AIRLOCK CONFIG

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AIRLOCK PREP (50 min)

Retrieve or unstow following equipment:
- MF28G 3/8-in breaker bar, 4-in ext w/3/8-in drive
- IFM Tool Kit 1/2-in socket w/3/8-in drive
- Vol H EMU Equipment Bag – attach to middeck lockers/wall
  - Cooling Loop Jumper – stow in EMU Equipment Bag
  - EMU Servicing Kit – temp stow
  - Helmet Lights – remove covers
  - EVA Bag
- FDF Locker Cuff Checklists (2) – stow in EMU Equipment Bag
  - DEPRESS/REPRESS Cue Card

AW18A
1. √ Inner hatch Equal vlv (two) – OFF
2. LTG FLOOD (four) – ON

3. Remove from airlock, as reqd:
   - Airlock Stowage Bag
   - Airlock Floor Pallet using 3/8-in breaker bar, 4-in ext w/3/8-in drive, and
     1/2-in socket w/3/8-in drive

   CAUTION
   Do not stow EMU lights in locker with batteries installed

4. Stow Vol H Bags in Vol H
5. Transfer to airlock:
   - EVA Bag – install on airlock wall
   - DEPRESS/REPRESS Cue Card
   - Helmet Lights
6. Install IVA foot restraint, as reqd
7. Unbuckle SCU straps, Velcro SCU to wall
8. Install EMU lights on helmets (EMU 1,EMU 2)
9. Disconnect all helmets, temp stow
10. Remove comm caps from LTA restraint bags and connect to electrical
    harnesses
11. Remove LTA restraint bags
12. Disconnect waist rings; remove and stow any equipment stowed in HUT/LTA
13. Remove Drink Bag restraint bags – stow in EV1,EV2 mesh bags
14. Stow LTA restraint bags on AAPs
15. √ Thermal cover clear of waist ring
16. Waist ring – engage posn
17. Connect LTA to HUT, lock
18. √ Tether hook operation
19. Remove 20-g Crash Bag from middeck EMU, as reqd
EMU PREP FOR ISS TRANSFER (60 min)

1. Configure/verify items stowed in table below

BOTH EMUs
2. \PWR – SCU
3. \PURGE vlv – op (up)
4. \O2 ACT – OFF
5. \WATER – OFF, switch guard installed
6. Helmet sun visors down, switch guard installed

<table>
<thead>
<tr>
<th>EMU 3015 (L) (SI)</th>
<th>EMU 3003 (L) (Fs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ DIDB Restraint Bag installed</td>
<td>□ DIDB Restraint Bag installed</td>
</tr>
<tr>
<td>□ Comm Cap installed</td>
<td>□ Comm Cap installed</td>
</tr>
<tr>
<td>□ LCVG stowed in HUT</td>
<td>□ LCVG stowed in HUT</td>
</tr>
<tr>
<td>□ EMU Battery S/N 20XX</td>
<td>□ EMU Battery S/N 20XX</td>
</tr>
<tr>
<td>□ LiOH Cartridge S/N 20XX</td>
<td>□ LiOH Cartridge S/N 20XX</td>
</tr>
<tr>
<td>□ Helmet S/N XXXX</td>
<td>□ Helmet S/N XXXX</td>
</tr>
<tr>
<td>□ Helmet cover</td>
<td>□ Helmet cover</td>
</tr>
<tr>
<td>□ LTA (attached)</td>
<td>□ LTA (attached)</td>
</tr>
<tr>
<td>□ EV1 (SI) gloves</td>
<td>□ EV2 (Fs) gloves</td>
</tr>
<tr>
<td>□ Wrist Mirrors (2)</td>
<td>□ Wrist Mirrors (2)</td>
</tr>
<tr>
<td>□ ISS Waist Tethers (2)</td>
<td>□ ISS Waist Tethers (2)</td>
</tr>
<tr>
<td>□ Mesh Bag (EV Crew Options Kit) (SI)</td>
<td>□ Mesh Bag (EV Crew Options Kit) (Fs)</td>
</tr>
<tr>
<td>□ Si-1 Ziplock Bag</td>
<td>□ Fs-1 Ziplock Bag</td>
</tr>
<tr>
<td>□ MAG</td>
<td>□ MAG</td>
</tr>
<tr>
<td>□ TCU (top)</td>
<td>□ TCU (top)</td>
</tr>
<tr>
<td>□ TCU (bottom)</td>
<td>□ TCU (bottom)</td>
</tr>
<tr>
<td>□ Wristlets</td>
<td>□ Wristlets</td>
</tr>
<tr>
<td>□ Comfort gloves</td>
<td>□ Comfort gloves</td>
</tr>
<tr>
<td>□ Moleskin</td>
<td>□ Moleskin</td>
</tr>
<tr>
<td>□ Socks</td>
<td>□ Socks</td>
</tr>
<tr>
<td>□ Si-2 Bag (same as above)</td>
<td>□ Fs-2 Bag (same as above)</td>
</tr>
</tbody>
</table>

EVA Systems Mesh Transfer Bag

Vol H □ EMU Servicing Kit
Vol D □ EMU Middeck Battery Charger (10XX)
A16 □ AA Batts - 1- 50 pack
Med Kit □ Aspirin
Locker □ REBA Battery
FDF Locker □ FDF EVA Checklists (1 of 2)
FDF Locker □ Exercise Prebreathe Cue Card
ODF Locker (1 ODF, 1 FDF)
FDF Locker □ EMU Consumables Cue Card (1 of 1)
ODF Locker □ ISS EVA Systems Checklists (3 of 3)
ODF Locker □ ISS EVA Cuff Checklists (2 of 2)
ODF Locker □ ISS EVA Cuff Checklist - Enhanced (1 of 1)
ODF Locker □ Crewlock Depress/Repress Cue Card (1 of 1)
PRE EVA 1 EMU TRANSFER AND RECONFIG

PRE-EVA 1 TRANSFER

NOTE
This procedure assumes that transfer items were preconfigured per EMU PREP FOR ISS TRANSFER

1. Transfer following EMU equipment to ISS:

<table>
<thead>
<tr>
<th>Item</th>
<th>Destination</th>
<th>Transfer Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMU 3003 (Fs)</td>
<td>E-Lk fwd EDDA</td>
<td></td>
</tr>
<tr>
<td>EMU 3015 (Sl)</td>
<td>E-Lk aft EDDA</td>
<td></td>
</tr>
<tr>
<td>EVA Systems Mesh Transfer Bag</td>
<td>E-Lk</td>
<td></td>
</tr>
</tbody>
</table>

2. Report transfer status to MCC

PRE-EVA 1 EMU RECONFIGURATION

3. Remove LCVG and Mesh Bag (EV Crew Options Kit) from EV1 and EV2 EMUs; temp stow
4. Install helmet lights/EMU TV on EV1 and EV2 helmets from ISS stowage/helmets

REBA INSTALLATION INTO EMUs 3015 and 3003

5. Unstow two REBAs, report serial numbers to MCC
6. Rotate EDDA to access back of EMUs
7. Unzip TMG to access REBA pouch and power cable
8. Remove REBA J1 connector cover
9. Install REBA on EMUs
10. Configure REBA pull tabs through slots in TMG
11. REBA sw – OFF, toward left arm of suit
12. Connect EMU Power Harness to REBA (P1/J1)

METOX INSTALLATION INTO EMUs 3015 and 3003

13. Unstow Metox canisters, report barcodes to MCC
14. Unzip thermal cover, affix to top of EMU with Velcro
15. Remove LiOH canisters from PLSS
16. Remove caps from new Metox canisters, place on LiOH ports
17. Cover hole in LiOH port caps with Kapton tape, temp stow LiOH for use on EVA 2
18. Install Metox using label on canister for proper orientation
19. Close thermal cover zipper
20. Rotate EDDA closed
POST EVA 2 RECONFIG AND TRANSFER

EVA TRANSFER BAG PREP

1. Configure/verify items in bags per table below

<table>
<thead>
<tr>
<th>EVA Systems Transfer Bag</th>
<th>EVA Tool Transfer Bag</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Mesh Bag labeled ‘EVA Systems Transfer Bag’</td>
<td>□ Mesh Bag labeled ‘EVA Tools Transfer Bag’</td>
</tr>
<tr>
<td>□ EMU Servicing Kit</td>
<td>□ TBD</td>
</tr>
<tr>
<td>□ FDF EVA Checklist (1)</td>
<td></td>
</tr>
<tr>
<td>□ EVA Prebreathe Cue Card (used FDF version)</td>
<td></td>
</tr>
<tr>
<td>□ Ergometer Shoes (1 pr, EV1 and EV2)</td>
<td></td>
</tr>
<tr>
<td>□ EMU Consumables Cue Card</td>
<td></td>
</tr>
<tr>
<td>□ ISS EVA Systems Checklist (return copy)</td>
<td></td>
</tr>
<tr>
<td>□ Aspirin</td>
<td></td>
</tr>
</tbody>
</table>

2. Perform PRE-UNDOCK EMU RECONFIGURATION, then go to POST EVA 2 TRANSFER
POST EVA 2 RECONFIG AND TRANSFER (Cont)

PRE-UNDOCK EMU RECONFIGURATION

A 1. Perform reconfig of EMU 3003 (L) per figure below

EMU 3003 (L) RECONFIGURATION FOR RETURN

- [ ] 1. ←|→ Helmet, temp stow
- [ ] 2. ←|→ and stow Comm Cap in EV2 Mesh Bag (ECOK) (Fs)
- [√] 3. √DIDB restraint bag installed
- [ ] 4. Transfer helmet lights/EMU TV to ISS EMU 3009
- [ ] 5. Install helmet with sun visors down and helmet cover
- [ ] 6. Remove ISS Cuff C/L; stow in EMU Equipment Bag
- [ ] 7. Install EV2 (Fs) gloves; √locked
- [ ] 8. Remove Metox (install caps); stow in Metox CTB on A/L101
- [ ] 9. Remove EMU Battery (S/N 20XX); stow in M-02 bag
- [ ] 10. Transfer REBA (S/N XXXX); stow in M-02 bag
- [ ] 11. Install EMU Battery (S/N 20XX)
- [ ] 12. Install used LiOH from EVA 2 (S/N 2XXX)
- [ ] 13. Stow LCVG (Fs) in HUT
- [ ] 14. Stow EV2 Mesh Bag (ECOK) (Fs) in HUT
- [ ] 15. Install LTA, √locked

Cont next page
POST EVA 2 RECONFIG AND TRANSFER (Cont)

B 1. Perform reconfig of EMU 3015 (L) per figure below

EMU 3015 (L) RECONFIGURATION FOR RETURN

☐ 1. ←→ Helmet, temp stow
☐ 2. ←→ and stow Comm Cap in EV1 Mesh Bag (ECOK) (Sl)
☐ 3. √DIDB restraint bag installed
☐ 4. Transfer helmet lights/EMU TV to ISS EMU 3010
☐ 5. Install helmet with sun visors down and helmet cover
☐ 6. Remove ISS Cuff C/L; stow in EMU Equipment Bag
☐ 7. Install EV1 (Sl) gloves; √locked
☐ 8. Remove Metox (install caps); stow in Metox CTB on A/L1O1
☐ 9. Remove EMU Battery (S/N 20XX); stow in M-02 bag
☐ 10. Remove REBA (S/N XXXX); stow in M-02 bag
☐ 11. Install EMU Battery (S/N 20XX)
☐ 12. Install used LiOH from EVA 2 (S/N 2XXX)
☐ 13. Stow LCVG (Sl) in HUT
☐ 14. Stow EV1 Mesh Bag (ECOK) (Sl) in HUT
☐ 15. Install LTA, √locked

Cont next page
POST EVA 2 RECONFIG AND TRANSFER (Cont)

POST EVA 2 TRANSFER

NOTE
This procedure assumes that transfer items were preconfigured per EVA TRANSFER BAG PREP and PRE-UNDOCK EMU RECONFIGURATION

1. Transfer following EMU equipment to shuttle:

<table>
<thead>
<tr>
<th>Item</th>
<th>Destination</th>
<th>Transfer Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMU 3003 (L)</td>
<td>A/L port (EV2)</td>
<td></td>
</tr>
<tr>
<td>EMU 3015 (L)</td>
<td>A/L stbd (EV1)</td>
<td></td>
</tr>
<tr>
<td>EVA Systems Transfer Bag</td>
<td>Temp stow Middeck</td>
<td></td>
</tr>
<tr>
<td>EVA Tool Transfer Bag</td>
<td>Temp stow Middeck</td>
<td></td>
</tr>
</tbody>
</table>

2. Report transfer status to MCC-H

POST UNDOCK TRANSFER STOW

1. Stow EVA Transfer Bag items post-undock

<table>
<thead>
<tr>
<th>EVA Systems Transfer Bag</th>
<th>EVA Tool Transfer Bag</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vol H Bag “Prime”</td>
<td>□ Mesh Bag</td>
</tr>
<tr>
<td>□ EMU Servicing Kit labeled “Inc 6”</td>
<td>□ TBD</td>
</tr>
<tr>
<td>FDF Locker</td>
<td></td>
</tr>
<tr>
<td>□ FDF EVA Checklist (1)</td>
<td></td>
</tr>
<tr>
<td>□ EVA Exercise Prebreathe Cue Card</td>
<td></td>
</tr>
<tr>
<td>□ EMU Consumables Cue Card</td>
<td></td>
</tr>
<tr>
<td>□ ISS EVA Systems Checklist</td>
<td></td>
</tr>
<tr>
<td>Ergometer Shoe Bag</td>
<td></td>
</tr>
<tr>
<td>□ Ergometer Shoes (EV1 and EV2)</td>
<td></td>
</tr>
<tr>
<td>Vol D</td>
<td></td>
</tr>
<tr>
<td>□ EMU Middeck Battery Charger (1002)</td>
<td></td>
</tr>
<tr>
<td>Med Kit</td>
<td></td>
</tr>
<tr>
<td>□ Aspirin</td>
<td></td>
</tr>
</tbody>
</table>