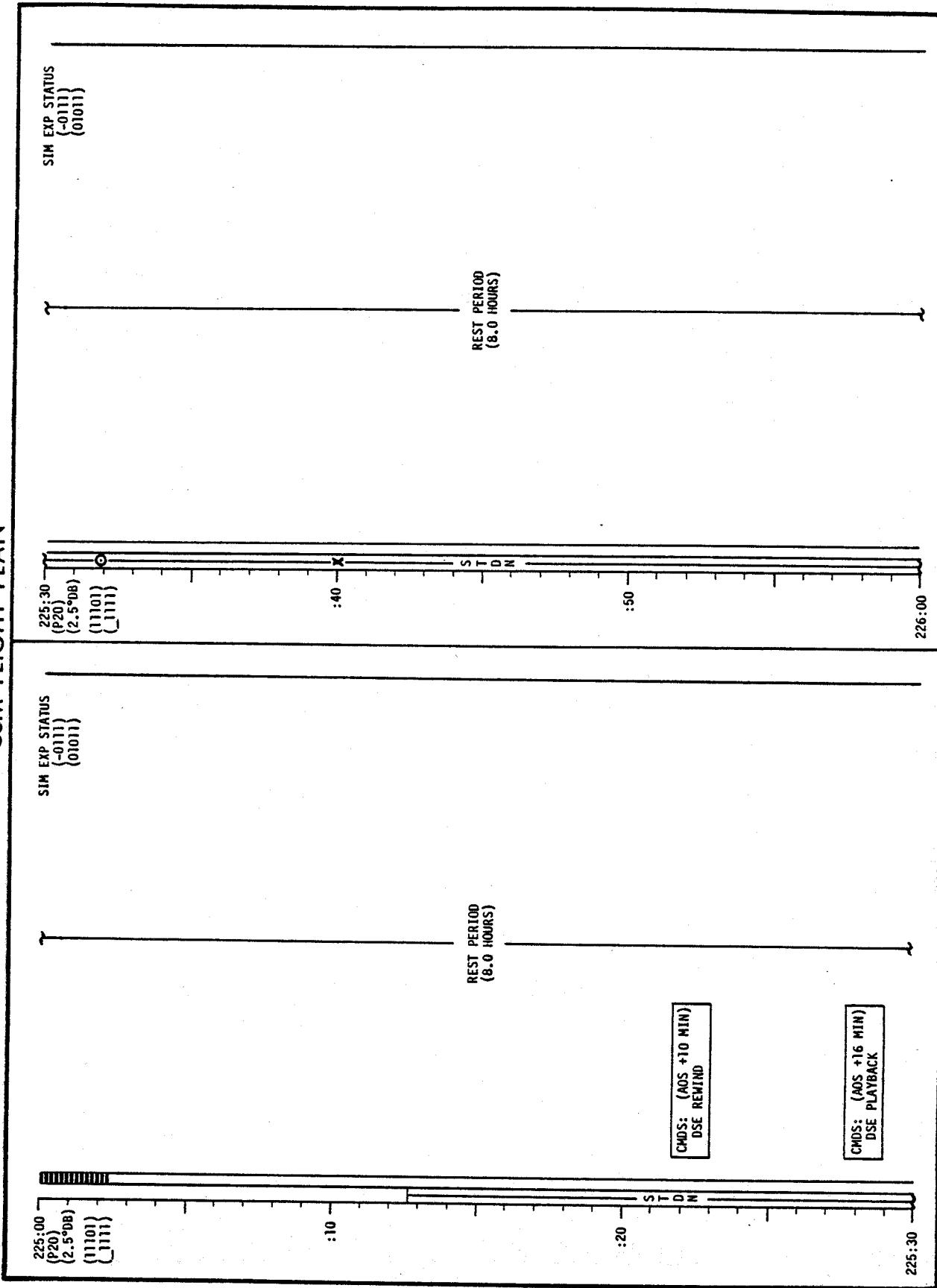
MISSION	EDITION	DATE	PAGE
Apollo 17	FINAL (12/6)	10/23/72	3-332

CSM FLIGHT PLAN



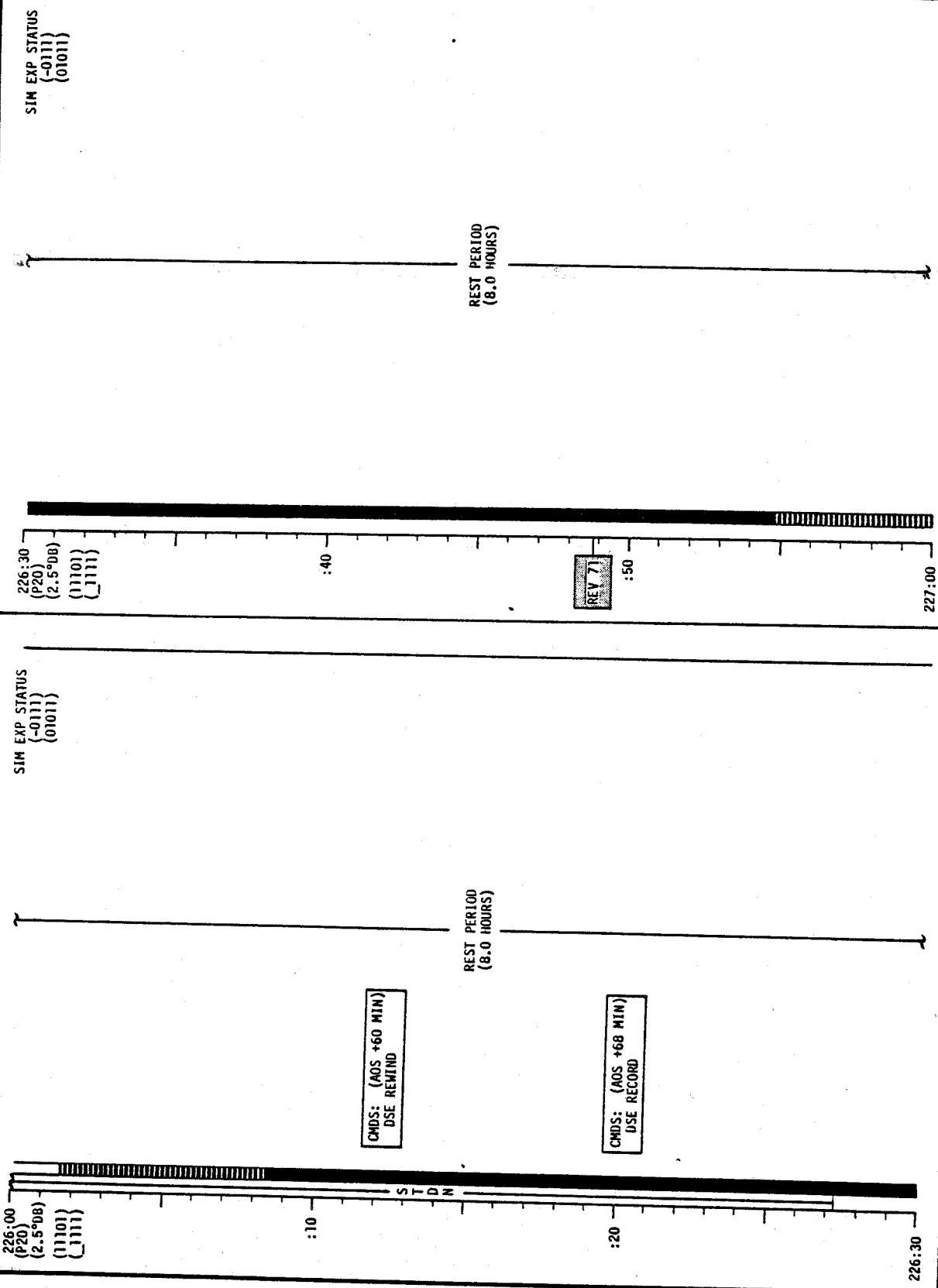
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-333

CSM FLIGHT PLAN



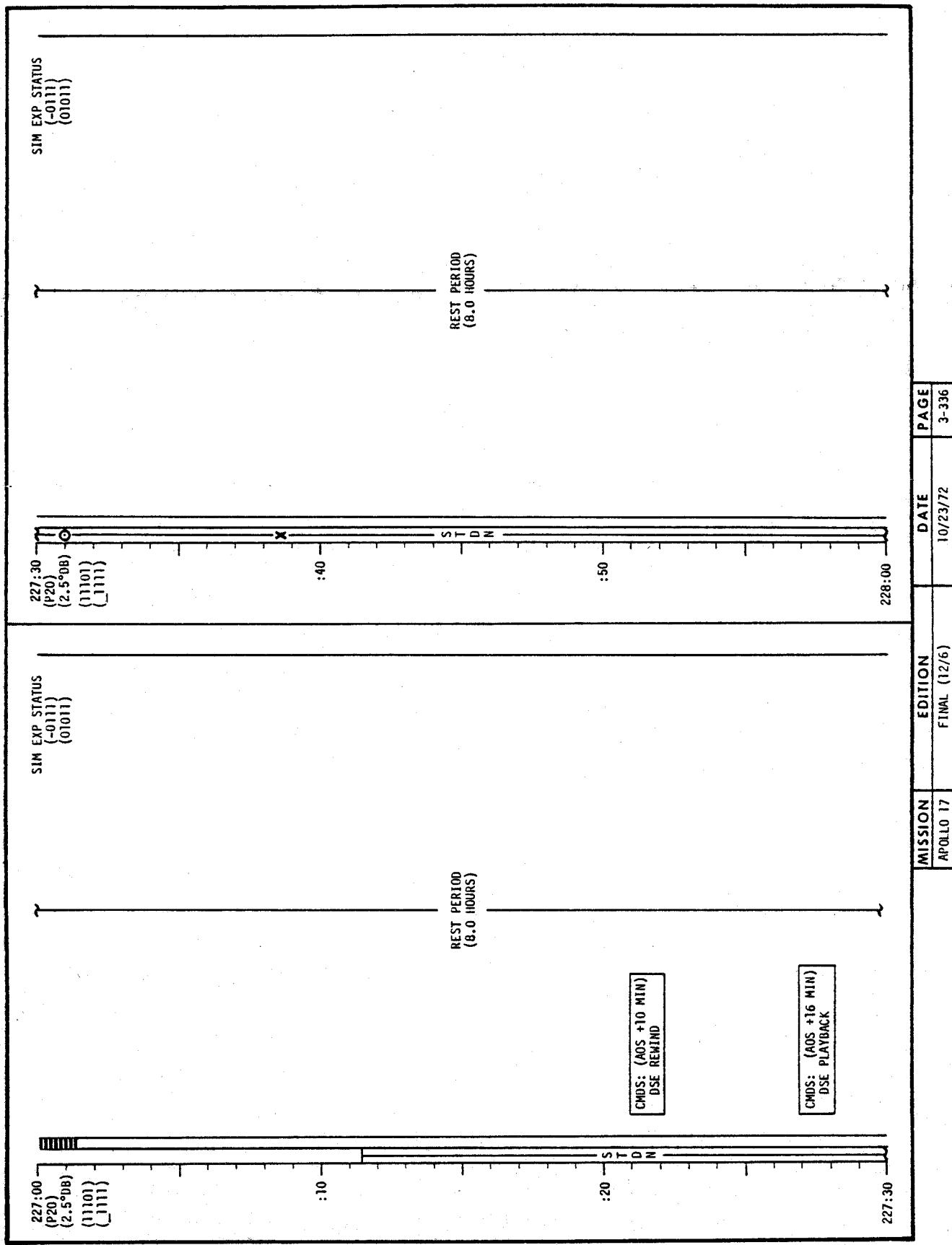
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-334

CSM FLIGHT PLAN



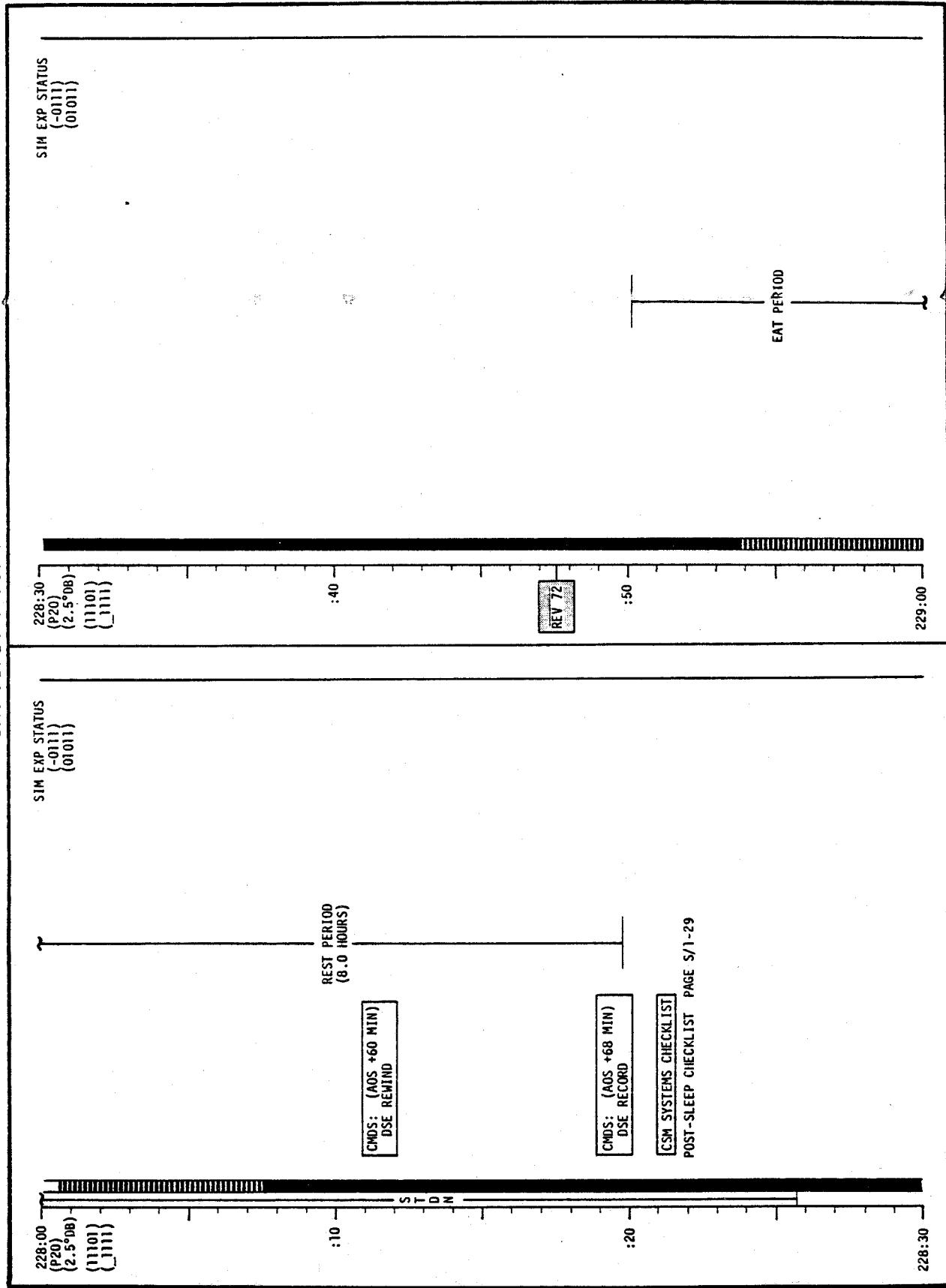
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-335

CSM FLIGHT PLAN

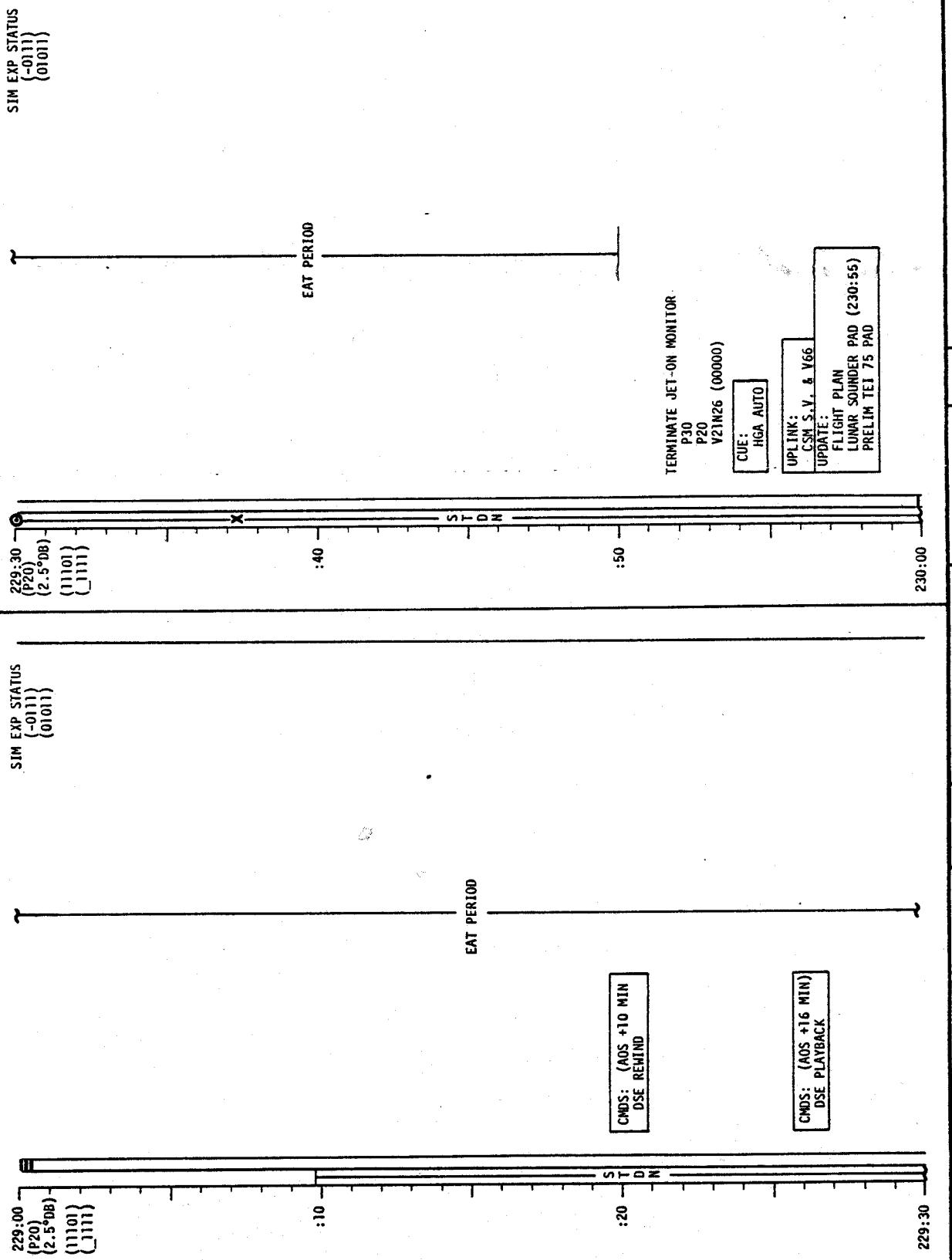


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-336

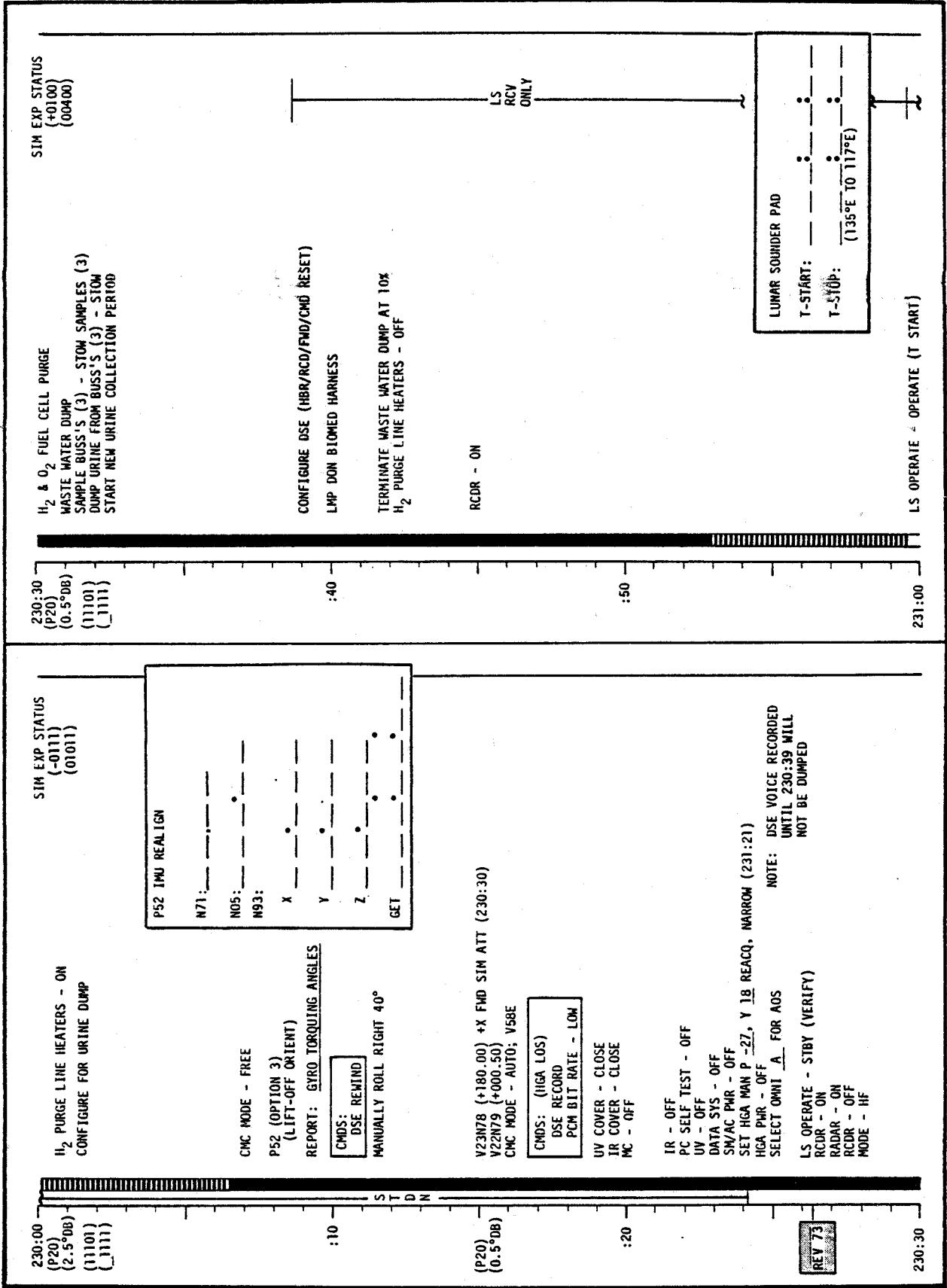
CSM FLIGHT PLAN



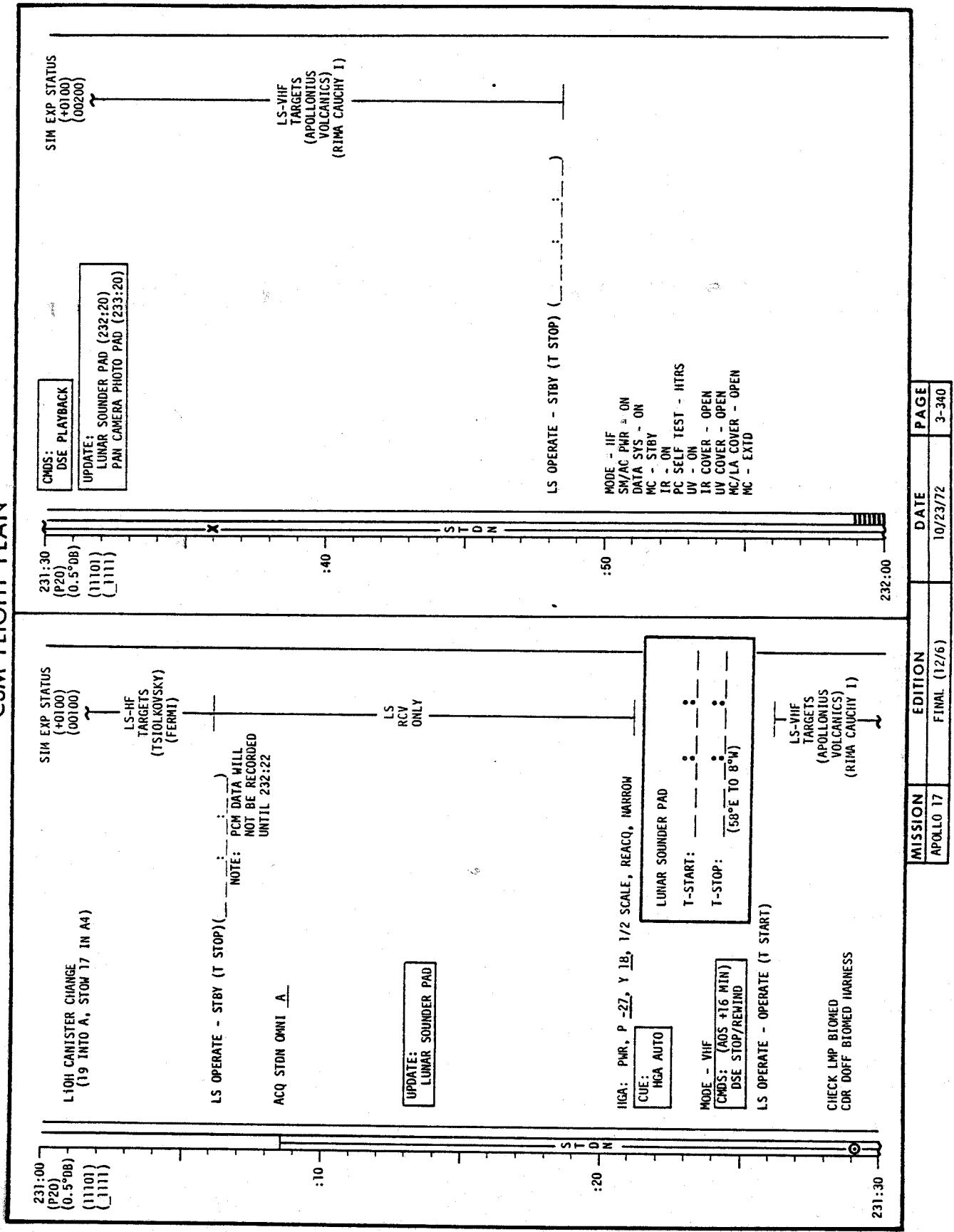
CSM FLIGHT PLAN



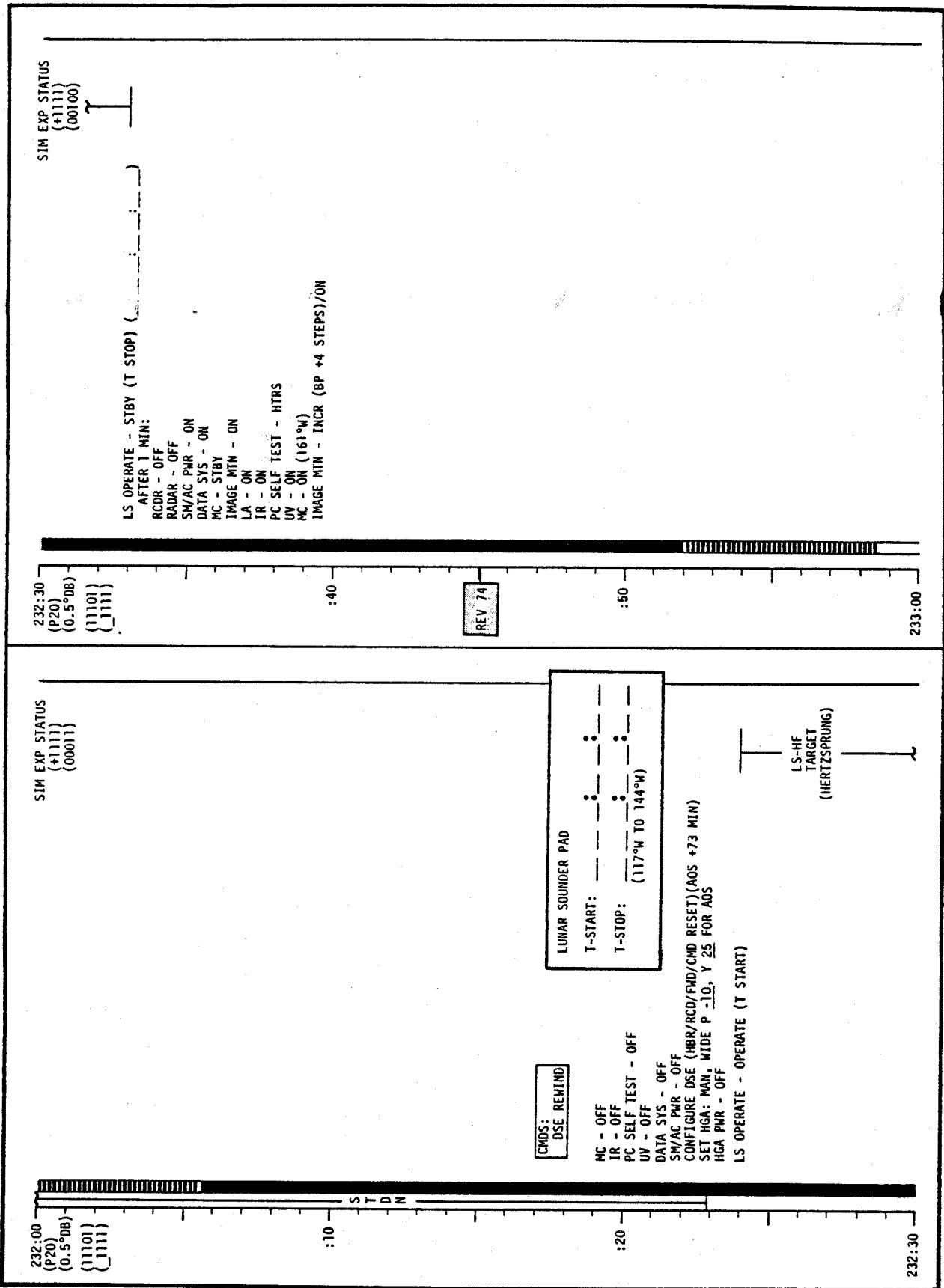
CSM FLIGHT PLAN



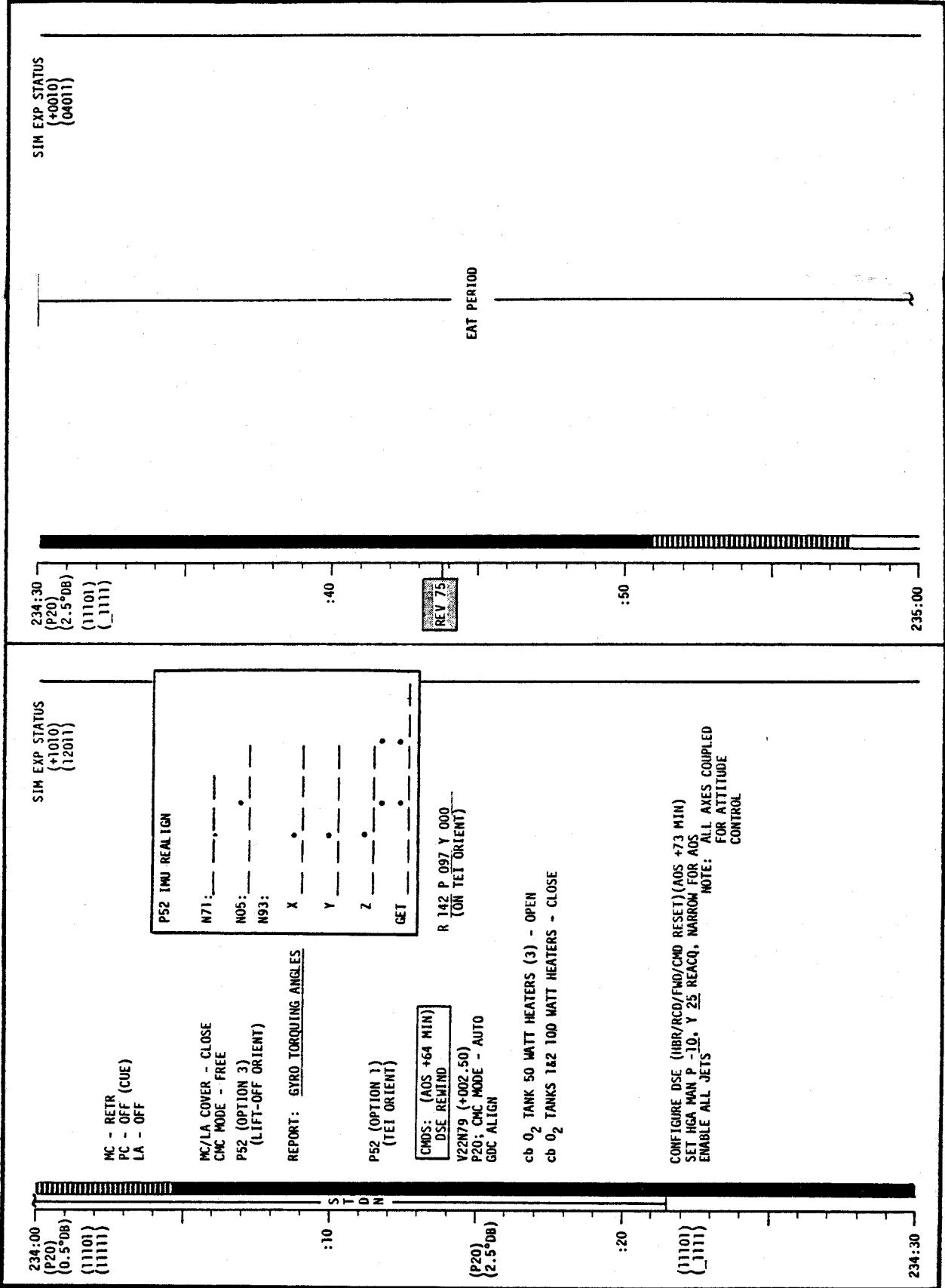
CSM FLIGHT PLAN



CSM FLIGHT PLAN



CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (17/6)	10/23/72	3-343

CSM FLIGHT PLAN

SIM EXP STATUS
(+0010)
(04011)

235:00
(P20)
(2.5° BB)
(11101)
(_1111)

EAT PERIOD

:10

S T D N
: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%BB)	UPLINK: CSM S. V. & V66 TEI 75 TGT LOAD	SIM EXP STATUS (+0010) (04011)	P30 MANEUVER																							
(11101) (_1111)	UPDATE: TEI 75 PAD (235:45) TEI 76 PAD MAP UPDATE REV 76 (236:50)	CSM SYSTEMS CHECKLIST																								
	WIPE EXCESS MOISTURE FROM TUNNEL CAMS 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	S T D N																									
50	MC - OFF WAIT 30 SEC MC - STBY IMAGE MTN - OFF PRE-SYS 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.																									
(11101) (_1111)	CMDIS: (HGA LOS) DSE REMIND PCM BIT RATE - LOW																									

	T	E	I	S	P	S	G	&	N	PURPOSE
SET STARS	+									WT N47
R ALIGN				0	0					P TRIM N48
P ALIGN					0	0				Y TRIM
Y ALIGN						+	0	0		HRS GETI N33
ULLAGE							+	0	0	MIN SEC
										ΔV X N81
										ΔV Y
										ΔV Z
HORIZON/WINDOW				X	X	X	X	X	X	R (180)
					X	X	X	X	X	P (000)
						X	X	X	X	Y (000)
							+			H A N44
										H p
										AVT
										BT
										AVC
										SXTS
										SFT
										TRN
OTHER										LAT N61
										LONG
										RTGO EMS
										V10
										GET 0.05G

CSM FLIGHT PLAN

SIM EXP STATUS
(*0010)
(31011)

236:00
{11101}
{_1111}

UPDATE:
GO/NO-GO FOR TEI

V48
{11102}
{01111}

{11102}
{01111}

:10 S

D

N

P40

CMDs:
DSE RECORD
PCM BIT RATE - HIGH
VERIFY DSE TAPE MOTION (HBR/RCD/FND/CMD RESET)
SET HGA MAN P 47, Y 250 AUTO, NARROW FOR AOS

:20

SXT STAR CHECK

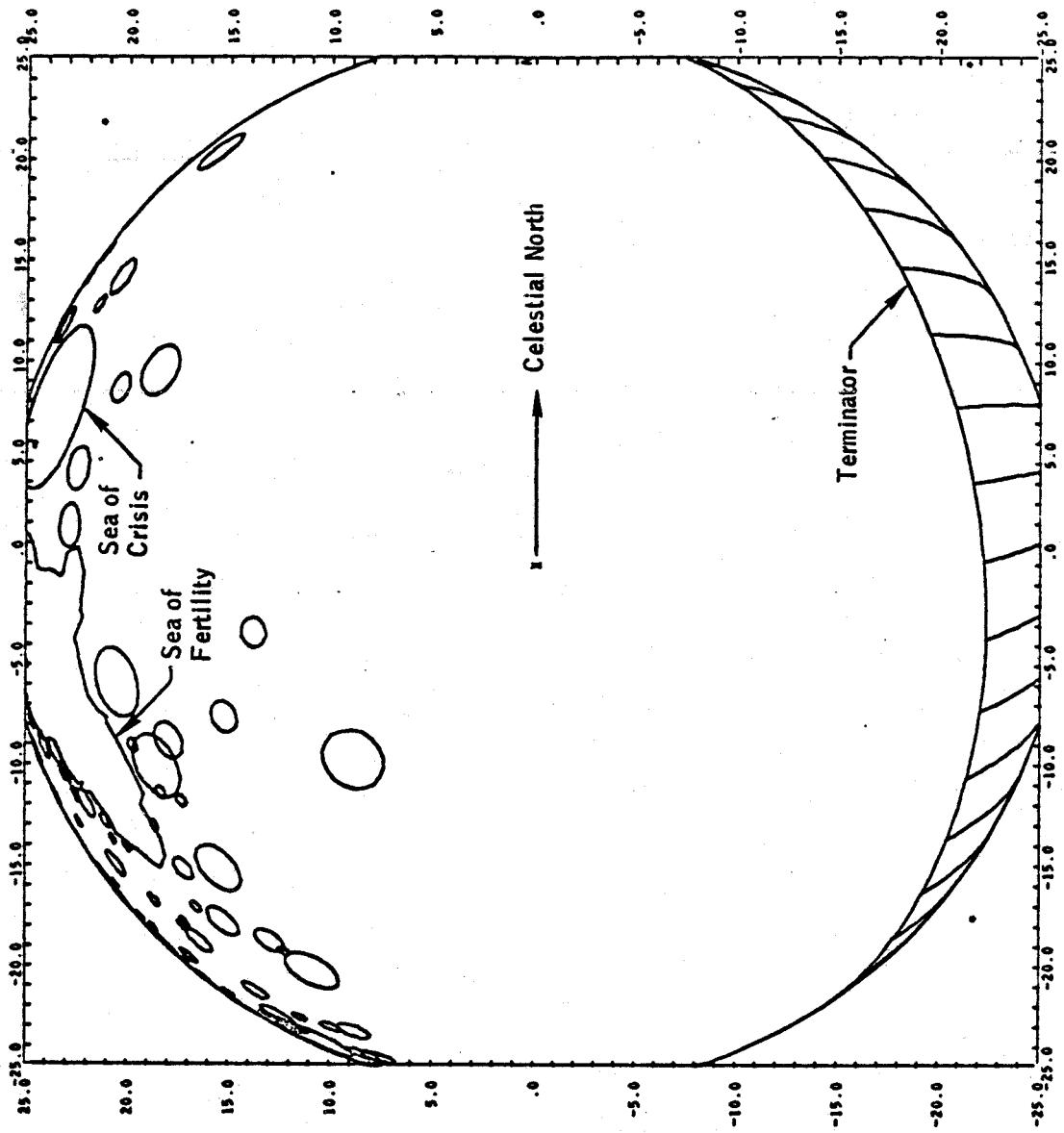
P40 (TRIM)

(P40)
(0.5°DB)

236:30

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-346

Longitude = 96.24° Latitude = -13.32° Radius = 2121.73 n. mi.



GET=237:10
TEI cutoff + 30 minutes.

APOLLO 17

10/23/72

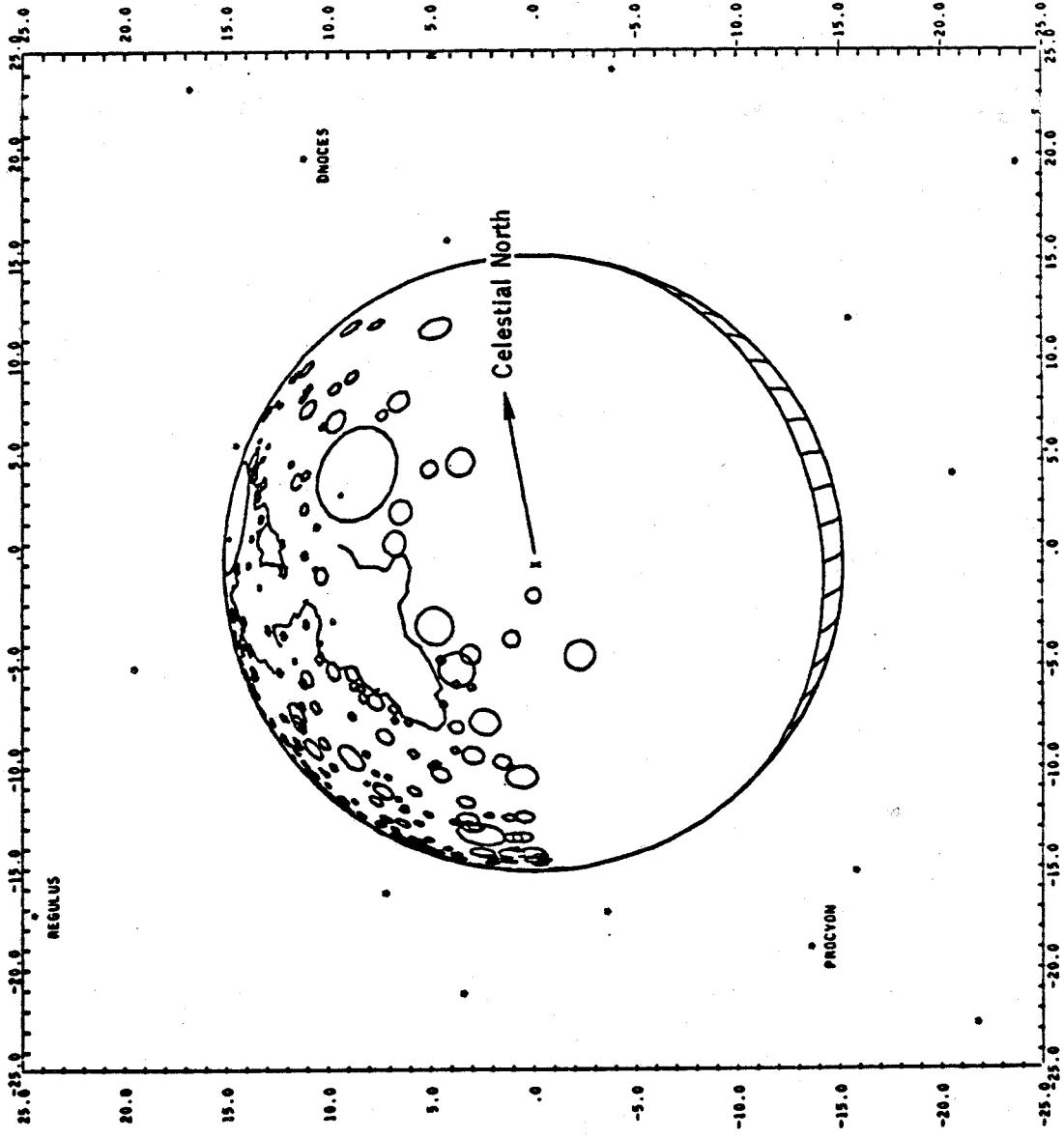
FINAL (12/6)

3-348

Longitude = 78.28°

Latitude = -6.51°

Radius = 3587.53 n. mi.



GET=237:40

TEL cutoff + 1 hour.

P27 UPDATE

PURP	TF1	BO	MIN	V	7	1	V	INDEX	INDEX	V	INDEX	INDEX	V
GET	236.	43	•	13.3	•	•	•	•	•	•	•	•	•
304	01	INDEX	2	1	INDEX								
305	02	0	1	5	0	1							
306	03	0	0	0	0	2							
307	04	0	0	2	4	7							
310	05	1	7	3	1	4							
311	06	0	0	2	2	6							
312	07	2	7	6	0	1							
313	10	7	7	7	3	6							
314	11	4	7	2	2	3							
315	12	1	7	3	5	4							
316	13	0	6	7	6	5							
317	14	5	7	5	7	1							
320	15	4	2	4	1	5							
321	16	6	3	7	6	6							
322	17	4	5	0	2	0							
323	20	1	2	1	2	1							
324	21	1	1	3	2	0							
325	22												
326	23												
327	24												
N34	HRS	X	X										
	MIN	X	X	X									
	NAV CHECK SEC	X	X										
N43	LAT									0			
	LONG												
	ALT	+ 0								+ 0			

APOLLO 17

FINAL (12/6) 10/23/72

3-350

FLIGHT PLAN

MCC-H

1753 CST

PC - STBY AT (tb - bp)

V48 (11101)(01111)

10:

CMD
DOSE REWIND

•20

UPDATE FLIGHT PLAN

CMD DSE PLAYBACK

UPLINK DESIRED ORIENT
(PTC)

COPY CSM S.V. FROM DSKY

UV OPTICAL AXIS
 POINTED AT RA 4:35,
 DEC +30° WITH CSM
 +X AXIS AT RA 9:48:20,
 DEC 28°51'51"
 LY MIN
 IR

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

FLIGHT PLAN

1853 CST

MCC-H

238:00
(01101)

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

:10

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

REPORT: GYRO TORQUING ANGLES

P52 (OPTION 1)
(PTC ORIENT)
GDC ALIGN
SC CONT - CMC
BMAG (3) - RATE 2
CMP DON BIOMED HARNESS

:20

S
T
D
N

238:30

:40

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

:50

CMD
DSE REWIND

239:00

NOTES

SIM EXP STATUS
(*1011)
(04011)

UV
LY α MIN
IR

UV

LY α MIN

IR

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

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

CMD
DSE RECORD

FLIGHT PLAN

MCC.H

1953 CST

239:00
[(11101)
 (01111)]

:10

:20

239:30

:40

240:00

S T D N

CMD
DSE REWIND

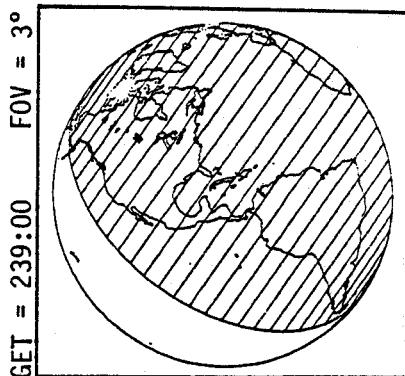
V49 MNVR TO UV STELLAR TGT ATT (MOON) (240:00)

(071,355,320) HGA: P -46, Y 347

NOTES

SIM EXP STATUS
(*1011)
(0401)
EARTH DISTANCE
~190,239 NM

UV OPTICAL AXIS
POINTED AT EARTH
WITH +X AXIS AT
RA 9:31, DEC -14°



UV
EARTH

IR

EXERCISE PERIOD

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

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2153 CST

(11101)
 (01111)

:10

:20

241:30

:40

242:00

S T D N

:50

NOTES

SIM EXP STATUS
(*0001)
(01001)

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

UV/PTC
GALACTIC SCAN

EAT PERIOD

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

FLIGHT PLAN

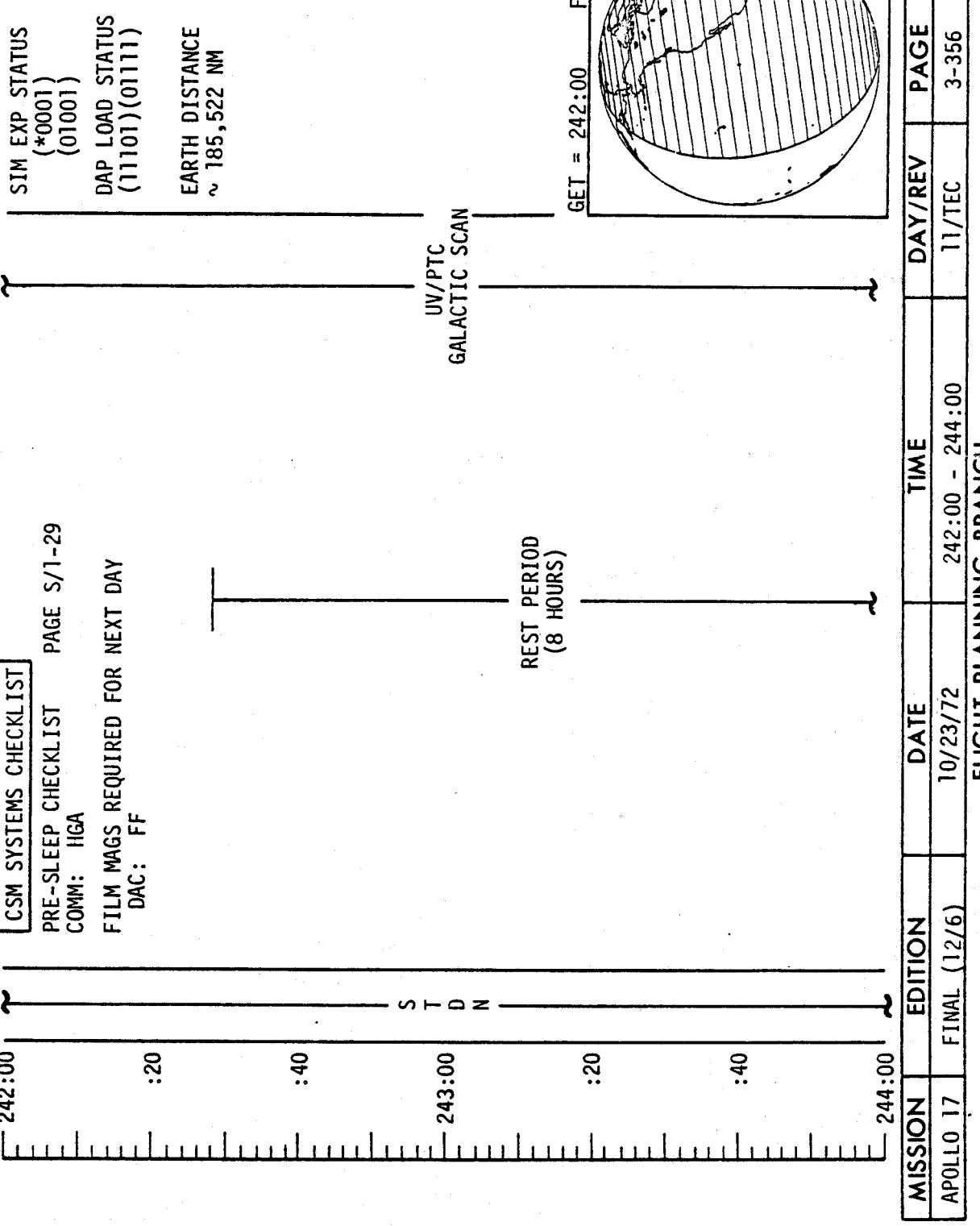
2253 CST

CSM SYSTEMS CHECKLIST

PRE-SLEEP CHECKLIST PAGE S/1-29

COMM: HGA

FILM MAGS REQUIRED FOR NEXT DAY
DAC: FF



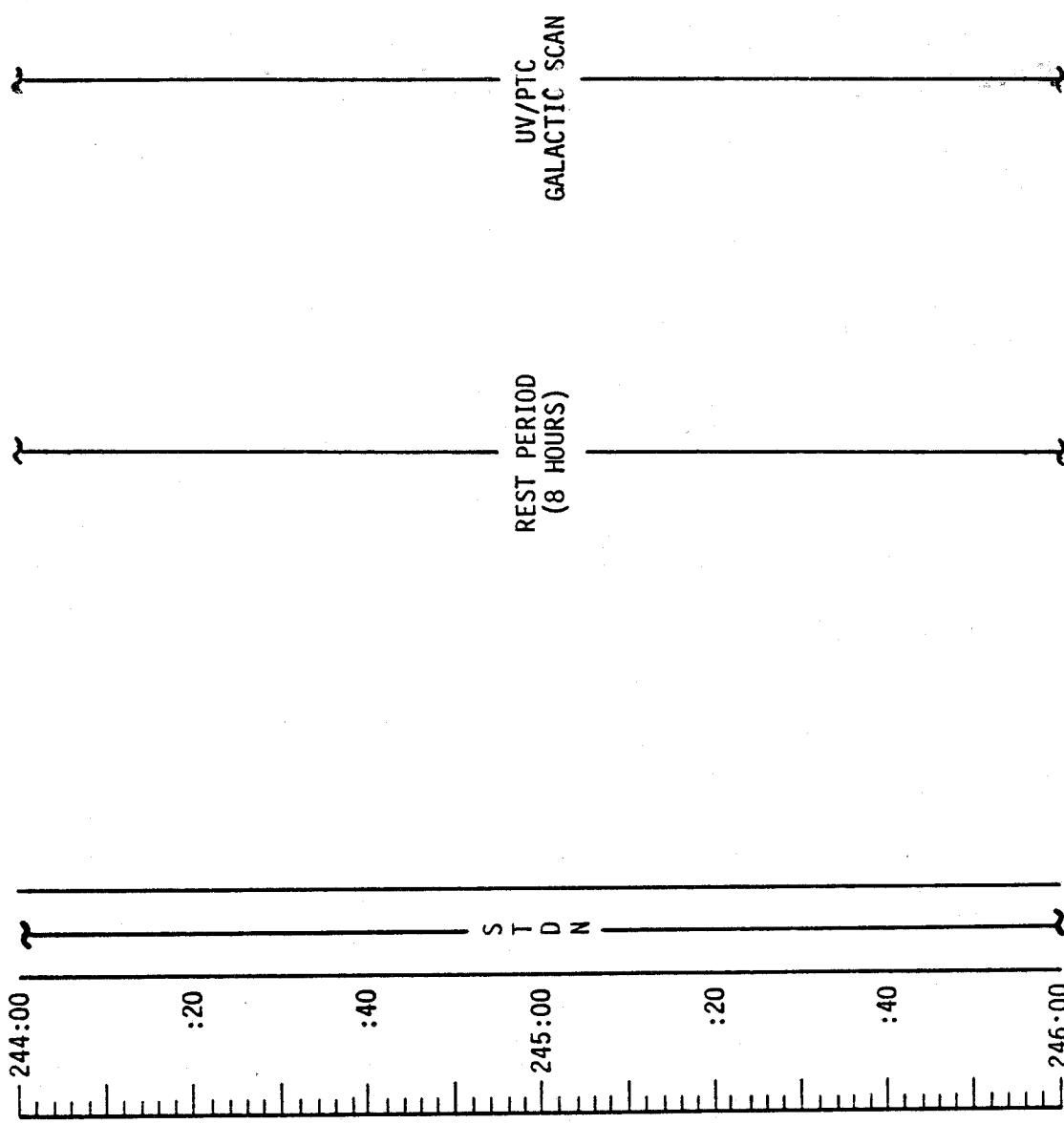
MCC-H

FLIGHT PLAN

0053 CST

NOTES

SIM EXP STATUS
(*0001)
(01001)
DAP LOAD STATUS
(11101)(01111)



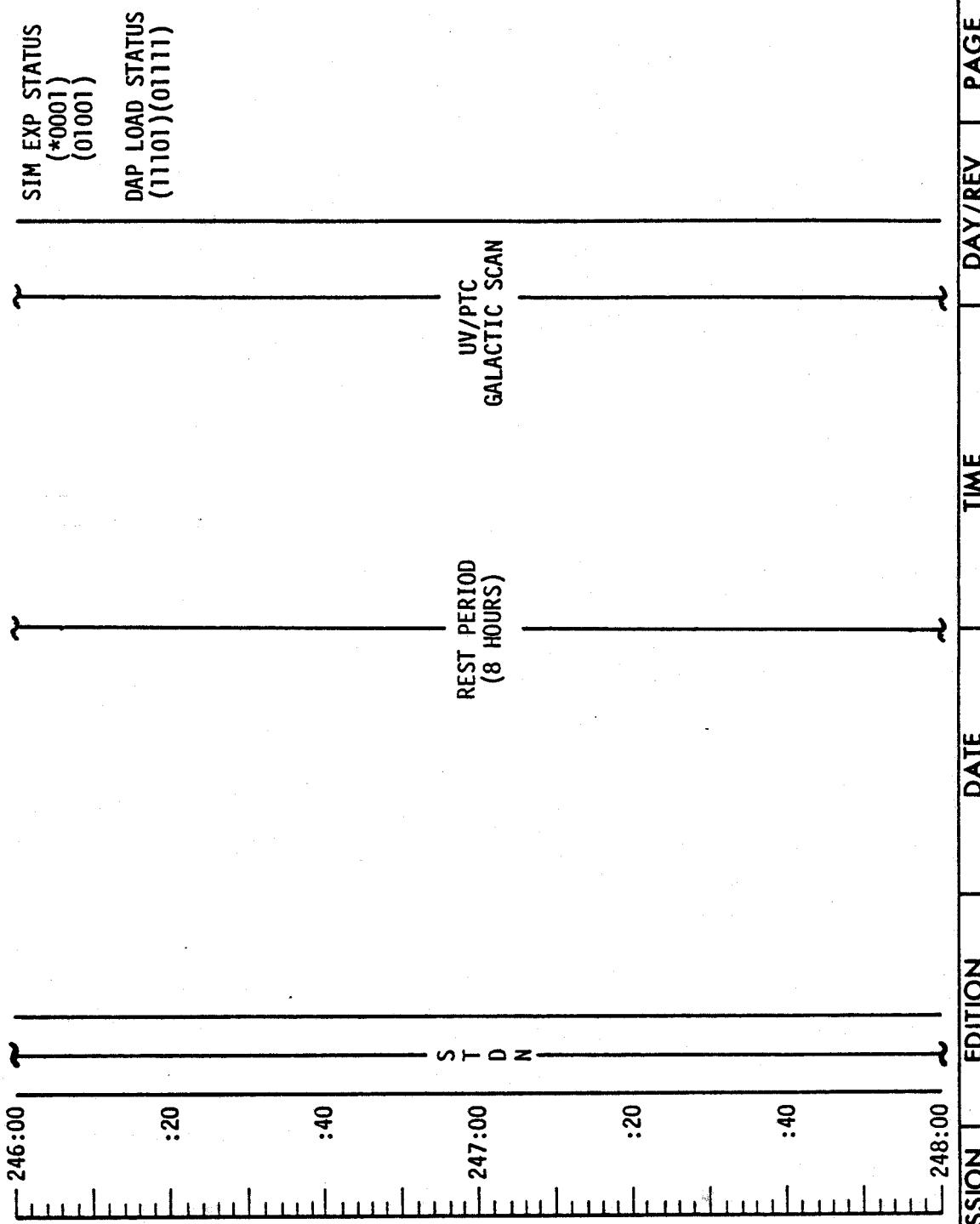
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	244:00 - 246:00	11/TEC	3-357

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0253 CST



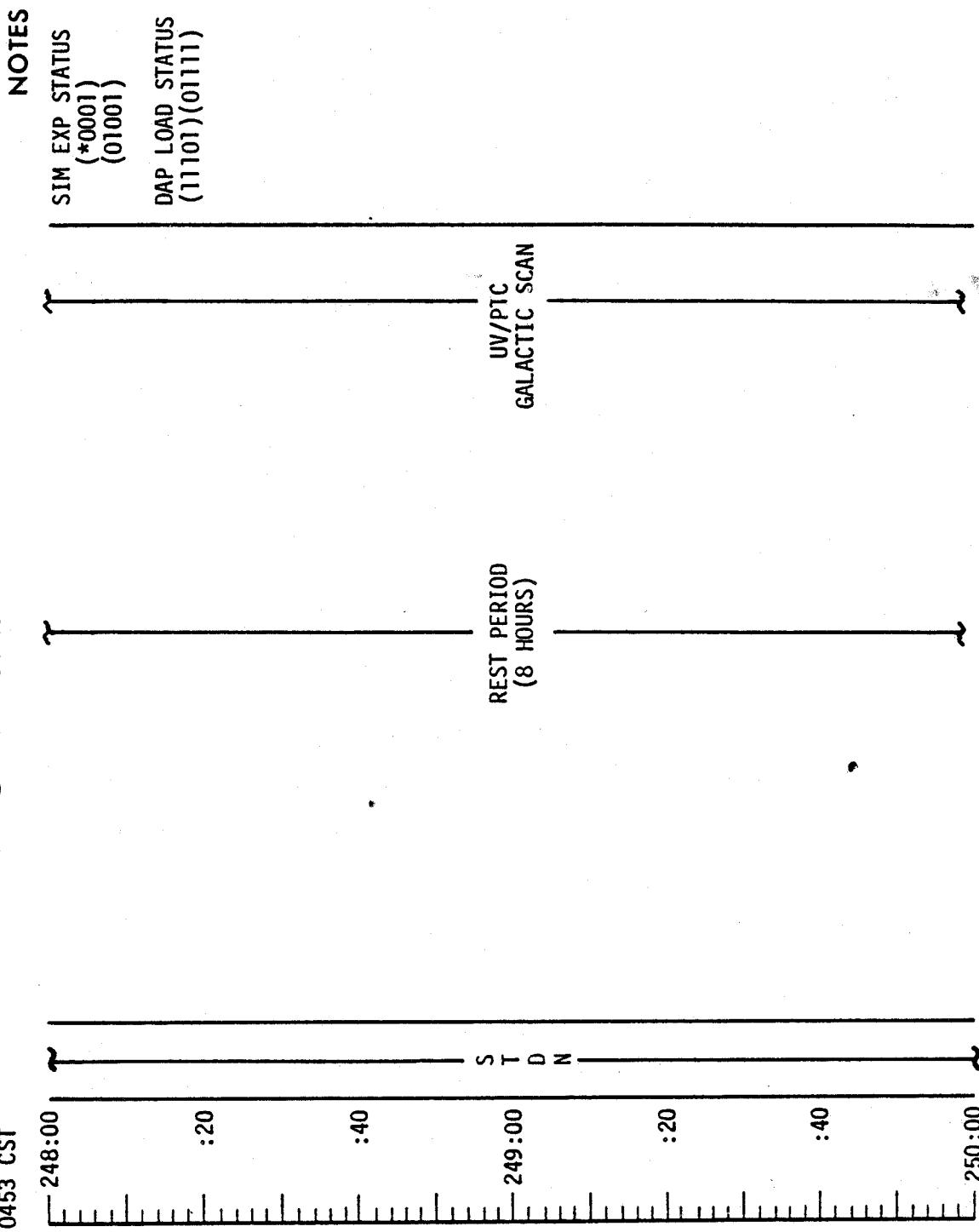
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	246:00 - 248:00	11/TEC	3-358

FLIGHT PLANNING BRANCH

MCC-H

0453 CST

FLIGHT PLAN



NOTES

SIM EXP STATUS
(*0001)
(01001)

DAP LOAD STATUS
(11101)(01111)

UV/PIC
GALACTIC SCAN

REST PERIOD
(8 HOURS)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	248:00 - 250:00	11/TEC	3-359

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0653 CST

250:00

:10

:20

250:30

S T D N

:40

:50

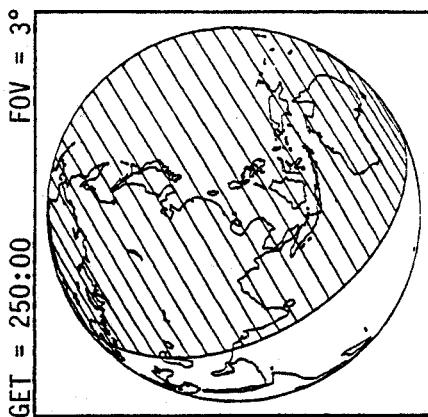
251:00

NOTES

SIM EXP STATUS
(*0001)
(01001)

DAP LOAD STATUS
(11101)(01111)

EARTH DISTANCE
~ 172,669 NM



UV/PTC
GALACTIC SCAN

CSM SYSTEMS CHECKLIST
POST-SLEEP CHECKLIST PAGE S/1-29

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

251:00
((11101)
(01111))

:10

:20

251:30

S T D N

:40

:50

252:00

UV/PTC
GALACTIC SCAN

EAT PERIOD

NOTES

SIM EXP STATUS
(*0001)
(01001)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	251:00 - 252:00	12/TEC	3-361

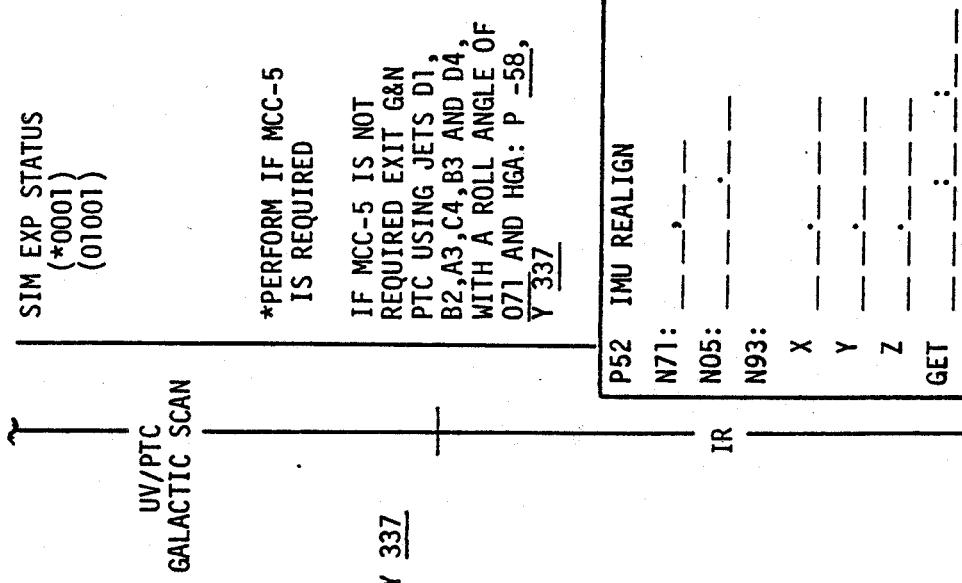
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

UPDATE GO/NO-GO FOR MCC-5 MCC-5 MNVR RAD (IF REQUIRED)	252:00 (11101) (01111)	IR - ON P52 (OPTION 3) (PTC ORIENT)
CONSUMABLES STATUS FLIGHT PLAN SIM EXP STATUS	:10	REPORT: <u>GYRO TORQUING ANGLES</u> GDC ALIGN
UPLINK CSM S.V. & V66 MCC-5 TGT LOAD (IF REQUIRED)	:20	LIOH CANISTER CHANGE (21 INTO A, STOW 19 IN A4)
		*UV COVER - CLOSE *EXIT G&N PTC AT ROLL ANGLE <u>071</u> , HGA P <u>-58</u> , Y <u>337</u> (COUPLED JETS) PAGE 6/8-3
		IR COVER - OPEN CONFIGURE FOR URINE DUMP
		*P30 EXTERNAL AV *V49 MNVR TO PAD BURN ATTITUDE
	252:30	S D N
		:40
		:50
		253:00

NOTES



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

APOLLO 17

FINAL (12/6)

10/23/72

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3-363

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_{qz} 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

— 253:00
— (11101)
— (01111)

二

20

253:30

四
•

٢٥

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

TERMINATE WASTE WATER DUMP AT 10% LEVEL

*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

NOTES

SIM EXP STATUS
(*0010)
(01011)

*PERFORM IF MCC-5
IS REQUIRED

四

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

MCC-5
*V66 SET CSM S.V. INTO LM S.V.

OX	FUEL	UNBAL
X	X	X
X	X	X
X	X	X

BT : NUM ZERO
ΔVT : NOM ZERO
ULLAGE : NOM ZERO

MCC-5
*V66 SET CSM S.V. INTO LM S.
*REPORT: BURN STATUS
*LOGIC PWR (2) - DPLY/RETR

CSM EXP/EVA CHECKLIST

TEI +17 HR

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

254:00
{1110}
{0111}

:10

:20

254:30

S T D N

:40

TV AND DAC PREP
MAG (FF)

:50

255:00

NOTES

SIM EXP STATUS
{*0010}
{01011}

IR

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

SIM EXP STATUS
(*0010)
(01011)

IR

255:00
|
(11101)
(01111)

:10

:20

255:30

:40

:50

256:00

S T D N

EVA EQUIPMENT PREP

PGA DONNING

NOTES

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	255:00 - 256:00	12/TEC	3-367

FLIGHT PLANNING BRANCH

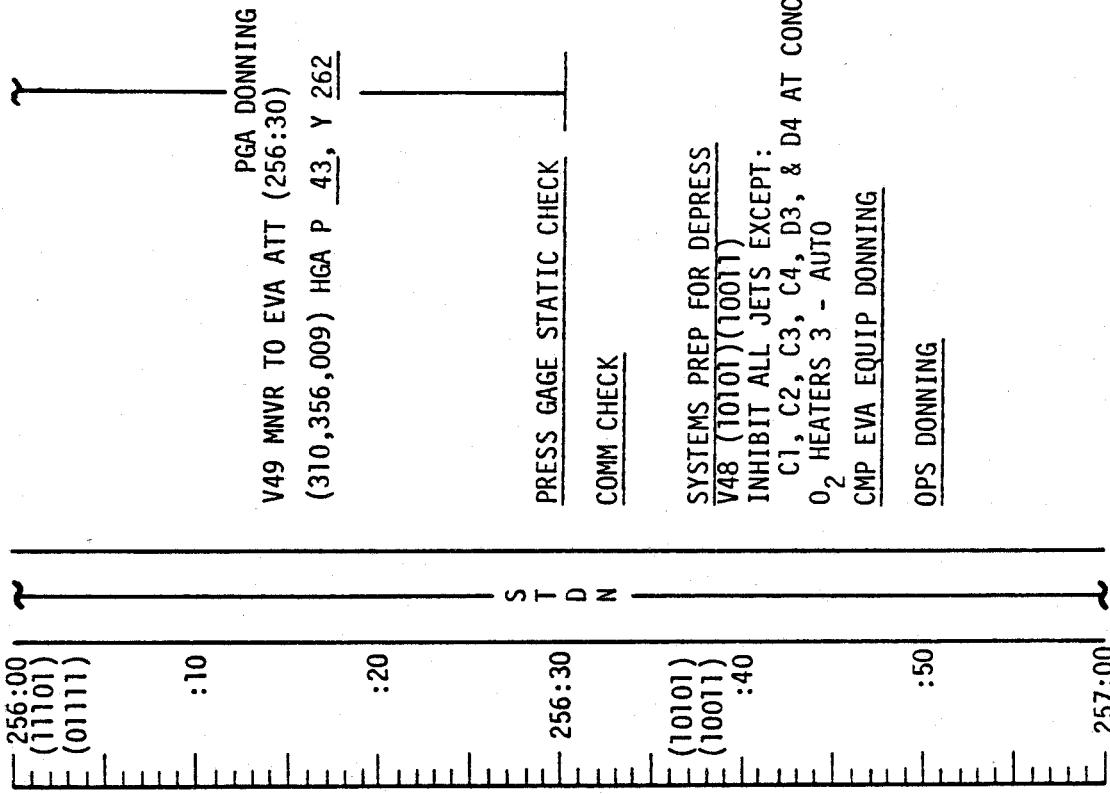
FLIGHT PLAN

1253 CST

MCC-H

NOTES

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

257:00
T
((10101)
((10011))

:10
CDR/LMP INTEGRITY CHECK

UPDATE
CONFIRM GO
FOR DEPRESS

CMP HELMET/GLOVE DONNING
EVA WARNING TONE CHECK
CMP INTEGRITY CHECK

CABIN DEPRESS
607/NO-GO FOR CABIN DEPRESS
S-BD AUX TV - TV
HATCH OPENING

EVA OPERATIONS
CMP EGRESS

INSTALL TV/DAC, ADJUST

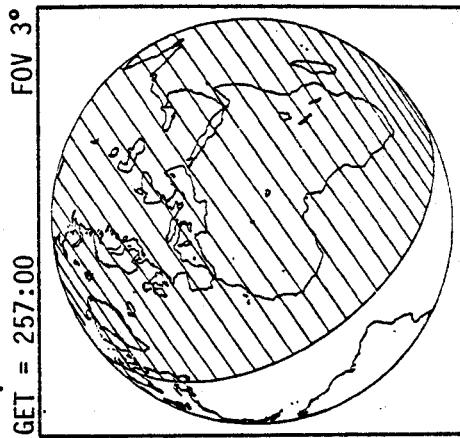
RETRIEVE LUNAR SOUNDER FILM CASSETTE

RETRIEVE PAN CAMERA CASSETTE

258:00

NOTES

SIM EXP STATUS
(*0000)
(00000)
EARTH DISTANCE
~ 160,372 NM



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

E {10101}
(10011)

SIM EXP STATUS
(*0000)
{00000}

REST
RETRIEVE MAPPING CAMERA CASSETTE

:10

REST
REMOVE TV/DAC & INGRESS

:20

INGRESS
CM POST EVA

258:30

HATCH CLOSING
CABIN REPRESS

:40

POST EVA PROCEDURES

:50

CLEANUP PROCEDURES

DOFF PGA'S
CDR VERIFY BIOMED OPERATION
CMP & LMP DOFF BIOMED HARNESS
STOW EQUIPMENT

259:00

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

NOTES

MCC-H

FLIGHT PLAN

259:00

{10101}
{01111}

:10

{11101}
{01111}

:20

V48 (11101)(01111)
 SIM EXP PREP
 AUTO RCS SELECT - OFF
 EXCEPT: D1, B2, A3, C4, B3, D4

S

T

D

N

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

:40

MANUALLY ROLL LEFT 40° TO R 270°
 V49 MNVR TO UV STELLAR TGT ATT (COMA CLUSTER) (260:00)

:50

(206,161,301) OMNI: A
 O_2 HEATERS 3 - OFF

CONTINUE POST EVA

NOTES

SIM EXP STATUS
(*0000)
{00000}CMD
DSE RECORD

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	259:00 - 260:00	12/TEC	3-371

FLIGHT PLANNING BRANCH

FLIGHT PLAN

1653 CST

MCC-H

NOTES
ON

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 $\overline{+X}$ AXIS AT
RA 16:37:00, DEC
 $-12^{\circ} 24'$

UV COMA CLUSTER

8

EAT PERIOD

:20

260 : 30

40

50

261 : 00

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	260:00 - 261:00	12/TEC	3-372

FLIGHT PLAN

MCC-H

1753 CST

CMD
DSE REWIND

261:00
(11101)
(01111)

CONTINUE POST EVA
MANUALLY ROLL RIGHT 40° TO R 246
V49 MNVR TO UV STELLAR TGT ATT (CAL LUNAR GRAZING 60x14)
(261:20)

:10

:20

CMD
~~DSE~~ PLAYBACK

261:30 S T D N

:40 :50

262:00

NOTES

SIM EXP STATUS
(*0011)
(00011)

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

(1110)	V49 MNVR TO UV STELLAR TGT ATT (CAL LUNAR GRAZING 60 X 60)	SIM EXP STATUS
(0111)	(262:15)	(*0011)
	(035,228,298)	(00011)

HGA: P-8, Y 336

262:00

:10

T

(262:15)

(035,228,298)

:20

T

UV STELLAR CAL

262:30

S

T

D

N

:40

T

CREW EXERCISE PERIOD

:50

T

263:00

T

NOTES

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	262:00 - 263:00	12/TEC	3-374

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H 1953 CST

263:00
E{11101}
E{01111}

10

卷之三

UPLINK CSM S.V. & V66

NOTES

V49 MNVR TO UV STELLAR TGT ATT (α ERIDANII) (263:15)
(014.192,3333) HGA P -5, Y 296

卷之三

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

D1	B1
D4	W11
	RATE 0
	B2 & I
(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 S

UV OPTICAL AXIS
POINTED AT RA
01:38:33.0, DEC
-58°10'28",
WITH CSM + X
AXIS AT RA 19:00,
DEC -33°

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	263:00 - 264:00	12/TEC	3-375

FLIGHT PLAN

2053 CST

MCC-H

264:00
T
(11101)
(01111)

:10

:20

S
LiOH CANISTER CHANGE
T (22 INTO B, STOW 20 IN A4)
D
N

264:30

:40

:50

265:00
T
REPORT: GYRO TORQUING ANGLES
GDC ALIGN

NOTES

T | SIM EXP STATUS
| (*0001)
| (00001)

DURING UV/PTC
GALACTIC SCAN THE
CSM +X AXIS WILL
BE POINTED AT RA
00:55, DEC +08°

UV/PTC
α ERI, α GRU

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

UPDATE
FLIGHT PLAN

NOTES

SIM EXP STATUS
(*0001)
(00001)

265:00
[1101]
(0111) 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

265:00
[1101]
(0111) :10

:20

265:30

:40

:50

266:00

DURING UV/PTC
GALACTIC SCAN
THE CSM +X AXIS
WILL BE POINTED
AT RA 20:20, DEC
+88°

UV/PTC
GALACTIC SCAN

EAT PERIOD

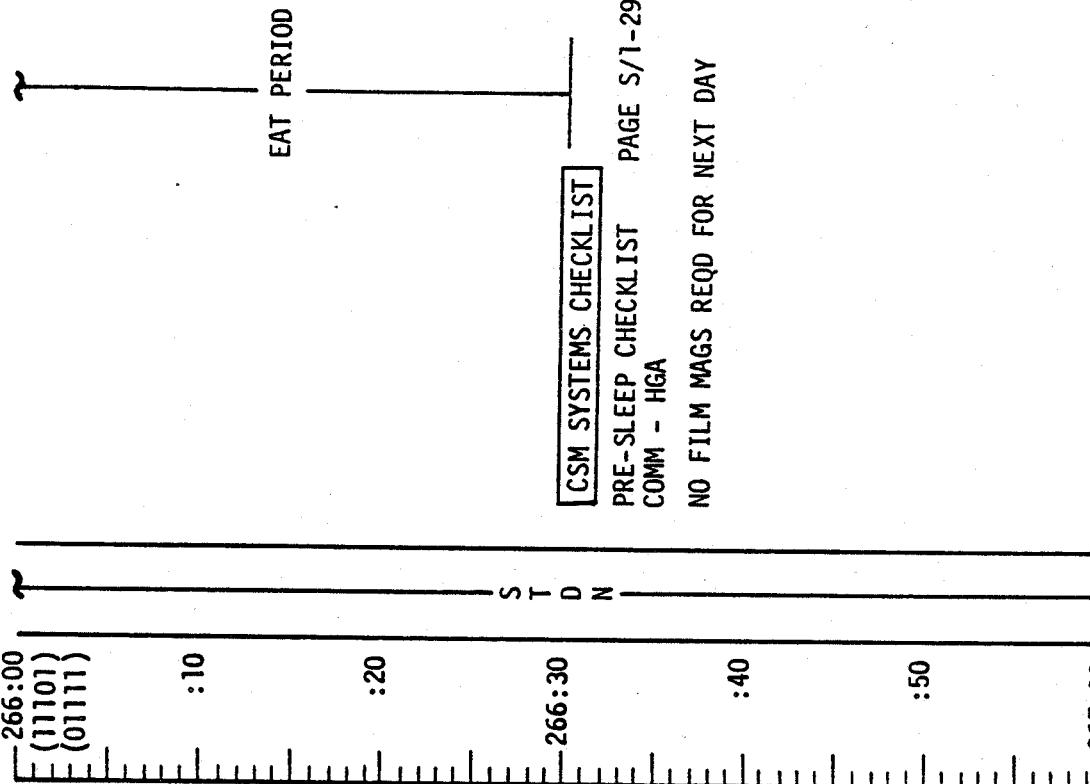
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	265:00 - 266:00	12/TEC	3-377

FLIGHT PLANNING BRANCH

FLIGHT PLAN

2253 CST

MCC-H

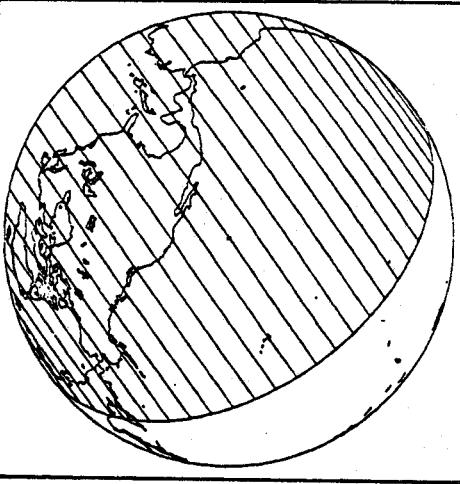


NOTES

SIM EXP STATUS
(*0001)
(00001)

GET = 266:00

FOV = 3°



ONBOARD READOUT	
BAT C	
UV/PTC	PYRO BAT A
GALACTIC SCAN	PYRO BAT B
	RCS A
	B
	C
	D

DC IND SEL - MNA OR B
EARTH DISTANCE
~ 140,423 NM

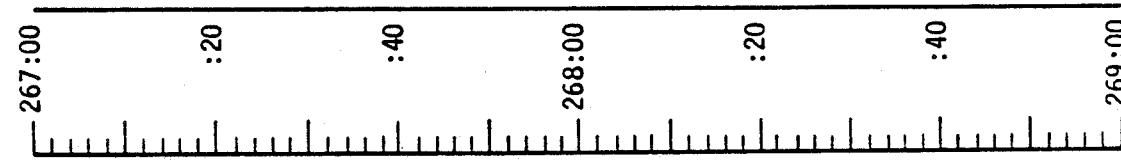
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	266:00 - 267:00	12/TEC	3-378

FLIGHT PLANNING BRANCH

MCC-H

FLIGHT PLAN

2653 CST



267:00

:20

:40

268:00

:20

:40

269:00

NOTES

SIM EXP STATUS
(*0001)
(00001)

DAP LOAD STATUS
(11101)(01111)

UV/PTC
GALACTIC SCAN
REST PERIOD
(8 HOURS)

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

FLIGHT PLAN

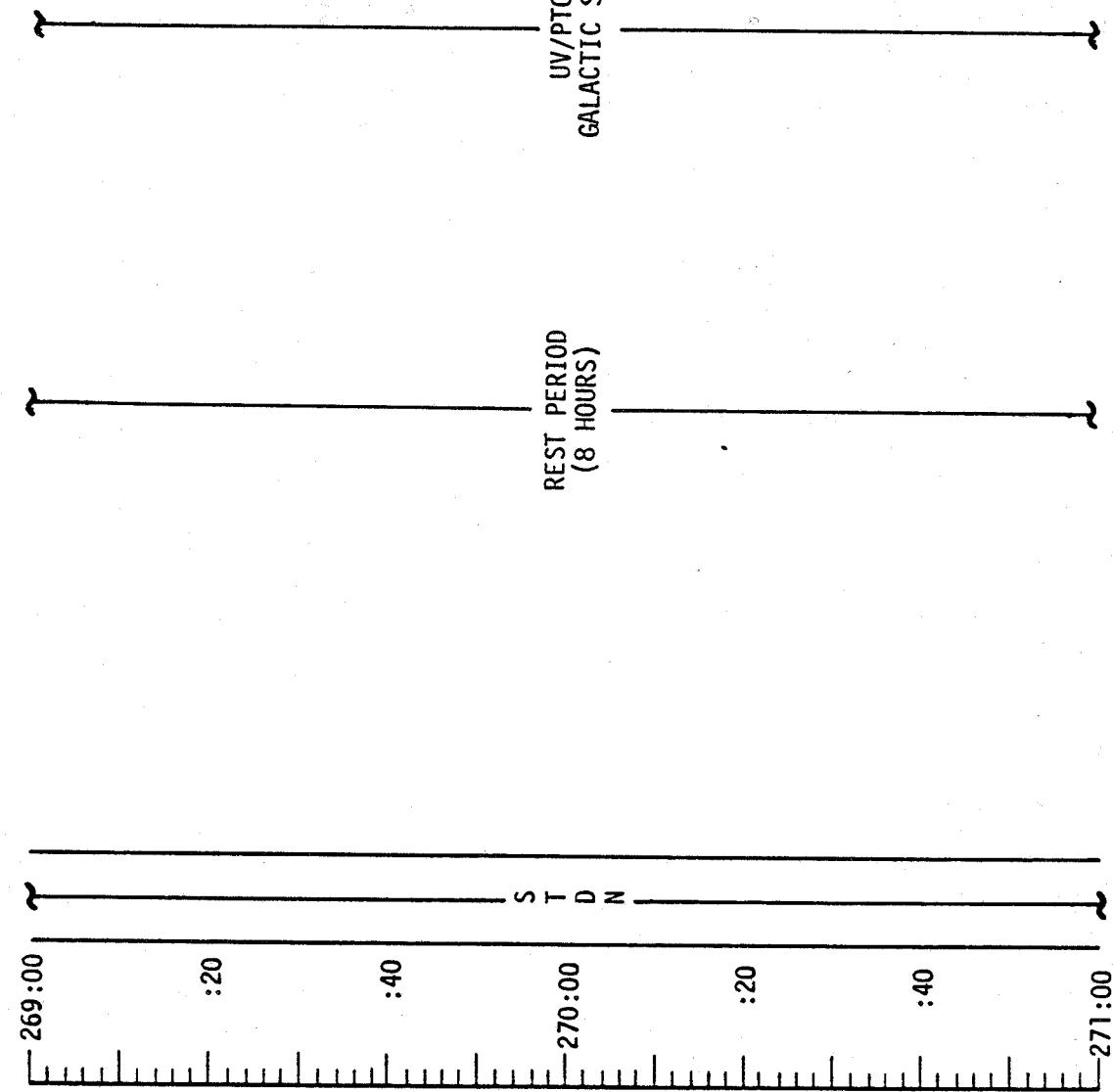
0153 CST

MCC-H

NOTES

SIM EXP STATUS
(*0001)
(00001)

DAP LOAD STATUS
(11101)(01111)



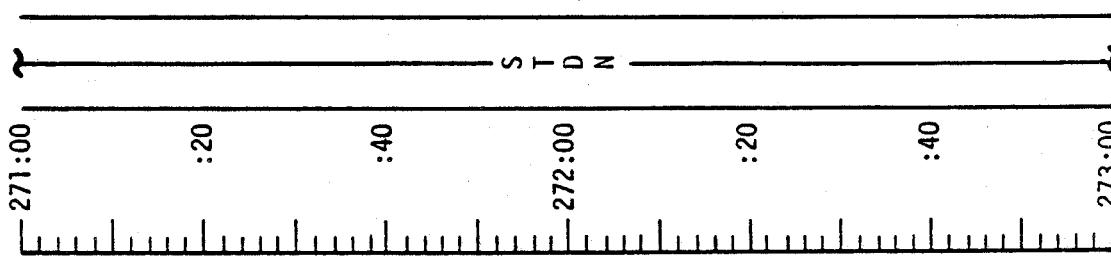
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	269:00 - 271:00	12/TEC	3-380

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0353 CST



NOTES

SIM EXP STATUS
(*0001)
(00001)

DAP LOAD STATUS
(11101)(01111)

UV/PTC
GALACTIC SCAN

REST PERIOD
(8 HOURS)

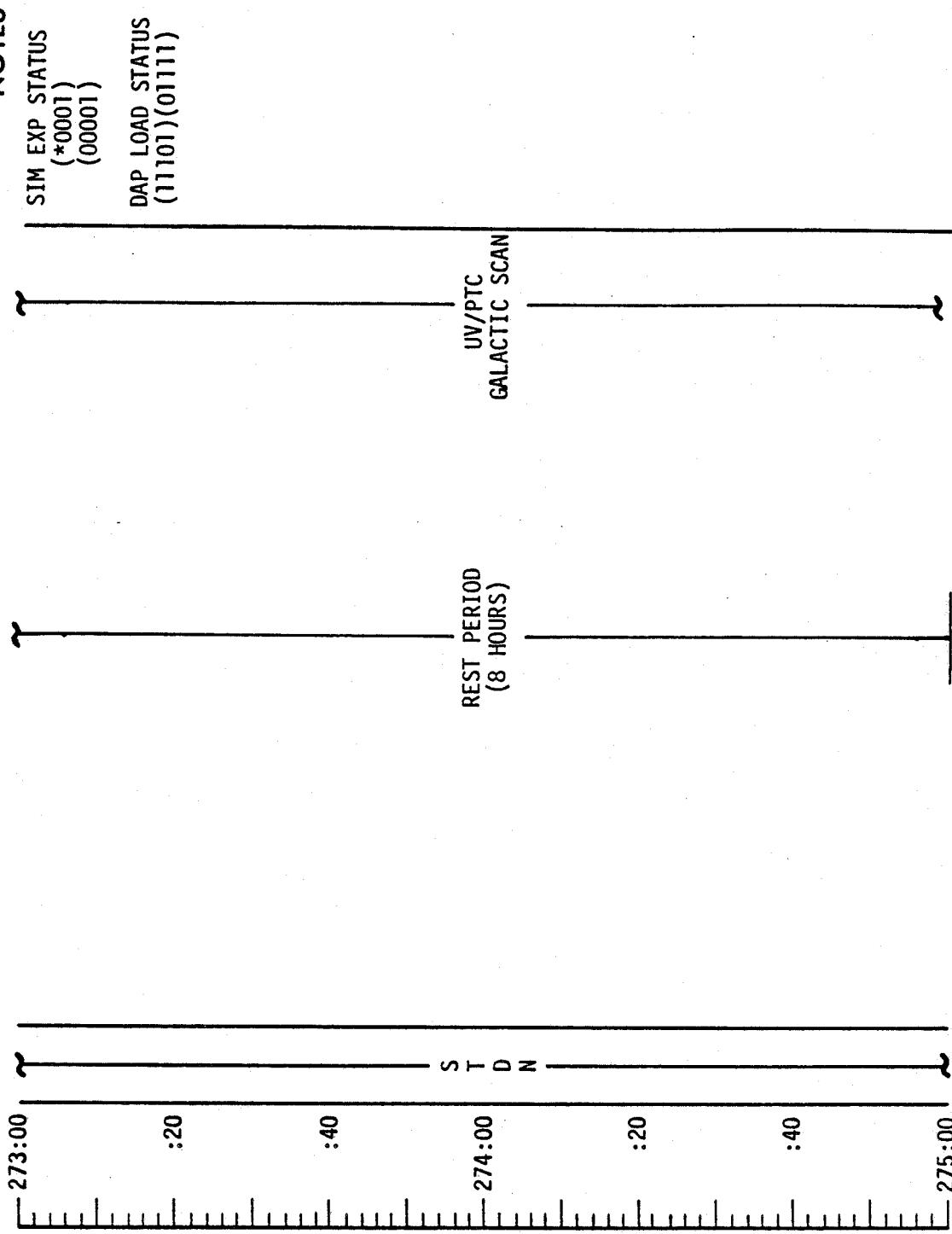
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	271:00 - 273:00	12/TEC	3-381

FLIGHT PLANNING BRANCH

FLIGHT PLAN

0553 CST

MCC-H



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	273:00 - 275:00	12/TEC	3-382

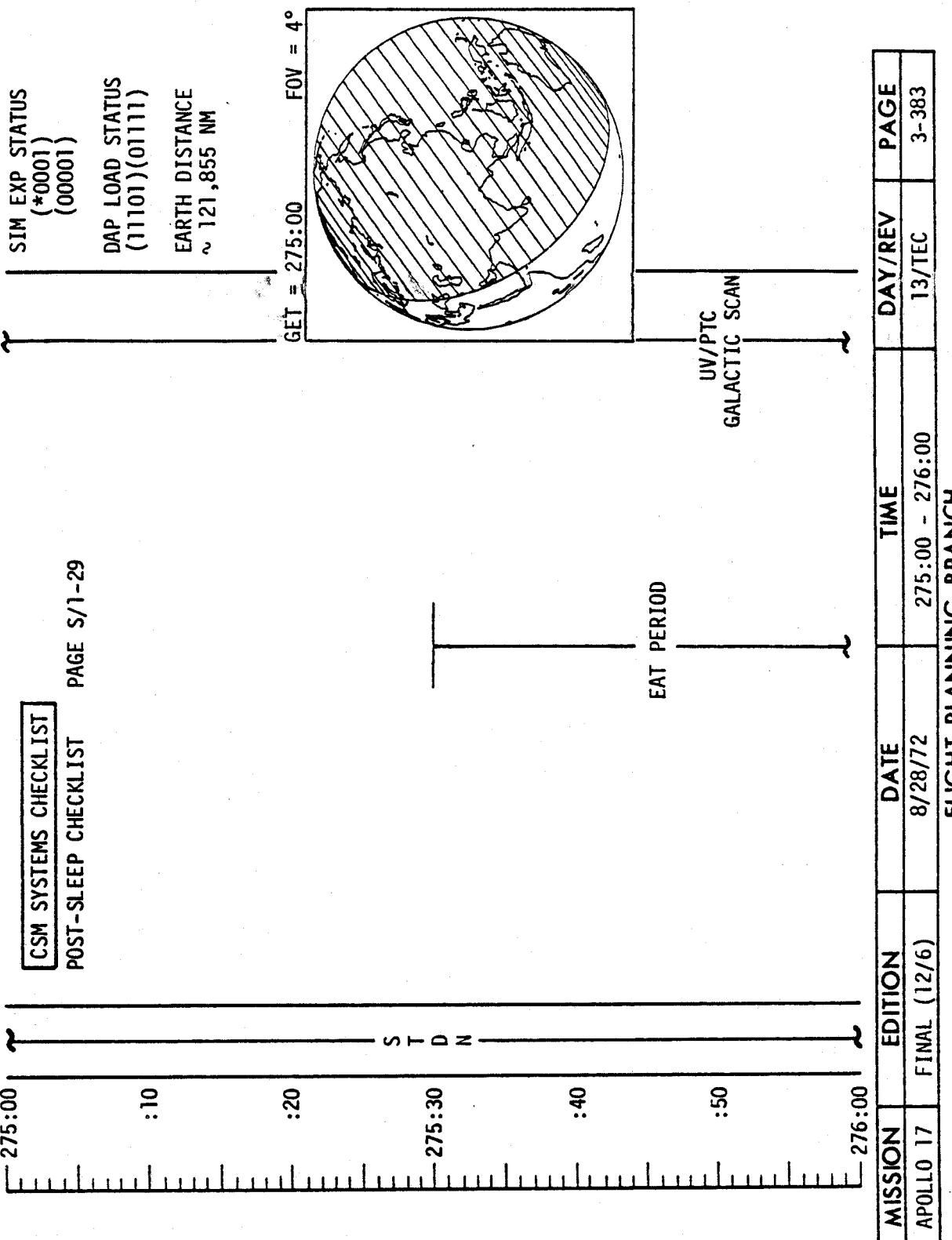
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0753 CST

CSM SYSTEMS CHECKLIST
POST-SLEEP CHECKLIST PAGE S/1-29



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	8/28/72	275:00 - 276:00	13/TEC	3-383

FLIGHT PLANNING BRANCH

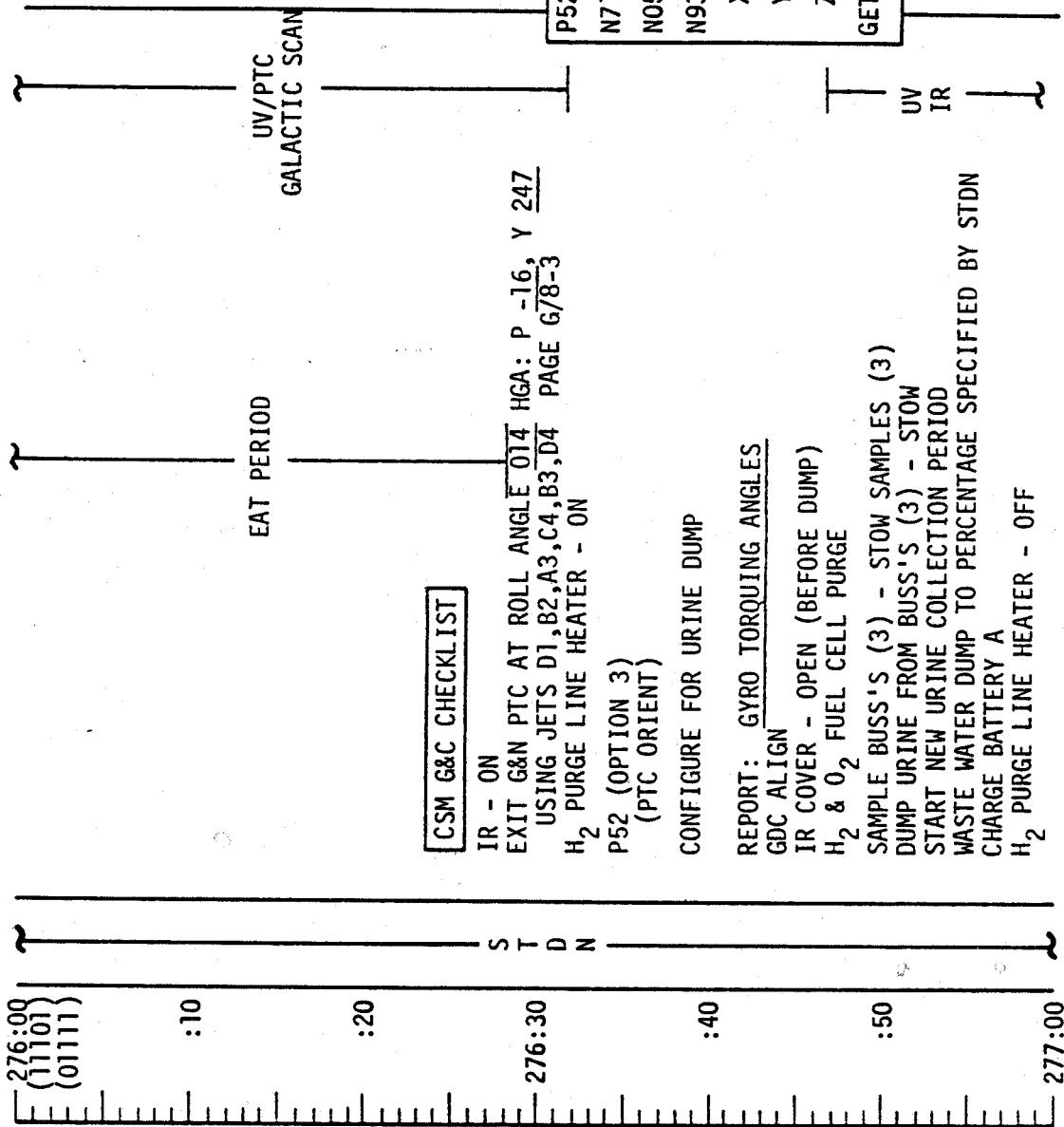
FLIGHT PLAN

0853 CST

MCC-H

NOTES

SIM EXP STATUS
(*0000)
(00001)



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

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	276:00 - 277:00	13/TEC	3-384

FLIGHT PLANNING BRANCH

FLIGHT PLAN

NOTES

MCC-H 0953 CST

277:00
 { (11101)
 (01111)}

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

:10

CMD
DSE RECORD

:20

S

T

D

N

277:30

:40

:50

CMD
DSE STOP
PCM BIT RATE - LOW
278:00

SIM EXP STATUS
 (*0011)
 (0001)
 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'.

UV
DARK NORTH

IR

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	277:00 - 278:00	13/TEC	3-385

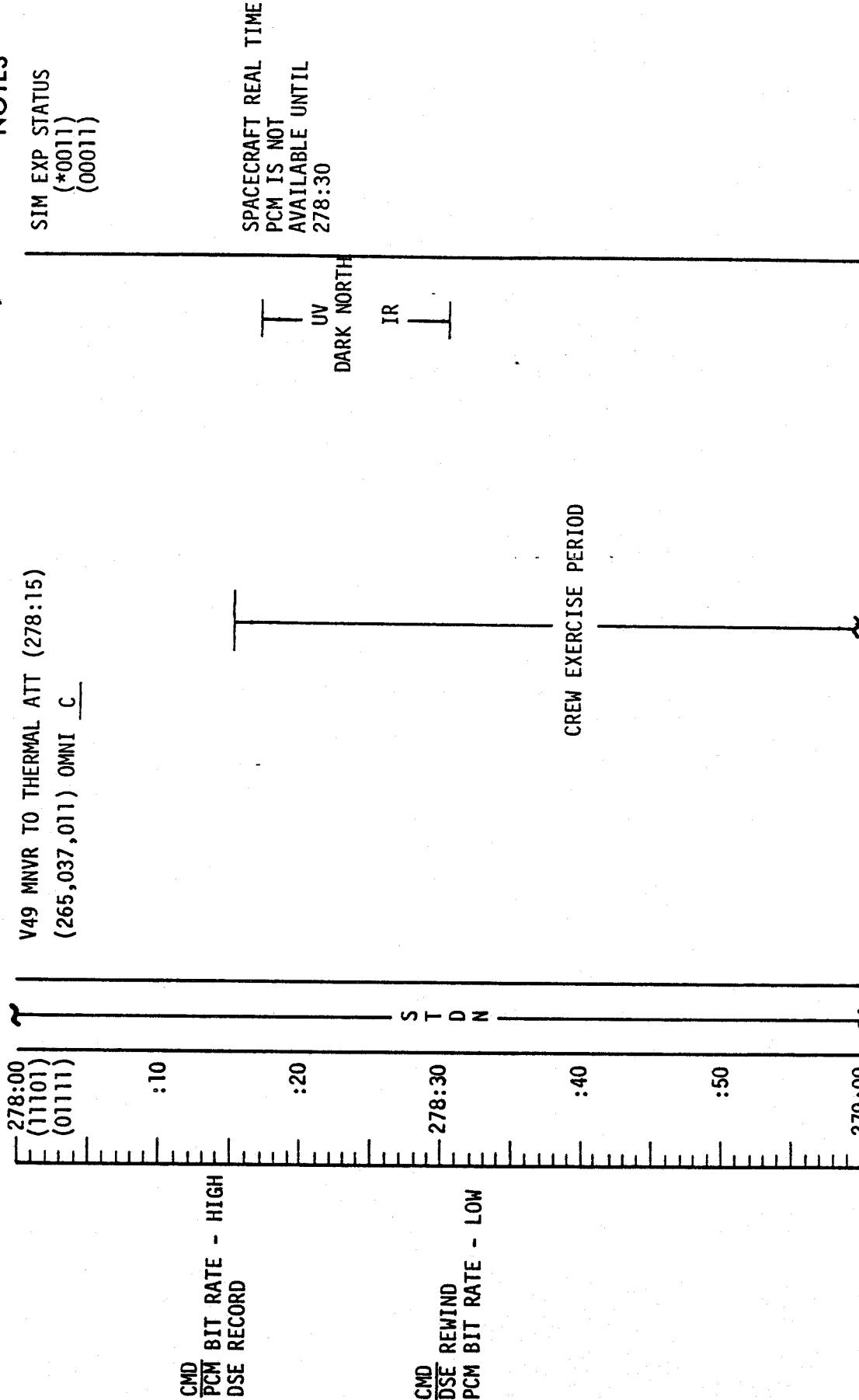
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H 1053 CST

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

NOTES
 SIM EXP STATUS
 { *0011 }
 { 00011 }



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

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1153 CST

279:00
 (11101)
 (01111)

LMP DON BIOMED HARNESS
 CREW EXERCISE PERIOD

:10

V49 MNVR TO UV STELLAR TGT ATT(NORTH ECLIPTIC POLE)(279:25)
 (131,138,327) HGA: P -45, Y 50

:20

CMD
DSE PLAYBACK
 PCM BIT RATE - HIGH

279:30

S T
 CDR DOFF BIOMED HARNESS

D N
 CSM EXP/EVA CHECKLIST

:40

LIGHT FLASH PHENOMENON OBSERVATION PAGE X/2-1

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

UV
 NEP

IR

LIGHT
 FLASH
 OBS

:50

280:00

NOTES

SIM EXP STATUS
 (*0011)
 (00011)

REPORT: READINESS TO DON EYE SHIELDS
 WHEN EACH EYE SHIELD IS DONNED
 THE OCCURRENCE OF EACH LIGHT FLASH
 WHEN OBSERVATIONS ARE TERMINATED

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

1253 CST

MCC-H

CUE
WHEN 60 MIN
FLASH OBS IS
COMPLETE

280:00
E {1101}
{0111}

:10

:20

CMD
DSE

280:30

:40

UPLINK
CSM S.V. & V66

:50

L10H CANISTER CHANGE
(23 INTO A, STOW 21 IN A5)
ENTRY CHECKLIST

EMS ENTRY CHECK PAGE E/1-3

281:00

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

NOTES

SIM EXP STATUS
(*0011)
(00011)

UV NEP

IR

LIGHT FLASH OBS

S T D N

40

50

)

FLIGHT PLAN

MCC-H 1353 CST

UPDATE
ENTRY PAD
FLIGHT PLAN

T | 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)

:10 :20

CMD
DSE RECORD

UV
ATMOSPHERE
CAL

S T D N

281:30

CMD (HGA AOS)
DSE DUMP

:40

STOP PITCH RATE AT 146°

:50

282:00

NOTES

SIM EXP STATUS
(*0011)
(00011)

IF MCC-6 IS REQUIRED:
PCM IS NOT AVAILABLE
UNTIL 281:35
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 PLANNING BRANCH

FLIGHT PLAN

MCC-H

1453 CST

282:00
(11101)
(01111)

:10
ON STDN CUE

CMD
DSE RECORD

EI -22 HRS

:20

S
T
D
N
282:30

:40

:50

283:00

NOTES

SIM EXP STATUS
(*0011)
(00011)

SPACECRAFT REAL TIME
PCM IS NOT AVAILABLE
UNTIL 283:15

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

(253,018,017) OMNI D

UV OPTICAL AXIS
POINTED AT RA 12:30,
DEC +12°

UV
VIRGO CLUSTER
IR

EAT PERIOD

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	282:00 - 283:00	13/TEC	3-390

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1553 CST

283:00
 {11101}
 {01111}

:10

:20

CMD
DSE STOP/REWIND
 PCM BIT RATE LOW

283:30

:40

284:00

CMD
PCM BIT RATE HIGH
 DSE PLAYBACK

:50

CHARGE BATTERY B

NOTES
 SIM EXP STATUS
 (*0011)
 (00011)

UV
 EAT PERIOD
 VIRGO CLUSTER
 IR

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)

UV
 DARK SOUTH
 IR

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

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1653 CST

284:00
 {11101}
 {01111}

CMD
 DSE STOP

TEC PRESS CONFERENCE
 S-BD AUX TV - TV

:10

:20

284:30

S-BD AUX TV - SCI

:40

:50

285:00

CMD
 DSE PLAYBACK

NOTES

SIM EXP STATUS
 (*0011)
 (00011)

T
 UV
 DARK SOUTH
 IR

UV OPTICAL AXIS
 POINTED AT RA 01:05,
 DEC -10° WITH CSM,
 +X AXIS AT RA 20:30,
 DEC -25°

T
 UV
 DARK SOUTH
 IR

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

UPDATE
FLIGHT PLAN
CMD
DSE REWIND

SIM EXP STATUS
(*0011)
(00011)

T
UV
DARK SOUTH
IR

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

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

(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

DURING UV/PTC
GALACTIC SCAN THE
CSM + AXIS WILL
BE POINTED AT
RA 04:55, DEC +46°

UV/PTC
NEP, PEG

MISSION EDITION DATE TIME DAY/REV PAGE

APOLLO 17 FINAL (12/6) 10/23/72 285:00 - 286:00 13/TEC 3-393

FLIGHT PLANNING RANCH

FLIGHT PLAN

MCC-H

1853 CST

286:00
|
(11112)
(01111)

:10

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 6/8-3
 AFTER STDN CUE
 V49 MNVR TO UV STELLAR TGT ATT (SPICA) (286:30)
 (255,188,321) OMNI D
 IR COVER - OPEN

V48 (11112)(01111)

:20

286:30
|
(11112)
(01111)

:40

CMD DSE RECORD

286:30
|
(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

:50

287:00
|
287:00

NOTES

SIM EXP STATUS
 {*0001}
 {00011}

UV/PTC
 NEP, Y PEG

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°

UV
 SPICA

IR

UV
 SPICA, NUMA

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

288:00
{11102}
(01111)

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 STDIN 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
V48 P -40, Y 90
(TTT01)(01111)

:10

:20

288:30
S
(11101)
(01111)

:40

:50

289:00

NOTES

SIM EXP STATUS
(*0001)
(00001)

UV/PTC
SPICA, NUMA

P52 IMU REALIGN

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

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

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

MCC-C

FLIGHT PLAN

2153 CST

289:00
|
(1110)
(0111)

:10

:20

289:30

S T D N

:40

:50

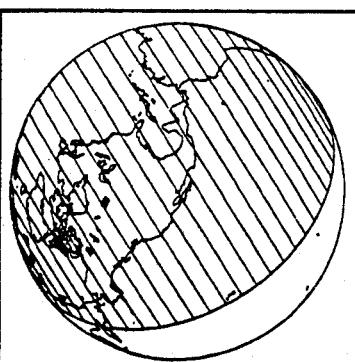
290:00

NOTES

SIM EXP STATUS
(*0001)
(00001)

EARTH DISTANCE
~ 80,921 NM

GET = 289:00



FOV = 7°

EAT PERIOD

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

FILM MAGS REQUIRED FOR NEXT DAY

DAC: GG

UV/PTC
GALACTIC SCAN

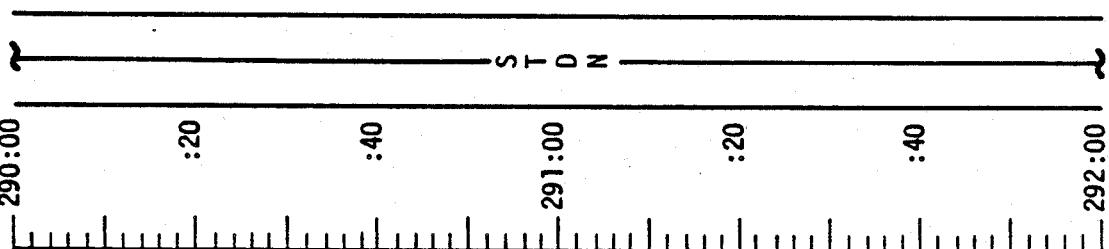
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	289:00 - 290:00	13/TEC	3-397

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2253 CST



NOTES

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

UV/PTC
GALACTIC SCAN

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

MCC-H

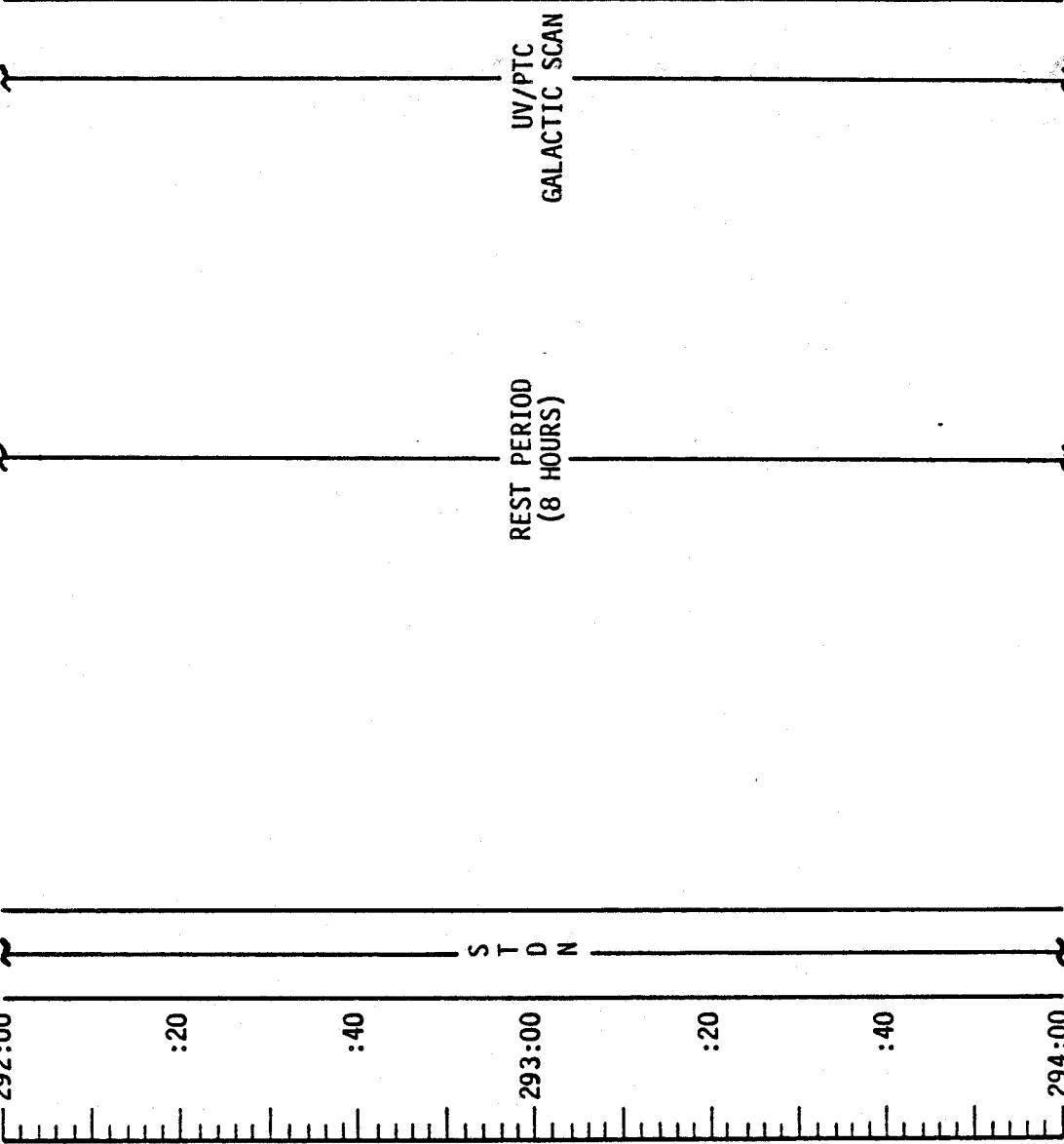
0053 CST

FLIGHT PLAN

NOTES

SIM EXP STATUS
(*0001)
(00001)

DAP LOAD STATUS
(11101)(01111)



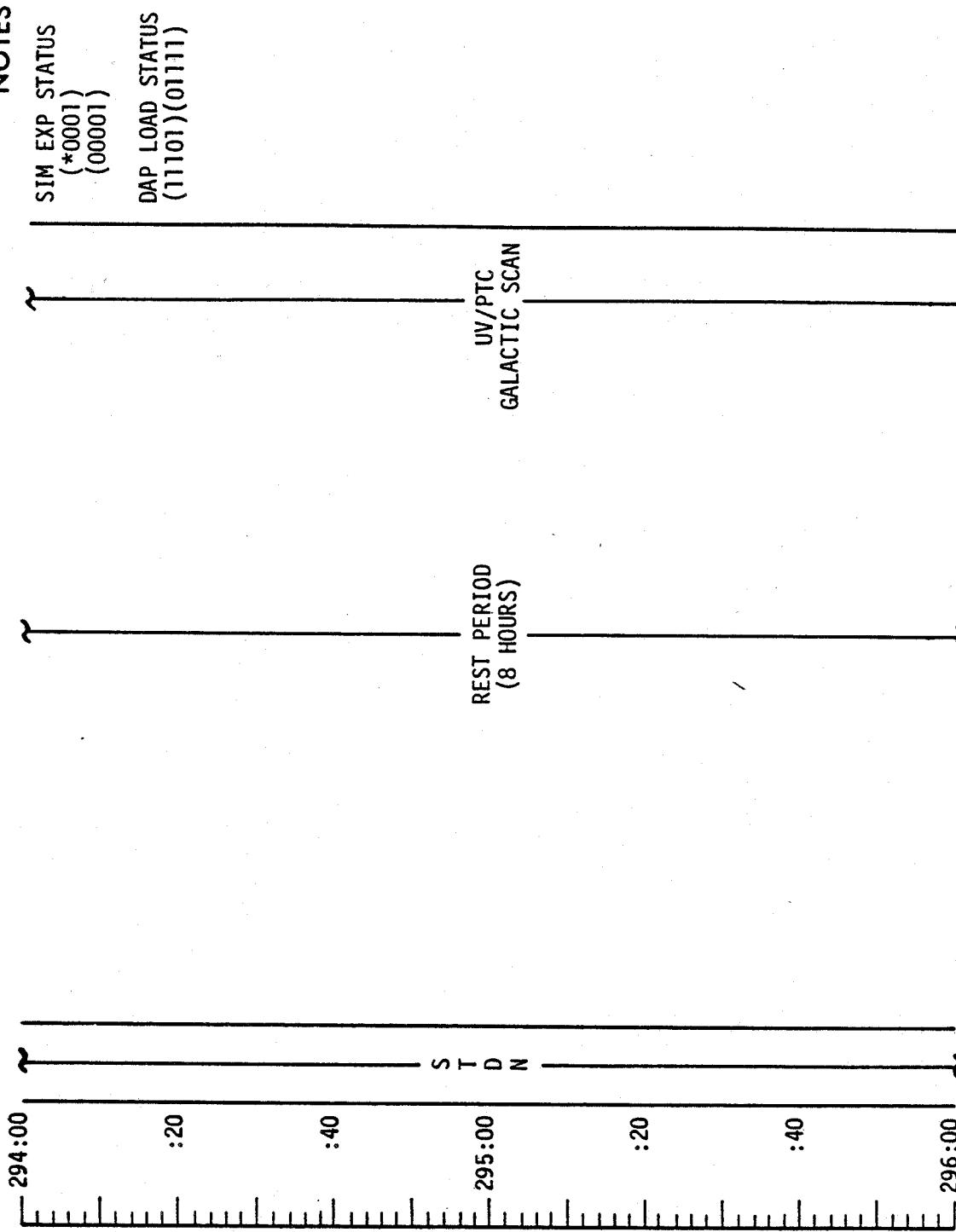
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	292:00 - 294:00	13/TEC	3-399

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0253 CST
294:00



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

MCC-H

FLIGHT PLAN

NOTES

0453 CST
296:00

:20

:40

297:00

S T D N

:20

:40

298:00

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 PLANNING BRANCH

FLIGHT PLAN

MCC-H

0653 CST

CSM SYSTEMS CHECKLIST
POST-SLEEP CHECKLIST PAGE S/1-29

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

298:00 :10

:20 298:30

:40 :50

299:00

EI - 6 HRS

UV/PTC
GALACTIC SCAN

GET = 299:00 FOV = 20°



EAT PERIOD

EARTH DISTANCE
~ 38,615

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	298:00 - 299:00	14/TEC	3-402

FLIGHT PLANNING BRANCH

FLIGHT PLAN

NOTES

MCC-H 299:00
 (11101)
 (01111)

:10

EI - 5 HRS

:20

299:30

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

(11102)
 (01111)

:40

DESIRED ORIENT
(ENTRY)

:50

300:00

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 6/8-3
 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 T)
 (ENTRY ORIENT)

P52 IMU REALIGN
 N71: _____
 N05: _____
 N93: X _____
 Y _____
 Z _____
 GET : _____

EAT PERIOD

UV/PTC
 GALACTIC SCAN

STARS _____
 SA _____
 TA _____
 EI REFMMAT ATT
 R 246
 P 324
 Y 059
 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

FLIGHT PLANNING BRANCH

FLIGHT PLAN

0853 CST

MCC-H

		NOTES	
		SIM	EXP STATUS
		(11102) (01111)	(*0011) (00011)
UPLINK <u>MCC-7</u> TGT LOAD CSM S.V. & V66 UPDATE <u>MCC-7</u> MNVR PAD ENTRY PAD	300:00 :10 EI -4 HR	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	EVAP H2O CONT SEC VLV - AUTO SUIT HEAT EXCH SEC GLY - FLOW MARK DIRECT 02 "OFF" POSITION WITH TAPE
		02 SUPPLY REFILL PAGE S/1-7 PGA VERIFICATION (IF SUITED) PAGE S/1-14 ECS MONITOR CK PAGE S/1-5 EVAP H2O CONT PRI VLV - AUTO *P30 EXTERNAL AV	[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
		*V49 MNVR TO BURN ATT CONFIGURE FOR URINE DUMP UPDATE STOWAGE LIST & TAPE TO LEB CDR & LMP DON BIOMED HARNESS	*PERFORM IF MCC-7 IS REQUIRED
		S T D N	UV IR
	300:30	*SXT STAR CHECK SAMPLE BUSS'S (3) - STOW SAMPLES (3) DUMP URINE FROM BUSS'S (3) - STOW START NEW URINE COLLECTION PERIOD	
	:40		
	:50		
	301:00		

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

APOLLO 17 FINAL (12/6) 10/23/72

3-405

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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

0953 CST
MCC-H

- 301 :00
- (1102)
- (0111)

*P40 SPS THRUSTING OR
*P41 RCS THRUSTING

10

EI -3 HR

20

301 : 30

40

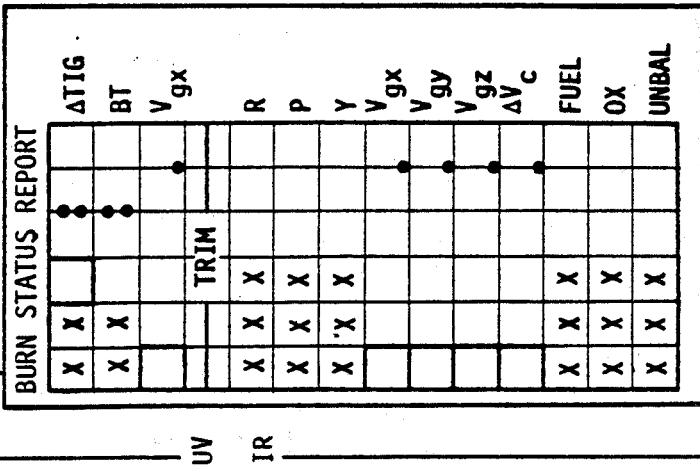
- 302:00

NOTES

SIM EXP STATUS

*0011

***PERFORM IF MCC-7
IS REQUIRED**



TIG: 301:18
BT: NOM ZERO
AVT: 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)

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

302:00 {1102 0111}	IR - OFF UV - OFF IR COVER - CLOSE UV COVER - CLOSE S-BD AUX TV - OFF DATA SYS - OFF
:10	STOW FLIGHT PLAN

CSM ENTRY CHECKLIST
LOGIC SEQUENCE CHECK PAGE E/1-2

:20

EI -2 HR

UPDATE
GO/NO-GO FOR
PYRO ARM
SEQUENCE

302:30

S T D N

:40

:50

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

303:00

NOTES

SIM EXP STATUS
(*0011)
(00011)

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

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	302:00 - 303:00	14/TEC	3-408

FLIGHT PLANNING BRANCH

FLIGHT PLAN

NOTES

SIM EXP STATUS
(*0000)
(0000)

MCC-H 1153 CST

REPORT: GYRO TORQUING ANGLES

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

:10

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

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

FINAL STOWAGE PAGE E/1-5

UPDATE
GO/NO-GO FOR
PYRO ARM
ENTRY PAD
RECOVERY PAD
UPLINK
CSM S.V. & V66

:20

CONFIGURE FOR VHF A SIMPLEX VOICE CHECK
TERMINATE RCS PREHEAT
PYRO BATT CHECK
SYSTEMS TEST PANEL CONFIGURATION PAGE E/1-6
CONFIGURE PNL 8

:40

EMS INITIALIZATION PAGE E/2-1

RSI ALIGNMENT
CM RCS CHECK

:50

VHF-A SIMPLEX
COMM 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

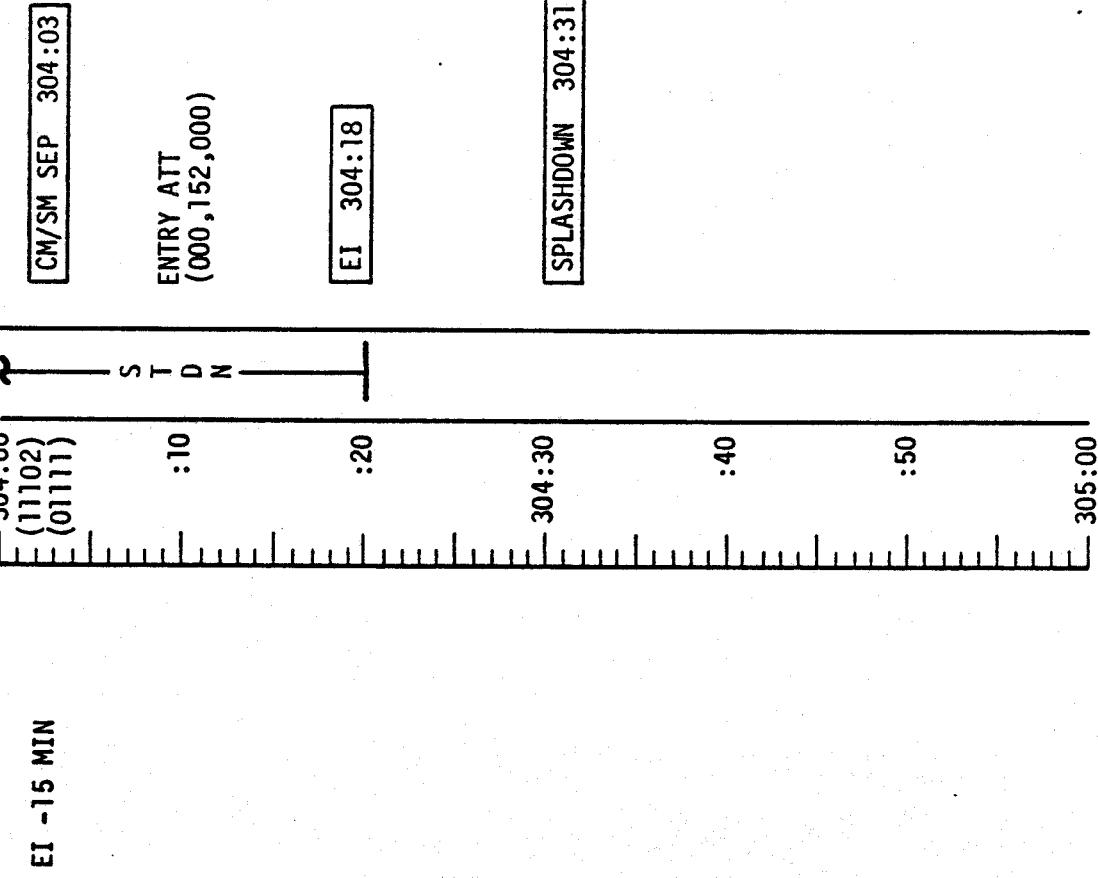
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	303:00 - 304:00	14/TEC	3-409

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1253 CST



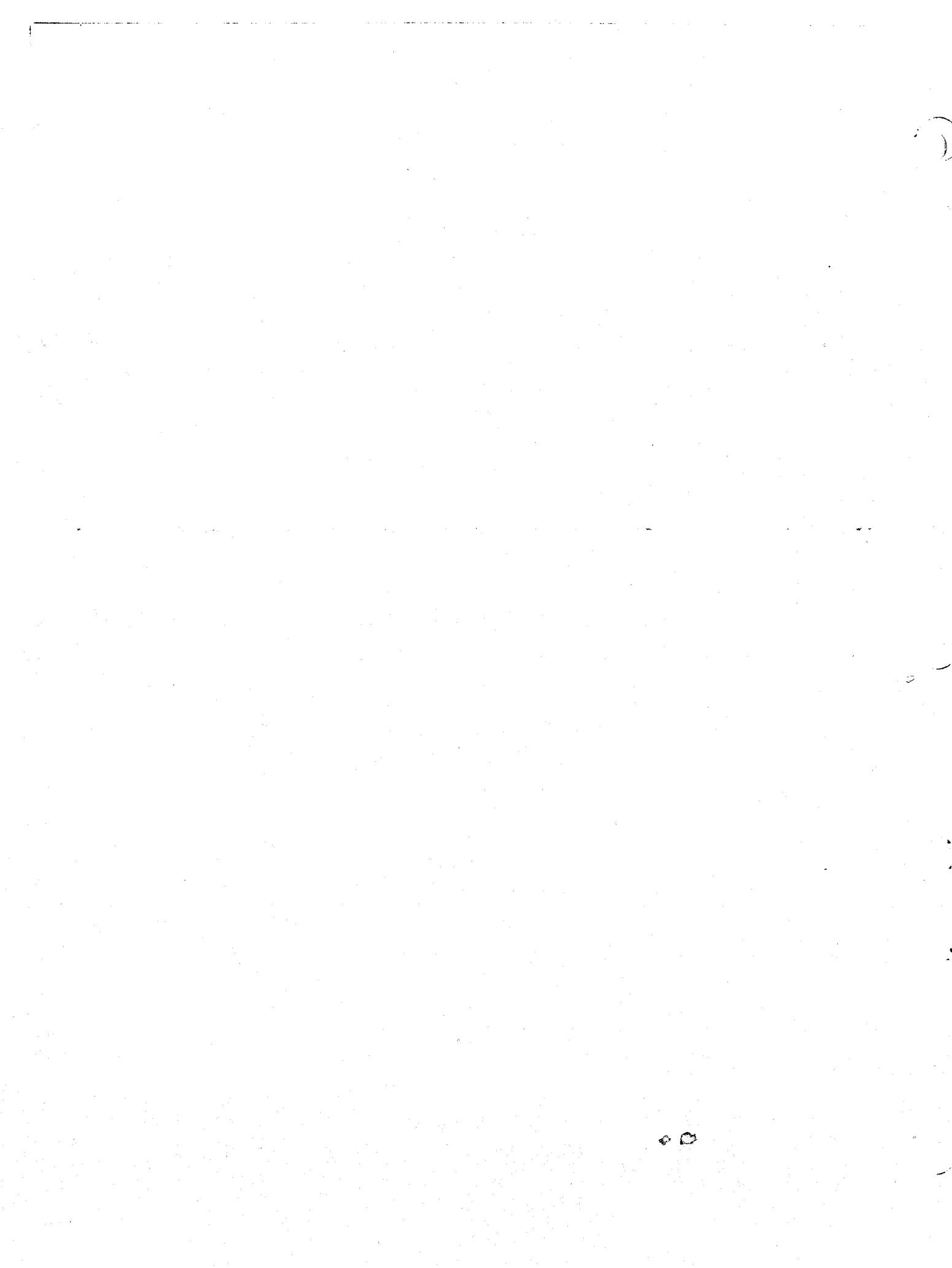
NOTES

TIME FROM 400K FT	MIN:SEC
TRAJECTORY EVENTS	
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



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.

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.

10/23/72

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

4-5

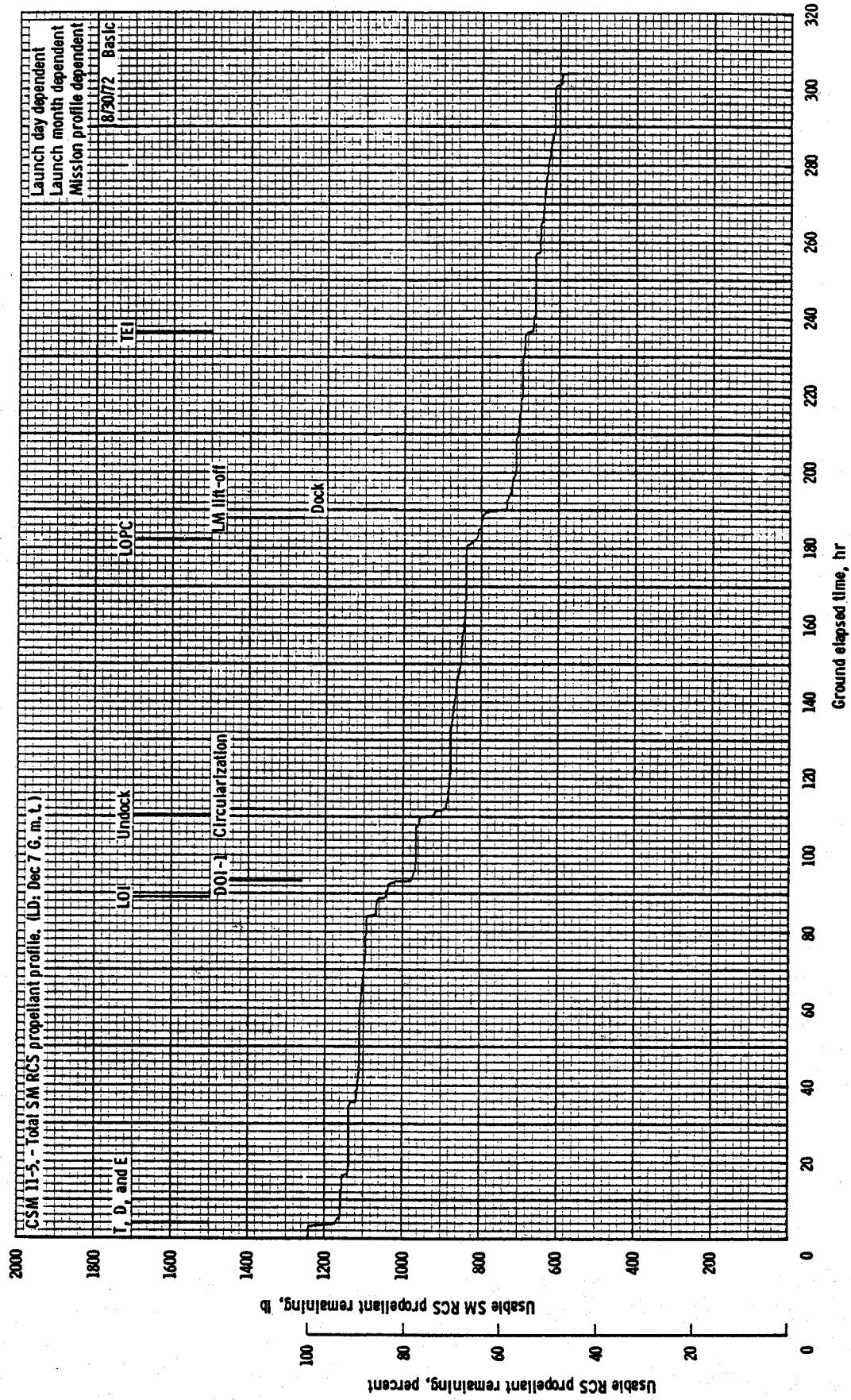
Mission profile dependent
8/29/72 Basic

SM RCS PROPELLANT TRANSLATION COST

Apollo 17

(CSM 114/LM-12)

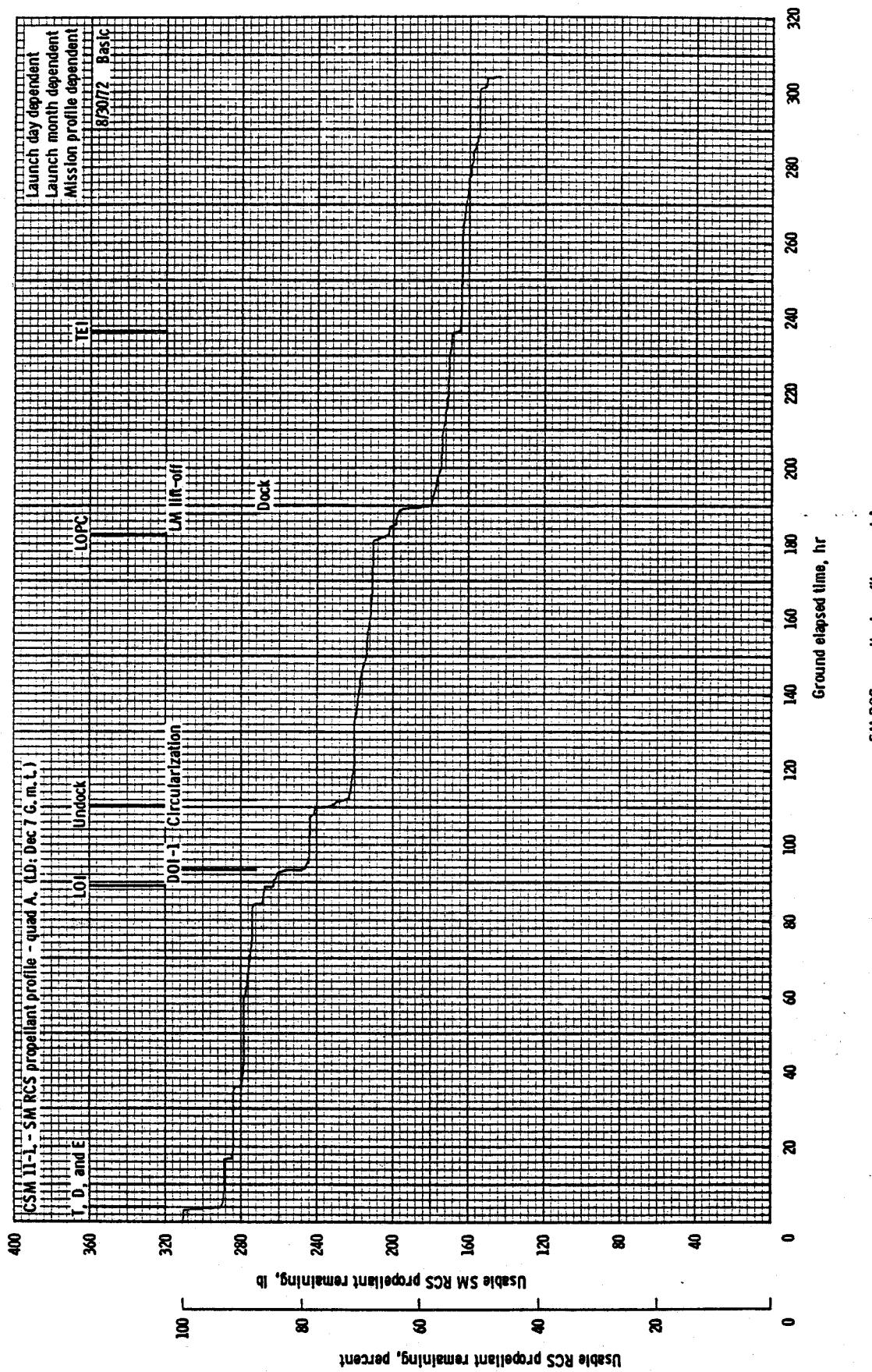
Mission phase	Typical S/C weight (1b)	+X jet G&C (1b/fps)	-X jet SCS (1b/fps)	+X jet A/C (1b/fps)	2 jet G&C (1b/fps)	2 jet SCS (1b/fps)	+X jet B/D (1b/fps)	2 jet SCS (1b/fps)	+Y or +Z G&C (1b/fps)
Translunar	103 000	11.7	13.3	12.0	13.3	12.4	13.3	13.3	--
Lunar orbit docked	75 000	8.6	9.3	8.7	9.3	8.8	9.3	9.3	--
Lunar orbit undocked	36 500	4.0	4.7	4.1	4.7	4.3	4.7	4.7	5.0
Transearth	26 900	3.1	3.8	3.2	3.8	3.4	3.8	3.8	3.5



Total SM RCS propellant usage profile.

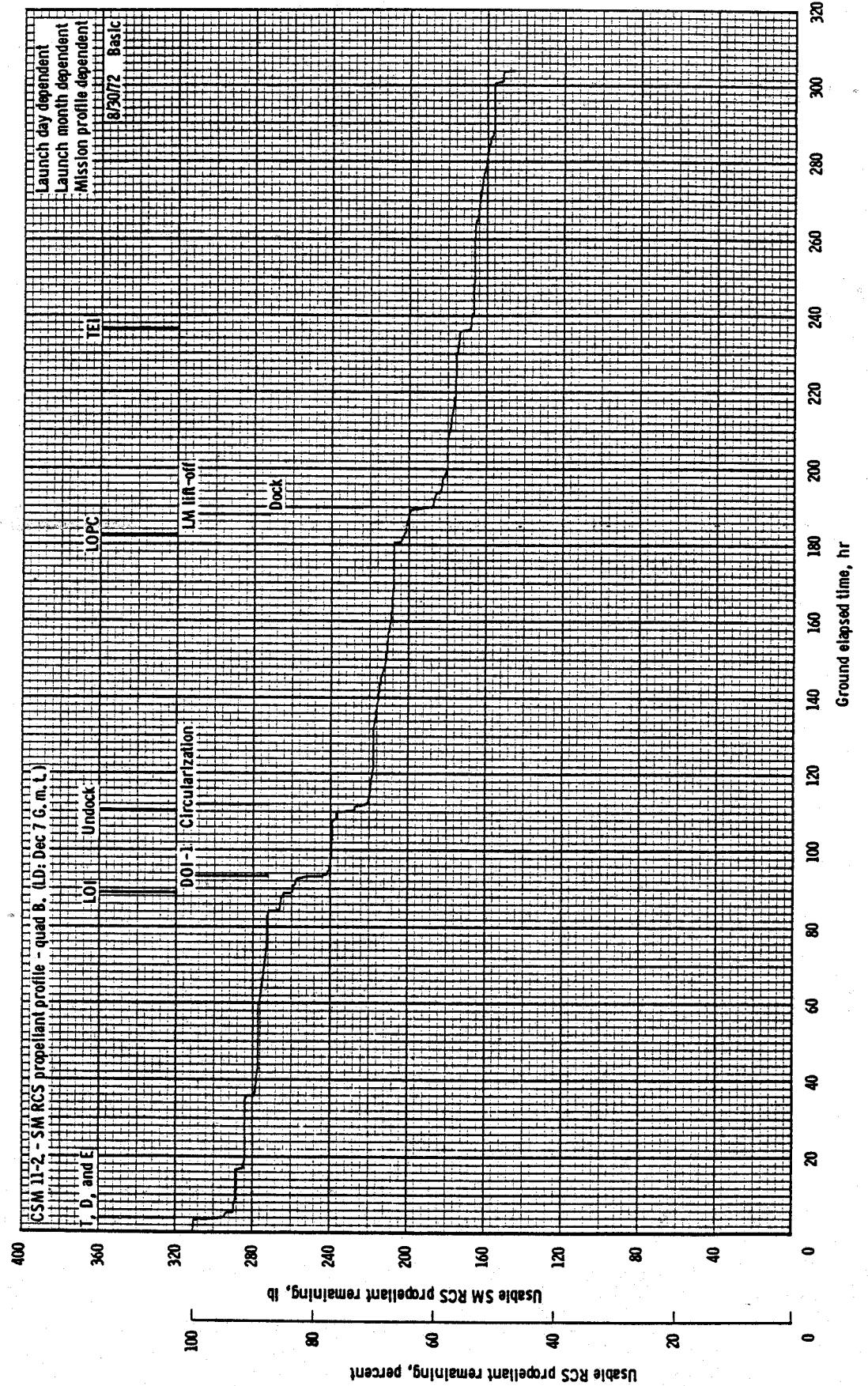
10/23/72

4-7



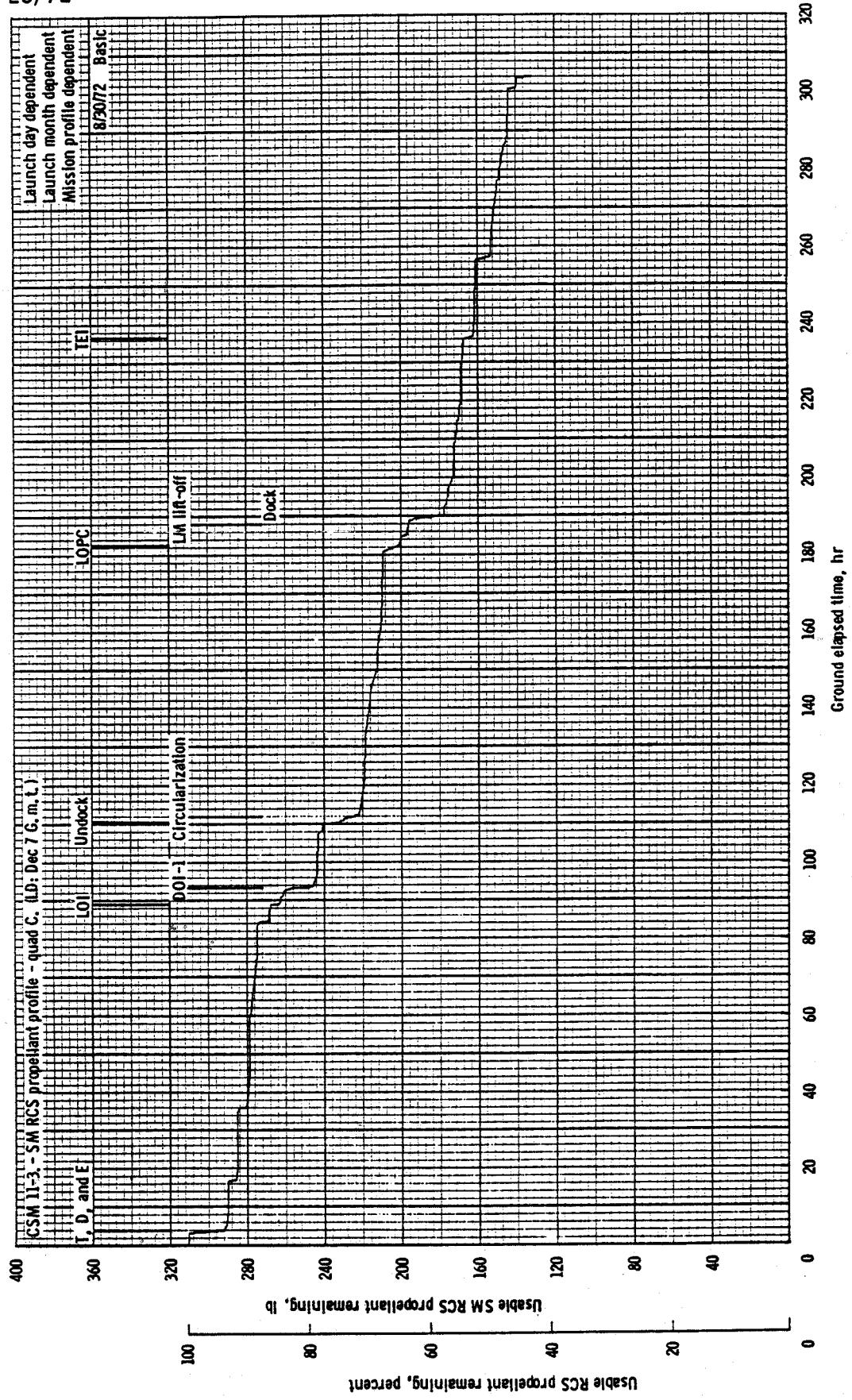
SM RCS propellant profile - quad A.

10/23/72

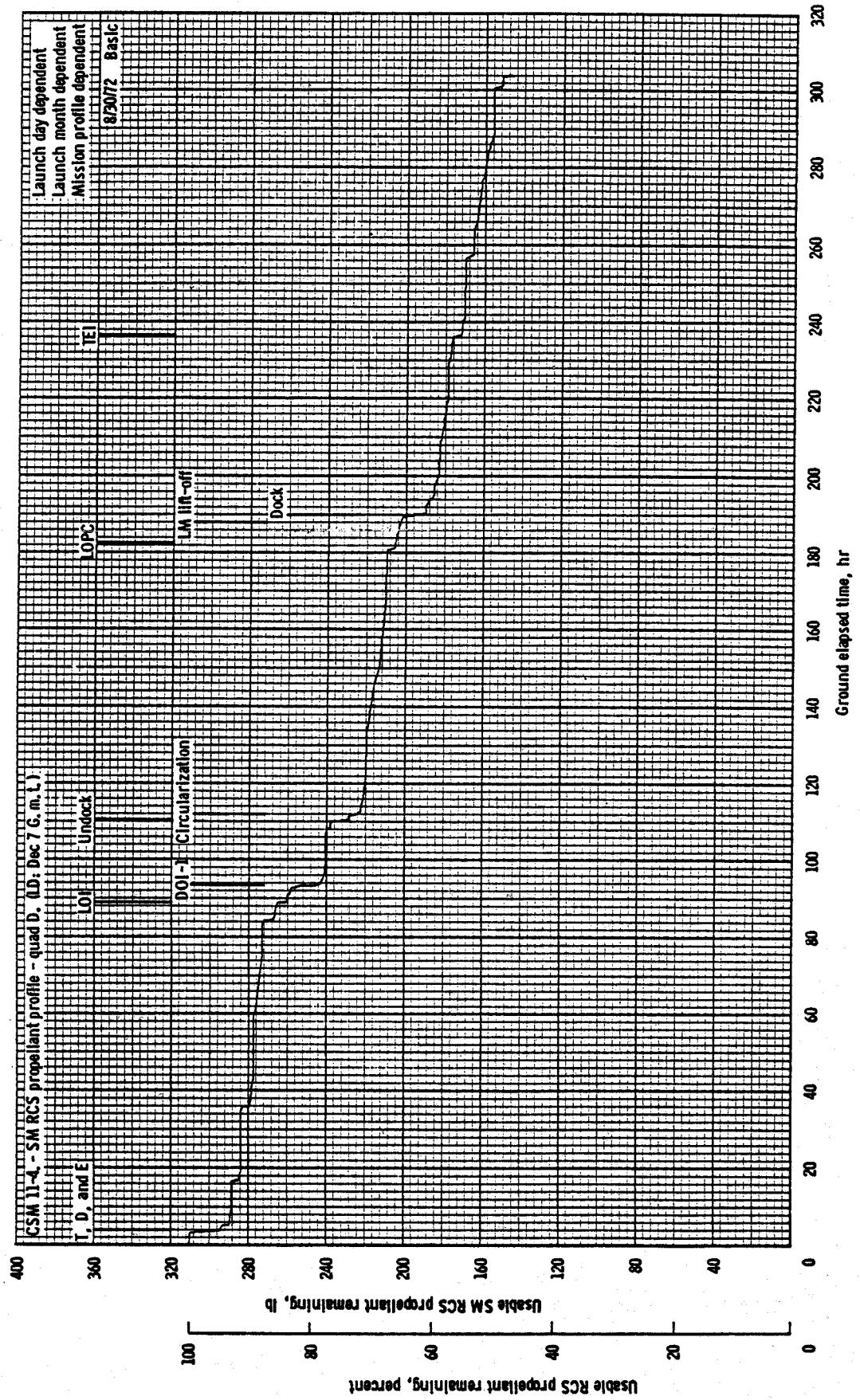


SM RCS propellant profile - quad B.

10/23/72



SM RCS propellant profile - quad C.



SM RCS propellant profile - quad D.

10/23/72

4-11

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

4-12

10/23/72

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.

10/23/72

4-13

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			

^a O_2 tank 1 and 2 heaters may be required if the LM pressure equalization at approximately 39:00 hrs GET causes a pressure decay in the O_2 tanks.

^bSwitch to 50-watt heaters in O_2 tanks 1, 2 at this time.

^cSwitch to 100-watt heaters in O_2 tanks 1, 2 and 3 at this time.

The CSM consumables summary (table 5-I) shows that a significant H_2 and O_2 margin exists at the end of the mission. This is reflected in the H_2 and O_2 usage profiles shown in figures 5-1 and 5-2. However, these curves do not include dispersions.

In summary, the nominal mission requirements can be satisfied with the existent consumables.

4-14

10/23/72

Mission profile dependent
8/30/72 Basic

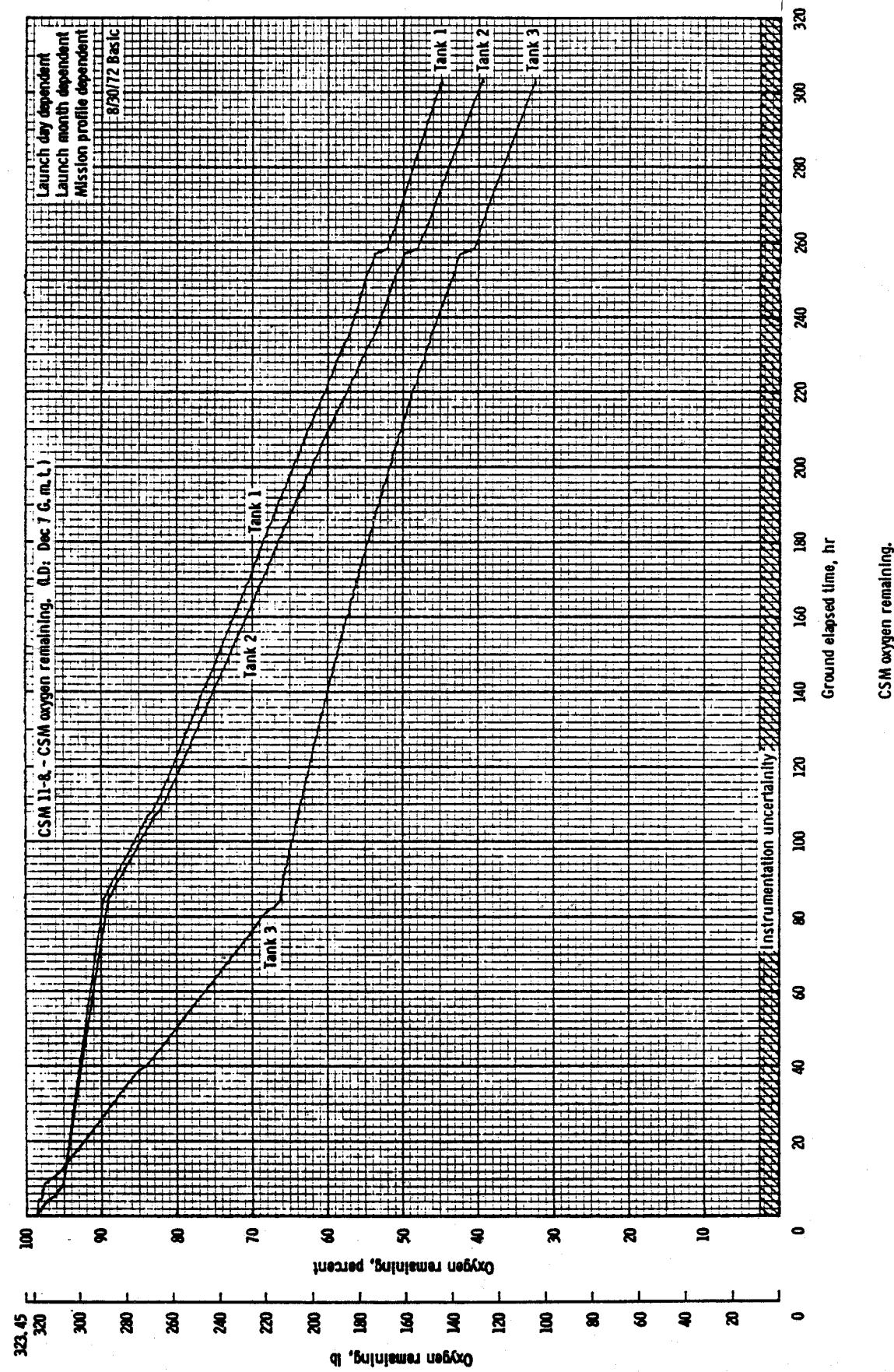
APOLLO 17 CRYOGENIC SUMMARY

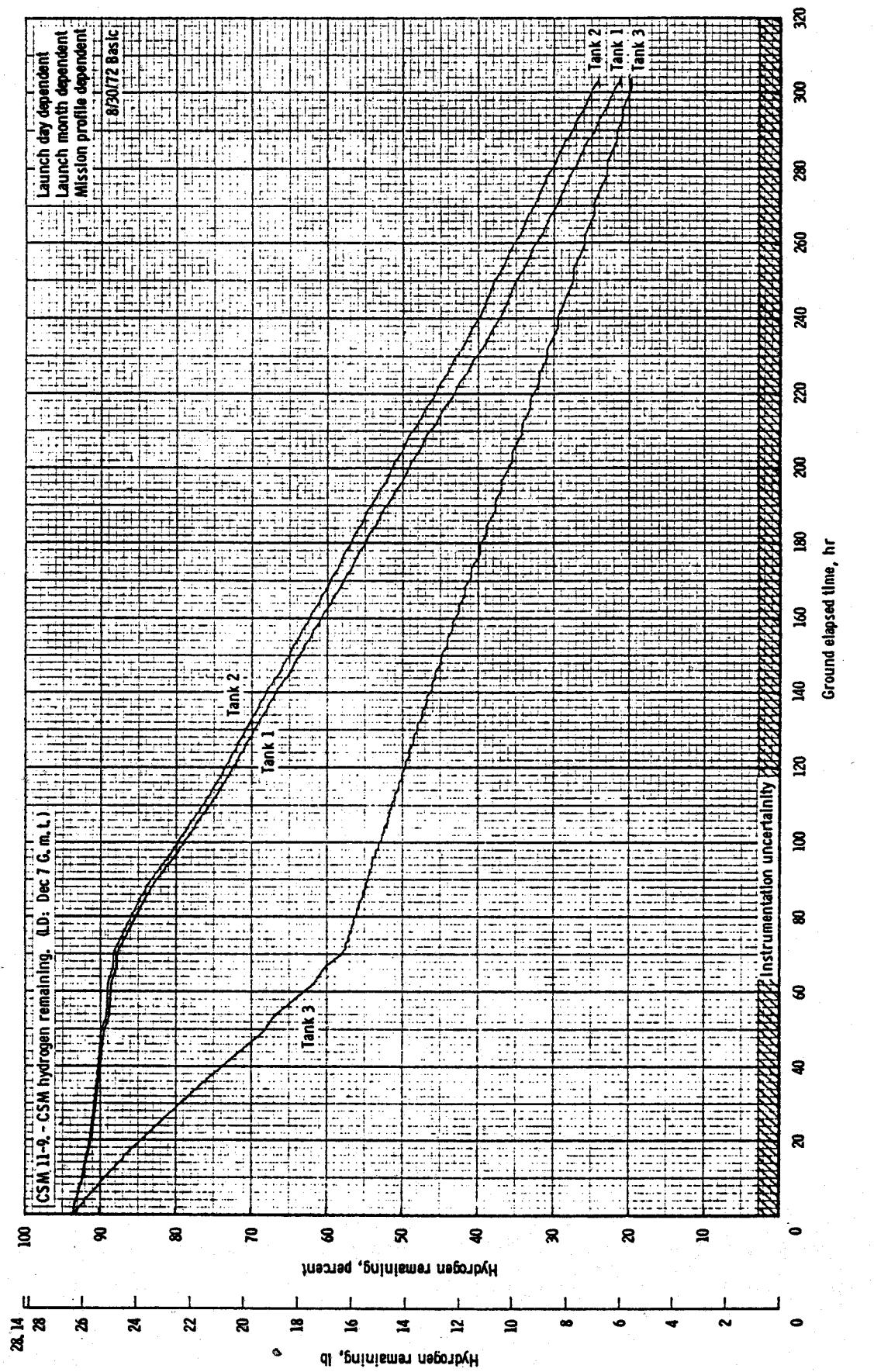
	H ₂ lbs	O ₂ lbs
Planning allowance		
Total loaded	87.9	990.3
Less residual	3.5	19.8
Less instrumentation error	<u>2.3</u>	<u>26.0</u>
Available for mission planning	82.1	944.5
Prelaunch requirement*	5.7	44.8
Flight requirement		
EPS (including fuel cell purge)	60.5	479.3
ECS (including cabin purge + EVA)	--	85.7
LM pressurization	--	11.9
	<u>60.5</u>	<u>576.9</u>
Nominal reserves		
EPS uncertainty (2.5%)	1.5	12.0
ECS uncertainty (.08 #/hr)	--	24.3
	<u>1.5</u>	<u>36.3</u>
Total requirement	67.7	658.0
Margin T = 0 (fill/launch)	14.4	286.5

*Supplied by KSC.

10/23/72

4-15





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 (-3 σ)	-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.

4-20

10/23/72

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 (-3 σ)	-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.

Mission profile dependent
8/29/72 Basic

ASSUMPTIONS AND GROUND RULES FOR THE LM RCS ANALYSIS

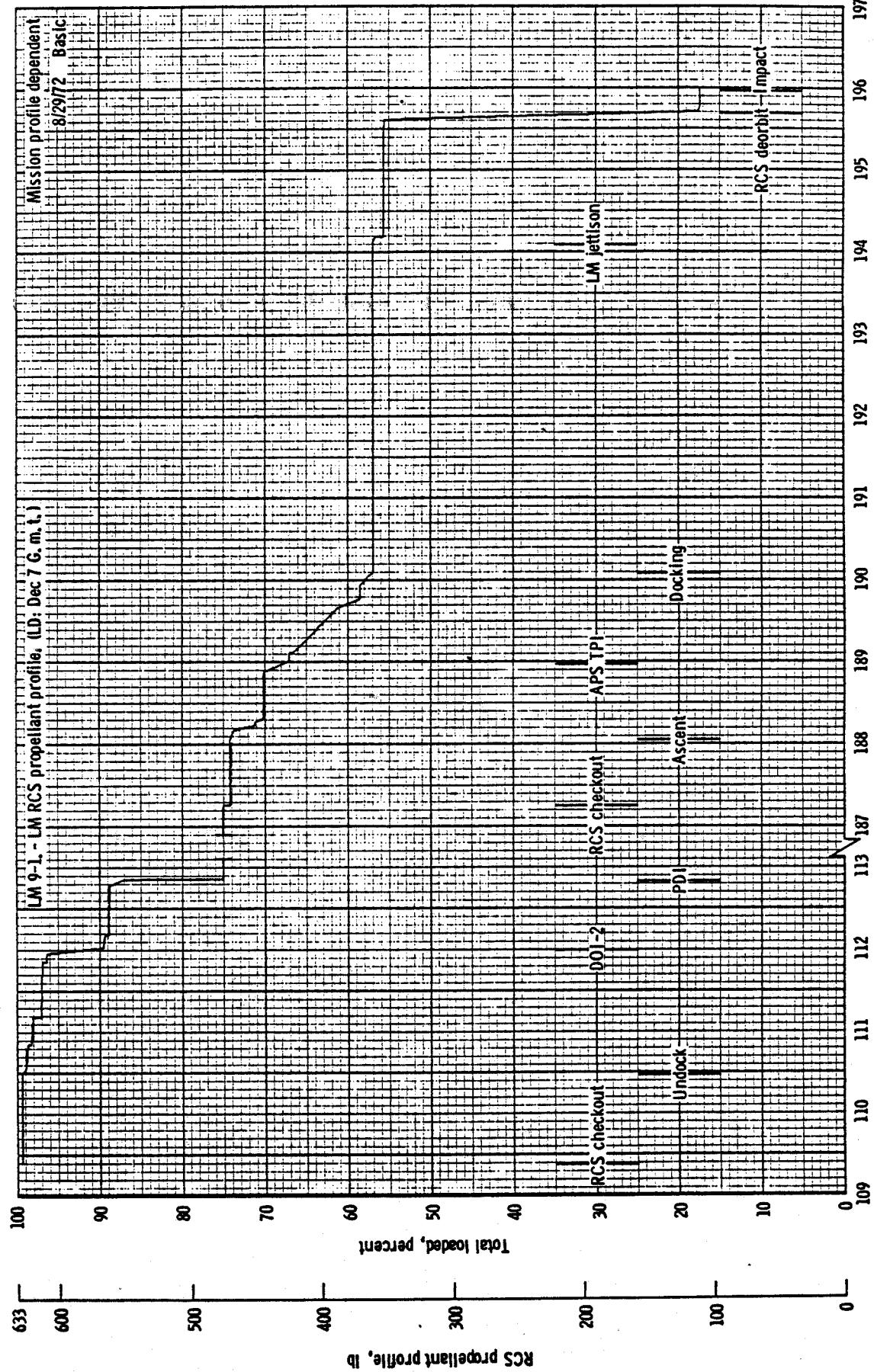
1. Data for the LM RCS engine performance and propellant requirements were obtained from the SODB, Volume II, and from postflight analyses of Apollo 9-16 missions.
2. The analysis assumes an insertion trim or RCS tweak burn (nominally zero) of 20 fps.
3. It is assumed there will be a 5-fps RCS trim following 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

10/23/72



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

1. 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

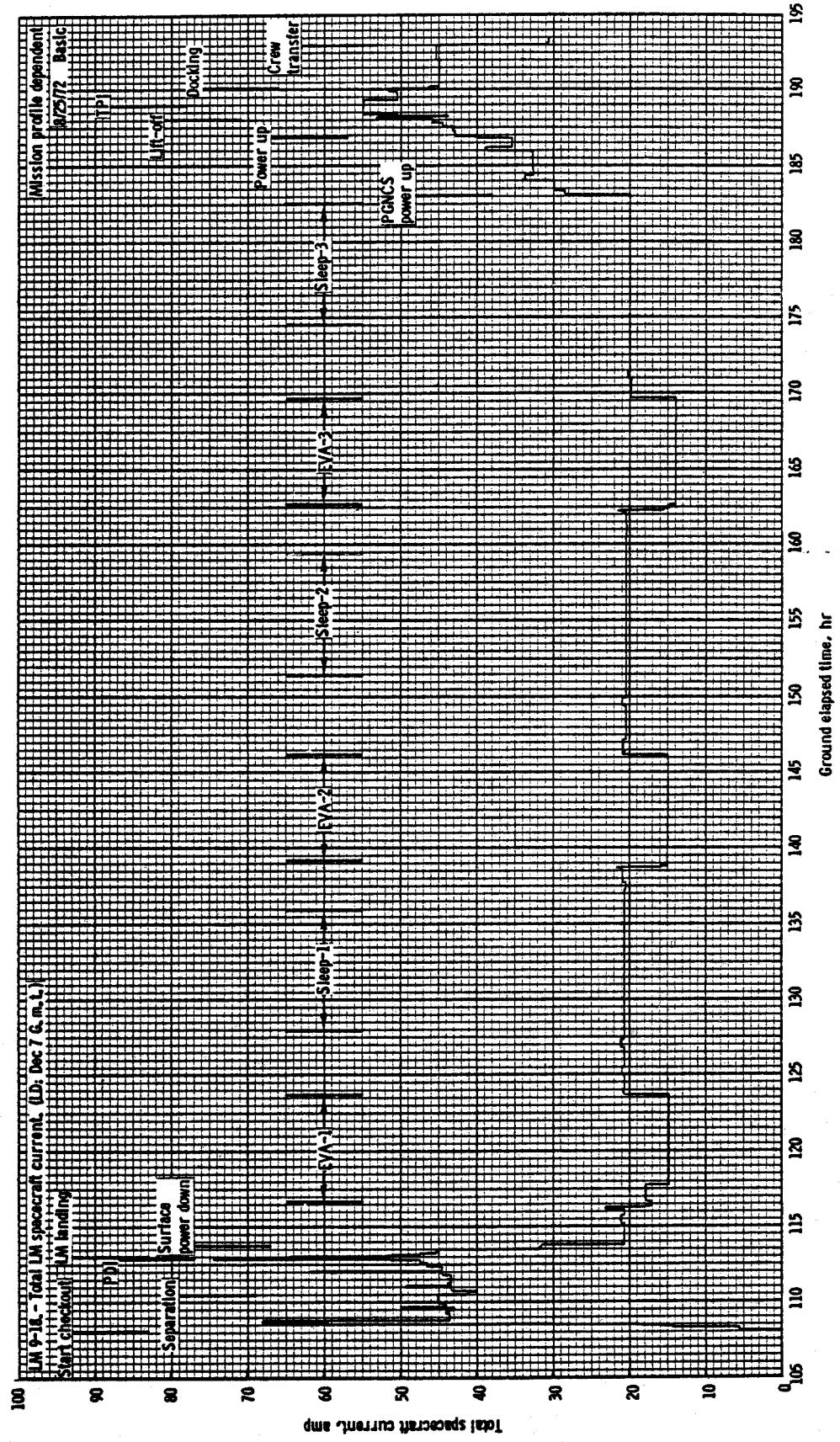
Item	A-h required	A-h remaining
Initial capacity	--	2075
Total unusables	108	1967
Required through touchdown	219	1748
Required for surface stay	1470	278
Total usable margin	--	278

ASCENT STAGE EPS SUMMARY

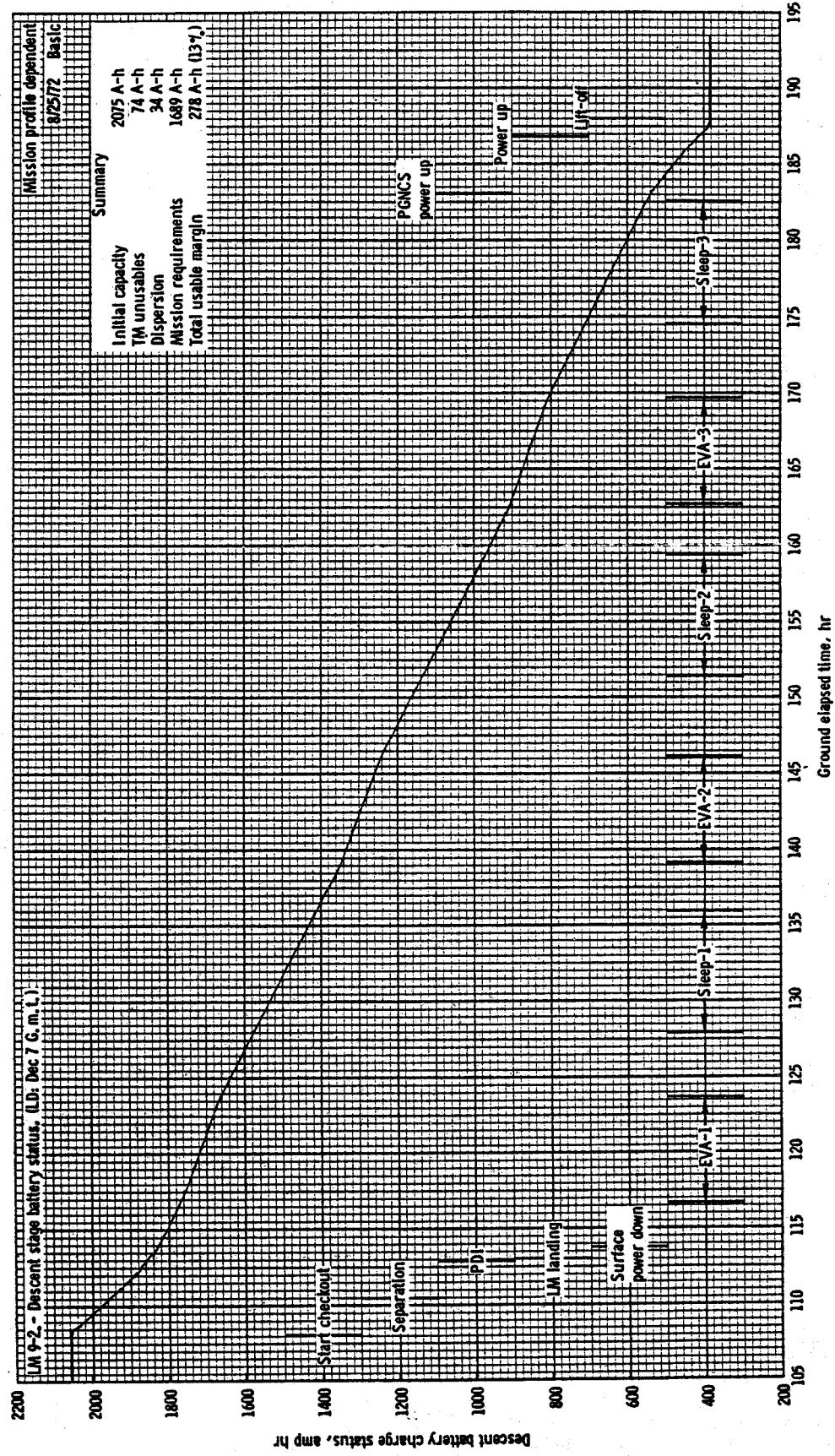
Item	A-h required	A-h remaining
Initial capacity	--	592
Total unusables	24	568
Required through docking	150	418
Required through crew transfer	284	284

10/23/72

4-27



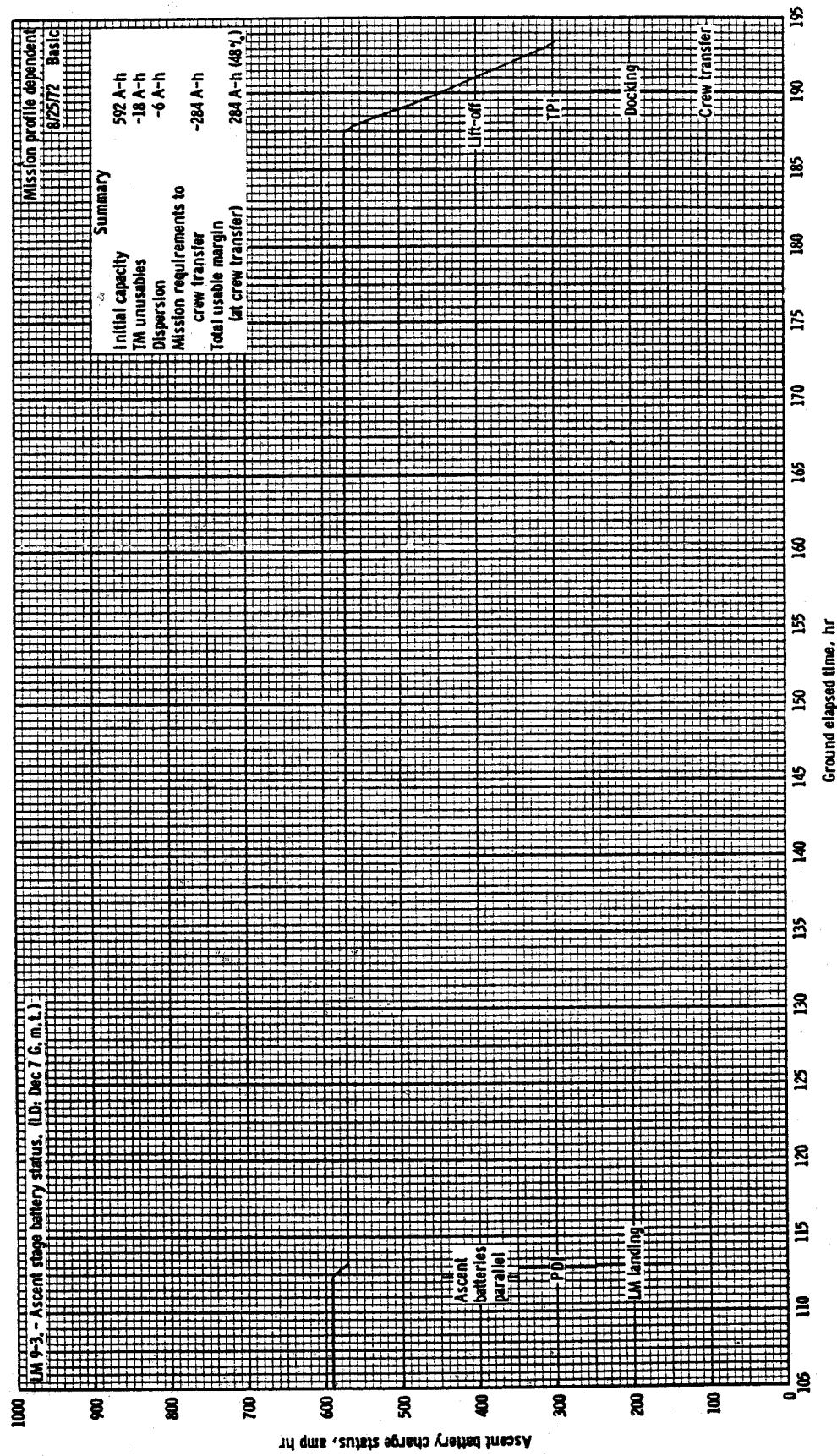
10/23/72



Apollo 17 descent electrical energy remaining.

10/23/72

4-29



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

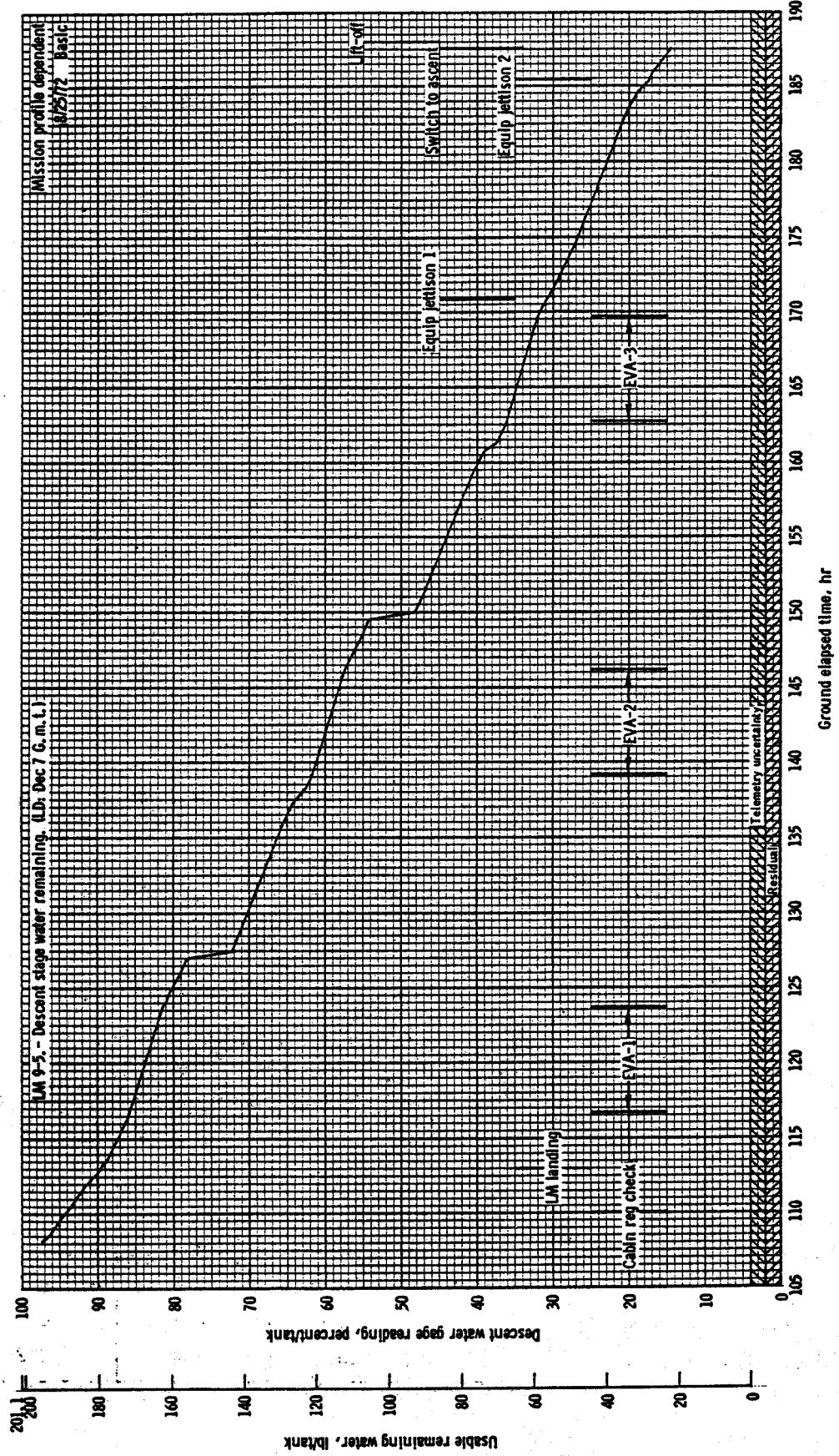
(a) Water

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

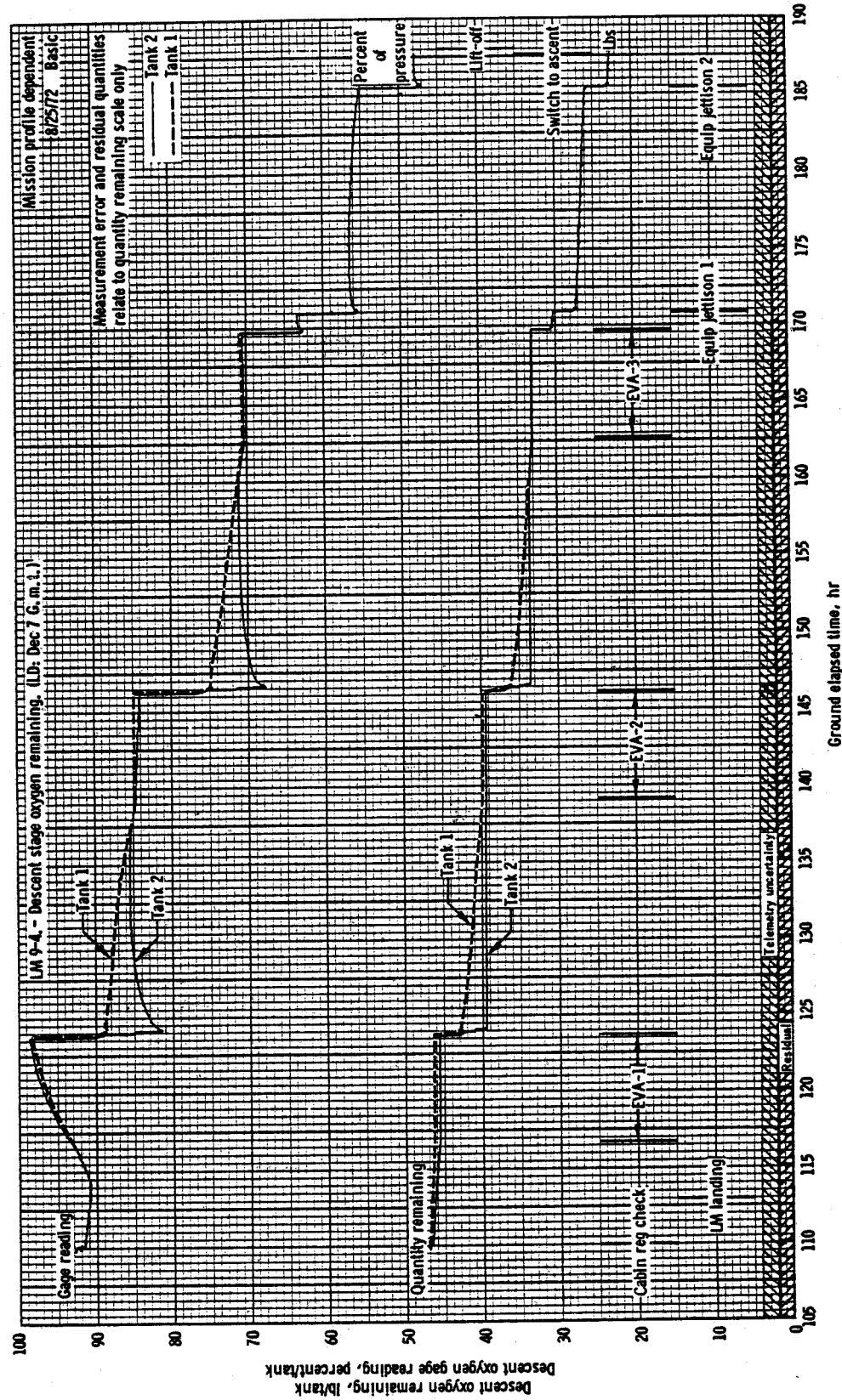
10/23/72

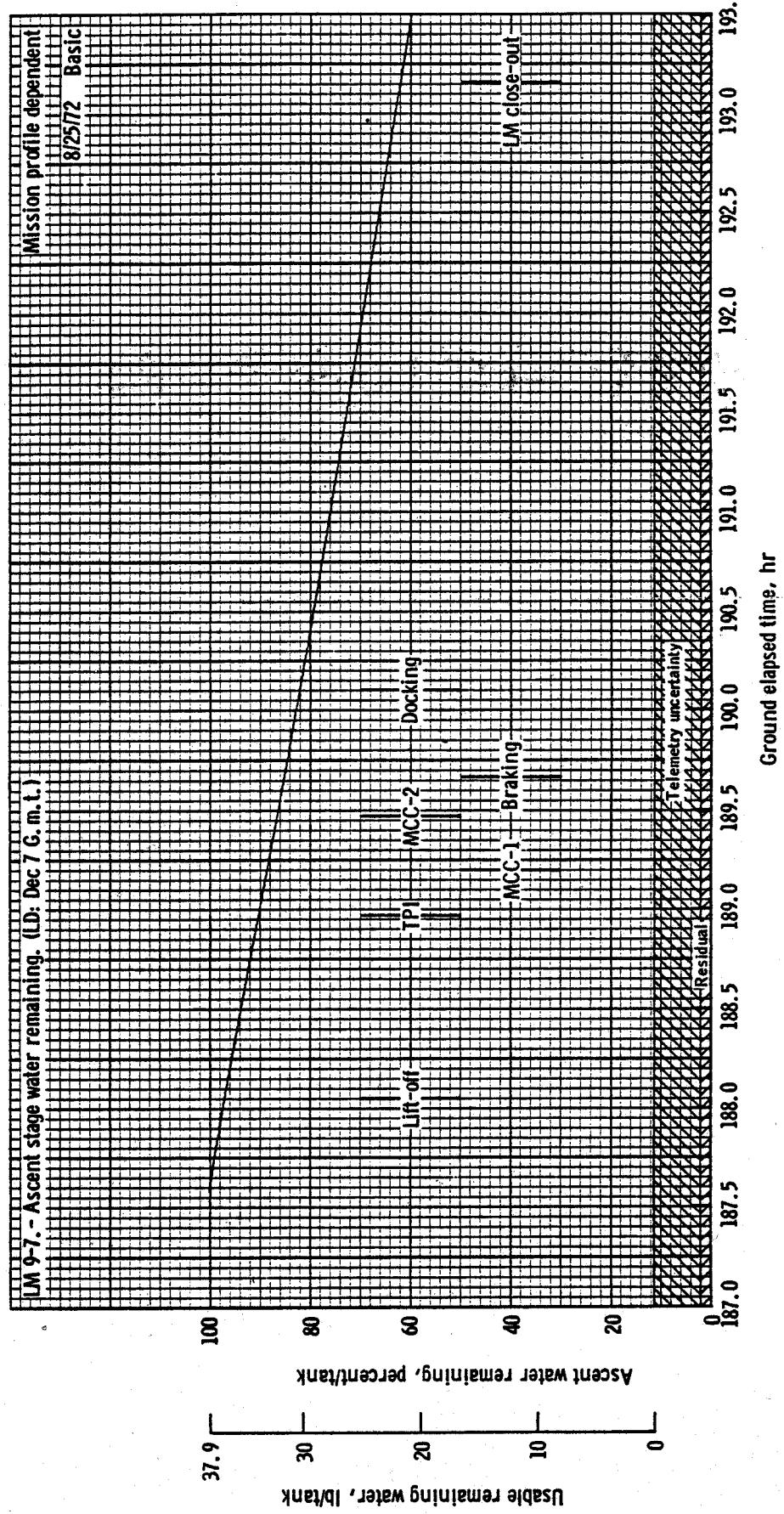


Descent stage water remaining.

- 10/23/72

4-33

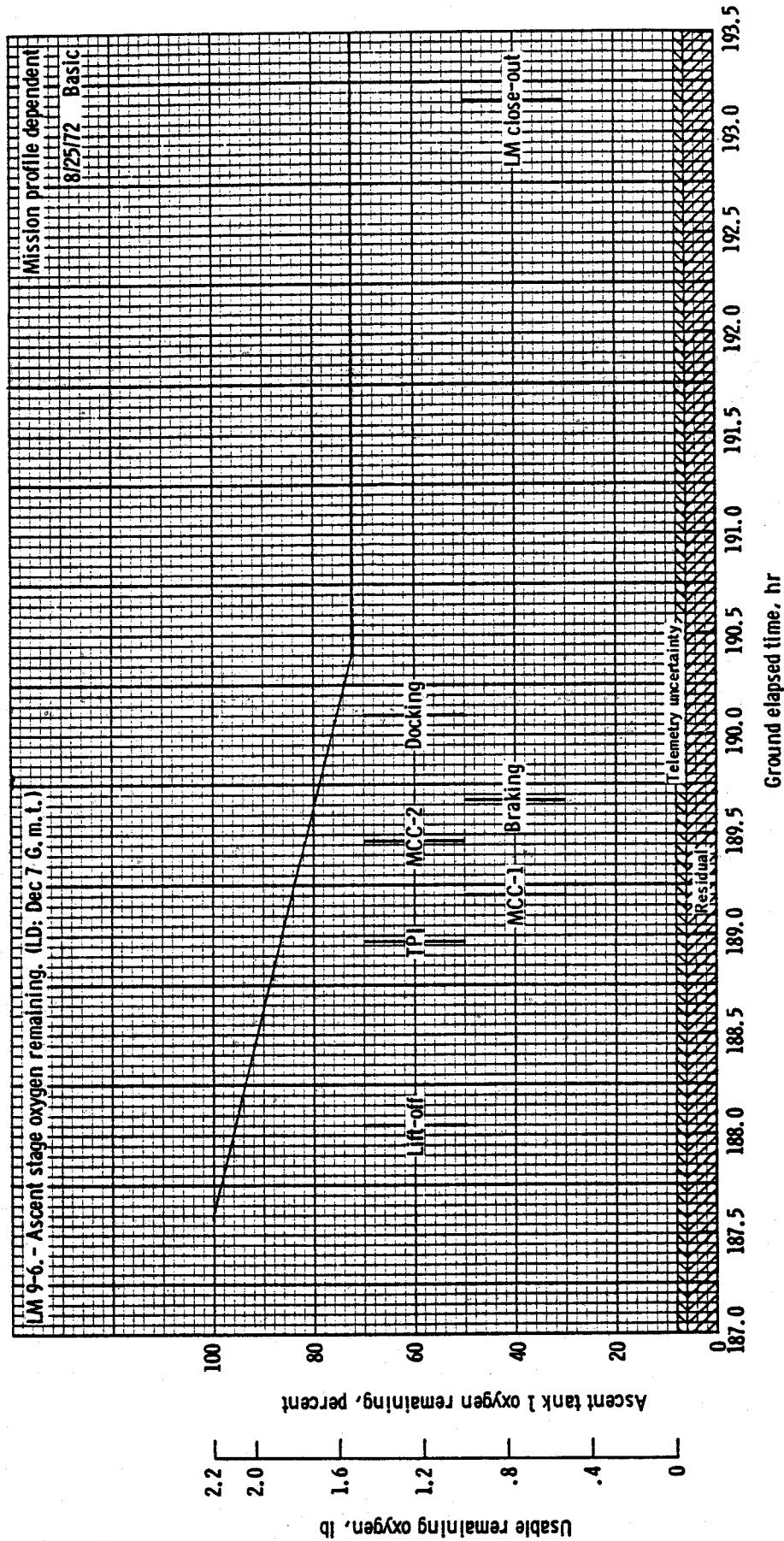




Ascent stage water remaining.

10/23/72

4-35



Ascent tank 1 oxygen remaining.

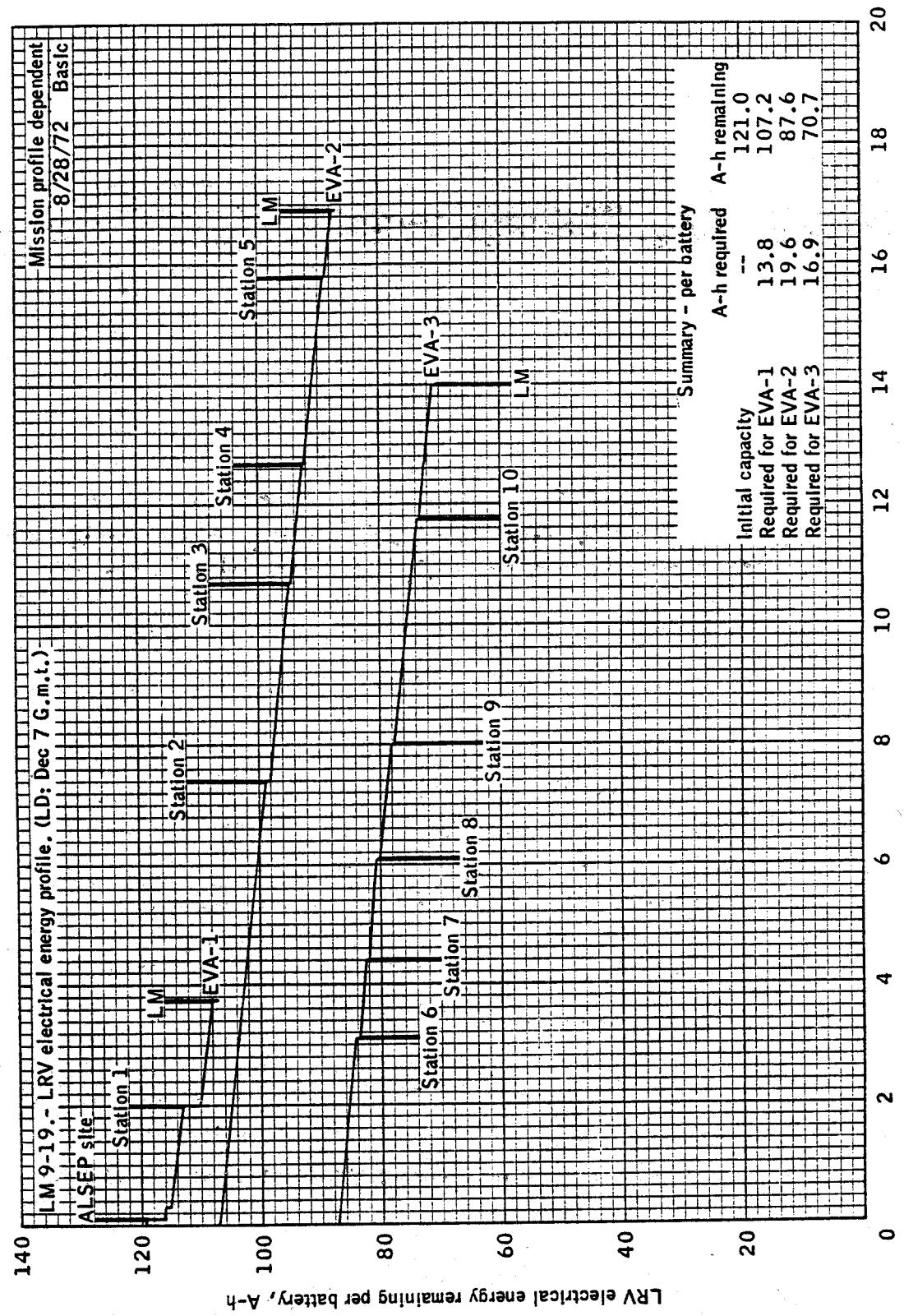
Mission profile dependent
8/28/72 Basic

ASSUMPTIONS FOR THE LRV EPS ANALYSIS

- a. The energy available from each of the two batteries is 121 A-h.
- b. No unusables or uncertainties are considered in the budget.
- c. Slopes were derived from the Apollo 17 landing site form line map.
- d. Terrain types and stop times were derived from the traverse data package.
- e. The MSFC soil model L-3 was used.
- f. The vehicle speed was 8 km/hr except where mobility conditions dictated lower speeds.
- g. The traction drive system was off during stops longer than 5 minutes.
- h. The navigation and caution systems were operated throughout each traverse.
- i. Electrical power required by the LCRU during EVA-1 was supplied by LRV batteries. While driving, the LCRU was in the PM1/WB mode. During all station stops the LCRU mode of operation was FM/TV.
- j. The vehicle weight was 1470 pounds.
- k. A wander factor of 1.1 is included in the analysis.
- l. The distance traveled is the map or straight line distance between points.
- m. An effective alpha of 0.40 was assumed for all cool-down periods.

10/23/72

4-37



LRV electrical energy profile.



SECTION 5 - SUMMARY TIMELINE

FLIGHT PLAN

CSM

LIFT-OFF 2053 CST, DEC. 6, 1972

CSM

LIFT-OFF

2053

CST

DEC. 6, 1972

P52 OPT 3

P52 OPT 3

TLI PREP

03:21

SIVB MNVR TO SEP ATT

04:12

CSM/S-IVB SEP

04:22

DOCK

05:07

CSM/LM EJECTION

05:07

W49 (S-IVB VIEWING ATT)

05:30

S-IVB APS EVASIVE MNVR

05:30

DOFF SUITS

06:00

PTC

06:00

PTC

06:00

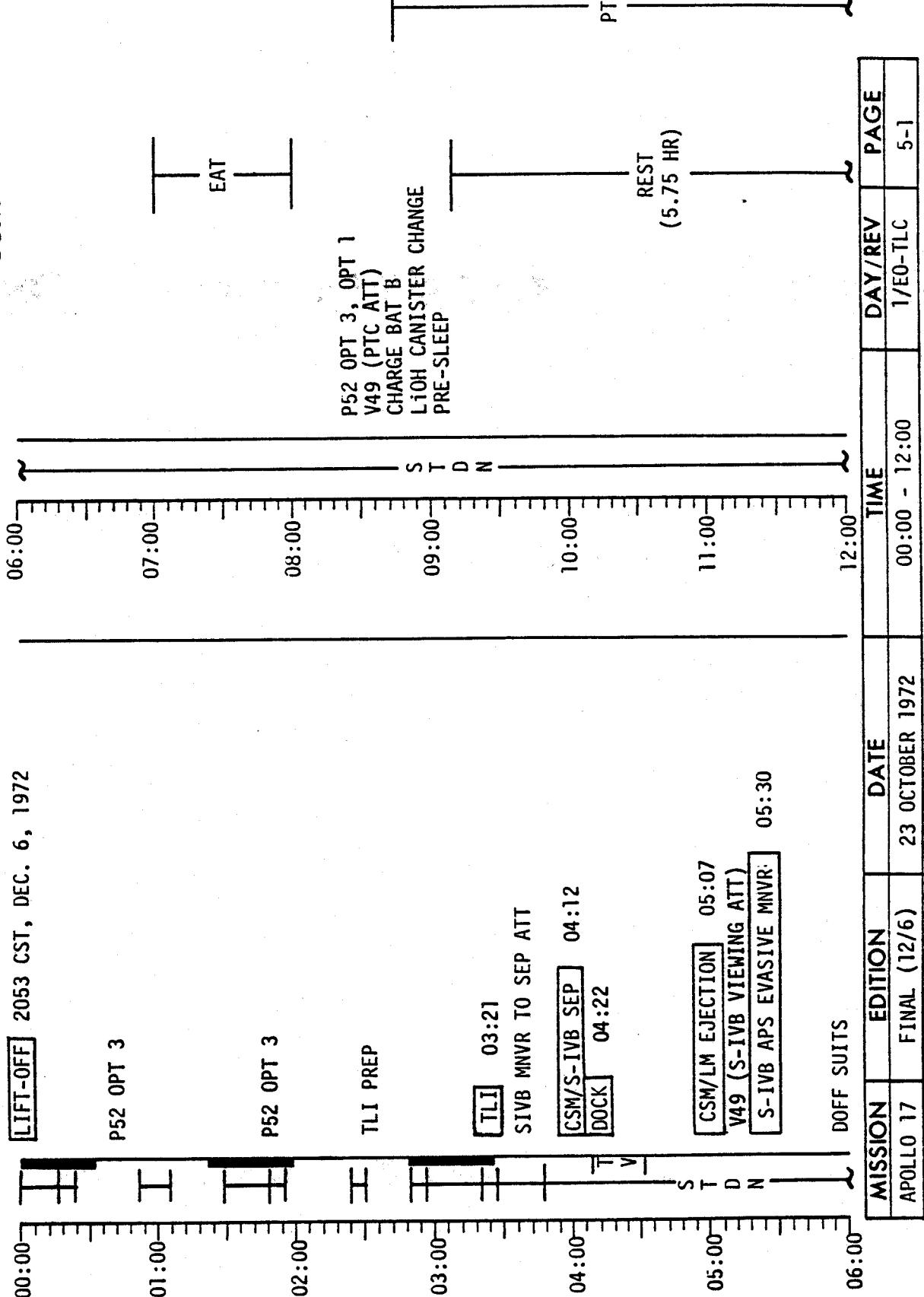
PTC

06:00

PTC

06:00

PTC

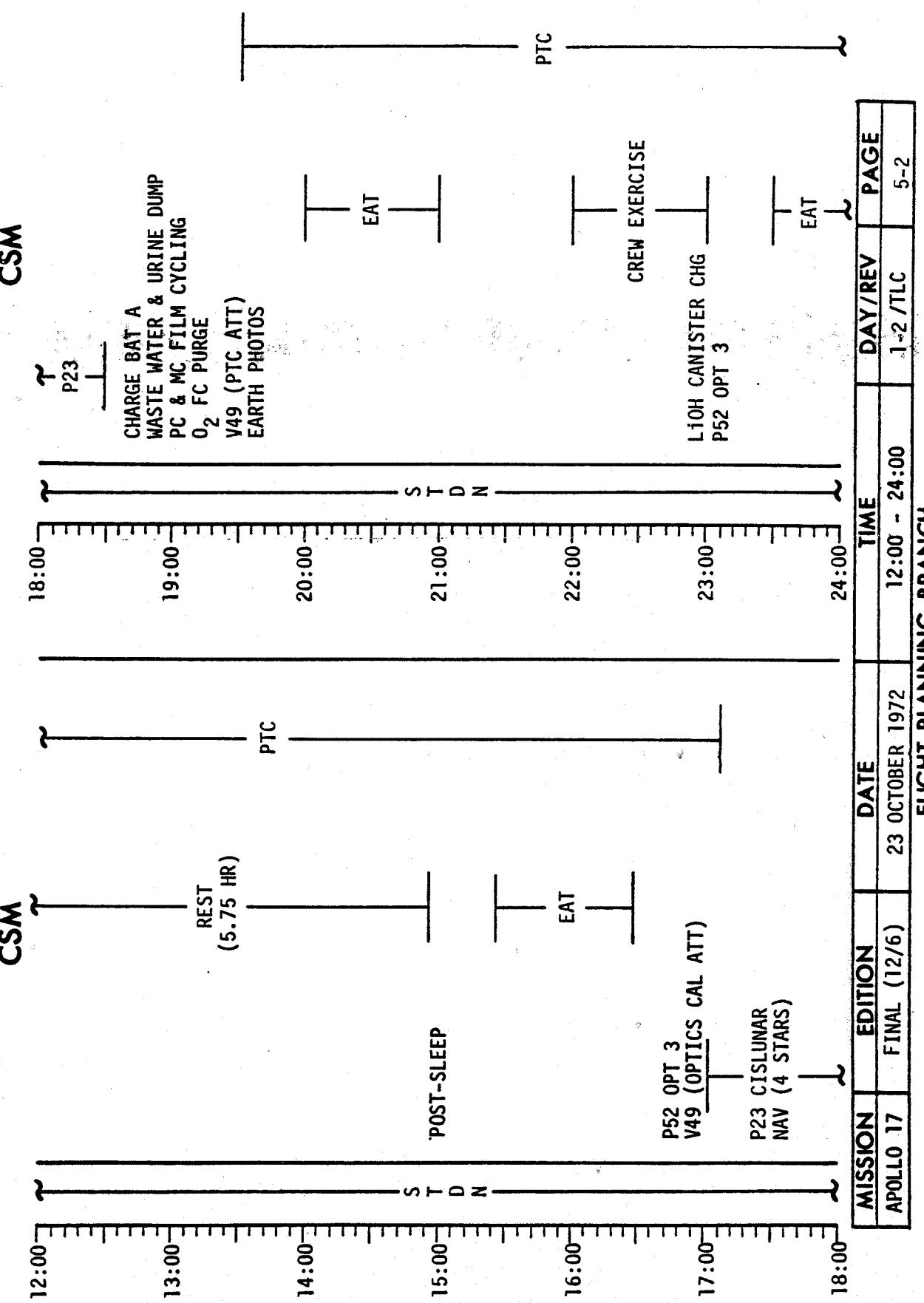


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	00:00 - 12:00	1/E0-TLC	5-1

FLIGHT PLANNING BRANCH

FLIGHT PLAN

CSM

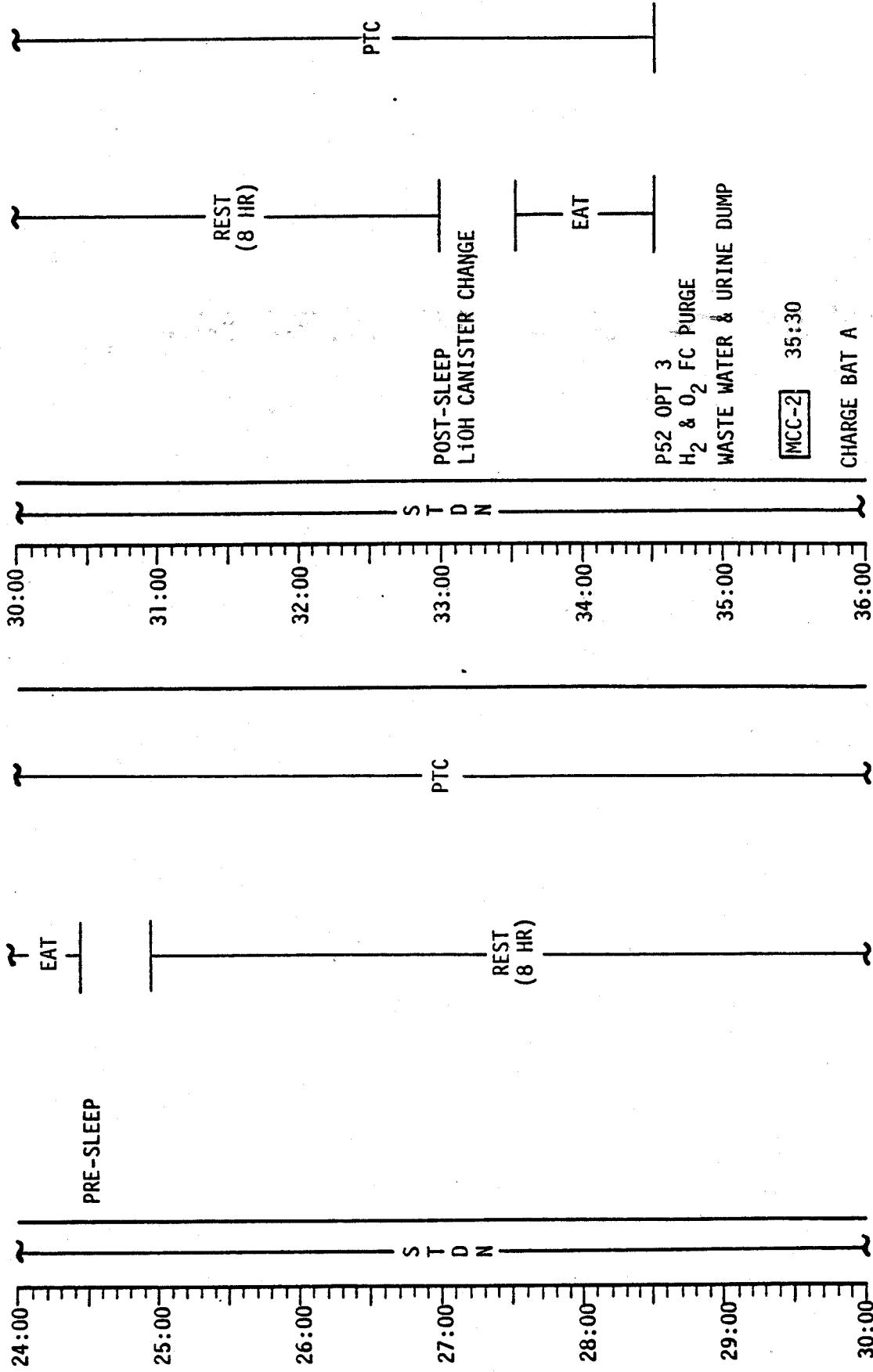


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	12:00 - 24:00	1-2 / TLC	5-2

FLIGHT PLANNING BRANCH

FLIGHT PLAN

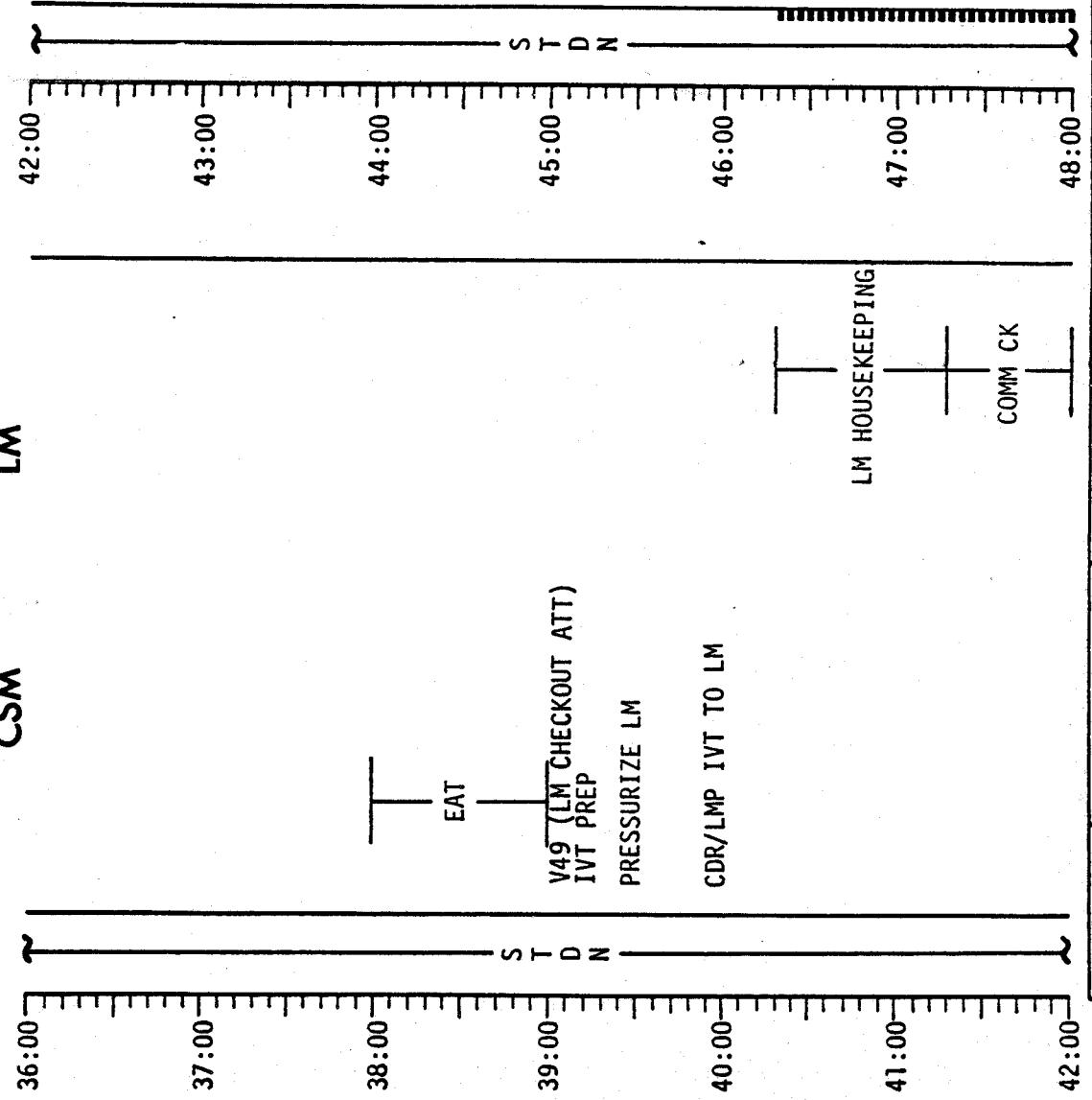
CSM



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 PLAN

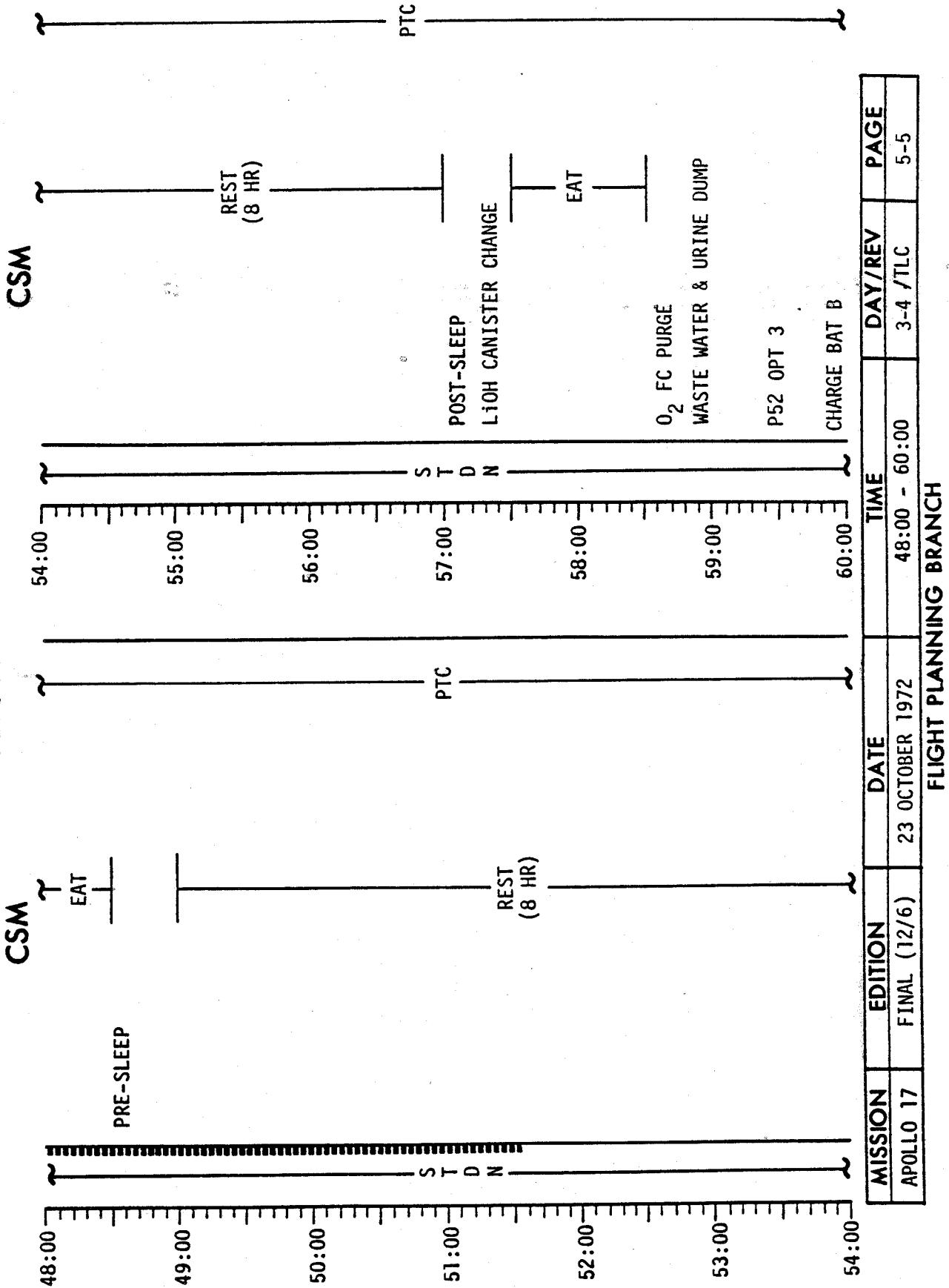
CSM LM



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



FLIGHT PLAN

CSM

IVT PREP
V49 (LM CHECKOUT ATT)
PRESSURIZE LM
IVT TO LM

E-MEMORY DUMP

IVT TO CSM

PGA TEST

LM

IVT PREP

V49 (LM CHECKOUT ATT)

PRESSURIZE LM

IVT TO LM

E-MEMORY DUMP

IVT TO CSM

PGA TEST

60:00

61:00

62:00

S

T

63:00

D

64:00

N

65:00

S

66:00

T

67:00

EAT

68:00

PTC

69:00

PTC

70:00

PTC

71:00

EAT

72:00

EAT

73:00

PTC

74:00

EAT

75:00

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76:00

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205:00

EAT

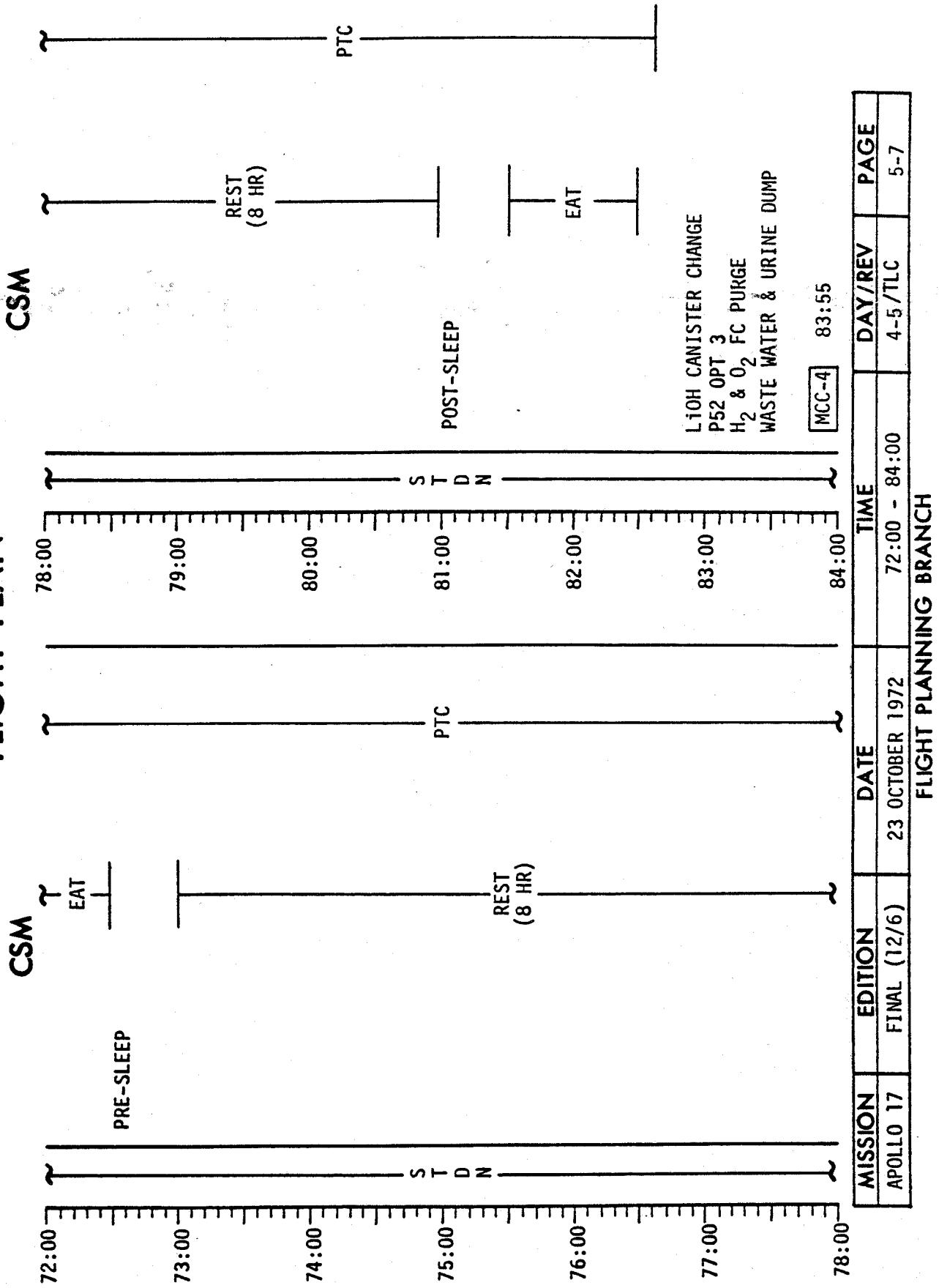
206:00

EAT

207:00

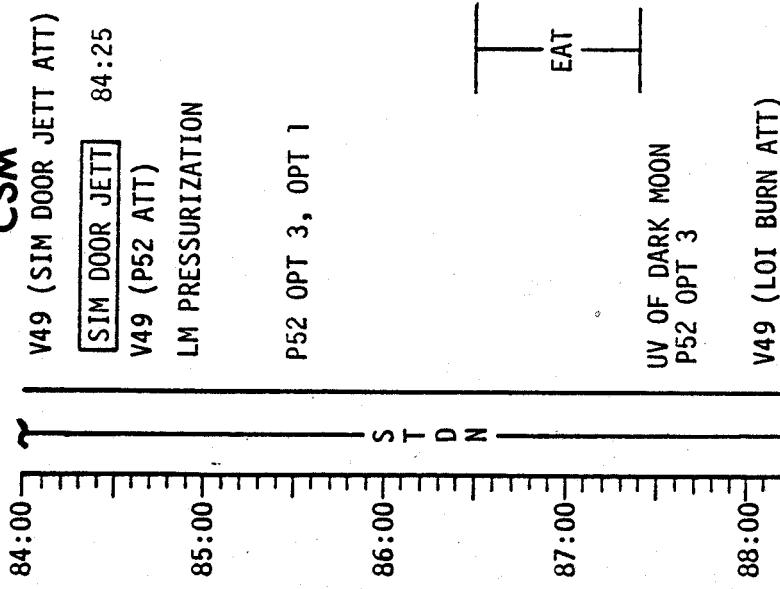
EAT

FLIGHT PLAN



FLIGHT PLAN

CSM



CSM

ORB SCIENCE VISUAL
P52 OPT 3, OPT 1

ORB SCIENCE PHOTOS

PREP FOR DOI

P52 OPT 3
V49 (DOI BURN ATT)

DOI

93:13
V49 (LDMK OBS ATT)
P24 LDMK OBS (J-3 & 17-1)

BAIL OUT

93:48
O₂ FC PURGE

WASTE WATER DUMP
V49 (UV MODE III ATT)
LiOH CANISTER CHANGE

P20 (-X FWD)

UV MODE III

P20 (-X FWD)

UV MODE III

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

CSM

96:00 P52 OPT 3, OPT 1 (IF REQ)

REV 5

EAT

PRE-SLEEP

97:00 REST 8 HR (-X)

UV IR

REV 6

UV IR

UV IR

98:00 REST 8 HR (-X)

UV IR

REV 7

UV IR

99:00 REST 8 HR (-X)

UV IR

REV 8

UV IR

UV IR

REV 9

UV IR

UV IR

REV 10

UV IR

UV IR

REV 11

UV IR

UV IR

REV 12

UV IR

UV IR

REV 13

UV IR

UV IR

REV 14

UV IR

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REV 15

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REV 16

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REV 100

UV IR

UV IR

REV 101

UV IR

UV IR

REV 102

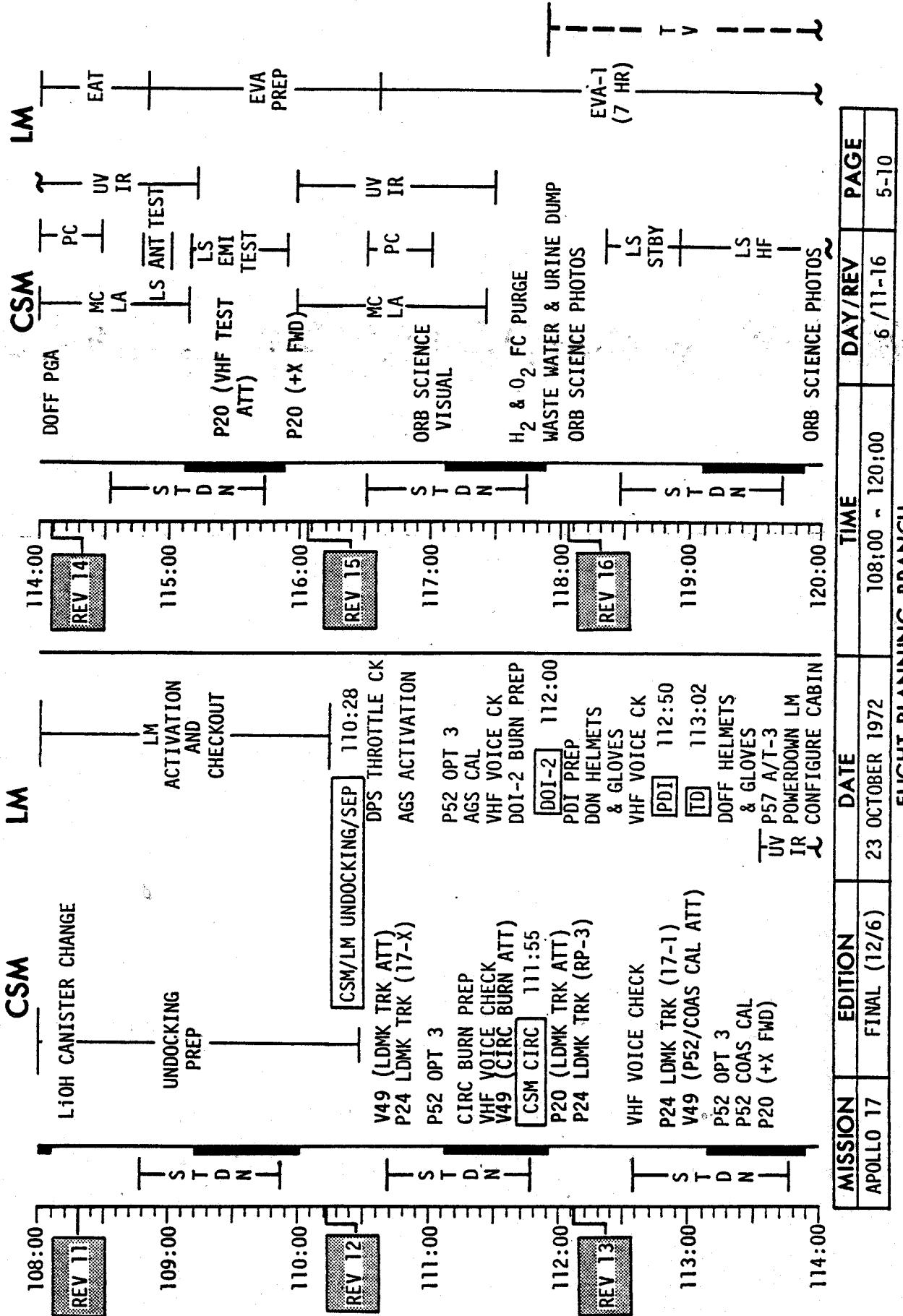
UV IR

UV IR

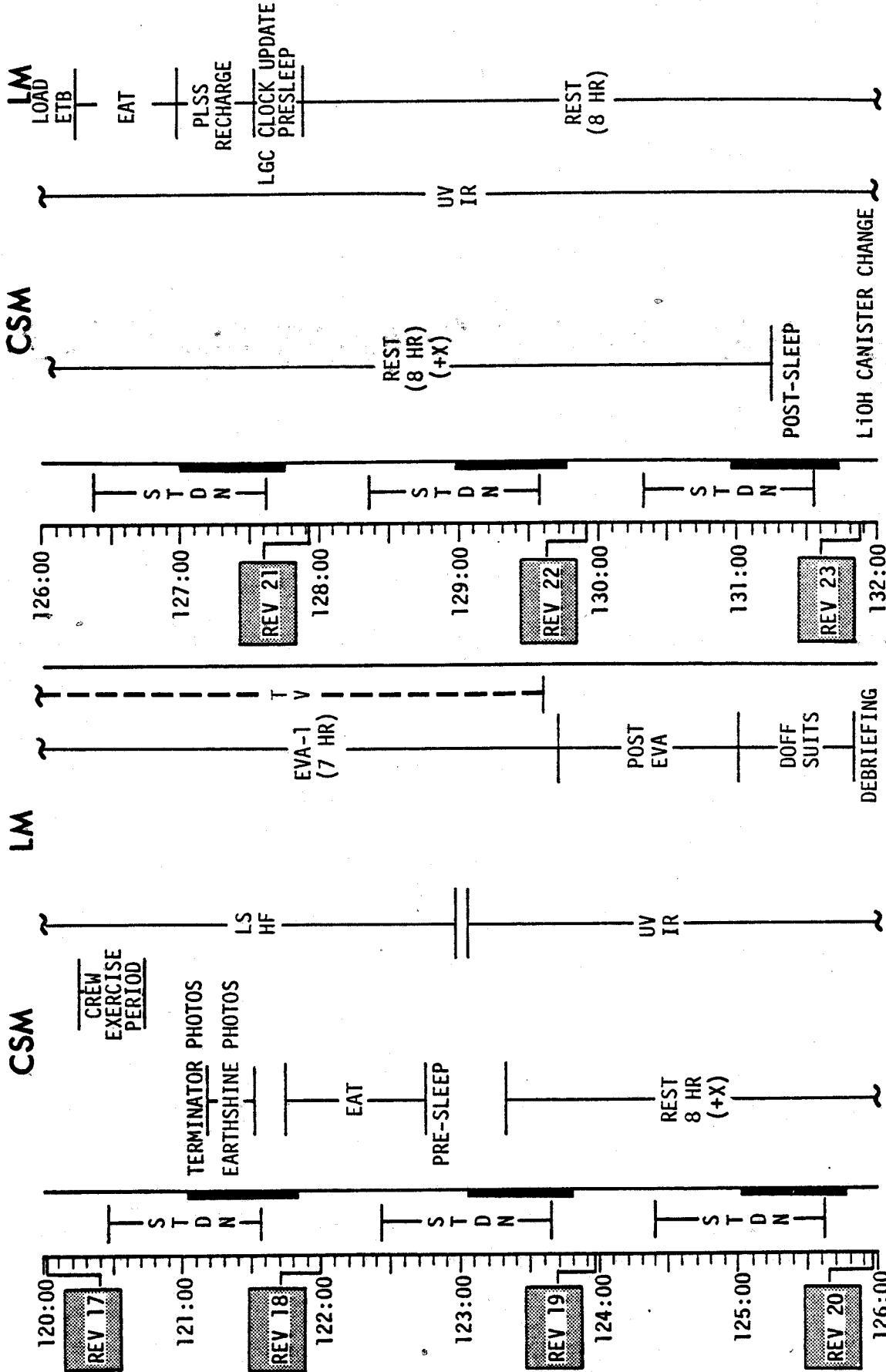
REV 103

UV IR

FLIGHT PLAN



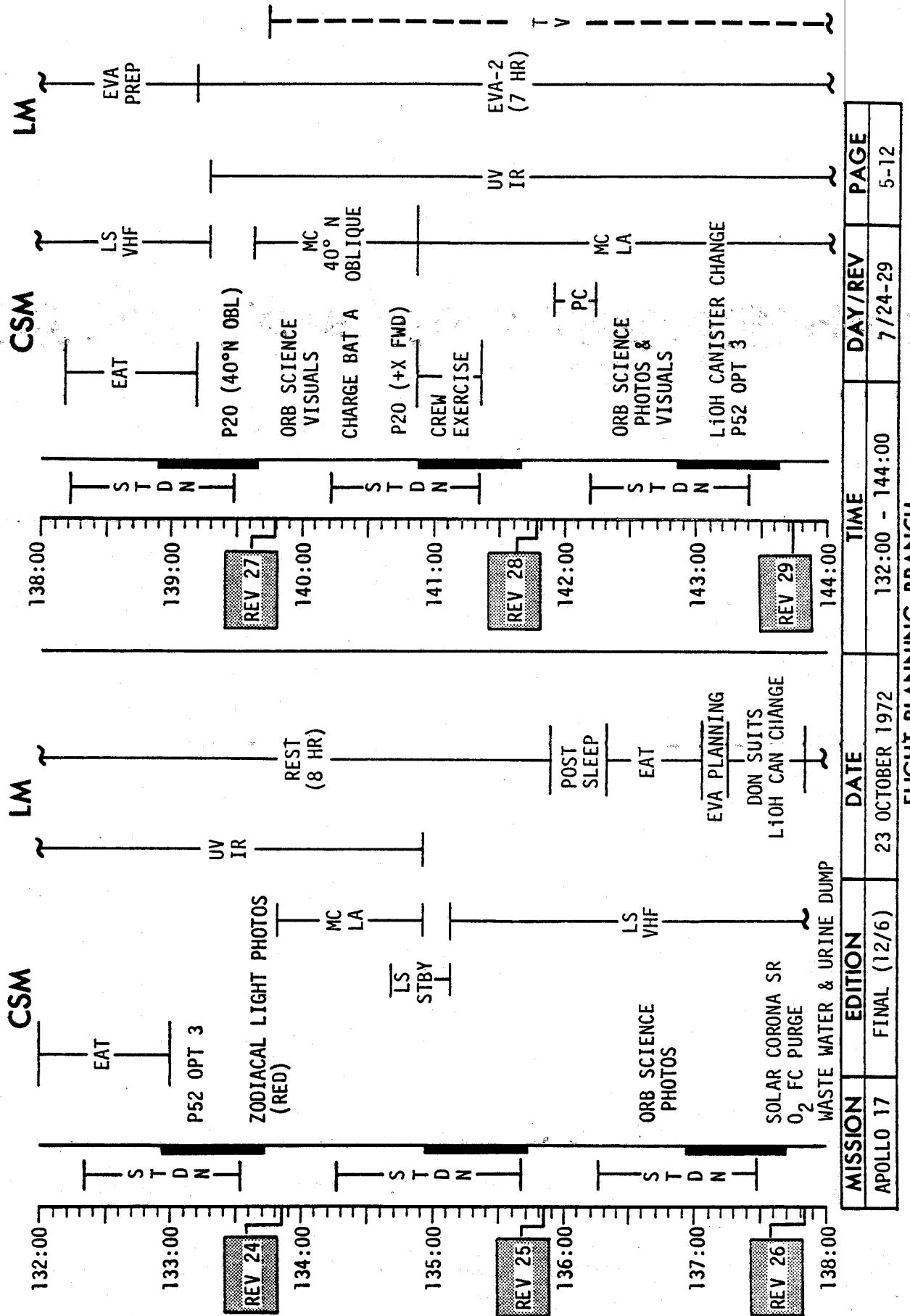
FLIGHT PLAN



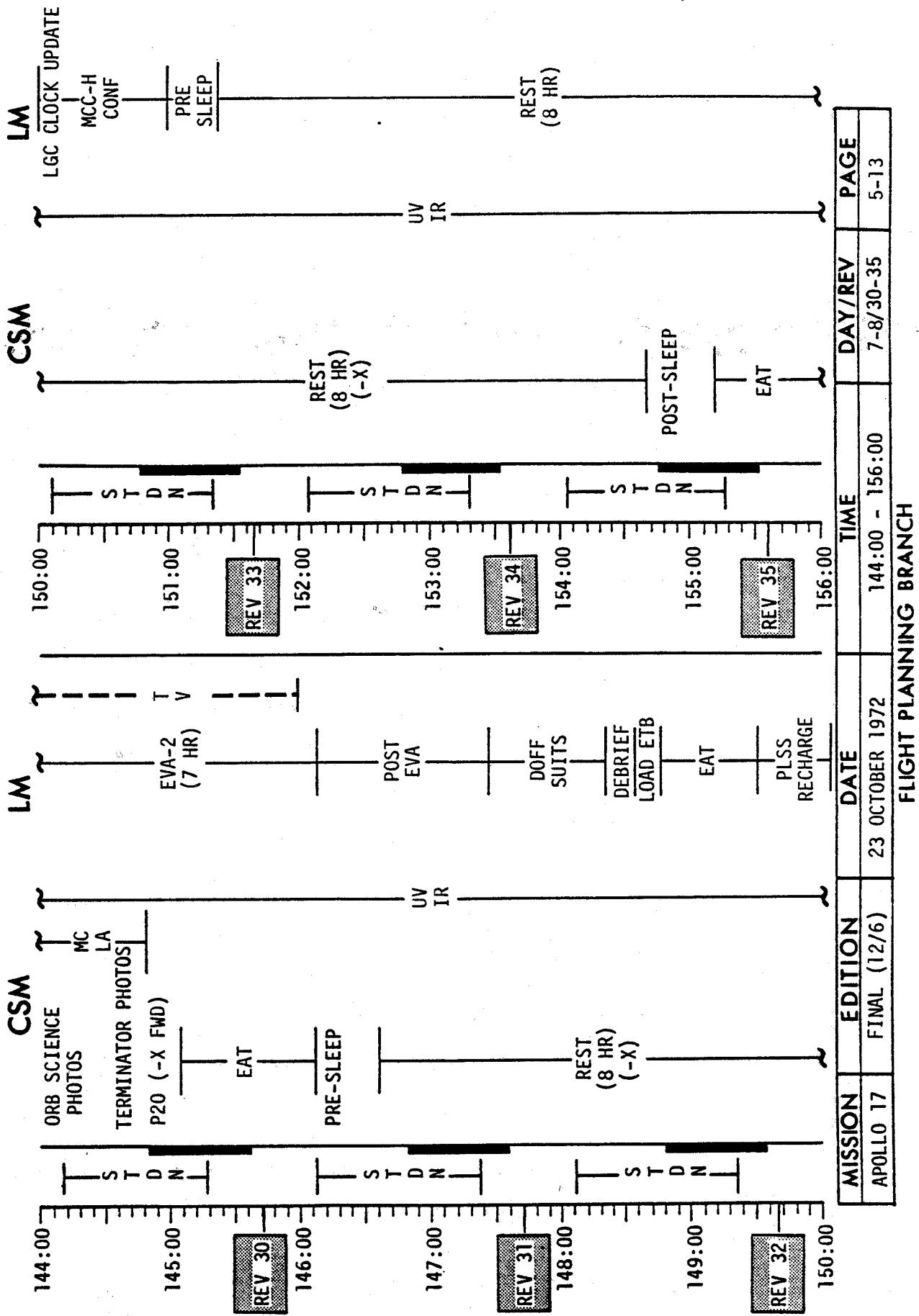
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	120:00 - 132:00	6-7/17-23	5-11

FLIGHT PLANNING BRANCH

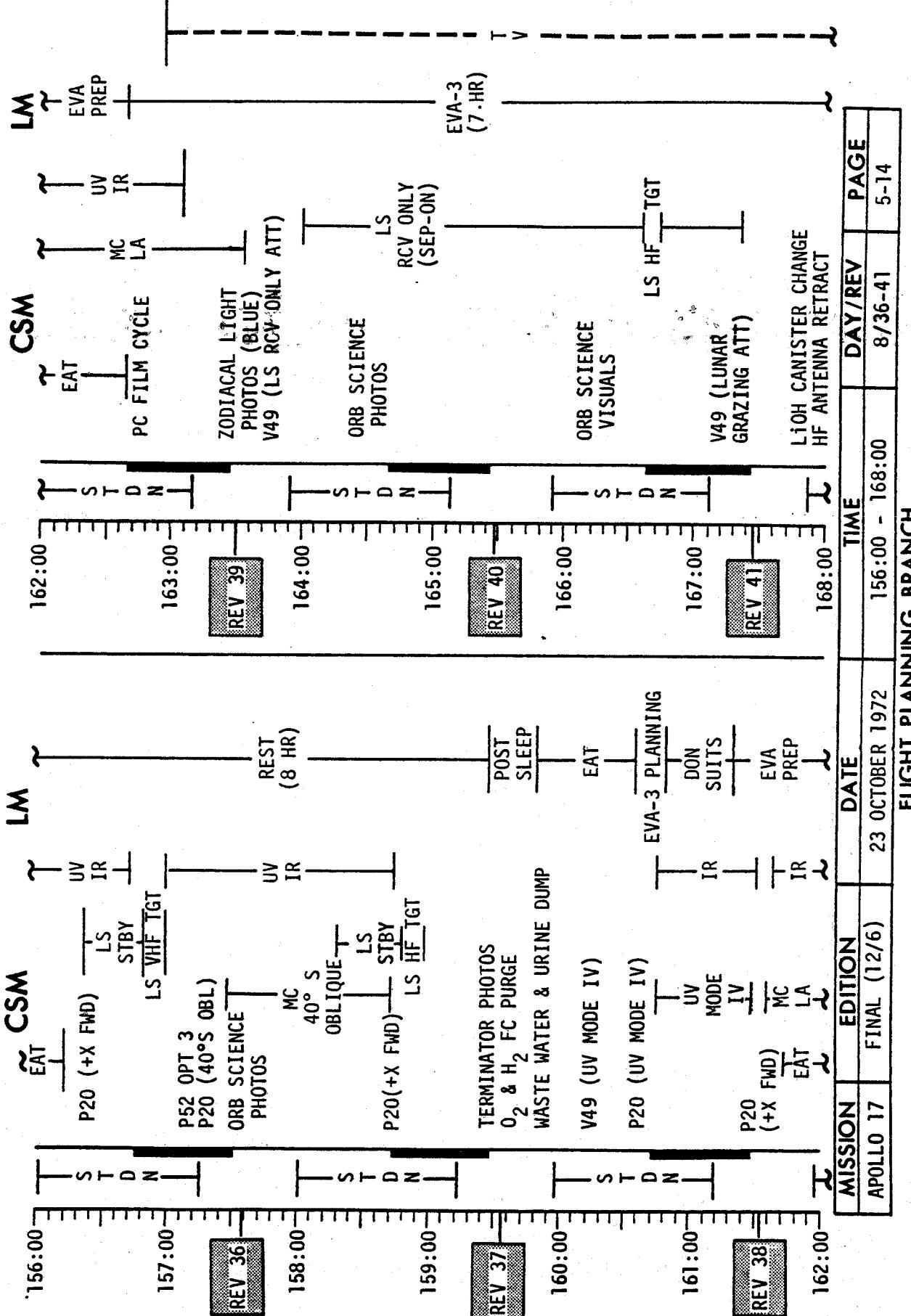
FLIGHT PLAN



FLIGHT PLAN



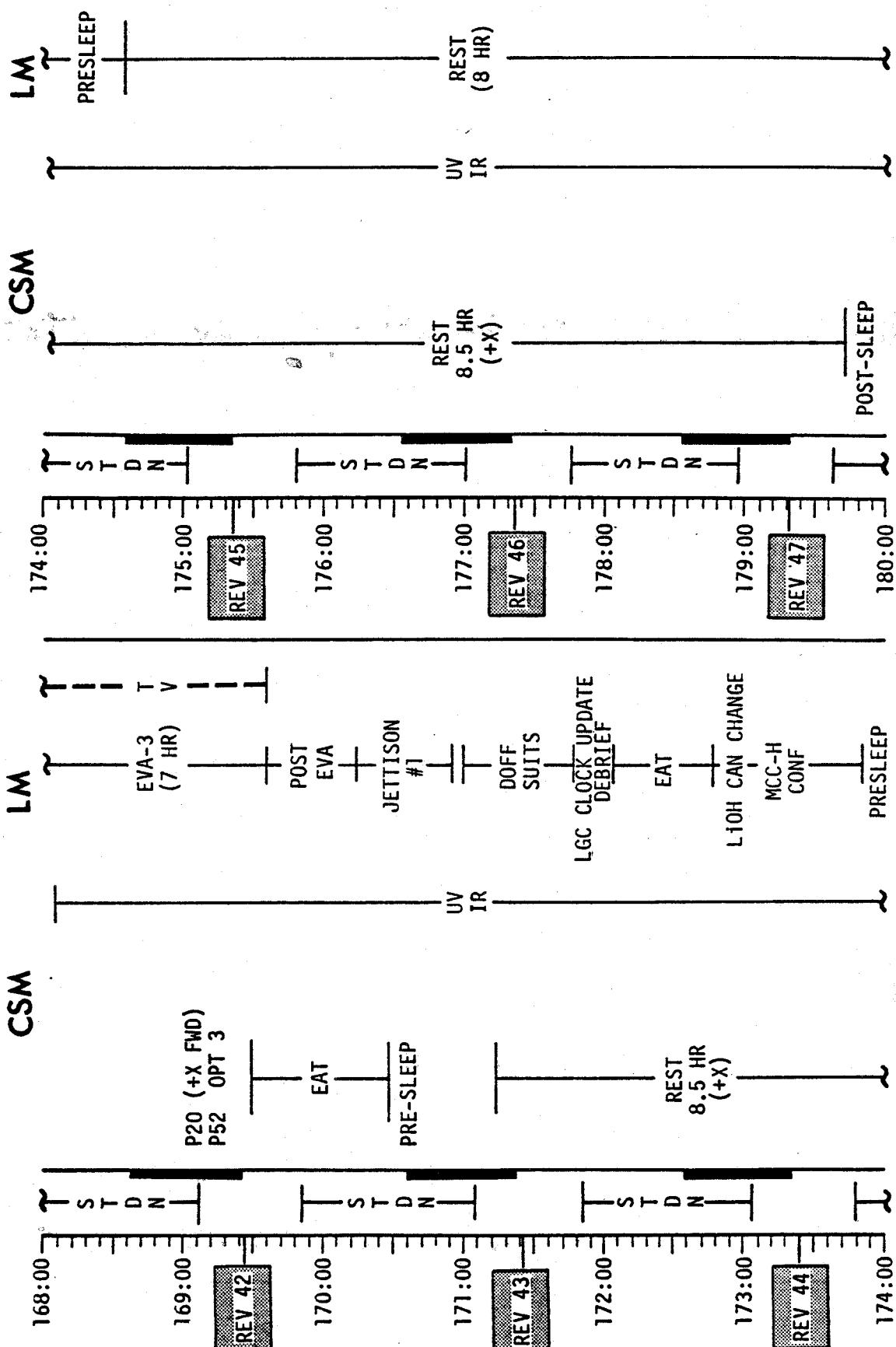
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	156:00 - 168:00	8/36-41	5-14

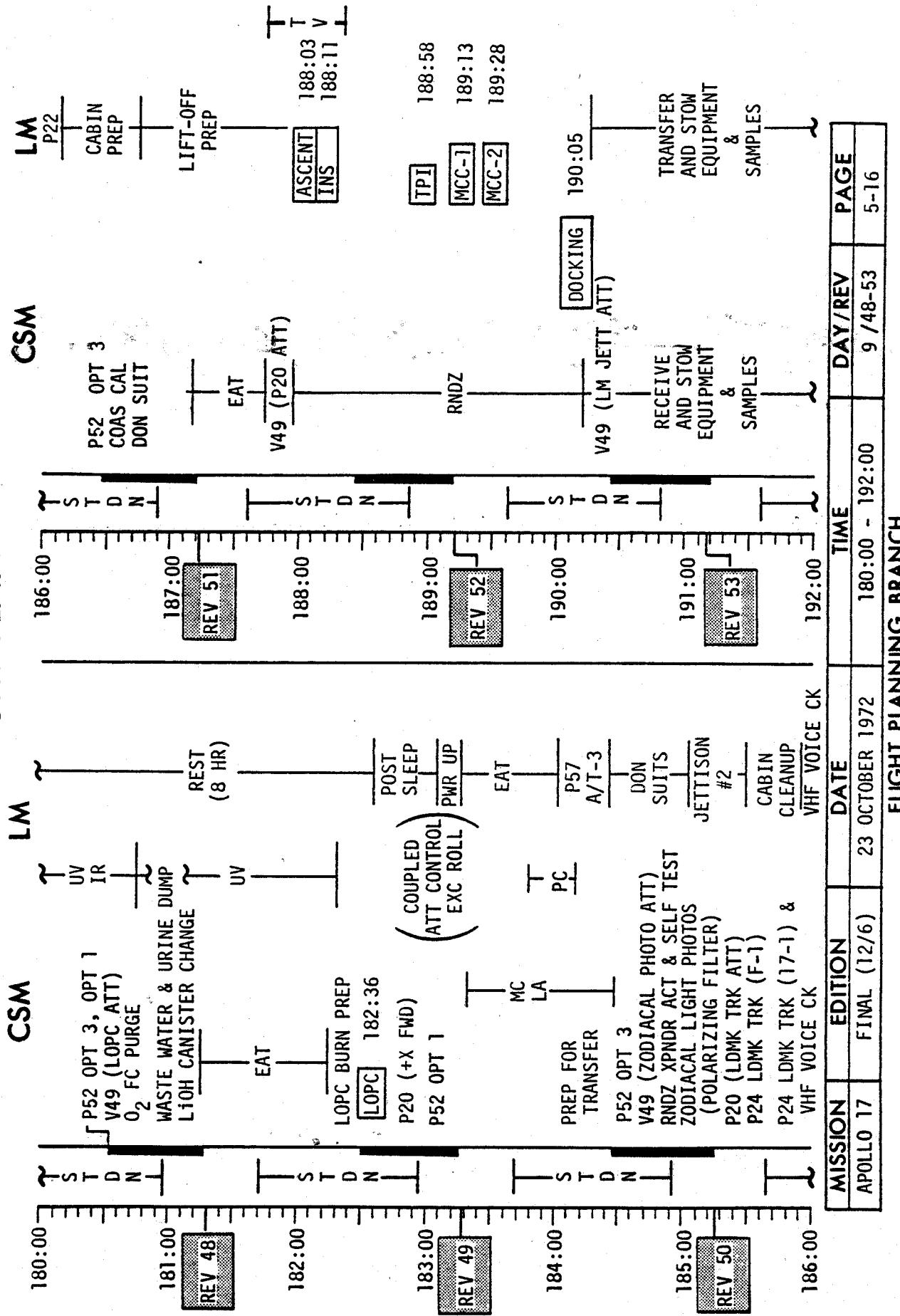
FLIGHT PLANNING BRANCH

FLIGHT PLAN

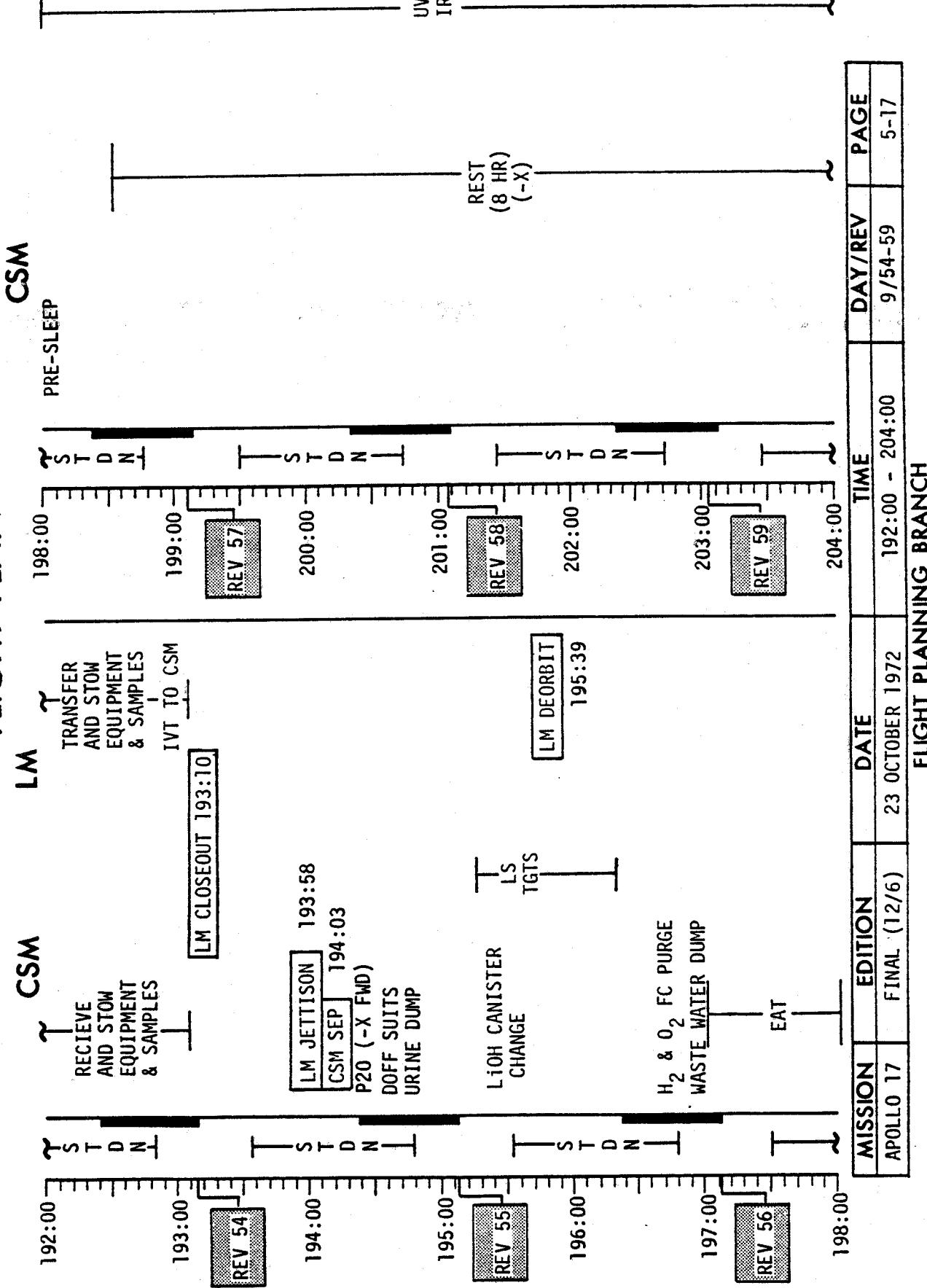


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	168:00 - 180:00	8-9 / 42-47	5-15

FLIGHT PLAN

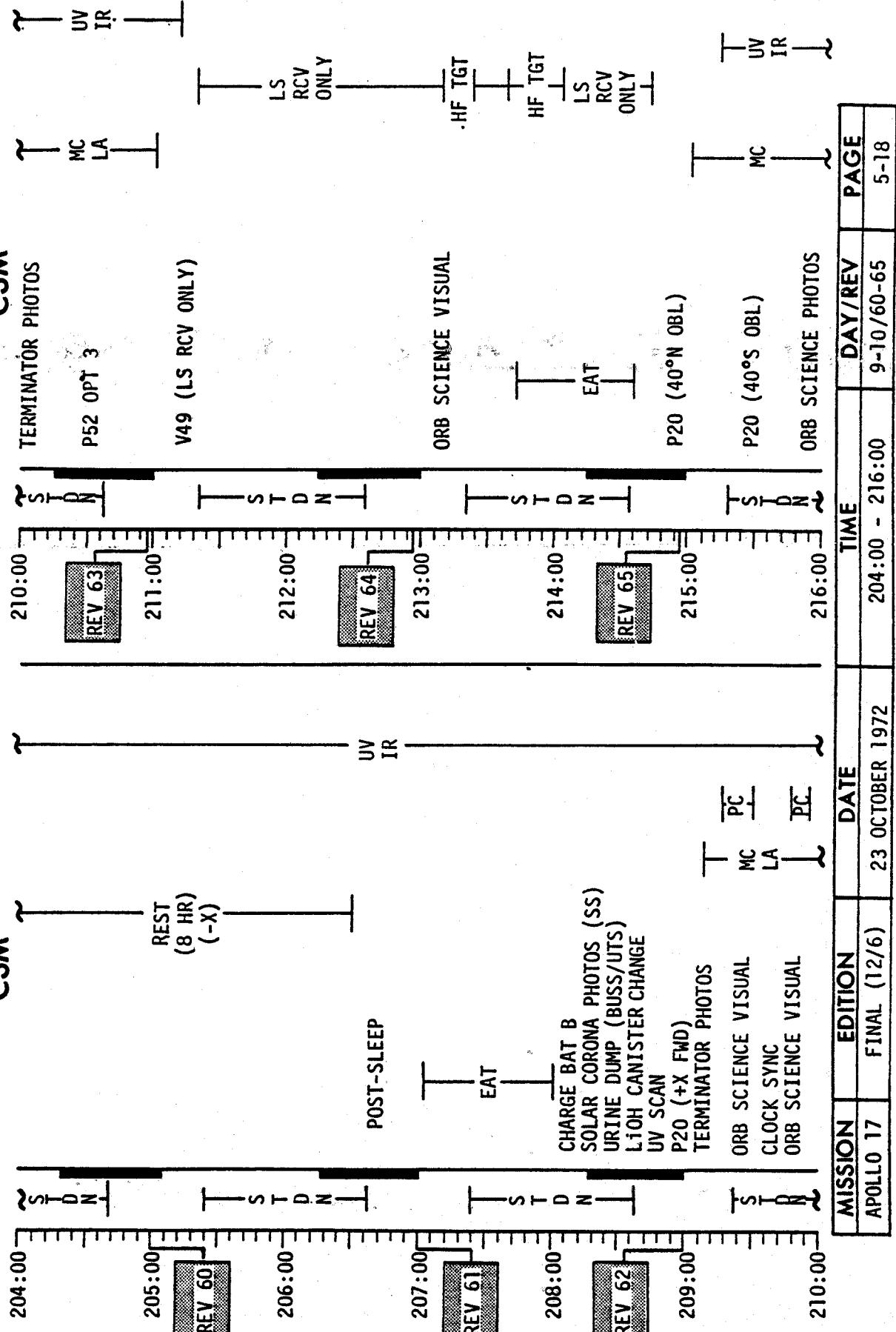


FLIGHT PLAN

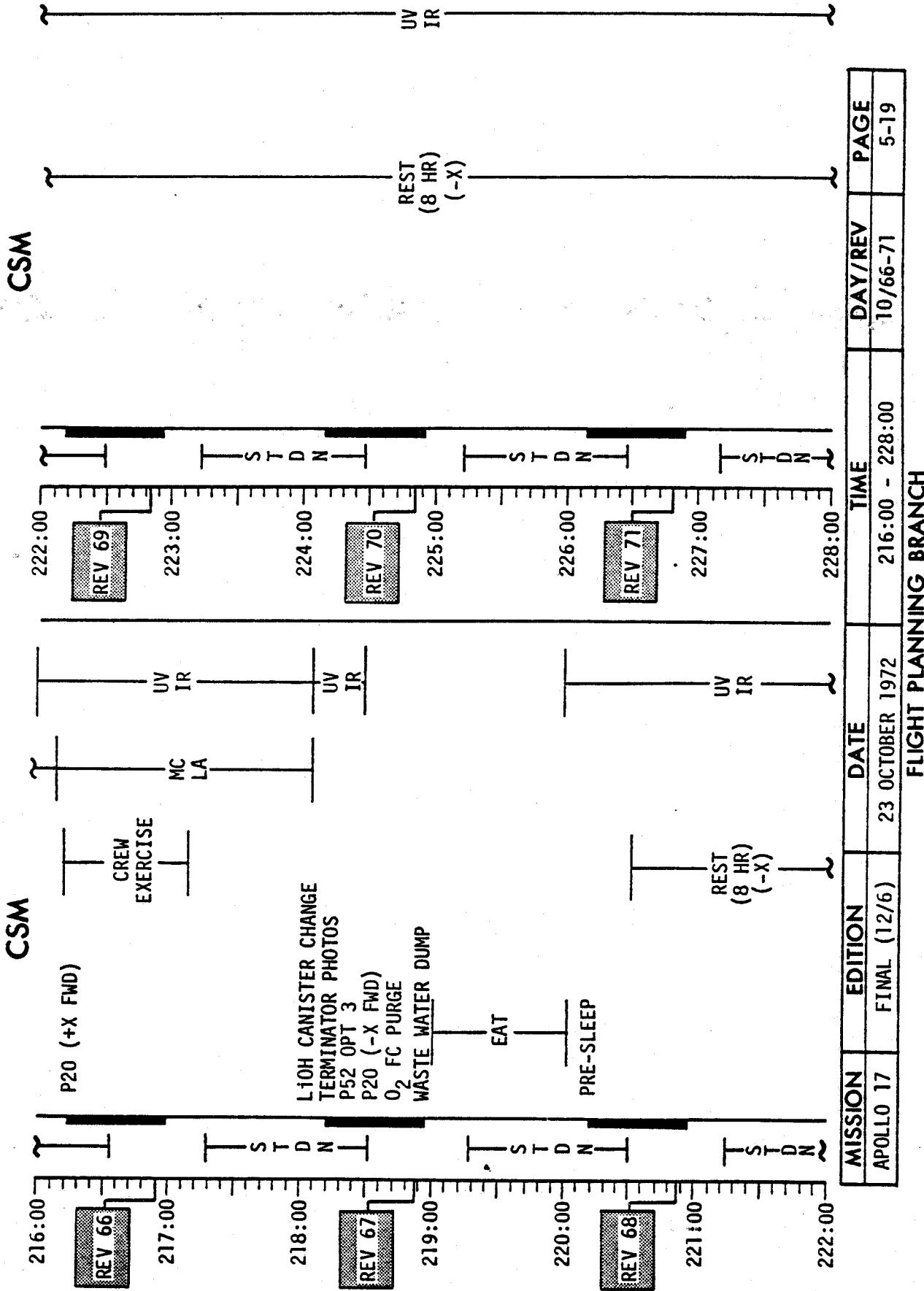


FLIGHT PLAN

CSM



FLIGHT PLAN



FLIGHT PLAN

CSM

228:00 REV 72
POST-SLEEP REST (-X)

EAT

229:00 P52 OPT 3
P20 (+X FWD)
H₂ & O₂ FC PURGE
WASTE WATER & URINE DUMP

LIOH CANISTER CHANGE

(COUPLED ATT CONTROL
EXC. ROLL)

TERMINATOR PHOTOS

230:00 REV 73
EAT

LS STBY
LS TGT
LS RCV
ONLY
LS TGT

CREW EXERCISE

231:00 REV 74
EAT

LS TGT
UV IR
UV IR
MC LA PC
PC

232:00 REV 75
EAT

LS STBY
V49 (TV/COMM ATT)

S D N
V49 (UV LY- α ATT)

233:00 REV 76
EAT

LS STBY
V49 (TV/COMM ATT)

S D N
V49 (UV LY- α ATT)

234:00 REV 77
EAT

LS STBY
V49 (TV/COMM ATT)

S D N
V49 (UV LY- α ATT)

CSM

235:00 REV 78
EAT

LS STBY
V49 (TV/COMM ATT)

S D N
V49 (UV LY- α ATT)

236:00 REV 79
EAT

LS STBY
V49 (TV/COMM ATT)

S D N
V49 (UV LY- α ATT)

237:00 REV 80
EAT

LS STBY
V49 (TV/COMM ATT)

S D N
V49 (UV LY- α ATT)

238:00 REV 81
EAT

LS STBY
V49 (TV/COMM ATT)

S D N
V49 (UV LY- α ATT)

239:00 REV 82
EAT

LS STBY
V49 (TV/COMM ATT)

S D N
V49 (UV LY- α ATT)

240:00 REV 83
EAT

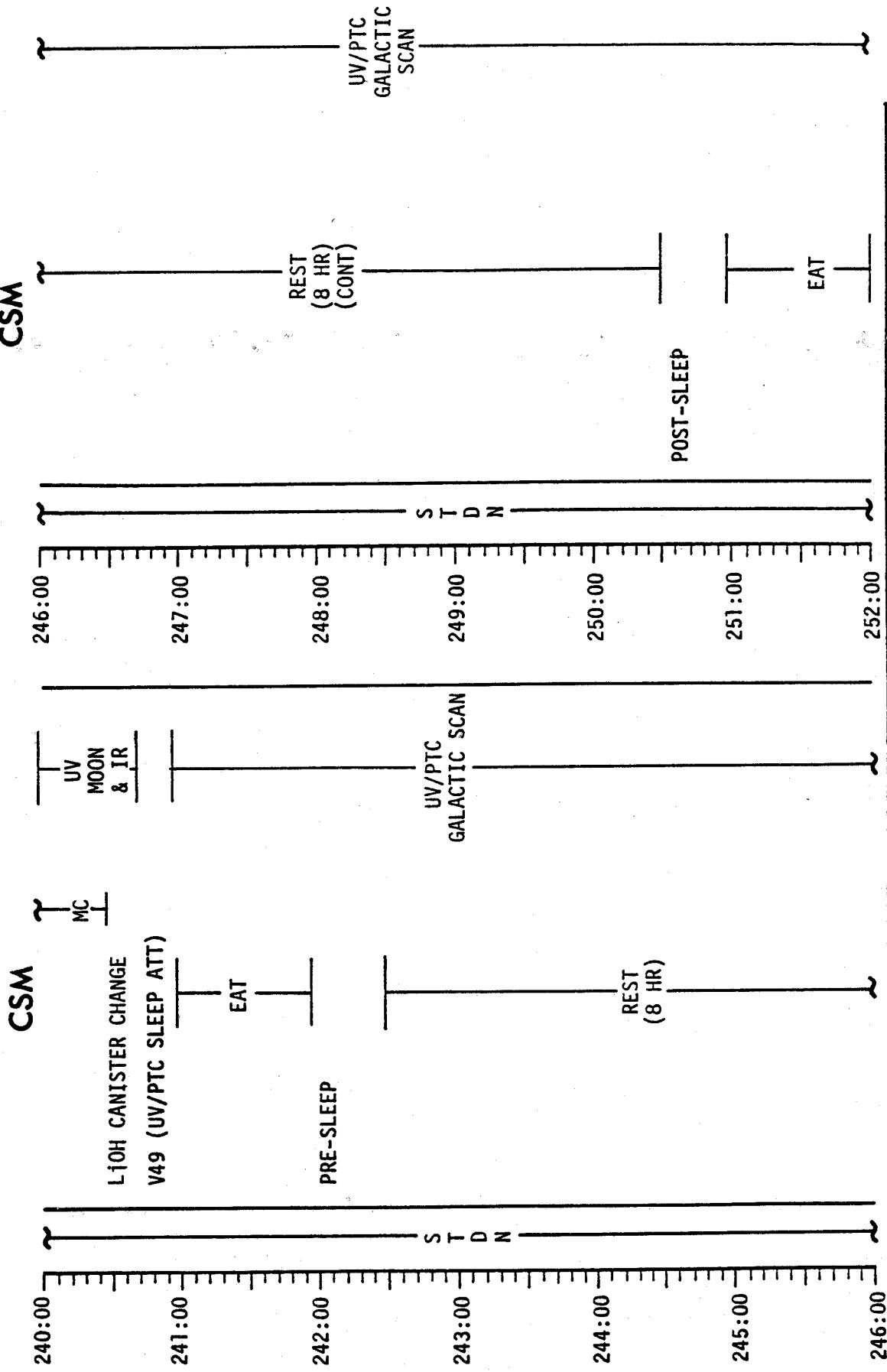
LS STBY
V49 (TV/COMM ATT)

S D N
V49 (UV LY- α ATT)

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

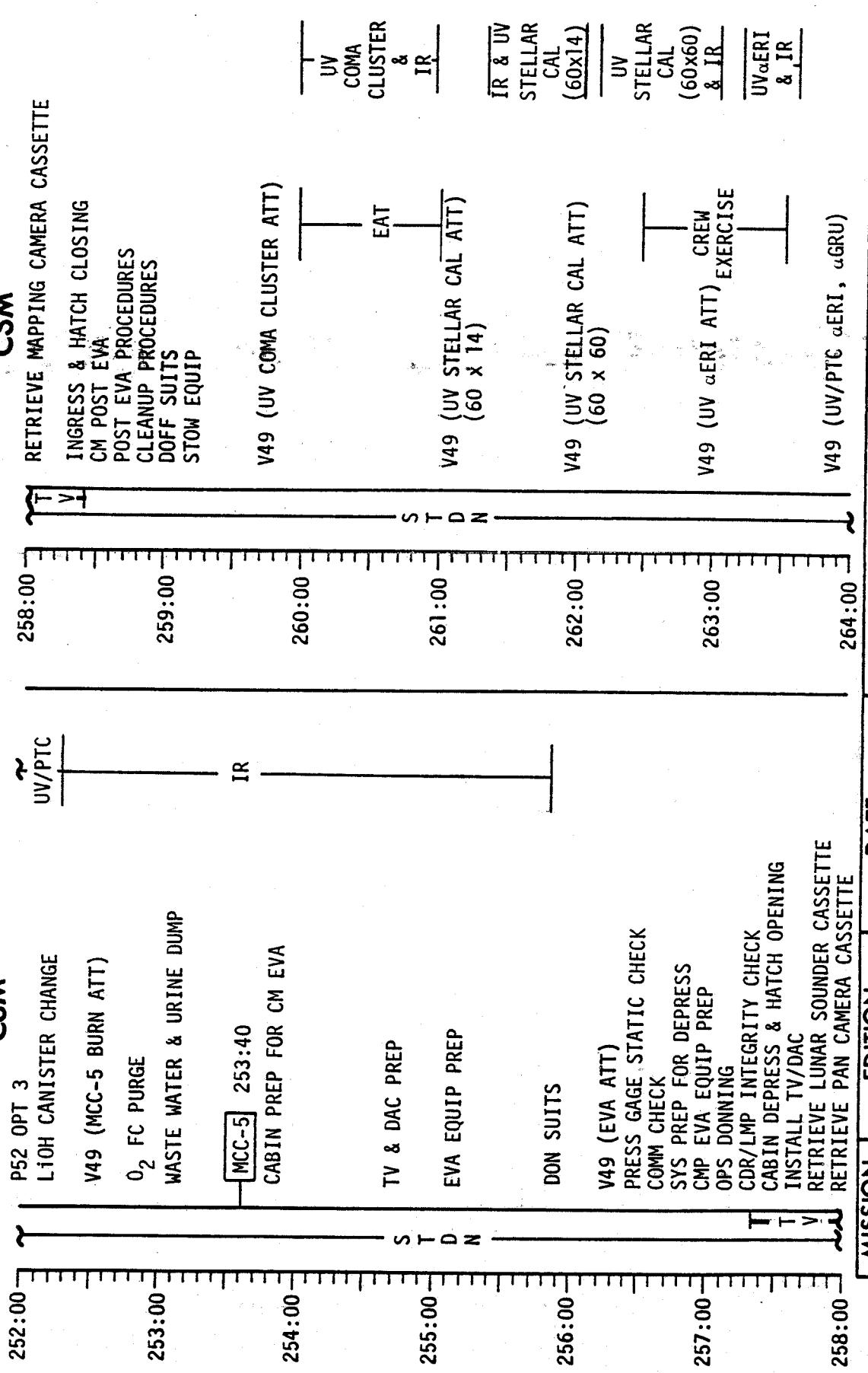
FLIGHT PLAN



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

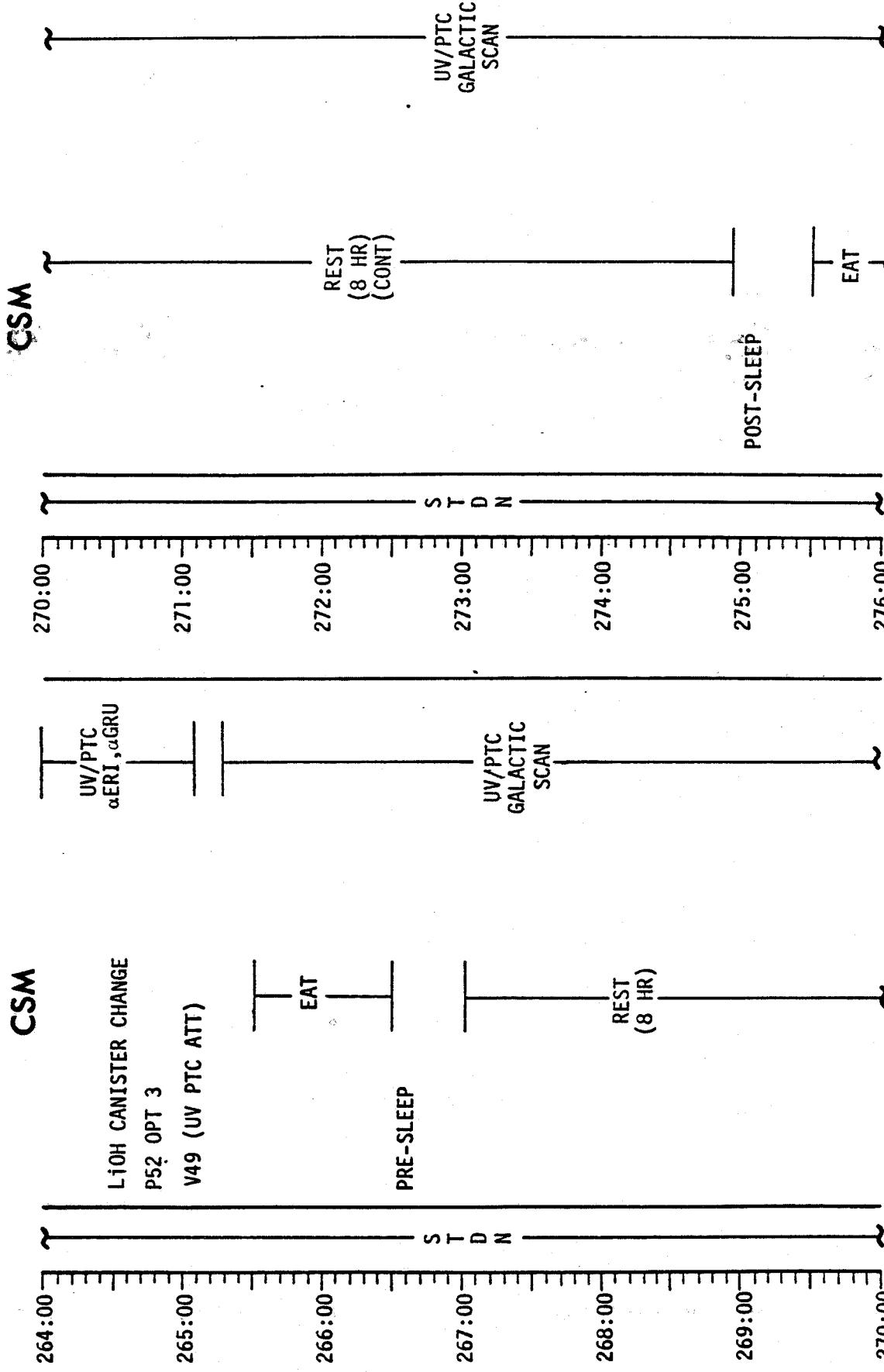
CSM



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

CSM

276:00

P52 OPT 3
CHARGE BAT A
 H_2 & O_2 FC PURGE,
WASTE WATER & URINE DUMP
V49 (UV DARK NORTH ATT)

EAT

UV/PTC

277:00

ENTRY STOWAGE

UV DARK & IR

V49 (THERMAL ATT)
CREW
EXERCISE

278:00

V49 (UV NEP ATT)
S
D

279:00

279:00 — T D N —

V49 (UV NEP ATT)

— T —

LIGHT FLASH OBSERVATION

LiOH CANISTER CHANGE

EMS ENTRY CHECK

V49 (UV SOLAR ATMOSPHERIC CAL ATT)

— T —

UV ATMOSPHERIC CAL & IR

280:00 —

281:00 —

282:00 —

FLIGHT PLANN		
MISSION	EDITION	DATE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972

TIME	DAY/REV	PAGE
276:00 - 288:00	13 /TEC	5-24

FLIGHT PLANNING BRANCH

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	276:00 - 288:00	13 /TEC	5-24

FLIGHT PLAN

CSM

V49 (UV/PTC SLEEP ATT)

EAT

PRE-SLEEP

S
T
D
N

REST
(8 HR)

298:00

299:00

POST-SLEEP

294:00

300:00

CSM

UV/PTC
SPICA, NUMA

294:00

295:00

REST
(8 HR)

296:00

297:00

UV/PTC
GALACTIC SCAN

S
T
D
N

293:00

299:00

EAT

P52 OPT 3, OPT 1

TIME

DAY/REV

PAGE

UV/PTC
GALACTIC
SCAN

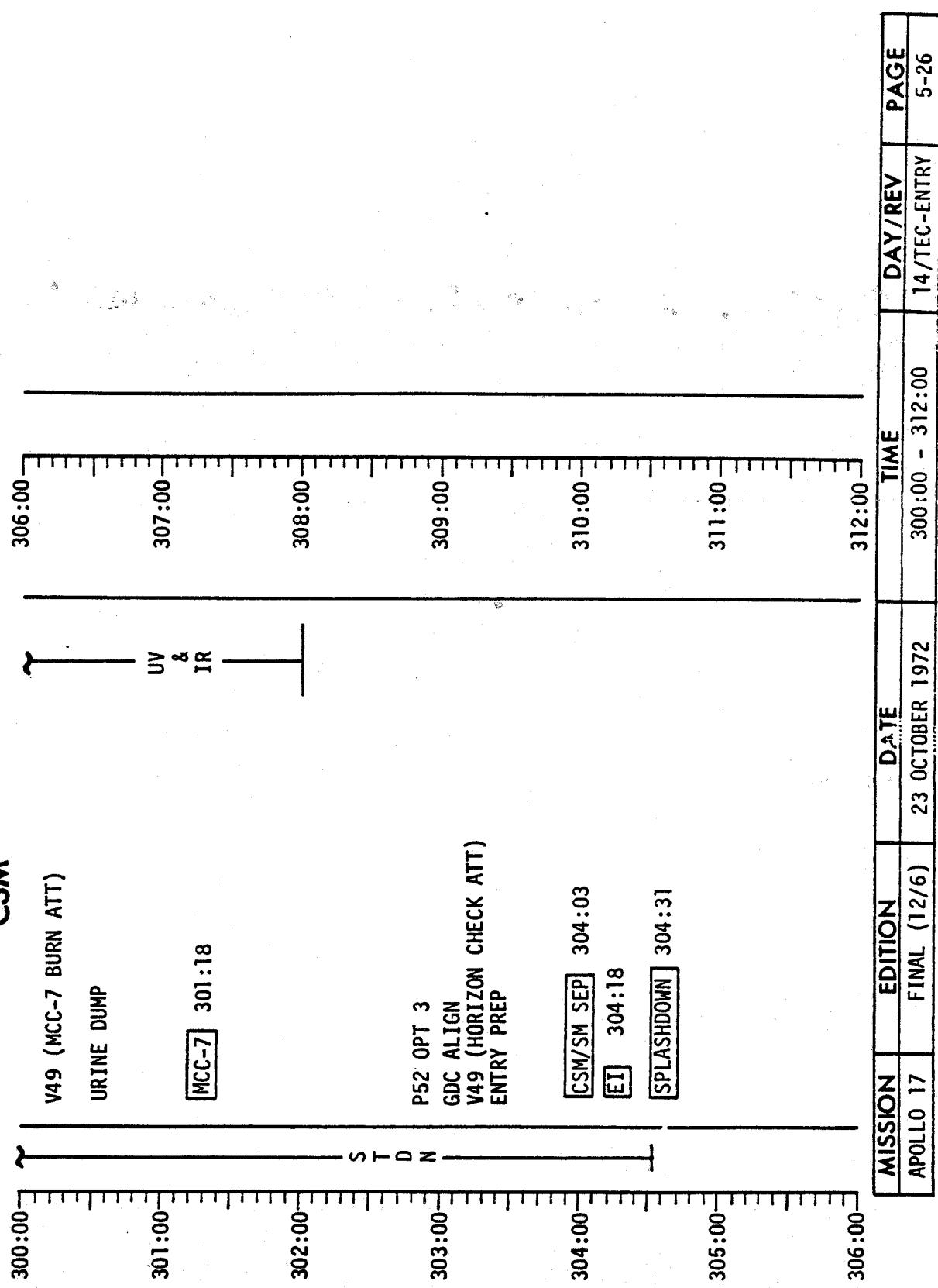
UV & IR

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

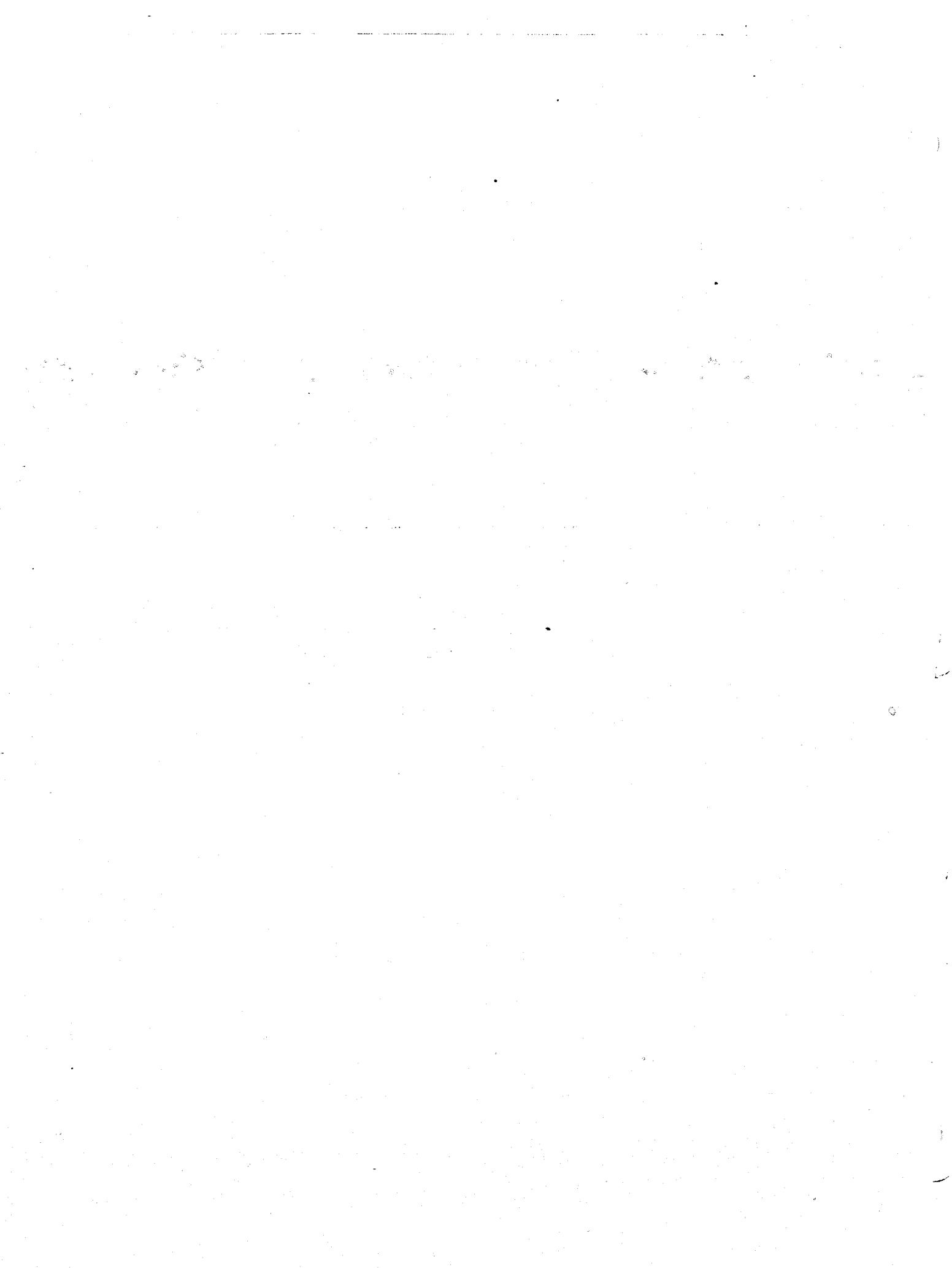
CSM



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.

6-2

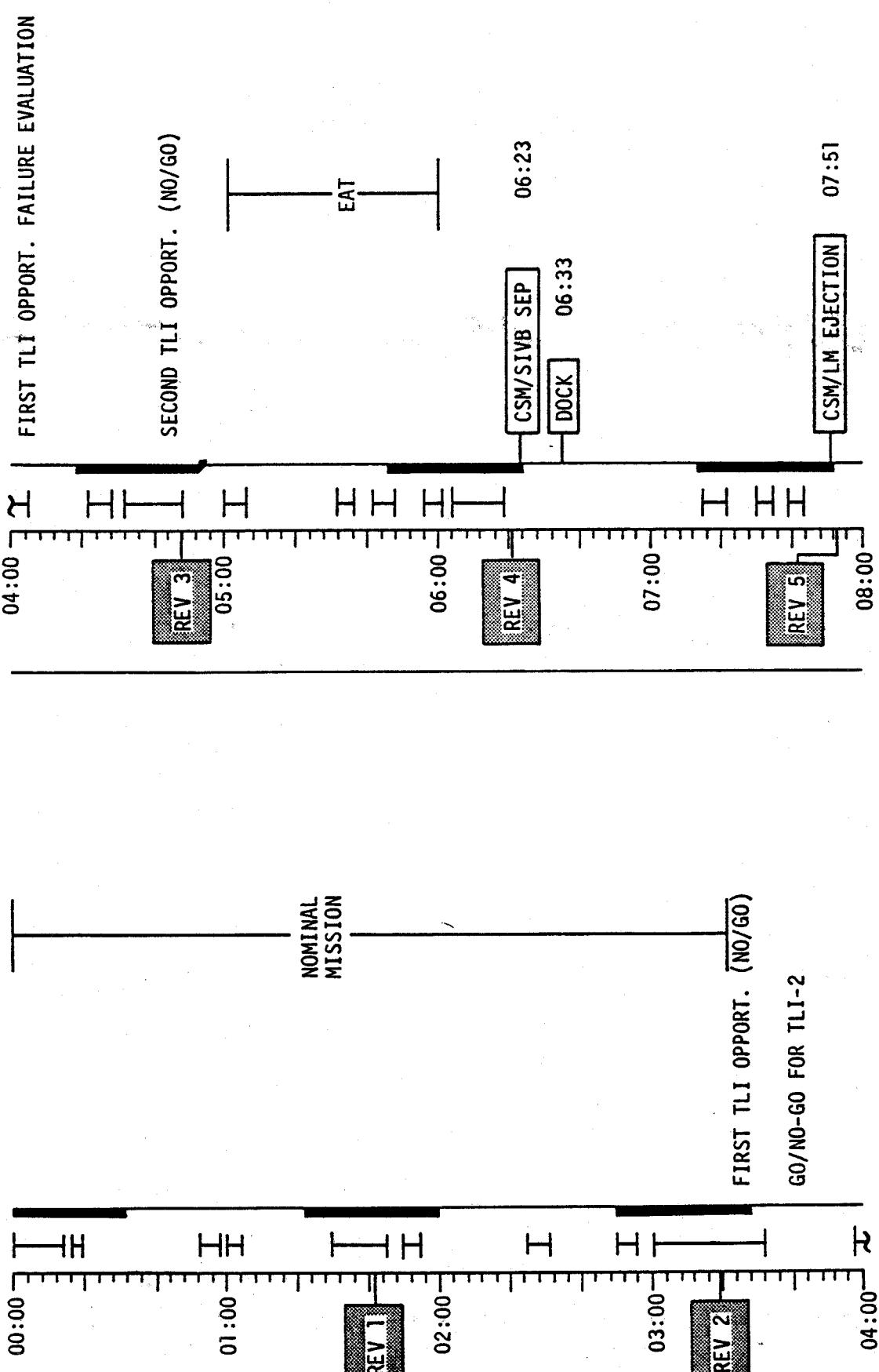
10/23/72

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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

08:00 DOFF & STOW PGA'S

12:00

P52 OPT 3, OPT 1

13:00

02 FC PURGE
WASTE H₂O DUMP
LiOH CANISTER CHANGE

14

REV 6

PREP FOR IWT TO LM

10:00

IWT TO LM
TRANSFER EQUIP

14

REV 7

11:00

LM CLOSEOUT
IWT TO CSM

P52 OPT 3

12:00

EAT

EAT

14:24

LM JETTISON

14:27

CSM SEP MNVR

15:00

LM DEORBIT

REV 10

16:00

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

16:00

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17:00

REV 11

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18:00

REV 12

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20:00

20:00

REV 13

21:00

REV 14

22:00

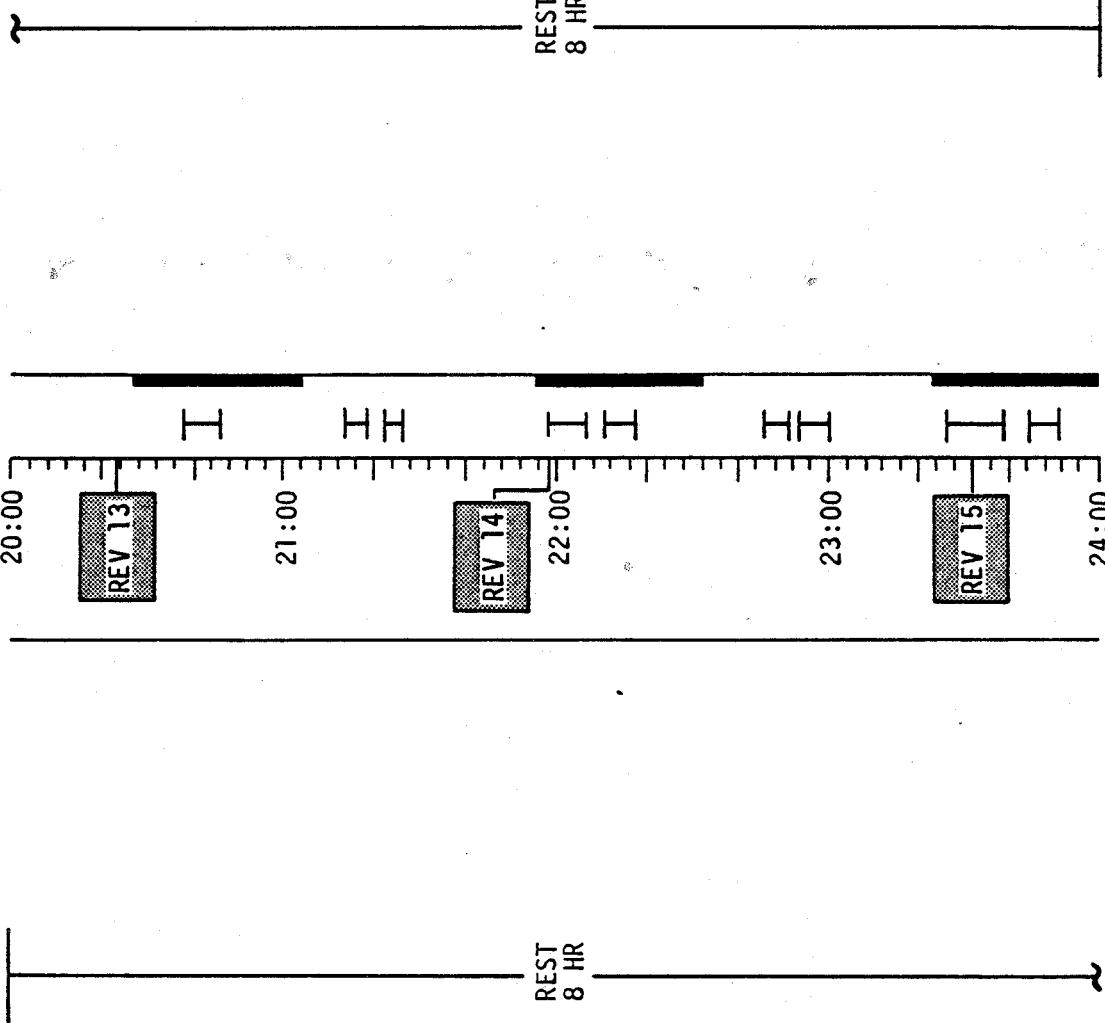
REV 15

23:00

24:00

REST
8 HR

REST
8 HR



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

EARTH ALTERNATE

2053 CST

24:00 SIM DOOR JETT PREP

SIM DOOR JETTISON
LIOH CANISTER CHANGE

24:21

PC & MC FILM CYCLE
PREP FOR SPS-1 BURN

25:00

25:00

REV 16

28:00 PREP FOR SPS-2 BURN

29:00 GO/NO-GO FOR SPS-2 (PLANE CHANGE)

26:00

27:00

P52, OPT 3, OPT 1
GO/NO-GO FOR SPS-1

REV 17

GETI: 26:51:59.3
BT: 5 MIN 38.2 SEC
AV: 4059.8 FPS
HAXHP: 706 x 97
ULLAGE: NONE

SPS-1
BURN STATUS REPORT

REV 18

EAT

30:00

REV 19

SPS-2
BURN STATUS REPORT

REV 19

31:00

REV 20

SPS-2
BURN STATUS REPORT

REV 20

28:00

EAT

32:00

29:00

30:00

31:00

32:00

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FLIGHT PLAN

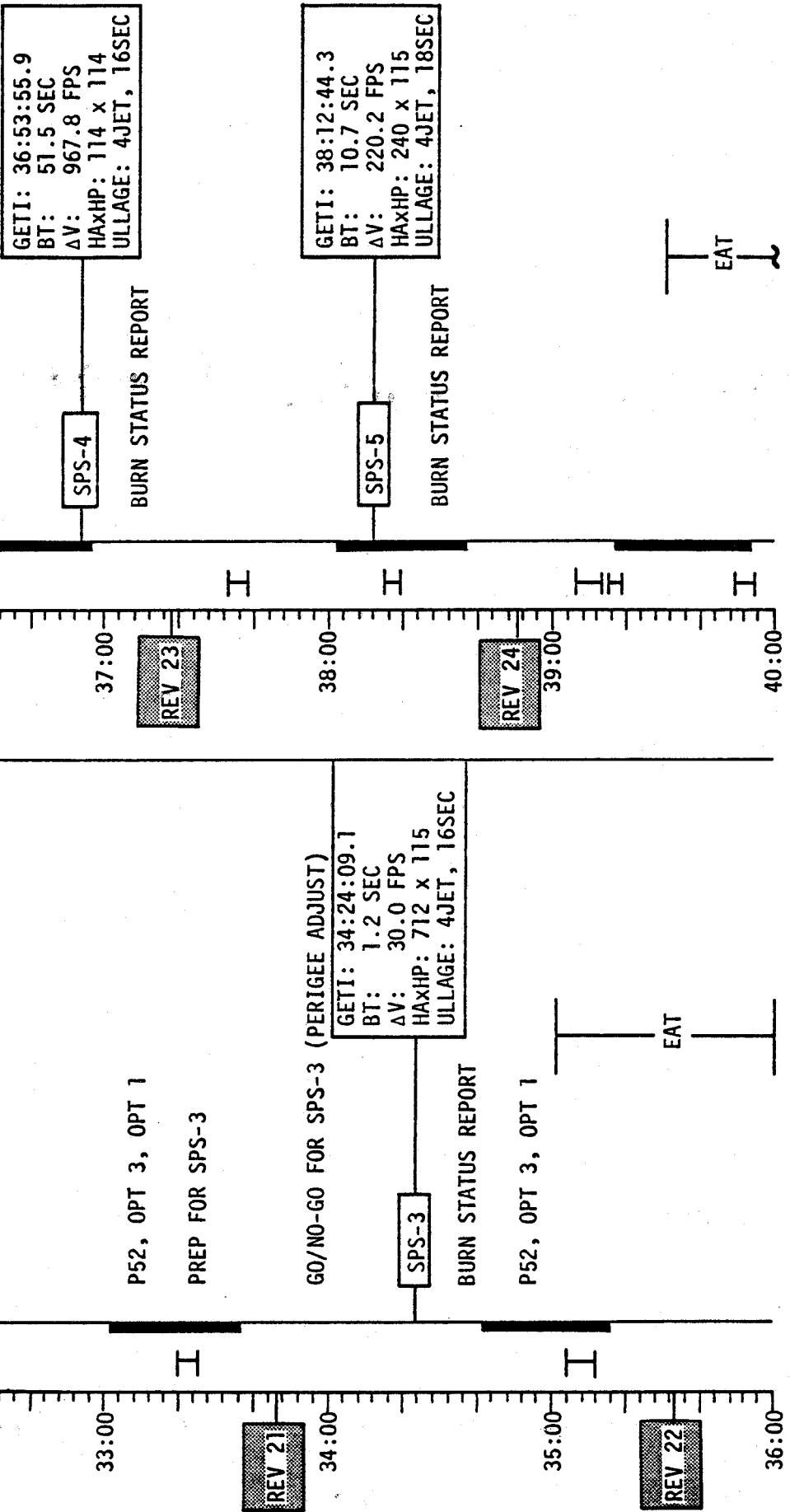
EARTH ALTERNATE

0453 CST

CREW EXERCISE

36:00

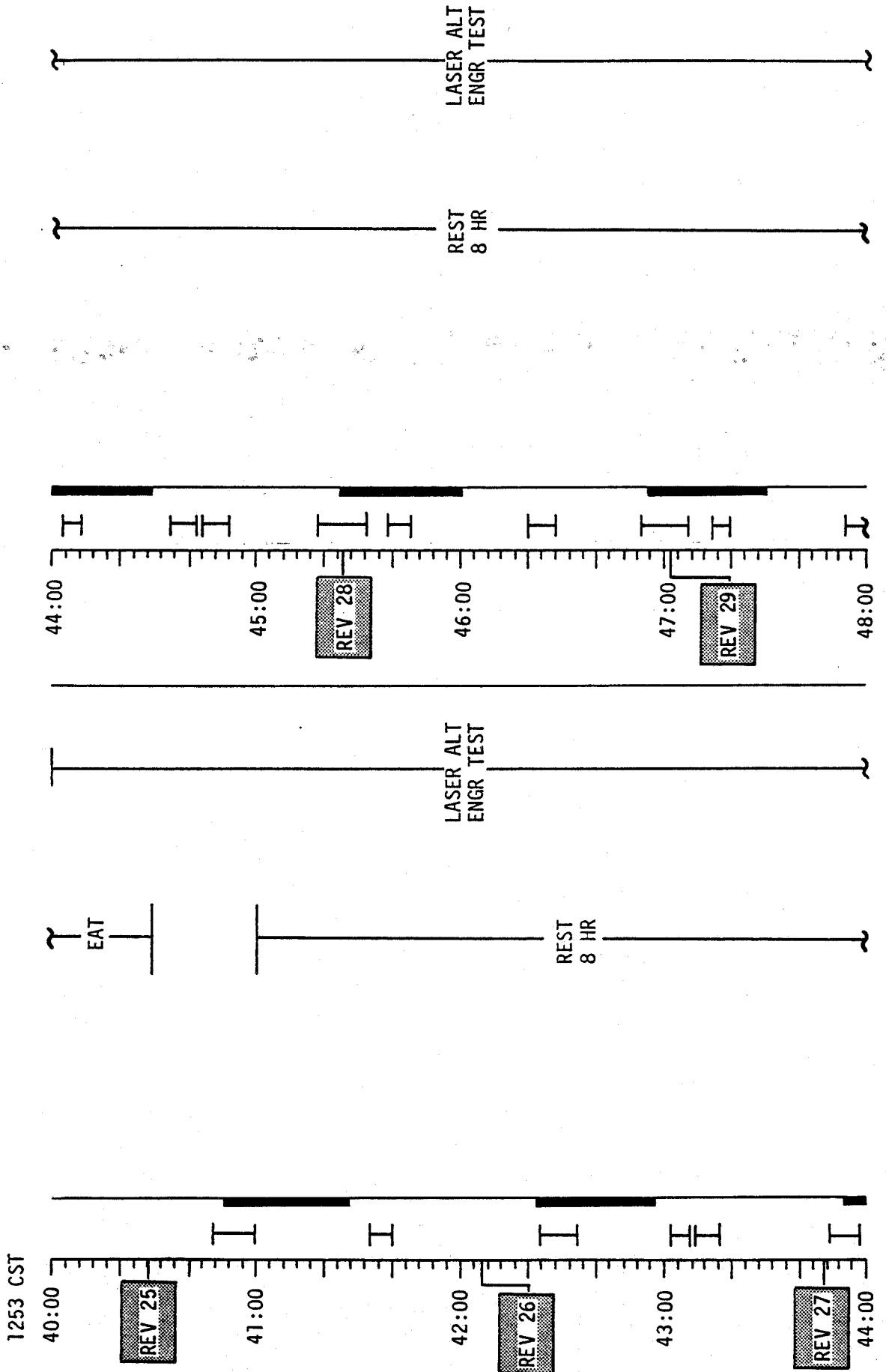
O2 & H2 FC PURGE
WASTE H2O DUMP
LiOH CANISTER CHANGE



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

EARTH ALTERNATE

FLIGHT PLAN

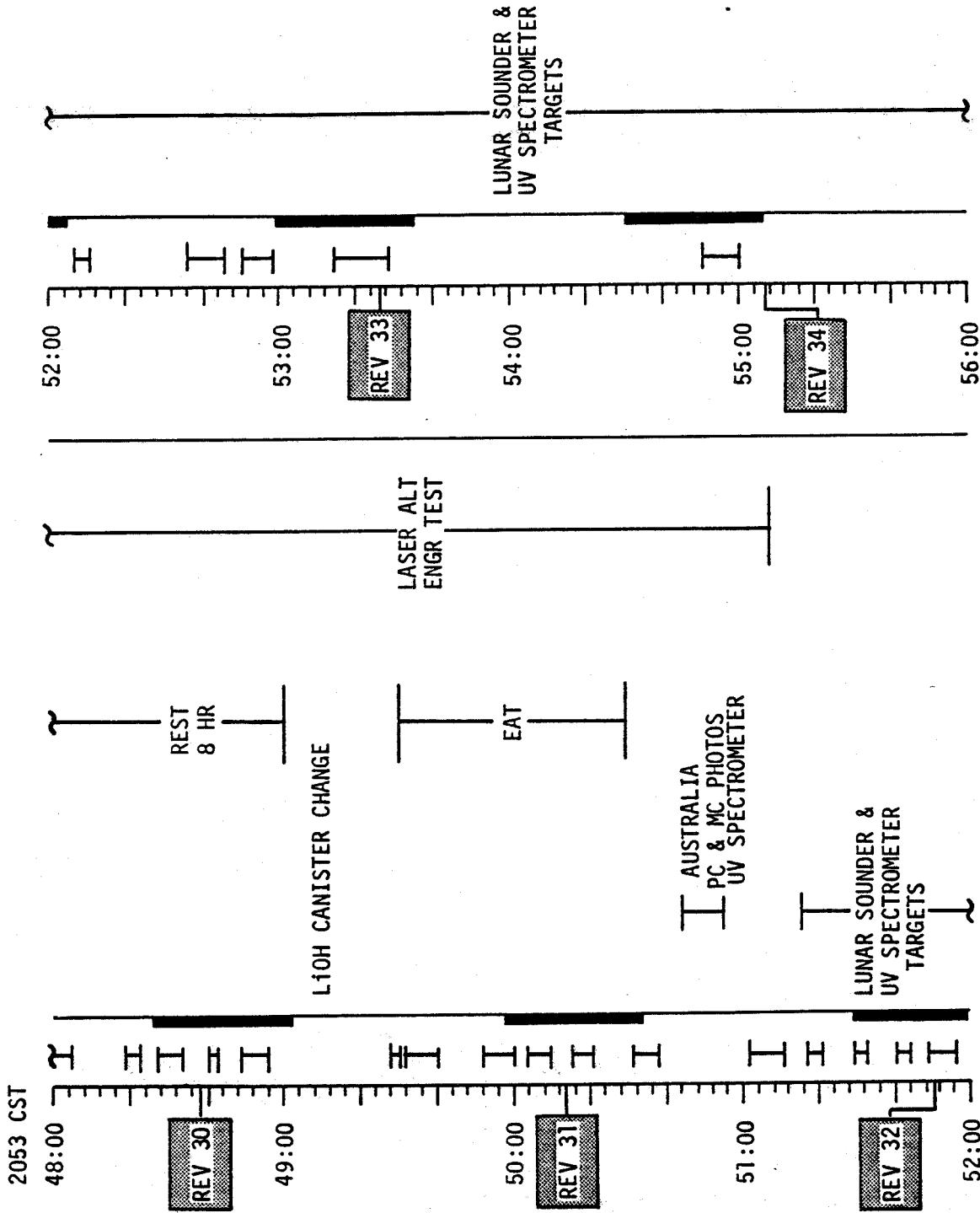


MISSION	EDITION	DATE	TIME	DAY / REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	40:00 - 48:00	2/25-29	6-8

FLIGHT PLANNING BRANCH

FLIGHT PLAN

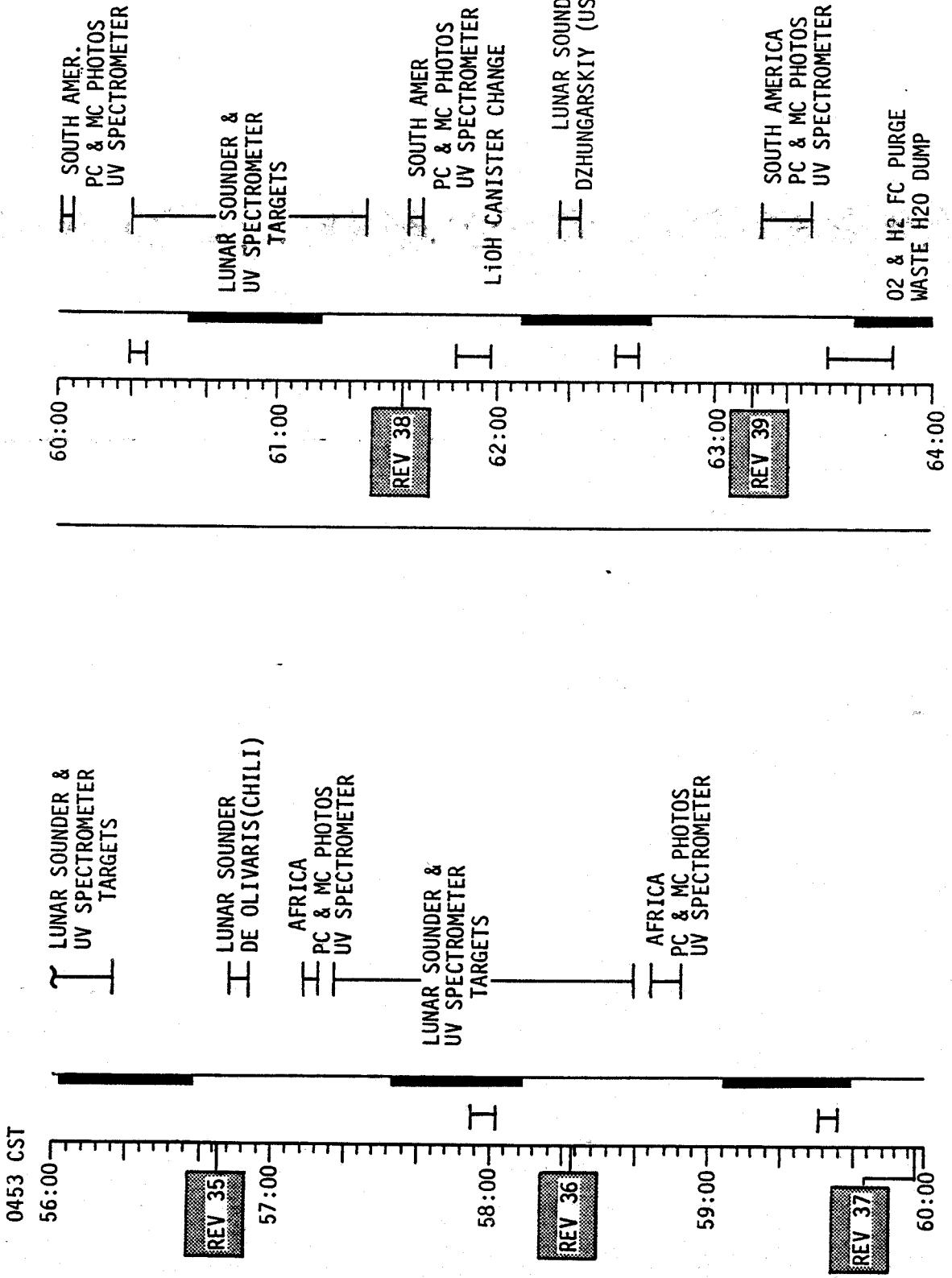
EARTH ALTERNATE



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

FLIGHT PLAN

EARTH ALTERNATE



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

64:00

REV 40

65:00

EAT

REV 41

66:00

REV 42

67:00

REST
8 HR

68:00

REV 43

69:00

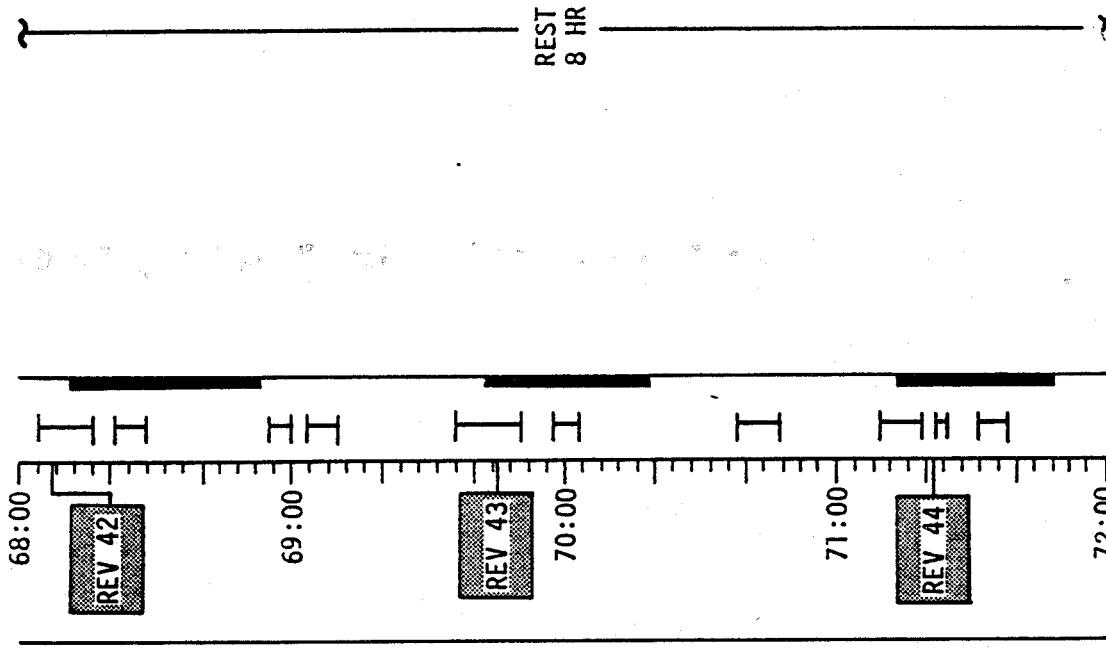
REV 44

70:00

REV 45

71:00

72:00



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

2053 CST

72:00

REV 45

73:00

REST
8 HR

74:00

REV 46

75:00

EAT

76:00

X

LUNAR SOUNDER - VHF
COLLIER, ORE.

76:00

REV 47

77:00

I

REV 48

78:00

I

LUNAR SOUNDER
IONOSPHERIC SOUNDING (HF)

79:00

REV 49

80:00

I

LiOH CANISTER CHANGE

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

EARTH ALTERNATE

FLIGHT PLAN

0453 CST

80:00

LUNAR SOUNDER &
UV SPECTROMETER
TARGETS

REV 52

84:00

AFRICA
PC & MC PHOTOS
UV SPECTROMETER

REV 50

81:00

AFRICA
PC & MC PHOTOS
UV SPECTROMETER

UV SPECTROMETER
ZODIACAL LIGHT

T

85:00

LIOH CANISTER CHANGE
SOUTH AMER
PC & MC PHOTOS
UV SPECTROMETER

REV 53

86:00

AFRICA
PC & MC PHOTOS
UV SPECTROMETER

REV 51

83:00

LUNAR SOUNDER &
UV SPECTROMETER
TARGETS

80:00 - 88:00

LUNAR SOUNDER &
UV SPECTROMETER
TARGETS

LUNAR SOUNDER &
UV SPECTROMETER
TARGETS

REV 54

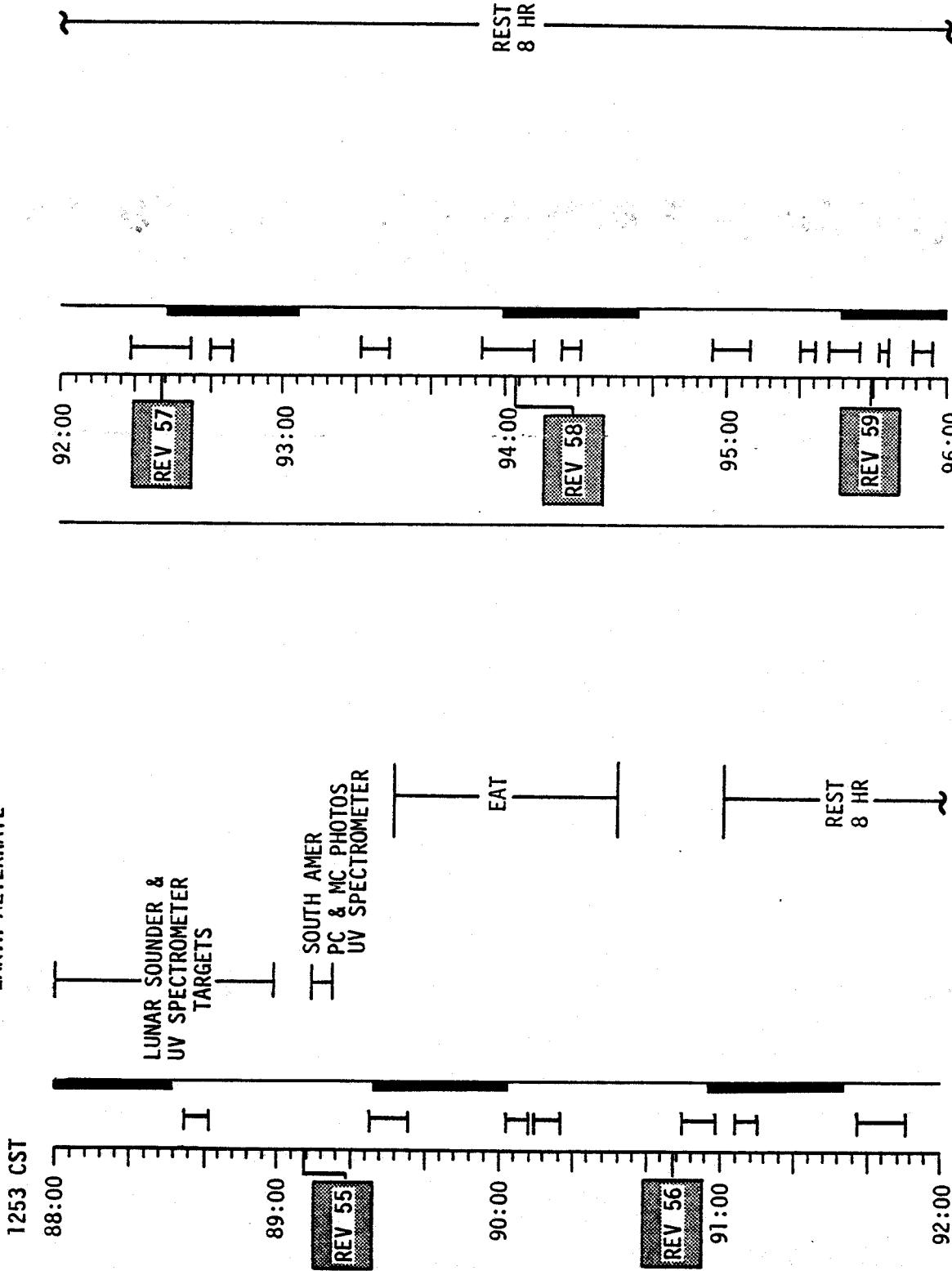
88:00

SOUTH AMER
PC & MC PHOTOS
UV SPECTROMETER
O2 FC PURGE
WASTE H2O DUMP

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 PLAN

EARTH ALTERNATE



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

2053 CST

96:00

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REST
8 HR

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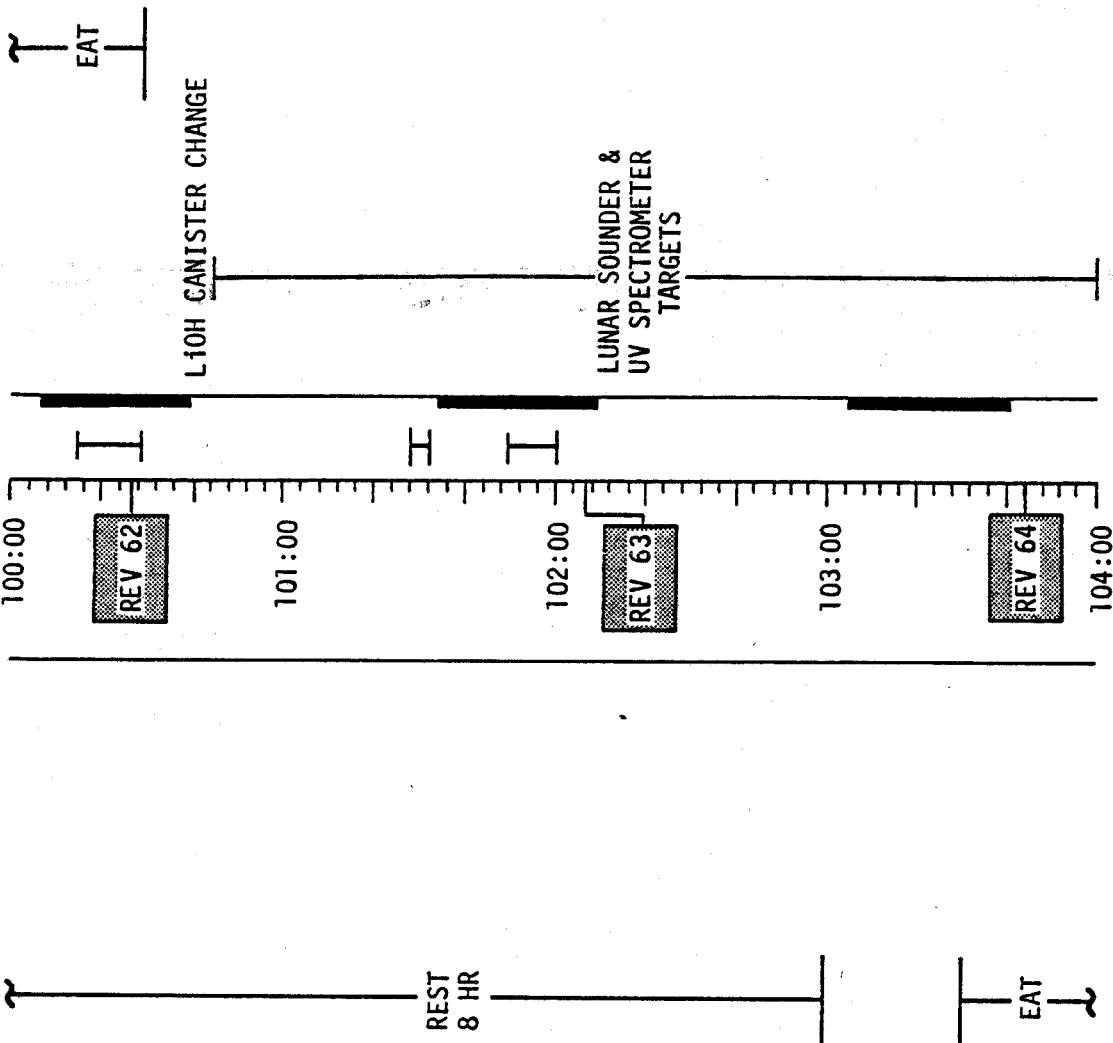
I

LION CANISTER CHANGE
LUNAR SOUNDER &
UV SPECTROMETER
TARGETS

EAT

EAT

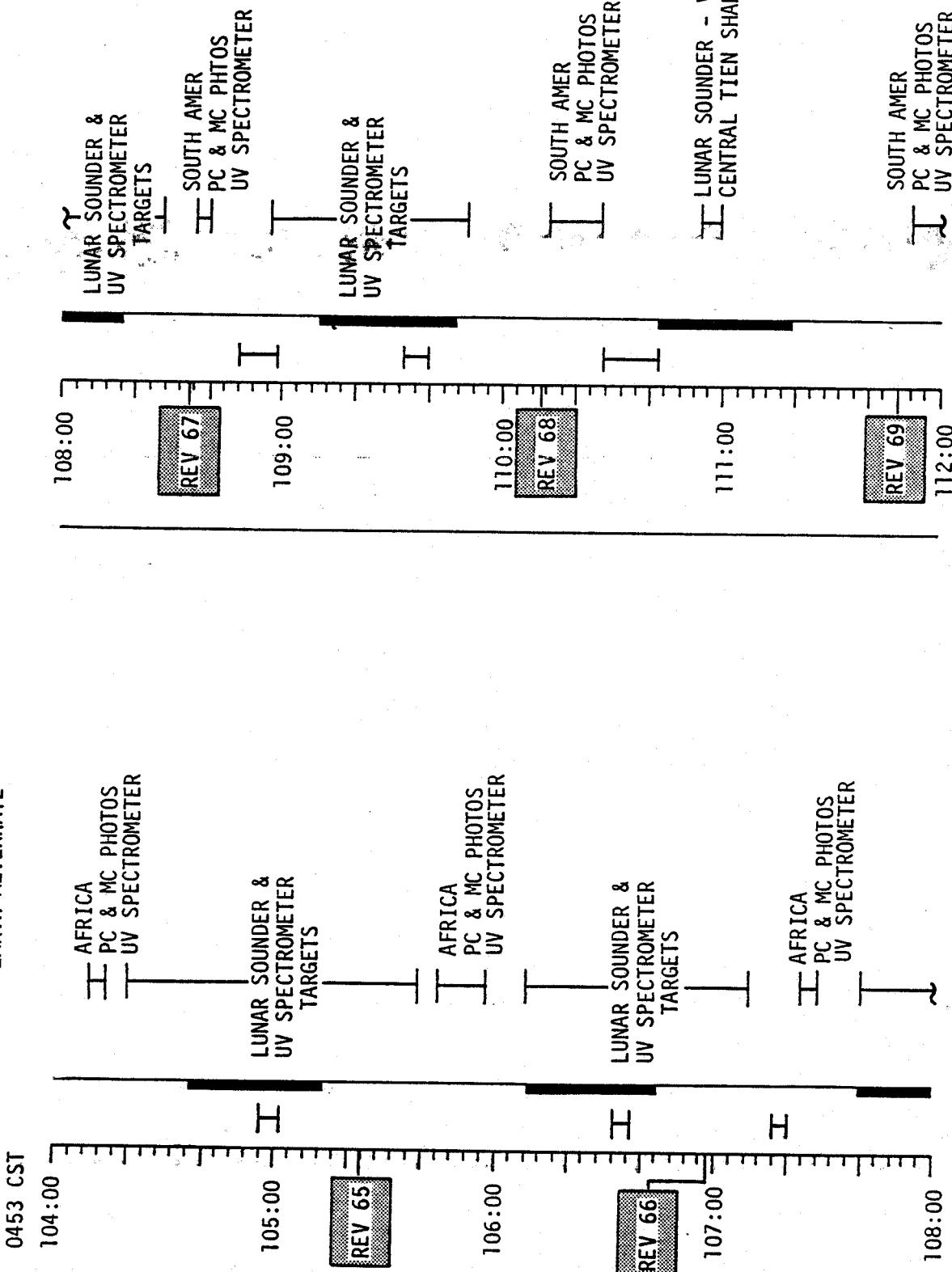
FLIGHT PLAN



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

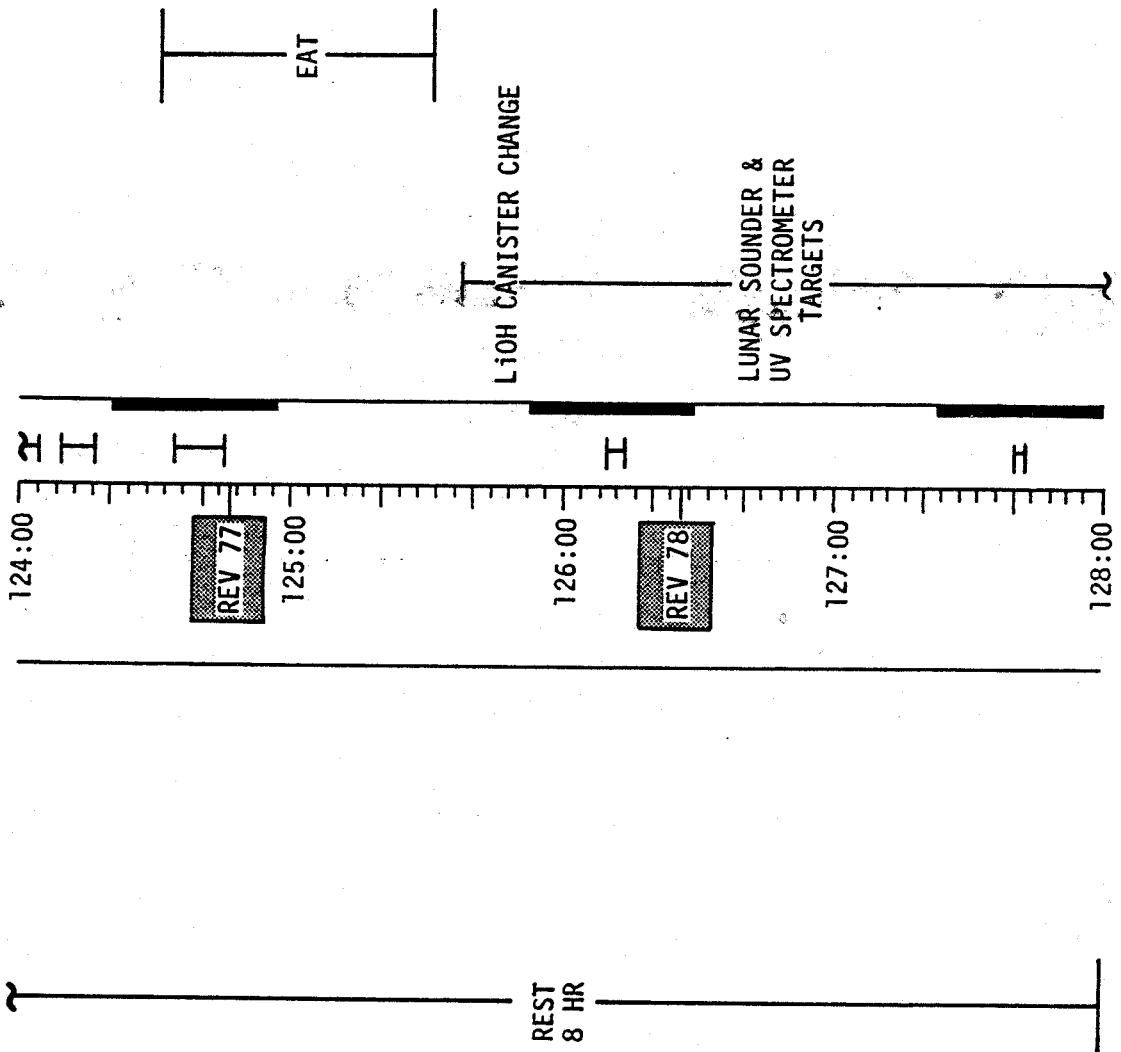
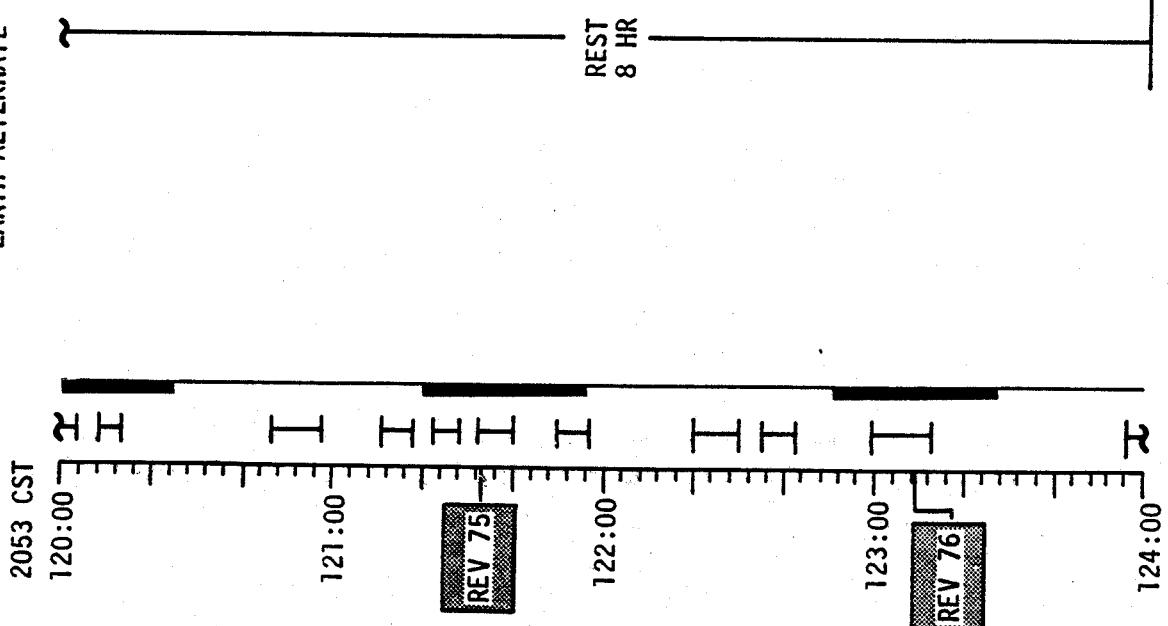


MISSION	EDITION	DATE	TIME	DAY / REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	104:00 - 112:00	5/65-69	6-16

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE

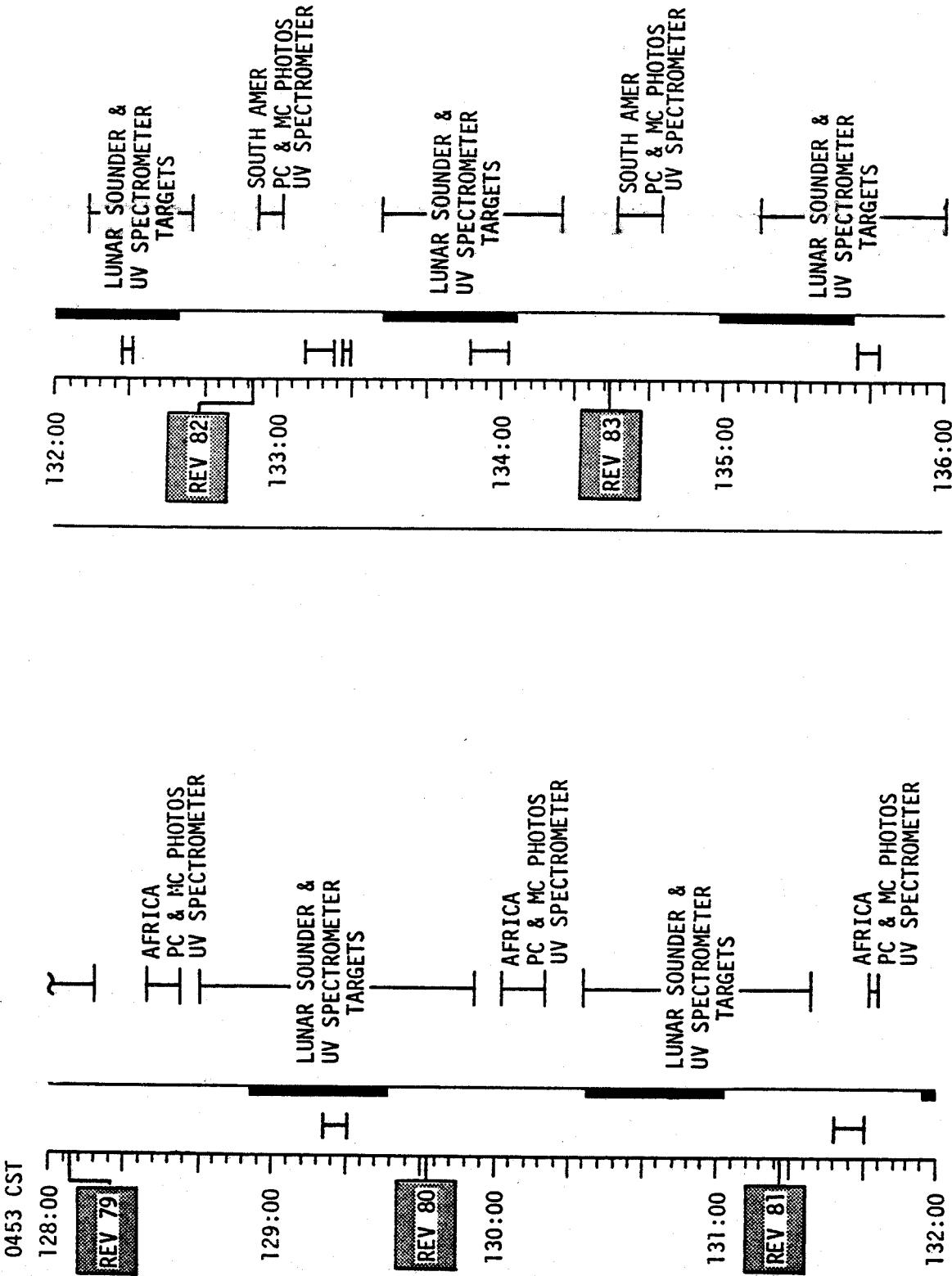


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	120:00 - 128:00	6/7F-78	6-18

FLIGHT PLANNING BRANCH

FLIGHT PLAN

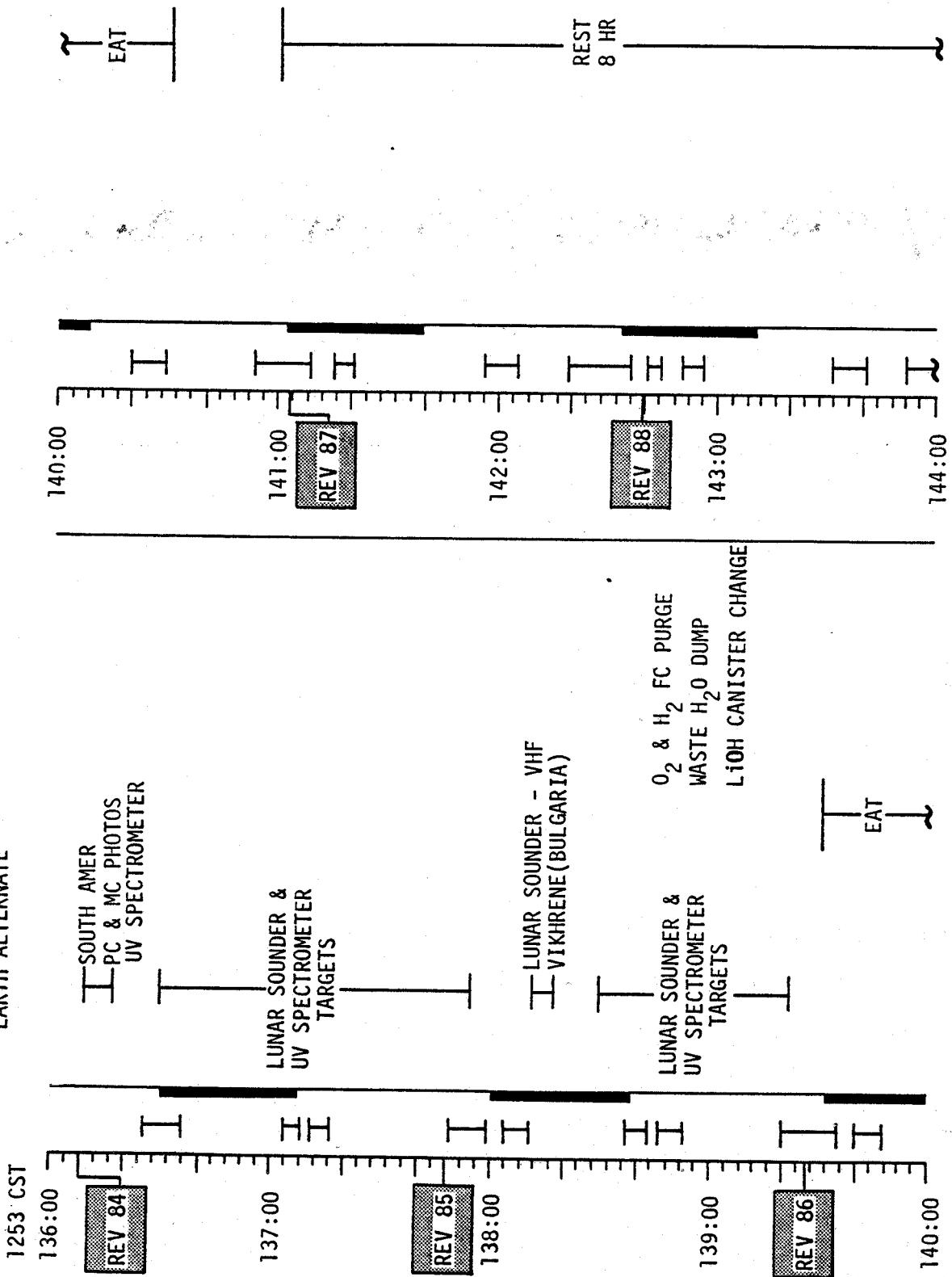
EARTH ALTERNATE



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

EARTH ALTERNATE

2053 CST

144:00

REV 89

148:00

REST
8 HR

149:00

REV 92

150:00

REST
8 HR

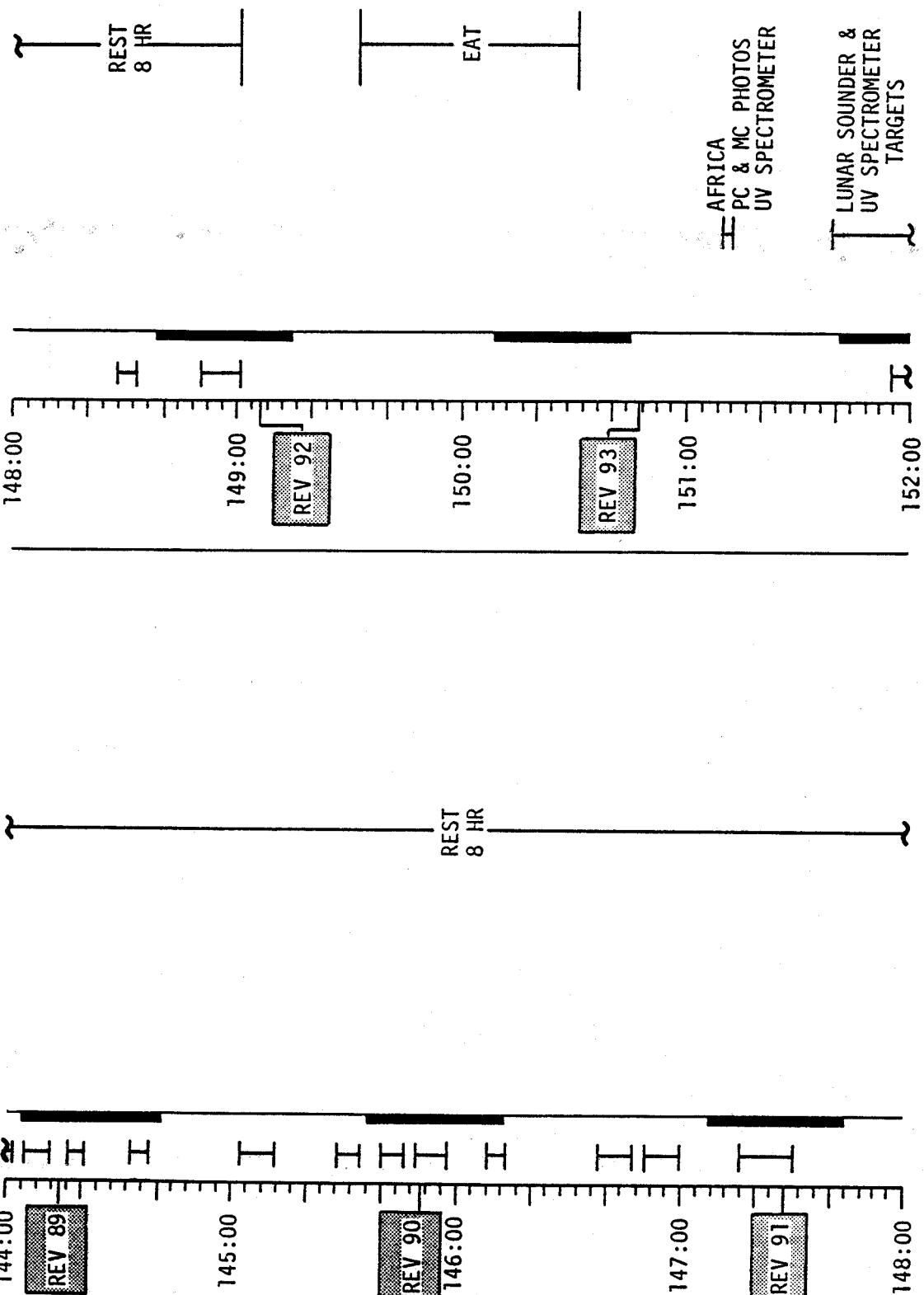
151:00

REV 93

152:00

148:00

FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	144:00 - 152:00	7/89-93	6-21

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE

0453 CST

152:00

REV 94

LUNAR SOUNDER &
UV SPECTROMETER
TARGETS

AFRICA
PC & MC PHOTOS
UV SPECTROMETER

LUNAR SOUNDER
UV SPECTROMETER
TARGETS

AFRICA
PC & MC PHOTOS
UV SPECTROMETER
P52 OPT 3

155:00

REV 96

156:00

156:00

CABIN PREP FOR EVA

EVA EQUIP PREP
DON PGA'S

CMP & CDR DON BIOMED HARNESSSES

CMP DON EVA EQUIPMENT

HATCH OPENING

CMP EGRESS

EVA

160:00

FLIGHT PLANNING BRANCH

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 PLAN

EARTH ALTERNATE

1253 CST

160:00

HATCH CLOSING
CABIN REPRESS

REV 99

STOW EQUIPMENT

161:00

RECONFIGURE CABIN

162:00

164:57

SPLASHDOWN

DEORBIT BURN

164:26:08

165:00

166:00

167:00

168:00

EAT

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APOLLO 17

FINAL (12/6)

10/23/72

6-24

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10/23/72

6-25

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

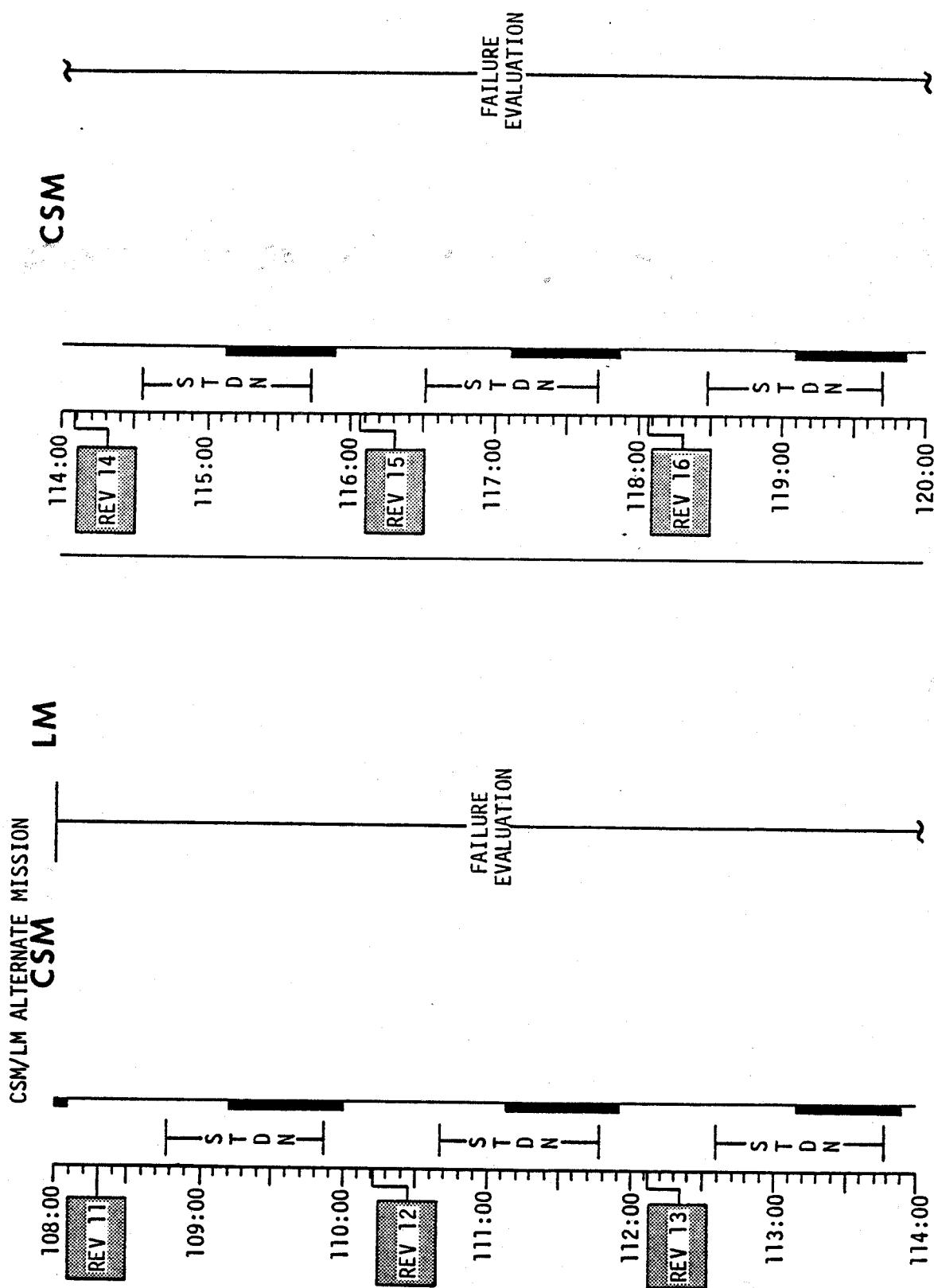
This alternate mission is initiated by a systems failure with the DPS which will not allow a landing mission. LM jettison, Circularization and TEI occurs at approximately the nominal time.

6-26

10/23/72

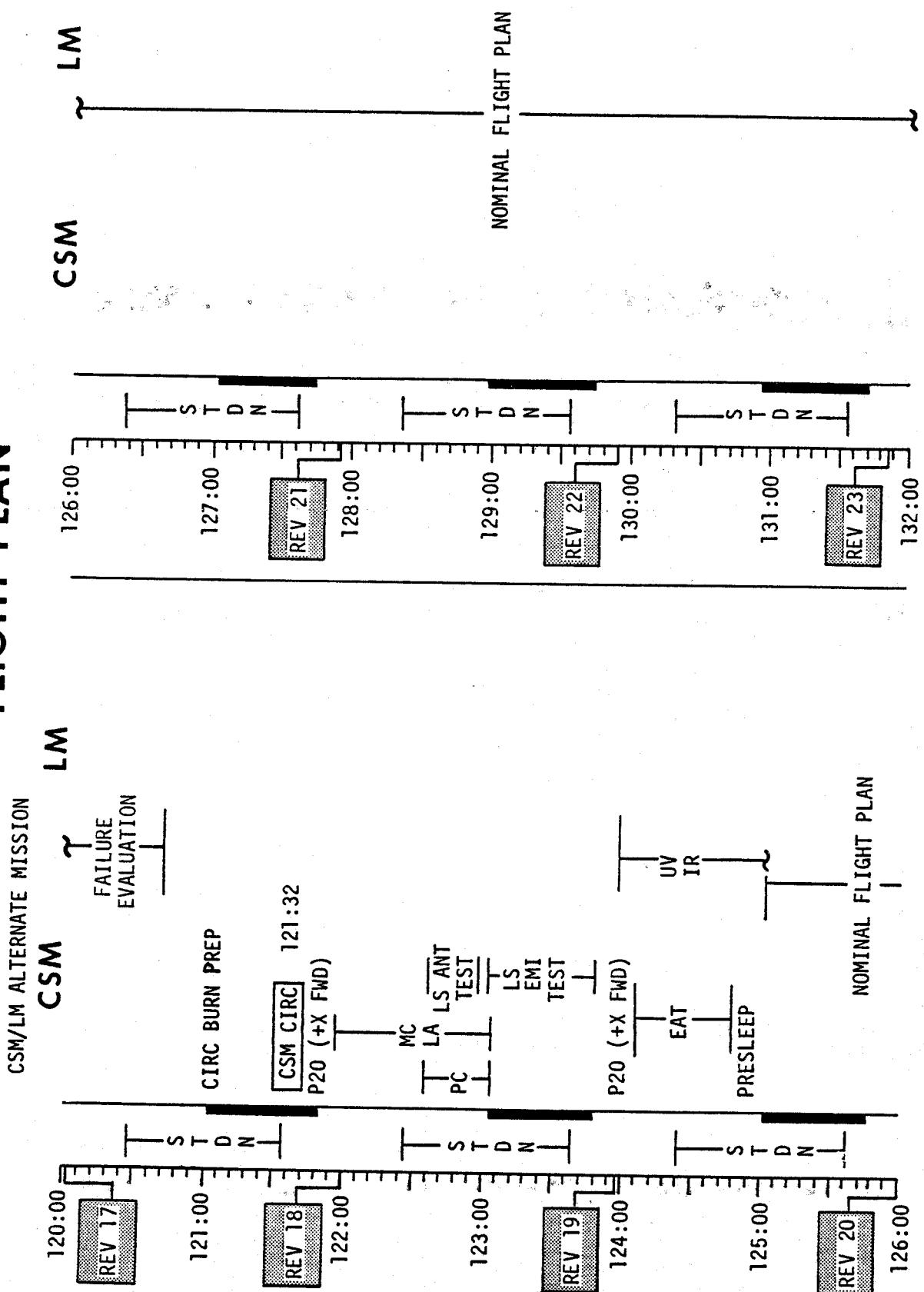
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FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	108:00 - 120:00	6/11-16	6-27

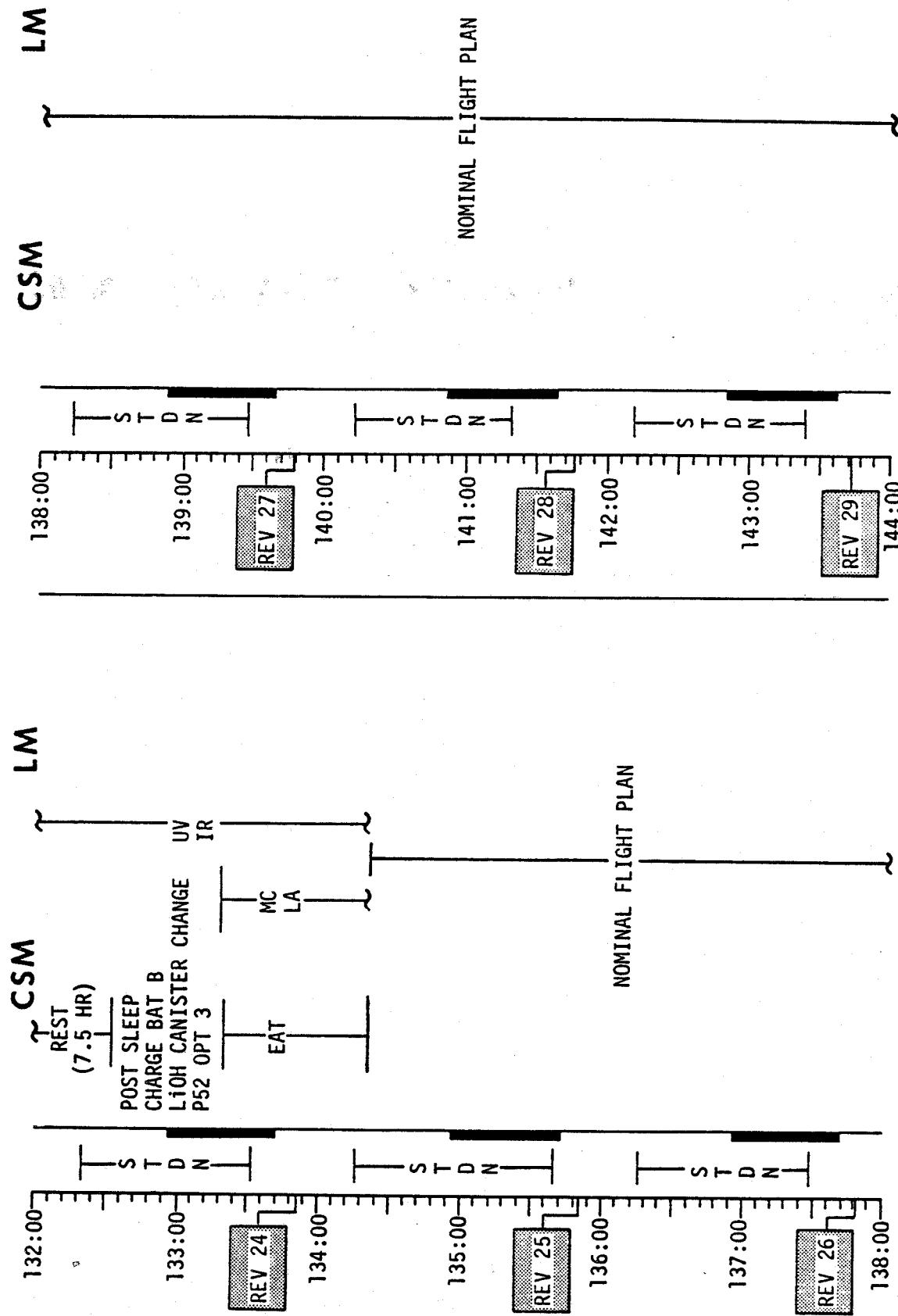
FLIGHT PLAN



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

CSM/LM ALTERNATE MISSION

FLIGHT PLAN



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

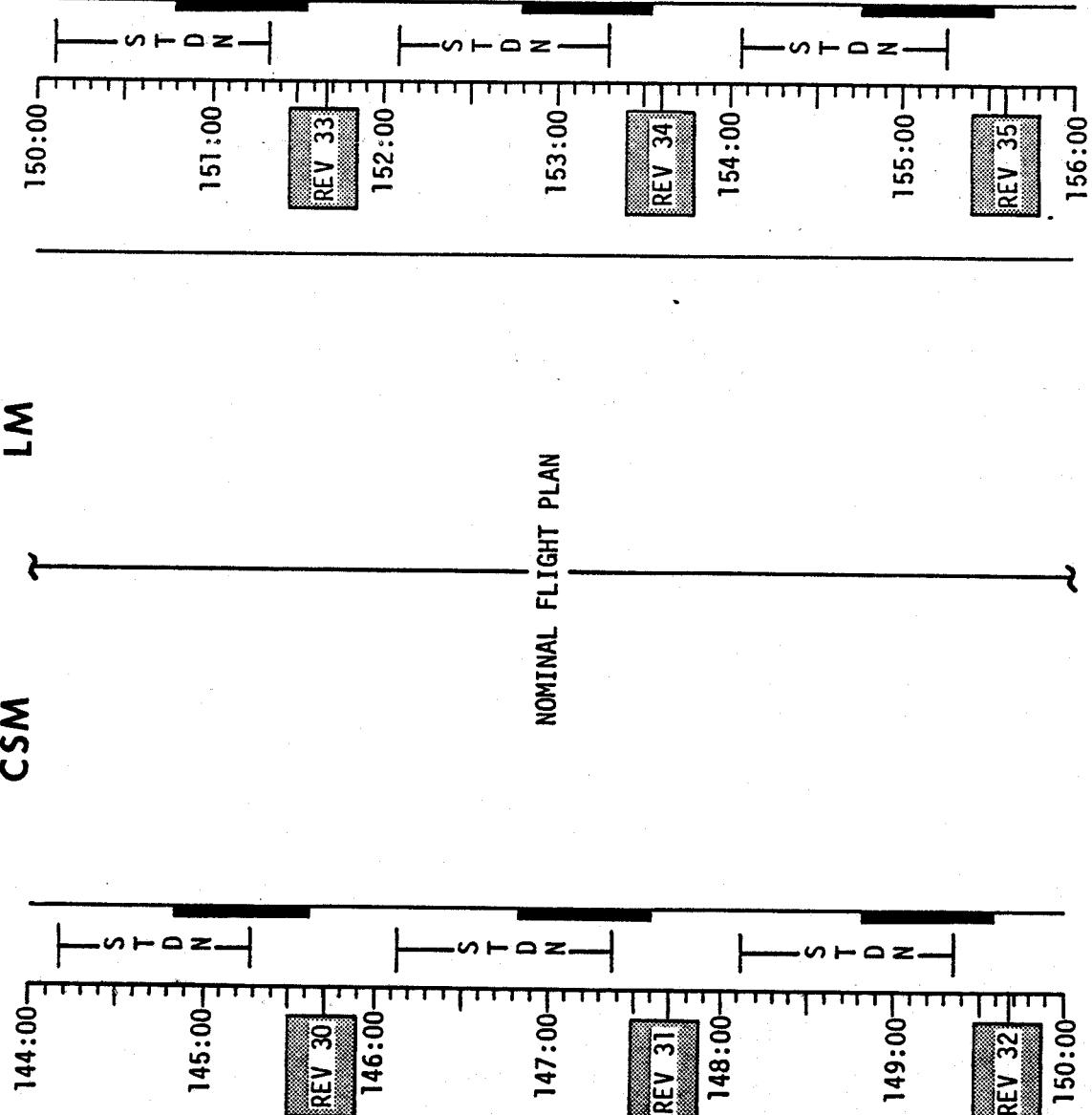
CSM/LM ALTERNATE MISSION

CSM

LM

CSM

LM



NOMINAL FLIGHT PLAN

NOMINAL FLIGHT PLAN

NOMINAL FLIGHT PLAN

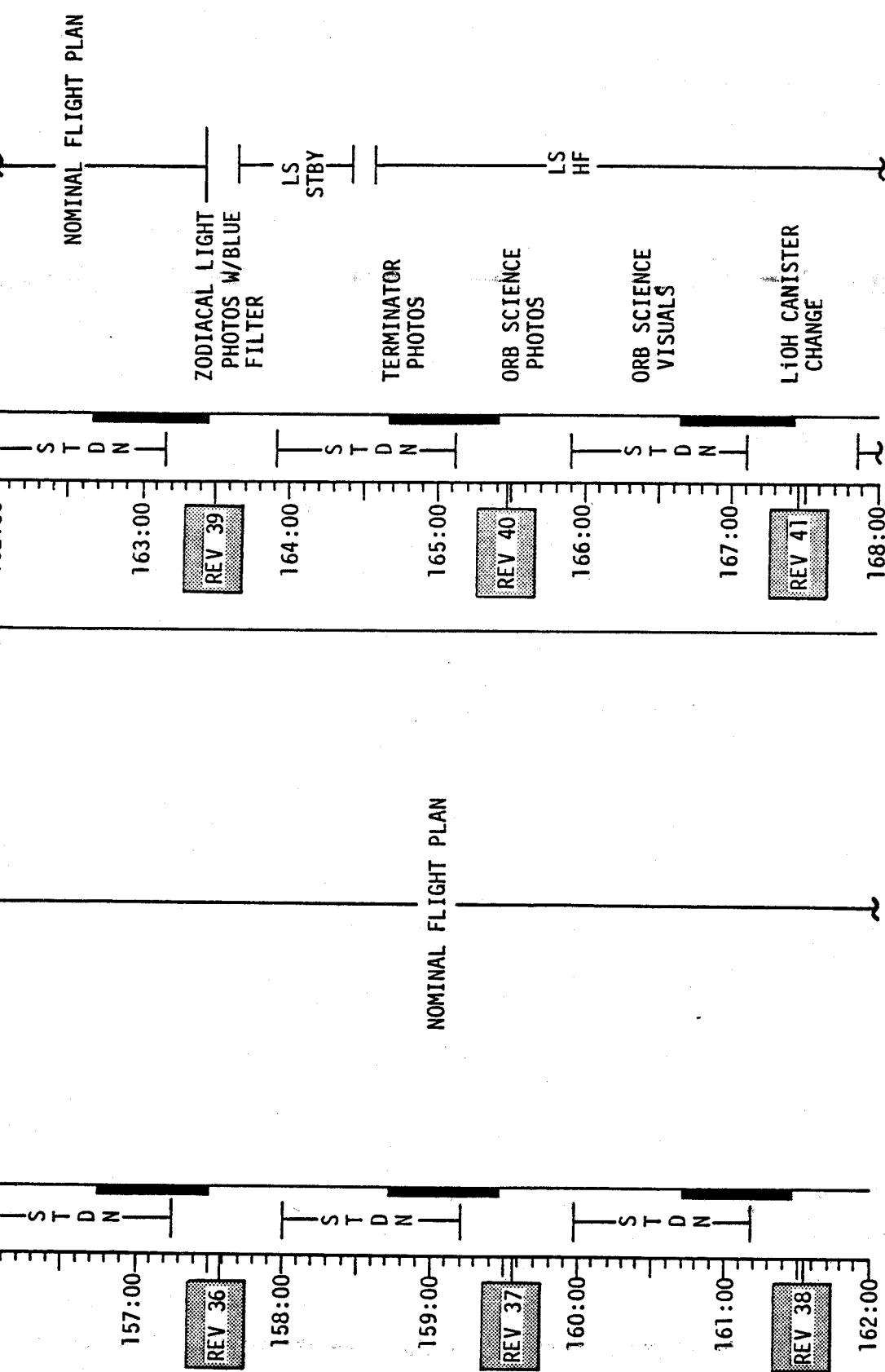
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	144:00 - 156:00	7-8/30-35	6-30

FLIGHT PLANNING BRANCH

FLIGHT PLAN

CSM/LM ALTERNATE MISSION

CSM ↑ LM ↑



FLIGHT PLAN

CSM/LM ALTERNATE MISSION

CSM

ORB SCIENCE
VISUAL
TERMINATOR
PHOTOS
P52, OPT 3

LM

CSM

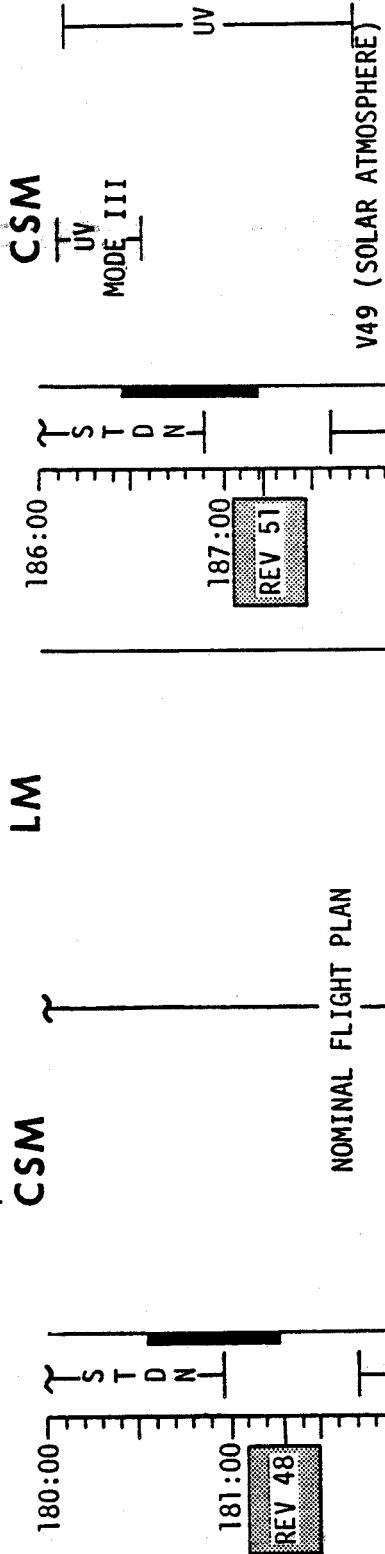
LM

FLIGHT PLAN

CSM/LM ALTERNATE MISSION

CSM

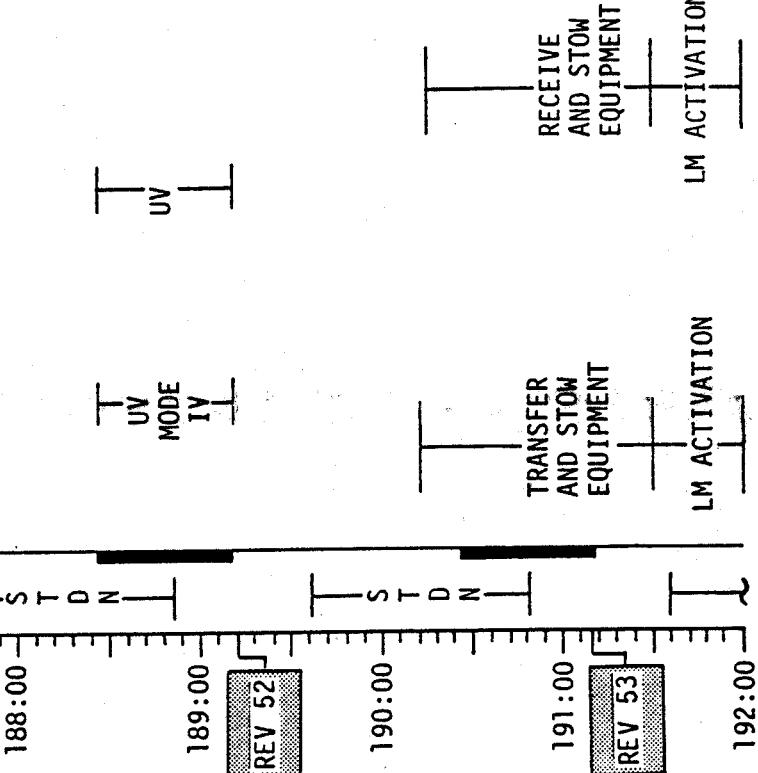
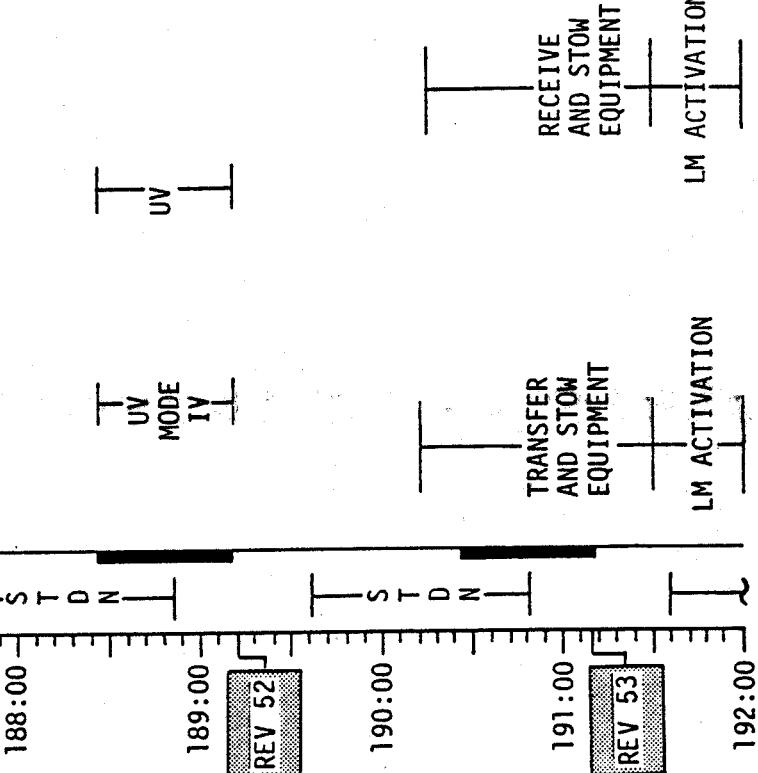
LM



CSM

LM

V49 (SOLAR ATMOSPHERE)



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

CSM/LM ALTERNATE MISSION

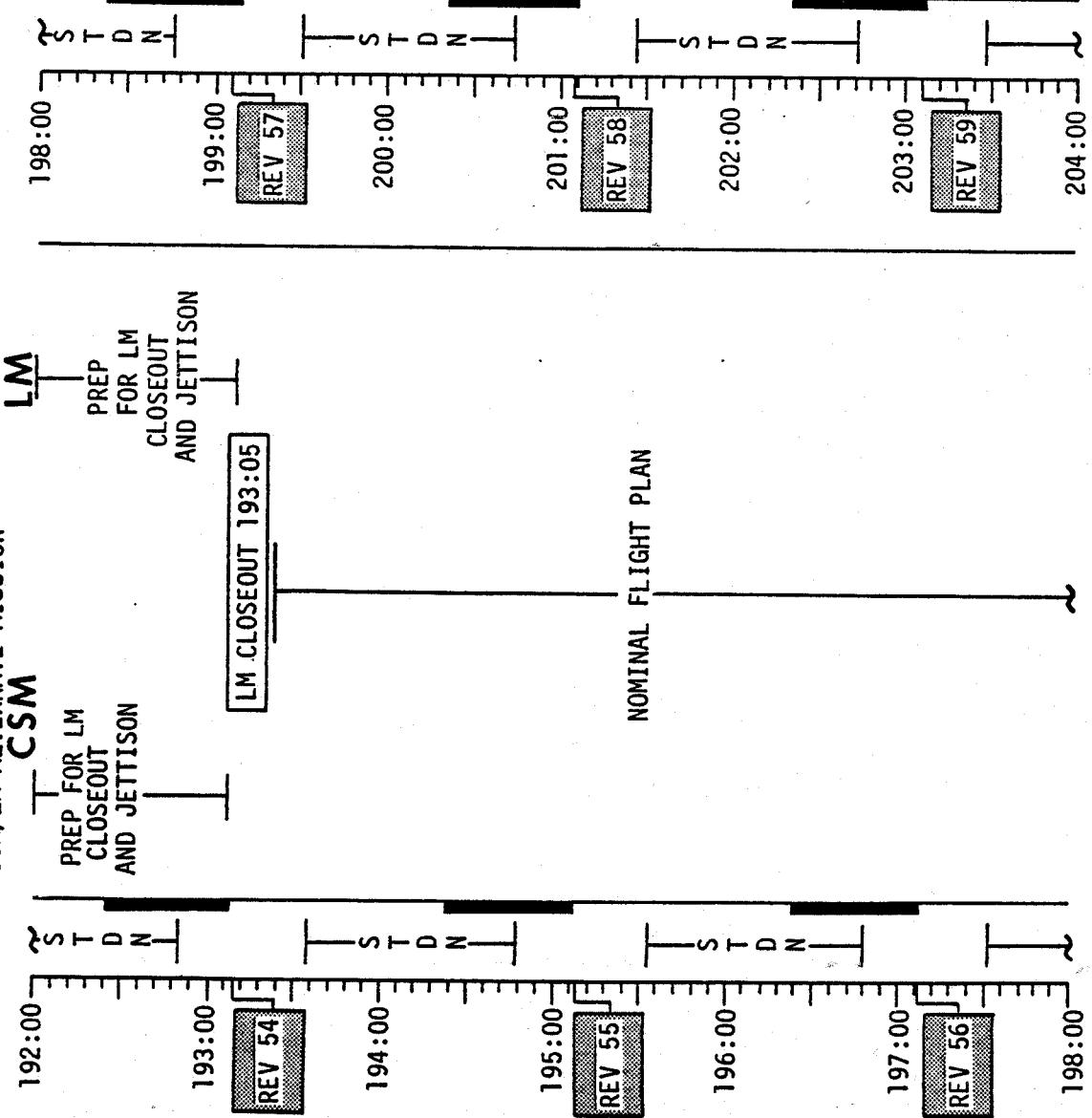
三

**PREP FOR LM
CLOSEOUT
AND JETTISON**

三

CSM

三



NOMINAL FLIGHT PLAN

NOMINAL 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

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.

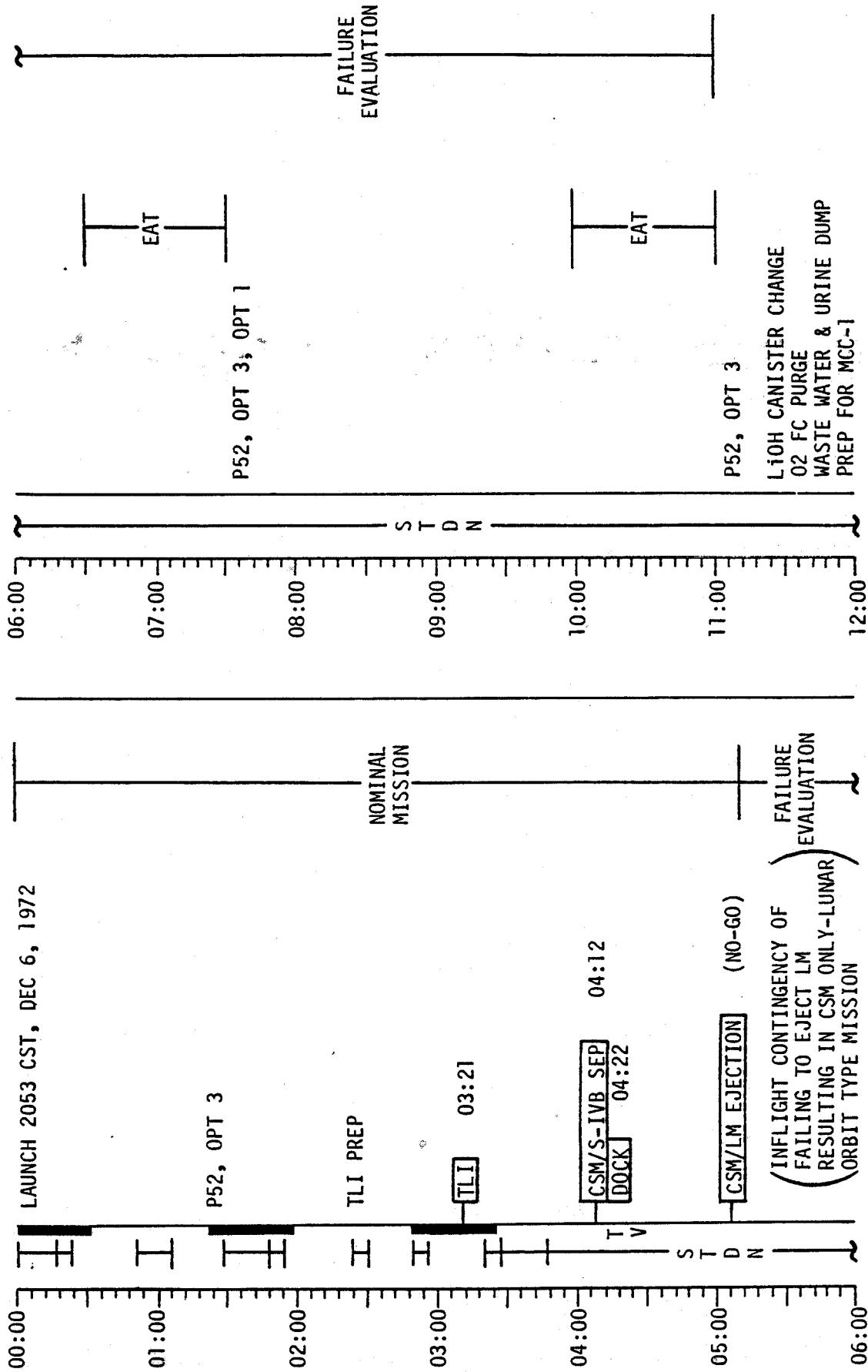
6-36

10/23/72

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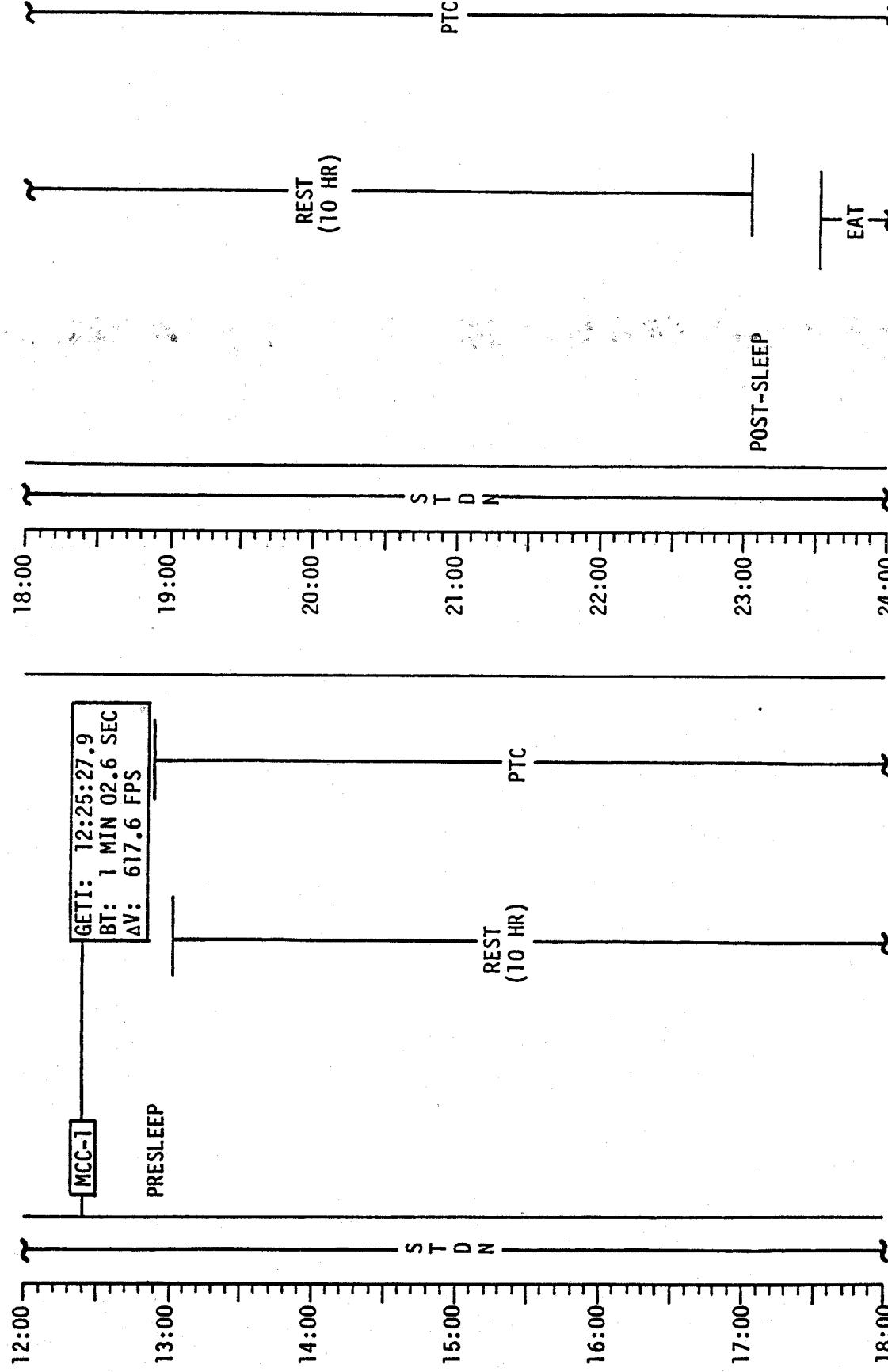
FLIGHT PLAN

LAUNCH 2053 CST, DEC 6, 1972



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

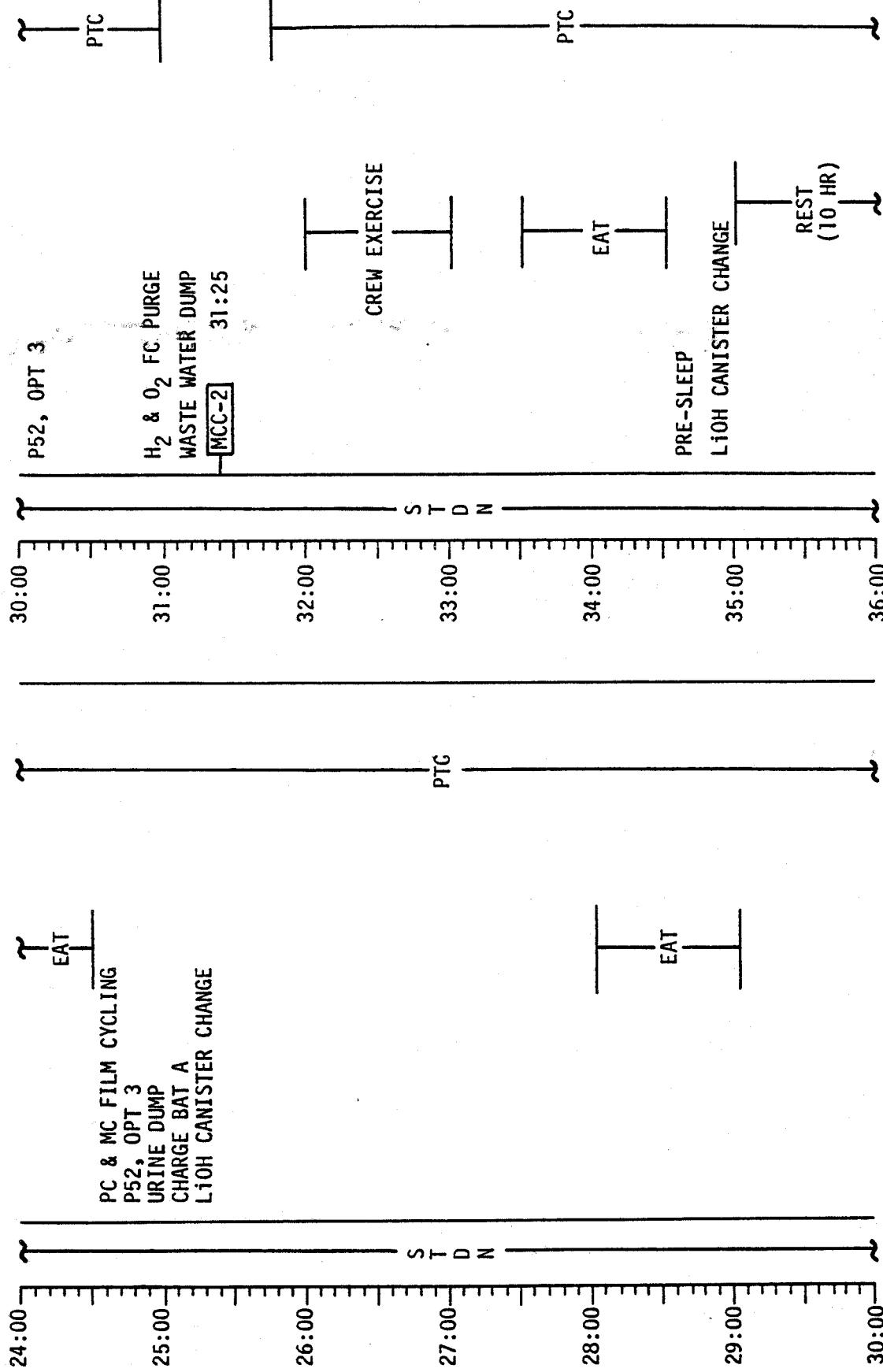
FLIGHT PLAN



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

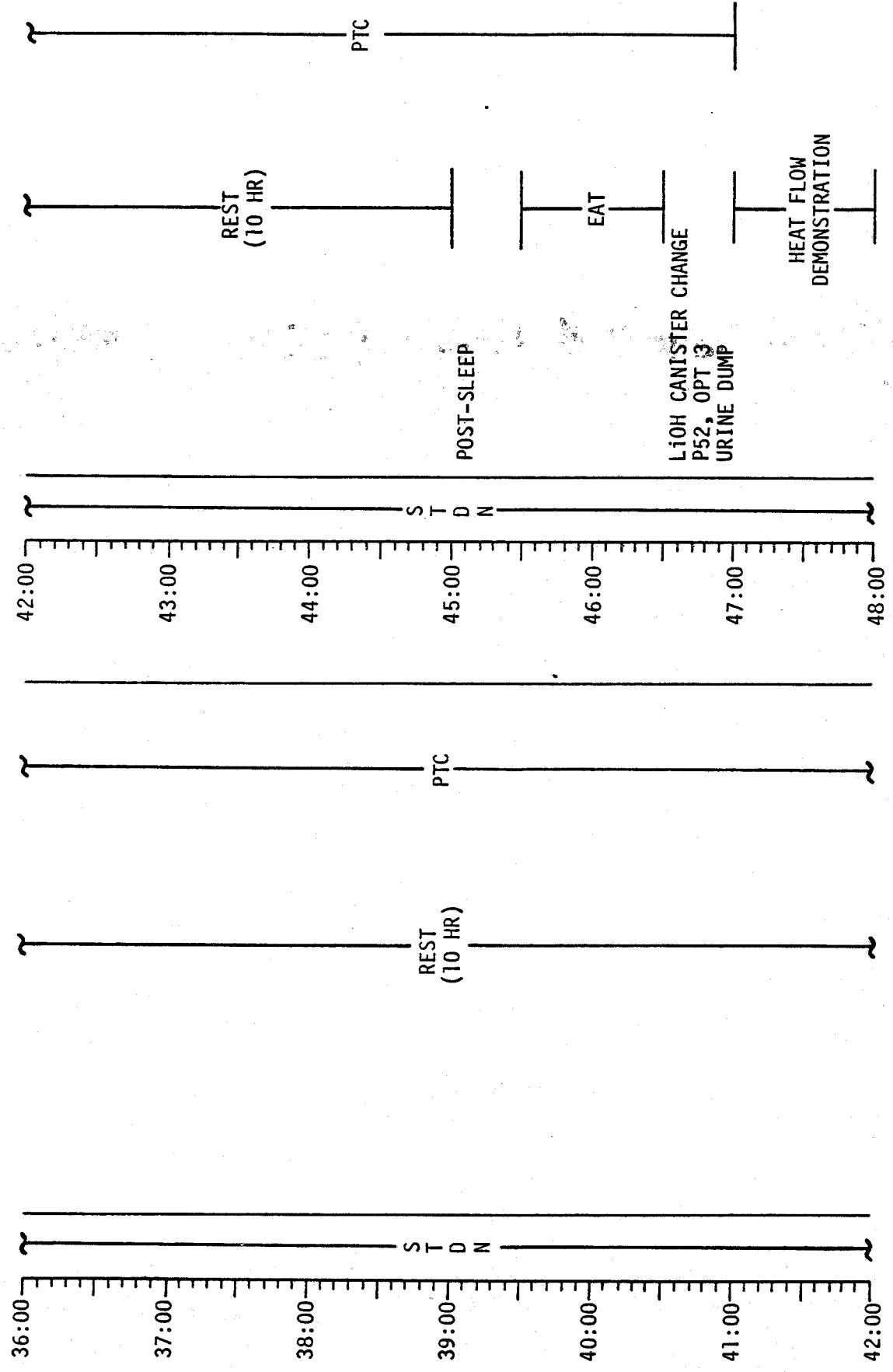
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY / REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	24:00 - 36:00	2/TLC	6-39

FLIGHT PLANNING BRANCH

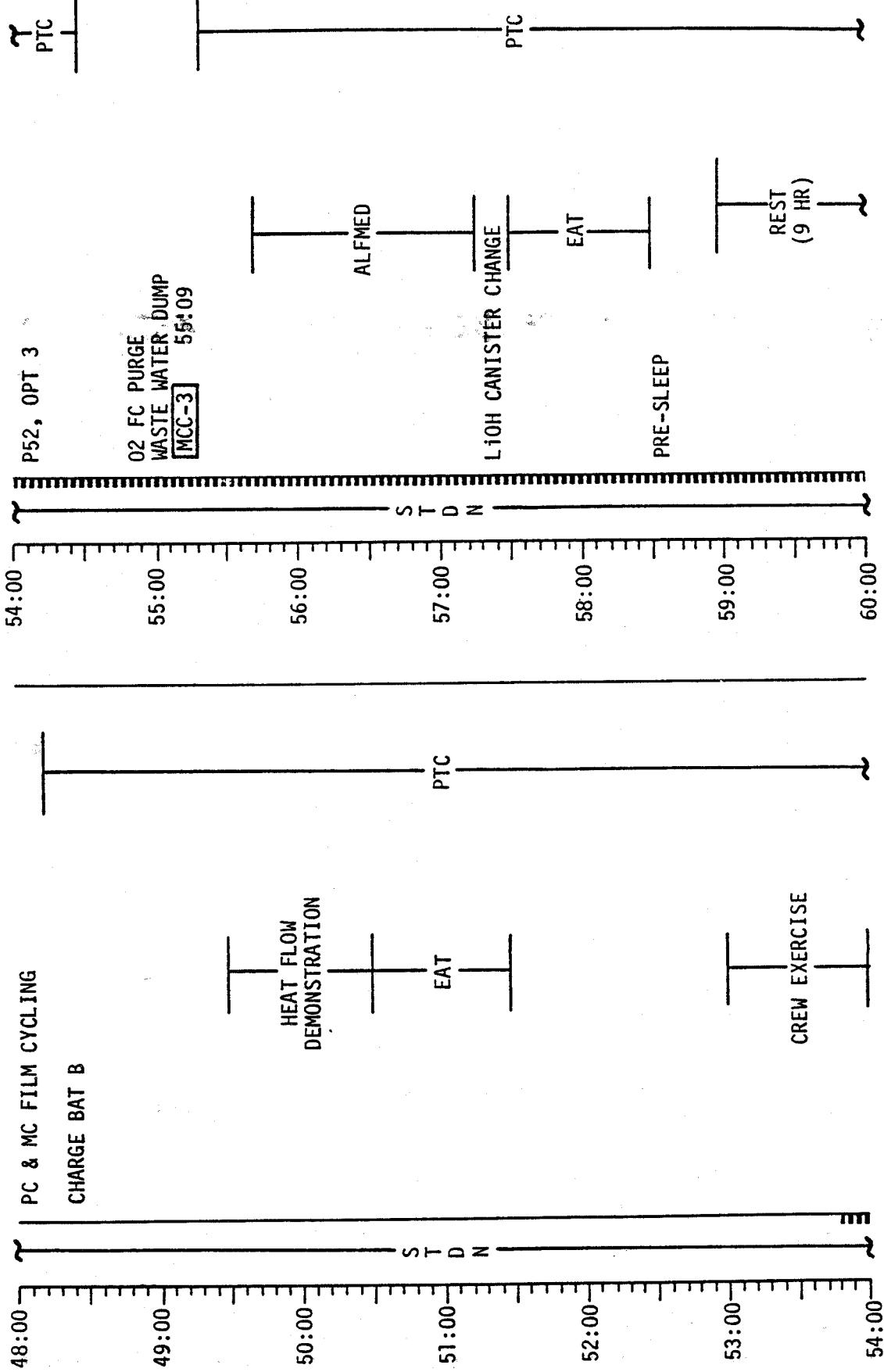
FLIGHT PLAN



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

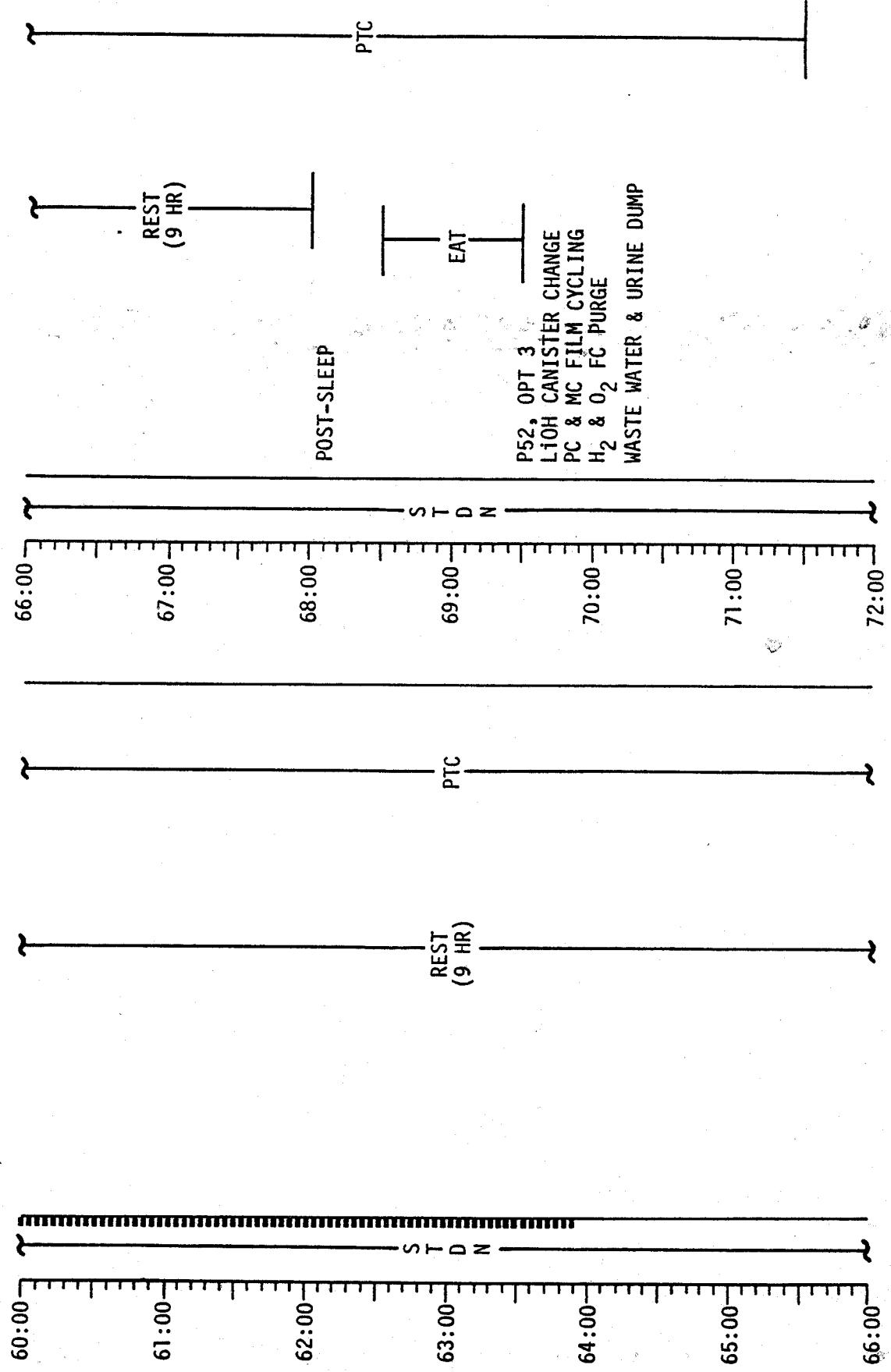
FLIGHT PLANNING BRANCH

FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY / REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	48:00 - 60:00	3/TLC	6-41

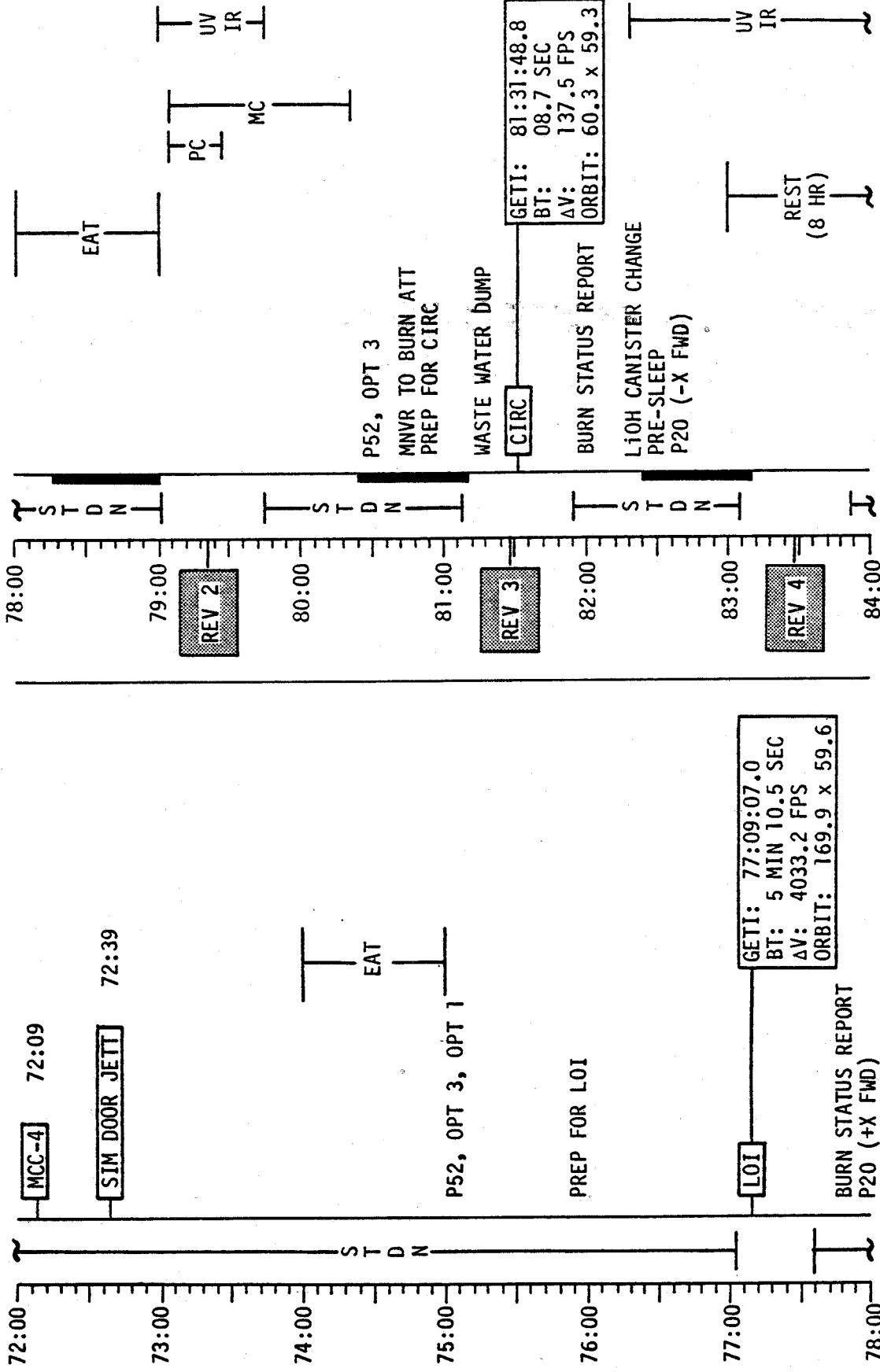
FLIGHT PLAN



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

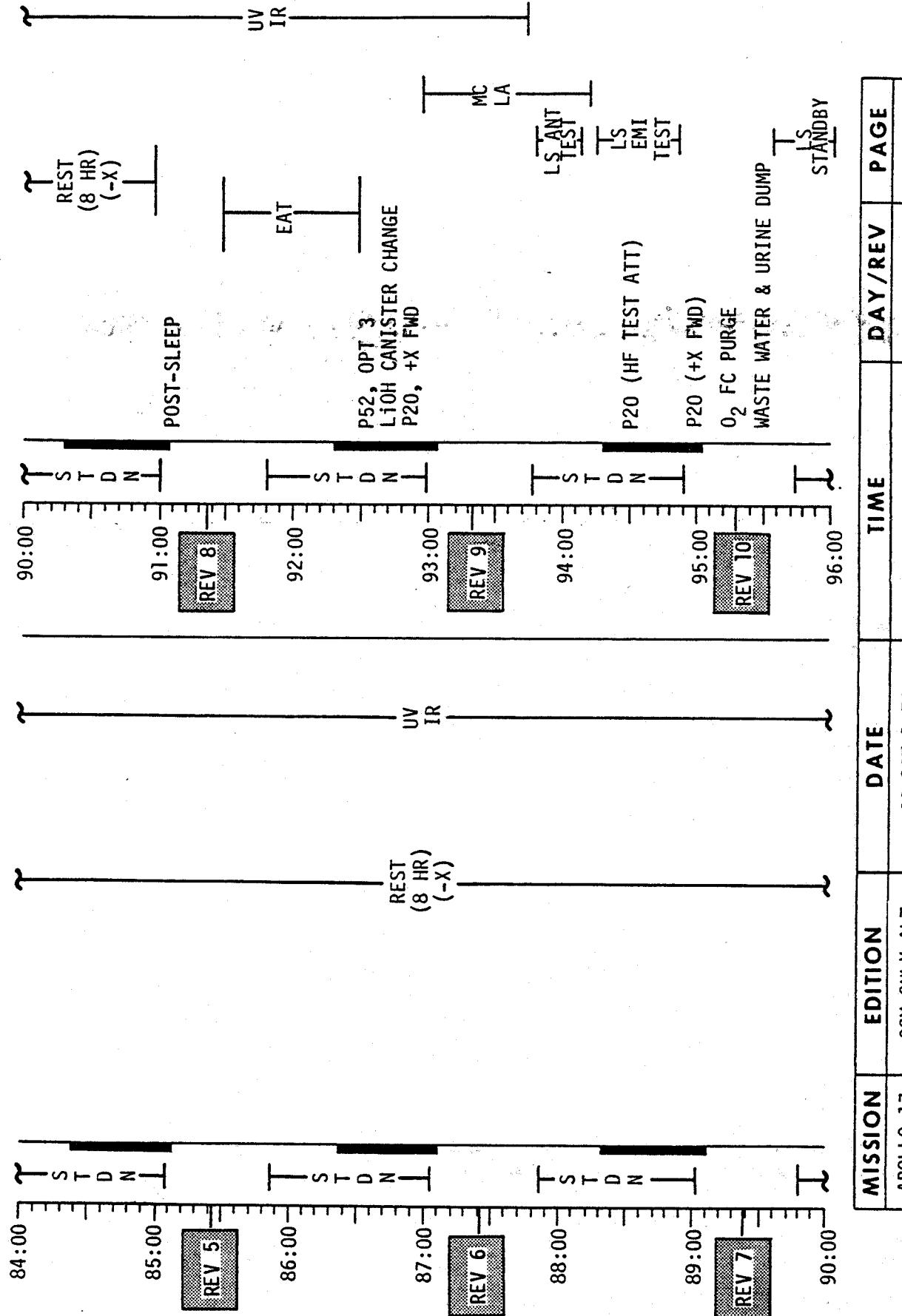
FLIGHT PLANNING BRANCH

FLIGHT PLAN



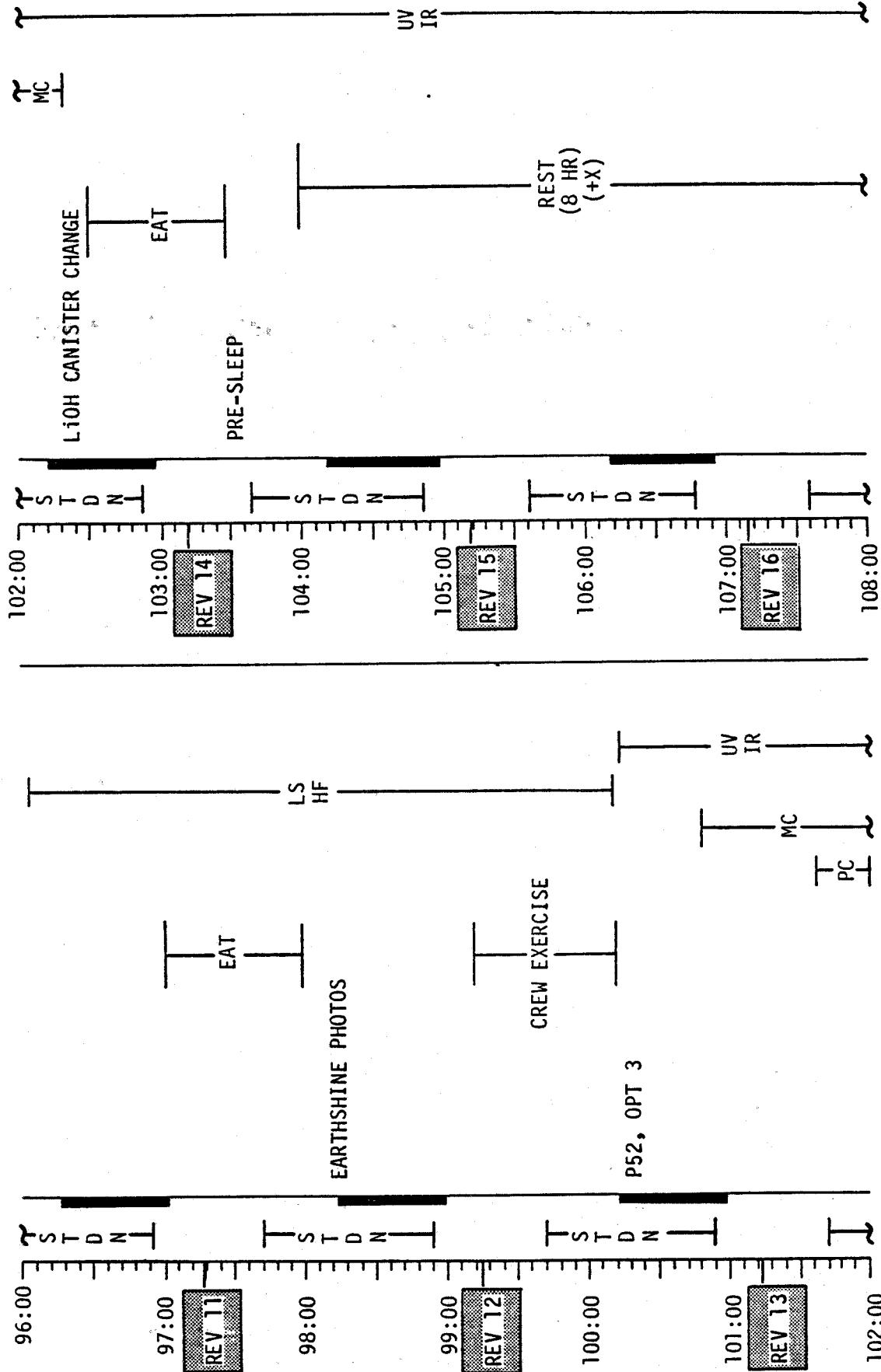
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	72:00 - 84:00	4/1-4	6-43

FLIGHT PLAN



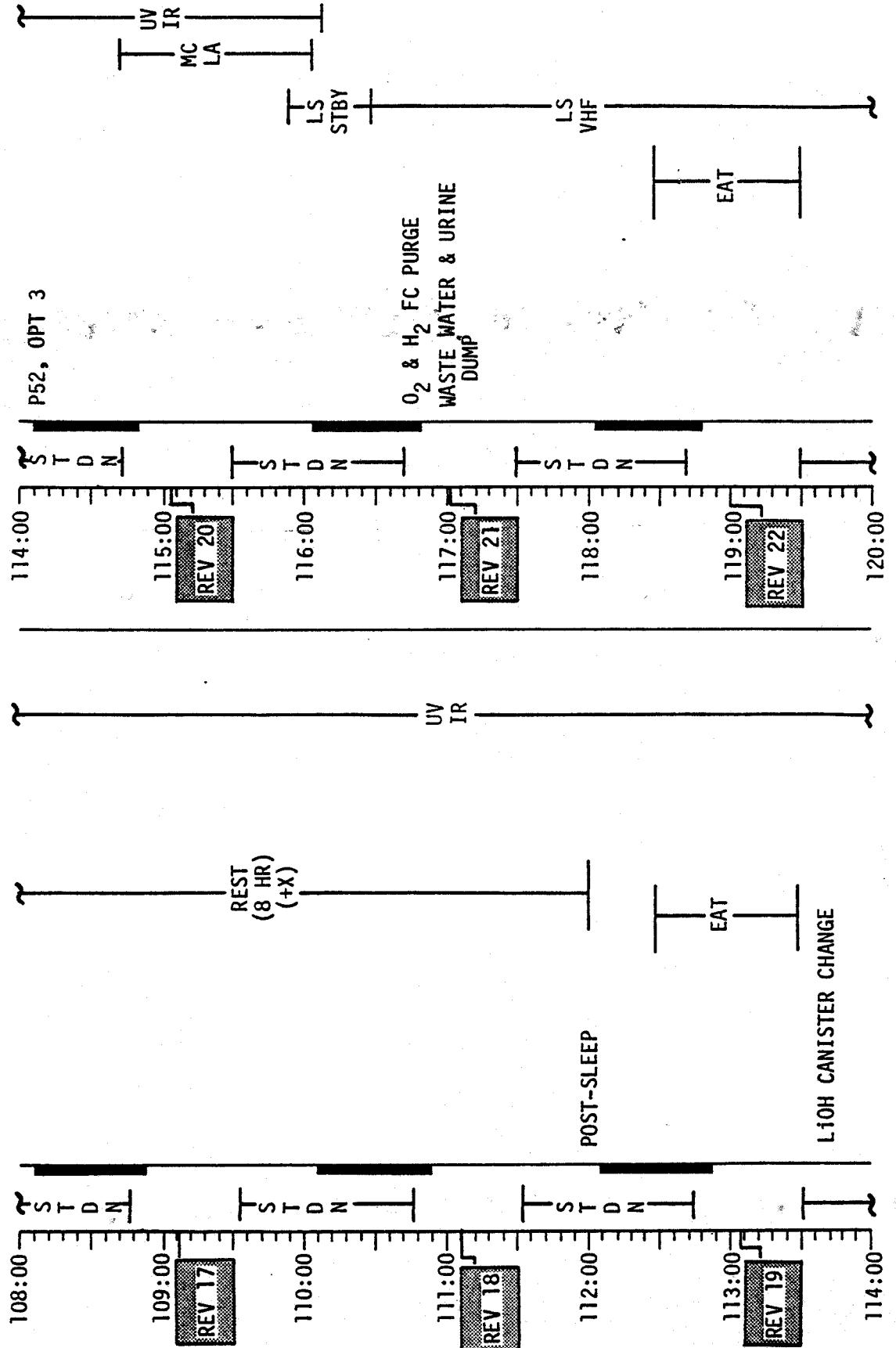
MISSION	EDITION	DATE	TIME	DAY / REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	84:00 - 96:00	4/4-10	6-44

FLIGHT 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

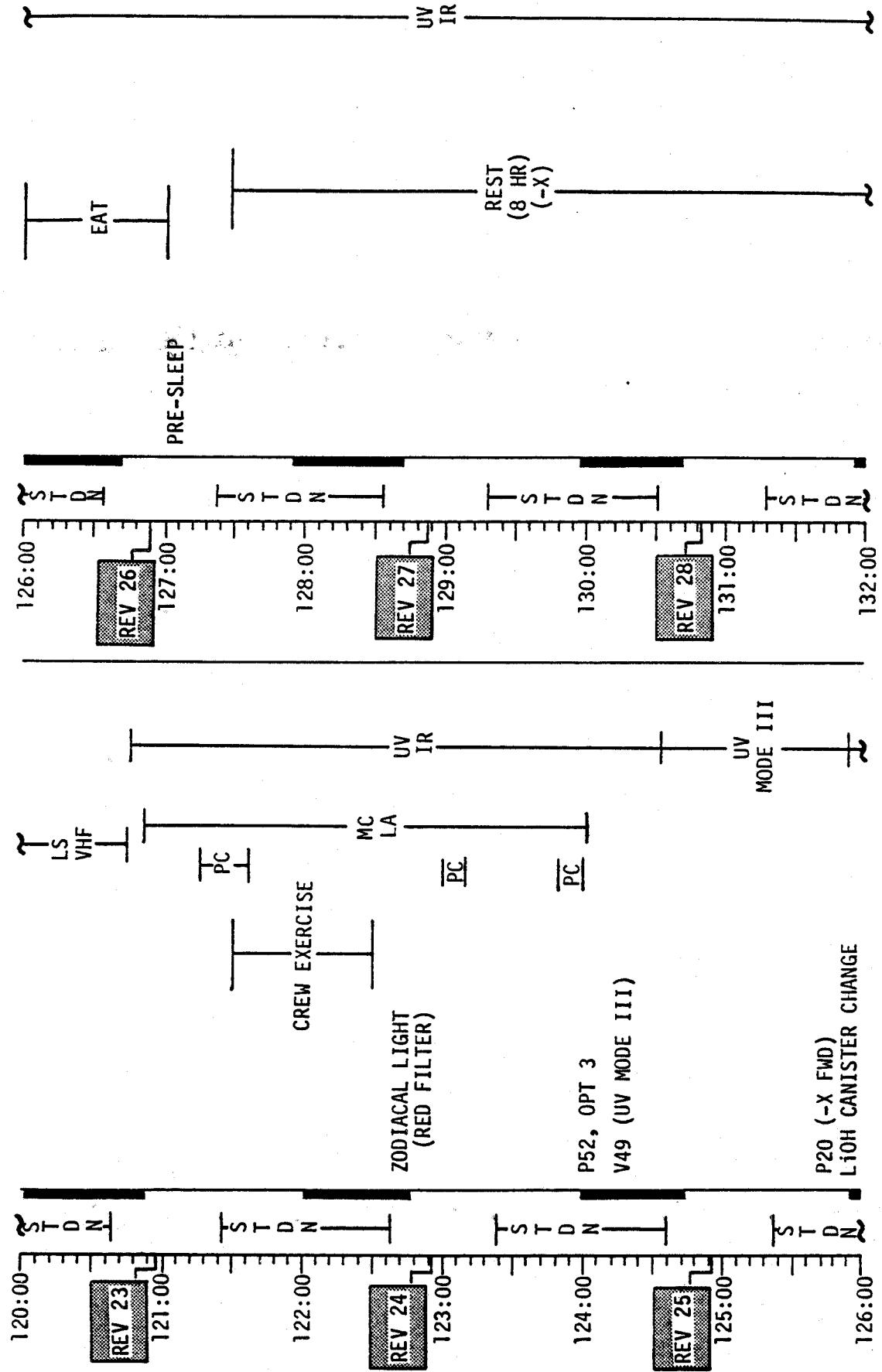
FLIGHT PLAN



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

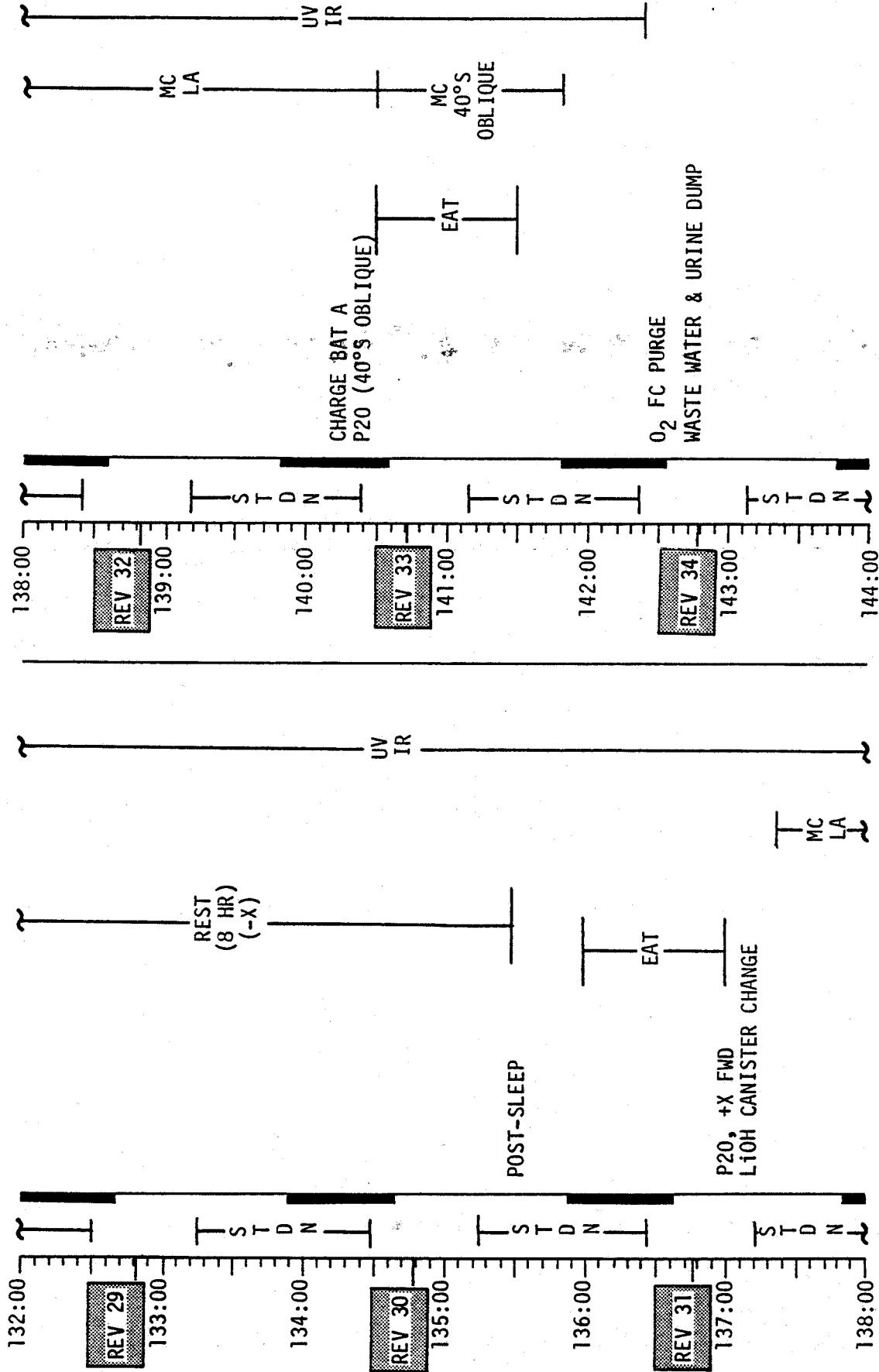
FLIGHT PLAN



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 PLANNING BRANCH

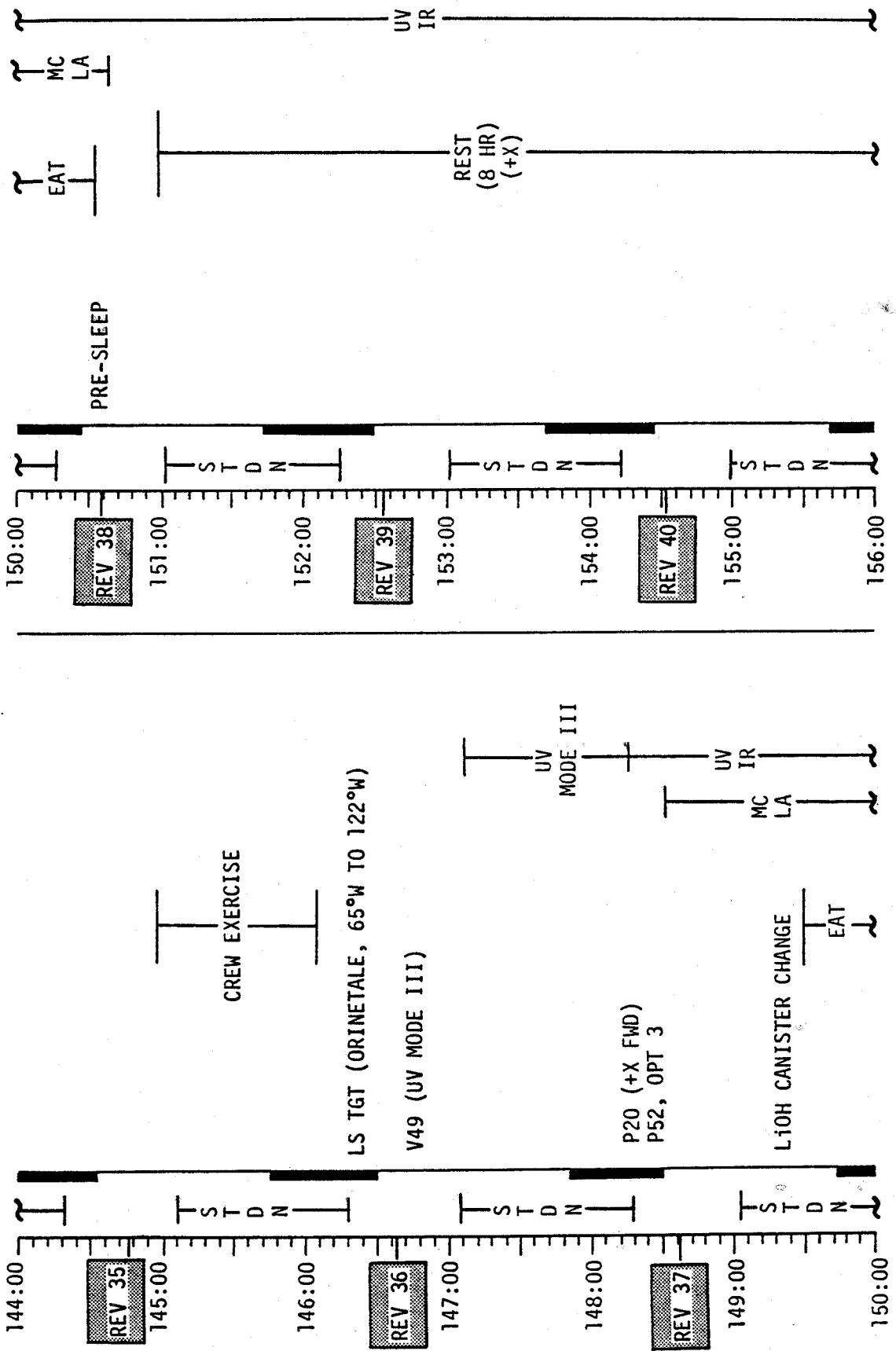
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY / REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	132:00 - 144:00	6-7/29-34	6-48

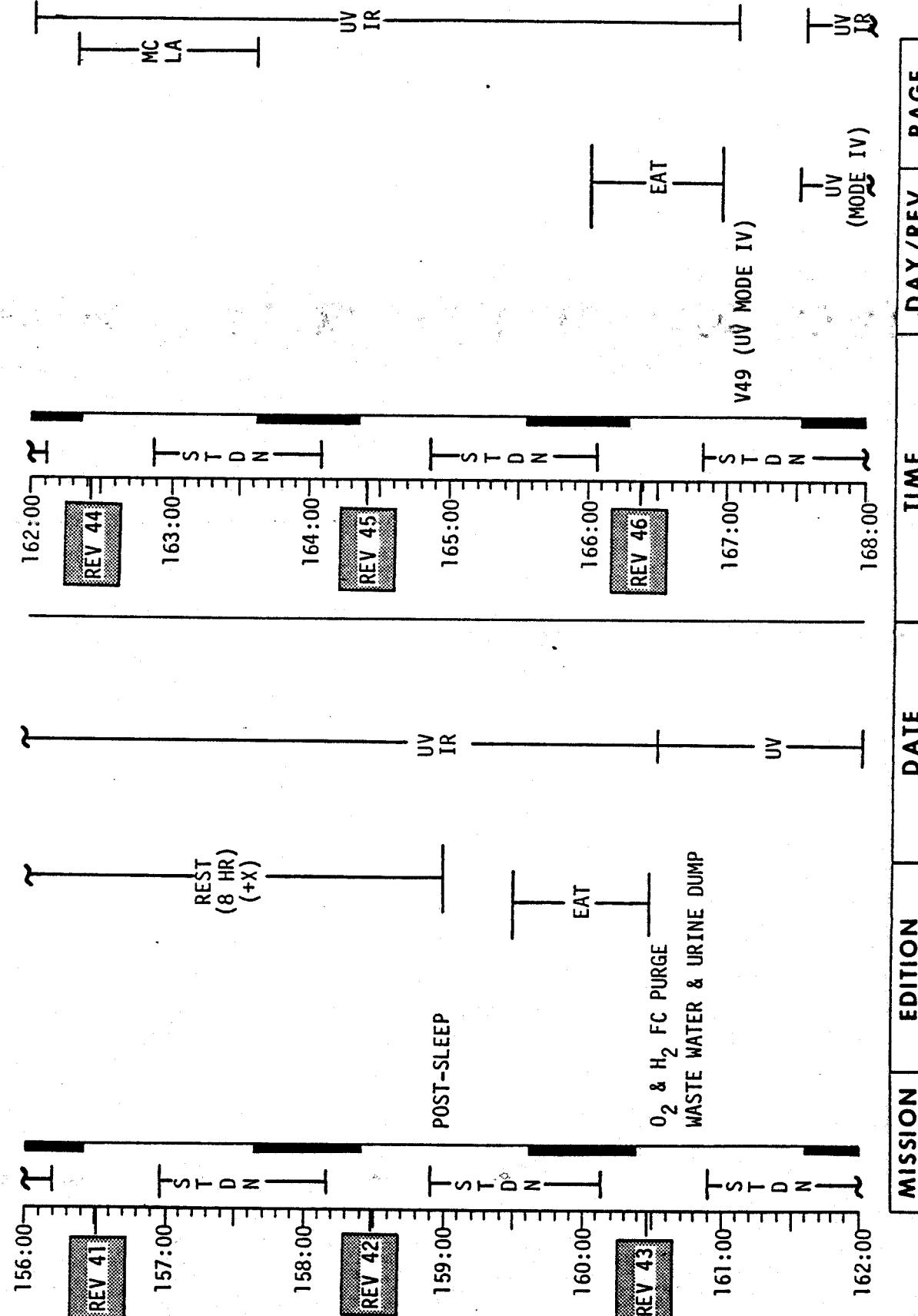
FLIGHT PLANNING BRANCH

FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY / REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	144:00 - 156:00	7/35-40	6-49

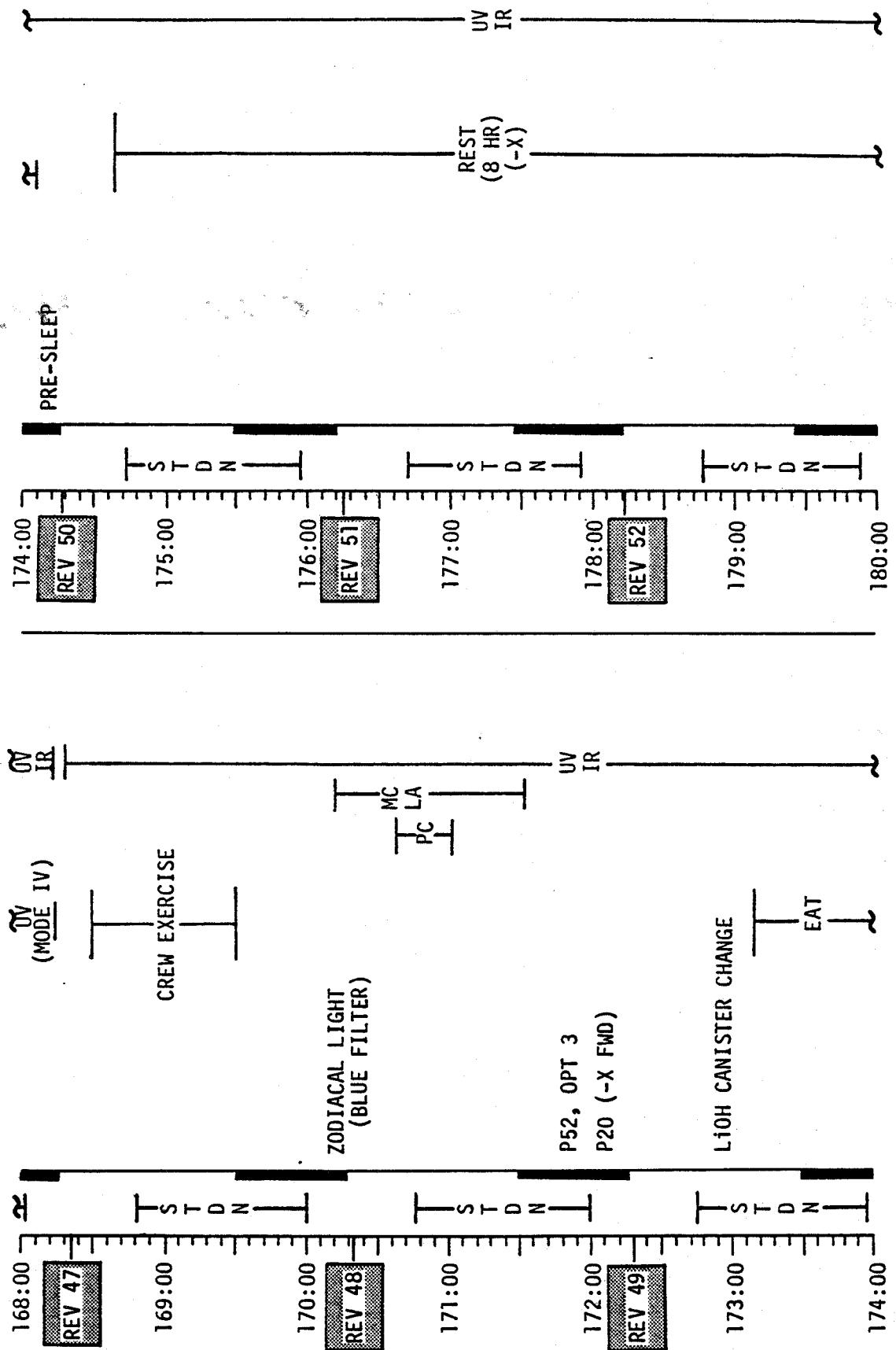
FLIGHT PLAN



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

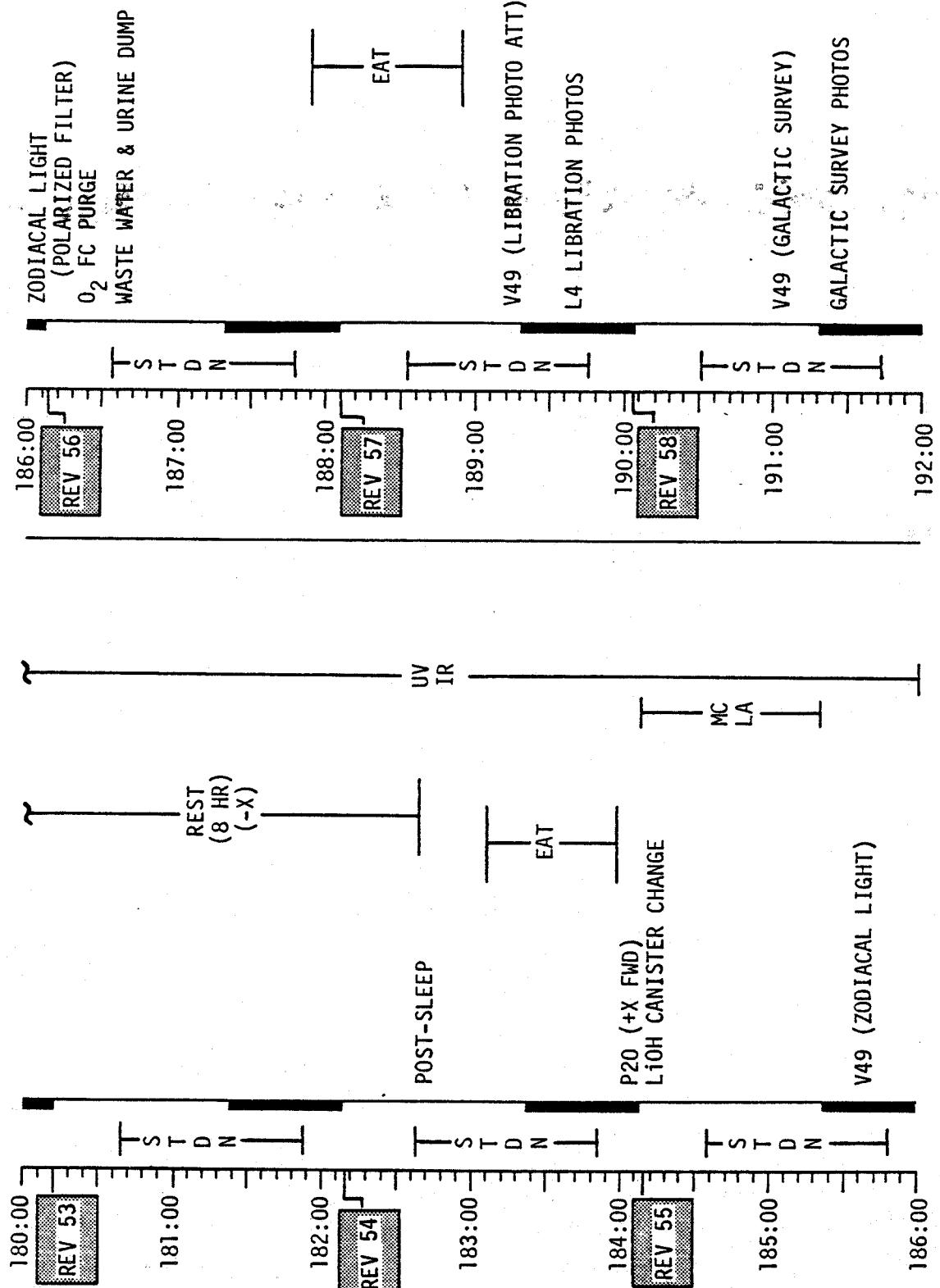
FLIGHT PLANNING BRANCH

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

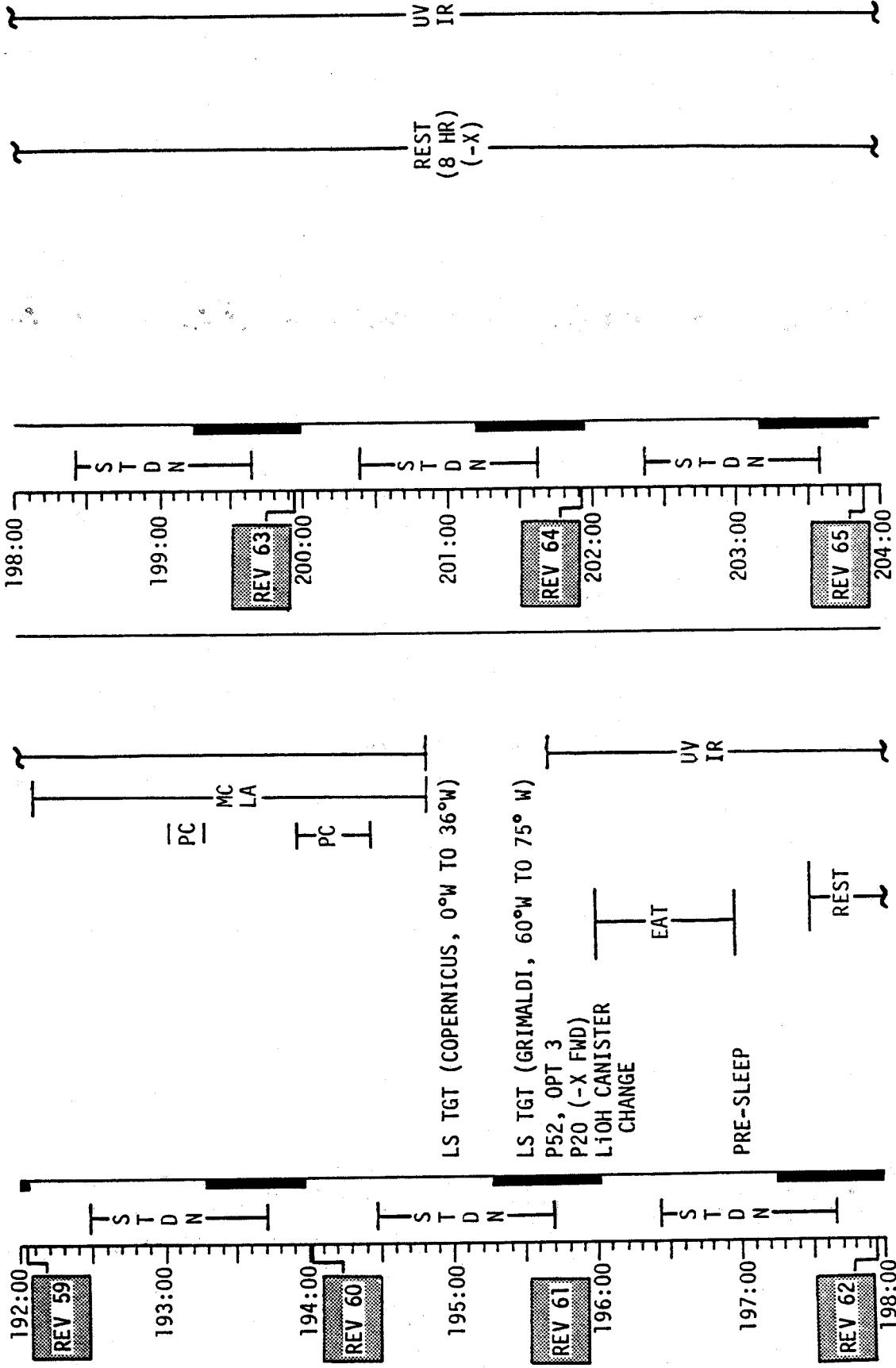
FLIGHT PLAN



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

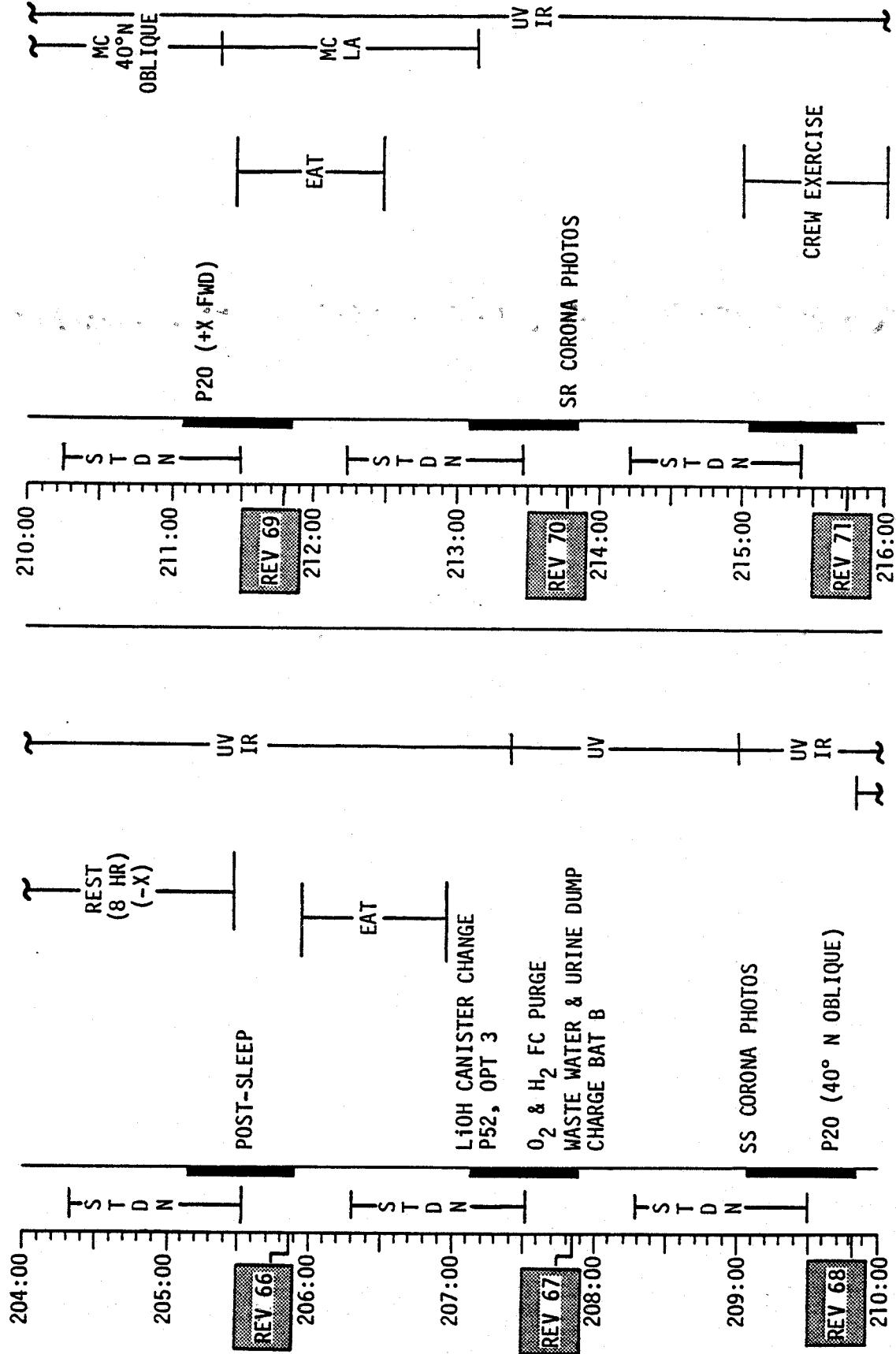
FLIGHT PLANNING BRANCH

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

222:00

223:00

UV IR

216:00

217:00

SATURN L/0 TIME UPDATE (+1:12)
(NOMINAL TIMELINE AT 219:00)
(REV 72 BECOMES REV 67)

NOMINAL
TIMELINE

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

NOTE:

UV IR

223:00 REV 75

224:00 REV 76

225:00 REV 77

226:00

227:00 REV 77

228:00

217:00 REV 72

218:00 REV 73

219:00 REV 74

220:00

221:00

222:00

P52, OPT 3

LiOH CANISTER CHANGE

P20 (-X FWD)

O₂ FC PURGE

WASTE WATER & URINE DUMP

SATURN L/O TIME UPDATE (+1:12)
(NOMINAL TIMELINE AT 219:00)
(REV 72 BECOMES REV 67)

NOMINAL TIMELINE

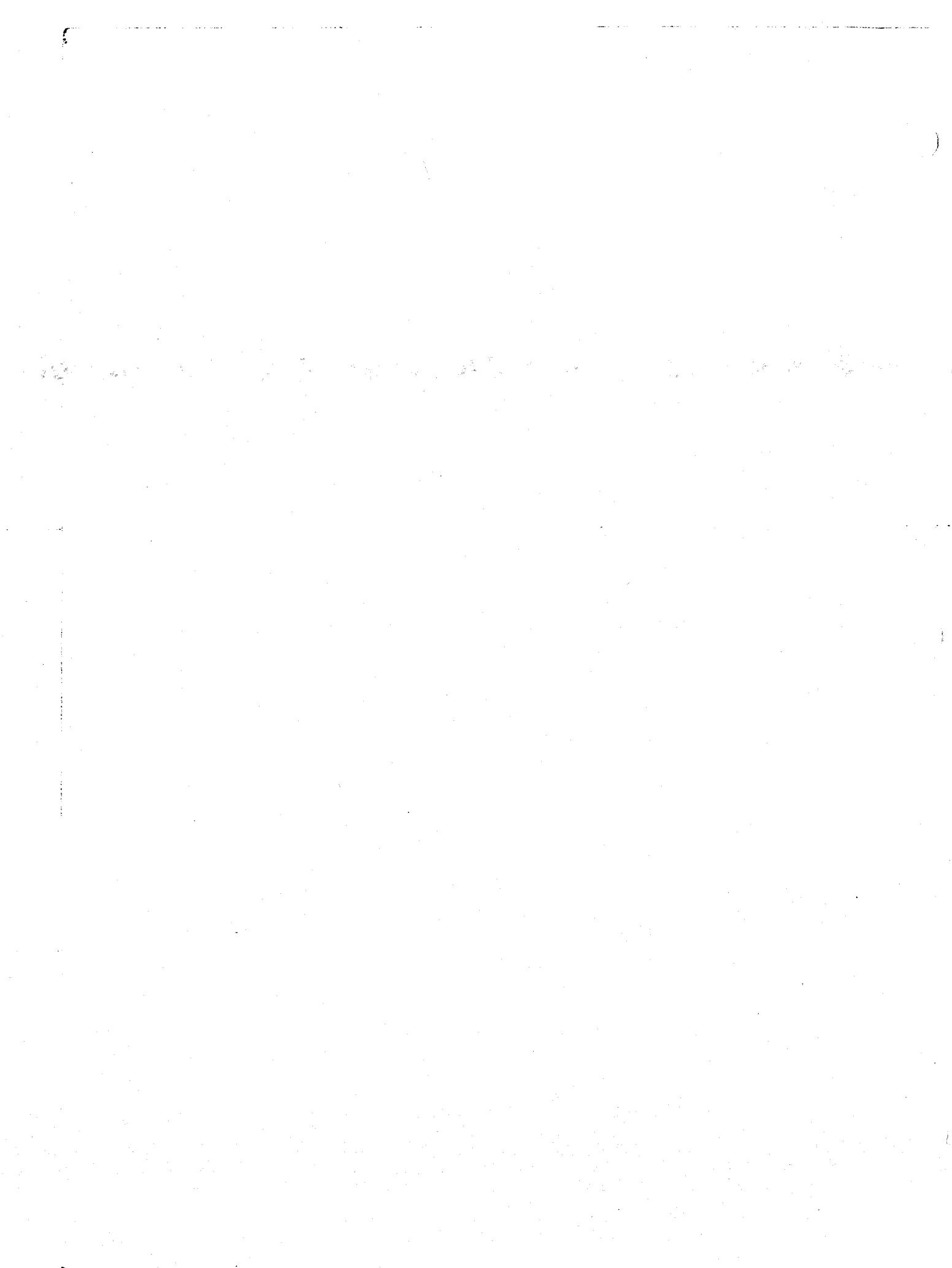
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
Apollo 17	CSM ONLY ALT	23 OCT 1972	216:00 - 228:00	10/71-72	6-55

APOLLO 17 FINAL (12/6)

10/23/72

6-56

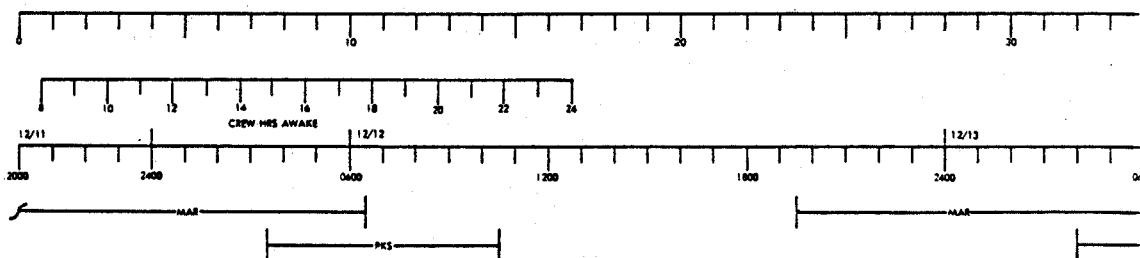
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10/23/72

- ALL PLANS ASSUME L/O AT NEXT BEST OPPORTUNITY.
- ~~18 HRS SINCE CREW WAKEUP~~

1. TD/EVA/L/O	POST-TD EAT EVA-PREP		L/O TD + 4 REV'S (1/2 HR EVA)									
	EVA EQUIP JETT L/O PREP (EAT)		0 + 5		L/O TD + 6 REV'S (5 HR EVA)							
18 HRS SINCE CREW WAKEUP												
• MINIMUM STAY FOR EVA • CREW AWAKE 21 HRS AT L/O (NOMINAL POI, 6HR/EVA)												
CTD												
2A. TD/EVA/REST/L/O	POST-TD CABIN CONFIG EAT	EVA-1 PREP	POST EVA-1 EAT PRESLEEP	REST	POST SLEEP EAT EQUIP JETT L/O PREP	L/O TD + 11 HRS (3 HR EVA, 7 HR REST, 1 EQUIP JETT) 0 + 12						
TD												
2B. TD/REST/EVA	POST-TD CABIN CONFIG EAT PRESLEEP	REST	POSTSLEEP EAT EVA-1 PREP	EVA-1 6-7 HR	POST EVA EAT L/O PREP	L/O TD + 14 REV'S (7 HR EVA, 8 HR REST)						
• MINIMUM STAY FOR ONE FULL EVA • REVERSIBLE TO ALLOW EVA BEFORE REST (~ APOLLO 11)												
TD												
3. TD/EVA/ETC	POST-TD CABIN CONFIG EAT	EVA-1 PREP	POST EVA-1 EAT PRESLEEP	REST	POSTSLEEP EAT EVA-2 PREP	L/O TD + 15 REV'S (3 HR EVA, 7 HR REST, 1 EQUIP JETT) 0 + 16						
• CREW AWAKE 18 HRS AT EVA-1 (REPRESS) • SECONDARY (IMPROVED) ALTERNATE FOR APOLLO 17 BUT TWO EVA'S ONLY (POI > 2 REV'S LATE) • MINIMUM STAY FOR TWO EVA'S (~ NOMINAL)												
TD												
4. TD/REST/ETC	POST-TD CABIN CONFIG EAT PRESLEEP	REST-1 7-8 HR	POSTSLEEP EAT EVA-1 PREP	EVA-1 5-7 HR	REST-2 7-8 HR	POSTSLEEP EAT						
• SHORT STAY ALTERNATE FOR POI > 2 REV'S LATE, 2 EVA'S												
TD												
5. TD/EVA/ETC	POST-TD CABIN CONFIG EAT	EVA-1 3-7 HR	POST-EVA-1 EAT PRESLEEP	1ST-1 7-8 HR	POSTSLEEP EAT EVA-2 PREP	POST-EVA-2 EAT PRESLEEP						
• CREW AWAKE 18 HRS AT EVA-1 (REPRESS) • PRIMARY ALTERNATE FOR APOLLO 17 REDUCED STAY (POI > 2 REV'S LATE) • MINIMUM STAY FOR THREE EVA'S (~ NOMINAL)												
TD												
6. BASELINE REST FIRST	POST-TD CABIN CONFIG EAT PRESLEEP	REST-1 7-8 HR	POSTSLEEP EAT EVA-1 PREP	EVA-1 5-7 HR	POST-EVA-1 EAT PRESLEEP	REST-2 7-8 HR						
PLANNING 0-2:00 • WOULD BE PRIMARY ALTERNATE FOR APOLLO 17 POI > 2 REV'S LATE												
TD												
7. BASELINE 17	POST-TD CABIN CONFIG EAT	EVA-1 3-7 HR	POST-EVA-1 EAT PRESLEEP	REST 8 HR	POSTSLEEP EAT EVA-2 PREP	EV-A-2 7 HR						
• CREW AWAKE 18 HRS AT EVA-1 (REPRESS) • ASSUMES DIFFERENT PLAN FOR POI > 2 REV'S LATE • VARIABLES OF NOMINAL APOLLO 17 PLAN POI POI + 2 REV'S LATE												
TD												
8. APOLLO 17 NOMINAL	POST-TD CABIN CONFIG EAT 1:53	EVA-1 1:45	EVA-1 7:00	POST-EVA-1 EAT PRESLEEP 6:15	REST-1 8:00	POST SLEEP EAT EV-A-2 PREP 1:05						
TD												



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 EFFECTIVE LUNAR-STAY PLAN FOR VARIOUS SURFACE STAY TIMES LESS THAN 10 HOURS. IT IS ASSUMED THAT THE LUNAR DAY IS 24 HOURS AND 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 IN THE MISSION.
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 12 HOURS FROM WAKEUP TO EVA-1 REPRESS. THE 12 HOUR LIMIT IS INDICATED BY A HATCHED LINE AT THE END OF EVA-1 ON THESE PLANS. THUS, THOSE WITHIN 12 HOURS OF EVA-1 BEFORE LIFTOFF. IF MORE REST THAN SIX HOURS IS NEEDED, THE LIFTOFF 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.
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 SIX HOURS IS NEEDED, THE LIFTOFF 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.
6. THE GMAT SCALE AND 210 FT ANTENNA COVERAGES ARE EFFECTIVE FOR THE NOMINAL TD TIME ONLY.

5 EVA, 8 HR REST, 7 HR EVA, 1 EQUIP JETT)

L/O TD + 21 REV (7 HR REST, 5 HR EVA, 7 HR REST, 4 HR EVA, 1 EQUIP JETT)

1ST EVA

0+22

EQUIP JETT

0+23

EAT

0+24

L/O PREP 0+24 L/O TD + 25 REV (8 HR REST, 7 HR EVA, 8 HR REST, 6 HR EVA, 1 EQUIP JETT)

L/O TD + 25 REV (8 HR REST, 7 HR EVA, 8 HR REST, 6 HR EVA, 1 EQUIP JETT)

0+26

POST EVA

0+27

EAT

0+28

EQUIP JETT

0+29

EAT

0+29

L/O PREP

L/O TD + 30 REV (7 HR EVA, 8 HR REST, 7 HR EVA, 8 HR REST, 5 HR EVA, 1 EQUIP JETT)

L/O TD + 30 REV (7 HR EVA, 8 HR REST, 7 HR EVA, 8 HR REST, 5 HR EVA, 1 EQUIP JETT)

5-7 HR

REST-3

POSTSLEEP

7-8 HS

EAT

EVA-3

PREP

5-7 HR

POST EVA

0+33

EAT

EVA-3

PREP

5-7 HR

EQUIP JETT

0+34

EAT

0+35

L/O PREP

0+36

L/O TD + 32 REV (7 HR REST, 5 HR EVA, 7 HR REST, 5 HR EVA, 1 EQUIP JETT)

5-7 HR

POSTSLEEP

EAT

EVA-3

PREP

7 HR

POST-EVA-3

EAT

REST

POSTSLEEP - DON SUITS

EAT

EQUIP JETT

0+37

L/O PREP

0+37

L/O TD + 36 REV (3 HR EVA, 8 HR REST, 7 HR EVA, 8 HR REST, 7 HR EVA, 8 HR REST, 2 EQUIP JETT)

8:00

POST SLEEP

EAT

EVA-3

PREP

7:00

POST-EVA-3

EAT

CONF

2:33

REST-3

8:00

POST SLEEP

EAT

DON SUITS

EQUIP JETT

2:49

L/O PREP

1:15

L/O TD + 36 REV (7 HR EVA, 8 HR REST, 7 HR EVA, 8 HR REST, 2 EQUIP JETT)

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