

# Flight Plan

## STS-116

(STS-116 February 9, 2006 Launch Trajectory)

### Mission Operations Directorate Operations Division

**Basic, Rev A**  
**August 24, 2006**

For the latest working copy of the Flight Plan, visit  
<http://mod.jsc.nasa.gov/do4/flightplan/main/fp.cfm?id=116>

EVENT	FD	MET	LOCAL DATE	CST	GMT
Launch	01	0/00:00	02/08/2006	23:52	040/05:52
OBSS Survey	02	0/18:25	02/09/2006	18:17	041/00:17
ISS Docking	03	1/21:03	02/10/2006	20:55	042/02:55
EVA 1	04	2/18:20	02/11/2006	18:12	043/00:12
P6 4B SA Retract	05	3/15:35	02/12/2006	15:27	043/21:27
EVA 2	06	4/17:50	02/13/2006	17:42	044/23:42
EVA 3	08	6/17:20	02/15/2006	17:12	046/23:12
Undock	10	8/18:40	02/17/2006	18:32	049/00:32
MEPSI Deploy	10	8/22:40	02/17/2006	22:32	049/04:32
ANDE Deploy	10	9/00:25	02/18/2006	00:17	049/06:17
RAFT Deploy	11	9/18:25	02/18/2006	18:17	050/00:17
Landing	12	10/19:26	02/19/2006	19:18	051/01:18

National Aeronautics and  
Space Administration

**Lyndon B. Johnson Space Center**  
Houston, Texas



**Verify this is the correct version for the pending operation (training, simulation or flight).**  
Electronic copies of FDF books are available. URL: <http://mod.jsc.nasa.gov/do3/FDF/index.html>

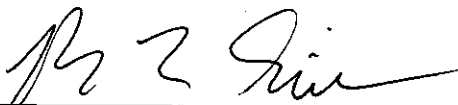


MISSION OPERATIONS DIRECTORATE

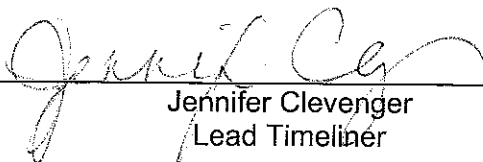
**FLIGHT PLAN  
STS-116**

BASIC, REVISION A  
August 24, 2006

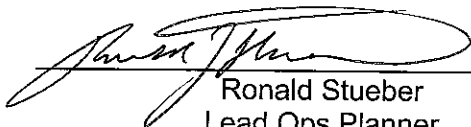
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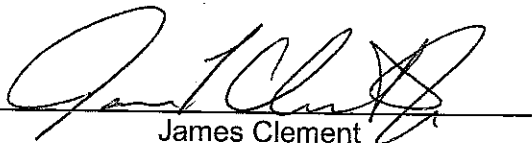


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FLIGHT PLAN  
STS-116

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## INTRODUCTION

The STS-116 Flight Plan is the Flight Data File article that contains the on-orbit timeline. It does not contain the detailed timelines that are covered in the Ascent, Post Insertion, Deorbit Prep, and Entry Checklists. The detailed rendezvous and undocking timelines and procedures are contained in the Rendezvous Checklist. The detailed EVA task timelines and procedures are contained in the EVA Checklist.

This Flight Plan satisfies the mission requirements specified in the following documents:

- NSTS-07700 Vol III, Flight Definition and Requirements Document
- NSTS-17462-116, STS-116 Flight Requirements Document
- NSTS-37326, Shuttle Crew Scheduling Constraints
- NSTS-21504, ISS 12A.1 Mission Integration Plan

The timeline formats used in this Flight Plan are based on JSC-19933, Timeline Format Definitions and Standard Notes, Rev C, May 1990.

The STS-116 Flight Plan is based on a launch date of February 9, 2006 at 23:52 CST. Orbiter inertial attitudes are expressed relative to a mean of 1950 (M50) reference frame.

The following SCSC Exceptions have been submitted in order to meet Category 1 objectives:

None

The Flight Plan and other related mission information are available on the following Space Shuttle Flight Planning web site:

<http://mod.jsc.nasa.gov/do4/flightplan/main/fp.cfm?id=116>



OVERVIEW TIMELINE

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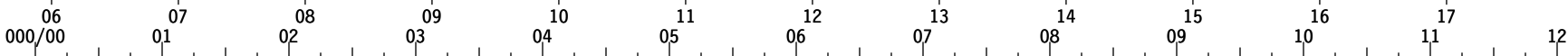


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SUMMARY TIMELINE AND ISS SHORT TERM PLAN

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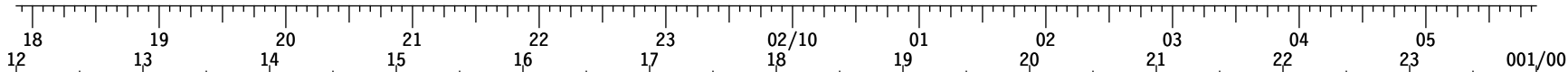
GMT 02/09/06 (040)



MET Day 000

STS-116	<b>FD01</b>	CDR POLANSKY	ASCENT	POST INSERTION	RMS* IMCO AFT NC1Δ OMS BURN	--ZLV EVPK RPMWRUP	RMS C/O	RMS A/G PRE SLEEP	<b>ASSUMPTIONS:</b> 1. FEBRUARY 9, 2006 05:52 GMTLO SLEEP 2. SSRMS Pre-launch C/O @ L-48hrs (MT @ WS#8 with SSRMS in Pre-Handoff Position) 3. ISS SAFER C/Os completed. SLEEP 4. ISS EMUs temp stowed in Node. SLEEP 5. MTL & LTL ITCS sample complete. 6. MS5 Rotation with ISS FE-2 7. ISS N2 venting at ~launch +2 hours SLEEP
		PLT OEFELIN	ASCENT	POST INSERTION	PRE SLEEP	OMS BURN	GPWR PRDN GIRA INSTALL	APU* PRE SLEEP	
		MS1 PATRICK	ASCENT	POST INSERTION	RMS* P/TV01 VIDEO SETUP	PSLR EEP	RPMWRUP RMS C/O	RMS PRE SLEEP	
		MS2 CURBEAM	ASCENT	POST INSERTION	SHAB ACT	TEPCON	SEE SETUP	EVD TIDE PRE SLEEP	
		MS3 FUGLESANG	ASCENT	POST INSERTION	PGSC SETUP (PART I)		WLES S/U	PRE SLEEP	
		MS4 HIGGINBOTHAM	ASCENT	POST INSERTION	SHAB ACT	OS CAT CUP	PRE SLEEP - SHAB		
		MS5 WILLIAMS	ASCENT	POST INSERTION	PGSC SETUP (PART I)		TID PM/ SAL G E R Y	PRE SLEEP	
DAY/NIGHT		[Day/Night bar chart]							
ORBIT		[Orbit bar chart]							
DAILY ORBIT		[Daily Orbit bar chart]							
TDRS		[TDRS bar chart]							
ORB ATT		ASCENT -ZLV -YVV *ON-ORBIT INIT ^PWRDN *RECONFIG -ZLV -XVV							
NOTES									

GMT 02/09/06 (040)



STS-116	<b>FD02</b>	SLEEP	POST SLEEP	NC2A OMS BURN	OBSS UNBERTH	FLAT FIELD	MS NT V B R D	OBSS STBD SURVEY	M N O V S R E	NOSE CAP SURVEY	MEAL	M E A L	OBSS PORT SURVEY
	PLT OEFELEIN	SLEEP	POST SLEEP	OMS BURN	M F L CRYO 02 LOAD N V R F L D S N S R D A P S	FLAT FIELD		OBSS STBD SURVEY		NOSE CAP SURVEY	MEAL		OBSS PORT SURVEY
	MS1 PATRICK	SLEEP	POST SLEEP			FLAT FIELD		OBSS STBD SURVEY		NOSE CAP SURVEY	MEAL		OBSS PORT SURVEY
	MS2 CURBEAM	SLEEP	POST SLEEP		P/TV01 VIDEO SETUP	EMU C/O PREP	EMU C/O	ETVCG ASSBLY	C/L CAMR INST	ODS RING EXT	MEAL		EMU & EVA XFER PREP
	MS3 FUGLESANG	SLEEP	POST SLEEP	PGSC SETUP (PART II)	P/TV01 VIDEO SETUP	EMU C/O PREP	EMU C/O	ETVCG ASSBLY	C/L CAMR INST	ODS RING EXT	MEAL		EMU & EVA XFER PREP
	MS4 HIGGINBOTHAM	SLEEP	POST SLEEP - SHAB					TRANSFER PREP	ERG SETUP	EXERCISE	MEAL		
	MS5 WILLIAMS	SLEEP	POST SLEEP	PGSC SETUP (PART II)		H2O CWC S/U & FILL 1	TRANSFER PREP	CT W E C R # M 1	ERG SETUP		MEAL		



NOTES \*NOTE: NPC BURN MAY NEED TO BE SCHEDULED REALTIME

\*OBSS BERT  
@OBSS BERT





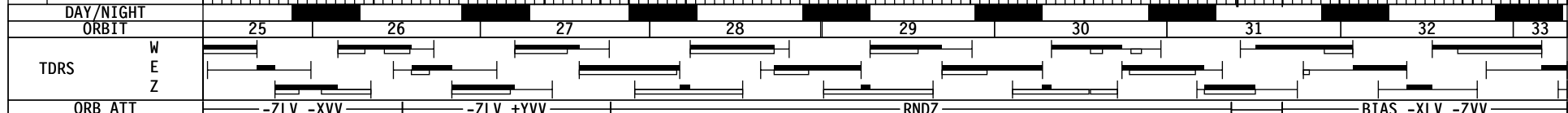
GMT 02/10/06 (041)

MET Day 001

12 13 14 15 16 17 18 19 20 21 22 23 02/11 01 02 03 04 05 002/00

S T S - 1 1 6	FD03 CDR POLANSKY	SLEEP	POST SLEEP	POST SLEEP	ISS RNDZ OPS	APPROACH T/L	MNVRTA	GPWR PRDN B	DTO 257	ATT HO	WLCM	SFTY BRF	PTV06 S/U	
	PLT OEFELIN	SLEEP	POST SLEEP	POST SLEEP	ISS RNDZ OPS	APPROACH T/L	DAOU CKIO	GPWR PRDN B	EXERCISE		WLCM	SFTY BRF	ETVCG LUM ASSY	
	MS1 PATRICK	SLEEP	POST SLEEP	POST SLEEP	EXERCISE	ISS RNDZ OPS	APPROACH T/L	POST RNDZ PGSC CNFG	P/TV 04 S/U	HATCH OPEN	WLCM	SFTY BRF	P/TV 05 S/UP	
	MS2 CURBEAM	SLEEP	POST SLEEP	ISS RNDZ OPS	DFIDL BL	EMU RMVL	EXERCISE	APPROACH T/L	HATCH LEAK CK	ODS PREP	HATCH OPEN	WLCM	SFTY BRF	EMU EVA TOOL XFR
	MS3 FUGLESANG	SLEEP	POST SLEEP	EXERCISE	DFIDL BL	EMU RMVL	OIU ACT	P/TV02 S/U	P/TV02 DOCK OPS	HATCH LEAK CK	ODS PREP	WLCM	SFTY BRF	EMU EVA TOOL XFR
	MS4 HIGGINBOTHAM	SLEEP	POST SLEEP - SHAB	EXERCISE	SHAB PREP FOR DOCK	ISS RNDZ OPS	APPROACH T/L	POST RNDZ PGSC CNFG	SHAB POST DOCK RCNFG	WLCM	SFTY BRF	ETVCG LUM ASSY		
U P	FE-2 WILLIAMS	SLEEP	POST SLEEP	CIN CI #T 2	ISS RNDZ OPS	CTE CR #2	COND CWC S/U	ISS RNDZ OPS	APPROACH T/L	EXERCISE	WLCM	SFTY BRF	IELK INST & C/O	
E X P 1 4	ISS CDR LOPEZ-ALEGRIA	SLEEP (8.5)	POST SLEEP	PREP WORK	DPC	P/TV S/U	EXERCISE RED	EVA CMR S/U	MIDDAY-MEAL	DOCK VIDEO	ISW IUS	HATCH OPEN	SFTY BRF	
	FE-1	SLEEP (8.5)	POST SLEEP	PREP WORK	DPC	IMS EDIT	EXERCISE CEVIS	COFC-AK 1M SAMPLE	MIDDAY-MEAL	PMA2 CFG	HATCH OPEN	AK 1M SMPL	SFTY BRF	
D N	FE-2 REITER	SLEEP (8.5)	POST SLEEP	PREP WORK	DPC	COX MNT	EXERCISE TVIS	MIDDAY-MEAL	HATCH LK CK-ISS	WLCM	SFTY BRF	IELK INST & C/O		

DOCKING \* HARMATE



NOTES

\*RWS-CABLE-CNCT @CTTC-ST5 REND-CNFG

\*FILTER CK \*PWRDN 2-6

\*LAB WNDW CLS

\*IMAGE D/L

\*DOCKING (01/21:03)

ACTTC-ST5 DOCK-CNFG

FLT PLN/116/BAS A

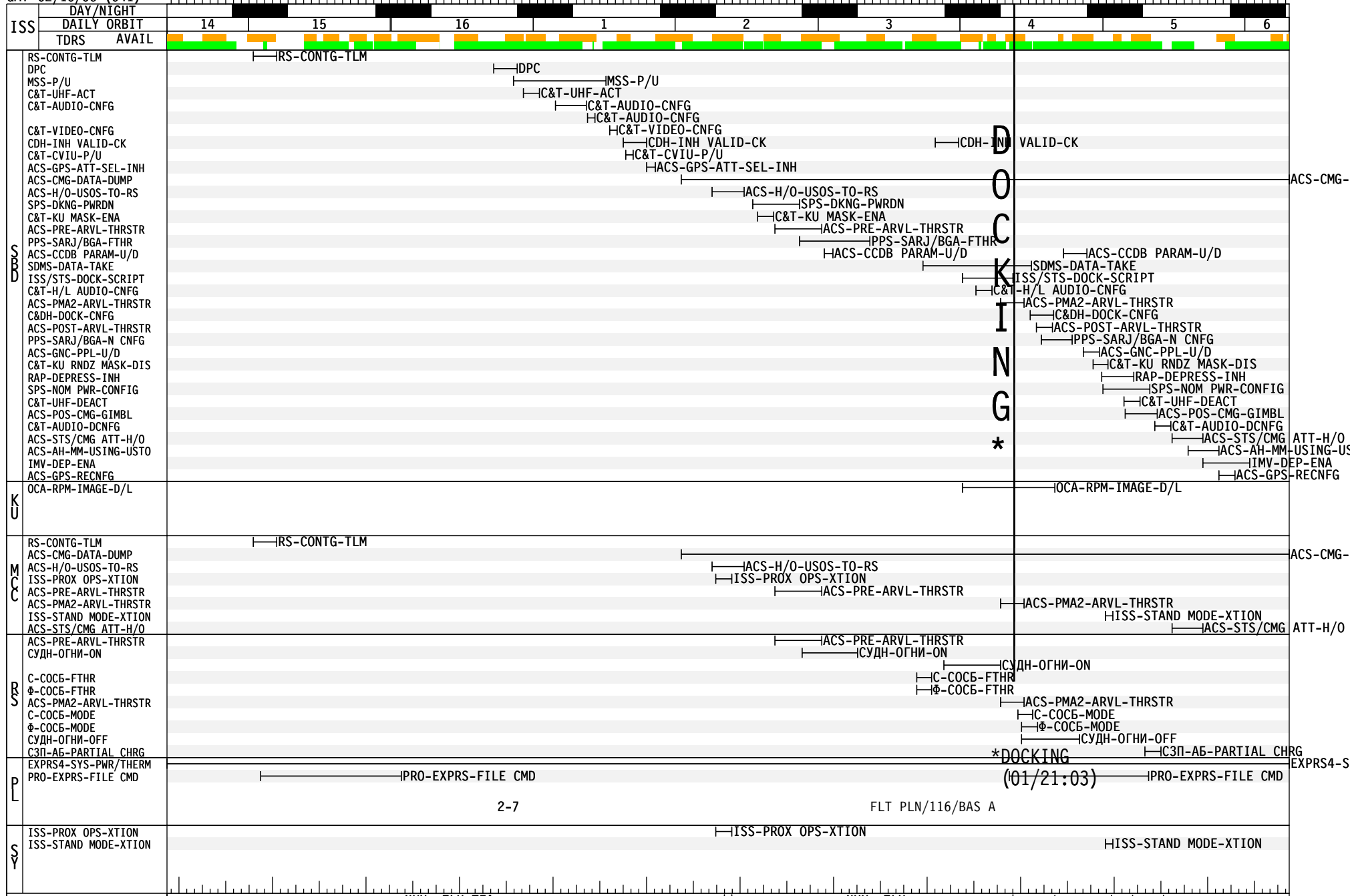
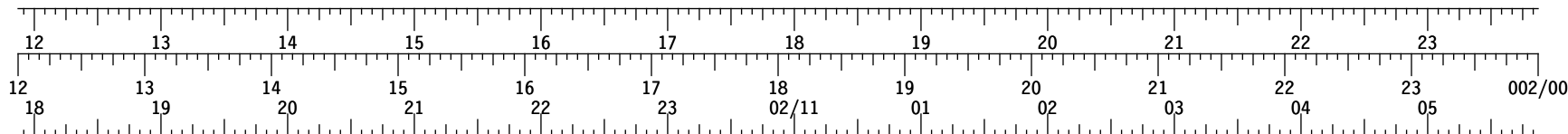
DEACT

CT 02/10/06 (041)

MET Day 001

FD03

GMT 02/10/06 (041)



DOCKING\*

\*DOCKING (01/21:03)

2-7

FLT PLN/116/BAS A

ACS-CMG-D

ATT-H/O

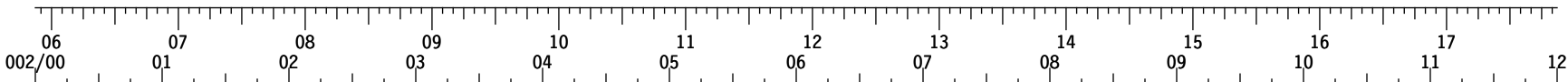
ACS-CMG-D

ATT-H/O

EXPRS4-SY

GMT 02/11/06 (042)

MET Day 002



S T S - 1 1 6	FD03 CDR POLANSKY	PG 5 R P L	P5 UN- BERTH	P5 H/O	I U	PU 5 N G P L	O2 P/B CONFIG	EVA PROC RVW	PS R L E E P	PMC A/G	PRE SLEEP	SLEEP			
	PLT OEFELIN	EMU EVA TOOL XFR							O I U *	EVA PROCEDURE REVIEW	MASK PB/ TOOL CONFIG	PRE SLEEP	SLEEP		
	MS1 PATRICK	PG 5 R P L	P5 UN- BERTH	P5 H/O	I U	PU 5 N G P L	DP OL CY K B K	PP 5 L Y B K	PRE SLEEP			ISS A/L Campout @ 10.2 psi	SLEEP		
	MS2 CURBEAM	EMU EVA TOOL XFR								EVA PROCEDURE REVIEW	MASK PB/ TOOL CONFIG	PB/ 10.2 DPRS	TC 00 N L F G	PS R L E E P	SLEEP
	MS3 FUGLESANG	EMU EVA TOOL XFR								EVA PROCEDURE REVIEW	MASK PB/ TOOL CONFIG	PB/ 10.2 DPRS	TC 00 N L F G	PS R L E E P	SLEEP
	MS4 HIGGINBOTHAM	CWC XFER (2)	SSRMS VIEW			G P L P 5	S X O F D E F R	PRE SLEEP - SHAB	EVA PROCEDURE REVIEW	PRE SLEEP - SHAB			SLEEP		
U P	FE-2 WILLIAMS	IELK INST & C/O				G P L P 5	I E L K	S L O K K O L		PMC	EVA PROCEDURE REVIEW	PRE SLEEP		SLEEP (8.5)	
	ISS CDR LOPEZ-ALEGRIA		EXERCISE TVIS		G P L P 5	S X O F D E F R		PRE SLEEP	EVA PROCEDURE REVIEW	DPC	PRE SLEEP		SLEEP (8.5)		
E X P 1 4	FE-1		EXERCISE RED					O2 P/B CONFIG	EVA PROCEDURE REVIEW	PRE SLEEP			SLEEP (8.5)		
	FE-2 REITER	IELK INST & C/O					I E L K	PRE SLEEP	EVA PROCEDURE REVIEW	DPC	COFC ИПД SMPL	PRE SLEEP	SLEEP (8.5)		



ORB ATT \*PTV06 S/U \*DEACT BIAS -XLV -ZVV

NOTES

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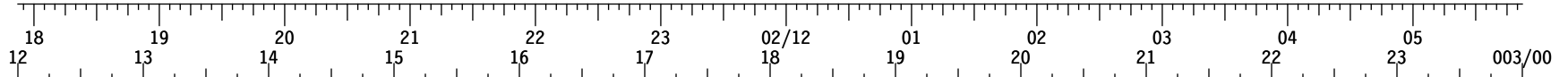
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	DAILY ORBIT	[Bar chart showing orbit data]													
	TDRS AVAIL	[Bar chart showing TDRS availability]													
S D B	ACS-CMG-DATA-DUMP	-----IACS-CMG-DATA-DUMP													
	SDMS-DATA-DUMP	-----SDMS-DATA-DUMP													
	ACS-GPS-ATT-SEL-AUTO	-----HACS-GPS-ATT-SEL-AUTO													
	IATCS-MTL FLOW-ADJST	-----IATCS-MTL FLOW-ADJST													
	PMC	-----PMC													
	EVA-10.2 PSI OP-INIT	-----EVA-10.2 PSI OP-INIT													
	DPC	-----DPC													
	RWS-CAUTION-SUPPRESS	-----RWS-CAUTION-SUPPRESS													
	ACS-AUTO H/O RS-ENA	-----ACS-AUTO H/O RS-ENA													
	EVA-A/L CAMPOUT-CNFG	-----EVA-A/L CAMPOUT-CNFG													
K															
M C C	ACS-CMG-DATA-DUMP	-----IACS-CMG-DATA-DUMP													
	ACS-AUTO H/O RS-ENA	-----ACS-AUTO H/O RS-ENA													
R S															
P	EXPRS4-SYS-PWR/THERM	-----CPO/PRO-EXPRS1-CMD													
	CPO/PRO-EXPRS1-CMD	-----CPO/PRO-EXPRS1-CMD													
	PRO-EXPRS-FILE CMD	-----PRO-EXPRS-FILE CMD													
S Y															
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EXPRS4-SY

GMT 02/11/06 (042)

MET Day 002



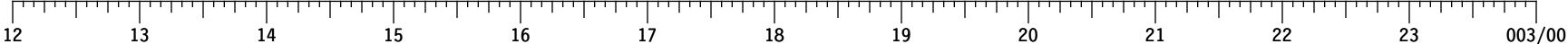
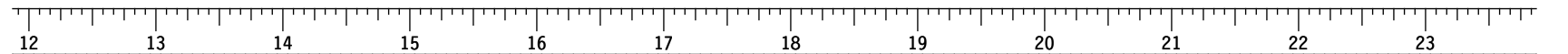
S T S - 1 1 6	FD04 CDR/R2 POLANSKY	SLEEP	POST SLEEP	PMCA/GMM	POST SLEEP	IPNAHDBT	EXERCISE		P/TV07 S/U	P/TV07 EVA OPS	MEAL	P/TV07 EVA OPS				
	PLT/IV OFELEIN	SLEEP	POST SLEEP		CAMPOUT EVA PREP	EMURGE	EMU PBRTHE	C/L DPRS		IV SUPPORT						
	MS1/R1 PATRICK	SLEEP		POST SLEEP	14.7 RPRS	10.2 DPRS	CINWCI #3	14.7 RPRS	CTWCRM #3	CXFCER	EXERCISE	MEAL	6:15 XFER			
	MS2/EV1 CURBEAM	SLEEP	POST SLEEP	HYGN BREAK/ PREBRTHE	CAMPOUT EVA PREP	EMURGE	EMU PBRTHE	C/L DPRS	DEGRSS	P5 LAUNCH LOCK RMVL	P5 TO P4 ATTACHMENT	PVRGF TRANSFER KEEL	CP3 CAMERA R&R *			
	MS3/EV2 FUGLESANG	SLEEP	POST SLEEP	HYGN BREAK/ PREBRTHE	CAMPOUT EVA PREP	EMURGE	EMU PBRTHE	C/L DPRS	DEGRSS	P5 LAUNCH LOCK RMVL	P5 TO P4 ATTACHMENT	PVRGF TRANSFER KEEL	CP3 CAMERA R&R @			
	MS4 HIGGINBOTHAM	SLEEP	POST SLEEP - SHAB		SSRMS TO PREINST S/U	XUFRDAT		EXERCISE	PIRNES-TL	SSRMS LOCK RMVL OPS	INSTALL P5 ON P4	UNGRPS	SSRMS	TRANSFER		
D N	FE-2 REITER	SLEEP (8.5)		POST SLEEP	PREP WORK	DPC	SDORKEYOL		EXERCISE TVIS	SSOTKOWL	MIDDAY-MEAL	GLIME	STOW	COX MNT	EXERCISE TVIS	HANDOVER
	ISS CDR LOPEZ-ALEGRIA	SLEEP (8.5)		POST SLEEP	CAMPOUT EVA PREP	EMURGE	EMU PBRTHE	C/L DPRS	PIRNES-TL	SSRMS LOCK RMVL OPS	INSTALL P5 ON P4	UNGRPS	EXERCISE RED		EXERCISE TVIS	
E X P 1 4	FE-1	SLEEP (8.5)		POST SLEEP	PREP WORK	DPC	EXERCISE TVIS			MIDDAY-MEAL		TRANSFER				
	FE-2/EV3 WILLIAMS	SLEEP (8.5)		POST SLEEP	SSRMS TO PREINST S/U		EHX/EOR		PIRNES-TL	SSRMS LOCK RMVL OPS	INSTALL P5 ON P4	UNGRPS	SSRMS	PSM/PMDIS	PSMTDOIS	HANDOVER
DAY/NIGHT		[Bar chart showing day/night cycle]														
ORBIT		[Bar chart showing orbit parameters]														
TDRS		[Bar chart showing TDRS events]														
ORB ATT		BIAS -XLV -ZVV *FILTER CK														
NOTES																

\*CLEAN UP  
@CLEAN UP

CT 02/11/06 (042)

MET Day 002  
FD04

GMT 02/11/06 (042)



ISS	DAY/NIGHT	[Bar chart showing day/night cycle]								
	DAILY ORBIT	14	15	1	2	3	4	5	6	7
	TDRS AVAIL	[Bar chart showing TDRS availability]								

D B S	C&T-VIDEO-CNFG	-----	C&T-VIDEO-CNFG
	C&T-UHF-ACT	-----	C&T-UHF-ACT
	EVA-HYG BRK/PREBRTHE	-----	EVA-HYG BRK/PREBRTHE
	C&T-AUDIO-CNFG	-----	C&T-AUDIO-CNFG
	VDS-VTR-ACT	-----	VDS-VTR-ACT
	RWS-CAUTION-RE-ENABL	-----	RWS-CAUTION-RE-ENABL
	PPS-PCU-DISCHARGE	-----	PPS-PCU-DISCHARGE
	DPC	-----	DPC
	EVA1 INHIBIT PAD	-----	EVA1 INHIBIT PAD
	EVA-RAP DPRS-INH	-----	EVA-RAP DPRS-INH
	PPS-PCU WARNING-ENA	-----	PPS-PCU WARNING-ENA
	EVA-10.2 PSI OP-TERM	-----	EVA-10.2 PSI OP-TERM
		-----	EVA-10.2 PSI OP-TERM

K U	VDS-WETA-ACT	-----	VDS-WETA-ACT
	EPS-P4 SARJ/BGA-POSN	-----	EPS-P4 SARJ/BGA-POSN

M C	VDS-WETA-CONFIG	-----	VDS-WETA-CONFIG
	ACS-GNC-PPL-U/D	-----	ACS-GNC-PPL-U/D

R S	EPS-P4 SARJ/BGA-CNFG	-----	EPS-P4 SARJ/BGA-CNFG
	IACS-GNC-PPL-U/D	-----	IACS-GNC-PPL-U/D

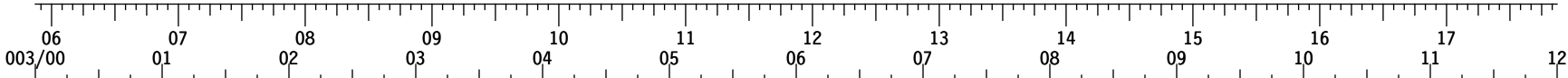
P L	EPS-P4 SARJ/BGA-POSN	-----	EPS-P4 SARJ/BGA-POSN
	EPS-P4 SARJ/BGA-CNFG	-----	EPS-P4 SARJ/BGA-CNFG

S Y	EPS-P4 SARJ/BGA-POSN	-----	EPS-P4 SARJ/BGA-POSN
	EPS-P4 SARJ/BGA-CNFG	-----	EPS-P4 SARJ/BGA-CNFG

ISS ATT	-XVV +ZLV TEA		
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NOTES			
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GMT 02/12/06 (043)



MET Day 003

S T S - 1 1 6	FD04	CDR/R2 POLANSKY	P/TV07 EVA OPS		IMU		PSL COM E P	PMCA	PRE SLEEP		SLEEP		
		PLT/IV OEFELIN	*	PRE PR S		POST EVA W/H2O	BSA INIT		PRE SLEEP		SLEEP		
		MS1/R1 PATRICK	XFER	RP M SR D N			CT A/ M D R		PRE SLEEP		SLEEP		
		MS2/EV1 CURBEAM	⊕	I N G R S	PRE PR S		POST EVA W/H2O	TOOL CONFG		PRE SLEEP		SLEEP	
		MS3/EV2 FUGLESANG	♦	I N G R S	PRE PR S		POST EVA W/H2O	TOOL CONFG		PRE SLEEP		SLEEP	
		MS4 HIGGINBOTHAM		TRANSFER		X T F A F R E I R U R E P F			PRE SLEEP - SHAB	P6 RET VIEW	PRE SLEEP - SHAB	SLEEP	
D N		FE-2 REITER		TRANSFER	X T F A F R E I R U R E P		PREP WORK	DPC	PREP WORK		PRE SLEEP	SLEEP (8.5)	
E X P 1 4		ISS CDR LOPEZ-ALEGRIA				POST EVA W/H2O	⊕	DPC	PREP WORK		PRE SLEEP	SLEEP (8.5)	
		FE-1	▼			EXERCISE RED		PREP WORK	DPC	PREP WORK		PRE SLEEP	SLEEP (8.5)
U P		FE-2/EV3 WILLIAMS				PMC	PREP WORK	DPC		PRE SLEEP	P6 RET VIEW	PRE SLEEP	SLEEP (8.5)
DAY/NIGHT													
ORBIT		49 50 51 52 53 54 55 56											
TDRS													
ORB ATT		BIAS -XLV -ZVV											
NOTES		♦IV SUPPORT ⊕CLEAN UP ♦CLEAN UP ▼TRANSFER ⊙PREP WORK											



CT 02/11/06 (042) 02/12 01 02 03 04 05 06 07 08 09 10 11

MET Day 003 003/00 01 02 03 04 05 06 07 08 09 10 11 12  
**FD04**  
 GMT 02/12/06 (043) 06 07 08 09 10 11 12 13 14 15 16 17

ISS	DAY/NIGHT	[Bar chart showing day/night cycle]													
	DAILY ORBIT	7 8 9 10 11 12 13 14													
	TDRS AVAIL	[Bar chart showing TDRS availability]													

DPS	VDS-WETA-DEACT	[Timeline bar]													
	C&T-VIDEO-DECONFIG	[Timeline bar]													
	PMC	[Timeline bar]													
	MT-WS #3-TRANSLATE	[Timeline bar]													
	POST-EVA-SUPPORT	[Timeline bar]													
	IATCS-SNGL MT-XTION	[Timeline bar]													
	PPS-PCU WARNING-INH	[Timeline bar]													
	DPC	[Timeline bar]													
	MSS-P/U	[Timeline bar]													
	C&T-VDS-CNFG	[Timeline bar]													
	RWS-P/D	[Timeline bar]													
	C&T-VDS-DECNFG	[Timeline bar]													
	VDS-VTR-DEACT	[Timeline bar]													
	C&T-AUDIO-DCNFG	[Timeline bar]													
C&T-UHF-DEACT	[Timeline bar]														
PPS-ECU 4B-REDUN PWR	[Timeline bar]														

PPS-ECU 4

K		
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M		
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S	GTS-ON-PRD400	HGTS-ON-PRD400
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P	EXPRS4-SYS-PWR/THERM PRO-EXPRS-FILE CMD	PRO-EXPRS-FILE CMD
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EXPRS4-S

S		
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ISS ATT		-XVV +ZLV TEA
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NOTES		
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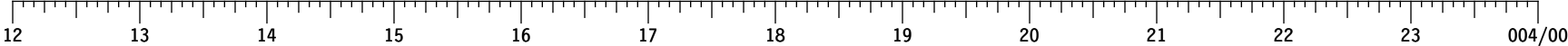
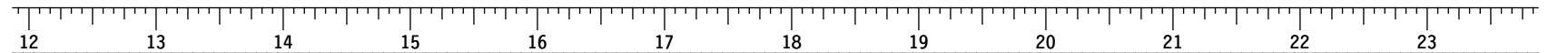
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GMT 02/12/06 (043)		18	19	20	21	22	23	02/13	01	02	03	04	05	004/00							
MET Day 003		12	13	14	15	16	17	18	19	20	21	22	23	004/00							
S T S - 1 1 6	FD05 CDR/R2 POLANSKY	SLEEP	POST SLEEP			JMU P/TV 10 S/U	3 BAY	RTRCT SRVEY	TO 1 BAY	CIN CIT #4	SABB UNLCH	CTE CRM #4	CX WFER	MEAL	FR UT LR LCT	N2 XFER INIT	MCI U*	SABB LATCH			
	PLT/IV OFELEIN	SLEEP	POST SLEEP			EMU LION BATT RPLC INIT	ETVCG DISASSMBL	TRANSFER			MEAL	TRANSFER	EXERCISE	TRANSFER							
	MS1/R1 PATRICK	SLEEP	POST SLEEP	POST SLEEP	RMS P MWR S	RMS P MWR S	P/TV 10 S/U	POST SLEEP	DB CAST	TRANSFER			EXERCISE	XFER	MEAL	TRANSFER					
	MS2/EV1 CURBEAM	SLEEP	POST SLEEP			ETVCG DISASSMBL	TRANSFER			EXERCISE	MEAL	STBD QD BAG 1 PACK	PORT QD BAG 2 PACK	E/L PREP	XFER						
	MS3/EV2 FUGLESANG	SLEEP	POST SLEEP			3 BAY	RTRCT SRVEY	TO 1 BAY	SABB UNLCH	EXERCISE	B S A *	EVA CMR S/U	MEAL	STBD QD BAG 1 PACK	PORT QD BAG 2 PACK	E/L PREP					
	MS4 HIGGINBOTHAM	SLEEP	POST SLEEP - SHAB			XU FP RD AT	TRANS FER	EXERCISE	TRANSFER			MEAL	TRANSFER								
D N	FE-2 REITER	SLEEP (8.5)	POST SLEEP	PREP WORK	DPC P R O P K	TRANSFER	EXERCISE TVIS	ODHT PRELIM	TRANSFER			MIDDAY-MEAL	TRANSFER			COX MNT					
E X P 1 4	ISS CDR LOPEZ-ALEGRIA	SLEEP (8.5)	POST SLEEP	OPS LAN P/D	DPC P R O P K	TRANSFER	PAO	TRANSFER			EXERCISE RED	MIDDAY-MEAL	HANDOVER			A/L AV RCNFG					
	FE-1	SLEEP (8.5)	POST SLEEP	PREP WORK	DPC P R O P K	TRANSFER	PAO	TRANSFER	ODHT PRELIM	EXERCISE TVIS	MIDDAY-MEAL	N2 XFER INIT	TRANSFER								
U P	FE-2/EV3 WILLIAMS	SLEEP (8.5)	POST SLEEP	PREP WORK	DPC P R O P K	3 BAY	RTRCT SRVEY	TO 1 BAY	SABB UNLCH	4B SA CONTAIN INSPECT	C S W A T A C H	MIDDAY-MEAL	FR UT LR LCT	HANDOVER			SABB LATCH				
DAY/NIGHT		DAY		NIGHT		DAY		NIGHT		DAY		NIGHT		DAY		NIGHT					
ORBIT		57		58		59		60		61		62		63		64					
TDRS		W		E		Z															
ORB ATT								BIAS -XLV -ZVV													
NOTES		*HTR		*OIU ACT		*PAO-S/U		*TERM		*FILTER CK		*EXERCISE		*PCS PWRDN		*EXERCISE					
				*MNVR		@PAO-PREP										*EXERCISE					

CT 02/12/06 (043)

MET Day 003

FD05

GMT 02/12/06 (043)



ISS	DAY/NIGHT	[Day/Night Cycle]											
	DAILY ORBIT	[Daily Orbit Cycle]											
	TDRS AVAIL	[TDRS Availability]											

D B S	PPS-ECU 4B-REDUN PWR	[Timeline]											
	SPS-4B-PWRDN	[Timeline]											
	VDS-ACT	[Timeline]											
	PPS-4B TO 4A-SPCH	[Timeline]											
	PPS-4B-CHARGE BOOST	[Timeline]											
	PPS-BGA 4B-SAFE/LOCK	[Timeline]											
	C&T-VDS-CNFG	[Timeline]											
	PPS-SA 4B RTRCT-PREP	[Timeline]											
	DPC	[Timeline]											
	PPS-4B 3 BAYS-RETRCT	[Timeline]											
	PAO-EVENT	[Timeline]											
	PPS-BGA 4B-UNLATCH	[Timeline]											
PPS-P4 SA-FTHR	[Timeline]												
VDS-ISS VTR-D/L	[Timeline]												

K	PPS-PRT SARJ-AUTOTRK	[Timeline]											
	ETCS-LP B-NH3 FILL	[Timeline]											
	PPS-P6 SA SABB-UNLCH	[Timeline]											
	PPS-BGA 4A/2A-AUTO	[Timeline]											
	PPS-4B CNT SCRPT-U/L	[Timeline]											
	PPS-4B SA-CONT INSP	[Timeline]											

M C C	SPS-4B-PWRDN	[Timeline]											
	NO EXERCISE	[Timeline]											
	VDS-ISS VTR-D/L	[Timeline]											

R S	SPS-4B/4A-PWRUP	[Timeline]											
	EPS-A/L AV PWR-RCNFG	[Timeline]											

P	EXPRS4-SYS-PWR/THERM	[Timeline]											
	PRO-EXPRS-FILE CMD	[Timeline]											

S	2-15	[Timeline]											
	FLT PLN/116/BAS A	[Timeline]											

ISS ATT	-XVV +ZLV TEA											
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NOTES												
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GMT 02/13/06 (044)

06 07 08 09 10 11 12 13 14 15 16 17 12

MET Day 004

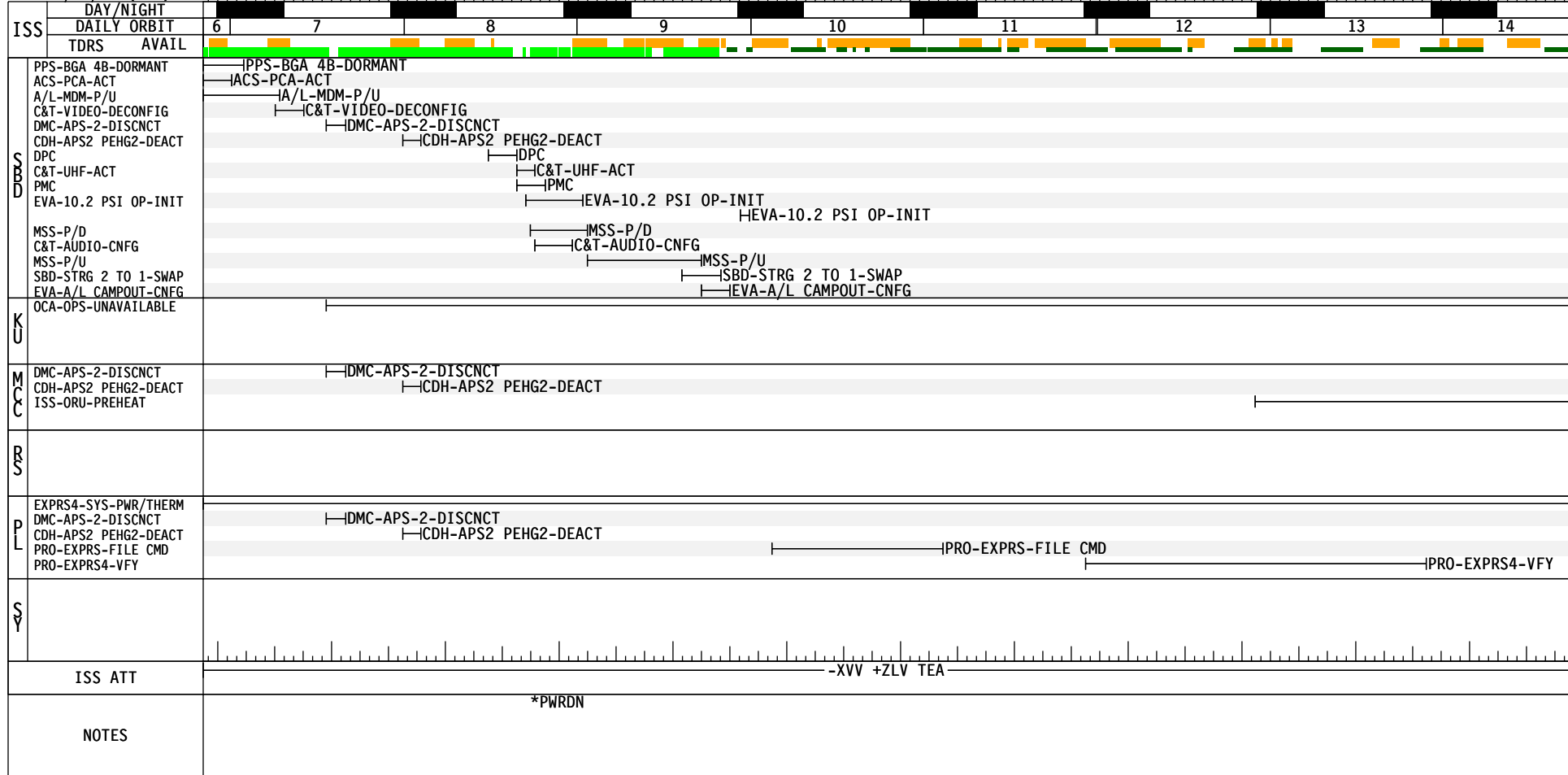
		06		07		08		09		10		11		12		13		14		15		16		17		12	
S T S - 1 1 6	FD05	CDR/R2 POLANSKY		EXERCISE		EVA PROCEDURE REVIEW		PRE SLEEP		PMC OCA	PRE SLEEP		SLEEP														
		PLT/IV OFELEIN		TRANSFER		EVA PROCEDURE REVIEW		PRE SLEEP		MASK PB/ TOOL CONFIG		PRE SLEEP		SLEEP													
		MS1/R1 PATRICK		RMS* RMS* RMS* RMS*	OI UI* OUI*	TF RARS	EVA PROCEDURE REVIEW		PRE SLEEP		ISS A/L Campout @ 10.2 psi		SLEEP														
		MS2/EV1 CURBEAM		XFER		PS RL EEP	EVA PROCEDURE REVIEW		PRE SLEEP		MASK PB/ TOOL CONFIG		PB/ 10.2 DPRS	TC ON LFG	PS RL EEP	SLEEP											
		MS3/EV2 FUGLESANG		PRE SLEEP			EVA PROCEDURE REVIEW		PRE SLEEP		MASK PB/ TOOL CONFIG		PB/ 10.2 DPRS	TC ON LFG	PS RL EEP	SLEEP											
		MS4 HIGGINBOTHAM					EVA PROCEDURE REVIEW		XT FA EG RUR P	TX FR EIE URE P	PRE SLEEP - SHAB		SLEEP														
D N	FE-2 REITER		IMS EDIT			EVA PROCEDURE REVIEW		XT FA EG RUR P	PRE WORK	DPC	PW RO ER PK	PRE SLEEP		SLEEP (8.5)													
E X P 1 4	ISS CDR LOPEZ-ALEGRIA		EXERCISE TVIS			EVA PROCEDURE REVIEW		OPS LAN P/U	PW RO ER PK	DPC	PW RO ER PK	PRE SLEEP		SLEEP (8.5)													
	FE-1		EXERCISE RED			EVA PROCEDURE REVIEW		PREP WORK		DPC	PW RO ER PK	PRE SLEEP		SLEEP (8.5)													
U P	FE-2/EV3 WILLIAMS		E H X/ E O R	IMS EDIT		EVA PROCEDURE REVIEW		PREP WORK		DPC	PMC	PRE SLEEP		SLEEP (8.5)													
DAY/NIGHT		ORBIT		64		65		66		67		68		69		70		71		72							
TDRS		W E Z																									
ORB ATT																											
NOTES																											

CT 02/12/06 (043)

MET  
FD05

Day 004 004/00

GMT 02/13/06 (044)



GMT 02/13/06 (044)

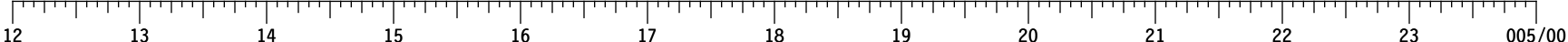
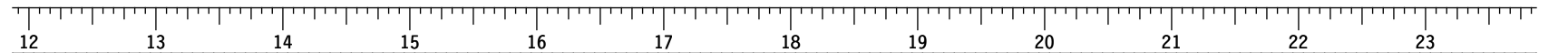
18 19 20 21 22 23 02/14 01 02 03 04 05 005/00  
 MET Day 004 12 13 14 15 16 17 18 19 20 21 22 23

S T S - 1 1 6	FD06 CDR/R2 POLANSKY	SLEEP	POST SLEEP	PMCA/GM	POST SLEEP	INADHT	EXERCISE	P/TV 07 S/U	PC R L O A S E	MEAL	P/TV07 EVA OPS				COMBAT	C A B T			
	PLT/IV OEFELIN	SLEEP	POST SLEEP	B A T T *	CAMP O U T E V A P R E P	EMURGE	EMU PBRTHE	C/L DPRS	P D P R	IV SUPPORT				P R E P R S	P R E P R S				
	MS1/R1 PATRICK	SLEEP	POST SLEEP	campout 14.7 RPRS	POST SLEEP 10.2 DPRS	R M S *	14.7 RPRS	O I U S R A C T	R P M W R U P	C E T A *	C I W N C I # T	MEAL	C T W E R C R I # M # T	6:00 Hours	C T W E R C R I # M # T	C W C X F E R (2)	EXERCISE	TRANSFER	
	MS2/EV1 CURBEAM	SLEEP	POST SLEEP	HYGN B R E A K / P R E B R T H E	CAMP O U T E V A P R E P	EMURGE	EMU PBRTHE	C/L DPRS	D E G R S S C H 2/3	P W R R E C O N F I G	CETA CART 2 RELOCATE		CETA CART 1 RELOCATE		F M S M L I I N S T	Z R I C N E A N P F G	C U L P E A N	I N G R S	P R E P R S
	MS3/EV2 FUGLESANG	SLEEP	POST SLEEP	HYGN B R E A K / P R E B R T H E	CAMP O U T E V A P R E P	EMURGE	EMU PBRTHE	C/L DPRS	D E G R S S C H 2/3	P W R R E C O N F I G	CETA CART 2 RELOCATE		CETA CART 1 RELOCATE		F M S M L I I N S T	Q B I D A N G S T L	C U L P E A N	I N G R S	P R E P R S
	MS4 HIGGINBOTHAM	SLEEP	POST SLEEP - SHAB			X U F P R D A T	F I L T E R C L E A N I N G	EXERCISE	MEAL	SSRMS-S/U	CETA CART 2 RELOCATE		CETA CART 1 RELOCATE		TRANSFER				
D N	FE-2 REITER	SLEEP (8.5)		POST SLEEP	D P C	P R E P W O R K	MIDDAY-MEAL			LAB D D C U C O N F I G	TVIS GYRO R&R			EXERCISE TVIS					
E X P 1 4	ISS CDR LOPEZ-ALEGRIA	SLEEP (8.5)		POST SLEEP	CAMP O U T E V A P R E P			EMURGE	EMU PBRTHE	C/L DPRS	MIDDAY-MEAL			TVIS GYRO R&R			*EXERCISE RED	⊕	
	FE-1	SLEEP (8.5)		POST SLEEP	AV1 J M P R D P C I N S T	OPS L A N P / D	P S O L S E T E P	EXERCISE TVIS			MIDDAY-MEAL	LAB D D C U C O N F I G	RUSSIAN OPS	SAFER C/O	AV1 J M P R R M V	COX M N T	IMS E D I T		
U P	FE-2/EV3 WILLIAMS	SLEEP (8.5)		POST SLEEP	CAMP O U T E V A P R E P			EMURGE	EMU PBRTHE	C/L DPRS	MIDDAY-MEAL		SSRMS-S/U	CETA CART 2 RELOCATE		CETA CART 1 RELOCATE			E H X / E O R
DAY/NIGHT ORBIT		72		73	74			75	76	77	78		79	80					
TDRS W E Z		[Bar]		[Bar]	[Bar]			[Bar]	[Bar]	[Bar]	[Bar]		[Bar]	[Bar]					
ORB ATT		[Bar]		[Bar]	[Bar]			[Bar]	[Bar]	[Bar]	[Bar]		[Bar]	[Bar]					
NOTES		*TERM			♦PCS PWRDN			*RELOCATE			BIAS -XLV -ZVV			♦CDRA ACT			⊕EXERCISE CEV		
					*HTR			VIEW						*Verify MBSU and DDCU			*FILTER CK		

CT 02/13/06 (044)

MET Day 004  
FD06

GMT 02/13/06 (044)



ISS	DAY/NIGHT	[Day/Night Cycle]						
	DAILY ORBIT	[Orbit Cycle]						
	TDRS AVAIL	[TDRS Availability]						

S B D	C&DH-OIU-DECONFIG	IC&DH-OIU-DECONFIG	
	AR-TCCS-DEACT	AR-TCCS-DEACT	
	EVA-HYG BRK/PREBRTHE	EVA-HYG BRK/PREBRTHE	
	MSS-P/U	MSS-P/U	
	C&C-MDM-P/D	C&C-MDM-P/D	
	AV1-PWR JMPR-INSTL	AV1-PWR JMPR-INSTL	
	C&T-VIDEO-CNFG	C&T-VIDEO-CNFG	
	DPC	DPC	
	C&C-MDM-P/U	C&C-MDM-P/U	
	C&W-STATE TABLE-DUMP	C&W-STATE TABLE-DUMP	
C&DH-PRE EVA-CNFG	C&DH-PRE EVA-CNFG		
EPS-CH 2/3 P/D-RCNFG	EPS-CH 2/3 P/D-RCNFG		
EVA-RAP DPRS-INH	EVA-RAP DPRS-INH		
EVA2 INHIBIT PAD	EVA2 INHIBIT PAD		
PPS-PCU WARNING-ENA	PPS-PCU WARNING-ENA		
EVA-10.2 PSI OP-TERM	EVA-10.2 PSI OP-TERM		
EPS-CH 2B-PWRDN	EPS-CH 2B-PWRDN		
EPS-EVA 2/3-RECNG	EPS-EVA 2/3-RECNG		
EPS/CDH-INITIAL-ACT	EPS/CDH-INITIAL-ACT		
ETCS-LP B-CRIT ACT	ETCS-LP B-CRIT ACT		
EPS-FINAL-ACT	EPS-FINAL-ACT		
EPS-DOMAIN 2/3-PWRUP	EPS-DOMAIN 2/3-PWRUP		
PPS-BGA 2B-DIR POSN	PPS-BGA 2B-DIR POSN		
ACS-AH-USING-USTO	ACS-AH-USING-USTO		
PPS-PCU WARNING-INH	PPS-PCU WARNING-INH		
SPS-Z1 CPP-PWRDN	SPS-Z1 CPP-PWRDN		
AV1-PWR JMPR-RMV	AV1-PWR JMPR-RMV		
SPS-Z1 CPP-RCNFG	SPS-Z1 CPP-RCNFG		
C&T-EQUIP-P/U	C&T-EQUIP-P/U		
THC-A/L CCAA-RCNFG	THC-A/L CCAA-RCNFG		
SPS-Z1 CPP-PWRUP	SPS-Z1 CPP-PWRUP		
ACS-MM-USING-USTO	ACS-MM-USING-USTO		

K U	OCA-OPS-UNAVAILABLE	
	KU-OPS-UNAVAILABLE	

M C C	ISS-ORU-PREHEAT	ISS-ORU-PREHEAT	
	AV1-PWR JMPR-INSTL	AV1-PWR JMPR-INSTL	
	EVA2 INHIBIT PAD	EVA2 INHIBIT PAD	
	PPS-PCU WARNING-ENA	PPS-PCU WARNING-ENA	
	KU-OPS-UNAVAILABLE		
	EPS-CH 2B-PWRDN	EPS-CH 2B-PWRDN	
	EPS-EVA 2/3-RECNG	EPS-EVA 2/3-RECNG	
	EPS/CDH-INITIAL-ACT	EPS/CDH-INITIAL-ACT	
	ETCS-LP B-CRIT ACT	ETCS-LP B-CRIT ACT	
	EPS-FINAL-ACT	EPS-FINAL-ACT	
PPS-PCU WARNING-INH	PPS-PCU WARNING-INH		
AV1-PWR JMPR-RMV	AV1-PWR JMPR-RMV		

R S		
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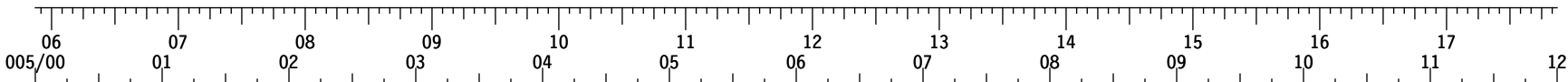
P L	EXPRS4-SYS-PWR/THERM	
	PRO-EXPRS-FILE CMD	

S Y	2-19	FLT PLN/116/BAS A
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ISS ATT -XVY +ZLV TEA

GMT 02/14/06 (045)

MET Day 005



S T S - 1 1 6	FD06 CDR/R2 POLANSKY	COMM 1		PMC OCA	PRE SLEEP			SLEEP			
	PLT/IV OEFELIN	POST EVA W/H2O		BSA INIT	PRE SLEEP	METX*	PRE SLEEP		SLEEP		
	MS1/R1 PATRICK	TRANSFER	CRP EMW TSTR A* DN	PRE SLEEP			SLEEP				
	MS2/EV1 CURBEAM	POST EVA W/H2O	TOOL CONFG	PRE SLEEP			SLEEP				
	MS3/EV2 FUGLESANG	POST EVA W/H2O	TOOL CONFG	CT A/ MD R	PRE SLEEP			SLEEP			
	MS4 HIGGINBOTHAM	TRANSFER	XTX FAFR EGER RURE P	PRE SLEEP - SHAB			SLEEP				
D N	FE-2 REITER	*	XTX FAFR EGER RURE P	PREP WORK	DPC	PREP WORK	PRE SLEEP		SLEEP (8.5)		
E X P 1 4	ISS CDR LOPEZ-ALEGRIA	EXERCISE CEVIS		PREP WORK	DPC	PREP WORK	PRE SLEEP		SLEEP (8.5)		
	FE-1	IEM D S I T	EXERCISE VELO	PREP WORK	DPC	OPS LAN P/ U	PRE SLEEP		SLEEP (8.5)		
U P	FE-2/EV3 WILLIAMS	POST EVA W/H2O		PMC	⊕	DPC	PREP WORK	PRE SLEEP		SLEEP (8.5)	
DAY/NIGHT		[Bar chart showing day/night cycle]									
ORBIT		[Bar chart showing orbit parameters]									
TDRS		[Bar chart showing TDRS activity]									
ORB ATT		[Bar chart showing orbit attitude]									
NOTES		*EXERCISE TVIS    ⊕PREP WORK    *INIT *RELOCATE VIEW									

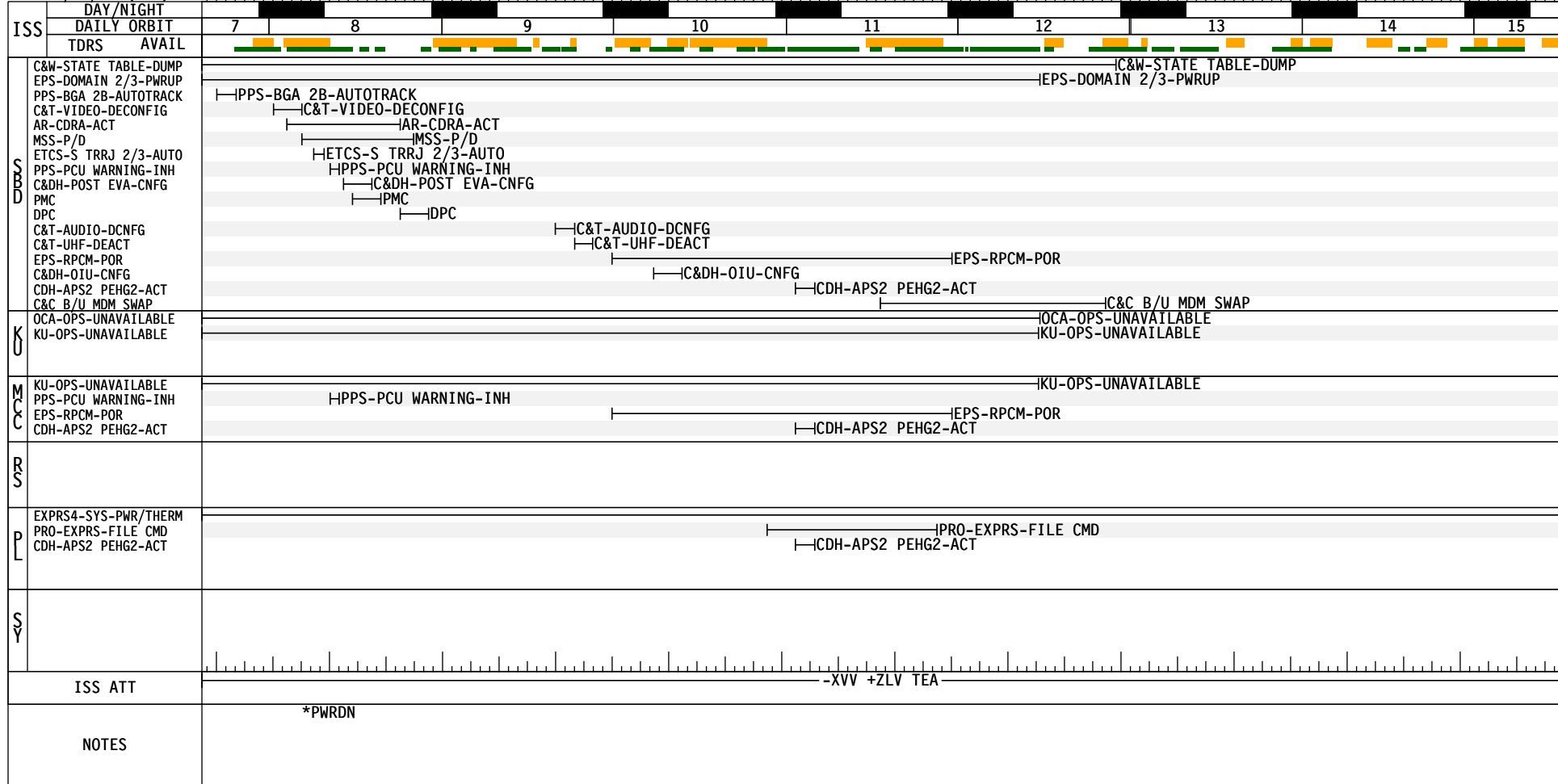


CT 02/13/06 (044)

MET F006

Day 005 005/00

GMT 02/14/06 (045)



GMT 02/14/06 (045)

18 19 20 21 22 23 02/15 01 02 03 04 05 006/00  
 12 13 14 15 16 17 18 19 20 21 22 23

MET Day 005

S T S - 1 1 6	FD07 CDR/R2 POLANSKY	SLEEP	POST SLEEP		IMPOST SLEEP	HOAATT	MDNUMRP	SIMONIT	CSWACP	EXERCISE	MCIU*	SIMONIT	HOAATT	MEAL	CPREO W T O	CREW CONF	OFF DUTY	PFC OCA	OFF DUTY	
	PLT/IV OFELEIN	SLEEP	POST SLEEP		EXERCISE	TRANSFER	CIN#7	TRANSFER	MNV#7	CTE#7	CXFER	MEAL	CPREO W T O	CREW CONF	OFF DUTY	PFC OCA	OFF DUTY			
	MS1/R1 PATRICK	SLEEP	POST SLEEP		P/TV 05 S/U	TRANSFER		EXERCISE	EVA CMR S/U	MEAL	CPREO W T O	CREW CONF	OFF DUTY		PFC OCA	OFF DUTY				
	MS2/EV1 CURBEAM	SLEEP	POST SLEEP		EXERCISE	BSA*	LIORPLC	MTC ON LFG	E/L PREP	MEAL	CPREO W T O	CREW CONF	OFF DUTY		PFC OCA	OFF DUTY				
	MS3/EV2 FUGLESANG	SLEEP	POST SLEEP		DBCAST	ESAPAO	EMU RESIZE		EXERCISE	MEAL	CPREO W T O	CREW CONF	OFF DUTY		PFC OCA	OFF DUTY				
	MS4 HIGGINBOTHAM	SLEEP	POST SLEEP - SHAB		XUFRD AT	IOI*	XFER	EXERCISE	TRANSFER		MEAL	CPREO W T O	CREW CONF	OFF DUTY		PFC OCA	OFF DUTY			
D N	FE-2 REITER	SLEEP (8.5)	POST SLEEP	PREP WORK	DPC	CGBA XFER	ESAPAO	TRANSFER		EXERCISE TVIS	MIDDAY-MEAL	CPREO W T O	CREW CONF	A/L AV RCNFG	N1 Y JUMPER INSTL		COX MNT	EXERCISE TVIS		
E X P 1 4	ISS CDR LOPEZ-ALEGRIA	SLEEP (8.5)	POST SLEEP	PREP WORK	DPC	HANDOVER		EXERCISE TVIS	EXERCISE RED		MIDDAY-MEAL	CPREO W T O	CREW CONF	HANDOVER						
	FE-1	SLEEP (8.5)	POST SLEEP	PREP WORK	DPC	TRANSFER				MIDDAY-MEAL	CPREO W T O	CREW CONF	EXERCISE VELO	EXERCISE TVIS		IWIS XFER				
U P	FE-2/EV3 WILLIAMS	SLEEP (8.5)	POST SLEEP	PREP WORK	DPC	HANDOVER		EMU RESIZE	TCON LFG	E/L PREP	MIDDAY-MEAL	CPREO W T O	CREW CONF	HANDOVER						

DAY/NIGHT ORBIT 88 89 90 91 92 93 94 95 96

TDRS W E Z

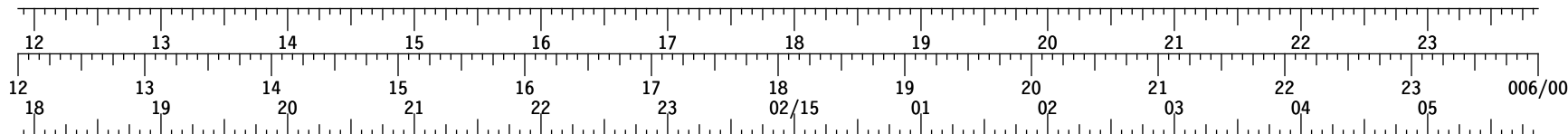
ORB ATT BIAS -XLV -ZVV \*C&W C/O \*DEACT \*TERM @CGBA STAT CK \*FILTER CK \*TERM BIAS -XLV -ZVV @ETCS-A IFHX VLV-CNFG @ETCS-B IFHX VLV-

NOTES

CT 02/14/06 (045)

MET Day 005  
FD07

GMT 02/14/06 (045)

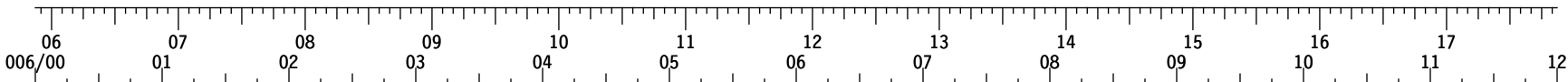


ISS	DAY/NIGHT	15 16 1 2 3 4 5 6 7						
	DAILY ORBIT	15 16 1 2 3 4 5 6 7						
	TDRS AVAIL	15 16 1 2 3 4 5 6 7						
S B D	SBD-STRG 1 TO 2-SWAP	----- ----- ----- ----- ----- ----- -----						
	C&C-MDM-SWAP	----- ----- ----- ----- ----- ----- -----						
	EXT MDM SWAP	----- ----- ----- ----- ----- ----- -----						
	SBD-STRING 1-DEACT	----- ----- ----- ----- ----- ----- -----						
	SPS-PWRDOWN	----- ----- ----- ----- ----- ----- -----						
	ACS-CMG-DATA-DUMP	----- ----- ----- ----- ----- ----- -----						
	PPS-SARJ/BGA-FTHR	----- ----- ----- ----- ----- ----- -----						
	DPC	----- ----- ----- ----- ----- ----- -----						
	ACS-CMG/STS ATT-H/O	----- ----- ----- ----- ----- ----- -----						
	IATCS-SNGL MT-XTION	----- ----- ----- ----- ----- ----- -----						
	PPS-SARJ-STRING SWAP	----- ----- ----- ----- ----- ----- -----						
	ACS-ST/CMG ATT-H/O	----- ----- ----- ----- ----- ----- -----						
	PPS-SARJ/BGA-AUTOTRK	----- ----- ----- ----- ----- ----- -----						
	ACS-AH-MM-USING-USTO	----- ----- ----- ----- ----- ----- -----						
	SPS-PWRUP	----- ----- ----- ----- ----- ----- -----						
K U	GNC-MDM-SWAP	----- ----- ----- ----- ----- ----- -----						
	EPS-A/L AV PWR-RCNFG	----- ----- ----- ----- ----- ----- -----						
	NI-Y JMP INSTL-CNFG	----- ----- ----- ----- ----- ----- -----						
M C C	ACS-GPS-AA-P/D	----- ----- ----- ----- ----- ----- -----						
	ACS-GPS-AA-P/U	----- ----- ----- ----- ----- ----- -----						
	SPS-PWRDOWN	----- ----- ----- ----- ----- ----- -----						
	ACS-CMG-DATA-DUMP	----- ----- ----- ----- ----- ----- -----						
	ACS-CMG/STS ATT-H/O	----- ----- ----- ----- ----- ----- -----						
R S	ACS-ST/CMG ATT-H/O	----- ----- ----- ----- ----- ----- -----						
	SPS-PWRUP	----- ----- ----- ----- ----- ----- -----						
	EPS-A/L AV PWR-RCNFG	----- ----- ----- ----- ----- ----- -----						
P L	EXPRS4-SYS-PWR/THERM	----- ----- ----- ----- ----- ----- -----						
	PRO-EXPRS-FILE CMD	----- ----- ----- ----- ----- ----- -----						
S Y		----- ----- ----- ----- ----- ----- -----						
		----- ----- ----- ----- ----- ----- -----						
ISS ATT		-XVV +ZLV TEA  ----- ----- ----- ----- ----- ----- -----  MNVN TO DUMP ATT  ----- ----- ----- ----- ----- ----- -----  -XVV +ZLV BIAS  ----- ----- ----- ----- ----- ----- -----  MNVN TO TEA  ----- ----- ----- ----- ----- ----- -----						
NOTES								

EXPRS4-SY

GMT 02/15/06 (046)

MET Day 006



S T S - 1 1 6	FD07 CDR/R2 POLANSKY	OFF DUTY	EVA PROCEDURE REVIEW	COM 2	PRE SLEEP	PMCA	PRE SLEEP	SLEEP <b>ISS EXTERNAL SURVEY</b>					
	PLT/IV OFELEIN	OFF DUTY	EVA PROCEDURE REVIEW		PRE SLEEP		MASK PB/ TOOL CONFIG	PRE SLEEP	SLEEP				
	MS1/R1 PATRICK	OFF DUTY	EVA PROCEDURE REVIEW		PRE SLEEP				SLEEP ISS A/L Campout @ 10.2 psi				
	MS2/EV1 CURBEAM	OFF DUTY	EVA PROCEDURE REVIEW		PRE SLEEP		MASK PB/ TOOL CONFIG	PB/ 10.2 DPRS	PS RL EE EP	SLEEP			
	MS3/EV2 FUGLESANG	OFF DUTY	EVA PROCEDURE REVIEW		PRE SLEEP					SLEEP			
	MS4 HIGGINBOTHAM	OFF DUTY		X T X B F A F R E G E I R U R E P F	PRE SLEEP - SHAB					SLEEP			
D N	FE-2 REITER	* IMS EDIT	X T X B F A F R E G E I R U R E P F	PREP WORK	DPC	PREP WORK			PRE SLEEP	SLEEP (8.5)			
E X P 1 4	ISS CDR LOPEZ-ALEGRIA	♦	EVA PROCEDURE REVIEW	PREP WORK	DPC	PREP WORK			PRE SLEEP	SLEEP (8.5)			
	FE-1	IWIS XFER	EVA PROCEDURE REVIEW	PREP WORK	DPC	PREP WORK			PRE SLEEP	SLEEP (8.5)			
U P	FE-2/EV3 WILLIAMS		EVA PROCEDURE REVIEW		PRE SLEEP		MASK PB/ TOOL CONFIG	PB/ 10.2 DPRS	PS RL EE EP	SLEEP			
DAY/NIGHT		[Shaded bars indicating day/night cycle]											
ORBIT		96 97 98 99 100 101 102 103 104											
TDRS		[TDRS activity bars]											
ORB ATT		♦EXERCISE TVIS @CGBA STAT CK BIAS -XLV -ZVV											
NOTES		♦CCAA SWITCH											

CT 02/14/06 (045) 02/15 01 02 03 04 05 06 07 08 09 10 11

MET Day 006 006/00 01 02 03 04 05 06 07 08 09 10 11 12  
**FDO7**  
 GMT 02/15/06 (046) 06 07 08 09 10 11 12 13 14 15 16 17

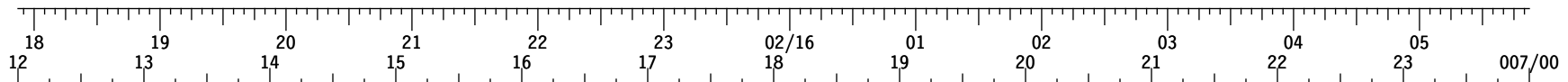
ISS	DAY/NIGHT	[Bar chart showing day/night cycle]														
	DAILY ORBIT	[Bar chart showing orbit data]														
	TDRS AVAIL	[Bar chart showing TDRS availability]														
S B	DMC-APS-1-DISCNCT ETCS-LP A-NH3 FILL PRO-EXPRS4 TO PEHG2 DPC CDH-APS1 PEHG1-DEACT C&T-UHF-ACT EVA-10.2 PSI OP-INIT	---IDMC-APS-1-DISCNCT  ---ETCS-LP A-NH3 FILL  ---PRO-EXPRS4 TO PEHG2  ---DPC  ---CDH-APS1 PEHG1-DEACT  ---C&T-UHF-ACT  ---EVA-10.2 PSI OP-INIT  ---EVA-10.2 PSI OP-INIT  ---C&T-AUDIO-CNFG  ---EVA-A/L CAMPOUT-CNFG  ---INT MDM SWAP  ---CDH-PL MDM-SWAP  ---PMCU MDM SWAP														
	C&T-AUDIO-CNFG EVA-A/L CAMPOUT-CNFG INT MDM SWAP CDH-PL MDM-SWAP PMCU MDM SWAP	---C&T-AUDIO-CNFG  ---EVA-A/L CAMPOUT-CNFG  ---INT MDM SWAP  ---CDH-PL MDM-SWAP  ---PMCU MDM SWAP														
K	PRO-EXPRS4 TO PEHG2	---PRO-EXPRS4 TO PEHG2														
M C	DMC-APS-1-DISCNCT C&W-USOS TONE-INH CDH-APS1 PEHG1-DEACT CDH-PL MDM-SWAP ISS-ORU-PREHEAT	---IDMC-APS-1-DISCNCT  ---C&W-USOS TONE-INH  ---CDH-APS1 PEHG1-DEACT  ---CDH-PL MDM-SWAP  ---ISS-ORU-PREHEAT														
R S																
P L	EXPRS4-SYS-PWR/THERM DMC-APS-1-DISCNCT PRO-EXPRS4 TO PEHG2 CDH-APS1 PEHG1-DEACT PRO-EXPRS-FILE CMD CDH-PL MDM-SWAP	---IDMC-APS-1-DISCNCT  ---PRO-EXPRS4 TO PEHG2  ---CDH-APS1 PEHG1-DEACT  ---PRO-EXPRS-FILE CMD  ---CDH-PL MDM-SWAP														
S Y																
ISS ATT		-XVY +ZLV TEA														
NOTES																

ISS-ORU-F

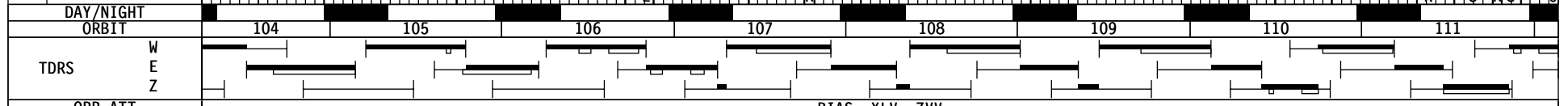
EXPRS4-SY

GMT 02/15/06 (046)

MET Day 006



S T S - 1 1 6	FD08	CDR/R2 POLANSKY	SLEEP	POST SLEEP	PMCA/GM	POST SLEEP	INAHDBT	EXERCISE		CINCI#8	MEAL	CTE#8	CXFER		CINCI#9								
		PLT/IV OEFELIN	SLEEP	POST SLEEP		CAMP-OUT EVA PREP	EMURGE	EMU PBRTHE	C/L DPRS					IV SUPPORT	PREP/SAH/20								
		MS1/R1 PATRICK	SLEEP	POST SLEEP	14.7 RPRS	10.2 DPRS		EMURGE	EMU PBRTHE	C/L DPRS	EXERCISE	MEAL		SRMS EVA SUPPORT	TRANSFER	PEW/SAH/20							
		MS2/EV1 CURBEAM	SLEEP	POST SLEEP		HYGN BREAK/PREBRTHE	CAMP-OUT EVA PREP	EMURGE	EMU PBRTHE	C/L DPRS	DEGRSSCH 1/4 PWR RECONFIG			SMDP TRANSFER *	RS PWR RCNFG	AGB TRANSFER	CULPEAN	INGRS	PREP/SAH/20				
		MS3/EV2 FUGLESANG	SLEEP	POST SLEEP			CAMP-OUT EVA PREP	EMURGE	EMU PBRTHE	C/L DPRS				P/TV07 EVA OPS					PEW/SAH/20				
		MS4 HIGGINBOTHAM	SLEEP				POST SLEEP - SHAB		EXERCISE	XUFRDAT		TRANSFER		MEAL					TRANSFER				
D N		FE-2 REITER	SLEEP (8.5)			POST SLEEP	PREP WORK	DPC	AV2 JMPR INST					ODHT FINAL	MIDDAY-MEAL	LAB DDCU CONFIG		TRANSFER	EXERCISE TVIS	AV2 JMPR RMV	N1 Y JMPR RMV		
E X P 1 4		ISS CDR LOPEZ-ALEGRIA	SLEEP (8.5)			POST SLEEP				CAMP-OUT EVA PREP	EMURGE	EMU PBRTHE	C/L DPRS		MIDDAY-MEAL	CBA R&R		EXERCISE CEVIS		EXERCISE RED	PEW/SAH/20		
		FE-1	SLEEP (8.5)			POST SLEEP	POST SLEEP	OPS LAN P/D	DPC	PREP WORK				EXERCISE TVIS	ODHT FINAL	MIDDAY-MEAL	LAB DDCU CONFIG	RUSSIAN OPS	EXERCISE RED		TRANSFER	COX MNT	
U P		FE-2/EV3 WILLIAMS	SLEEP			POST SLEEP				HYGN BREAK/PREBRTHE	CAMP-OUT EVA PREP	EMURGE	EMU PBRTHE	C/L DPRS	DEGRSSCH 1/4 PWR RECONFIG			SMDP TRANSFER	RS PWR RCNFG	AGB TRANSFER	CULPEAN	INGRS	PREP/SAH/20



NOTES

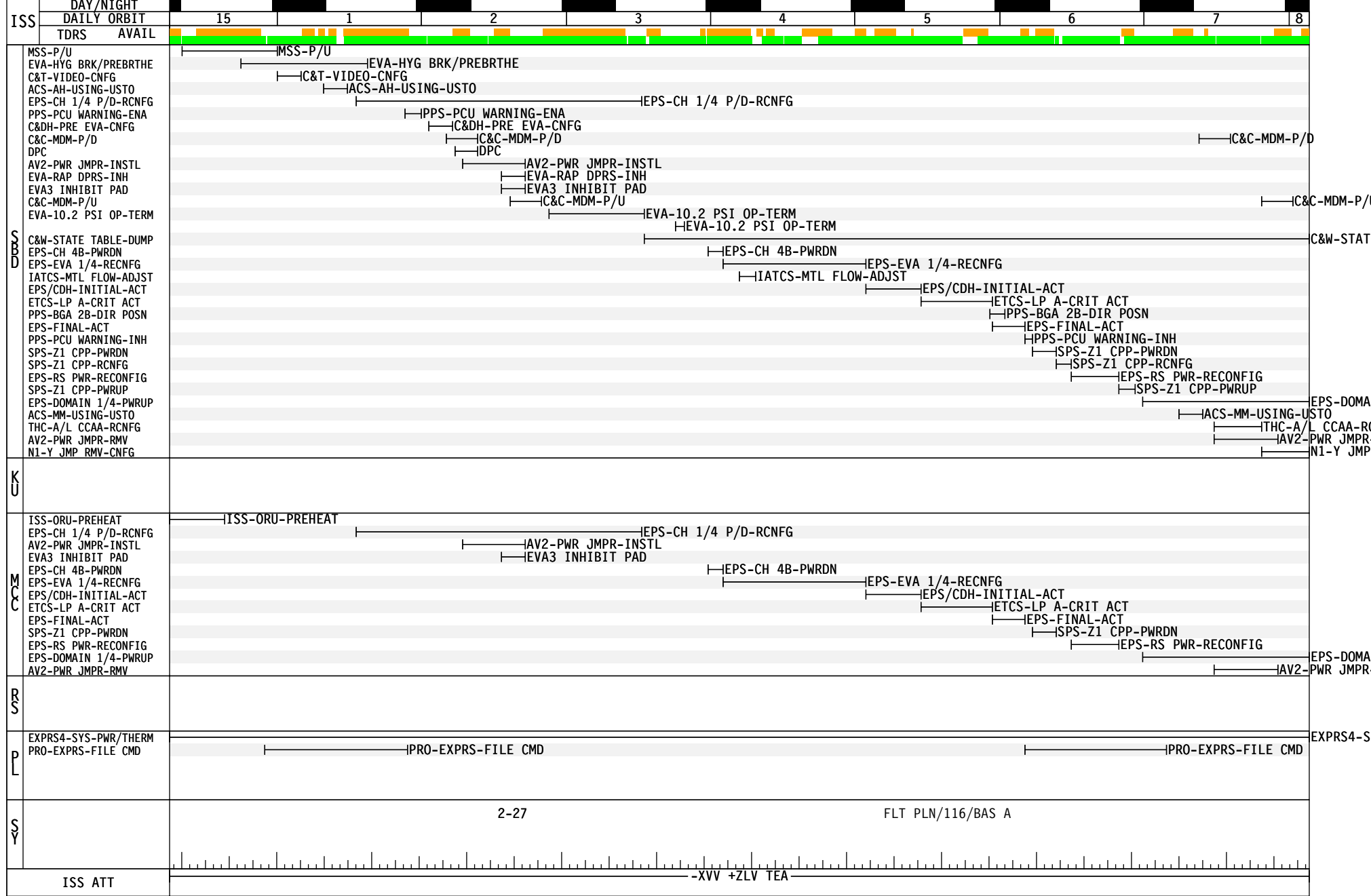
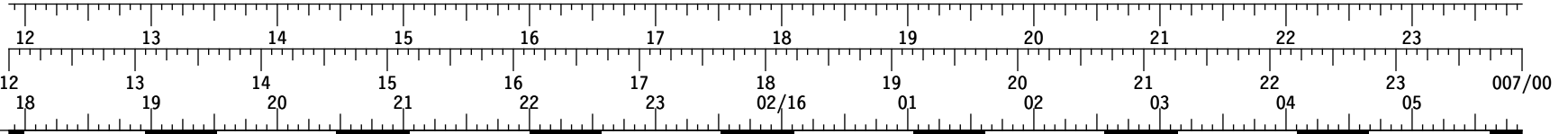
@CGBA STAT CK ♦PCS PWRDN \*FILTER CK \*HTR  
 @PCS RECNCCT♥PREP WORK \*Verify MBSU and DDCU \*DEACT  
 ♦Z1 PP RCNFG

CT 02/15/06 (046)

MET Day 006

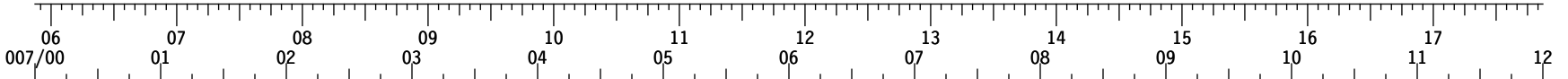
FD08

GMT 02/15/06 (046)



GMT 02/16/06 (047)

MET Day 007



S T S - 1 1 6	FD08	CDR/R2 POLANSKY	WCS*	COM#9	CTWCR	CXWCR	PMCOCA	PRE SLEEP	SLEEP	ISS EXTERNAL SURVEY
	PLT/IV OFELEIN	POST EVA W/H2O						PRE SLEEP	SLEEP	
	MS1/R1 PATRICK	*						PRE SLEEP	SLEEP	
	MS2/EV1 CURBEAM	POST EVA W/H2O	TOOL CONFIG					PRE SLEEP	SLEEP	
	MS3/EV2 FUGLESANG	POST EVA W/H2O	TOOL CONFIG	CTA/ MDR				PRE SLEEP	SLEEP	
	MS4 HIGGINBOTHAM	@	XTFA EGE RUR P	XTB FR E I R E F				PRE SLEEP - SHAB	SLEEP	
D N	FE-2 REITER	N1 Y JMPR RMV		PREP WORK	DPC PREP WORK			PRE SLEEP	SLEEP (8.5)	
E X P 1 4	ISS CDR LOPEZ-ALEGRIA	POST EVA W/H2O		PREP WORK	DPC PREP WORK			PRE SLEEP	SLEEP (8.5)	
	FE-1	@	OPS LAN P/U	XTFA EGE RUR P	IMS EDIT	DPC PREP WORK		PRE SLEEP	SLEEP (8.5)	
U P	FE-2/EV3 WILLIAMS	POST EVA W/H2O	TOOL CONFIG					PRE SLEEP	SLEEP (8.5)	
DAY/NIGHT		[Bar chart showing day/night cycle]								
ORBIT		112 113 114 115 116 117 118 119								
TDRS		W E Z [Bar chart showing TDRS activity]								
ORB ATT		BIAS -XLV -ZVV								
NOTES		*TRANSFER ♦PCS P/U @TRANSFER @COX MNT *COMPACT								



CT 02/15/06 (046)

MET  
FD08

Day 007 007/00

GMT 02/16/06 (047)

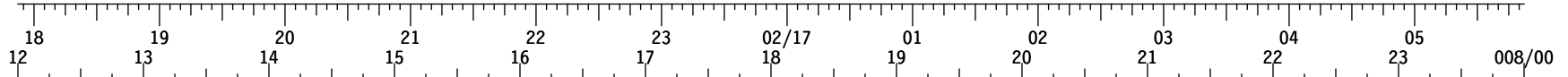
		02/16	01	02	03	04	05	06	07	08	09	10	11	12
ISS	DAY/NIGHT	[Bar chart showing day/night cycle]												
	DAILY ORBIT	[Bar chart showing orbit data]												
	TDRS	[Bar chart showing TDRS availability]												
	AVAIL	[Bar chart showing availability]												
D R S	C&W-STATE TABLE-DUMP												C&W-STATE TABLE-DUMP	
	EPS-DOMAIN 1/4-PWRUP												EPS-DOMAIN 1/4-PWRUP	
	N1-Y JMP RMV-CNFG	N1-Y JMP RMV-CNFG												
	C&T-VIDEO-DECONFIG	C&T-VIDEO-DECONFIG												
	PPS-BGA 2B-AUTOTRACK	PPS-BGA 2B-AUTOTRACK												
	MSS-P/D	MSS-P/D												
	DPC	DPC												
	PPS-PCU WARNING-INH	PPS-PCU WARNING-INH												
	C&DH-POST EVA-CNFG	C&DH-POST EVA-CNFG												
	C&T-AUDIO-DCNFG	C&T-AUDIO-DCNFG												
C&T-UHF-DEACT	C&T-UHF-DEACT													
PCS-S/W-UPGD PT.1												CDH-APS1 PEHG1-ACT		
CDH-APS1 PEHG1-ACT												CDH-APS1 PEHG1-ACT		
EPS-RPCM-POR												EPS-RPCM-POR		
C&DH-OIU-CNFG												C&DH-OIU-CNFG		
ETCS-P TRRJ 1/4-RCFG												ETCS-P TRRJ 1/4-RCFG		
K U C M	EPS-DOMAIN 1/4-PWRUP												EPS-DOMAIN 1/4-PWRUP	
	C&W-USOS TONE-INH	C&W-USOS TONE-INH												
	CDH-APS1 PEHG1-ACT												CDH-APS1 PEHG1-ACT	
R S P L	EXPRS4-SYS-PWR/THERM												CDH-APS1 PEHG1-ACT	
	CDH-APS1 PEHG1-ACT												CDH-APS1 PEHG1-ACT	
	PRO-EXPRS-FILE CMD												PRO-EXPRS-FILE CMD	
S		[Bar chart showing signal strength]												
		[Bar chart showing signal strength]												
ISS ATT		-XVV +ZLV TEA												
NOTES		*PWRDN												

PCS-S/W-U

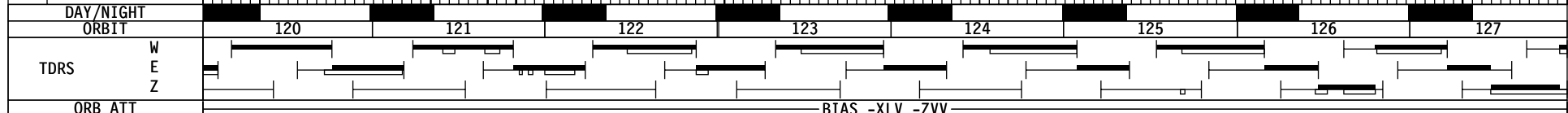
EXPRS4-S

GMT 02/16/06 (047)

MET Day 007



S T S - 1 1 6	FD09	CDR/R2 POLANSKY	POST SLEEP		N2 XFER TERM		M C I U *	O I U *			TRANSFER	MEAL	TRANSFER		P E A V E N T	EXERCISE				
		PLT/IV OEFELIN	POST SLEEP		PWR FILL	P X F E R	TRANSFER		C I W N C I T O	TRANSFER	C T W E R I M O	C X F E R	MEAL	TRANSFER		P E A V E N T	TRANSFER			
		MS1/R1 PATRICK	POST SLEEP		TRANSFER		EXERCISE		TRANSFER		MEAL		P T V 0 8 S /U	P /TV08 OPS	TRANSFER	P /TV 05 S /U	P E A V E N T	A P R E P	XFER	*
		MS2/EV1 CURBEAM	POST SLEEP		TRANSFER		EMU RCNFG & XFER				M E T X *	MEAL	TRANSFER	EXERCISE	XFER	P E A V E N T	XFER			
		MS3/EV2 FUGLESANG	POST SLEEP		TRANSFER		EMU RCNFG & XFER				M E T X *	MEAL	TRANSFER	EXERCISE	XFER	P E A V E N T	XFER			
		MS4 HIGGINBOTHAM	POST SLEEP - SHAB		X U F P R D A T	XFER	EXERCISE	TRANSFER				MEAL	TRANSFER		P E A V E N T	XFER				
D N	FE-2 REITER	SLEEP (8.5)	POST SLEEP	PREP WORK	DPC	TRANSFER			EXERCISE TVIS	MIDDAY-MEAL	ODHT FINAL	TRANSFER	TROPI PACK	⊕						
E X P 1 4	ISS CDR LOPEZ-ALEGRIA	SLEEP (8.5)	POST SLEEP	PREP WORK	DPC	HANDOVER	POEMS	TRANSFER	EXERCISE CEVIS	MIDDAY-MEAL	HANDOVER		EXERCISE RED							
	FE-1	SLEEP (8.5)	POST SLEEP	PREP WORK	DPC	N2 XFER TERM	TRANSFER			MIDDAY-MEAL	ODHT FINAL	EXERCISE VELO	EXERCISE TVIS							
U P	FE-2/EV3 WILLIAMS	SLEEP (8.5)	POST SLEEP	PREP WORK	DPC	HANDOVER	EMU RCNFG & XFER			MIDDAY-MEAL	HANDOVER		EXERCISE CEVIS							



NOTES

\*DEACT  
\*FILTER CK

BIAS -XLV -ZVV

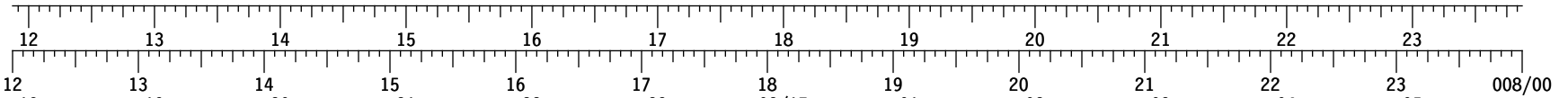
\*INIT  
\*INIT

\*TRANSFER  
⊕IMS EDIT

CT 02/16/06 (047)

MET Day 007  
FD09

GMT 02/16/06 (047)

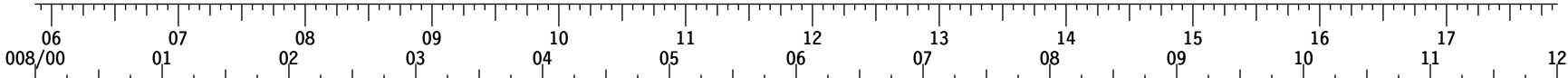


ISS		DAY/NIGHT
		DAILY ORBIT
		TDRS AVAIL
S B D	C&DH-OIU-DECONFIG	12:00 - 12:15
	RWS-P/U	12:15 - 12:30
	MT-WS #2-TRANSLATE	13:00 - 13:15
	SPS-PWRDOWN	13:15 - 13:30
	DPC	13:30 - 13:45
	PPS-SARJ/BGA-POSN	13:45 - 14:00
	CDH-EXT MDM-PPL LOAD	14:00 - 14:15
K U	PPS-SARJ/BGA-N CNFG	14:15 - 14:30
	SPS-PWRUP	14:30 - 14:45
	MT-WS #4-TRANSLATE	14:45 - 15:00
	PCS-S/W-UPGD PT.2	15:00 - 15:15
	MSS-P/D	15:15 - 15:30
	CDH-EXT MDM-PPL LOAD	15:30 - 15:45
	PPS-SARJ/BGA-N CNFG	15:45 - 16:00
M C C	SPS-PWRDOWN	16:00 - 16:15
	PPS-SARJ/BGA-POSN	16:15 - 16:30
	PPS-SARJ/BGA-N CNFG	16:30 - 16:45
	MT-WS #4-TRANSLATE	16:45 - 17:00
P L	EXPRS4-SYS-PWR/THERM	17:00 - 17:15
	PRO-EXPRS-FILE CMD	17:15 - 17:30
	CPO/PRO-EXPRS1-CMD	17:30 - 17:45
S Y	ISS ATT	17:45 - 18:00
	NOTES	18:00 - 18:15

PCS-S/W-U

EXPRS4-S  
CPO/PRO-E

GMT 02/17/06 (048)



MET Day 008

S T S - 1 1 6	FD09	CDR/R2 POLANSKY		PS RL EE EP	PMC OCA	PRE SLEEP	SLEEP <b>ISS EXTERNAL SURVEY</b>	
		PLT/IV OEFELIN	EXERCISE			PRE SLEEP	SLEEP	
		MS1/R1 PATRICK	RNDZ TOOLS C/O			PRE SLEEP	SLEEP	
		MS2/EV1 CURBEAM	XFER			PRE SLEEP	SLEEP	
		MS3/EV2 FUGLESANG	XFER			PRE SLEEP	SLEEP	
		MS4 HIGGINBOTHAM	XFER	X T X B F A F R E G E I R U R E P F		PRE SLEEP - SHAB	SLEEP	
D N	FE-2 REITER	IMS EDIT	X T X B F A F R E G E I R U R E P F	PREP WORK	DPC	PREP WORK	PRE SLEEP	SLEEP (8.5)
E X P 1 4	ISS CDR LOPEZ-ALEGRIA	*		PREP WORK	DPC	PREP WORK	PRE SLEEP	SLEEP (8.5)
	FE-1	⊗ COX MNT		PREP WORK	DPC	PREP WORK	PRE SLEEP	SLEEP (8.5)
U P	FE-2/EV3 WILLIAMS	♦ COX MNT		PREP WORK	DPC	PREP WORK	PRE SLEEP	SLEEP (8.5)
DAY/NIGHT		[Bar chart showing day/night cycles]						
ORBIT		128 129 130 131 132 133 134 135						
TDRS		W E Z [Bar chart showing TDRS events]						
ORB ATT		BIAS -XLV -ZVV						
NOTES		♦EXERCISE RED ⊗EXERCISE TVIS ♦EXERCISE CEVIS						

CT 02/16/06 (047) 02/17 01 02 03 04 05 06 07 08 09 10 11

MET Day 008 008/00 01 02 03 04 05 06 07 08 09 10 11 12  
 FD09 GMT 02/17/06 (048) 06 07 08 09 10 11 12 13 14 15 16 17

ISS	DAY/NIGHT															
	DAILY ORBIT	7	8	9	10	11	12	13	14	15						
	TDRS AVAIL															
S B D	PCS-S/W-UPGD PT.2															
	DPC	-----IDPC														
	ACS-GNC-PPL-U/D	-----IACS-GNC-PPL-U/D														
	ACS-CCDB PARAM-U/D	-----IACS-CCDB PARAM-U/D														
K																
U																
M																
C																
R																
S																
P	EXPRS4-SYS-PWR/THERM															
	CPO/PRO-EXPRS1-CMD	-----ICPO/PRO-EXPRS1-CMD														
	PRO-EXPRS-FILE CMD	-----IPRO-EXPRS-FILE CMD														
S																
ISS ATT		-----XVV +ZLV TEA														
NOTES																

EXPRS4-S

GMT 02/17/06 (048)

MET Day 008

18 19 20 21 22 23 02/18 01 02 03 04 05 009/00

S T S - 1 1 6	FD10 CDR/R2 POLANSKY	POST SLEEP		TRANSFER	02 XFER TEARDOWN	A D I O S	H/O ATT	EXERCISE	M U N D V R K	UNDOCK OPS	FLYAROUND	M D N U M R P	G P R P D N	MEAL	D M P N I L V M O R Y	R H C T S R * B	PRE SLEEP	
	PLT/IV OEFELIN	POST SLEEP		TRANSFER		A D I O S	HATCH CLOSE	F D M P L Y	G P R P R U B P	UNDOCK OPS	FLYAROUND	C T O N D	S I M O I N I T	MEAL	S I M O T E R M		EXER CISE	
	MS1/R1 PATRICK	POST SLEEP		TRANSFER	P/TV 04 S/U	A D I O S	C/L CAMR INST	P/TV03 S/U	EXERCISE		P/TV03 UNDOCK OPS		P D E T A V C T	M E A L S	MEAL		P T V 1 1	
	MS2/EV1 CURBEAM	POST SLEEP		C I W C I T 1	P S O L S E T E P	TRANSFER	C T W E R C I M 1	C X W F E R	A D I O S	HATCH CLOSE	ODS LEAK CHECK	E I M N U S T L	UNDOCK OPS	FLYAROUND	MEAL	POST EVA ENT PREP		EXERCISE
	MS3/EV2 FUGLESANG	POST SLEEP		EXERCISE		A D I O S	H A B I L U D O I O	ODS LEAK CHECK	UNDOCK OPS	FLYAROUND	MEAL	POST EVA ENT PREP	MEPSI	UNDK PLBK				
	MS4 HIGGINBOTHAM	POST SLEEP - SHAB			XFER	X T F A F R E I R E P	A D I O S	TRANSFER CLEANUP	EXERCISE	FLYAROUND	S D S E O A R C T	MEAL	MEPSI	FILTER CLEANING				
D N	FE-2 REITER	SLEEP (8.5)	POST SLEEP	PREP WORK	D P C	X T F A F R E G U P	A D I O S	TRANSFER CLEANUP	EXERCISE	FLYAROUND	EXERCISE	MEAL						
E X P 1 4	ISS CDR LOPEZ-ALEGRIA	SLEEP (8.5)	POST SLEEP	PREP WORK	D P C		A D I O S	IMS EDIT	COX MNT		MIDDAY-MEAL	EXERCISE TVIS	EXERCISE RED				P W R O P K	
	FE-1	SLEEP (8.5)	POST SLEEP	PREP WORK	D P C	02 XFER TEARDOWN	A D I O S	HATCH CLOSE	M E T X *	⊕	MIDDAY-MEAL	EXERCISE TVIS	EXERCISE RED				P W R O P K	
U P	FE-2/EV3 WILLIAMS	SLEEP (8.5)	POST SLEEP	PREP WORK	D P C	02 XFER TEARDOWN	A D I O S				MIDDAY-MEAL		EXERCISE TVIS				P W R O P K	

UNDOCK\*

DAY/NIGHT	ORBIT	135	136	137	138	139	140	141	142	143	
TDRS	W E Z	[Timeline bars for TDRS, W, E, Z]									
ORB ATT		BIAS -XLV -ZVV -XLV +ZVV UNDOCK/FLYAROUND -ZLV +YVV MEPSI									

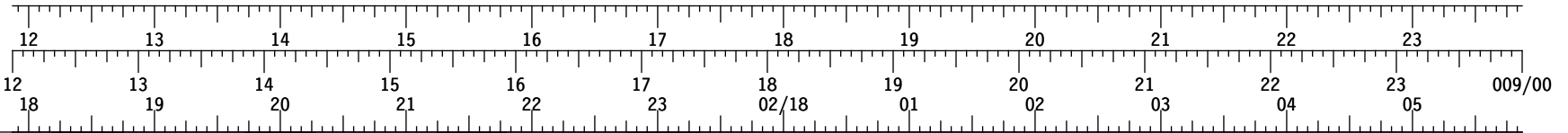
NOTES \*CONFIG ISS UNMATED OPS \*TERM \*UNDOCK (08/18:40) \*REG RCNFG \*PWRDN

\*RWS-CABLE-CN  
\*CDRA DCNCT

CT 02/17/06 (048)

MET Day 008

FD10 GMT 02/17/06 (048)



ISS	DAY/NIGHT	15		1		2		3		4		02/18		01		02		03		04		05		009/00	
	DAILY ORBIT																								
	TDRS AVAIL																								
S B D	CDH-INH VALID-CK	-----												-----											
	DPC	-----												-----											
	C&T-UHF-ACT	-----												-----											
	SPS-PWRDOWN	-----												-----											
	ACS-CMG/STS ATT-H/O	-----												-----											
	C&T-H/L AUDIO-BCKOUT	-----												-----											
	PPS-SARJ/BGA-FTHR	-----												-----											
	ACS-PRE DPRT-THRSTR	-----												-----											
	C&T-VTR-ACT	-----												-----											
	SDMS-DATA-TAKE	-----												-----											
	C&DH-UNDOCK-CNFG	-----												-----											
	C&T-VTR-RECORD	-----												-----											
	ACS-PMA2-DPRT-THRSTR	-----												-----											
UNDOCK	-----												-----												
ACS-POST DPRT-THRSTR	-----												-----												
PPS-BGA 2B-AUTOTRACK	-----												-----												
C&T-VTR-DEACT	-----												-----												
SBD-KEY-CHG	-----												-----												
PPS-SARJ/BGA-AUTOTRK	-----												-----												
AR-CDRA-DEACT	-----												-----												
SPS-PWRUP	-----												-----												
PMA2-DEPRESS	-----												-----												
ACS-H/O-RS-TO-US-MM	-----												-----												
SDMS-DATA-DUMP	-----												-----												
TCS-PMA2 HTR-RCNFG	-----												-----												
ACS-GPS-RECNG	-----												-----												
K U	ISS-PROX OPS-XTION	-----												-----											
	SPS-PWRDOWN	-----												-----											
	ACS-CMG/STS ATT-H/O	-----												-----											
	ACS-PRE DPRT-THRSTR	-----												-----											
	ACS-PMA2-DPRT-THRSTR	-----												-----											
	UNDOCK	-----												-----											
	ACS-POST DPRT-THRSTR	-----												-----											
R S	ISS-STAND MODE-XTION	-----												-----											
	SPS-PWRUP	-----												-----											
	ACS-H/O-RS-TO-US-MM	-----												-----											
P L	ACS-PRE DPRT-THRSTR	-----												-----											
	ACS-PMA2-DPRT-THRSTR	-----												-----											
S Y	EXPRS4-SYS-PWR/THERM	-----												-----											
	PRO-EXPRS-FILE CMD	-----												-----											
ISS ATT	ISS ATT	-----												-----											
	ISS ATT	-----												-----											
NOTES	NOTES	-----												-----											
	NOTES	-----												-----											

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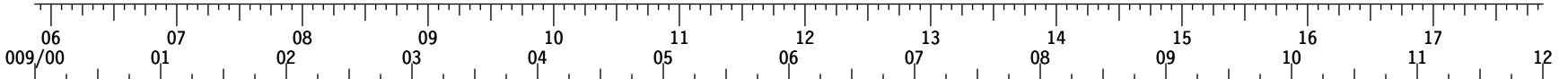
\*UNDOCK  
(08/18:36)

2-35

FLT PLN/116/BAS A

GMT 02/18/06 (049)

MET Day 009



STS-116	FD10	CDR/R2 POLANSKY	DM PN LV OR Y	PRE SLEEP	PRE SLEEP	SLEEP	POST SLEEP
		PLT/IV OEFELIN	EXER CISE		PRE SLEEP	SLEEP	POST SLEEP
		MS1/R1 PATRICK	PS RL EE EP	PT TV 11	PRE SLEEP	SLEEP	POST SLEEP
		MS2/EV1 CURBEAM			PRE SLEEP	SLEEP	POST SLEEP
		MS3/EV2 FUGLESANG	ANDE PL DEPLOY		PRE SLEEP	SLEEP	POST SLEEP
		MS4 HIGGINBOTHAM	ANDE PL DEPLOY		PRE SLEEP - SHAB	SLEEP	POST SLEEP - SHAB
DN		FE-2 REITER			PRE SLEEP	SLEEP	POST SLEEP
EXP 14		ISS CDR LOPEZ-ALEGRIA	PW RO ER PK	DPC PREP WORK	PRE SLEEP	SLEEP (8.5)	
		FE-1	PW RO ER PK	DPC PREP WORK	PRE SLEEP	SLEEP (8.5)	
UP		FE-2/EV3 WILLIAMS	PW RO ER PK	DPC PREP WORK	PRE SLEEP	SLEEP (8.5)	
DAY/NIGHT		[Timeline with shaded day and unshaded night periods]					
ORBIT		143 144 145 146 147 148 149 150 151					
TDRS		[Timeline with horizontal bars representing TDRS events]					
ORB ATT		ANDE -ZLV -XVV					
NOTES							



CT 02/17/06 (048) 02/18 01 02 03 04 05 06 07 08 09 10 11

MET Day 009 009/00 01 02 03 04 05 06 07 08 09 10 11 12

**FD10**

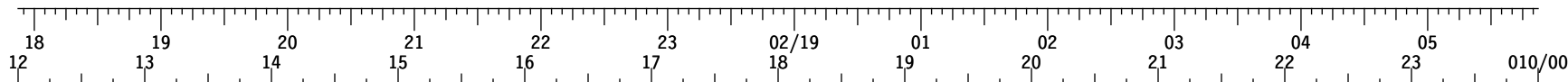
GMT 02/18/06 (049) 06 07 08 09 10 11 12 13 14 15 16 17

ISS	DAY/NIGHT	
	DAILY ORBIT	
	TDRS AVAIL	
DPC		—IDPC
SBS		
DU		
MC		
RS		
P	EXPRS4-SYS-PWR/THERM PRO-EXPRS-FILE CMD	————— PRO-EXPRS-FILE CMD
S		
ISS ATT		+XVV +ZLV TEA
NOTES		

EXPRS4-S

GMT 02/18/06 (049)

MET Day 009



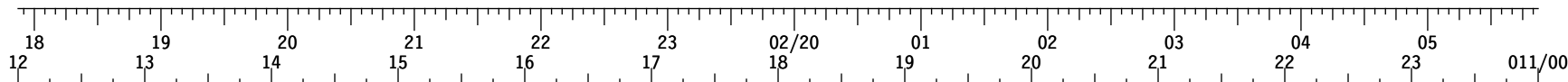
STS-116	<b>FD11</b>	CDR POLANSKY	POST SLEEP	POST SLEEP	CABIN STOW	FCS C/O	RCS H/F	PILOT OPS	EXERCISE	D/O BRIEF	DEP M N V	FUT M N V	CS AT BOW	PEAVO ENT	MEAL	LCOM	CABIN STOW	OFF DUTY	PMCA/G	PSRL EEP
	PLT OEFELEIN	POST SLEEP			FCS C/O	RCS H/F	PILOT OPS	CABIN STOW	D/O BRIEF	EXERCISE	MEAL	CABIN STOW	ERG STOW	OFF DUTY			PRE SLEEP			
	MS1 PATRICK	POST SLEEP			CABIN STOW		SD SE VACT	EXERCISE	CABIN STOW	D/O BRIEF	MC IU*	PAO P/TV S/U	PTV 11	PEAVO ENT	EV NTD REYO	MEAL	CABIN STOW	WD LEA SCT	OFF DUTY	PRE SLEEP
	MS2 CURBEAM	POST SLEEP			FCS C/O	RCS H/F	EXERCISE	TRANSFER CLEANUP	D/O BRIEF	CABIN STOW	PEAVO ENT	MEAL	CABIN STOW	OFF DUTY			PRE SLEEP			
	MS3 FUGLESANG	POST SLEEP			CABIN STOW	EXERCISE	CABIN STOW	D/O BRIEF	RAFT PL DEPLOY	PEAVO ENT	MEAL	CABIN STOW	ERG STOW	OFF DUTY			KU STO	PSRL EEP		
	MS4 HIGGINBOTHAM	POST SLEEP - SHAB	CABIN STOW	EXERCISE	CABIN STOW	TRANSFER CLEANUP	D/O BRIEF	RAFT PL DEPLOY	PEAVO ENT	MEAL	LAUNCH ENTRY SUIT CK	RMBNT SEAT S/U	OFF DUTY				PRE SLEEP - SHAB			
	MS5 REITER	POST SLEEP	CABIN STOW	EXERCISE	CABIN STOW	D/O BRIEF	CABIN STOW	PEAVO ENT	MEAL	LAUNCH ENTRY SUIT CK	RMBNT SEAT S/U	OFF DUTY				PRE SLEEP				

DAY/NIGHT	[Timeline bar]																		
ORBIT	151	152	153	154	155	156	157	158	159										
DAILY ORBIT	16	1	2	3	4	5	6	7	8										
TDRS	[Timeline bar]																		
ORB ATT	*HEATER ACT      -ZLV -XVV      RAFT      *STOW      *FILTER CK      -ZLV -XVV																		
NOTES																			

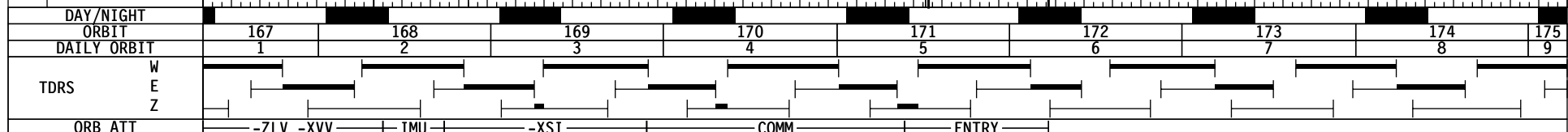


GMT 02/19/06 (050)

MET Day 010



STS - 116	<b>FD12</b> CDR POLANSKY	POST SLEEP	PMC A/G GPRUP IMU ALIGN & VERIF -XSI	DEORBIT PREP	DEORBIT*	KSC LANDING
	PLT OEFELIN	POST SLEEP	GPRUP FWA FSMTKOW	DEORBIT PREP		
	MS1 PATRICK	POST SLEEP	GSI ITRO AOAWCW	DEORBIT PREP		
	MS2 CURBEAM	POST SLEEP	PDGERT SANO CCTWR	DEORBIT PREP		
	MS3 FUGLESANG	POST SLEEP	SHAB ENTRY PREP	DEORBIT PREP		
	MS4 HIGGINBOTHAM	POST SLEEP - SHAB	SHAB ENTRY PREP	DEORBIT PREP		
	MS5 REITER	POST SLEEP		DEORBIT PREP		



ORB ATT	-ZLV -XVV	IMU	-XSI	COMM	ENTRY
NOTES	*TEPC PWRDN		*DEORBIT TIG (10/18:23)		*LANDING (10/19:26)

DETAILED TIMELINE

DETAILED  
TIMELINE

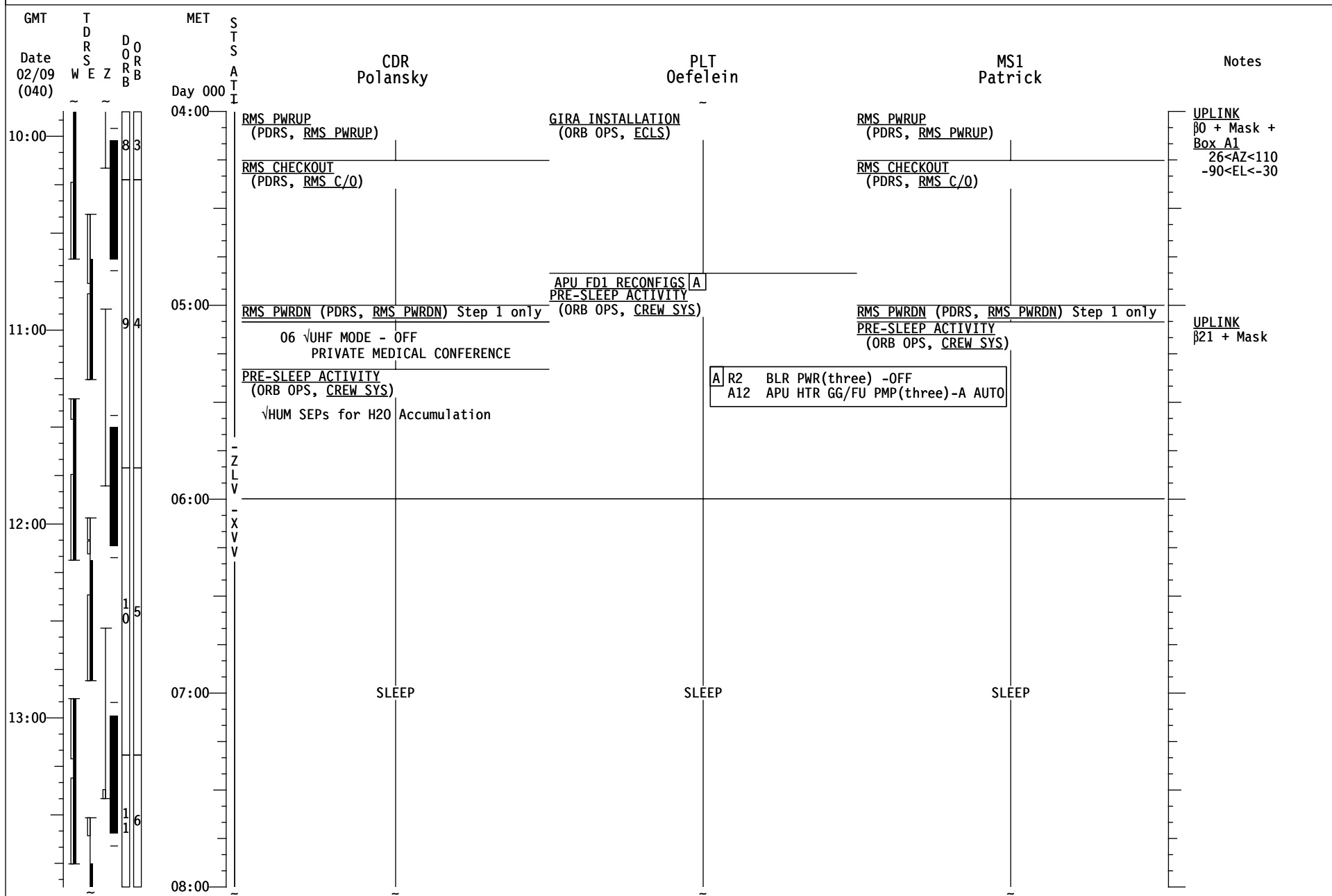
# STS-116 FD01

GMT	TDRS WSEZ	DORB	MET Day 000	STS ASCT	CDR Polansky	PLT Oefelein	MS1 Patrick	Notes
06:00			00:00	ASCENT	ACTIVITIES PRIOR TO 00/02:30 ARE IN THE ASCENT AND POST INSERTION CHECKLISTS. THE ORBITER SHOULD BE IN A -ZLV -YVV ATTITUDE UPON ENTERING THE FLIGHT PLAN			
				ASCENT	<b>FD01 EZ ACTIVITES</b> PCS 1(2) CONFIG (ORB OPS, ECLS) Config Sys 2 with 14.7 CAB REG INLET SYS 1,2 VLV - CL SMK DETN CKT TEST (ORB OPS, ECLS) LAMP TEST (ORB OPS, EPS) CSA-CP CHECKOUT AND ZERO CAL OPS (ORB OPS, CSA-CP) DATE/TIME SET (PHOTO/TV, DCS 760) VTR CLOCK SET (PHOTO/TV, DTV) if not performed for PLBD rec			
07:00			01:00	ASCENT	POST INSERTION	POST INSERTION	POST INSERTION	
08:00			02:00	ZLV -YVV	ON-ORBIT INITIALIZATION (PDRS, ON-ORBIT INIT)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	ON-ORBIT INITIALIZATION (PDRS, ON-ORBIT INIT)	UPLINK β21 + Mask
				ZLV -YVV	IMU STAR OF OPPTY ALIGN (ORB OPS, GNC) AFT CONTROLLER C/O (ORB OPS, GNC)		P/TV01 VIDEO SETUP (PHOTO/TV, SCENES)	
09:00			03:00	ZLV -YVV	ON-ORBIT OMS BURN (ORB OPS, OMS)	ON-ORBIT OMS BURN (ORB OPS, OMS)		UPDATE ORBITAL MNVR PAD
				ZLV -YVV	< NC1 TIG (03:31) MNVR (TRK) -ZLV -XVV TG=2 BV=3 OM=0 A1/AUTO/VERN Init TRK	PRTY PWRDN GRP B (ORB PKT, PRIOR PWRDN) Omit Steps 3,7,13 (Single G2) (In Step 12, IMU 3 STBY-ITEM 23 EXEC)		
			04:00	ZLV -YVV	ELEVON PARK, GNC 201 (ORB OPS, GNC)	GIRA INSTALLATION (ORB OPS, ECLS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	

# STS-116 FD01

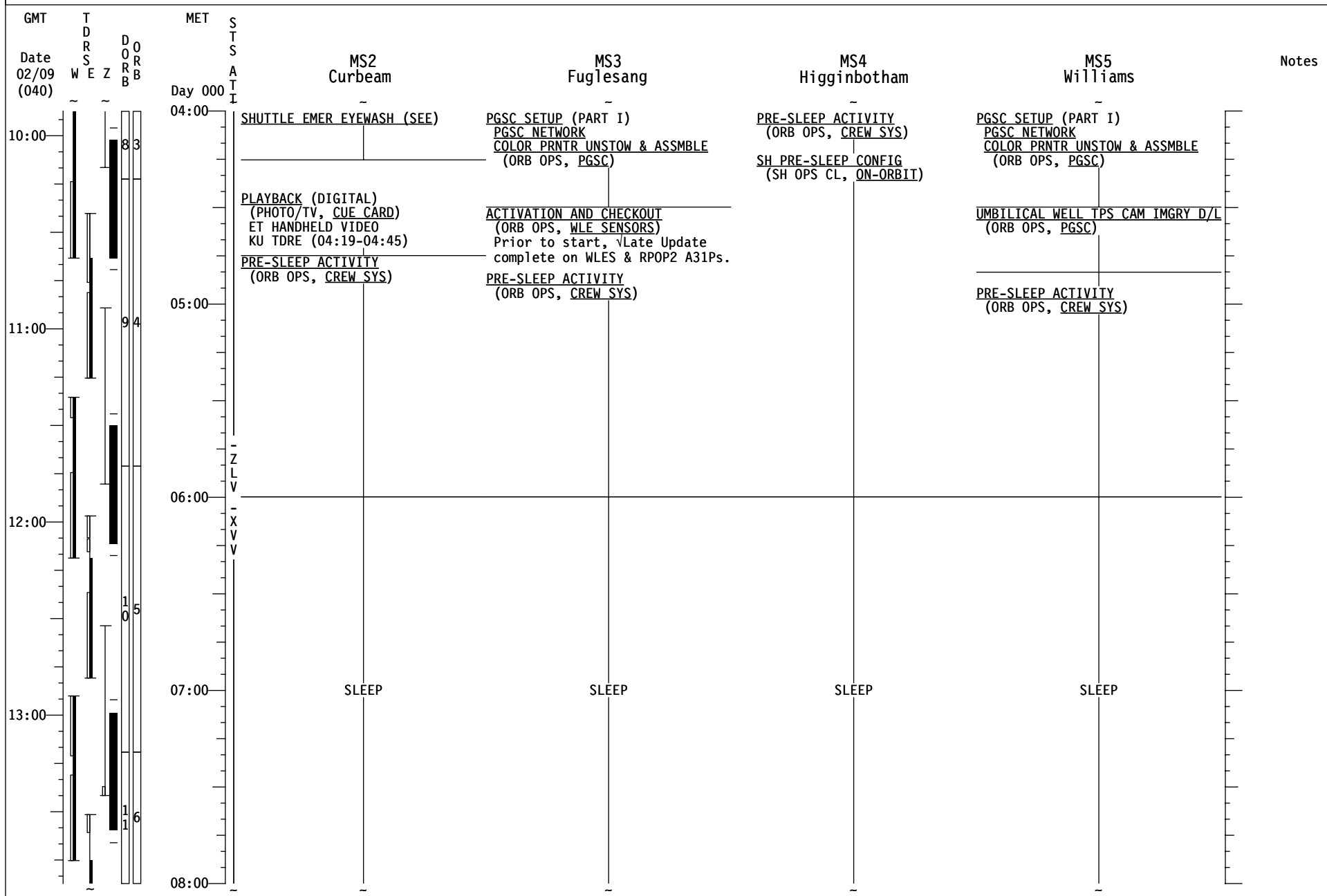
GMT Date 02/09 (040)	TDRSEZ W E Z	DORB D O R B	MET Day 000	STS A T T	MS2 Curbeam	MS3 Fuglesang	MS4 Higginbotham	MS5 Williams	Notes
06:00			00:00	A S C E N T					
07:00			01:00		P O S T  I N S E R T I O N	P O S T  I N S E R T I O N	P O S T  I N S E R T I O N	P O S T  I N S E R T I O N	
08:00			02:00	Z L V - Y V V					
09:00			03:00		<u>SHAB ACTIVATION</u> <u>ON-ORBIT SYSTEM CONFIG</u> <u>TUNNEL CONFIG</u> <u>MODULE CONFIG</u> <u>ARS FAN CLAMP REMOVAL</u> (SH OPS CL, ACTIVATION)	<u>PGSC SETUP (PART I)</u> At minimum, setup and run Late Update on WLES, KFX, RPOP2, & OCA Router per PGSC Usage Chart. Setup Access Point. <u>PGSC NETWORK</u> <u>COLOR PRNTR UNSTOW &amp; ASSMBLE</u> (ORB OPS, PGSC)	<u>SHAB ACTIVATION</u> <u>ON-ORBIT SYSTEM CONFIG</u> <u>TUNNEL CONFIG</u> <u>MODULE CONFIG</u> <u>ARS FAN CLAMP REMOVAL</u> (SH OPS CL, ACTIVATION)	<u>PGSC SETUP (PART I)</u> At minimum, setup and run Late Update on WLES, KFX, RPOP2, & OCA Router per PGSC Usage Chart. Setup Access Point. <u>PGSC NETWORK</u> <u>COLOR PRNTR UNSTOW &amp; ASSMBLE</u> (ORB OPS, PGSC)	
			04:00		<u>TISSUE EQUIV PRPRT COUNTER(TEPC)</u> (ORB OPS, CREW SYSTEMS) Perform POWER ON <u>SHUTTLE EMER EYEWASH (SEE)</u> Unstow, attach on or near galley Fill one drink container, label For SEE use only and attach on or near galley		<u>OCAC SETUP</u> (ORB OPS, CREW SYS)		
							<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)		
							<u>SH PRE-SLEEP CONFIG</u> (SH OPS CL, ON-ORBIT)		

# STS-116 FD01

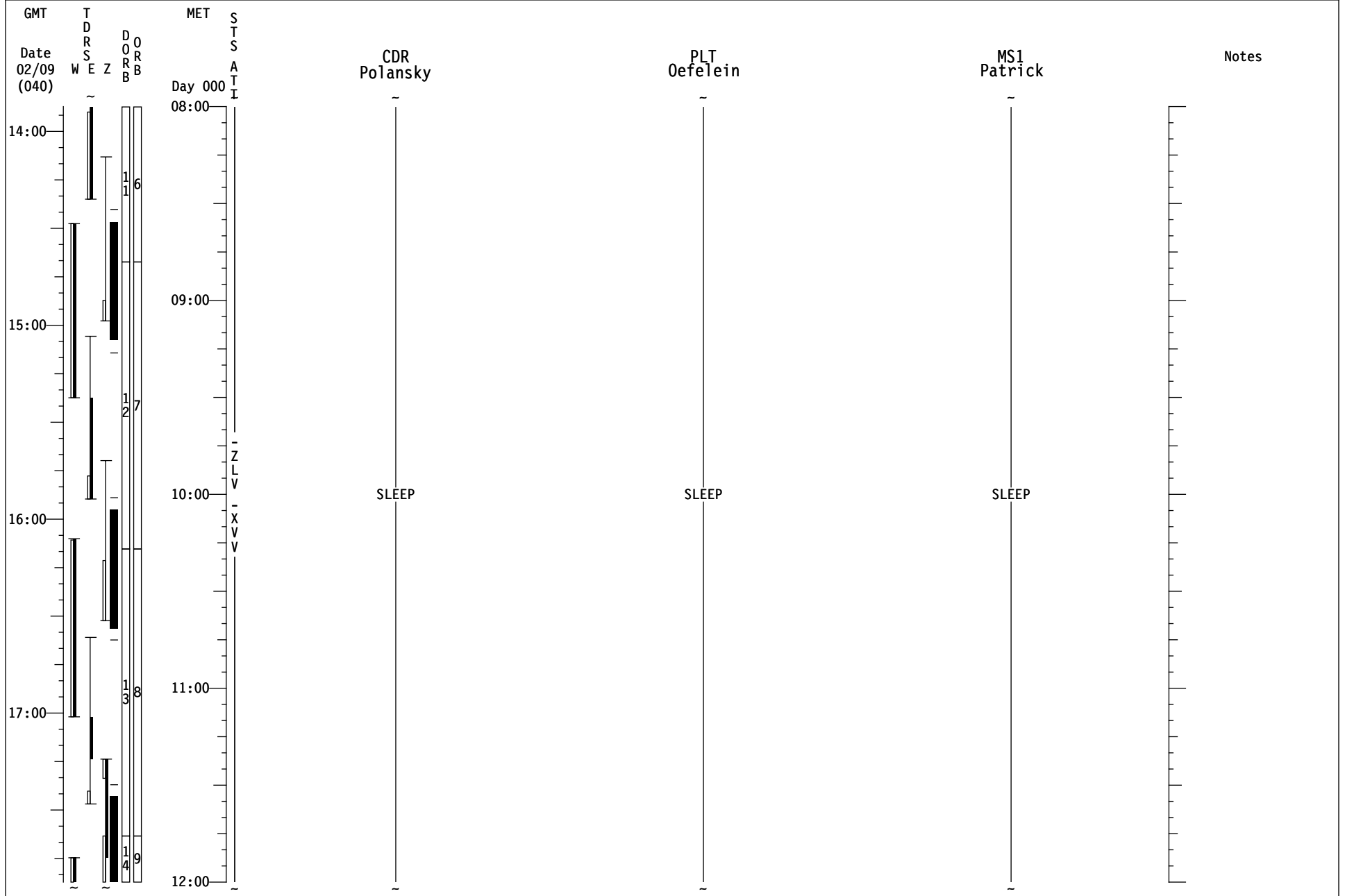




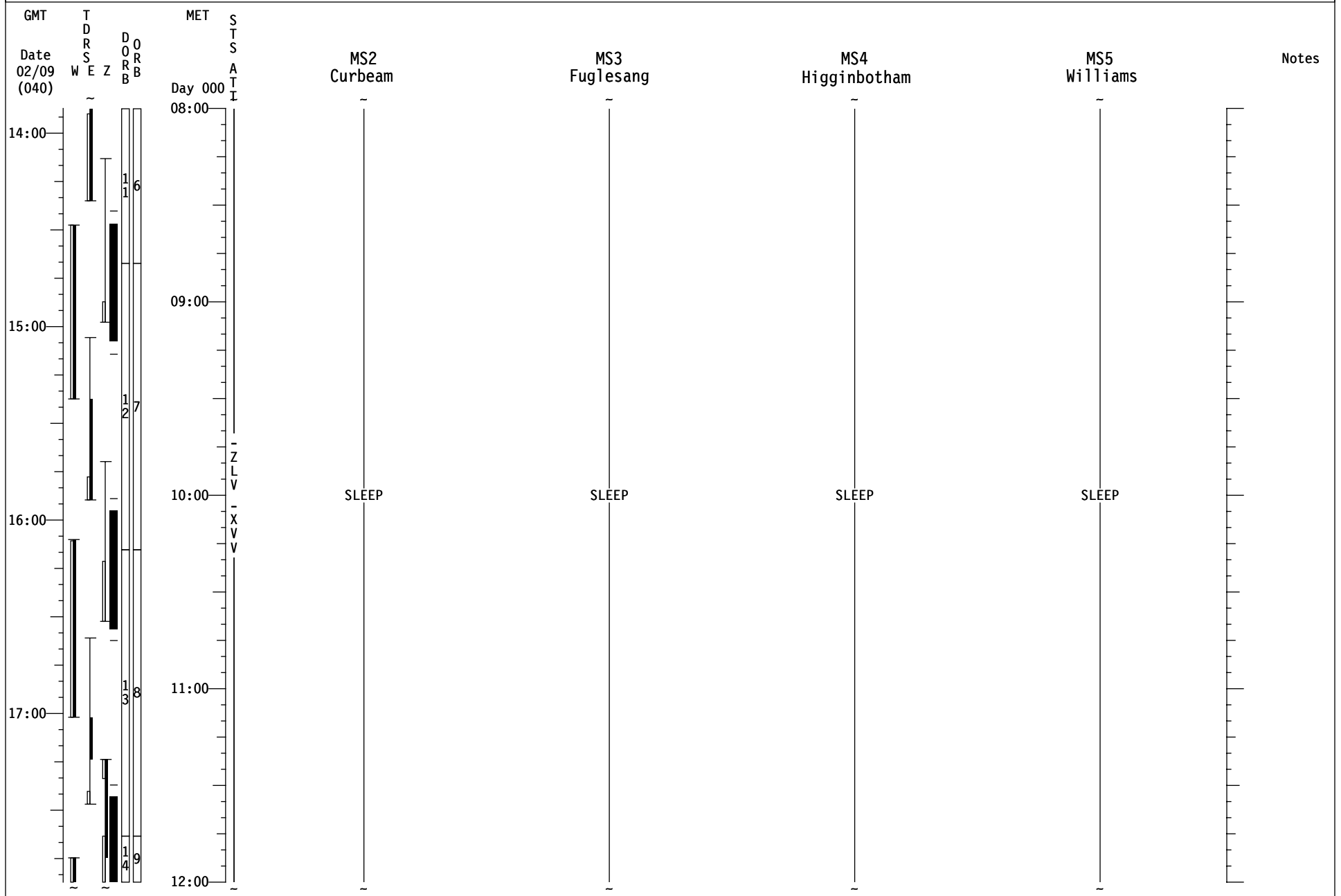
# STS-116 FD01



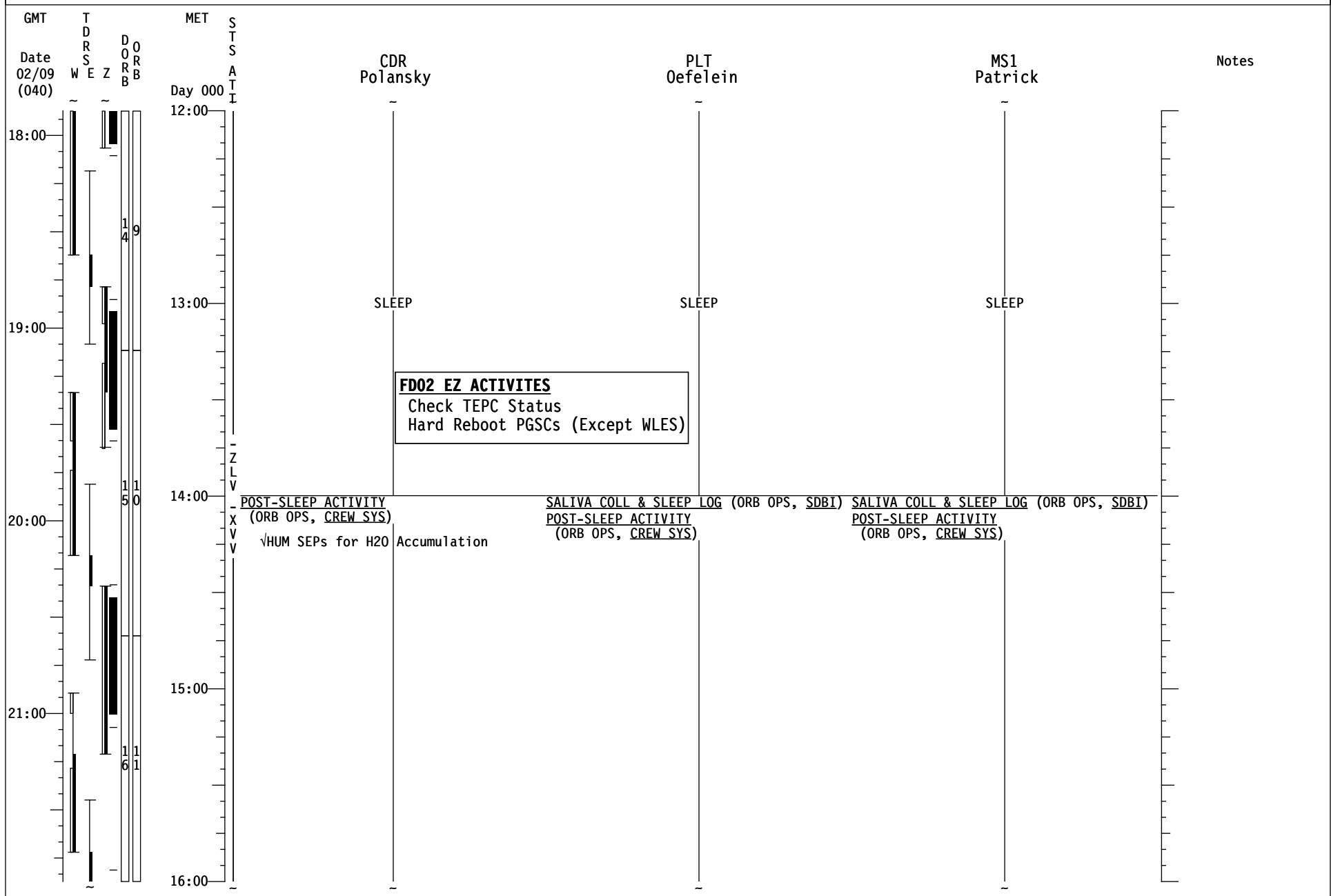
# STS-116 FD01



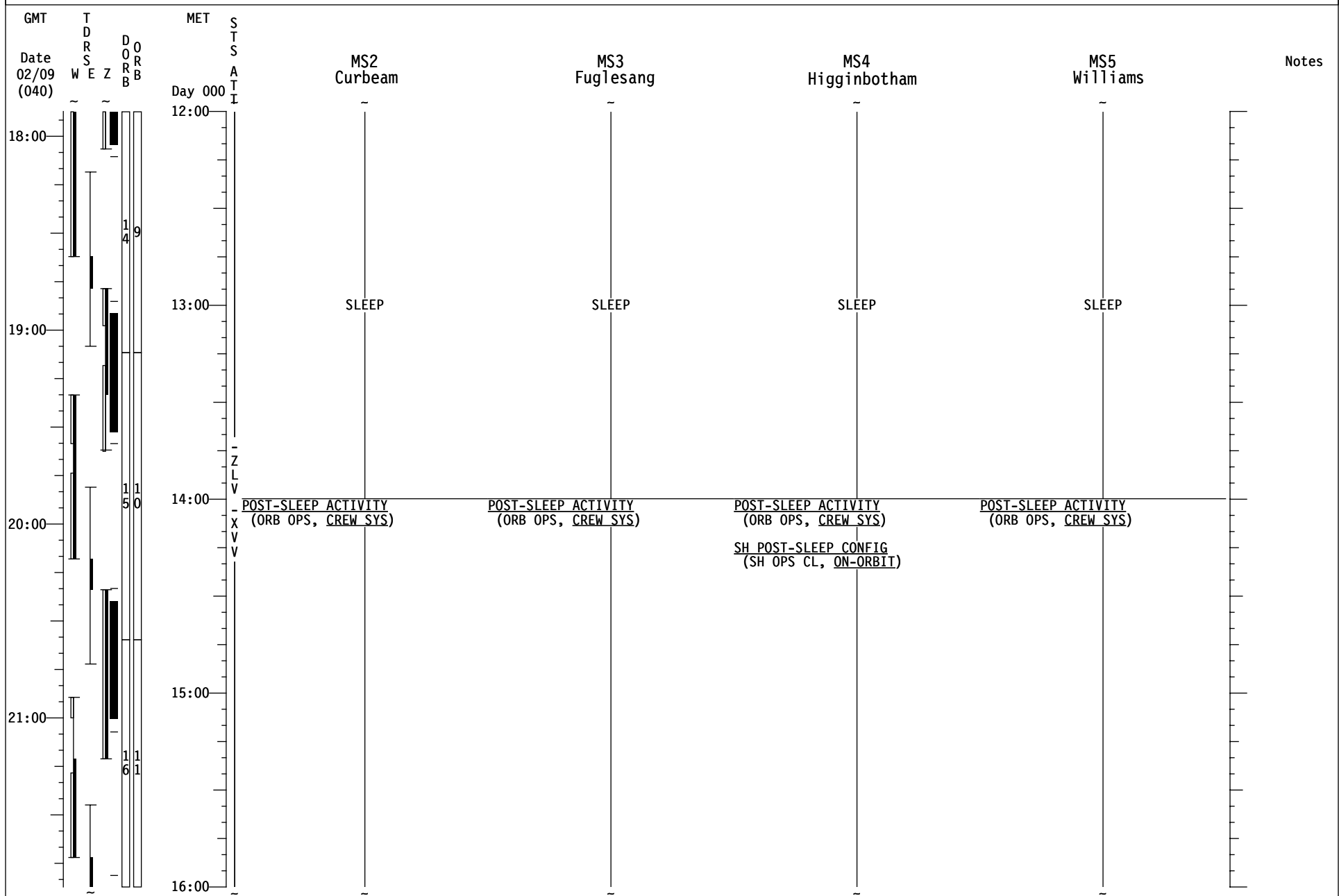
# STS-116 FD01



# STS-116 FD02



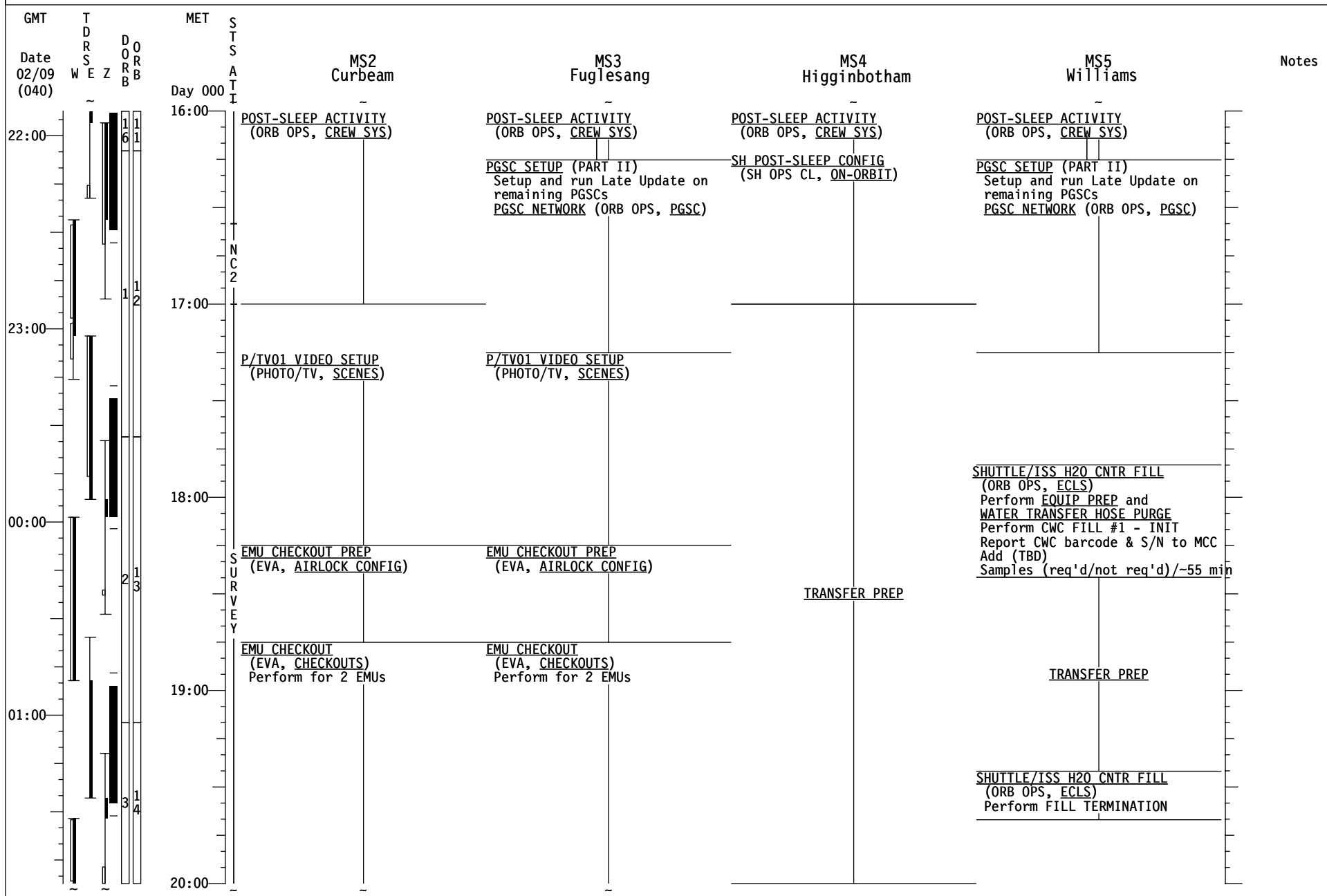
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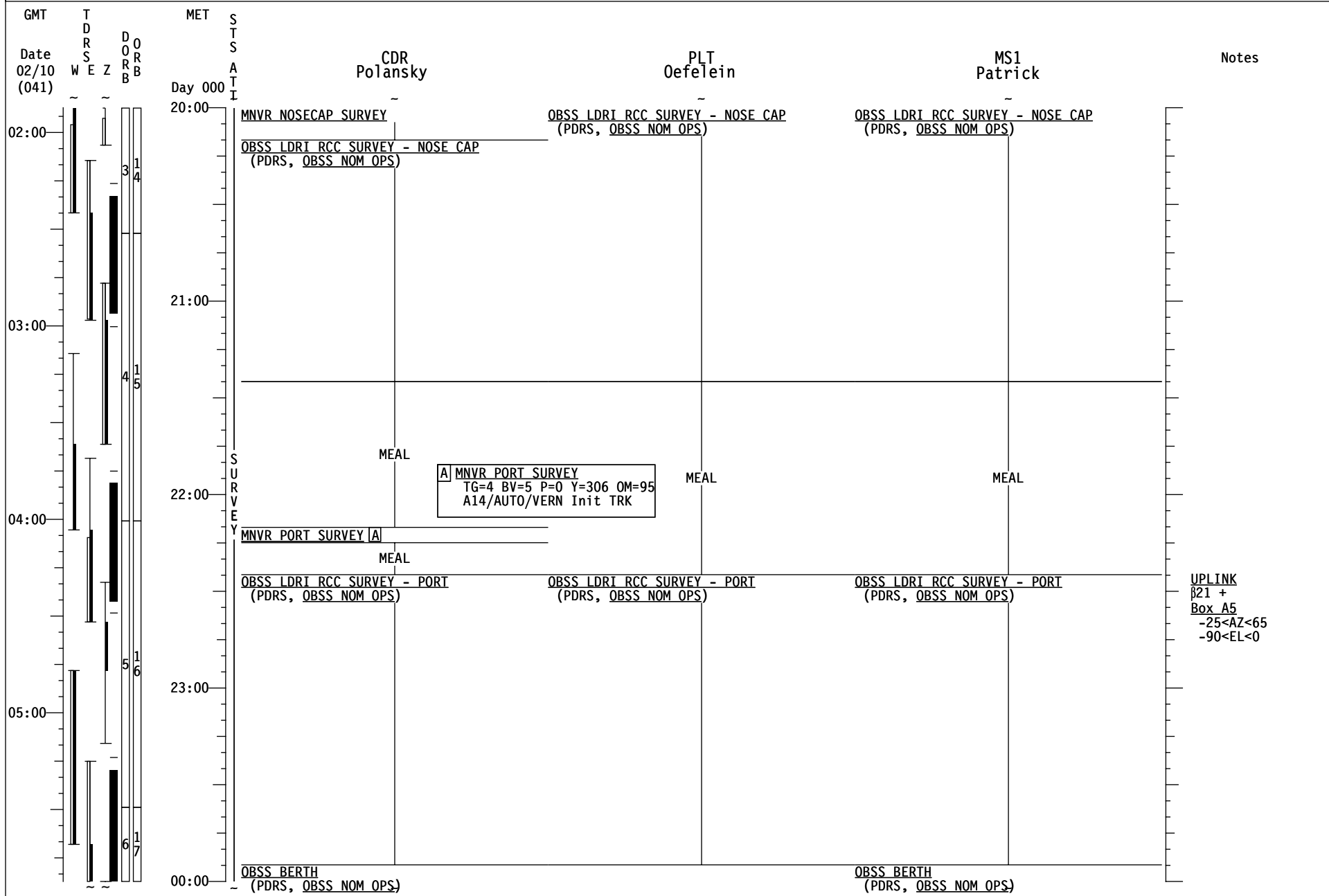
# STS-116 FD02

GMT Date 02/09 (040)	TDRS W E Z	DORB 1 6 1	MET Day 000	S T S A T I	CDR Polansky	PLT Oefelein	MS1 Patrick	Notes
22:00		1 6 1	16:00		POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
					ON-ORBIT OMS BURN (ORB OPS, OMS)	ON-ORBIT OMS BURN (ORB OPS, OMS)		UPDATE ORBITAL MNVR PAD
					< NC2 TIG (16:51)			
23:00		1 2	17:00		OBSS UNBERTH (PDRS, OBSS NOM OPS)	MNVR OBSS UNBERTH/FLAT FIELD TG=2 BV=5 P=90 Y=350 OM=135 A14/AUTO/VERN Init TRK CRYO 02 TK HTR SNSR CK (ORB OPS, EPS)	OBSS UNBERTH (PDRS, OBSS NOM OPS)	UPLINK β21 + Box A2 -90<AZ<110 -90<EL<0
						STS-116 DAP A(B) CONFIGS (ORB OPS, DAP TABLE) Load Flight Specific A&B DAPS		
00:00		2 3	18:00		OBSS ITVC/LDRI FLAT FIELDS (PDRS, OBSS NOM OPS)	OBSS ITVC/LDRI FLAT FIELDS (PDRS, OBSS NOM OPS)	OBSS ITVC/LDRI FLAT FIELDS (PDRS, OBSS NOM OPS)	
					MNVR STARBOARD SURVEY TG=4 BV=5 P=0 Y=49 OM=315 A14/AUTO/VERN Init TRK	OBSS LDRI RCC SURVEY - STBD (PDRS, OBSS NOM OPS)	OBSS LDRI RCC SURVEY - STBD (PDRS, OBSS NOM OPS)	UPLINK β21 + Box A3 -120<AZ<80 -90<EL<45
					OBSS LDRI RCC SURVEY - STBD (PDRS, OBSS NOM OPS)			
01:00		3 4	19:00					
			20:00		MNVR NOSE CAP SURVEY TG=4 BV=5 P=320 Y=0 OM=65 A14/AUTO/VERN Init TRK	OBSS LDRI RCC SURVEY - NOSE CAP (PDRS, OBSS NOM OPS)	OBSS LDRI RCC SURVEY - NOSE CAP (PDRS, OBSS NOM OPS)	UPLINK β21 + Box A4 -36<AZ<70 -48<EL<32

# STS-116 FD02

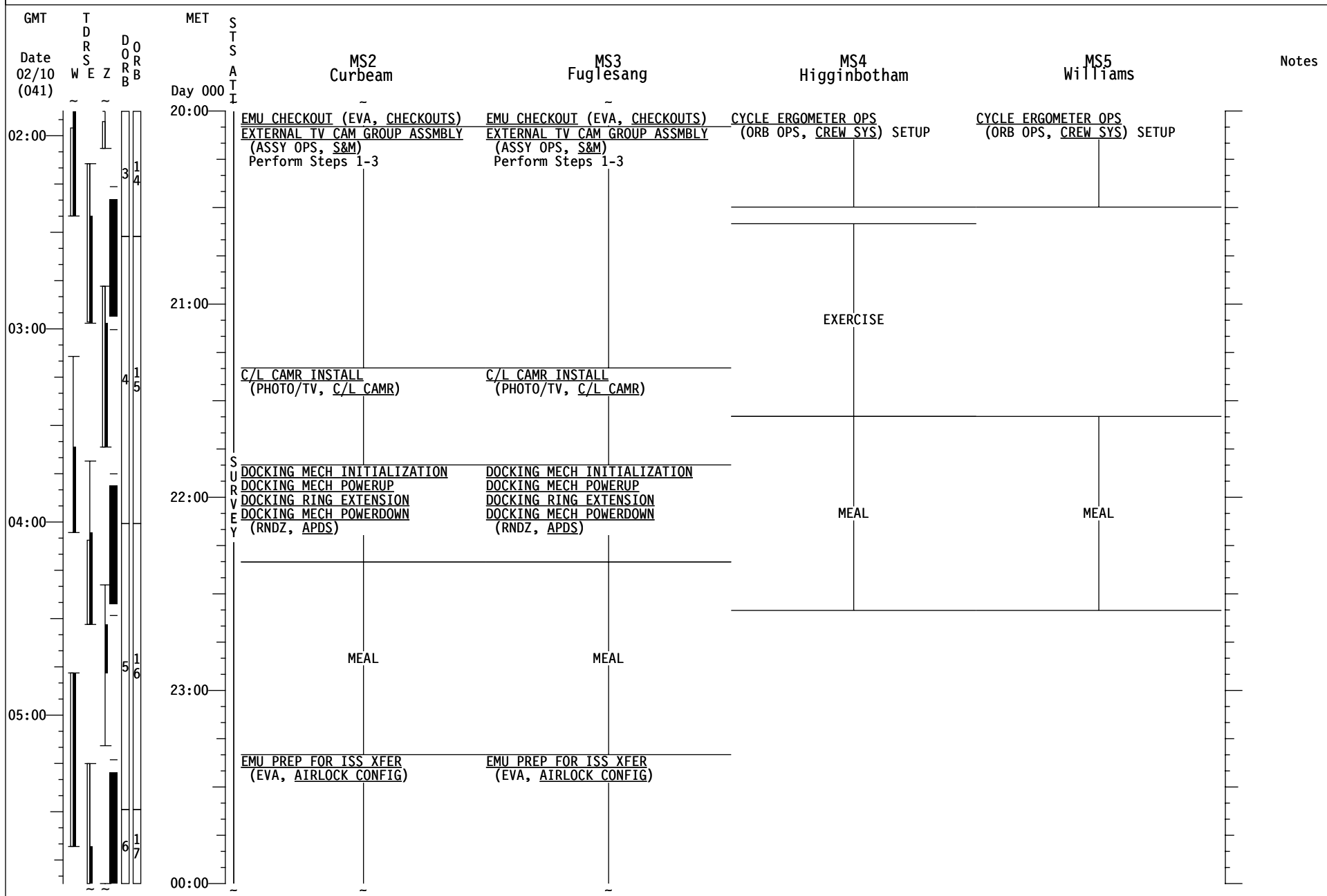


# STS-116 FD02

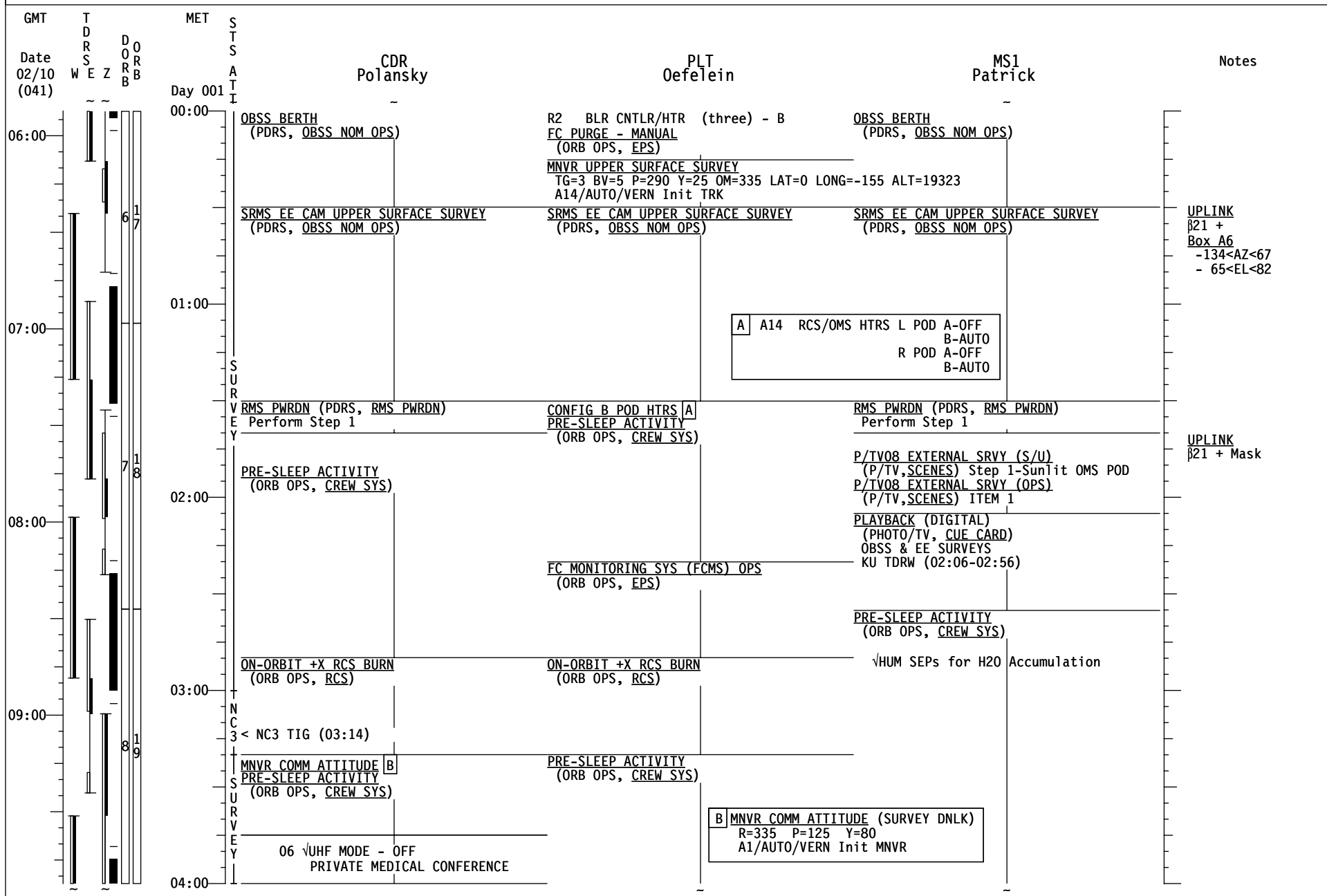




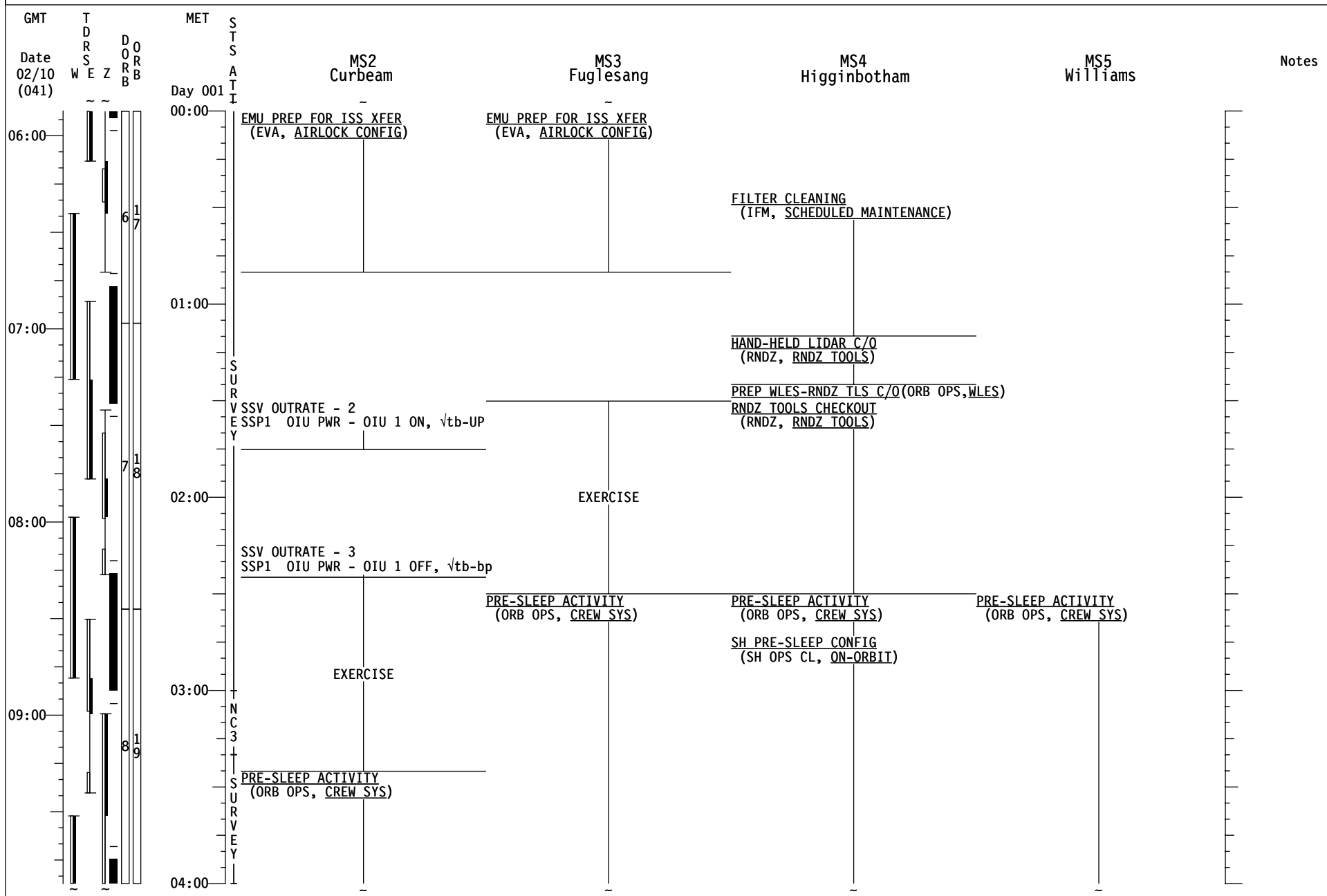
# STS-116 FD02



# STS-116 FD02

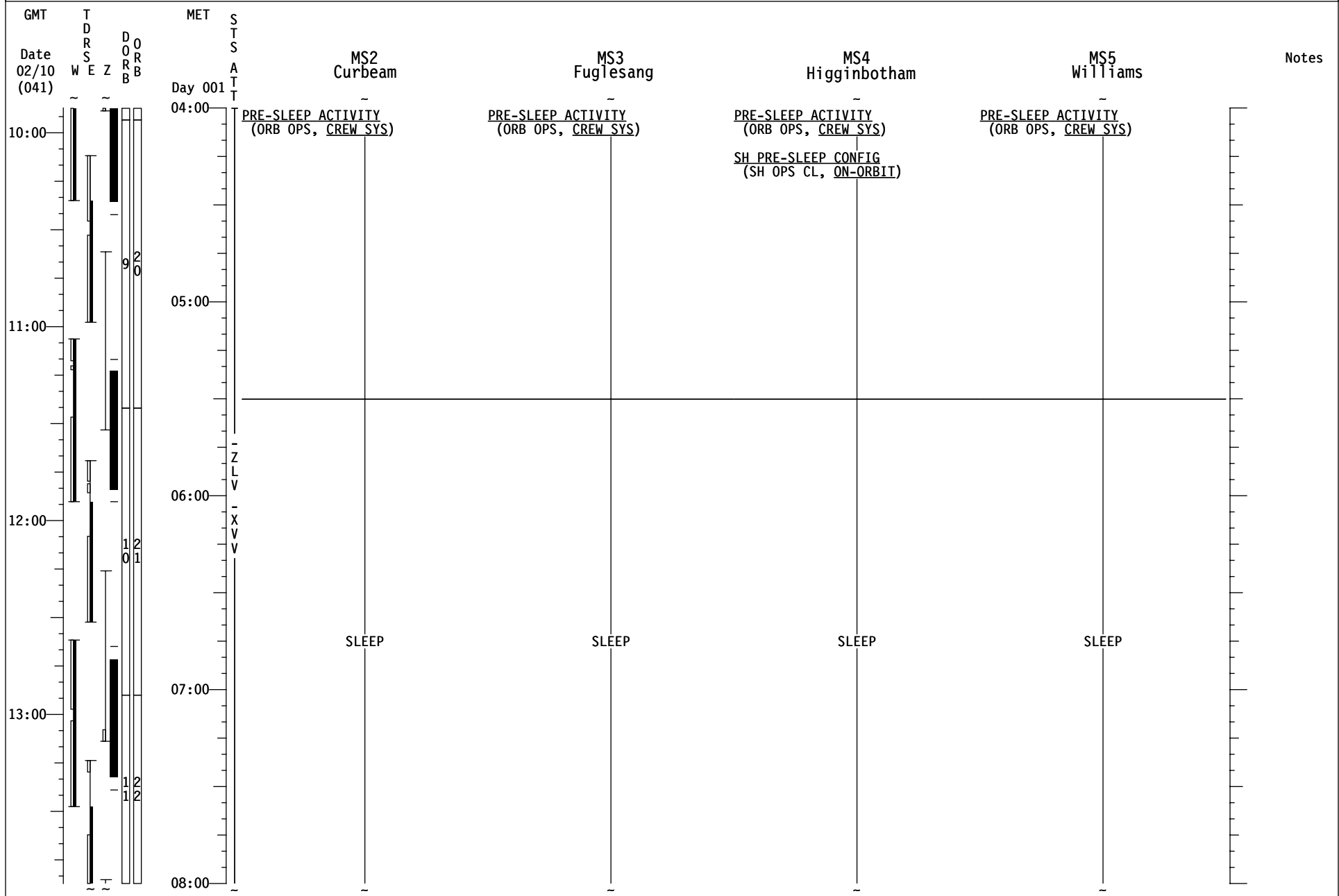


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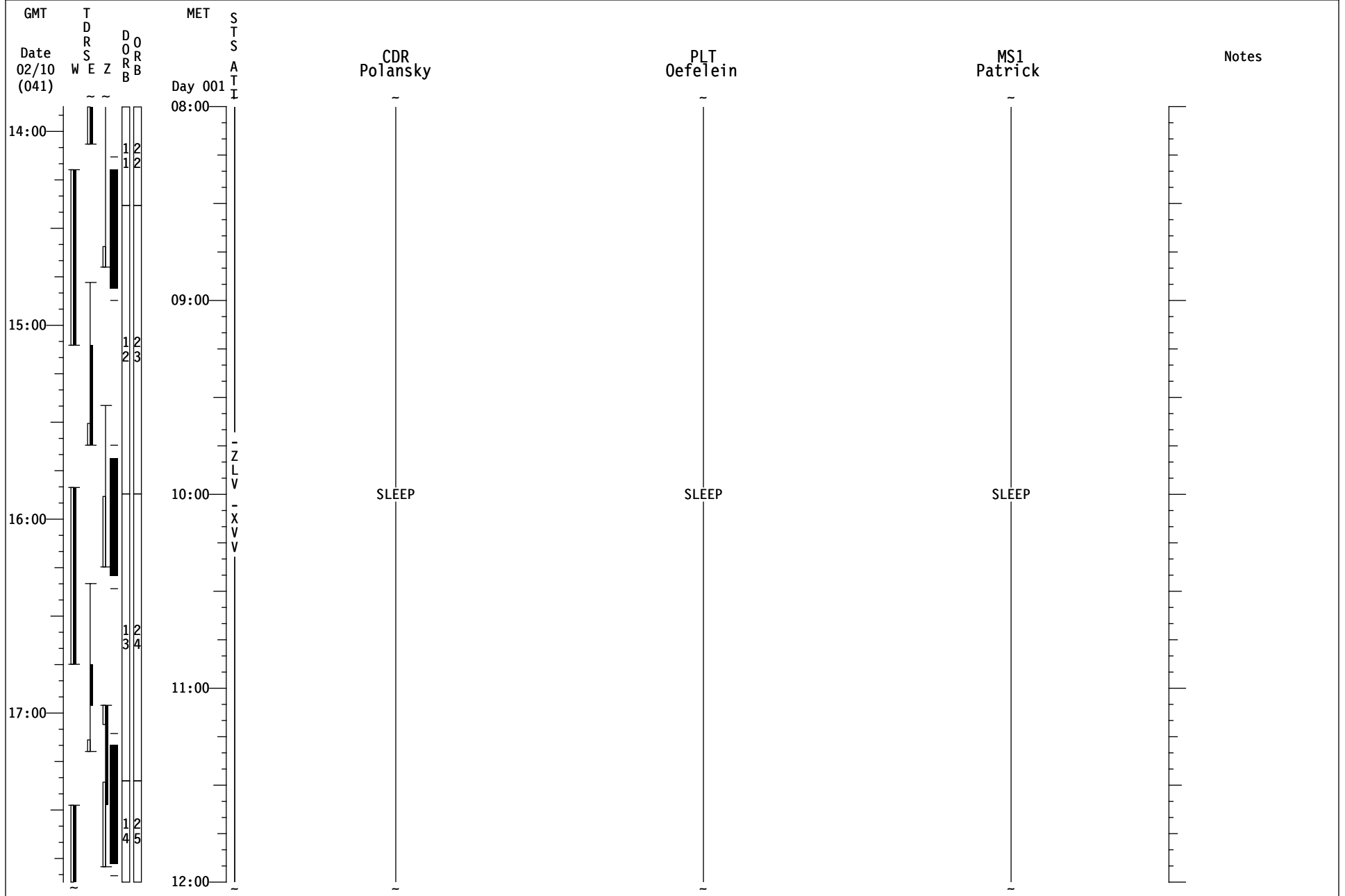




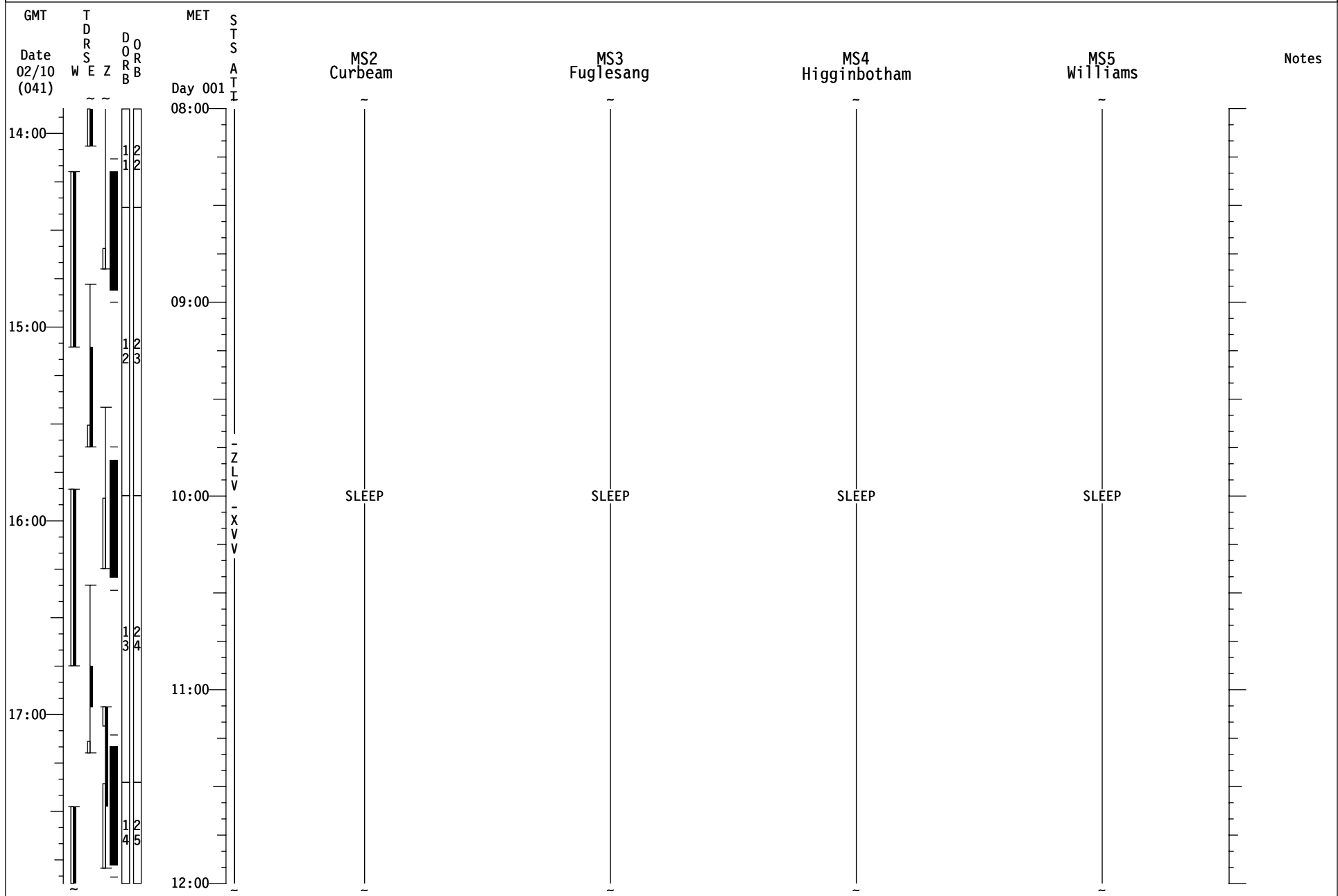
# STS-116 FD02



# STS-116 FD02



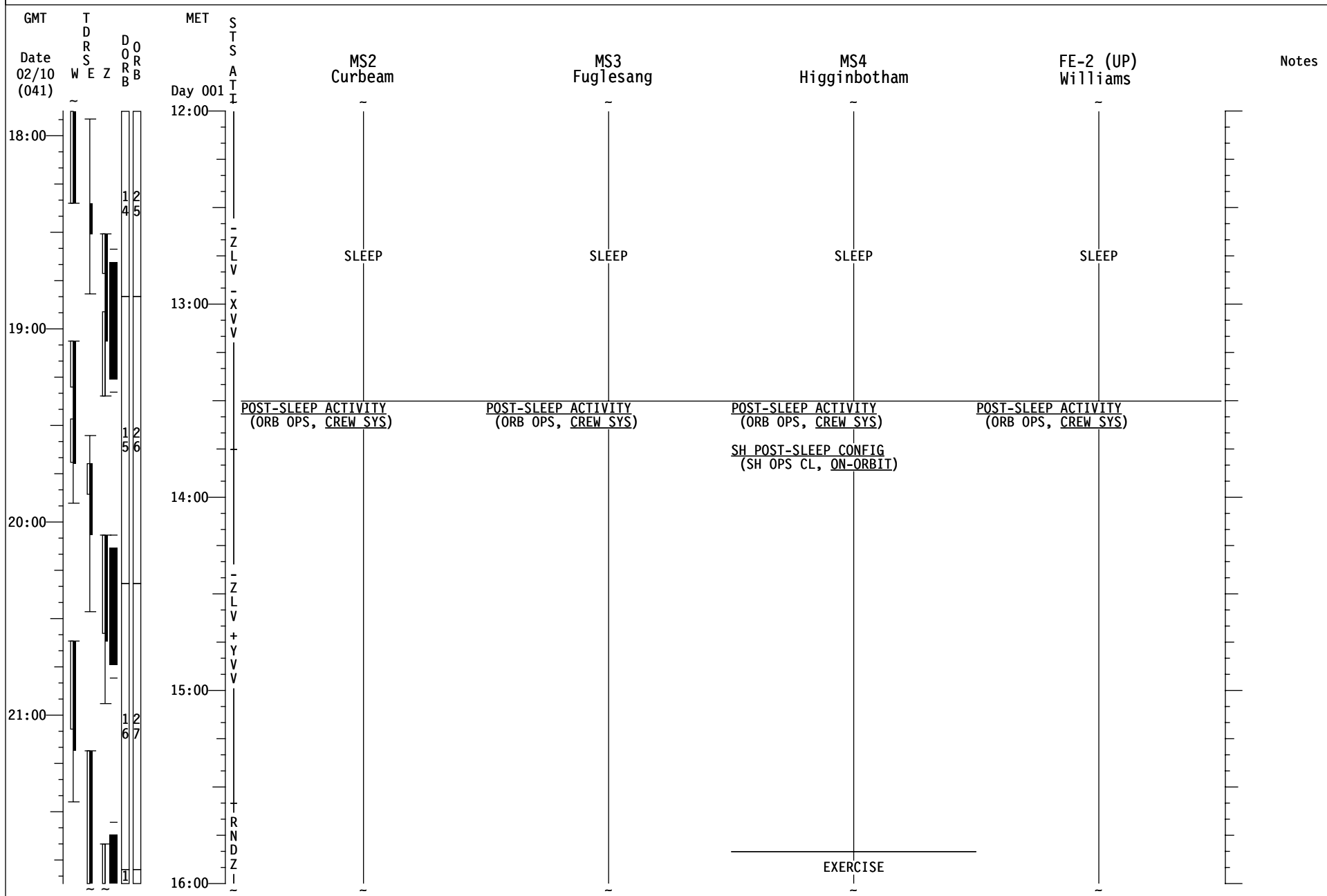
# STS-116 FD02



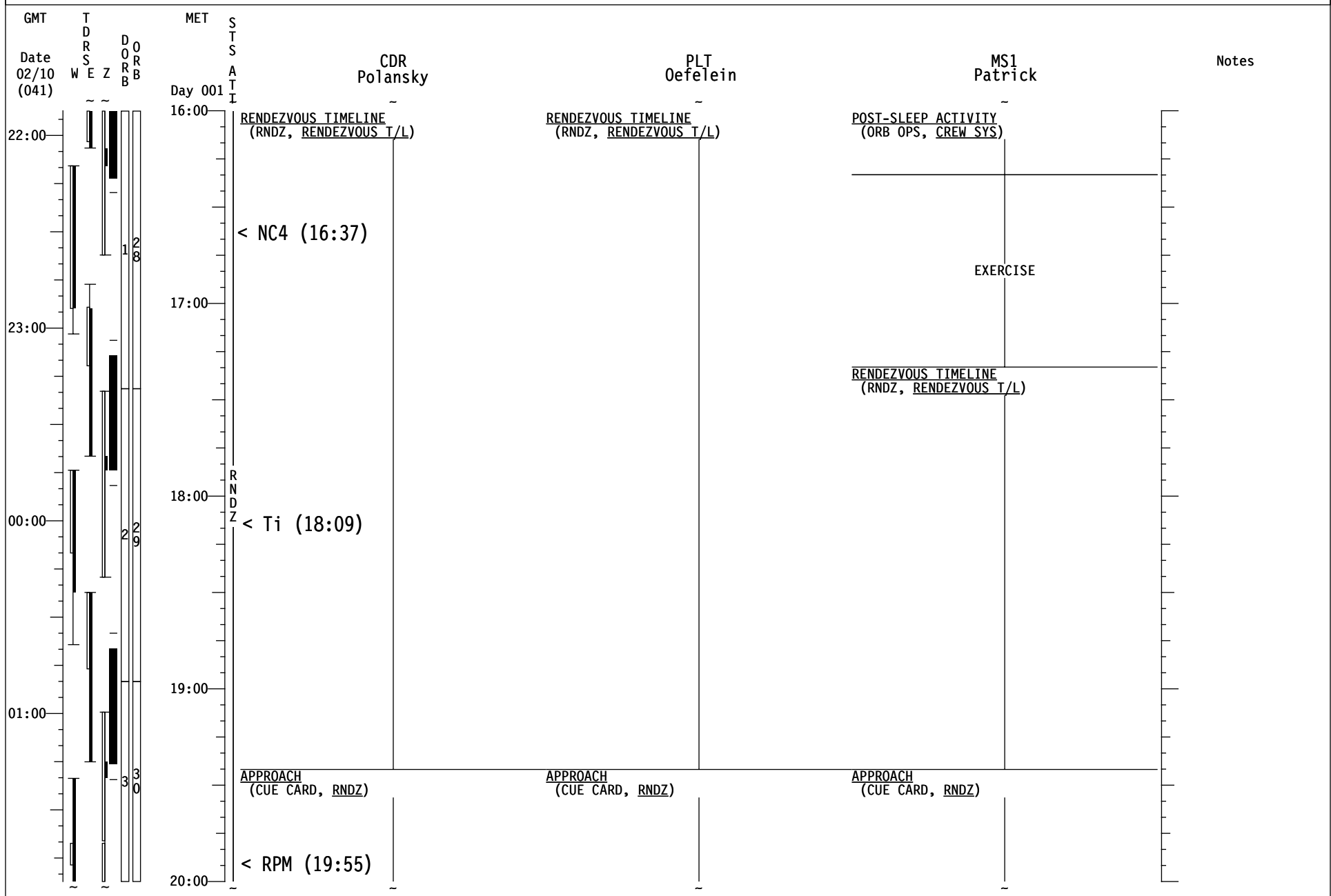




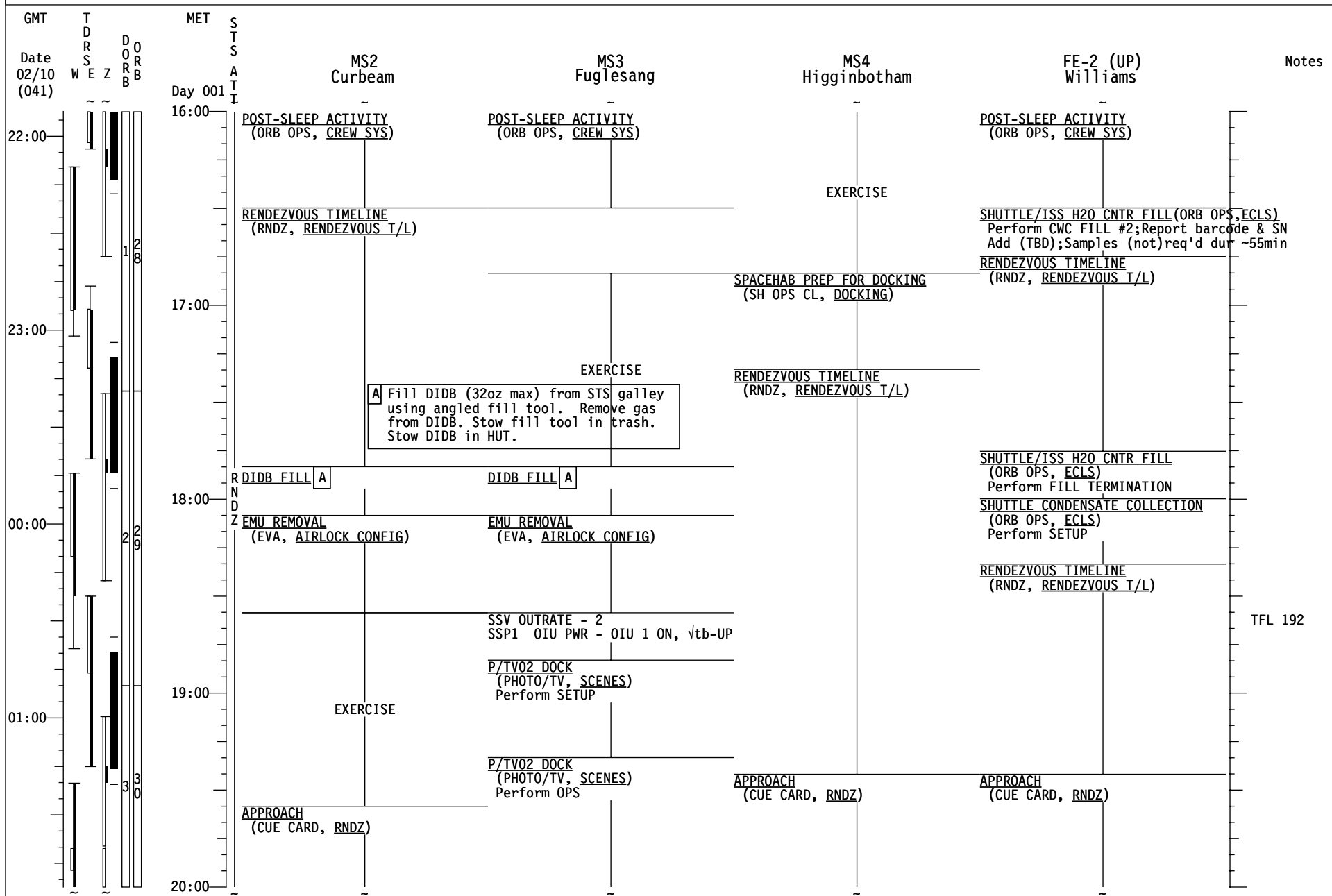
# STS-116 FD03



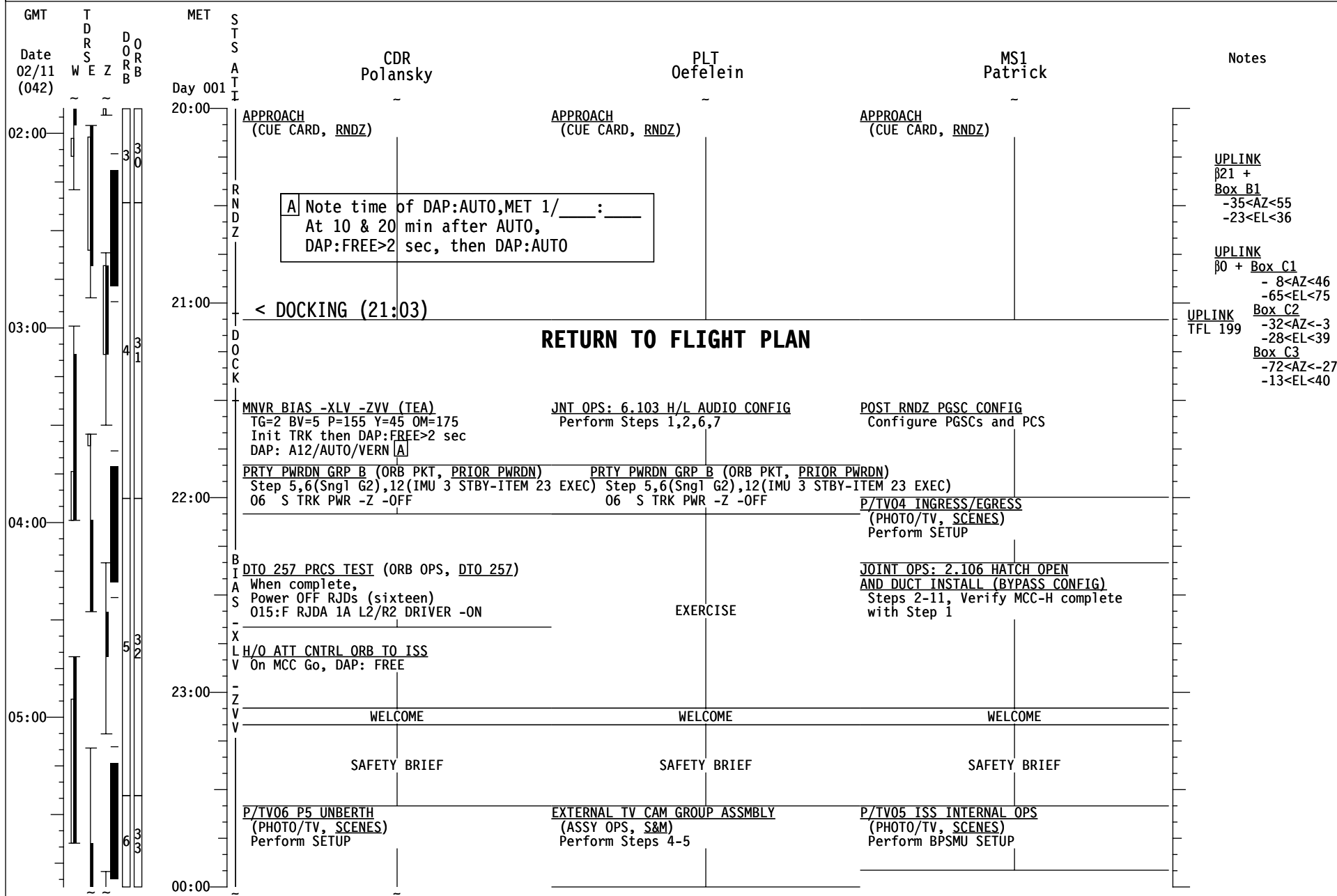
# STS-116 FD03



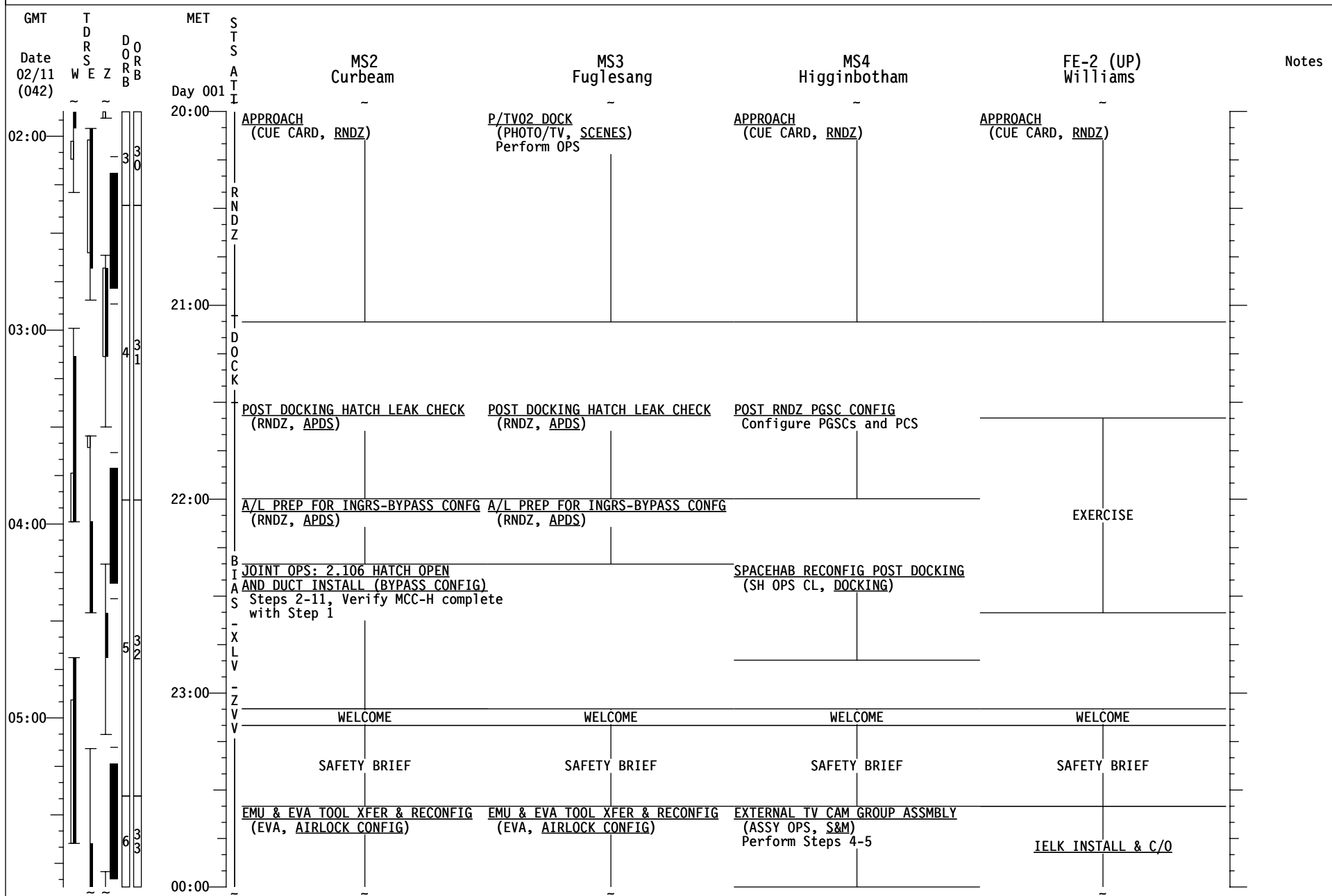
# STS-116 FD03



# STS-116 FD03



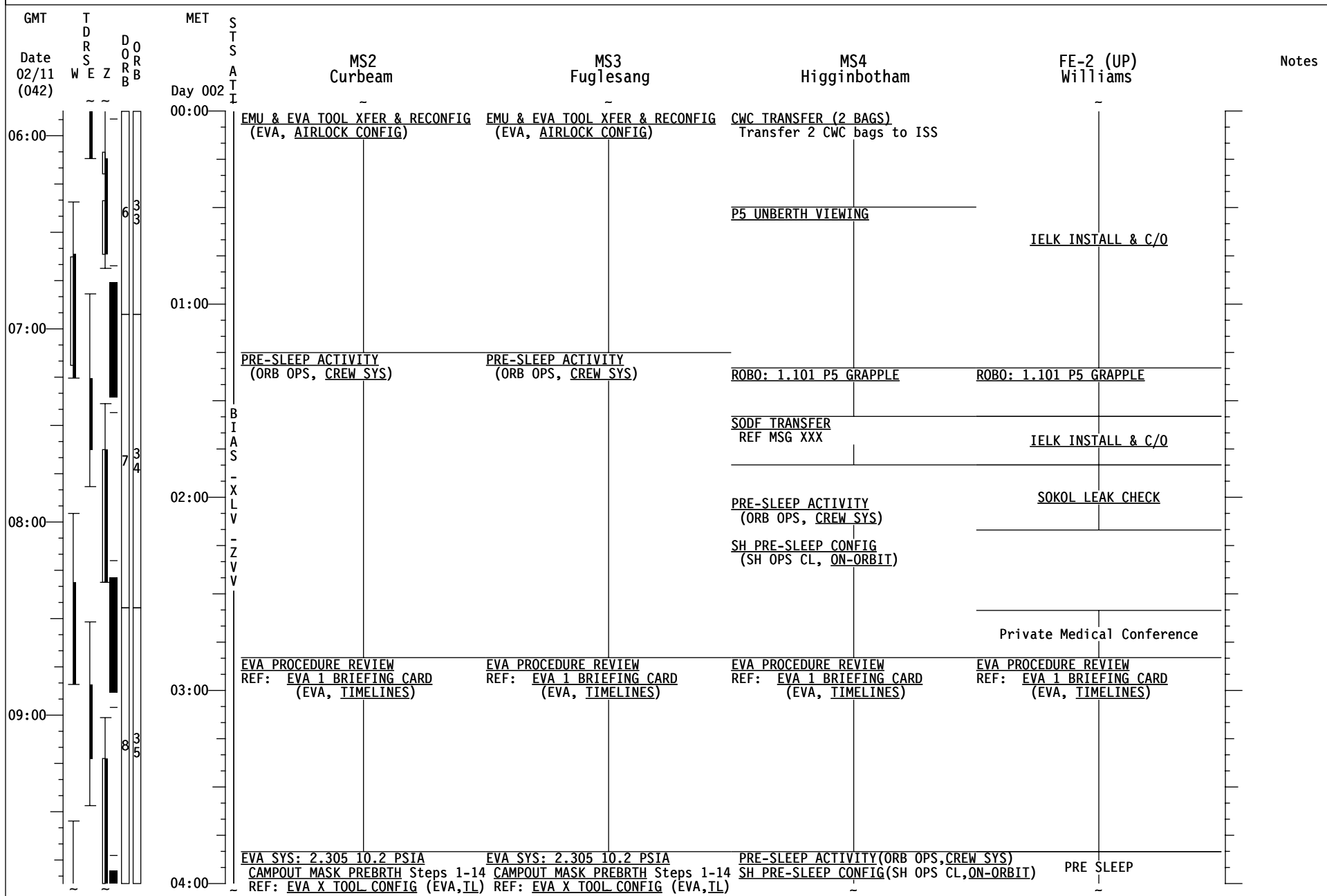
# STS-116 FD03



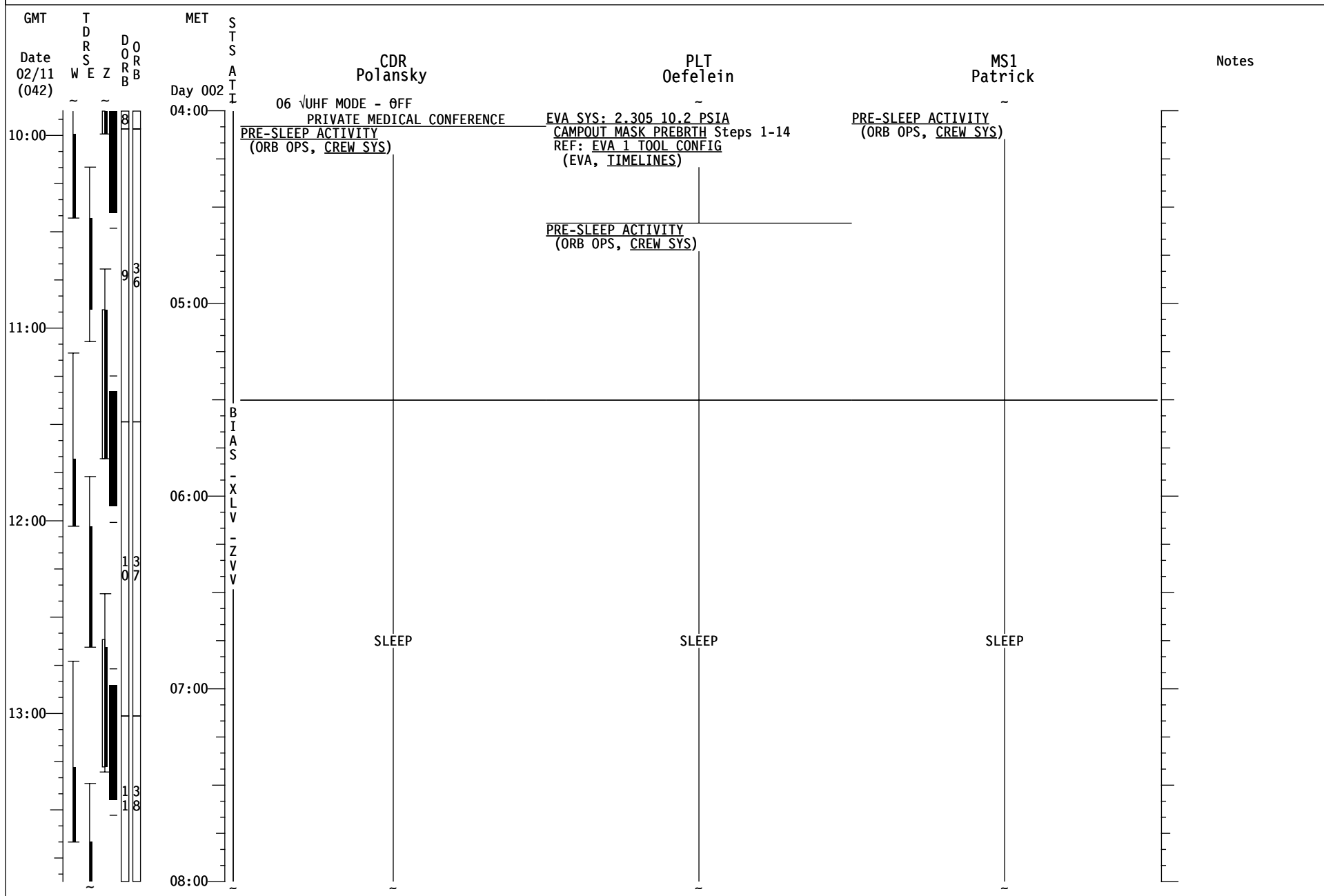
# STS-116 FD03

GMT	TDRS W E Z	DORB	MET Day 002	STS A T I	CDR Polansky	PLT Oefelein	MS1 Patrick	Notes
06:00					P/TV06 P5 UNBERTH (PHOTO/TV, SCENES) P5 GRAPPLE (PDRS, NOM P5 OPS)	EMU & EVA TOOL XFER & RECONFIG (EVA, AIRLOCK CONFIG)	P5 GRAPPLE (PDRS, NOM P5 OPS)	
					P5 UNBERTH (PDRS, NOM P5 OPS)		P5 UNBERTH (PDRS, NOM P5 OPS)	
07:00					P5 HANDOFF (PDRS, NOM P5 OPS)		P5 HANDOFF (PDRS, NOM P5 OPS)	
						PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		
					IMU STAR OF OPPTY ALIGN (ORB OPS, GNC)			
					P5 UNGRAPPLE (PDRS, NOM P5 OPS)		P5 UNGRAPPLE (PDRS, NOM P5 OPS)	
					JNT OPS: 3.120 PREBRTH USING SHUTTLE 02 S/U		PLAYBACK (ANALOG) (PHOTO/TV, CUE CARD) DOCKING KU TDRZ (01:46-02:26)	
08:00							PLAYBACK (ANALOG) (PHOTO/TV, CUE CARD) P5 HANDOFF KU TDRZ (01:46-02:26)	
							PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
						SSV OUTFATE - 3 SSP1 OIU PWR - OIU 1 OFF, √tb-bp		UPLINK TFL 184
09:00					EVA PROCEDURE REVIEW REF: EVA 1 BRIEFING CARD (EVA, TIMELINES)	EVA PROCEDURE REVIEW REF: EVA 1 BRIEFING CARD (EVA, TIMELINES)		
					PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)			
04:00					06 √UHF MODE - OFF PRIVATE MEDICAL CONFERENCE	EVA SYS: 2.305 10.2 PSIA CAMPOUT MASK PREBRTH Steps 1-14 REF: EVA 1 TOOL CONFIG (EVA, TIMELINES)		

# STS-116 FD03

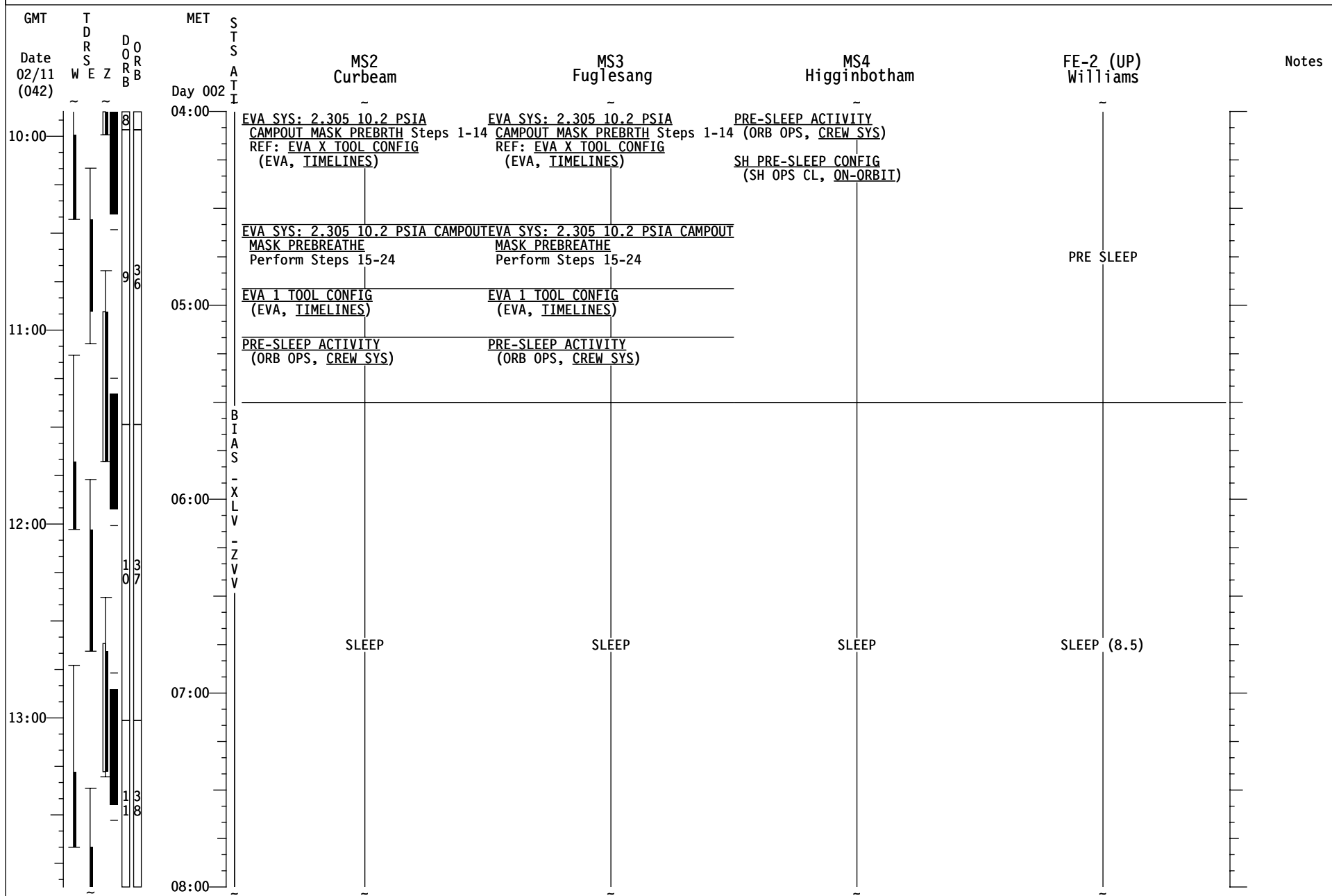


# STS-116 FD03

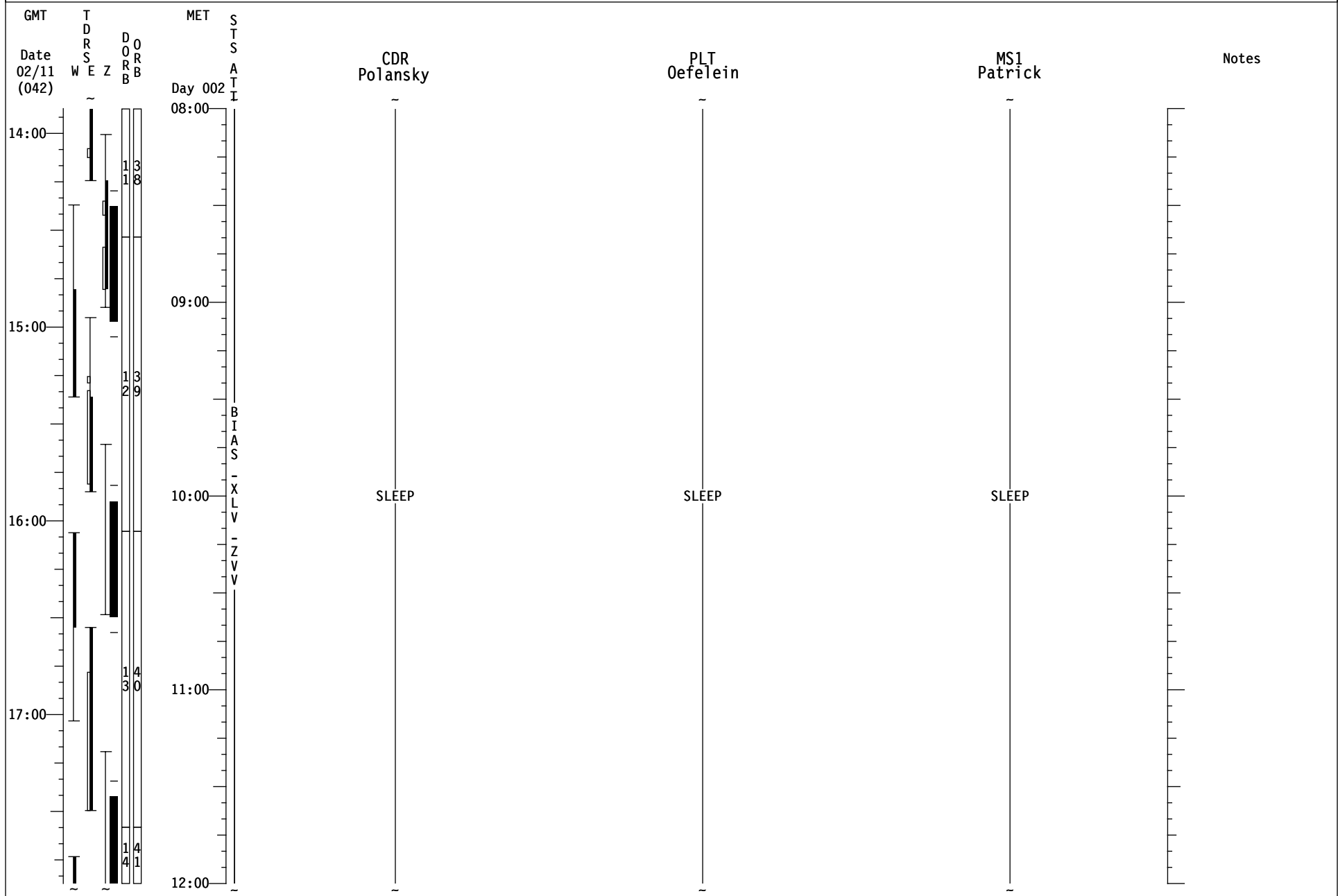




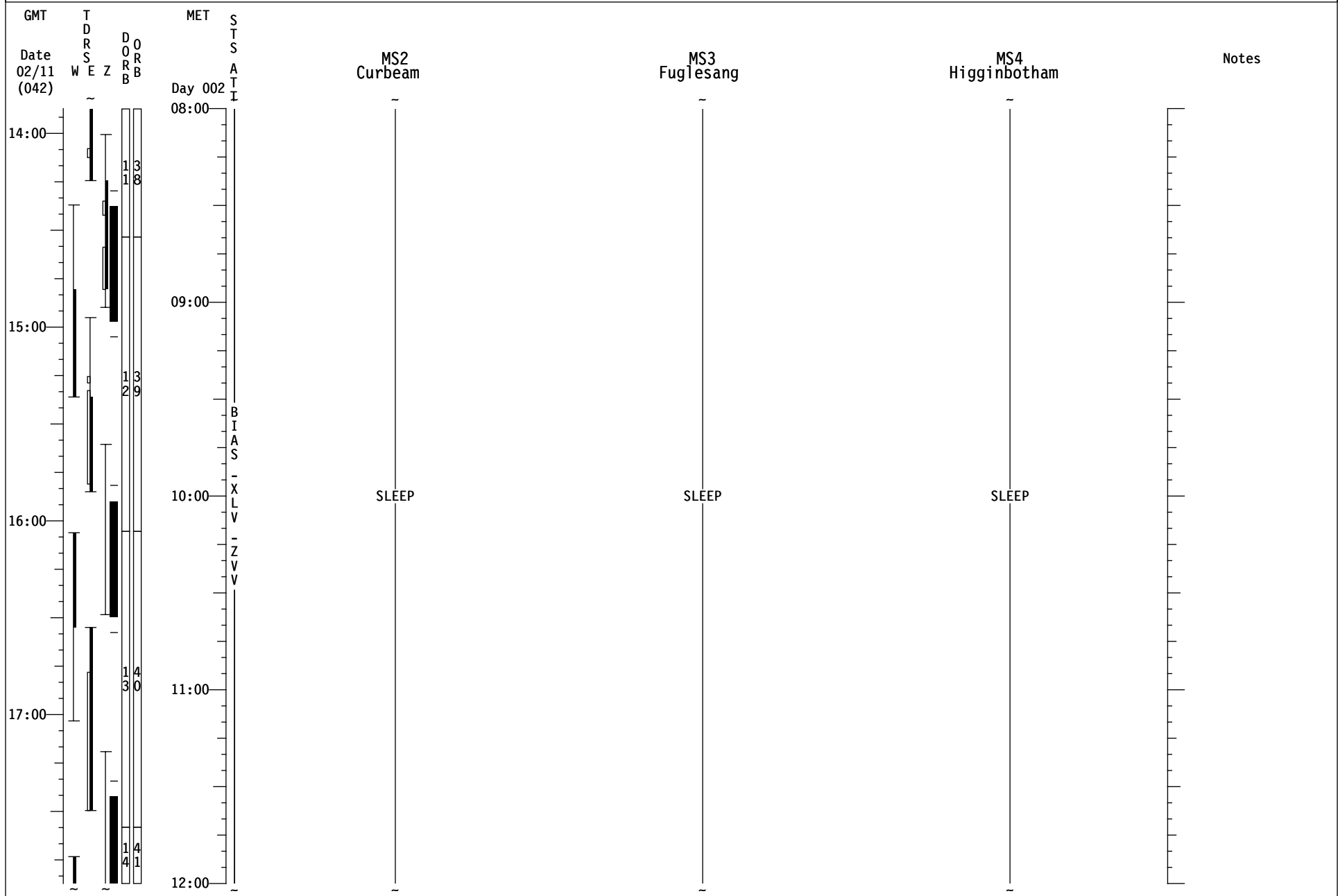
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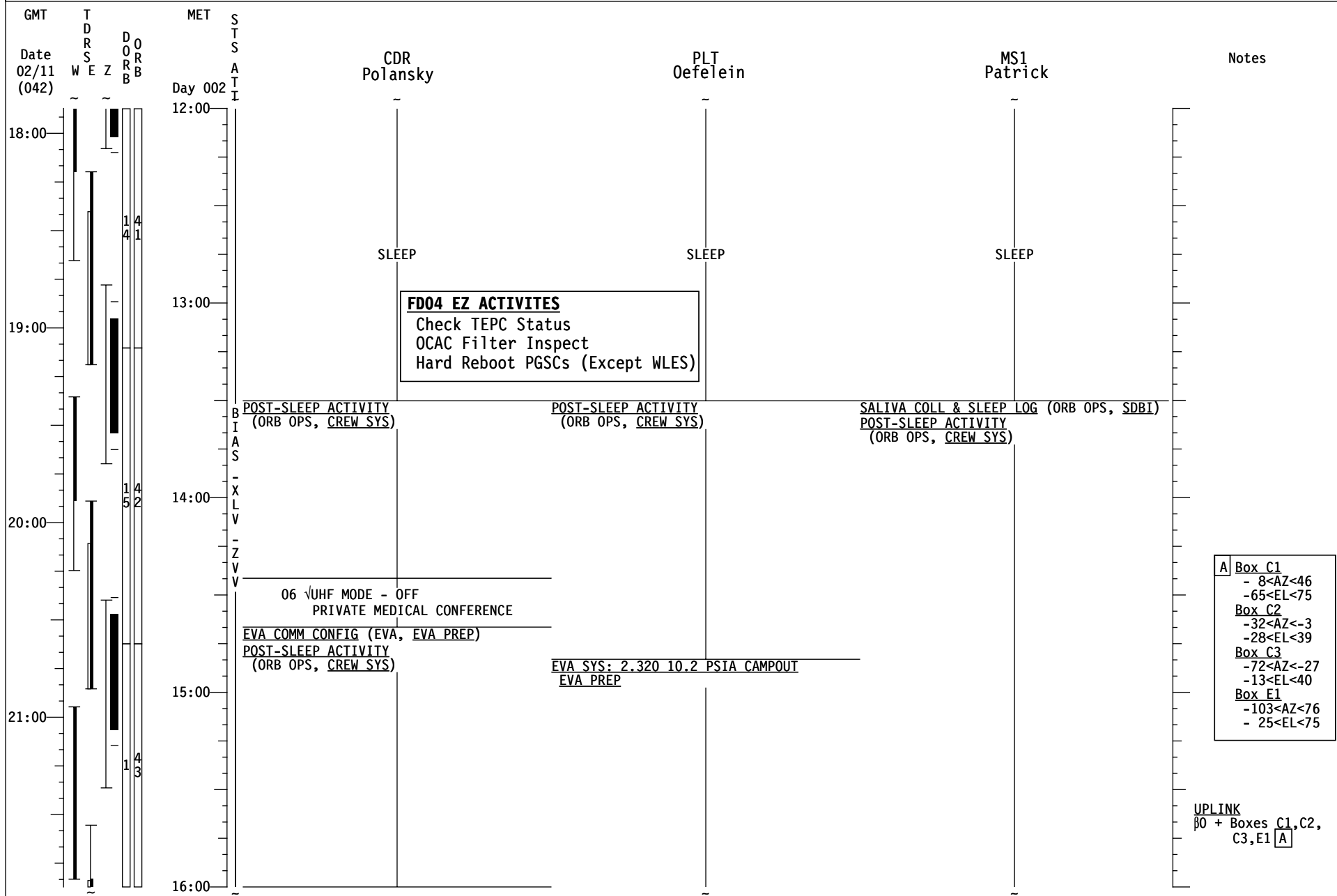
# STS-116 FD03



# STS-116 FD03



# STS-116 FD04



- A** Box C1  
 - 8<AZ<46  
 -65<EL<75

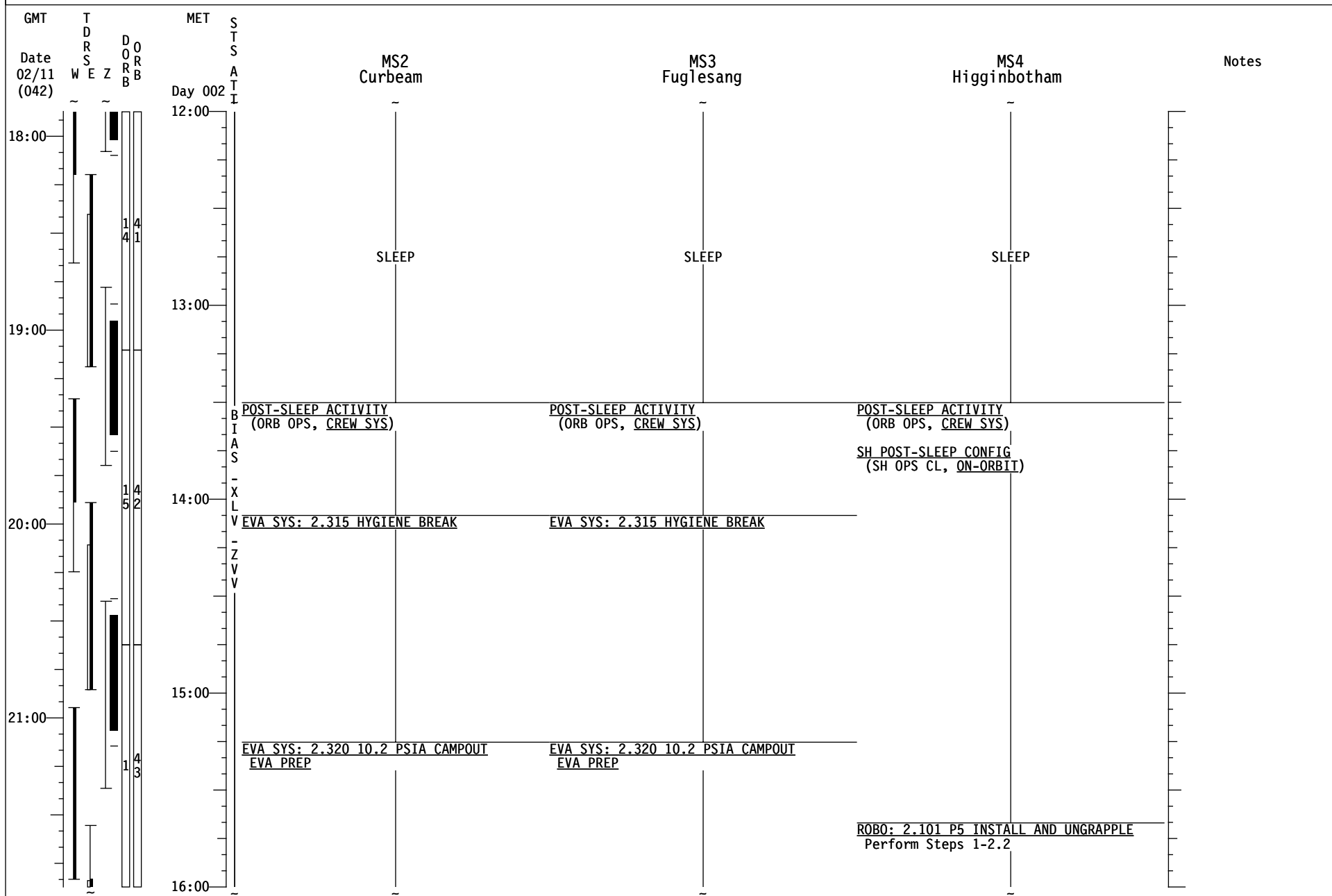
Box C2  
 -32<AZ<-3  
 -28<EL<39

Box C3  
 -72<AZ<-27  
 -13<EL<40

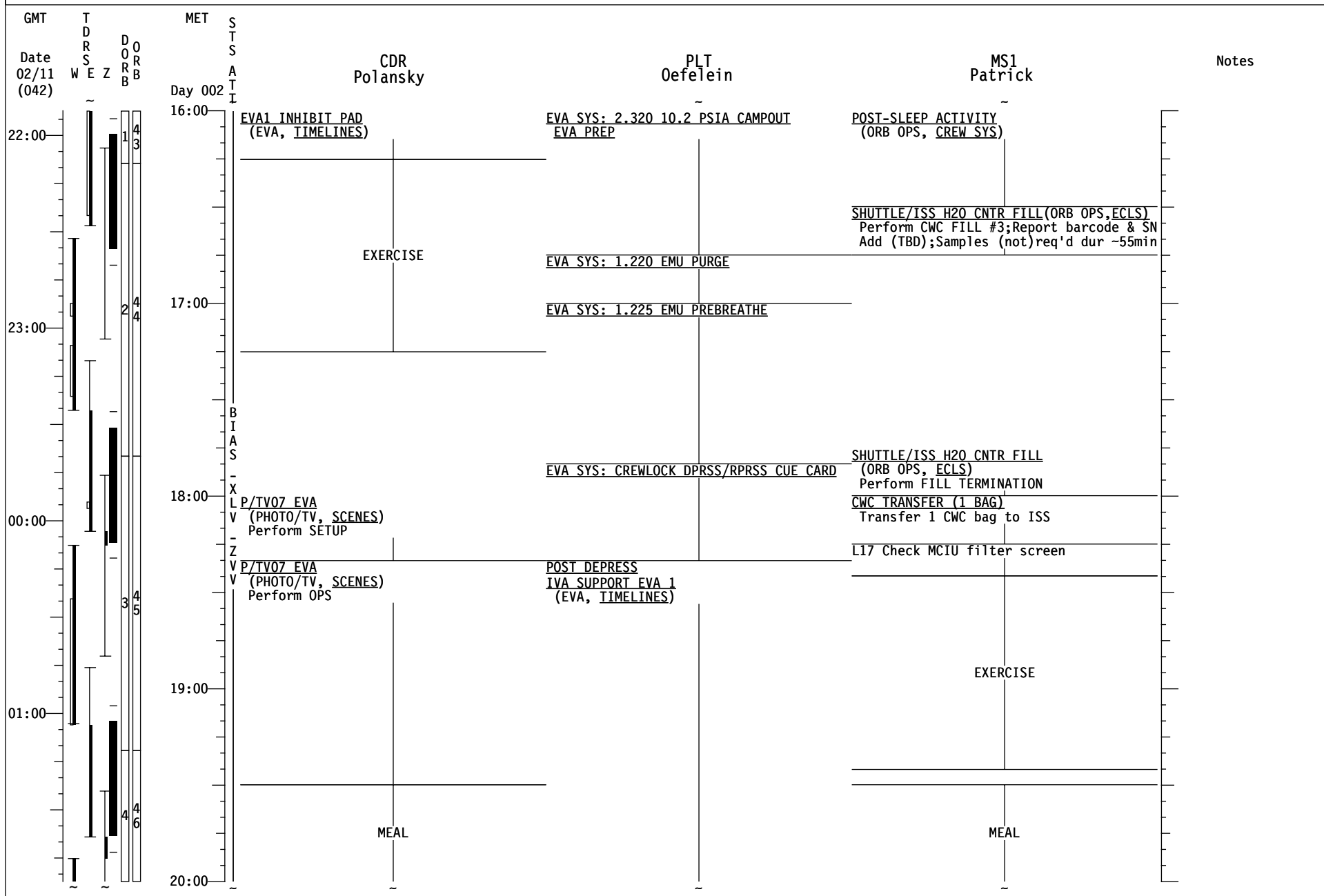
Box E1  
 -103<AZ<76  
 - 25<EL<75

UPLINK  
 80 + Boxes C1,C2,  
 C3,E1 **A**

# STS-116 FD04



# STS-116 FD04



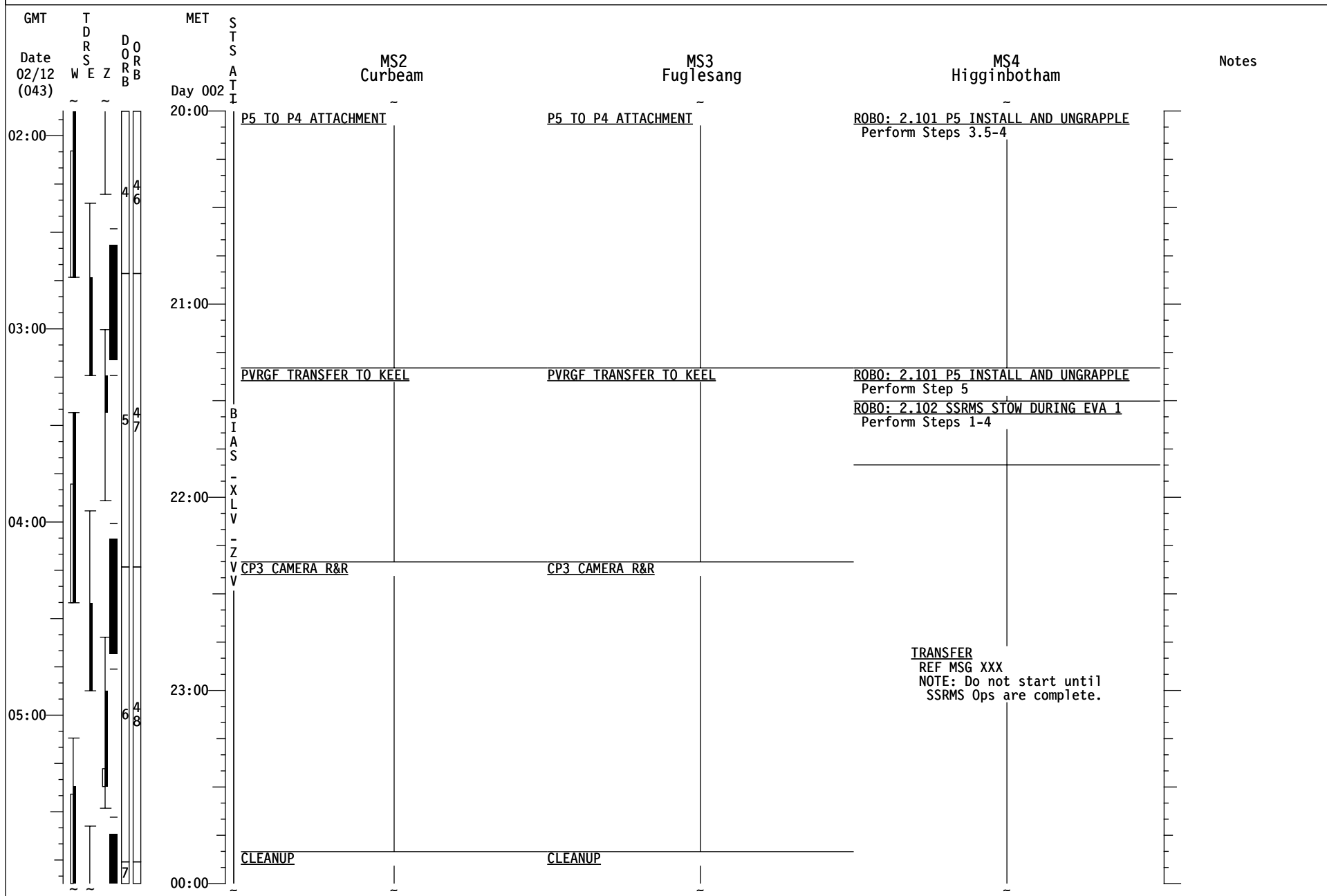
# STS-116 FD04

GMT	TDRS W E Z	DORB 1 3 2 4 3 5 4 6	MET Day 002	S T S A T I	MS2 Curbeam	MS3 Fuglesang	MS4 Higginbotham	Notes
22:00					<u>EVA SYS: 2.320 10.2 PSIA CAMPOUT</u> <u>EVA PREP</u>	<u>EVA SYS: 2.320 10.2 PSIA CAMPOUT</u> <u>EVA PREP</u>	<u>ROBO: 2.101 P5 INSTALL AND UNGRAPPLE</u> Perform Steps 1-2.2	
					<u>EVA SYS: 1.220 EMU PURGE</u>	<u>EVA SYS: 1.220 EMU PURGE</u>	DAILY TRANSFER LIST UPDATE	
23:00					<u>EVA SYS: 1.225 EMU PREBREATHE</u>	<u>EVA SYS: 1.225 EMU PREBREATHE</u>		
					<u>EVA SYS: CREWLOCK DPRSS/RPRSS CUE CARD</u>	<u>EVA SYS: CREWLOCK DPRSS/RPRSS CUE CARD</u>	EXERCISE	
00:00					<u>POST DEPRESS</u> <u>EGRESS</u>	<u>POST DEPRESS</u> <u>EGRESS</u>		
					<u>P5 LAUNCH LOCK REMOVAL</u>	<u>P5 LAUNCH LOCK REMOVAL</u>	<u>ROBO: 2.101 P5 INSTALL AND UNGRAPPLE</u> Perform Step 2.3	
01:00							<u>ROBO: 2.101 P5 INSTALL AND UNGRAPPLE</u> Perform Steps 3.1-3.4	
					<u>P5 TO P4 ATTACHMENT</u>	<u>P5 TO P4 ATTACHMENT</u>	<u>ROBO: 2.101 P5 INSTALL AND UNGRAPPLE</u> Perform Steps 3.5-4	
20:00								

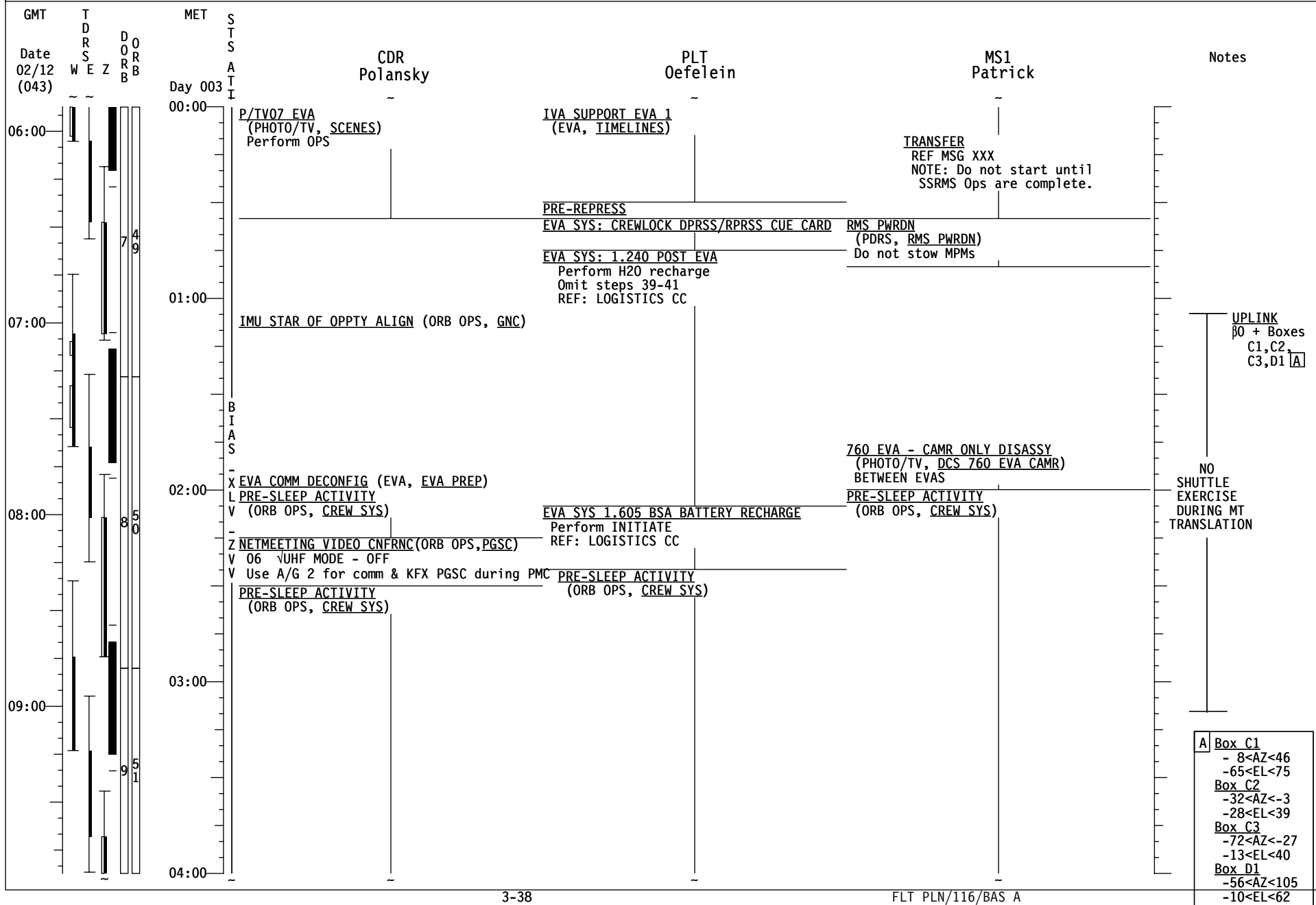




# STS-116 FD04



# STS-116 FD04

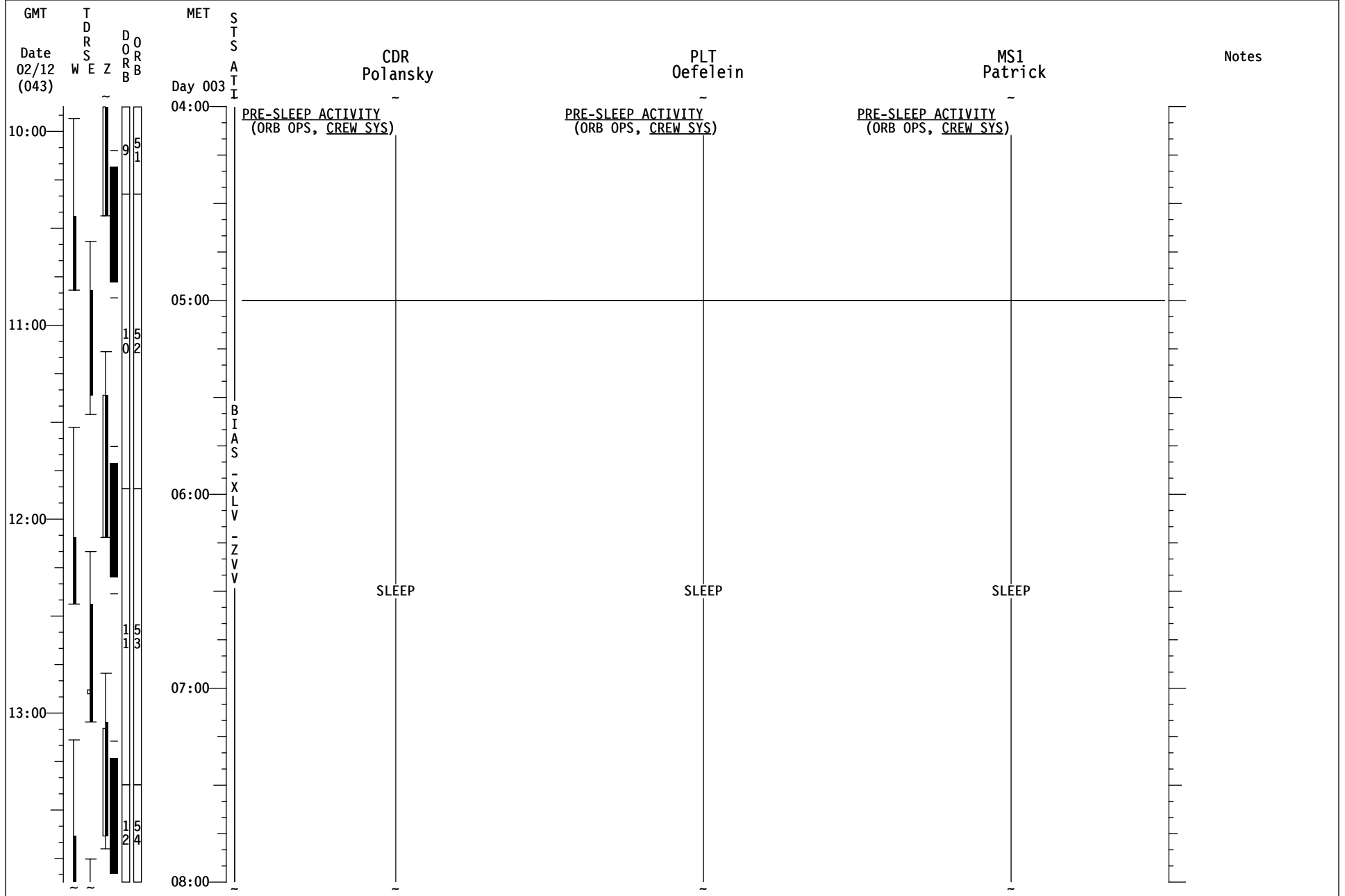


- |                        |
|------------------------|
| <b>A</b> <u>Box C1</u> |
| - 8<AZ<46              |
| - 65<EL<75             |
| <u>Box C2</u>          |
| - 32<AZ<-3             |
| - 28<EL<39             |
| <u>Box C3</u>          |
| - 72<AZ<-27            |
| - 13<EL<40             |
| <u>Box D1</u>          |
| - 56<AZ<105            |
| - 10<EL<62             |

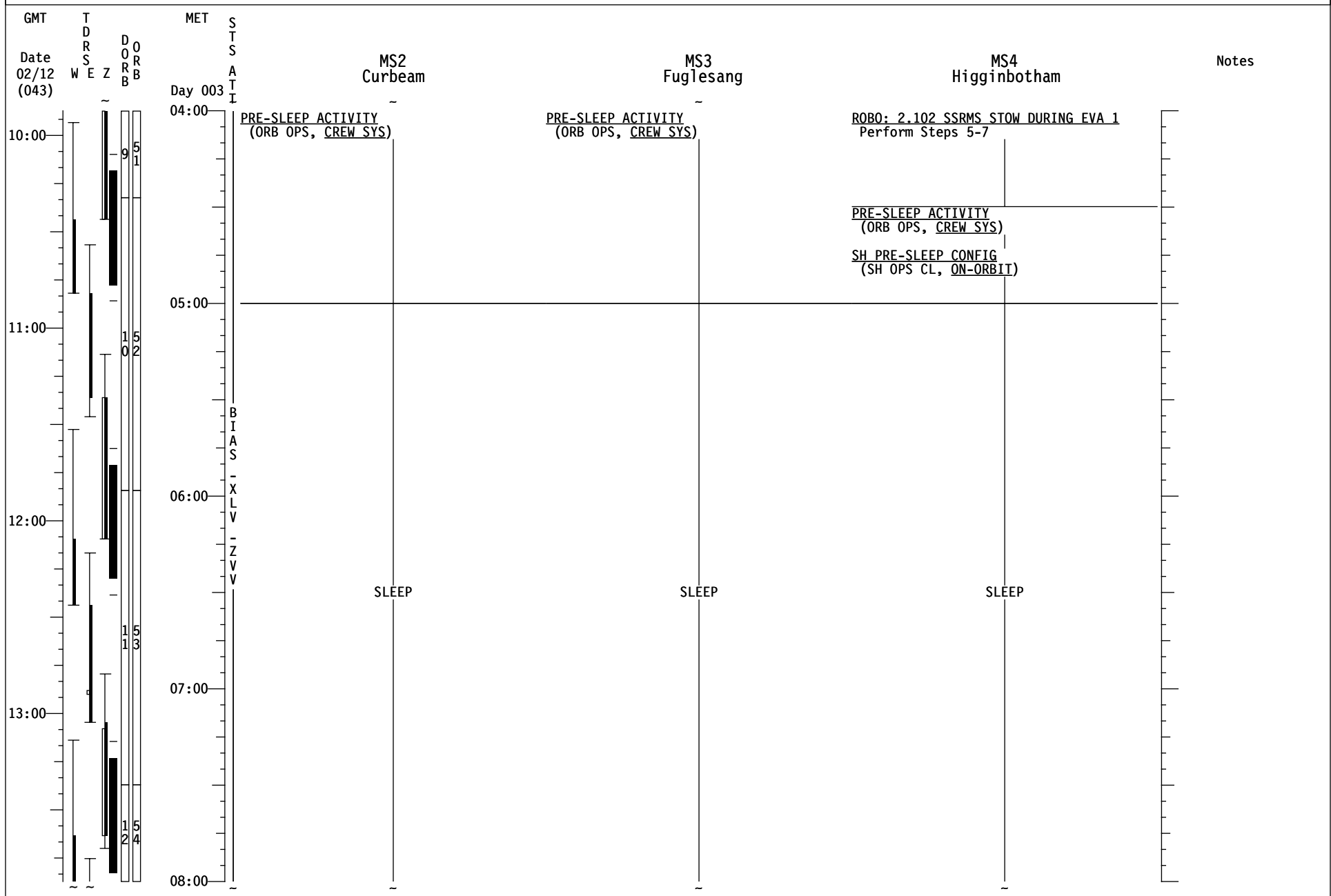
# STS-116 FD04

GMT	T D R S E Z W E Z	D O R B D O R B	MET Day 003	S T S A T I	MS2 Curbeam	MS3 Fuglesang	MS4 Higginbotham	Notes
06:00					CLEANUP	CLEANUP		
					INGRESS	INGRESS		
					PRE-REPRESS	PRE-REPRESS		
					EVA SYS: CREWLOCK DPRSS/RPRSS CUE CARD	EVA SYS: CREWLOCK DPRSS/RPRSS CUE CARD	TRANSFER REF MSG XXX NOTE: Do not start until SSRMS Ops are complete.	
					EVA SYS: 1.240 POST EVA Perform H2O recharge Omit steps 39-41 REF: LOGISTICS CC	EVA SYS: 1.240 POST EVA Perform H2O recharge Omit steps 39-41 REF: LOGISTICS CC		
07:00							DAILY STS/ISS CREW TRANSFER TAGUP	
							DAILY TRANSFER BRIEFING	
					EVA 2 TOOL CONFIG (EVA, TIMELINES)	EVA 2 TOOL CONFIG (EVA, TIMELINES)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
							SH PRE-SLEEP CONFIG (SH OPS CL, ON-ORBIT)	
08:00					PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		NO SHUTTLE EXERCISE DURING MT TRANSLATION
09:00								
04:00								

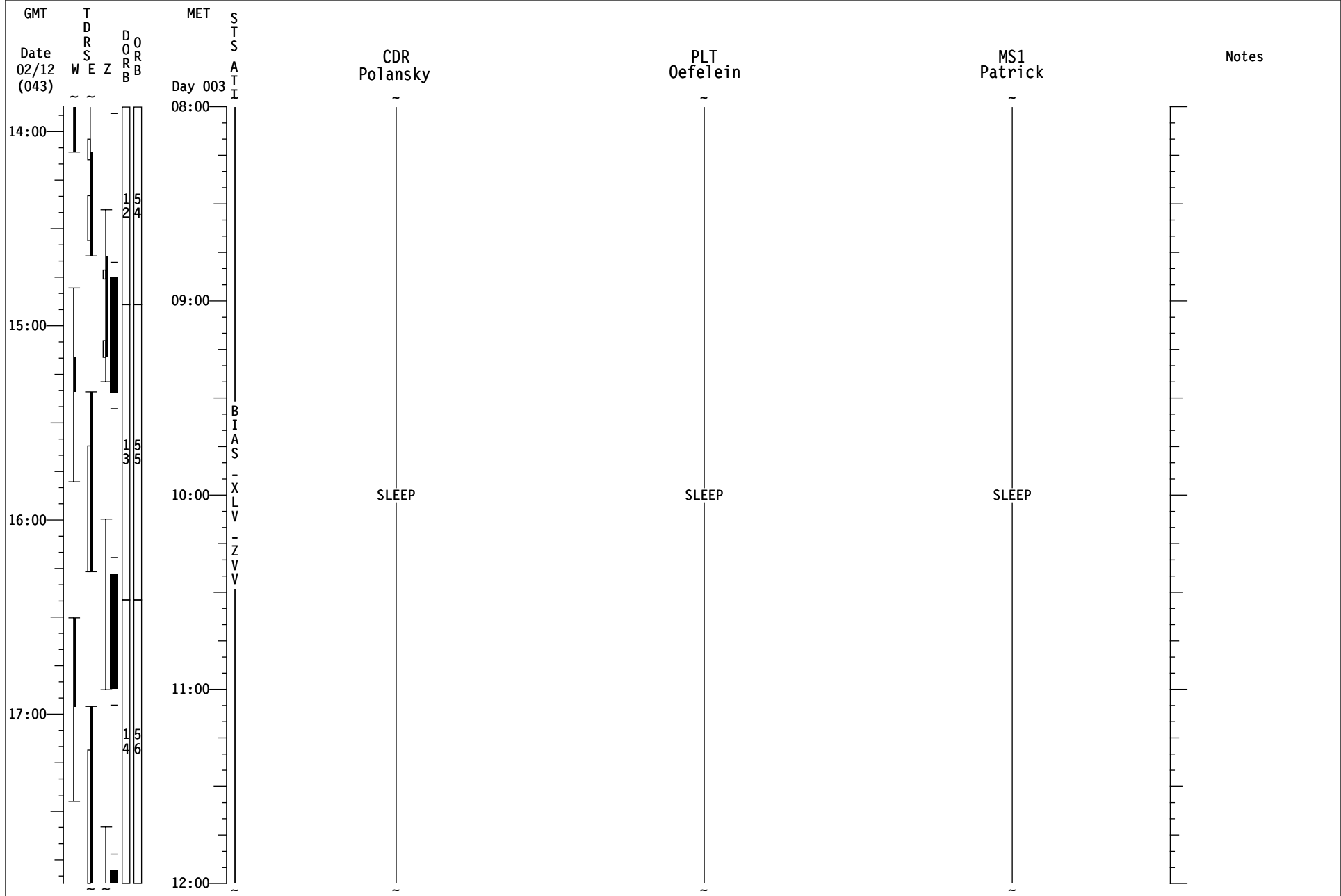
# STS-116 FD04



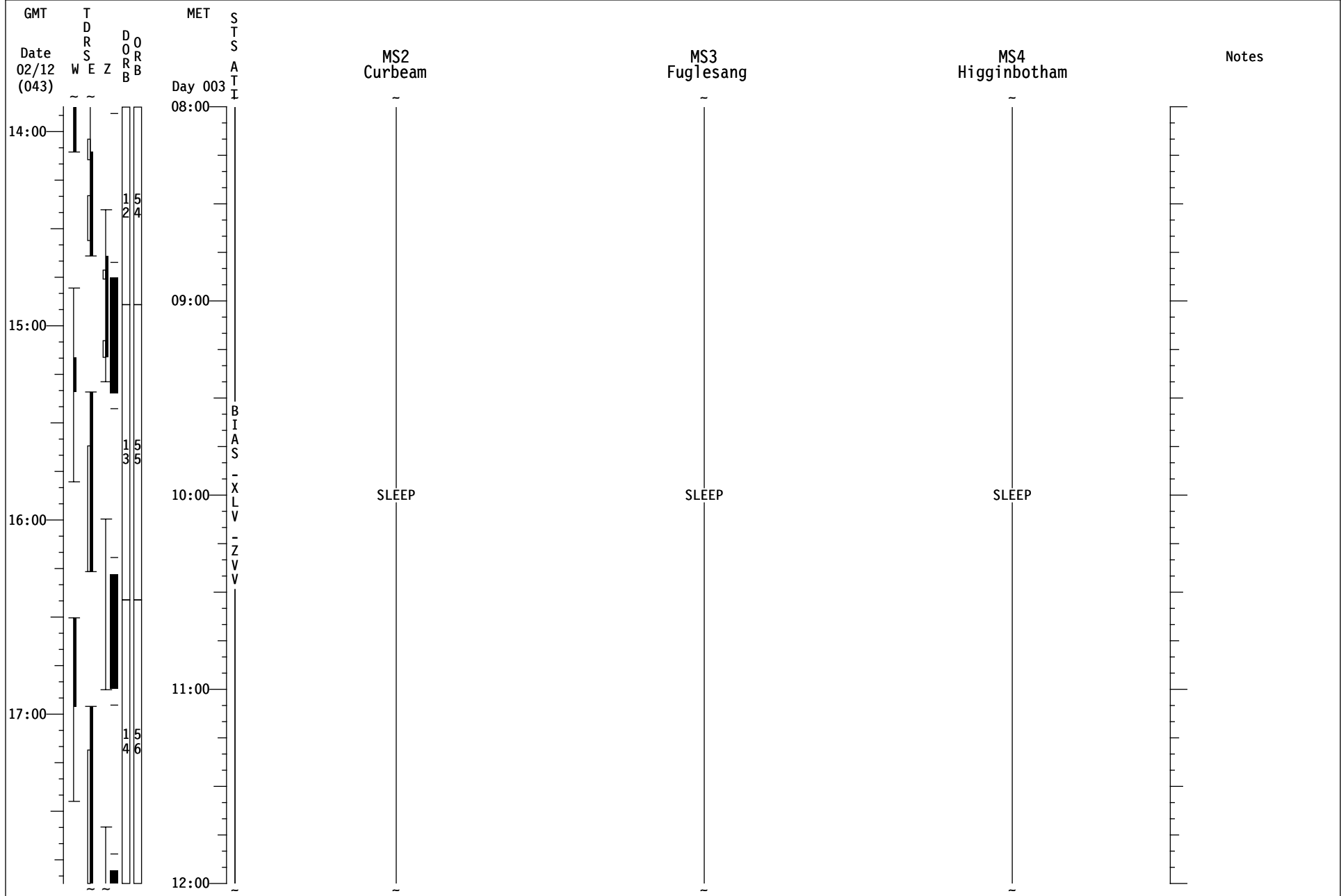
# STS-116 FD04



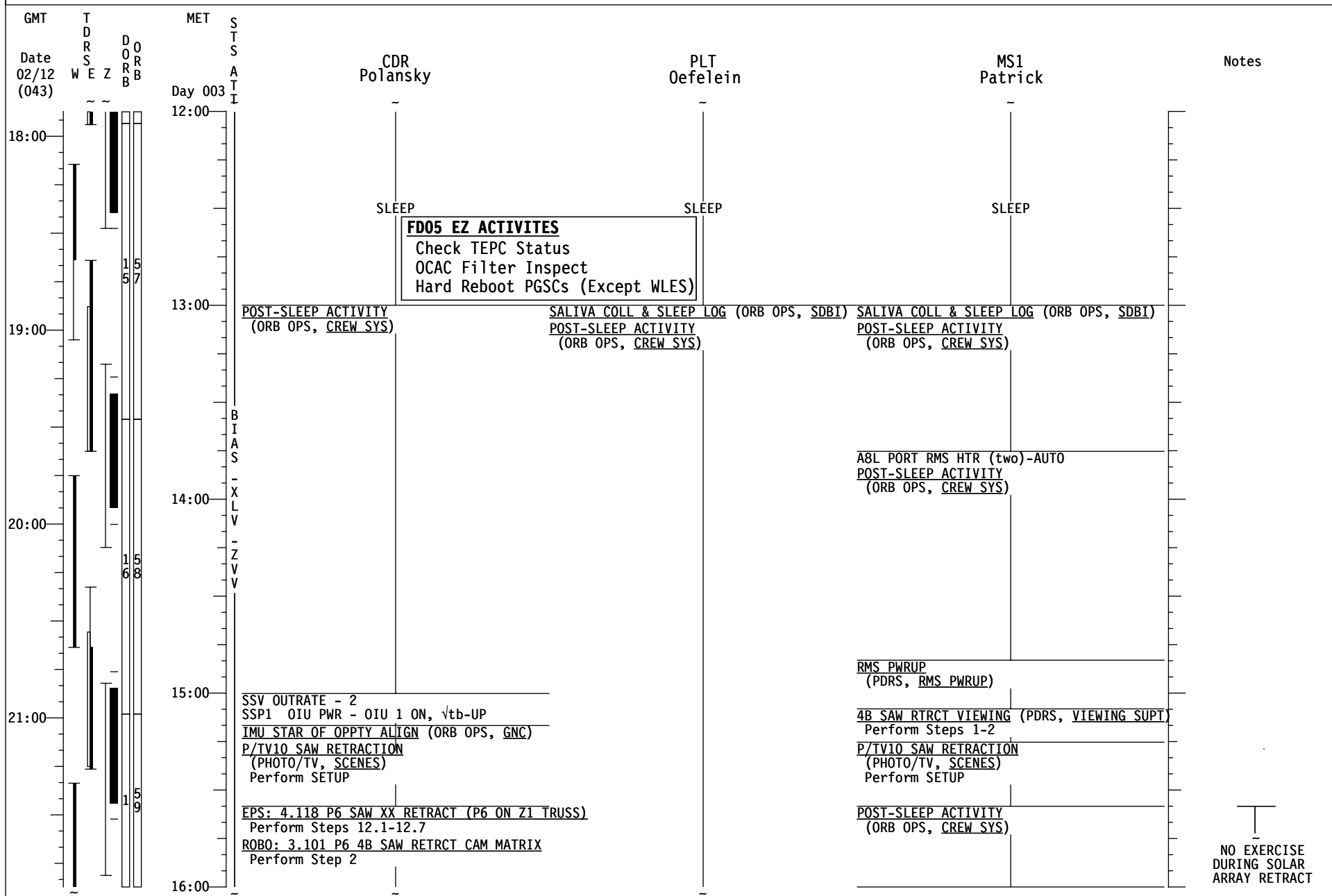
# STS-116 FD04



# STS-116 FD 04

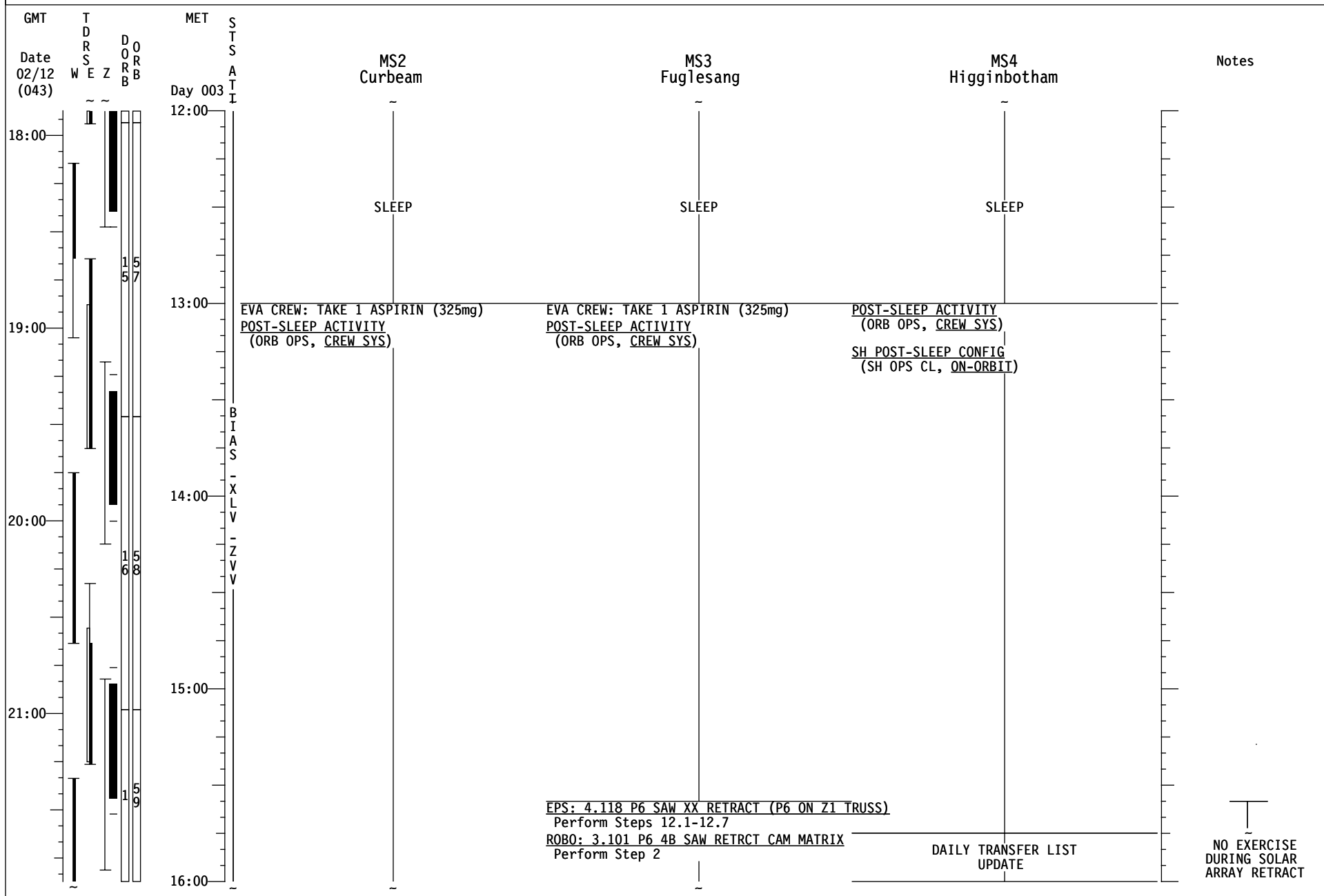


# STS-116 FD05





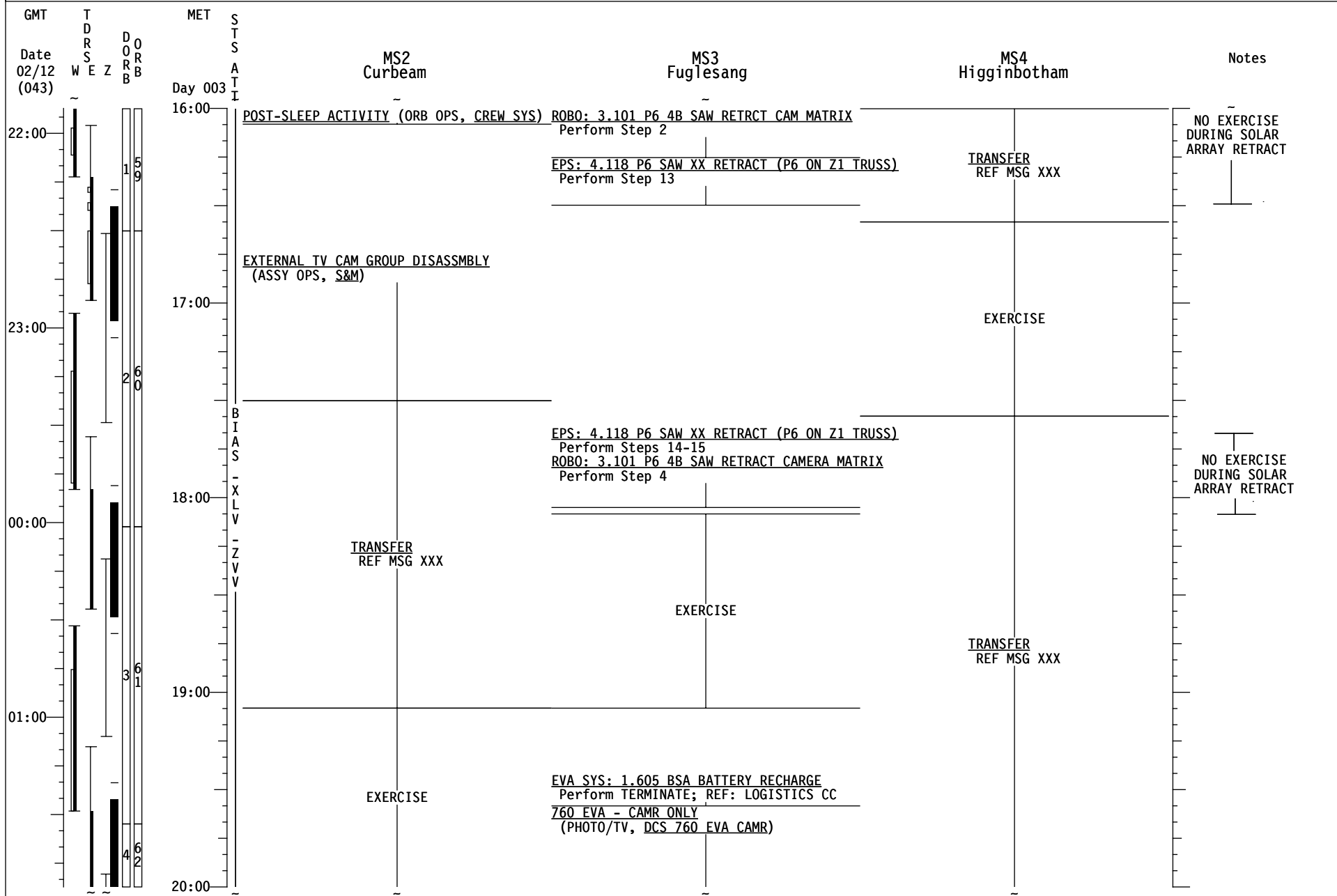
# STS-116 FD05



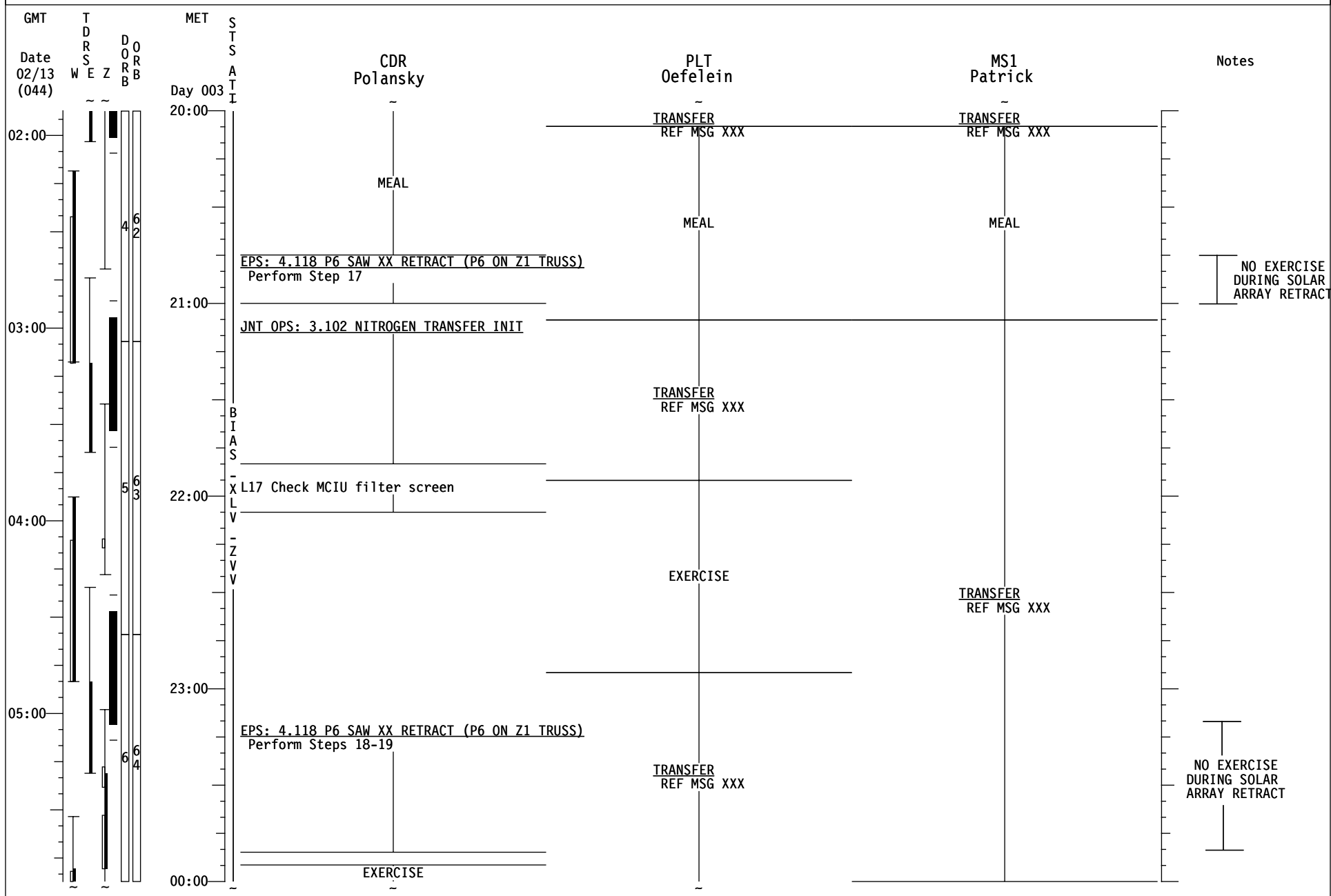
# STS-116 FD05

GMT	T D R S W E Z	D O R B 1 5 9	MET	S T S A T I	CDR Polansky	PLT Oefelein	MS1 Patrick	Notes
02/12 (043)			Day 003					
22:00			16:00		ROBO: 3.101 P6 4B SAW RETRACT CAM MATRIX Perform Step 2	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS) EVA SYS: 1.515 METOX/LIOH/BTTRY REPLCMNT Perform Steps 1-10, 15-17 REF: LOGISTICS CC	P/TV: 2.631 760 BATTERY CHARGING FROM HRE PWR STRIP PLUG-IN DIAGRAM EVA Camera	NO EXERCISE DURING SOLAR ARRAY RETRACT
					EPS: 4.118 P6 SAW XX RETRACT (P6 ON Z1 TRUSS) Perform Step 13	EMU BATTERY RECHARGE (EVA, EMU MAINT/RECHRG) Perform INITIATE REF: LOGISTICS CC		
						EXTERNAL TV CAM GROUP DISASSEMBLY (ASSY OPS, S&M)		
23:00			17:00		SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform CWC FILL #4; Report barcode & SN Add (TBD); Samples (not) req'd dur ~55min			
							TRANSFER REF MSG XXX	
					EPS: 4.118 P6 SAW XX RETRACT (P6 ON Z1 TRUSS) Perform Steps 14-15			NO EXERCISE DURING SOLAR ARRAY RETRACT
					ROBO: 3.101 P6 4B SAW RETRACT CAMERA MATRIX Perform Step 4			
00:00			18:00					
					SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION			
					CWC TRANSFER (1 BAG) Transfer 1 CWC bag to ISS	TRANSFER REF MSG XXX		
01:00			19:00				EXERCISE	
					MEAL			
							TRANSFER REF MSG XXX	
20:00			20:00					

# STS-116 FD05



# STS-116 FD05



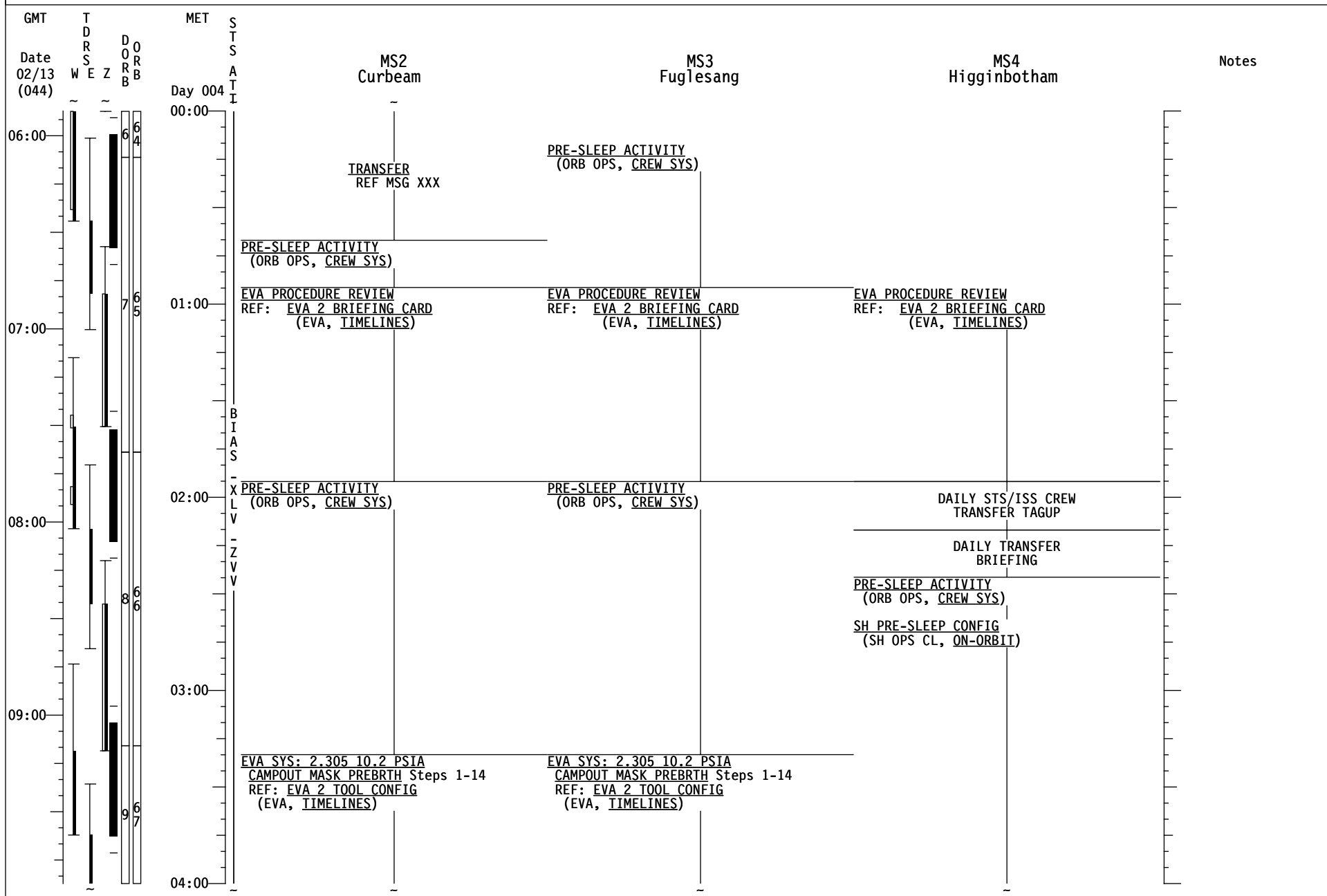
# STS-116 FD05

GMT	T D R S E Z	D O R B	MET	S T S	MS2 Curbeam	MS3 Fuglesang	MS4 Higginbotham	Notes
Date 02/13 (044)	W	E	Day 003	A T I				
02:00			20:00		EXERCISE	760 EVA - CAMR ONLY (PHOTO/TV, DCS 760 EVA CAMR)	TRANSFER ~ REF MSG XXX	
					MEAL	MEAL	MEAL	
03:00			21:00					NO EXERCISE DURING SOLAR ARRAY RETRACT
					STBD OD TOOL PACK (BAG #1) (EVA, TOOLS & STOWAGE)	STBD OD TOOL PACK (BAG #1) (EVA, TOOLS & STOWAGE)		
04:00			22:00		X PORT OD TOOL PACK (BAG #2) L (EVA, TOOLS & STOWAGE)	PORT OD TOOL PACK (BAG #2) (EVA, TOOLS & STOWAGE)		
05:00			23:00		EVA SYS: 1.305 EQPMNT LOCK PREP REF: LOGISTICS CC	EVA SYS: 1.305 EQPMNT LOCK PREP REF: LOGISTICS CC	TRANSFER REF MSG XXX	
								NO EXERCISE DURING SOLAR ARRAY RETRACT
00:00			00:00		TRANSFER REF MSG XXX			

# STS-116 FD05

GMT	TDRS WSEZ	DORB 64	MET Day 004	STS A T I	CDR Polansky	PLT Oefelein	MS1 Patrick	Notes
06:00		64			EXERCISE	TRANSFER REF MSG XXX	TRANSFER REF MSG XXX	<u>4B SAW RTRCT VIEWING (PDRS, VIEWING SUPT)</u> Perform Step 3 <u>RMS PWRDN</u> (PDRS, RMS PWRDN) Do not stow MPMs <u>OIU DEACTIVATION</u> (ORB OPS, OIU)
07:00		65			<u>EVA PROCEDURE REVIEW</u> REF: <u>EVA 2 BRIEFING CARD</u> (EVA, <u>TIMELINES</u> )	<u>EVA PROCEDURE REVIEW</u> REF: <u>EVA 2 BRIEFING CARD</u> (EVA, <u>TIMELINES</u> )	<u>EVA PROCEDURE REVIEW</u> REF: <u>EVA 2 BRIEFING CARD</u> (EVA, <u>TIMELINES</u> )	
08:00		66			<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, <u>CREW SYS</u> )	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, <u>CREW SYS</u> )	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, <u>CREW SYS</u> )	
09:00		67			<u>NETMEETING VIDEO CNFRNC (ORB OPS, PGSC)</u> 06 VUHF MODE - OFF Use A/G 2 for comm & KFX PGSC during PMC <u>PRE-SLEEP ACTIVITY</u> (ORB OPS, <u>CREW SYS</u> )	<u>EVA SYS: 2.305 10.2 PSIA</u> <u>CAMPOUT MASK PREBRTH</u> Steps 1-14 REF: <u>EVA 2 TOOL CONFIG</u> (EVA, <u>TIMELINES</u> )		
04:00								

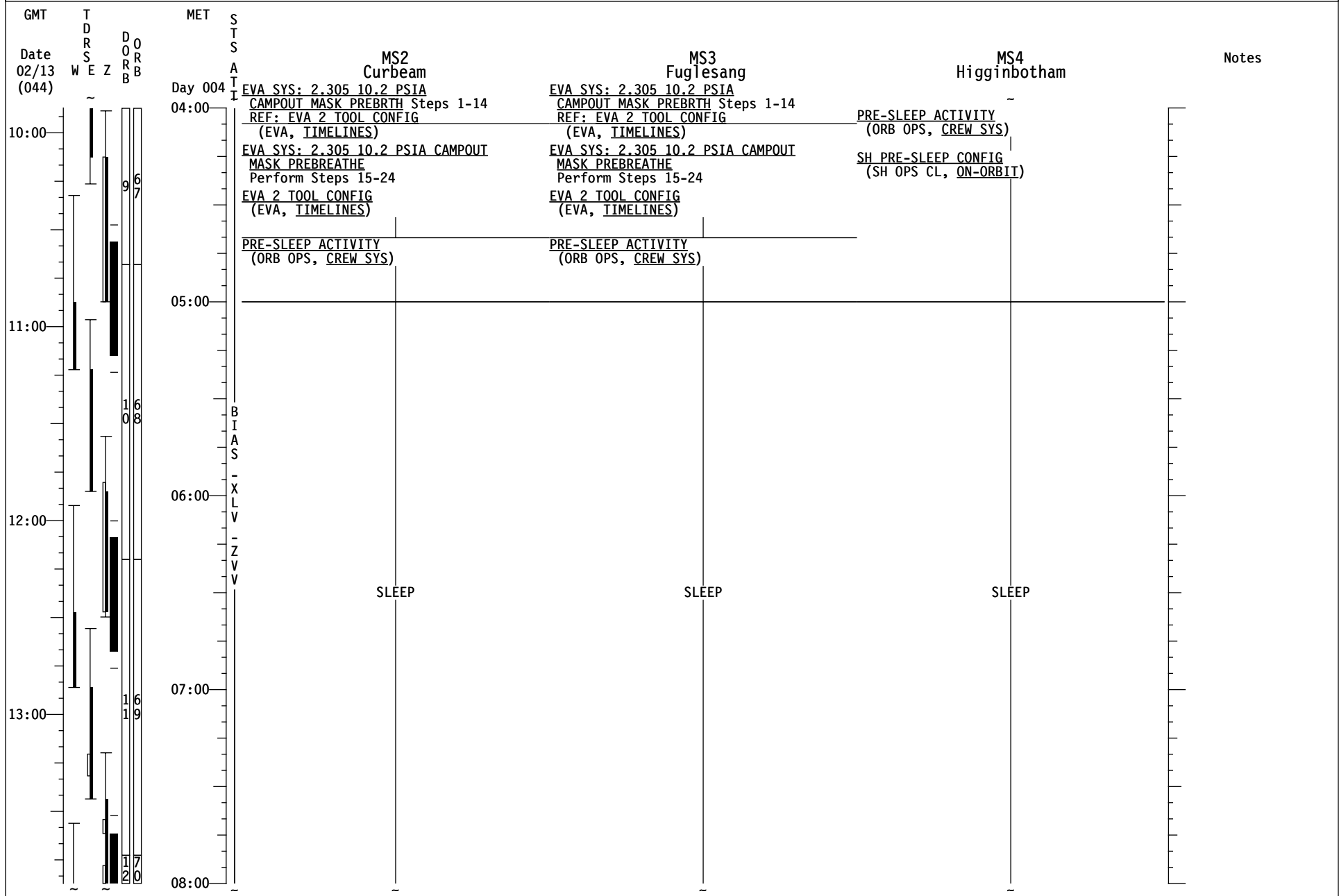
# STS-116 FD05





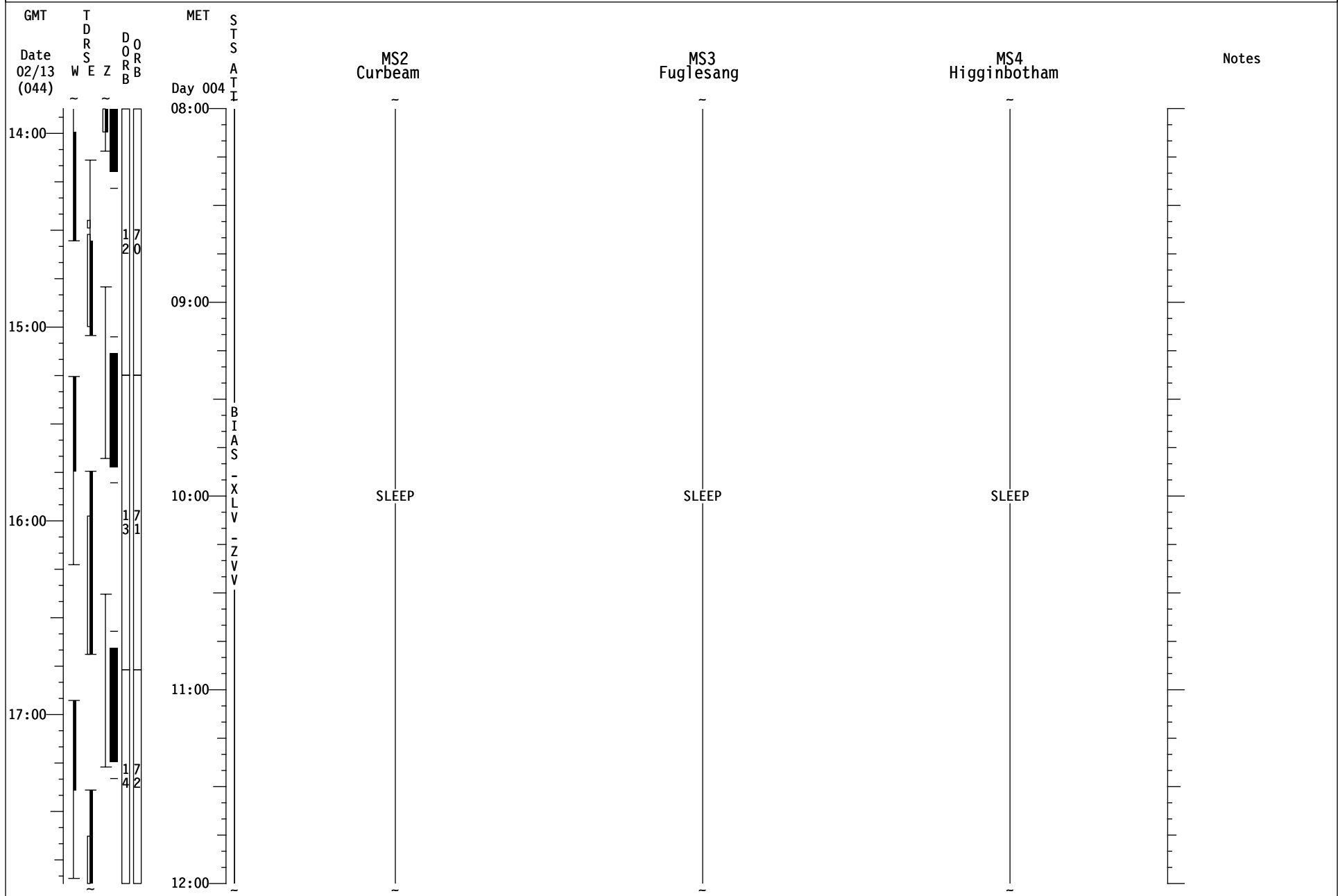


# STS-116 FD05

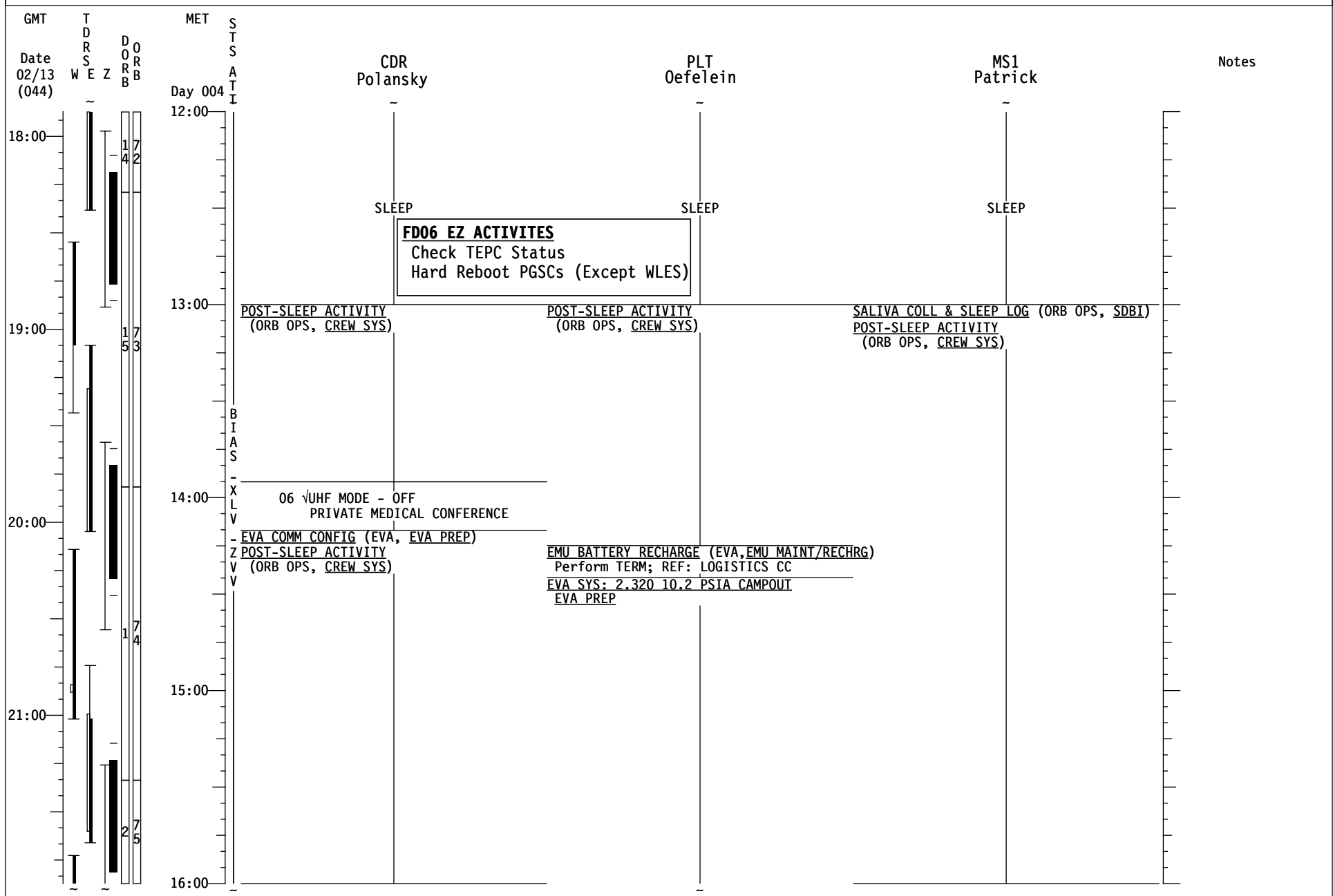




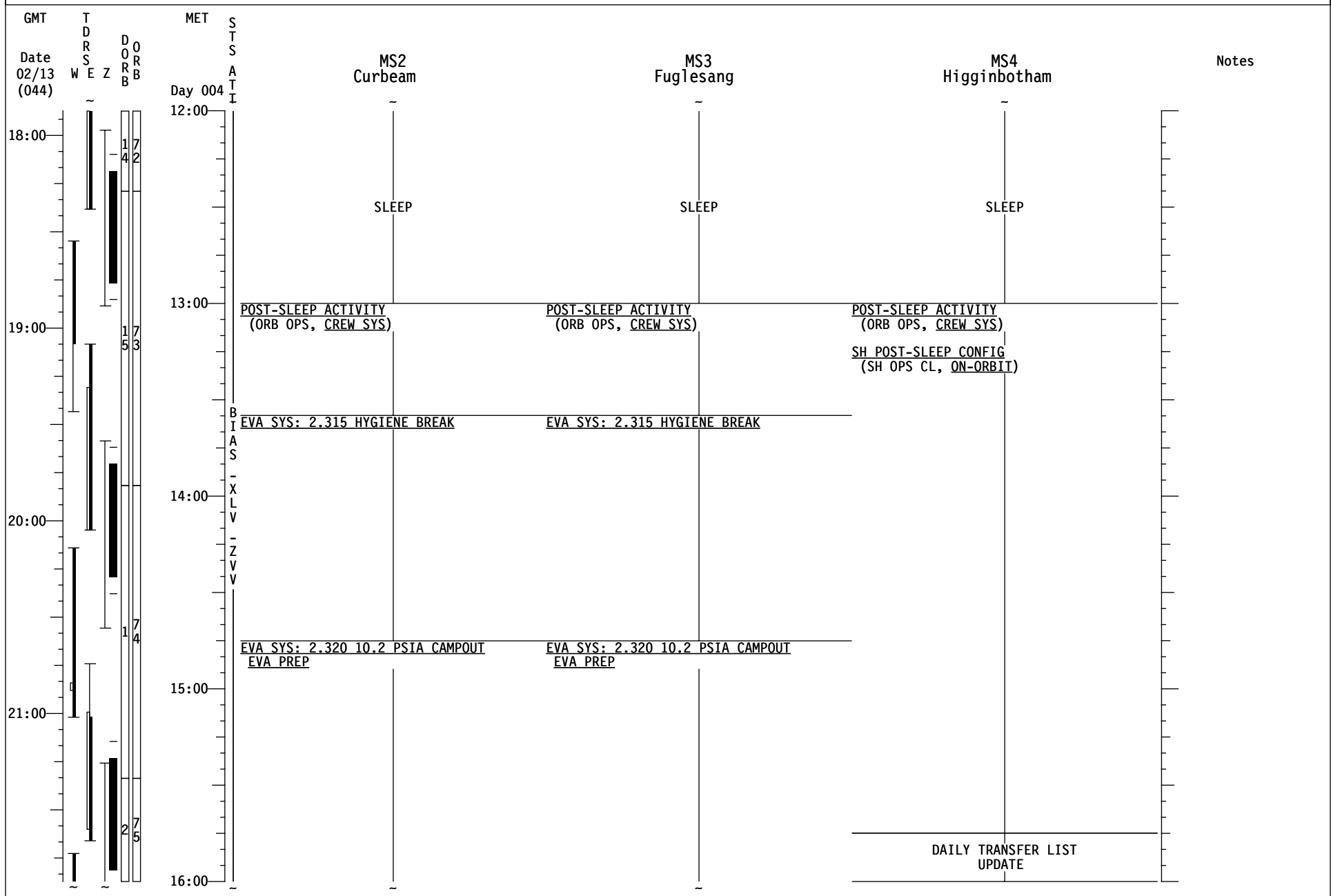
# STS-116 FD05



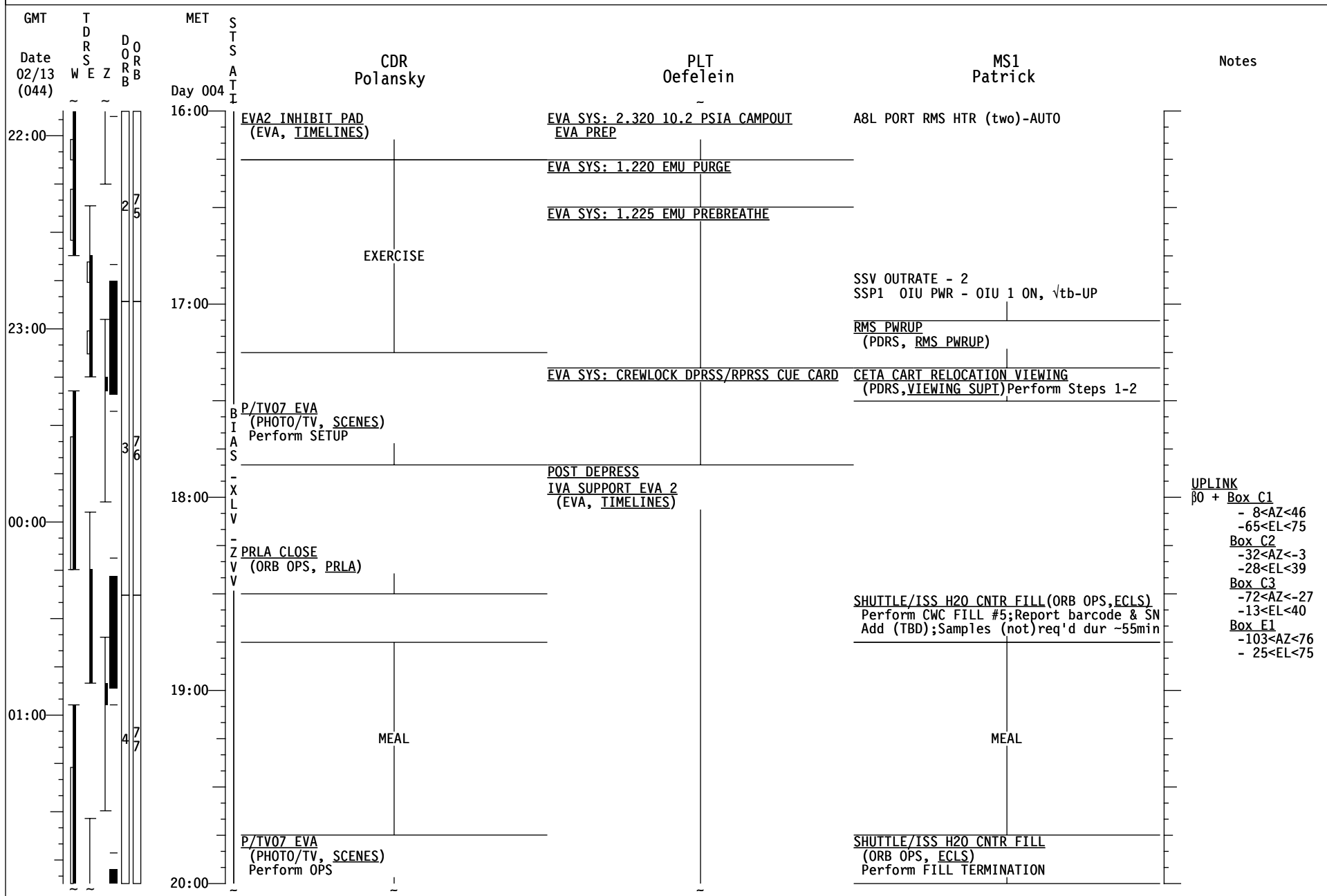
# STS-116 FD06



# STS-116 FD06



# STS-116 FD06



# STS-116 FD06

GMT	TDRS W E Z	DORB D O R B	MET Day 004	S T S A T I	MS2 Curbeam	MS3 Fuglesang	MS4 Higginbotham	Notes
22:00					EVA SYS: 2.320 10.2 PSIA CAMPOUT EVA PREP	EVA SYS: 2.320 10.2 PSIA CAMPOUT EVA PREP	FILTER CLEANING (IFM, SCHEDULED MAINTENANCE)	
					EVA SYS: 1.220 EMU PURGE	EVA SYS: 1.220 EMU PURGE		
					EVA SYS: 1.225 EMU PREBREATHE	EVA SYS: 1.225 EMU PREBREATHE		
23:00							EXERCISE	
					EVA SYS: CREWLOCK DPRSS/RPRSS CUE CARD	EVA SYS: CREWLOCK DPRSS/RPRSS CUE CARD		
00:00					POST DEPRESS EGRESS	POST DEPRESS EGRESS	MEAL	
					CHANNEL 2/3 POWER RECONFIGURATION	CHANNEL 2/3 POWER RECONFIGURATION		
							ROBO: 4.101 STBD CETA CART 2 RELOCATION Perform Steps 1-3	
01:00								
					CETA CART 2 RELOCATION	CETA CART 2 RELOCATION	ROBO: 4.101 STBD CETA CART 2 RELOCATION	
20:00								

# STS-116 FD06

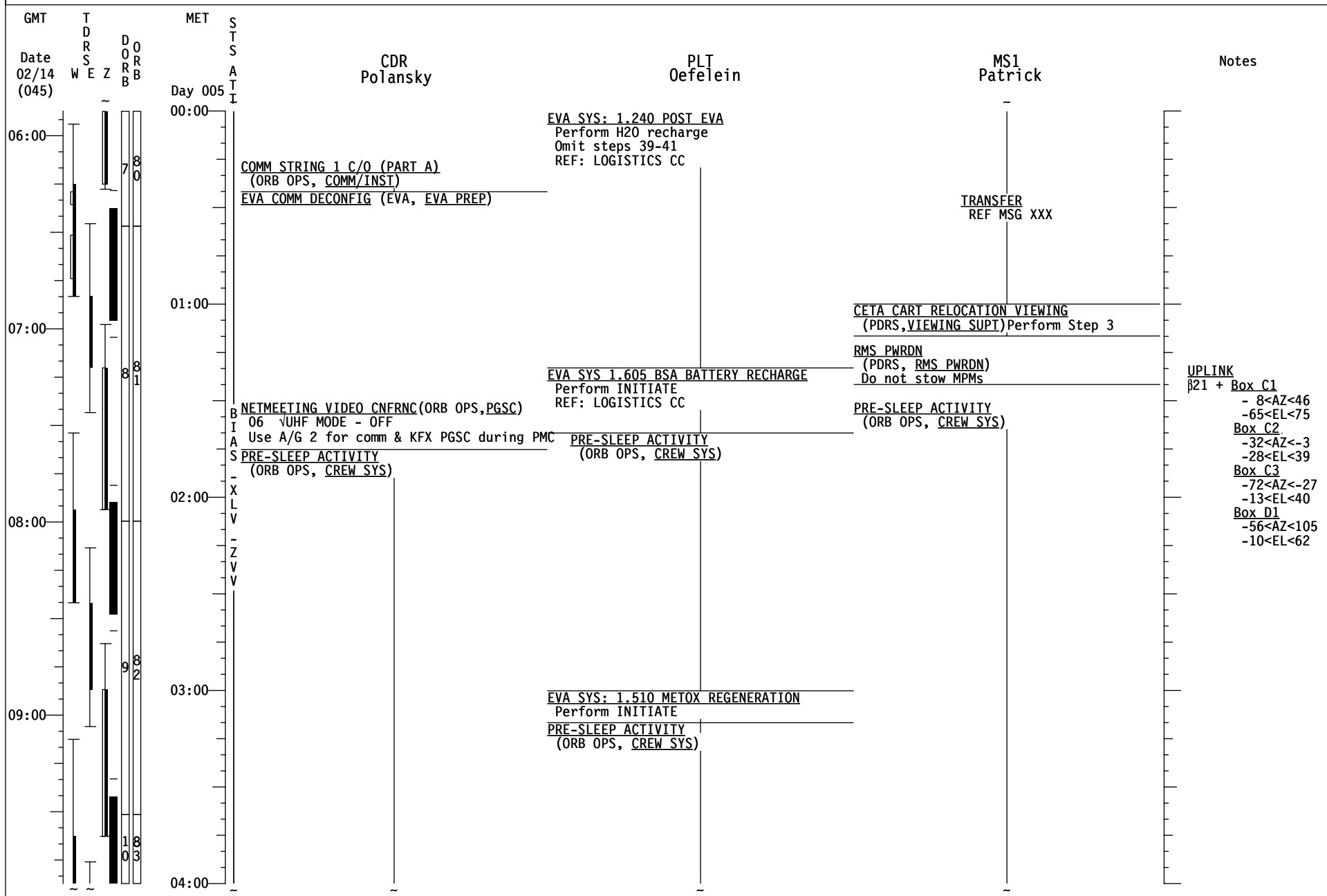
GMT	T D R S W E Z	D O R B	MET	S T S A T I	CDR Polansky	PLT Oefelein	MS1 Patrick	Notes
Date 02/14 (045)	~	~	Day 004	20:00				
02:00					<u>P/TV07 EVA</u> (PHOTO/TV, SCENES) Perform OPS	<u>IVA SUPPORT EVA 2</u> (EVA, TIMELINES)	<u>SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS)</u> Perform CWC FILL #6; Report barcode & SN Add (TBD); Samples (not) req'd dur ~55min	
03:00							<u>SHUTTLE/ISS H2O CNTR FILL</u> (ORB OPS, ECLS) Perform FILL TERMINATION	
04:00							<u>CWC TRANSFER (2 BAGS)</u> Transfer 2 CWC bags to ISS	
05:00							EXERCISE	
00:00					<u>WCS CRADLE - AUTO INHIBIT</u> Inspect hose block filter, change if req'd <u>WCS CRADLE - AUTO</u>	<u>PRE-REPRESS</u>	<u>TRANSFER</u> REF MSG XXX	
					<u>CABIN TEMP CONTROLLER RECNG 2(1)</u> (ORB OPS, ECLS)	<u>EVA SYS: CREWLOCK DPRSS/RPRSS CUE CARD</u>		



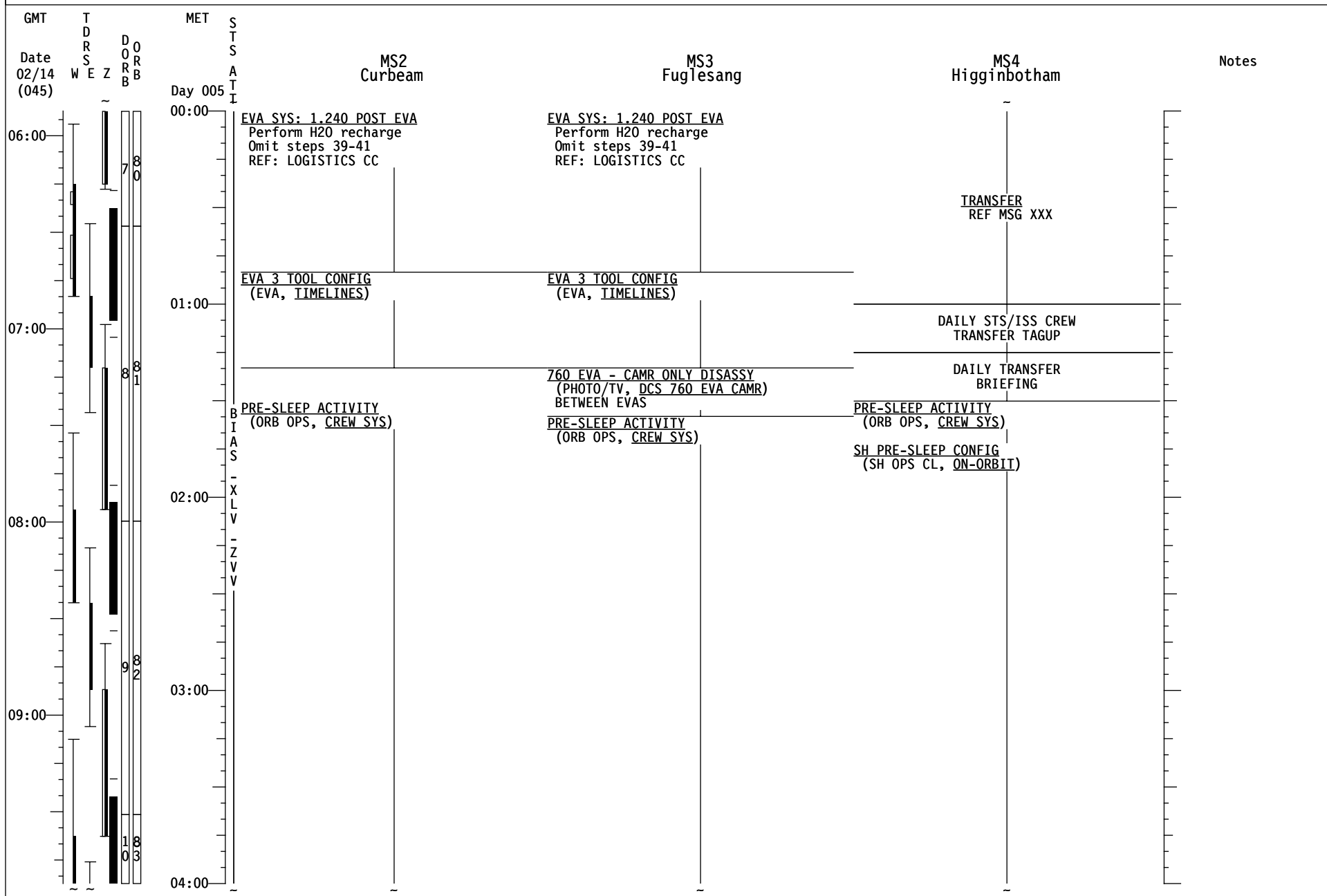
# STS-116 FD06

GMT	T D R S E Z	D O R B	MET	S T S A T I	MS2 Curbeam	MS3 Fuglesang	MS4 Higginbotham	Notes
Date 02/14 (045)	W	578	Day 004					
02:00					CETA CART 2 RELOCATION	CETA CART 2 RELOCATION	ROBO: 4.101 STBD CETA CART 2 RELOCATION	
03:00					CETA CART 1 RELOCATION	CETA CART 1 RELOCATION	ROBO: 4.102 STBD CETA CART 1 RELOCATION	
04:00								
05:00					SSRMS FMS MLI INSTALL	SSRMS FMS MLI INSTALL		
					Z1-006 PATCH PANEL 2 RECONFIGURATION	STARBOARD & PORT OD BAG INSTALLATION		
					CLEANUP	CLEANUP		
					INGRESS	INGRESS		
					PRE-REPRESS	PRE-REPRESS		
					EVA SYS: CREWLOCK DPRSS/RPRSS CUE CARD	EVA SYS: CREWLOCK DPRSS/RPRSS CUE CARD		
00:00							TRANSFER REF MSG XXX	

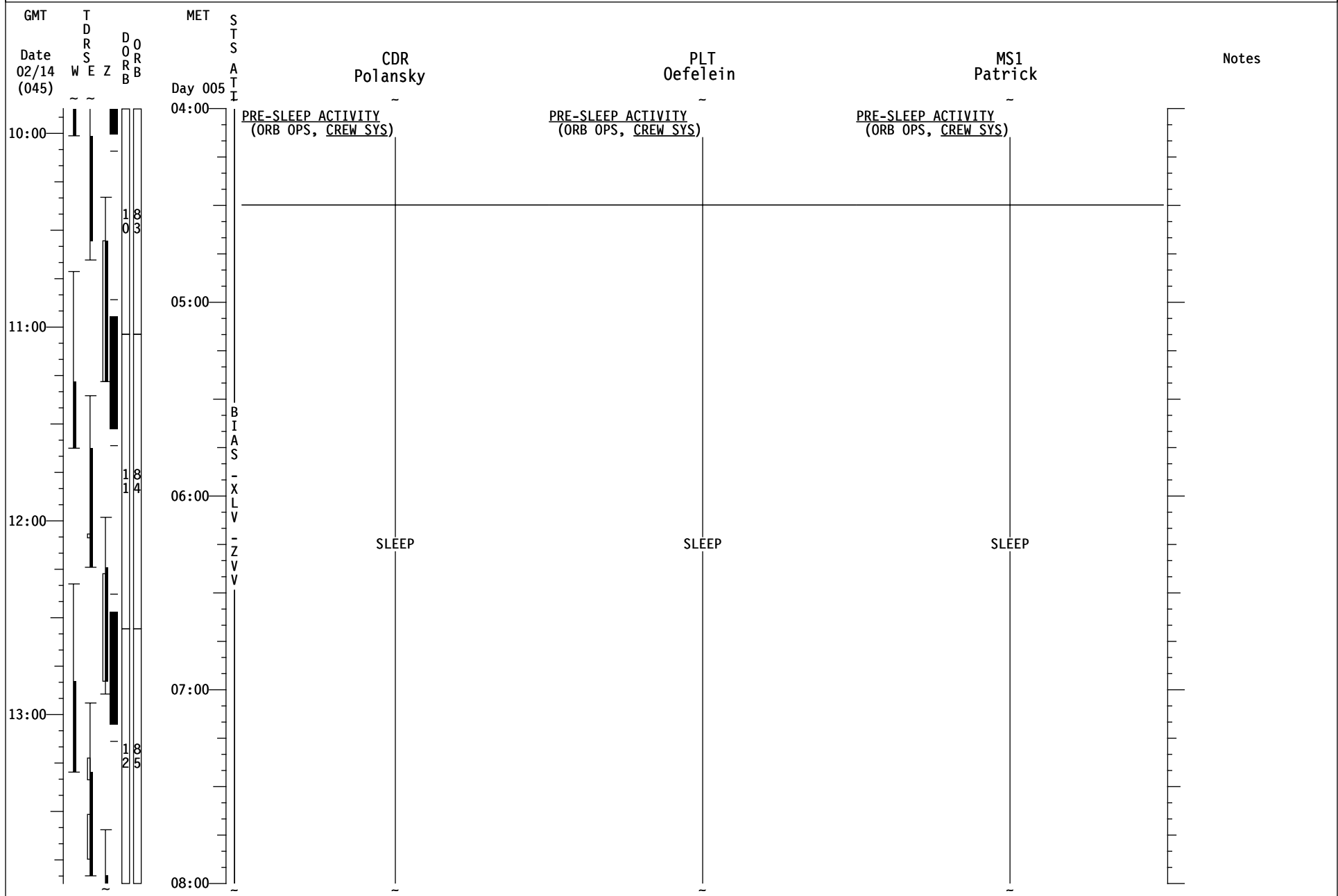
# STS-116 FD06



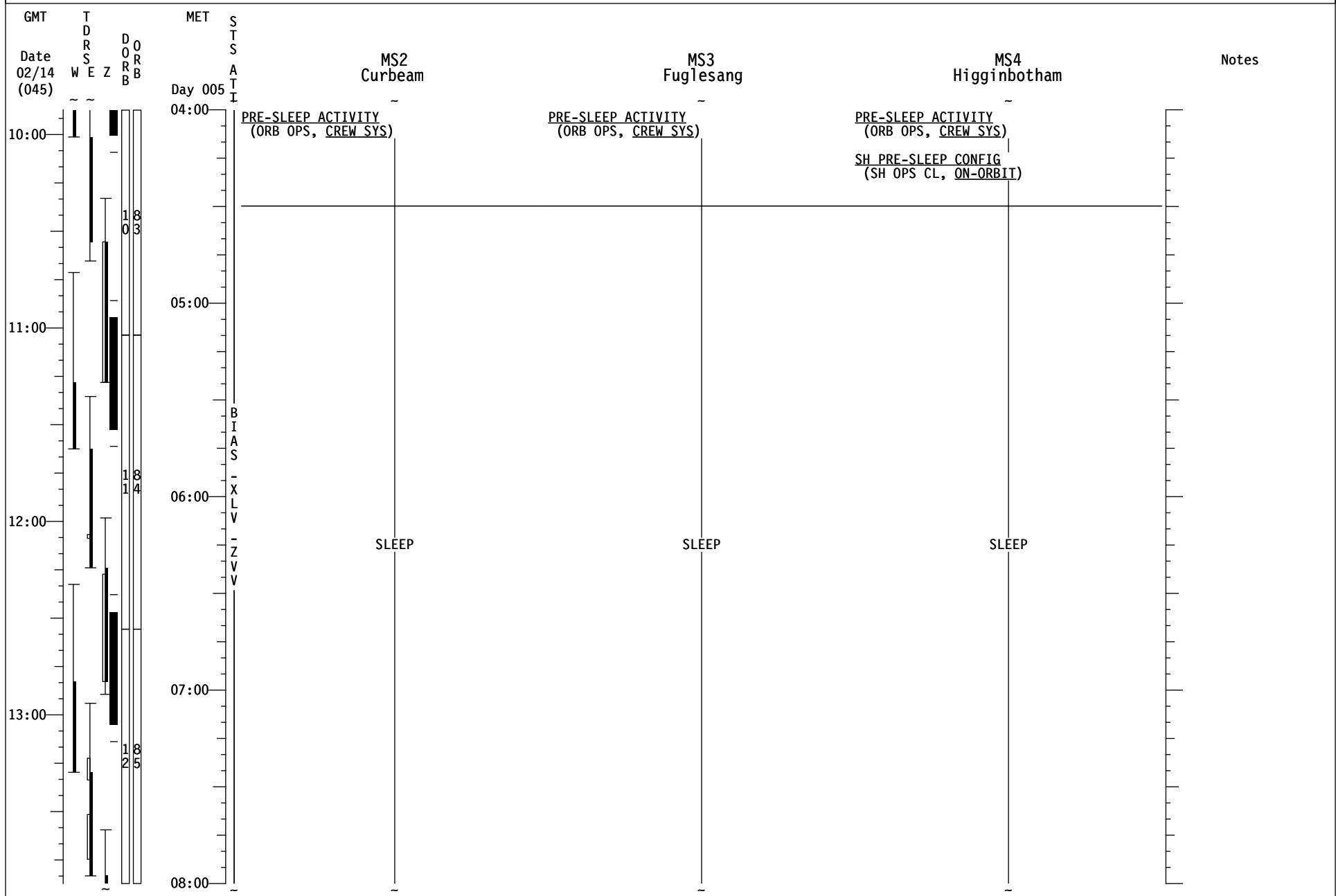
# STS-116 FD06



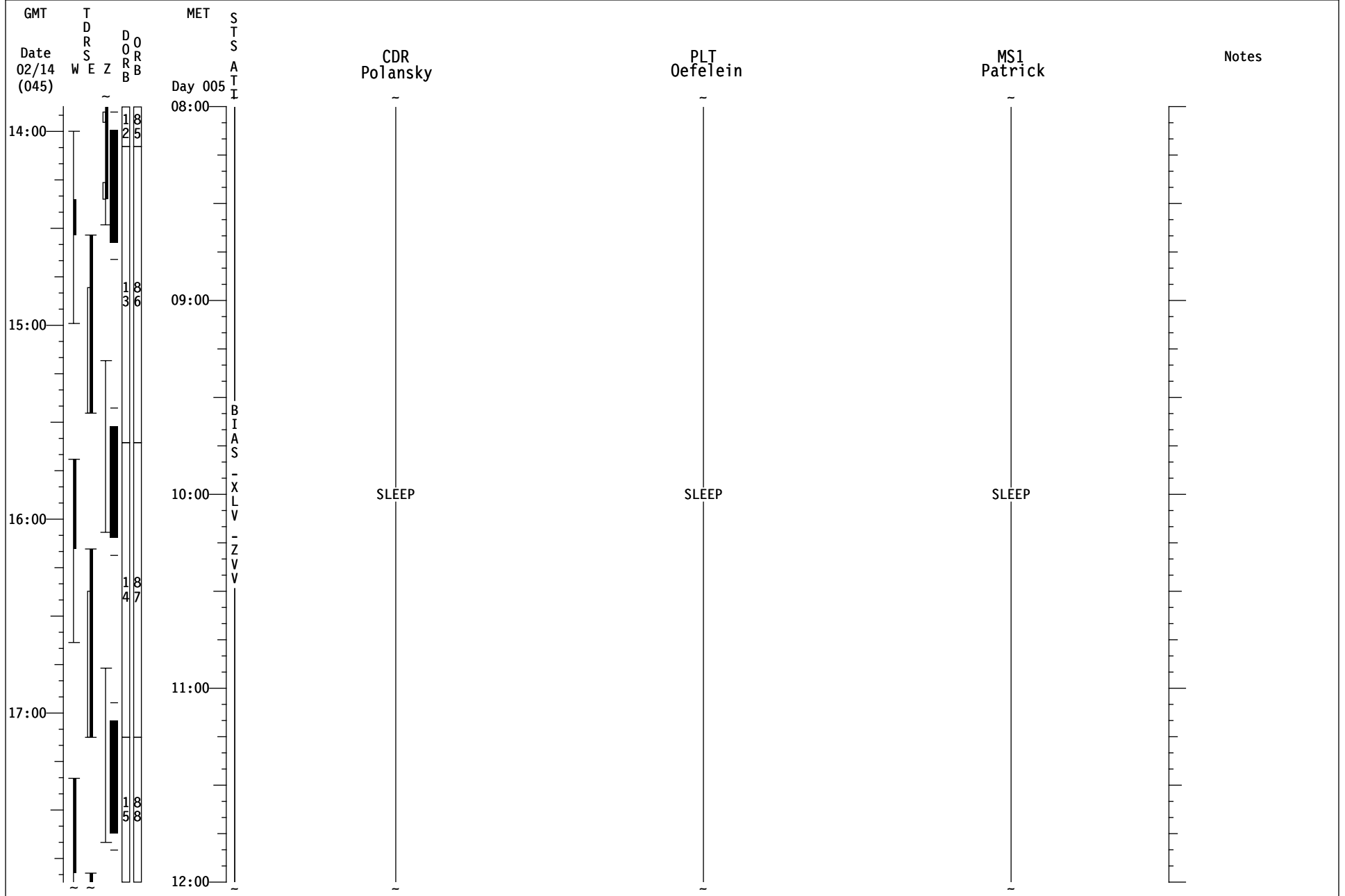
# STS-116 FD06



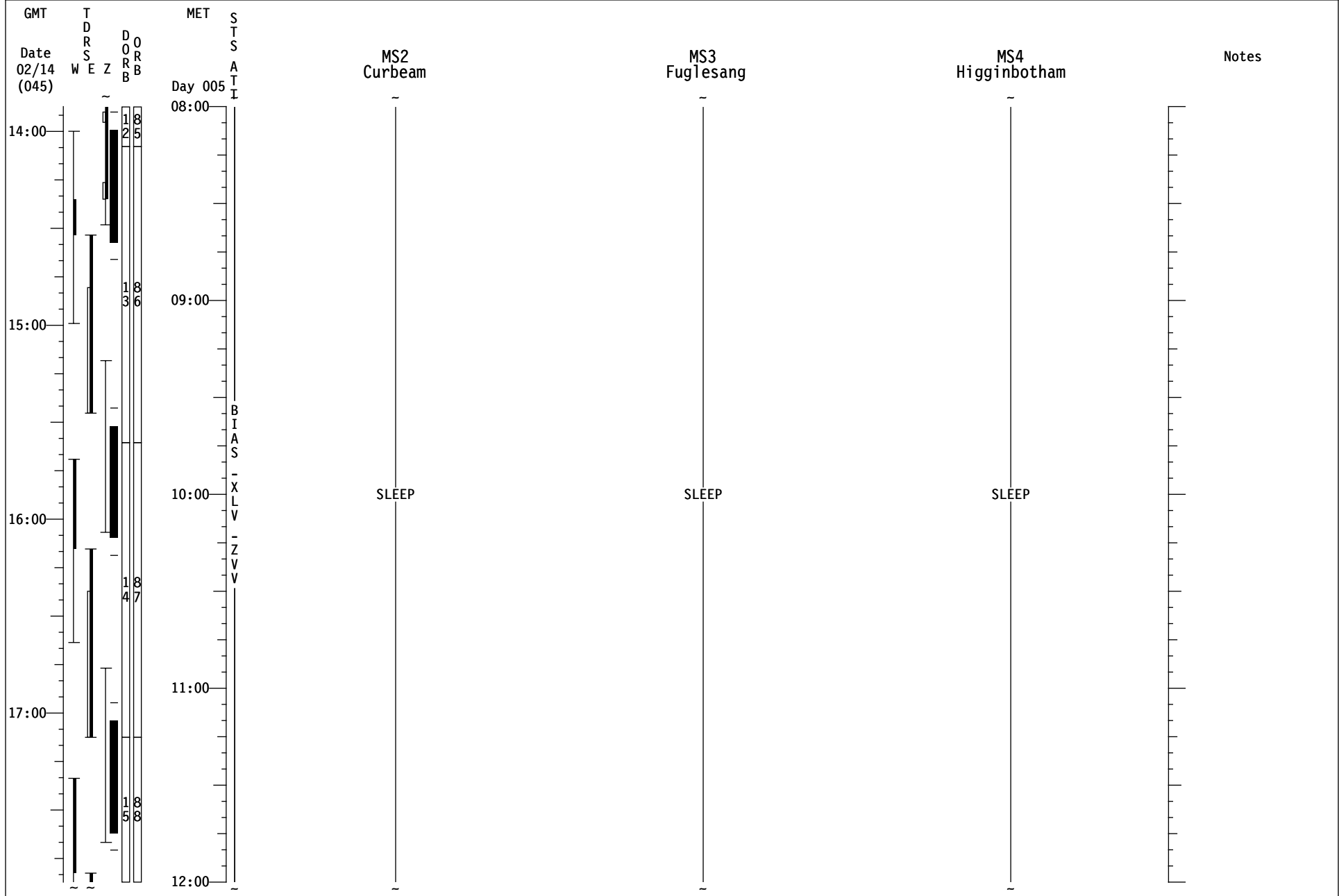
# STS-116 FD06



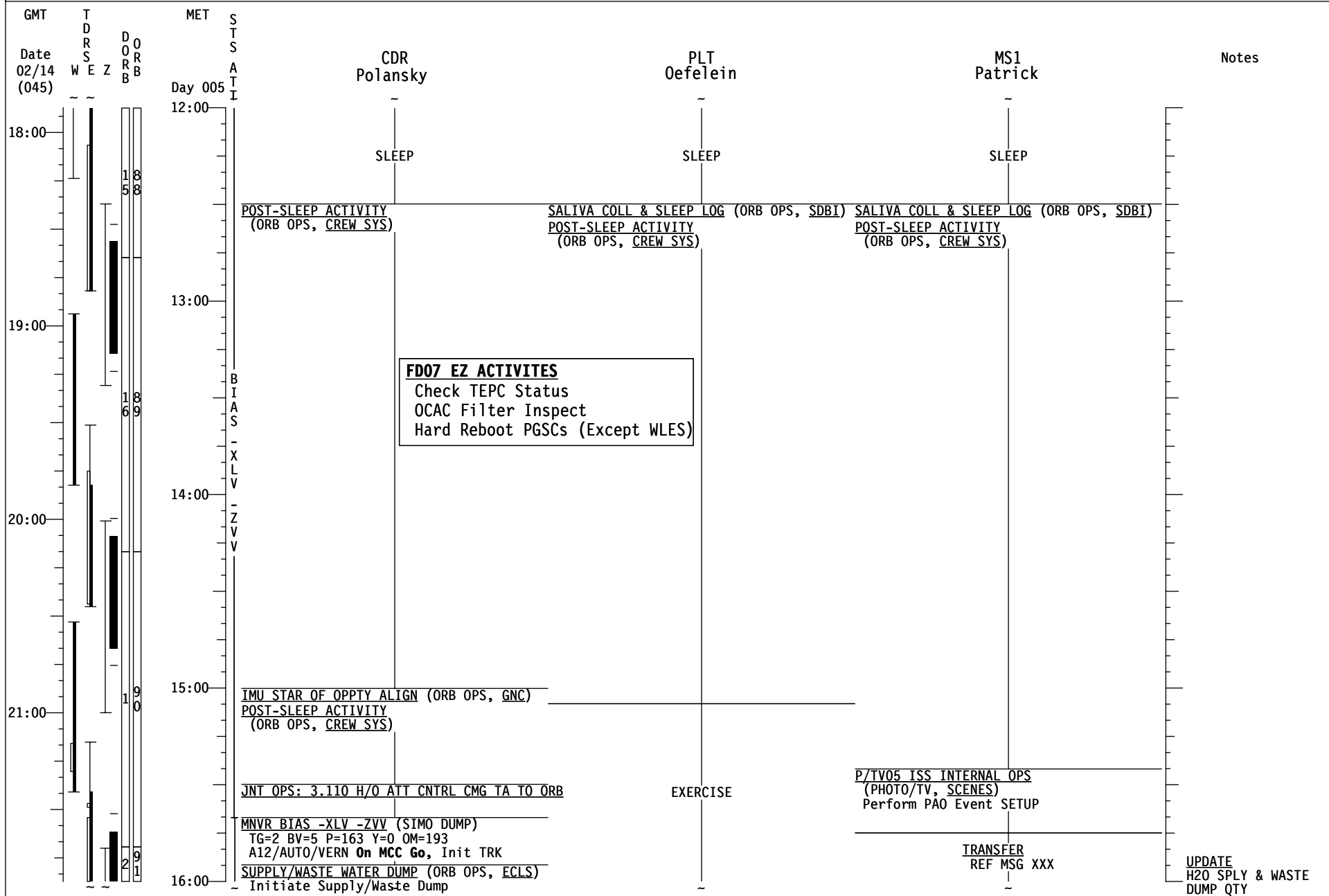
# STS-116 FD06



# STS-116 FD06



# STS-116 FD07



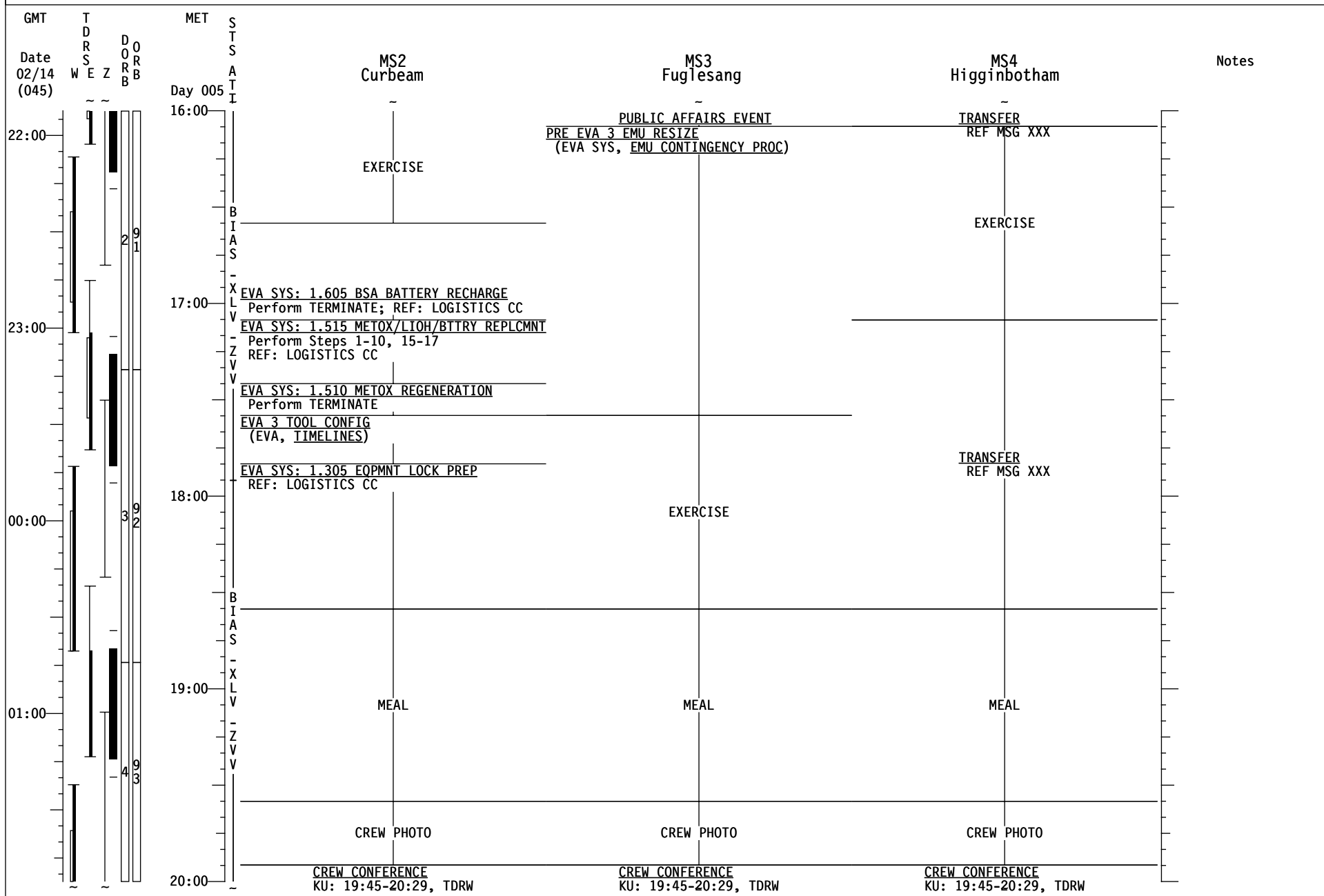




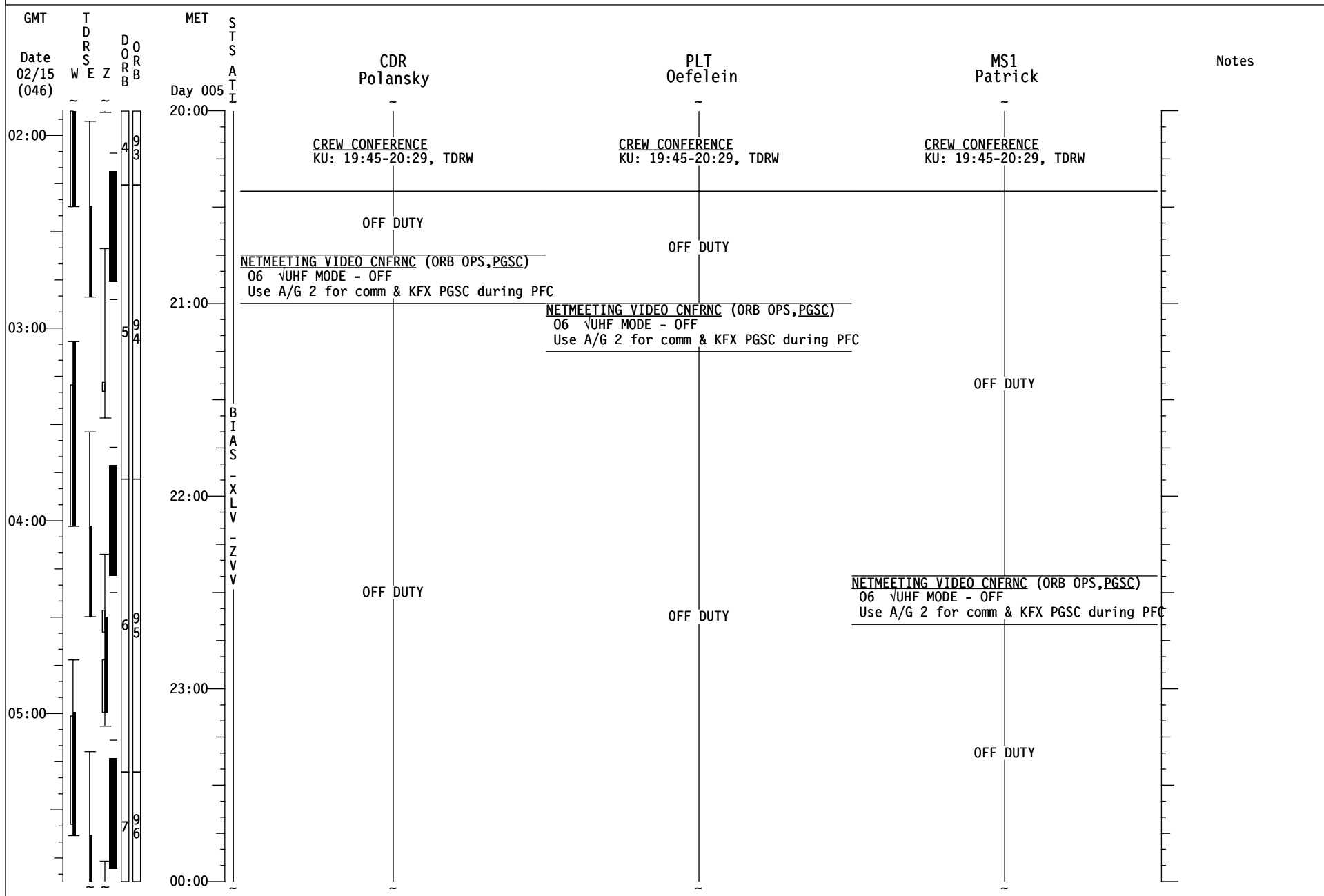
# STS-116 FD07

GMT	TDRS W E Z	DORB D O R B	MET Day 005	STS A T I	CDR Polansky	PLT Oefelein	MS1 Patrick	Notes
22:00					<u>SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS)</u> Initiate Supply/Waste Dump	EXERCISE		UPDATE H2O SPLY & WASTE DUMP QTY
					<u>SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS)</u> Perform CHANGEOUT	TRANSFER REF MSG XXX	TRANSFER REF MSG XXX	
23:00					EXERCISE	<u>SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS)</u> Perform CWC FILL #7; Report barcode & SN Add (TBD); Samples (not) req'd dur ~55min		
					L17 Check MCIU filter screen	TRANSFER REF MSG XXX	EXERCISE	
00:00					<u>SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS)</u> Terminate Supply/Waste Dump	<u>MNVR BIAS -XLV -ZVV (TEA)</u> TG=2 BV=5 P=155 Y=45 OM=175 A12/AUTO/VERN <b>On MCC Go, Init TRK</b>		
					<u>JNT OPS: 3.111 H/O ATT CNTRL ORB TO CMG TA</u>	<u>SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS)</u> Perform FILL TERMINATION	<u>760 EVA - CAMR ONLY (PHOTO/TV, DCS 760 EVA CAMR)</u>	
						<u>CWC TRANSFER (1 BAG)</u> Transfer 1 CWC bag to ISS		
01:00					MEAL	MEAL	MEAL	
					CREW PHOTO	CREW PHOTO	CREW PHOTO	
20:00					<u>CREW CONFERENCE</u> KU: 19:45-20:29, TDRW	<u>CREW CONFERENCE</u> KU: 19:45-20:29, TDRW	<u>CREW CONFERENCE</u> KU: 19:45-20:29, TDRW	

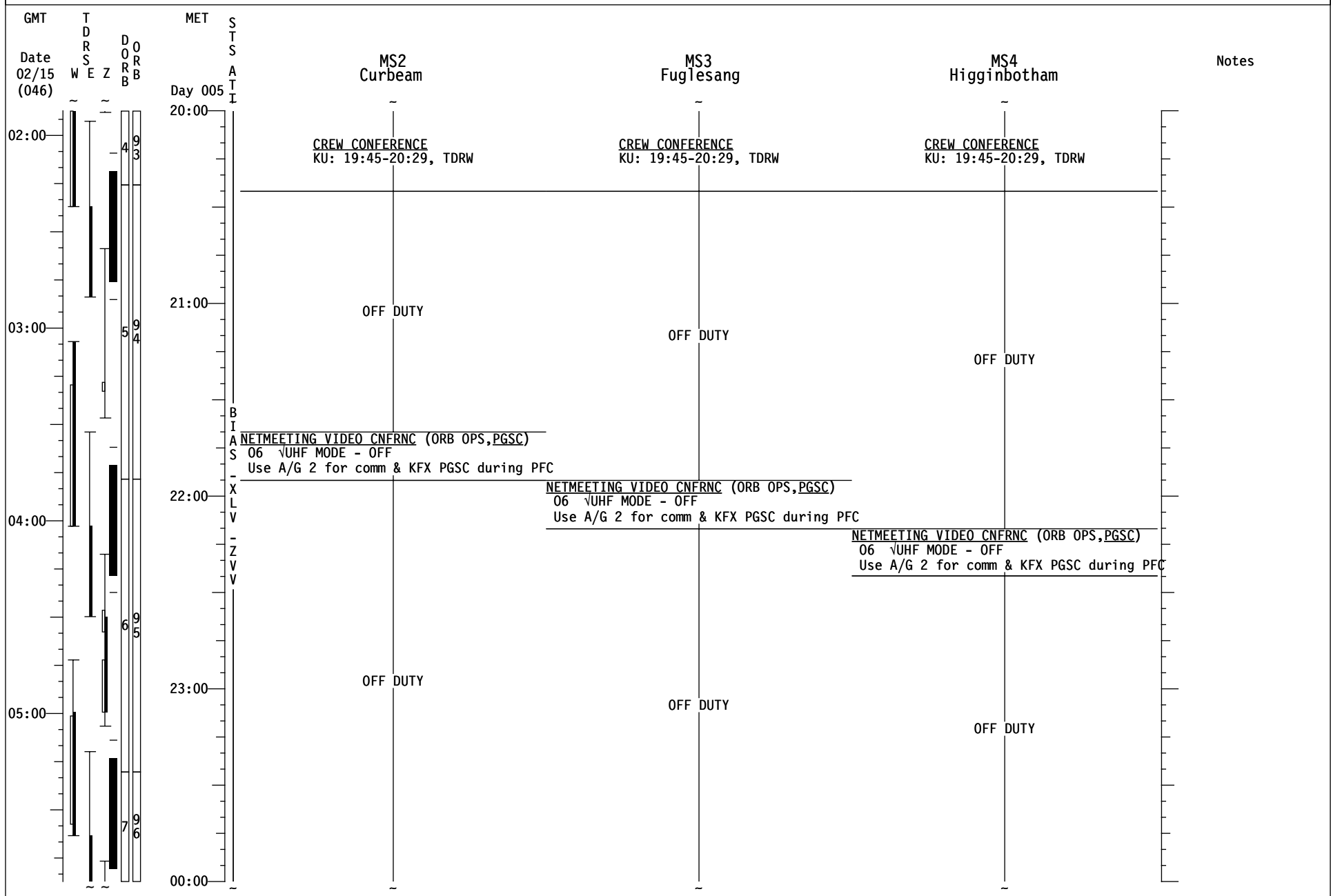
# STS-116 FD07



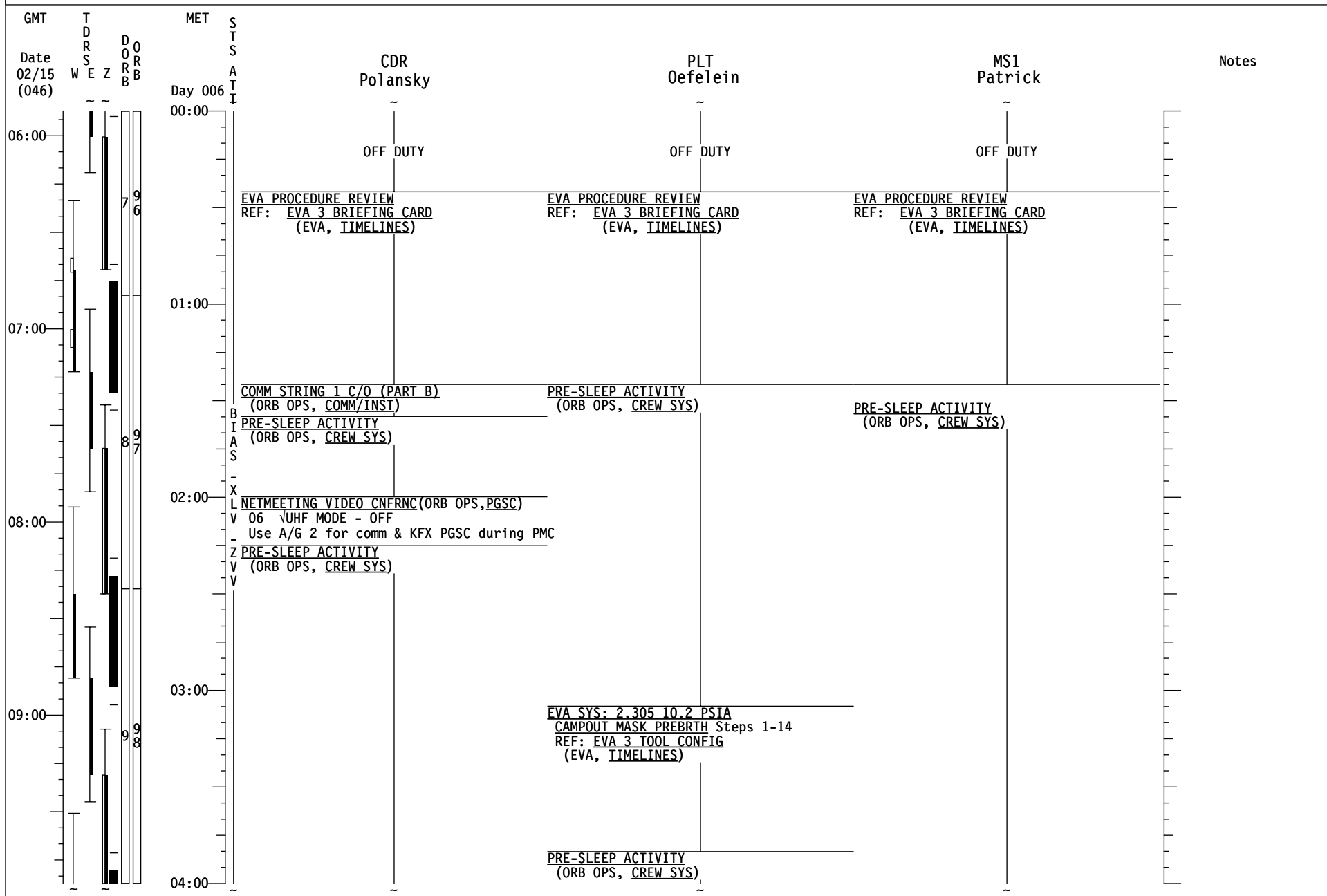
# STS-116 FD07



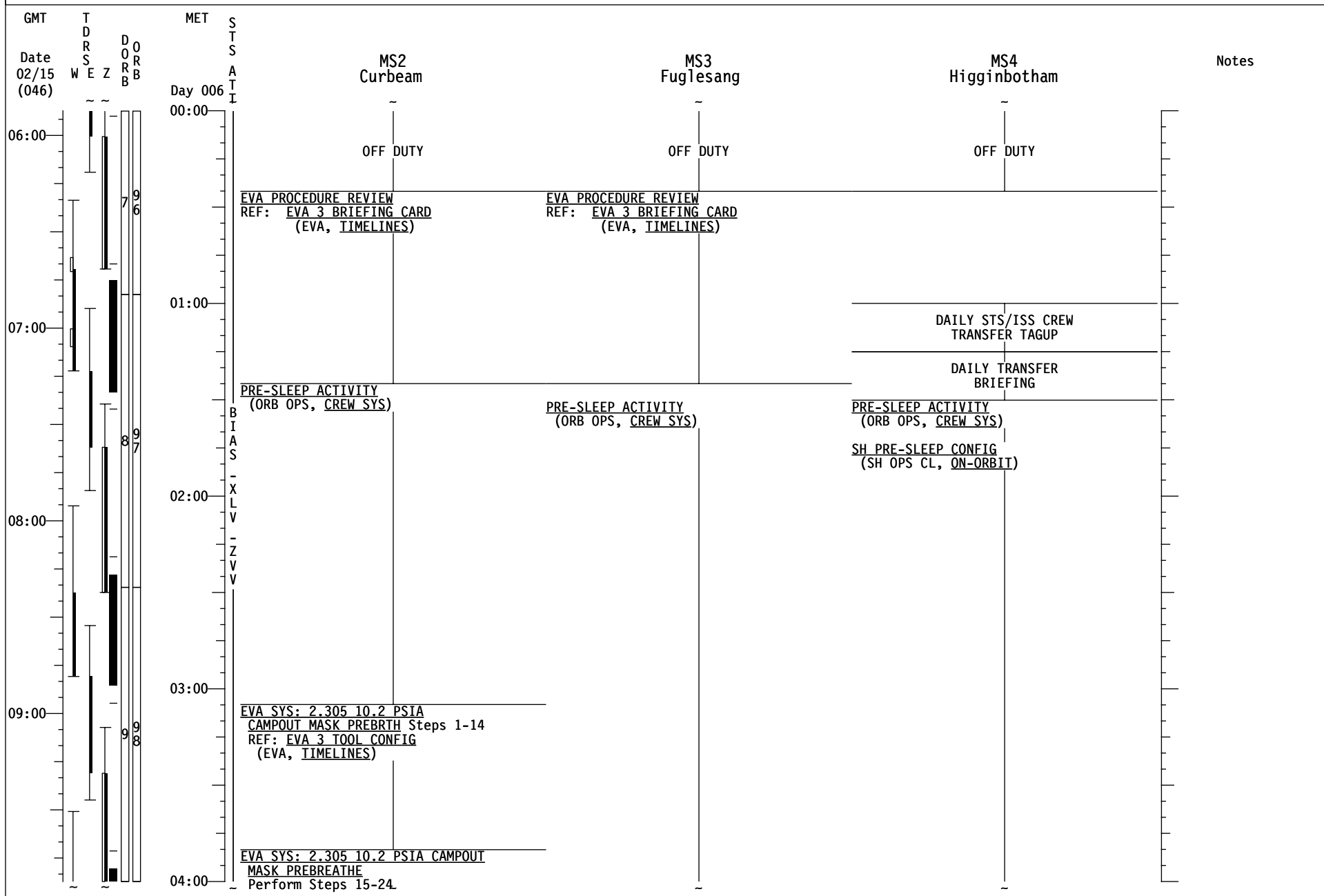
# STS-116 FD07



# STS-116 FD07



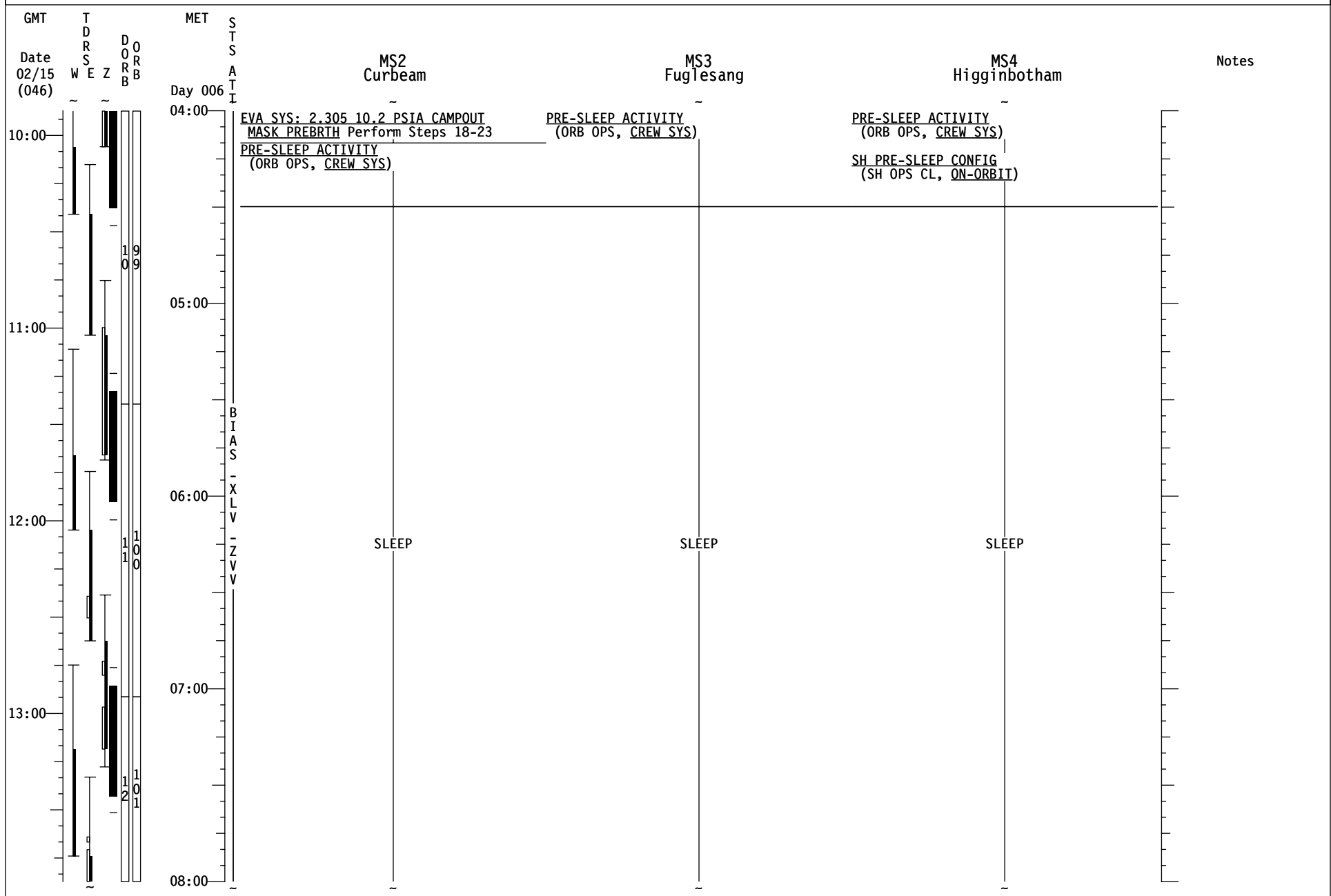
# STS-116 FD07



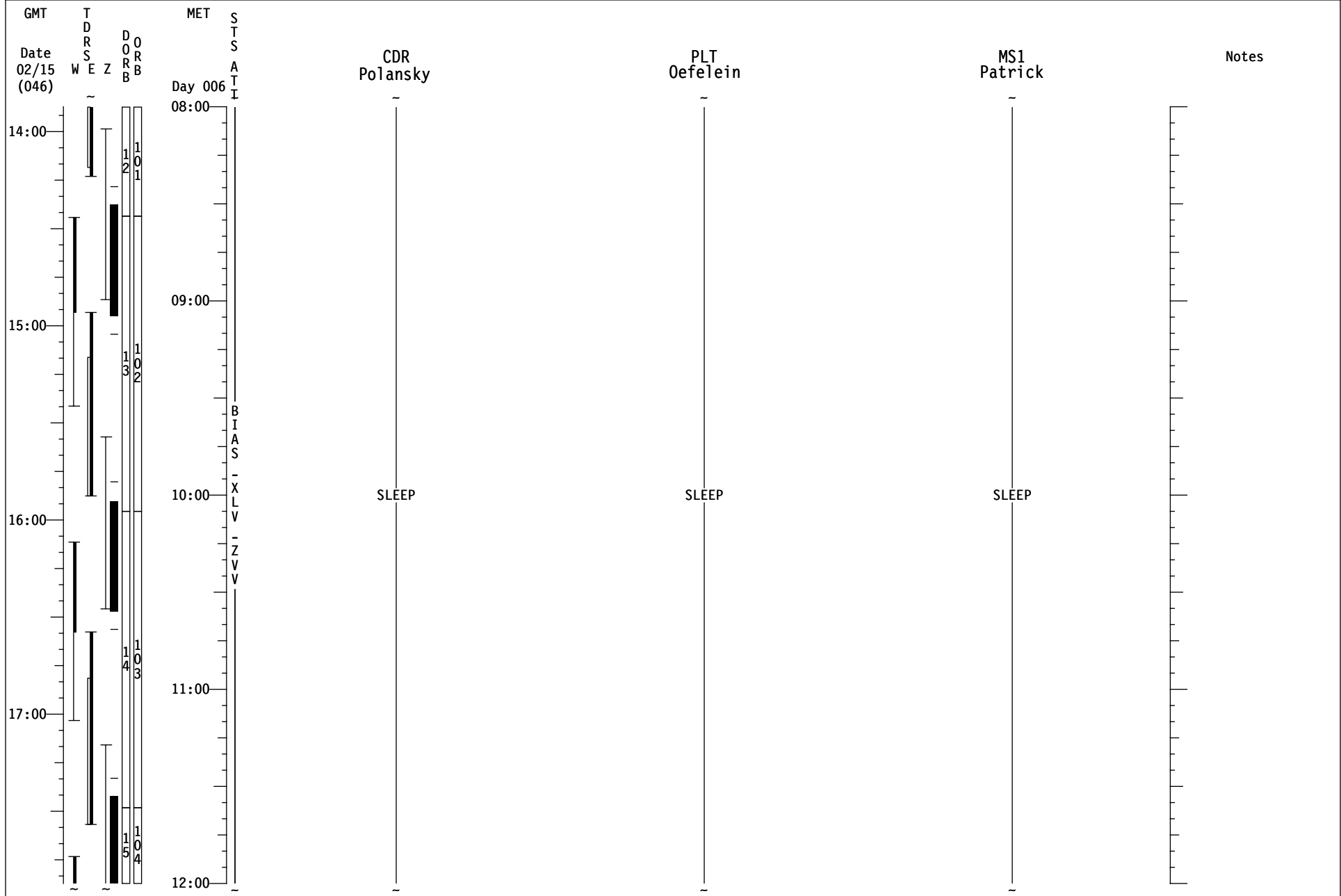




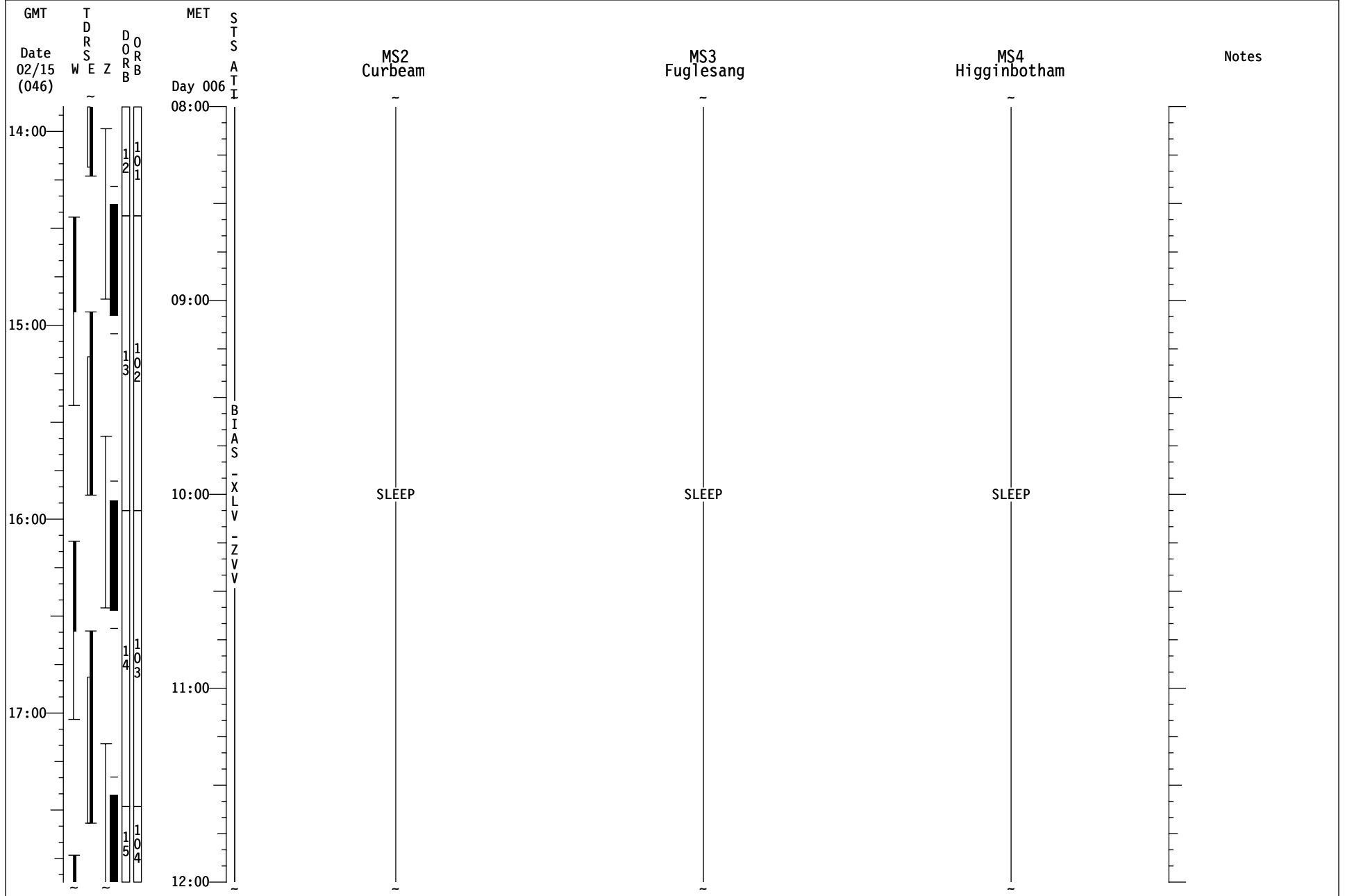
# STS-116 FD07



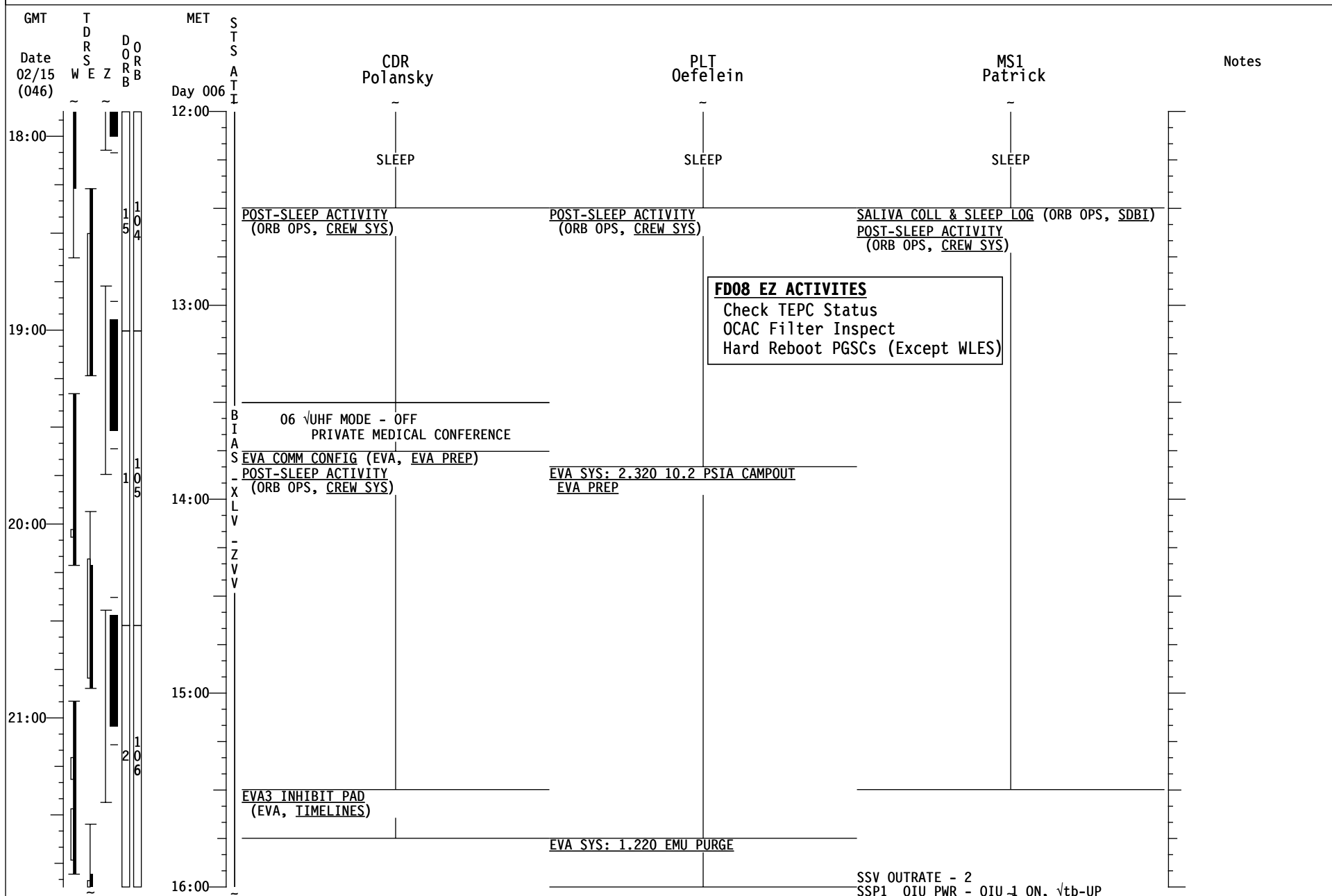
# STS-116 FD07



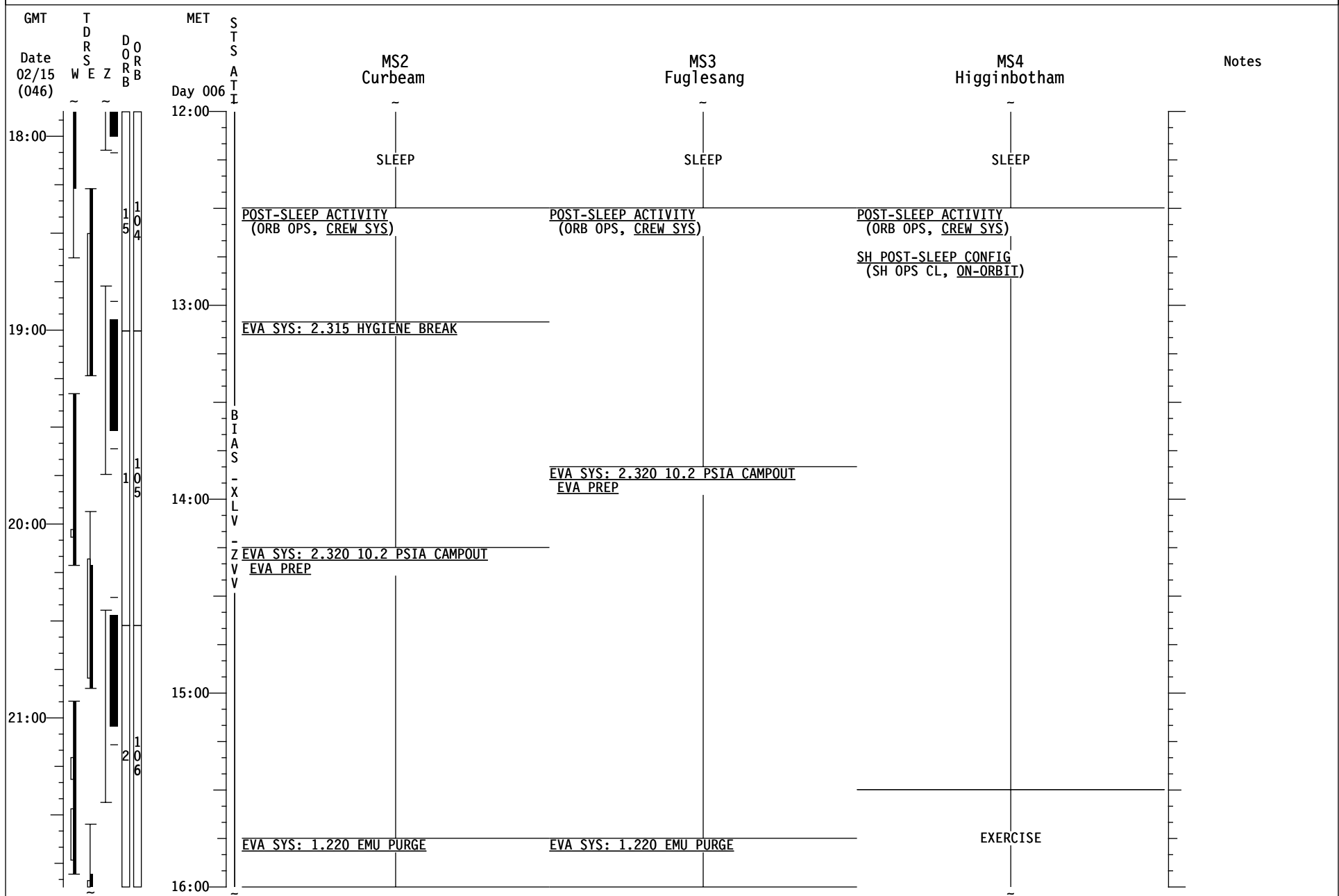
# STS-116 FD07



# STS-116 FD08

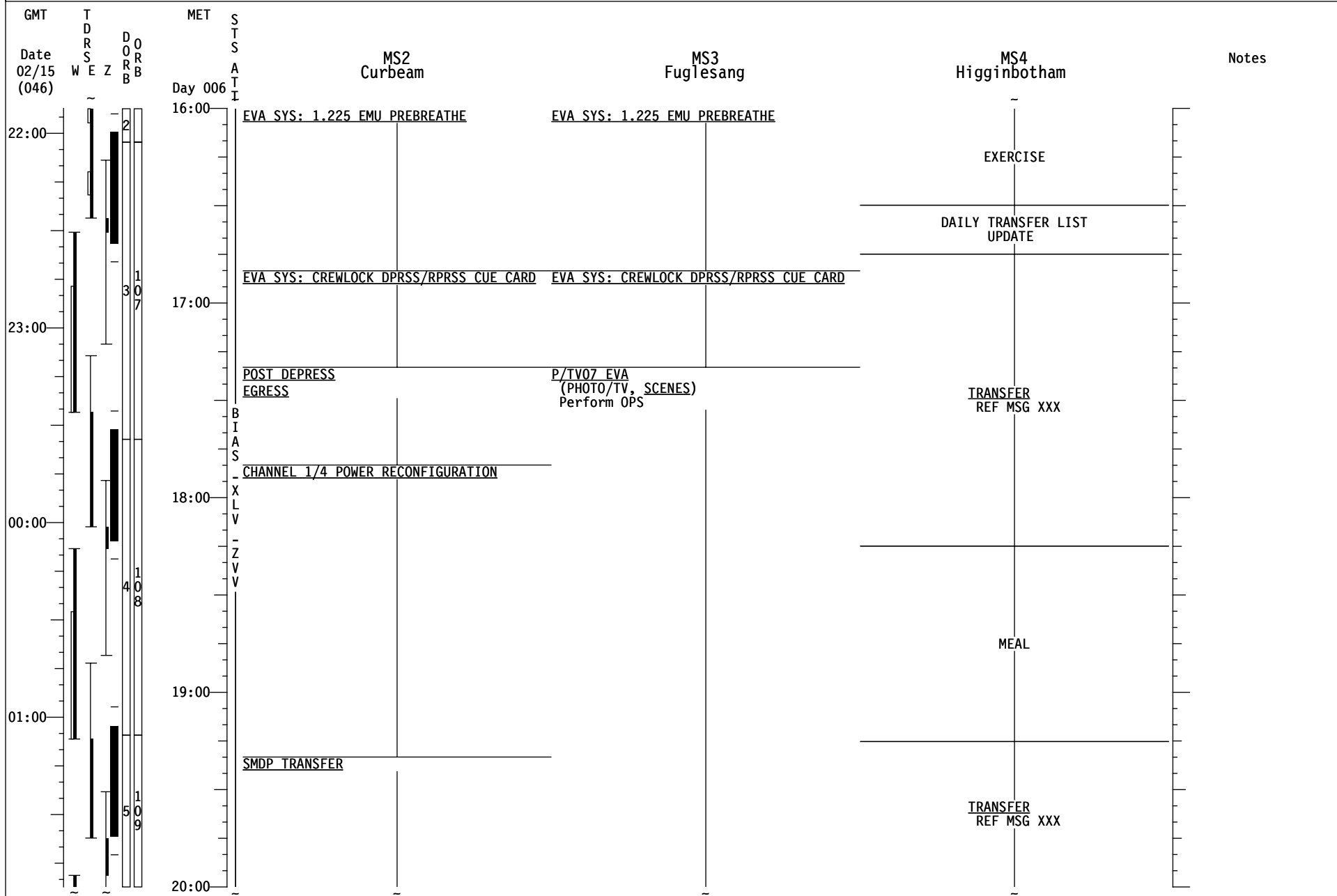


# STS-116 FD08

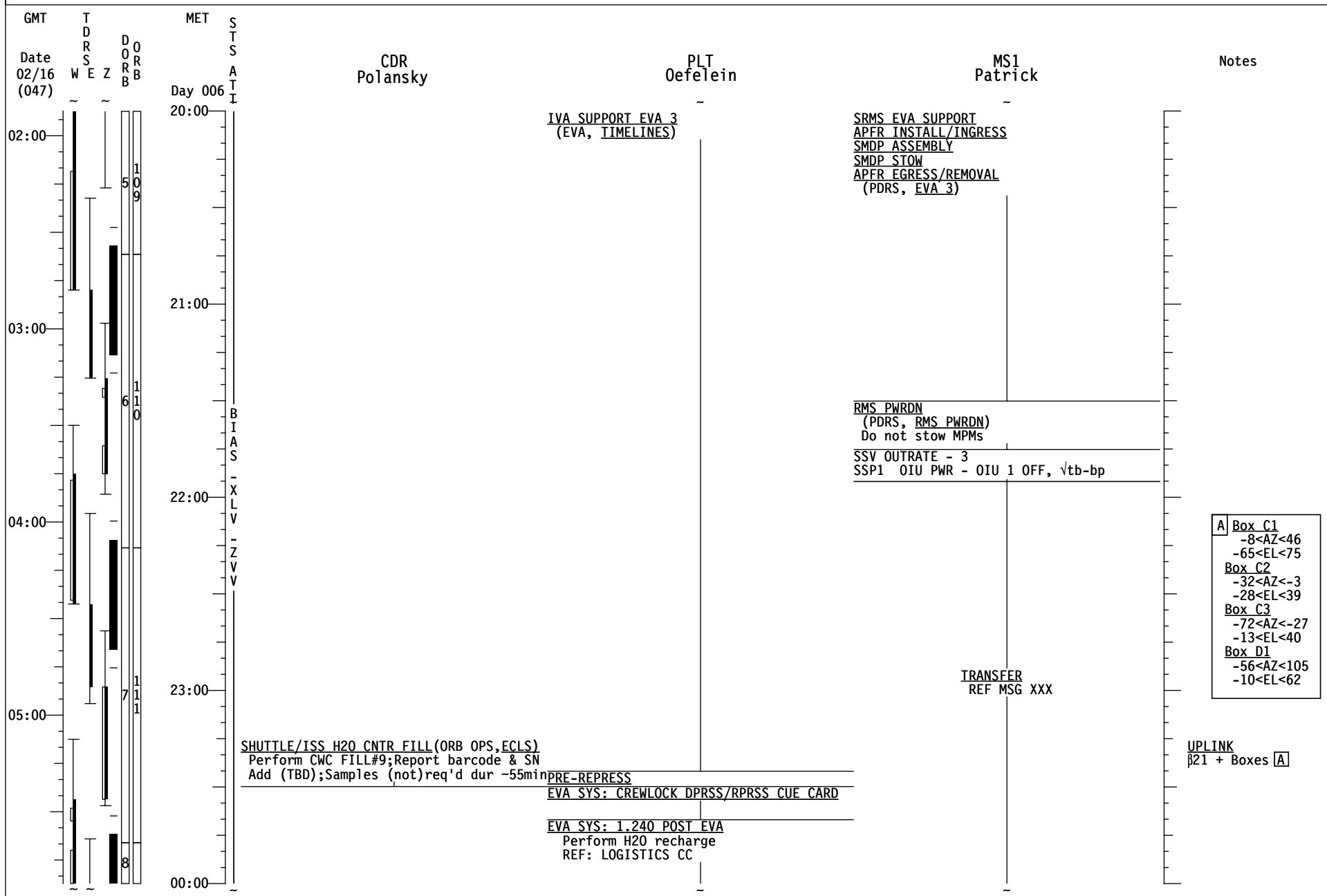




# STS-116 FD08

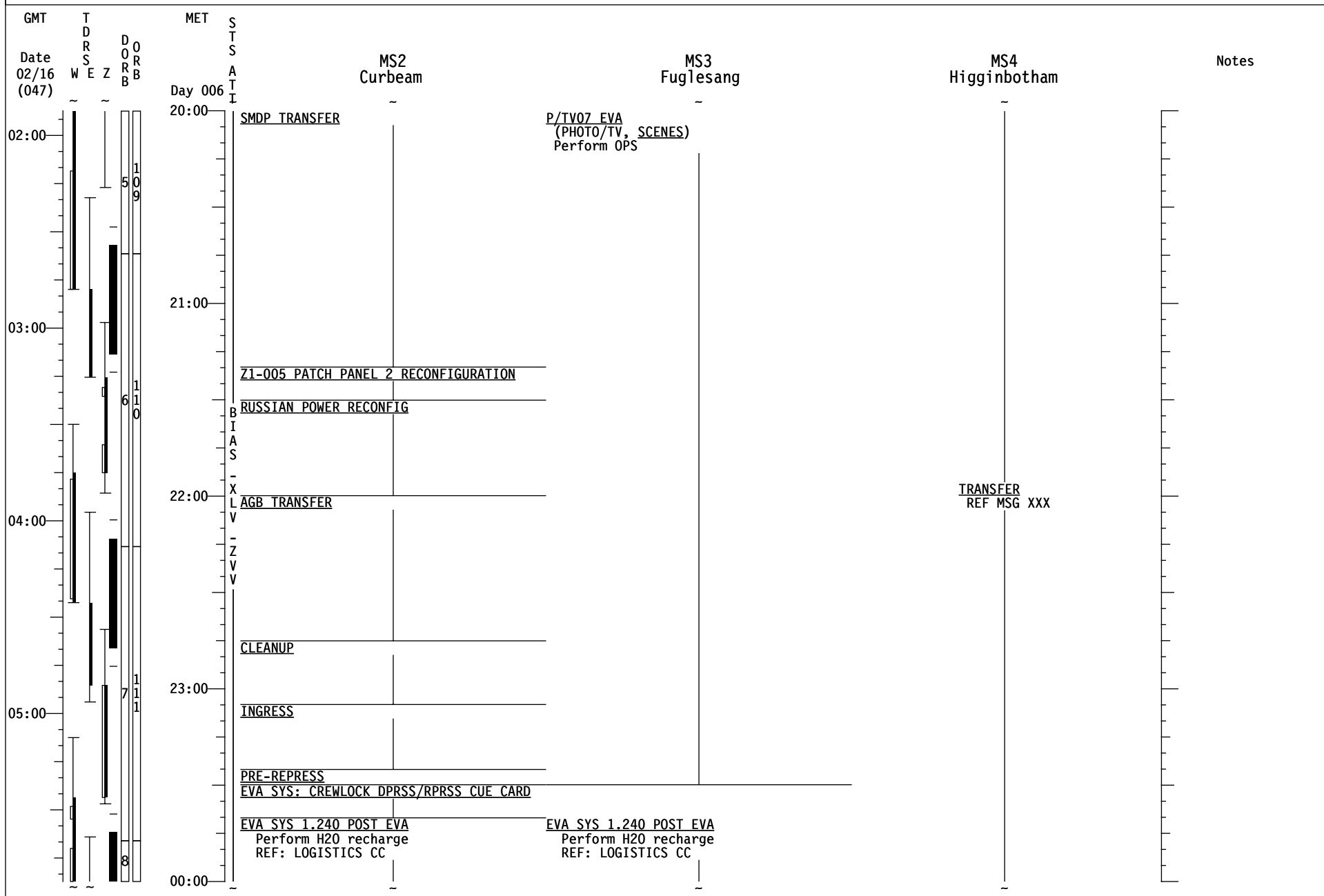


# STS-116 FD08





# STS-116 FD08



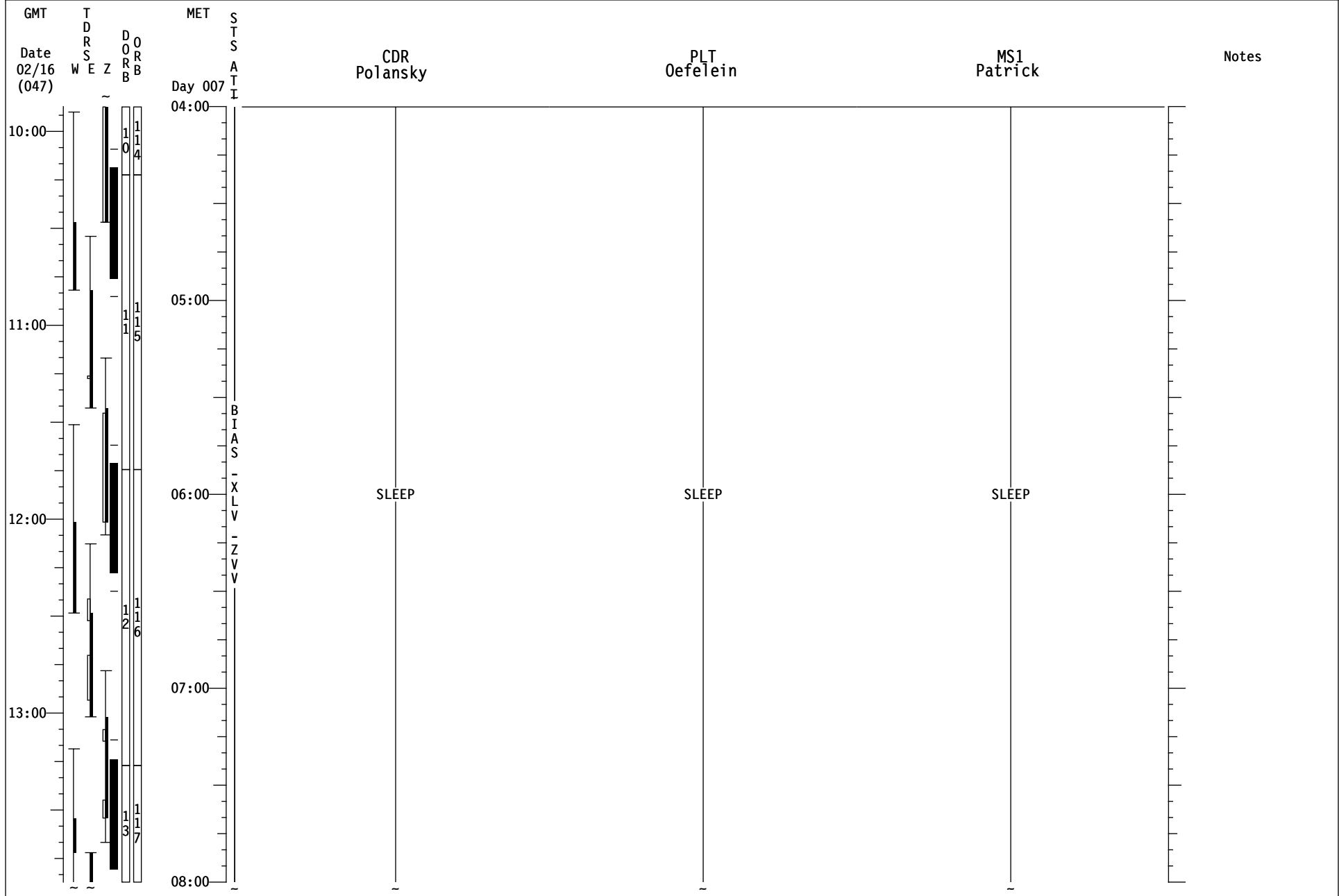
# STS-116 FD08

GMT	T D R S E Z	D O R B	MET	S T S	A T I	CDR	PLT	MS1	Notes
Date 02/16 (047)	W E Z	D O R B	Day 007			Polansky	Oefelein	Patrick	
06:00			00:00			<u>WCS COMPACTOR OPS</u> (CUE CARD, DUAL-VANE)	<u>EVA SYS: 1.240 POST EVA</u> Perform H2O recharge REF: LOGISTICS CC	<u>TRANSFER</u> REF MSG XXX	
						<u>EVA COMM DECONFIG (EVA, EVA PREP)</u> <u>SHUTTLE/ISS H2O CNTR FILL</u> (ORB OPS, ECLS) Perform FILL TERMINATION			
						<u>CWC TRANSFER (1 BAG)</u> Transfer 1 CWC bag to ISS			
07:00			01:00			<u>NETMEETING VIDEO CNFRNC(ORB OPS,PGSC)</u> 06 UHF MODE - OFF Use A/G 2 for comm & KFX PGSC during PMC	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	
						<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)			
08:00			02:00						
09:00			03:00						
04:00			04:00						

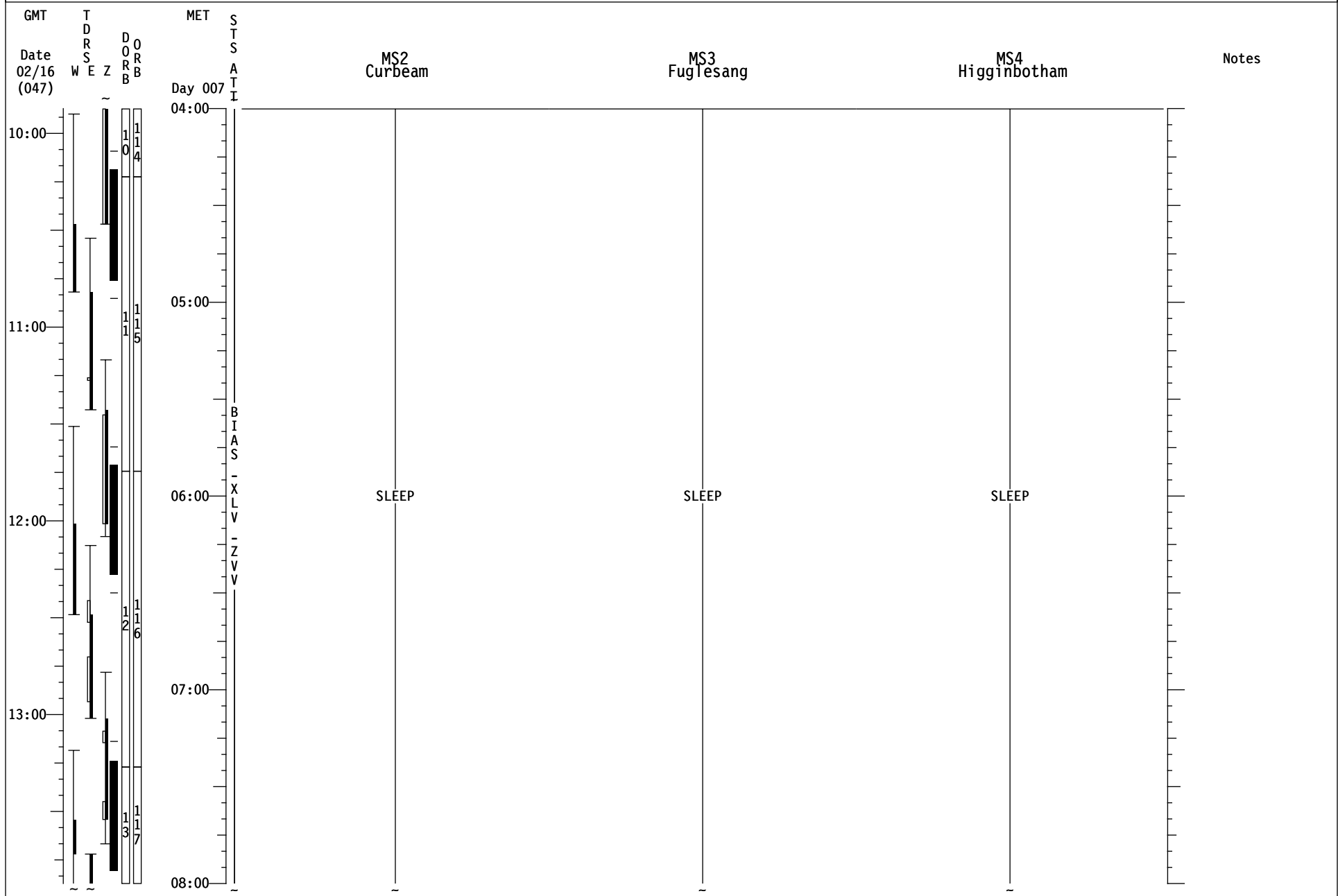
# STS-116 FD08

GMT	T D R S W E Z	D O R B	MET	S T S	MS2 Curbeam	MS3 Fuglesang	MS4 Higginbotham	Notes
Date 02/16 (047)			Day 007	A T I				
06:00					<u>EVA SYS 1.240 POST EVA</u> Perform H2O recharge REF: LOGISTICS CC	<u>EVA SYS 1.240 POST EVA</u> Perform H2O recharge REF: LOGISTICS CC	TRANSFER REF MSG XXX	
					<u>EVA TOOL CONFIG</u> (EVA, TIMELINES) Post EVA Tool Stow	<u>EVA TOOL CONFIG</u> (EVA, TIMELINES) Post EVA Tool Stow	DAILY STS/ISS CREW TRANSFER TAGUP	
07:00					<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	<u>760 EVA - CAMR ONLY DISASSY</u> (PHOTO/TV, DCS 760 EVA CAMR) POST EVA	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	
						<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	<u>SH PRE-SLEEP CONFIG</u> (SH OPS CL, ON-ORBIT)	
08:00								
09:00								
04:00								

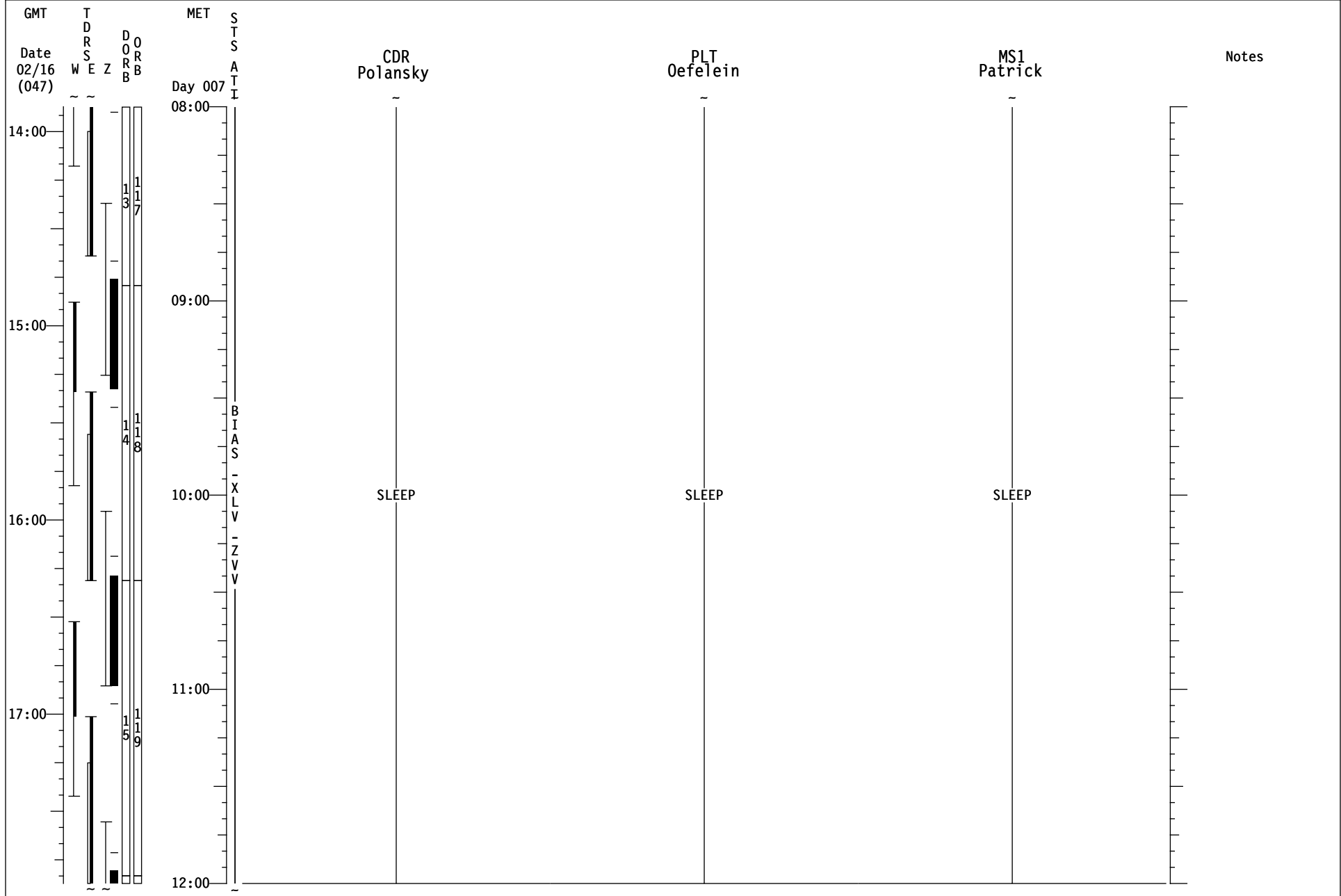
# STS-116 FD08



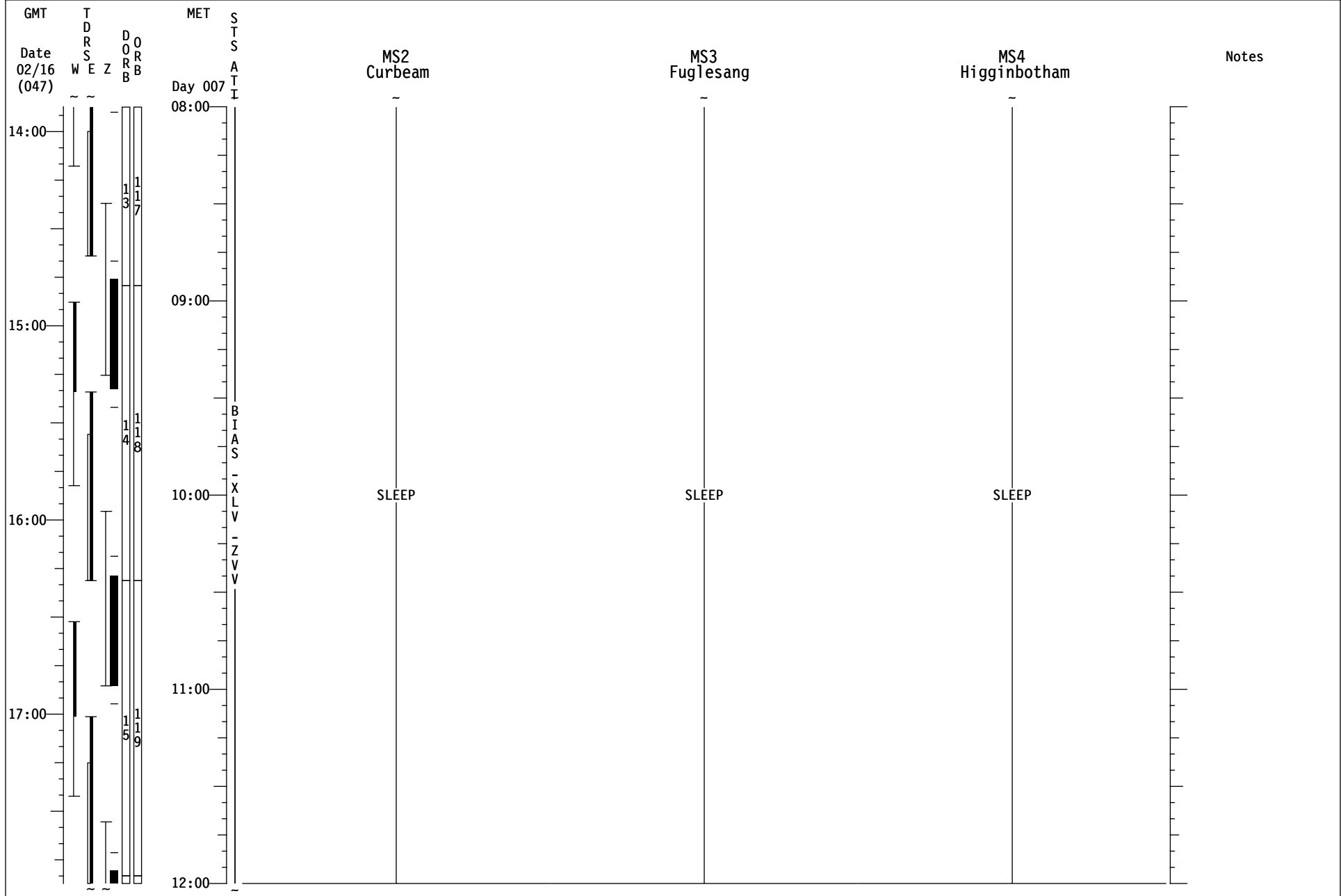
# STS-116 FD08



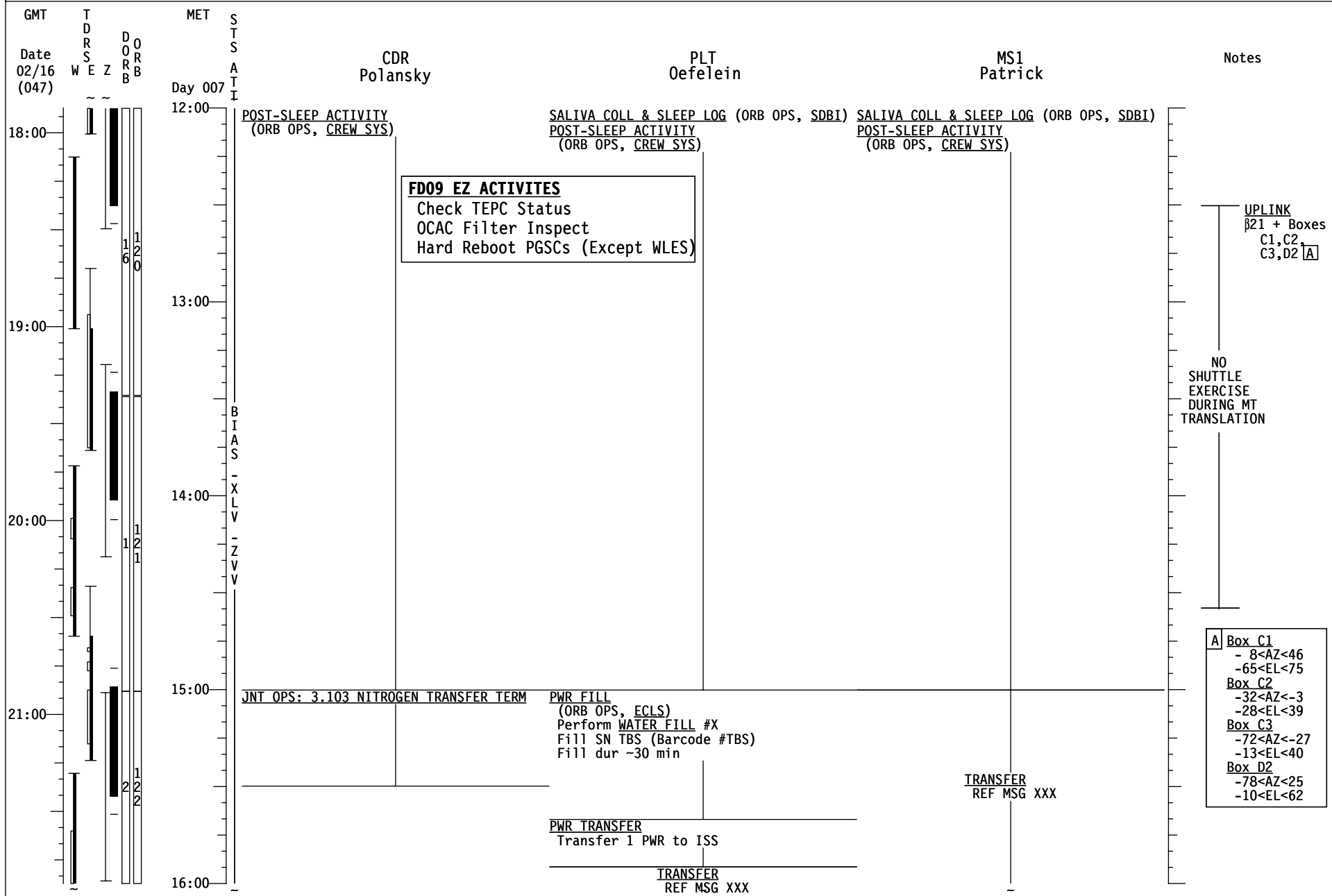
# STS-116 FD08



# STS-116 FD08

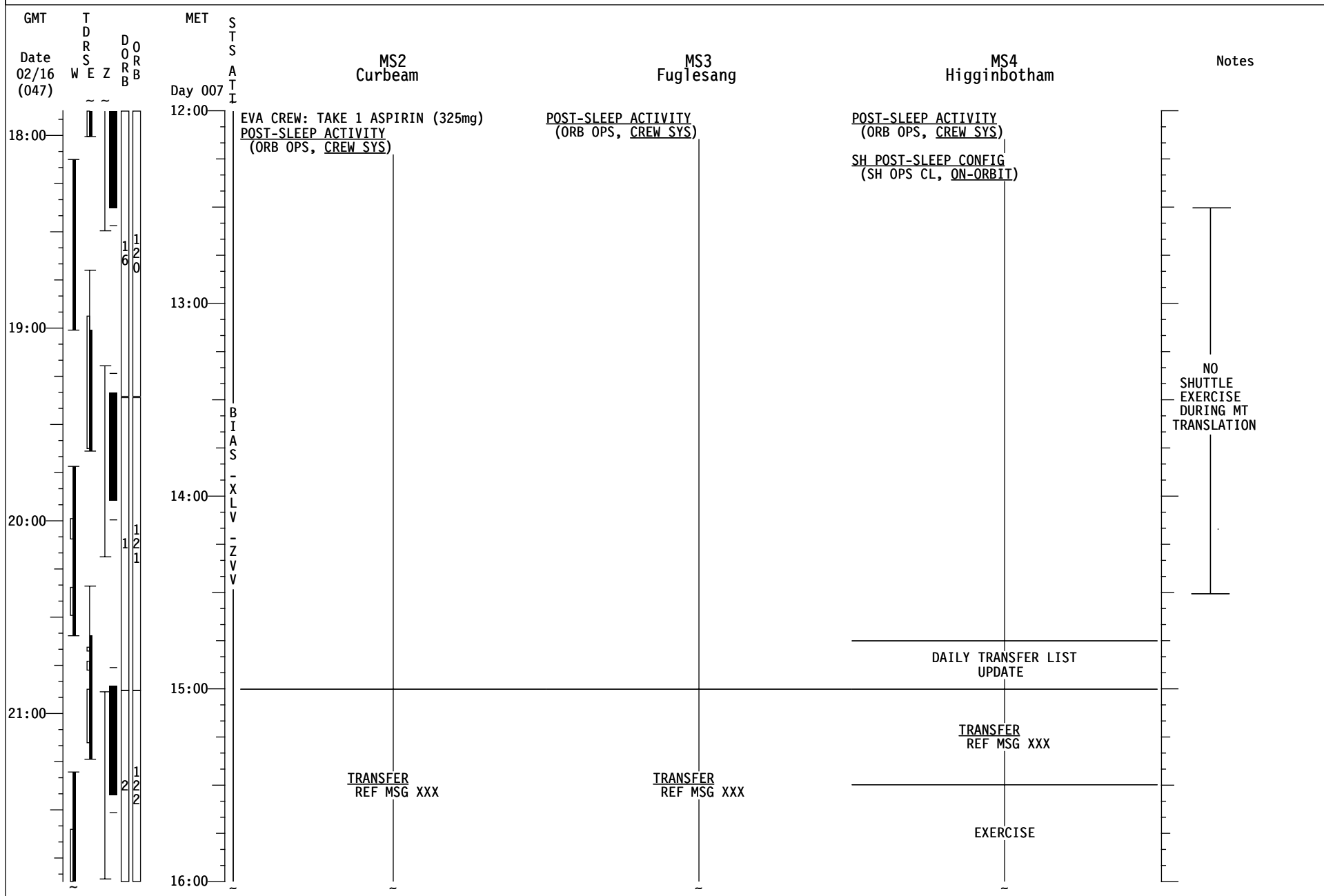


# STS-116 FD09

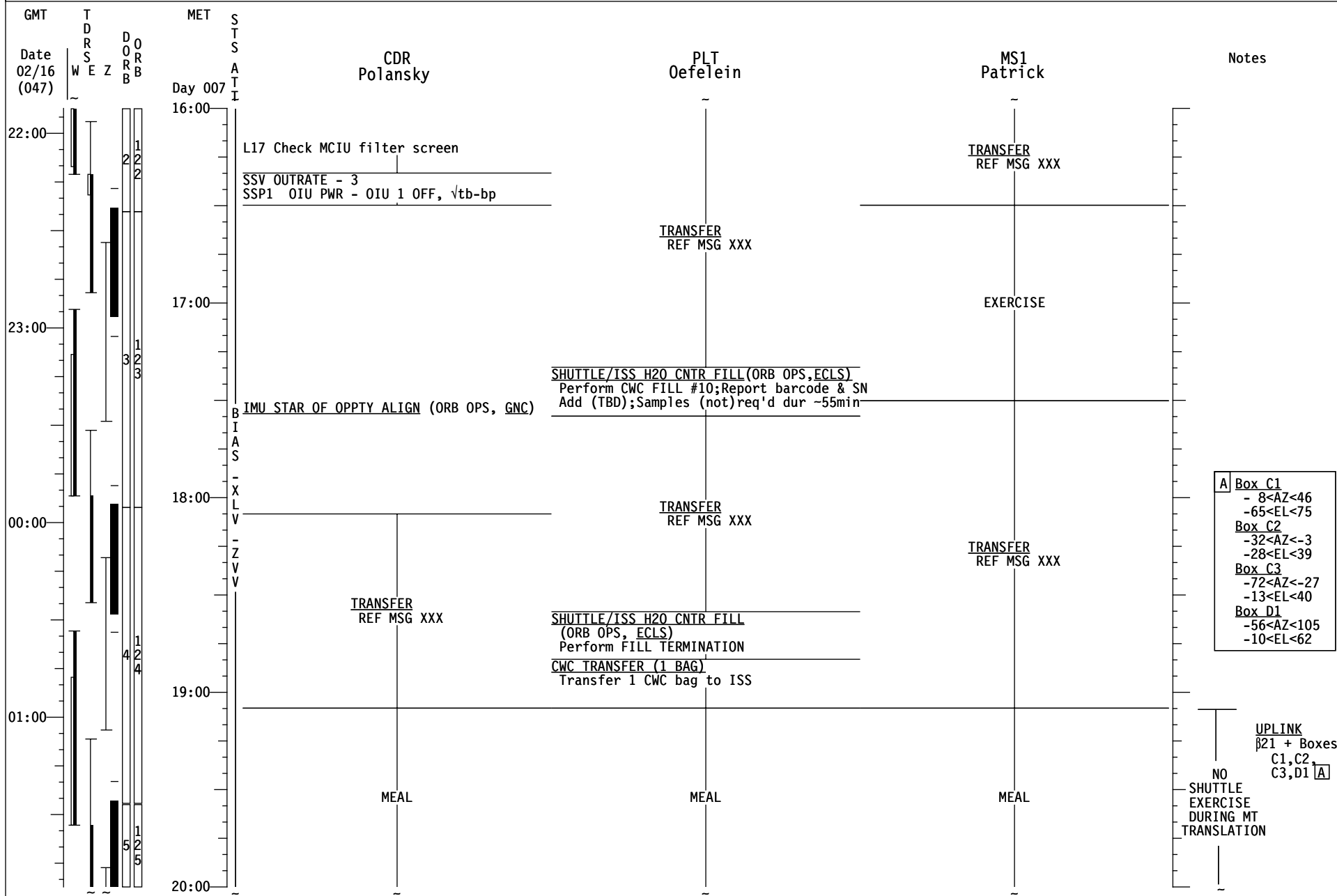




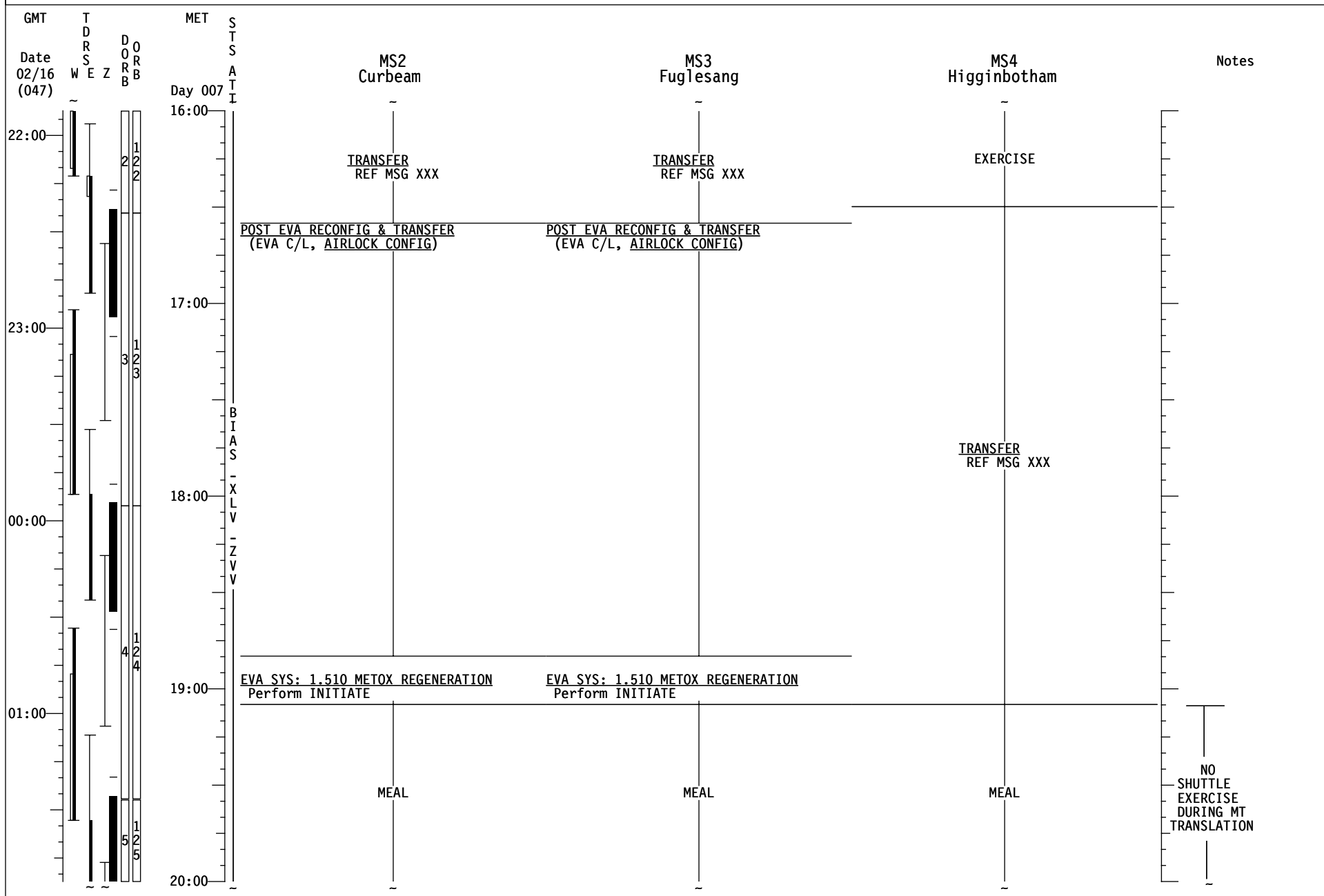
# STS-116 FD09



# STS-116 FD09



# STS-116 FD09



# STS-116 FD09

GMT	TDRS WSEZ	DORB	MET Day 007	STS ATTI	CDR Polansky	PLT Oefelein	MS1 Patrick	Notes
02:00			20:00		MEAL	MEAL	MEAL	
							<u>P/TV08 EXTERNAL SURVEY</u> (PHOTO/TV, SCENES) Perform SETUP	
							<u>P/TV08 EXTERNAL SURVEY</u> (PHOTO/TV, SCENES) Perform OPS, Item 2	NO SHUTTLE EXERCISE DURING MT TRANSLATION
03:00			21:00		TRANSFER REF MSG XXX	TRANSFER REF MSG XXX		UPLINK β21 + Boxes C1, C2, C3, D3 <span style="border: 1px solid black; padding: 2px;">A</span>
							TRANSFER REF MSG XXX	
04:00			22:00				<u>P/TV05 ISS INTERNAL OPS</u> (PHOTO/TV, SCENES) Perform PAO Event SETUP	
					PUBLIC AFFAIRS EVENT KU: 22:20-22:53, TDRW	PUBLIC AFFAIRS EVENT KU: 22:20-22:53, TDRW	PUBLIC AFFAIRS EVENT KU: 22:20-22:53, TDRW	
							<u>PREP WLES LAPTOP FOR TRANSFER</u> (ORB OPS, WLE SENSORS)	
05:00			23:00		EXERCISE	TRANSFER REF MSG XXX	PGSC TRANSFER REF MSG XXX	
							TRANSFER REF MSG XXX	
00:00			00:00					

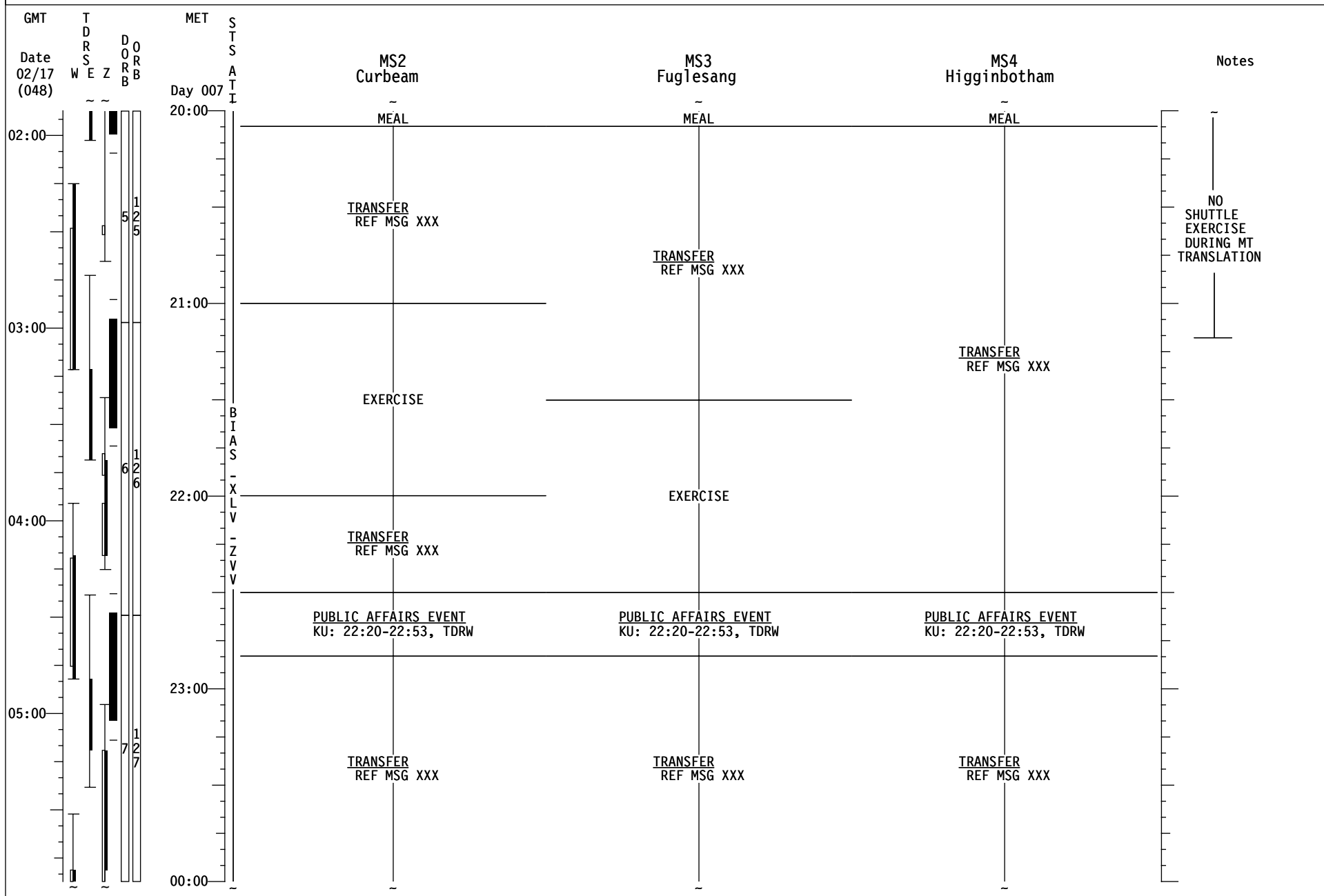
**A** Box C1  
 - 8<AZ<46  
 -65<EL<75

Box C2  
 -32<AZ<-3  
 -28<EL<39

Box C3  
 -72<AZ<-27  
 -13<EL<40

Box D3  
 -23<AZ<85  
 -10<EL<56

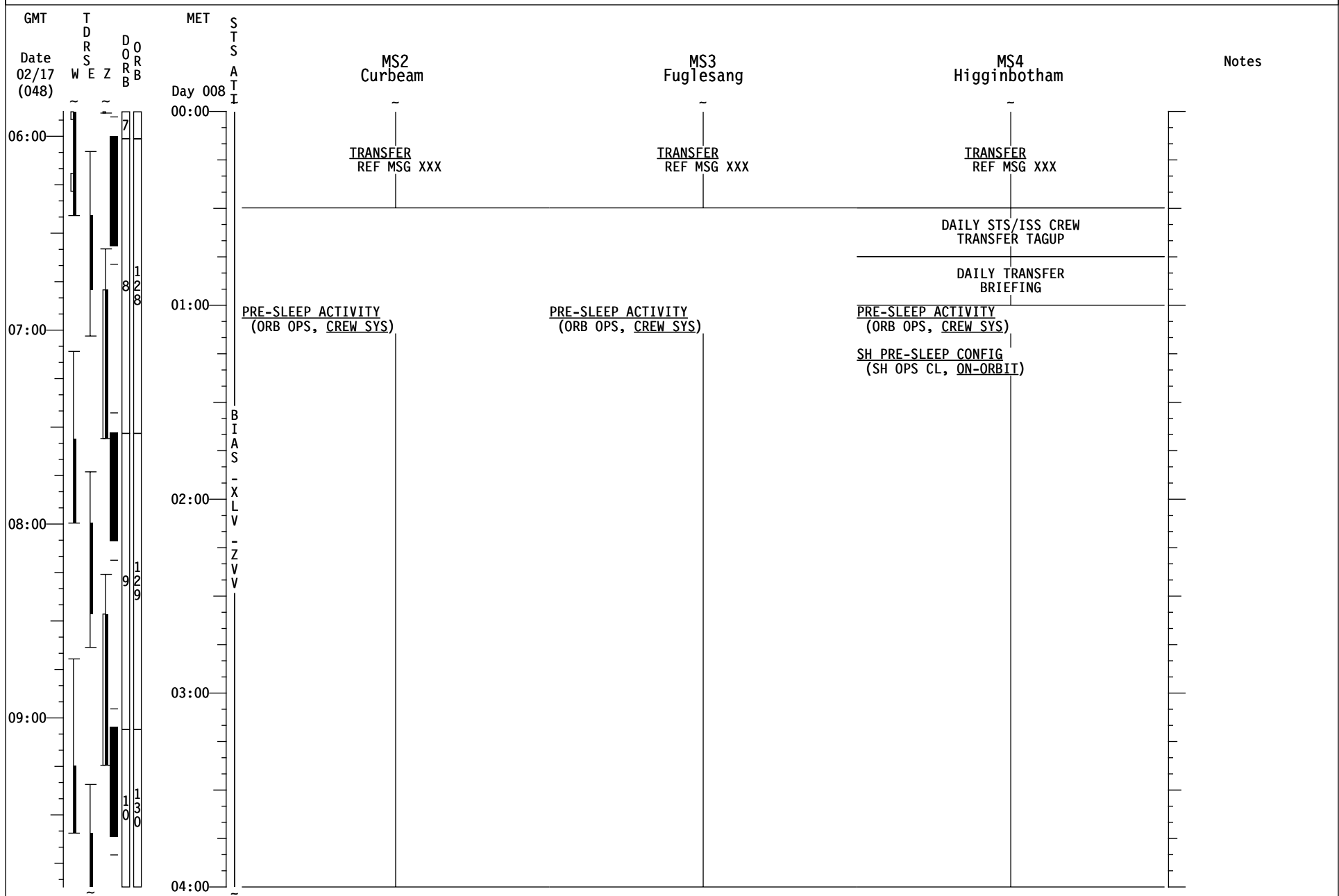
# STS-116 FD09



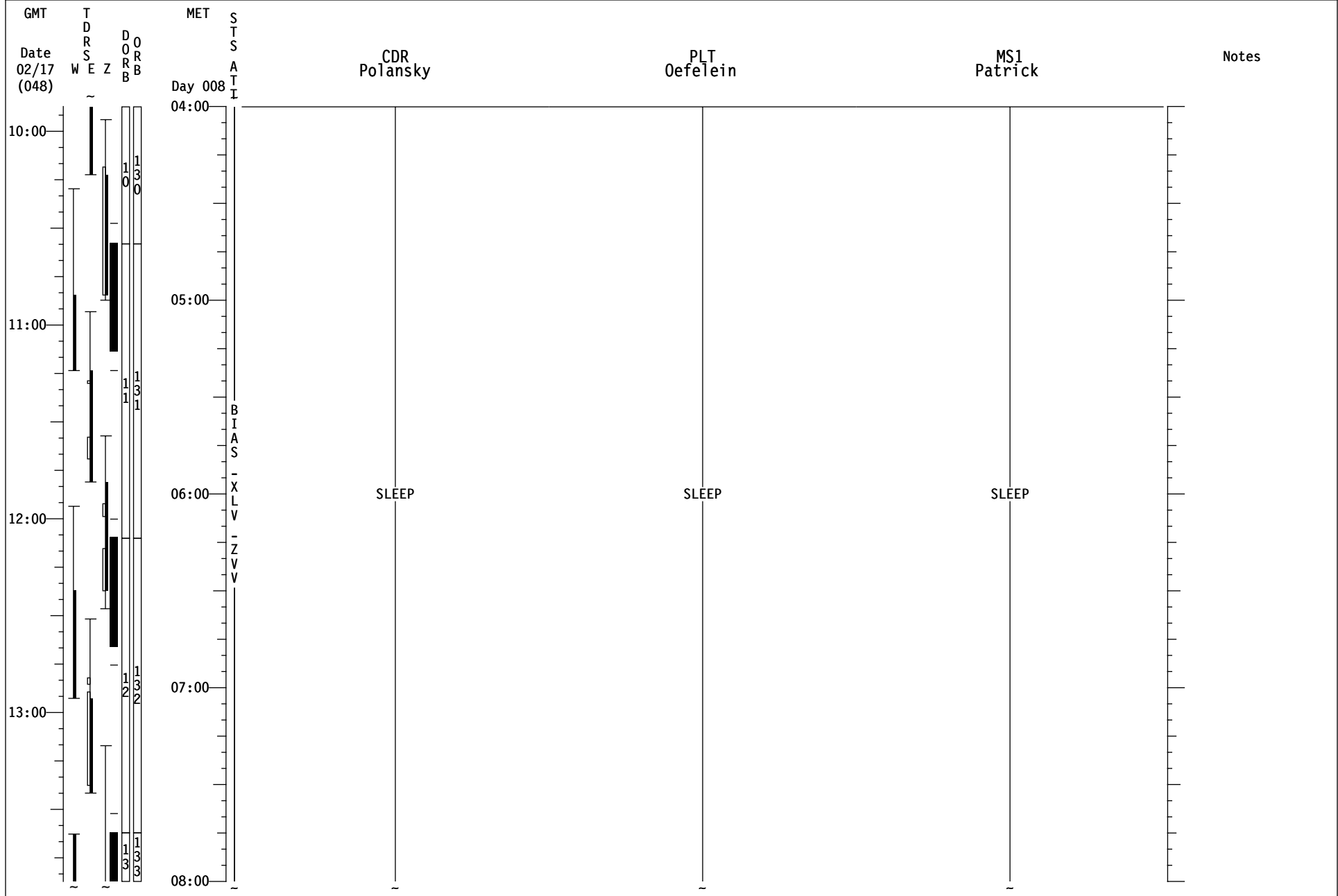
# STS-116 FD09

GMT	TDRS WSEZ	DORB 7 8 9 10	MET Day 008	STS A T I	CDR Polansky	PLT Oefelein	MS1 Patrick	Notes
06:00						EXERCISE		
							<u>RNDZ TOOLS CHECKOUT</u> (RNDZ, RNDZ TOOLS)	
07:00					<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	
					<u>NETMEETING VIDEO CNFRNC</u> (ORB OPS, PGSC) 06 VUHF MODE - OFF Use A/G 2 for comm & KFX PGSC during PMC			
					<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)			
08:00								
09:00								
04:00								

# STS-116 FD09

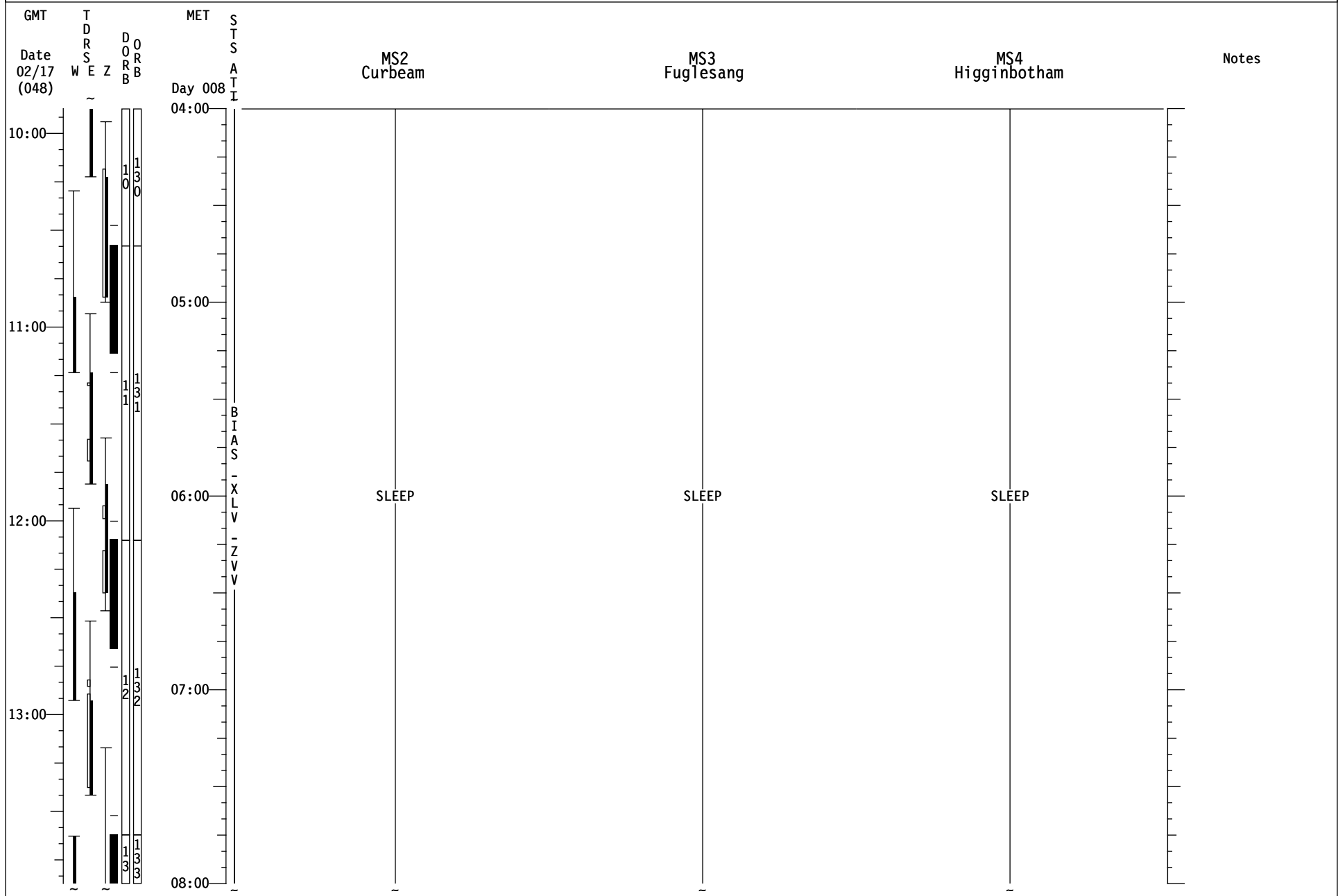


# STS-116 FD09



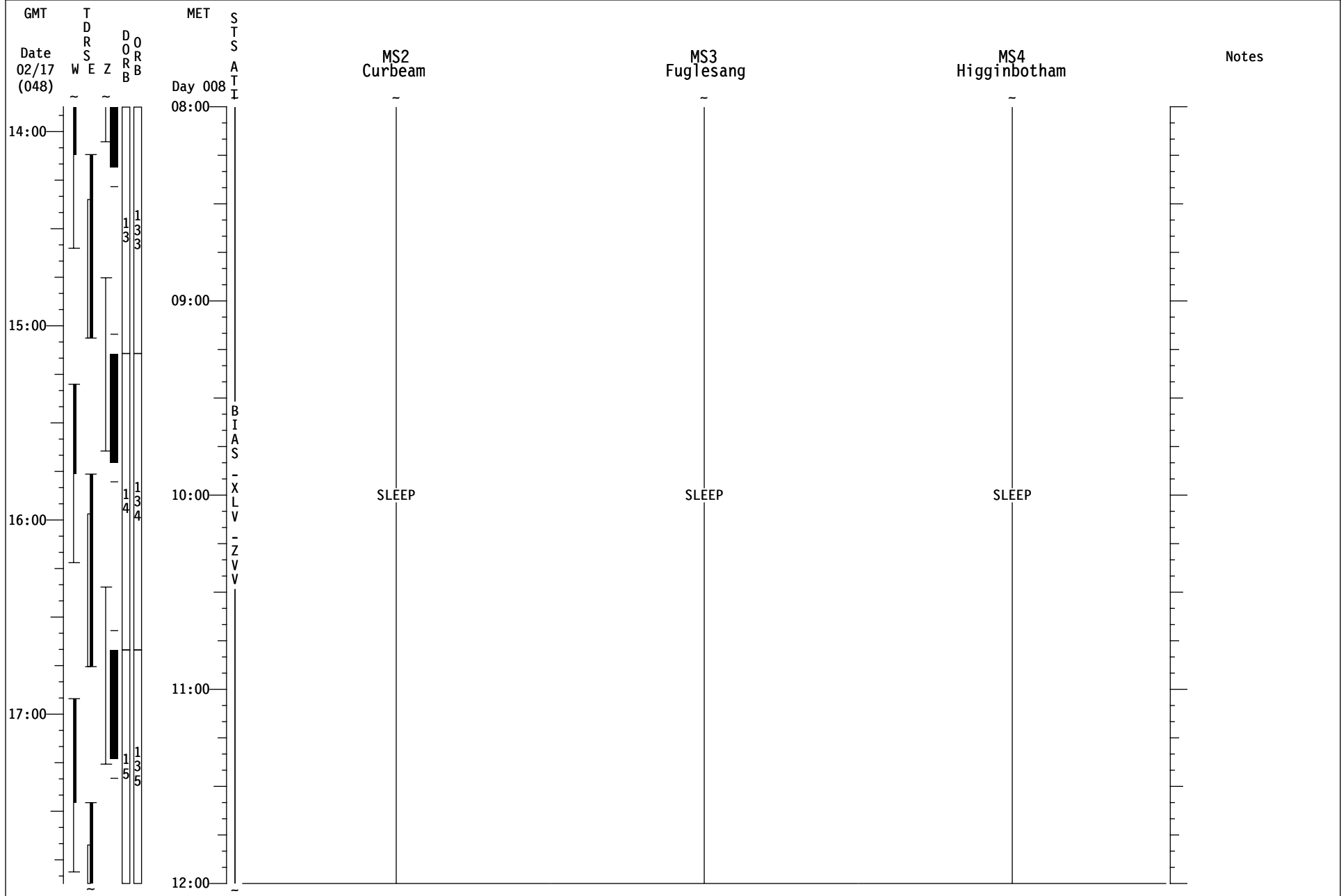


# STS-116 FD 09

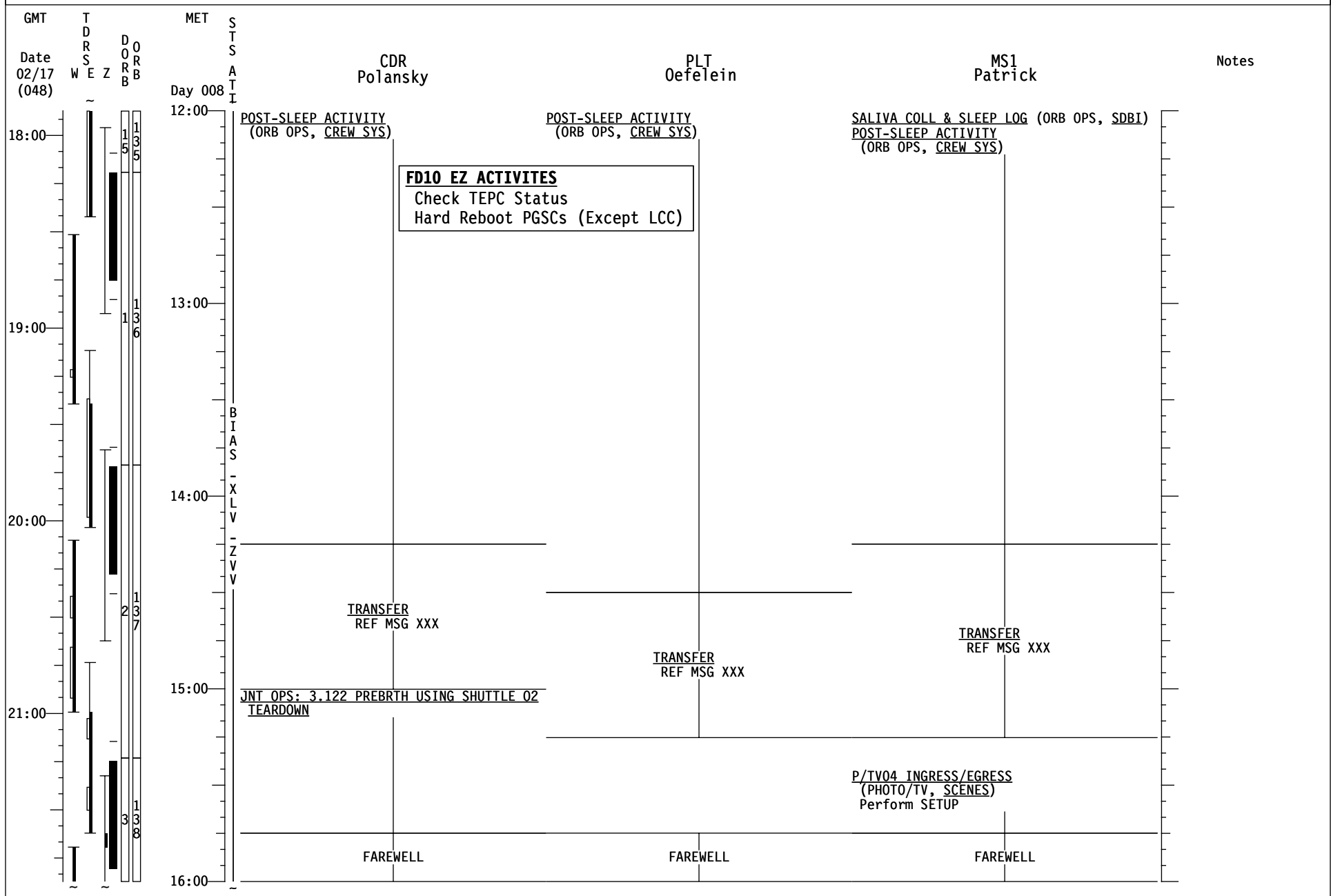




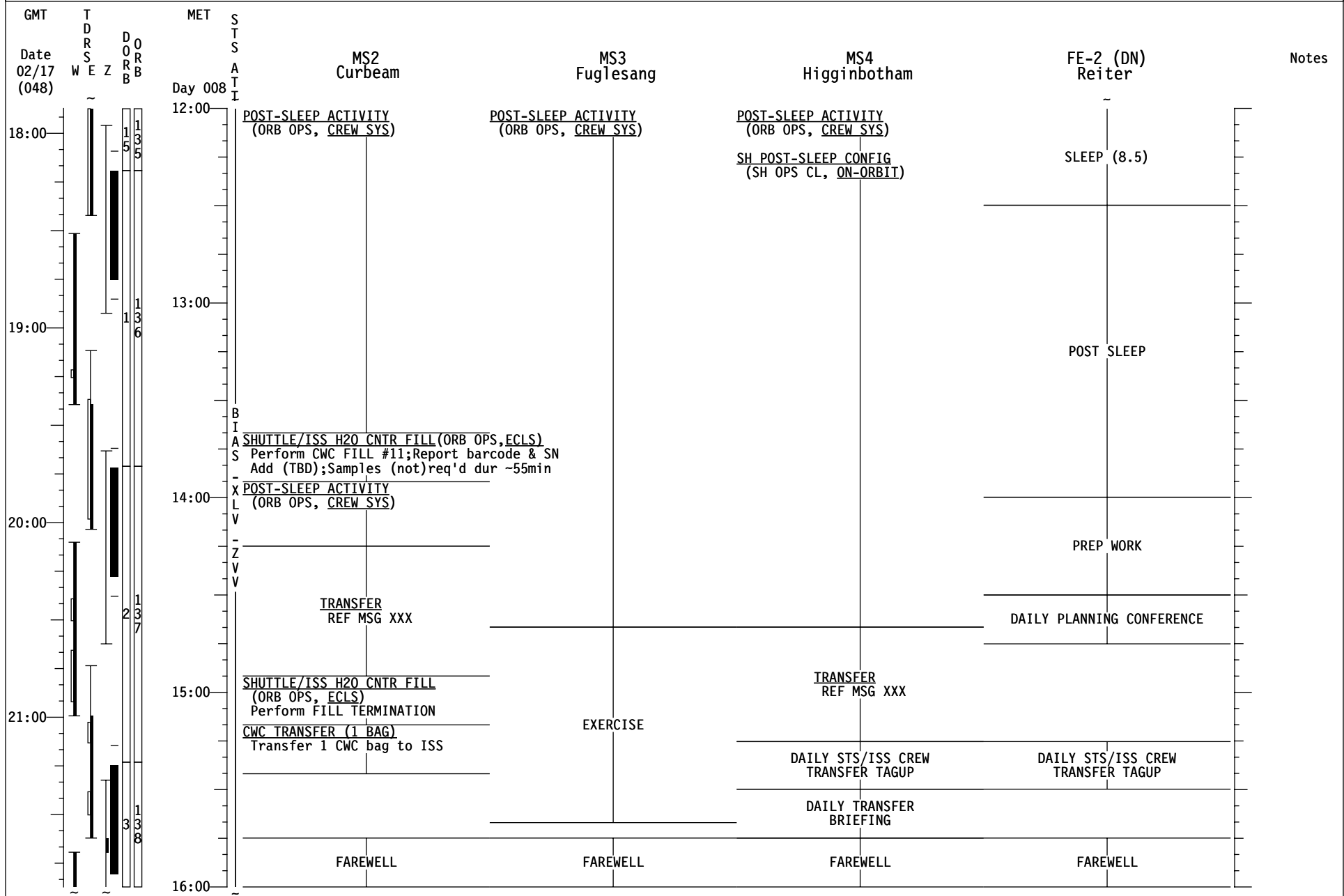
# STS-116 FD 09



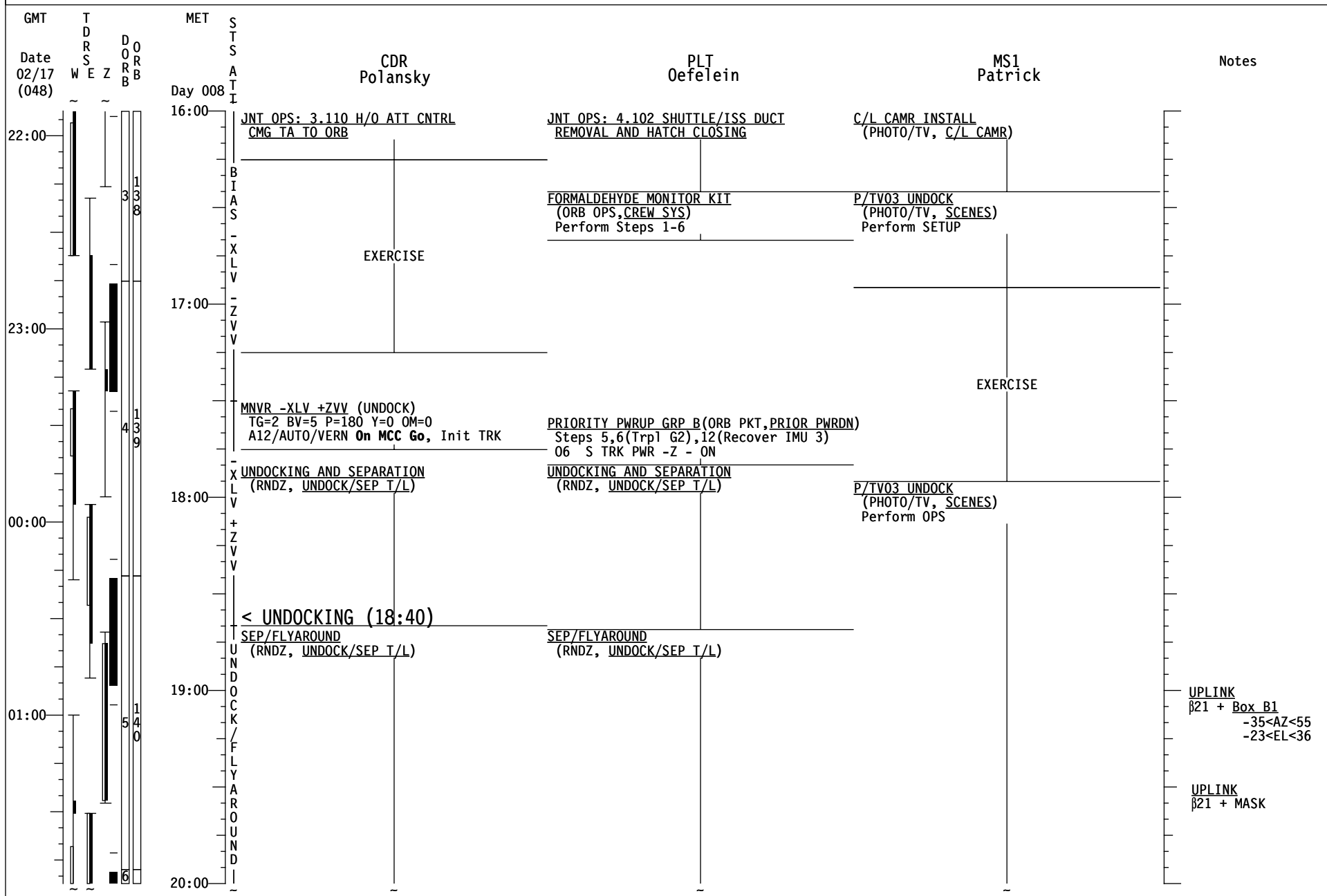
# STS-116 FD 10



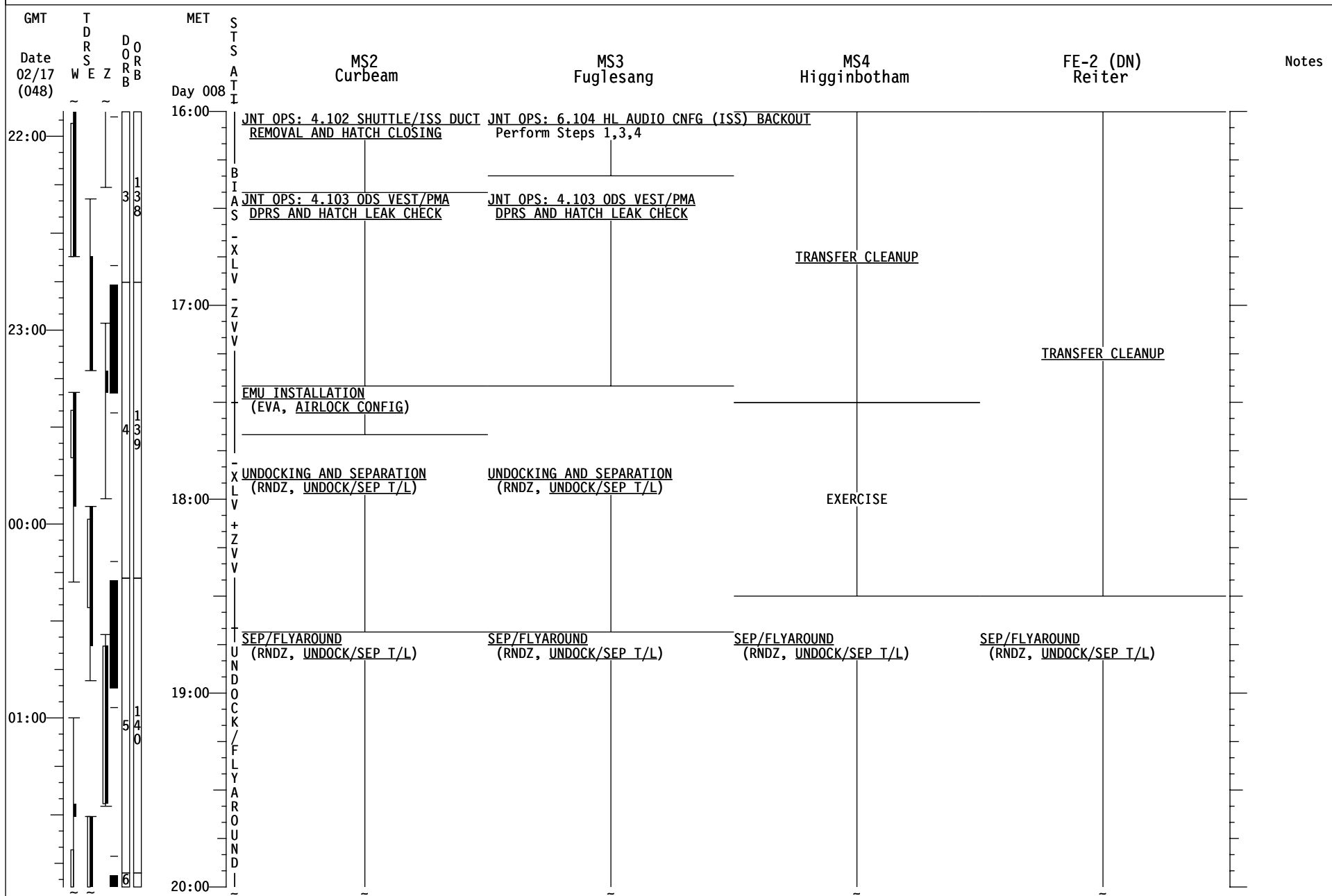
# STS-116 FD10



# STS-116 FD10



# STS-116 FD10



# STS-116 FD10

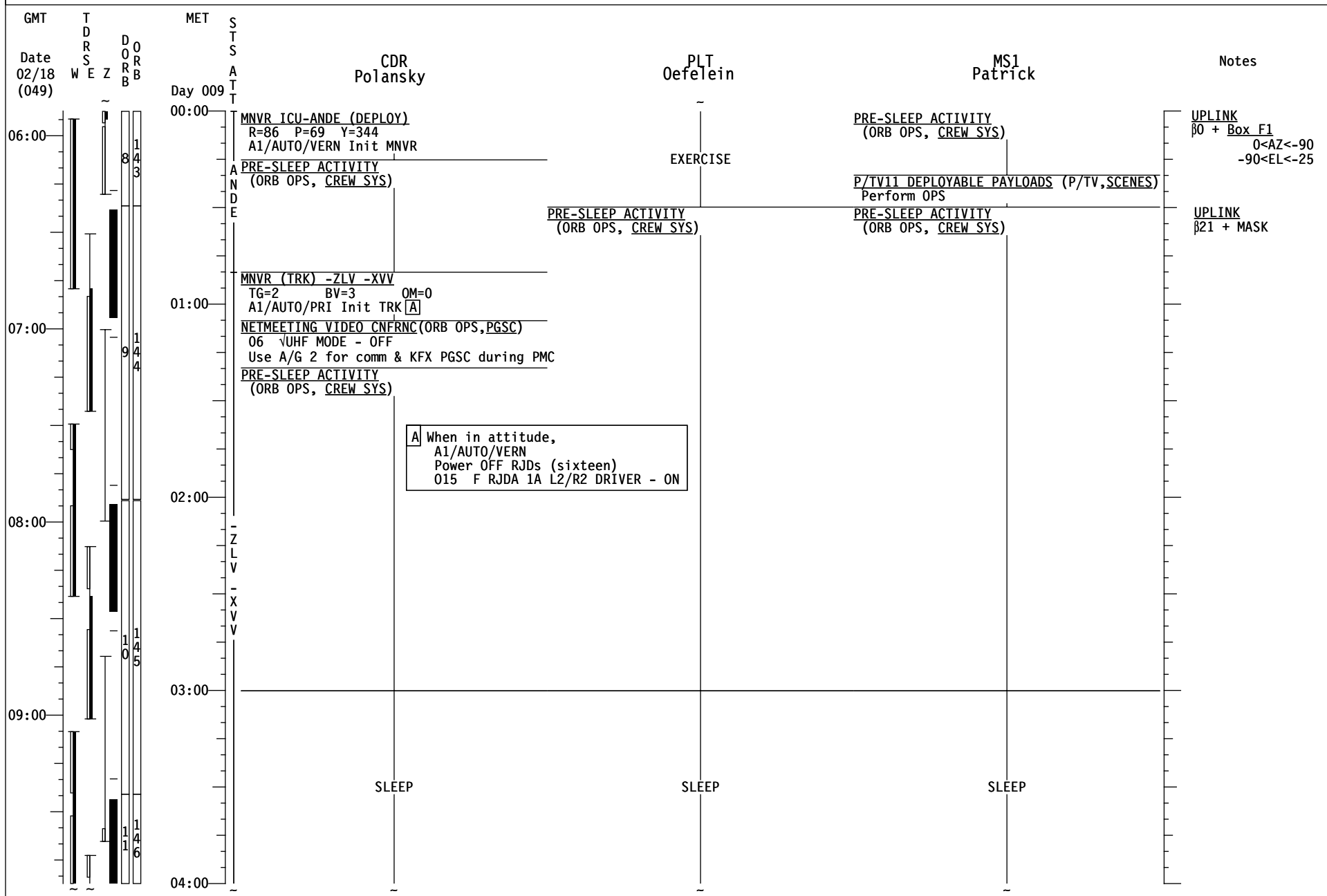
GMT Date 02/18 (049)	TDRS W E Z	DORB D O R B	MET Day 008	STS A T I	CDR Polansky	PLT Oefelein	MS1 Patrick	Notes
02:00					SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	P/TV03 UNDOCK (PHOTO/TV, SCENES) Perform OPS	
					MNVR -ZLV +YVV (SIMO DUMP) TG=2 BV=5 P=90 Y=0 OM=230 A1/AUTO/VERN Init TRK	SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS) Perform TEARDOWN	P/TV03 UNDOCK (PHOTO/TV, SCENES) Perform DEACT, Step 3	
					PRTY PWRDN GRP B (ORB PKT, PRIOR PWRDN) Steps 5,6(Single G2), & 12 (In Step 12, IMU 3 STBY-ITEM 23 EXEC)	SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) Initiate Supply/Waste Dump	WLES RECFG PST DK/UNDK(ORB OPS,WLES)	
03:00								
					MEAL	MEAL	MEAL	
04:00						SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) Terminate Supply/Waste Dump		
					MNVR MEPSI (DEPLOY) TG=2 BV=5 P=349 Y=332 OM=203 A1/AUTO/VERN Init TRK			
					IMU STAR OF OPPTY ALIGN (ORB OPS, GNC)		P/TV11 DEPLOYABLE PAYLOADS (P/TV,SCENES) Perform OPS	
05:00					M RCS REG RCNEG (ORB OPS, RCS) E HEATER RECONFIG-CONFIG B P (ORB OPS, EPS)			
					PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	EXERCISE		
00:00								



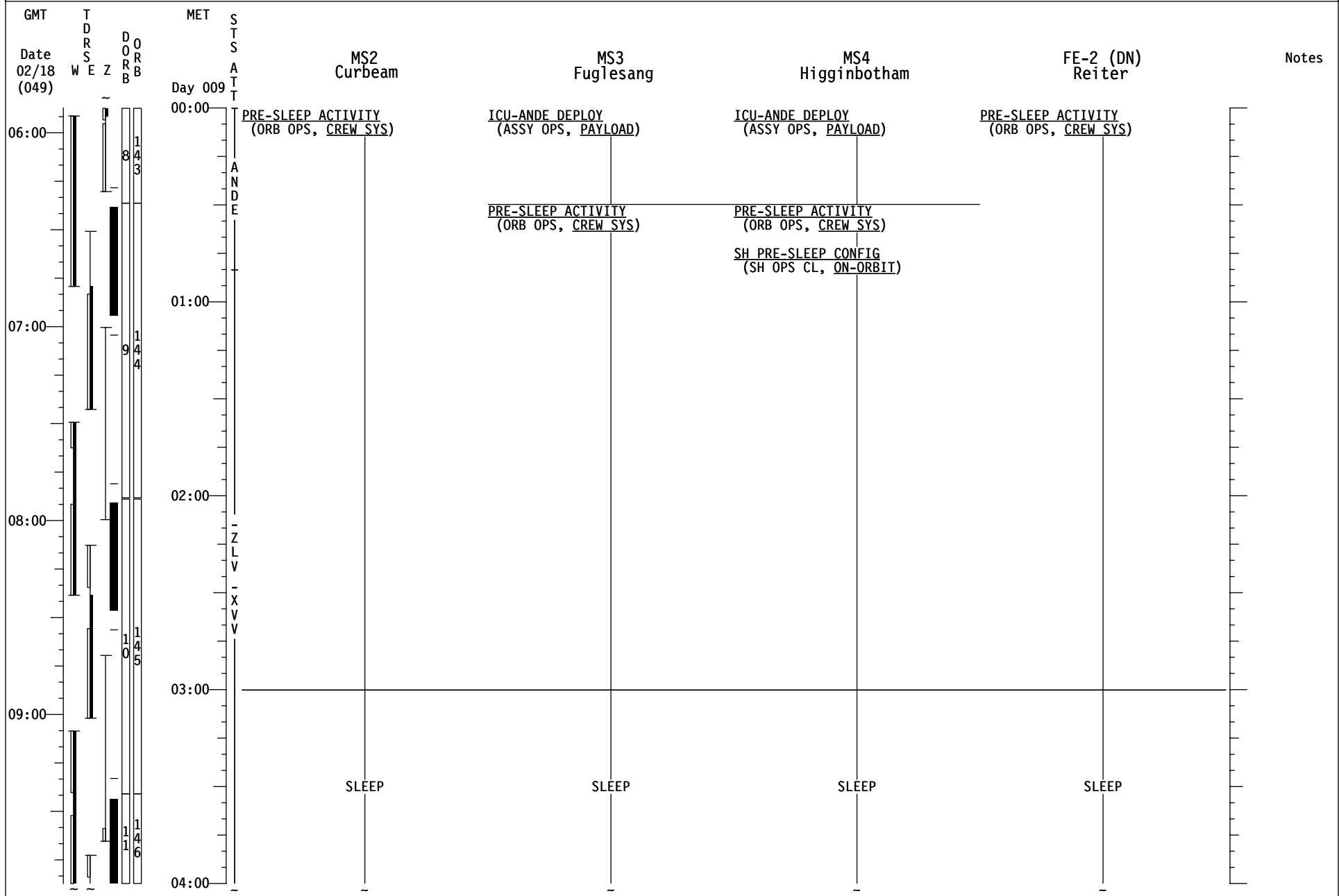
# STS-116 FD10

GMT	TDRS W E Z	DORB D O R B B	MET Day 008	S T S A T I	MS2 Curbeam	MS3 Fuglesang	MS4 Higginbotham	FE-2 (DN) Reiter	Notes
02:00					SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	
							JNT OPS: 6.106 SSOR DEACTIVATION		
03:00					MEAL	MEAL		EXERCISE	
					POST EVA ENT PREP (EVA, POST EVA ENT PREP)	POST EVA ENT PREP (EVA, POST EVA ENT PREP)	MEAL		
04:00						MEPSI DEPLOY (ASSY OPS, PAYLOAD)	MEPSI DEPLOY (ASSY OPS, PAYLOAD)	MEAL	
						PLAYBACK (DIGITAL) (PHOTO/TV, CUE CARD) UNDOCK KU TDRW (22:27-23:20)			
05:00					EXERCISE		FILTER CLEANING (IFM, SCHEDULED MAINTENANCE)		
00:00									

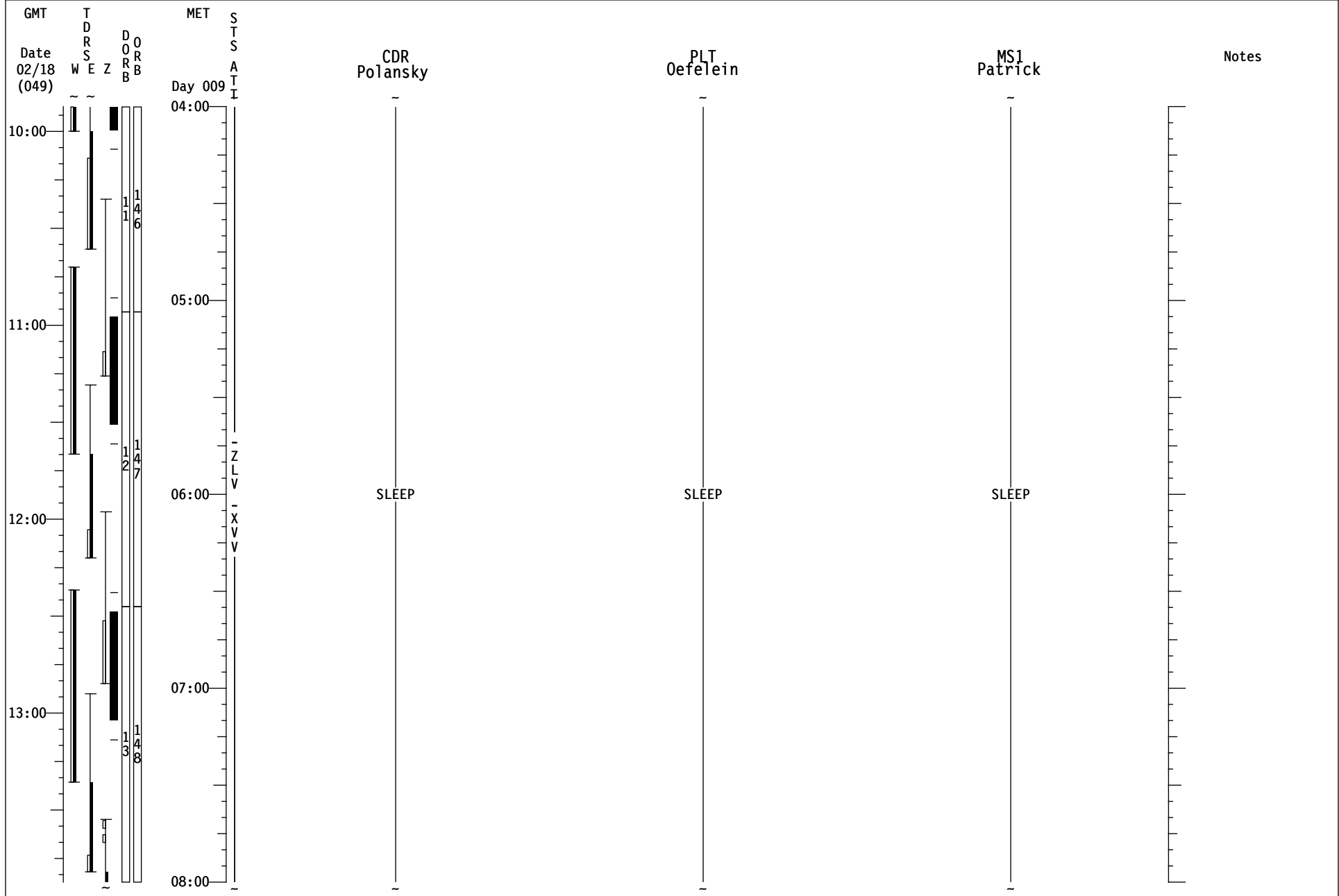
# STS-116 FD10



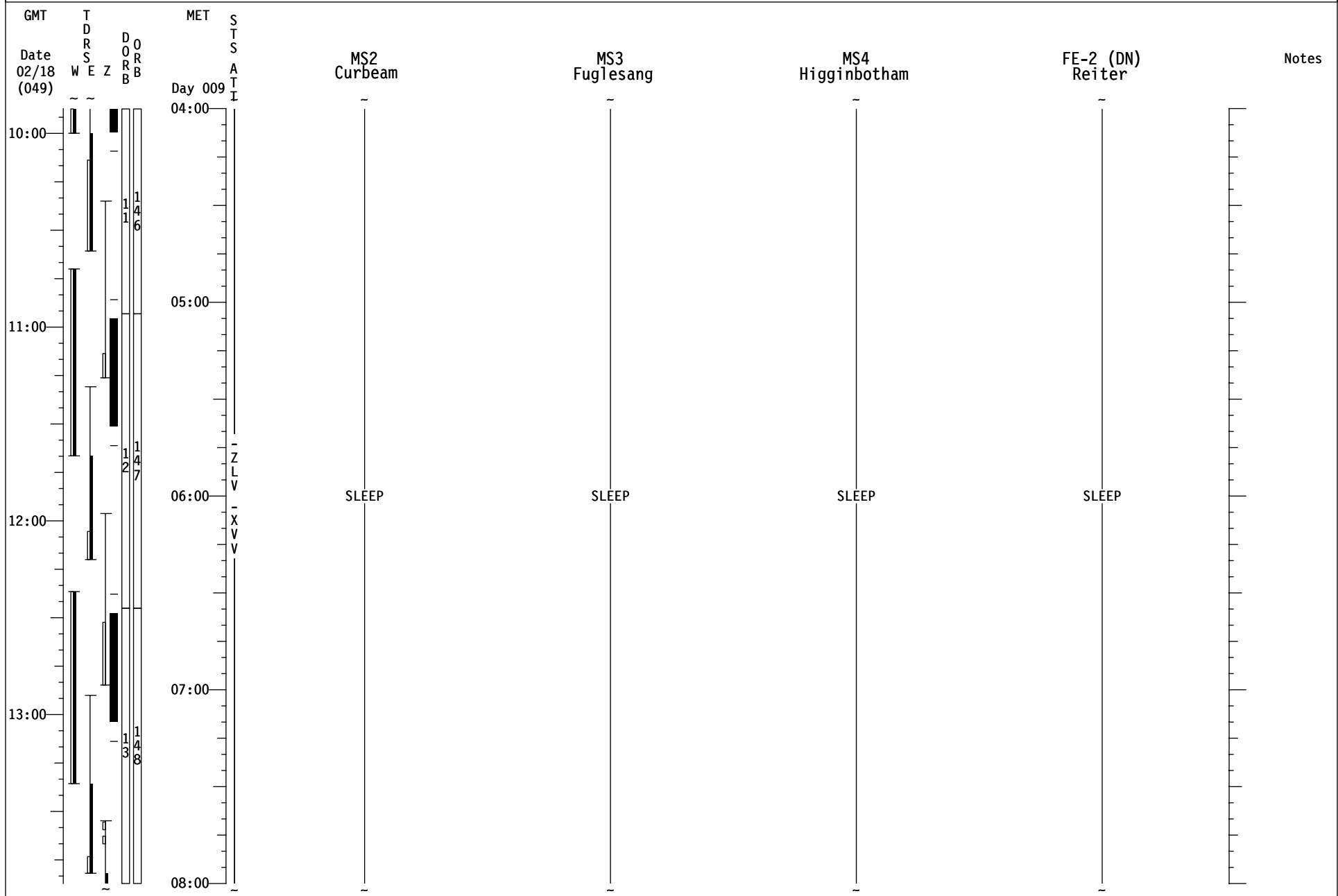
# STS-116 FD 10



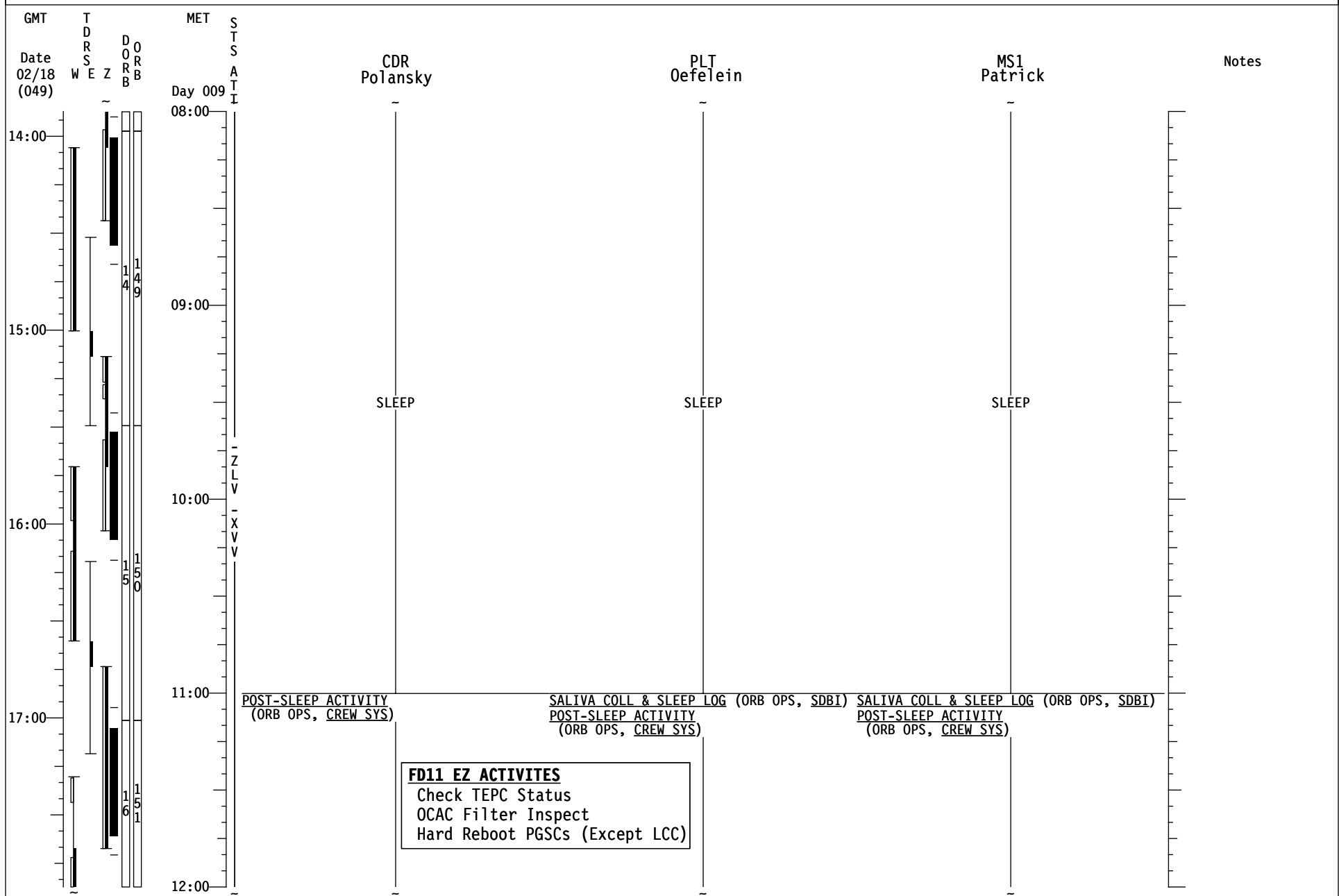
# STS-116 FD10



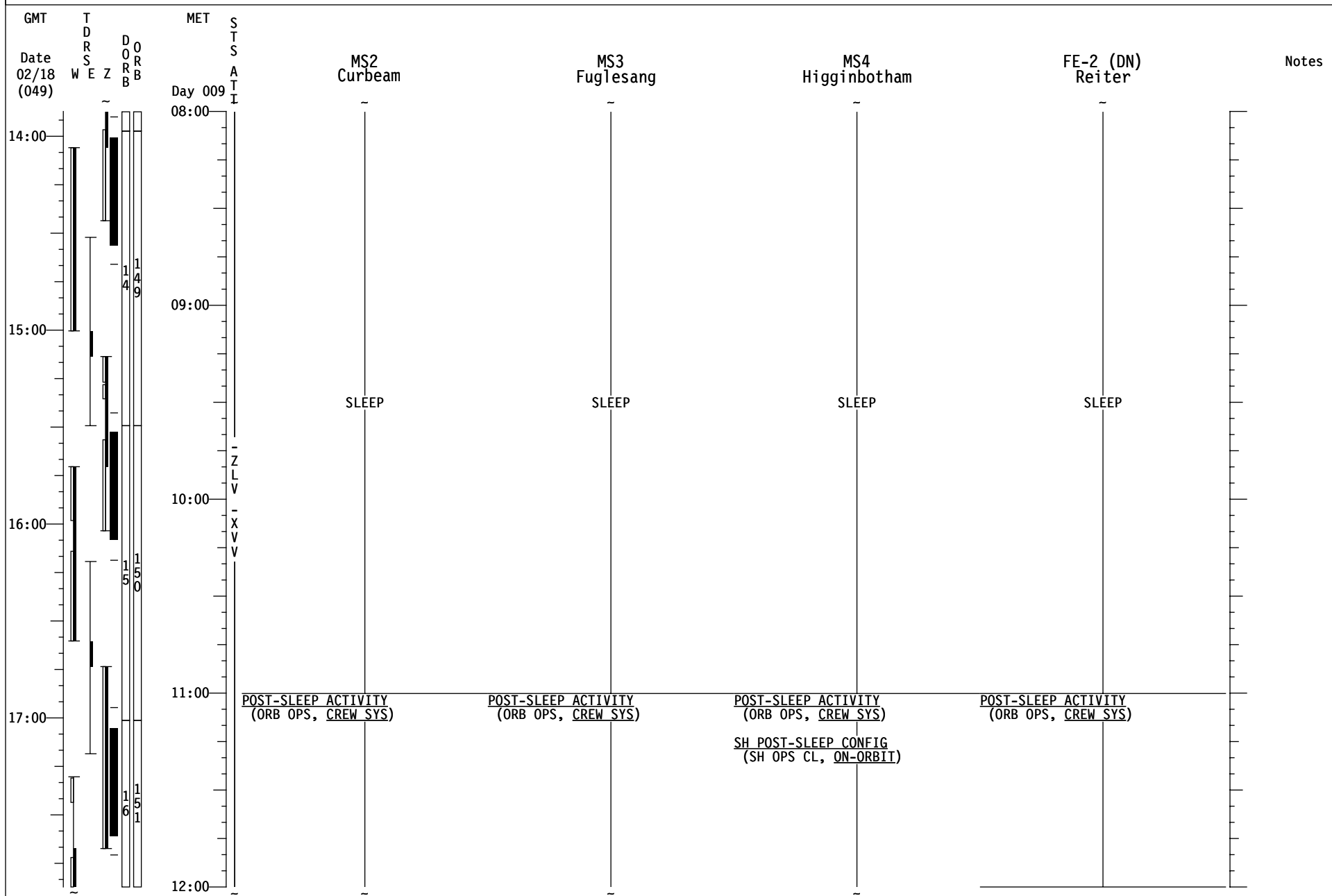
# STS-116 FD10



# STS-116 FD 11



# STS-116 FD 11

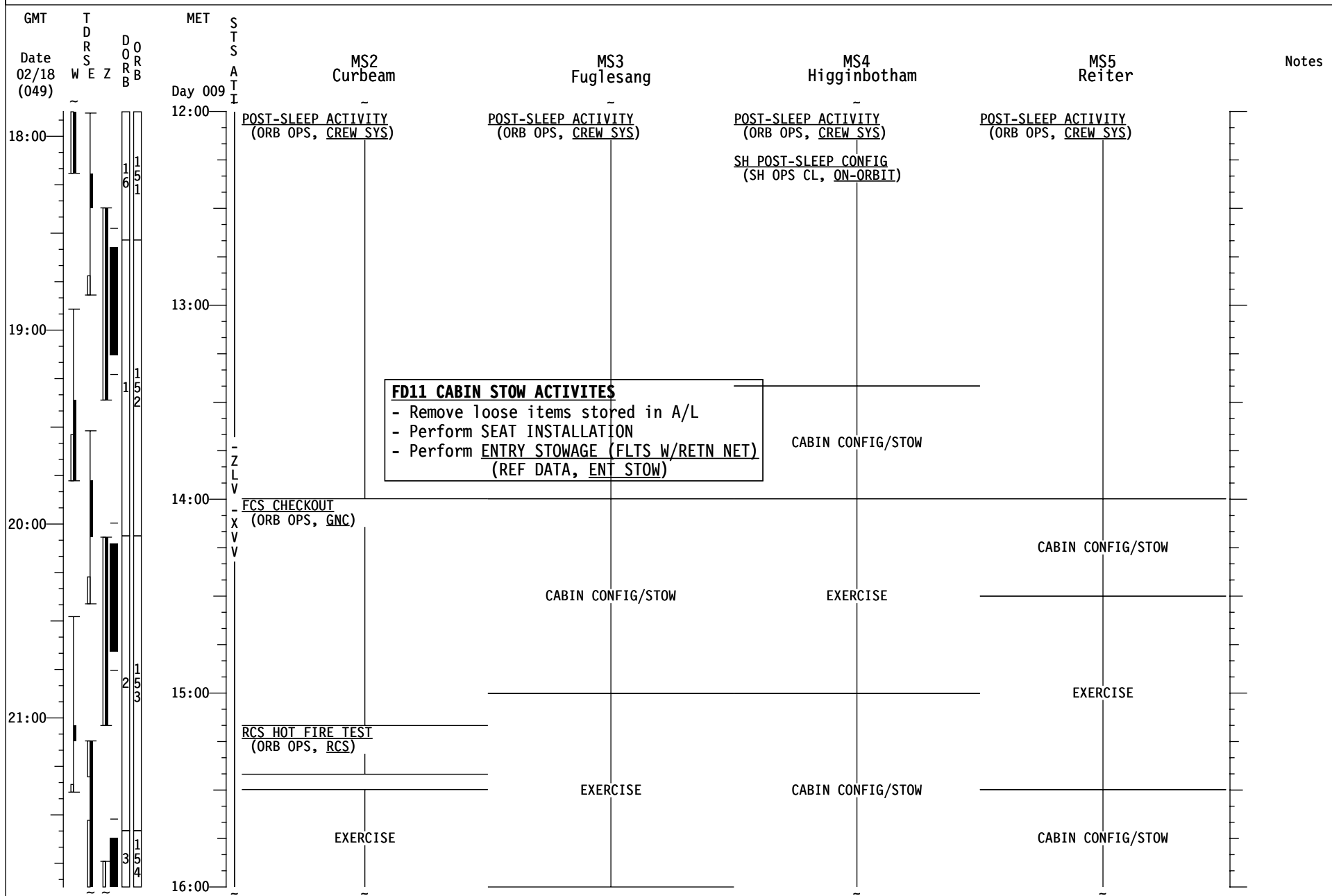


# STS-116 FD 11

GMT	TDRS WSEZ	DORB	MET	STS A T I	CDR Polansky	PLT Oefelein	MS1 Patrick	Notes
Date 02/18 (049)			Day 009					
18:00		151			POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
19:00		152			W/B STEAM VENT HTR ACT R2 VBLR CNTLR/HTR(three) -B PWR (three) -ON POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)			
20:00		153		Z L V X V V	CABIN CONFIG/STOW			
21:00		154			FCS CHECKOUT (ORB OPS, GNC)	FCS CHECKOUT (ORB OPS, GNC)	CABIN CONFIG/STOW	
		155			RCS HOT FIRE TEST (ORB OPS, RCS)	RCS HOT FIRE TEST (ORB OPS, RCS)		
		156			PILOT WITH RHC (ORB OPS, PGSC)	PILOT WITH RHC (ORB OPS, PGSC)		
16:00		157					SSV DEACTIVATION (PHOTO/TV, SSV)	UPLINK TFL 184



# STS-116 FD 11



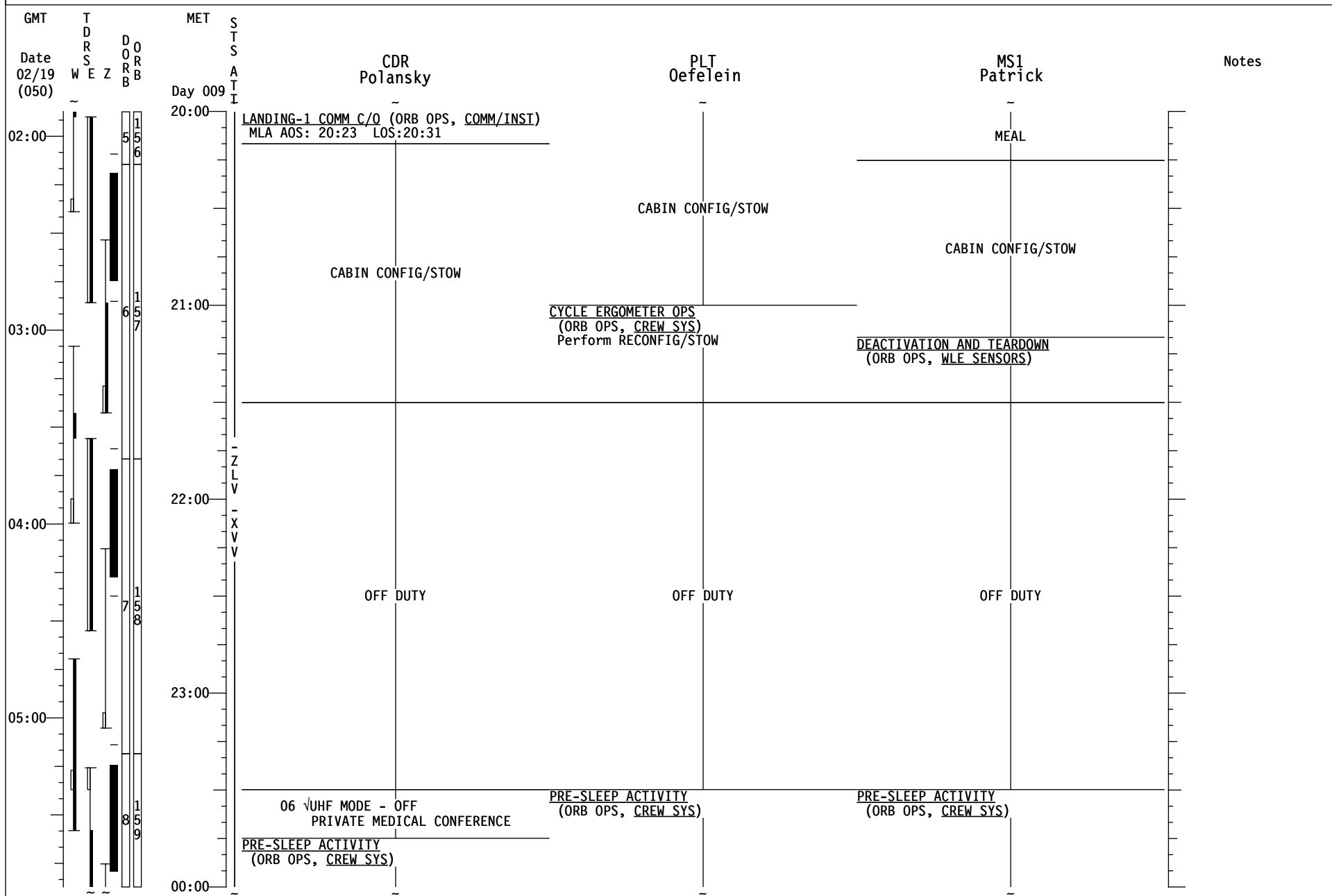
# STS-116 FD 11

GMT	TDRS W E Z	DORB	MET Day 009	STS A T I	CDR Polansky	PLT Oefelein	MS1 Patrick	Notes
22:00								
					PILOT WITH RHC (ORB OPS, PGSC)	PILOT WITH RHC (ORB OPS, PGSC)		
							EXERCISE	
23:00					EXERCISE	CABIN CONFIG/STOW		
							CABIN CONFIG/STOW	
					DEORBIT PREP BRIEFING	DEORBIT PREP BRIEFING	DEORBIT PREP BRIEFING	
00:00					MNVR RAFT (DEPLOY) TG=2 BV=2 OM=340 A1/AUTO/VERN Init TRK		L17 Check MCIU filter screen	UPLINK β0
					FUTURE LOADED MNVR -ZLV -XVV TG=2 BV=3 OM=0 A1/AUTO/VERN (19:00) Init TRK		ANALOG PAO CC (PHOTO/TV, SONY PD100)	
					CABIN CONFIG/STOW	EXERCISE	P/TV11 DEPLOYABLE PAYLOADS (P/TV, SCENES) Perform OPS	UPLINK β21 + Mask
					RMS PWRDN (PDRS, RMS PWRDN) Steps 3,5-7		PUBLIC AFFAIRS EVENT KU: 18:26-19:19, TDRE	
01:00					< FUTURE LOADED MNVR		ENTRY VIDEO (PHOTO/TV, MINI-CAM) Perform SETUP	
					MEAL	MEAL	MEAL	
20:00					LANDING-1 COMM C/O (ORB OPS, COMM/INST) MLA AOS: 20:23 LOS:20:31	CABIN CONFIG/STOW		

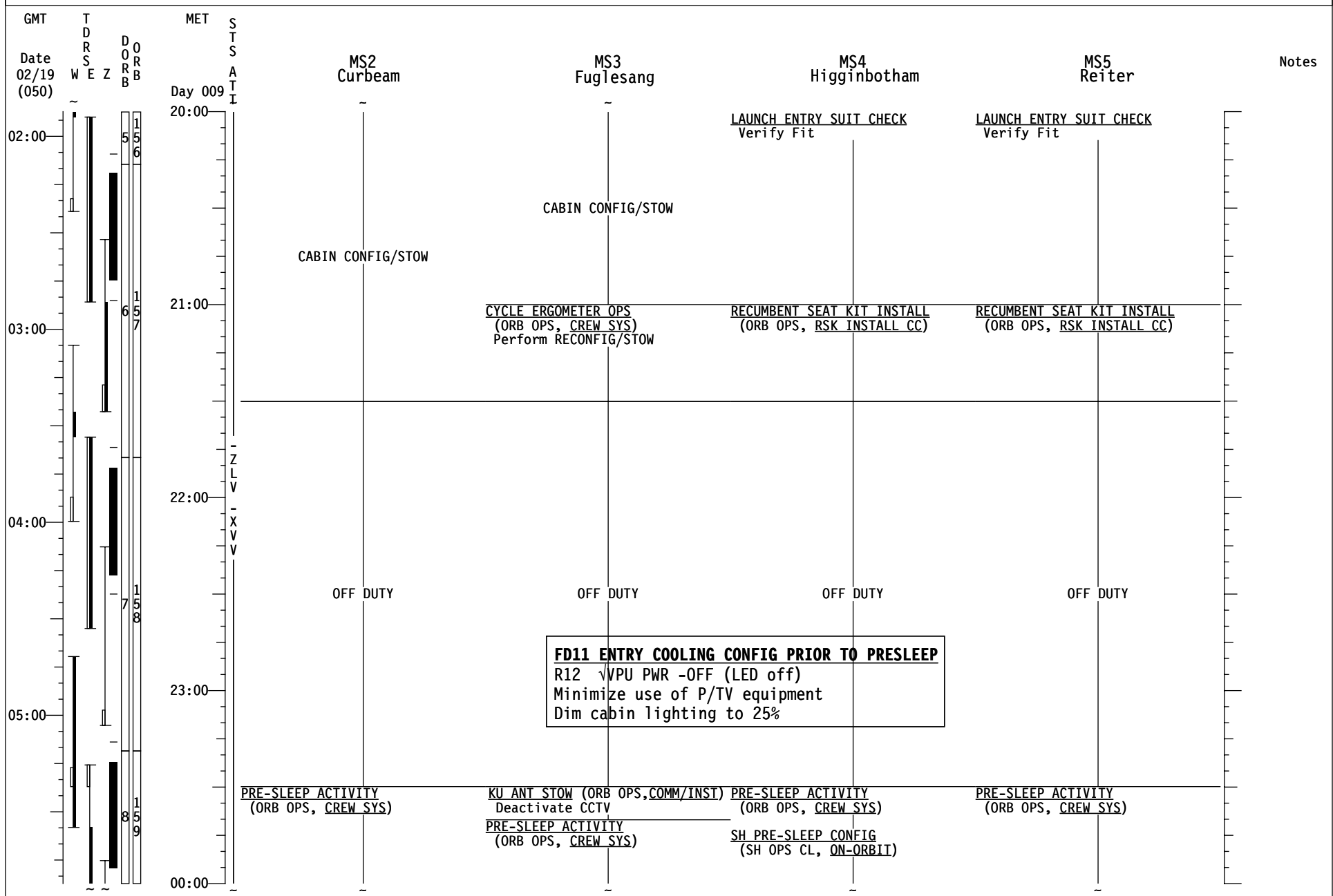
# STS-116 FD 11

GMT	T D R S W E Z	D O R B 1 5 3 4	MET Day 009	S T S A T I	MS2 Curbeam	MS3 Fuglesang	MS4 Higginbotham	MS5 Reiter	Notes
22:00					EXERCISE		CABIN CONFIG/STOW		
						CABIN CONFIG/STOW		CABIN CONFIG/STOW	
23:00					<u>TRANSFER CLEANUP</u>		<u>TRANSFER CLEANUP</u>		
					DEORBIT PREP BRIEFING	DEORBIT PREP BRIEFING	DEORBIT PREP BRIEFING	DEORBIT PREP BRIEFING	
00:00					CABIN CONFIG/STOW	<u>RAFT DEPLOY</u> (ASSY OPS, PAYLOAD)	<u>RAFT DEPLOY</u> (ASSY OPS, PAYLOAD)	CABIN CONFIG/STOW	
					<u>PUBLIC AFFAIRS EVENT</u> KU: 18:26-19:19, TDRE	<u>PUBLIC AFFAIRS EVENT</u> KU: 18:26-19:19, TDRE	<u>PUBLIC AFFAIRS EVENT</u> KU: 18:26-19:19, TDRE	<u>PUBLIC AFFAIRS EVENT</u> KU: 18:26-19:19, TDRE	
01:00					MEAL	MEAL	MEAL	MEAL	
20:00					CABIN CONFIG/STOW	CABIN CONFIG/STOW			

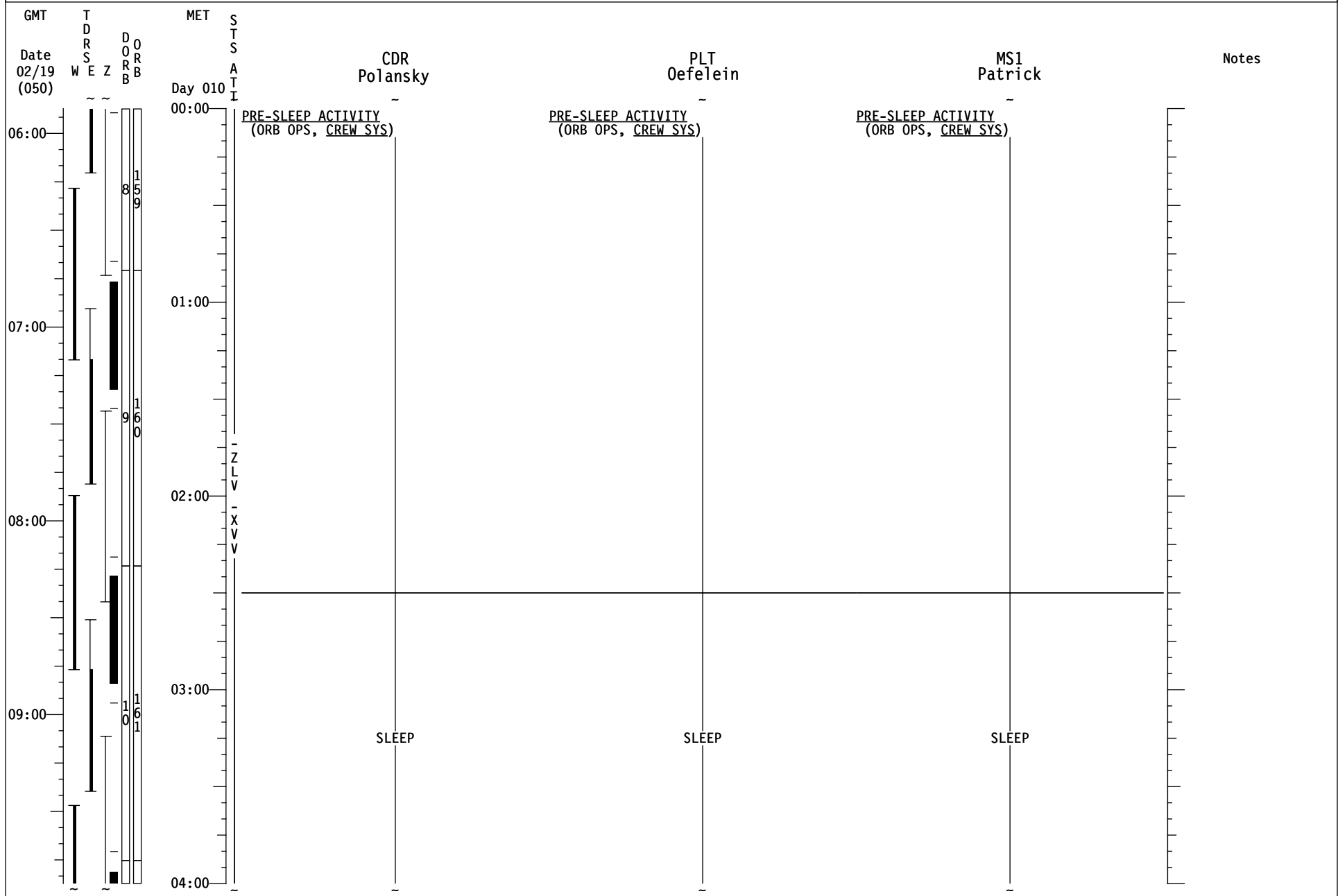
# STS-116 FD11



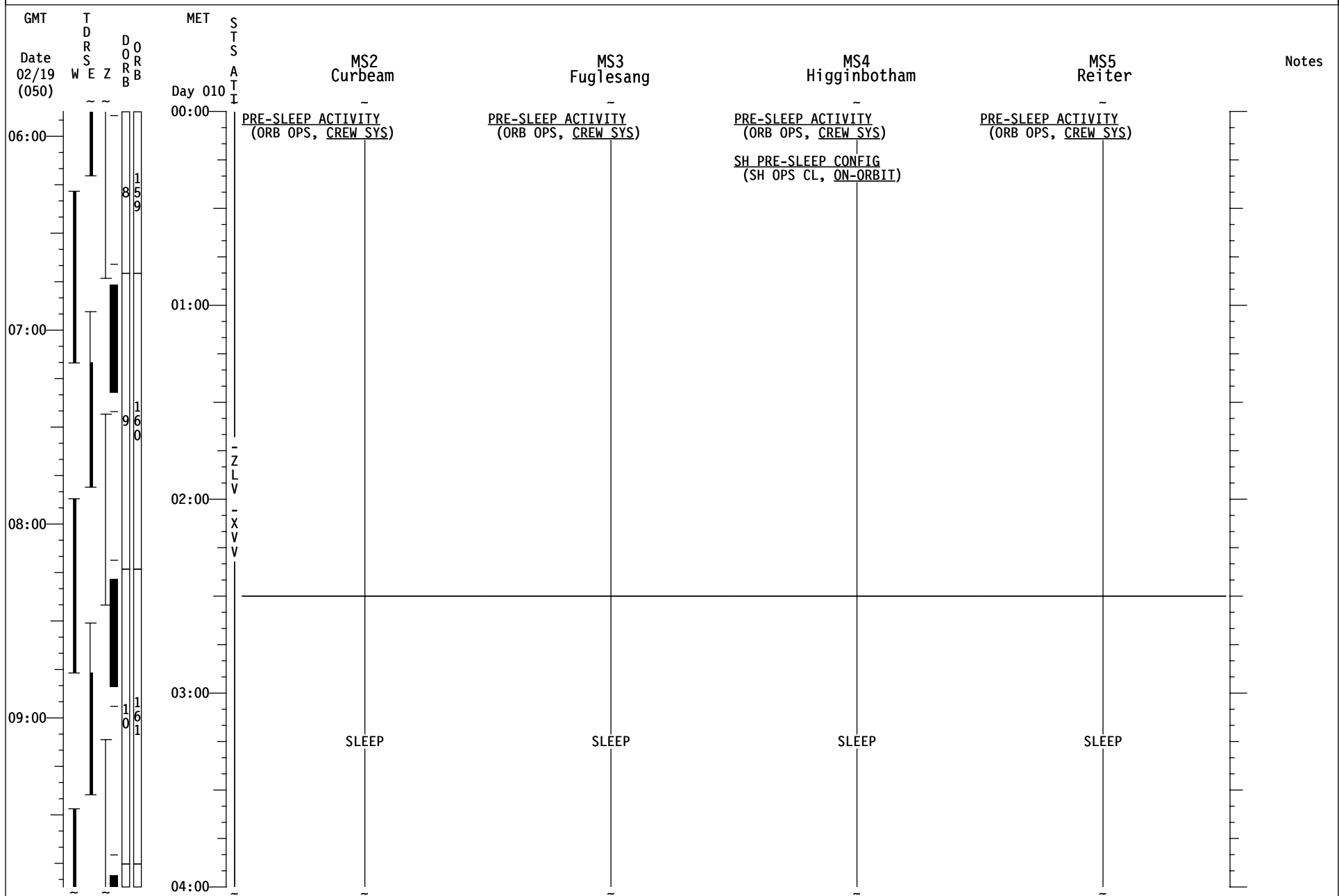
# STS-116 FD 11



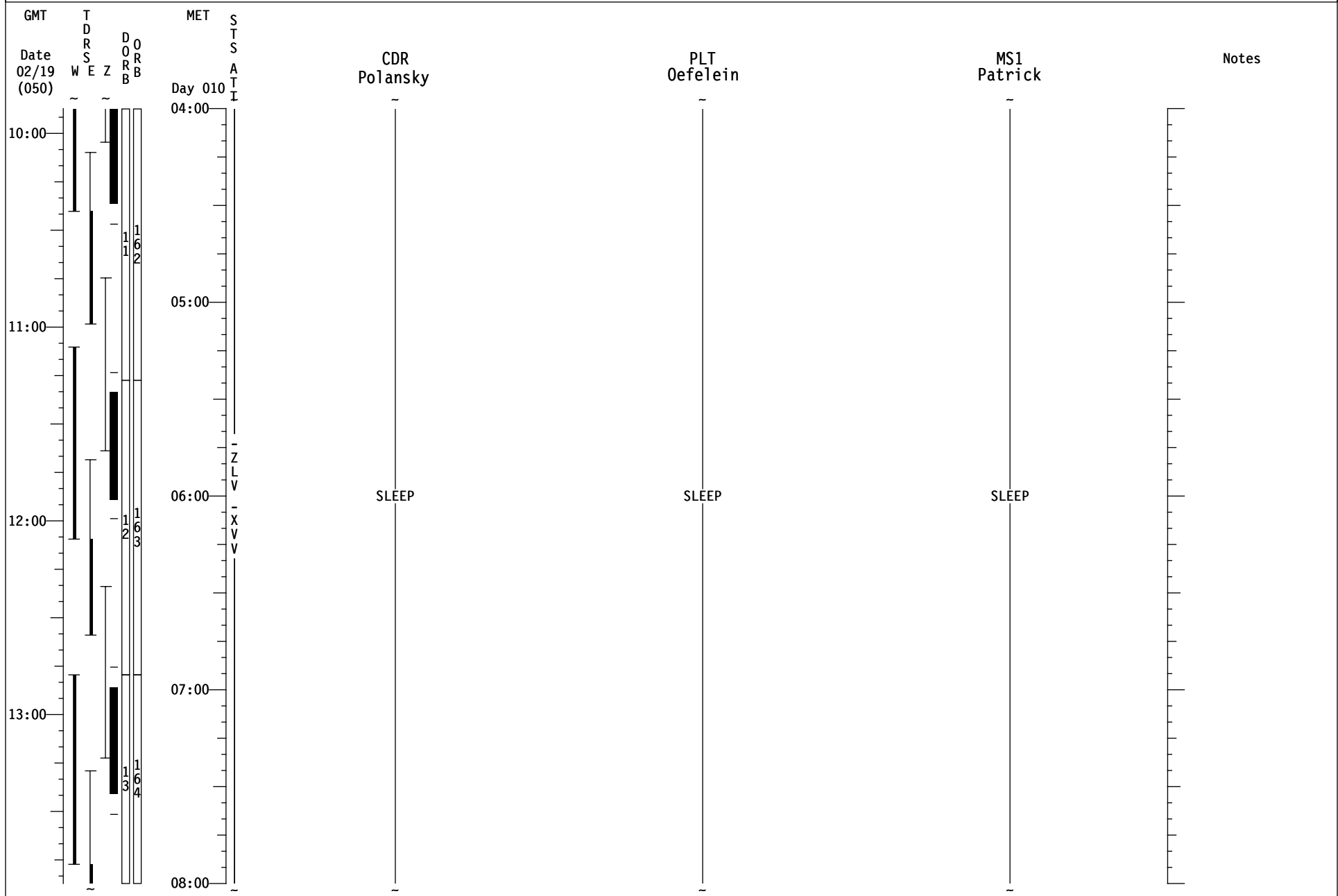
# STS-116 FD 11



# STS-116 FD11

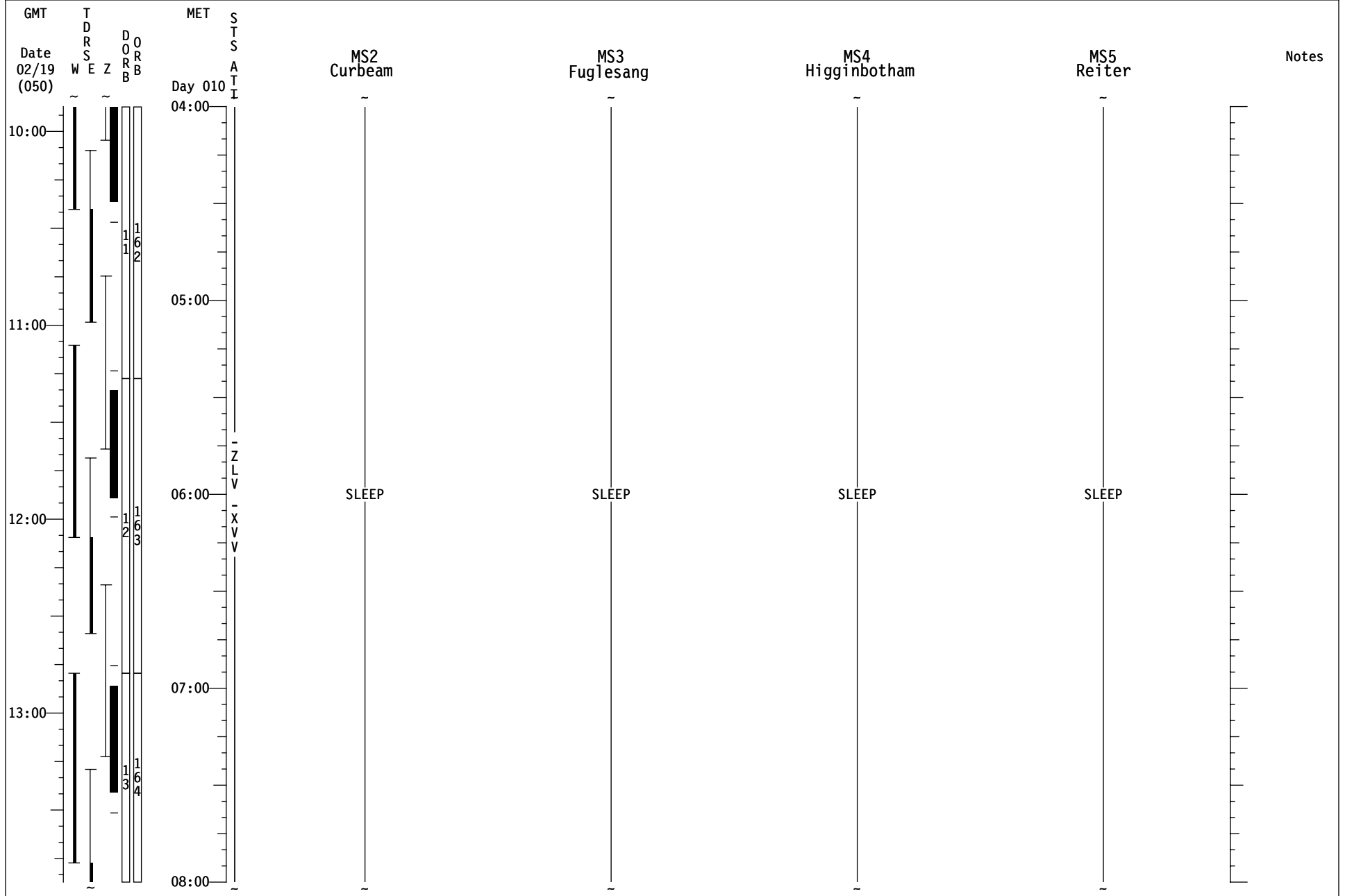


# STS-116 FD11

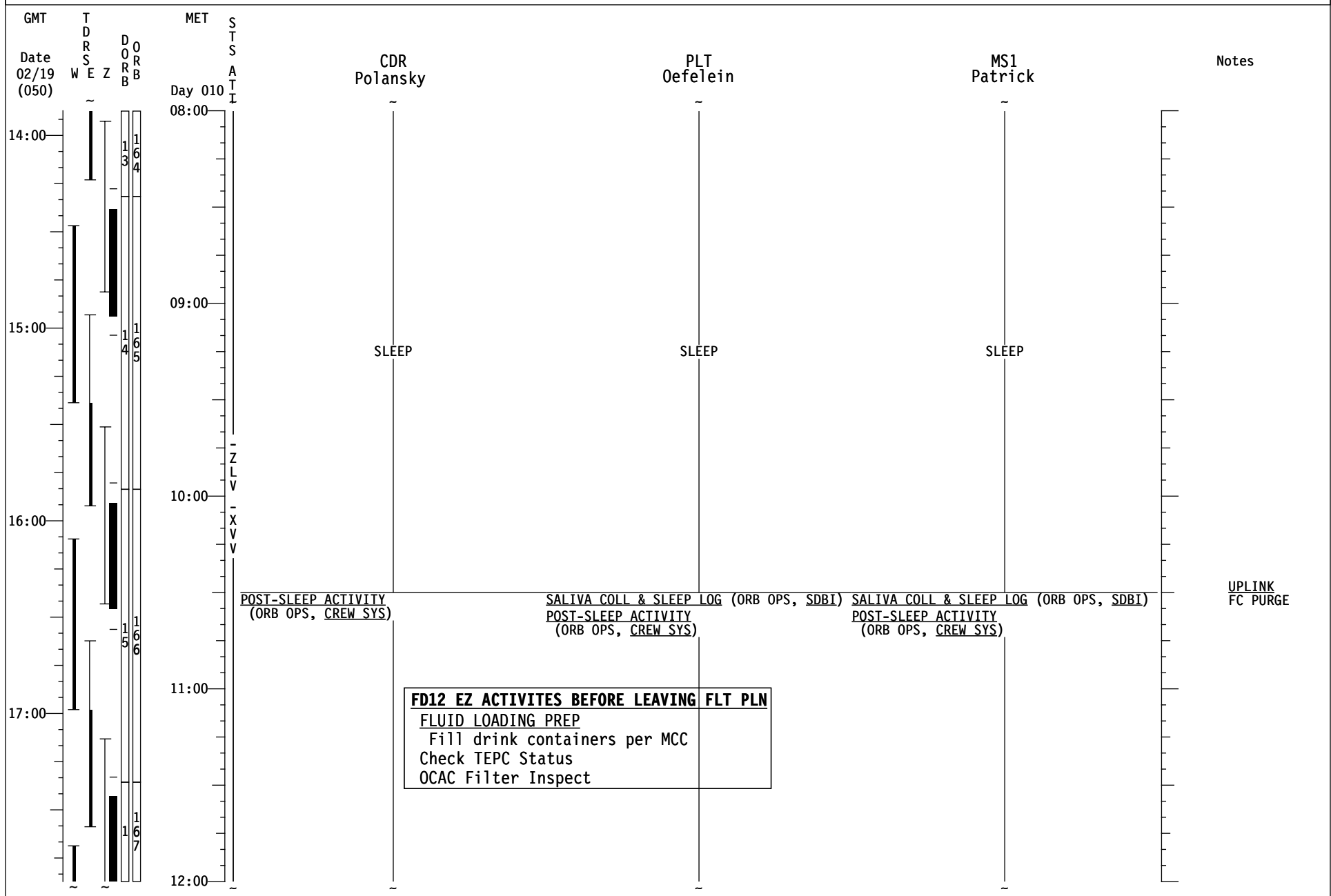




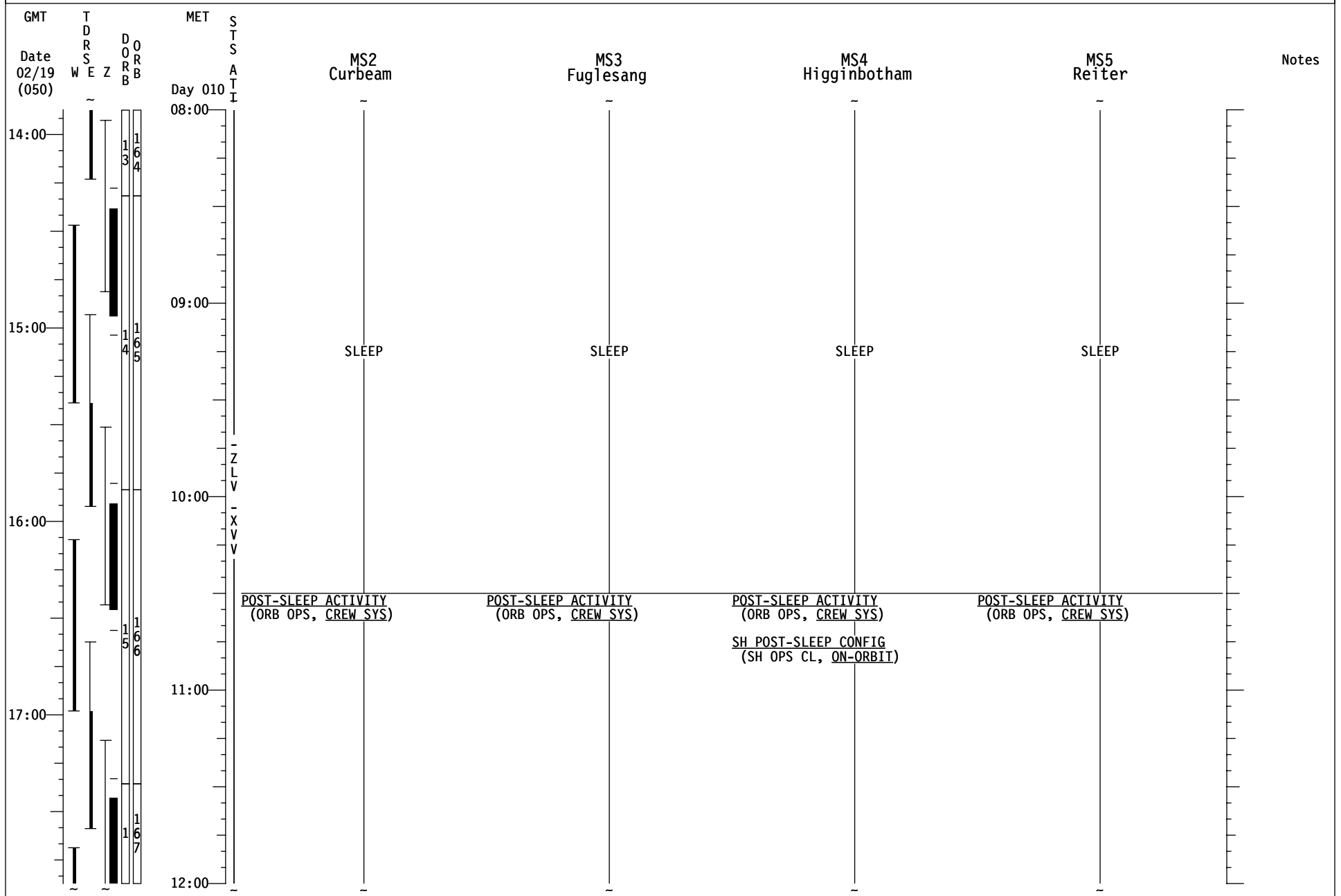
# STS-116 FD11



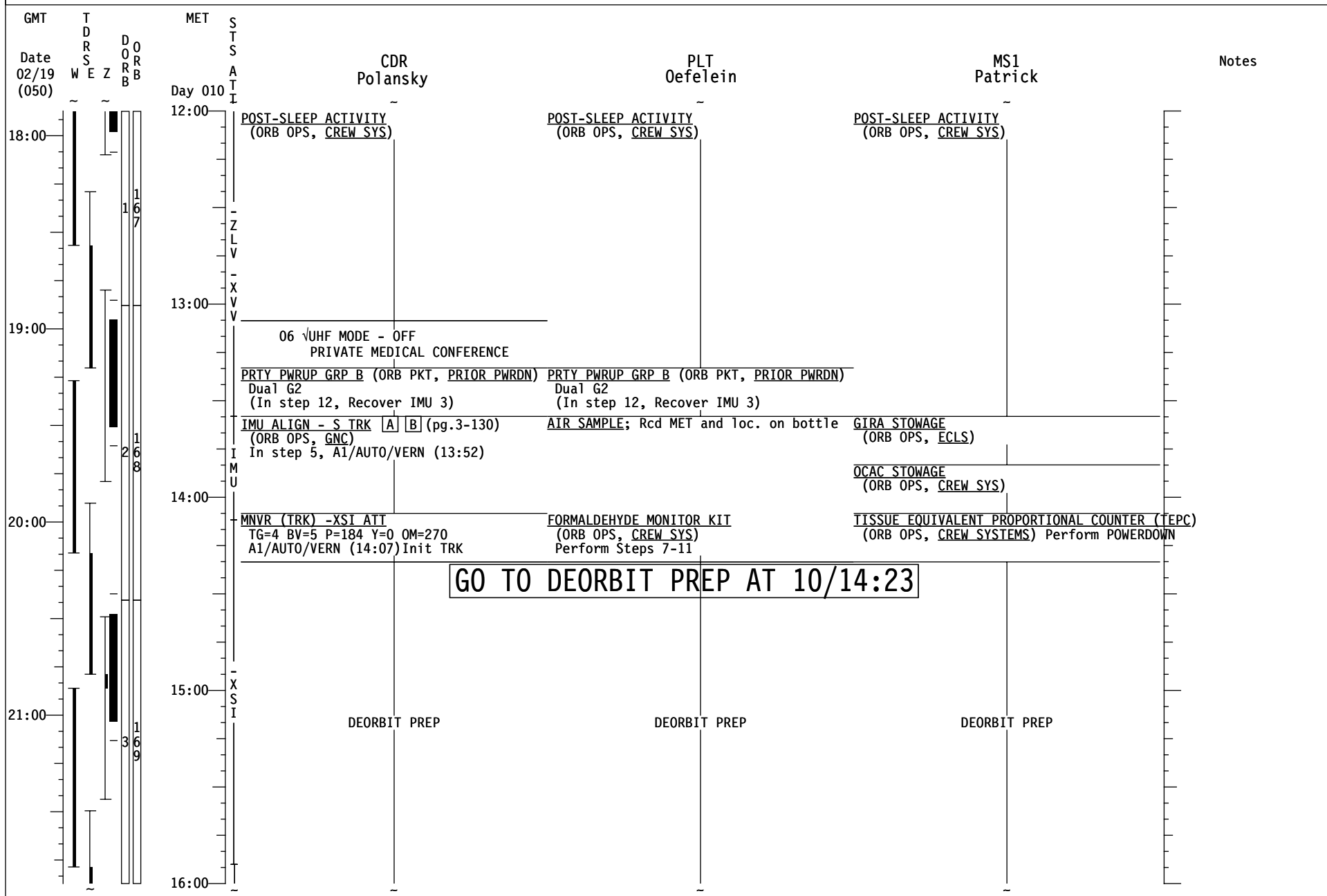
# STS-116 FD12



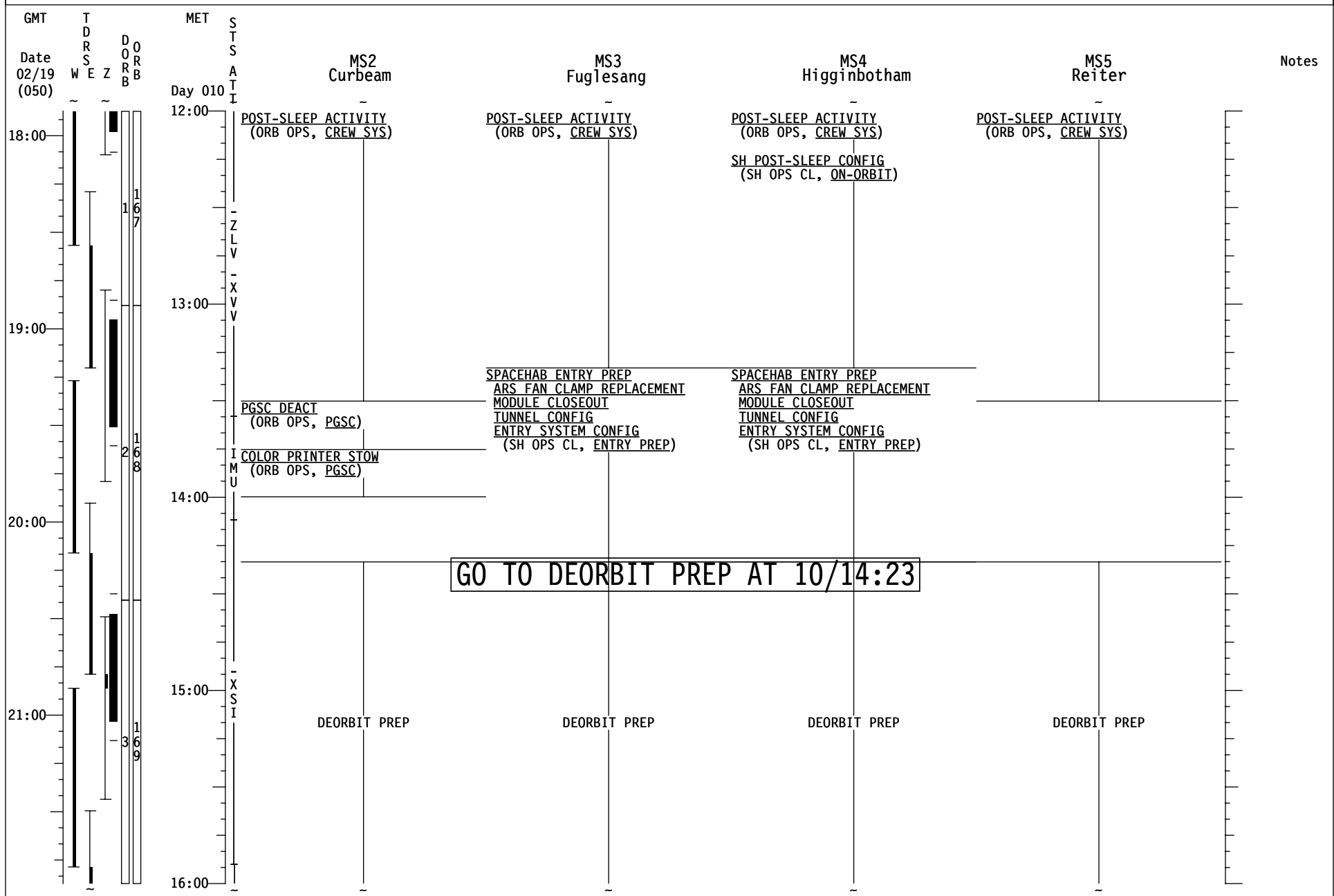
# STS-116 FD12



# STS-116 FD12



# STS-116 FD12



GO TO DEORBIT PREP AT 10/14:23

<b>A</b>	<u>IMU STAR ALIGN PAD</u>		
ID: -Y: 53, MENKENT MET (10/13:22 TO 10/14:12)			
-Z: 22, ALTAIR MET (10/13:26 TO 10/14:15)			
ANG DIFF: 92.1			
DUAL S TRKR ALIGNMENT		2nd ATTITUDE (SINGLE S TRKR) -Z: 53 -Y:22	
R 295	R 206	028	
P 225	P 227	241	
Y 344	Y 359	342	
REQD ID:			
-Y: _____, -Z: _____, ANG ERR _____, _____			
ANG:	1	2	3
$\Delta X$	( ) _____	( ) _____	( ) _____
$\Delta Y$	( ) _____	( ) _____	( ) _____
$\Delta Z$	( ) _____	( ) _____	( ) _____
EXECUTION TIME: ____/____:____:____ MET			

<b>B</b>	<u>IMU VERIFICATION STAR ALIGN PAD</u>		
ID: -Y: 16, ACHERNAR MET (10/13:53 TO 10/14:41)			
-Z: 59, SCHEAT MET (10/13:57 TO 10/15:09)			
ANG DIFF: 91.3			
DUAL S TRKR ALIGNMENT		2nd ATTITUDE (SINGLE S TRKR) -Z: 16 -Y: 59	
R 207	R 149	284	
P 085	P 119	073	
Y 295	Y 298	281	
REQD ID:			
-Y: _____, -Z: _____, ANG ERR _____, _____			
ANG:	1	2	3
$\Delta X$	( ) _____	( ) _____	( ) _____
$\Delta Y$	( ) _____	( ) _____	( ) _____
$\Delta Z$	( ) _____	( ) _____	( ) _____
<b>If any <math>\Delta X</math>, <math>\Delta Y</math>, OR <math>\Delta Z</math> &gt; 0.1 Check MCC</b>			
EXECUTION TIME: ____/____:____:____ MET			

The sections following this divider page will not be included in flight copies.

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ATTITUDE TIMELINE

ATTITUDE  
TIMELINE

Attitude Timeline

MET/GMT	ORBITER		REF ATT/REMARKS	EVENT
	MNVR OPTION	DAP E/S/ $\beta$		
1 000/00:30:00 M  040/06:22:19 G	M50 (CALC) INRTL R = 245.00 MNVR P = 47.00 PYR Y = 1.00  MNVR B1/AUTO/PRI HOLD (same)	RATE 0.5000 DB AT 3.00 DB RT 0.20  SUN R 353 P 46 $\beta = 5$	+X PYR R = 0.22 P = 16.00 Y = 359.57 LVLH 000/00:39:00 M 040/06:31:19 G	OMS-2 MNVR Heads Down  DV = 95.7 ft/s TIG = 00:39:00
2 000/00:40:00 M  040/06:32:19 G				Launch STS-116  GMTLO 2006/040/05:52:19
3 000/01:10:00 M 18:22  040/07:02:19 G 10:41	LVLH TRACK TGT = 2 P = 90.00 BV = 5 Y = 6.00 OM = 93.00  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020  EARTH R 6 P 90 $\beta = 5$	LVLH R=174.00 P= 0.00 Y=273.00	Post Insertion BIAS -ZLV -YVV  SOPA -Y: 11 02:25 -Y: 46 02:48
4 000/03:20:00 M 27:40  040/09:12:19 G 19:59	M50 (CALC) INRTL R = 64.00 MNVR P = 39.00 PYR Y = 343.00  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020  SUN R 167 P 26 $\beta = 5$	+X PYR R = 179.98 P = 16.34 Y = 359.90 LVLH 000/03:30:55 M 040/09:23:14 G	NC-1 MNVR Heads Down  DV = 55.8 ft/s TIG = 03:30:55
5 000/03:35:00 M 49:59  040/09:27:19 G 42:18	LVLH TRACK TGT = 2 P = 90.00 BV = 3 Y = 0.00 OM = 0.00  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020  EARTH R 0 P 90 $\beta = 5$	LVLH R= 0.00 P=180.00 Y= 0.00	Overnight -ZLV -XVV
6 000/16:35:00 M 50:00  040/22:27:19 G 42:19	M50 (CALC) INRTL R = 66.54 MNVR P = 41.27 PYR Y = 343.93  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020  SUN R 162 P 28 $\beta = 8$	+X PYR R = 180.00 P = 16.00 Y = 0.00 LVLH 000/16:51:35 M 040/22:43:54 G	NC-2 MNVR Heads Down  DV = 8.0 ft/s TIG = 16:51:35
7 000/17:00:00 M 05:49  040/22:52:19 G 58:08	LVLH TRACK TGT = 2 P = 90.00 BV = 5 Y = 350.00 OM = 135.00  MNVR A14/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 3.000 DB RT 0.200  EARTH R 350 P 90 $\beta = 8$	LVLH R=190.00 P= 0.00 Y=315.00	OBSS UNBERTH FLAT FIELD
8 000/18:25:00 M 32:55  041/00:17:19 G 25:14	TGT= 4 BV = 5 P = 0.00 Y = 49.00 OM = 315.00  MNVR A14/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 3.000 DB RT 0.200  SUN R 90 P 49 $\beta = 8$	INRTL R=187.66 P= 11.12 Y= 12.69  RA= 322.739 DEC= -14.712S	STBD SURVEY
9 000/19:49:57 M  041/01:42:16 G				NPC MNVR Multi-Axis  DV = 3.0 ft/s TIG = 19:49:57
10 000/19:55:00 M 20:06:20  041/01:47:19 G 58:39	TGT= 4 BV = 5 P = 320.00 Y = 0.00 OM = 65.00  MNVR A14/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 3.000 DB RT 0.200  SUN R 180 P 40 $\beta = 9$	INRTL R=337.36 P= 65.22 Y=295.51  RA= 322.801 DEC= -14.692S	NOSE SURVEY

ALL ORBITER DATA IN  
MEAN OF 1950 AND PYR EULER SEQUENCE

Attitude Timeline

MET/GMT	ORBITER		REF ATT/REMARKS	EVENT
	MNVR OPTION	DAP E/S/ $\beta$		
11 000/22:10:00 M 16:38  041/04:02:19 G 08:57	TGT= 4 BV = 5 P = 0.00 Y = 306.00 OM = 95.00  MNVR A14/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 3.000 DB RT 0.200  SUN R 270 P 54 $\beta = 9$	INRTL R=334.99 P= 43.08 Y= 12.88  RA= 322.894 DEC= -14.662S	PORT SURVEY
12 001/00:15:00 M 19:35  041/06:07:19 G 11:54	GND TRACK TGT = 3 P = 290.00 BV = 5 Y = 25.00 OM = 335.00  MNVR A14/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 3.000 DB RT 0.200  $\beta = 9$	LVLH R= 46.36 P= 14.15 Y=322.34  LAT = 0.000N LON = -155.000W ALT = 19323.0nm	UPPER SURFACE SRMS SURVEY
13 001/03:00:00 M 13:01  041/08:52:19 G 09:05:20	M50 (CALC) INRTL R = 68.93 MNVR P = 44.88 PYR Y = 349.88  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020  SUN R 161 P 35 $\beta = 10$	+X PYR R = 180.00 P = 10.00 Y = 0.00 LVLH 001/03:14:48 M 041/09:07:07 G	NC-3 MNVR Heads Down  DV = 3.0 ft/s TIG = 03:14:48
14 001/03:20:00 M 28:23  041/09:12:19 G 20:42	INRTL R = 335.00 MNVR P = 125.00 Y = 80.00  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020  SUN R 195 P 128 $\beta = 10$		OBSS DOWNLINK ATTITUDE
15 001/04:00:00 M 13:18  041/09:52:19 G 10:05:37	LVLH TRACK TGT = 2 P = 90.00 BV = 3 Y = 0.00 OM = 0.00  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020  EARTH R 0 P 90 $\beta = 10$	LVLH R= 0.00 P=180.00 Y= 0.00	Overnight -ZLV -XVV
16 001/13:45:00 M 52:30  041/19:37:19 G 44:49	LVLH TRACK TGT = 2 P = 90.00 BV = 3 Y = 0.00 OM = 270.00  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020  EARTH R 0 P 90 $\beta = 12$	LVLH R= 0.00 P=180.00 Y= 90.00	Supply/Waste Dump -ZLV +YVV  SOPA -Y: 108 13:05 -Y: 28 14:17
17 001/15:35:00 M 46:52  041/21:27:19 G 39:11	M50 (CALC) INRTL R = 109.08 MNVR P = 224.93 PYR Y = 13.13  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020  SUN R 204 P 147 $\beta = 12$	+X PYR R = 0.00 P = 16.00 Y = 0.00 LVLH 001/15:52:24 M 041/21:44:43 G	NH MNVR Heads Up  DV = 104.6 ft/s TIG = 15:52:24
18 001/15:58:00 M   041/21:50:19 G	   HOLD A1/AUTO/VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020  EARTH R 180 P 129 $\beta = 13$	LVLH R=360.00 HOLD P= 38.75 Y= 0.00	LVLH HOLD -ZLV +XVV
19 001/16:30:00 M 34:19  041/22:22:19 G 26:38	M50 (CALC) INRTL R = 251.00 MNVR P = 45.00 PYR Y = 347.00  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020  SUN R 335 P 33 $\beta = 13$	+X PYR R = 359.95 P = 16.03 Y = 359.96 LVLH 001/16:37:24 M 041/22:29:43 G	NC-4 MNVR Heads Up  DV = 105.5 ft/s TIG = 16:37:24
20 001/16:55:00 M 17:09:22  041/22:47:19 G 23:01:41	EPH TARGET TGT = 1 P = 90.00 BV = 3 Y = 0.00 OM = 0.00  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020  $\beta = 13$	LVLH R=359.70 P=277.88 Y= 0.00  TGT VIDFILE: 116FOR_ISS VID #: 3	EPH TGT TRACK -XLV +ZVV  TGT = ISS Pre Ti TGT Track

ALL ORBITER DATA IN  
MEAN OF 1950 AND PYR EULER SEQUENCE

Attitude Timeline

MET/GMT	ORBITER		REF ATT/REMARKS	EVENT
	MNVR OPTION	DAP E/S/ $\beta$		
21 001/17:55:00 M 58:42 041/23:47:19 G 51:01	M50 (CALC) INRTL R = 250.00 MNVR P = 40.00 PYR Y = 350.00 MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 344 P 32 $\beta = 13$	+X PYR R = 359.67 P = 16.19 Y = 354.22 LVLH 001/18:09:01 M 042/00:01:20 G	TI MNVR Heads Up DV = 9.1 ft/s TIG = 18:09:01
22 001/18:10:00 M 19:07 042/00:02:19 G 11:26	EPH TARGET TGT = 1 P = 90.00 BV = 3 Y = 0.00 OM = 0.00 MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 $\beta = 13$	LVLH R= 1.19 P=272.03 Y= 0.00 TGT VIDFILE: 116FOR_ISS VID #: 3	EPH TGT TRACK -XLV +ZVV TGT = ISS Post Ti TGT Track
23 001/18:27:00 M 042/00:19:19 G				MC-1 MNVR EPH TGT TRACK BIAS -XLV +ZVV
24 001/18:57:00 M 042/00:49:19 G				MC-2 MNVR EPH TGT TRACK BIAS -XLV +ZVV
25 001/18:57:01 M 59:02 042/00:49:20 G 51:21 TI+50	LVLH TRACK TGT = 2 P = 325.00 BV = 5 Y = 0.00 OM = 0.00 MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2083 DB AT 1.000 DB RT 0.020 EARTH R 180 P 35 $\beta = 13$	LVLH R= 0.00 P=305.00 Y= 0.00	EPH TGT TRACK -XLV +ZVV TGT = ISS Post MC-2 TGT Track
26 001/19:14:00 M 042/01:06:19 G				MC-3 MNVR EPH TGT TRACK BIAS -XLV +ZVV
27 001/19:14:01 M 51 042/01:06:20 G 07:10	LVLH TRACK TGT = 2 P = 335.00 BV = 5 Y = 0.00 OM = 0.00 MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 EARTH R 180 P 25 $\beta = 13$	LVLH R= 0.00 P=295.00 Y= 0.00	EPH TGT TRACK -XLV +ZVV TGT = ISS Post MC-3 TGT Track
28 001/19:21:00 M 042/01:13:19 G				MC-4 MNVR EPH TGT TRACK BIAS -XLV +ZVV
29 001/19:21:01 M 042/01:13:20 G	HOLD B1/AUTO/PRI	RATE 0.5000 DB AT 3.00 DB RT 0.20 EARTH R 180 P 25 $\beta = 13$	LVLH R= 0.00 HOLD P=295.00 Y= 0.00	LVLH Hold -XLV +ZVV TGT = ISS Post MC-4 TGT Track
30 001/19:24:00 M 29:25 042/01:16:19 G 21:44	LVLH TRACK TGT = 2 P = 270.00 BV = 5 Y = 0.00 OM = 0.00 MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 EARTH R 180 P 90 $\beta = 13$	LVLH R= 0.00 P= 0.00 Y= 0.00	Establish RBar +ZLV +XVV

ALL ORBITER DATA IN  
MEAN OF 1950 AND PYR EULER SEQUENCE

Attitude Timeline

MET/GMT	ORBITER		REF ATT/REMARKS	EVENT
	MNVR OPTION	DAP E/S/ $\beta$		
31 001/19:42:00 M 44:00  042/01:34:19 G 36:19 MC2 ET 01:00:00	LVLH TRACK TGT = 2 P = 180.00 BV = 5 Y = 0.00 OM = 0.00  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.7500 DB AT 1.000 DB RT 0.020  EARTH R 104 P 180 $\beta = 13$	LVLH R= 0.00 P= 90.00 Y= 0.00	RPM
32 001/19:44:00 M 46:00  042/01:36:19 G 38:19	LVLH TRACK TGT = 2 P = 90.00 BV = 5 Y = 0.00 OM = 0.00  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.7500 DB AT 1.000 DB RT 0.020  EARTH R 0 P 90 $\beta = 13$	LVLH R= 0.00 P=180.00 Y= 0.00	RPM
33 001/19:46:00 M 48:00  042/01:38:19 G 40:19	LVLH TRACK TGT = 2 P = 0.00 BV = 5 Y = 0.00 OM = 0.00  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.7500 DB AT 1.000 DB RT 0.020  EARTH R 153 P 0 $\beta = 13$	LVLH R= 0.00 P=270.00 Y= 0.00	RPM
34 001/19:48:00 M 50:00  042/01:40:19 G 42:19	LVLH TRACK TGT = 2 P = 270.00 BV = 5 Y = 0.00 OM = 0.00  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.7500 DB AT 1.000 DB RT 0.020  EARTH R 180 P 90 $\beta = 13$	LVLH R= 0.00 P= 0.00 Y= 0.00	RPM
35 001/19:53:00 M 20:00:35  042/01:45:19 G 52:54	LVLH TRACK TGT = 2 P = 179.00 BV = 5 Y = 0.00 OM = 0.00  MNVR A9/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020  EARTH R 0 P 179 $\beta = 13$	LVLH R= 0.00 P= 91.00 Y= 0.00	TORVA +XLV +ZVV
36 001/21:03:30 M   042/02:55:49 G  MC2 ET 02:05:00				Docking  MET = 21:03:30
37 001/21:30:00 M 59:15  042/03:22:19 G 51:34	COE (CALC) TGT = 2 P = 155.44 BV = 5 Y = 45.29 OM = 175.01  MNVR A12/AUTO/VERN HOLD A15/AUTO/VERN	RATE 0.1000 DB AT 3.000 DB RT 0.050  EARTH R 68 P 130 $\beta = 13$	ISS YPR R = 48.00 P = 17.00 Y = 193.00  LVLH 001/21:30:00 M 042/03:22:19 G	Mated Operations MNVR TEA BIAS -XLV -ZVV  ORB R = 162.94 LVLH P = 60.79 Y = 317.15
38 001/22:20:00 M   042/04:12:19 G				Mated Operations Free Drift  DTO 257
39 005/15:40:00 M 48:00  045/21:32:19 G 40:19	COE (CALC) TGT = 2 P = 163.00 BV = 5 Y = 0.00 OM = 193.00  MNVR A12/AUTO/VERN HOLD A15/AUTO/VERN	RATE 0.1000 DB AT 3.000 DB RT 0.050  EARTH R 0 P 163 $\beta = 28$	ISS YPR R = 0.00 P = 17.00 Y = 193.00  LVLH 005/15:40:00 M 045/21:32:19 G	Mated Operations Simo Dump BIAS -XLV -ZVV  ORB R = 167.55 LVLH P = 73.41 Y = 3.77
40 005/17:55:00 M 18:03:00  045/23:47:19 G 55:19	COE (CALC) TGT = 2 P = 155.44 BV = 5 Y = 45.29 OM = 175.01  MNVR A12/AUTO/VERN HOLD A15/AUTO/VERN	RATE 0.1000 DB AT 3.000 DB RT 0.050  EARTH R 68 P 130 $\beta = 29$	ISS YPR R = 48.00 P = 17.00 Y = 193.00  LVLH 005/17:55:00 M 045/23:47:19 G	Mated Operations MNVR TEA BIAS -XLV -ZVV  ORB R = 162.94 LVLH P = 60.79 Y = 317.15

ALL ORBITER DATA IN  
MEAN OF 1950 AND PYR EULER SEQUENCE

Attitude Timeline

MET/GMT	ORBITER		REF ATT/REMARKS	EVENT
	MNVR OPTION	DAP E/S/ $\beta$		
41 008/17:30:00 M 59:11  048/23:22:19 G 51:30	COE (CALC) TGT = 2 P = 180.00 BV = 5 Y = 0.00 OM = 0.00  MNVR A12/AUTO/VERN HOLD A15/AUTO/VERN	RATE 0.1000 DB AT 3.000 DB RT 0.050  EARTH R 53 P 180 $\beta = 37$	ISS YPR R = 0.00 P = 0.00 Y = 0.00  LVLH 008/17:30:00 M 048/23:22:19 G	Mated Operations Undocking -XLV +ZVV  ORB R = 0.00 LVLH P = 90.00 Y = 0.00
42 008/19:08:00 M 19:32  049/01:00:19 G 11:51	LVLH TRACK TGT = 2 P = 90.00 BV = 3 Y = 0.00 OM = 0.00  MNVR A7/AUTO/ALT HOLD (same)	RATE 0.1300 DB AT 2.00 DB RT 0.200  EARTH R 0 P 90 $\beta = 37$	LVLH R= 0.00 P=180.00 Y= 0.00	Flyaround -RBAR
43 008/19:19:32 M 31:04  049/01:11:51 G 23:23	LVLH TRACK TGT = 2 P = 0.00 BV = 1 Y = 0.00 OM = 0.00  MNVR A7/AUTO/ALT HOLD (same)	RATE 0.1300 DB AT 2.00 DB RT 0.200  EARTH R 209 P 0 $\beta = 37$	LVLH R= 0.00 P=270.00 Y= 0.00	Flyaround -VBAR
44 008/19:31:04 M 42:36  049/01:23:23 G 34:55	LVLH TRACK TGT = 2 P = 270.00 BV = 5 Y = 0.00 OM = 0.00  MNVR A7/AUTO/ALT HOLD (same)	RATE 0.1300 DB AT 2.00 DB RT 0.200  EARTH R 180 P 90 $\beta = 37$	LVLH R= 0.00 P= 0.00 Y= 0.00	Flyaround +RBAR
45 008/19:42:36 M 54:08  049/01:34:55 G 46:27	LVLH TRACK TGT = 2 P = 180.00 BV = 2 Y = 0.00 OM = 0.00  MNVR A7/AUTO/ALT HOLD (same)	RATE 0.1300 DB AT 2.00 DB RT 0.200  EARTH R 293 P 180 $\beta = 37$	LVLH R= 0.00 P= 90.00 Y= 0.00	Flyaround +VBAR
46 008/19:55:00 M   049/01:47:19 G	   HOLD A1/AUTO/VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020  SUN R 321 P 104 $\beta = 37$	INRTL R=313.66 HOLD P= 8.53 Y= 75.25	Sep Burn #1 Multi-Axis  DV = 1.5 TIG = 19:55
47 008/20:18:00 M 52  049/02:10:19 G 11:11	M50 (CALC) INRTL R = 358.00 MNVR P = 323.00 PYR Y = 80.00  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020  SUN R 319 P 112 $\beta = 37$	+X PYR R = 359.78 P = 189.98 Y = 0.21  LVLH 008/20:23:00 M 049/02:15:19 G	Sep Burn #2  DV = 3.0 TIG = 20:23
48 008/20:30:00 M 41:03  049/02:22:19 G 33:22	COE (CALC) TGT = 2 P = 90.00 BV = 5 Y = 0.00 OM = 230.00  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020  EARTH R 0 P 90 $\beta = 37$	+X PYR R = 180.00 P = 0.00 Y = 50.00  LVLH 008/20:30:00 M 049/02:22:19 G	Simo Dump BIAS -ZLV +YVV  ORB R = 180.00 LVLH P = 0.00 Y = 50.00
49 008/22:20:00 M 29:22  049/04:12:19 G 21:41	LVLH TRACK TGT = 2 P = 349.00 BV = 5 Y = 332.00 OM = 203.00  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020  EARTH R 250 P 30 $\beta = 37$	LVLH R=200.33 P=270.29 Y=330.08  DEPLOY WINDOW SS: 8/23:00 Deploy: 8/22:40	MEPSI Deploy AMOS AOS/LOS 9/00:34 - 9/00:40 ELEV = 36.7 MENLO AOS/LOS 9/07:03 - 9/07:12 ELEV = 62.6
50 009/00:00:00 M 14:21  049/05:52:19 G 06:06:40	INRTL R = 85.67 MNVR P = 68.74 Y = 343.74  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020  SUN R 118 P 52 $\beta = 37$	DEPLOY WINDOW SR: 8/23:33 SS: 9/00:30	ANDE Deploy 9/00:25 AMOS AOS: 9/00:31 AMOS LOS: 9/00:40 SS: 8/22:29  Elev = 36.7

ALL ORBITER DATA IN  
MEAN OF 1950 AND PYR EULER SEQUENCE

Attitude Timeline

MET/GMT	ORBITER		REF ATT/REMARKS	EVENT
	MNVR OPTION	DAP E/S/ $\beta$		
51 009/00:27:00 M  049/06:19:19 G	HOLD A1/INRT/VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020  SUN R 118 P 52 $\beta = 37$	INRTL R= 85.67 HOLD P= 68.74 Y=343.74	ANDE POST DEPLOY
52 009/00:50:00 M 01:04:38  049/06:42:19 G 56:57	LVLH TRACK TGT = 2 P = 90.00 BV = 3 Y = 0.00 OM = 0.00  MNVR A1/AUTO/PRI HOLD A1/AUTO/VERN	RATE 0.2000 DB AT 5.00 DB RT 0.20  EARTH R 0 P 90 $\beta = 37$	LVLH R= 0.00 P=180.00 Y= 0.00	Overnight -ZLV -XVV
53 009/14:40:00 M  049/20:32:19 G	HOLD A1/AUTO/VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020  SUN R 314 P 119 $\beta = 38$	INRTL R= 43.70 HOLD P=275.46 Y= 71.52	FCS Checkout MET 14:00 Begin
54 009/14:45:00 M 46:39  049/20:37:19 G 38:58	LVLH TRACK TGT = 2 P = 90.00 BV = 3 Y = 0.00 OM = 0.00  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020  EARTH R 0 P 90 $\beta = 39$	LVLH R= 0.00 P=180.00 Y= 0.00	Overnight -ZLV -XVV
55 009/15:10:00 M  049/21:02:19 G	HOLD A1/AUTO/VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020  SUN R 221 P 108 $\beta = 39$	INRTL R= 72.52 HOLD P=219.22 Y=319.95	RCS Hotfire
56 009/15:25:00 M 29:55  049/21:17:19 G 22:14	LVLH TRACK TGT = 2 P = 90.00 BV = 3 Y = 0.00 OM = 0.00  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020  EARTH R 0 P 90 $\beta = 39$	LVLH R= 0.00 P=180.00 Y= 0.00	Overnight -ZLV -XVV
57 009/17:55:00 M 18:02:39  049/23:47:19 G 54:58 *PRELIMINARY*	LVLH TRACK TGT = 2 P = 180.00 BV = 2 Y = 0.00 OM = 340.00  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020  EARTH R 0 P 180 $\beta = 39$	LVLH R= 20.00 P= 90.00 Y= 0.00  Deploy Window SS: 9/18:47 Deploy: 9/18:25	RAFT Deploy ANNAPOLIS AOS: 9/20:24 LOS: 9/20:34  Elev = 55.4
58 009/19:00:00 M 07:39  050/00:52:19 G 59:58	LVLH TRACK TGT = 2 P = 90.00 BV = 3 Y = 0.00 OM = 0.00  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020  EARTH R 0 P 90 $\beta = 39$	LVLH R= 0.00 P=180.00 Y= 0.00	Overnight -ZLV -XVV
59 010/13:35:00 M 47:11  050/19:27:19 G 39:30	INRTL R = 295.00 MNVR P = 225.00 Y = 344.00  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020  SUN R 11 P 127 $\beta = 40$	-Y: 53 AOS: 13:21 LOS: 14:12  -Z: 22 AOS: 13:25 LOS: 14:15	IMU Alignment INERTIAL  PAIR: AOS: 13:25 LOS: 14:12
60 010/13:52:00 M 14:00:16  050/19:44:19 G 52:35	INRTL R = 207.00 MNVR P = 85.00 Y = 295.00  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020  SUN R 329 P 58 $\beta = 40$	-Y: 16 AOS: 13:53 LOS: 14:41  -Z: 59 AOS: 13:57 LOS: 15:09	IMU Verification INERTIAL  PAIR: AOS: 13:57 LOS: 14:41

ALL ORBITER DATA IN  
MEAN OF 1950 AND PYR EULER SEQUENCE

Attitude Timeline

MET/GMT	ORBITER		REF ATT/REMARKS	EVENT
	MNVR OPTION	DAP E/S/ $\beta$		
61 010/14:07:00 M 19:01  050/19:59:19 G 20:11:20	TGT= 4 BV = 5 P = 184.00 Y = 0.00 OM = 270.00  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020  SUN R 180 P 176 $\beta$ = 40	INRTL R=177.98 P=197.30 Y= 27.01  RA= 332.333 DEC= -11.384S	Rad Coldsoak -XSI
62 010/15:54:00 M 16:01:19  050/21:46:19 G 53:38	M50 (CALC) INRTL R = 250.95 MNVR P = 224.81 PYR Y = 20.35  MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020  SUN R 90 P 150 $\beta$ = 40	+Y PYR R = 0.00 P = 0.00 Y = 30.00  TCWIN 010/15:54:00 M 050/21:46:19 G	Thermal/Comm BIAS -XSI
63 010/18:10:00 M 15:53  051/00:02:19 G 08:12	M50 (CALC) INRTL R = 71.00 MNVR P = 236.00 PYR Y = 18.00  MNVR B1/AUTO/PRI HOLD (same)	RATE 0.5000 DB AT 3.00 DB RT 0.20  SUN R 268 P 139 $\beta$ = 40	+X PYR R = 359.85 P = 196.08 Y = 359.67  LVLH 010/18:23:00 M 051/00:15:19 G	Deorbit Burn Heads Down  DV = 294.1 TIG = 18:23:00
64 010/19:25:00 M   051/01:17:19 G				Landing KSC   MET = 19:25:00



FLIGHT PLAN NOTES

FLIGHT PLAN NOTES  
(CONSTRAINTS AND GUIDELINES)

A. FLIGHT DESCRIPTION

Orbiter: OV-103 Discovery  
 Launch Window: 10 minutes  
 Inclination: 51.6°  
 Insertion Altitude: 122 nautical miles  
 Rendezvous Altitude: 185 nautical miles  
 Duration: 11+(1)+2

B. SHUTTLE AND STATION CREW

CDR – Mark Polansky  
 PLT – William Oefelein  
 MS1 – Nicholas Patrick  
 MS2 – Robert Curbeam  
 MS3 – Chister Fuglesang  
 MS4 – Joan Higginbotham  
 MS5up – Sunita Williams  
 MS5down – Thomas Reiter

C. MAJOR EVENTS

<u>EVENT</u>	<u>FD</u>	<u>MET</u>	<u>LOCAL DATE</u>	<u>CST</u>	<u>GMT</u>
Launch	01	0/00:00	02/08/2006	23:52	040/05:52
NC1	01	0/03:31	02/09/2006	03:23	040/09:23
NC2	02	0/16:51	02/09/2006	16:43	040/22:43
OBSS Survey	02	0/18:25	02/09/2006	18:17	041/00:17
NC3	02	1/03:14	02/10/2006	03:06	041/09:06
Ti	03	1/18:09	02/10/2006	18:01	042/00:01
ISS Docking	03	1/21:03	02/10/2006	20:55	042/02:55
Hatch Open	03	1/23:05	02/10/2006	22:57	042/04:57
EVA 1	04	2/18:20	02/11/2006	18:12	043/00:12
P6 4B SA Retract	05	3/15:35	02/12/2006	15:27	043/21:27
EVA 2	06	4/17:50	02/13/2006	17:42	044/23:42
Crew Conference	07	5/19:55	02/14/2006	19:47	046/01:47
EVA 3	08	6/17:20	02/15/2006	17:12	046/23:12
Hatch Close	10	8/16:00	02/17/2006	15:52	048/21:52
Undock	10	8/18:40	02/17/2006	18:32	049/00:32
Sep 1	10	8/19:55	02/17/2006	19:47	049/01:47
Sep 2	10	8/20:23	02/17/2006	20:15	049/02:15
MEPSI Deploy	10	8/22:40	02/17/2006	22:32	049/04:32
ANDE Deploy	10	9/00:25	02/18/2006	00:17	049/06:17
RAFT Deploy	11	9/18:25	02/18/2006	18:17	050/00:17
Deorbit	12	10/18:23	02/19/2006	18:15	051/00:15
Landing	12	10/19:26	02/19/2006	19:18	051/01:18

#### D. LANDING OPPORTUNITIES

	<u>Landing Orbit</u>		<u>Site</u>	<u>CST</u>	<u>MET</u>	
Nominal	Primary	171	KSC	Sun Feb 19/19:18	10/19:26	
	1 Rev Late	TBD	TBD	TBD	TBD	
	Weather Alt	TBD	TBD	TBD	TBD	
1 Day Late	Primary	TBD	TBD	TBD	TBD	
	1 Rev Late	TBD	TBD	TBD	TBD	
	Weather Alt	TBD	TBD	TBD	TBD	
2 Days Late	Primary	TBD	TBD	TBD	TBD	
	1 Rev Late	TBD	TBD	TBD	TBD	
	Weather Alt	TBD	TBD	TBD	TBD	

#### E. COMMUNICATIONS

The Summary Timeline contains several databands for TDRS events. The TDRS bands reflect the three TDRS satellites that will be used for Orbiter coverage (East, West, and Z) and their longitudinal position. The data shown contains which TDRS is scheduled (bold shaded bar), S Band coverage (thin line), and Ku band coverage (unshaded bar).

TDRS Z currently does not have the capability for DTV; therefore, can not be used for critical damage detection. Nor is TDRS Z considered acceptable for PAO events. OCA downlink is limited to 2 Mbps on TDRS Z.

Prime TDRS Support: TDRS 46 (LON: -46° W), TDRS 171 (LON: -171° W), TDRS 275 (LON: -275° W)

Backup TDRS Support: TDRS 41 (LON: -41° W), TDRS 174 (LON: -174° W)

Ground Sites: NASA (MIL, WLP, and DFR) and AIR FORCE (OTS, DGS, GTS HTS, VTS, CTS)

#### F. PAYLOADS

##### LAUNCH PACKAGE (LP) 12A.1

The LP consists of the ITS-P5 Short Spacer Truss Segment (SSTS) with a Photovoltaic Radiator Grapple Fixture (PVRGF) that has two Grapple Fixtures (GFs) attached to the structure, the ICC with a Passive Flight Releasable Attachment Mechanism (PFRAM), the STP-H2 Utilization payload installed, and the Service Module Debris Panels (SMDPs), the Spacehab SM and its stowed logistics and ISS Utilization payload items, and ISS hardware and Utilization payload items stowed in the Orbiter middeck lockers.

The SMDPs consist of three bundles of panels and an adapter. The three bundles will be attached to the adapter and the entire assembly will be transferred to Pressurized Mating Adapter-3 (PMA-3).

The PFRAM, installed on the ICC, will be utilized to support the contingency return of a failed Pump Module (PM).

Crew rotation equipment, Extravehicular Activity (EVA) equipment and hardware, water transfer equipment, logistics items, critical spares, photographic equipment and supplies will be launched in the Orbiter middeck and Spacehab SM, and will be transferred to the ISS to support crew rotation, and docked and steady state ISS operations.

## G. SECONDARY PAYLOADS

### 1. Passive Observatories for Experimental Microbial Systems (POEMS)

POEMS will evaluate the effect of stress in the spaceflight environment on the generation of genetic variation within model microbial cells. POEMS canisters are currently on the ISS, and will be removed from cold storage and transferred to the Shuttle for return to Earth on 12A.1.

### 2. Perceptual Motor Deficits in Space (PMDIS)

The objective of PMDIS is to determine if perceptual motor deficits observed in previous missions are simply due to postural instability or actually represent central nervous system deficits.

### 3. Space Test Program-H2 (STP-H2)

STP-H2 is comprised of three independent deployable payloads located on top of the 12A.1 Integrated Cargo Carrier (ICC). Atmospheric Neutral Density Experiment (ANDE) will determine total atmospheric density at low earth orbit altitudes, using two spheres, to enable better orbit determination and collision avoidance techniques.

Microelectromechanical System (MEMS)-Based Pico Satellite Inspector (MEPSI) will provide a proof of concept for inspection, servicing, and protection of a host satellite.

This flight will demonstrate a picosat propulsion system and camera inspection capability. Radar Fence Transponder (RAFT) will enable the Air Force-operated radar fence to calibrate transmit and receive signals with a cooperative picosat.

## H. PAYLOADS OF OPPORTUNITY

### 1. Ram Burn Observation (RAMBO)

The objective of the RAMBO payload is to help calibrate the RAMBO satellite. This requires retrograde, posigrade, and out-of-plane burns. RAMBO will be performed only if propellant is available and a sufficient opportunity exists.

### 2. Maui Analysis of Upper-Atmospheric Injections (MAUI)

The objective of the MAUI payload is to obtain optical signatures of spacecraft plumes using optical telescope sensors and all-sky imagers at the Air Force Maui Optical and Supercomputing Site (AMOS). The MAUI payload may collect data during any encounter opportunity when the Orbiter support activities can be planned to meet the criteria defined.

No unique onboard hardware is required to establish the controlled conditions for the cooperative passes. The MAUI payload observes retrograde OMS engine firings, various Angle-Of-Attack (AOA) PRCS and VRCS thruster firings, and Shuttle burns to reboost ISS. These burns can be dedicated to MAUI or required by Shuttle. MAUI will only be performed if propellant is available and a sufficient overflight opportunity exists.

## I. ON ORBIT DETAILED TEST OBJECTIVES (DTOS)

### 1. Structural Dynamics Model Validation (DTO 257)

This test will excite the structural dynamics of the joined Shuttle and International Space Station (ISS) to acquire several critical natural frequencies and their corresponding structural damping. This test will allow confirmation that Shuttle primary jet control algorithm tuning is acceptable prior to attitude control which uses this algorithm.

The data acquired by this test will be assessed in a near real time manner to improve notch filters on the Shuttle DAP that will improve propellant usage during periods of Shuttle attitude control. The CDR will perform five unique, Shuttle primary jet commands which are each separated by about 5 minutes.

### 2. Crosswind Landing Performance (DTO 805 – DTO of Opportunity)

The purpose is to demonstrate the capability to perform a manually controlled landing in the presence of a crosswind.

## J. STATION DEVELOPMENT TEST OBJECTIVES (SDTOS)

NONE

## K. SHORT DURATION BIOASTRONAUTICS INVESTIGATIONS (SDBIS)

### 1. Test of Midodrine as a Countermeasure Against Postflight Orthostatic Hypotension (SDBI 1503S)

To date, available countermeasures have not eliminated postflight orthostatic hypotension. This study is designed to evaluate a new pharmacological countermeasure for protection from postflight orthostatic hypotension. This experiment will measure the efficacy of midodrine in reducing the incidence and/or severity of orthostatic hypotension in returning astronauts. Efficacy will be evaluated with an expanded tilt test.

Protocol B will evaluate the efficacy of midodrine taken in-flight, between TIG and landing.

Space alters cardiovascular function and orthostatic hypotension is one of the alterations that negatively impacts crew safety. Susceptibility to orthostatic hypotension is individual, with some astronauts experiencing severe symptoms, while others are less affected. This countermeasure evaluation proposal, sponsored by the Countermeasures Evaluation and Validation Project, is the first phase of the evaluation of midodrine. It is designed to give the greatest opportunity of measuring the maximum efficacy of the drug.

### 2. Sleep-Wake Actigraphy and Light Exposure During Spaceflight (SDBI 1634)

The success and effectiveness of manned space flight depends on the ability of crew members to maintain a high level of cognitive performance and vigilance while operating and monitoring sophisticated instrumentation. Astronauts, however, commonly experience sleep disruption, together with misalignment of circadian phase during space flight. Both of these conditions are associated with insomnia and associated impairment of alertness and cognitive performance. Relatively little is known of the prevalence or cause of space flight-induced insomnia in short duration missions. This experiment will

use state-of-the-art ambulatory technology to monitor sleep-wake activity and light exposure patterns obtained in-flight. These data should help us better understand the effects of space flight on sleep as well as aid in the development of effective countermeasures for both short and long-duration spaceflight.

Documenting sleep-wake and light exposure patterns on all crewmembers will lead to a better understanding of the effects of space flight on sleep, will enable objective evaluation of the effectiveness of current countermeasures for insomnia, will enable objective evaluation of the effects, on sleep, of countermeasures taken to alleviate other untoward physiological effects of space flight (e.g., motion sickness), and will aid in the development of new countermeasures to more effectively alleviate the detrimental effects of space flight on sleep and circadian organization.

### 3. Monitoring Latent Virus Reactivation and Shedding in Astronauts (SDBI 1493)

The objective of this SDBI is to determine the frequency of induced reactivation of latent viruses, latent virus shedding, and clinical disease after exposure to the physical, physiological, and psychological stressors associated with space flight.

Space flight-induced alterations in the immune response will become increasingly important on long duration missions, with one focus being the potential for reactivation and dissemination (shedding) of latent viruses. An example of a latent virus is herpes simplex type-1 (HSV-1), which infects 70-80 percent of all adults. Its manifestation is classically associated with the presence of cold sores, pharyngitis, and tonsillitis, and is usually acquired through contact with the saliva, skin, or mucous membranes of an infected individual. However, many recurrences are asymptomatic, resulting in shedding of the virus. Through an initial qualitative look at the reactivation and shedding of latent viruses, twenty subjects were studied for Epstein-Barr Virus (EBV). To continue a quantitative study of latent virus activity in microgravity, additional subjects were approved to focus on three viruses, EBV, Cytomegalovirus (CMV), and Varicella Zoster Virus (VZV).



**FLIGHT PLAN**

**STS  
116**