

Jack N



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

APOLLO 17

DECEMBER 6 LAUNCH

DO NOT DISCARD

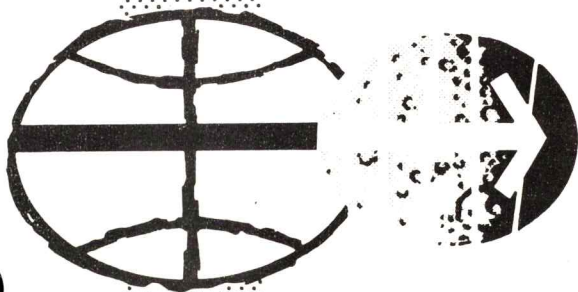
THIS COPY BASELINE
FOR ALL LAUNCH DATES

CHANGE D LM TIMELINE

PREPARED BY

FLIGHT PROCEDURES BRANCH

CREW PROCEDURES DIVISION



MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

NOVEMBER 7, 1972

APOLLO 17

LM TIMELINE BOOK

NOVEMBER 7, 1972

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It is requested that any organization having comments, questions, or suggestions concerning this document contact C. O. Lewis, Flight Procedures Branch, CG42, Building 4, room 255, telephone 483-3291.

This document is under the configuration control of the Crew Procedures Control Board (CPCB). All proposed changes should be submitted to the Apollo Flight Data File Manager, T. W. Holloway, CG5, Building 4, room 230, telephone 483-4271.

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

ACKNOWLEDGMENT

<u>AREA</u>	<u>NAME/BRANCH</u>	<u>LOCATION</u>
Rendezvous (Sec. 2, 4)	S. Grega Flight Procedures CG4	Ext 5348 Bldg 4, Rm 252
Post Docking (Sec. 3)	G. Doerre Spacecraft Systems CG2	Ext 4371 Bldg 4, Rm 250

It is requested that any organization having comments in the above areas contact the responsible individuals.

LM TIMELINE BOOK

LIST OF EFFECTIVE PAGES

Basic 9/8/72
 Change A 9/27/72
 Change B 10/18/72
 Change C 11/3/72
 Change D 11/7/72

PAGE	DATE	PAGE	DATE
*i	11/7/72	4-1	9/8/72
1-1	10/8/72	4-2	9/8/72
1-2	9/8/72	4-3	9/8/72
*1-3	11/7/72	4-4	9/8/72
*1-4	11/7/72	4-5	9/8/72
1-5	10/18/72	4-6	9/8/72
1-6	9/27/72	4-7	9/8/72
1-7	9/27/72	4-8	9/8/72
1-8	11/3/72	4-9	9/8/72
1-9	9/27/72	4-10	9/8/72
1-10	11/3/72	4-11	9/8/72
2-1	11/3/72	4-12	9/27/72
2-2	9/8/72	4-13	9/27/72
3-1	11/3/72	4-14	11/3/72
3-2	11/3/72	4-15	9/8/72
3-3	9/27/72	4-16	9/8/72
3-4	9/27/72	4-17	9/8/72
3-5	9/27/72	4-18	9/8/72
3-6	11/3/72	4-19	9/8/72
3-7	11/3/72	4-20	9/8/72
3-8	11/3/72	4-21	9/8/72
3-9	11/3/72	4-22	9/8/72
3-10	11/3/72	4-23	9/8/72
3-11	11/3/72	4-24	9/8/72
3-12	11/3/72	4-25	9/8/72
		4-26	9/8/72

*Current Change

AGS CHECK TO COAS CAL

110:55

AGS CONT CHECK

MODE CONT (AGS) - ATT HOLD
GUID CONT - AGS
MNVR TO FDAI (0, 315/330, 0)

*CAMERA SETTINGS FOR REV 12 TCA
*LM3/DAC/10/CEX (T/2.8, 1/250, ∞)
* 1 FPS, .05 MAG 0, (5 MIN)
*LM/DC/60/CEX (f5.6, 1/125, 74 ft)
* 5 FR, MAG A

*SEQUENCE CAMERA - ON (110:56)

REV 12 LS TCA ____:____:____ (111:01)

*SEQUENCE CAMERA - OFF

RENDEZVOUS RADAR CHECKOUT

GUID CONT - PGNS
CB(11) AC BUS A: RNDZ RDR - CLOSE

CB(11) PGNS: RNDZ RDR - CLOSE
*VHF A XMTR - VOICE/RNG

✓ TEMP (10° - 75°)

RT/ERR MON - RR

RR SLEW, MANUAL LOCK-ON, RR LGC

TM - RNG/RNG RT

V63, PRO, NO TRACK LIGHT OUT, PRO, N78

COMPARE N78, VHF, TM
V34

*VHF A XMTR - VOICE
V41N72E (+18000, +28300)
CB(11) PGNS: RNDZ RDR - OPEN
CB(11) AC BUS A: RNDZ RDR - OPEN
V44, RR - SLEW
RT/ERR MON - LDG RDR/CMPTR
TM - H/H

22012

111:05

SS
111
+07

111:20

MSFN UPDATE

*COPY CSM CIRC P76
*COPY PADS FOR
* NO PDI + 12 ABORT
* PDI
* PDI EARLY ABORT
* PDI LATE ABORT
* T2 ABORT
* T3 TIG
* SHe PRESSURE
*SET DET TO COUNT DN TO DOI-2

IMU FINE ALIGN

V76
P52 OPT 3
CB(11) AC BUS B: AOT LAMP - CLOSE
AOT - DETENT F/0.0°
PGNS MODE CONT - AUTO
1ST STAR PROCYON (216)
PRO
2ND STAR ALDEBARAN (211)
N05 ANGLE DIFF _____
PRO
N93 TORQUING ANG
X _____
Y _____
Z _____
PRO, RCD GET ____:____:____
N25, (ENTR FOR NO COAS CAL)

COAS CALIBRATION

PRO, ENTR
N70, ENTR 011 (ALDBN), PRO
N87, (+00000, +00000) PRO, PRO
P00

BIAS AZ _____
EL _____

DETENT CL
CB AOT LAMP - OPEN

AGS CHECK
TO COAS CAL

	R	Ṙ
MAX Δ.27 NM	7 FPS	
N78		
VHF		
TM		

111:05

MSFN UPLINK TO DOI-2

22012 111:45

MSFN UPLINK, UPDATE

- *UPDATA LINK - DATA
- *UPLINK CSM/LM S.V., E-MEMORY
- * DESCENT TARGETING
- *UPDATA LINK - OFF
- *COPY AND LOAD GYRO DRIFT COMP, PIPA BIAS*
- * (REF P2 DATA CARD BOOK)

V47

*414+1 400+3

V83, SET ORDEAL

*317R, 440R

MNVR TO AGS CAL ATT

V49, +02250 OGA ROLL 24 }
+06750 IGA PITCH 77 } FDAI
+02250 MGA YAW 339 }

- *VHF ANT - AFT
- *VHF B XMTR - DATA
- *VHF ✓ WITH CSM

AGS CALIBRATION

- *READ AND RECORD INITIAL CAL. NOS.
- PGNS MODE CONT - ATT HOLD
- *VERIFY 25 MIN SINCE TURN-ON

V60, V76, V16N20E

RATES < 0.075°/SEC

- *400+6 (647R > 00034)
- *400R

MONITOR ICDU LIMITS

{ OGA +00000 / +04500 }
{ IGA +04500 / +09000 } LIMITS
{ MGA +00000 / +04500 }

BEFORE LIMITS ARE EXCEEDED, 400+0.
IF TIME IS LESS THAN 5 MINUTES
REPEAT AGS CALIBRATION

- *CHECK ECS, RCS, EPS, APS
- *CYCLE CWEA CB

- *400R+0
- *READ AND RECORD CAL VALUES

	INIT	CAL	Δ LIM
540			± .039
541			± .039
542			± .039
544			±2.00
545			±2.00
546			±2.00

GO/NO GO FOR DOI-2

CONFIGURE COMM FOR LOS

- *MATCH INDICATED ANGLES
- *TRACK MODE - SLEW
- *S-BD ANT - FWD
- *SET P (+90)
- * Y (-45)
- *PCM - LO
- *UPLINK SQUELCH - ENABLE
- *COMM CHK WITH CSM

DOI-2 PREP

- P30 LOAD PAD
- SET DET, PRO
- P41
- N18 R,P,Y BYPASS MNVR
- N85
- MNVR TO N85 -VGX,0,0 (0,085,0)
- V77E
- N40E ✓DET, VG
- *410+5, 373+TIG
- *450-VGX, 451+0, 452+VGZ
- *310R ✓DET, 370R ✓VG
- *500R

CSM CIRC : : (111:55)

DOI-2 : : (112:01) [5 MIN MAX SLIP]

T=0 NULL VG'S TO .2FPS
V82E ✓HP (7.2)

SR
111
+55

112:05

111:20

111:45