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* APOLLO 17

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SUBJECT *

PGM APD
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CHANGE A LM ACTIVATION CHECKLIST

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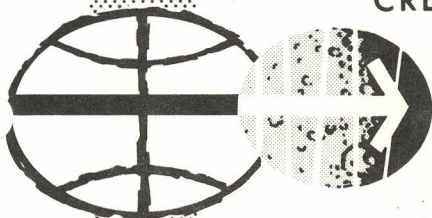
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FLIGHT PROCEDURES BRANCH
CREW PROCEDURES DIVISION

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

NOVEMBER 3, 1972



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APOLLO 17

LM ACTIVATION CHECKLIST

NOVEMBER 3, 1972

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LM ACTIVATION CHECKLIST

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3. PDI DAY

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DATE 11/3/72

DATE 11/3/72

1-1

CSM TO LM TRANSFER LIST (TLC)

<u>CSM</u>	<u>ITEM</u>	<u>LM</u>
A2	Jettison Bag	Temp Stwg
ICG	Scissor (1)	Aft Data File
CCU Cable/R8	CWG Elect Adapter w/cap (2)	On Crew
On Crew	Comm Carrier (2)	On Crew
R5	Inflight Straps (4)	190 Pkg Handrail
R5	Utility Straps (3)	LHSSC
A8	CWG's (2 pr)	AFT ENG COVER
A7	APK (1)	Aft Bulkhead
U4	Monocular (1)	RHSSC

TRANSFER LIST

TRANSFER LIST

1-2

R13	70mm Mag (4) In Bag	AFT RHSSC (B&W-L; CEX-A, E&F)
R13	70mm Mag (3) In Bag	AFT Eng Cover (B&W-H&I; CEX-D)
A8	70mm Mag (3) In Bag	AFT Eng Cover (B&W-J, K&R)
A8	70mm Mag (2) In Bag	BOT RHSSC (B&W-M&N)
R13	70mm Mag (3) In Bag	FWD RHSSC (B&W-G; CEX-B&C)
R13	16mm Mag (3) In Bag	2 w/Bag-ISA Top Pkt (P&Q) 1 Window SEQ Camr (0)
R3	LM ACTIVATION C/L (2)	Data File

DATE 11/3/72

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1-3

40:00

IVT TO LM

- 1 Activate CABIN DUMP VALVE & Open Hatch
 Carry Comm Carrier, CWG Connector &
 CSM 02 Hose
- 2 Record Docking Tunnel Index Angle

 _____ Rc
- 3 FLOOD LIGHT - All
 EXTERIOR LTG - OFF
 Window Shades (3) - Open
- 4 DES H20 - OPEN
 DES 02 - OPEN
 CABIN REPRESS - AUTO
 CB(16) CABIN REPRESS - CLOSE
- 5 Check AOT Visibility

IVT TO LM

1-4

40:05

ENTRY STATUS CHECK

- 1 Mount Purse (ISA Bottom Pocket)
Stow Drink Bags (2) (ISA Back Pkt) In Jett Bag
Stow LCG's (LHMS) In ISA Big Pkt
Unstow ISA And Install On AFT
Cabin Rest Station Fittings
Stow Food Stick (2) (Food Compt) In Jett Bag
- 2 Verify CB Status Per INITIAL ACTIVATION
status Chart

DATE 11/3/72

DATE 9/11/72

1-13

40:20

HOUSEKEEPING

- 1 Install 16mm Camr Wedge - RHSSC
- 2 Tape Broomclip On AOT
- 3 Tape Crash Bar
- 4 Position UTILITY LIGHTS On Back AOT GUARD

HOUSEKEEPING

1-14

- 5 Configure 1-70mm Camr (Top RHSSC):
 - Stow Reseau Cover In Camr Compt
 - Remove Polarizing Filter & Stow in Camr Compt
 - Install CEX MAG A (AFT RHSSC) f11,250, ∞
 - Stow Dark Slide In Camr Compt
 - Unstow Trigger and Handle (Camr Compt)
 - Unstow RCU/Camr Brkt (AFT RHSSC)
 - Install Trigger, RCU/Camr Brkt, Then Handle
 - Install Bag Dispenser Brkt (Camr Compt)
 - Stow Camr In RHSSC Camr Compt, 2 Snaps
- 6 Position Q-Cards

DATE 11/3/72

DATE 11/3/72

1-21

42:00

IVT TO CSM

- 1 DES 02 - CLOSE
DES H20 - CLOSE
CABIN REPRESS - CLOSE
CB(11) EPS: DC BUS VOLT - Open
CB(16) ECS: CABIN REPRESS - Open
Window Shades (3) - Close
- 2 FLOOD LIGHT - OFF
- 3 CABIN RELIEF & DUMP (OVHD) - Open
IVT TO CSM, Close LM Hatch

LM TO CSM TRANSFER LIST

<u>LM</u>		<u>ITEM</u>		<u>CSM</u>
On Crew	-	Comm Carriers (2)	-	On Crew
On Crew	-	CWG Adptr w/cap(2)	-	CCU Cable
Temp Stwg	-	Jettison Bag	-	A2
Temp Stwg	-	LM ACTIVATION C/L (1)	-	R3
Jett Bag	-	Drink Bag (2)	-	Temp Stwg
Jett Bag	-	Food Stick (2)	-	Temp Stwg

DATE 11/3/72

3-1

CSM TO LM TRANSFER LIST(PDI)

<u>CSM</u>	<u>ITEM</u>	<u>LM</u>
A2	Jettison Bag (1)	Temp Stwg
On Crew	Bio Instrumentation (2)	On Crew
PGA Bag	UCTA (2)	On Crew
A2	FCS (2)	On Crew
U1	LCG (2)	On Crew
Temp Stwg	Drink Bag (2)	On PGA
Temp Stwg	Food Stick (2)	On PGA
PGA Bag	Suit ITSLA-EV (2)	On Crew
ICG	Sunglasses In Pouch (2)	PGA Pocket
On Crew	Watch/Watchband (2)	On PGA
On Crew	Pen (2)	PGA Pocket
On Crew	Pen - Felt Tip (2)	PGA Pocket
On Crew	Pencil (2)	PGA Pocket
On Crew	Pocket, C/L & Scissor (2)	On PGA
On Crew	Pocket, Data (2)	On PGA
On Crew	Scissor (1)	LMP Pocket
On Crew	Pen Light (2)	PGA Pocket
On Crew	Earplug (2 Pr)	PGA Pocket
On Crew	Dosimeter - Personal (2); Passive (6)	PGA Pocket
On Crew	Pliers/screwdriver (2) - CDR	PGA Pocket
On Crew	Silicone Lube - CDR	PGA Pocket
On Crew	Contingency Sample Bag - CDR	PGA Pocket
On Crew	Hand lens - LMP	PGA Pocket

TRANSFER LIST

TRANSFER LIST

3-2

On Crew
Helmet Acc Bag
Helmet Bag
CCU Cable/R8
A8
In Jett Bag
On PGA
On PGA
R3

Comm Carrier (2)
IV Gloves (2 Pr) - CDR Transfer
Helmet (2) - CDR Transfer
CWG Elect Adptr w/Cap (2)
Lt/Wt Headsets (2)
LCG Plug (2)
Gas Connector Plugs (4)
PGA Elect Conn Cap (2)
LM XFER DATA CARD KIT
LM TIMELINE BOOK
LM DATA CARD BOOK
LM LUNAR SURFACE C/L
ORBIT MONITOR CHART (LM)
ASCENT MONITOR CHART
LM STAR CHARTS (3)
LM ACTIVATION C/L (1)
(RETURN JETTISON BAG TO CSM)

On Crew
Temp Stwg
Temp Stwg
LHSSC
LHSSC
Purse
On PGA
Purse
Data File

DATE 11/3/72

DATE 9/11/72

3-15

108:41

LGC/CMC CLOCK SYNC/TEPHEM UPDATE

- 1 V25 N36E
- 2 Load Mission Time _____:_____:_____
- 3 V06 N65, On Mark - ENTR
Compare With CSM N65

CSM Time _____:_____:_____
LM Time _____:_____:_____

V55E - Load ΔT
Check Mission Timer
- 4 Record CSM TEPHEM
R1 _____
R2 _____
R3 _____
- 5 V25 N01E, 1706E Load TEPHEM (Octal)
- 6 V05 N01E, 1706E Verify TEPHEM

LGC/CMC CLOCK SYNC
SUIT FAN/H₂O CK

108:41

SUIT FAN/H2O SEP CHECK

- 1 CB(16) ECS: SUIT FAN 2 - Open
(Master Alarm, SUIT/FAN Warning
SUIT FAN Comp Lts - On)
- 2 CB(11) ECS: SUIT FAN 1 - Close
H2O SEP SEL - PUSH SEP 1
- 3 SUIT FAN - 1 (SUIT/FAN Warning, SUIT
FAN Comp Lts - Off
CB(16) ECS: SUIT FAN 2 - Close

3-16

108:45

GLYCOL PUMP CHECK

- 1 CB(11) ECS: GLYCOL PUMP 1 - Open
 (Master Alarm, ECS Caution & Glycol
 Comp Lts - On Momentarily)
 CB(11) ECS: GLYCOL PUMP 1 - Close
 (GLYCOL Comp Lt-On)

- 2 GLYCOL - INST (SEC) (8 psia)
 CB(16) ECS: GLYCOL PUMP SEC - Close
 (10-20 psi Rise)
 : GLYCOL PUMP SEC - Open
 (Press Decrease)

- 3 GLYCOL - PUMP 2 (21-37 psi)
 (GLYCOL Comp Lt - On Then Off)
 CB(11) ECS: GLYCOL PUMP AUTO
 TRNFR-Open
 GLYCOL - PUMP 1 (21-37 psi)

***** AOS-108:47 *****

DATE 11/3/72

DATE 11/3/72

3-17

108:49

SET DAP

- 1 V48E
F 04 46 Codes (Octal)
R1 _____ (32022)
R2 _____ (00011)
PRO _____
- 2 F 06 47 LM, CSM Wt. (LBS)
R1 _____ (+36744)
R2 _____ (+37831)
PRO _____
- 3 F 06 48 GMBL TRIM, PITCH, ROLL (.01°)
R1 _____ (+00645)
R2 _____ (+00641)
(TERM) V34E

*E-MEMORY DUMP

- 1 Verify Steerable Lockup
V74E (Erasable Dump) (42 sec)

108:47

*PRIM S-BD T/R & SEC PWR AMPL CK

Perform PRIM T/R & SEC PWR AMPL
VOICE CK With MSFN (Up To 60 sec To Lock)

108:49

*S-BAND STEERABLE ANTENNA ACTIVATION

- 1 Notify MSFN of SEC T/R & PRIM PWR AMPL CK
HTR CONT TEMP MONITOR - S-BAND
(-52° to +135°)
S-BAND -PM,SEC,PRIM,VOICE,PCM,RANGE,OFF,LO
- 2 STEERABLE: PITCH - -75°
YAW - -12°
TRACK MODE - SLEW (Wait 30 sec)
PITCH (From MSFN) _____ (+125)CCW
YAW (From MSFN) _____ (-22)CCW
ANTENNA S-BAND - SLEW
- 3 Verify Signal Strength >3.0
TRACK MODE - AUTO
BIOMED - RIGHT, PCM - HI
UPLINK SQUELCH - OFF
S-BAND CHECK WITH MSFN

LDG GEAR DEPLOY
S-BD ANT ACT

3-18

***** UD - 1:30 (108:58) *****

108:58

LANDING GEAR DEPLOY

1 CB(11) ED: LDG GEAR FLAG - Close
: LOGIC POWER A - Open
MASTER ARM - ON (SYS B Lt - On)
LDG GEAR DEPLOY-FIRE, tb - gray
CB(11) ED: LOGIC PWER A - Close
(SYS A Lt - On)
LDG GEAR DEPLOY - FIRE
MASTER ARM - OFF (SYS A&B Lts - OFF)
CB(11) ED: LDG GEAR FLAG - Open

109:00

*MSFN UPLINK

UPDATA LINK - DATA
MSFN P-27 Updates LS REFSMMAT,LM
STATE VECTOR AND V66, AND LGC ABORT
CONSTANTS
UPDATA LINK - OFF

108:58

MSFN UPDATE

1 Report PRIM EVAP FLOW TIME (3-8)
2 Copy: AGS Abort Constants
: DOI - 2 PAD

11/3/72

DATE 11/3/72

3-37

ATTITUDE MON (LMP) - PGNS
RR MODE - SLEW
DEADBAND - MIN
ATTITUDE CONTROL (3)-MODE CONT
MODE CONT (Both) - ATT HOLD
TTCA (Both) - JET

- 4 Mount Camera On Window Bar
LM 3 /DAC/10/CEX (0) - ULC
(T8,250,6) 6 fps, .06 Mag (1 min)
LM /DC/60/ CEX (A)
(f11,250,focus) 10 Pictures
Mount TIMELINE Book
- 5 Configure CB Panels Per UNDOCKING Chart
And Then Go To LM TIMELINE BOOK

UNDOCKING

6 - OPEN

AC BUS B				AC BUS A				AC BUS A												
SE WIND	IN-POS	SBD	ORDEAL	AGS	AOT	SE	NUM	LTG	FDAL	INV 2	INV 1	BUS TIE	AC BUS	CDR WIND	TAPE	AOT	RNDZ	DECA	INTOL	LTG
HTF	PROPUL DISP	ANT			LAMP											LAMP	RDR	GMBL		

0 - OPEN

RCS SYS A				FLIGHT DISPLAYS				AC BUS A													
MAIN	QUAD 4	QUAD 3	QUAD 2	QUAD 1	AISC	FEED 2	AISC	FEED 1	THRUST	MISSION	CDR	RNG	RNG RT	GASTA	CDR	COAS	ORDEAL	RNG	INERT	GASTA	CDR
SOV	TCA	TCA	TCA	TCA																	

7 - OPEN

*

HEATERS				STAB CONT				ED				LIG									
URINE	RNDZ RDR	LOG	RDR	DOCK	WIND	SIG	CONTR 1	ABORT	ATCA	AELD	ENG	CONTR	ATTOR	ENG START	DECA	LOGG	GEAR	LOGIC	UTIL	ANNU DOCK	COMPT
LINE	STBYT	OPR						STAGE	PODS												

4 - OPEN

HEATERS RCS SYS A/B				EC3				EC3				COM1				FMS				
QUAD 4	QUAD 3	QUAD 2	QUAD 1	SUIT	CABIN	PAK 1	PAK 2	GLYCOL	PUMP	UP DATA	SEC SBD	VHF B	VHF A	CDR	SIG STR	LOG	RNDZ	LCC	IMU	IMU
								1		LINE	ANTH	RCVR	PWR	AUTG	DOFF	RDR	RDR	DOFF	DOFF	DOFF

2 - OPEN

EPS				RCS				RCS				RCS				PROPUL				
BAT	FEED TIE	CROSS TIE	BUS	BUS TIE	ECG CONT	ECG	ASC	ASC	ASC	ASC	ASC	ASC	ASC	ASC	ASC	ASC	ASC	ASC	ASC	ASC

* Closed At This Time

DATE 9/11/72