

JULY 16, LAUNCH

EASTERN (SITE 2) 10° SUN #

LAT: 0°43'N
LONG: 23°42'E

JULY 17, LAUNCH

CENTRAL (SITE 3) 10° SUN #

LAT: 0°21'N
LONG: 17°16'W

JULY 21, LAUNCH

WESTERN (SITE 5) 6° SUN #

LAT: 1°41'N
LONG: 41°54'W

TIME	CMF	CDR	LMP	MCCH	CMF	CDR	LMP	MCCH	CMF	CDR	LMP	MCCH
LOI +4:30												
+5:00	V64 ACQUIRE MSFN BURN STATUS REPORT (LOI-2 BURN) RECORD P22 UPDATE (PSEUDO LMK) P52 IMU REALIGN LOG SITE REFSMMAT			CSM VOICE: P22	V64 ACQUIRE MSFN BURN STATUS REPORT (LOI-2 BURN) RECORD P22 UPDATE (PSEUDO LMK) P52 IMU REALIGN LOG SITE REFSMMAT			CSM VOICE: P22	V64 ACQUIRE MSFN BURN STATUS REPORT (LOI-2 BURN) RECORD P22 UPDATE (PSEUDO LMK) P52 IMU REALIGN LOG SITE REFSMMAT			CSM VOICE: P22
	STOP CM HATCH, PROBE & DROGUE DON HELMET & GLOVES GO/NO GO (UNDOCK) VERIFY LM/CSM COMM	PREPARE FOR LM INGRESS CLEAR TUNNEL IVT TO LM *RCS PRESSURIZATION & CHECKOUT		VOICE: SC NIGHT SEP PAD UNDOCK GO	STOP CM HATCH, PROBE & DROGUE DON HELMET & GLOVES GO/NO GO (UNDOCK) VERIFY LM/CSM COMM	PREPARE FOR LM INGRESS CLEAR TUNNEL *RCS PRESSURIZATION & CHECKOUT		CSM P22 VOICE: SC NIGHT SEP PAD UNDOCK GO	STOP CM HATCH, PROBE & DROGUE DON HELMET & GLOVES GO/NO GO (UNDOCK) VERIFY LM/CSM COMM	PREPARE FOR LM INGRESS CLEAR TUNNEL *RCS PRESSURIZATION & CHECKOUT		CSM P22 VOICE: SC NIGHT SEP PAD UNDOCK GO
+22:00	MANEUVER TO AGS CAL ATTITUDE THEN UNDOCK ATTITUDE RR SPINOR ACT & SELF TEST	RR ACT & SELF TEST V48 DAP LOAD DPS PRESS & C/O V47 AGS UPDATE & ALIGN	AGS GYRO & ACCEL CALIBRATE		MANEUVER TO AGS CAL ATTITUDE THEN UNDOCK ATTITUDE RR SPINOR ACT & SELF TEST	RR ACT & SELF TEST V48 DAP LOAD DPS PRESS & C/O V47 AGS UPDATE & ALIGN		AGS GYRO & ACCEL CALIBRATE	MANEUVER TO AGS CAL ATTITUDE THEN UNDOCK ATTITUDE RR SPINOR ACT & SELF TEST	RR ACT & SELF TEST V48 DAP LOAD DPS PRESS & C/O V47 AGS UPDATE & ALIGN		AGS GYRO & ACCEL CALIBRATE
	FINAL UNDOCKING PREPARATION REACTIVATE B3, C4 JETS LM INSP. PHOTO. LOAD DAP (4 JET) S/C CONT - CMC P30 EXTERNAL ΔV P41 RCS THRUST ΔV: 2.5 FPS RAD. DWN MNRV TO TRACK ATT SXT & VHF TRACKING	UNDOCK MANEUVER FOR INSPECT. FLY FORMATION CSM SEP P30 EXTERNAL ΔV RR & VHF C/O & RANGING	V64 ACQUIRE MSFN COPY PADS (DOI, PDI) V47 AGS UPDATE & ALIGN	LM P27 VOICE: DOI PAD PDI PAD LM P27	FINAL UNDOCKING PREPARATION REACTIVATE B3, C4 JETS LM INSP. PHOTO. LOAD DAP (4 JET) S/C CONT - CMC P30 EXTERNAL ΔV P41 RCS THRUST ΔV: 2.5 FPS RAD. DWN MNRV TO TRACK ATT SXT & VHF TRACKING	UNDOCK MANEUVER FOR INSPECT. FLY FORMATION CSM SEP P30 EXTERNAL ΔV RR & VHF C/O & RANGING	V64 ACQUIRE MSFN COPY PADS (DOI, PDI) V47 AGS UPDATE & ALIGN	LM P27 VOICE: DOI PAD PDI PAD LM P27	FINAL UNDOCKING PREPARATION REACTIVATE B3, C4 JETS LM INSP. PHOTO. LOAD DAP (4 JET) S/C CONT - CMC P30 EXTERNAL ΔV P41 RCS THRUST ΔV: 2.5 FPS RAD. DWN MNRV TO TRACK ATT SXT & VHF TRACKING	UNDOCK MANEUVER FOR INSPECT. FLY FORMATION CSM SEP P30 EXTERNAL ΔV RR & VHF C/O & RANGING	V64 ACQUIRE MSFN COPY PADS (DOI, PDI) V47 AGS UPDATE & ALIGN	LM P27 VOICE: DOI PAD PDI PAD LM P27
+23:00	P52 IMU REALIGN OPTION 3 REFSMMAT GDC ALIGN MNRV TO TRACK ATT	GO/NO GO FOR DOI P40 DPS THRUST	P52 IMU REALIGN OPTION 3 REFSMMAT	LM VOICE: DOI GO L.S. PAD	P52 IMU REALIGN OPTION 3 REFSMMAT GDC ALIGN MNRV TO TRACK ATT	GO/NO GO FOR DOI P40 DPS THRUST	P52 IMU REALIGN OPTION 3 REFSMMAT	LM VOICE: DOI GO L.S. PAD	P52 IMU REALIGN OPTION 3 REFSMMAT GDC ALIGN MNRV TO TRACK ATT	GO/NO GO FOR DOI P40 DPS THRUST	P52 IMU REALIGN OPTION 3 REFSMMAT	LM VOICE: DOI GO L.S. PAD
+24:00	CONFIRM DOI P76 TARGET ΔV	TRIM Vx P-90° VERIFY ΔVx			CONFIRM DOI P76 TARGET ΔV	TRIM Vx P-90° VERIFY ΔVx			CONFIRM DOI P76 TARGET ΔV	TRIM Vx P-90° VERIFY ΔVx		

*NOTE: ACTIVITY REQUIRES STEERABLE ANTENNA FOR HBR TELEMETRY
SHADED ACTIVITIES OCCUR AT SAME RELATIVE TIME ON ALL THREE LAUNCH DAYS



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

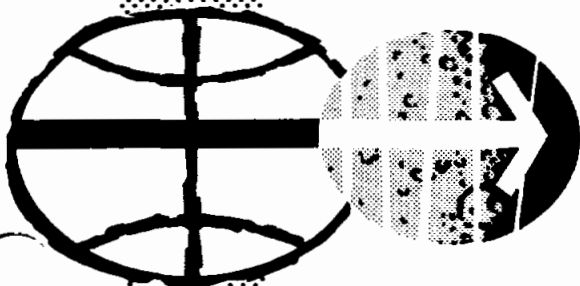
PRELIMINARY
OPTION 1

APOLLO 11 FLIGHT PLAN

AS-506/CSM-107/LM5

MAY 9, 1969

PREPARED BY
FLIGHT PLANNING BRANCH
FLIGHT CREW SUPPORT DIVISION



MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

FLIGHT PLAN

CSM

LM

MCC-H

CMP

3:30 PM EDT

CDR

LMP

50:00

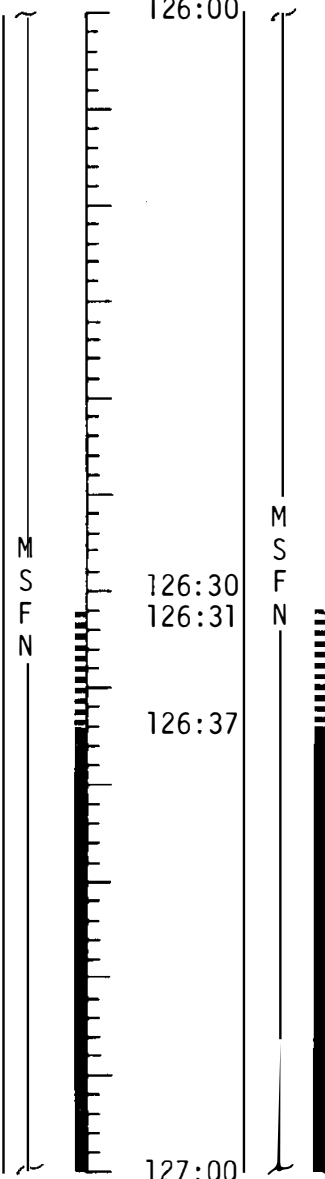
126:00

DOCKING 126:00

PRESS CM TO 5.5 PSIA
ADJUST O₂ FLOW TO .81bs/hr
PRESS TUNNEL TO
ΔP = 3 PSID AND CK
FOR LEAK THAN, EQUALIZE
CM/LM ΔP
INFORM LM OF PRESS
EQUALIZATION

REMOVE HATCH AND STOW

PASS EQUIPMENT TO LM



OPEN LM HATCH
REMOVE AND STOW
PROBE AND DROGUE

RETRIEVE FROM CSM THE
FOLLOWING ITEMS:

- PGA BAG (1)
- HELMET STOWAGE (2)
- SRC (ROCK BOX) BAGS (2)
- CSC (GRAB SAMPLE) BAG (1)
- 70mm MAGAZINE BAG (1)
- CLOSEUP MAGAZINE BAG (1)
- LIGHT WEIGHT HEADSET (2)
- T-ADAPTER (2)

VACUUM BRUSH FWD
DUMP VLV BACTERIA
FILTER

VACUUM BRUSH PGA's

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT - 1	MAY 9, 1969	126:00 - 127:00	6/26	3-92

FLIGHT PLANNING BRANCH

FLIGHT PLAN

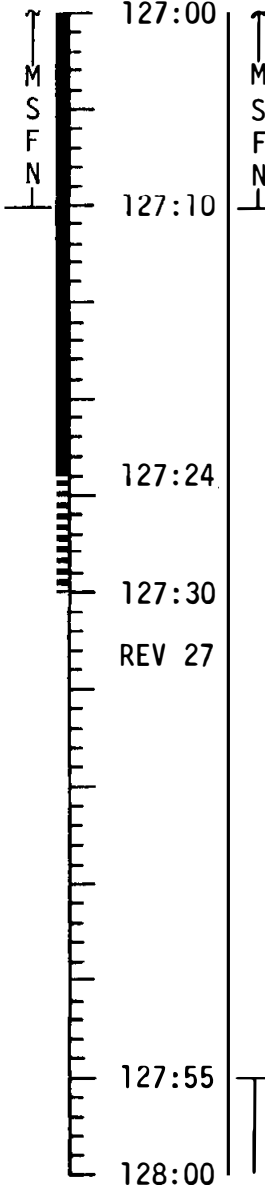
CSM
CMP

LM

MCC-H

4:30 PM EDT

51:00



CDR

LMP

DOFF PGA's

DOFF PGA's

DONN AND CONNECT LIGHT-
WEIGHT HEADSET AND
T-ADAPTER

DONN AND CONNECT LIGHT-
WEIGHT HEADSET AND
T-ADAPTER

VACUUM BRUSH AND BAG
THE FOLLOWING ITEMS
PGA's
HELMETS
SRC's
CSC
70mm FILM MAGAZINE
CLOSEUP CAMERA FILM MAGAZINE

DOFF AND STOW PGA

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 1	PRELIM OPT 1	MAY 9, 1969	127:00 - 128:00	6	3/9

FLIGHT PLAN

CSM

LM

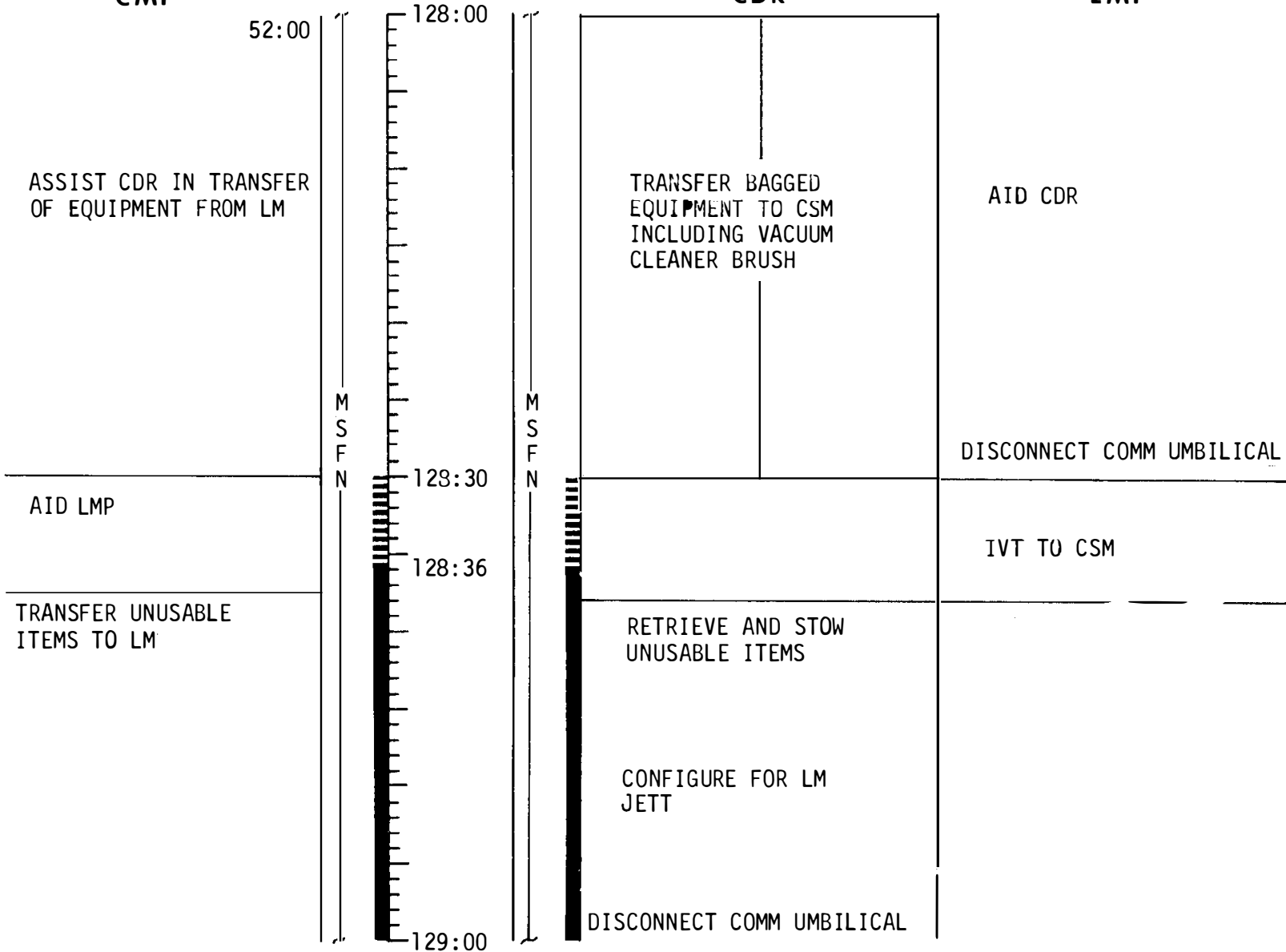
MCC-H

CMP

5:30 PM EDT

CDR

LMP



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	128:00-129:00	6/27	3-94

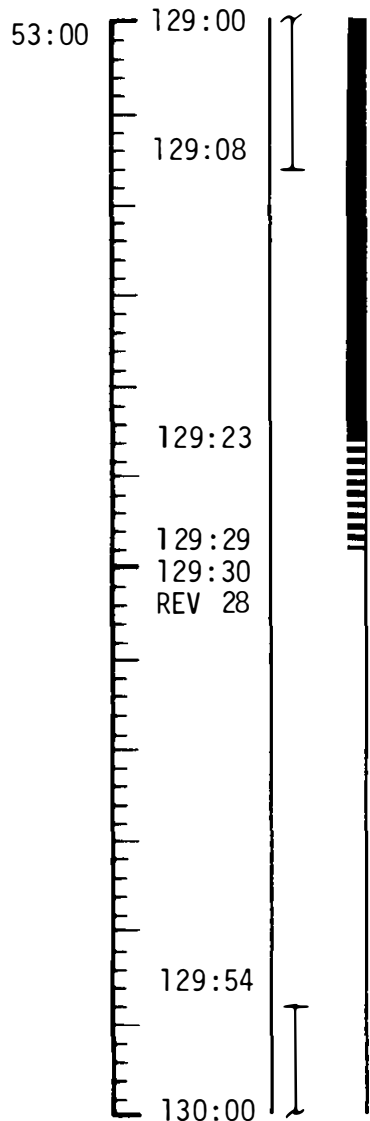
FLIGHT PLANNING BRANCH

MCC-H

6:30 PM EDT

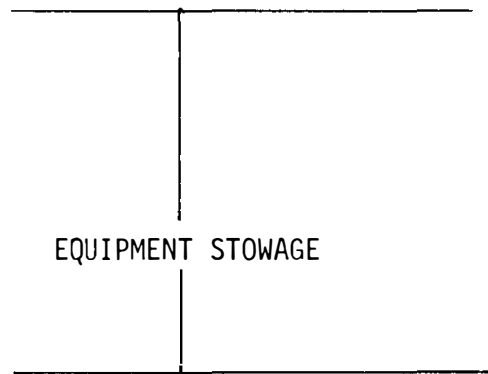
FLIGHT PLAN

NOTES



CLOSE LM HATCH

LMP IVT TO CSM



CDR-LMP - UNSTOW AND INSTALL

CSM HATCH

DIRECT O₂ - OFF

CDR - HATCH INTEGRITY CHECK

MNVR TO LM JETTISON ATT

P _____

R _____

Y _____

GO/NO GO FOR PYRO ARM

PYRO LOGIC ARM

THRUST MONITOR - P47

LM JETTISON

GETI: 129:28

BT:

ΔV: 1 FPS

BURN STATUS REPORT

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

REMARKS:

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	129:00-130:00	6/28	3-95

FLIGHT PLANNING BRANCH

MSC For ... OT (Mar. 69)

GO/NO GO FOR
PYRO ARM

MCC-H

7:30 PM EDT

FLIGHT PLAN

NOTES

SM RCS CK
 SPS MON CK
 V66 - TRANS CSM STATE VECTOR
 TO LM SLOT
 BURN STATUS REPORT
 LiOH CANISTER CHANGE NO. 11
 (13 INTO A, STORE 11 IN A3)
 O₂ FUEL CELL PURGE

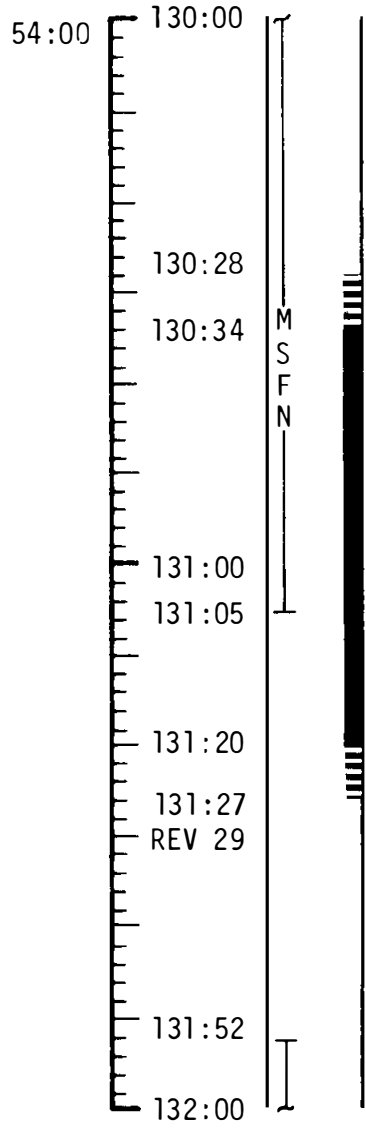
RECORD BLOCK DATA
 (TEI₂₉)

EAT PERIOD

CREW STATUS REPORT
 CYCLE O₂ & H₂ FANS
 CHLORINATE POTABLE WATER

REST PERIOD
 (8 HOURS)

VOICE UPDATE:
 BLOCK DATA



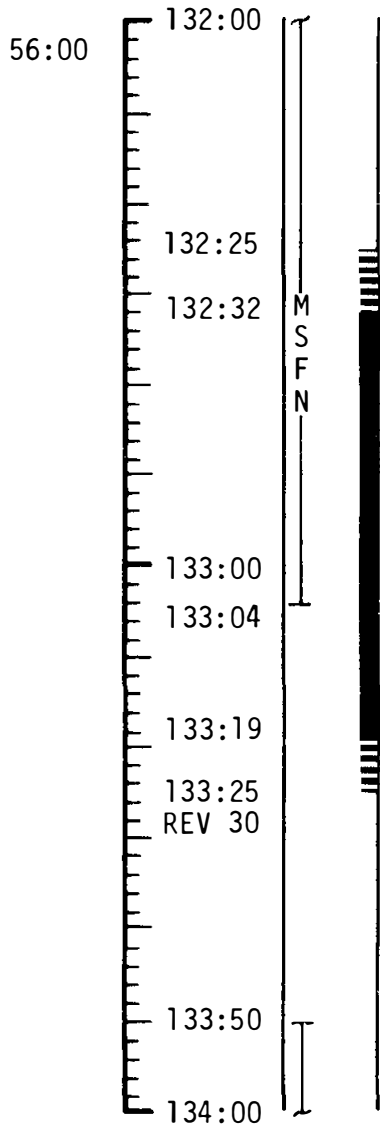
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	130:00-132:00	6/29	3-96

MCC-H

9:30 PM EDT

FLIGHT PLAN

NOTES



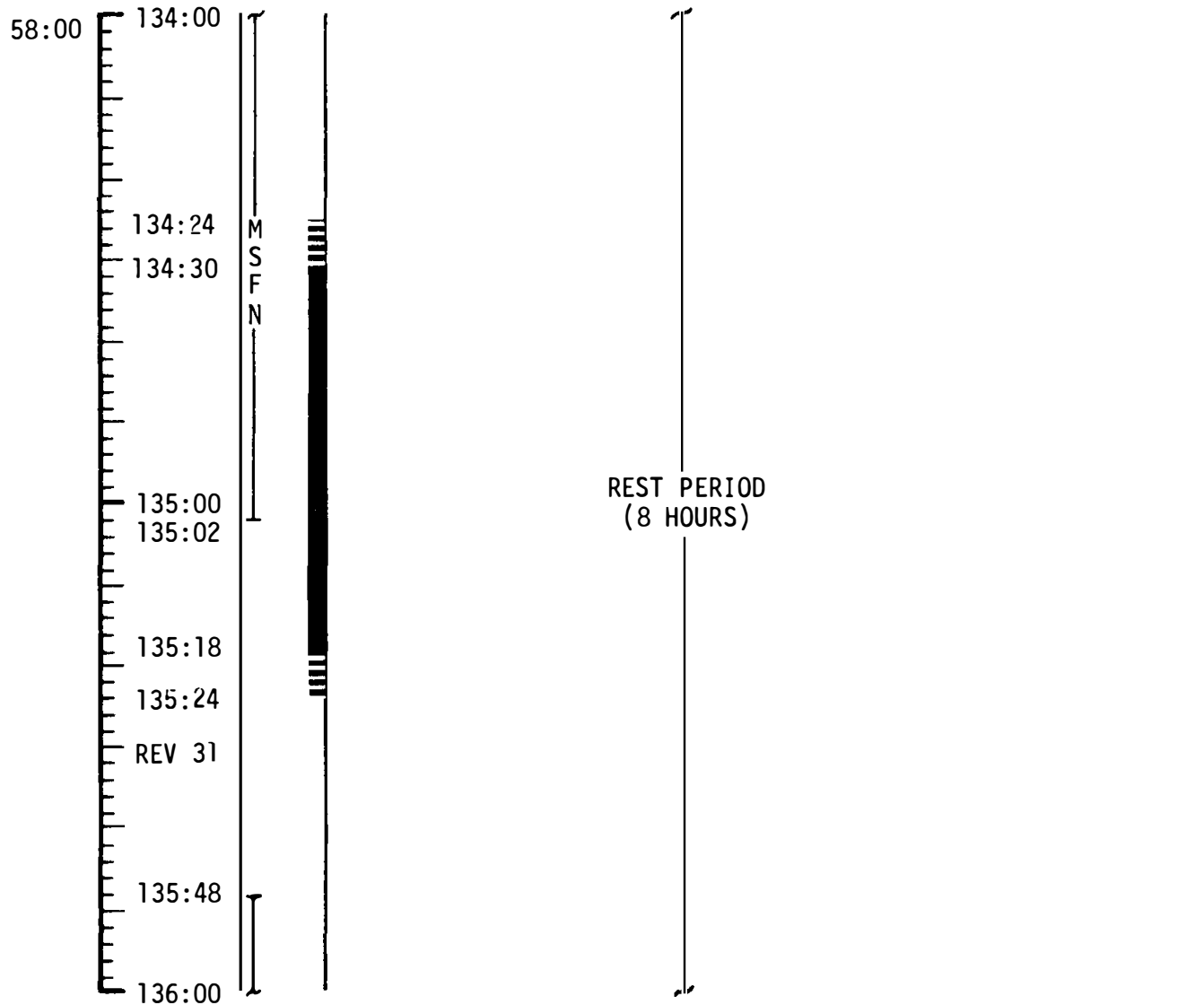
REST PERIOD
(8 HOURS)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	132:00-134:00	6/30	3-97

MCC-H 11:30 PM EDT

FLIGHT PLAN

NOTES



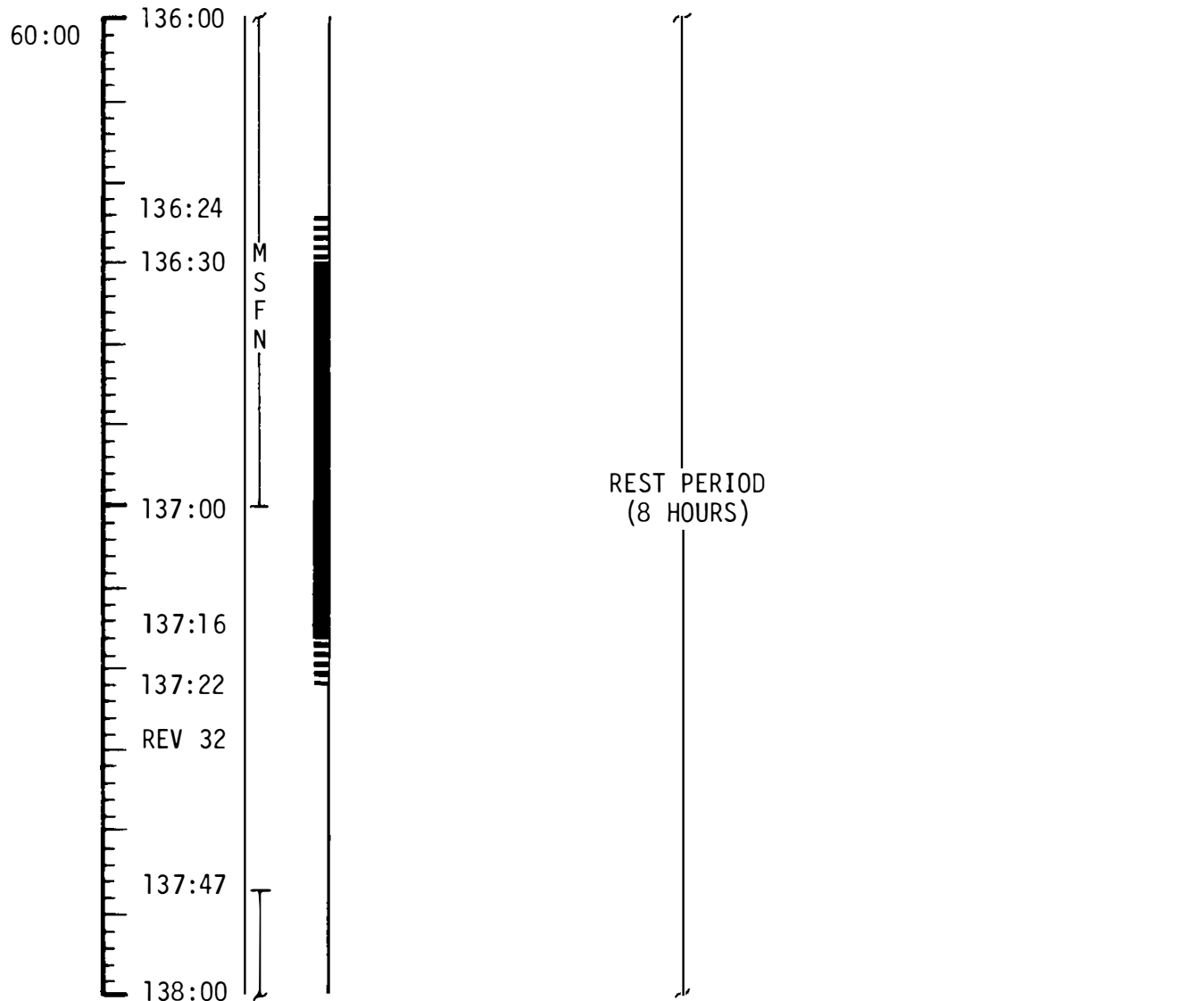
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	134:00-136:00	6/31	3-98

MCC-H

1:30 AM EDT

FLIGHT PLAN

NOTES



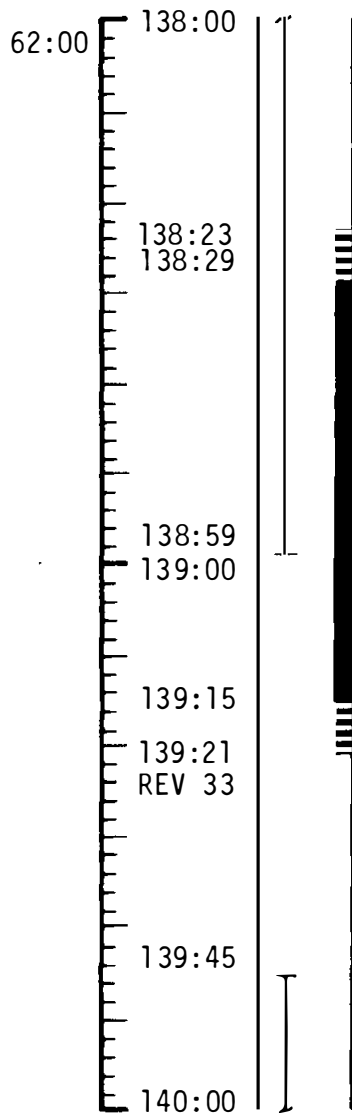
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	137:00-138:00	6/32	3-99

MCC-H

3:30 AM EDT

FLIGHT PLAN

NOTES



REST PERIOD
(8 HOURS)

GDC ALIGN TO IMU
CYCLE O₂ & H₂ FANS

EAT PERIOD

RECORD BLOCK DATA
(TEI₃₄)

VOICE UPDATE
BLOCK UPDATE

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	138:00-140:00	6/33	3-100

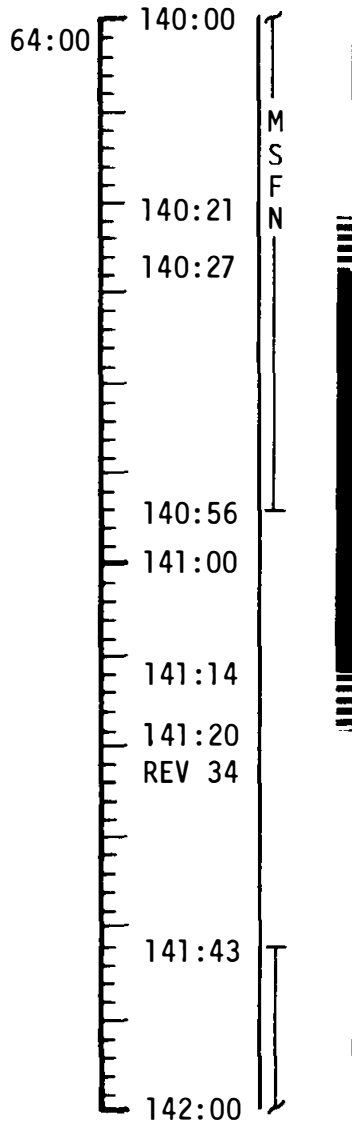
FLIGHT PLANNING BRANCH

MCC-H

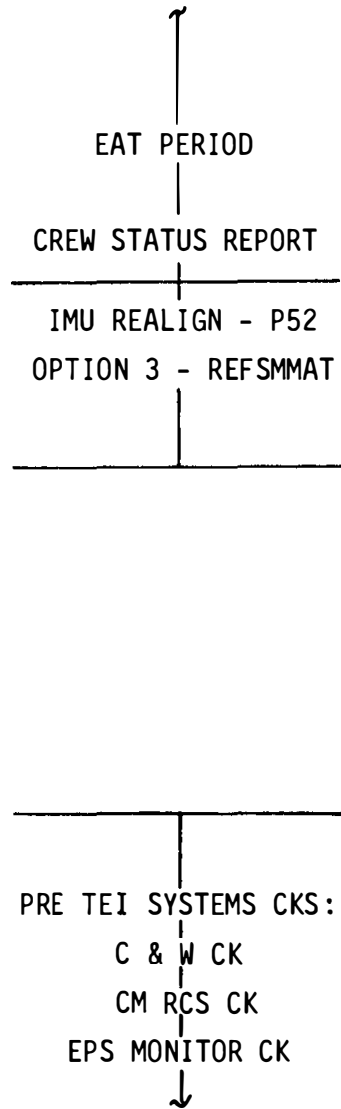
5:30 AM EDT

FLIGHT PLAN

NOTES



P27 UPDATE:
STATE VECTOR
(CSM & LM)
TGT LOAD



P52 - LIFT OFF REFS
N71: ____ , ____
N05: ____ . ____
N93:
X ____ . ____
Y ____ . ____
Z ____ . ____

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	140:00-142:00	7/34	3-101

MCC-H

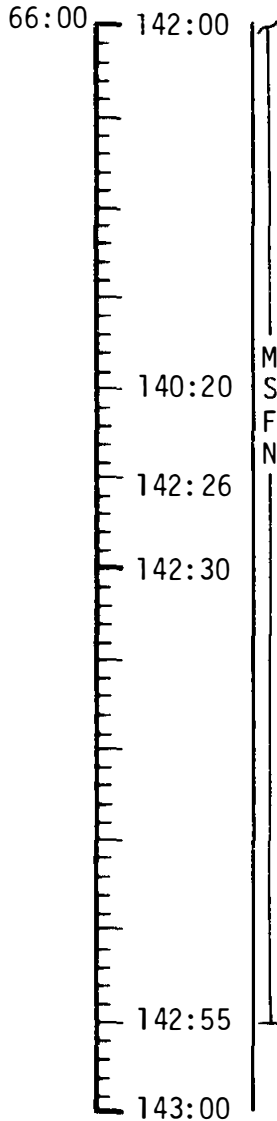
7:30 AM EDT

FLIGHT PLAN

NOTES

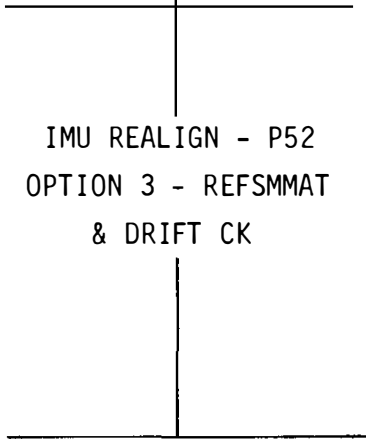
VOICE UPDATE:

MNVR PAD
BLOCK DATA
GO/NO-GO



M
S
F
N

ECS REDUNDANT COMPONENTS CK
 USING VACUUM BRUSH, STIR POSSIBLE "DEAD AIR" POCKETS
 RECORD MNVR PAD &
 BLOCK DATA (TEI₃₅)
 GO/NO GO FOR TEI



IMU REALIGN - P52
 OPTION 3 - REFSMMAT
 & DRIFT CK

EXT ΔV - P30
 SPS THRUST - P40
 MNVR TO BURN ATT

P52 - LIFT OFF REFS

N71: ____ , ____

N05: ____ . ____

N93:

X: ____ . ____

Y: ____ . ____

Z: ____ . ____

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	142:00-143:00	7/34	3-102

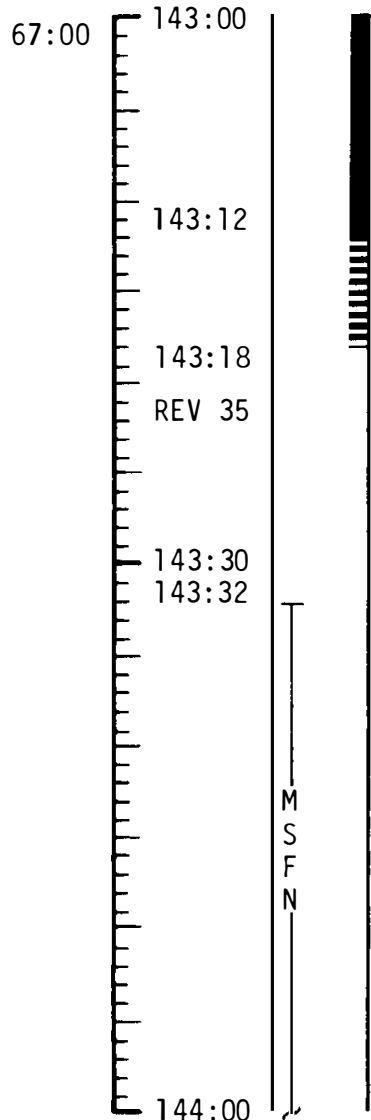
FLIGHT PLANNING BRANCH

MCC-H

8:30 AM EDT

FLIGHT PLAN

NOTES



SXT STAR CK

EMS ΔV TEST

SM RCS CK

GDC ALIGN TO IMU

TEI

GETI: 143:23:45
ULLAGE: 2JET, 14SEC
BT: 02:50
ΔV: 3699 FPS

V48 - DAP UPDATE (S/C WT)

SM RCS CK

SPS MON CK

V66 - TRANS CSM STATE VECTOR TO LM SLOT

PITCH DOWN TO ACQ MSFN AND VISUALLY ACQ MOON

H₂ PURGE LINE HTR - ON

LiOH CANISTER CHANGE NO. 12 (14 INTO B, STORE 12 IN A3)

BURN STATUS REPORT

X	X	•	ΔTIG
X	X	•	BT
		•	V _{gx}
----- TRIM -----			
X	X	X	R
X	X	X	P
X	X	X	Y
		•	V _{gx}
		•	V _{gy}
		•	V _{gz}
		•	ΔV _c
X	X	X	FUEL
X	X	X	OX
X	X	X	UNBAL

REMARKS:

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	143:00-144:00	7/35	3-103

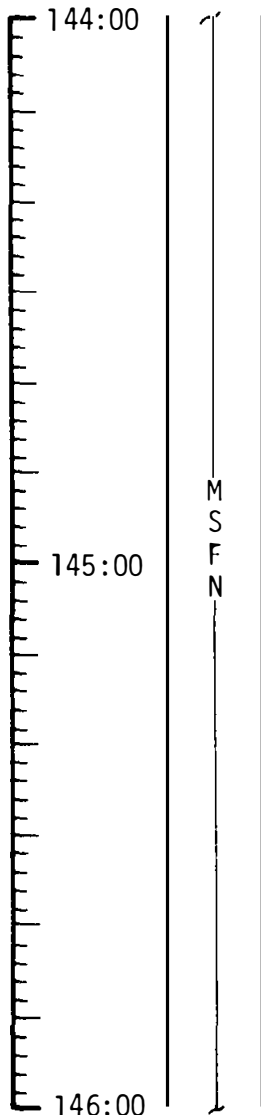
FLIGHT PLANNING BRANCH

MCC-H

9:30 AM EDT

FLIGHT PLAN

NOTES



CREW STATUS REPORT
 DEACTIVATE PRIMARY EVAPORATOR
 CYCLE O₂ & H₂ FANS

O₂ FUEL CELL PURGE
 H₂ FUEL CELL PURGE

EAT PERIOD

IMU REALIGN - P52
 OPTION 1 - PREFERRED
 AND STAR CK

P52 - PULSE TORQUE
 TO PTC REFSMMAT
 PLATFORM ALIGN
 CHECKED WITH OPTICS

P27 UPDATE:
 DESIRED
 ORIENTATION
 (PTC)

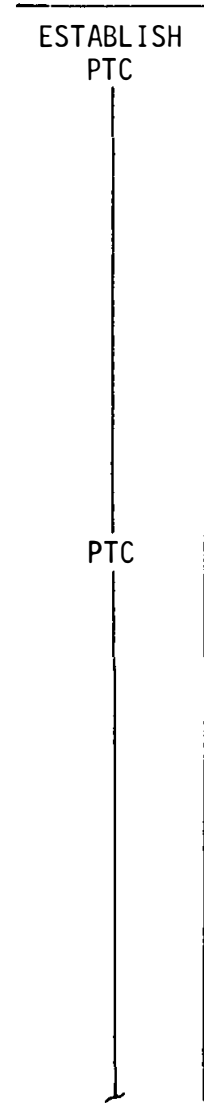
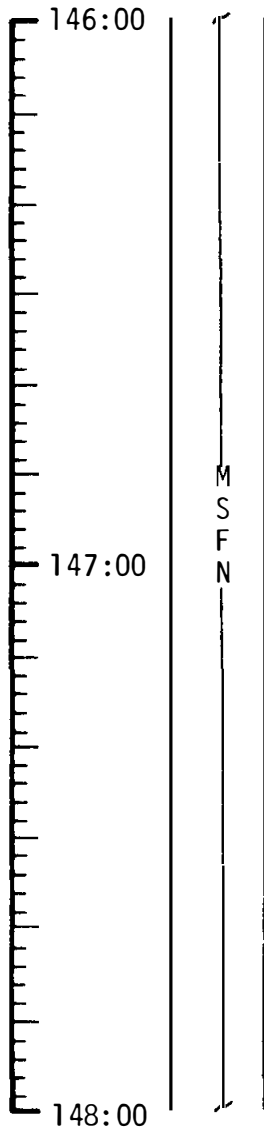
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	144:00-146:00	7/TEC	3-104

MCC-H

11:30 AM EDT

FLIGHT PLAN

NOTES



PTC ESTABLISHED IN
G&N P,Y, $\pm 20^\circ$ DB
R RATE OF 0.1° /SEC

CONSUMABLES UPDATE:
 Δ FROM NOMINAL

RCS TOT _____
A _____
B _____
C _____
D _____

H₂ TOT _____
O₂ TOT _____

REPORT CM RCS EJECTOR VLV TEMP

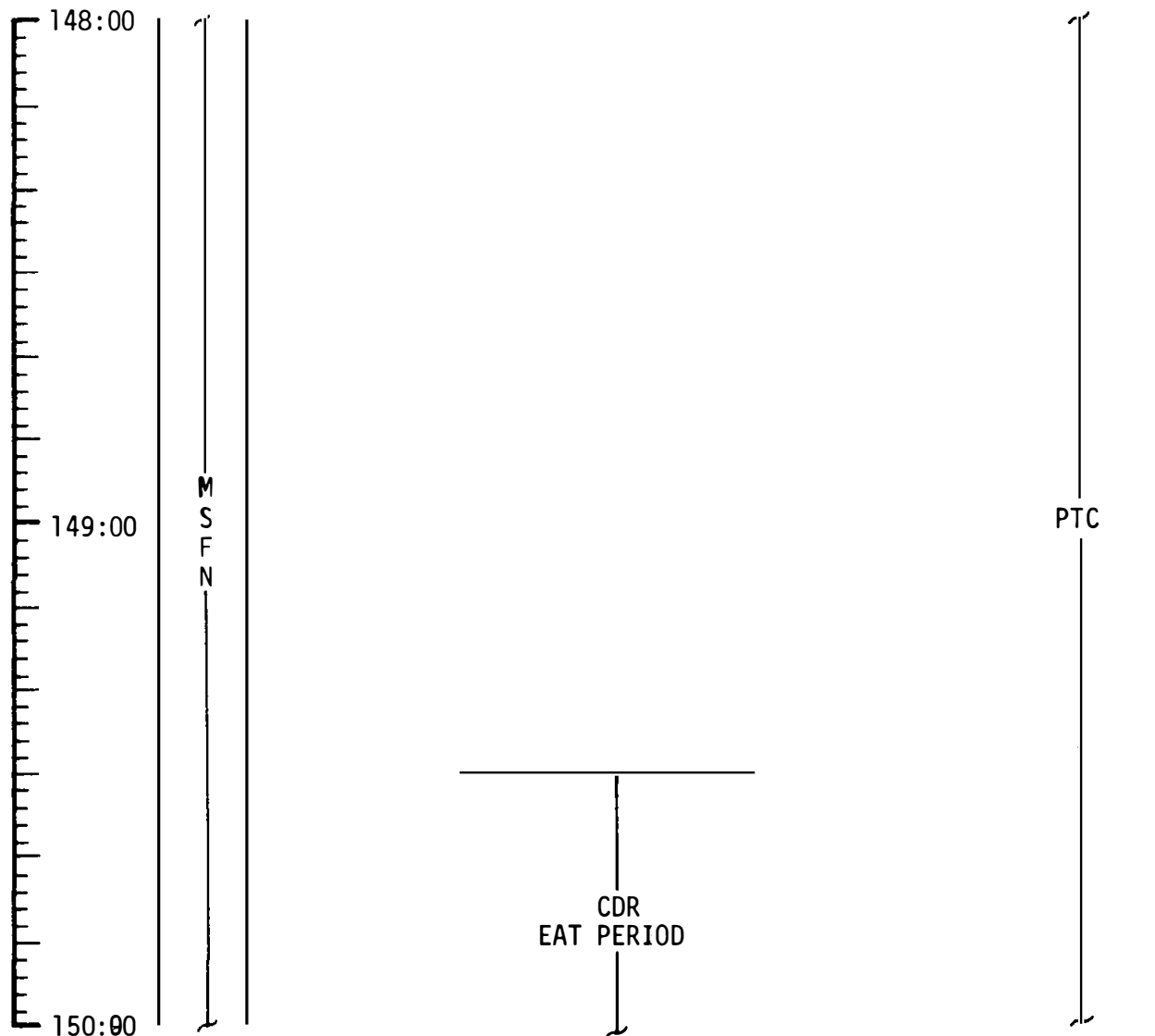
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	146:00-148:00	7/TEC	3-105

MCC-H

1:30 PM EDT

FLIGHT PLAN

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	148:00-150:00	7/TEC	3-106

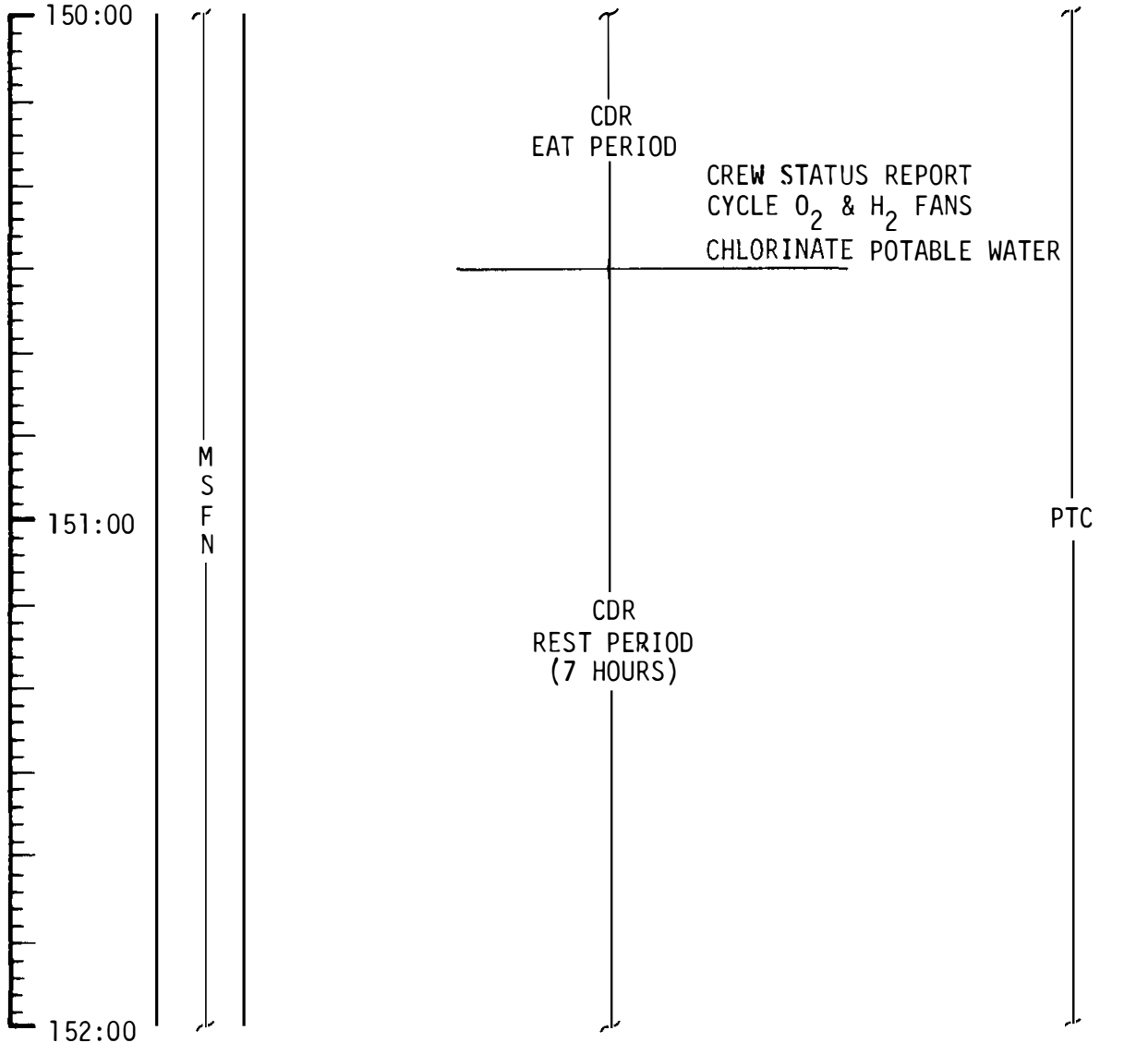
FLIGHT PLANNING BRANCH

MCC-H

3:30 PM EDT

FLIGHT PLAN

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	150:00-152:00	7/TEC	3-107

MSC Form 29 OT (Mar. 69)

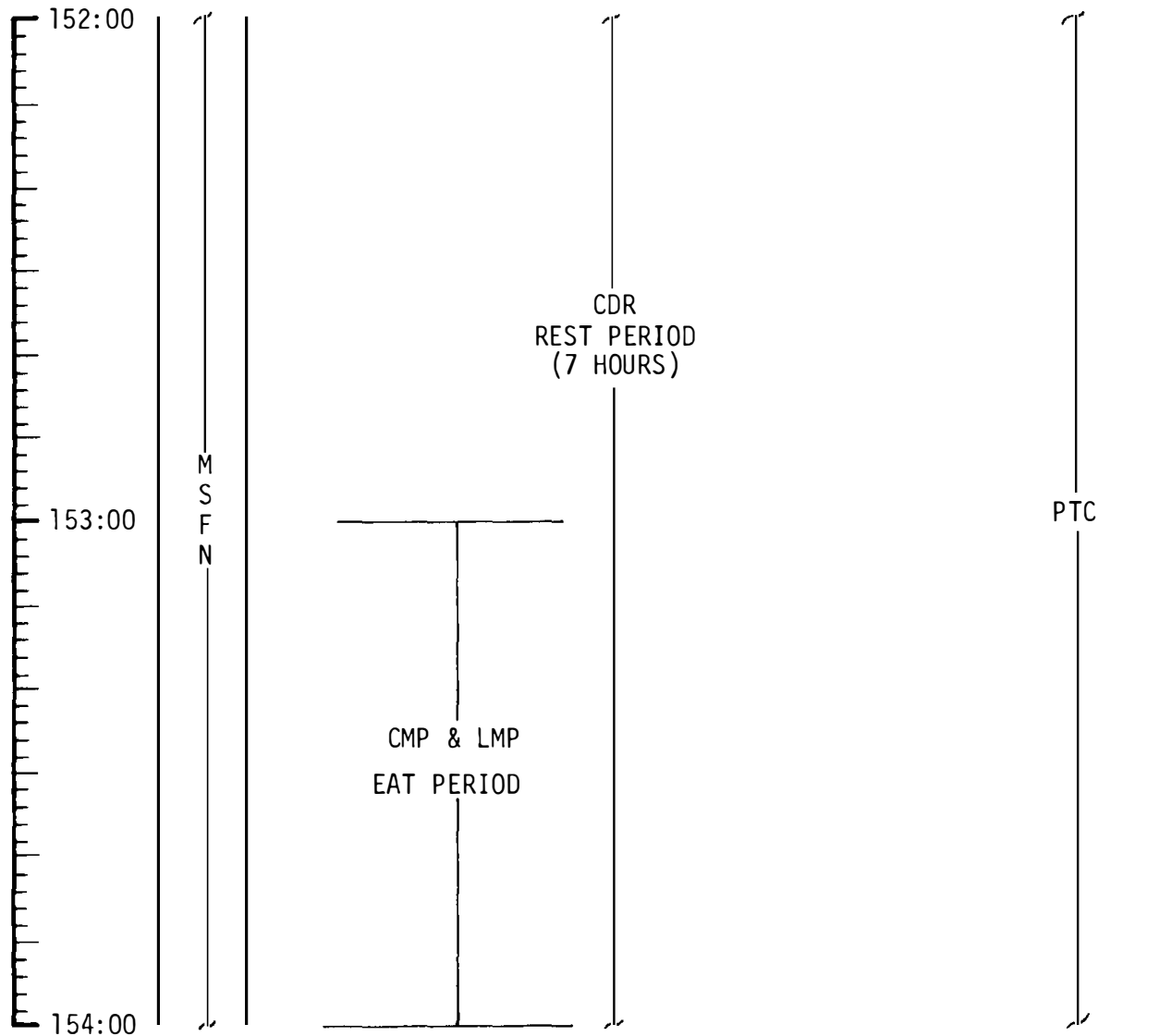
FLIGHT PLANNING BRANCH

MCC-H

5:30 PM EDT

FLIGHT PLAN

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	152:00-;54:00	7/TEC	3-108

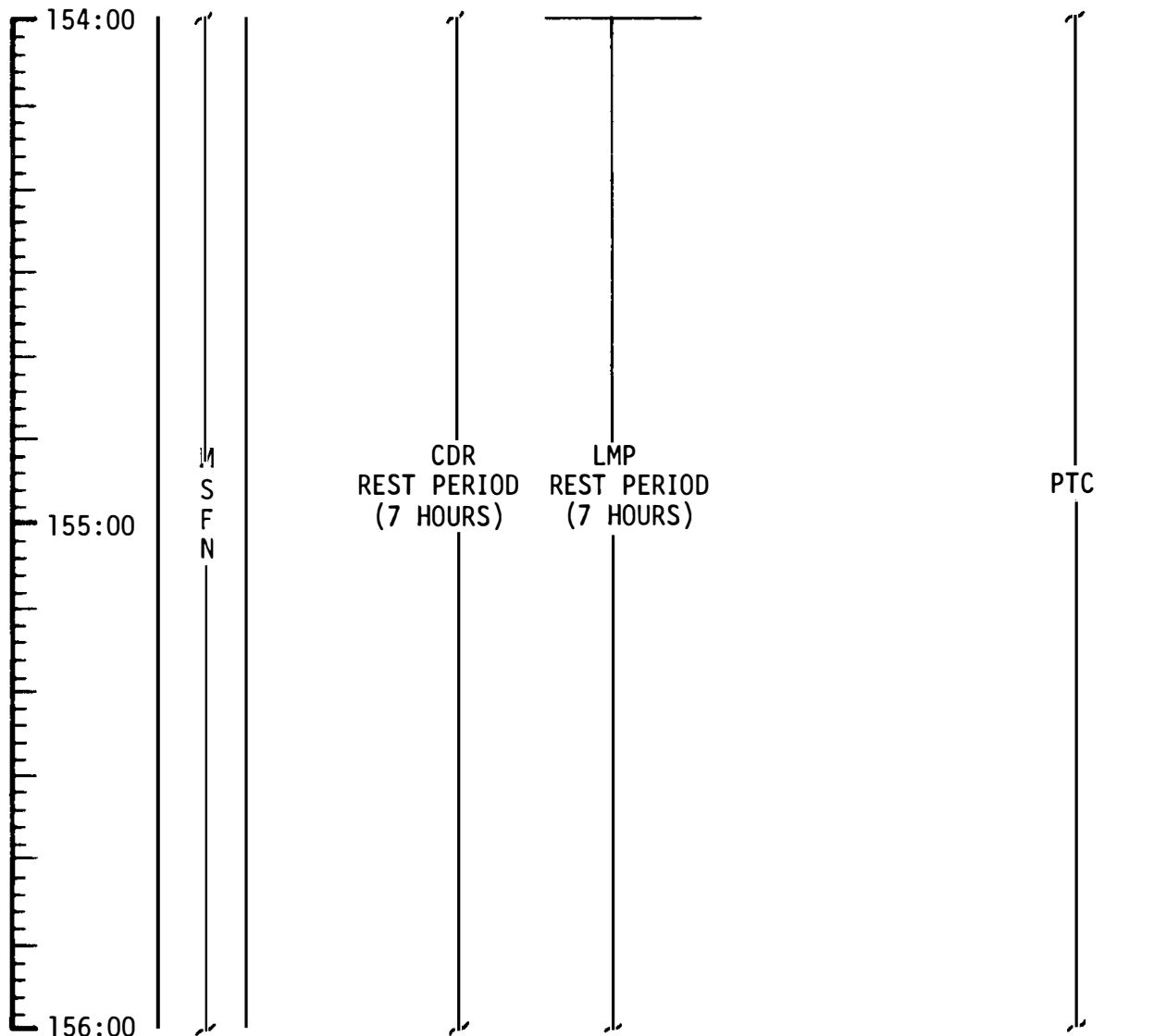
FLIGHT PLANNING BRANCH

MCC-H

7:30 PM EDT

FLIGHT PLAN

NOTES



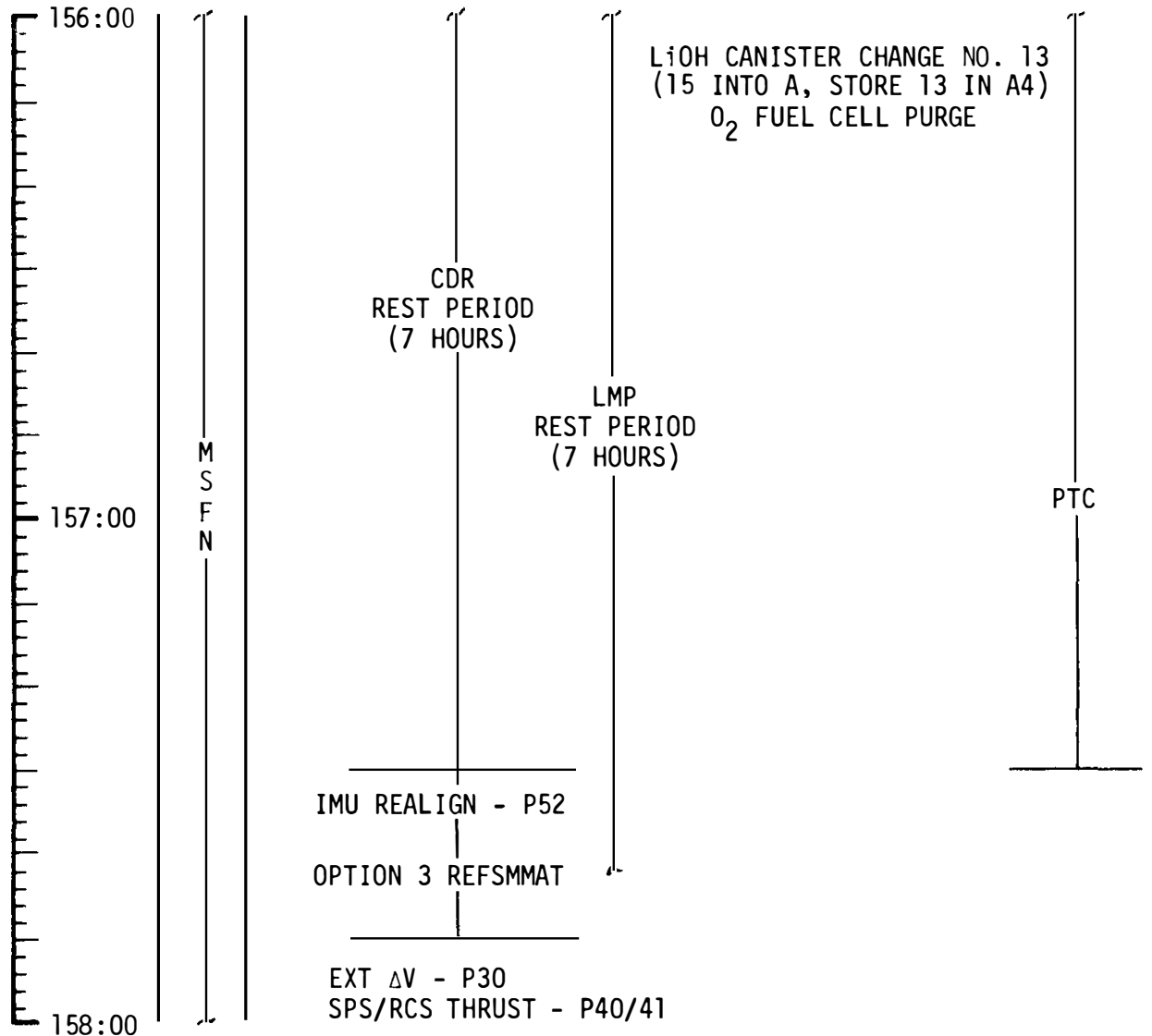
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	154:00-156:00	7/TEC	3-109

MCC-H

9:30 PM EDT

FLIGHT PLAN

NOTES



P52 - (PTC REFSMMAT)

N71: _____

N05: _____

N93:

X _____

Y _____

Z _____

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	156:00-158:00	7/TEC	3-110

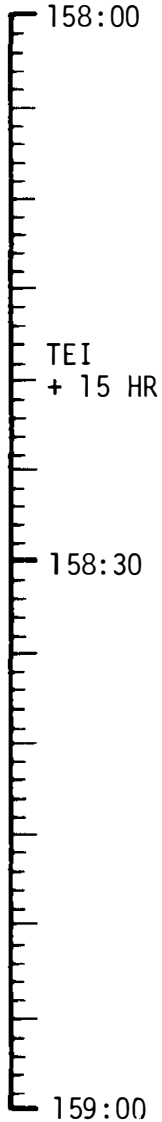
FLIGHT PLANNING BRANCH

MCC-H

11:30 PM EDT

FLIGHT PLAN

NOTES



MNVR TO BURN ATT

SXT STAR CK

EMS ΔV TEST

SM RCS CK

GDC ALIGN TO IMU

MCC 5 ΔV = NOMINALLY ZERO

SM RCS CK

SPS MON CK

V66 - TRANS CSM STATE VECTOR
TO LM SLOT

BURN STATUS REPORT

LMP
REST PERIOD
(7 HOURS)

LMP WILL BE AWAKE
FOR MCC 5
(IF PERFORMED)

BURN STATUS REPORT			
X	X	•	ΔTIG
X	X	•	BT
		•	V _{gx}
----- TRIM -----			
X	X	X	R
X	X	X	P
X	X	X	Y
		•	V _{gx}
		•	V _{gy}
		•	V _{gz}
		•	ΔV _c
X	X	X	FUEL
X	X	X	OX
X	X	X	UNBAL
REMARKS:			

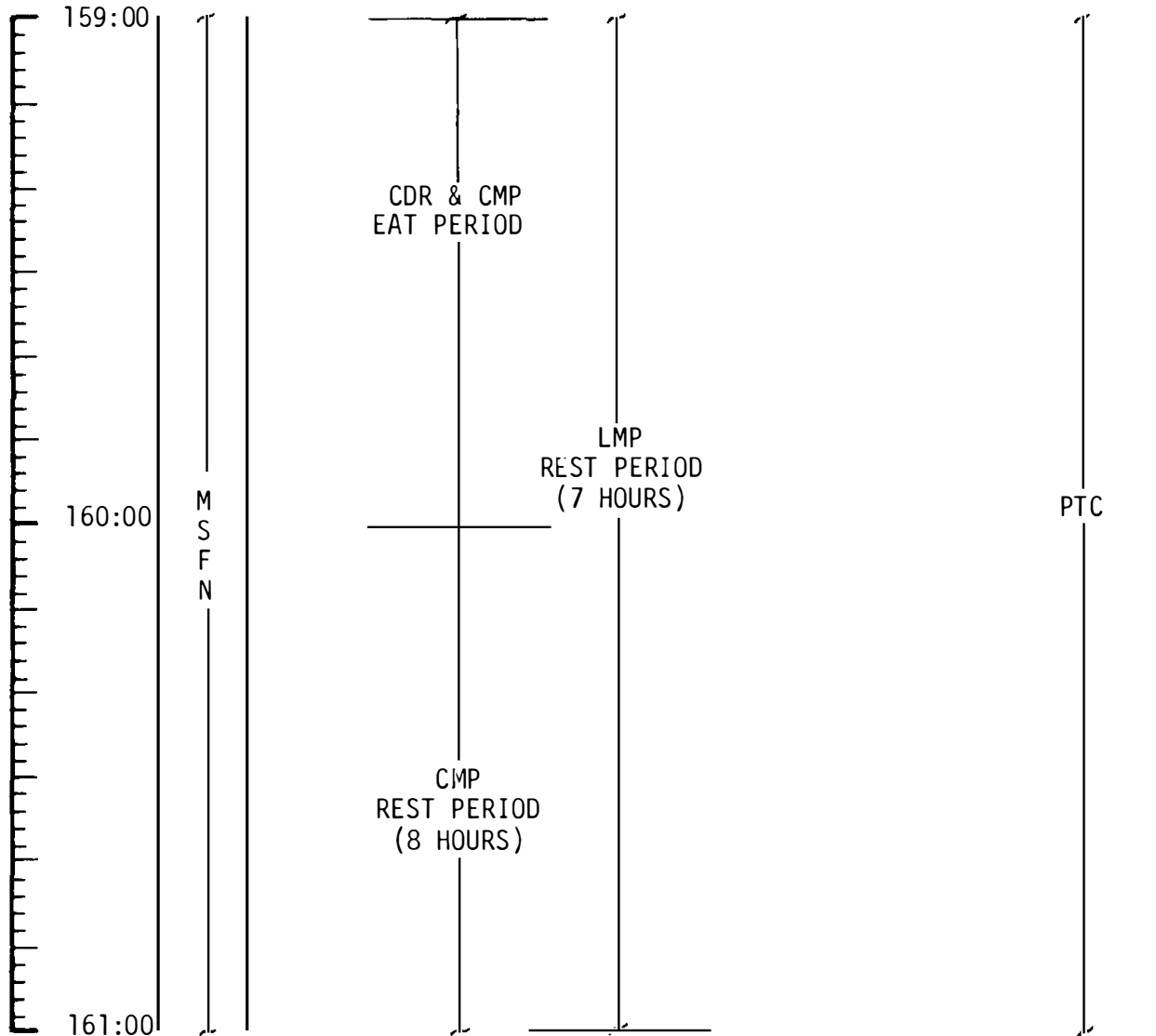
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	158:00-159:00	7/TEC	3-111

MCC-H

12:30 AM EDT

FLIGHT PLAN

NOTES



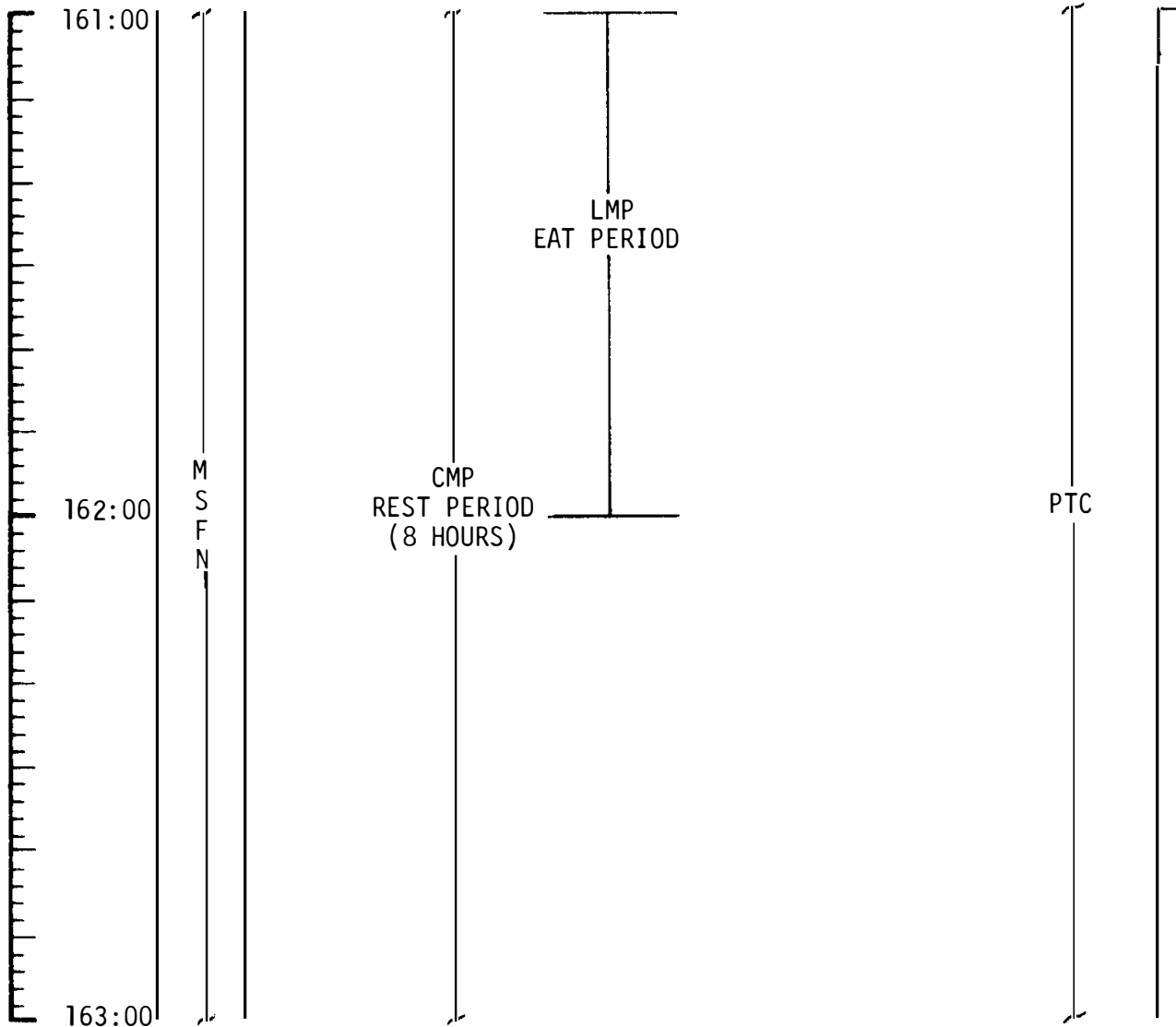
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	159:00 - 161:00	6/TEC	3-112

MCC-H

2:30 AM EDT

FLIGHT PLAN

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	161:00 - 163:00	7/TEC	3-113

MSC Form 29 OT (Mar. 69)

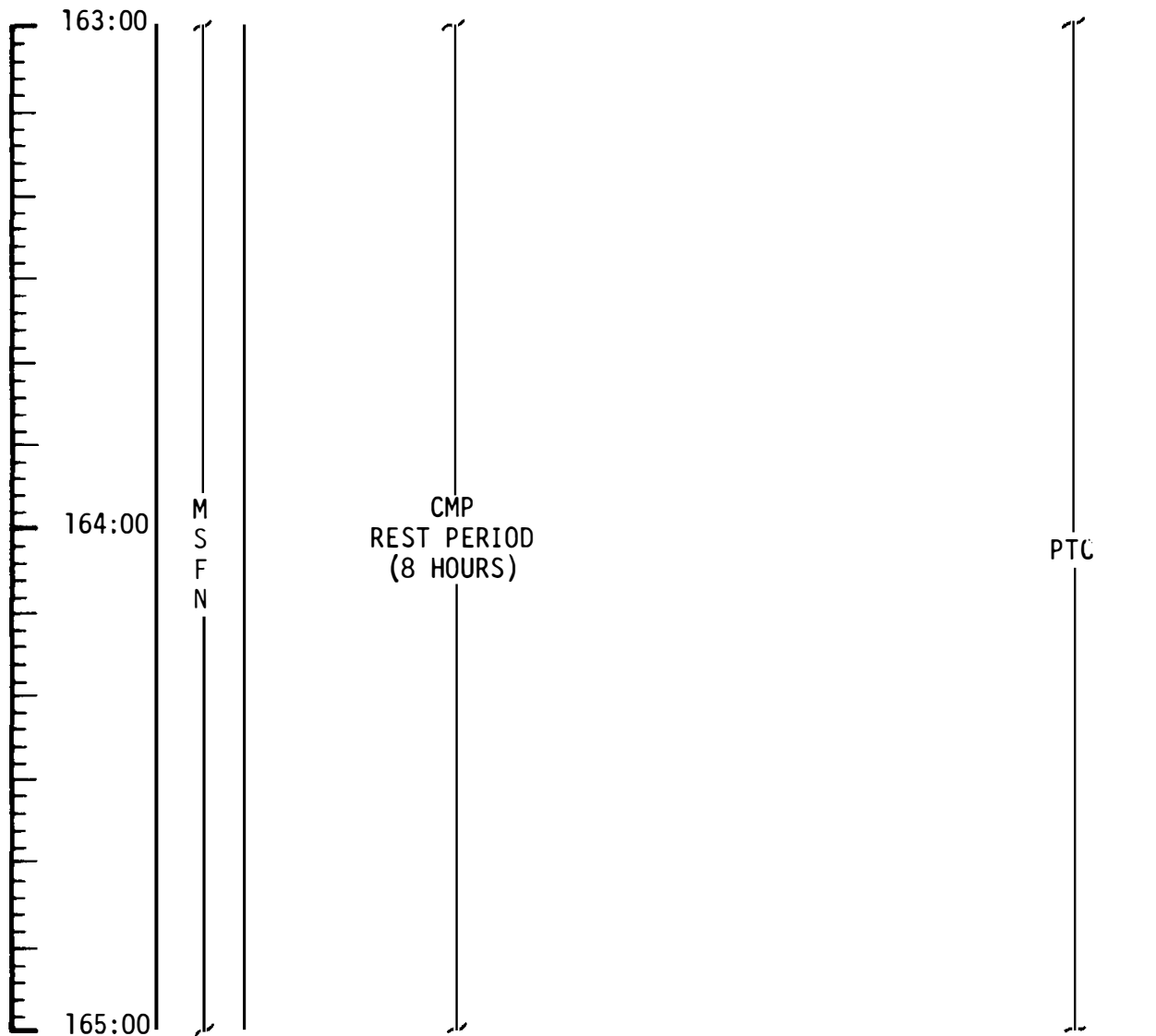
FLIGHT PLANNING BRANCH

MCC-H

4:30 AM EDT

FLIGHT PLAN

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	163:00 - 165:00	7/TEC	3-114

MSC Form 29 OT (Mar. 69)

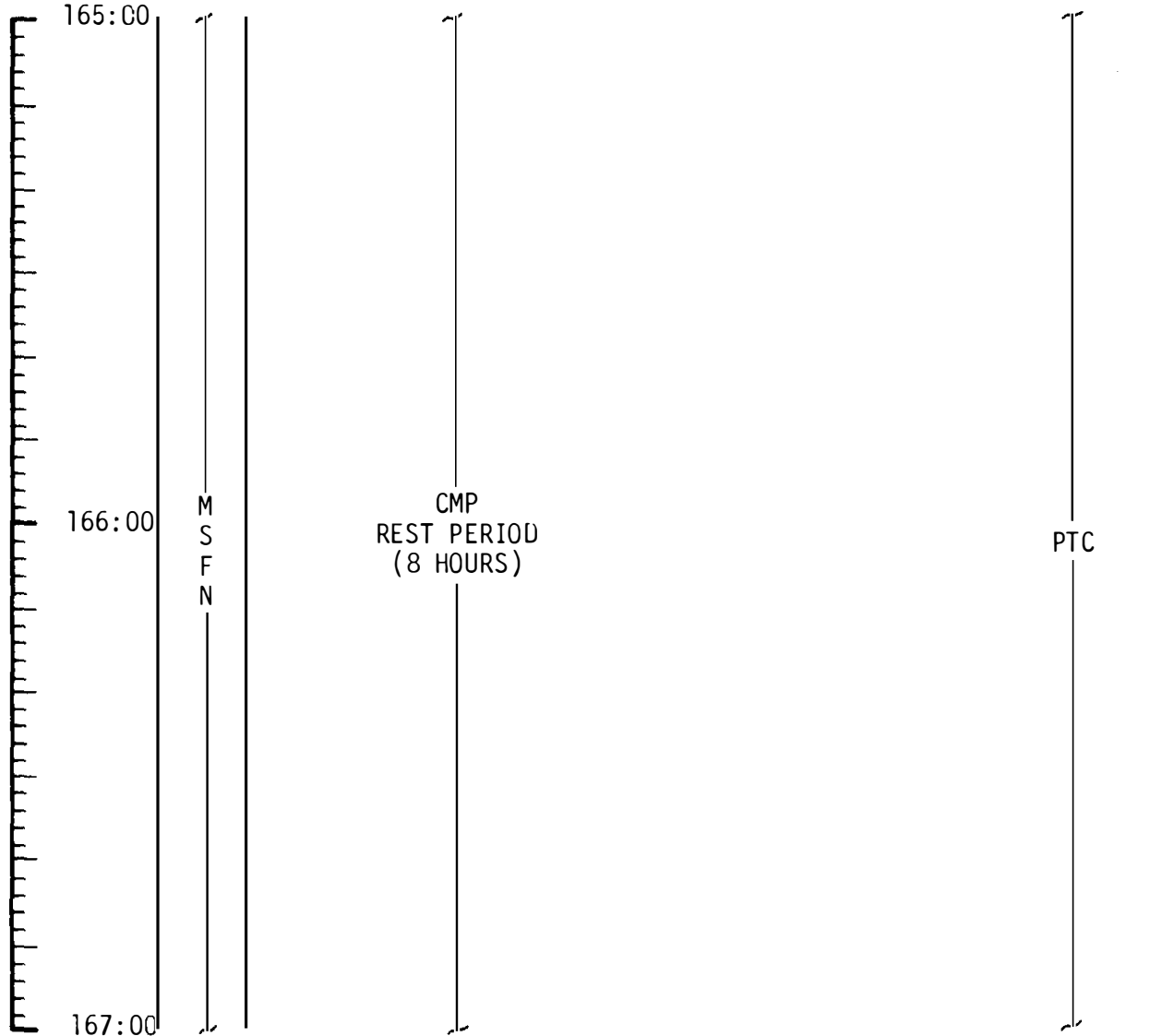
FLIGHT PLANNING BRANCH

MCC-H

6:30 AM EDT

FLIGHT PLAN

NOTES



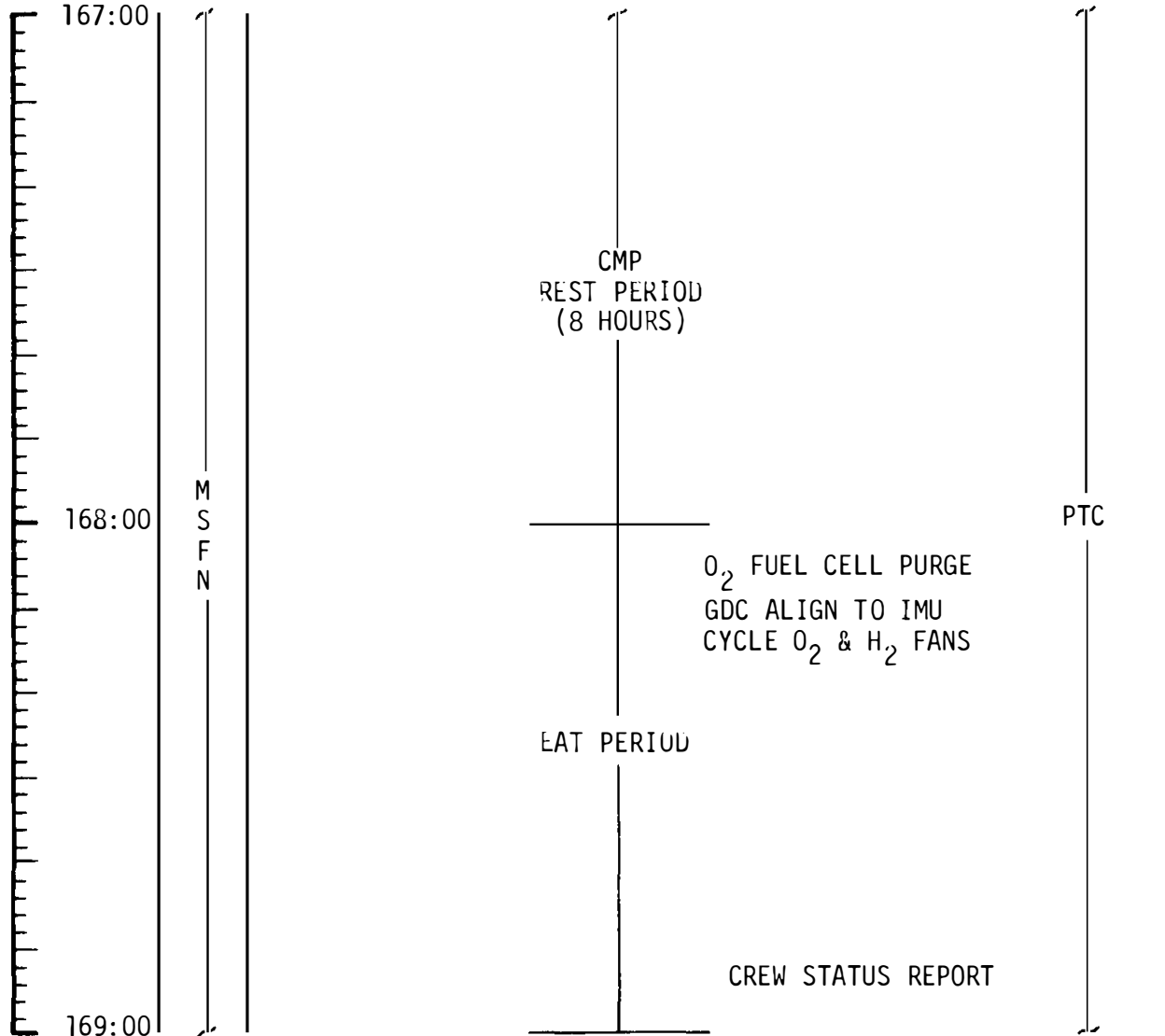
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	165:00 - 167:00	7/TEC	3-115

MCC-H

8:30 AM EDT

FLIGHT PLAN

NOTES



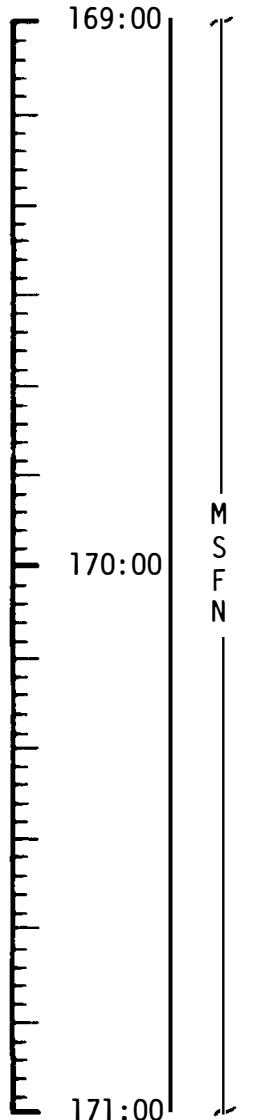
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	167:00 - 169:00	8/TEC	3-116

MCC-H

10:30 AM EDT

FLIGHT PLAN

NOTES



LiOH CANISTER CHANGE NO. 12
 (14 INTO A, STORE 12 IN A3)

ECS REDUNDANT COMPONENTS CK.
 USING VACUUM CLEANER BRUSH,
 STIR UP POTENTIAL "DEAD AIR" POCKETS

REPORT CM RCS EJECTOR VLV TEMP

CONSUMABLE UPDATE:
 ΔV FROM NOMINAL

RCS TOT _____
 A _____
 B _____
 C _____
 D _____

H₂ TOT _____
 O₂ TOT _____

PTC

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	169:00 - 171:00	8/T&C	3-117

MCC-H

12:30 PM EDT

FLIGHT PLAN

NOTES

12:30 PM EDT

171:00



171:30

M
S
F
N

PTC

P27 UPDATE:
STATE VECTOR
(CSM & LM)
TGT LOAD

VOICE UPDATE:
PAD DATA

RECORD MCC₆ MNVR PAD

172:00

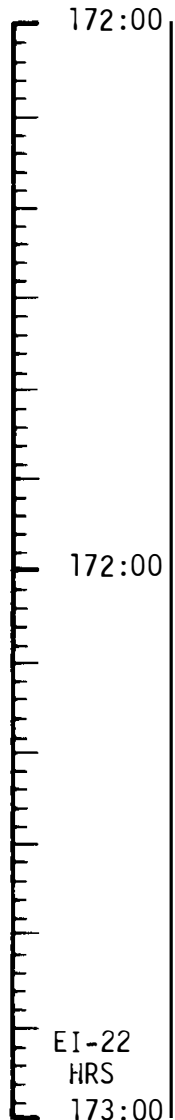
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	171:00 - 172:00	8/TEC	3-118

MCC-H

1:30 PM EDT

FLIGHT PLAN

NOTES



M
S
F
N

IMU REALIGN - P52
(OPTION 3 - REFSMMAT)

EXT ΔV - P30
SPS/RCS THRUST - P40/41
MNVR TO BURN ATT

SXT STAR CK

EMS ΔV TEST

SM RCS CK

GDC ALIGN TO IMU

MCC₆ ΔV NOMINALLY ZERO

BURN STATUS REPORT

X	X	:		Δ TIG
X	X	:		BT
			.	V _{gx}
TRIM				
X	X	X		R
X	X	X		P
X	X	X		Y
			.	V _{gx}
			.	V _{gy}
			.	V _{gz}
			.	ΔV_c
X	X	X		FUEL
X	X	X		OX
X	X	X		UNBAL

REMARKS:

P52 - (PTC REFSMMAT)
N71: _____
N05: _____
N93: _____
X _____
Y _____
Z _____

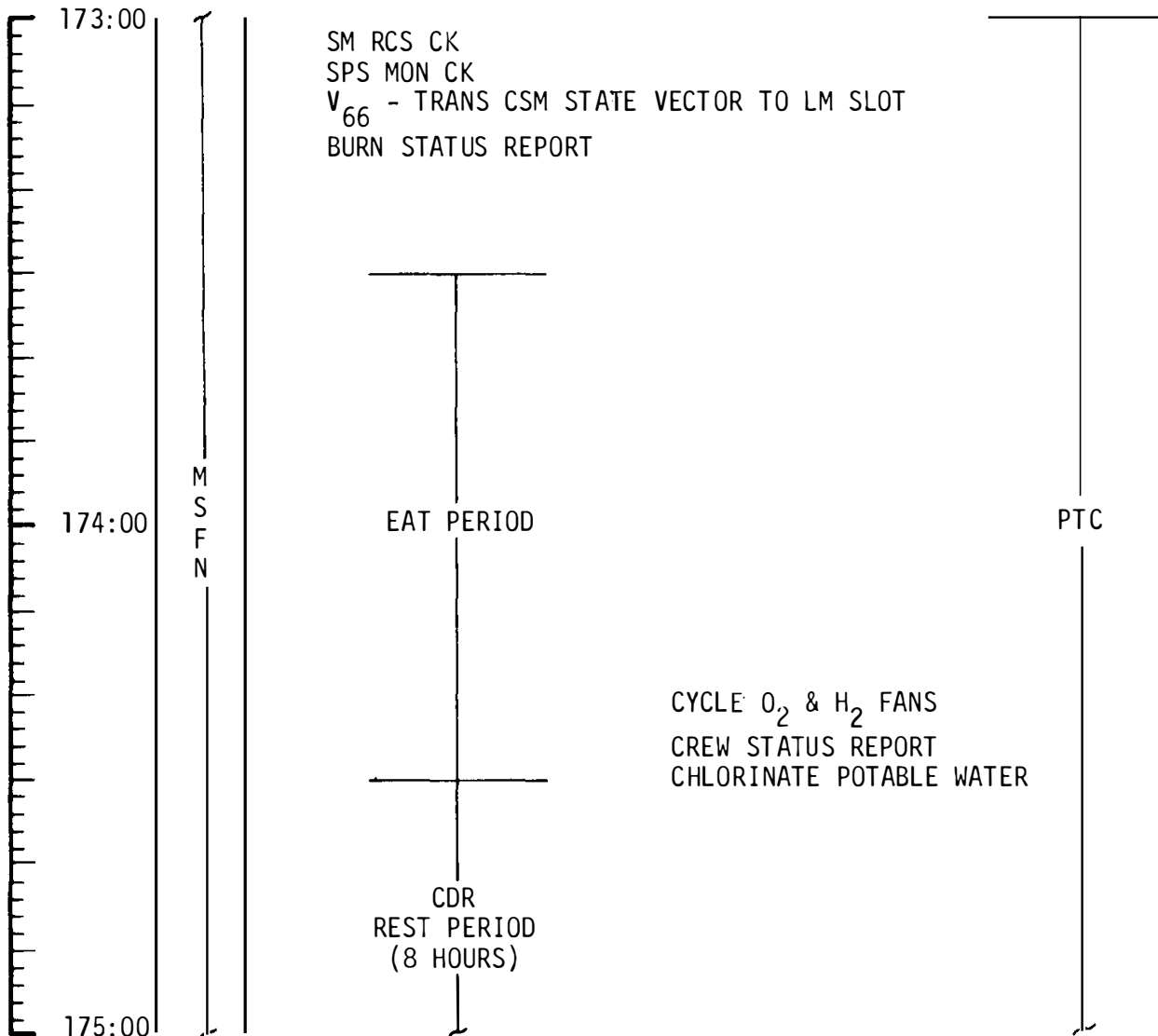
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	172:00 - 173:00	8/TEC	3-119

MCC-H

2:30 PM EDT

FLIGHT PLAN

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	173:00 - 175:00	8/TEC	3-120

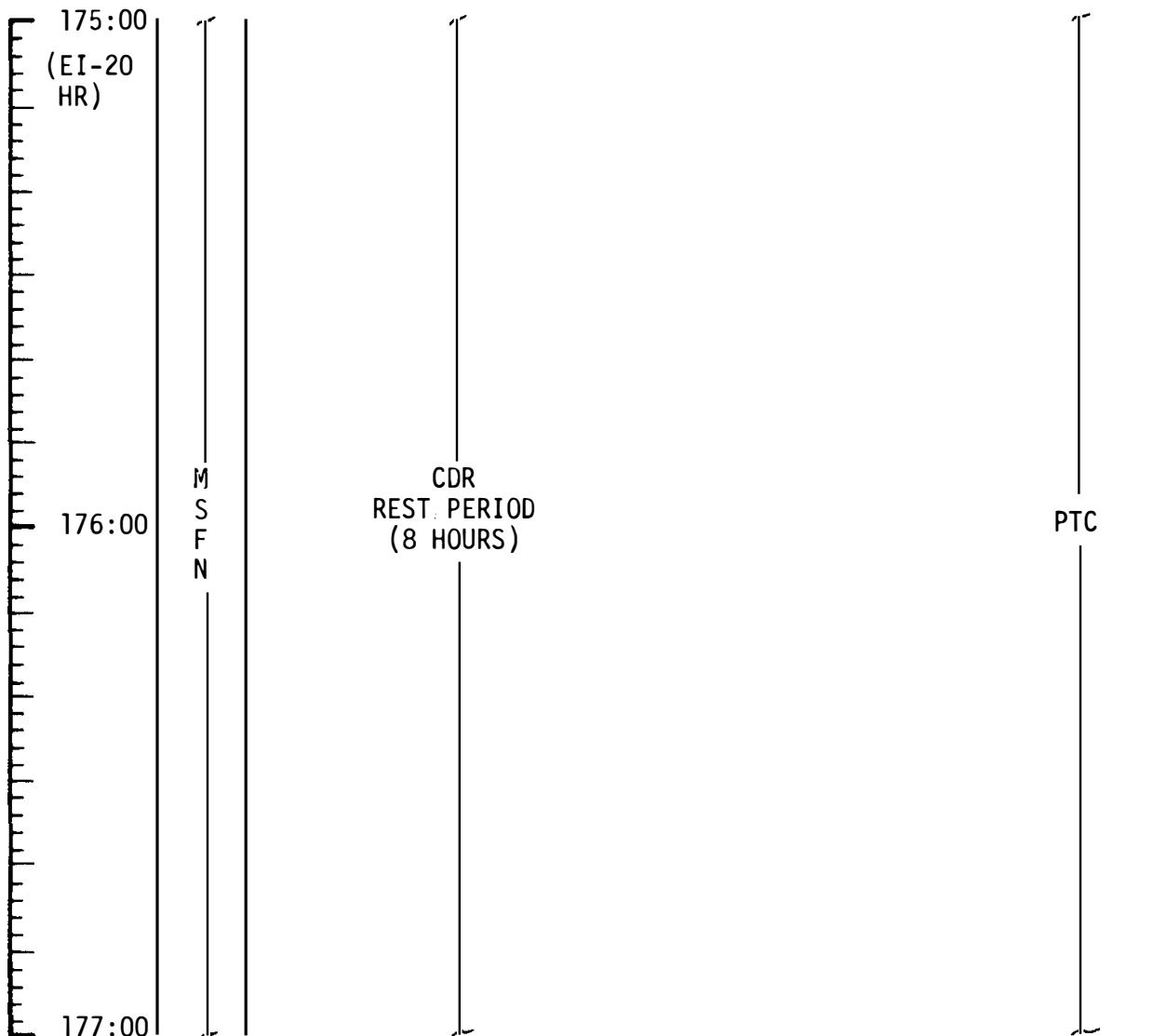
FLIGHT PLANNING BRANCH

MCC-H

4:30 PM EDT

FLIGHT PLAN

NOTES



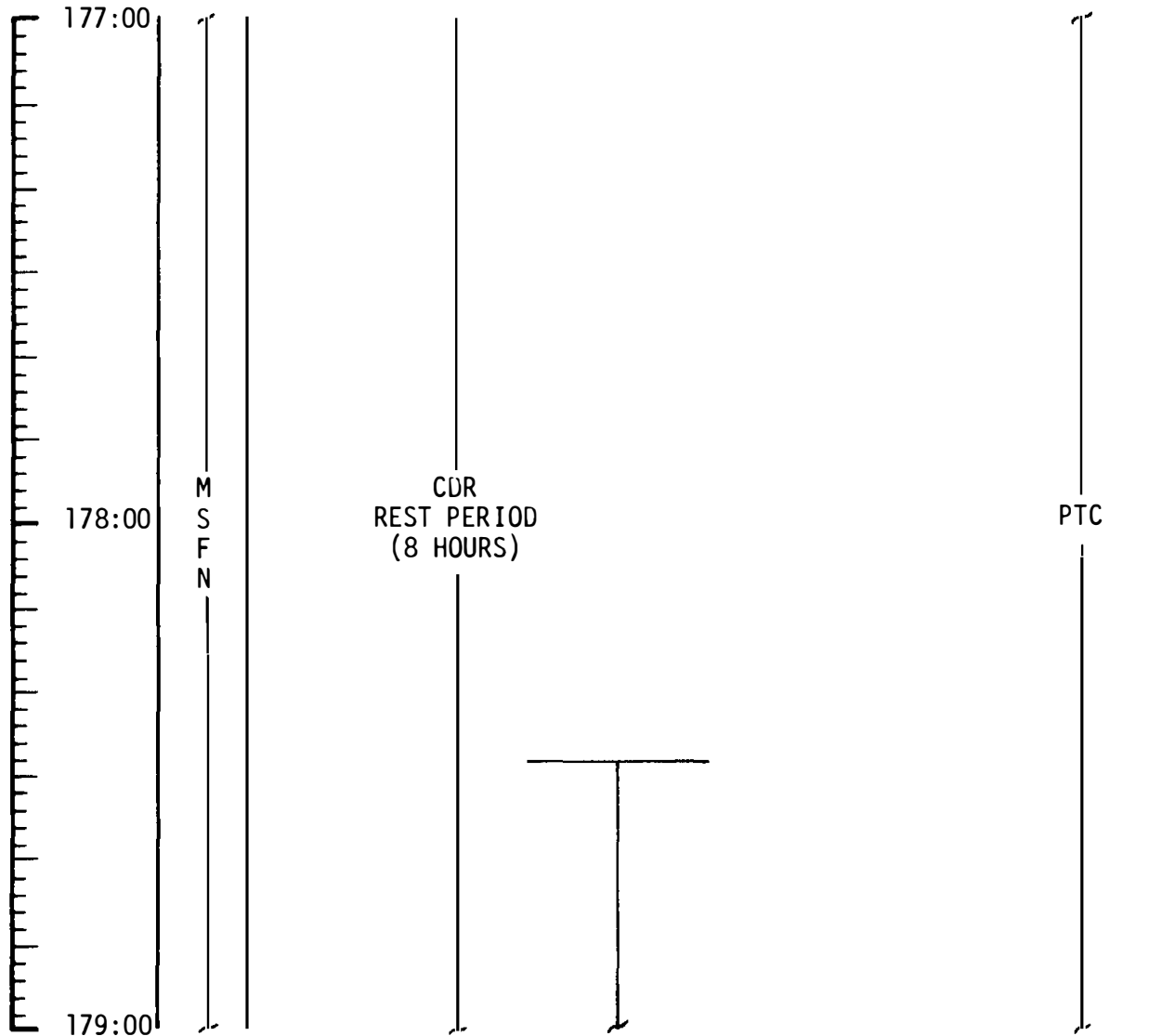
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	175:00 - 177:00	8/TEC	3-121

MCC-H

6:30 PM EDT

FLIGHT PLAN

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	177:00 - 179:00	8/TEC	3-122

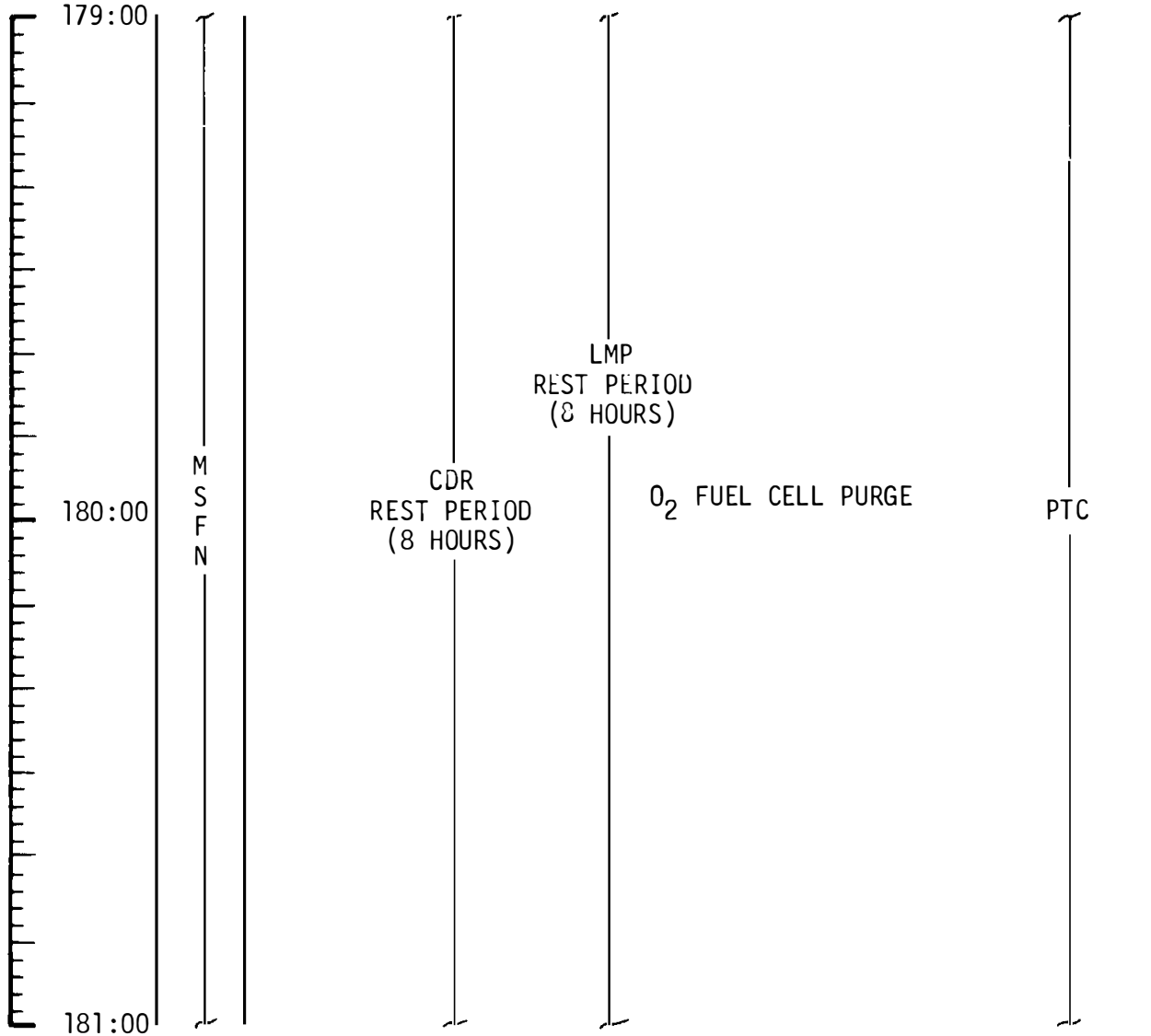
FLIGHT PLANNING BRANCH

MCC-H

8:30 PM EDT

FLIGHT PLAN

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	179:00 - 181:00	8/TEC	3-123

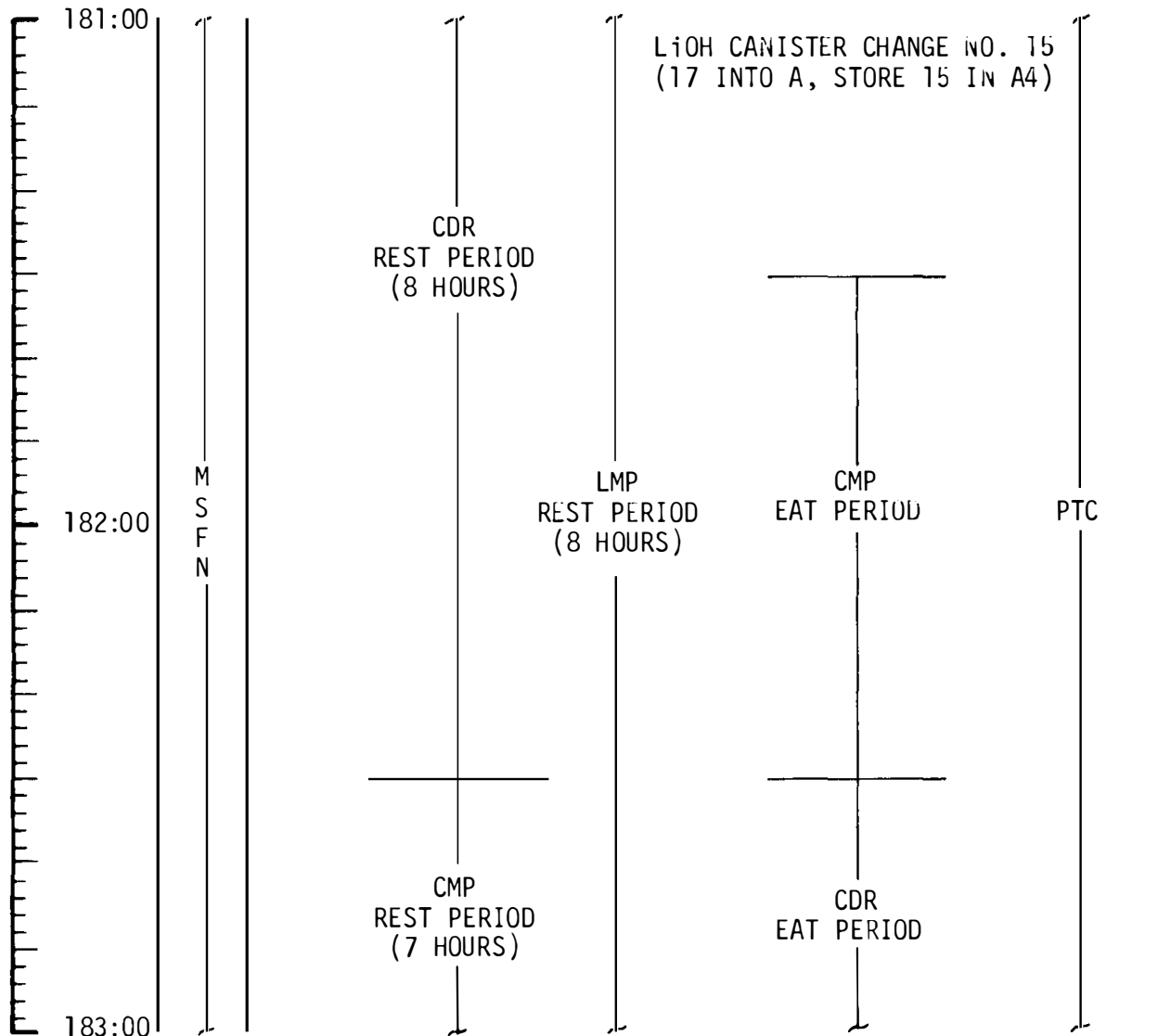
FLIGHT PLANNING BRANCH

MCC-H

10:30 PM EDT

FLIGHT PLAN

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	181:00 - 183:00	8/TEC	3-124

MSC Form 29 OT (Mar. 69)

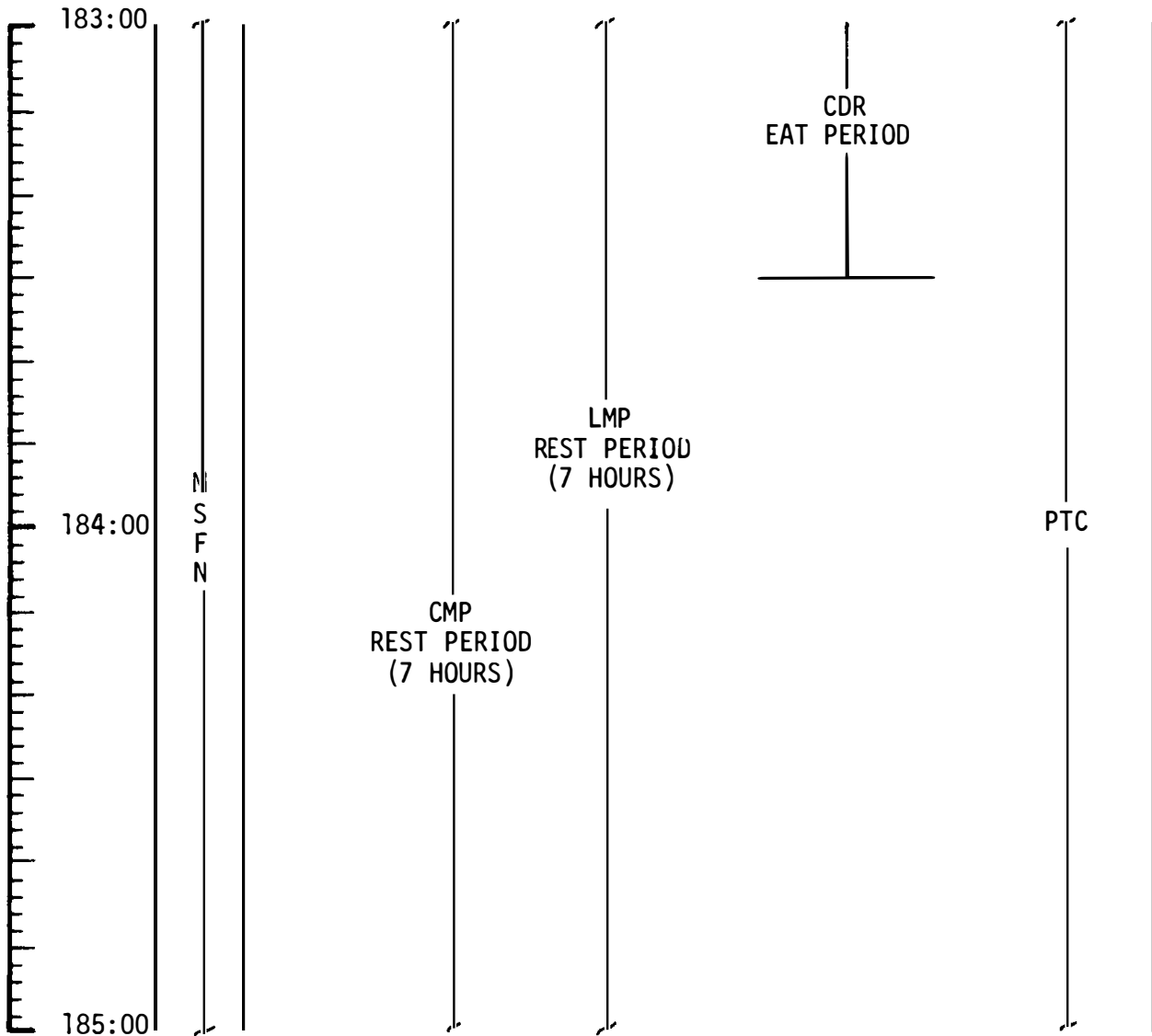
FLIGHT PLANNING BRANCH

MCC-H

12:30 AM EDT

FLIGHT PLAN

NOTES



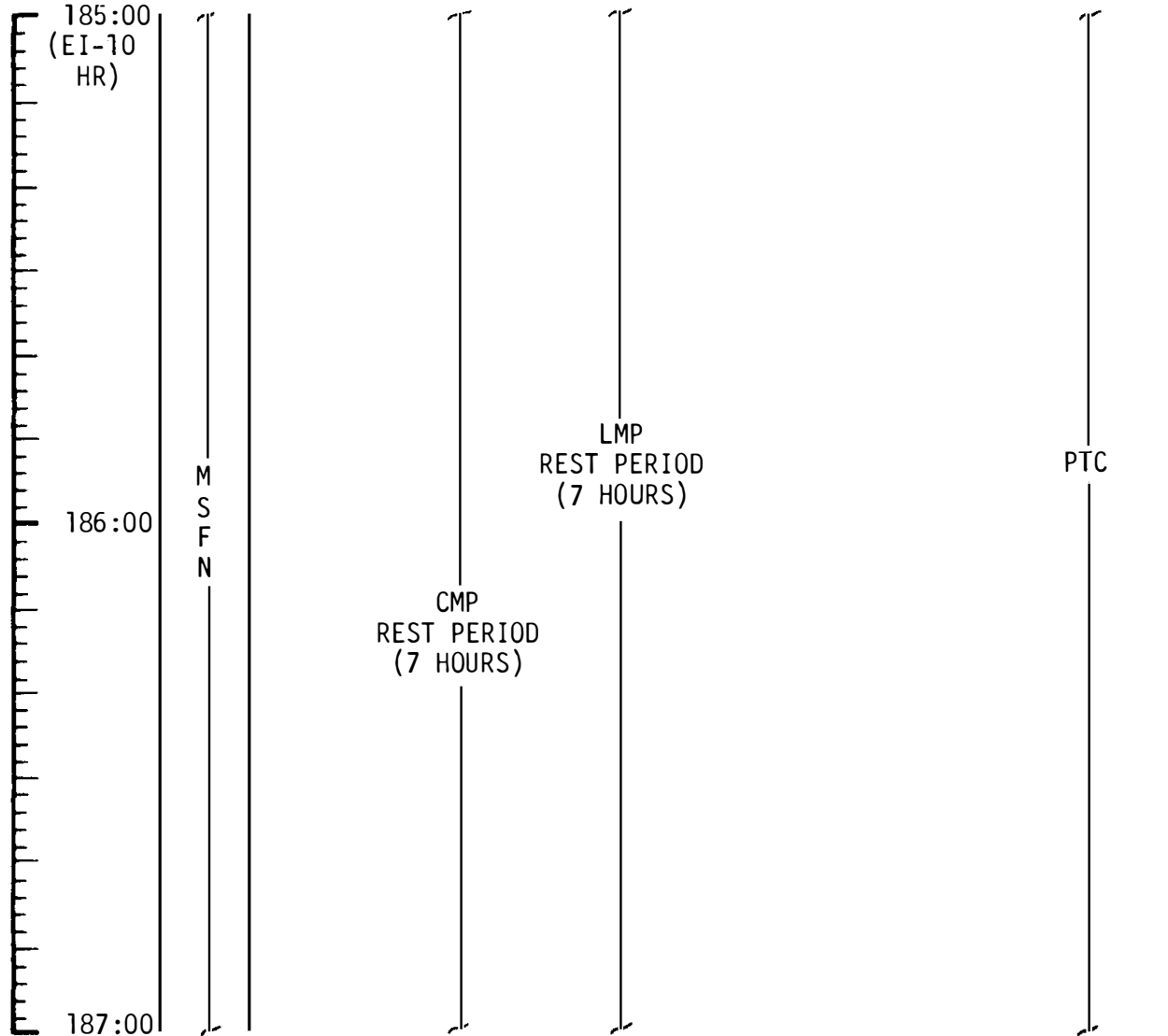
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	183:00 - 185:00	8/TEC	3-125

MCC-H

2:30 AM EDT

FLIGHT PLAN

NOTES



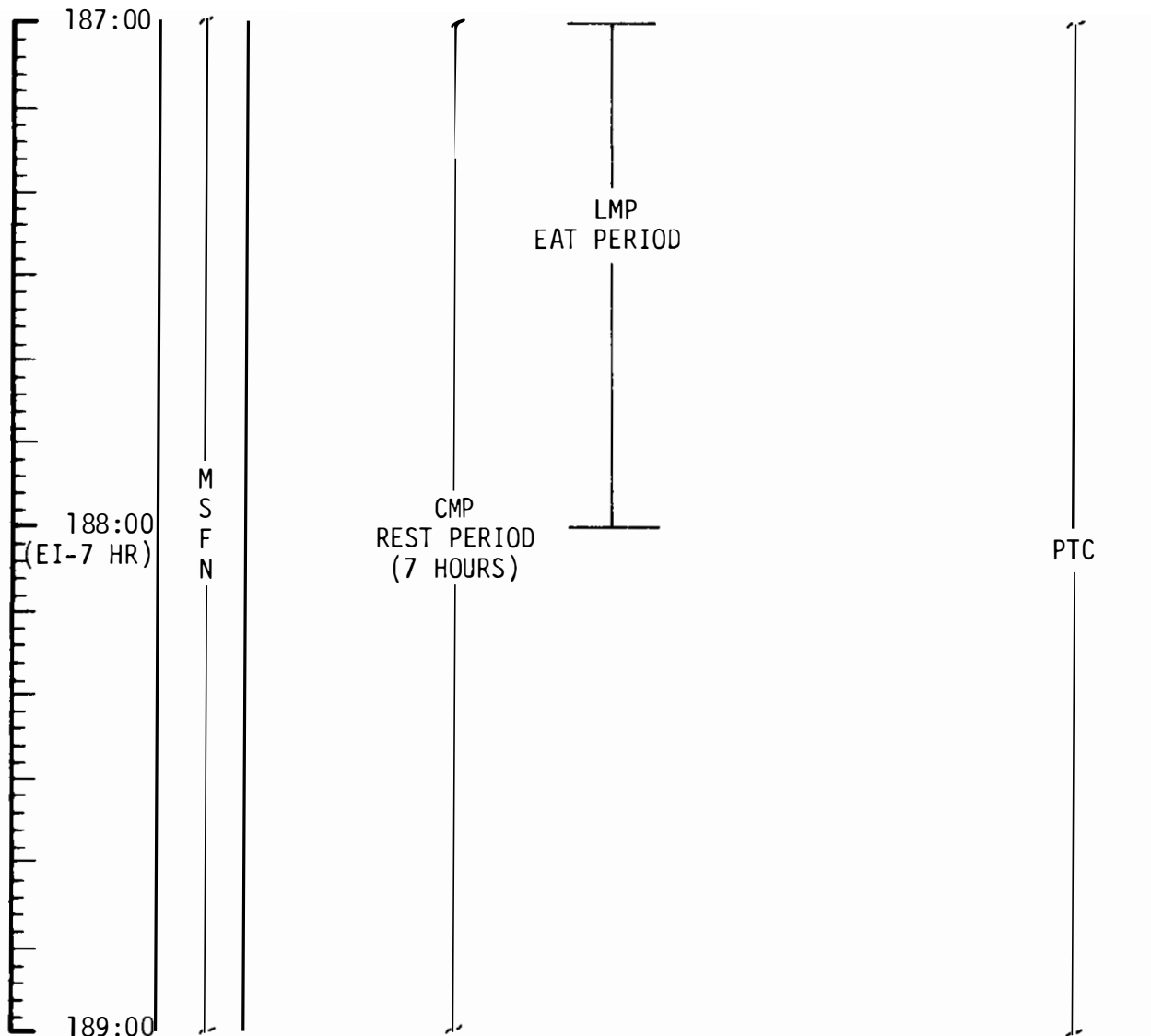
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	185:00 - 187:00	8/TEC	3-126

MCC-H 4:30 AM EDT

FLIGHT PLAN

NOTES

4:30 AM EDT

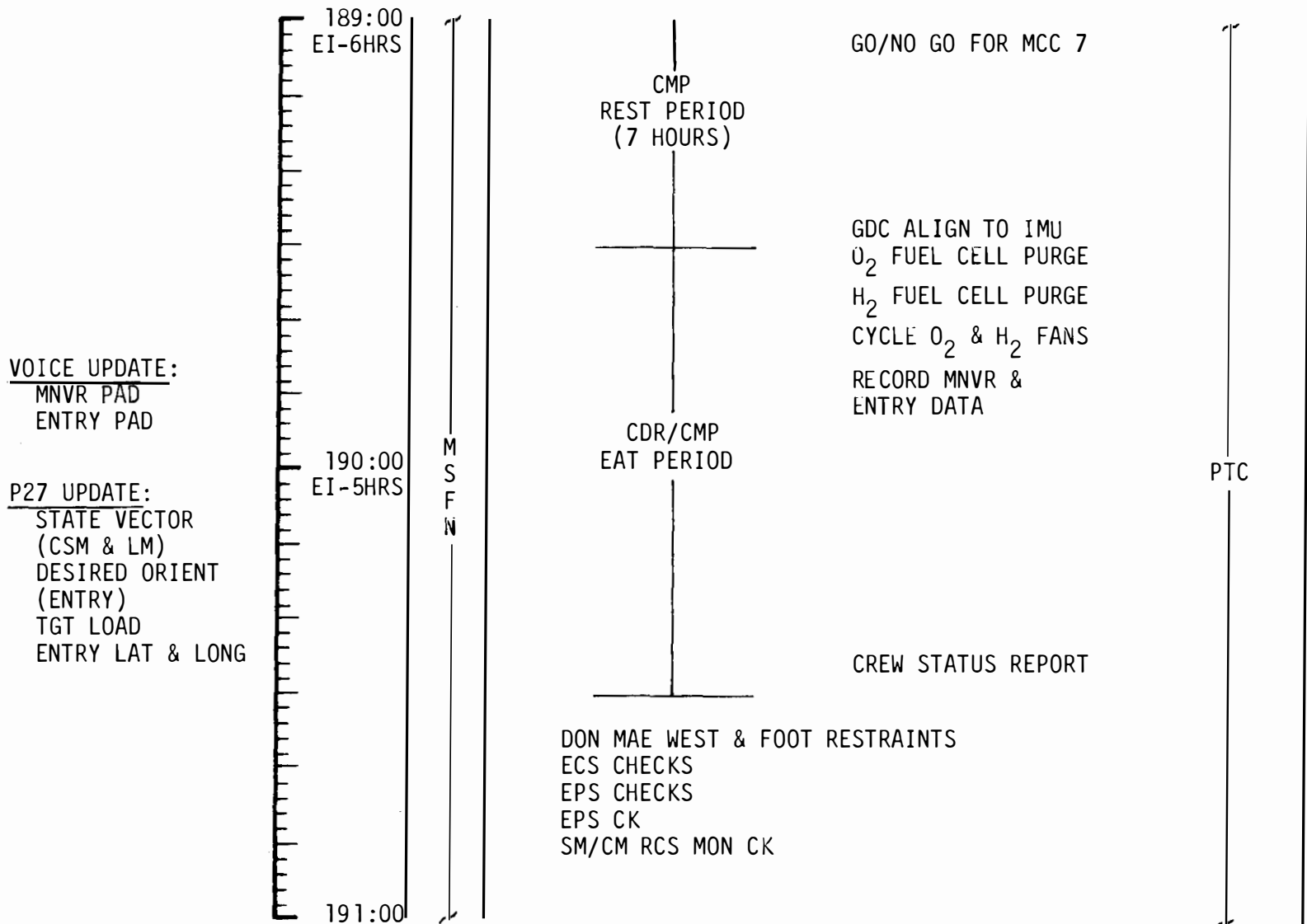


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	187:00 - 189:00	8/TEC	3-127

MCC-H 6:30 AM EDT

FLIGHT PLAN

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	189:00 - 191:00	9/TEC	3-128

MSC Form 29 OT (Mar. 69)

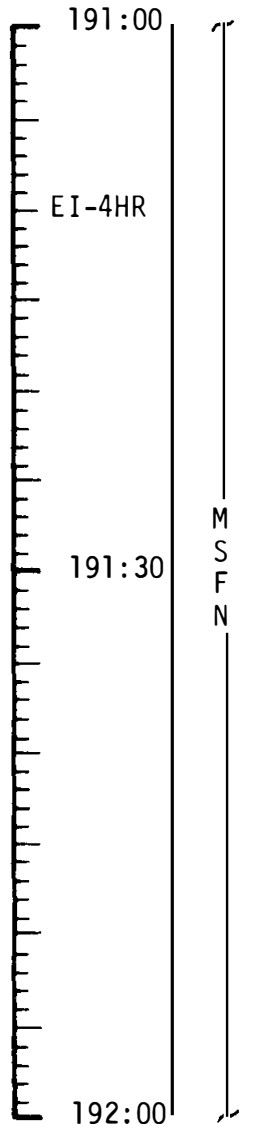
FLIGHT PLANNING BRANCH

MCC-H

8:30 AM EDT

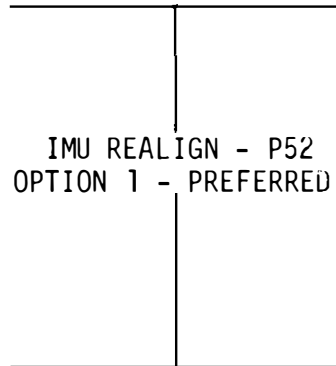
FLIGHT PLAN

NOTES



VHF ACTIVATION & C/O

CMC SELF TEST
DSKY COND LT TEST



EXT ΔV - P30
SPS/RCS THRUST - P40/41

MNVR TO BURN ATT

SXT STAR CK

EMS ΔV TEST

SM RCS CK

P52 - (ENTRY REFSMMAT)

N71: _____

N05: _____

N93:

X _____

Y _____

Z _____

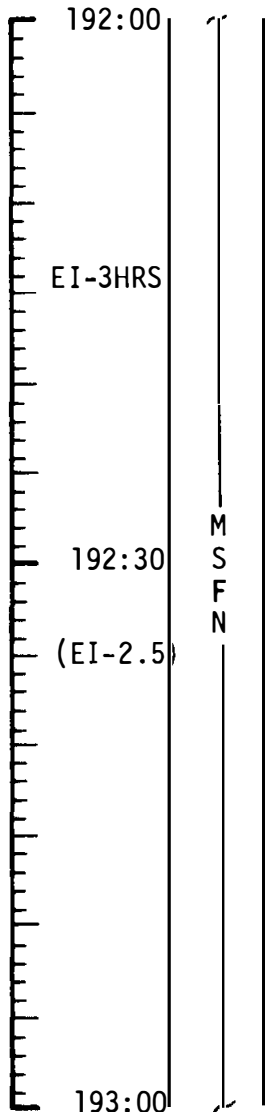
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	191:00 - 192:00	9/TEC	3-129

MCC-H

9:30 AM EDT

FLIGHT PLAN

NOTES



GDC ALIGN TO IMU

MCC 7 ΔV = NOMINALLY ZERO

SM RCS CK

SPS MON CK

V66 - TRANS CSM STATE VECTOR
TO LM SLOT

BURN STATUS REPORT

MNVR TO ENTRY ATT

COAS STAR CK

SXT STAR CK

BURN STATUS REPORT			
X	X	:	ΔTIG
X	X	:	BT
		.	V_{gx}
TRIM			
X	X	X	R
X	X	X	P
X	X	X	Y
		.	V_{gx}
		.	V_{gy}
		.	V_{gz}
		.	ΔV_c
X	X	X	FUEL
X	X	X	OX
X	X	X	UNBAL
REMARKS:			

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	192:00 - 193:00	9/TEC	3-130

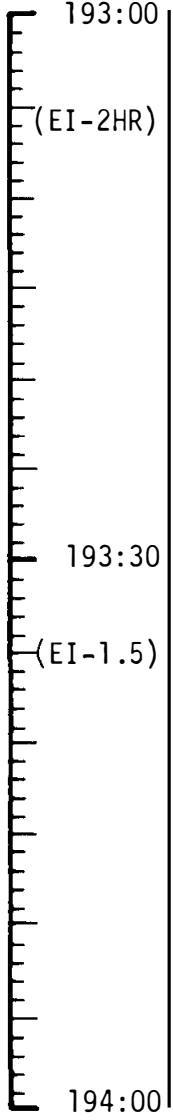
FLIGHT PLANNING BRANCH

MCC-H

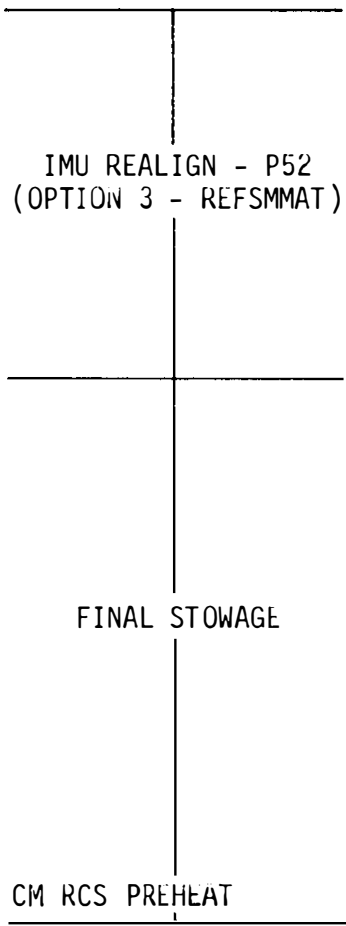
10:30 AM EDT

FLIGHT PLAN

NOTES



M
S
F
N



P52 - (ENTRY REFSMMAT)

N71: ____ , ____

N05: ____ . ____

N93:

X ____ . ____

Y ____ . ____

Z ____ . ____

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	193:00 - 194:00	9/T&C	3-131

FLIGHT PLANNING BRANCH

MCC-H

11:30 AM EDT

FLIGHT PLAN

NOTES

SECONDARY EVAPORATOR
MAY BE ACTIVATED AT
CREW OPTION FOR CABIN
COLD SOAK

PRELIMINARY EVAPORATOR ACTIVATION

FINAL GDC DRIFT CHECK
TERM CK RCS PREHEAT
PYRO BATT CK

RECORD ENTRY PAD AND RECOVERY DATA

SET DET TO RRT
EMS INITIALIZATION
RSI ALIGN TO GDC
CM RCS CK

ENTRY BATTS - ON

SEPARATION CHECKLIST
GO FOR PYRO ARM
P61 ENTRY PREP
MNVR TO CM/SM SEP ATT

CM/SM SEP

P62 - ENTRY ATTITUDE
MNVR TO ENTRY ATT

194:00

(EI-1HR)

194:30

(EI-30)

194:46

195:00

P27 UPDATE:
STATE VECTOR
(CSM & LM)

VOICE UPDATE:
ENTRY PAD
RCVY PAD

GO/NO-GO

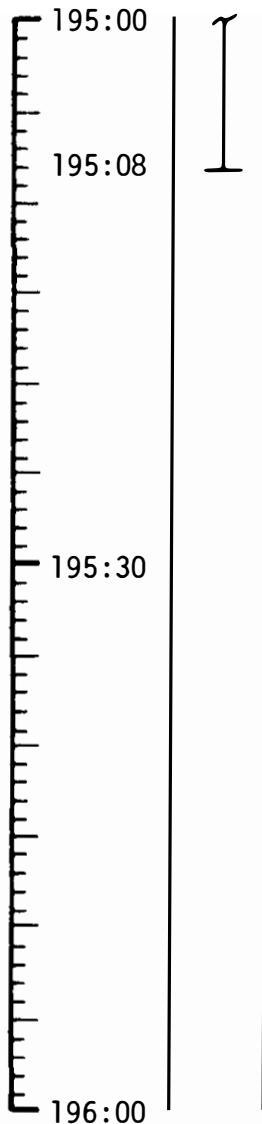
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	194:00-195:00	9/TEC	3-132

MCC-H

12:30 PM EDT

FLIGHT PLAN

NOTES



P63 - ENTRY INITIATE

EI - GETI = 195:06:27

P64 - ENTRY POST .05G

TRAJECTORY EVENT

TIME FROM ENTRY INTERFACE MIN:SEC

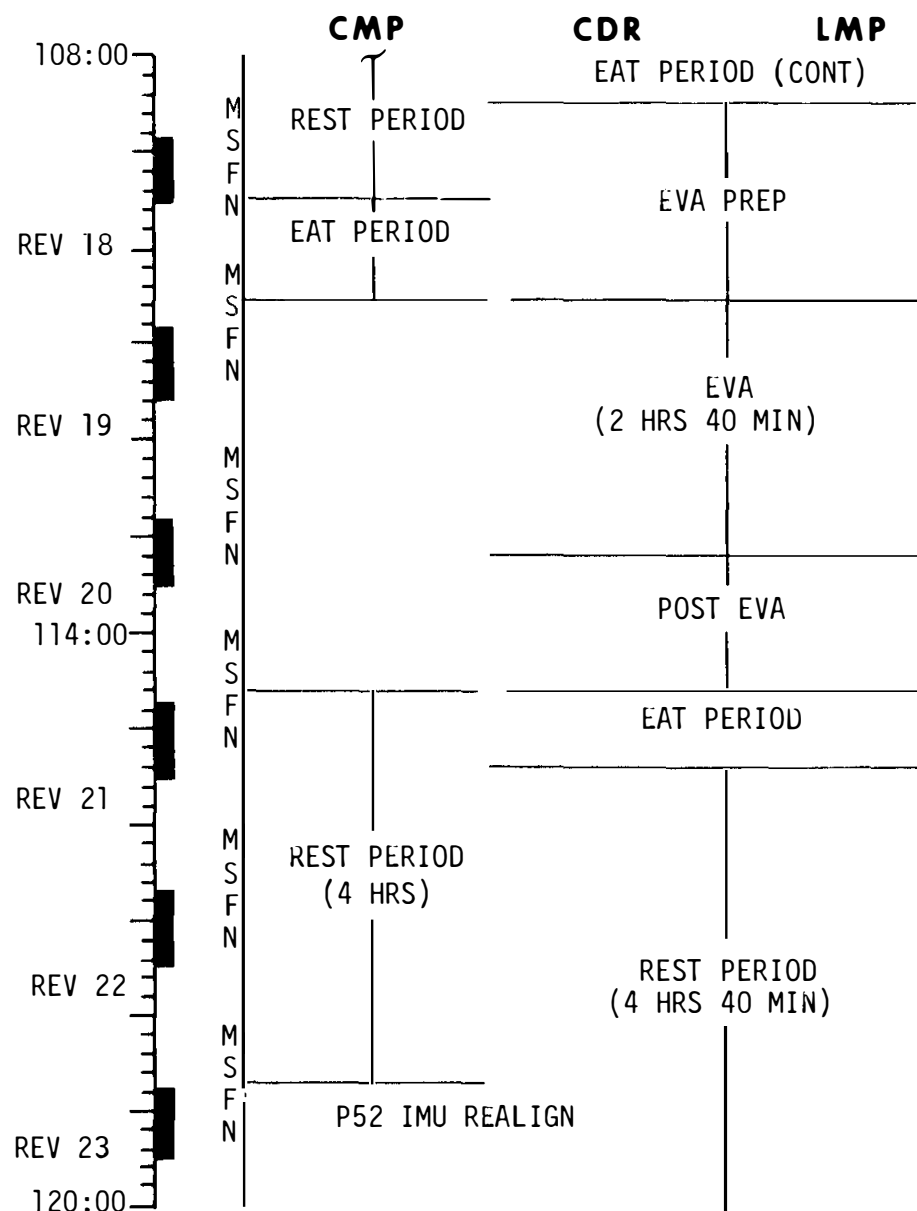
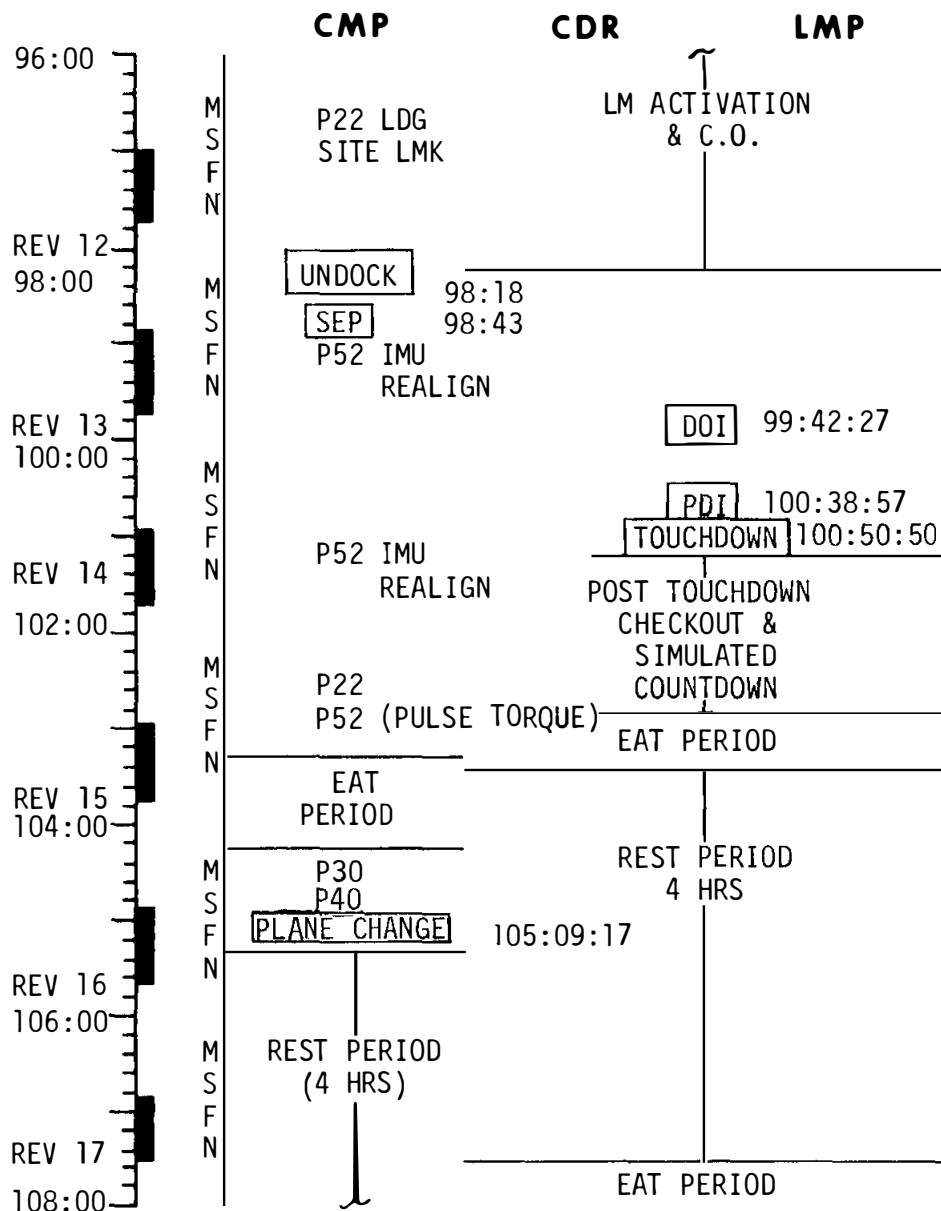
4000,000 FEET (GET 191:50:32)	00:00
ENTER S-BAND BLACKOUT	00:18
0.05G	00:28
KA - INITIATE CONSTANT DRAG	00:52
RDOT = -700 FPS	01:18
PEAK G (6.6)	01:22
SUBCIRCULAR VELOCITY	02:08
P64 to P67	02:08
EXIT S-BAND BLACKOUT	03:24
GUIDANCE TERMINATION	07:14
DROGUE DEPLOYMENT	08:12
MAIN DEPLOYMENT	09:00
TOUCHDOWN	13:55

$\gamma = 6.52^\circ$, $L/D = 0.295$, $V = 36,309$, & $R = 1285$

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	195:00-196:00	9/TEC	3-133

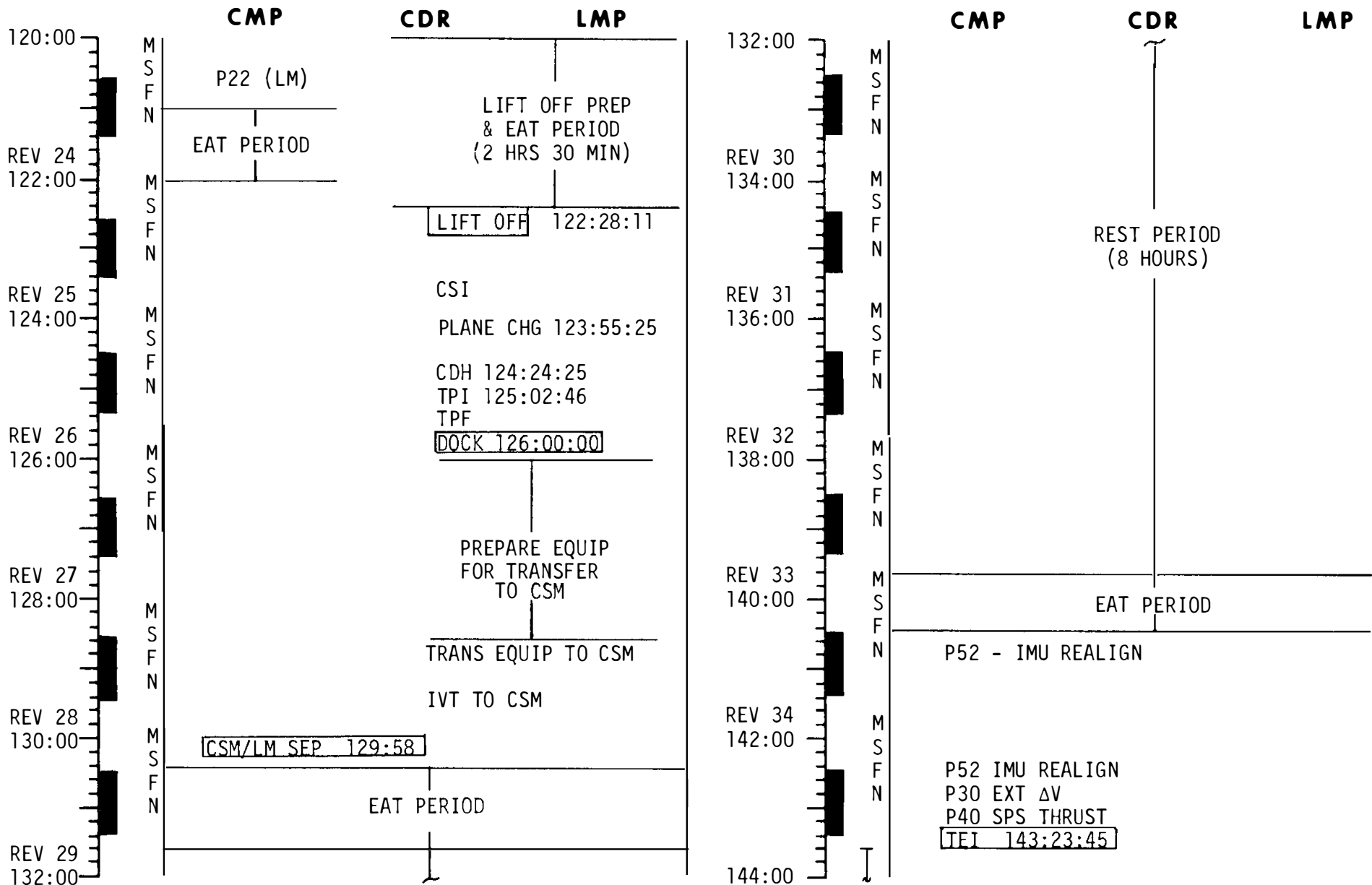
FLIGHT PLAN

ENCLOSURE



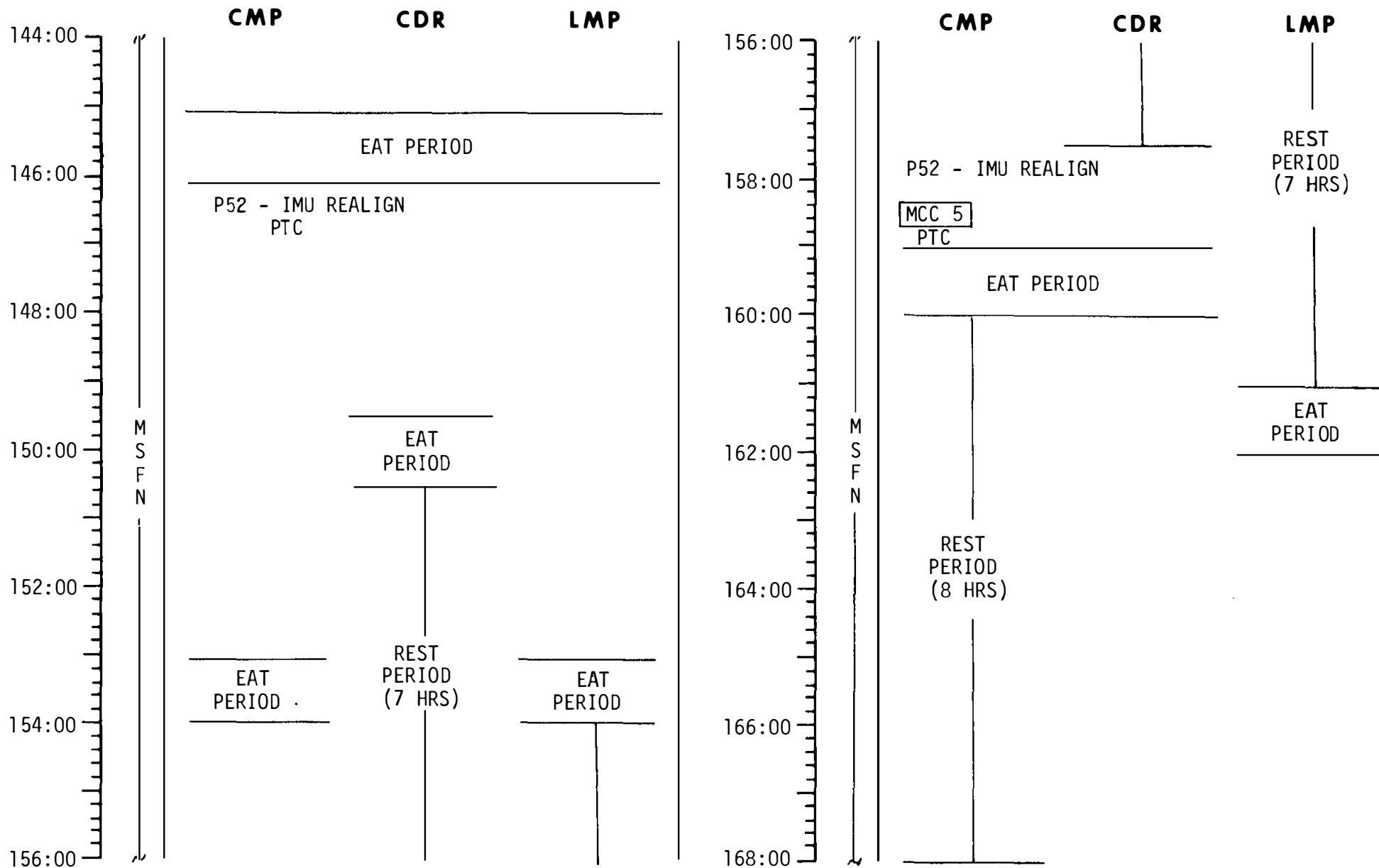
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIMINARY	APRIL 15, 1969	96:00 - 120:00	5/LPO	6-5

FLIGHT PLAN



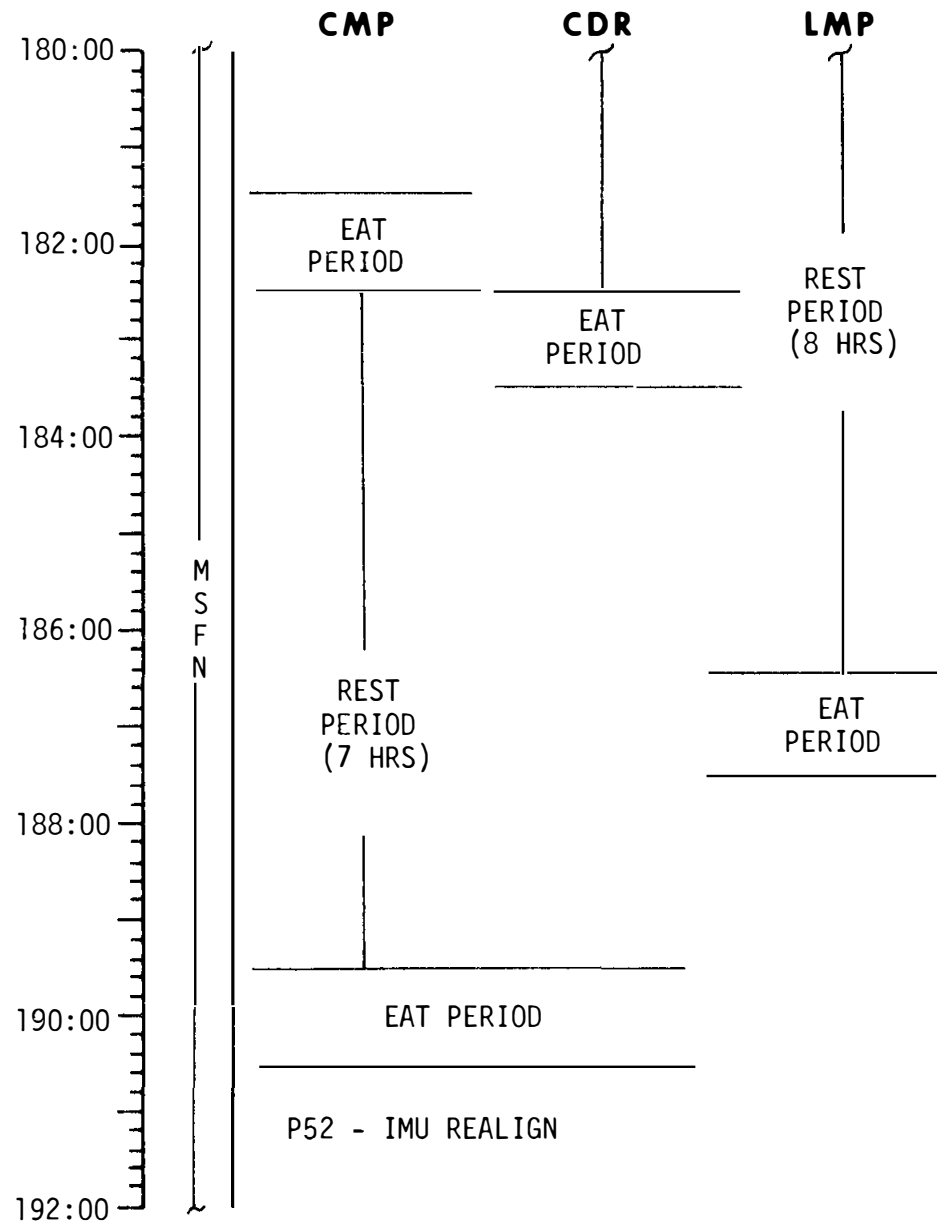
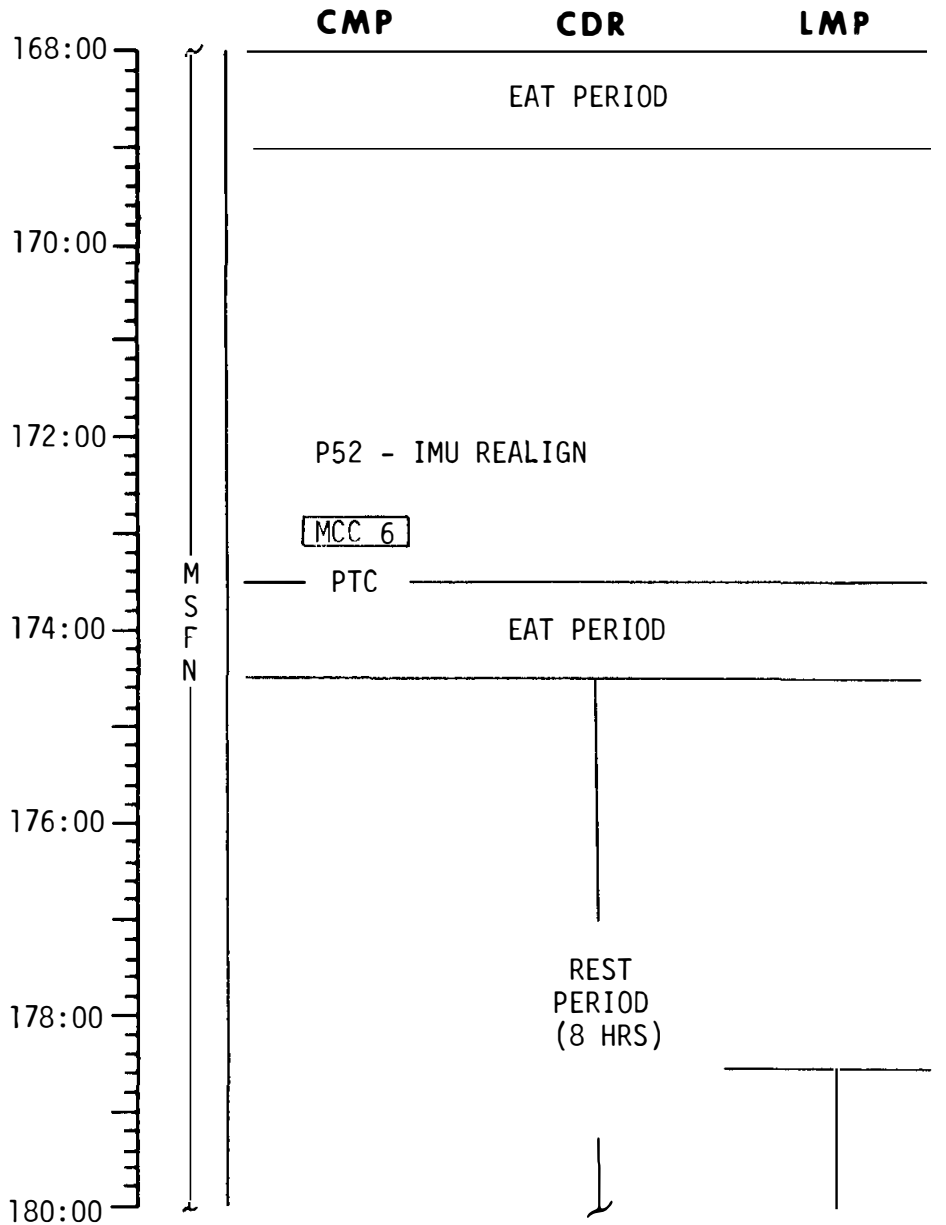
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	120:00-144:00	6/LPO	6-6

FLIGHT PLAN



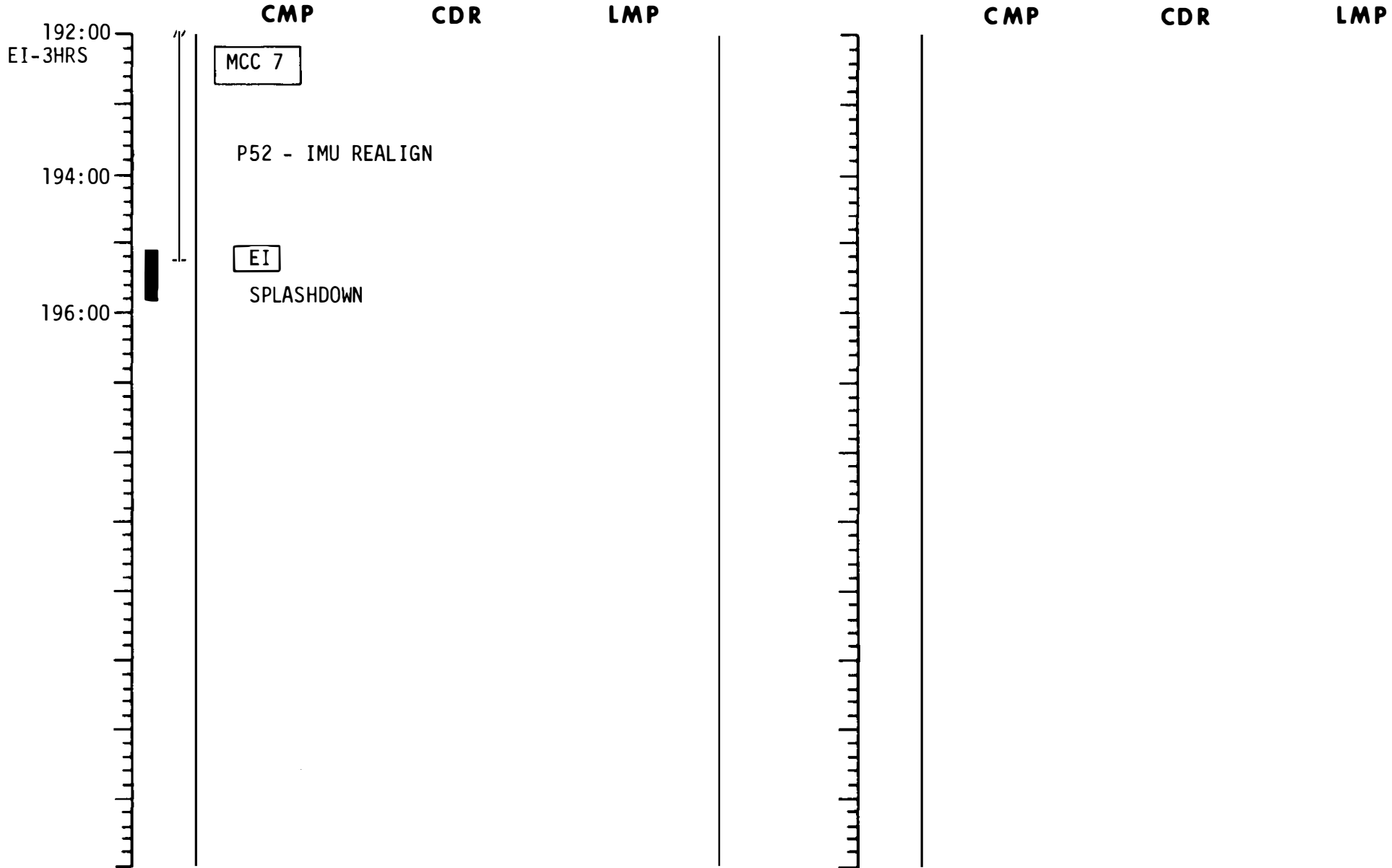
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	144:00-168:00	7/TEC	6-7

FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	168:00-192:00	8/TEC	6-8

FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 11	PRELIM OPT 1	MAY 9, 1969	192:00-196:00	9/TEC	6-9