STS-134 / ULF6

FD 04 Execute Package

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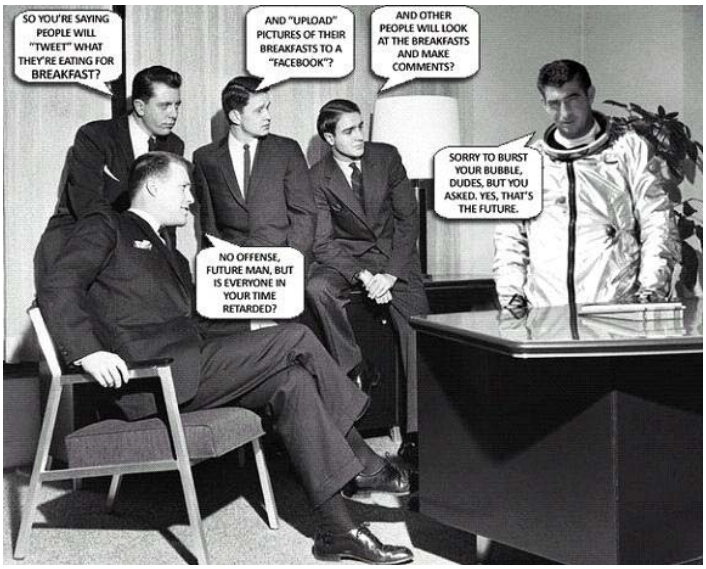
034A	34	Manually Mapping External USB Drive Letters
035	35 - 36	FD03 MMT Summary

Approved by FAO:

T. Clancy

Approved by OpsPlan:

J. Kitchen



Last Updated: May 19 2011 1:53 AM GMT

***JEDI** (**J**oint **E**xecute package **D**evelopment and **I**ntegration), v3.0*

MSG INDEX

MSG NO.	TITLE
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1. Post-Sleep Cryo Config

   For today's post-sleep cryo config, O2 tanks 2 & 5, and H2 tanks 2 & 4 will be active.

   R1 O2,H2 MANF VLV TK2 (two) - OP (tb-OP)

2. Pre-Sleep Cryo Config

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

   For tonight's pre-sleep cryo config, manifold 1 will be closed with O2 tanks 1 & 5 and H2 tanks 1 & 4 active.

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

3. H2O Ops Cue Card

   MSG 030 is your H2O Ops Cue Card for this mission. Note that a final stowage location for CWC Fills #9 and subs is TBD. Once that information is finalized, we will have you Pen and Ink the Cue Card.

4. Contingency DAP Actions during AMS Robotics

   If contingency Shuttle attitude control is required during the AMS robotics operations, for the AMS INTERMEDIATE POSITION (ROBO:1.210 AMS HANDOFF AND INSTALL Step 5.1) and subsequent positions, perform DAP LOAD UPDATE (**MSG 029**) prior to use of Shuttle attitude control.

5. NLP Termination

   Spanky - We moved the NLP TERMINATION (ASSY OPS, PAYLOADS) a little earlier in the timeline to maximize the science, based on Mark's activation time reported FD2. Please give us a call if you need to do this procedure earlier or later, since we have a ground control experiment to operate also.

6. IENOS Sensor Deployment

   Roberto - For the IENOS OPERATIONS (ASSY OPS, PAYLOADS) activity to deploy the IENOS sensors in the US Lab, please note that the air vents to be avoided are located along the overhead. Please place the sensors along the deck to meet the 2m avoidance constraint.

7. STORRM Comments

   Drew - The STORRM team would like to thank you for your excellent detailed descriptions and timely responses to the STORRM issues that were seen during rendezvous! Although the team had limited visibility into the data, what we saw has us very excited. The data will be extremely useful and we will be retrieving data over the next 4 to 5 days. We will also be working on the unexplained issues seen yesterday to prepare for re-rendezvous, and will inform you if any changes to operations are needed.

   We were, however, able to recreate the SSV video problem reported during yesterday's operations. If the screen to the laptop is closed prior to the Windows software starting, the desktop is sent to the S-Video out port and is downlinked via SSV. If the screen is reopened, it will be blank as you described. The workaround will be to leave the screen open until Windows is fully booted.

8. FD04 EVA Updates

   Mark, Drew, Spanky and Taz,

   We have three products for your reference during your timelined EVA related activities today.

   1. **MSG 27- 0601 (134-021)** IR Body Camera Positions provides descriptions of possible body positions for discussion during IR Camera Tag up.

   2. **MSG 27-0592 (134-026)** STS-134/ULF6 QD Fam Ops is an overview for the QD FAM OPS activity on MS1, MS3, and MS4 and for reference, if needed, during Procedure Review.

   3. **MSG 27-0603 (134-027)** STS-134/ULF6 FD4 EVA Deltas contains updates for today’s EVA activities and a reminder for Mark about the Metox Canister plan for FD5. The message will be reviewed during Procedure Review.

9. MHA IFM

   Due to problems with the flight deck MHA, an IFM may be required in preparation for EVA 1, to swap the flight deck MHA with the middeck MHA. Pending the results of the MHA Checkout (**MSG 033**), you may be called to perform the MHA Removal From Middeck Ceiling IFM called out at MET 2/22:45. The IFM will be uplinked at a later time, as we are still reviewing it.

10. REPLACE PAGES 2-10 AND 2-12, AND 3-32 THROUGH 3-41.

REPLANNED

GMT 05/19/11 (139) 01 02 03 04 05 06 07 08 09 10 11 12

MET Day 002 12 13 14 15 16 17 18 19 20 21 22 23 003/00

FD04

STS 134	CDR MARK	SLEEP; POST SLEEP; MHA; POST SLEEP; MDDK#; XFER UPDAT; CWC#1 INIT; MDDK XFER; CWC#1 TERM; CWC#2 INIT; MDDK XFER; CWC#2 TERM; SSV-2; CWC XFER; PAO EVENT; EXERCISE; MEAL; O2 TERM
	PLT BOX	SLEEP; LOG; POST SLEEP; MHA; POST SLEEP; P/TV06; SSRMS AMS GRPL; SSRMS AMS INSTALL; CAPTURE; LIMP; CAPTURE; BRAKE; DEMATE; UMA MATE; AMS RLS; CCR RMV; PAO EVENT; MEAL; MHA RMVL
	MS1 SPANKY	SLEEP; POST SLEEP; EXERCISE; POST SLEEP; BATT INSTL; REBA*; REBA C/O; NLP VACC TERM; WLES; AMS PGSC DEACT; SSC SETUP; E_LK PREP; PAO EVENT; MEAL; EVA IR CAMERA TAGUP; QD FAM OPS; EVA TOOL CONFIG
	MS2 ROBERTO	SLEEP; LOG; POST SLEEP; PLYBK; P/TV08 AMS; MCIU*; AMS GRPL; AMS UNBERTH & H/O; AMS UNGRPL; VIABLE ACT; IENOS S/U; MDDK XFER; EXERCISE; MEAL; MHA RMVL; MDDK XFER
	MS3 DREW	SLEEP; POST SLEEP; AMS GRPL; AMS UNBERTH & H/O; AMS UNGRPL; P/TV06; E_LK PREP; MEAL; EVA IR CAMERA TAGUP; QD FAM OPS; EVA TOOL CONFIG
	MS4 TAZ	SLEEP; LOG; POST SLEEP; EXERCISE; POST SLEEP; SSRMS AMS GRPL; SSRMS AMS INSTALL; CAPTURE; LIMP; CAPTURE; BRAKE; DEMATE; UMA MATE; AMS RLS; PAO EVENT; MEAL; EVA IR CAMERA TAGUP; QD FAM OPS; VERIF EMU SIZE
KU	CH 2	OCA
	CH 3	AMS; TV
NO EXERCISE		[I]; [A]; [B]; [C]; [D]; [E]
DAY/NIGHT		
ORBIT		40 41 42 43 44 45 46 47 48
TDRS	W E Z	
ISS	TDRS AVAIL	
ORB ATT		BIAS -XLV -ZVV

NOTES

[I] NO UNISOLATED EXERCISE [MT XLATE]
[A] NO EXERCISE [AMS UNBERTH]
[B] NO EXERCISE [DOUBLE GRAPPLE]
[C] NO EXERCISE [AMS INSTALL]
[D] NO UNISOLATED EXERCISE [1ST THRU 3RD STAGE CAPUTRE]

#STATUS CHECK *INSTALL
*FILTER CK

[E] NO UNISOLATED EXERCISE [UMA MATING]

3

REPLANNED

GMT 05/19/11 (139) 13 14 15 16 17 18 19 20 21 22 23 05/20

MET Day 003 003/00 01 02 03 04 05 06 07 08 09 10 11 12

FD04

STS 134														
CDR MARK	O2 TERM	STS O2 P/B CONFIG	PAO EVENT	EVA PROC RVW	PRESLP	PMC A/G	OMS^	PRE SLEEP	MASK PB/TOOL CONFIG	PRE SLEEP	SLEEP			
PLT BOX	EXERCISE	PRLA	PRECRDL	EVA PROC RVW	DAP	PRE SLEEP	SLEEP							
MS1 SPANKY	EVA TOOL CONFIG			EVA PROC RVW	PRE SLEEP	SLEEP								
MS2 ROBERTO	MDDK XFER	XFR BRF	PREP XFER	BRIEF BIOKIS*	PRECRDL	EVA PROC RVW	MDDK#	PRE SLEEP	SLEEP					
MS3 DREW	EVA TOOL CONFIG			EVA PROC RVW	PRE SLEEP	MASK PB/TOOL CONFIG	PRE SLEEP	SLEEP						
						10.2 DPRS	ISS Airlock Campout at 10.2 PSI							
MS4 TAZ	♣	EVA TOOL CONFIG	PAO EVENT	EVA PROC RVW	PRE SLEEP	MASK PB/TOOL CONFIG	PRE SLEEP	SLEEP						

NO EXERCISE — NO UNISOLATED EX [F]

DAY/NIGHT

ORBIT 48 49 50 51 52 53 54 55 56

TDRS W E Z

ISS TDRS AVAIL

ORB ATT — BIAS -XLV -ZVV

NOTES
♣VERIF EMU SIZE
*ACT 2
^ACCUM REPRESS
#STATUS CHECK

[F] NO UNISOLATED EXERCISE [MT XLATE]

STS-134/ULF6 FD04

GMT Date 05/19 (139) | W | T D R S E | Z | D/N | O R B | MET Day 002 | A T T

CDR MARK | PLT BOX | MS1 SPANKY | NOTES

01:00 — 02:00 — 03:00 — 04:00

12:00 — 13:00 — 14:00 — 15:00 — 16:00

40 — 41 — 42 — 43

BIAS-XLV-ZVV

SLEEP (CDR MARK, PLT BOX, MS1 SPANKY)

FD04 EZ ACTIVITIES:
- √OCAC Filter
- √MDDK Duct Screen
- TEPC Status Check:
  - Verify display is backlit
- Hard reboot: STS-2(WINDECOM), STS-3(KFX) & STS-4(RPOP)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
√HUM SEPS FOR H2O ACCUMULATION

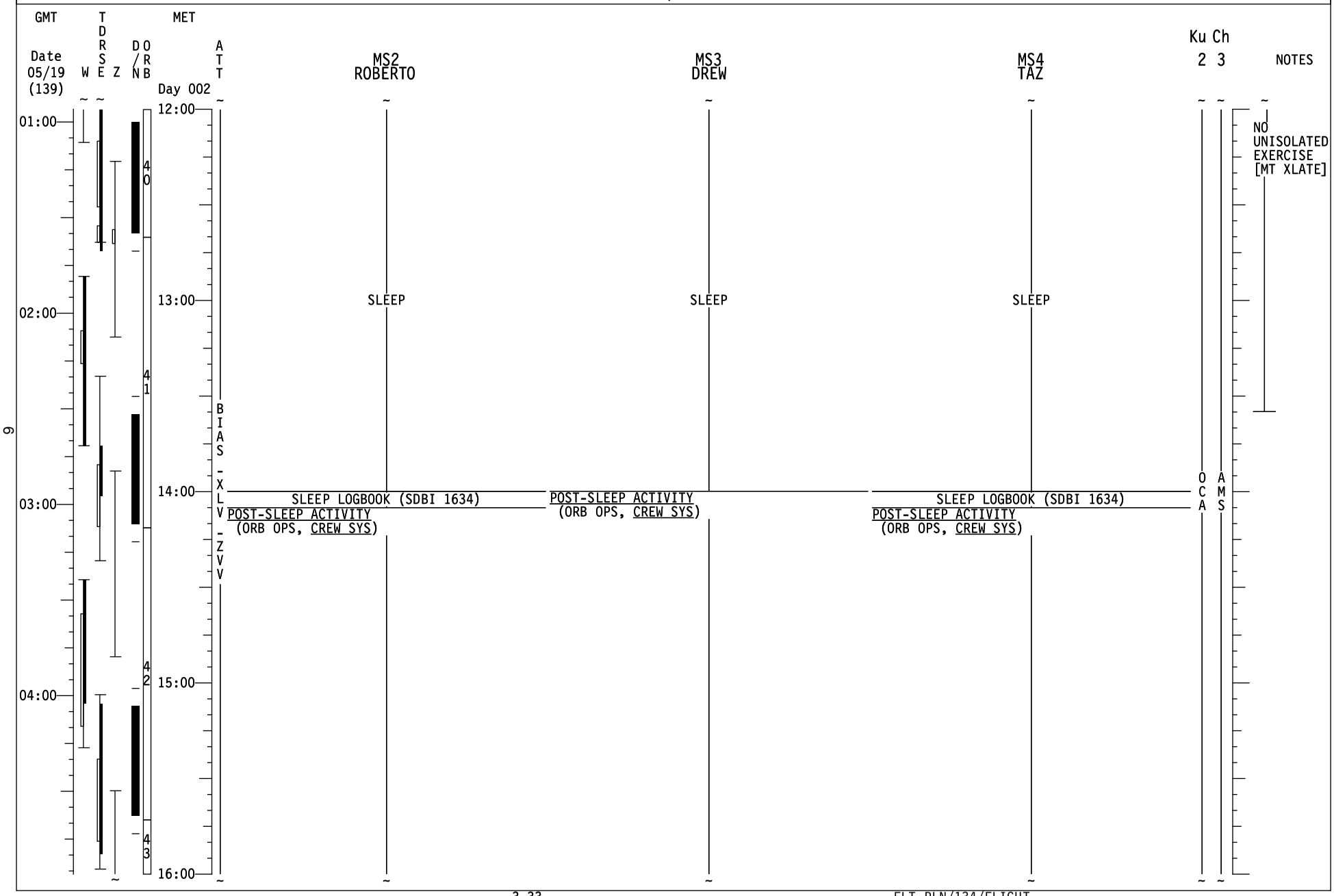
SLEEP LOGBOOK (SDBI 1634)
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

EXERCISE

NOTES:
- NO UNISOLATED EXERCISE [MT XLATE]
- UPLINK β21+ Mask Box 40, 41,43

STS-134/ULF6 FD04



STS-134/ULF6 FD04

GMT Date 05/19 (139) | W | TDRSE | Z | D/N | ORB | MET Day 002 | ATT

05:00 | 06:00 | 07:00 | 08:00

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

43 | 44 | 45

BIAS-XLV-ZVV

CDR MARK

MHA CHECKOUT
Ref. MSG 033

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

CGBA STATUS CHK; GLACIER STATUS CHK (CC)

IMU STAR OF OPPORTUNITY ALIGN (ORB OPS,GNC)

DAILY TRANSFER LIST UPDATE
Ref. Transfer List & MSG 025

SHUTTLE/ISS H2O CONTAINER FILL (HC)
(ORB OPS, ECLS) Perform CWC FILL #1
Ref. MSG 030

TRANSFER OPS
Ref. Transfer List & MSG 025

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

SHUTTLE/ISS H2O CONTAINER FILL (HC)
(ORB OPS, ECLS) Perform CWC FILL #2
Ref. MSG 030

TRANSFER OPS
Ref. Transfer List & MSG 025

PLT BOX

MHA CHECKOUT
Ref. MSG 033

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

P/TV06 ROBOTICS OPERATIONS
(PHOTO/TV, SCENES)
OPS, Item 3

A Ref. STS-134 CONSUMABLES TRACKING (CC)

ROBO: 1.210 AMS HANDOFF AND INSTALL
Steps 1-4
EXERCISE CONSTRAINT

ROBO: 1.210 AMS HANDOFF AND INSTALL
Steps 5-8.4
EXERCISE CONSTRAINT
Ref. MSG 023 Item 4

C Procedure Variables:
PAS Site [N] = 2
Initframe PPL ID [H] = 00002
Speed of latch in
1st stage = 450 rpm
2nd stage = 225 rpm
3rd stage = 450 rpm

S&M: 1.911 PAS NORMAL MATE
Steps 6-10 EXERCISE CONSTRAINT C

ROBO:1.210 AMS HANDOFF AND INSTALL Step 8.5
EXERCISE CONSTRAINT

MS1 SPANKY

EXERCISE

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

ISS EVA SYSTEMS: 1.515 EMU
METOX/LIOH/BATTERY REPLACEMENT
Ref: STS-134 CONSUMABLES TRACKING CC

ISS EVA SYS:1.307 REBA INSTALLATION/REMOVAL
INSTALLATION A

ISS EVA SYSTEMS: 1.403 REBA POWERED
HARDWARE CHECKOUT
Perform for EMUs 3004 and 3005

B Do not disconnect the LRU from the serial port on RPOP 2

NLP TERMINATION (ASSY OPS, PAYLOADS)
Terminate Vaccine GAPs A-P
Ref. MSG 023, Item 5

WLES RNDZ TOOLS C/O PREP (ORB OPS, WLES) B

AMS PGSC DEACT
(ASSY OPS, PAYLOADS)

NOTES

NO EXERCISE [AMS UNBERTH TO SRMS AT HOVER POS'N]

NO EXERCISE [DOUBLE GRAPPLE]

NO EXERCISE [MNVR TO INSTALL THRU 1st STAGE CAPTURE]

NO UNISOL EXERCISE

7

STS-134/ULF6 FD04

GMT Date 05/19 (139) | W | TDRSE | Z | D/N | ORB | MET Day 002 | ATT | MS2 ROBERTO | MS3 DREW | MS4 TAZ | Ku 2 | Ch 3 | NOTES

05:00 | 06:00 | 07:00 | 08:00

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

ATT: BIAS-XLV-ZVV

MS2 ROBERTO

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

DOCKING PLAYBACK D

P/TV08 AMS
(PHOTO/TV, SCENES)
OPS

L17 Check MCIU filter screen

AMS GRAPPLE
(PDRS, AMS NOMINAL)

AMS UNBERTH AND HANDOFF
(PDRS, AMS NOMINAL)
EXERCISE CONSTRAINT

AMS UNGRAPPLE AND VIEWING
(PDRS, AMS NOMINAL)
EXERCISE CONSTRAINT

VIABLE OPERATIONS
(ASSY OPS, PAYLOADS)
Step 1
Ref. Transfer List: Resupply Item 30.5

IENOS OPERATIONS
(ASSY OPS, PAYLOADS)
Step 1, Ref. MSG 023 Item 6

TRANSFER OPS
Ref. Transfer List & MSG 025

MS3 DREW

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

D DIGITAL VIA VTR
(CUE CARD, DIGITAL PLAYBACK)
C/L CAMR from GMT 138/10:11-10:16
KU TDRW (16:19-16:47)

AMS GRAPPLE
(PDRS, AMS NOMINAL)

AMS UNBERTH AND HANDOFF
(PDRS, AMS NOMINAL)
EXERCISE CONSTRAINT

AMS UNGRAPPLE AND VIEWING
(PDRS, AMS NOMINAL)
EXERCISE CONSTRAINT

P/TV06 ROBOTICS OPERATIONS
(PHOTO/TV, SCENES)
OPS, Item 3

MS4 TAZ

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

EXERCISE

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

ROBO: 1.210 AMS HANDOFF AND INSTALL
Steps 1-4
EXERCISE CONSTRAINT

ROBO: 1.210 AMS HANDOFF AND INSTALL
Steps 5-8.4
EXERCISE CONSTRAINT
Ref. MSG 023 Item 4

C Procedure Variables:
PAS Site [N] = 2
Initframe PPL ID [H] = 00002
Speed of latch in
1st stage = 450 rpm
2nd stage = 225 rpm
3rd stage = 450 rpm

S&M: 1.911 PAS NORMAL MATE
Steps 6-10 EXERCISE CONSTRAINT C

ROBO:1.210 AMS HANDOFF AND INSTALL Step 8.5
EXERCISE CONSTRAINT

Ku 2: OCA
Ch 3: AMS, TV

NOTES:
NO EXERCISE [AMS UNBERTH TO SRMS AT HOVER POS'N]
NO EXERCISE [DOUBLE GRAPPLE]
NO EXERCISE [MNVR TO INSTALL THRU 1st STAGE CAPTURE]
NO UNISOL EXERCISE

FLT PLN/134/FLIGHT

8

STS-134/ULF6 FD04

GMT Date 05/19 (139) | W | TDRSE | Z | D/N | ORB | MET Day 002 | ATT

09:00 – 10:00 – 11:00 – 12:00

45 – 46 – 47 – 48

20:00 – 21:00 – 22:00 – 23:00 – 00:00

BIAS - XLV - ZVV

CDR MARK

TRANSFER OPS
Ref. Transfer List & MSG 025

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

SSV OUTRATE - 2

Transfer CWCs to ISS

PUBLIC AFFAIRS EVENT
ISS S & Ku AVAIL: 21:15-21:32
JPM: Mark/Box/Spanky/Taz/Ron
Ref. MSG 031

EXERCISE

MEAL

JOINT OPS:3.128 O2 XFER TO HI P AND LO P O2 TANKS
Step 3. Ground will perform step 3.5.

PLT BOX

S&M: 1.911 PAS NORMAL MATE
Steps 11-14 [C]
EXERCISE CONSTRAINT

ROBO:1.210 AMS HANDOFF AND INSTALL Step 8.6

ROBO:1.210 AMS HANDOFF AND INSTALL Step 8.7

S&M: 1.911 PAS NORMAL MATE
Steps 15-17 [C] EXERCISE CONSTRAINT
Note: UMA Mate occurs after SSRMS Umbilical release

ROBO: 1.220 AMS RELEASE AND MANEUVER TO MT TRANSLATION CONFIG

CSS: 1.111 CUPOLA CREW RESTRAINT OPS Step 6

PUBLIC AFFAIRS EVENT
ISS S & Ku AVAIL: 21:15-21:32
JPM: Mark/Box/Spanky/Taz/Ron
Ref. MSG 031

[C] Procedure Variables:
PAS Site [N] = 2
Initframe PPL ID [H] = 00002
Speed of latch in
1st stage = 450 rpm
2nd stage = 225 rpm
3rd stage = 450 rpm

[E] 1.104 SET UP ORBITER SSC
(ASSY OPS, ACT & C/O) Ref. Xfer List:
Return Items 727, 727.1, 727.2, 727.3
MANUALLY MAPPING EXTERNAL USB DRIVE
Ref. MSG 034

MEAL

MHA REMOVAL FROM MIDDECK CEILING
Ref. MSG 023 Item 9

MS1 SPANKY

AMS PGSC DEACT
(ASSY OPS, PAYLOADS)

SET UP ORBITER SSC [E]

ISS EVA SYSTEMS: 1.305 EQUIPMENT LOCK PREP
Retrieve 1" Kapton tape for use in Airlock

PUBLIC AFFAIRS EVENT
ISS S & Ku AVAIL: 21:15-21:32
JPM: Mark/Box/Spanky/Taz/Ron
Ref. MSG 031

MEAL

EVA IR CAMERA TAGUP via S/G 2
Ref. MSG 021

QD FAM OPS
Ref. MSG 026

EVA 1 TOOL CONFIGURATION
(EVA, TIMELINES)
Ref. STS-134 CONSUMABLES TRACKING (CC)
Ref. MSG 027

NOTES

NO UNISOLATED EXERCISE [1ST THRU 3RD STAGE CAPTURE]

TFL 184

NO UNISOLATED EXERCISE [UMA MATING]

STS-134/ULF6 FD04

GMT Date 05/19 (139) | W | TDRSE | Z | D/N | ORB | MET Day 002 | ATT

09:00 – 10:00 – 11:00 – 12:00

45 – 46 – 47 – 48

20:00 – 21:00 – 22:00 – 23:00 – 00:00

BIAS - XLV - ZVV

MS2 ROBERTO

TRANSFER OPS
Ref. Transfer List & MSG 025

EXERCISE

MEAL

MHA REMOVAL FROM MIDDECK CEILING
Ref. MSG 023 Item 9

TRANSFER OPS
Ref. Transfer List & MSG 025

MS3 DREW

P/TV06 ROBOTICS OPERATIONS
(PHOTO/TV, SCENES) OPS, Item 3

ISS EVA SYSTEMS: 1.305 EQUIPMENT LOCK PREP
Retrieve 1" Kapton tape for use in Airlock

C Procedure Variables:
PAS Site [N] = 2
Initframe PPL ID [H] = 00002
Speed of latch in
1st stage = 450 rpm
2nd stage = 225 rpm
3rd stage = 450 rpm

MEAL

EVA IR CAMERA TAGUP via S/G 2
Ref. MSG 021

QD FAM OPS
Ref. MSG 026

EVA 1 TOOL CONFIGURATION
(EVA, TIMELINES)
Ref. STS-134 CONSUMABLES TRACKING (CC)
Ref. MSG 027

MS4 TAZ

S&M: 1.911 PAS NORMAL MATE
Steps 11-14 C
EXERCISE CONSTRAINT

ROBO:1.210 AMS HANDOFF AND INSTALL Step 8.6
ROBO:1.210 AMS HANDOFF AND INSTALL Step 8.7
S&M: 1.911 PAS NORMAL MATE
Steps 15-17 C EXERCISE CONSTRAINT
Note: UMA Mate occurs after SSRMS Umbilical release
ROBO: 1.220 AMS RELEASE AND MANEUVER TO MT TRANSLATION CONFIG

PUBLIC AFFAIRS EVENT
ISS S & Ku AVAIL: 21:15-21:32
JPM: Mark/Box/Spanky/Taz/Ron
Ref. MSG 031

MEAL

EVA IR CAMERA TAGUP via S/G 2
Ref. MSG 021

QD FAM OPS
Ref. MSG 026

Verify EMU 3005 sizing
Ref. STS-134 NOMINAL EMU SIZING
(EVA, EMU CONTINGENCY PROCS)
Install two wrist mirrors from Outside Pocket of MO-2 bag s/n 1010

NOTES

NO UNISOLATED EXERCISE [1ST THRU 3RD STAGE CAPTURE]

NO UNISOLATED EXERCISE [UMA MATING]

STS-134/ULF6 FD04

GMT Date 05/19 (139) | W E Z | DOR/NB | MET Day 003 | ATT

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

00:00 01:00 02:00 03:00 04:00

ATT: BIAS-XLV-ZVV

DOR/NB: 48 49 50

CDR MARK

JOINT OPS:3.128 O2 XFER TO HI P AND LO P O2 TANKS
Step 3. Ground will perform step 3.5.
JOINT OPS: 3.121 PREBREATHE USING
SHUTTLE O2 SETUP (POST O2 XFER)
Steps 1-4,
Ground will perform steps 1.7 and 4.15

PUBLIC AFFAIRS EVENT
ISS S & KU AVAIL: 00:54-01:37
JPM: Mark/Taz/Cady
Ref. MSG 032

EVA 1 PROCEDURE REVIEW
Ref. EVA 1 BRIEFING CARD
(EVA, TIMELINES)
Ref. MSG 026, MSG 027

PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
L9 PS AUD A/G 1,2 (two) - OFF
PRIVATE MEDICAL CONFERENCE
Private Conference via A/G 2

L OMS ACCUMULATOR REPRESS E
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

E C3 OMS ENG LEFT - ARM/PRESS (Wait 5 Seconds)
- OFF

ISS EVA SYSTEMS: 1.206 10.2 PSIA CAMPOUT
MASK PREBREATHE MCC-H~performs steps 1, 19

PLT BOX

EXERCISE

PRLA CLOSE
(ORB OPS, PRLA)

AMS VIEWING TO PRECRADLE
(PDRS, AMS NOMINAL)

EVA 1 PROCEDURE REVIEW
Ref. EVA 1 BRIEFING CARD
(EVA, TIMELINES)
Ref. MSG 026, MSG 027

DAP UPDATE Ref. MSG 029
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

MS1 SPANKY

EVA 1 TOOL CONFIGURATION
(EVA, TIMELINES)
Ref. STS-134 CONSUMABLES TRACKING (CC)
Ref. MSG 027

EVA 1 PROCEDURE REVIEW
Ref. EVA 1 BRIEFING CARD
(EVA, TIMELINES)
Ref. MSG 026, MSG 027

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

NOTES

UPLINK
β21+Mask
Box 40,41,42

NO
UNISOLATED
EXERCISE
[MT XLATE]

STS-134/ULF6 FD04

GMT Date 05/19 (139) | W | TDRSE | Z | D/N | ORB | MET Day 003 | ATT

13:00 | 14:00 | 15:00 | 16:00

00:00 | 01:00 | 02:00 | 03:00 | 04:00

48 | 49 | 50

BIAS-XLV-ZVV

MS2 ROBERTO

TRANSFER OPS
Ref. Transfer List & MSG 025

TRANSFER BRIEF PREP
Coordinate with transfer counterparts

TRANSFER BRIEF
Call down status to MCC via A/G2

BIOKIS OPERATIONS
(ASSY OPS, PAYLOADS) Step 3

AMS VIEWING TO PRECRADLE
(PDRS, AMS NOMINAL)

EVA 1 PROCEDURE REVIEW
Ref. EVA 1 BRIEFING CARD
(EVA, TIMELINES)
Ref. MSG 026, MSG 027

CGBA STATUS CHK; GLACIER STATUS CHK (CC)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

MS3 DREW

EVA 1 TOOL CONFIGURATION
(EVA, TIMELINES)
Ref. STS-134 CONSUMABLES TRACKING (CC)
Ref. MSG 027

EVA 1 PROCEDURE REVIEW
Ref. EVA 1 BRIEFING CARD
(EVA, TIMELINES)
Ref. MSG 026, MSG 027

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

ISS EVA SYSTEMS: 1.206 10.2 PSIA CAMPOUT
MASK PREBREATHE MCC-H~performs steps 1, 19

MS4 TAZ

Verify EMU 3005 sizing: See pg. 3-37

EVA 1 TOOL CONFIGURATION
(EVA, TIMELINES)
Ref. STS-134 CONSUMABLES TRACKING (CC)
Ref. MSG 027

PUBLIC AFFAIRS EVENT
ISS S & KU AVAIL: 00:54-01:37
JPM: Mark/Taz/Cady
Ref. MSG 032

EVA 1 PROCEDURE REVIEW
Ref. EVA 1 BRIEFING CARD
(EVA, TIMELINES)
Ref. MSG 026, MSG 027

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

ISS EVA SYSTEMS: 1.206 10.2 PSIA CAMPOUT
MASK PREBREATHE MCC-H~performs steps 1, 19

NOTES

NO UNISOLATED EXERCISE [MT XLATE]

REPLANNED

STS-134/ULF6 FD04

GMT Date 05/19 (139) | W | T D R S E | Z | D/N | O R B | MET Day 003 | ATT

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

04:00 05:00 06:00 07:00 08:00

ATT: BIAS-XLV-ZVV

O R B: 51 52 53

CDR MARK

ISS EVA SYSTEMS: 1.206 10.2 PSIA CAMPOUT
MASK PREBREATHE MCC-H performs steps 1, 19

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

CREW WAKE AT 03/13:30

SLEEP

PLT BOX

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

MS1 SPANKY

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

NOTES

NO UNISOLATED EXERCISE [MT XLATE]

UPLINK
β21+Mask
Box 40,41,46

STS-134/ULF6 FD04

GMT Date 05/19 (139) | W | T D R S E | Z | D / N | O R B | MET Day 003 | A T T

MS2 ROBERTO | MS3 DREW | MS4 TAZ | NOTES

17:00 | 18:00 | 19:00 | 20:00

04:00 | 05:00 | 06:00 | 07:00 | 08:00

51 | 52 | 53

BIAS -XLV -ZVV

PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

ISS EVA SYSTEMS: 1.206 10.2 PSIA CAMPOUT MASK PREBREATHE
MCC-H performs steps 1, 19

PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

ISS EVA SYSTEMS: 1.206 10.2 PSIA CAMPOUT MASK PREBREATHE
MCC-H performs steps 1, 19

PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

CREW WAKE AT 03/13:30

SLEEP

SLEEP

SLEEP

NO UNISOLATED EXERCISE [MT XLATE]

MSG 024 - FD04 MISSION SUMMARY

Good Morning Endeavour!!!!

Thanks for the great rendezvous yesterday!!!!

We are excited about working with you today to install AMS!

YOUR CURRENT ORBIT IS: 187 X 183 NM

NOTAMS -

EDW -	EDW 22L/04R IN USE. EDT 22R/04L EMERGENCY DAY USE ONLY.
EDW -	LAKEBED RWYS RED.
NOR -	LAKEBED RWYS GREEN.
NTU -	RWY 05R/23L CLSD.
FFA -	NOT USABLE. IN CARETAKER STATUS.
LAJ -	RWY WIDTH REDUCED TO 154' - EAST SIDE OF RWY CLSD.
BEN -	NOT USABLE. NOT SUPPORTED.
IKF -	NOT USABLE. NO AGREEMENT

NEXT 2 PLS OPPORTUNITIES:

EDW22 ORB 48 – 3/00:10 SKC 7 240/10P16
EDW22 ORB 64 – 4/00:34 SKC 7 220/05P08

OMS TANK FAIL CAPABILITY:

NO

LEAKING OMS PRPLT BURN:

L or R OMS LEAK: ALWAYS BURN RETROGRADE

OMS QUANTITIES(%) (POST Ti)

L OMS OX = 33.23 R OMS OX = 34.28
FU = 33.24 FU = 33.95

FOR CURRENT QTYS, SUBTRACT INCN'T COUNTER

DELTA V AVAILABLE:

OMS	345 FPS
ARCS (TOTAL ABOVE QTY1)	47 FPS
TOTAL IN THE AFT	392 FPS
ARCS (TOTAL ABOVE QTY2)	80 FPS
FRCS (ABOVE QTY 1)	32 FPS
AFT QTY 1	82 %
AFT QTY 2	44 %

END OF PAGE 1 OF 1, MSG 024

Good morning Roberto & Mark!

Great job getting all the big bags over to Station yesterday and thanks for getting the other items done as well.

The Transfer List Excel file, FD04_Transfer_List_STS134.xls, is located on the KFX machine in **C:\OCA-up\transfer** (and available via the **PGSC homepage**).

For ISS, the Transfer List Excel file, FD04_Transfer_List_STS134.xls, is located in **K:\OCA-up\transfer**.

Reminder

- Sometimes the Crew Support locker, MA16N contains some goodies for the ISS Crew. The Transfer Team doesn't know the contents of that locker, but just a reminder to check there for anything you may want to give to the ISS crew.

FD4 Choreography

- **Resupply Item 12** (MF57G - PAYLOADS MISC/CD STOWAGE CASE)
- **Roberto: Resupply Item 30.5** (VIABLE) (timelined)
- **Ron & Alexander: Resupply Item 9 & Return Item 735** (RSP Swap) (timelined)
- **Spanky: Return Item 727, 727.1, 727.2, 727.3** (ISS SSC 20, 120GB Hard Drive & Cable, Bose Headset) (timelined)
- **Cady: Return Item 732** (NLP Cells Stow Bag) (timelined)
- **Paolo: Return Item 733** (EDV samples) (timelined)

Change Pages

Please incorporate changes as follows:

In the Transfer List **RESUPPLY** tab:
Replace page 4

In the Transfer List **RETURN** tab
Replace pages 1, 6

Change Details

Item 21.1: Deleted incorrect serial number. Since this item returns to ISS and is crew pref, serial number is not required.

Item 401: Added constraint to not transfer bag until samples are taken. Not all samples were able to be taken before docking, so will have to be added to timeline after docking.

Item 405: Added constraint to not transfer the bag until FD6. Since Paolo will add a harddrive to this bag on FD6, it is best if the bag is not transferred until the harddrive is added.

Item 727.3: Deleted incorrect serial number. Since this item returns to ISS and is crew pref, serial number is not required.

On-Orbit QD Trainer

17

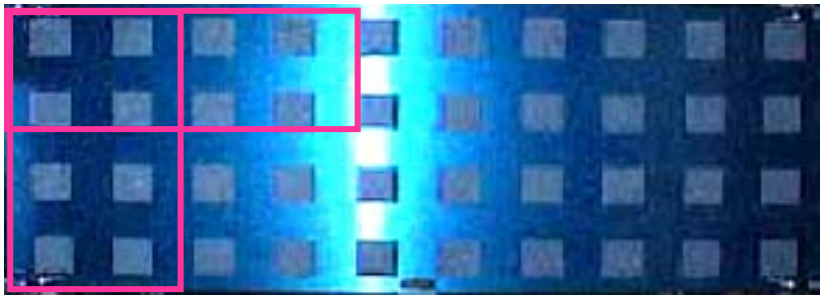
QD Refresher Information

Onboard Fluid QD Training Overview

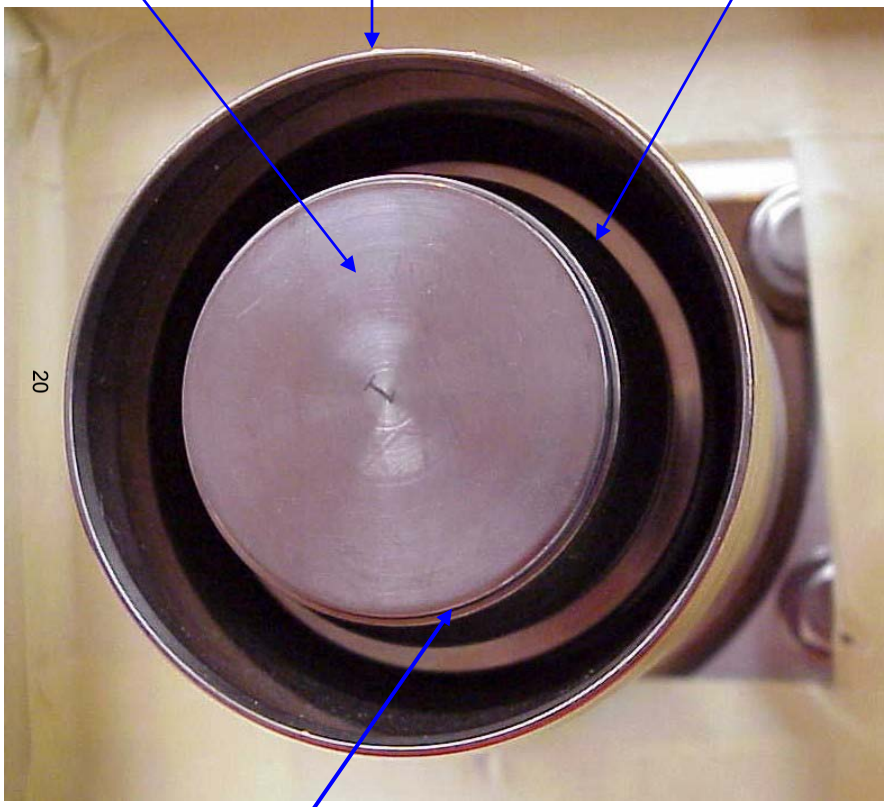
- Review hardware
- QD Nomenclature (damage to look for)
- Nominal usage QD Block Steps
- Contingency tools (installation and usage)

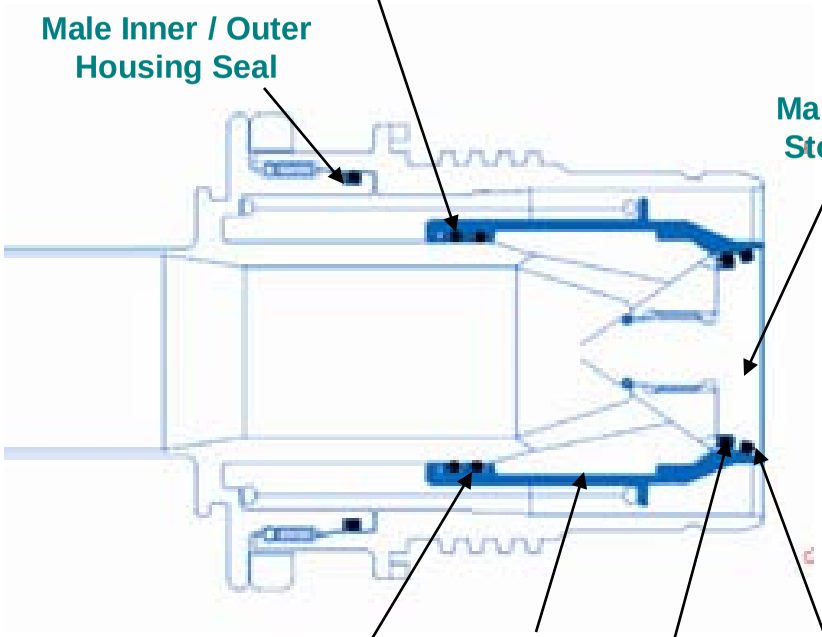
Onboard Fluid QD Training Hardware

- Hardware Current Locations
  - 1.0 CTB QD Trainer S/N 1258 – Deployed in A/L
    - QD Board - 3 male QDs (1.5”, 1.0”, 0.75”)
    - Shunt jumper - has 1.0”female QD
    - 1.0” QRT/FID Gauge
    - 1.0” Cap – no threads on QD board
    - 0.25” BDT - no female .25” QD
  - EVA2 Tools Mesh bag
    - 0.75”/1.0” Bail Drive Lever (Boomerang)
    - 1.0” Button Depress Tool/Anti-Kickback Tool
- Panel Cover Reqd for QD Board
  - A 16” x 41” Aluminum panel provides workspace and Velcro attachment points (P/N SEG33107639-301)
  - There is a panel deployed in NOD2 and possibly others deployed elsewhere
  - IMS shows some stowed in NOD1O4_AFT (between ZSR shell and insert)
- Please return all hardware to same locations as found when complete with OBT

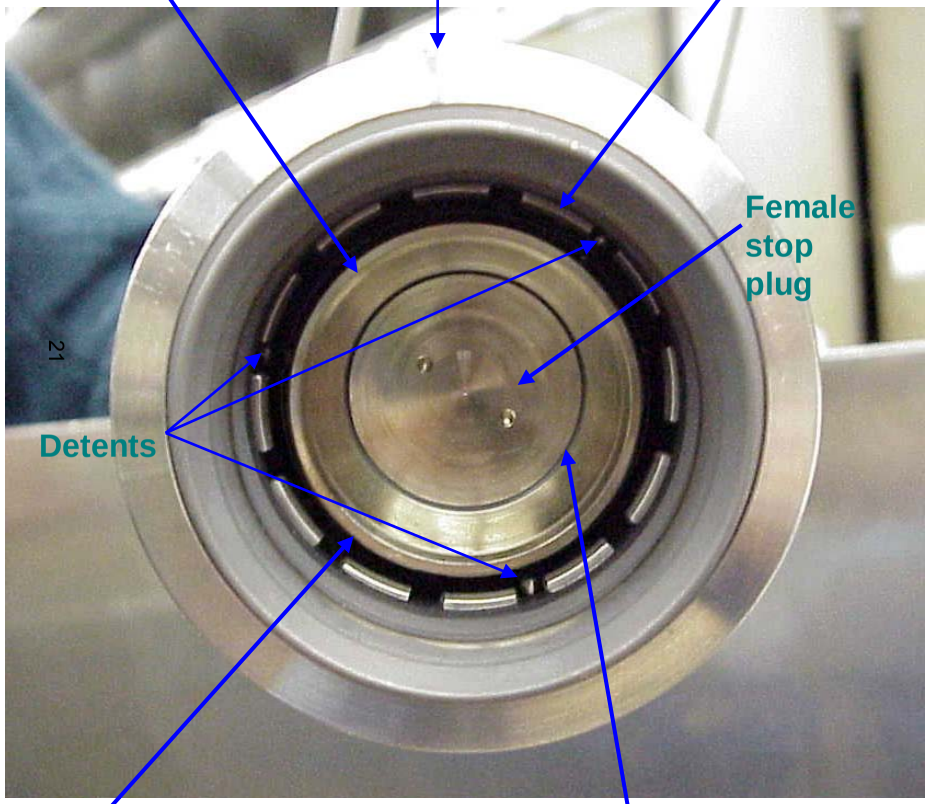


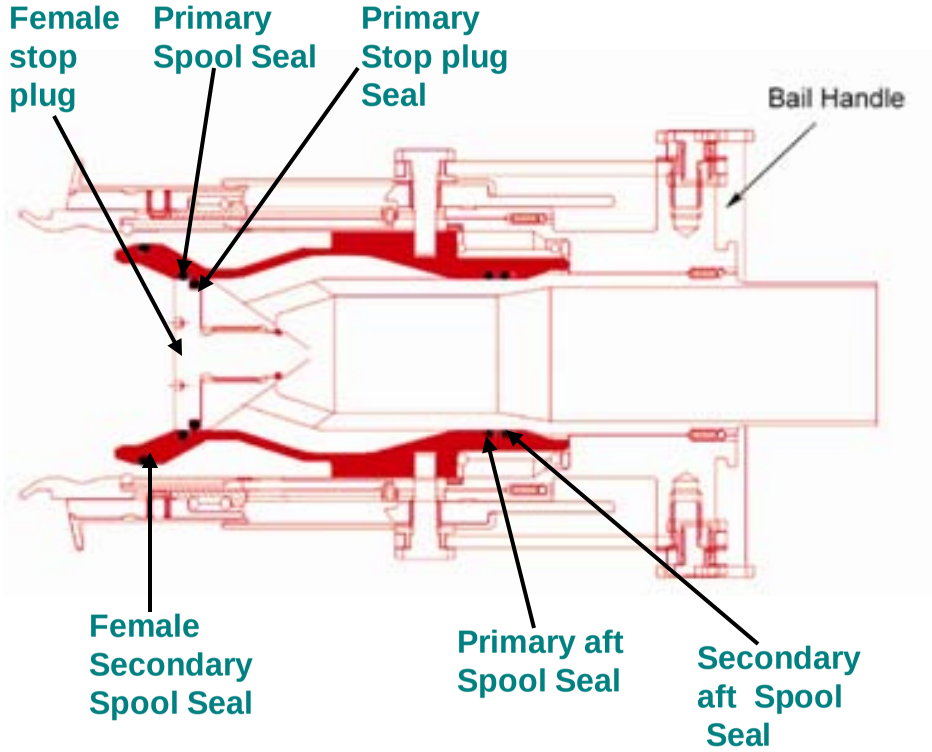
Male QD


Male Stop Plug
Male Outer Housing
Male Sleeve
Male Secondary Stop Plug Seal, behind which is the Male Primary Stop Plug Seal (seals are either uniform or not really visible)
20


Secondary sleeve seal
Male Inner / Outer Housing Seal
Male Stop Plug
Male sleeve
Primary sleeve seal
Male secondary stop plug seal
Male primary stop plug seal

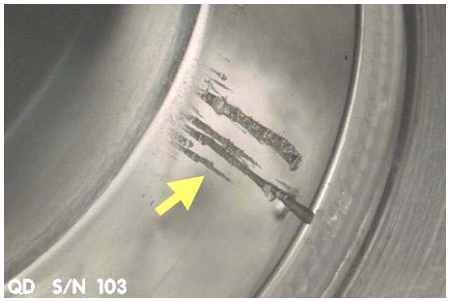
Female QD


Inner Spool
Female Outer Housing
Locking Fingers
Female stop plug
Detents
21
Female Secondary Spool Seal (exposed portion of seal is not really visible)
Female Primary Spool Seal, behind which is the Female Primary Stop Plug Seal (seals are either uniform or not really visible)


Female stop plug
Primary Spool Seal
Primary Stop plug Seal
Bail Handle
Female Secondary Spool Seal
Primary aft Spool Seal
Secondary aft Spool Seal

Damaged QD Examples

- Galling



- Male Sleeve Sticking Open

Stop plug seals are exposed when male sleeve fails to close

- Seal damage

- Retaining Wire Backed Out

22

BLOCK A – DEMATE QD

1. √Side-loads
2. Pull back release ring – demate
3. √Fwd band not visible
4. √FOD – both sides

BLOCK B – MATE QD

1. √FOD – both sides
2. √Button up, collar locked (1" only)
3. √Fwd band not visible
4. √Side-loads
5. Mate QD
6. √Fwd band visible
7. Snapback, Pull, Gap checks
8. Close bootie (as reqd)

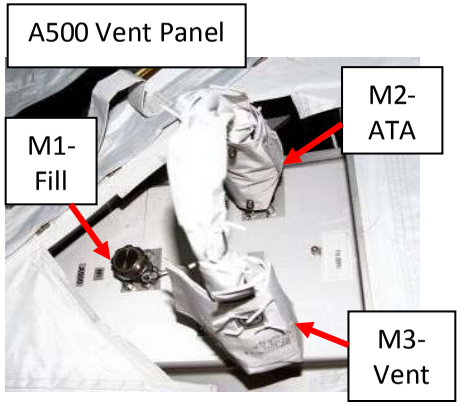
BLOCK C – OPEN VALVE

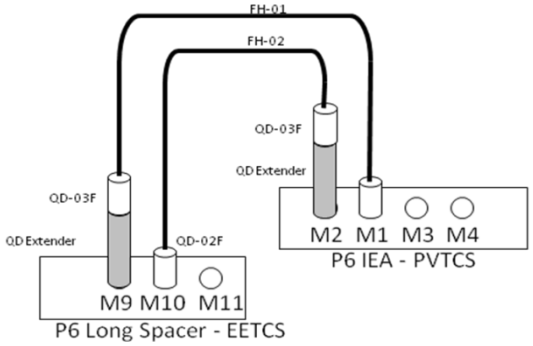
1. √Side-loads
2. Unlock collar (1" only)
3. Depress button, move bail fwd
4. √Aft band visible
   √Button up
5. Lock collar (1" only)
6. Close bootie (as reqd)

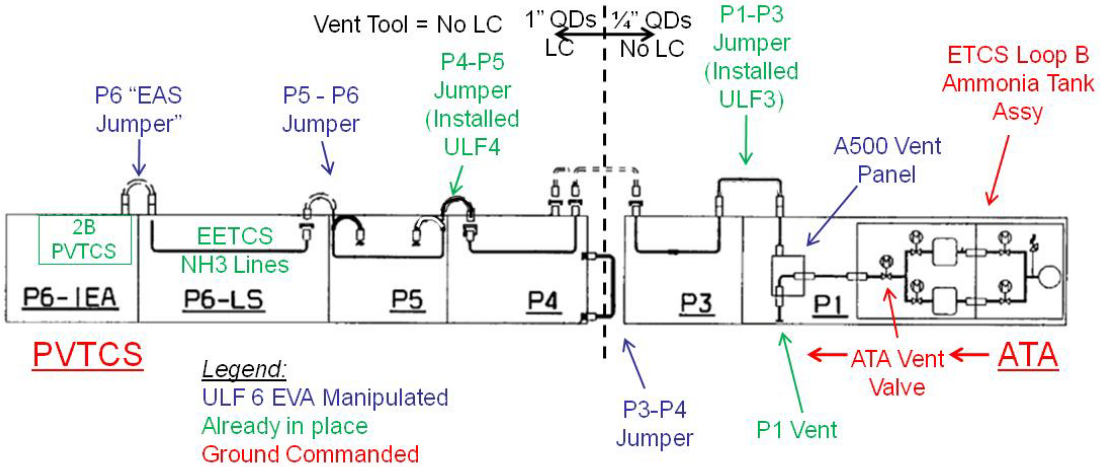
23

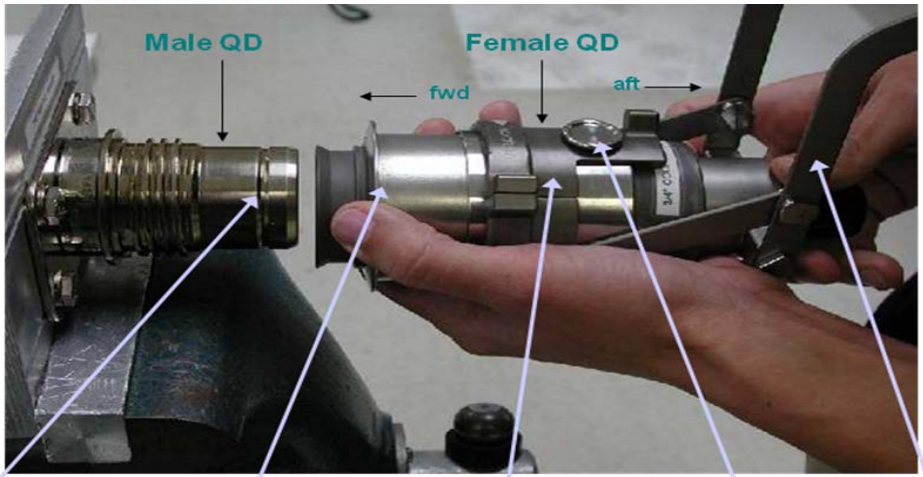
BLOCK D – CLOSE VALVE

1. √Aft band visible
2. Unlock collar (1" only)
3. √Detent button up & depressible
4. √Side-loads
5. Move bail fwd forcefully; while depressing button, move bail aft
6. √Fwd band visible
7. √Detent button up
8. Lock collar (1" only)
9. Close bootie (as reqd)









0.25” BDT Installation and Removal

<u>0.25” BDT Installation and Removal on Mated/ Valve Open QD</u>

1. Verify that the BDT plunger is fully retracted
2. Squeeze BDT handles to open the BDT jaws and place the BDT on top of the QD, fwd of bail handle
3. Release handles for the jaws to close and lock onto the QD
4. Verify proper hard dock
   - Perform pull and tug test

   √ Handle position marks are visible (handles fully out)

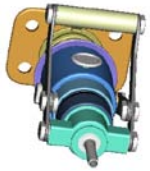
   √ Knob can rotate CW 1 full turn
5. Rotate BDT knob CW until full travel is reached or bail handle motion observed
   - If no bail handle motion observed, cycle bail aft
   - Wait 10 sec for full venting to occur
6. Push bail forward
7. Rotate BDT knob CCW to hard stop
8. Squeeze BDT handles to open the jaws and remove the BDT

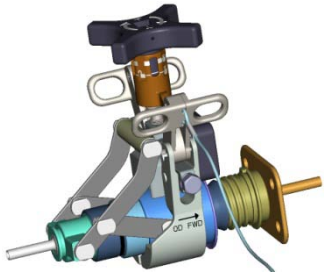
Ops Notes

- Status Indicator line under the knob will correspond to symbols indicating button ‘up’ (plunger fully retracted) and button ‘down’
- Orientation: ‘QD FWD’ arrow points towards the QD mating interface
- 3/8” square drive interface is integrated into the knob for use with external tools to provide additional torque, or for applying torque-limited input capability
- EVA override bolts may be used to disconnect the BDT from the QD in the event of a contingency

Ops Constraints

- The BDT must be tethered at all times
- The BDT shall not be left on a QD when not in use
- Cycling the BDT knob is a one-handed operation due to kick back load and pinch point concerns





1.0” AKT/BDT Installation and Removal

<u>1.0” BDT Installation and Removal on Mated/ Valve Open QD</u>

1. Verify AKT is ready for use
2. Install AKT on QD
   - √ Capture points - bail bosses (2)
   - • Perform pull and tug test
3. Verify BDT is ready for use
   - • Cycle BDT plunger; leave fully retracted
   - √ Tether is not in the way
4. Install BDT along either AKT guide route
   - • Perform pull and tug test
5. Use fingertip torque only, turn BDT knob CW until indicator is in-between the ‘2’ and ‘3’ positions
   - • If no bail handle motion observed, cycle bail aft
   - • Wait 10 sec for full venting to occur
6. Push bail full forward
7. Rotate BDT knob CCW to hard stop
8. Depress hard dock lever and remove BDT
9. Depress AKT latches and remove AKT

25

Ops Notes

• QD locking collar must be in unlocked position
• Status Indicator on the BDT knob has three lines which correspond to the button being fully retracted (1) and the button being depressed (2 & 3)
• 3/8” square drive interface is integrated into the knob for use with external tools to provide additional torque, or for applying torque-limited input capability

Ops Constraints

• The AKT is an acceptable tether point for the BDT
• The BDT shall not be left on a QD when not in use
• Cycling the BDT knob is a one-handed operation due to kick back load and pinch point concerns
• All hands, equipment hooks, tethers, etc. must remain clear of the bail handle path
• The 6 in wobble socket must be used with the PGT when applying additional torque to the BDT knob
• The BDT is limited to 1 hour exposure time outside of thermal bag on EVA

Mark, Drew, Spanky and Taz,

It's great to see you guys on ISS! We're looking forward to getting ready for EVA 1!

We have a few deltas for **FD4** activities:

EVA IR Camera Tagup

1) Drew, Spanky, Taz - The NBL run went well yesterday. MSG 27-0601 (134-021) IR Camera Body Positions contains some photos from the run. A tagup for all three of you with the EVA team is scheduled just after your midday meal to discuss these results and your comments.

QD Fam Ops:

2) Drew, Spanky, Taz - MSG 27-0592 (134-026) STS -134/ULF6 QD Fam Ops contains a short QD refresher to use during your QD FAM OPS activity today.

EMU Size Verification:

3) Taz - once you complete verifying EMU 3005's sizing, please get two wrist mirrors from the Ziploc bag in the outside pocket of M-02 bag S/N 1010, and install them on your suit. Your Sizing diagram (bubble person) is in STS-134 NOMINAL EMU SIZING (EVA, EMU CONTINGENCY PROCS), page FS 12-29.

EVA 1 Tool Config:

4) Drew, Spanky, Taz - Please use the ISS 85' STs with ID #s 23 and 26 to build your Safety Tether Packs during EVA1 Tool Config.

EVA 1 Procedure Review:

5) Drew, Spanky, Taz - Good news it looks like we might not have to shunt arrays in the case of a PCU failure. On page FS 7-11, update the PCU inhibit as follows:

Was:

PCU *(PHALCON: Prior to Egress)*

NOTE

PCUs may require up to a 1-hr warmup period before they are operational

MCC-H 1. √PCUs (two) operational in discharge mode and one of the following:

a. CCS PCU EVA hazard control FDIR enabled
b. No more than two arrays unshunted and oriented < 105º from velocity vector

If one or both PCUs failed

2. No more than two arrays unshunted and oriented < 105º from velocity vector

Is:

PCU *(PHALCON: Prior to Egress)*

NOTE

PCUs may require up to a 1-hr warmup period before they are operational

MCC-H 1. √PCUs (two) operational in discharge mode and one of the following:

a. CCS PCU EVA hazard control FDIR enabled
b. Only allowed arrays unshunted and oriented < 105º from velocity vector

If one or both PCUs failed

2. Only allowed arrays unshunted and oriented < 105º from velocity vector

6) Drew, Spanky, Taz - The connector to J1 of the P4 EWIS connectors actually contains power connections, thus an inhibit is required before the connector demate when retrieving the P3/P4 NH3 jumper. Please make the following additions to <u>EVA 1</u> (EVA, <u>TIMELINES</u>):

a. Page FS 7-12, add the following to the EVA 1 Inhibit Pad:

P4 EWIS connector (*PHALCON: Prior to Egress)*

MCC-H 1. RPCM P42A_A RPC8 – Open, Close Command Inhibited

b. Page FS 7-28, IV column step 1, make the following changes:

WAS: 1. Verify inhibits in place
√Port SARJ locked at 50°
(No inhibit required for P4 EWIS)

IS: 1. Verify inhibits in place
√Port SARJ locked at 50°
√P4 EWIS Inhibited

c. Page FS 7-47, update “EVA Connectors” block

WAS:

EVA Connectors:

Harness	Function
EWIS Connectors J1 and J2	Data

IS:

EVA Connectors:

Harness	Function
EWIS Connector~~s J1 and~~ J2 to P2/TAA1 J2	Data
EWIS Connector J1 to P4/TAA1 J1	Power

7) Spanky, Taz - On page FS 7-26, Taz BRTs later than what’s in the procedures, so please add pen & ink to move step 4 after step 7. Also Taz can complete step 12 immediately after step 7 or as written.

8) Spanky - On page FS 7-35, add note to EV3 step 45 “Only if P3/P4 Connectors complete”

9) Spanky - On page FS 7-36, make the following change to EV3 step 61
WAS: If not completed, wire tie P4 cable……
IS: If not completed, mate EWC P3/P4 Connectors as written in steps 33-38 and wire tie P4 cable….

10) Drew, Spanky - the photo reminder on page FS 7-37 is for the vent tool extension kink only if you see anything significant and if have time.

We have a heads up for **FD5** and **FD07**:

<u>Metox Canisters:</u>

11) Mark - As we talked pre-flight, the Metox canisters used in the Airlock to support 10.2 psia ops will remain in the A/L CCAA during the EVA. Instead of nominally removing the canisters during EMU Prebreathe, we'll remove them in Post EVA for EVAs 1 and 2 only.
We will add a reminder in the flight plan call out.

Split Sleep Shift Communication Adjustments

The following Communications Loop Management plan was developed to protect crew members' sleep periods as a result of the split sleep schedule of the Station and Shuttle crews.

1. To protect the Node 2 sleep zone, the ground will remove all Node 2 ATUs from public calls from the start of Shuttle crew sleep through Station crew sleep.

2. To protect the SM sleep zone, the ground will inhibit voice uplink as follows:
    a. On FD 3 prior to docking, S/G 1 uplink will be inhibited during the Station crew sleep period. They will be awake by the time the big loop is established.
    b. On FD 4 through wake-up on FD 10, S/G 2 uplink will be inhibited during the Station crew sleep period.
        i. The nominal comm panel configuration will protect S/G 1 voice from waking the crew in the SM.
    c. To prevent waking up the crew in the SM, do not use S/G 2 onboard during Station crew sleep unless it has been configured for a scheduled PMC/PFC.

3. To allow use of S/G 1 in the USOS when the Shuttle crew is sleeping, the ground will un-tie the 'Big Loop'. From the start of Shuttle crew sleep until the start of Station crew sleep, the ground will temporarily remove UHF from public call 1.
    d. During this timeframe the ground is prime to re-establish the 'Big Loop' if needed. If LOS, ISS crew adds UHF to public call 1.
        i. Reference {US SODF; C&T: 2. Nominal: 2.2 Audio; 2.213 Audio Subsystem Configuration for UHF Ops}; steps 3, 7 only
4. We will not plan to have morning DPCs on EVA days
5. At the start of the mission, the morning DPC on non-EVA days will be based on Dima, Paolo and Cady's wake time. At this time, we may also call up any changes to the plan that have been coordinated since the uplink of OSTPV and the Daily Summary. All ISS crew members will be scheduled for these when possible.
6. Ron will not have a separate morning DPC coincident with Shuttle wake times; coordination of changes will be voiced up real time as necessary.
7. To protect the A/L sleep zone during campout periods, the ground will remove all A/L ATUs from public calls from the start of Shuttle crew sleep through Shuttle Crew wake.

<u>General Comm Guidelines updated to reflect the above:</u>

Due to the dynamic volume and nature of calls anticipated on this mission, we would like to start with these general guidelines and then manage calls real-time by moving to alternate loops as circumstances warrant.

Big picture:

1. The Big Loop, when available, should be used for calls requiring broad team awareness. It is also used for EVA and Robotics handoffs. For calls that need to also be broadcast to the Russian segment, consider multicast on both loops (Big loop + S/G2) since the big loop is not configured in the Service Module.
2. Shuttle only and Station only calls will be made on the respective A/G 2 or S/G 2 loops when possible. Note that when those loops are privatized, there will be some calls on the big loop that would otherwise not be. The teams will determine whether the call can wait.
3. For some Shuttle Payloads, calls will be answered by Shuttle CAPCOM until the payload is installed on ISS. At that time, Payload support transfers to Huntsville. Paycom will be enabled to respond on either S/G 2 or A/G 2. Affected payloads are:
    - AMS
    - Glacier (transfer FD 9)
    - Double Cold Bags (Paycom will take all calls)

MYCO samples will be collected on both vehicles (Shuttle crew supported by ACO on A/G 2, ISS crew supported by JAXA on S/G2).

4. When making calls to two parties, “and” and “from” can help reduce awkwardness. Example: “*Airlock and Houston, from Endeavor…”* also, the smoothest replies preserve the same order: “*Airlock Copies,” “Houston copies.”* More important than the order is that both parties respond in some way.
5. Transfer tagups (with Mark and/or Roberto) and Stowage tagups (with Box and/or Roberto) will be scheduled at the end of the day on A/G 2 and be supported from the WFCR.
6. To help CAPCOMs with who should reply, please specify A/G or S/G rather than “On 2.” Adding the topic is helpful, such as “for Double Cold Bags.”
7. Pre-coordination of Shuttle PAO events will occur on A/G 2. Pre-coordination of Station PAO events will occur on different loops depending on the time of day.

MSG 029 - DAP LOAD UPDATE

To update the flight specific DAPs with the AMS on SSRMS in the intermediate position through undock mass properties, perform the following:

GNC 20 DAP CONFIG

Permanent Edit DAP A11 with CNTL ACC 9
ITEM 3+11 EXEC
ITEM 68+9 EXEC
ITEM 5 EXEC

Permanent Edit DAP A12 with CNTL ACC 9
ITEM 3+12 EXEC
ITEM 68+9 EXEC
ITEM 5 EXEC

Permanent Edit DAP B12 with CNTL ACC 9
ITEM 4+12 EXEC
ITEM 68+9 EXEC
ITEM 5 EXEC

Permanent Edit DAP B13 with CNTL ACC 9
ITEM 4+13 EXEC
ITEM 68+9 EXEC
ITEM 5 EXEC

END OF PAGE 1 OF 1, MSG 029

CWC FILLS

	CWC Fill No.	CWC Initial Location	Record S/N Used	Disinfect QDs (INIT)	Mineral Syringe Kit Ref: Kit Table	Report CWC S/N to MCC	Ag Biocide Kit Ref: Kit Table	TERM at MET:	Cap Water Transfer Hose (TERM)	Verify Label In Window	Sample/Purge Kit Ref: Kit Table	Transfer To:	
					← Fill Duration ~52 minutes →								
☐	1	NOD2O2 3.0 CTB S/N 1016 (Note C) ☐ 1004 ☐ 1008 ☐ 1021 ☐ 1030 ☐ 1043 ☐ 1050 ☐ 1051 ☐ 1064 ☐ 1069 ☐ 1073 ☐ 1077 ☐ 1081 ☐ 1085 ☐ 1086 (Note E) ☐ 1089 (Note E)		☐		☐	S/N 1010 ☐		☐	Green ☐		☐	JPM1A5
☐	2			☐		☐	S/N 1010 ☐		☐	Green ☐		☐	
☐	3			☐		☐	S/N 1010 ☐		☐	Green ☐		☐	
☐	4			☐		☐	S/N 1010 ☐		☐	Green ☐		☐	
☐	5			☐		☐	S/N 1003 ☐		☐	Green ☐		☐	
☐	6			☐		☐	S/N 1003 ☐		☐	Green ☐		☐	
☐	7			☐		☐	S/N 1003 ☐		☐	Green ☐		☐	
☐	8			☐		☐	S/N 1003 ☐		☐	Green ☐		☐	
☐	9			☐		☐	S/N 1003 ☐		☐	Green ☐		☐	TBD
☐	10			☐		☐	S/N 1003 ☐		☐	Green ☐		☐	
☐	11			☐		☐	S/N 1003 ☐		☐	Green ☐		☐	
☐	12 (Note D)			☐		☐	S/N 1003 ☐		☐	Green ☐		☐	
☐	13 (Note D)			☐		☐	S/N 1003 ☐		☐	Green ☐		☐	
☐	14 (Note D)			☐		☐	S/N 1003 ☐		☐	Green ☐		☐	

CWC Fill Notes:

A. Rough handling may cause leakage.
B. Fill each CWC for 52 min or Term CWC Fill on MCC call.
C. Some CWCs may still contain residual water. Prior to filling, report if CWC has a significant amount of residuals.
D. These CWC Fills will occur only if sufficient water is available.
E. Believed to be in CTB S/N 1016. If not, should be nearby in NOD2O2.
F. H2O Ops Jettison Stowage Bag (JSB) originally in Bag H then temp stowed near Galley on FD2.

PWR FILLS

	PWR No.	PWR S/N	Initial Stowage Location	Final Stowage Location
☐	1	1018	H2O Ops JSB (near Galley, Note C)	A/L1D1_A1 or A2
☐	2	1025	A/L1D1_A2	A/L1D2_Behind Closeout
☐	3	1026	H2O Recharge Mesh Bag (Note D)	A/L1D1_A2
☐	4	1007	H2O Recharge Mesh Bag (Note D)	A/L1D1_A1

PWR Fill Notes:

A. Do not detach PWR (EMU H2O Recharge Bag) QD restraint during PWR ops.
B. Prior to filling, inspect PWR inlet and outlet hose lines. Report any observable scratches/damage to MCC.
C. H2O Ops Jettision Stowage Bag (JSB) originally in Bag H then temp stowed near Galley on FD2.
D. H2O Recharge Mesh Bag originally located in PMM in front of the Aft 2 rack, but may be in Node 1 during EVA support. Alternate locations include: A/L1D1_A1 and A/L1D2_Behind Closeout

Kit Table

Kit	S/N	Initial Location	Undock Location
Mineral Syringe Kit (no planned use)	1001	H2O Ops JSB (near Galley, Note F)	H2O Ops JSB (near Galley)
Ag Biocide Kit	1010	NOD2O2 3.0 CTB S/N 1016	Shuttle Middeck (Bag H)
Ag Biocide Kit	1003	NOD2O2 3.0 CTB S/N 1016	Shuttle Middeck (Bag H)
Sample/Purge Kit (no planned H2O Op use)	1003	H2O Ops JSB (near Galley, Note F)	H2O Ops JSB (near Galley)

STS-134/ULF6

MHA Checkout

To troubleshoot the MHA we would like you to test the remaining capability of all 3 ports, specifically the listen capability of the J1 and J2 ports. These ports will provide the voice that will be recorded on the WVS V10s on EVA days. In the long term, understanding the remaining capabilities of the MHA will affect the forward plan for entry comm.

Please perform the following steps to test the FD MHA capabilities:

1. ✓MHA is plugged into the MS CCU
2. MS COMM CCU PRW - OFF
3. ✓MS ATU ICOM A - T/R
4. MS SPKR PWR - OFF
5. Plug HIU/VLHS into J1 port of MHA
6. MS COMM CCU PRW - ON
7. Have a crew member listen for ICOM A on J1 port with HIU/VLHS while the other crew member transmits on ICOM A from an alternate ATU
8. Have crew member listen for ICOM A from an alternate ATU while the MS ATU crew member attempts a call on ICOM A from the VLHS/HIU
9. MS COMM CCU PWR- OFF
10. Repeat steps 4-9 for the J2 port and J3 port
11. MS SPKR PWR - SPKR
12. MS COMM CCU PWR - ON

END OF PAGE 1 OF 1, MSG 033

Objective:
To manually map a drive letter to a T61p 120GB USB Hard Drive if Windows does not automatically map a drive letter.

Procedure:

1. ✓120GB USB Hard Drive connected and powered
2. Right-Click 'My Computer'
3. sel 'Manage'

   Computer Management

4. sel 'Disk Management' (left pane)
5. Right-click 'External HDD' (or similar, right pane)
6. sel 'Change Drive Letter and Paths…'

   Change Drive Letter and Paths for XXXXXXXXX

7. sel 'Add'

   Change Drive Letter and Paths

8. 'Assign the following drive letter:'
9. sel Drive Letter (crew preference)
10. sel 'OK'
11. Close Computer Management
12. Check drive accessible in Windows Explorer.

MSG 035 (27-0615) - FD03 MMT SUMMARY

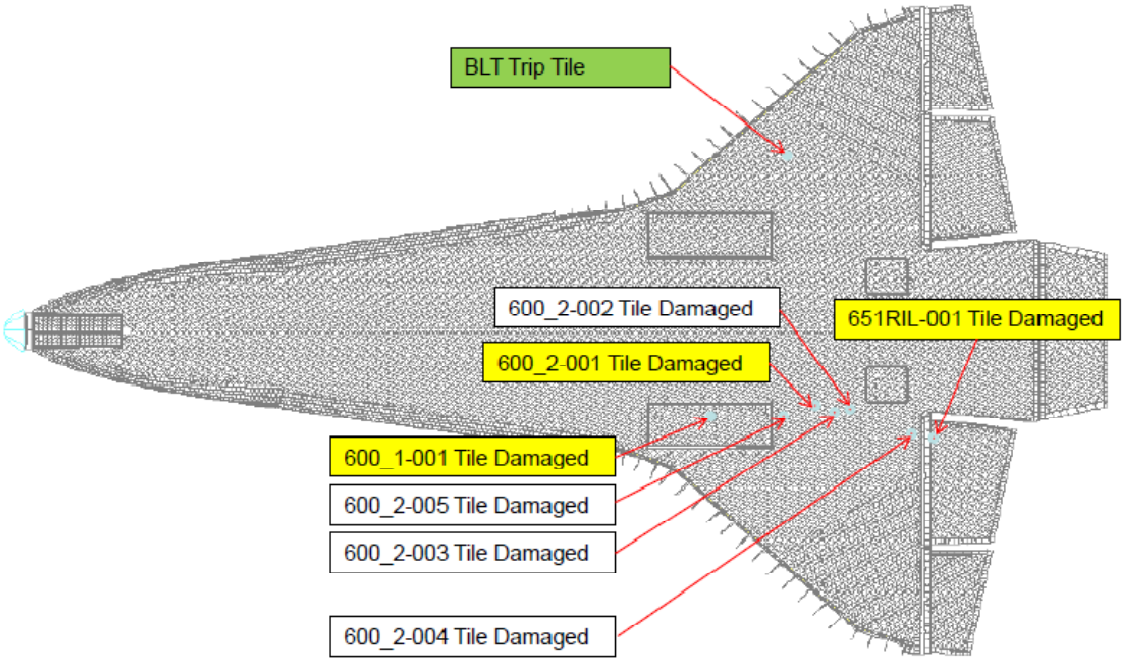
Congratulations on a excellent Rendezvous and Docking. The ISS team is very happy that you have arrived.

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

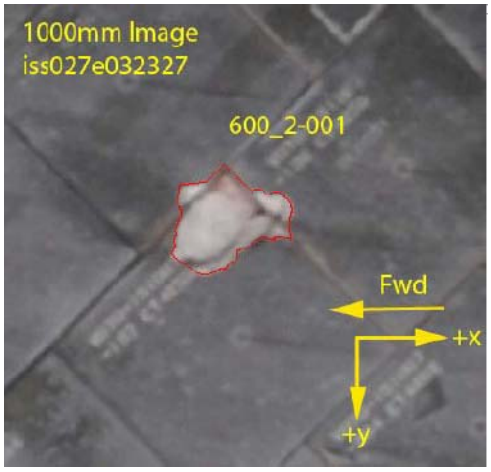
Endeavour continues to perform exceptionally well and the teams are not working any systems issues.

The LESS/RCC team has completed review of the FD2 inspection data and the RCC has been cleared for Entry. As for the Tile inspection, the ET doors have been verified closed and there are no protruding GAP fillers. The DAT team has identified seven tile areas of interest as shown in the diagram below. The three yellow boxes (001 tiles) are the sites that the team continues to assess depth dimensions via photogrammetric analysis. The MMT will review the DAT assessment tomorrow in support of whether any additional dimensional information on these three sites are required for the standard thermal analysis which is performed for all damage locations. The Flight Control Team is being proactive regarding timeline and is developing procedures for focused inspection if that becomes a required activity on FD6.

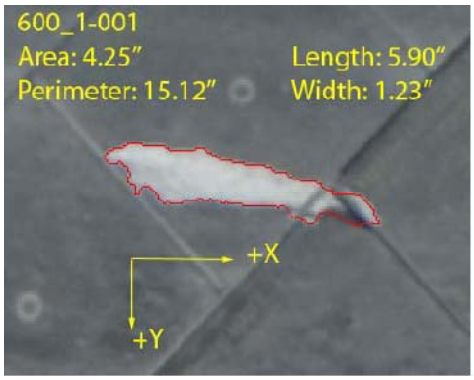
You guy are doing great!



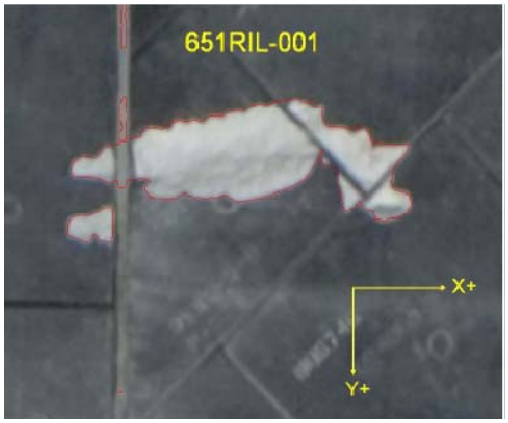
Below are photos of the three yellow box areas:



Size of damage: L 3.28” x W 2.34” ± .15”



Size of damage: L 5.9” x W 1.23” ± .15”



Size of damage: L 6.52” x W 2.232” ± .15”