STS-132 / ULF4

FD 10 Execute Package

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094	---	FD10 PAO Event Summary Message: Crew News Conference (electronic only)

Approved by FAO:
F. Reynolds

Last Updated: May 23 2010 2:26 AM GMT
JEDI *(**J**oint **E**xecute package **D**evelopment and **I**ntegration), v3.0*

Flight Director
Vs.
Flight Director

- There is no coat that can constrain the most interesting Flight Director in the world... Stay thirsty my friends!
- Danger! Danger Will Robinson!
- OK, I've got my jacket for the PAO event! Now all I need is hair and make-up...
- Hey Flight! Ugly shirt day was FD08!
- Does this coat make me look...
- If not for the help of these trusty balloons, I'm not sure I'd be able to lift my arms...
- Look! It's the incredible shrinking Flight Director!
- Honey! Dean, Shrunk the Flight Director!
- Emily "Half" Nelson models her '09 Christmas Snuggie for the team
- Dean was saving the beads for Shuttle Flight, so ISS Flight got the jacket.

- "The wakeup music is Freebird? Wooooooo!"
- Someone just met a sign he couldn't take down...
- What?! Pirates are not real people?
- Proof he is better suited to be a Flight Director than an actor.
- Looks like another losing contestant from "¿Quien es mas Macho?"
- Look! I've grown two more mustaches underneath my eyes!
- Mike Serafin...next American Idol?
- Doop-de-dooo
- Hey!! That's my Snuggie!

MSG INDEX

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1. Post-Sleep Cryo Config

For today's post-sleep cryo config, O2 tanks 1 and 5, and H2 tanks 1 and 2 will be active. Additionally, you can expect a realtime call to reconfigure O2 tanks prior to Undock.

R1 O2,H2 MANF VLV TK1 (two) - OP (tb-OP)
H2 TK2 HTRS A,B (two) - AUTO
TK3 HTRS A,B (two) - OFF

Pre-Sleep Cryo Config

√MCC for deltas prior to configuring for pre-sleep.

For tonight's pre-sleep cryo config, manifold 2 will be closed with O2 and H2 tanks 2 and 3 active.

R1 O2 TK2 HTR B - OFF
H2 TK1 HTRS A,B (two) - OFF
TK3 HTRS A,B (two) - AUTO
O2,H2 MANF VLV TK2 (two) - CL (tb-CL)

2. Crew Choice Downlink Opportunities

TDRS	AOS	LOS	Delta (min)	Notes
E	08/23:06	08/23:53	47	Alpha Stop 23:33
W	09/00:35	09/00:42	7	
E	09/00:45	09/01:01	16	
E	09/01:11	09/01:39	28	
W	09/01:46	09/01:52	6	
W	09/02:11	09/02:28	17	

3. Condensate Changeout

Before performing condensate changeout, retrieve CWC s/n 6005 from NOD2D5. CWC s/n 6005 has been processed and should be empty. If it is not at NOD2D5, ask Oleg for the location. After changeout, transfer ISS CWC s/n 1054 to NOD2D5. Notify MCC when complete.

4. FD11 EVA Unpack and Stow
   Great job this mission keeping all of the EVA transfers and stowage straight! Updates have been made to the EVA Unpack and Stow procedure (REF. MSG 093). This activity is scheduled for FD11, but is being uplinked today in case you want to get a head start on it. All of Bueno's hardware will now be coming home in Bag C. Packing of some of his hardware is layout specific (e.g., EMU gloves), so please reference MSG 084 "5-MLE Bag Layout Updates" for the Bag C layout.

5. Outlook and Pictures
   In preparation for a reduced OCA rate available through shuttle assets post undock, please clean out your Outlook INBOX, SENT ITEMS, and UPLINKED BY CAPCOM folders by deleting messages or moving any you want to keep to your Personal Folders. This will keep your mail files smaller and reduce the time required to uplink them following mail synchs. Also, since you will be configuring for 48 Mbps downlink rate overnight, feel free to place any remaining image cards into the PGSC's prior to sleep.

6. Soyuz Pictures
   Just a reminder to take pictures of the Soyuz during the flyaround (REF. MSG 086).

7. REPLACE PAGES 2-32 THROUGH 2-37 AND 3-102 THROUGH 3-111.

REPLANNED

FD09

GMT 05/22/10 (142) 19 20 21 22 23 05/23 01 02 03 04 05 06

MET Day 008 008/00 01 02 03 04 05 06 07 08 09 10 11 12

STS-132					
CDR	Ham	PRE SLEEP; PMC A/G	PRE SLEEP	SLEEP	POST SLEEP
PLT	Antonelli	XFER; BRIEF	PRE SLEEP	SLEEP	LOG; POST SLEEP
MS1	Reisman	PRE SLEEP		SLEEP	LOG; POST SLEEP
MS2	Good	PRE SLEEP		SLEEP	POST SLEEP
MS3	Bowen	PRE SLEEP		SLEEP	LOG; POST SLEEP
MS4	Sellers	PRE SLEEP		SLEEP	LOG; POST SLEEP

DAY/NIGHT

ORBIT 128 129 130 131 132 133 134 135

TDRS W E Z

ISS TDRS AVAIL

ORB ATT BIAS -XLV -ZVV

SSRMS POS LAB PDGF @ WS4

NOTES

REPLANNED

FD09

GMT 05/22/10 (142)

MET Day 008

ISS	TDRS AVAIL	008/00	19	20	21	22	23	05/23	01	02	03	04	05	06	07	08	09	10	11	12

ISS					
ISS	ISS CDR Kotov	PRE SLEEP-ISS	SLEEP	ЭЛКТБЖ	POST SLEEP
ISS	FE-1 Skvortsov	PRE SLEEP-ISS	SLEEP		POST SLEEP TBUCK
ISS	FE-2 Caldwell-Dyson	PRE SLEEP-ISS; PFC; PRE SLEEP ISS	SLEEP		POST SLEEP
ISS	FE-3 Kornienko	PRE SLEEP-ISS	SLEEP		POST SLEEP
ISS	FE-5 Noguchi	MPC; PRE SLEEP-ISS; MPC	SLEEP	BISP	ARED
ISS	FE-6 Creamer	PRE SLEEP-ISS	SLEEP		POST SLEEP

DAY/NIGHT	
ORBIT	128 129 130 131 132 133 134 135
SSRMS POS	LAB PDGF @ WS4
ALL VHF	
NOTES	

4

FD10 — **REPLANNED**

GMT 05/23/10 (143) — MET Day 008 — 009/00

STS-132	12	13	14	15	16	17	18	19	20	21	22	23	
CDR Ham	POST SLEEP	MCU* / CONDCWC / CHGOUT	O2TM / O2 TEARDOWN	EXERCISE	O2-H2OP%S# / O2-RPRS@ / CREW PHOTO	CREW CONF	MEAL	FWE / HATCH CLOSE	ODS LEAK CHECK	PCS-ACT / GRPB / PWRUP	MNVR UNDOCK	UNDOCK	OPS / FLYAROUND / SEP / GRPB / PWRDN / LD3D / PRE SLEEP
PLT Antonelli	POST SLEEP	XFER / UPDATE / CWC#5 INIT	EXERCISE	CWC TERM / CWC XFER	XFER UP / XFER REF / CREW PHOTO	CREW CONF	MEAL	FWE / H/O-IMSUTS	ODS LEAK CHECK	GRPB / PWRUP	UNDOCK	UNDOCKING* OPS / FLYAROUND / SEP / GRPB / PWRDN / OIUDCT / RCS@ / HTRB / CABT / PRE SLEEP
MS1 Reisman	POST SLEEP	EXERCISE	MDDK XFER	RNDZ TOOLS C/O	CREW PHOTO	CREW CONF	MEAL	FWE	C/L CMR INSTL	SSV-3	UNDOCK	OPS / FLYAROUND / SEP / SSV-4 / SSOR / DEACT / PRE SLEEP
MS2 Good	POST SLEEP	PS/TVUP8 / PE/XTTVOR8 / SEURVNAL	MDDK XFER	PTV04UP / STV04 / PTV05 / DEACT	CREW PHOTO	CREW CONF	MEAL	FWE / P/TV 04 OPS		P/TV03 UNDOCK SETUP	P/TV03 UNDOCK	PTV03 / DEACT / EXERCISE
MS3 Bowen	POST SLEEP	MDDK XFER	RNDZ TOOLS C/O	CREW PHOTO	CREW CONF	MEAL	FWE	EXERCISE		UNDOCK	OPS / FLYAROUND / SEP / POLYBK / OPS / PRE SLEEP
MS4 Sellers	POST SLEEP	MDDK# / MDDK XFER	SSC / RETURN	CREW PHOTO	CREW CONF	MEAL	FWE / HATCH CLOSE	C/L CMR INSTL	EXERCISE	UNDOCK	OPS / FLYAROUND / SEP / POST RNDZ PGSC CNFG / WLES* / MDDK# / OCA& / PRE SLEEP

DAY/NIGHT

ORBIT: 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143

TDRS W / E / Z

ISS TDRS AVAIL

ORB ATT: BIAS -XLV -ZVV — UNDOCK/FLYAROUND/SEP — -ZLV -XVV

SSRMS POS: LAB PDGF @ WS4

NOTES: *FILTER CK; #STATUS CHECK; %NOMINAL CONFIG; #INIT; @TERM; *8/21:02; @REG RCNFG; #STATUS CHECK; &RATE RCNFG; *RECOVERY

FD10 **REPLANNED**

GMT 05/23/10 (143)

MET Day 008

12 13 14 15 16 17 18 19 20 21 22 23 009/00

| ISS | TDRS AVAIL | | |

REPLANNED

FD10

GMT 05/23/10 (143)

MET Day 009

009/00 19 20 21 22 23 05/24 01 02 03 04 05 06
01 02 03 04 05 06 07 08 09 10 11 12

STS-132				
CDR Ham	PRE SLEEP	PMC A/G	PRE SLEEP	SLEEP	POST SLEEP
PLT Antonelli	PRE SLEEP			SLEEP	LOG	POST SLEEP
MS1 Reisman	PRE SLEEP			SLEEP	LOG	POST SLEEP
MS2 Good	EXERCISE	PRE SLEEP		SLEEP	POST SLEEP
MS3 Bowen	PRE SLEEP			SLEEP	LOG	POST SLEEP
MS4 Sellers	PRE SLEEP			SLEEP	LOG	POST SLEEP

DAY/NIGHT

ORBIT: 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 | 151

TDRS W E Z

ISS TDRS AVAIL

ORB ATT: -ZLV -XVV

SSRMS POS

NOTES

REPLANNED

FD10

GMT 05/23/10 (143)

MET Day 009

ISS	TDRS AVAIL	009/00	19	20	21	22	23	05/24	01	02	03	04	05	06	07	08	09	10	11	12

ISS	ISS CDR Kotov	TVIS	PRE SLEEP-ISS	SLEEP	
	FE-1 Skvortsov		PRE SLEEP-ISS	SLEEP	
	FE-2 Caldwell-Dyson	PS-ISS, PMA2 PT3	PRE SLEEP-ISS	SLEEP	
	FE-3 Kornienko	VELO, ARED	PRE SLEEP-ISS	SLEEP	
	FE-5 Noguchi	THC-IMV, DUCT-RMV, CWC PT2	PRE SLEEP-ISS	SLEEP	
	FE-6 Creamer	CEVIS, PFC, MPC	PRE SLEEP-ISS, MPC	SLEEP	

DAY/NIGHT								
ORBIT	143	144	145	146	147	148	149	150	151
SSRMS POS								
ALL VHF					—	—	—	—	—
NOTES								

8

STS-132 FD (10)

REPLANNED

GMT Date 05/23 (143) | W | TDRSE | Z | D/N | DORB 13 | DORB 14 | DORB 15 | ORB 133 | ORB 134 | ORB 135 | MET Day 008 | STS ATI

CDR HAM | PLT ANTONELLI | MS1 REISMAN | NOTES

08:00 — 09:00 — 10:00 — 11:00 — 12:00

03:00 — 04:00 — 05:00 — 06:00

SLEEP (CDR HAM)

SLEEP (PLT ANTONELLI)

SLEEP (MS1 REISMAN)

FD10 EZ ACTIVITIES:
- √OCAC FILTER
- √MDDK DUCT SCREEN
- TEPC (STATUS CHECK) (ORB OPS, CREW SYS)
- HARD REBOOT ALL PGSCs EXCEPT: STS-1(OCA ROUTER) & STS-6(WLES)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

√Hum Seps for H2O Accumulation

SLEEP LOGBOOK (SDBI 1634)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

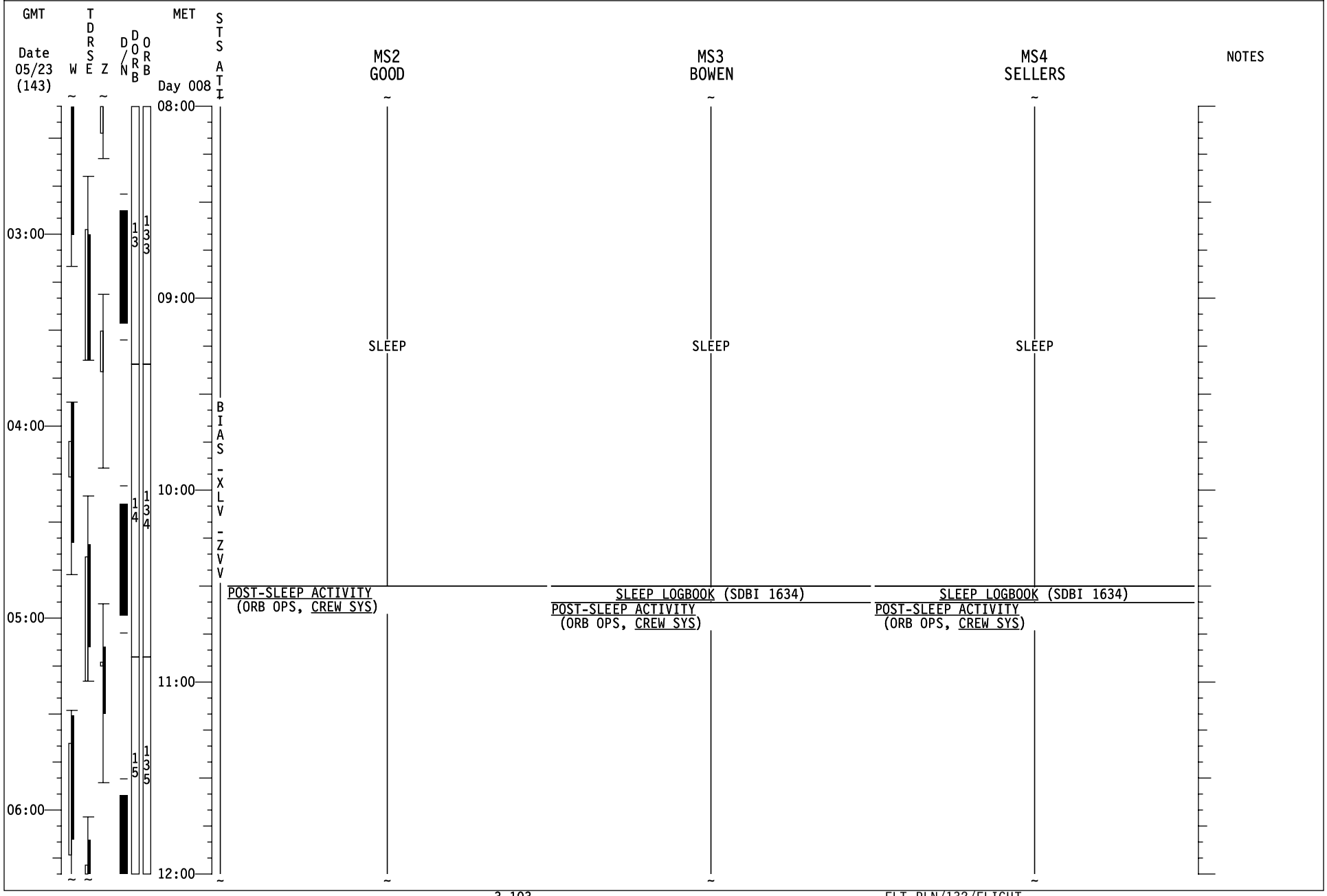
SLEEP LOGBOOK (SDBI 1634)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

BIAS-XLV-ZVV

STS-132 FD (10)

REPLANNED



STS-132 FD (10)

REPLANNED

GMT Date 05/23 (143) | W | TDRSE | Z | D/N | DORB 15 | DORB 1 | DORB 2 | DORB 3 | ORB 135 | ORB 136 | ORB 137 | ORB 138 | MET Day 008 | STS ATT

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

BIAS -XLV -ZVV

12:00 13:00 14:00 15:00 16:00

CDR HAM

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

√Hum Seps for H2O Accumulation

L17 Check MCIU filter screen

SHUTTLE CONDENSATE COLLECTION
(ORB OPS, ECLS) Perform CHANGEOUT
Ref. MSG 089, Item 3

JOINT OPS: 3.128 O2 TRANSFER TO HI P AND LO P O2 TANKS Step 3.4

JOINT OPS: 3.118 OXYGEN TRANSFER TEARDOWN
Steps 1-6
MCC-H will perform steps 1.6 and 4.5

EXERCISE

NOMINAL H2O CNFG (ORB OPS,ECLS)
√MCC for FES Pri A

O2 REPRESS INIT (On MCC GO) A

O2 REPRESS TERM (On MCC GO) B

CREW PHOTO

PLT ANTONELLI

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

DAILY TRANSFER LIST UPDATE
Ref. Transfer List & MSG 092

SHUTTLE/ISS H2O CNTR FILL
(ORB OPS, ECLS) Init Fill #5
Ref. MSG 016

EXERCISE

A OCAC PWR - OFF
C5 DIRECT O2 vlv - OP

SHUTTLE/ISS H2O CNTR FILL
(ORB OPS, ECLS)
Perform FILL TERMINATION

CWC TRANSFER
Transfer 1 CWC to ISS

TRANSFER TAGUP
Coordinate with transfer counterpart

TRANSFER BRIEF
Call down status to MCC

B C5 DIRECT O2 vlv - CL
OCAC PWR - ON

CREW PHOTO

MS1 REISMAN

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

EXERCISE

TRANSFER OPS
Ref. Middeck Transfer List & MSG 092

RNDZ TOOLS CHECKOUT
(RNDZ, RNDZ TOOLS)

CREW PHOTO

NOTES

UPLINK TFL 192

UPLINK TFL 184

STS-132 FD (10)

REPLANNED

GMT Date 05/23 (143) | W | TDRS E | Z | D/N | DORB 15 | DORB 1 | DORB 2 | DORB 3 | ORB 135 | ORB 136 | ORB 137 | ORB 138 | MET Day 008 | STS ATT

12:00 — 13:00 — 14:00 — 15:00 — 16:00

07:00 — 08:00 — 09:00 — 10:00

BIAS-XLV-ZVV

MS2 GOOD

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

P/TV08 EXTERNAL SURVEY
(PHOTO/TV, SCENES)
Setup, Step 2

P/TV08 EXTERNAL SURVEY
(PHOTO/TV, SCENES)
Ops, Item 2 for ISS Survey

TRANSFER OPS
Ref. Middeck Transfer List & MSG 092

P/TV04 INGRESS/EGRESS
(PHOTO/TV, SCENES)
Setup

P/TV05 ISS INTERNAL OPS
(PHOTO/TV, SCENES)
DEACTIVATION

CREW PHOTO

MS3 BOWEN

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

TRANSFER OPS
Ref. Middeck Transfer List & MSG 092

RNDZ TOOLS CHECKOUT
(RNDZ, RNDZ TOOLS)

CREW PHOTO

MS4 SELLERS

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

GLACIER STATUS CHECK (Cue Card)
CGBA STATUS CHECK (Cue Card)
TRANSFER OPS
Ref. Middeck Transfer List & MSG 092

SSC 20 RETURN TO ISS
Powerdown & disconnect SSC 20
Return SSC 20 to ISS per
Transfer List: Item 730
Stow brick & cables in MAR

CREW PHOTO

NOTES

STS-132 FD (10)

REPLANNED

GMT Date 05/23 (143) | W | TDRSE | Z | D/N | DORB | ORB | MET Day 008 | STS ATT

CDR HAM | PLT ANTONELLI | MS1 REISMAN | NOTES

16:00 — CREW PHOTO (CDR, PLT, MS1)

CREW CONFERENCE
ISS KU AVAIL: 16:01-16:46
Ref. MSG 094

11:00 — 3 — 138

17:00 — MEAL (CDR, PLT, MS1)

12:00 — 4 — 139

BIAS-XLV

C √A12/FREE/VERN
When ISS in Free Drift, DAP:LVLH,
When jet activity stopped for > 5 sec,
DAP:FREE > 2 sec, Then DAP:AUTO

18:00 — FAREWELL (CDR, PLT, MS1)

-ZVV

JOINT OPS: 4.102 SHUTTLE/ISS DUCT REMOVAL & HATCH CLOSING
MCC-H will perform steps 2-3

H/O ATTITUDE CONTROL CMG-TA TO ORBITER C
IMU STAR OF OPPTY ALIGN (ORB OPS, GNC)

13:00 — 5 — 140

JOINT OPS: 4.104 ODS VEST/PMA DPRS & HATCH LEAK CHECK
Depress ODS Vestibule only

JOINT OPS: 4.104 ODS VEST/PMA DPRS & HATCH LEAK CHECK
Depress ODS Vestibule only

C/L CAMR INSTALL
(PHOTO/TV, C/L CAMR)
Setup & Align C/L Camera

19:00

D On MCC GO:
MO10W 14.7 CAB REG INLET SYS 1 VLV - OP
Avoid WCS use during potential high N2 flow
Expect possible "S66 CAB O2 FLO 1" msg

PCS ACTIVATION D
O6 S TRK PWR-Z -ON
PRIORITY PWRUP GRP B
(ORB PKT, PRIOR PWRDN)
Steps 12(IMU3),6 E (Triple G2)

PRIORITY PWRUP GRP B
(ORB PKT, PRIOR PWRDN)
Steps 12(IMU3),6 E (Triple G2)

SSV OUTRATE - 3

UPLINK TFL 192

14:00

MNVR (TRK) UNDOCK
TG=2 BV=5 P=180 Y=0 OM=0
A12/AUTO/VERN Init TRK

E In step 4 of G2 SET EXPANSION
√MCC or pause ~3min (DAP Settling)

20:00

STS-132 FD (10)

REPLANNED

GMT Date 05/23 (143) | W | TDRSE | Z | D/N | DORB | ORB | MET Day 008 | STS ATT | MS2 GOOD | MS3 BOWEN | MS4 SELLERS | NOTES

16:00 — 11:00 — 12:00 — 13:00 — 14:00 — 17:00 — 18:00 — 19:00 — 20:00

D/N: 3, 4, 5

ORB: 138, 139, 140

STS ATT: BIAS-XLV, -ZVV

MS2 GOOD

CREW PHOTO

CREW CONFERENCE
ISS KU AVAIL: 16:01-16:46
Ref. MSG 094

MEAL

FAREWELL

P/TV04 INGRESS/EGRESS (PHOTO/TV, SCENES) OPS

P/TV03 UNDOCK (PHOTO/TV, SCENES) SETUP

MS3 BOWEN

CREW PHOTO

CREW CONFERENCE
ISS KU AVAIL: 16:01-16:46
Ref. MSG 094

MEAL

FAREWELL

EXERCISE

MS4 SELLERS

CREW PHOTO

CREW CONFERENCE
ISS KU AVAIL: 16:01-16:46
Ref. MSG 094

MEAL

FAREWELL

JOINT OPS: 4.102 SHUTTLE/ISS DUCT REMOVAL & HATCH CLOSING
MCC-H will perform steps 2-3

C/L CAMR INSTALL (PHOTO/TV, C/L CAMR)
Setup & Align C/L Camera

EXERCISE

STS-132 FD (10) — REPLANNED

GMT Date 05/23 (143) | W | TDRS E | Z | D/N | DORB 6 | DORB 7 | DORB 8 | 141 | 142 | 143 | MET Day 008 | STS ATT

MET	CDR HAM	PLT ANTONELLI	MS1 REISMAN	NOTES
20:00	MNVR (TRK) UNDOCK TG=2 BV=5 P=180 Y=0 OM=0 A12/AUTO/VERN Init TRK			
	UNDOCKING AND SEPARATION TIMELINE (RNDZ, UNDOCK/SEP T/L)	UNDOCKING AND SEPARATION TIMELINE (RNDZ, UNDOCK/SEP T/L)	UNDOCKING AND SEPARATION TIMELINE (RNDZ, UNDOCK/SEP T/L)	
15:00				UPLINK β21 + MASK BOX 20,22
21:00	**< UNDOCK 8/21:02**			
	FLYAROUND (RNDZ, UNDOCK/SEP T/L)	FLYAROUND (RNDZ, UNDOCK/SEP T/L)	FLYAROUND (RNDZ, UNDOCK/SEP T/L)	
16:00				
22:00	**< SEP1 TIG (22:17)**			
	SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	
17:00	**< SEP2 TIG (22:45)**			
	PRIORITY PWRDN GRP B (ORB PKT,PRIOR PWRDN) Steps 5,6(Single G2),9,10 & 12(IMU3)	PRIORITY PWRDN GRP B (ORB PKT,PRIOR PWRDN) Steps 5,6(Single G2),9,10 & 12(IMU3)	SSV OUTRATE - 4 JOINT OPS: 6.106 SSOR DEACTIVATION	
23:00	GNC 23 RCS RCS L - ITEM 2 EXEC (*) DES INH (twice)L3D-ITEM 28 EXEC (no*)	SSP1 OIU PWR - OFF (tb-bp) Expect 'BCE BYP PSP 1'msg RCS REGULATOR RECONFIG (ORB OPS, RCS) HEATER RECONFIG-CONFIG B (ORB OPS, EPS) CABIN TEMP CONTROLLER RECNFG 2(1) (ORB OPS, ECLS)		UPLINK TFL 188 UPLINK β21 + MASK
	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
18:00				
00:00				

STS-132 FD (10)

REPLANNED

GMT Date 05/23 (143) | W | TDRS E | Z | D/N | DORB 6 7 8 | ORB 141 142 143 | MET Day 008 | STS ATT

MET	MS2 GOOD	MS3 BOWEN	MS4 SELLERS	NOTES
20:00	P/TV03 UNDOCK (PHOTO/TV, SCENES) SETUP		EXERCISE	
	P/TV03 UNDOCK (PHOTO/TV, SCENES) Ops Ref. MSG 086	UNDOCKING AND SEPARATION TIMELINE (RNDZ, UNDOCK/SEP T/L)	UNDOCKING AND SEPARATION TIMELINE (RNDZ, UNDOCK/SEP T/L)	
15:00				
21:00		FLYAROUND (RNDZ, UNDOCK/SEP T/L)	FLYAROUND (RNDZ, UNDOCK/SEP T/L)	
16:00				
22:00		SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	
17:00	P/TV03 UNDOCK (PHOTO/TV, SCENES) Deactivation		POST RNDZ PGSC CONFIG Configure PGSCs	
23:00		DIGITAL VIA VTR (CUE CARD, DIGITAL PLAYBACK) Undocking KU TDRE (23:06-23:53)Alpha stop @ 23:33	WLES DOCK/UNDOCK RECOVERY (ORB OPS, WLES PROCEDURES) GLACIER STATUS CHECK (Cue Card) CGBA STATUS CHECK (Cue Card)	
18:00	EXERCISE	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	RECONFIG OCA DWNLK RATE [F] PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
00:00				

[F] After Crew Choice D/L cmplt: RECONFIGURE OCA D/L RATE (PL Max) (ORB OPS, PGSC) Part C, omit Step 4

STS-132 FD (10)

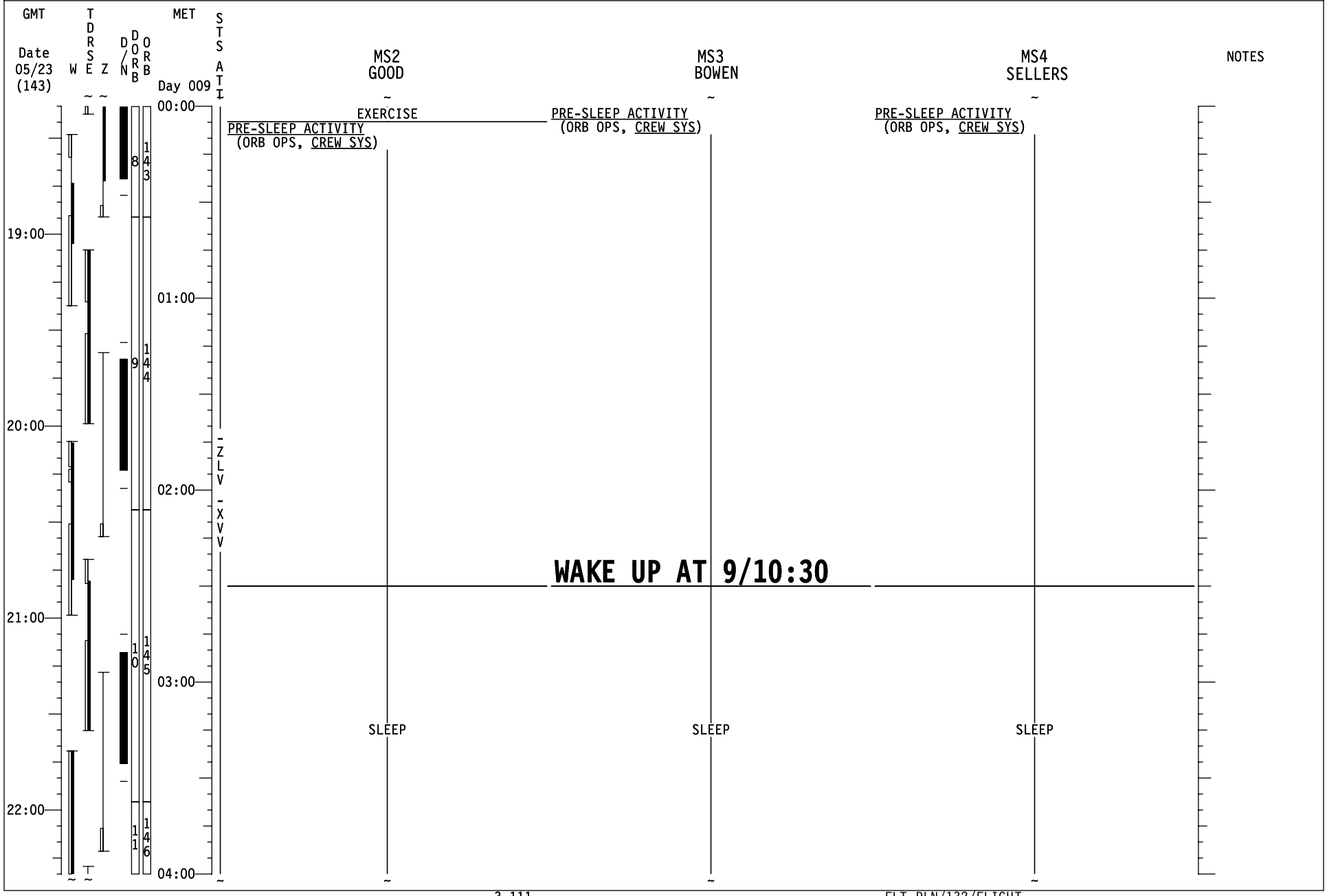
REPLANNED

GMT Date 05/23 (143) | W | TDRS E | Z | D/N | DORB 8 9 10 11 | ORB 143 144 145 146 | MET Day 009 | STS ATT -ZLV -XVV

CDR HAM	PLT ANTONELLI	MS1 REISMAN	NOTES
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
06 √UHF MODE - OFF PRIVATE MEDICAL CONFERENCE			
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)			
	WAKE UP AT 9/10:30		
SLEEP	SLEEP	SLEEP	

STS-132 FD (10)

REPLANNED



MSG 090 - FD10 MISSION SUMMARY

Good Morning Atlantis!!!

Thanks for an absolutely fantastic docked mission!

Enjoy the fly around today!!!

YOUR CURRENT ORBIT IS: 191 X 183 NM

NOTAMS - (NO CHANGE)

EDW -	EDW 22L/04R IN USE. EDT 22R/04L CLOSED FOR CONSTRUCTION.
EDW -	LAKEBED RWYS 15/33 GREEN. 18L RED.
NOR -	LAKEBED RWYS GREEN.
NTU -	RWY 05R/23L CLSD.
FOK -	CLOSED.
FMH -	RWY 23 APCH LTS OTS.
EDF -	TACAN EDF81 OTS.
YYT -	TACAN UYT23 AZIMUTH OTS.
KBO -	TACAN DOR23Y DME OTS.
AMB -	RWY 15/33 REQUIRES 30MIN PN TO CLEAR WIP.
PTN -	CLSD.
IKF -	NOT USABLE. NO AGREEMENT.
BEN -	NOT RECOMMENDED/NOT SUPPORTED.

NEXT 2 PLS OPPORTUNITIES:

NOR17	ORB141 – 8/20:53	SKC	7	180/13P18
EDW22	ORB157 – 9/21:17	SCT150 BKN250	7	260/7P11

OMS TANK FAIL CAPABILITY:

L or R OMS FAILS: NO

LEAKING OMS PRPLT BURN:

L or R OMS LEAK: ALWAYS BURN RETROGRADE

OMS QUANTITIES(%)

L OMS	OX = 36.77	R OMS	OX = 37.23
	FU = 36.79		FU = 36.89

FOR CURRENT QTYS, SUBTRACT INCN’T COUNTER

END OF PAGE 1 OF 2, MSG 090

MSG 090 - FD10 MISSION SUMMARY

DELTA V AVAILABLE:

OMS	381 FPS
ARCS (TOTAL ABOVE QTY1)	39 FPS
TOTAL IN THE AFT	420 FPS
ARCS (TOTAL ABOVE QTY2)	71 FPS
FRCS (ABOVE QTY 1)	36 FPS
AFT QTY 1	84 %
AFT QTY 2	46 %

THERE ARE NO FAILURE/IMPACT/WORK AROUNDS FOR TODAY.

END OF PAGE 2 OF 2, MSG 090

STS-132/ULF4 FD09 - MMT Summary

The MMT met briefly today to review the orbiter systems and mission progress.

Atlantis continues to perform well. The NASA team did an exceptional job getting her ready for STS-132/ULF4 flight support.

The MMT voted unanimously to be GO for Undock tomorrow and again thanked the entire NASA team for an outstanding docked mission.

END OF PAGE 1 OF 1, MSG 091

Good morning Ken and Tony,

Welcome to your final day of transfer ops! You are 87% complete with transfer and have a big day ahead of you. Please call down any questions you may have as early as possible.

Note that the SSC (item 730), DCBs (item 710, 711, 712), and ECCO bag (item 713) are all scheduled to be transferred during our brief. Please keep an eye out for these!

The Transfer List Excel file, FD10_Transfer_List_STS132.xls, is located on the KFX machine in **C:\OCA-up\transfer.**

For ISS, the Transfer List Excel file, FD10_Transfer_List_STS132.xls, is located in **K:\OCA-up\transfer.**

Transfer Questions/Comments

1.) Ken – Can you please report the S/N of the 0.5 CTB used to pack the Commemorative items (item 900)? This bag is now stowed in MA16G.

2.) The additional volume in Bag C is being held in case the EMU servicing kit that is supposed to be stowed in Vol H on FD11 is too big. This has happened in the past.

3.) We've worked the CIR foam boxes into the return plan. We think you can fit 6 of those boxes in Bag E, so please let us know if we're right. The rest of those boxes can be stowed in the STS A/L. These are in the transfer list as return items 927 and 928.

4.) We were also able to accommodate Steve's request to return some of the excess EVA items. These are in the transfer list as return items 922-926.

5.) Unfortunately, we are unable to return the Cupola Corner Panels on this flight.

FD10 Transfer Choreography:

- Piers: Transfer SSC back to ISS per SSC RETURN activity (Item 730)
- Tracy: Transfer returning DCBs on time per DCB XFER (Items 710, 711, and 712)
- T.J.: Transfer returning ECCO bag on time per ECCO XFER (713)
- XFER OPS:
    - Return Bose headphones and integrated cable to ISS (Items 909 and 910)
    - Complete all remaining transfer!

<u>Change Pages:</u>
Please incorporate changes as follows:

In the Transfer List **RESUPPLY** tab
Replace the following pages:
Resupply Page – 9

In the Transfer List **RETURN** tab
Replace the following pages:
Return Page – 5

In the Transfer List **RETURN** tab
Add the following pages:
Return Page – 12

Let us know if you have any questions!
- The ULF4 Transfer Team

EVA UNPACK AND STOW (60 min)

NOTE

This procedure assumes that transfer items were preconfigured per EVA PREP FOR TRANSFER TO SHUTTLE and EVA TRANSFER TO SHUTTLE

All ECOKs

1. Stow crew specific tags on drawstring inside ECOKs

2. Remove Comm Caps (6) from ECOKs; temp stow

3. Retrieve from RM & BW ECOKs the back-up set of patches/stripes. Remove from G ECOK both prime and back-up sets of patches/stripes. Stow all in Return to Houston bag. Each set contains:
   - ☐☐☐☐ EV stripes (4)
   - ☐ STS-132 mission patch
   - ☐ American flag

G ECOK

4. Remove EMU Gloves (G1); temp stow

5. Remove LCVG (G1); temp stow

Both EMUs

6. Remove from both EMUs the prime set of patches/stripes and stow in Return to Houston bag. Each set contains:
   - ☐☐☐☐ EV stripes (4)
   - ☐ STS-132 mission patch
   - ☐ American flag

Bag E

7. Remove contingency LiOH canisters (4) and temp stow

8. Unpack and stow items per table below
   Report status to **MCC-H** when complete:

Current Location	Item	Final Stowage Location	Status
Middeck	ECOK (BW)	EMU 3004 (BW)	
	ECOK (RM)	EMU 3018 (RM)	
	EMU 3004 (BW)	External A/L (Stbd AAP), bundle with LTA Restraint Bag	
	EMU 3018 (RM)	External A/L (Port AAP), bundle with LTA Restraint Bag	
	Comm Cap (BW1)	EMU 3004 LTA Restraint Bag	
	Comm Cap (BW2)		
	Comm Cap (RM1)	EMU 3018 LTA Restraint Bag	
	Comm Cap (RM2)		
	ECOK (G) - see MSG 84A Bag C layout	Bag C	
	LCVG (G1) - see MSG 84A Bag C layout	Bag C	
	Comm Caps(G1) - see MSG 84A Bag C layout	Bag C	
	Comm Caps (G2) - see MSG 84A Bag C layout	Bag C	
	Gloves (G1) - see MSG 84A Bag C layout	Bag C	
	Contingency LiOH canisters (4)	External A/L Floor Bag	

Current Location	Item	Final Stowage Location	Status
Xfer to Shuttle Bag	Old ISS EVA Systems Checklist (ISS copy, no stripe)	Locker MF57G	
	STS-132 CONSUMABLES TRACKING CUE CARD		
	STS-132 BATTERY RECHARGE PLAN CUE CARD		
Xfer to Shuttle Bag (Cont)	EMERGENCY UNDOCKING/ EXPEDITED SUIT DOFFING CUE CARD	Locker MF57G	
	10.102 Joint Emergency Egress CC		
	ISS EVA Systems Checklist (STS-132 copy with Red stripe)		
	FDF STS-132 EVA CHECKLIST		
	LiOH (1) (used)	Bag B	
	Old ISS MWS (2) (baseplate [-303], t-bar)	Bag C	
	LiOH (3) (used)		
	85-ft Safety Tether (#25)	External A/L Floor Bag	
	85-ft Safety Tether (#27)		
	Empty Xfer to Shuttle Bag	Bag C	
EVA Sys Xfer Bag	'EVA Transfer' ziplock (empty)	Locker MF57G	
	EMU Servicing Kit (s/n 5002)	Vol H Inboard	
	EVA Helmet Light Assembly (s/n 1003)		
	EVA Helmet Light Assembly (s/n 1005)	Vol H Outboard	
	Shuttle Crew Specific Compartment (1)		
	SAFER Hardmount (s/n 04)	External A/L Floor Bag	
	EMU Battery (s/n 2078)		
	Empty EVA Sys Xfer Bag	Bag C	

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