

# STS-128/17A

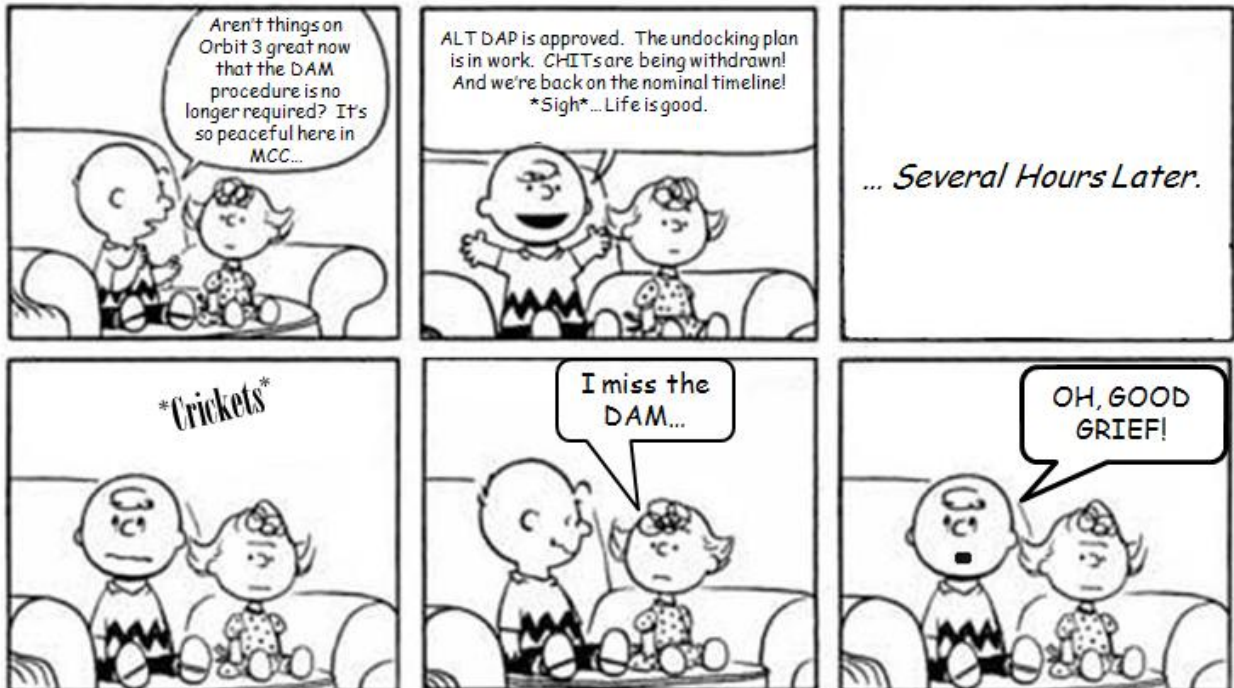
## FD 09 Execute Package



MSG	Page(s)	Title
-	-	FD09 Summary Timeline
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069	10 - 11	FD09 Mission Summary
070	12 - 13	FD09 Transfer Message (20-1125)
071	14	FD09 Crew Choice Downlink
072	15	FD09 EVA Deltas (20-1130)
073	16	Updated STS-128 EVA Battery Recharge Plan (20-1131)

**Approved by FAO:**  
Gail Hansen

Last Updated: Sep 5 2009 11:39 AM GMT  
JEDI (Joint Execute package Development and Integration), v3.0





09/05/09 08:14:58

REPLANNED

GMT	09/06/09 (Z49)	04	05	06	07	08	09	10	11	12	13	14	15	16
MET	Day 008	008/00	01	02	03	04	05	06	07	08	09	10	11	12
S T S 1 2 8	FD09 CDR STURCKOW	MPLM XFER	X T F A E G R U P XFER BRIEF	PRE SLEEP A/G	PRE SLEEP					SLEEP				
	PLT FORD	EXERCISE		PRE SLEEP						SLEEP				
	MS1 FORRESTER	EXERCISE	H2O CMC S/UCR #	PRE SLEEP						SLEEP				
	MS2 HERNANDEZ	POST EVA W/H2O	BSA INIT	PRE SLEEP						SLEEP				
	MS3 OLIVAS	POST EVA W/H2O		PRE SLEEP						SLEEP				
	MS4 FUGLESANG	POST EVA W/H2O		PRE SLEEP						SLEEP				
	DAY/NIGHT ORBIT	127	128	129	130	131	132	133	134	135				
	TDRS W E Z													
	ISS TDRS AVAIL ORB ATT													
	NOTES													

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MSG 068A - FD09 FLIGHT PLAN REVISION

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MSG INDEX

<u>MSG NO.</u>	<u>TITLE</u>
068	FD09 Flight Plan Revision
069	FD09 Mission Summary
070	FD09 Transfer Message (20-1125)
071	FD09 Crew Choice Downlink
072	FD09 EVA Deltas (20-1130)
073	Updated STS-128 EVA Battery Recharge Plan (20-1131)

1. **CWC-I FILLS** - Samples are required for CWC-I FILLS #13 & #15. Since Sample/Purge Kit S/N 1006 was reported to be empty, retrieve two sample bags from ISS Sample/Purge Kit S/N 1005 (located in NOD2O2 in M-02 Bag S/N 1026) for these samples.

Following CWC-I FILL #14, perform all of step E. FILL TERMINATION. This will reopen the TK A Outlet Valve to make the potable water in TK B available for CWC-I FILL #15 later in the day. When performing CWC-I FILL #15, begin in step D.1.

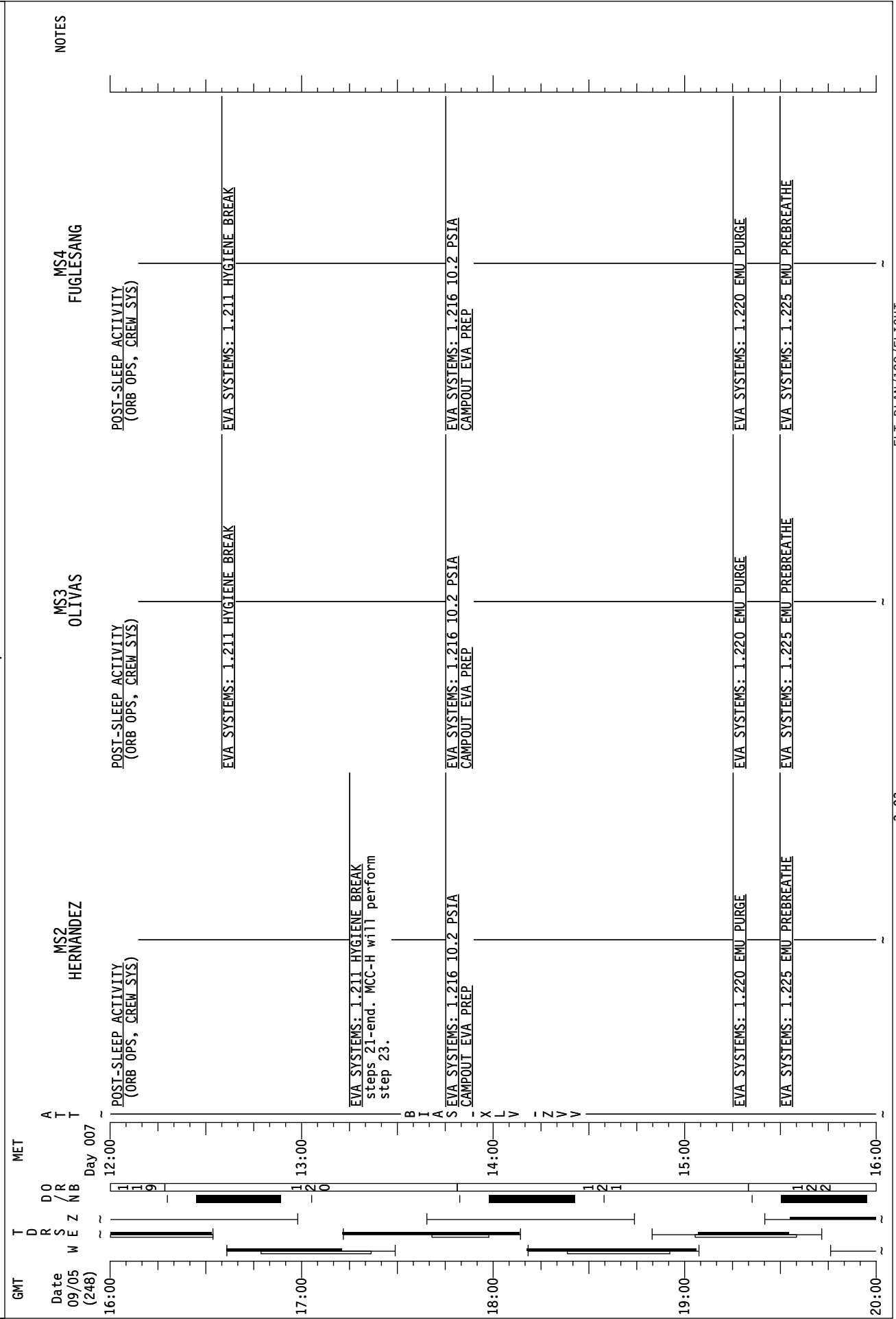
CWC-I FILL #15 is the last CWC-I fill of the flight. After fill termination, perform step F. CWC-I FILL TEARDOWN. All remaining CWC fills this flight will be Technical CWCs.

2. Replace pages 3-92 through 3-99.

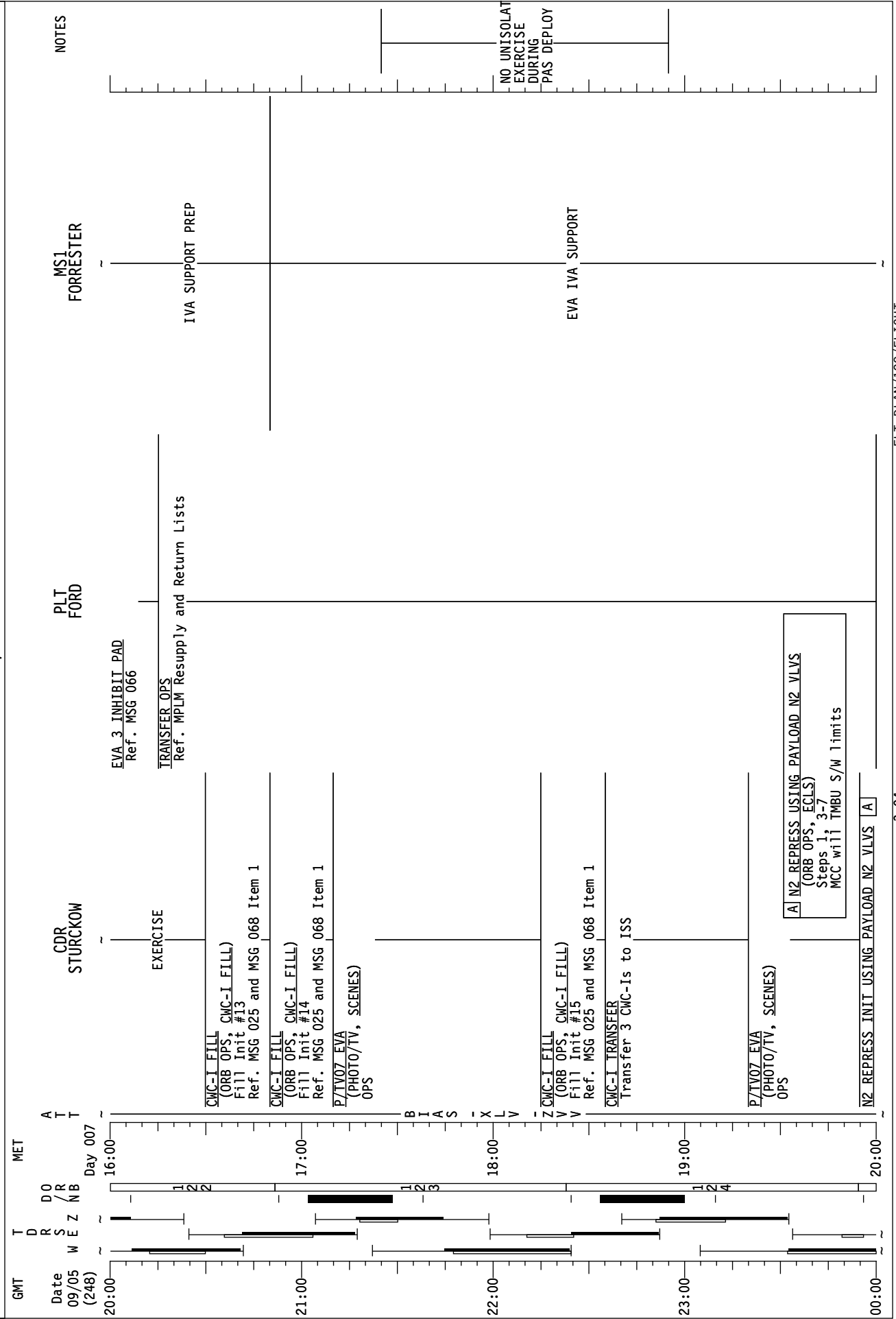


09/05/09 08:15:15

STS-128/17A FD09



STS-128/17A FD09



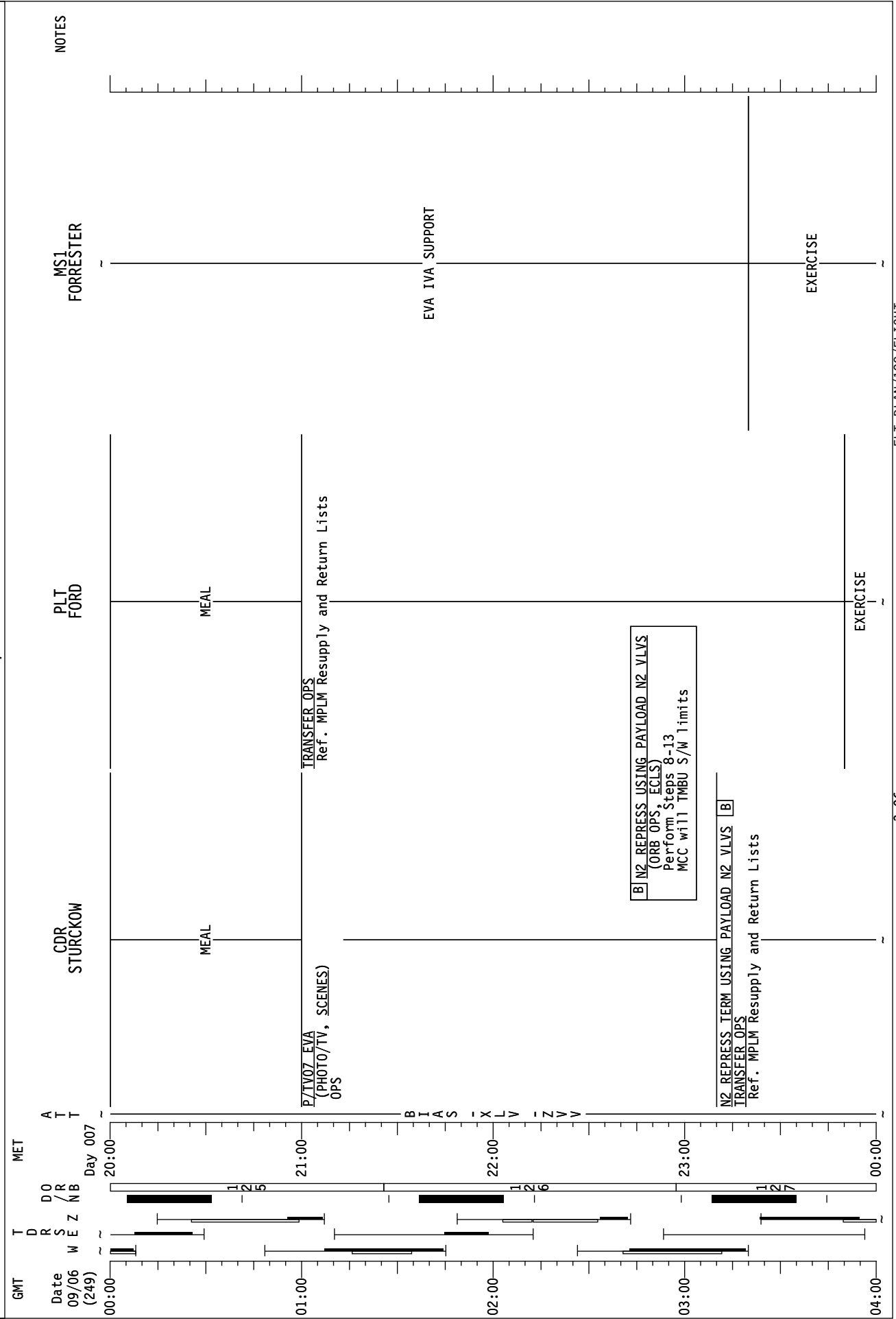


09/05/09 08:15:15

STS-128/17A FD09

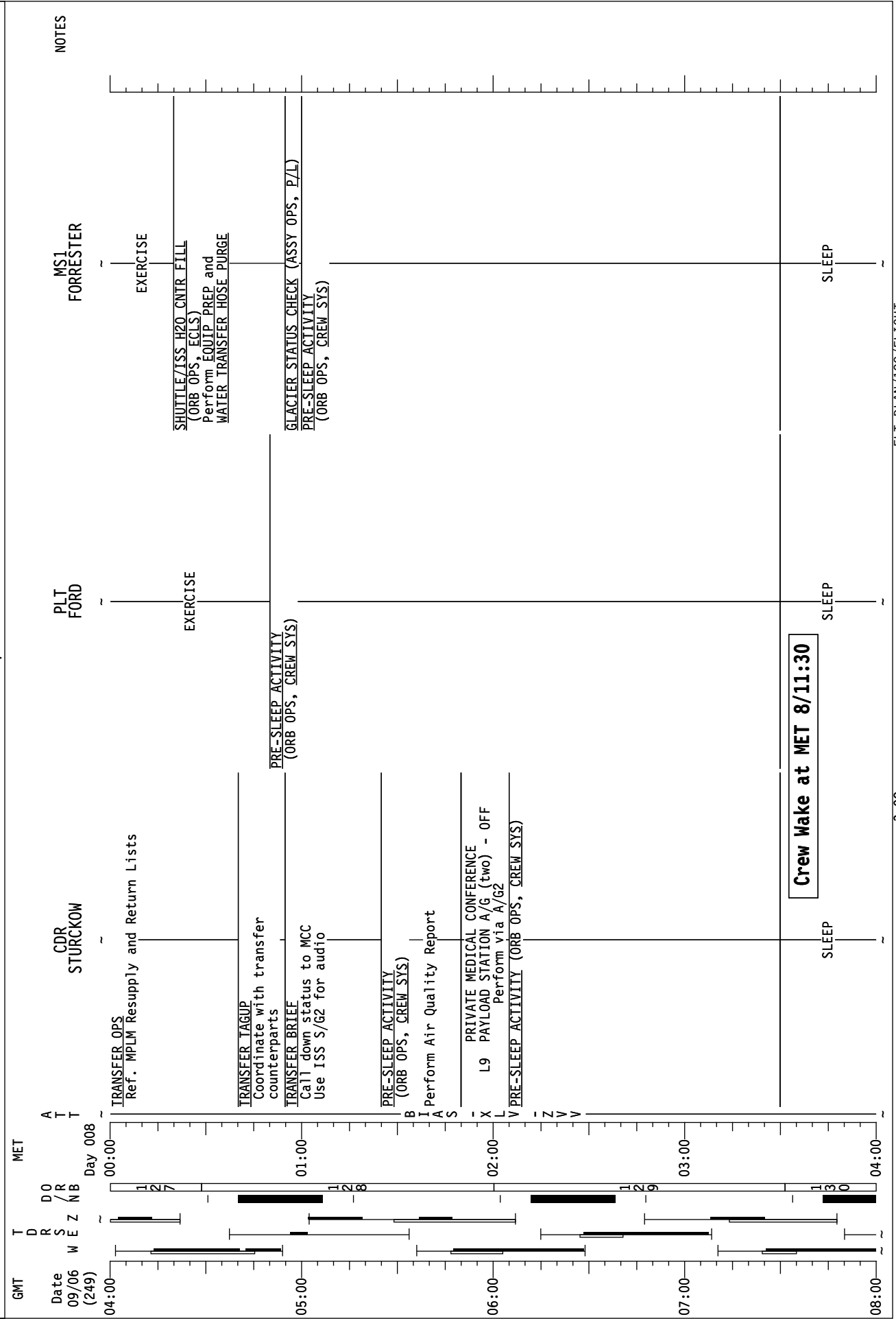
GMT	DATE	TIME	MS2 HERNANDEZ	MS3 OLIVAS	MS4 FUGLESANG	NOTES
20:00	09/05 (248)	16:00	EVA SYSTEMS: 1.225 EMU PREBREATHE	EVA SYSTEMS: 1.225 EMU PREBREATHE	EVA SYSTEMS: 1.225 EMU PREBREATHE	
		16:00	EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS (CC)	EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS (CC)	EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS (CC)	
		17:00	EVA SYSTEMS: CREWLOCK POST DEPRESS (CC) TRANSFER OPS Ref. MPLM Resupply and Return Lists	EVA SYSTEMS: CREWLOCK POST DEPRESS (CC) TRANSFER OPS Ref. MPLM Resupply and Return Lists	EVA SYSTEMS: CREWLOCK POST DEPRESS (CC) TRANSFER OPS Ref. MPLM Resupply and Return Lists	
		17:00	SETUP	SETUP	SETUP	
		18:00	S3 UO PAS	S3 UO PAS	S3 UO PAS	NO UNISOLATED EXERCISE DURING PAS DEPLOY
		19:00	EXERCISE	EXERCISE	EXERCISE	
		19:00	GPS ANTENNA #4 INSTALLATION	GPS ANTENNA #4 INSTALLATION	GPS ANTENNA #4 INSTALLATION	
		20:00	GPS ANTENNA #4 INSTALLATION	GPS ANTENNA #4 INSTALLATION	GPS ANTENNA #4 INSTALLATION	
		20:00	S0 RPCM R&R	S0 RPCM R&R	S0 RPCM R&R	
		20:00	RGA 2 REMOVE AND REPLACE	RGA 2 REMOVE AND REPLACE	RGA 2 REMOVE AND REPLACE	

STS-128/17A FD09

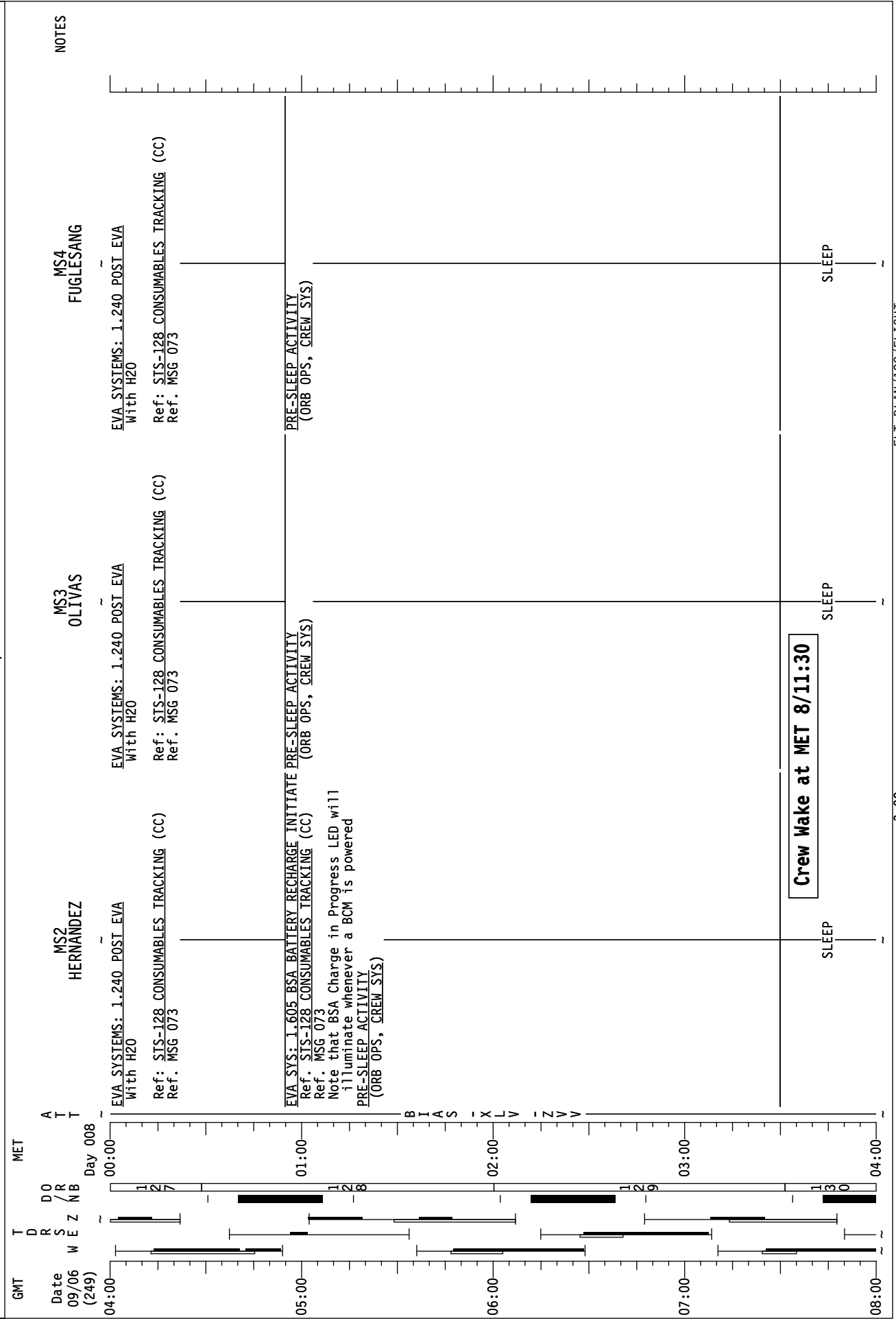




STS-128/17A FD09



STS-128/17A FD09



MSG 069 - FD09 MISSION SUMMARY

1  
2 Good Morning Discovery!

3  
4 Thanks for all the hard work on transfer yesterday. Your attention to detail and suggestions  
5 were much appreciated. And you are now well ahead on transfer!

6  
7 On to another great EVA....  
8  
9

10  
11 YOUR CURRENT ORBIT IS: 194 X 181 NM  
12

13 **NOTAMS: ONE CHANGE (ADDED EDF)**

14  
15 EDW - EDW IN USE. EDT DAY ELS ONLY.  
16 EDW - LAKEBED RWY 15/33 GREEN - ELS ONLY. RWY 18L - UNUSABLE.  
17 NOR - LAKEBED RUNWAYS GREEN.  
18 NKT - AERODROME CLOSED.  
19 FMH - RWY 32 SEQUENCED FLASHING LIGHTS OTS.  
20 YJT - TACAN YJT78 OTS.  
21 EDF - RWY 06/24 CLOSED  
22 LAJ - TACAN LAJ45 OTS.  
23 HAW - RWY 31 LDA = 9024 FT.  
24 GUA - RWY 24R END LIGHTS OTS.  
25 IKF - NOT USABLE. NO AGREEMENT.  
26 BEN - NOT RECOMMENDED/NOT SUPPORTED.  
27  
28

29 **NEXT 2 PLS OPPORTUNITIES:**

30  
31 EDW22 ORB 126 – 7/22:17 FEW060 FEW250 7 230/11P18  
32 NOR17 ORB 141 – 8/21:08 FEW080 SCT120 BKN250 7 230/05P11  
33

34 **OMS TANK FAIL CAPABILITY:**

35  
36 L OMS FAILS: NO  
37 R OMS FAILS: NO  
38

39 **LEAKING OMS PRPLT BURN:**

40  
41 L OMS LEAK: ALWAYS BURN RETROGRADE  
42 R OMS LEAK: ALWAYS BURN RETROGRADE  
43

44 **OMS QUANTITIES(%)**

45  
46 L OMS OX = 34.4 R OMS OX = 33.4  
47 FU = 33.9 FU = 33.4  
48  
49  
50  
51

END OF PAGE 1 OF 2, MSG 069

MSG 069 - FD09 MISSION SUMMARY

1 DELTA V AVAILABLE:

2		
3	OMS	359 FPS
4	<u>ARCS (TOTAL ABOVE QTY1)</u>	<u>23 FPS</u>
5		
6	TOTAL IN THE AFT	382 FPS
7		
8	ARCS (TOTAL ABOVE QTY2)	55 FPS
9	FRCS (ABOVE QTY 1)	33 FPS
10		
11	AFT QTY 1	82 %
12	AFT QTY 2	44 %

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

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END OF PAGE 2 OF 2, MSG 069

## MSG 070 (20-1125) - FD09 TRANSFER MESSAGE

1 Good morning Danny, Christer, CJ & Jose

2  
3 All of you have done great work packing the MPLM up for return! We have listed in the  
4 Transfer Notes section a more detailed breakdown of your transfer status. For today there  
5 are no constraints, so just start working your way through the books and let us know if you  
6 have any questions!

7  
8 The Transfer List Excel file, FD09\_Transfer\_List\_STS128.xls, locations are:

- 9 • Shuttle: **C:\OCA-up\transfer** (KFX machine)
- 10 • Station: **K:\OCA-up\transfer**

### 11 Transfer Notes

- 12 • Due to comm conflicts and poor comm quality the Transfer Brief has been moved to S/G  
13 2 for today.
- 14 • **MPLM Resupply:** There are no items required for transfer today but we have listed in  
15 the choreography the unconstrained MPLM Resupply items that have not yet been  
16 transferred. In tomorrow's Transfer Message we will give you a list of all open MPLM  
17 resupply and return transfer items.
- 18 • **Percentage Complete:**
  - 19 • Middeck overall: 77%
    - 20 ▪ Middeck Resupply: 98%
    - 21 ▪ Middeck Return: 51%
  - 22 • MPLM Overall: 66%
    - 23 ▪ MPLM Resupply: 91%
    - 24 ▪ MPLM Return: 36%

### 25 FD09 Choreography

- 26 • Transfer return items per crew preference
- 27 • Open MPLM Resupply Items that are not constrained
  - 28 ○ Temp Stowed M-Bags
    - 29 ▪ We believe are complete based on completed return items
      - 30 • 138 & 153
    - 31 ▪ We believe are still open
      - 32 • 108, 109, 117, 118, 137, 150, 151, 154, 155
  - 33 ○ Item 150.6 – Ziplock of CARD hardware
  - 34 ○ Item 259 – RPCMs
  - 35 ○ Item 266 – Ziplock of Wet Wipes



MSG 070 (20-1125) - FD09 TRANSFER MESSAGE

1 **Please incorporate uplink pages as follows (we've listed the updates in the order they**  
2 **printed out for you):**

3  
4 In the Middeck Transfer List **RETURN** tab

5 Add the following page:  
6 Return 6

7  
8 In the MPLM Return Transfer List **RETURN** tab

9 Replace the following page:  
10 Return 15, 19

11  
12  
13 **Changes to the Transfer List are detailed below:**

14  
15 **MIDDECK RETURN**

16 Item 906 – new item

17  
18 **MPLM RETURN**

19 Item 711 – updated final location

20 Item 816 – updated quantity and notes

21  
22  
23 **FD10 Choreography**

- 24 • **Danny (LiOH)**
  - 25 ○ **Items 810, 811, 812, & 813:** LiOH Transfer Part 2
  - 26 ○ **Items 260.1, 267.1, & 269.1:** Transfer Jettison Stowage Bags to ISS
- 27 • **EVA Hardware:**
  - 28 ○ **Items 210 & 818:** Transfer SAFERs per SAFER C/O activity
  - 29 ○ **Item 815:** Transfer returning RGA after EVA 2 and stow in foam box
    - 30 ▪ Stow M-Bag on front of MPL1F2 rack (this bag launched on the back
    - 31 of the rack)
  - 32 ○ **Item 817:** Transfer EVA hardware to MPLM per EVA H/W STOW MPLM
  - 33 activity
- 34 • **Item 607:** Transfer Glacier samples to STS per GLACIER SAMPLE XFER activity
- 35 • **Item 614:** Transfer Micro Sample Post-Flight Analysis Packets per EMU WPA SMPL
- 36 activity
- 37 • **MPLM Prep for return**
  - 38 ○ **Items 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, & 831:** Install temp
  - 39 stowed handrails on MPLM racks for return
  - 40 ○ **Item 836:** Strap ISP foam down for return
  - 41 ○ **Items 834 & 835:** Uninstall all pivot pins & bungees and then transfer them to
  - 42 ISS
  - 43 ○ **Item 103:** Scavenge GLAs per MPLM GLA SCAVENGE activity

44  
45  
46 Have a great day and let us know if you have any questions!

47  
48 - The STS-128 Transfer Team

MSG 071 - FD09 CREW CHOICE DOWNLINK

1 Below are your crew choice downlink opportunities based on Ku availability:  
2  
3  
4

TDRS	AOS	LOS	Delta (min)	Notes
W	8/00:15	8/00:40	25	
Z	8/01:38	8/01:47	9	Analog Only
W	8/01:48	8/02:02	14	
E	8/02:29	8/02:40	11	
Z	8/03:15	8/03:25	10	Analog Only

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END OF PAGE 1 OF 1, MSG 071

1 Post EVA Battery Charging - For Jose

2 PGT Battery s/n 1008 experienced a charge error after EVA 2, so we had Christer  
3 use s/n 1004. We have uplinked a new **STS-128 EVA BATTERY RECHARGE**  
4 **PLAN** in message 20-1131 (MSG 073). You may either print this out and tape it to  
5 your cue card or pen and ink the addition of PGT Battery s/n 1004, whichever is  
6 more convenient for you.

7  
8 RPCM/GPS Antenna R&R Safety Tether suggestion:

9 Pat, if Christer completes the RPCM R&R before Danny completes his work on GPS  
10 Antenna #4, we think Christer should stay zenith as he translates to GPS Antenna  
11 #2 to keep the safety tethers de-conflicted.

12  
13 Pen and Inks:

14  
15 S3 Zenith Outboard PAS Deploy:

16 There is a failed heater on the S3 Upper Outboard PAS. Therefore, to maximize the  
17 time with operational power on, we plan to delay the inhibit until crew  
18 egress. Please make the following update to the detailed timeline as the crew heads  
19 to the PAS worksite:

20  
21 Message 20-1121 (MSG 066), p 7-5

- 22 1.) Verify **MCC-H** RPCM S31A A RPC 12 – Open, Close Cmd Inhibit (prior to  
23 worksite arrival)

24  
25 MT/MBS Connector Sleeve Install:

26 There is a typo in the as-flown STS-128 EVA Checklist. See below for correction.  
27 Page FS 7-144,

- 28 Was: 3. Retrieve connector insulating sleeve size 33/37 from crewlock bag  
29 Is: 3. Retrieve connector insulating sleeve size 21/25 from crewlock bag

- 30  
31 Was: 8. Retrieve connector insulating sleeve size 33/37 from crewlock bag  
32 Is: 8. Retrieve connector insulating sleeve size 21/25 from crewlock bag

33  
34 The tool config message 20-1118 (MSG 065) uplinked yesterday is correct.  
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47

HOOK  
VELCRO

STS-128 EVA BATTERY RECHARGE PLAN

