ALTMAN • JOHNSON • MASSIMINO • GOOD • McARTHUR • FEUSTEL • GRUNSFELD •
125

Scott Altman

CDR, STS-125

Hubble Servicing Mission 4

Reach for the Stars!

Verification and Validation Summit 8

11 Oct 2012

SKY KING

courtesy of
Doug Abbott

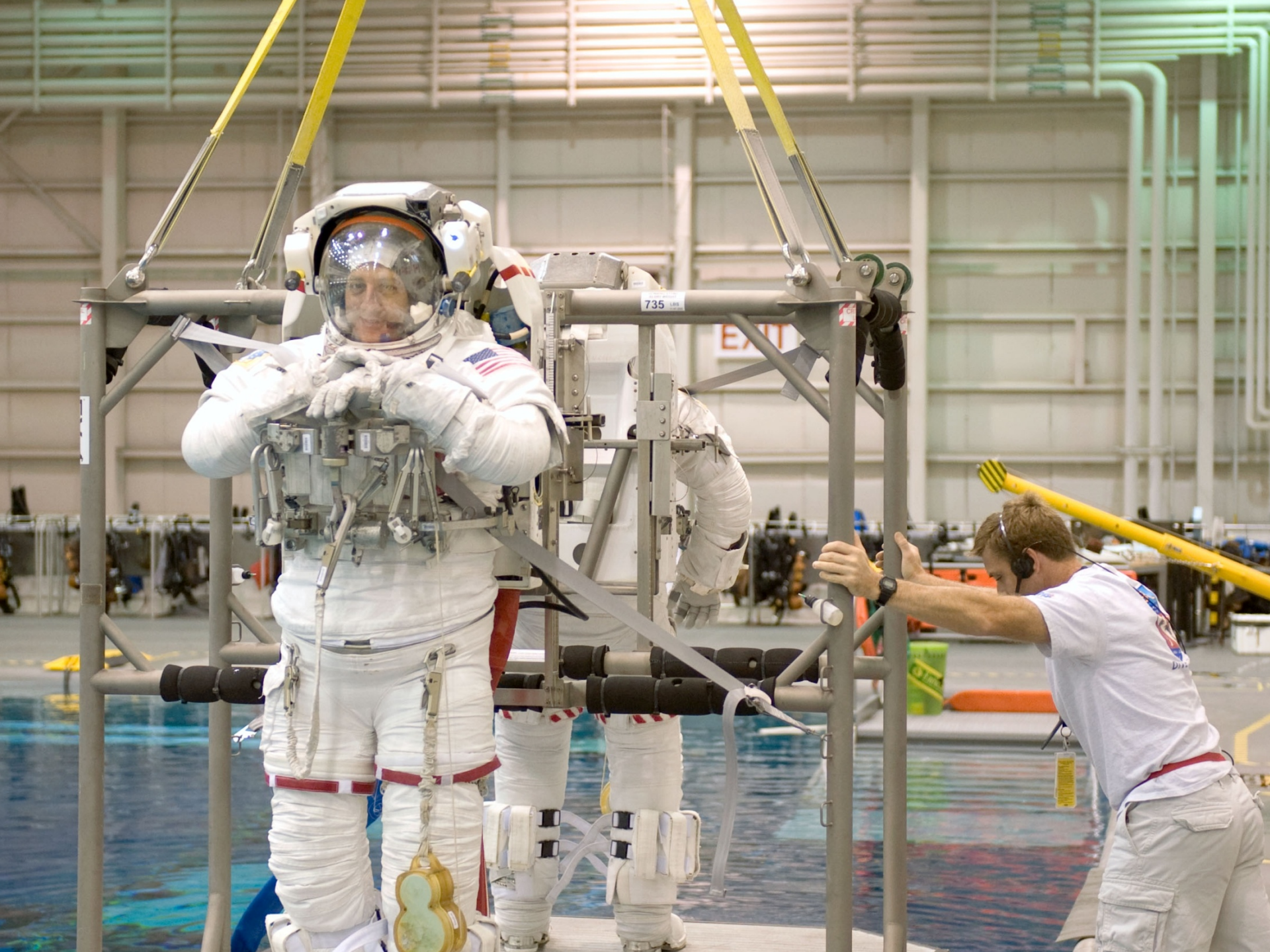
200
NAVY
VF-31
NK
CAG

NL
100
NAVY

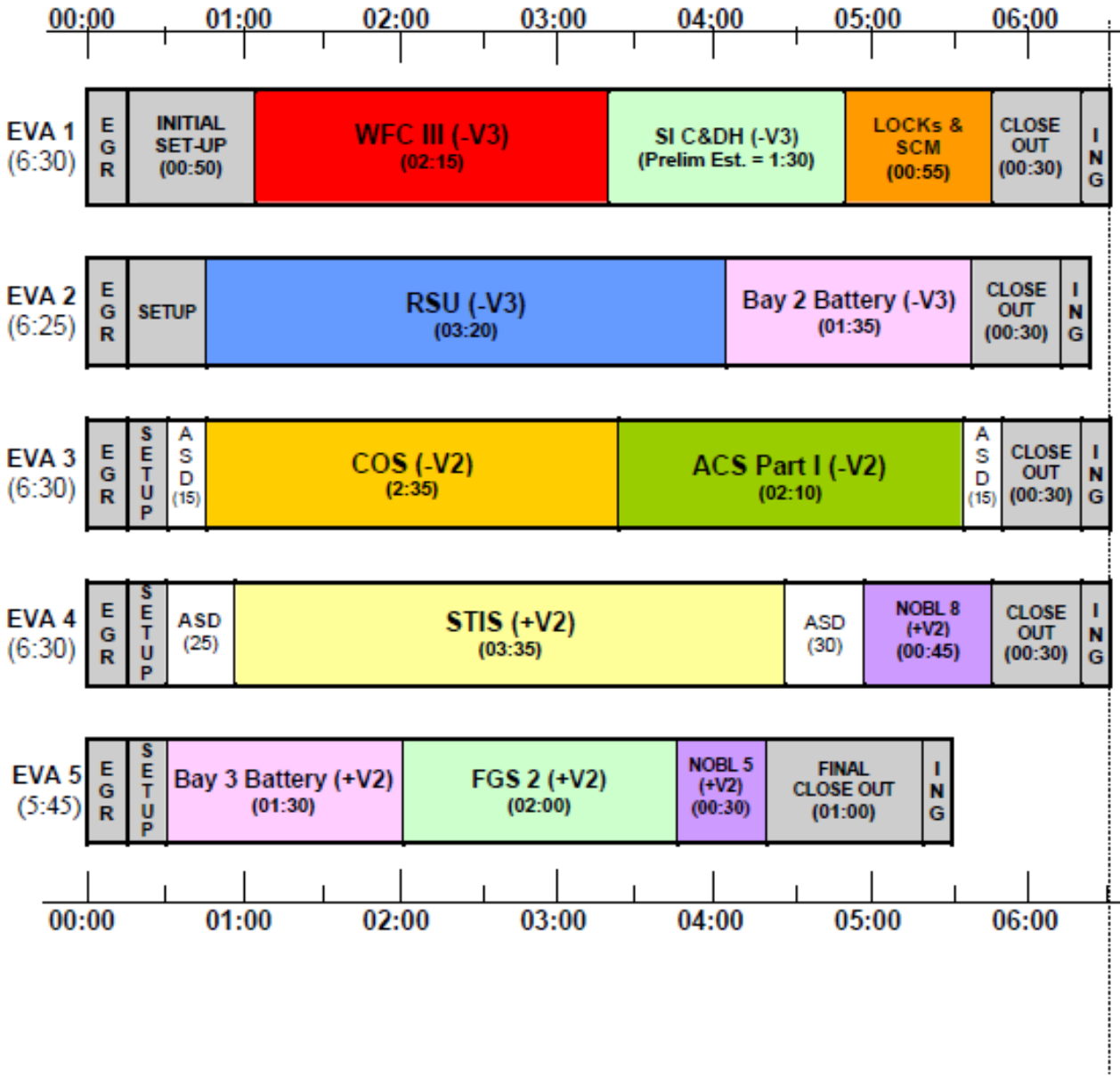
202
NAVY

06
NK
106
USS ABRAHAM LINCOLN
VF-31

NASA


735
EXIT

HST SM4 EVA Timelines (w/ ACS Part I only) - *DRAFT*



Notes:

1. At the end of ACS Part I, two cards have been removed.
2. Aft shroud door open/close for -V2 doors is shorter than the other doors due to LOCKs being installed.
3. ACS Part II is not shown in the timeline since FGS 2 is higher priority than one of the SI repairs. Therefore, ACS Part I is only listed as a prep on EVA 3 in case STIS repair is not successful. In that case, FGS would be deleted from EVA 5 and replaced with ACS Part II.
4. If ACS Part II is added into EVA 5, the total task duration for that block would be 2:15, it would be performed after the Bay 3 Battery, and the entire EVA would be executed with -V3 fwd.
5. An additional 55-60 min will be required to complete ACS during EVA 3, w/ LOCKs installed.
6. The time estimate for SI C&DH is very preliminary and will be impacted by new task requirements (qty of bolts required for installation, etc.)

JSC EVA/T. Gonzalez-Torres & C. Hansen

MODULAR LOCKER LAYOUT

(FOR REFERENCE ONLY. NOT A RELEASED DRAWING.

REFER TO CCCD DRAWING # SGD32104448.)

LW MAR
SJD32108929-334

CDR	Scott Altman
PLT	Gregory C. Johnson
M/S #1	Michael Good
M/S #2	Megan McArthur
M/S #3	John Grunsfeld
M/S #4	Michael Massimino
M/S #5	Andrew Feustel

LEADER:	STACI BROWN
DATE:	11/11/08
LAUNCH:	05/12/09 (Under Review)
FLIGHT	STS-125 HST SM-4
VEHICLE	OV-104
CREW:	7 CREW 11 + 0 + 2 DAY
ROMTS:	NO RCRS, SLEEPING BAGS
	ERGOMETER, GALLEY, RMS,
	TEPC

MIDDECK FORWARD

MIDDECK AFT

1622 -308 PANTRY FOOD | MF57A 1622 -308 PANTRY FOOD | 1622 -302 PANTRY FOOD

ML60B 0689 -301
ERCA LOWER ARM KITS (2)
EHIP CHARGER(2)
CSA CP

ML60E 0646 -307
PGSC'S (7)
AUTO (SHUTTLE UNIT)
(6 W/O ESAT UNIT)
STS1 OCA
STS2 WINDOWCOM
STS3 KFX/MAIL
STS4 WORLDMAP
STS5 RPOP
STS6 RPOP2
STS7 WLES
MLE CABIN RELAYS
PGT 15422 HARNESS
PGSC ACCESSORIES & BACK-UP EQUIPMENT

ML60M 0697 -302
ERCA / CCC
LEG SIZING RING
GIRA-ACTEX, MCV
MICROBIAL FILTER
SURVIVAL FOOD

VOL B 7499 -302
HYGIENE (2 MLE)
0.5 ENTRY GARMENTS
COMMUNITY P-HK
MESH BAGS

VOL 3B 7425 -326
QUICK DON MASKS (3)
CABIN AIR CLEANERS
SPOT FLIGHT (FLASH LIGHT)
D7 CAMCORDER, ASSY
D20/D30 MINI 12-36MM LENS

MF14E 2762 -307
MENU FOOD
MENU FOOD

MF28E 2765 -304
MENU FOOD
MENU FOOD

MF43E 6700 -308
FDF CUFF CKLIST 3160 -302
PILOT 0680 -301

MF57E 2760 -306
FRESH FOOD

MF71C/E 7250 -305
LiOH (9)
#32 - #40

6300 -346 MF14G 6250 -354
IFM TOOLS
2163-302
2161-305
2162-307

MF28G 1901 -305
PLT
CLOTH

MF43G 1902 -308
M/S #1
CLOTH

MF57G 1903 -305
M/S #2
CLOTH

MF71G 1904 -307
M/S #3
CLOTH

MF14H 0681 -303
760XD W/EXP
ICBC3D

MF28H 6231 -356
POST INSERTION ALTIMETER

MF43H 5946 -319
PGT'S (2)
PGT (NiMH) (6)
PGT/EHIP CBL (2)
PGT BATT JUMPER

MF57H 0688 -304
HST TOOL BAG
EHIP BATT PACK
ADJ. TETHERS
INSPECTION MIRROR

MF71H 0687 -302
PGT/BALL STACK/
HST LUBE APP(2)/
CONN. CLEANER KIT/
DEPRESS VALVE CAP(2)
DRIVE RTCHT W/TL

MF14K 5452 -327
IFM BRKOUT BOX
TURNBUCKLES
AIRBOTTLES (2)
WWD FLT/RMS KIT

MF28K 2764 -306
MENU FOOD
MENU FOOD

MF43K 1900 -308
CDR
CLOTH

MF57K 2761 -308
FRESH FOOD
MENU FOOD

MF71K 1905 -309
CREW SUPPORT

6066 -333 MF14M 8719 -308
COLOR PRINTER

MF28M 2763 -304
MENU FOOD
MENU FOOD

MF43M 2766 -305
MENU FOOD
MENU FOOD

MF57M 3005 -304
M/S #4
CLOTH

MF71M 3006 -304
M/S #5
CLOTH

MF14O 6697 -331
HH LIDAR W/ NIGHT SCOPE (CONFIG D)
SSV
BPSMU
CDM

MF28O 6243 -314
EMU GLOVES (4 PAIRS)
SUPA (11)

MF43O 8723 -302
STOW-N-GO (PHOTO/TV)

MF57O 6266 -322
CDAS/FLUOR LT.
LIGHT SHIELDS
D2X CAMERA/AUDIO
DOSIMETER/BTA

6015 -326 MF71O 8047 -304
DC VACUUM

MA9D/F 9882 -305
TRAD
SPARE DTV VIP(0.10)
MUX/TOOLS(0.50)
DTV DSR 2S(0.20)
ULTRASONIC LEAK PROBES

MA16D 0692 -304
BSA PRIME + B/U
BSA CABLES
MPC (2)
ACTIWATCH

MA16F 0682 -301
MINI POWER TOOL
EHIP PGT CBL (3)
PGT (NiMH)
SM TRASH BAG

0675 -302 MA9G 0679 -301
RCC REPAIR

MA16G 0680 -303
EMU BATTERY GAP (8)
OVERGLOVES (4)
MAK

MA9J 8737 -310
RCC COLD BAG (NOAX)

MA16J 0673 -301
RETRACTABLE TETHERS
WAIST TETHERS
TETHERS
D-RING EXTENDER

MA9L 0690 -302
GEL BRUSH KITS
SCRAPERS
SURVIVAL FOOD

MA16L 9014 -310
MED KITS
MAK

MA9N 7402 -331
SOFT STWG BAGS
FWBS(1) 4980-310
BSSTB (BRKTS) 8071-320
COOLIBOOSTERS 8070-302
CHEM LTS

MA16N 0672 -301
MINI WORK STATIONS
RH SWING ARMS
LH SWING ARMS
GIMBAL ASSY

A16 5527 -312
STILL CAMERA BAG
STILL CAMERA BAG #2
CAMCORDER BAG #2
FRED LEG BAR

A17 7424 -304
CAMCORDER BAG
DTV CAMERA BAG
HATCH TOOL
QUICK DON MASKS (4)

VOLUME D 7593 -306 (MF28D)
LiOH (20)
#59 - #78
CRACK REPAIR PALLET (2)
SURVIVAL FOOD
RCO CABLE

VOLUME F 5535 -327 (MF43M)
WET TRASH
LCVG (2)
FRED (5877-306)
TOWELS
GIRA FILTER
HOSE ASSY

VOLUME G 1800 -350 (MF43O)
CONT UCDs
WASTE MGMT
CONT EMU GLOVES

VOLUME H 8068 -310 (MA3J)
EVA ACCESS (INBD)
EVA ACCESS (OBD) 8065 -310

4575 -315 WMC 0914 -332 (MA16L)
TOWELS AND RESUPPLY ITEMS
WMC DISPENSER
1st DAY CLOTH
SUPA (1)
1641-330

EXT AIRLOCK
7404 -319 (STBD) 2 EMUs 7403 -321 (PORT)
EXT A/L FLOOR
LiOH (18) #41 - #58
CCC-SUIT LiOH
LiOH AND ORU BAGS
LEAK DETECT. DEADSET
SURVIVAL FOOD
0698-302

MD CEIL (PORT)
3RD EMU
5567-309

MD CEIL (STBD)
4TH EMU
7440-312

MD FLOOR 0275 -310 (PORT 2) — B
CRACK REPAIR
EVA WIPES / EWAS
LG TRASH BAG
CCC-SUIT LiOH (2)
COLOR PRINT TRAYS
RULER AND GAUGE
TETHER EXTENDER

MD FLOOR 0677 -305 (PORT 1) — A
STS HST EQUIPMENT
MULTIUSE END EFFECTOR
CCC-SUIT LiOH (8)
MPT BIT CADDY
FASTNER RETENTION
RIGID HEX SOCKET
CHEATER BAR / DIDB (5)
EVA TRANSFER INSERT
MPT HOLSTER W/COVER

MD FLOOR 0954 -304 (STBD 2) — D
CRACK REPAIR
TILE OVERLAY REPAIR
MIDDECK CONTINGENCY KIT & BLANKET
PLUG INSTL TOOLS
DIDB (8)
O2 ACTUATOR COVERS (2)
ECOK ZIPLOCK (GF&MS)
WAIST TETHERS

MD FLOOR 0676 -303 (STBD 1) — C
MFR HANDHOLD & TOOLS
REBA BATTERIES (4)
B/U REBA EXT (25')
LEG ASSY KIT (3) / TOOL BOARDS
SAFER HAND CONTROLLER
ORU TRANSFER BAG / DIDB (5)
BATTERY COVER CADDY
EHIP BATT W/THML POUCH
HIGH TORQUE CONNECTOR TOOL
COMM CARRIER ASSEMBLY

TOTAL LiOH CTBs
7 G-SUITS &
26 LiOH IN LiOH BOX & 1 ATCO
2 INSTALLED 7405-324
20 W/VOLUME D
8 IMA16D/F
18 EXT A/L BAG

C/D JSC (SJD33112183-304)
P/D JSC (SJD33112180-305)
C/D KSC (SJD33112183-304)
P/D KSC (SJD33112181-303)
CSIT KIT (SJD33112156-306)

WINDOW SHADE BAG: 5548-368
1. WINDOW SHADES
2. IFM CABLES & HOSES (4208-344)
3. FILM CHG BAG (4828-303)
4. PANEL COVERS
5. B/U OCA CABLE
6. ATCO/SOR CABLE
7. BANNER/FLAG

CTB	HLF	SGL
LAUNCH/ RETURN	0	5

AV BAY STOW
1. BAP1/SLOT3 APOLLO BAGS (7494-301)
2. BAP2/SLOT4 SURVIVAL FOOD (1127-307)

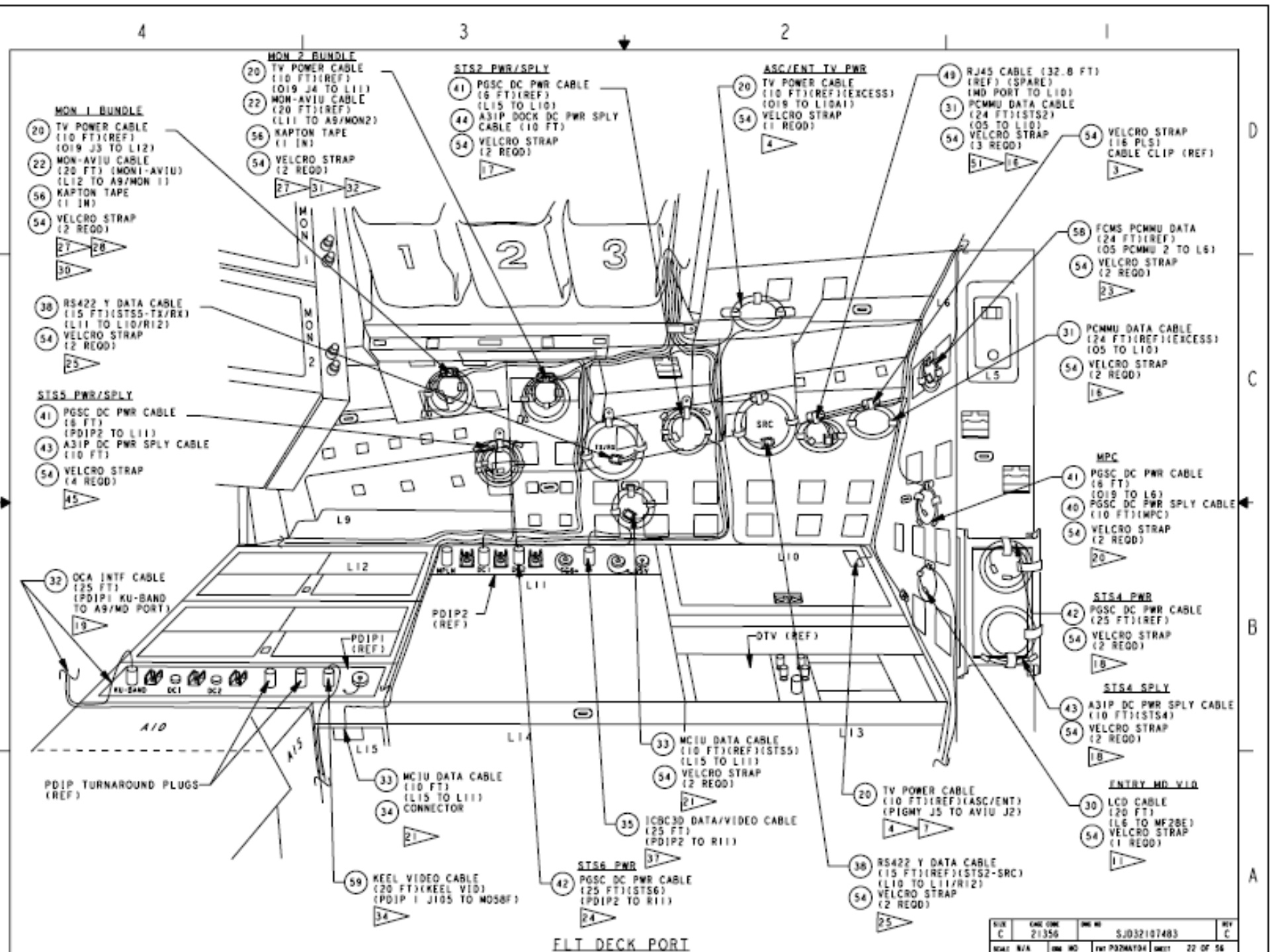
L10A1:	V10/AVIU/TAPES 6686-334
L10A2:	DTV MUX
L11A1:	PDIP 2
L11A2:	SSP3
L12A1:	SSP1
L12A2:	SSP2
L12A3:	PDIP 1
R12A1:	VPU
R12A2:	OBSS/OPP/SPASP

*	NOT APPROVED
◆	L-24 LATE LOAD
CTB	CARGO TRANSFER BAG
HCTB	HALF CARGO TRANSFER BAG

DWG NO. SGD32104448

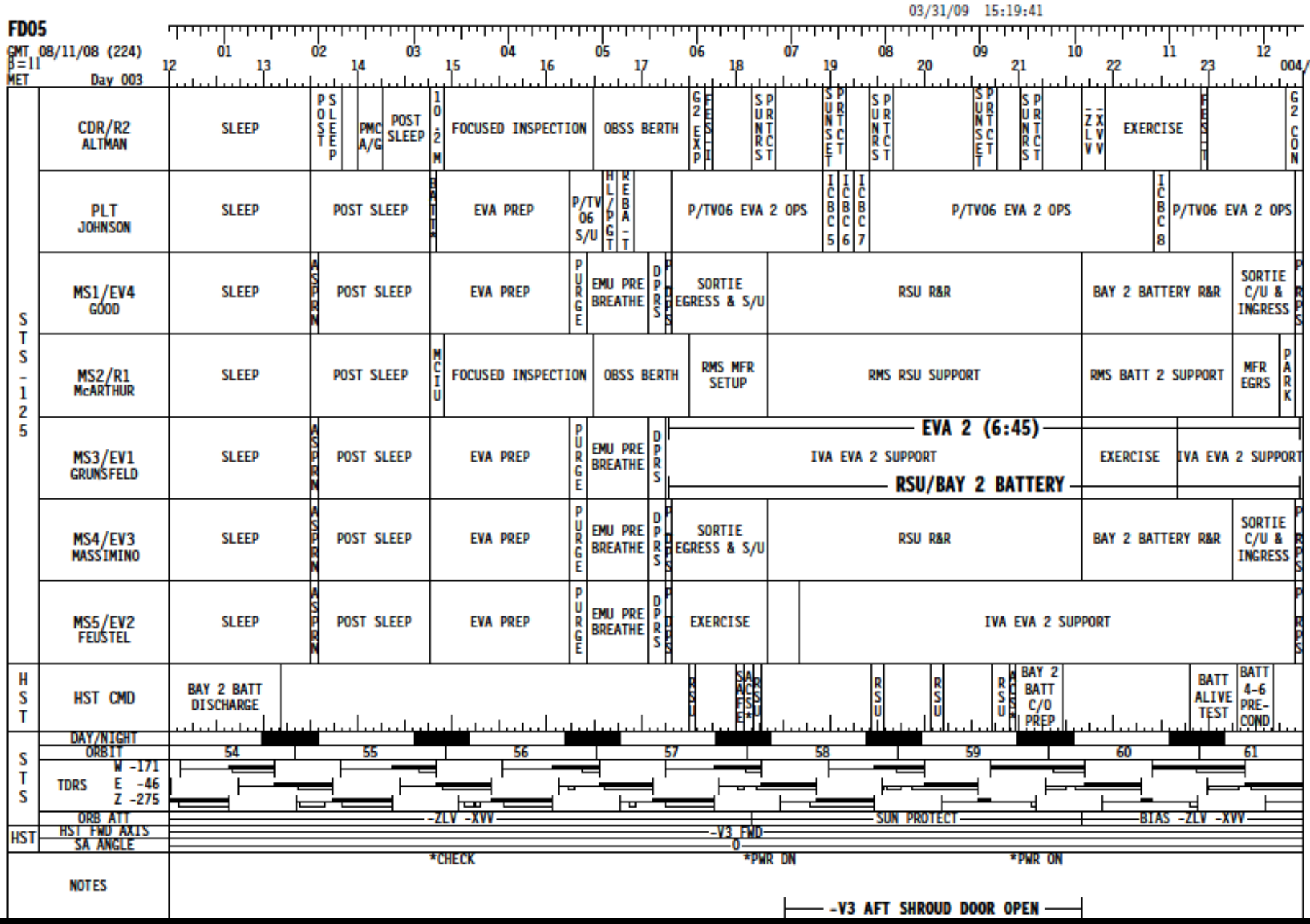
CCMM: DELLA WYLIN
(281) 483-9790
/USR/DWGS/LOCKER/STS125

NOTE: LOCKER LAYOUTS ARE FOR REFERENCE ONLY & ARE NOT RELEASED DWGS. FOR RELEASED DRAWING, PLEASE REFER TO THE CREW COMPARTMENT CONFIGURATION DRAWING FOR THIS FLIGHT (SGD32104448)



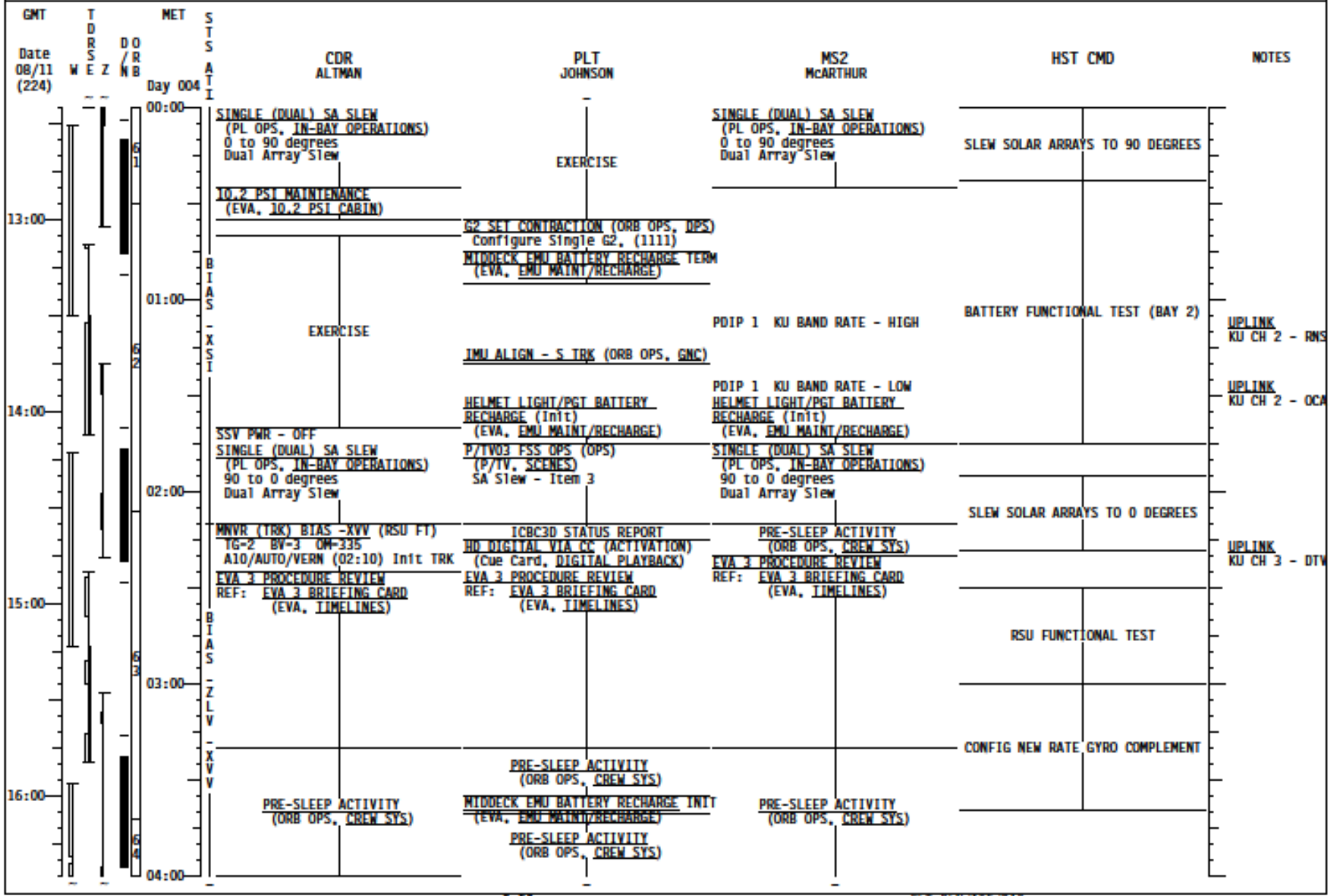
MON 1 BUNDLE
20 TV POWER CABLE (10 FT)(REF) (O19 J3 TO L12)
22 MON-AVIU CABLE (20 FT) (MON1-AVIU) (L12 TO A9/MON 1)
56 KAPTON TAPE (1 IN)
54 VELCRO STRAP (2 REQD)
27 28 30
38 RS422 Y DATA CABLE (15 FT)(STS5-TX/RX) (L11 TO L10/R12)
54 VELCRO STRAP (2 REQD)
25
STS5 PWR/SPLY
41 PGSC DC PWR CABLE (6 FT) (PDIP2 TO L11)
43 A31P DC PWR SPLY CABLE (10 FT)
54 VELCRO STRAP (4 REQD)
45
32 OCA INTF CABLE (25 FT) (PDIP1 KU-BAND TO A9/MD PORT)
19
MON 2 BUNDLE
20 TV POWER CABLE (10 FT)(REF) (O19 J4 TO L11)
22 MON-AVIU CABLE (20 FT)(REF) (L11 TO A9/MON2)
56 KAPTON TAPE (1 IN)
54 VELCRO STRAP (2 REQD)
27 31 32
STS2 PWR/SPLY
41 PGSC DC PWR CABLE (6 FT)(REF) (L15 TO L10)
44 A31P DOCK DC PWR SPLY CABLE (10 FT)
54 VELCRO STRAP (2 REQD)
17
ASC/ENT TV PWR
20 TV POWER CABLE (10 FT)(REF)(EXCESS) (O19 TO L10A1)
54 VELCRO STRAP (1 REQD)
4
49 RJ45 CABLE (32.8 FT) (REF) (SPARE) (MD PORT TO L10)
31 PCMMU DATA CABLE (24 FT)(STS2) (O5 TO L10)
54 VELCRO STRAP (3 REQD)
51 16
54 VELCRO STRAP (16 PLS) CABLE CLIP (REF)
3
58 FCMS PCMMU DATA (24 FT)(REF) (O5 PCMMU 2 TO L6)
54 VELCRO STRAP (2 REQD)
23
31 PCMMU DATA CABLE (24 FT)(REF)(EXCESS) (O5 TO L10)
54 VELCRO STRAP (2 REQD)
16
MPC
41 PGSC DC PWR CABLE (6 FT) (O19 TO L6)
40 PGSC DC PWR SPLY CABLE (10 FT)(MPC)
54 VELCRO STRAP (2 REQD)
20
STS4 PWR
42 PGSC DC PWR CABLE (25 FT)(REF)
54 VELCRO STRAP (2 REQD)
18
STS4 SPLY
43 A31P DC PWR SPLY CABLE (10 FT)(STS4)
54 VELCRO STRAP (2 REQD)
18
ENTRY MD VID
30 LCD CABLE (20 FT) (L6 TO MF28E)
54 VELCRO STRAP (1 REQD)
11
33 MCIU DATA CABLE (10 FT)(REF)(STS5) (L15 TO L11)
54 VELCRO STRAP (2 REQD)
21
20 TV POWER CABLE (10 FT)(REF)(ASC/ENT) (PIGMY J5 TO AVIU J2)
4 7
35 ICBC3D DATA/VIDEO CABLE (25 FT) (PDIP2 TO R11)
37
38 RS422 Y DATA CABLE (15 FT)(REF)(STS2-SRC) (L10 TO L11/R12)
54 VELCRO STRAP (2 REQD)
25
STS6 PWR
42 PGSC DC PWR CABLE (25 FT)(STS6) (PDIP2 TO R11)
24
59 KEEL VIDEO CABLE (20 FT)(KEEL VID) (PDIP 1 J105 TO MO58F)
34
33 MCIU DATA CABLE (10 FT) (L15 TO L11)
34 CONNECTOR
21
PDIP TURNAROUND PLUGS (REF)
PDIP1 (REF)
PDIP2 (REF)
DTV (REF)
MON 1
MON 2
1 2 3
SRC
L5
L6
L9
L10
L11
L12
L13
L14
L15
A10
A15
FLT DECK PORT
SIZE C
CAGE CODE 21356
DWG NO SJD32107483
REV C
SCALE N/A
DWG NO
PNT PD2MAY04
SHEET 22 OF 56

Atlantis
STS-106
ATLANTIS
STS-106
STS-106


FD05
03/31/09 15:19:41
GMT 08/11/8 (224)
MET Day 003
004/00
STS-125
CDR/R2 ALTMAN
PLT JOHNSON
MS1/EV4 GOOD
MS2/R1 McARTHUR
MS3/EV1 GRUNSFELD
MS4/EV3 MASSIMINO
MS5/EV2 FEUSTEL
SLEEP
POST SLEEP
PMC A/G
10.2M
FOCUSED INSPECTION
OBSS BERTH
EVA PREP
EMU PRE BREATHE
SORTIE EGRESS & S/U
RSU R&R
BAY 2 BATTERY R&R
SORTIE C/U & INGRESS
RMS MFR SETUP
RMS RSU SUPPORT
RMS BATT 2 SUPPORT
EXERCISE
IVA EVA 2 SUPPORT
EVA 2 (6:45)
RSU/BAY 2 BATTERY
HST
HST CMD
BAY 2 BATT DISCHARGE
BATT ALIVE TEST
BATT 4-6 PRE-COND
DAY/NIGHT
ORBIT
TDRS W -171 E -46 Z -275
ORB ATT
-ZLV -XVV
SUN PROTECT
BIAS -ZLV -XVV
HST FWD AXIS
-V3 FWD
SA ANGLE
0
*CHECK
*PWR DN
*PWR ON
NOTES
-V3 AFT SHROUD DOOR OPEN

STS-125 (FD05)

GMT Date 08/11 (224) | W | TDRSE | Z | D/N | ORB | MET Day 004 | STS ATI



CDR ALTMAN	PLT JOHNSON	MS2 McARTHUR	HST CMD	NOTES
SINGLE (DUAL) SA SLEW (PL OPS, IN-BAY OPERATIONS) 0 to 90 degrees Dual Array Slew	EXERCISE	SINGLE (DUAL) SA SLEW (PL OPS, IN-BAY OPERATIONS) 0 to 90 degrees Dual Array Slew	SLEW SOLAR ARRAYS TO 90 DEGREES	
10.2 PSI MAINTENANCE (EVA, 10.2 PSI CABIN)	G2 SET CONTRACTION (ORB OPS, DPS) Configure Single G2, (1111)			
	MIDDECK EMU BATTERY RECHARGE TERM (EVA, EMU MAINT/RECHARGE)			
EXERCISE	IMU ALIGN - S TRK (ORB OPS, GNC)	PDIP 1 KU BAND RATE - HIGH	BATTERY FUNCTIONAL TEST (BAY 2)	UPLINK KU CH 2 - RNS
	HELMET LIGHT/PGT BATTERY RECHARGE (Init) (EVA, EMU MAINT/RECHARGE)	PDIP 1 KU BAND RATE - LOW HELMET LIGHT/PGT BATTERY RECHARGE (Init) (EVA, EMU MAINT/RECHARGE)		UPLINK KU CH 2 - OCA
SSV PWR - OFF SINGLE (DUAL) SA SLEW (PL OPS, IN-BAY OPERATIONS) 90 to 0 degrees Dual Array Slew	P/TV03 FSS OPS (OPS) (P/TV, SCENES) SA Slew - Item 3	SINGLE (DUAL) SA SLEW (PL OPS, IN-BAY OPERATIONS) 90 to 0 degrees Dual Array Slew		
MNVR (TRK) BIAS -XVV (RSU FT) TG-2 BV-3 OM-335 A10/AUTO/VERN (02:10) Init TRK	ICBC3D STATUS REPORT HD DIGITAL VIA CC (ACTIVATION) (Cue Card, DIGITAL PLAYBACK)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	SLEW SOLAR ARRAYS TO 0 DEGREES	UPLINK KU CH 3 - DTV
EVA 3 PROCEDURE REVIEW REF: EVA 3 BRIEFING CARD (EVA, TIMELINES)	EVA 3 PROCEDURE REVIEW REF: EVA 3 BRIEFING CARD (EVA, TIMELINES)	EVA 3 PROCEDURE REVIEW REF: EVA 3 BRIEFING CARD (EVA, TIMELINES)		
			RSU FUNCTIONAL TEST	
			CONFIG NEW RATE GYRO COMPLEMENT	
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS) MIDDECK EMU BATTERY RECHARGE INIT (EVA, EMU MAINT/RECHARGE) PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		

BIAS -XSI

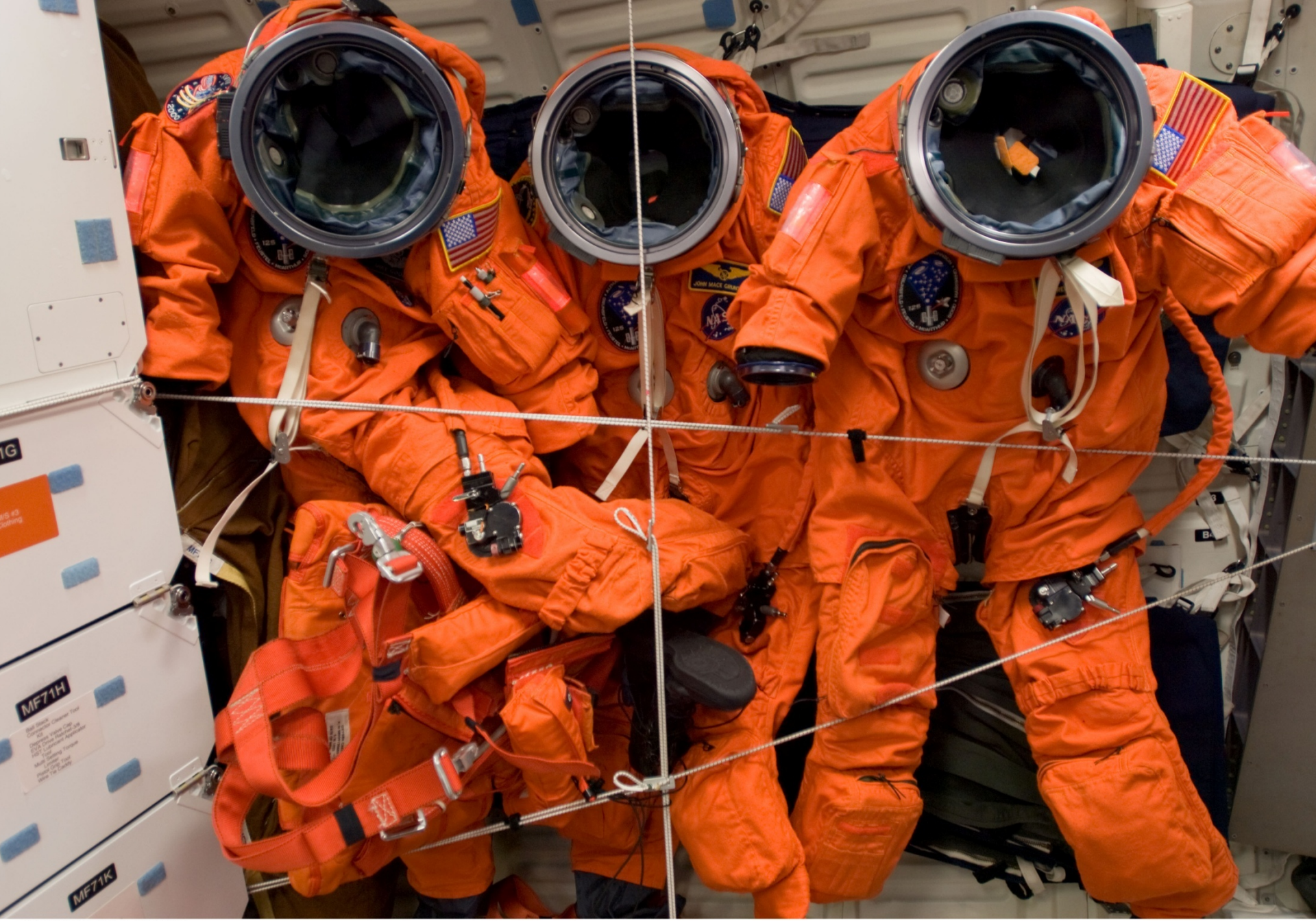
BIAS -ZLV -XVV

FLT PLN/125/BAS

S125E007388

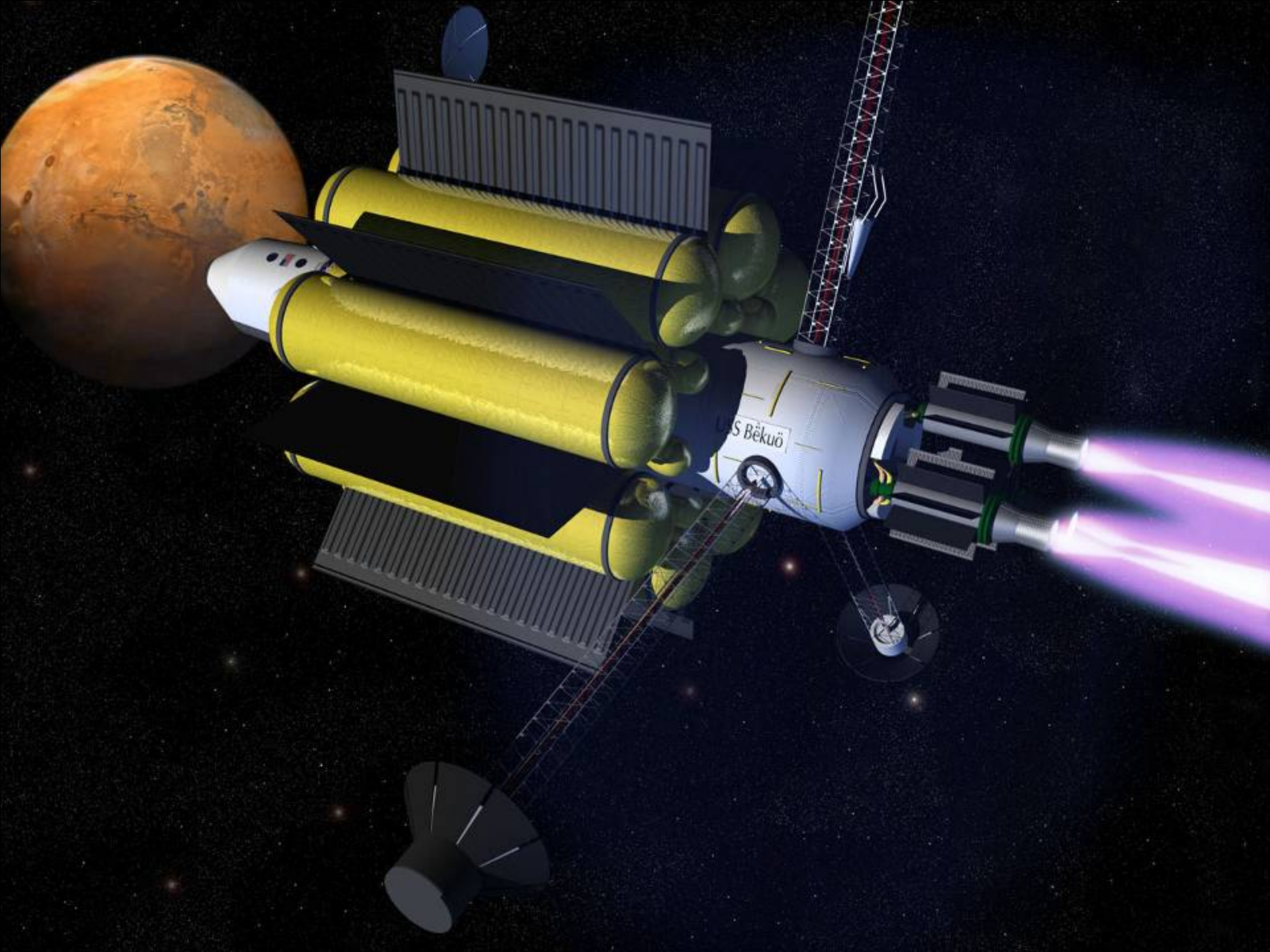
S125E007631

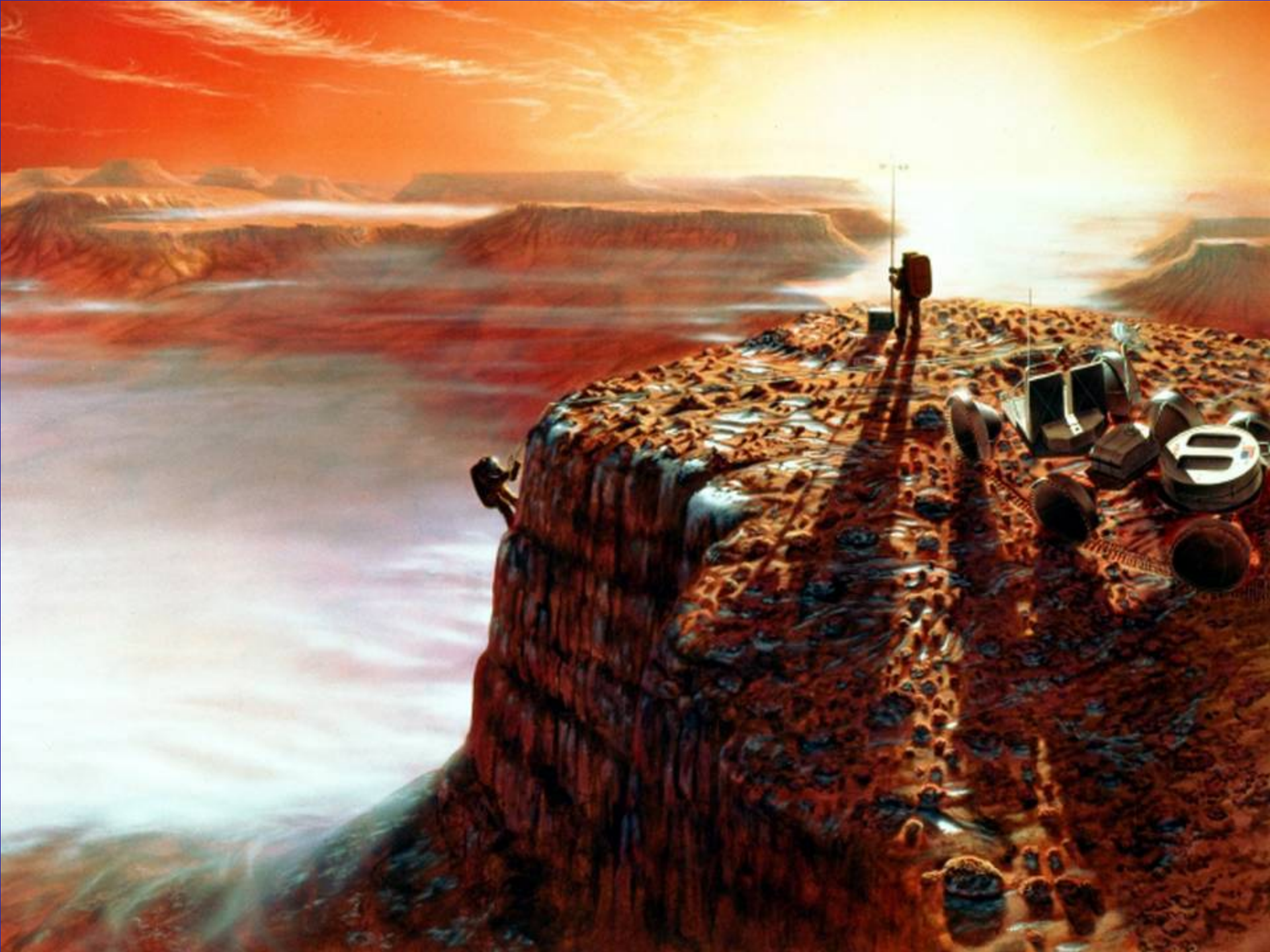
L5
LEFT COMM
POWER
ON
OFF
GPC STATUS
FAILED GPC
COAS
ON
Off
LOOP 1
LOOP 1
CAB
HX
OUT
AV BAY
ENTRY NO-GO CHECKLIST
CDR1
CDR2
ABORT MODE
AIR DATA



S125E014036

United States


S Bëkuö



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