# STS-129/ULF3

## FD 02 Execute Package

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Approved by FAO:
Gail Hansen

Last Updated: Nov 17 2009 8:28 AM GMT
JEDI (Joint Execute package Development and Integration), v3.0

**SSR-1 REGAIN GREEN LIGHTS**

(IFM, PGSC)
1. **Post-Sleep Cryo Config**
   
   For today's Post-Sleep cryo config, O2 and H2 Tanks 1 and 5 will be active.

   **A15**  
   CRYO TK5 HTRS O2,H2 A,B (four) - AUTO

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

2. **Pre-Sleep Cryo Config**
   
   VMCC 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 4 active.

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

   **A15**  
   CRYO TK5 HTRS O2,H2 A,B (four) - OFF

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

3. Please make the following pen and ink change to the EVA Checklist. Under EVA Systems Transfer Bag (from BR ECOK) on page FS 2-8, change

   **FROM:**
   
   SODF Locker   Joint Emergency Egress CC
   MD Bag D   EMU Battery s/n 2083

   **TO:**
   
   SODF Locker   Joint Emergency Egress CC (1)
   MD Bag C   EMU Battery s/n 2083

4. CGBA AND ABRS STATUS CHECK
   
   Reminder to record and call down the MET and Temp of CGBA per step 2.8. We think you gave us the EET time on the FD1 callout vs. the MET. This can be confusing due to the EET being listed at the top of the CGBA display in step 2.5.

4. With some recent changes to the propellant management plan, the dedicated OMS/RCS valve test will not be required. Instead, OMS/RCS valve checkout will be accomplished with the Interconnect plan, which has been incorporated into the FD02 timeline.
5. Additionally, since the RCS Pri RJDs will remain powered on until post-docking, the actions associated with panels O14:F, O15:F, and O16:F can be ignored within the RCC Surveys.

The affected steps are:

- **OBSS LDRI/IDC RCC SURVEY – STBD**
  Pg. 7-20 Step 10
- **OBSS LDRI/IDC RCC SURVEY – NOSE**
  Pg. 7-27 Step 2
- **OBSS LDRI/IDC RCC SURVEY – PORT**
  Pg. 7-44 Step 8
  Pg. 7-47 Step 10

6. For today's OMS POD Survey (Photo/TV, **SCENES P/TV08 EXTERNAL SURVEY**, FS 1-62) planned for MS2 at 01/00:55, please install and use an empty Flash Card for the survey.

7. In response to the HD video downlink failure on FD1, the following troubleshooting steps are proposed while in the HD downlink configuration:

   First, configure the G1 to live view mode and check for HDV and Taxi LEDs on MPC. If the LEDs are on, switch the G1 to VCR/Play mode and press “play”, check again for HDV and Taxi LEDs on MPC. If the LEDs are on then report status to MCC. If still no joy, then try the above actions again with a different G1 and/or a spare firewire cable located in: [A17, Minicam/G1/Video Acc. Bag (“Spares” Ziploc bag)].

8. REPLACE PAGES 2-4 THROUGH 2-5 and 3-8 THROUGH 3-17.
<table>
<thead>
<tr>
<th>Time (GMT)</th>
<th>MET Day 001</th>
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**FD02**

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<tr>
<th>CDR Hobaugh</th>
<th>EXERCISE</th>
<th>C/L CMR INSTL</th>
<th>FCMS OPS</th>
<th>PRE SLEEP</th>
<th>RCS BURN</th>
<th>PRE SLEEP</th>
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<td>PLT Wilmore</td>
<td>OBSS BERTH</td>
<td>C/L CMR INSTL</td>
<td>EXERCISE</td>
<td>PSLEEP</td>
<td>RCS BURN</td>
<td>PRE SLEEP</td>
<td>SLEEP</td>
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<tr>
<td>STS Melvin</td>
<td>OBSS BERTH</td>
<td>REMS GRPL</td>
<td>ODS RING</td>
<td>RNDZ TOOLS C/O</td>
<td>PRE SLEEP</td>
<td>SLEEP</td>
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<tr>
<td>STS Bresnik</td>
<td>OBSS BERTH</td>
<td>REMS GRPL</td>
<td>OMS POD</td>
<td>RNDZ TOOLS C/O</td>
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<tr>
<td>STS Foreman</td>
<td>MODK XFER PREP</td>
<td>LDRI</td>
<td>DOWNLINK</td>
<td>PRE SLEEP</td>
<td>SLEEP</td>
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<tr>
<td>STS Satcher</td>
<td>MODK XFER PREP</td>
<td>NLPA VAC ACT</td>
<td>PRE SLEEP</td>
<td>SLEEP</td>
<td></td>
<td></td>
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</tbody>
</table>

**NOTES**

*TANK SWITCH #RETURN

**ORBIT**

- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25

**TDRS**

- WEZ

**ATTITUDE**

- ZLV - XVY

**FLT PLN 129/FLT**
FD02 EZ ACTIVITIES:
- OCAC FILTER
- TEPC (STATUS CHECK)
- ORB OPS, CREW SYS
- HARD REBOOT ALL PGSCs EXCEPT:
  - STS-1 (OCA ROUTER) AND STS-6 (WLES)

ON-ORBIT OMS BURN
- ORB OPS, OMS

POST-SLEEP ACTIVITY
- ORB OPS, CREW SYS

HUM SEP FOR H2O ACCUMULATION

SLEEP

SLEEP LOGBOOK (SDBI 1634)
STST-129/ULF3 FD02

**MS2 BRESNIK**
- 16:00-17:00: DRY SALIVA CLCT (ORB OPS, SDBI) (PDRS, OBSS OPS) - Ref. MSG 002, Item 5
- 17:00-18:00: OBSS LDRI/IDC RCC SURVEY - NOSE CAP (PDRS, OBSS OPS) - Ref. MSG 002, Item 5
- 18:00-19:00: OBSS LDRI/IDC RCC SURVEY - PORT (PDRS, OBSS OPS) - Ref. MSG 002, Item 5

**MS3 FOREMAN**
- 16:00-17:00: CMU PREP FOR ISS TRANSFER (EVA, AIRLOCK CONFIG)
- 18:00-19:00: MIDDECK TRANSFER PREP

**MS4 SATCHER**
- 16:00-17:00: DRY SALIVA CLCT (ORB OPS, SDBI) (PDRS, OBSS OPS) - Ref. MSG 002, Item 5
- 18:00-19:00: EMU PREP FOR ISS TRANSFER (EVA, AIRLOCK CONFIG)
  - In SODF locker (MF57K), take one Joint Emergency Egress CC from EVA TRANSFER Ziploc and place it in the "Joint Ops Cue Card Kit"

**NOTES**
- 20:00-21:00: O2 REPRESS INIT
- 21:00-22:00: OCAC PWR - OFF C5 DIRECT O2 vlv - OP
- 22:00-23:00: DRY SALIVA CLCT (ORB OPS, SDBI)
- 23:00-00:00: EXERCISE
- 00:00: MIDDECK TRANSFER PREP
- 19:00-20:00: EXERCISE
- 18:00-19:00: MIDDECK TRANSFER PREP
- 17:00-18:00: O2 REPRESS INIT
**NOTES**

- **EXERCISE**
- **PRE-SLEEP ACTIVITY**

**CDR**

- HOBBAUGH

**PLT**

- WILMORE

**MSL**

- MELVIN

**PLT OBS BERTH**

- (PDRS, OBSS OPS)

- Steps 1-8

**CDR C/L CAMR INSTALL**

- (PHOTO/TV, REF PROC)

- Setup & Align C/L Camera

**PLT O-RBIT +X RCS BURN**

- (ORB OPs, RCS)

**CDR ON-ORBIT +X RCS BURN**

- (ORB OPs, RCS)

**CDR EXERCISE**

- (ORB OPS, CREW SYS)

**CDR PRE-SLEEP ACTIVITY**

- (ORB OPS, CREW SYS)

**CDR RNDZ TOOLS CHECKOUT**

- (RNDZ, RNDZ TOOLS)

**CDR ELC 1 GRAPPLE**

- (PDRS, ELC NOM OPS)

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**NOTES**

- **UPDATE**

- **TFL 192**

- **TFL 198**

**NOTES**

- **REPLANNED**

**NOTES**

- **PRIVATE MEDICAL CONFERENCE**

See page 3-16 for details.
RECONFIGURE OCA D/L RATE D
After LDRI Playback complete, RECONFIGURE OCA D/L RATE (PL Max) (ORB OPS, PGSC) Part C, omit Step 4 In Step 3, use 48 Mbps

Activate GAPs A-H (Vaccine 6 in MA16D) Steps 2, 6, 11

NOTES

P/TV08 EXTERNAL SURVEY (PHOTO/TV, SCENES) OMS POD SURVEY
- Setup, Step 1; OPS, Item 1
L Ref. MSG 002, Item 6
K Best Lighting: 00:37 - 01:15
J

02 REPRESS TERM on MCC GO
I CS DIRECT O2 vlv - CL

FLR 1 GRAPPLE
(PDRS, OLC NOM OPS)

ST-129/ULF3 FD

MIDDECK TRANSFER PREP

MS2 BRESNIK

MS3 FOREMAN

MS4 SATCHER

Day 001

00:00

RNDZ TOOLS CHECKOUT
(RNDZ, RNDZ TOOLS)

01:00

02:00

03:00

04:00

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

01:00

DIGITAL VIA VTR
(CUE CARD, DIGITAL PLAYBACK)

LDRI SURVEYS
KU TDRE 0:59 - 1:53

02:00

03:00

04:00

05:00

06:00

07:00

08:00

09:00

10:00

11:00

12:00

13:00

14:00

15:00

16:00

17:00

18:00

19:00

20:00

21:00

22:00

23:00
Crew Wake @ 001/14:00

- Private Medical Conference
- L9 Payload Station A/G (two) - Off (Perform via A/G 2)
- Pre-Sleep Activity (ORB Ops, Crew Sys)
- Pre-Sleep Activity (ORB Ops, Crew Sys)
- Pre-Sleep Activity (ORB Ops, Crew Sys)
- SLEEP
Crew Wake @ 001/14:00

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

DRY SALIVA CLCT
(ORB OPS, SDBI)

SLEEP

NOTES

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Congratulations on a beautiful, flawless launch, Atlantis! Now the fun begins...!!!

YOUR CURRENT ORBIT IS: 127 X 103 NM

NOTAMS:

EDW - LAKEBED RWY 15/33 GREEN - ELS ONLY. RWY 18L - UNUSABLE.
NOR - LAKEBED RUNWAYS GREEN.
NTU - RWYS 05R/23L & 14L/32R CLOSED.
YQX - TACAN YQX CH74 OTS.
LAJ - TACAN LAJ45 OTS.
PTN - AIRFIELD CLOSED.
GUA - RWY 06R/24L CLOSED. RWY 06L REIL OTS.
IKF - NOT USABLE. NO AGREEMENT.
BEN - NOT RECOMMENDED/NOT SUPPORTED

NEXT 2 PLS OPPORTUNITIES:

EDW22 ORB 18 – 1/02:06 FEW250 7 060/3P5 WND LGT VRB
EDW22 ORB 33 – 2/00:17 FEW030 FEW030 SCT250 7 230/17P24

OMS TANK FAIL CAPABILITY:

L OMS FAILS: YES
R OMS FAILS: YES

LEAKING OMS PRPLT BURN:

L OMS LEAK: ALWAYS BURN OUT OF PLANE
R OMS LEAK: ALWAYS BURN OUT OF PLANE

OMS QUANTITIES(%)

L OMS OX = 61.4  R OMS OX = 61.4
FU = 61.1       FU = 61.0

Subtract interconnect counter for current OMS quantities

DELTA V AVAILABLE:

OMS 588 FPS
ARCS (TOTAL ABOVE QTY1) 53 FPS

TOTAL IN THE AFT 641 FPS

ARCS (TOTAL ABOVE QTY2) 81 FPS
FRCS (ABOVE QTY 1) 52 FPS

AFT QTY 1 92 %
AFT QTY 2 55 %
There are no FIWs
## MSG 004 - FD02 CREW CHOICE DOWNLINK

<table>
<thead>
<tr>
<th>TDRS</th>
<th>AOS</th>
<th>LOS</th>
<th>Delta (min)</th>
<th>Notes</th>
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<td>01/04:00</td>
<td>01/04:13</td>
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</tr>
<tr>
<td>E</td>
<td>01/04:15</td>
<td>01/05:04</td>
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<td>01/05:33</td>
<td>01/05:58</td>
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Note: Please notify MCC-H 10 minutes prior to the event to allow for ground network configuration.