STS-125

FD 10 Execute Package

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082A	20	FD10 IMAX Notes **(pdf)**
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084	---	FD09 MMT Summary **(pdf - Electronic Only)**
085A	42	FD10 Crew Choice D/L Opportunities **(pdf)**

Approved by FAO: *Jennifer Clevenger*

Last Updated: May 20 2009 7:25AM GMT
JEDI *(**J**oint **E**xecute package **D**evelopment and **I**ntegration), v2.04.0003*

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1. Post Sleep Cryo Config:
   For today's cryo config, O2 and H2 Tanks 1 and 5 will be active.

   A15 CRYO TK5 HTR O2 A - AUTO
   H2 A, B (two) - AUTO

   R1 O2, H2 MANF VLV TK1 (two) - OP (tb-OP)
   O2 TK3 HTR A - OFF
   H2 TK3 HTRS A, B (two) - OFF

   Note: O2 and H2 Tanks 4 and 5 will be depleting today.

2. O2 Flow Sensor Enable
   To enable the O2 flow sensors and set the appropriate upper limits, perform the following actions:

R13U	PARAMETER NAME	C/W CH	H/W C/W
	CAB O2 FLOW 1	014	ENA UPPER LIMIT = 4.00 V / 5.23 lb/hr
	CAB O2 FLOW 2	024	ENA UPPER LIMIT = 4.00 V / 5.23 lb/hr

   Report to MCC when complete and MCC will TMBU associated software limits. The N2 flow sensors have a known issue that causes flow spikes, so they will remain inhibited. The O2 flow sensors have not produced any erroneous flow spikes, so they will be enabled for cabin leak detection.

3. Waste Dump Details
   For the waste dump, MCC will TMBU limits in steps B and K. Waste nozzle open time will be ~35 minutes and will dump the waste tank to 5%.

4. REPLACE PAGES 2-20 THROUGH 2-21 and 3-104 THROUGH 3-113.

FD10 05/20/09 02:09:35 **REPLANNED**

GMT 05/20/09 (140)
β = −2
MET Day 008

12 07 13 08 14 09 15 10 16 11 17 12 18 13 19 14 20 15 21 16 22 17 23 18 009/00

STS-125

CDR ALTMAN	SLEEP	LOG; POST SLEEP; R5R*; POST SLEEP; FUT; MNVR; OFF DUTY (MNVR); HDTV CREW CONF; MEAL; ISS CALL; -ZLV -XVV; OFF DUTY; EXERCISE
PLT JOHNSON	SLEEP	LOG; POST SLEEP; PAO SETUP; G1*; VIDEO CABLE; OFF DUTY; HDTV CREW CONF; MEAL; ISS CALL; IMU OFF; DUTY PFC OCA; OFF DUTY; EXER-CISE
MS1/EV4/R2 GOOD	SLEEP	POST SLEEP; OFF DUTY; HDTV CREW CONF; MEAL; ISS CALL; OFF DUTY
MS2/R1 McARTHUR	SLEEP	LOG; POST SLEEP; FES-I; POST SLEEP; RMS PWRDN; OFF DUTY; FES-T; HDTV CREW CONF; MEAL; ISS CALL; OFF DUTY; PFC OCA
MS3/EV1 GRUNSFELD	SLEEP	POST SLEEP; OFF DUTY; PFC OCA; OFF DUTY; HDTV CREW CONF; MEAL; ISS CALL; OFF DUTY
MS4/EV3/R1 MASSIMINO	SLEEP	LOG; POST SLEEP; MCIU; RMS PWRDN; OFF DUTY; EXERCISE; OFF DUTY; HDTV CREW CONF; MEAL; ISS CALL; OFF DUTY
MS5/EV2 FEUSTEL	SLEEP	LOG; POST SLEEP; OCA#; POST SLEEP; OFF DUTY; PFC OCA; OFF DUTY; HDTV CREW CONF; MEAL; ISS CALL; OFF DUTY

STS

DAY/NIGHT

ORBIT: 130 131 132 133 134 135 136 137

TDRS W E Z

ORB ATT: -ZLV -XVV; BIAS -XLV -ZVV; -ZLV -XVV

GND: —MLA —MLA —DFR —MLA —DFR —MLA —DFR —MLA

NOTES: *RESELECT *BLK IMAGE DNLK #CH 2

GMT 05/20/09 (140)
β=0
MET Day 009

009/00 19 01 20 02 21 03 22 04 23 05 05/21 06 01 07 02 08 03 09 04 10 05 11 06 12

STS-125

CDR	ALTMAN	OFF DUTY; PFC OCA; OFF DUTY; PRE SLEEP; MNVR SLEEP; DUMP; PRE SLEEP; -ZLV -XVV; R5R+; PRE SLEEP; PMC A/G; PRE SLEEP; SLEEP
PLT	JOHNSON	EXER-CISE; OFF DUTY; IMAX; PRE SLEEP; HDTV; PRE SLEEP*; SLEEP
MS1/EV4/R2	GOOD	OFF DUTY; PFC OCA; OFF DUTY; EXERCISE; COMM 1; PRE SLEEP; SLEEP
MS2/R1	McARTHUR	OFF DUTY; EXERCISE; OFF DUTY; PRE SLEEP; WASTE SLEEP; WASTE INSITE; PRE SLEEP; WASTE TEMP; PDIP^; PRE SLEEP*; SLEEP
MS3/EV1	GRUNSFELD	OFF DUTY; EXERCISE; PRE SLEEP; SLEEP
MS4/EV3/R1	MASSIMINO	OFF DUTY; PFC OCA; PRE SLEEP; SLEEP
MS5/EV2	FEUSTEL	EXERCISE; OFF DUTY; PRE SLEEP; OCA#; PRE SLEEP; SLEEP

STS

DAY/NIGHT	
ORBIT	138 139 140 141 142 143 144 145
TDRS W	
TDRS E	
TDRS Z	
ORB ATT	-ZLV -XVV; -YLV -ZVV; -ZLV -XVV
GND	—DFR —MLA; —DFR

NOTES: +DESELECT; ^OFF; #PL MAX; *HUM SEP

STS-125 (FD10)

REPLANNED

GMT Date 05/20 (140) | W | TDRS E | Z | DO/N | ORB | MET Day 008 | STS ATI

CDR ALTMAN | PLT JOHNSON | MS2 McARTHUR | NOTES

FD10 EZ ACTIVITIES:
TEPC (ORB OPS, CREW SYSTEMS)
Check Status
OCAC Filter Inspection
Hard reboot all PGSCs not shut down overnight, except:
STS1 (OCA ROUTER) & STS7 (WLES)

12:00 — 13:00 — 14:00 — 15:00 — 16:00

07:00 — 08:00 — 09:00 — 10:00

130 — 131 — 132

ZLV — XVV

SLEEP — SLEEP — SLEEP

SLEEP LOGBOOK (SDBI 1634) — SLEEP LOGBOOK (SDBI 1634) — SLEEP LOGBOOK (SDBI 1634)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS) — POST-SLEEP ACTIVITY (ORB OPS, CREW SYS) — POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

A GNC 23 RCS
CRT RCS R - ITEM 3 EXEC (*)
JET DES R5R - ITEM 37 EXEC (no*)

R5R RESELECT A
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

STS-125 (FD10)

REPLANNED

GMT Date 05/20 (140) | W | T D R S E | Z | D / N | O R B | MET Day 008 | STS ATT

MS1 GOOD | MS3 GRUNSFELD | MS4 MASSIMINO | MS5 FEUSTEL | NOTES

07:00 — 08:00 — 09:00 — 10:00

12:00 — 13:00 — 14:00 — 15:00 — 16:00

130 — 131 — 132

-ZLV -XVV

SLEEP

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

SLEEP LOGBOOK (SDBI 1634)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

L10 MUX/VTR/CC PWR - ON (LED ON)
RECONFIGURE OCA D/L RATE (Ch. 2)
(ORB OPS, PGSC)
Part D then A, omit Step 4
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

STS-125 (FD10)

REPLANNED

GMT Date 05/20 (140) | W | TDRS E | Z | DO/N | ORB | MET Day 008 | STS ATT

CDR ALTMAN

16:00 — POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

FUTURE LOADED MNVR (Comm)
TG=2 BV=2 OM=165
A1/AUTO/VERN (8/20:10) Init TRK

17:00

OFF DUTY

18:00

19:00

20:00

PLT JOHNSON

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

CANON G1 (PAO Event Setup)
(P/TV, REF PROC)
HD CC DNLK

G1 BLACK REF IMAGE DOWNLINK
Ref. MSG 078

ENTRY VIDEO SETUP CABLE REPLACEMENT
Ref. MSG 079

OFF DUTY

MS2 McARTHUR

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

SUPPLY WATER DUMP USING FES
(ORB OPS, ECLS)
Step 1 only, using FES PRI B

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

RMS PWRDN (PDRS, RMS PWRDN)
PORT RMS HTR A - OFF
B - AUTO

OFF DUTY

NOTES

UPLINK
KU CH 3 -DTV

ORB: 133, 134, 135

STS ATT: -ZLV -XVV

STS-125 (FD10)

REPLANNED

GMT Date 05/20 (140) | W E Z | TDRS | DO/RN | ORB | MET Day 008 | STS ATI

MS1 GOOD | MS3 GRUNSFELD | MS4 MASSIMINO | MS5 FEUSTEL | NOTES

16:00 — 17:00 — 18:00 — 19:00 — 20:00

11:00 — 12:00 — 13:00 — 14:00

133 — 134 — 135

-ZLV -XVV

MS1 GOOD

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

OFF DUTY

MS3 GRUNSFELD

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

OFF DUTY

L9 PAYLOAD STATION AUDIO A/G (two) - OFF
NETMEETING VIDEO CONFERENCING (ORB OPS, PGSC)
PFC using A/G 2 for comm, TDRE (19:47-20:15)

MS4 MASSIMINO

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

L17 Check MCIU filter screen
RMS PWRDN
(PDRS, RMS PWRDN)
PORT RMS HTR A - OFF
B - AUTO

OFF DUTY

EXERCISE

OFF DUTY

MS5 FEUSTEL

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

OFF DUTY

L9 PAYLOAD STATION AUDIO A/G (two) - OFF
NETMEETING VIDEO CONFERENCING (ORB OPS, PGSC)
PFC using A/G 2 for comm, TDRW (19:13-19:40)

OFF DUTY

NOTES

OCA-PFC

STS-125 (FD10)

REPLANNED

GMT Date 05/20 (140) | W E Z | D/N O R B | MET Day 008 | STS ATI

MET	CDR ALTMAN	PLT JOHNSON	MS2 McARTHUR	NOTES
20:00	< FUT MNVR INIT (Comm) OFF DUTY	OFF DUTY	OFF DUTY	
			SUPPLY WATER DUMP USING FES (ORB OPS, ECLS) Step 2 only, FES PRI B req'd	UPLINK KU CH 3 - DTV
	CREW CONFERENCE KU TDRW (20:24-21:15) Ref. MSG 080	CREW CONFERENCE KU TDRW (20:24-21:15) Ref. MSG 080	CREW CONFERENCE KU TDRW (20:24-21:15) Ref. MSG 080	
21:00				UPLINK KU CH 3 - TV
	MEAL	MEAL	MEAL	
22:00	SHIP-TO-SHIP CALL Ref. MSG 081 KU TDRW (22:03-22:30) ISS S-BD (22:09-22:30)	SHIP-TO-SHIP CALL Ref. MSG 081 KU TDRW (22:03-22:30) ISS S-BD (22:09-22:30)	SHIP-TO-SHIP CALL Ref. MSG 081 KU TDRW (22:03-22:30) ISS S-BD (22:09-22:30)	UPLINK KU CH 3 - DTV
	MNVR (TRK) -ZLV -XVV TG=2 BV=3 OM=0 A1/AUTO/VERN (Call cmplt) Init TRK	IMU STAR OF OPPTY ALIGN (ORB OPS, GNC)		UPLINK KU CH 3 - TV
		OFF DUTY		
	OFF DUTY	L9 PAYLOAD STATION AUDIO A/G (two) - OFF NETMEETING VIDEO CONFERENCING (ORB OPS, PGSC) PFC using A/G 2 for comm, TDRW (22:37-22:58)		OCA-PFC
23:00			OFF DUTY	
		OFF DUTY		
	EXERCISE			
		EXERCISE	L9 PAYLOAD STATION AUDIO A/G (two) - OFF NETMEETING VIDEO CONFERENCING (ORB OPS, PGSC) PFC using A/G 2 for comm, TDRW (23:43-00:04)	OCA-PFC
00:00				

Bias: -XLV -ZVV; -ZLV -XVV

Orbits: 135, 136, 137

STS-125 (FD10)

REPLANNED

GMT Date 05/20 (140) | W | TDRS E | Z | D/N | ORB | MET Day 008 | STS ATI

MS1 GOOD | MS3 GRUNSFELD | MS4 MASSIMINO | MS5 FEUSTEL | NOTES

L9 PAYLOAD STATION AUDIO A/G (two) - OFF
NETMEETING VIDEO CONFERENCING (ORB OPS, PGSC)
PFC using A/G 2 for comm, TDRE (19:47-20:15)

OCA-PFC

	MS1	MS3	MS4	MS5
	OFF DUTY	OFF DUTY	OFF DUTY	OFF DUTY
	CREW CONFERENCE KU TDRW (20:24-21:15) Ref. MSG 080	CREW CONFERENCE KU TDRW (20:24-21:15) Ref. MSG 080	CREW CONFERENCE KU TDRW (20:24-21:15) Ref. MSG 080	CREW CONFERENCE KU TDRW (20:24-21:15) Ref. MSG 080
	MEAL	MEAL	MEAL	MEAL
	SHIP-TO-SHIP CALL Ref. MSG 081 KU TDRW (22:03-22:30) ISS S-BD (22:09-22:30)	SHIP-TO-SHIP CALL Ref. MSG 081 KU TDRW (22:03-22:30) ISS S-BD (22:09-22:30)	SHIP-TO-SHIP CALL Ref. MSG 081 KU TDRW (22:03-22:30) ISS S-BD (22:09-22:30)	SHIP-TO-SHIP CALL Ref. MSG 081 KU TDRW (22:03-22:30) ISS S-BD (22:09-22:30)
	OFF DUTY	OFF DUTY	OFF DUTY	OFF DUTY

GMT: 15:00, 16:00, 17:00, 18:00
MET: 20:00, 21:00, 22:00, 23:00, 00:00
ORB: 135, 136, 137
STS ATI: BIAS-XLV-ZVV, -ZLV-XVV

STS-125 (FD10)

REPLANNED

GMT Date 05/20 (140) | W | TDRS E | Z | DON/B | MET Day 009 | STS ATT

CDR ALTMAN | PLT JOHNSON | MS2 McARTHUR | NOTES

00:00 — 01:00 — 02:00 — 03:00 — 04:00

19:00 — 20:00 — 21:00 — 22:00

138 — 139 — 140

-ZLV -XVV — -YLV -ZVV — -ZLV -XVV

CDR (ALTMAN)

OFF DUTY

L9 PAYLOAD STATION AUDIO A/G (two) - OFF
NETMEETING VIDEO CONFERENCING (ORB OPS, PGSC)
PFC using A/G 2 for comm, TDRW (01:24-01:48)

OFF DUTY

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

MNVR (TRK) BIAS -YLV -ZVV (Waste Dump)
TG=2 BV=5 P=90 Y=300 OM=270
A1/AUTO/VERN Init TRK

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

MNVR (TRK) -ZLV -XVV
TG=2 BV=3 OM=0
A1/AUTO/VERN (Dump cmplt) Init TRK

R5R DESELECT B

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

PLT (JOHNSON)

EXERCISE

B GNC 23 RCS

CRT RCS R - ITEM 3 EXEC (*)
JET DES R5R - ITEM 37 EXEC (*)

NOTE
Expect DAP RECONFIG message.
DAP will mode to FREE.

C3 DAP: AUTO

OFF DUTY

IMAX STATUS REPORT

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

HD DIGITAL VIA CC (ACTIVATION)
(Cue Card, DIGITAL PLAYBACK) Ref. MSG 085

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
√HUM SEP for H2O accumulation.

MS2 (McARTHUR)

OFF DUTY

EXERCISE

OFF DUTY

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SUPPLY/WASTE WATER DUMP
(ORB OPS, ECLS) Initiate Waste Dump
Ref. MSG 075, Item 3

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SUPPLY/WASTE WATER DUMP
(ORB OPS, ECLS)
Terminate Waste Dump

PDIP 1 KU BAND RATE - OFF

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
√HUM SEP for H2O accumulation.

NOTES

OCA-PFC

UPDATE
H2O WASTE
DUMP QTY

UPLINK
KU CH 3 -DTV

UPLINK
KU CH 2 - RNS

STS-125 (FD10)

REPLANNED

GMT Date 05/20 (140) | W | TDRS E | Z | DON/B | MET Day 009 | STS ATI

MS1 GOOD | MS3 GRUNSFELD | MS4 MASSIMINO | MS5 FEUSTEL | NOTES

00:00 — 01:00 — 02:00 — 03:00 — 04:00

19:00 — 20:00 — 21:00 — 22:00

138 — 139 — 140

-ZLV -XVV -YLV -ZVV -ZLV -XVV

MS1 GOOD

OFF DUTY

L9 PAYLOAD STATION AUDIO A/G (two) - OFF
NETMEETING VIDEO CONFERENCING (ORB OPS, PGSC)
PFC using A/G 2 for comm, TDRW (00:10-00:40)

OFF DUTY

EXERCISE

COMM STRING 1 C/O (PART A)
(ORB OPS, COMM/INST)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

MS3 GRUNSFELD

OFF DUTY

EXERCISE

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

MS4 MASSIMINO

OFF DUTY

L9 PAYLOAD STATION AUDIO A/G (two) - OFF
NETMEETING VIDEO CONFERENCING (ORB OPS, PGSC)
PFC using A/G 2 for comm, TDRW (01:52-02:20)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

MS5 FEUSTEL

EXERCISE

OFF DUTY

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

C After Crew Choice D/L complete:
L10 √MUX/VTR/CC PWR - ON (LED ON)
RECONFIGURE OCA D/L RATE (PL Max)
(ORB OPS, PGSC) Part C, omit Step 4
L10 MUX/VTR/CC PWR - OFF (LED OFF)

RECONFIGURE OCA D/L RATE C
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

NOTES

OCA-PFC

OCA-PFC

STS-125 (FD10)

REPLANNED

GMT Date 05/20 (140) | W E Z | D/N | ORB | MET Day 009 | STS ATI

CDR ALTMAN | PLT JOHNSON | MS2 McARTHUR | NOTES

04:00 — 05:00 — 06:00 — 07:00 — 08:00

23:00 — 00:00 — 01:00 — 02:00

140 — 141 — 142 — 143

-ZLV -XVV

PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
06 √UHF MODE - OFF
L9 PAYLOAD STATION AUDIO A/G (two) - OFF
PRIVATE MEDICAL CONFERENCE
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
√HUM SEP for H2O accumulation.

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
√HUM SEP for H2O accumulation.

Crew Wake: 9/13:00

SLEEP | SLEEP | SLEEP

STS-125 (FD10)

REPLANNED

GMT Date 05/20 (140) | W E Z | T D R S | D/N | O R B | MET Day 009 | STS ATI

MS1 GOOD | MS3 GRUNSFELD | MS4 MASSIMINO | MS5 FEUSTEL | NOTES

04:00 — PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

05:00 — **Crew Wake: 9/13:00**

06:00 — SLEEP

07:00 — SLEEP

08:00 — SLEEP

23:00 — 00:00 — 01:00 — 02:00

140 — 141 — 142 — 143

-ZLV -XVV

MSG 076 - FD10 MISSION SUMMARY

Good Morning Atlantis!!!

Happiness is an empty payload bay!

Right now, you should be very happy!

Have a great day!!!

HST Program Words:
Hubble is again on its way to explore the cosmos thanks to the wonderful crew of Atlantis and all of the dedicated men and women of the Space Shuttle Program. It is renewed and better than ever. We did it!

YOUR CURRENT ORBIT IS: 305 X 160 NM

NOTAMS:

EDW	LAKEBED RUNWAYS RED - WET.
NOR	LAKEBED RUNWAYS GREEN.
MRN	TACAN AOG 23X OUT OF SERVICE.
GUA	RUNWAY 06R/24L CLOSED.
GDV	RUNWAY 03R/21L CLOSED.
KIN	UNUSABLE.
GSA	UNUSABLE.
AMB	UNUSABLE.
VBG	RUNWAY 30 THRESHOLD LIGHTS OUT OF SERVICE.
EIP	NOT USABLE. NO AGREEMENT.
BEN	NOT RECOMMENDED/NOT SUPPORTED.
BYD	POLITICALLY NOT RECOMMENDED. RUNWAY 32 THREHOLD DISP. 700M
AAT	POLITICALLY NOT RECOMMENDED.
LRB	POLITICALLY NOT RECOMMENDED. TACAN CH 85 OUT.

NEXT 2 PLS OPPORTUNITIES:

EDW22	ORB 136 –	08/21:54	FEW150	7	230/11P19
EDW22	ORB 151 –	09/21:05	SCT150	7	230/08P14

OMS TANK FAIL CAPABILITY:

LOMS FAILS: NO
ROMS FAILS: NO

LEAKING OMS PRPLT BURN:

L OMS LEAK: ALWAYS BURN RETROGRADE
R OMS LEAK: ALWAYS BURN RETROGRADE

END OF PAGE 1 OF 2, MSG 076

OMS QUANTITIES(%):

L OMS OX = 29.8 R OMS OX = 29.7
FU = 30.1 FU = 29.9

DELTA V AVAILABLE:

OMS	284 FPS
ARCS (TOTAL ABOVE QTY1)	25 FPS
TOTAL IN THE AFT	309 FPS
ARCS (TOTAL ABOVE QTY2)	55 FPS
FRCS (ABOVE QTY 1)	0 FPS
AFT QTY 1	66%
AFT QTY 2	28%

SYSTEM	FAILURE	IMPACT	WORK AROUND
PLBD	Two pieces of debris were found on the port aft bulkhead pressure seal.	None. The debris will not impede PLBD closure or latching.	None.

END OF PAGE 2 OF 2, MSG 076

Cabin Stow

Good morning STS-125 crew. We would like to know the final return stowage location for a few items prior to landing. Some of these items launched in Volume F (wet trash) or the payload bay.

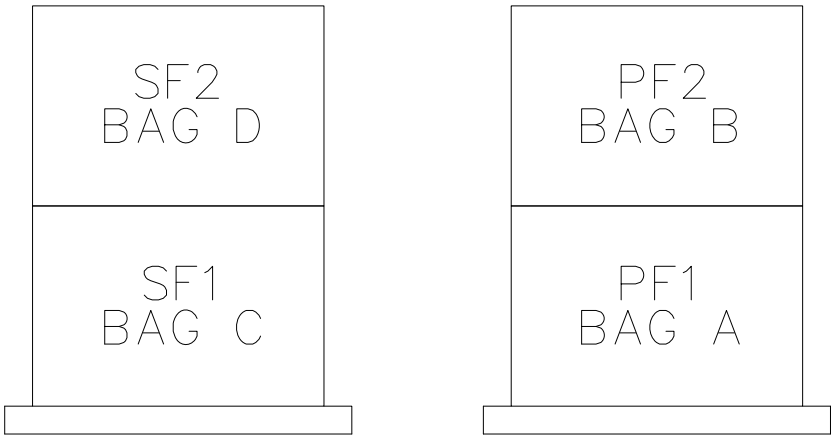
1) EHIP Charger s/n 14 which had issues
2) Items that launched in volume F (wet trash):
   a. LCVGs (qty 2, s/n 3163 & 3205)
   b. FRED
   c. GIRA filter Hose Assy
3) Items that launched in the payload bay:
   a. LOCK
   b. Bay 8 MLI Recovery Bags- (Two potential stowage options please report your preferred option)

      Option 1- Stow 1 or 2 Bay 8 MLI Recovery Bags behind the retention net. Weight constraints do not allow for both 10 days shirts and MLI Recovery bags behind retention net.

      Option 2- Stow both Bay 8 MLI Recovery Bags in the airlock. All 10 day shirts may be stowed here in addition to the Bay 8 MLI Recovery Bags if needed. Reference FS 6-2, AIRLOCK CONFIGURATION, items 2-4 (Next page).

5-MLE BAG return configuration

The 5-MLE Bags will return in the same configuration launched. Reference picture decals on bag for assistance in repacking, but please don't hesitate to call during CABIN STOW if you have questions.



DITCH VIEW LOOKING AFT

Due to mass constraints of the 5-MLE bags please do not add additional items.
Reminder: Stow the Actiwatches and logbooks back in MA16D for return.

ENTRY STOWAGE

MISSION SPECIFIC ITEMS/NOTES

1. Disassemble FRED and stow in its single tray. Choose Menu Food locker, consolidate any leftover food items and remove one tray. Place FRED tray in Menu Food locker. Move food tray to Middeck Retention Net.
2. Use Return Stowage drawings on reverse side of contents decal to pack Bag A.
3. Stow two LCVG's in crew clothing lockers.
4. Stow GIRA (ACTEX, Filter Hose) in Fresh Food locker.
5. Laundry not stowed in Volume B should be placed in a Jettison Stowage bag and moved to the Airlock.
6. Stow Crew Shirts from first 9 flight days in Crew Shirt Bag.
7. Fold MLI bags into spare Jettison Stowage Bag.

AIRLOCK CONFIGURATION

1. Stow laundry and soft goods in airlock using mesh bag or jettison stowage bag
2. Tie bags to standoffs on handrails or EVA tether attach point
3. Avoid using standoffs on handrail just inside inner hatch (bags may snag on opening mechanism during ground retrieval)
4. Attempt to tape bags to floor or wall to prevent settling on EMUs or hatches

RETENTION NET CONFIGURATION

1. Configure sleeping bags in two flat stacks (4 top, 3 bottom)
2. Verify retention net in forward position
3. Return to Houston bag behind retention net should contain only:
   Ascent FDF and Digital Video Tapes
4. Crew Shirts bag should be stowed on the menu food tray restrained on the deck using the Seat Restraint or Grey Tape
   Protect tray from breakage upon return if possible

Restrain RTH Bag to floor using Gray Tape as necessary

ITEMS/NOTES

1. Stow the following items:
   Water Samples (if any) in Fresh Food Locker (MF57E)

2. Stow used disposable batteries in double-wrap Ziplock Bags away from heat source in Fresh Food Locker (MF57E)

ENTRY STOW

MSG 078 - PAO EVENT G1 BLANK IMAGE AND COLOR BARS

Please perform the following steps with the G1 camcorder once the HD downlink signal is established prior to the PAO event:

PWR dial - Av
Aperture - close
√Av CLOSE displayed on top left of LCD
AGC - OFF
√GAIN sw - L
√+/-0dB displayed on LCD
OUTPUT - BARS

√MCC
On MCC go:
OUTPUT - CAM

√MCC
On MCC go:
PWR dial - A

Rationale: Prior to the HD PAO events, Johnson TV requests color bars and a blank image be sent down prior to the event to check the camera characteristics and process pixel corrections.

END OF PAGE 1 OF 1, MSG 078

MSG 079 - ENTRY VIDEO SETUP CABLE REPLACEMENT

Due to the failure of ascent video recording on the Sony V10 VTR, a cable with a suspect connector will be replaced for Entry Video Setup. This will not affect entry video recording, because the DTV Sony DSR25 VTR will be recording and not the V10. The V10 will be used as a SA view for MS1 for in-cabin and HUD minicam video.

1. Obtain the AVIU-CC Video cable (15ft) (SED39122269-301) that is a part of the VPU repeater string stowed in a ziploc bag labeled "Video Repeater Cables" in the DTV bag in locker A17.
2. Near L7, locate the BNC straight adapter that is a part of the pre-routed ASC/ENT FD V10 video cable string. Disconnect the BNC Video cable (SED33105779-301) that runs to the FD V10.

3. Connect the AVIU-CC Video cable (15ft) (SED39122269-301) to the BNC straight adapter. Tape the newly installed cable in the same manner as the original cable so as not to impede the escape route and connect it to a V10.
4. Connect the other end of this cable string to the DTV VTR MON connector on L10A2. It should still be routed into the L10A1 bucket from the ascent configuration.
5. Route a camera video signal to DTV.
6. Install a battery on the V10, turn it on and verify good video from DTV.
7. Report results to MCC.

END OF PAGE 1 OF 1, MSG 079

Camera Notes

The comparison test material downlinked this afternoon looked very good! Thank you for doing that, it was very helpful.

We reviewed the footage several times on the high-res monitor in Bldg. 8 and concluded that the 24F camera is working fine. If you are not supremely confident of focus in manual mode, you should shoot in AUTO FOCUS mode, but be aware that it may not always focus where you expect it to, so keep an eye on that.

If you shoot more IMAX Canon today, we suggest the following:

- Please keep heads between center and two-thirds high in frame as much as possible.
- Try to keep the camera as steady as possible.
- Try to keep action centered between the side cut-off markers.

We were also seeing quite a few dust bunnies on the lens/wide angle adapter, so giving them a quick cleaning would be helpful (the lenses not the dust bunnies). FYI - we noticed a large finger print on the 60i camera lens.

Great work, we loved the action in the airlock!

END OF PAGE 1 OF 1, MSG 082A

ASA 1 Plan for FCS Checkout and Entry:

The ASA 1 short at liftoff was most likely a short to ground somewhere outside of the box. The RPCs that feed the ASA 1 power supply tripped, as designed. ASA 1 isolation power is still available. The plan for FCS C/O and Entry is to place FCS Channel 1 switch to Off at the beginning of FCS C/O and leave it in that configuration for the remainder of the mission. This will allow the ASA 1 switch to be used nominally for FCS C/O and Entry to provide isolation capability for Channel 1 aerosurface actuators, without resetting the tripped RPCs. Three healthy channels (Channel 2, 3, and 4) will be available for Entry. If you choose to do so, it would be a good idea to mark the FCS Channel 1 switch once it is placed in the Off position as a reminder not to move it for the remainder of the mission.

This message includes the modified FCS Checkout procedures. Deorbit Prep, and Entry Procedures will be updated per this plan, and included in the Entry Message.

FCS CHECKOUT

	DISPLAY/DPS CONFIG
C3	FCS CH 1 – OFF
	CAUTION FCS Ch 1 will remain OFF for remainder of mission to prevent supplying power to the short when ASA 1 switch is taken to ON.
O14:F	Remove Switch Guard ASA 1
O14,	RGA (four) – ON
O15,	cb MNA,B,C ADTA (four) – cl
O16	MNA,B ACCEL 1,2 (two) – cl
	DDU L (two) – cl
	MNB,C DDU R (two) – cl
	If APU will be used:
	ASA (four) – ON
	If circ pump will be used:
	√ASA (four) – OFF
	ACCEL 3,4 (two) – ON
	BRAKES (three) – ON
L2	ANTISKID – ON
O17	ATVC (four) – ON
	If OV103,4:
O7	TACAN 1,2,3 MODE sel (three) – GPC
O8	RA (two) – ON
	MLS (three) – ON
F3	L,R TRIM PNL (two) – ON
	HUD PWR (two) – ON
C3	√FCS CH 2,3,4 (three) – AUTO
	√DAP: A1/AUTO/VERN

Cont next page

If OV105:
Perform GPS PWRUP, 7-35, for GPS 1,3 if reqd

Perform G2 TO G8 TRANSITION (DPS), then:

If using APU for part 1:
GNC 42 SWITCH/SURF
Deselect SURF 1 fdbk – ITEM 19 EXEC (*)

If using circ pump for part 1:
√FCS CH 1, – OFF
3 – OFF
O14,O15, O16:F ASA (four) – ON

Go to step 7b, 7-19

Cont next page

ON-ORBIT FCS CHECKOUT, PART 1

NOTE

Only one APU used for FCS C/O. Circ pump used if APU does not start or MCC advises abbreviated actuator check. APU or circ pump selection made real time by MCC

If APU shuts down, ‘S86 APU GBX T’, ‘S86 APU TEMP’, ‘S86 APU GBX P’ msgs, APU shifts to HI speed (SPEED % > 111), APU OVERSPEED or APU UNDERSPEED, then go to step 6, APU SHUTDOWN, 7-18

NOTE

Any previously failed actuator channel should be bypassed via ITEM 21 on FCS/DED DIS C/O display prior to APU start

Cont next page

1. FCS C/O PREP

C2 Set EVENT TIMER to 00:00, count UP

2. APU PRESTART

1: GNC, FCS/DED DIS C/O	2: SM 86 APU/HYD

CRT2 √APU,HYD,W/B status no '↑' or '↓' (except HYD B/U)

If SYS 1:

R4 √LG EXTD ISO VLV tb – CL

√HYD BK ISOL VLV X tb – CL

R2 CIRC PUMP (three) – OFF

BLR N2 SPLY X – ON
√PWR (three) – ON
√CNTLR/HTR (three) – B
√cb APU FU TK VLV ENA (six) – cl
√APU FU TK VLV (three) – CL
√AUTO SHTDN (three) – ENA
√SPEED SEL (three) – NORM
√OPER (three) – OFF
HYD MN PUMP PRESS X – LO
APU CNTLR PWR X – ON

Notify MCC: READY FOR APU START

Wait for MCC GO

Cont next page

3. APU START

R2 APU FU TK VLV X – OP
√APU/HYD RDY X tb – gray

* If tb – bp, √MCC *

00:00 Start EVENT TIMER
R2 APU OPER X – START/RUN
HYD/APU √HYD PRESS ind X – LOW green
R2 √APU/HYD RDY X tb – bp

* If APU did not start, go to step 6 *

HYD MN PUMP PRESS X – NORM
HYD/APU √HYD PRESS ind X – HI green

SM 87 HYD THERMAL
√SW VLV ELEV (four) per table
√RUD/SPDBK per table

If HYD SYS 1	If HYD SYS 2	If HYD SYS 3
1(*)	2(*)	3(*)
1(*)	2(*)	3(*)

4. AEROSURFACE DRIVE

CRT1 SURF DR START – ITEM 10 EXEC (*)
Verify all surfaces cycling for 30 sec

NOTE
POS '↓' may be indicated
until HYD SYS is warm.
Expect FCS CH 1 failure
('↓' port status)

* If FCS CH 2,3,4 failure ('↓' port *
* status), reset affected FCS CH: *
* FCS CH – ORIDE,AUTO *

After 30 sec of aerosurface drive,
SURF DR STOP – ITEM 11 EXEC (*)
√Surfaces not moving

Cont next page

5. SECONDARY ACTUATOR CHECK (APU)

NOTE

If a port does not bypass during check, bypass affected port after APU shutdn:
SEC ACT BYPASS – ITEM 21 +X X EXEC
If affected port still does not bypass:
SEC ACT RESET – ITEM 22 +X X EXEC

CRT1 a. √POS STIM ENA, ITEM 20 – (*)

C3 b. √FCS CH 1 – OFF
√FCS CH 2,3,4 – AUTO

CRT1 c. SEC ACT CK, CH 2 – ITEM 16 EXEC (*)

d. √All CH 2 ports bypass (‘↓’)
STOP – ITEM 19 EXEC (*)

C3 e. FCS CH 2 – ORIDE
CRT1 √All CH 2 ports reset (no ‘↓’)
C3 FCS CH 2 – AUTO

f. Repeat steps c thru e for CH 3,4

CRT1 g. NEG STIM – ITEM 20 EXEC (no *)

h. Repeat steps b thru f

6. APU SHUTDOWN

On MCC GO for APU SHUTDN:

R2 BLR N2 SPLY X – OFF
PWR (three) – OFF
APU OPER X – OFF
FU TK VLV X – CL
√Shutdn (hyd press < 200)
CNTLR PWR X – OFF
HYD CIRC PUMP (three) – GPC

Proceed to part 2, 7-21

Cont next page

7. CIRC PUMP ACTIVATION

1: GNC, FCS/DED DIS C/O	2: SM 86 APU/HYD

NOTE
OPS 2/8 trans must be performed with ASAs off to avoid AERO DRIVE fault msgs during actuator checks

a. Perform G8 TO G2 TRANSITION (DPS), then:

O14,O15, O16:F — ASA (four) – OFF

Perform G2 TO G8 TRANSITION (DPS), then:

GNC 42 SWITCH/SURF
Reselect SURF 1 fdbk – ITEM 19 EXEC (no *)

C3 — √FCS CH 2,4 – AUTO
√1 – OFF
3 – OFF

O14,O15, O16:F — ASA (four) – ON

R4 — √HYD BK ISOL VLV X tb – CL

R2 — √CIRC PUMP (three) – OFF

b. HYD CIRC PUMP X – ON

8. ABBREVIATED SECONDARY ACTUATOR CHECK (CIRC PUMP)

NOTE
If an elevon does not move to commanded posn, bypass affected port after check of all channels:
SEC ACT BYPASS – ITEM 21 +X X EXEC

CRT1 — a. √POS STIM ENA, ITEM 20 – (*)

C3 — b. √FCS CH 2,4 – AUTO
√1,3 – OFF

CRT2 — c. GNC 42 SWITCH/SURF

Cont next page

√All elevons move to U7.5° ± 0.8°

CRT1 d. SEC ACT CK, CH2 – ITEM 16 EXEC (*)
Wait 5 sec

e. Turn off FCS CH not being checked:
C3 FCS CH (three) – OFF
CRT2 √All elevons move to U1.5° ± 0.8°

```
* If any elevon drives past 0°, turn on     *
*   FCS CH2,3,4 to stop movement            *
* FCS CH 2,3,4(three) – AUTO                *
* Expect AERO DRIVE msg.  Continue          *
*   procedure and report to MCC             *
```

CRT1 f. STOP – ITEM 19 EXEC (*)
√All elevons move to U7.5° ± 0.8°

C3 g. Config FCS CHs for check of next CH:
(Config switches in sequence shown)

NEXT CH	FCS CH SWITCHES			
	4	1	2	3
3	AUTO	OFF	OFF	AUTO
4	AUTO	OFF	OFF	AUTO

h. Repeat steps d thru g for CHs 3,4

9. <u>HYDRAULIC SYSTEM RECONFIG</u>
R2 HYD CIRC PUMP (three) – GPC

10. <u>FCS CH RECONFIG</u>
a. Perform G8 TO G2 TRANSITION (<u>DPS</u>), then:
C3 FCS CH 2,3 – AUTO
√4 – AUTO
√1 – OFF

b. Perform G2 TO G8 TRANSITION (<u>DPS</u>), then:

c. GNC 42 SWITCH/SURF
Deselect SURF 1 fdbk – ITEM 19 EXEC (*)
Cont next page

ON-ORBIT FCS CHECKOUT, PART 2

1. Sensor Test – MLS,TAC,RA,AA

NOTE

TAC test not available for OV105.
During MLS/TAC/RA/AA test, deselect LRU for failure indicated:
MLS,TAC,RA,AA – '↑' or '↓'
or AA – BIAS/NULL limits exceeded
Record values of failures defined

2: GNC 40 SENSOR TEST

CRT2 √DES: (no *****)
√STAT: blank
√RNG,AZ,EL: no M

CONFIG FOR FREE DRIFT

F6 ADI RATE – MED
DAP: A1/INRTL/VERN
√R,P,Y rates 0 ± 0.1°/sec, then:
DAP: FREE

AA Bias/Null Shift Test

CRT2 √Y,Z within limits: Y -0.5 to +0.5
Z -1.3 to +1.3

MLS,TAC,RA,AA Test

START – ITEM 13 EXEC (*****)

NOTE

'*****' blanks when test complete (√no '↑' or '↓'). See LIMIT VALUES TABLE, 7-22

Cont next page

LIMIT VALUES TABLE

	RNG	AZ	EL
MLS	15.0 to 15.4	+,-2.9 to +,-3.1 (+ for 3 sec, then -)	5.9 to 6.1
TAC	0 to 0.5	177.5 to 182.5 NOTE Values from 182.1 to 182.5 will be displayed as 2.1 to 2.5	
RA	ALT 900 to 1100		
AA		Y +14.40 to 17.80	Z +57.70 to 71.10

STOP – ITEM 14 EXEC (*****)
If OV103,4:
O7 TACAN 1,2,3 MODE sel (three) – OFF

2. Sensor Test – RGA,ADTA

NOTE

During RGA,ADTA test, deselect LRU for failure indicated:
RGA – bias null limits exceeded, '↑' or '↓', or SMRD
ADTA – any '↑' or '↓', except temp ('T')

If RGA does not respond to HIGH or LOW TEST or displays 'SMRD' indication in STAT column:
√MCC, confirm that payload config can support PRCS firings
Null vehicle rates
Mnvr at 0.5°/sec about appropriate axis; monitor RGA data
If RGA responds, self-test circuitry or SMRD circuitry failed
If no RGA response, deselect sensor

Cont next page

2: GNC 41 RGA/ADTA/RCS

CRT2 √DES: (no *****)
√STAT: blank
√PS,PαC,PαU,PαL,T – no M

Config For Free Drift
√R,P,Y rates 0 ± 0.1°/sec
√DAP: FREE

RGA Bias/Null Shift Test
√R,P,Y within limits: R -0.4 to +0.4
P/Y -0.2 to +0.2
Refer to LIMIT VALUES TABLE, 7-24

High Test
TEST HI – ITEM 9 EXEC (*****)
(after 10 sec, no *****)
√No '↑' or '↓'
If ADTA BITE, √MCC (if LOS, proceed with test)

TEST STOP – ITEM 11 EXEC (*****)

Low Test
TEST LOW – ITEM 10 EXEC (*****) (after 10 sec, no *****)
√No '↑' or '↓'
If ADTA BITE, √MCC (if LOS, proceed with test)

TEST STOP – ITEM 11 EXEC (*****)
DAP: A1/AUTO/VERN

Cont next page

LIMIT VALUES TABLE

HIGH TEST LIMITS				
RGA				
R +18.8 to +21.2	P +9.4 to +10.6	Y +9.4 to +10.6		
ADTA				
PS .813 to .815	PαC 5.473 to 5.477	PαU 2.740 to 2.744	PαL 1.708 to 1.712	T 173.56 to 173.60
LOW TEST LIMITS				
RGA				
R -18.8 to -21.2	P -9.4 to -10.6	Y -9.4 to -10.6		
ADTA				
PS 24.887 to 24.889	PαC 29.527 to 29.531	PαU 21.708 to 21.712	PαL 14.713 to 14.717	T 18.50 to 18.54

3. SENSOR TEST – GPS (if reqd)

A13/O7 GPS 1(2,3) PRE AMPL (two) – OFF

NOTE

√MCC if deselect of LRU for failure indicated by '↓' is reqd at end of GPS S/TEST. GPS self-test takes ~2 min to complete. 'BIT' in STAT field on SPEC 55 indicates hardware feedback and clears when test complete

Cont next page

2: GNC 55 GPS STATUS

√NAV – ITEM 17(18,19) (*****)
If 'RPF' in STAT field, √MCC (if LOS, proceed with test)
S/TEST – ITEM 11(12,13) EXEC (*****)
√'BIT' in STAT field after ~6 sec,
'BIT' will clear after ~2 min, FCS Checkout may be continued without waiting for completion of GPS self-test

4. FCS MODE/CH SWITCH AND SURF TEST

NOTE

During tests, FCS CH:
Fail op or fail cl – deselect failed contacts
FCS CH OVERRIDE function of a CH with failed contacts may be made operable if at least one good contact available
Proceed: √MCC when possible

FCS MODE:
Fail op – 2 op or 1 op/1 cl contacts preclude use of sw
Fail cl – 1st failure, deselect failed contact
– 2nd failure L(R), deselect all L(R) contacts

2: GNC 42 SWITCH/SURF

CRT2

NOTE

During following tests, verify '*****' appears except as noted. If '*****' remains after releasing pb, contact failed closed

F6/F8 FLT CNTLR PWR (two) – ON

C3 √FCS CH 1 – OFF
FCS CH 2,3,4(three) – ORIDE (wait 5 sec)
– AUTO (no *****)

Cont next page

F2/F4 PITCH pb – AUTO
– CSS
ROLL/YAW pb – AUTO
– CSS
SPDBK/THROT pb – AUTO
BODY FLAP pb – AUTO
L2/C3 SBTC TAKEOVER pb – push

Notify MCC if any single surf feedback exceeds average of other three feedbacks by greater than:

Elevons	(Δ1.3°)
Rudder	(Δ1.2°)
SPD BK	(Δ2.2%)
BDY FLP	(Δ3%)

5. ENTRY MODE SW TEST

NOTE

ENTRY MODE:
Fail op or cl – 1st,2nd failure, deselect contact
– 3rd failure, when in OPS 3, GNC 51 OVERRIDE
– AUTO SEL – ITEM 42 EXEC (*)

2: GNC 44 SWITCHES

CRT2

NOTE

During following tests, verify '*' appears except as noted. If '*' remains after releasing pb, contact failed closed

L2 ENTRY MODE – LO GAIN
– NO Y JET
– AUTO (no *)

Cont next page

6. NWS CHECK

2: GNC 45 NWS CHECK

NOTE

During following tests, verify POSITION A,B,C (three) values remain ~0.00°

√POSITION A,B,C (three): 0.00° ± 0.75°

a. NWS1

L2 NWS – 1

CRT2 √NWS1 SYS SEL (*)
√HYD PRESS HIGH (no *)
√CURRENT: 1.00 to 3.15 ma

ENABLE – ITEM 1 EXEC (*)
√NWS1 ENABLE A,B (two) (*)

F3 √NWS FAIL lt – NWS FAIL lt on

CRT2 RIGHT TURN – ITEM 2 EXEC (*)
√NWS1 CURRENT: 3.75 to 6.25 ma

LEFT TURN – ITEM 3 EXEC (*)
√NWS1 CURRENT: -4.25 to -1.75 ma
STOP – ITEM 4 EXEC (*)
√NWS1 CURRENT: 1.00 to 3.15 ma

b. NWS2

L2 NWS – 2

CRT2 √NWS2 SYS SEL (*)
√HYD PRESS HIGH (no *)
√CURRENT: 1.00 to 3.15 ma
ENABLE – ITEM 1 EXEC (*)
√NWS2 ENABLE A,B (two) (*)

F3 √NWS FAIL lt – NWS FAIL lt on

Cont next page

CRT2 RIGHT TURN – ITEM 2 EXEC (*****)
√NWS2 CURRENT: 3.75 to 6.25 ma
LEFT TURN – ITEM 3 EXEC (*****)
√NWS2 CURRENT: -4.25 to -1.75 ma
STOP – ITEM 4 EXEC (*****)
√NWS2 CURRENT: 1.00 to 3.15 ma

L2 NWS – OFF

7. CONTROLLER AND SWITCH TEST

NOTE

During cntlr/sw test,
THC: One TX(TY,TZ) failed CLOSED – reselect all contacts (failed contact last)
One TX(TY,TZ) failed OPEN – reselect good contacts only
Multi +TX,-TX,+TY,-TY,+TZ,-TZ failures – reselect good contacts only

SPDBK L(R): Deselect failed xdcrs
After 2nd L(R) failure, use other side

RUD PED L(R): One failure – deselect failed xdcr
Multi L(R) failures – deselect all L(R) xdcrs

RHC L(R): One xdcr failure – reselect good xdcrs only
Multi L(R) failures – reselect good xdcrs L(R) and F7(F8) FLT CNTLR PWR – OFF

BDY FLP L(R): Fail close, deselect all L(R) contacts

Cont next page

RHC or PNL TRIM L(R): If contact failed, deselect failed contact row

2: GNC 43 CONTROLLERS

a. THC

Deselect L THC:

CRT2 THC L DES – ITEMS 1,2,3 EXEC (*****)

F5 L THC – deflect in each axis

CRT2 √THC: '+' and '-'

Reselect THC contacts:

THC L – ITEM 1,2,3 EXEC (no *****)

b. L SBTC

L SBTC – full aft; √ > 95%

– full fwd; √ < 15%

c. Rudder/Brake

RUD PED – full L; √ > 87% and ch Δ < 9%

– full R; √ > 80% and ch Δ < 9%

– null; between L 14% and R 4%

BK PED – depress to verify unrestricted movement (~20 to 25°)

d. L Body Flap Switch

L2 BDY FLP – UP,DN

CRT2 √BDY FLP UP,DN – '*****'

e. L RHC

Deselect L RHC:

RHC L DES – ITEM 23,24,25 EXEC (*****)

L RHC – deflect to hardstop in each axis

√RHC L: R,P – > 92%

Y – > 88%

Reselect RHC CHs:

RHC L DES – ITEM 23,24,25 EXEC (no *****)

f. L RHC Trim Switch

L RHC Trim – deflect sw in each axis

√RHC TRIM L: R – R/L

P – U/D

Cont next page

g. L Panel Trim Switches

L2 TRIM R – R,L
P – UP,DN
Y – R,L

CRT2 √PNL TRIM L: R,Y – R/L
P – U/D

F3 L,R TRIM RHC/PNL – ENA
(Wait 5 sec; no crew insight)
L,R TRIM RHC/PNL – INH

h. Repeat steps b and d thru g for R cntlrs/sws:
RHC R DES – ITEM 26,27,28

i. DDUs

O14:E cb MNA DDU L – op
O16:E MNC DDU R – op
(Wait 5 sec)
O14:E cb MNA DDU L – cl
O16:E MNC DDU R – cl
O15:E MNB DDU L,R (two) – op
(Wait 5 sec)
cb MNB DDU L,R (two) – cl

8. MEDS CHECKOUT

MDU Checkout

F6/F7 F8/C2 Power ON all forward MDUs (9) and IDPs (3)
Verify appropriate display appears (expect big 'X' for any DPS Display whose IDP is deassigned)

Flight Critical/IDP Interface Checkout

F6/F8 On CDR 1, CDR 2, and PLT 1 MDUs:
Ensure on primary ports
Sel FLT INST: A/E: ADI displays
Verify no OFF flags in following configs:
On CDR 1 and CDR 2, √FC BUS 4,1,2,3
On PLT 1, √FC BUS 1,2,3,4

F6/F7 F8/C2 Reconfig MDUs as desired (use only one IDP with three MDUs max if in GROUP B(C) PWRDN)

Cont next page

9. <u>HUD CHECK</u>
√HUD BRT (two) – as reqd
MODE (two) – TEST
√Brightness
√Format 'COMPLETE' msg
HUD MODE (two) – NORM

CRT1 DED DIS FWD – ITEM 1 EXEC (*)
LOW – ITEM 4 EXEC (*)

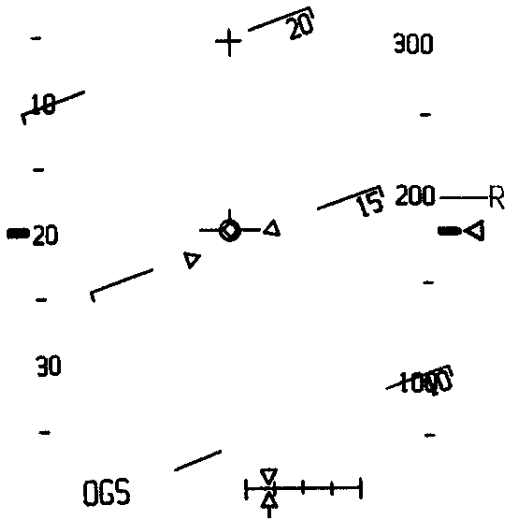
√HUD using HUD low value test diagram

F6/F8 √Readouts for L(R) HUD DATA BUS 1,2(3,4)

CRT1 DED DIS OFF – ITEM 6 EXEC (*)

HUD LOW VALUE TEST

<u>NOTE</u>
No HUD high value test exists



Cont next page

10. MODE LAMP TEST

Test Start

CRT1 MODE LT ON – ITEM 7 EXEC (*)

F2/F4 √PITCH AUTO,CSS lt (two) – on
√ROLL/YAW AUTO,CSS lt (two) – on
√SPDBK/THROT AUTO,MAN lt (two) – on
√BDY FLP AUTO,MAN lt (two) – on

Test Terminate

CRT1 MODE LT OFF – ITEM 8 EXEC (*)

F6/F8 FLT CNTLR PWR (two) – OFF

Display/DPS Reconfig

Perform G8 TO G2 TRANSITION (DPS), then:

F3 L,R TRIM PNL (two) – OFF
HUD PWR (two) – OFF

C3 √FCS CH 1 – OFF
√FCS CH 2,3,4(three)– AUTO

O8 MLS (three) – OFF
RA (two) – OFF

O14, O15, O16 RGA (four) – OFF
cb MNA,B,C ADTA (four) – op
MNA,B ACCEL 1,2 (two) – op
DDU L (two) – as reqd
MNB,C DDU R (two) – op
ASA (four) – OFF
ACCEL 3,4 (two) – OFF

BRAKES (three) – OFF

L2 ANTISKID – OFF

O17 ATVC (four) – OFF

If GPS self-test performed:
If OV103:

A13 GPS PRE AMPL (two) – MNC

If OV104:

A13 GPS PRE AMPL (two) – ON

If OV105:

O7 GPS 1(2,3) PRE AMPL (two) – ON

2: GNC 55 GPS STATUS

√S/TEST '↑'; if '↓' √MCC (if LOS, deselect GPS)
INIT – ITEM 14(15,16) EXEC (*)
√MODE – INIT
NAV – ITEM 17(18,19) EXEC (*)
√MODE – INS
If reqd, go to GPS PWRDN, 7-35

MSG 085A - FD10 CREW CHOICE D/L OPPORTUNITIES

Crew Choice TV Downlink KU Available Opportunities for FD10:

TDRS	Start	End	Duration
TDW	8/23:43	9/00:04	21 min
	9/00:11	00:40	29 min
TDE	9/01:03	01:13	10 min
TDW	9/01:24	01:48	24 min
	9/01:52	02:20	28 min
	(No HD downlink capability)		
TDE	9/02:22	02:27	5 min
TDW	9/03:06	03:22	16 min
	9/03:32	04:02	30 min
TDE	9/04:27	04:33	6 min
TDW	9/04:46	04:52	6 min

END OF PAGE 1 OF 1, MSG 085A