STS-114/LF1

FD 02 Execute Package

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011	13 - 14	FD02 Mission Summary **(pdf)**
013	15	OMS Pod Survey Camera Config Change **(pdf)**
014	16 - 17	Updated Star Pair Pad and Cue Card **(pdf)**
015	18	Single Motor Ku Band Deploy Procedure **(pdf)**
016	19	FD2 PDRS Procedure Changes **(pdf)**

Approved by FAO: *L. DeLapp*

Last Updated: Jul 27 2005 4:24AM GMT
JEDI *(**J**oint **E**xecute package **D**evelopment and **I**ntegration), v2.04.0003*

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MSG NO.	TITLE
11	FD02 Mission Summary
13	OMS Pod Survey Camera Config Change
14	Updated Star Pair Pad and Cue Card
15	Single Motor Ku Band Deploy Procedure
16	FD02 PDRS Procedure Changes

1. Post Sleep Cryo Config

   A11 CRYO TK4 HTRS O2, H2 A, B (four) - AUTO

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

2. During the FD1 Flight Camcorder configuration, troubleshooting and downlink, we noticed that the downlinked video appeared overexposed. Please check that the AVIU Hi-Z/75 switch is set to 75. Also, during your troubleshooting of AVIU s/n:1024, was the camcorder receiving power with the initial configuration or was it just a problem with the video return?

3. A new WLES config file will be uplinked to the WLES laptop towards the end of FD2 after ascent data downlink is complete (estimated for completion around 1/00:00 MET). Once the config file is uplinked, MCC will give you a call to perform the following steps on the WLES A31p:

   On MCC Go,
   1) Exit ' Enhanced Wideband MicroTAU - WLE 1.2' software by clicking 'EXIT'

      At prompt 'Are you sure you want to exit?' click 'Yes"

   2) Double click "Shuttle Apps' >'EWBTAU-WLE'

      Verify 'Mode: Processing Remote Commands' (shows locked icon at top of display)

   3) Report completion to MCC

4. For the H2O activities on the CDR:

    1. MET 0/19:00 – In the procedure SHUTTLE/ISS H2O CONT FILL (ORB OPS, ECLS), p. 5–25, perform EQUIPMENT PREP and WATER TRANSFER HOSE PURGE. The required Sample/Purge Kit (S/N 1001) and the Silver Biocide Syringe Kit (S/N 1003) are located in MF43C. (Note that neither CWCs nor minerals kit can be gathered at this time.)

    2. MET 0/23:00 – Fill two (2) PWRs S/Ns 1023 and 1024, located in Middeck Bag A, Floor Port 1, using PWR FILL (ORB OPS, ECLS), p. 5–43. Note that Steps 1, 18, and 19 of this procedure may be omitted. After the PWR fills are complete, temp stow the PWRs for post-docking transfer to ISS FGB Port.

5. REPLACE PAGES 2-4 THROUGH 2-5 AND 3-8 THROUGH 3-15.

07/26/05 23:17:21 **REPLANNED**

GMT 07/27/05 (208) 03 04 05 06 07 08 09 10 11 12 13 14

MET Day 000 12 13 14 15 16 17 18 19 20 21 22 23 001/00

STS-114

CDR COLLINS	SLEEP	MNVR
	POST SLEEP	FD02
	G2 SET	
	OMS BURN	NC2
	MNVR	
	ZLV	
	G2 SET	
	POST SLEEP	
	STS O2*	
	FILTER CLEANING	
	LOAD	
	DAP	
	MNVR	
	INRTL	
	H2O CWC SETUP	
	CRYO O2 SNSR CK	
	WSB	
	MNVR	
	INRTL	
	MEAL	
	MNVR	
	INRTL	
	AFT C/O	
	DOCK RING EXT	
	PWR FILL	
	PWR FILL	
PLT KELLY	SLEEP	
	SALIVA	
	POST SLEEP	
	OMS BURN	
	HTR	
	RCFG	
	POST SLEEP	
	OBSS UNBERTH	
	FLAT FIELD	
	OBSS SURVEY	
	OBSS SURVEY	
	MEAL	
	OBSS SURVEY	
MS1 NOGUCHI	SLEEP	
	POST SLEEP - GIRA	
	C/L CMR INSTL	
	ERGO S/U	
	KU BD DPLY	
	P/TV01 SETUP	
	SAFER C/O	
	PGT C/O	
	MEAL	
	A/L PREP	
	EMU C/O	
	EMU C/O	
MS2 ROBINSON	SLEEP	
	POST SLEEP	
	ERGO S/U	
	PGSC FD2 S/U	
	RNDZ TOOLS C/O PT1	
	PGT C/O	
	MEAL	
	A/L PREP	
	A/L*	
	EMU C/O	
	EMU C/O	
MS3 THOMAS	SLEEP	
	POST SLEEP	
	RMSHTR	
	POST SLEEP	
	RMS	
	PWRUP	
	RMS C/O	
	OBSS UNBERTH *	
	FLAT FIELD	
	OBSS SURVEY	
	OBSS SURVEY	
	MEAL	
	OBSS SURVEY	
MS4 LAWRENCE	SLEEP	
	SALIVA	
	LOG	
	POST SLEEP	
	C/L CMR INSTL	
	P/TV01 SETUP	
	OMS POD	
	RNDZ TOOLS C/O PT1	
	EXERCISE	
	MEAL	
	EMU C/O	
	DOCK RING EXT	
	EMU C/O	
MS5 CAMARDA	SLEEP	
	SALIVA	
	LOG	
	POST SLEEP	
	RMS C/O	
	OBSS UNBERTH	
	FLAT FIELD	
	OBSS SURVEY	
	OBSS SURVEY	
	MEAL	
	OBSS SURVEY	

DAY/NIGHT

ORBIT 9 10 11 12 13 14 15 16 17

TDRS E -46.0 W -171.0 Z -275.0

ORB ATT -ZLV +YVV | +ZLV -XVV | NC-2 | BIAS -ZLV +XVV *MAINT | INTRL *FAN ACT

NOTES LDRI SURVEY: STBD WING | NOSE CAP | PORT WING

*KU-BD DEPLOY

07/26/05 23:17:21 **REPLANNED**

GMT 07/27/05 (208) FD2 — 15 16 17 18 19 20 21 22 23 07/28 01 02

MET Day 001 — 001/00 01 02 03 04 05 06 07 08 09 10 11 12

STS-114													
CDR COLLINS		MNVR	-ZLV		STS 02*	PRE SLEEP	NC3 RCS BURN	MNVR	INRTL	PRE SLEEP	PMC A/G	MNVR -ZLV	PRE SLEEP	SLEEP
PLT KELLY	♣	OBSS BERTH				PRE SLEEP	RCS BURN	PRE SLEEP						SLEEP
MS1 NOGUCHI		EMU C/O					PRE SLEEP - GIRA							SLEEP
MS2 ROBINSON		EMU C/O			A/L*		PRE SLEEP							SLEEP
MS3 THOMAS	⊕	OBSS BERTH			SRMS SRVY		PRE SLEEP							SLEEP
MS4 LAWRENCE		PRE SLEEP			SRMS SRVY		PRE	LDRI DNLK			PRE SLEEP			SLEEP
MS5 CAMARDA	♦	OBSS BERTH			SRMS SRVY		PRE SLEEP							SLEEP

DAY/NIGHT

ORBIT: 17 18 19 20 21 22 23 24 25

TDRS: E -46.0, W -171.0, Z -275.0

ORB ATT: BIAS -ZLV -XVV — NC-3 — INTRL — -ZLV +YVV

NOTES:
♣OBSS SURVEY *FAN BYPASS
⊕OBSS SURVEY
♦OBSS SURVEY
*MAINT

LDRI SURVEY: PORT WING

STS-114 LF1 (FD02)

REPLANNED

GMT Date 07/27 (208) | TDRS E W Z | ORB | MET Day 000 | STS ATI

CDR COLLINS | PLT KELLY | MS1 NOGUCHI | MS2 ROBINSON | MCC

12:00 — 13:00 — 14:00 — 15:00 — 16:00

03:00 — 04:00 — 05:00 — 06:00

ORB: 9, 10, 11

STS ATI: -ZLV, +YVV, +ZLV, -XVV

FD02

SLEEP (CDR, PLT, MS1, MS2)

SALIVA COLLECT (ORB OPS, DSO)

FD02 EZ ACTIVITIES
HARD REBOOT PGSCs (not WLES)
SMK DETN CK TEST (ORB OPS, ECLS)
TEPC (STATUS CK)(ORB OPS, CREW SYS)
OCAC FILTER INSPECT
MS4: If PMZ Req'd, PMZ PROTOCOL (ORB OPS, DSO)
L17 MCIU Filter Screen, Clean as necessary

√ HUM SEP FOR H2O ACCUMULATION

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

POST SLEEP ACTIVITY (ORB OPS, CREW SYS)

GALLEY MORNING CONFIG (ORB OPS, ECLS)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

G2 SET EXPANSION (DUAL G2) (ORB OPS, DPS)Steps 2-5

ON-ORBIT OMS BURN (ORB OPS, OMS)

ON-ORBIT OMS BURN (ORB OPS, OMS)

UPDATE ORBITAL MNVR PAD

STS-114 LF1 (FD02)

REPLANNED

GMT Date 07/27 (208) | TDRS E W Z | ORB | MET Day 000 | STS ATI | MS3 THOMAS | MS4 LAWRENCE | MS5 CAMARDA | MCC

12:00

03:00

9

-ZLV

+YVV

13:00 SLEEP | SLEEP | SLEEP

04:00

14:00 SALIVA COLLECT (ORB OPS, DSO) | SALIVA COLLECT (ORB OPS, DSO)

FLIGHT SLEEP LOG (ORB OPS, DSO) | FLIGHT SLEEP LOG (ORB OPS, DSO)

FD02

05:00

+ZLV

-XVV

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

15:00 POST-SLEEP ACTIVITY (ORB OPS, CREW SYS) | POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

06:00

11

A8L √PORT RMS HTR (two) - AUTO

16:00

STS-114 LF1 (FD02)

REPLANNED

GMT Date 07/27 (208) | TDRS E W Z | ORB | MET Day 000 | STS ATI

CDR COLLINS

- 16:00 ON-ORBIT OMS BURN (ORB OPS, OMS)
- NC-2 <NC2 TIG (16:15)
- 07:00 MNVR (TRK) BIAS -ZLV +XVV TG=2 BV=3 OM=140 A1/AUTO/VERN Init TRK
- G2 SET CONTRACTION (ORB OPS, DPS) Steps 2-6
- 17:00 POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- 08:00 SHUTTLE O2 MAINTENANCE [C]
- BIAS-ZLV+XVV
- 18:00 FILTER CLEANING (IFM, SCHED MAINT) Inspect filters and clean as necessary. Do NOT perform for MCIU filter during RMS OPS.
- 09:00 LOAD FLT SPEC DAPS (ORB OPS, DAP TABLES)
- MNVR STBD SURVEY TG=4 BV=5 P=0 Y=49 OM=65 A14/AUTO/VERN Init TRK on MCC GO
- 19:00 SHUTTLE/ISS H2O CONT FILL (ORB OPS, ELCS) REF. MSG 010 ITEM 4
- 10:00 INTRL
- CRYO O2 TK HTR SNSR CK (ORB OPS. EPS)
- 20:00

PLT KELLY

- ON-ORBIT OMS BURN (ORB OPS, OMS)
- CONFIG B POD HTRS [A]
- [A] A14 RCS/OMS HTRS L POD A-OFF B-AUTO R POD A-OFF B-AUTO
- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- OBSS UNBERTH (PDRS, NOMINAL) REF. MSG 016 ITEM 2
- OBSS ITVC/LDRI FLAT FIELDS (PDRS, NOMINAL)
- OBSS LDRI RCC SURV - STBD (PDRS, SURVEYS)
- [C] SHUTTLE O2 MAINTENANCE
  - OCAC PWR - OFF
  - C5 DIRECT O2 - OP
  - When CABIN PPO2=3.1(~20 mins)
  - C5 DIRECT O2 - CL
  - OCAC PWR - ON

MS1 NOGUCHI

- POST SLEEP ACTIVITY (ORB OPS, CREW SYS)
- C/L CAMR INSTALL (PHOTO/TV, C/L CAMR)
- CYCLE ERGOMETER OPS (ORB OPS, CREW SYS) ERGOMETER SETUP
- When in OBSS HOVER, KU-BD ANT DEPLOY/ACTIVATION REF. MSG 015 NOTE: Take imagery at least SR+ 4min
- P/TVO1 VIDEO SETUP (PHOTO/TV, SCENES)
- SAFER CHECKOUT (EVA, CHECKOUTS) C/O Safer 1007
- PGT CHECKOUT (EVA, TOOLS & STOWAGE)

MS2 ROBINSON

- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- CYCLE ERGOMETER OPS (ORB OPS, CREW SYS) ERGOMETER SETUP
- PGSC FD2 SETUP Setup remaining PGSCs per Inspection Day Diagram
- PGSC NETWORK (ORB OPS, PGSC)
- KFX CONFIG [B]
- DCS FILE DNLK (FROM MICRODRIVE) (PHOTO/TV, DCS 760) ET PHOTO DNLK
- PGSC HARD DISK LATE UPDATE (ORB OPS, PGSC)
- RNDZ TOOLS CHECKOUT (PART 1) (RNDZ, RNDZ TOOLS) Checkout RNDZ tools with RPOP1
- [B] L12(PDIP) √ OCA I/F Cable connected to KU BD port
  - √ cb PDIP 1 PWR 2 KU BD Rly - cl
  - √ KU BD Rate - Lo
  - OCA Router √ OCA Router configured as Router
  - Proshare PGSC Start KFX
- PGT CHECKOUT (EVA, TOOLS & STOWAGE)

MCC

- UPDATE ORBITAL MNVR PAD
- OBSS UNBERTH UPLINK β21 +MASK+A2 BOX A2 -18<AZ<110 -90<EL<-3 UPLINK TGT SV
- FLAT FIELDS UPLINK β21 +MASK+A3 BOX A3 -81<AZ<110 -64<EL<-10
- TFL 192 STBD SURVEY UPLINK β21 +MASK+A4 BOX A4 -122<AZ<110 -90<EL<45
- TFL 184 NOSE SURVEY UPLINK AT 20:10 β21 +MASK+A10 BOX A10 -38<AZ<110 -50<EL<33

STS-114 LF1 (FD02)

REPLANNED

GMT Date 07/27 (208) | TDRS E W Z | ORB | MET Day 000 | STS ATI | MS3 THOMAS | MS4 LAWRENCE | MS5 CAMARDA | MCC

07:00 08:00 09:00 10:00

16:00 17:00 18:00 19:00 20:00

STS ATI: NC-2 BIAS-ZLV+XVV INTRL

MS3 THOMAS

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

RMS PWRUP
(PDRS, RMS PWRUP)

RMS EE CHECKOUT
(PDRS, RMS C/O) Step 9 only
NOTE: Prior to Step 9, drive
WP(-) to -45 and WY (-) to -10

OBSS UNBERTH
(PDRS, NOMINAL)
REF. MSG 016 ITEM 2

When in OBSS HOVER,
KU-BD ANT DEPLOY/ACTIVATION
REF. MSG 015
NOTE: Take Imagery at least
SR+ 4 min

OBSS ITVC/LDRI FLAT FIELDS
(PDRS, NOMINAL)

OBSS LDRI RCC SURV - STBD
(PDRS, SURVEYS)

MS4 LAWRENCE

CONFIGURE DTV FOR DOWNLINK
L10(MUX) √MUX BYPASS - ACT
MUX/VTR/CC PWR - ON
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

C/L CAMR INSTALL
(PHOTO/TV, C/L CAMR)

P/TV01 VIDEO SETUP
(PHOTO/TV, SCENES)

P/TV08 EXTERNAL SURVEY (OPS)
(PHOTO/TV, SCENES)
OMS POD SURVEY
REF. MSG 013

RNDZ TOOLS CHECKOUT (PART 1)
(RNDZ, RNDZ TOOLS)
Checkout RNDZ tools with RPOP1

EXERCISE

MS5 CAMARDA

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

RMS EE CHECKOUT
(PDRS, RMS C/O) Step 9 only
NOTE: Prior to Step 9, drive
WP(-) to -45 and WY (-) to -10

OBSS UNBERTH
(PDRS, NOMINAL)
REF. MSG 016 ITEM 2

OBSS ITVC/LDRI FLAT FIELDS
(PDRS, NOMINAL)

OBSS LDRI RCC SURV - STBD
(PDRS, SURVEYS)

MCC

STS-114 LF1 (FD02)

REPLANNED

GMT Date 07/27 (208) | TDRS E W Z | ORB 14 15 16 17 | MET Day 000 | STS ATI INTRL

MET	CDR COLLINS	PLT KELLY	MS1 NOGUCHI	MS2 ROBINSON	MCC
20:00	R2 BLR CNTLR/HTR (three) - B	OBSS LDRI RCC SURV - STBD (PDRS, SURVEYS)	PGT CHECKOUT (EVA, TOOLS & STOWAGE)	PGT CHECKOUT (EVA, TOOLS & STOWAGE)	
	MNVR NOSE CAP SURVEY TG=4 BV=5 P=334 Y=0 OM=190 A14/AUTO/VERN Init TRK on MCC GO	OBSS LDRI RCC SURV - NOSE CAP (PDRS, ALT SURVEYS) REF. MSG 016 ITEM 3			
11:00			MEAL	MEAL	
21:00	MEAL				
			AIRLOCK PREP (EVA, AIRLOCK CONFIG)	AIRLOCK PREP (EVA, AIRLOCK CONFIG)	
12:00					
	MNVR PORT SURVEY TG=4 BV=5 P=0 Y=320 OM=313 A14/AUTO/VERN Init TRK on MCC GO			AIRLOCK FAN ACT & ODS VOL PREP (RNDZ, APDS NOMINAL) Steps 1-5	PORT SURVEY UPLINK β21 +MASK+A7 BOX A7 -27<AZ<110 -90<EL<0
22:00	AFT CONTROLER C/O (ORB OPS, GNC)		EMU CHECKOUT (EVA, CHECKOUTS) C/O EMUs 3004, 3017	EMU CHECKOUT (EVA, CHECKOUTS) C/O EMUs 3004, 3017	
13:00	On SRMS Operator GO: DOCKING MECH INIT DOCKING MECH PWRUP DOCKING RING EXTENSION DOCKING MECH PWRDN (RNDZ, APDS NOMINAL)	MEAL			
		OBSS LDRI RCC SURV - PORT (PDRS, SURVEYS) REF. MSG 016 ITEM 4			
23:00	PWR FILL (ORB OPS, ECLS) REF. MSG 010 ITEM 4				
14:00	PWR FILL (ORB OPS, ECLS) REF. MSG 010 ITEM 4				
			EMU CHECKOUT (EVA, CHECKOUTS) C/O EMUs 3009, 3010	EMU CHECKOUT (EVA, CHECKOUTS) C/O EMUs 3009, 3010	
00:00					

STS-114 LF1 (FD02)

REPLANNED

GMT Date 07/27 (208) | TDRS E W Z | ORB | MET Day 000 | STS ATI

MS3 THOMAS	MS4 LAWRENCE	MS5 CAMARDA	MCC
OBSS LDRI RCC SURV - STBD (PDRS, SURVEYS)		OBSS LDRI RCC SURV - STBD (PDRS, SURVEYS)	
OBSS LDRI RCC SURV - NOSE CAP (PDRS, ALT SURVEYS) REF. MSG 016 ITEM 3	EXERCISE	OBSS LDRI RCC SURV - NOSE CAP (PDRS, ALT SURVEYS) REF. MSG 016 ITEM 3	
	MEAL		
INTRL			
MEAL	EMU CHECKOUT (EVA, CHECKOUTS) COMM CK On SRMS Operator GO: DOCKING MECH INIT DOCKING MECH PWRUP DOCKING RING EXTENSION DOCKING MECH PWRDN (RNDZ, APDS NOMINAL)	MEAL	
OBSS LDRI RCC SURV - PORT (PDRS, SURVEYS) REF. MSG 016 ITEM 4		OBSS LDRI RCC SURV - PORT (PDRS, SURVEYS) REF. MSG 016 ITEM 4	
	EMU CHECKOUT (EVA, CHECKOUTS) COMM CK		

STS-114 LF1 (FD02)

REPLANNED

GMT — Date 07/27 (208) — TDRS E W Z — ORB — MET — Day 001 — STS ATI

CDR COLLINS	PLT KELLY	MS1 NOGUCHI	MS2 ROBINSON	MCC
MNVR (TRK) BIAS -ZLV -XVV TG=2 BV=3 OM=20 A14/AUTO/VERN Init TRK on MCC GO	OBSS LDRI RCC SURV - PORT (PDRS, SURVEYS) REF. MSG 016 ITEM 4 OBSS BERTH (PDRS, NOMINAL)	EMU CHECKOUT (EVA, CHECKOUTS) C/O EMUs 3009, 3010	EMU CHECKOUT (EVA, CHECKOUTS) C/O EMUs 3009, 3010	
SHUTTLE O2 MAINTENANCE A	A SHUTTLE O2 MAINTENANCE OCAC PWR - OFF C5 DIRECT O2 - OP When CABIN PPO2=3.2(~12 mins) C5 DIRECT O2 - CL OCAC PWR - ON		AIRLOCK FAN BYPASS (RNDZ, APDS NOMINAL)	SRMS CABIN SURVEY UPLINK β21 +MASK+A8+A9 BOX A8 -93<AZ<110 -90<EL<32 BOX A9 -149<AZ<44 32<EL<83
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)			
√ HUM SEP FOR H2O ACCUMULATION				
ON-ORBIT +X RCS BURN (ORB OPS, RCS)	ON-ORBIT +X RCS BURN (ORB OPS, RCS)			UPLINK β21 +MASK
< NC-3 TIG (02:25)				
MNVR LDRI PLAYBACK TG=4 BV=5 P=0 Y=90 OM=20 A1/AUTO/VERN Init TRK		PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	GALLEY OVERNIGHT CONFIG (ORB OPS, ECLS)		
06 √UHF MODE - OFF A/G PRIVATE MEDICAL CONFERENCE				
MNVR (TRK) -ZLV +YVV TG=2 BV=3 OM=270 A1/AUTO/VERN Init TRK				

Time scale: 15:00, 16:00, 17:00, 18:00; 00:00, 01:00, 02:00, 03:00, 04:00

Stations: 17, 18, 19

STS-114 LF1 (FD02)

REPLANNED

GMT Date 07/27 (208) | TDRS E W Z | ORB 17 18 19 | MET Day 001 | STS ATI BIAS-ZLV-XVV NC-3 INTRL

MS3 THOMAS

- 00:00 OBSS LDRI RCC SURV - PORT (PDRS, SURVEYS) REF. MSG 016 ITEM 4
- OBSS BERTH (PDRS, NOMINAL)
- 01:00 SRMS EE CAM CREW CABIN SRVY (PDRS, SURVEYS)
- 03:00 PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

MS4 LAWRENCE

- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- SRMS EE CAM CREW CABIN SRVY (PDRS, SURVEYS)
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- PLAYBACK (DIGITAL) (PHOTO/TV, CUE CARD) KU TDRW (02:18-03:09) LDRI SURVEYS
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

MS5 CAMARDA

- OBSS LDRI RCC SURV - PORT (PDRS, SURVEYS) REF. MSG 016 ITEM 4
- OBSS BERTH (PDRS, NOMINAL)
- SRMS EE CAM CREW CABIN SRVY (PDRS, SURVEYS)
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

MCC

Good Morning Discovery!!!

What a great day! **The space shuttle is back in business!!!** It is hard to believe that you are really on your way to ISS!

You had a magnificent first flight day! It was such a pleasure to work with you yesterday.

Soichi gets the "Electrician of the Day" award for his fast response in getting everything squared away so that we could get a glimpse of all of you for a few minutes yesterday. It was great to see a shuttle crew working in space once again!

YOUR CURRENT ORBIT IS: 153 X 123 NM

NOTAMS:

EDWARDS (EDW) – LAKEBED RWYS ELS ONLY - UNCERTIFIED
OCEANA (NTU) – RWY 23L/05R CLOSED
HALIFAX (YHZ) – RWY 06/24 CLOSED
GUAM (GUA) – RWY 06L/24R CLOSED
RIO GALLEGOS (AWG) – NOT APPROVED
ELMENDORF (EDF) – RWY 06/24 CLOSED

NEXT 2 PLS OPPORTUNITIES:

EDW 22 ORB 17 – 1/00:40
EDW 22 ORB 33 – 2/00:46

OMS TANK FAIL CAPABILITY:

L OMS FAILS: YES
R OMS FAILS: YES

LEAKING OMS PRPLT BURN:

L OMS LEAK: ALWAYS BURN OOP
R OMS LEAK: ALWAYS BURN OOP

PREDICTED POST-NC2 OMS QUANTITIES(%)

L OMS OX = 48.7 R OMS OX = 48.5
FU = 49.1 FU = 49.1

SUBTRACT I'CNCT COUNTER FOR CURRENT OMS QUANTITIES

DELTA V AVAILABLE:

OMS	462 FPS
ARCS (TOTAL ABOVE QTY1)	55 FPS
TOTAL IN THE AFT	517 FPS
ARCS (TOTAL ABOVE QTY2)	83 FPS
FRCS (ABOVE QTY 1)	52 FPS
AFT QTY 1	92 %
AFT QTY 2	54 %

SYSTEM	FAILURE	IMPACT	WORK AROUND
OMS	LOMS POD UPPER Y WEB Thermal transducer	None	FDA has been inhibited for the erratic transducer. LOMS POD OUTBOARD Y WEB thermal transducer provides insight into the LOMS Y web area.
MECH	Sticky STBD PLBD CLS B microswitch	STBD door could be single motor in the closed direction if indication comes back	None
COMM/INST	S-Band PM lower-left antenna intermittent dropouts	Loss of S-Band forward and return during dropout periods.	Once docked, more frequent use of Big Loop comm.

MSG 013 - OMS POD SURVEY CAMERA CONFIG CHANGE

The planned Orbiter attitude for the OMS Pod survey planned for MET 000:18:15 has changed the lighting for the OMS Pod area from a sun-lit target area to an earth albedo-lit target area. The current camera setup in the Photo/TV checklist assumes a sun-lit target. Due to the uncertainty of the now earth albedo-lit target, the camera configuration requires a change from a manual configuration to an automatic configuration. The current Setup Step 1 on page 1-59 needs to be changed per the following:

1. <u>Config 760 Camr For Surveys</u>
   - Pwr – ON
   - √Disk installed
   - Rear LCD
     - √Batt
     - √Frames remaining sufficient
     - √White Balance – Flash
     - √ISO – 100
     - √BKT – Disabled
   - √Focus Area – Center, LOCK displayed
   - Exp Comp – 0.0
   - Exp Mode – ~~MP~~
     - ~~SS – 1000~~
   - AF Area Mode – [ ] (no “+”)
   - Meter – ~~Matrix~~Center
   - Diopter – Adjust
   - Film Adv – S
   - Body Focus Mode – S
   - Lens Focus Mode – A(M/A)
   - Focus Range – FULL
   - Aperture – Min,locked
     - ~~f/stop – F8~~
   - Flash Settings
     - ON/OFF – OFF

END OF PAGE 1 OF 1, MSG 013

Replace pages FS 2-2 and FS 2-3 of the ORB OPS Checklist with the following.

STAR PAIRS PAD

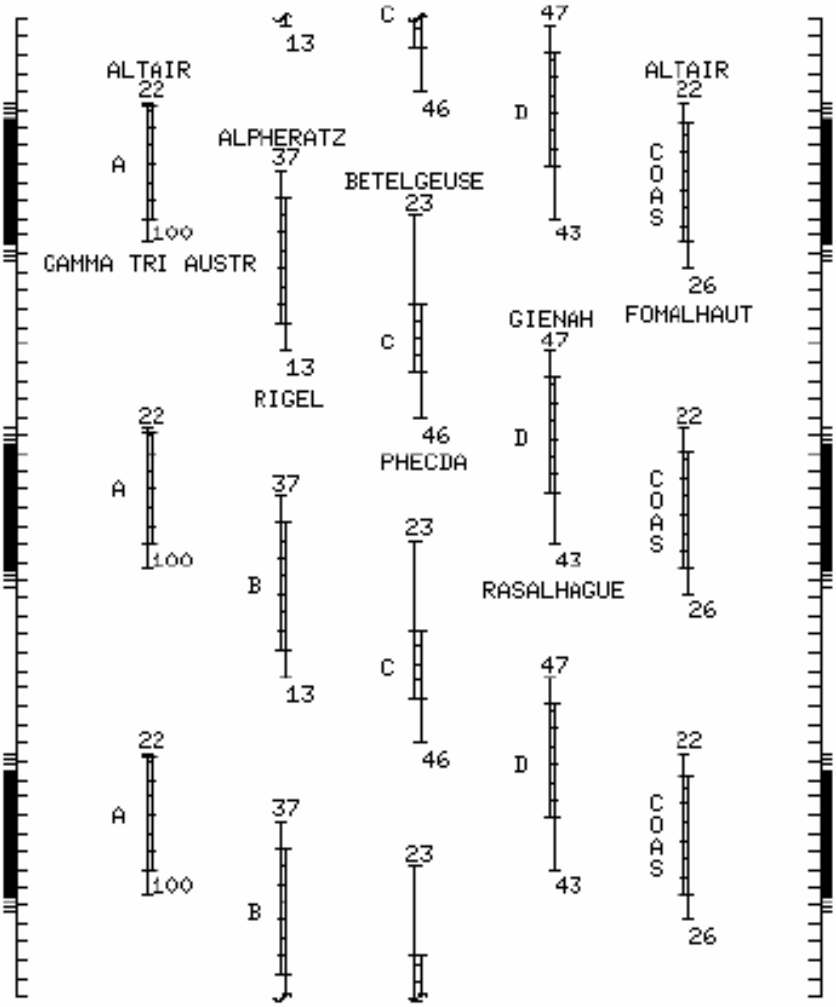
PAIR	ANG SEP	ATT SET 1 DUAL S TRK	ATT SET 1 SINGLE S TRK -Z	ATT SET 1 SINGLE S TRK -Y	ATT SET 2 DUAL S TRK	ATT SET 2 SINGLE S TRK -Z	ATT SET 2 SINGLE S TRK -Y
A	90.5	-Y:100 R+ 284 -Z:22 P+ 191 Y+ 333	R+ 198 -Z:100 P+ 196 Y+ 347	R+ 20 -Y:22 P+ 207 Y+ 328	-Y:22 R+ 344 -Z:100 P+ 20 Y+ 12	R+ 259 -Z:22 P+ 10 Y+ 23	R+ 68 -Y:100 P+ 33 Y+ 21
B	82.4	-Y:13 R+ 183 -Z:37 P+ 58 Y+ 357	R+ 100 -Z:13 P+ 71 Y+ 350	R+ 266 -Y:37 P+ 50 Y+ 346	-Y:37 R+ 86 -Z:13 P+ 252 Y+ 14	R+ 3 -Z:37 P+ 243 Y+ 3	R+ 174 -Y:13 P+ 240 Y+ 24
C	83.8	-Y:23 R+ 183 -Z:46 P+ 321 Y+ 5	R+ 98 -Z:23 P+ 334 Y+ 357	R+ 267 -Y:46 P+ 313 Y+ 353	-Y:46 R+ 88 -Z:23 P+ 155 Y+ 8	R+ 3 -Z:46 P+ 146 Y+ 355	R+ 175 -Y:23 P+ 143 Y+ 17
D	84.3	-Y:47 R+ 274 -Z:43 P+ 241 Y+ 12	R+ 186 -Z:47 P+ 249 Y+ 24	R+ 357 -Y:43 P+ 253 Y+ 3	-Y:43 R+ 1 -Z:47 P+ 74 Y+ 335	R+ 272 -Z:43 P+ 61 Y+ 343	R+ 89 -Y:47 P+ 83 Y+ 347

PAIR		COAS ALIGN ATTITUIE 1	ANG SEP	COAS ALIGN ATTITUDE 2
COAS	+X COAS	22 R+ 31 P+ 341 Y+ 298	NOSE → UP 59 TAIL → UP	26 R+ 65 P+ 31 Y+ 346
	-Z COAS	22 R+ 245 P+ 44 Y+ 14		26 R+ 211 P+ 93 Y+ 62

SINGLE S TRK MIN MNVR OPT
TGT ID = 11-110 NAV STAR #
BODY VECTOR = 5

	-Z S TRK	-Y S TRK
P	87.7	0
Y	358	280.6

MET Applicable: 00/02:00:0 - 11/14:00:0
Date L/O: 07/26/05
GMT L/O: 207/14:39:00



MET Applicable: 00/02:00:0 - 11/14:00:0
Date L/O: 07/26/05
GMT L/O: 207/14:39:00

KU-BD ANT DEPLOY

CAUTION
If OBSS cradled, OBSS MPMs must be stowed prior to Ku-band antenna deploy to prevent antenna/OBSS contact

MA73C:C √cb MCA PWR AC3 3Φ MID 2 - cl
:D √AC2 3Φ MID 4 - cl

A1U √KU BD PWR – OFF
CNTL – PNL
R13L √KU ANT (direct) STO – OFF

PL BAY MECH PWR SYS 1– ON
KU ANT – DPY

After 15 sec:
PL BAY MECH PWR SYS 2 - ON

* If tb not DPY after 46 sec total, *
* KU ANT – GND *
* Perform MAL, MECH, 9.3a *

When KU ANT tb – DPY (~30 to 46 sec total),
KU ANT – GND

PL BAY MECH PWR SYS 1,2 (two) – OFF

MSG 016 - FD2 PDRS PROCEDURE CHANGES

Make the following changes to the FD2 PDRS Procedures:

1. Remember, today you will be performing OBSS LDRI RCC SURVEY - NOSE CAP (PDRS, ALTERNATE SURVEYS), pg FS 3-2, instead of the LCS nose cap survey. The wing surveys remain the nominal LDRI procedures.

2. During OBSS UNBERTH (PDRS, NOMINAL), pg FS 1-6, Step 7, after reaching the OBSS HOVER posn, perform the following:

   A7U √VIDEO OUT DTV pb– push
   √IN RMS pb– push

   Verify RMS Elbow Pan/Tilt/Zoom values same as those used on FD1 during Ku Survey

   L10(VTR) REC pb – push, hold
   PLAY pb – push, simo (red •)

   Record video during Ku dish deploy, then:
   STOP pb – push, (no red •)

3. During OBSS LDRI RCC SURVEY - NOSE CAP (PDRS, ALTERNATE SURVEYS), pg FS 3-16, Step 12, do NOT perform:

   MANF VLVS OVRD 1 – ITEM 40 EXEC (OP)
   2 – ITEM 41 EXEC (OP)
   3 – ITEM 42 EXEC (OP)
   4 – ITEM 43 EXEC (OP)

   A6U DAP: as reqd

   DO perform:
   MANF VLVS OVRD 5 – ITEM 44 EXEC (OP)

   A6U DAP: VERN(FREE)

   O14:F Pri RJDA LOGIC,DRIVER (eight) – OFF
   O15:F
   O16:F RJDA 1A L2/R2 DRIVER – ON

4. During OBSS LDRI RCC SURVEY - PORT (PDRS, SURVEYS), after Step 9, perform the following:

   GNC 23 RCS
   √RCS FWD, ITEM 1: *
   MANF VLVS OVRD 1 – ITEM 40 EXEC (OP)
   2 – ITEM 41 EXEC (OP)
   3 – ITEM 42 EXEC (OP)
   4 – ITEM 43 EXEC (OP)

   A6U DAP: as reqd