



# STS-135/ULF7

## FD 02 Execute Package

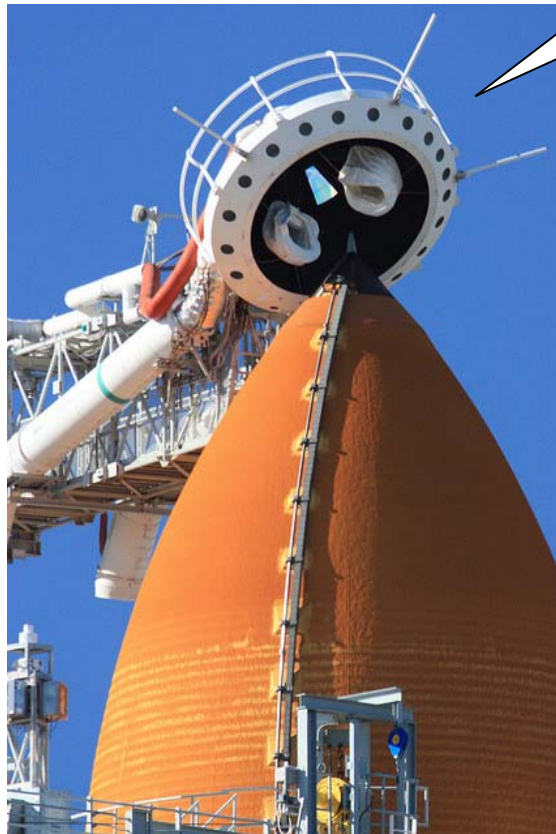
MSG	Page(s)	Title
002A	1 - 12	FD02 Flight Plan Revision
003	13 - 14	FD02 Mission Summary

**Approved by FAO:**

Jason Mintz

Last Updated: Jul 9 2011 5:54 AM GMT

JEDI (Joint Execute package Development and Integration), v3.0



My 2 minutes and 19 seconds of fame  
.... Sweeet!

MSG 002A - FD02 FLIGHT PLAN REVISION

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MSG INDEX

<u>MSG NO.</u>	<u>TITLE</u>
002	FD02 Flight Plan Revision
003	FD02 Mission Summary

1. For today's cryo config, O2 and H2 tanks 1 and 5 will be active.  
R1 O2,H2 MANF VLV TK1 (two) - OP (tb-OP)  
TK3 HTRS A,B (four) - OFF  
A15 CRYO TK5 HTRS O2,H2 A,B (four) - AUTO
2. Please incorporate the following Pen and Ink changes to the PDRS OPS book:
  - In OBSS LDRI/IDC RCC SURVEY - PORT (PDRS, OBSS OPERATIONS) Step 13, strike out "Mnvr to attitude per FLIGHT PLAN"
  - In OBSS LDRI/IDC RCC SURVEY - PORT (PDRS, OBSS OPERATIONS) Step 15, add "Mnvr to attitude per FLIGHT PLAN" before "AUTO SEQ - PROCEED"
3. If you wish to perform step 9 of OBSS BERTH (PDRS, OBSS OPERATIONS) as an OCAS to precradle, please drive EP to -120.0 in Single mode before starting the OCAS.
4. CGBA Cue Cards  
Sandy - we concur with your plan to refer to the CGBA's by their location codes (MF71E and MA16D) due to the lack of any S/N labels on the flight units. In order to eliminate any potential downstream confusion please ensure that the location code labels that you've added don't conflict with the preprinted location codes on step 1.1 of the cards. If so then just strike out the preprinted location codes in step 1.1.
5. Middeck Transfer Prep  
During today's transfer prep, please complete the following:
  - Remove and prepare seat bag items for transfer; collapse seat bags.
  - Gather ISS fresh food.
  - **Item 46.1:** Gather BNC-RCA Phono Adapters (qty 2) from A17, place in Ziploc retrieved from MPLM Resupply Transfer List book, and stow in CTB in MF71O.
  - **Item 38:** Gather SODF from MF43C (1.0 CTB) and MF57K ("FD4 DEPLOY" Ziploc).

MSG 002A - FD02 FLIGHT PLAN REVISION

- 1 6. Crew Choice Downlink KU Opportunities:  
2 Please allow 1-2 minutes to lock up on Ku-band. Check with MCC before starting  
3 playback.

4  
5 Post-Sleep Morning of FD02

TDRS	AOS	LOS	Delta (min)	Notes
W-171	0/18:51	0/19:10	19	Gimbal Flip @ 18:59

6  
7 Pre-Sleep Evening of FD02

TDRS	AOS	LOS	Delta (min)	Notes
W-171	1/06:08	1/06:22	14	Gimbal Flip @ 1/06:10
E-TDS	1/06:30	1/06:56	26	
W-171	1/07:05	1/07:24	19	
W-171	1/07:31	1/07:58	27	
E-TDS	1/08:04	1/08:26	22	

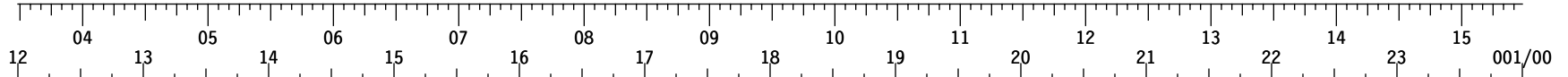
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7. REPLACE PAGES 2-4 THROUGH 2-5 AND 3-10 THROUGH 3-17.

FD02

GMT 07/09/11 (190)

MET Day 000

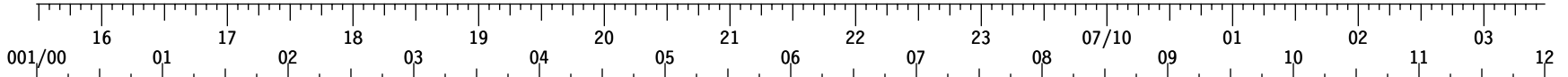


STS-135	CDR FERGUSON	SLEEP	POST SLEEP	OMS BURN	POST SLEEP	OBSS UNBERTH	STBD WING SURVEY	MEAL	NSOURVECYAP	
	PLT HURLEY	SLEEP	POST SLEEP	OMS BURN	POST SLEEP	OBSS UNBERTH	STBD WING SURVEY	MEAL	NSOURVECYAP	
	MS1 MAGNUS	SLEEP	POST SLEEP	FCMS OPS	POST SLEEP	ERG SETUP	STBD WING SURVEY	MEAL	NSOURVECYAP	
	MS2 WALHEIM	SLEEP	POST SLEEP		ERG SETUP	ERG SETUP	FILTER CLEAN	CRYO 02 SRSR CK	CWC SETUP	MEAL
DAY/NIGHT ORBIT	9	10	11	12	13	14	15	16	17	
TDRS WEZ	[Timeline of TDRS operations]									
ORB ATT	-ZLV -XVV   NC2   -ZLV -XVV   BIAS +YSI   BIAS +XSI									
NOTES	@INTERCONNECT ^B POD HTR RCFG *CRYSTALLIZATION %CNTLR SWAP %MANUAL									

FD02

GMT 07/09/11 (190)

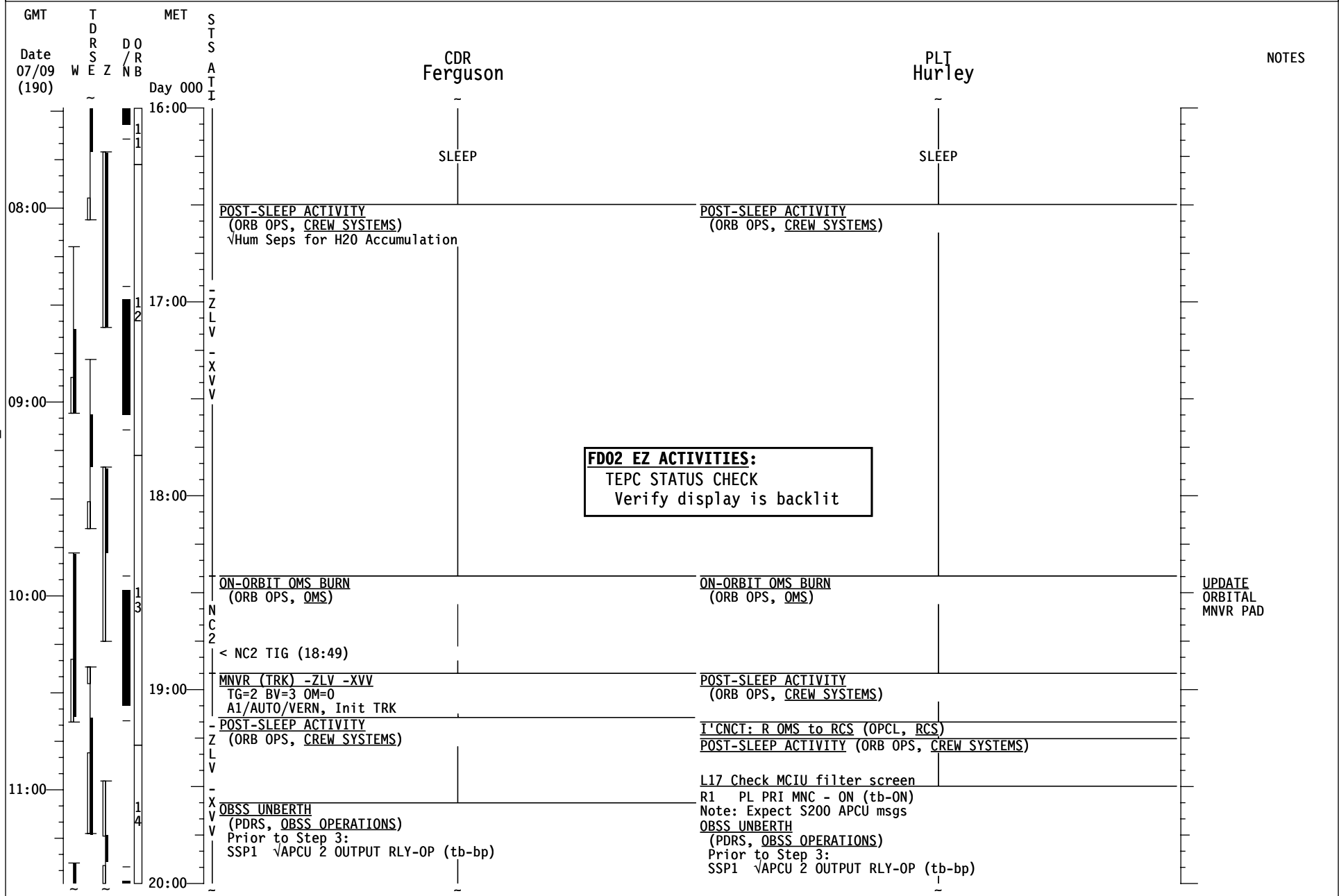
MET Day 001



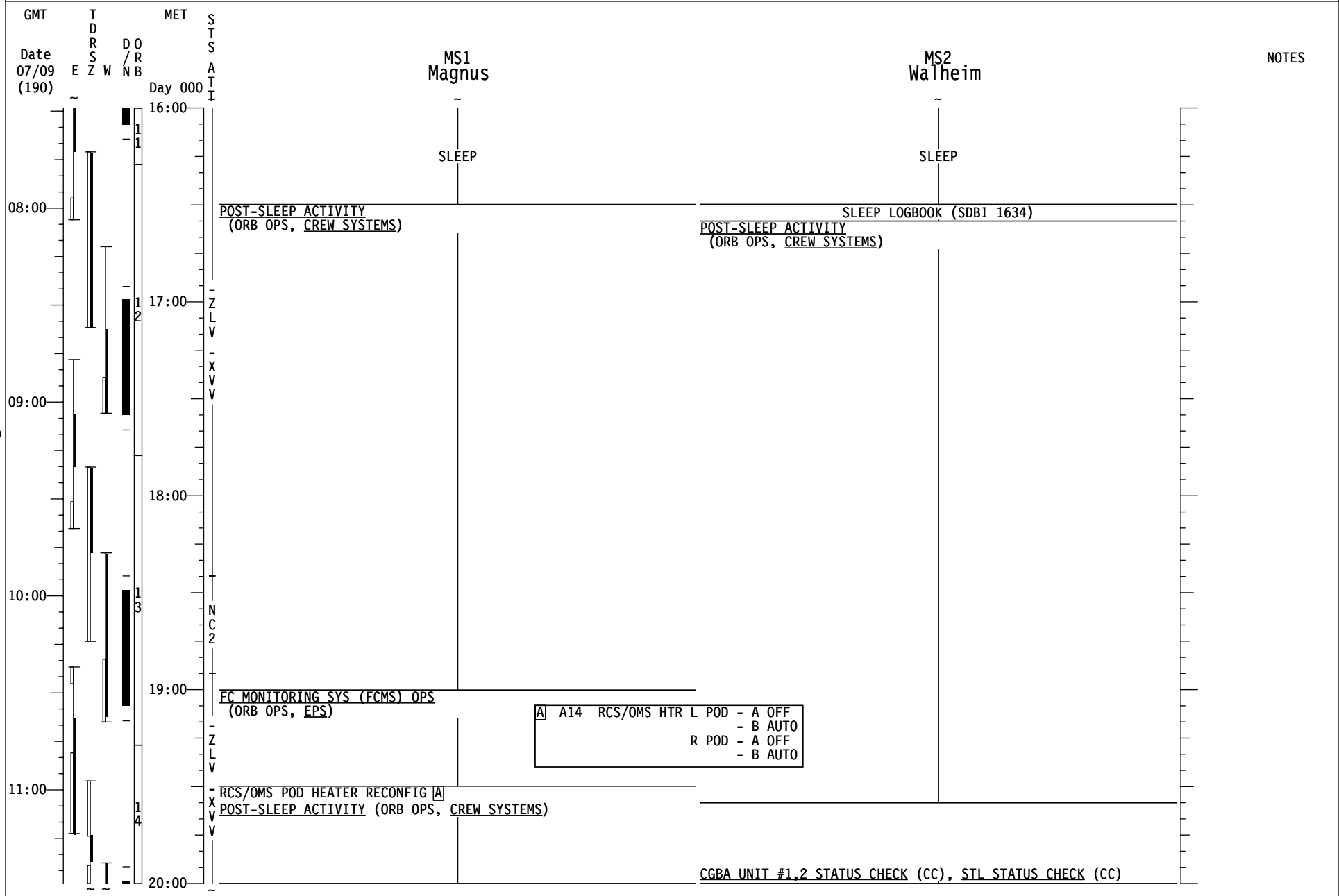
STS-135	CDR FERGUSON	NOSE CAP SURVEY	PORT SURVY	MNVR PORT	PORT WING SURVEY	MNVR -ZLV	OBSS BERTH	DOCKING %	C/L CMR INSTL	ODS RING EXT	PRE SLEEP	NC3^	+X RCS BURN	MNVR -ZLV	FUELOAD	PRE SLEEP	PMC A/G	PRE SLEEP	SLEEP	
	PLT HURLEY	NOSE CAP SURVEY			PORT WING SURVEY	DOCKING %	OBSS BERTH	PLT HURLEY			RNDZ TOOLS C/O	PRE SLEEP	+X RCS BURN	DOCKING %		PRE SLEEP		PRE SLEEP	SLEEP	
	MS1 MAGNUS	NOSE CAP SURVEY			PORT WING SURVEY	VEISA IMON	LDRI DOWNLINK	DOCKING %	C/L CMR INSTL	ODS RING EXT	COND CWC S/U	A/L PREP	ACHEM CHECK STATUS			PRE SLEEP		PRE SLEEP	SLEEP	
	MS2 WALHEIM	VEISA IMON			MDDK XFER PREP		EVA PRP XFER TO ISS	MDDK	RNDZ TOOLS C/O	OC A #	HTRC/O	A/L PREP				PRE SLEEP		PRE SLEEP	SLEEP	
DAY/NIGHT ORBIT																				
TDRS W E Z																				
ORB ATT		BIAS -YSI      -ZLV -XVV      NC3      -ZLV -XVV																		
NOTES		*INTERCONNECT #48 Mbps ^PREP-RNDZ C/O																		

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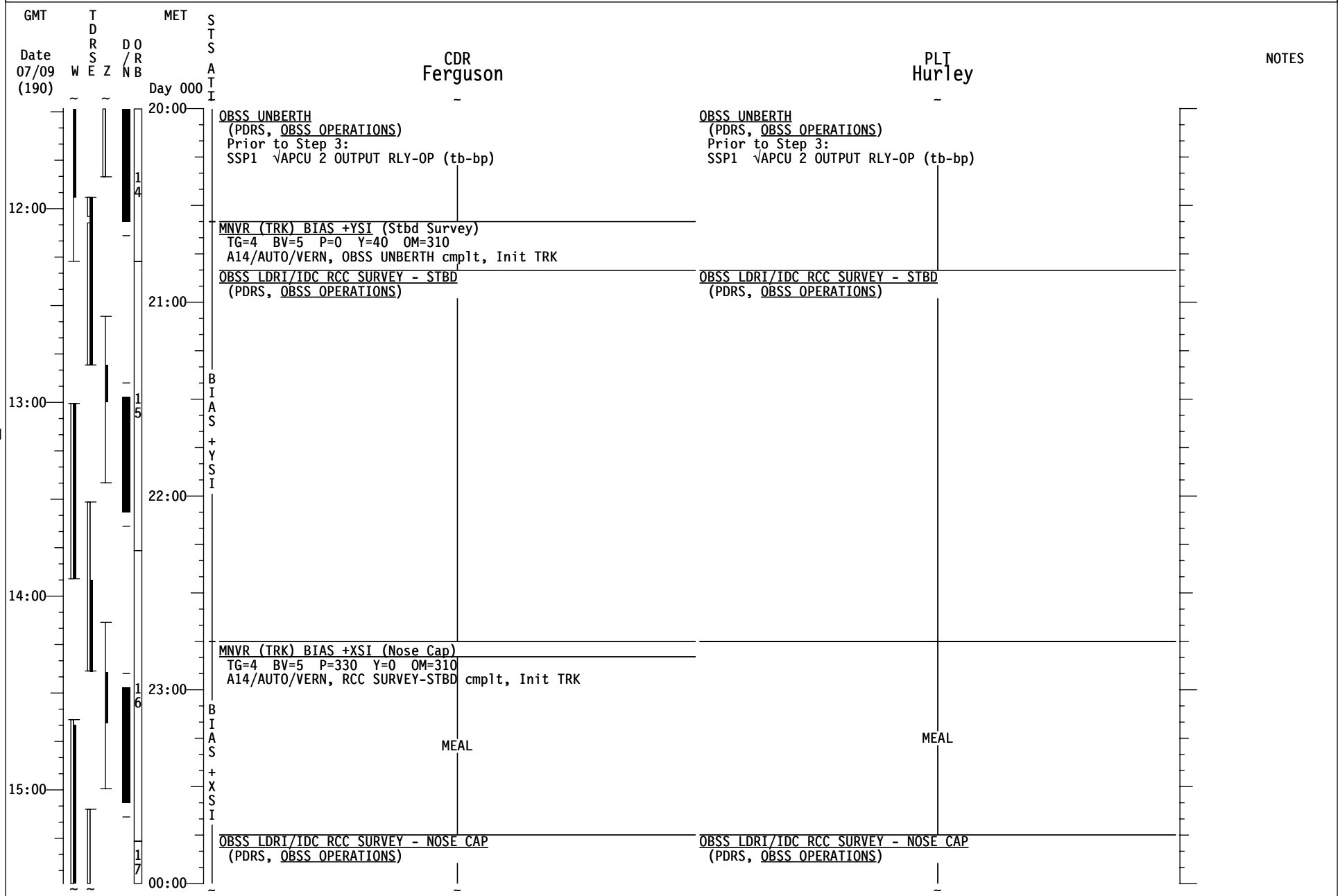
STS-135/ULF7 FD02



STS-135/ULF7 FD02

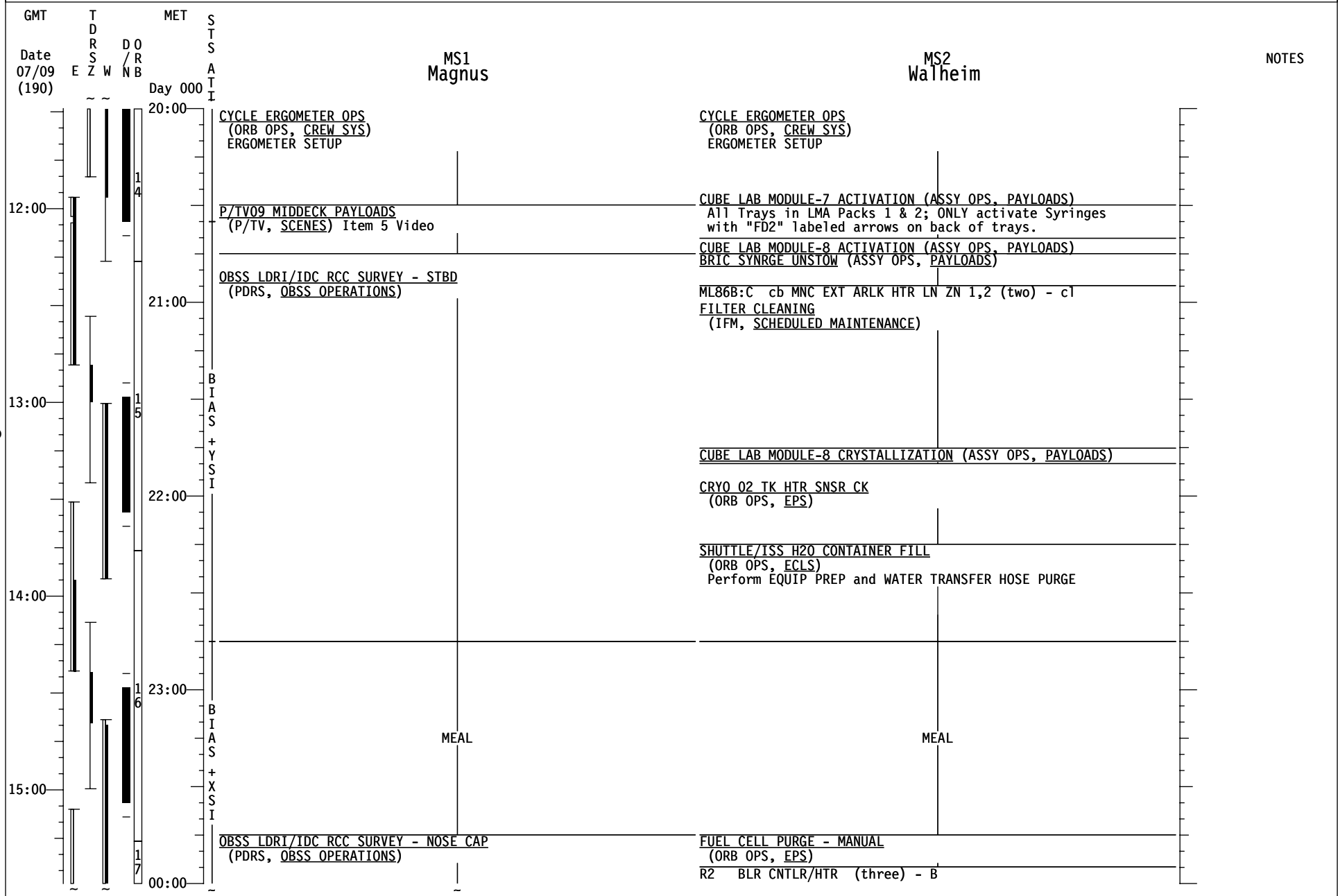


STS-135/ULF7 FD02

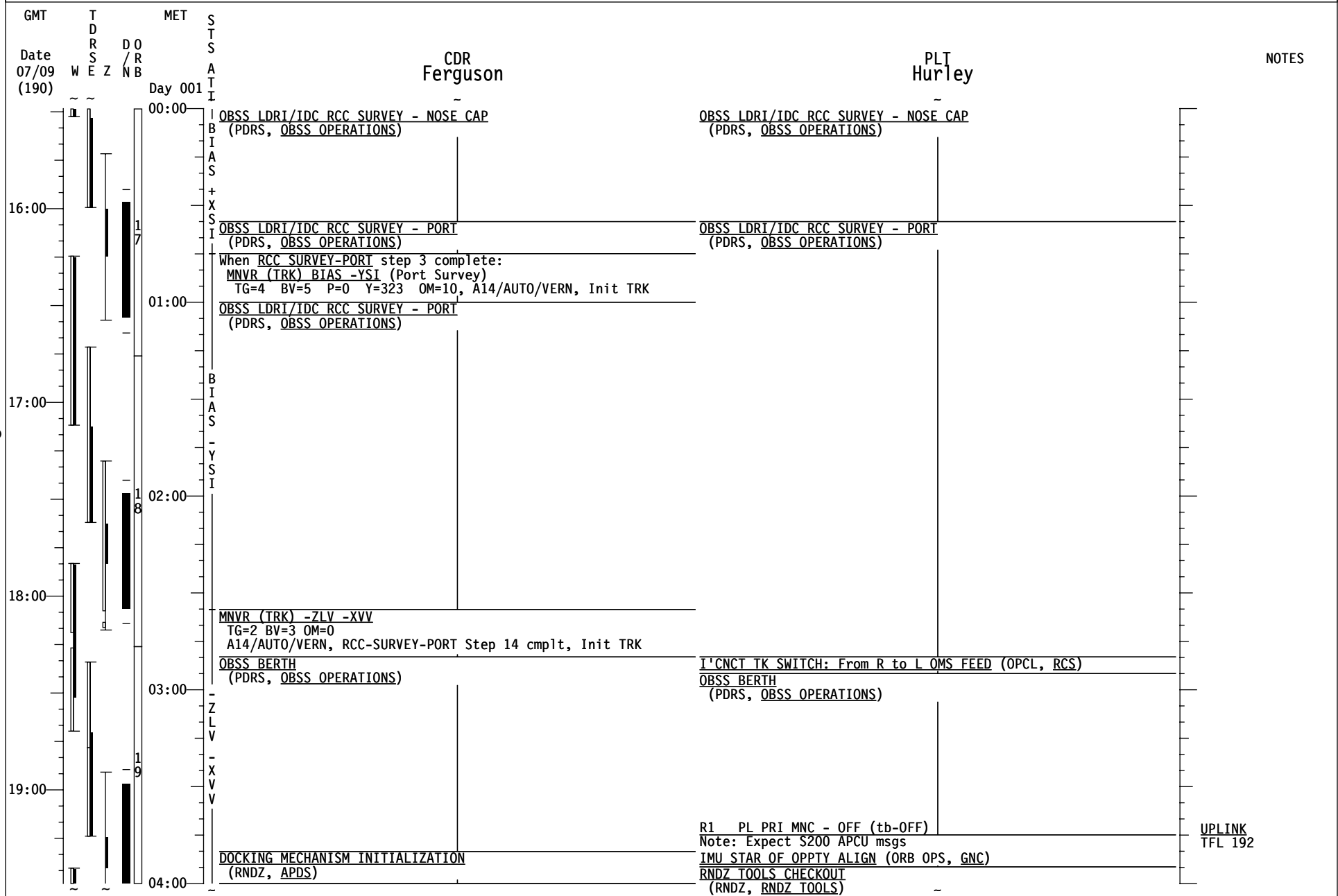




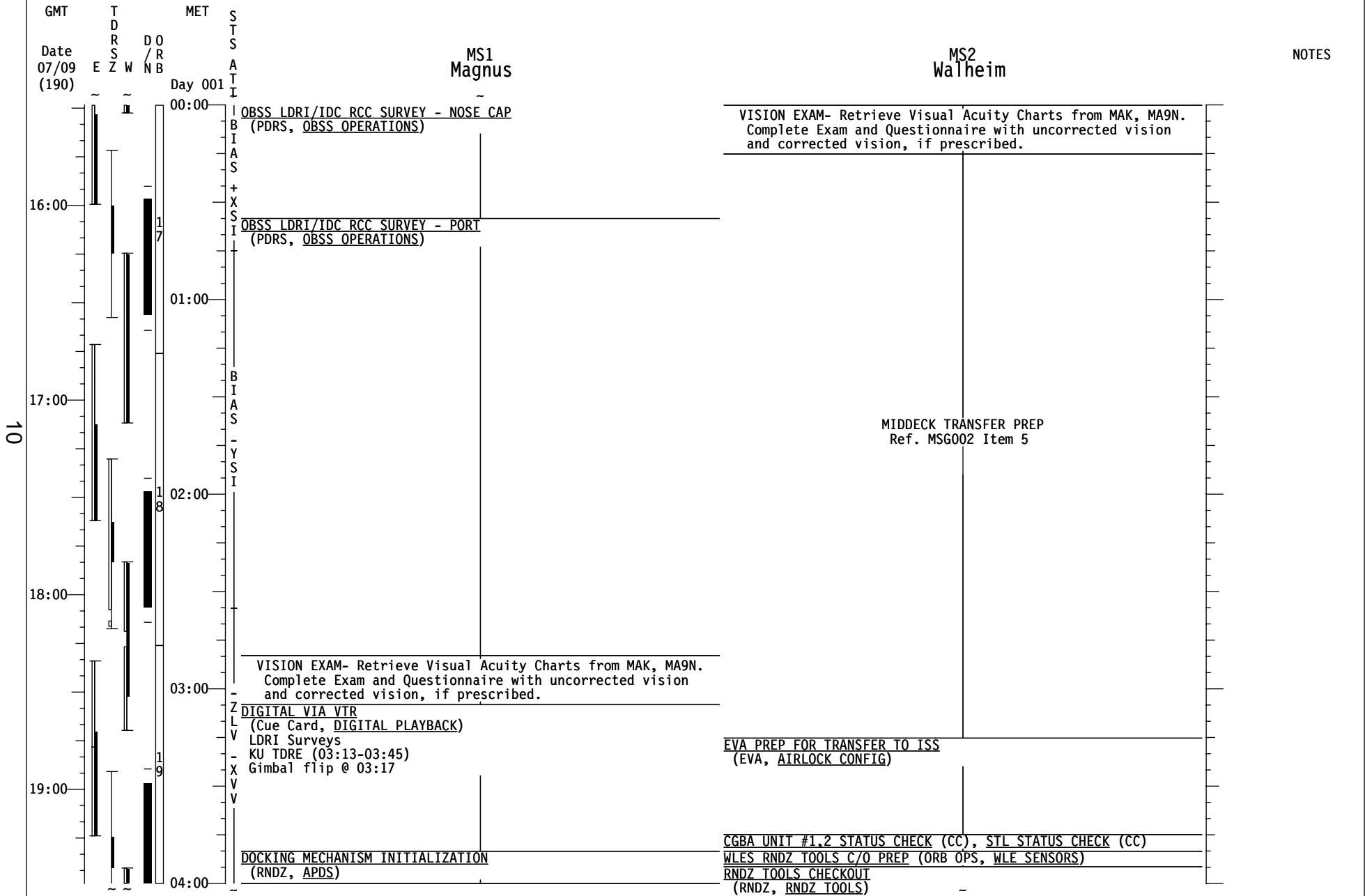
STS-135/ULF7 FD02



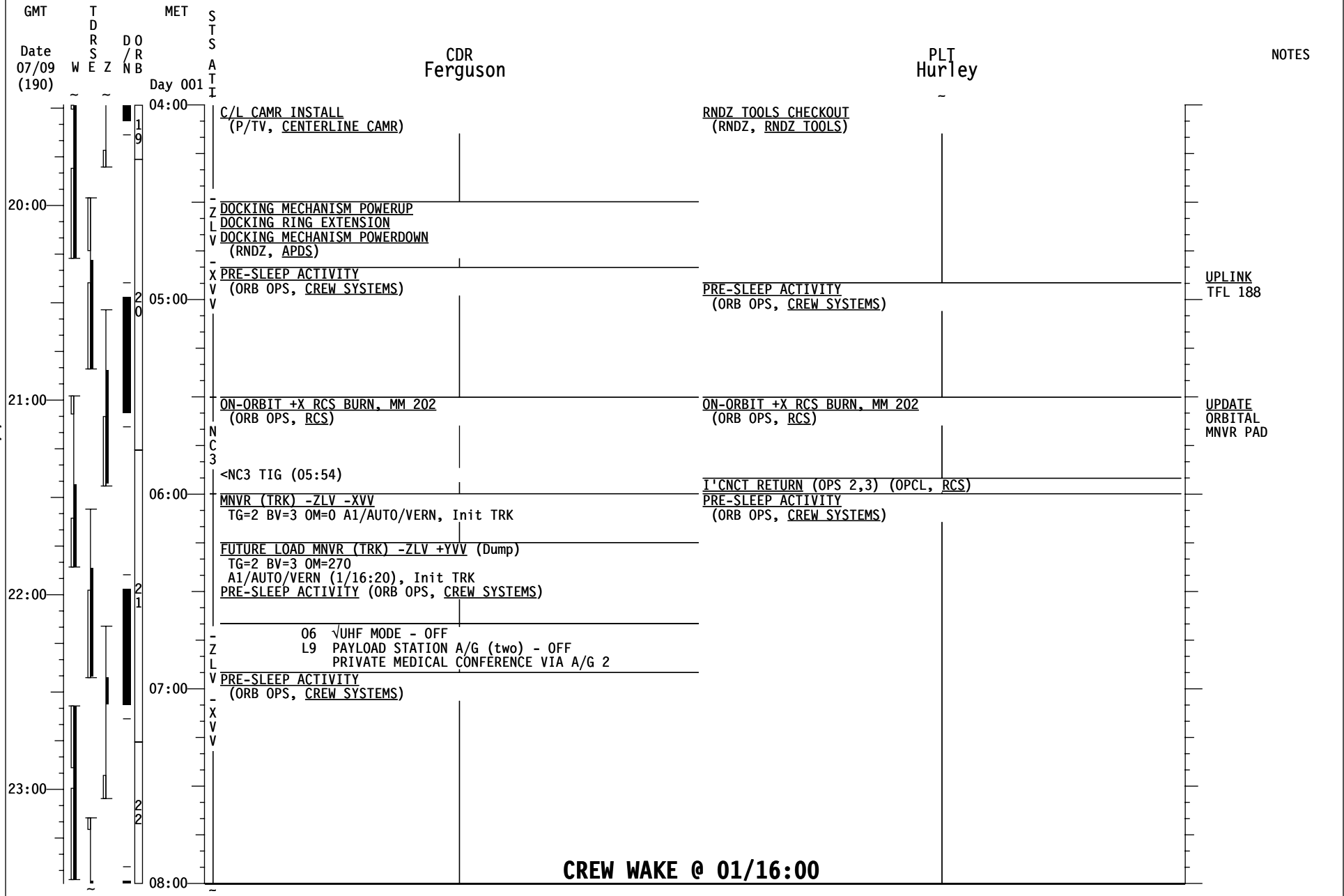
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STS-135/ULF7 FD02

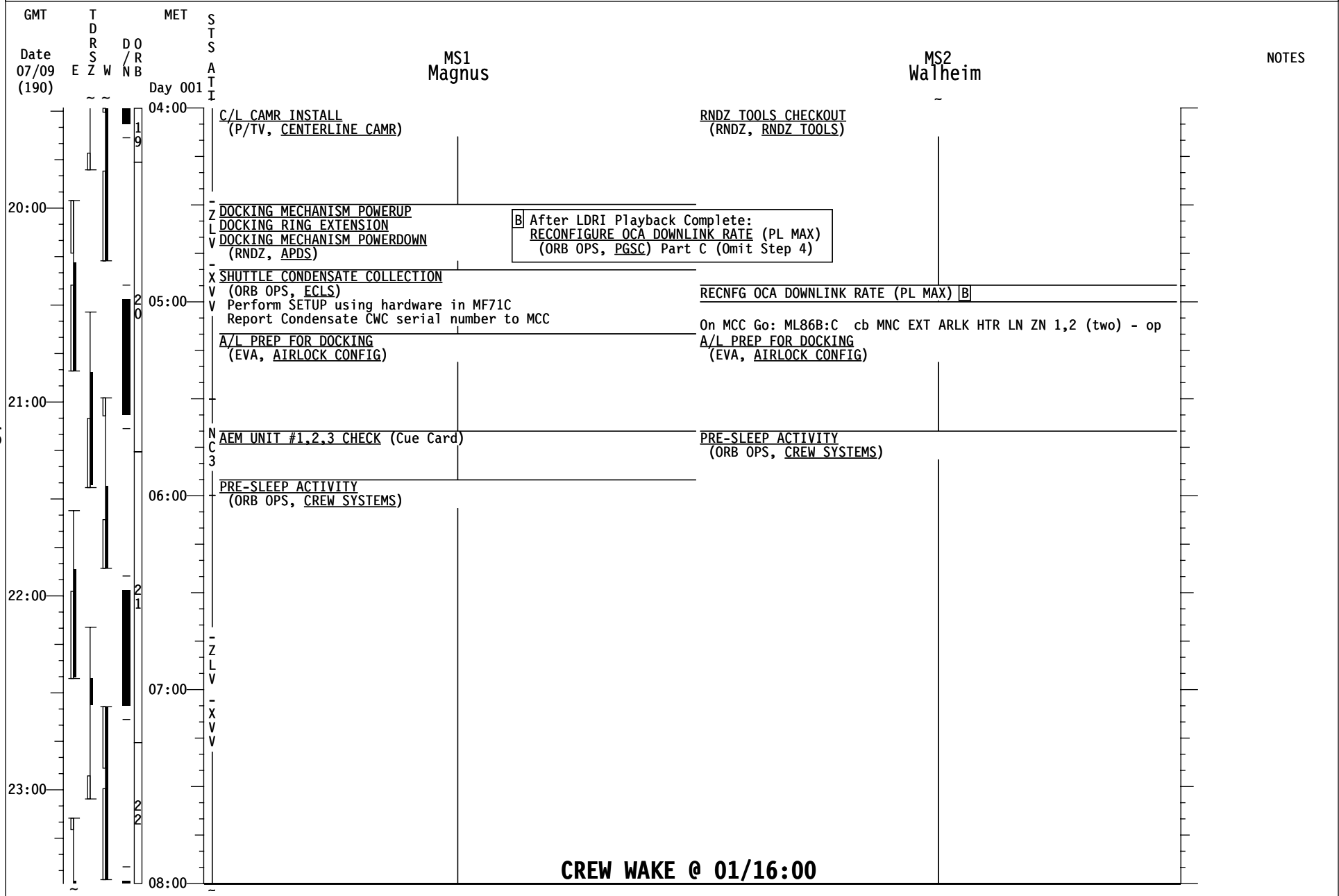


STS-135/ULF7 FD02



CREW WAKE @ 01/16:00

STS-135/ULF7 FD02



CREW WAKE @ 01/16:00

MSG 003 - FD02 MISSION SUMMARY

1 Good Morning Atlantis!!!!  
2 Yesterday's launch was spectacular!  
3 Also spectacular was your impressive post insertion performance!  
4 Have a great inspection day!

5  
6 YOUR CURRENT ORBIT IS: 169 X 121 NM

7  
8 NOTAMS -

9  
10 EDW - EDW 22L/04R IN USE. EDT 22R/04L EMERGENCY DAY USE ONLY.  
11 EDW - LAKEBED RWYS RED.  
12 NOR - LAKEBED RWYS GREEN.  
13 MRN - APPROACH LTS. OTS.  
14 FMI - TACAN NIM53 DECOMMISSIONED.  
15 ESN - TACAN BAG78 OUT OF SERVICE.  
16 GUA - TACAN UNZ105 OUT OF SERVICE.  
17 NTU - RWY 05L/23R AND 14L/32R CLSD.  
18 FFA - NOT USABLE. IN CARETAKER STATUS.  
19 YQX - TACAN YQX74 DME ONLY.  
20 YYR - TACAN UYR40 DME ONLY.  
21 YYT - TACAN UYT23 DME ONLY.  
22 YJT - TACAN YJT78 DME ONLY.  
23 BEN - NOT USABLE. NOT SUPPORTED.  
24 IKF - NOT USABLE. NO AGREEMENT.

25  
26 NEXT 2 PLS OPPORTUNITIES:

27  
28 EDW22 ORB 17 – 1/00:46 SKC 7 230/10P17  
29 EDW22 ORB 33 – 2/00:48 SKC 7 220/10P17

30  
31 OMS TANK FAIL CAPABILITY:

32  
33 YES

34  
35 LEAKING OMS PRPLT BURN:

36  
37 ALWAYS BURN OUT-OF-PLANE

38  
39 OMS QUANTITIES(%)

40  
41 L OMS OX = 57.96 R OMS OX = 59.56  
42 FU = 57.79 FU = 59.12

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END OF PAGE 1 OF 2, MSG 003

MSG 003 - FD02 MISSION SUMMARY

1 DELTA V AVAILABLE:

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3 OMS 574 FPS

4 ARCS (TOTAL ABOVE QTY1) 52 FPS

5

6 TOTAL IN THE AFT 626 FPS

7

8 ARCS (TOTAL ABOVE QTY2) 81 FPS

9 FRCS (ABOVE QTY 1) 52 FPS

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11 AFT QTY 1 92 %

12 AFT QTY 2 54 %

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16 There are no Failure Impact Workarounds.

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