

Flight Plan

STS-122/1E

(OCFR1 Flight Cycle Trajectory)

Mission Operations Directorate Operations Division

Basic

For the latest working copy of the Flight Plan, visit
<http://mod.jsc.nasa.gov/do4/flightplan/main/fp.cfm?id=122>

August 15, 2007

<u>EVENT</u>	<u>FD</u>	<u>MET</u>	<u>LOCAL DATE</u>	<u>CST</u>	<u>GMT</u>
Launch	1	00/00:00	12/06/2007	15:27	340/21:27
OBSS Survey	2	00/16:50	12/07/2007	08:17	341/14:17
ISS Docking	3	01/21:36	12/08/2007	13:03	342/19:03
Hatch Open	3	01/22:45	12/08/2007	14:12	342/20:12
EVA 1	4	02/18:50	12/09/2007	10:17	343/16:17
Columbus Unberth	4	02/22:45	12/09/2007	14:12	343/20:12
EVA 2	6	04/18:50	12/11/2007	10:17	345/16:17
EVA 3	8	06/17:50	12/13/2007	09:17	347/15:17
Hatch Close	9	07/23:45	12/14/2007	15:12	348/21:12
Undock	10	08/15:50	12/15/2007	07:17	349/13:17
OBSS Survey	10	08/19:30	12/15/2007	10:57	349/16:57
Deorbit	12	10/18:27	12/17/2007	09:54	351/15:54
KSC Landing	12	10/19:30	12/17/2007	10:57	351/16:57

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-122**

BASIC
August 15, 2007

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FLIGHT PLAN
STS-122

LIST OF EFFECTIVE PAGES

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Sign Off	* 122/BAS	3-1	122/BAS
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iii.....	* 122/BAS	3-3	122/BAS
iv.....	* 122/BAS	3-4	122/BAS
v	* 122/BAS	3-5	122/BAS
vi.....	* 122/BAS	3-6	122/BAS
1-1	122/BAS	3-7	122/BAS
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* – Omit from flight book

3-51	122/BAS	3-107	122/BAS
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3-82	122/BAS	4-4	* 122/BAS
3-83	122/BAS	4-5	* 122/BAS
3-84	122/BAS	4-6	* 122/BAS
3-85	122/BAS	4-7	* 122/BAS
3-86	122/BAS	4-8	* 122/BAS
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3-91	122/BAS	5-3	* 122/BAS
3-92	122/BAS	5-4	* 122/BAS
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* – Omit from flight book

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INTRODUCTION

The STS-122 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-17462-120, STS-122 Flight Requirements Document
- NSTS-37326, Shuttle Crew Scheduling Constraints
- NSTS-21504, ISS 10A 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-122 Flight Plan is based on a launch date of August 9, 2007 at 22:16 GMT (17:16 CDT). 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=122>

OVERVIEW TIMELINE

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STS-122/1E Overview Timeline (11+(1)+2)

		MET	12	13	14	15	16	17	18	19	20	21	22	23	01/0	1	2	3	4	5	6	7	8	9	10	11	
FD 01	STS															ASC	PI	S/Us									
	ISS																										
	Orb Att																										
FD 02	STS																										
	ISS																										
	Orb Att																										
FD 03	STS																										
	ISS																										
	Orb Att																										
FD 04	STS																										
	ISS																										
	Orb Att																										
FD 05	STS																										
	ISS																										
	Orb Att																										
FD 06	STS																										
	ISS																										
	Orb Att																										
FD 07	STS																										
	ISS																										
	Orb Att																										
FD 08	STS																										
	ISS																										
	Orb Att																										
FD 09	STS																										
	ISS																										
	Orb Att																										
FD 10	STS																										
	ISS																										
	Orb Att																										
FD 11	STS																										
	ISS																										
	Orb Att																										
FD 12	STS																										
	ISS																										
	Orb Att																										

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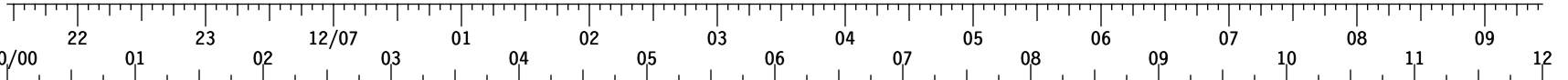
SUMMARY TIMELINE AND ISS SHORT TERM PLAN

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FD01

GMT 12/06/07 (340)

MET Day 000

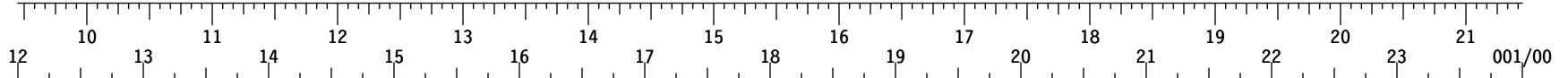


STS - 122	LAUNCH	OMS - 2	CDR FRICK	POST INSERTION	OMS BURN NC1 MNVLRV	GPWPRDU RPRBN	AFITC/O ELEVN PMC A/G	SEE SETUP	PRE SLEEP	APU*	SLEEP
	PLT POINDEXTER	POST INSERTION	OMS BURN	LDGAPDS	GPWPRDU RPRBN	P/TV01 VIDEO SETUP	TIDPM/SAL SALGERY	PRE SLEEP#		SLEEP	
	MS1 MELVIN	POST INSERTION	RMS* OSCEATCUP	SSSEVTUP	WATTCCH		PRE SLEEP		SLEEP		
	MS2 WALHEIM	POST INSERTION	OMS BURN APCU@	GIRA INSTALL	ETPHOTO	WEVD/IDLEO	PRE SLEEP		SLEEP		
	MS3 SCHLEGEL	POST INSERTION		PGSC SETUP (PART I)		WLESTACTCH	PRE SLEEP		SLEEP		
	MS4 LOVE	POST INSERTION	RMS* MCIU*	PGSC SETUP (PART I)	WATTCCH		PRE SLEEP		SLEEP		
	FE-2 EXP16 EYHARTS	POST INSERTION	MUOS MSP	WATTCCH			PRE SLEEP		SLEEP		
DAY/NIGHT											
ORBIT											
TDRS											
ORB ATT											
NOTES			<p>*ON-ORBIT INIT @ACT *FILTER CHECK -ZLV -XVV #VHUM SEP *FD1 RECONFIG MNRV</p>								

FD02

GMT 12/07/07 (341)

MET Day 000



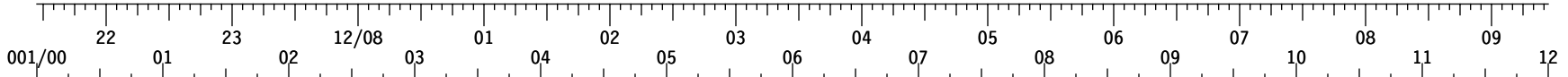
STS-122	CDR FRICK	SLEEP	POST SLEEP	OMS BURN	POST SLEEP	OBSS UNBERTH	STBD WING SURVEY	EXERCISE	MEAL	PORT WING SURVEY	
	PLT POINDEXTER	SLEEP	POST SLEEP	OMS BURN	P/TV01 VIDEO SETUP	POST SLEEP	CRYO 02 SNSR CK	FILTER CLEANING	MEAL	EVA PREP FOR XFER	
	MS1 MELVIN	SLEEP	POST SLEEP	POST SLEEP	RMS C/O	STBD WING SURVEY	NOSE CAP SURVEY	MEAL	PORT WING SURVEY		
	MS2 WALHEIM	SLEEP	POST SLEEP	OMS BURN	POST SLEEP	EMU C/O PREP	EMU C/O	EXERCISE	MEAL	EVA PREP FOR XFER	
	MS3 SCHLEGEL	SLEEP	POST SLEEP	PGSC SETUP (PART II)	EMU C/O PREP	EMU C/O	ERG SETUP	NOSE CAP SURVEY	MEAL	PORT WING SURVEY	
	MS4 LOVE	SLEEP	POST SLEEP	POST SLEEP	RMS C/O	OBSS UNBERTH	STBD WING SURVEY	NOSE CAP SURVEY	MEAL	EVA PREP FOR XFER	EXERCISE
	FE-2 EXP16 EYHARTS	SLEEP	POST SLEEP	XFER PREP	H2O CWC S/U	ERG SETUP	MEAL	CT W C T #1	MEAL	CT W C R M	
DAY/NIGHT	[Day/Night bar chart]										
ORBIT	[Orbit bar chart]										
TDRS	[TDRS bar chart]										
ORB ATT	-ZLV -XVV -NC2 -BIAS -ZLV +XVV -STBD SURVEY -NOSE SURVEY -PORT SURVEY										
NOTES	*SALIVA KIT *HEATER RCNFG @ACT *MANUAL										

FD02

GMT 12/07/07 (341)

MET

Day 001

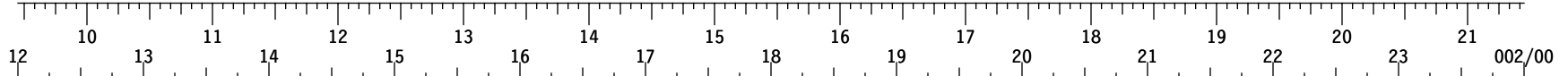


S T S - 1 2 2	CDR FRICK	PORT WING SURVEY	M-NZL RV	DRY SLV	OMS POD SRVY	APCU 2 @	NC37 +X RCS BURN	PCNO VM	PRE SLEEP	M-NZL RV	FLUO TADRE	PRE SLEEP	PMCA/G	PRE SLEEP	DRY SLV	SLEEP
	PLT POINDEXTER	EXERCISE			FCMS C/O		+X RCS BURN	RNDZ TOOLS C/O	PRE SLEEP					CDR MY ASCLTM	SLEEP	
	MS1 MELVIN	PORT WING SURVEY	OBSS BERTH		RMS*			LDR1 DOWNLINK	PRE SLEEP						SLEEP	
	MS2 WALHEIM				SETUP C/L CAMR		+X RCS BURN	WHLHHL SC/O	PRE SLEEP						SLEEP	
	MS3 SCHLEGEL	PORT WING SURVEY			SETUP C/L CAMR		ODS RING EXT	EXERCISE	PRE SLEEP						SLEEP	
	MS4 LOVE	EXERCISE	OBSS BERTH		RMS*		ODS RING EXT	RNDZ TOOLS C/O	PRE SLEEP						SLEEP	
	FE-2 EXP16 EYHARTS		EXERCISE						PRE SLEEP						SLEEP	
DAY/NIGHT		[Day/Night bar chart]														
ORBIT		[Orbit bar chart]														
TDRS		[TDRS bar chart]														
ORB ATT		[ORB ATT bar chart]														
NOTES		NC3/NPC @ACT *PWRDN -ZLV -XVV														

FD03

GMT 12/08/07 (342)

MET Day 001



S T S - 1 2 2	CDR FRICK	SLEEP	MNVR MSIMO UNIT	POST SLEEP	SIMO TERM	ISS RNDZ OPS				APPROACH W/RPM	PRP PL	GR RD N	H/ O	HATCH OPEN	SFTY BRIEF	PS TE V O U S P		
	PLT POINDEXTER	SLEEP	CS ML DA	POST SLEEP	MG CR R U P C I S U B	ISS RNDZ OPS				APPROACH W/RPM	MNVR -XLV	GR RD N	S/ V - 2	HATCH OPEN	SFTY BRIEF	*		
	MS1 MELVIN	SLEEP	LOG	POST SLEEP	GR RD R U P	POST SLEEP	P/TV02 DOCK S/U	EXERCISE	P/TV02 DOCK S/U	APPROACH W/RPM	D O C K I N G *	PRP PL	PS TE V O U S P	PS TE V O U S P	SFTY BRIEF			
	MS2/EV1 WALHEIM	SLEEP		POST SLEEP		ISS RNDZ OPS	ISS RNDZ OPS	ISS RNDZ OPS	APPROACH W/RPM	DA OU CK I O		EXERCISE	SFTY BRIEF	⊕				
	MS3/EV2 SCHLEGEL	SLEEP		POST SLEEP		ISS RNDZ OPS	MP DR DE K P	EMU RMVL	ISS RNDZ OPS	APPROACH W/RPM		HATCH LEAK CK	ODS PREP FOR INGR	HATCH OPEN	SFTY BRIEF	♦		
	MS4/EV3 LOVE	SLEEP	SL OV GA	POST SLEEP		COND CWC S/U	EXERCISE	MP DR DE K P	EMU RMVL	ISS RNDZ OPS		APPROACH W/RPM	HATCH LEAK CK	ODS PREP FOR INGR	POST RNDZ PGSC CONFG	SFTY BRIEF	W L E S	
FE-2 EXP16 EYHARTS	SLEEP	SL VA	POST SLEEP		ISS RNDZ OPS				APPROACH W/RPM				SFTY BRIEF					
I S S	ISS CDR WHITSON	SLEEP		POST SLEEP	PREP WORK	OP 2 R E P	DPC	EXERCISE CEVIS	EXERCISE RED	MIDDAY-MEAL		MIT III DM EEE ORR	DOCK VIDEO	PMA2 CFG	HATCH LEAK CK ISS	V D S *	HATCH OPEN	SFTY BRIEF
	FE-1 MALENCHENKO	SLEEP		POST SLEEP	PREP WORK	P/TV RPM VRFY S/U	DPC	CN FG	COX MNT	IMS FILE PREP	EXERCISE TVIS	MIDDAY-MEAL	PMA2 CFG	HATCH LEAK CK ISS	H O A P T E C H	CS OM P C L	SFTY BRIEF	
D N	FE-2 TANI	SLEEP		POST SLEEP	PREP WORK	P/TV RPM VRFY S/U	DPC	EXERCISE TVIS	EXERCISE CEVIS	MIDDAY-MEAL	P R E P	4 P O L M M	PMA2 CFG	HATCH OPEN	SFTY BRIEF	DCS CNFG		



ORB ATT: -ZLV -XVV, -ZLV +YVV, RNDZ, DOCK, MATED TEA

NOTES: *FILTER CHECK @REG RCNFG, *RPRS INIT *ACT, *RPRS TERM, *SHUTTLE-CNFG

***1/21:36:18**

♦PST DK EVA
⊕PST DK EVA
♦PST DK EVA

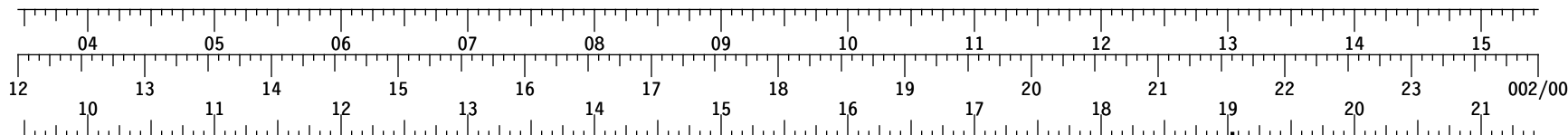
FD03

STS-122/1E JOINT MSN SHORT TERM PLAN (DOCK)

CT 12/08/07 (342)

MET Day 001

GMT 12/08/07 (342)



ISS	DAY/NIGHT	ORBIT	DAILY ORBIT	TDRS AVAIL	VHF			
		3825	3826	3827	3828	3829	3830	3831
	14	15	1	2	3	4	5	6
	ALL VHF		ALL VHF		ALL VHF		ALL VHF	
ISS ATTITUDE	+XV +ZLV TEA			MNVR TO DOCK	+XV +ZLV	FREE DRIFT	-XV +ZLV TEA	
TLM FORMAT SAA	JJK			H	H	JJK	JJK	
MSS-POWERUP	MSS-POWERUP							
COL-CC-NO OP-CMD	COL-CC-NO OP-CMD							
CDH-PROX VAL CK-INH	CDH-PROX VAL CK-INH							
DPC	DPC							
UHF-SSSR-ACT	UHF-SSSR-ACT							
C&T-AUDIO-CNFG	C&T-AUDIO-CNFG							
PPS-PWR DWN & RCVRY	PPS-PWR DWN & RCVRY							
CCS-TLM FORMAT-SWAP	CCS-TLM FORMAT-SWAP							ICCS-TLM FORMAT
ACS-H/O-USOS-TO-RS	ACS-H/O-USOS-TO-RS							
PPS-SARJ-FTHR	PPS-SARJ-FTHR							
C&T-AUDIO RSA-CNFG	C&T-AUDIO RSA-CNFG							
VDS-CNFG	VDS-CNFG							
PPS-BGA-FTHR	PPS-BGA-FTHR							
VDS-VTR-ACT	VDS-VTR-ACT							
KU-BD-MASK-ENA	KU-BD-MASK-ENA							
ACS-PRE-ARVL-CNFG	ACS-PRE-ARVL-CNFG							
VDS-VTR-RECORD	VDS-VTR-RECORD							
CDH-STND VAL CK-INH	CDH-STND VAL CK-INH							
ACS-PMA2-ARVL-CNFG	ACS-PMA2-ARVL-CNFG							
DOCKING	DOCKING							
PPS-SARJ-AUTOTRACK	PPS-SARJ-AUTOTRACK							
ACS-GNC-PPL-INC	ACS-GNC-PPL-INC							
C&T-H/L AUDIO-CNFG	C&T-H/L AUDIO-CNFG							
C&DH-DOCK-CNFG	C&DH-DOCK-CNFG							
ACS-POST-ARVL-CNFG	ACS-POST-ARVL-CNFG							
PPS-BGA-AUTOTRACK	PPS-BGA-AUTOTRACK							
VDS-CVIU-P/U	VDS-CVIU-P/U							
ISS-RAP DPRS-INH	ISS-RAP DPRS-INH							
ACS-ST/CMG ATT-H/O	ACS-ST/CMG ATT-H/O							
IATCS-LTL STPT-CHNG	IATCS-LTL STPT-CHNG							
KU-BD-RNDZ MASK-DIS	KU-BD-RNDZ MASK-DIS							
CHECS-DEFIB DLY-CMD	CHECS-DEFIB DLY-CMD							
ISS-PROX MODE-XTION	ISS-PROX MODE-XTION							
СУДН-ОГНИ-ОН	СУДН-ОГНИ-ОН							
Φ-COCB-MODE	Φ-COCB-MODE							
C-COCB-MODE	C-COCB-MODE							
ISS-STAND MODE-XTION	ISS-STAND MODE-XTION							
СЗП-АБ-PARTIAL CHRГ	СЗП-АБ-PARTIAL CHRГ							
COL-CC-NO OP-CMD	COL-CC-NO OP-CMD							
GO TI	GO TI							
CCS-TLM FORMAT-SWAP	CCS-TLM FORMAT-SWAP							
ACS-H/O-USOS-TO-RS	ACS-H/O-USOS-TO-RS							
GO FOR APPROACH	GO FOR APPROACH							
ISS-PROX MODE-XTION	ISS-PROX MODE-XTION							
GO FOR DOCK	GO FOR DOCK							
GO RS TAKE CTRL INH	GO RS TAKE CTRL INH							
DOCKING	DOCKING							
ISS-STAND MODE-XTION	ISS-STAND MODE-XTION							
CHECS-DEFIB DLY-CMD	CHECS-DEFIB DLY-CMD							

DOCKING

*

*342/19:04

IC3П-АБ-PARTIAL

FD03

GMT 12/08/07 (342)

NO EXERCISE

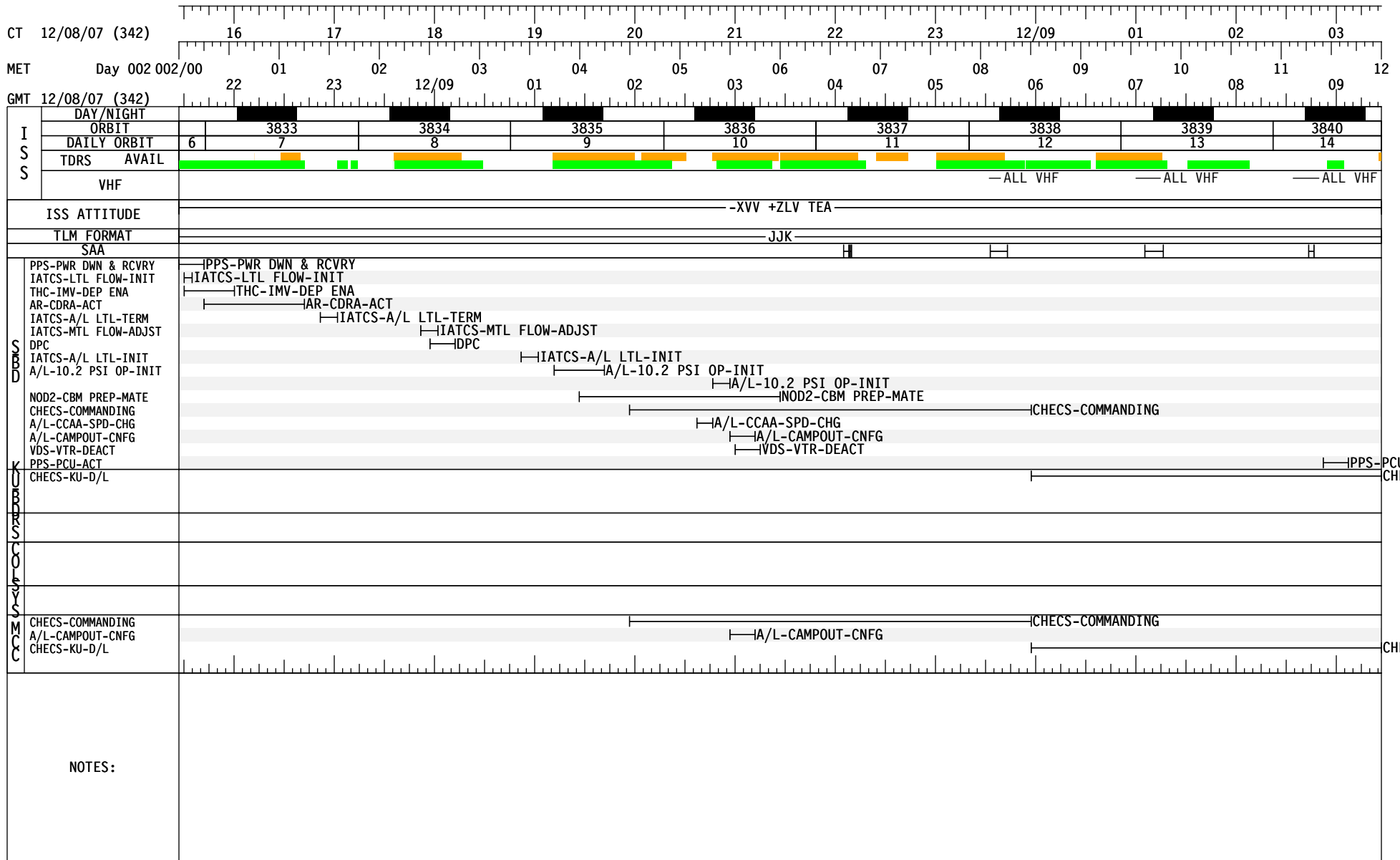
MET

Day 002

		22		01		02		03		04		05		06		07		08		09		10		11		12	
S T S - 1 2 2	CDR FRICK	02 RCNFG /PURGE				RG MR SPL	RMS*	PRE SLEEP	EVA1 PROC RVW	PMC OCA	PRE SLEEP				SLEEP												
	PLT POINDEXTER	PST DK EVA XFR RCNFG		E-LK PREP		PRE SLEEP	PO LYS B K	EVA1 PROC RVW	PRE SLEEP*				SLEEP														
	MS1 MELVIN	GRPL	OBSS UNBRTH			UH N/GO RRP		PRE SLEEP	EVA1 PROC RVW	PRE SLEEP				SLEEP													
	MS2/EV1 WALHEIM	PST DK EVA XFR RCNFG	REBA*	RCBO	E-LK PREP		PRE SLEEP	EVA1 PROC RVW	PRE SLEEP	MASK PB/TOOL CONFIG	PRE SLEEP	SLEEP															
	MS3/EV2 SCHLEGEL	PST DK EVA XFR RCNFG	REBA*	RCBO	E-LK PREP		PRE SLEEP	EVA1 PROC RVW	PRE SLEEP	MASK PB/TOOL CONFIG	PRE SLEEP	SLEEP															
	MS4/EV3 LOVE	GRPL	MR L@	OBSS UNBRTH		R S M E T U P	RG MR SPL	RMS*	PRE SLEEP	EVA1 PROC RVW	PRE SLEEP				SLEEP												
U P	FE-2 EXP16 EYHARTS	GRPL	OBSS UNBRTH			UH N/GO RRP	SM SN R V M R S	DPC	EVA1 PROC RVW	PRE SLEEP-ISS				SLEEP													
I S S	ISS CDR WHITSON	02 RCNFG /PURGE				PREP WORK		DPC	EVA1 PROC RVW	PRE SLEEP-ISS				SLEEP													
	FE-1 MALENCHENKO	PREP WORK			VELO		DW N L D	DPC	EVA1 PROC RVW	PRE SLEEP-ISS				SLEEP													
D N	FE-2 TANI	GRPL	OBSS UNBRTH			UH N/GO RRP	SM SN R V M R S	DPC	EVA1 PROC RVW	PRE SLEEP-ISS				SLEEP													
DAY/NIGHT		[Timeline with shaded blocks]																									
ORBIT		[Timeline with shaded blocks]																									
TDRS		[Timeline with shaded blocks]																									
ORB ATT		[Timeline with shaded blocks]																									
NOTES		*INSTALL @RELEASE *MNVR-COL VIEW *√HUM SEP MATED TEA																									

FD03

STS-122/1E JOINT MSN SHORT TERM PLAN



FD04

GMT 12/09/07 (343)

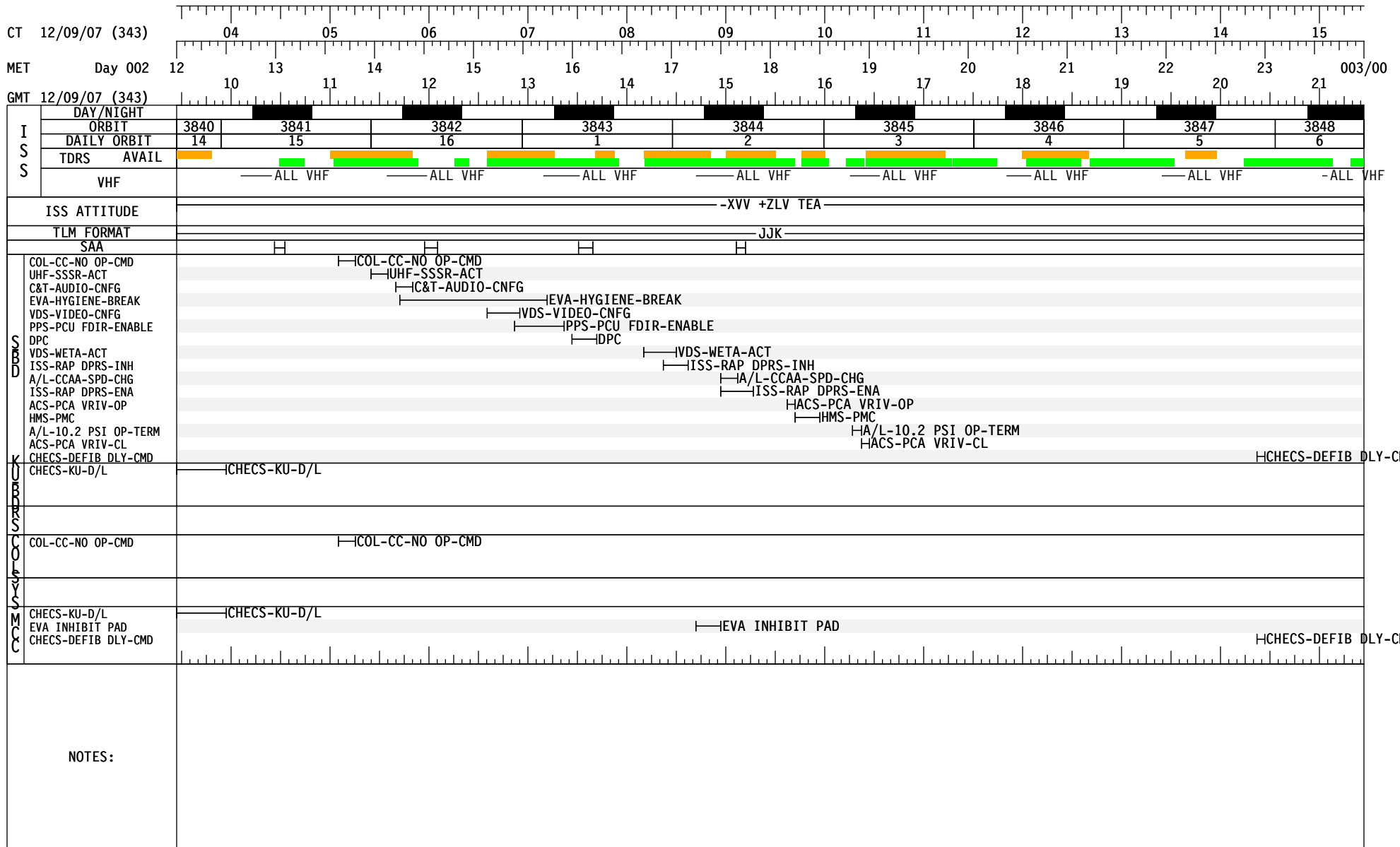
MET Day 002



STS	Personnel	12	13	14	15	16	17	18	19	20	21	22	23	21
STS-122	CDR FRICK	SLEEP	POST SLEEP	HYG BRK/HATCH CLS	CAMP OUT EVA PREP	EMU PREBREATHE	C LK DPRS	EXERCISE	P/TVO7 EVA SPPT	MEAL	P/TVO7 EVA SPPT	P/TVO7 EVA SPPT	P/TVO7 EVA SPPT	C I W C I T # 3
	PLT POINDEXTER	SLEEP	POST SLEEP	POST SLEEP	POST SLEEP	EMU PREBREATHE	C LK DPRS	EXERCISE	EVA 1 IVA SPRT					
	MS1 MELVIN	SLEEP	POST SLEEP	POST SLEEP	POST SLEEP	EMU PREBREATHE	C LK DPRS	EXERCISE	SSRMS EVA1 SPRT				COL UNBRTH	
	MS2/EV1 WALHEIM	SLEEP	POST SLEEP	HYG BRK/PREBREATHE	CAMP OUT EVA PREP	EMU PREBREATHE	C LK DPRS	EXERCISE	EVA 1 (06:30)		PDGF SETUP	PDGF INSTALL	COL UNBRTH PREP	P1 NTA RMVL
	MS3/EV2 SCHLEGEL	SLEEP	POST SLEEP	HYG BRK/PREBREATHE	CAMP OUT EVA PREP	EMU PREBREATHE	C LK DPRS	EXERCISE	PDGF SETUP	PDGF INSTALL	COL UNBRTH PREP	P1 NTA RMVL		
	MS4/EV3 LOVE	SLEEP	POST SLEEP	POST SLEEP	POST SLEEP	EMU PREBREATHE	C LK DPRS	EXERCISE	SSRMS EVA1 SPRT				COL UNBRTH *	
ISS	FE-2 TANI	SLEEP	POST SLEEP	PREP WORK	DPC	EXERCISE TVIS	SSRMS EVA1 SPRT	MIDDAY-MEAL	H/O	COL UNBRTH				
	ISS CDR WHITSON	SLEEP	POST SLEEP	HYG BRK/HATCH CLS	CAMP OUT EVA PREP	EMU PREBREATHE	C LK DPRS	EXERCISE RED	MIDDAY-MEAL	VAJ S/U	VEST OUTFIT PREP			
UP	FE-1 MALENCHENKO	SLEEP	POST SLEEP	PREP WORK	DPC	IELK RMVL	IELK INST & C/O	EXERCISE TVIS	MIDDAY-MEAL	GL OVE	COX MNT	SC O L K S O L		
	FE-2 EXP16 EYHARTS	SLEEP	POST SLEEP	PREP WORK	DPC	IELK RMVL & XFER	IELK INST & C/O	PM C INSTL PWS	ADAPTATION	MIDDAY-MEAL	H/O	VEST OUTFIT PREP	ADAPT	
DAY/NIGHT ORBIT		[Timeline bars for Day/Night and Orbit]												
TDRS		[Timeline bars for TDRS W, E, Z]												
ORB ATT		[Timeline bars for Orb Att]												
NOTES		*FILTER CHECK *STOW *RPRS INIT *RPRS TERM *SSRMS PWR LATCHES CONNECTED												

FD04

STS-122/1E JOINT MSN SHORT TERM PLAN



FD04

GMT 12/09/07 (343)

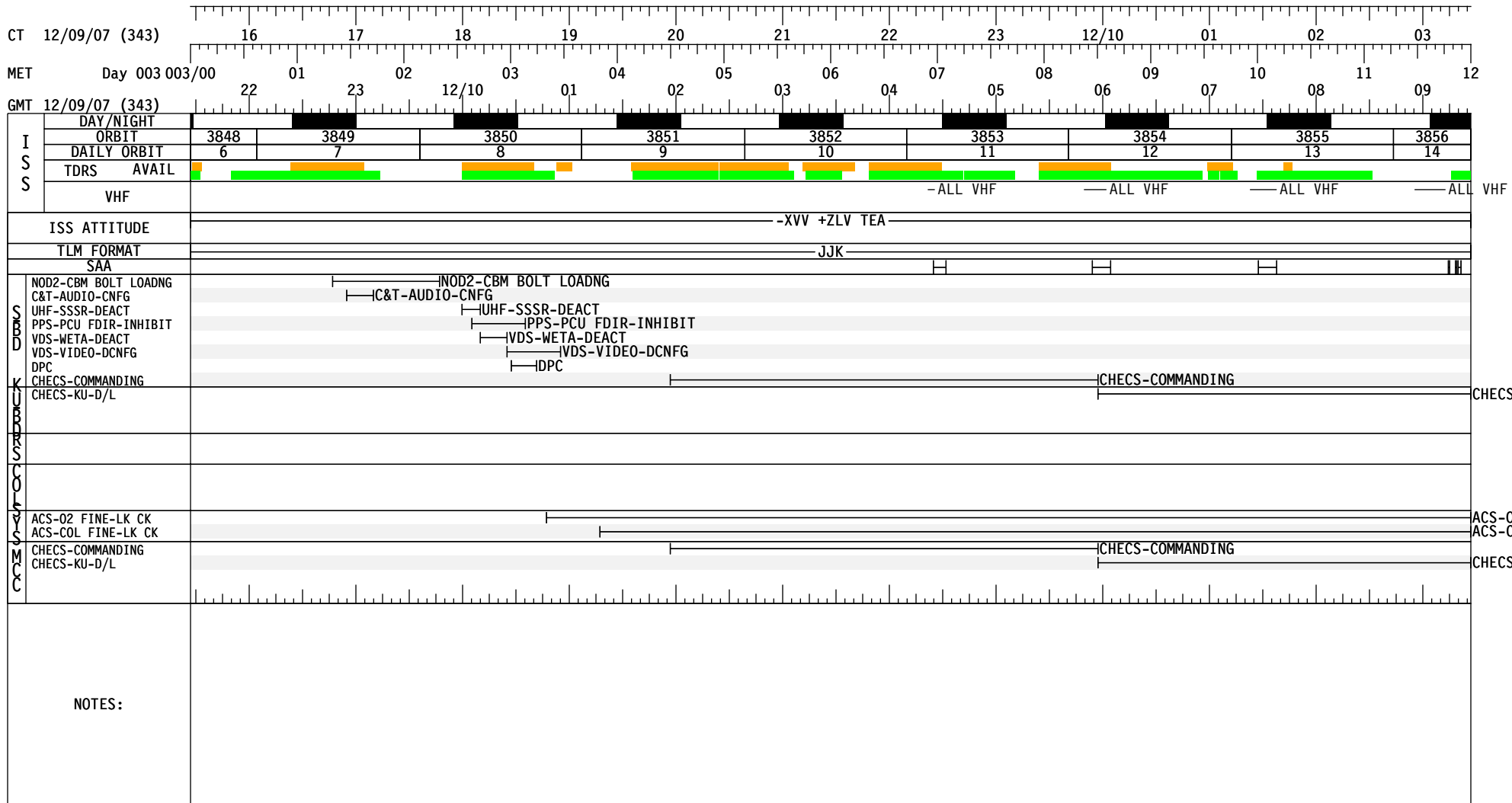
NO EXERCISE

MET Day 003 003/00 01 02 03 04 05 06 07 08 09 10 11 12

S T S - 1 2 2	CDR FRICK	P/TV07 EVA SPPT	CTWE CRMR	CXW FCE R	POST EVA W/H2O,METOX	PMC A/G	PRE SLEEP	SLEEP									
	PLT POINDEXTER	EVA1 IVA SPPT	PLR RPS	COM M*	EXERCISE	CD M*	PRE SLEEP	SLEEP									
	MS1 MELVIN	COL UNBRTH	1ST STG CAP	2ND STG CAP	SAFE	XFER OPS	XT F A G E R	PRE SLEEP	SLEEP								
	MS2/EV1 WALHEIM	P1 NTA RMVL		CLNUP & INGRS	PLR RPS	POST EVA W/H2O,METOX		PRE SLEEP	SLEEP								
	MS3/EV2 SCHLEGEL	P1 NTA RMVL		CLNUP & INGRS	PLR RPS	POST EVA W/H2O,METOX	M U S	PRE SLEEP	SLEEP								
	MS4/EV3 LOVE	COL UNBRTH *	1ST STG CAP	2ND STG CAP	SAFE	XFER OPS	BSA INIT	PRE SLEEP	SLEEP								
D N	FE-2 TANI	COL UNBRTH	1ST STG CAP	2ND STG CAP	SAFE	POST EVA W/H2O,METOX	XT F A G E R	PRE SLEEP-ISS	SLEEP								
I S S	ISS CDR WHITSON		NODE2 QD DISCNCT		EXERCISE TVIS	L K C K	PRE SLEEP-ISS	SLEEP									
	FE-1 MALENCHENKO		IMS FILE PREP	PREP WORK	VELO	D W N L D	PRE SLEEP-ISS	SLEEP									
U P	FE-2 EXP16 EYHARTS	ADAPT	1ST STG CAP	2ND STG CAP	SAFE	ADAPT	PRE SLEEP-ISS	SLEEP									
DAY/NIGHT		49		50		51		52		53		54		55		56	
ORBIT		49		50		51		52		53		54		55		56	
TDRS		W -171.0		E -46.0		Z -275.0											
ORB ATT																	
NOTES		*SSRMS PWR LATCHES CONNECTED		*DECONFIG		*BATT C/O		*CHECK-INIT		MATED TEA							

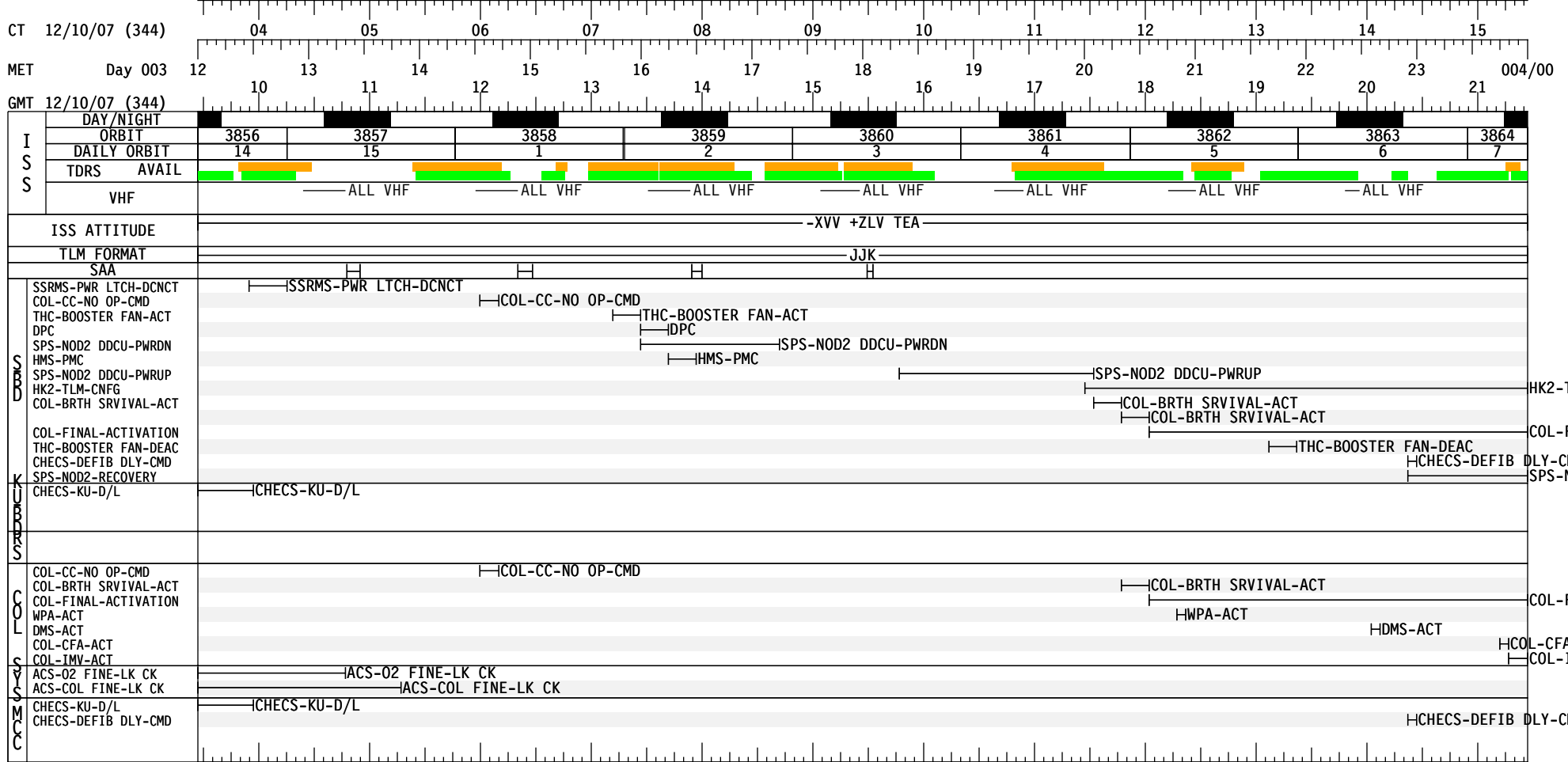
FD04

STS-122/1E JOINT MSN SHORT TERM PLAN



FD05

STS-122/1E JOINT MSN SHORT TERM PLAN



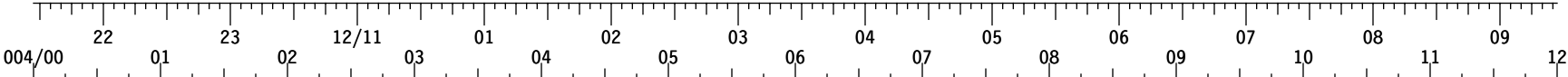
NOTES:

*ON *OFF

FD05

GMT 12/10/07 (344)

MET Day 004

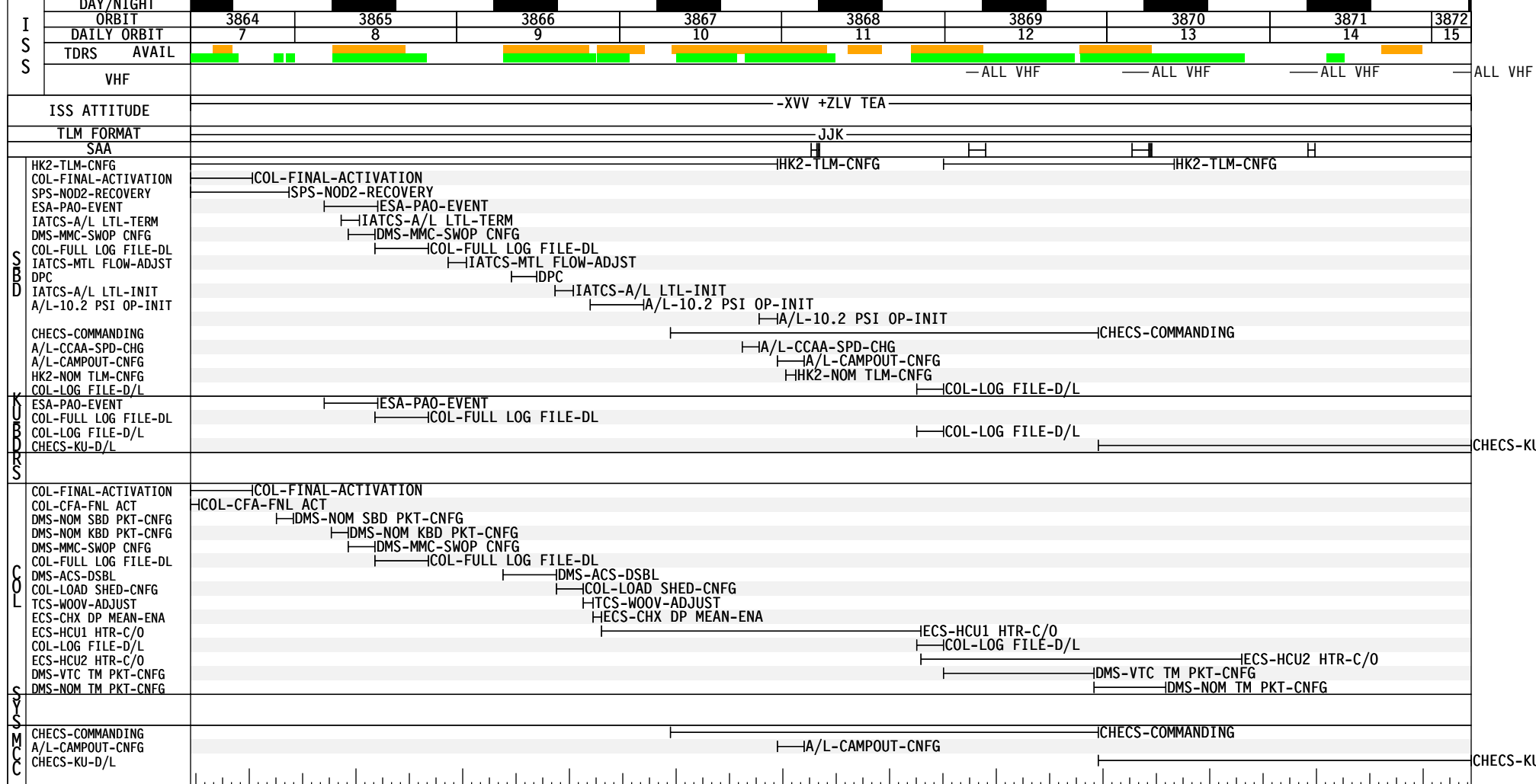


S T S - 1 2 2	CDR FRICK	FOCUSED INSPECTION			ESA PAO EVENT	EVA2 PROC REVIEW	PMC A/G	PRE SLEEP			SLEEP				
	PLT POINDEXTER	EXERCISE	P/TV 05 S/U	CDM*	P/TV07 EVA S/U	EVA2 PROC REVIEW		PRE SLEEP			SLEEP				
	MS1 MELVIN	FOCUSED INSPECTION			XTFAEGR	BRIEF	EVA2 PROC REVIEW		PRE SLEEP			SLEEP			
	MS2/EV1 WALHEIM	*	XFER OPS			PRE SLEEP	EVA2 PROC REVIEW		PRE SLEEP	MASK PB/TOOL CONFIG	PRE SLEEP	SLEEP			
	MS3/EV2 SCHLEGEL	⊕	EXERCISE	MUS	ESA PAO EVENT	PSRL EEP	EVA2 PROC REVIEW		PRE SLEEP	MASK PB/TOOL CONFIG	PRE SLEEP	SLEEP			
	MS4/EV3 LOVE		FOCUSED INSPECTION			ESA PAO EVENT	EVA2 PROC REVIEW		PRE SLEEP			SLEEP			
D N	FE-2 TANI	♦	IWIS DEACT	PREP WORK	XTFAEGR	BRIEF	EVA2 PROC REVIEW	DPC	PWORK	PRE SLEEP-ISS			SLEEP		
	ISS CDR WHITSON		RED		TVIS		EVA2 PROC REVIEW	DPC	PWORK	PRE SLEEP-ISS			SLEEP		
I S S	FE-1 MALENCHENKO		VELO		PREP WORK	DWNLD	EVA2 PROC REVIEW	DPC	PWORK	PRE SLEEP-ISS			SLEEP		
	UP FE-2 EXP16 EYHARTS	⊕	INSTL PART POSTS	ADAPT	ESA PAO EVENT	PWORK	EVA2 PROC REVIEW	DPC	PWORK	PRE SLEEP-ISS			SLEEP		
DAY/NIGHT		[Timeline bars for Day/Night]													
ORBIT		[Timeline bars for Orbit]													
TDRS		[Timeline bars for TDRS]													
ORB ATT		[Timeline bars for Orb Att]													
NOTES		*TOOL CONFIG *BATT C/O ⊕TOOL CONFIG ⊕EXERCISE TVIS ⊕PBA PPEX													

FD05

STS-122/1E JOINT MSN SHORT TERM PLAN

CT 12/10/07 (344) 16 17 18 19 20 21 22 23 12/11 01 02 03
 MET Day 004 004/00 22 01 23 02 12/11 03 04 05 06 07 08 09 10 11 12
 GMT 12/10/07 (344)

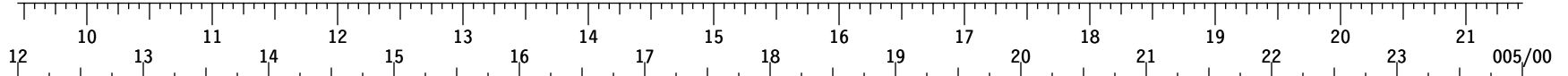


NOTES:

FD06

GMT 12/11/07 (345)

MET Day 004



S T S - 1 2 2	CDR FRICK	SLEEP	PS O L S E T E P	PMC A/G	POST SLEEP	HYG BRK/ HATCH CLS	CAMP OUT EVA PREP	EP MUR G E	EMU PRE BREA THE	C LK DPRS	C I N C I T # 6	P/TVO7 EVA SPPT	C T W E R M	CWC XFER (2)	P S T P T V O 7	MEAL	P/TVO7 EVA SPPT				
	PLT POINDEXTER	SLEEP	POST SLEEP		POST SLEEP	POST SLEEP	EP MUR G E	EMU PRE BREA THE	C LK DPRS	C T W E R M	P D P S	EVA2 IVA SPRT									
	MS1 MELVIN	SLEEP	POST SLEEP		POST SLEEP	POST SLEEP	EP MUR G E	EMU PRE BREA THE	C LK DPRS	C T W E R M	P D P S	SSRMS EVA2 SPRT									
	MS2/EV1 WALHEIM	SLEEP	POST SLEEP	HYG BRK/ PRE BREA THE	CAMP OUT EVA PREP	EP MUR G E	EMU PRE BREA THE	C LK DPRS	C E G L R S	EVA 2 (06:30)		P1 NTA RMVL FROM PLB		P1 NTA INSTALL		NTA STOW IN PLB					
	MS3/EV2 SCHLEGEL	SLEEP	POST SLEEP	HYG BRK/ PRE BREA THE	CAMP OUT EVA PREP	EP MUR G E	EMU PRE BREA THE	C LK DPRS	C E G L R S	EVA 2 (06:30)		P1 NTA RMVL FROM PLB		P1 NTA INSTALL		NTA STOW IN PLB					
	MS4/EV3 LOVE	SLEEP	POST SLEEP		POST SLEEP	POST SLEEP	EP MUR G E	EMU PRE BREA THE	C LK DPRS	C T W E R M	P D P S	SSRMS EVA2 SPRT									
D N	FE-2 TANI	SLEEP	POST SLEEP	PREP WORK	DPC	INSTL HNDRL	V I B N A S T L	DSTW INSTL FOOT LPS	SSC ACT	R S V O L N O L F W	PWS DINST	INSTL PWS	PWS ACT	EXERCISE TVIS	MIDDAY-MEAL	RELOCATE EPM - A3	PCS ACT	F C I / R O E	B S A - T S		
I S S	ISS CDR WHITSON	SLEEP	POST SLEEP	HYG BRK/ HATCH CLS	CAMP OUT EVA PREP	EP MUR G E	EMU PRE BREA THE	C LK DPRS	INSTL D3 FLOOR PANEL	A K I 3 B N F A S F R T L	EXERCISE CEVIS	MIDDAY-MEAL	EPM UMB MATE	F C I / R O E	*						
	FE-1 MALENCHENKO	SLEEP	POST SLEEP	PREP WORK	DPC	EXERCISE TVIS			MIDDAY-MEAL	COX MNT	IMS FILE PREP	VELO									
U P	FE-2 EXP16 EYHARTS	SLEEP	POST SLEEP	PREP WORK	DPC	E T H E R	A D A P T	V I B N A S T L	R M V D3 FLOOR PNLS	R M V D2 FLOOR PNLS	R S V O L N O L F W	R M V P A R T C V R S	INSTL D2 FLOOR PANEL	INSTL VCA	PMC	ADAPT	MIDDAY-MEAL	RELOCATE EPM - A3	R M V D1 FLOOR PANEL	U N L K W P A A V M	⊕
DAY/NIGHT ORBIT		72	73	74	75	76	77	78	79	80											
TDRS		W -171.0	E -46.0	Z -275.0																	
ORB ATT		MATED TEA																			
NOTES		*MNVN-EVA2 VIEW																			

*EXERCISE R
⊕UNLK CWSA

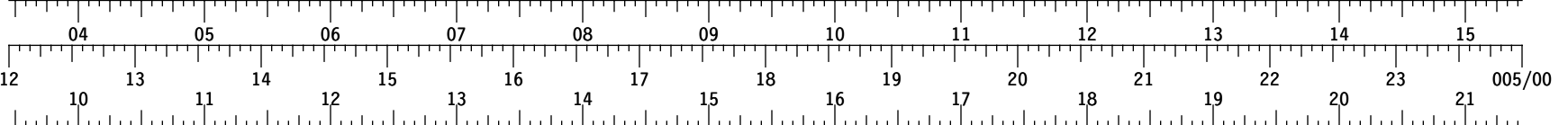
FD06

STS-122/1E JOINT MSN SHORT TERM PLAN

CT 12/11/07 (345)

MET Day 004

GMT 12/11/07 (345)



ISS	DAY/NIGHT	3872	3873	3874	3875	3876	3877	3878	3879
	ORBIT	15	16	1	2	3	4	5	6
	DAILY ORBIT								
	TDRS AVAIL								
VHF		-ALL VHF	-ALL VHF	-ALL VHF	-ALL VHF	-ALL VHF	-ALL VHF	-ALL VHF	-ALL VHF

ISS ATTITUDE -XVV +ZLV TEA

TLM FORMAT SAA H H H H JJK

DMS

- EVA-HYGIENE-BREAK
- UHF-SSSR-ACT
- C&T-AUDIO-CNFG
- VDS-VIDEO-CNFG
- PPS-PCU FDIR-ENABLE
- DPC
- VDS-WETA-ACT
- ISS-RAP DPRS-INH
- DMS-SMALL FILE-UPLK
- DMS-LARGE FILE-UPLK
- A/L-CCAA-SPD-CHG
- ISS-RAP DPRS-ENA
- DMS-MMU-FILE MGMT
- DMS-MMU-FILE DNLK
- ACS-PCA VRIV-OP
- A/L-10.2 PSI OP-TERM
- ACS-PCA VRIV-CL
- HMS-PMC
- HEVA-HYGIENE-BREAK
- UHF-SSSR-ACT
- C&T-AUDIO-CNFG
- VDS-VIDEO-CNFG
- PPS-PCU FDIR-ENABLE
- DPC
- VDS-WETA-ACT
- ISS-RAP DPRS-INH
- DMS-SMALL FILE-UPLK
- DMS-LARGE FILE-UPLK
- A/L-CCAA-SPD-CHG
- ISS-RAP DPRS-ENA
- DMS-MMU-FILE MGMT
- DMS-MMU-FILE DNLK
- ACS-PCA VRIV-OP
- A/L-10.2 PSI OP-TERM
- ACS-PCA VRIV-CL
- HMS-PMC

STRIP

- CHECS-DEFIB DLY-CMD
- CHECS-KU-D/L
- DMS-MMU-FILE DNLK
- HCHECS-DEFIB DLY-CMD

COG

- TCS-WPA2-C/O
- ECS-COL EVA MD-RECON
- DMS-SMALL FILE-UPLK
- DMS-LARGE FILE-UPLK
- DMS-MMU-FILE MGMT
- DMS-MMU-FILE DNLK
- ECS-COL EVA MD-RECON
- DMS-SMALL FILE-UPLK
- DMS-LARGE FILE-UPLK
- DMS-MMU-FILE MGMT
- DMS-MMU-FILE DNLK
- DMS-MMU-FILE DNLK
- EPS-EPM PDU OUTL-INH
- TCS-EPM WFSV-CL
- COMMS-VDPU-ACT
- COMMS-VCA1&2-ACT
- COMMS-VMN1&2-ACT
- COMMS-VCRI&2-ACT
- ECS-COL FIRE IND-C/O
- ECS-P/L FIRE IND-C/O
- HEPS-EPM PDU OUTL-INH
- HTCS-EPM WFSV-CL
- HCOMMS-VDPU-ACT
- HCOMMS-VCA1&2-ACT
- HCOMMS-VMN1&2-ACT
- HCOMMS-VCRI&2-ACT
- IECS-COL FIRE IND-C/O
- IECS-P/L FIRE IND-C/O

CS

- CHECS-KU-D/L
- EVA INHIBIT PAD
- CHECS-DEFIB DLY-CMD
- IEVA INHIBIT PAD
- HCHECS-DEFIB DLY-CMD

2-19

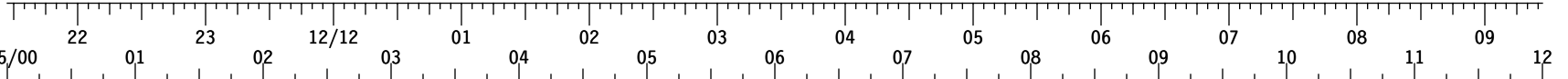
FLT PLN/122/BAS

NOTES:

FD06

GMT 12/11/07 (345)

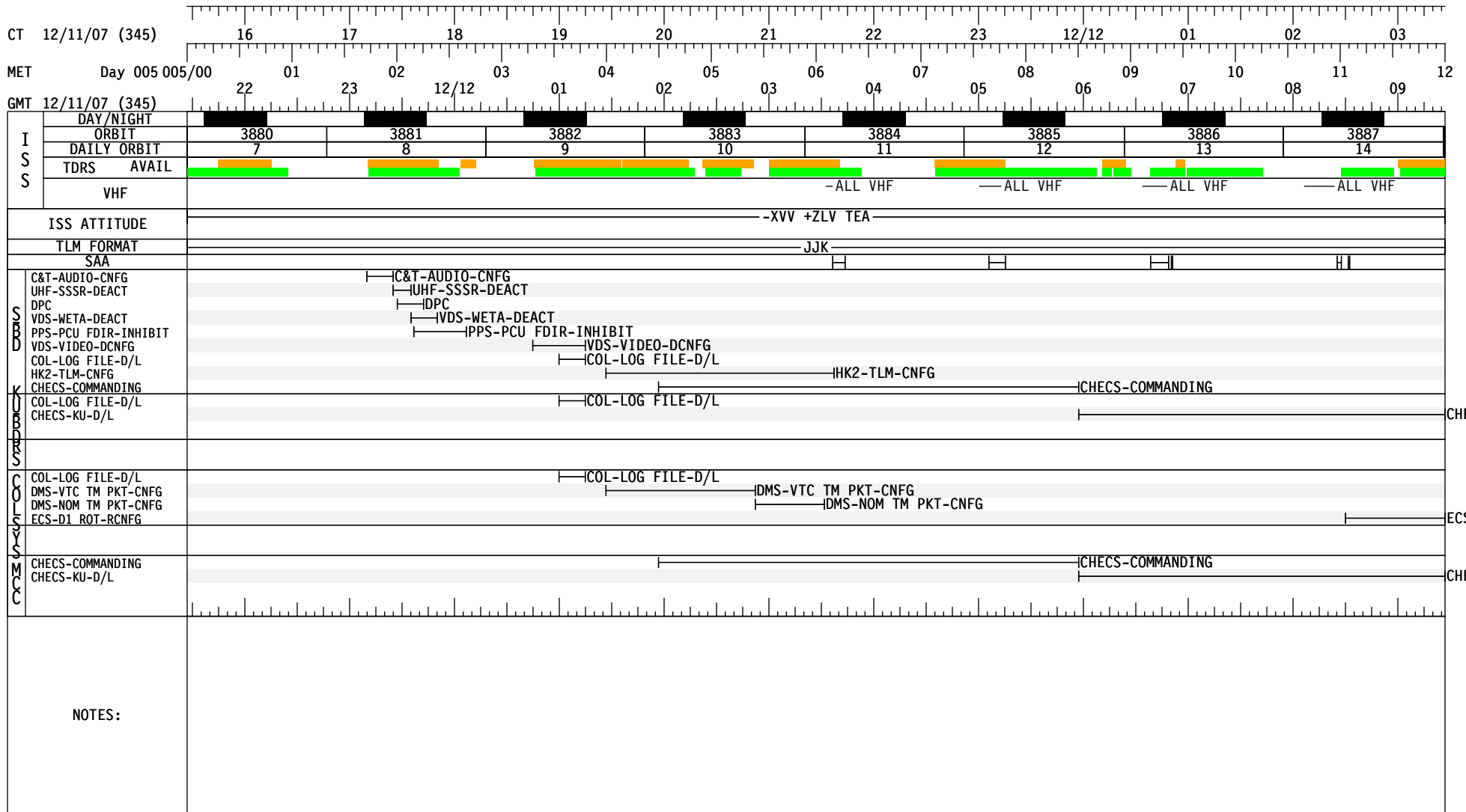
MET Day 005



S T S - 1 2 2	CDR FRICK	P/TV07 EVA SPPT	EXERCISE	POST EVA W/H2O,METOX	PRE SLEEP	PMC OCA	PRE SLEEP	SLEEP	
	PLT POINDEXTER	EVA2 IVA SPRT	PR RPS	COM M*	FILTER INSPECT		PRE SLEEP	SLEEP	
	MS1 MELVIN	SSRMS EVA2 SPRT	PR RPS	XFER OPS	XT FA E G R	B R I E F	PRE SLEEP	SLEEP	
	MS2/EV1 WALHEIM	TBD	CLNUP & INGRS	PR RPS	POST EVA W/H2O,METOX		PRE SLEEP	SLEEP	
	MS3/EV2 SCHLEGEL	TBD	CLNUP & INGRS	PR RPS	POST EVA W/H2O,METOX		PRE SLEEP	SLEEP	
	MS4/EV3 LOVE	SSRMS EVA2 SPRT	PR RPS	XFER OPS	PRE SLEEP	BSA INIT	PRE SLEEP	SLEEP	
D N	FE-2 TANI	TVIS	H/O	PREP WORK	DPC	XT FA E G R	PRE SLEEP-ISS	SLEEP	
I S S	ISS CDR WHITSON	EXERCISE RED	PW R O R E R K	POST EVA W/H2O,METOX			PRE SLEEP-ISS	SLEEP	
	FE-1 MALENCHENKO	VELO	D W N L D	PREP WORK	DPC	PW R O R E R K	PRE SLEEP-ISS	SLEEP	
U P	FE-2 EXP16 EYHARTS	UNLK CWSA AVM	INSTL D1 FLOOR PANEL	H/O	PREP WORK	DPC	PW R O R E R K	PRE SLEEP-ISS	SLEEP
DAY/NIGHT		ORBIT							
		W -171.0	80		81	82		83	
TDRS		E -46.0							
		Z -275.0							
ORB ATT						MATED TEA			
NOTES				*DECONFIG					
				*MNRV-COL VIEW					

FD06

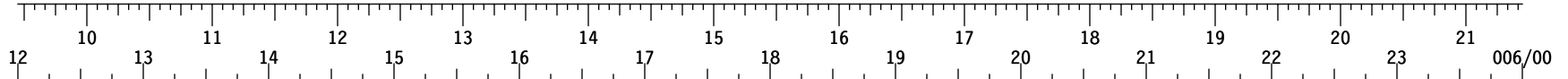
STS-122/1E JOINT MSN SHORT TERM PLAN



FD07

GMT 12/12/07 (346)

MET Day 005



STS-122	CDR FRICK	SLEEP	POST SLEEP	H/O	M/D	W/N	POST SLEEP	W/A	M/T	H/O	PE	EXERCISE	OFF DUTY	MEAL	PFC	OFF DUTY	
	PLT POINDEXTER	SLEEP	POST SLEEP				EXERCISE	M/C	N/P	H/O	PE	P/TV	COND	OFF DUTY	PFC	OFF DUTY	
	MS1 MELVIN	SLEEP	POST SLEEP				EXERCISE					RELOCATE	OFF DUTY	MEAL	OFF DUTY	OFF DUTY	
	MS2/EV1 WALHEIM	SLEEP	POST SLEEP				TOOL CONFIG	EMU	BMI	E-LK	PREP	OFF DUTY	MEAL	OFF DUTY			
	MS3/EV2 SCHLEGEL	SLEEP	POST SLEEP				EXERCISE	I/N	PE	RELOCATE	OFF DUTY	MEAL	OFF DUTY		PFC	OFF DUTY	
	MS4/EV3 LOVE	SLEEP	POST SLEEP				TOOL CONFIG	EMU	BMI	E-LK	PREP	OFF DUTY	MEAL	OFF DUTY	PFC	OFF DUTY	
ISS	FE-2 TANI	SLEEP	POST SLEEP	PREP	DPC	ROTATE	PPRV	ROTATE	N2	JUMPERS & PURGE	EDR	METS	PREP	MIDDAY-MEAL	HANDOVER		
	ISS CDR WHITSON	SLEEP	POST SLEEP	PREP	DPC	ROTATE	PPRV	ROTATE	N2	JUMPERS & PURGE	EDR	METS	PREP	MIDDAY-MEAL	BSA	EXERCISE	
UP	FE-1 MALENCHENKO	SLEEP	POST SLEEP	PREP	DPC	COX	CSA-CP				VELO	IMS	PREP	MIDDAY-MEAL	EXERCISE TVIS		
	FE-2 EXP16 EYHARTS	SLEEP	POST SLEEP	PREP	DPC	ROTATE	UNLK	ROTATE	E	PM	ADAPT		ADAPT	MIDDAY-MEAL	HANDOVER		
DAY/NIGHT		88		89		90		91		92		93		94		95	
ORBIT		88		89		90		91		92		93		94		95	
TDRS	W	-171.0															
	E	-46.0															
	Z	-275.0															
ORB ATT		MATED TEA		WATER DUMP								MATED TEA					
NOTES								*FILTER CHECK						*RPRS TERM		*TERM	
								*BATT C/O						*RPRS TERM		*TERM	
								#EVA Image Downlink						*RPRS TERM		*TERM	

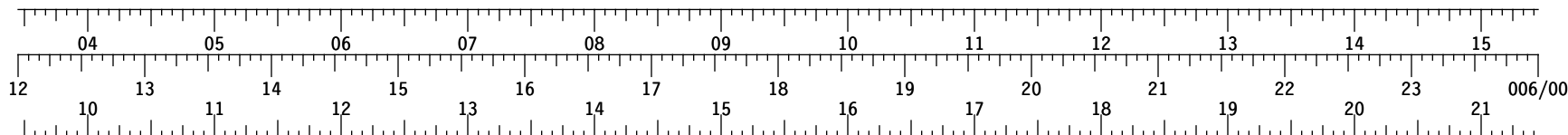
FD07

STS-122/1E JOINT MSN SHORT TERM PLAN

CT 12/12/07 (346)

MET Day 005

GMT 12/12/07 (346)



ISS	DAY/NIGHT	3888		3889		3890		3891		3892		3893		3894		3895	
	ORBIT	15		16		1		2		3		4		5		6	
	DAILY ORBIT	15		16		1		2		3		4		5		6	
	TDRS AVAIL	15		16		1		2		3		4		5		6	
VHF	ALL VHF		ALL VHF		ALL VHF		ALL VHF		ALL VHF		ALL VHF		ALL VHF		ALL VHF		
ISS ATTITUDE		-XVV +ZLV TEA				-XVV +ZLV				-XVV +ZLV TEA							
TLM FORMAT		JJK				JJK				JJK							
SAA		H				H				H							
DORS	CCS-TLM FORMAT-SWAP	H				H				H							
	ACS-CMG/STS ATT-H/O	H				H				H							
	DPC	H				H				H							
	ACS-STG/CMG ATT-H/O	H				H				H							
SPR	HMS-PMC	H				H				H							
	DMS-MMU-FILE MGMT	H				H				H							
	DMS-SPC4-C/O	H				H				H							
	PAO-EVENT	H				H				H							
SPE	CHECS-DEFIB DLY-CMD	H				H				H							
	CHECS-KU-D/L	H				H				H							
	COMMS-VCR1-PLBK	H				H				H							
	COMMS-VCR2-PLBK	H				H				H							
LOC	ECS-D1 ROT-RCNFG	H				H				H							
	COMMS-VDPU-SU-CNFG1	H				H				H							
	COMMS-VCR1-RCRD	H				H				H							
	COMMS-VDPU-CP1-ACT	H				H				H							
	COMMS-VCR1-PLBK	H				H				H							
	COMMS-VDPU-CP1-CNFG	H				H				H							
	COMMS-VDPU-SWTCOVER	H				H				H							
	ECS-D1 ROT-RCVRY	H				H				H							
	COMMS-VDPU-CP1-DEACT	H				H				H							
	DMS-MMU-FILE MGMT	H				H				H							
	DMS-SPC4-C/O	H				H				H							
	COMMS-VDPU-SU-CNFG2	H				H				H							
	COMMS-VCR2-RCRD	H				H				H							
	TCS-WPA2 ACCUM-S/U	H				H				H							
	COMMS-VDPU-CP2-ACT	H				H				H							
	COMMS-VCR2-PLBK	H				H				H							
COMMS-VDPU-CP2-CNFG	H				H				H								
COMMS-VDPU-CP2-DEACT	H				H				H								
ECS-CTCU2-C/O	H				H				H								
COMMS-VCR1-PLBK2	H				H				H								
COMMS-VCR1&2-DEACT	H				H				H								
COMMS-VMN1&2-DEACT	H				H				H								
CME	CHECS-KU-D/L	H				H				H							
	CCS-TLM FORMAT-SWAP	H				H				H							
	CHECS-DEFIB DLY-CMD	H				H				H							

NOTES:

FD07

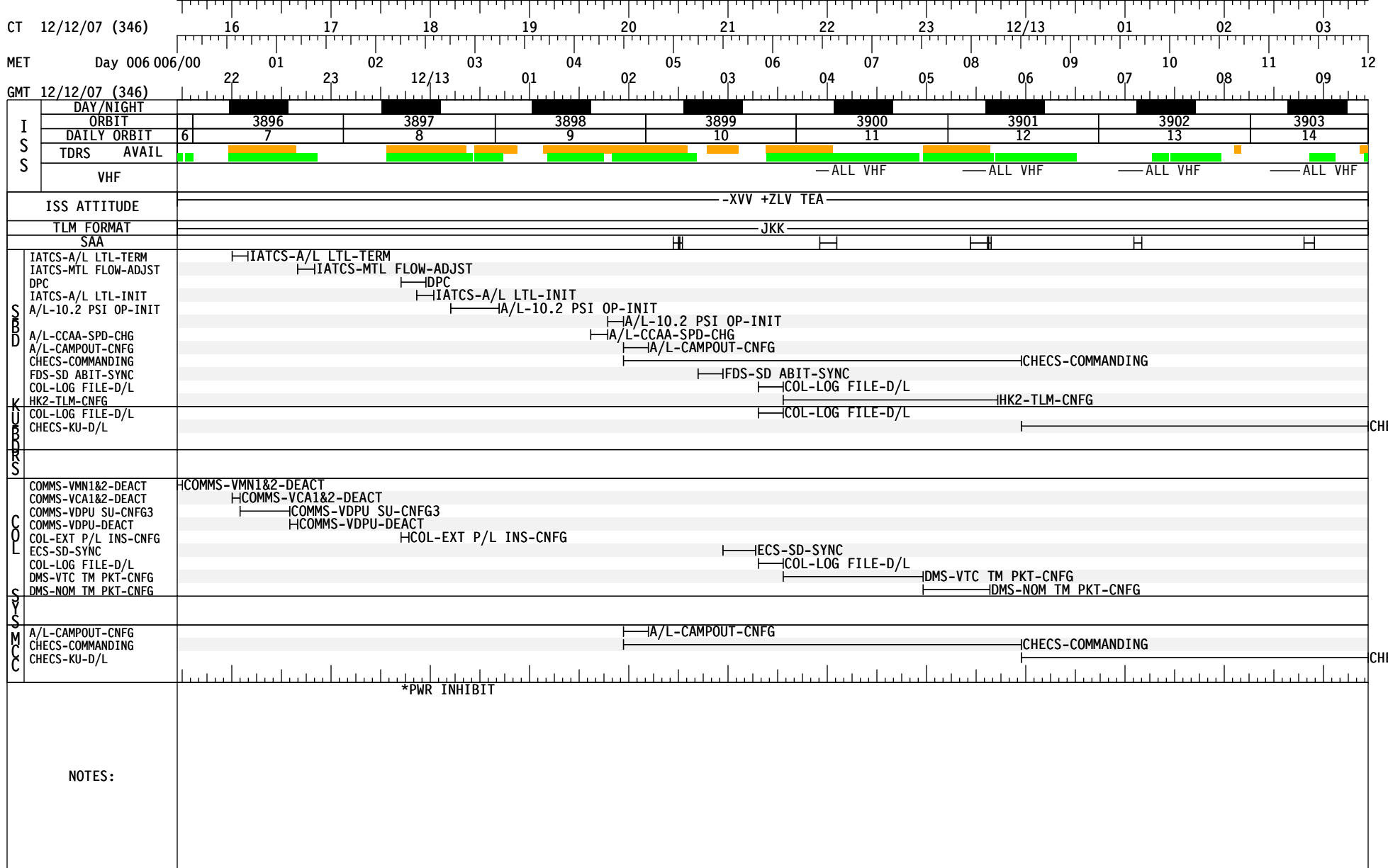
GMT 12/12/07 (346)

MET Day 006 006/00 22 01 23 02 12/13 03 01 04 02 05 03 06 04 07 05 08 06 09 07 10 08 11 09 12

S T S - 1 2 2	CDR FRICK	OFF DUTY	EVA3 PROC REVIEW	PMCA A/G3	PRE SLEEP	SLEEP		
	PLT POINDEXTER	OFF DUTY	EVA3 PROC REVIEW		PRE SLEEP	SLEEP		
	MS1 MELVIN	OFF DUTY	EVA3 PROC REVIEW		PRE SLEEP	SLEEP		
	MS2/EV1 WALHEIM	OD FTY PFC OCA	OD FTY PS LEEP	EVA3 PROC REVIEW	PRE SLEEP	MASK PB/TOOL CONFIG 10.2 DPRS	PRE SLEEP	SLEEP
	MS3/EV2 SCHLEGEL	OFF DUTY	EVA3 PROC REVIEW	MUS	PRE SLEEP		SLEEP	
	MS4/EV3 LOVE	OFF DUTY	PS LEEP	EVA3 PROC REVIEW	PRE SLEEP	MASK PB/TOOL CONFIG 10.2 DPRS	PRE SLEEP	SLEEP
D N	FE-2 TANI	HANDOVER	DCS TRN	EVA3 PROC REVIEW	PWR ERPK	DPC	PRE SLEEP-ISS	SLEEP
I S S	ISS CDR WHITSON	EXER RED		EVA3 PROC REVIEW	PWR ERPK	DPC	PRE SLEEP-ISS	SLEEP
	FE-1 MALENCHENKO		DWNLD	EVA3 PROC REVIEW	PWR ERPK	DPC	PRE SLEEP-ISS	SLEEP
U P	FE-2 EXP16 EYHARTS	HANDOVER	PWR ERPK	EVA3 PROC REVIEW	PWR ERPK	DPC	PRE SLEEP-ISS	SLEEP
DAY/NIGHT		[Timeline with shaded blocks for day/night cycles]						
ORBIT		[Timeline with shaded blocks for orbit parameters]						
TDRS		[Timeline with shaded blocks for TDRS parameters]						
ORB ATT		*ENABLE *PWR INHIBIT MATED TEA						
NOTES								

FD07

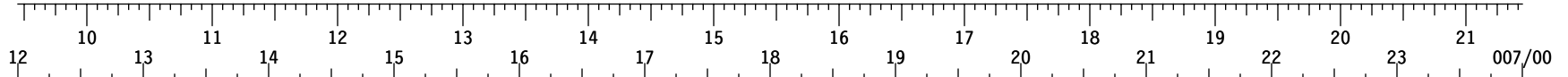
STS-122/1E JOINT MSN SHORT TERM PLAN



FD08

GMT 12/13/07 (347)

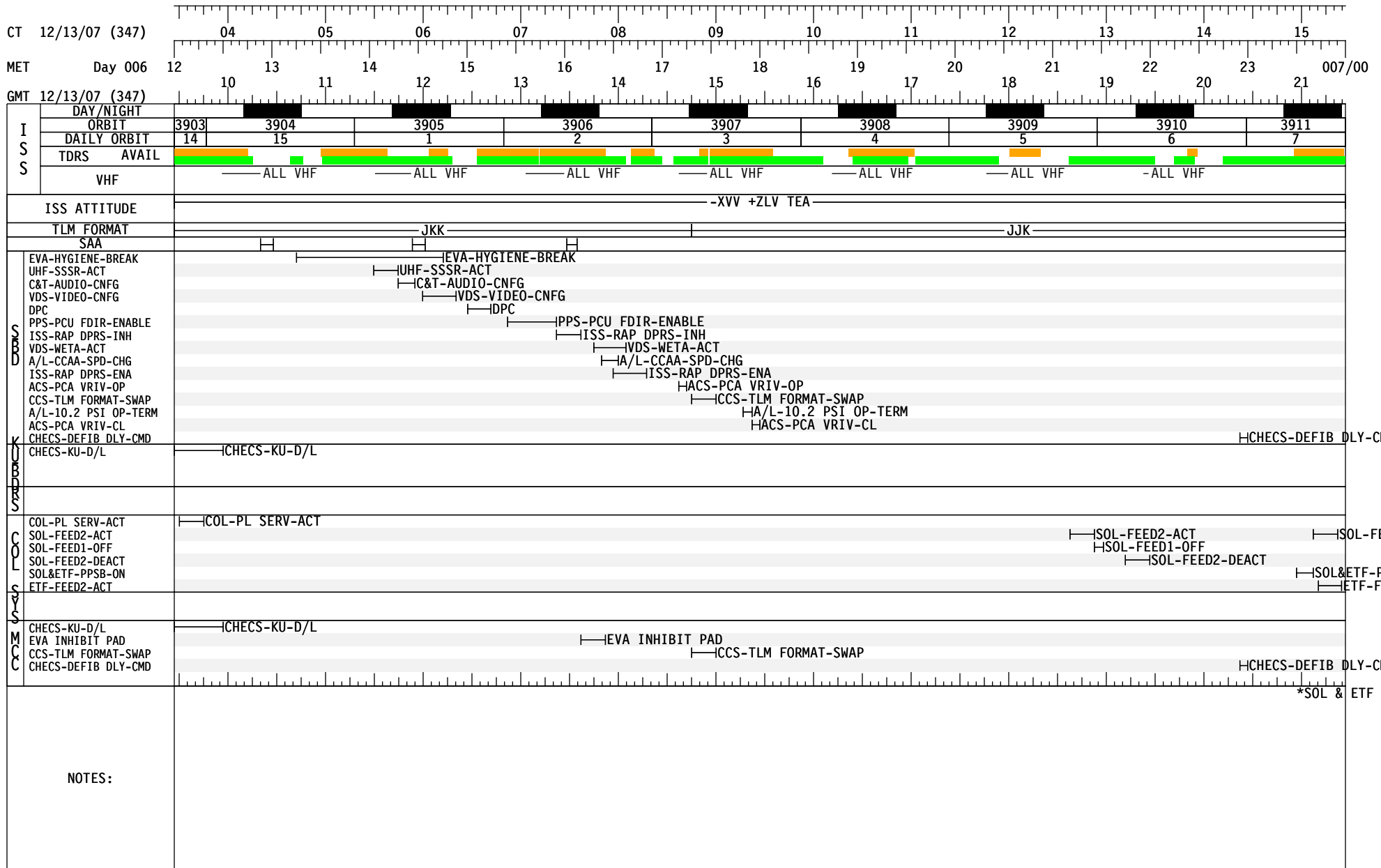
MET Day 006



S T S - 1 2 2	CDR FRICK	SLEEP	PS O L S E P	PMC A/G	POST SLEEP	HYG BRK/ HATCH CLS	CAMP OUT EVA PREP	EMU P R E B R E A T H E	EMU P R E B R E A T H E	C_LK D P R S	P/TV07 EVA SPPT	EXERCISE	PTV 07	SOL R *	MEAL	CIN C I T # 7	P/TV07 EVA SPPT	SOL R *	PTV 07	CT W E C R M	CIN C I T # 8	PTV 07	PTV 07	PTV 07
	PLT POINDEXTER	SLEEP	POST SLEEP		POST SLEEP	POST SLEEP	RELOCATE BIOLAB - A2	EMU P R E B R E A T H E	EMU P R E B R E A T H E	C_LK D P R S	EVA3 IVA SPRT													
	MS1 MELVIN	SLEEP	POST SLEEP		POST SLEEP	POST SLEEP	RELOCATE BIOLAB - A2	EMU P R E B R E A T H E	EMU P R E B R E A T H E	C_LK D P R S	SSRMS EVA3 SPRT													
	MS2/EV1 WALHEIM	SLEEP	POST SLEEP	HYG BRK/ PREBREATHE	CAMP OUT EVA PREP	EMU P R E B R E A T H E	EMU P R E B R E A T H E	C_LK D P R S	EVA 3 (06:30)			SOLAR TRANSFER		CMG TRANSFER	EUTEF TRANSFER	CLNUP INGRS								
	MS3/EV2 SCHLEGEL	SLEEP	POST SLEEP	HYG BRK/ PREBREATHE	CAMP OUT EVA PREP	EMU P R E B R E A T H E	EMU P R E B R E A T H E	C_LK D P R S	RELOCATE BIOLAB - A2	EMU P R E B R E A T H E	C_LK D P R S	BLB TOOL GATHER	BLB LF RMV	TCU LF RMV	BLB INC LF RMV	MEAL	BLB INC LF RMV	INC CI INSTL	BLB LF RMV					
	MS4/EV3 LOVE	SLEEP	POST SLEEP	HYG BRK/ PREBREATHE	CAMP OUT EVA PREP	EMU P R E B R E A T H E	EMU P R E B R E A T H E	C_LK D P R S	EVA 3 (06:30)			SOLAR TRANSFER		CMG TRANSFER	EUTEF TRANSFER	CLNUP INGRS								
D N	FE-2 TANI	SLEEP	POST SLEEP	PREP WORK	DPC	ZSR RLCT	HANDOVER	SSRMS EVA3 SPRT		EXERCISE TVIS	B S A - T	MIDDAY-MEAL	EDR ^	IP C N A V S R R T S	EXERCISE TVIS	EDR ^								
	ISS CDR WHITSON	SLEEP	POST SLEEP	HYG BRK/ HATCH CLS	CAMP OUT EVA PREP	EMU P R E B R E A T H E	EMU P R E B R E A T H E	C_LK D P R S	EXERCISE CEVIS	EXERCISE RED	MIDDAY-MEAL	EDR ^	EDR REAR S/U		EDR ^									
I S S	FE-1 MALENCHENKO	SLEEP	POST SLEEP	PREP WORK	DPC	VELO	EXERCISE TVIS	MIDDAY-MEAL	COX MNT	IMS FILE PREP														
	UP FE-2 EXP16 EYHARTS	SLEEP	POST SLEEP	PREP WORK	DPC	I N S T *	B R L B D A %	HANDOVER	SSRMS EVA3 SPRT															
DAY/NIGHT		ORBIT		104	105	106	107	108	109	110	111													
TDRS		W -171.0	E -46.0	Z -275.0																				
ORB ATT		MATED TEA																						
NOTES		*FILTER CHECK %PNL-INSTL *A2 KBAR CM					*DEACT #GN2-INSPCT			*PPSB-ON		*PPSB-OFF ^RACK ROTATE		*SOL & ^RACK		ETF ON ROTATE								

FD08

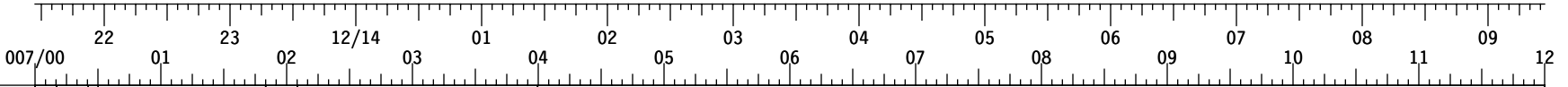
STS-122/1E JOINT MSN SHORT TERM PLAN



FD08

GMT 12/13/07 (347)

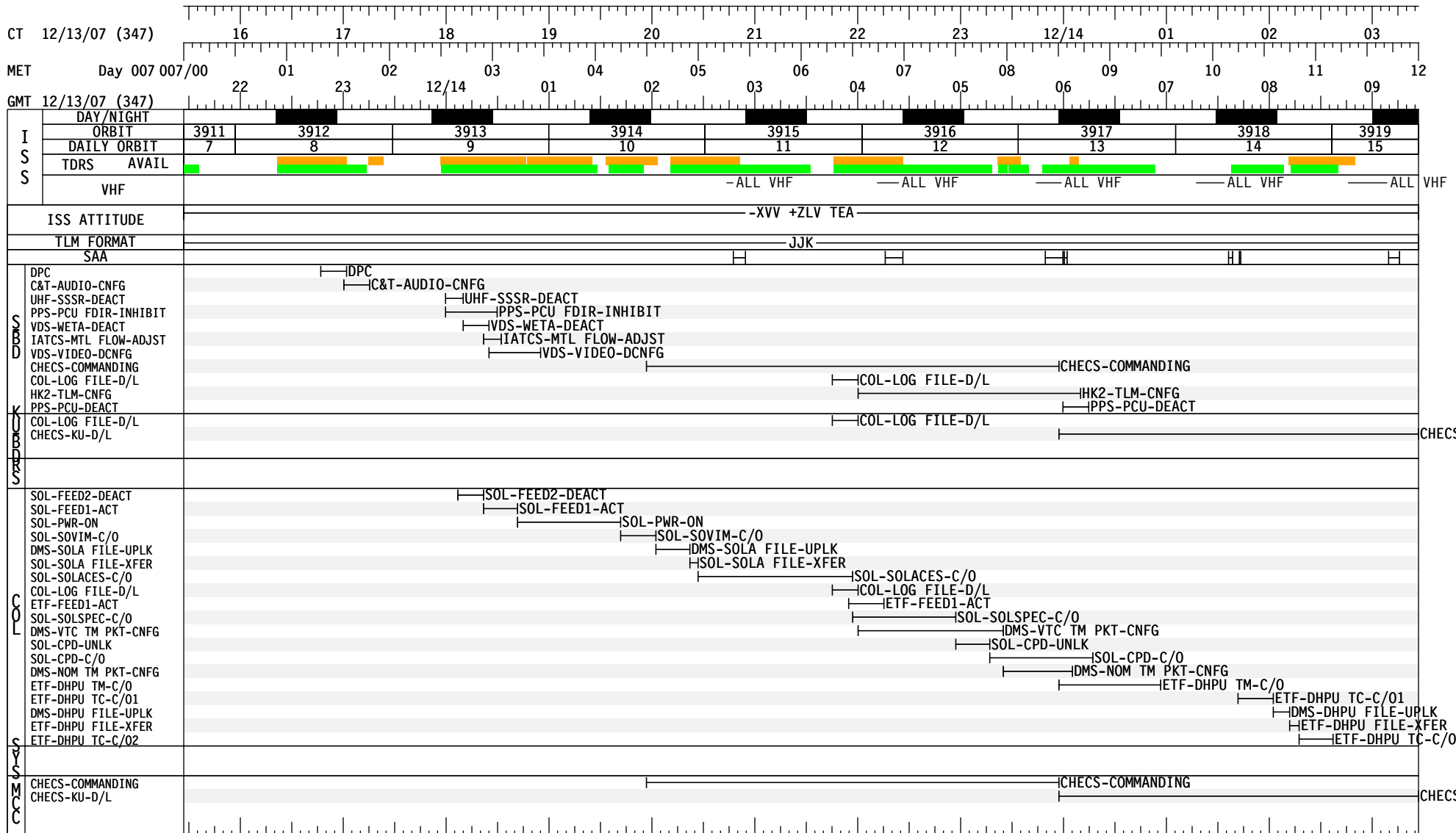
MET Day 007



STS - 1 2 2	CDR FRICK	*CT WER CRM	POST EVA W/H2O,METOX	PMC A/G	PRE SLEEP	SLEEP
	PLT POINDEXTER	⊕P RRS S	CWC XFER (2)		PRE SLEEP*	SLEEP
	MS1 MELVIN	SES SVP RAP M3R S3T	EXERCISE		PRE SLEEP	SLEEP
	MS2/EV1 WALHEIM	CT LN NGR URP PSS	POST EVA W/H2O,METOX		PRE SLEEP	SLEEP
	MS3/EV2 SCHLEGEL	♦	EXERCISE		PRE SLEEP	SLEEP
	MS4/EV3 LOVE	CT LN NGR URP PSS	POST EVA W/H2O,METOX		PRE SLEEP	SLEEP
DN	FE-2 TANI		PREP WORK	DPC	PRE SLEEP-ISS	SLEEP
	ISS CDR WHITSON	PREP WORK	POST EVA W/H2O,METOX		PRE SLEEP-ISS	SLEEP
ISS	FE-1 MALENCHENKO	PREP WORK	D W N L D	DPC	PRE SLEEP-ISS	SLEEP
	UP FE-2 EXP16 EYHARTS	SES SVP RAP M3R S3T	EXERCISE TVIS	DPC	PRE SLEEP-ISS	SLEEP
DAY/NIGHT		[Timeline bar with alternating black and white segments]				
ORBIT		[Timeline bar with alternating black and white segments]				
TDRS	W	-171.0	[Timeline bar with alternating black and white segments]			
	E	-46.0	[Timeline bar with alternating black and white segments]			
	Z	-275.0	[Timeline bar with alternating black and white segments]			
ORB ATT		MATED TEA				
NOTES		*PTV 07 */HUM SEP ⊕EVA3 IVA SPPRT ♦BLB LE RMV *DECONFIG				

FD08

STS-122/1E JOINT MSN SHORT TERM PLAN



NOTES:

FD09

GMT 12/14/07 (348)

MET Day 007

		12	13	14	15	16	17	18	19	20	21	22	23	24										
STS-122	CDR FRICK	POST SLEEP				H/O MNVR BIAS -XLV	REBOOST CONFIG 3	MNVR BIAS -XLV	H/O	N2*	EXERCISE	MEAL	N2*	CREW CONF	CPH REO W T O	CIWN CIT 10	CTWECR M	CXWFCR	02 XFER T/D	FWAEREL				
	PLT POINDEXTER	POST SLEEP				MCIU XFER OPS	REBOOST CONFIG 3	CIWN CIT #9	XFER OPS	CTWECR M	CXWFCR	P/TV 05 S/U	MEAL	CREW CONF	CPH REO W T O	RNDZ TOOLS C/O	XFER OPS	PS TE V T O U 4 P	PD TE V T O U 5 P	FWAEREL	CDM*			
	MS1 MELVIN	POST SLEEP				EXERCISE	P/TV09 REBOOST OPS	XFER OPS	PTV08 EXTRNL SRVY	XFER OPS	MEAL	CREW CONF	CPH REO W T O	RNDZ TOOLS C/O	BSB CO L O T O U D P D	BSB CO L O T O U D P D	XTFA EG R	BR I E F	FWAEREL					
	MS2/EV1 WALHEIM	POST SLEEP				POST EVA XFER/RCNFG						MEAL	CREW CONF	CPH REO W T O	XFER OPS	EXERCISE			FWAEREL					
	MS3/EV2 SCHLEGEL	POST SLEEP				HM SI INSTL	HM CI	AI SI	BLB AI CI INSTL	A T C S @	A T C S *	BGB LF RMV	DRY	MEAL	CREW CONF	CPH REO W T O	BLB U M B M A T E	BGB SI INSTL	BGB CI INSTLY	EXERCISE	FWAEREL	H C A L T O C S H E		
	MS4/EV3 LOVE	POST SLEEP				POST EVA XFER/RCNFG						MEAL	CREW CONF	CPH REO W T O	EXERCISE	DRY	XFER OPS		FWAEREL	H C A L T O C S H E				
ISS	FE-2 TANI	POST SLEEP		PREP WORK	DPC	IWIS S/U	DCB1 PACK	DCB2 PACK	HANDOVER			MIDDAY-MEAL	CREW CONF	CPH REO W T O	EXERCISE TVIS					FWAEREL				
	ISS CDR WHITSON	POST SLEEP		EDR EQUIP GATHER	DPC	PW O P R E R K	EDR FRONT S/U	EDR U M B M A T E	FC I R O E	EU H2O DATA CNCT	EDR S W F	EXERCISE CEVIS	EXERCISE RED	MIDDAY-MEAL	CREW CONF	CPH REO W T O	S/S	F I B E R	EU P U	FC I R O E	EU P D	02 XFER T/D	FWAEREL	H C A L T O C S H E
UP	FE-1 MALENCHENKO	POST SLEEP		PREP WORK	DPC	EXERCISE TVIS					IMS FILE PREP	COX MNT	MIDDAY-MEAL	CREW CONF	CPH REO W T O	XFER OPS					FWAEREL	V E L L O		
	FE-2 EXP16 EYHARTS	POST SLEEP		PREP WORK	DPC	EPM EQUIP GATHER	EPM S F R M V	DCB1 PACK	L S A E W T U P F	DCB2 PACK	L E T P	L C P I O #	S E L F C O	HANDOVER	MIDDAY-MEAL	CREW CONF	CPH REO W T O	M S E U C O M M	CDL S/U	B C S S T O L J W +	XTFA EG R	FWAEREL	C E V I S	
DAY/NIGHT ORBIT		120		121		122		123		124		125		126		127								
TDRS		W -171.0																						
		E -46.0																						
		Z -275.0																						
ORB ATT		MATED TEA				REBOOST				MATED TEA														
NOTES						*IMAGE D/L				@SI INSTL *RPRS INIT %LAPTOP-ACT *RPRS TERM				*SLVA CLCT *BATT C/O										
										*LAPTOP-INSTL #TEST-C/O														

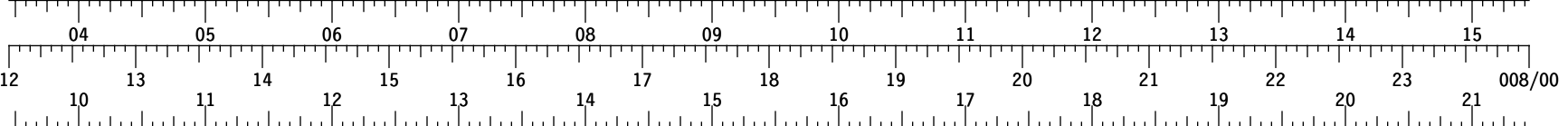
FD09

STS-122/1E JOINT MSN SHORT TERM PLAN

CT 12/14/07 (348)

MET Day 007

GMT 12/14/07 (348)

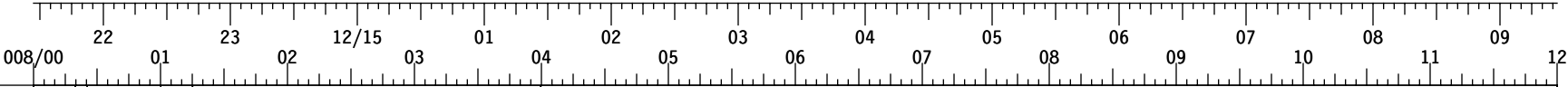


ISS	DAY/NIGHT	3919	3920	3921	3922	3923	3924	3925	3926	3927	
	DAILY ORBIT	15	16	1	2	3	4	5	6	7	
S	TDRS AVAIL	[Color-coded bars representing TDRS availability]									
	VHF	ALL VHF									
ISS ATTITUDE		-XVV +ZLV TEA MNV R TO REBOOST MNVR TO MATED TEA -XLV +ZLV -XVV +ZLV TEA									
TLM FORMAT SAA		JJK									
S	CCS-TLM FORMAT-SWAP	CCS-TLM FORMAT-SWAP									
	DPC	DPC									
	SPS-NOD2 DDCU-PWRDN	SPS-NOD2 DDCU-PWRDN									
	THC-A/L CCAA-CONFIG	THC-A/L CCAA-CONFIG									
	ACS-CMG/STS ATT-H/O	ACS-CMG/STS ATT-H/O									
	SPS-NOD2 DDCU-PWRUP	SPS-NOD2 DDCU-PWRUP									
	ACS-STS/CMG ATT-H/O	ACS-STS/CMG ATT-H/O									
	CHECS-DEFIB DLY-CMD	CHECS-DEFIB DLY-CMD									
	CHECS-KU-D/L	CHECS-KU-D/L									
	S	ETF-DHPU FILE-XFER	ETF-DHPU FILE-XFER								
DMS-DHPU FILE-DWNLK		DMS-DHPU FILE-DWNLK									
ETF-EUTEMP-C/O		ETF-EUTEMP-C/O									
EPS-EDR PDU OUTL-INH		EPS-EDR PDU OUTL-INH									
TCS-EDR WFSV-CL		TCS-EDR WFSV-CL									
ECS-P/L FIRE IND-C/O		ECS-P/L FIRE IND-C/O									
EDR-PCDF EU-CNCT		EDR-PCDF EU-CNCT									
ETF-EXPOSE-C/O		ETF-EXPOSE-C/O									
EPM-RACK-ACT		EPM-RACK-ACT									
ETF-MEDET-C/O		ETF-MEDET-C/O									
ETF-PLGEP-C/O		ETF-PLGEP-C/O									
EDR-RACK-ACT		EDR-RACK-ACT									
ETF-DEBIE2-C/O		ETF-DEBIE2-C/O									
ETF-FIPEX-C/O		ETF-FIPEX-C/O									
EPM-LAN-I/F-C/O		EPM-LAN-I/F-C/O									
COMMS-VDPU-ACT		COMMS-VDPU-ACT									
COMMS-VDPU-CNFG		COMMS-VDPU-CNFG									
EDR-S/S-C/O		EDR-S/S-C/O									
ETF-DOSTEL-C/O		ETF-DOSTEL-C/O									
TCS-BLB-WFSV-CL		TCS-BLB-WFSV-CL									
EPS-BLB PDU OUTL-INH		EPS-BLB PDU OUTL-INH									
ETF-TRIBO-C/O		ETF-TRIBO-C/O									
EPM-CDL DMCU-C/O		EPM-CDL DMCU-C/O									
ETF-EVC-C/O		ETF-EVC-C/O									
EPM-MPG FILE-CNFG		EPM-MPG FILE-CNFG									
EPM-LOG FILE-DNLK		EPM-LOG FILE-DNLK									
EDR-PCDF EU-CNFG1		EDR-PCDF EU-CNFG1									
EDR-PCDF EU-ACT		EDR-PCDF EU-ACT									
EDR-PCDF EU-CNFG2		EDR-PCDF EU-CNFG2									
ETF-EXPOSE-ACT		ETF-EXPOSE-ACT									
EPM-MEEMM MU-C/O	EPM-MEEMM MU-C/O										
DMS-ETF MEDET-UPLK	DMS-ETF MEDET-UPLK										
EDR-PCDF EU-C/O	EDR-PCDF EU-C/O										
ETF-MEDET FILE-XFER	ETF-MEDET FILE-XFER										
ETF-EXPOSE-COMM	ETF-EXPOSE-COMM										
ETF-MEDET-COMM	ETF-MEDET-COMM										
EDR-VMU-DCNFG	EDR-VMU-DCNFG										
EDR-PCDF EU-DEACT	EDR-PCDF EU-DEACT										
EDR-RACK-DCNFG	EDR-RACK-DCNFG										
EDR-RACK-DEACT	EDR-RACK-DEACT										
CHECS-KU-D/L		CHECS-KU-D/L									
CCS-TLM FORMAT-SWAP		CCS-TLM FORMAT-SWAP									
CHECS-DEFIB DLY-CMD		CHECS-DEFIB DLY-CMD									

FD09

GMT 12/14/07 (348)

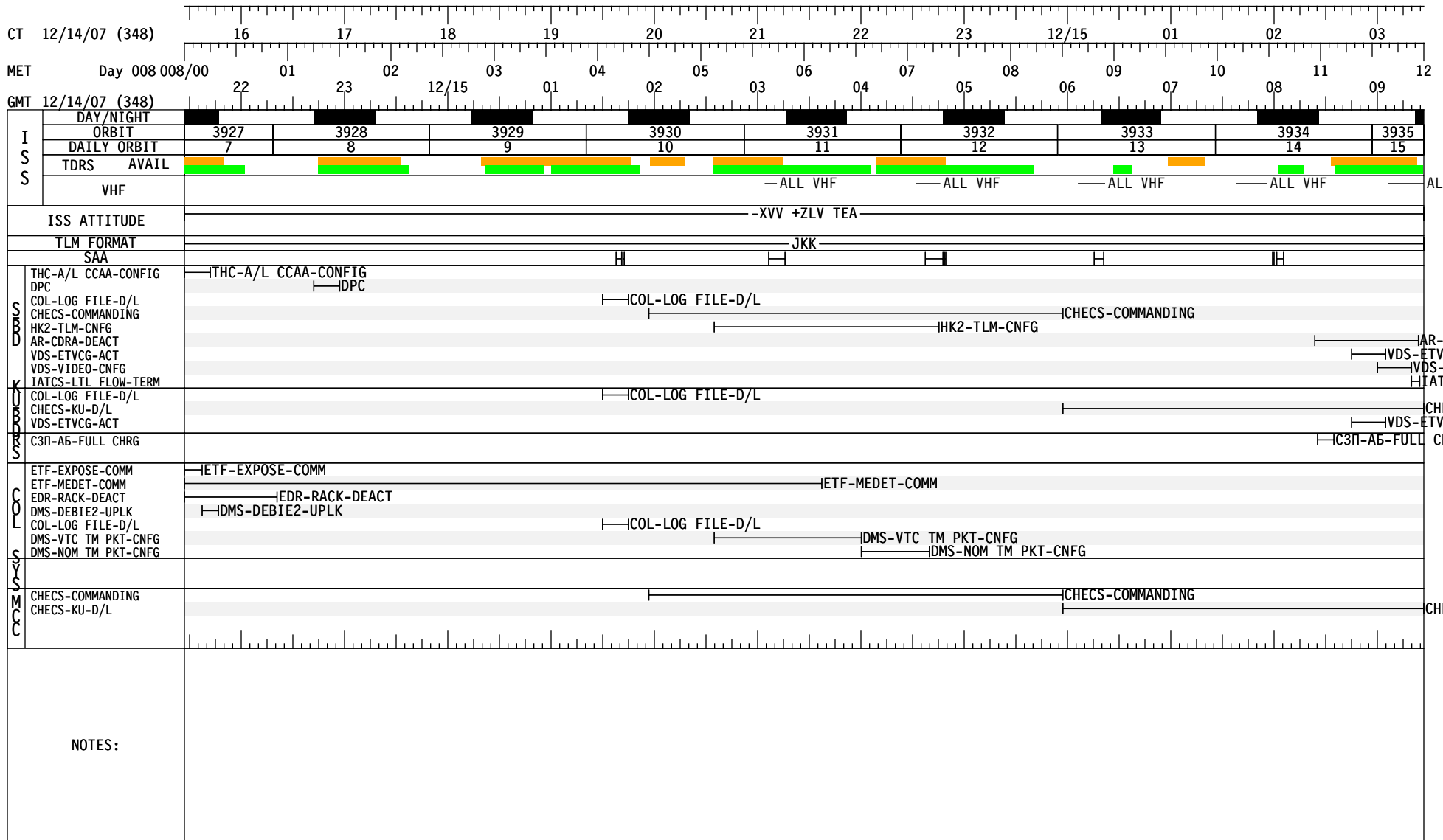
MET Day 008



S T S - 1 2 2	CDR FRICK	NOM H2O CNFG	PCS*	PMC A/G	PRE SLEEP	SLEEP
	PLT POINDEXTER	EXERCISE			PRE SLEEP	SLEEP
	MS1 MELVIN	P/TV03 UNDOCK SETUP			PRE SLEEP	SLEEP
	MS2/EV1 WALHEIM	SETUP C/L CAMR			PRE SLEEP	SLEEP
	MS3/EV2 SCHLEGEL	H C A L T O C S H E	HATCH LEAK CHECK	M U S	PRE SLEEP	SLEEP
	MS4/EV3 LOVE	H C A L T O C S H E	HATCH LEAK CHECK		PRE SLEEP	SLEEP
D N	FE-2 TANI				PRE SLEEP	SLEEP
I S S	ISS CDR WHITSON	H C A L T O C S H E	PREP WORK	DPC	PRE SLEEP-ISS	SLEEP
	FE-1 MALENCHENKO	VELO	PREP WORK	DPC	PRE SLEEP-ISS	SLEEP
U P	FE-2 EXP16 EYHARTS	CEVIS	PREP WORK	DPC	PRE SLEEP-ISS	SLEEP
DAY/NIGHT		[Bar chart showing day/night cycle]				
ORBIT		[Bar chart showing orbit parameters]				
TDRS	W	-171.0	[Bar chart]			
	E	-46.0	[Bar chart]			
	Z	-275.0	[Bar chart]			
ORB ATT		MATED TEA				
NOTES		*ACT				

FD09

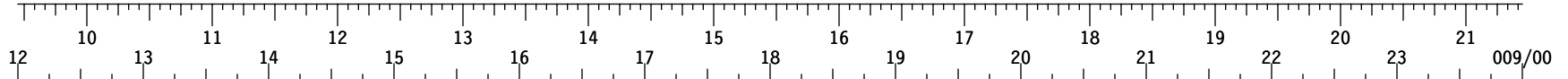
STS-122/1E JOINT MSN SHORT TERM PLAN



FD10

GMT 12/15/07 (349)

MET Day 008

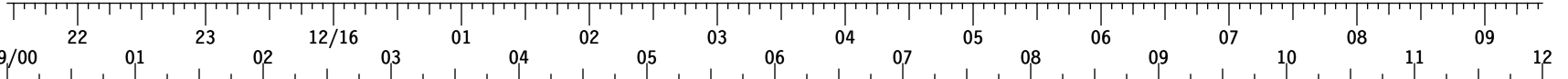


STS-122	CDR FRICK	POST SLEEP	GRWBUP	H/O	MUNDRK	UNDOCK OPS	FLYAROUND	SEP	MZLV	SIMONIT	MEAL	SIMOTERM	RMS*	STBD WING SURVEY	MNOVRE	MPNVRT	PORT WING SURVEY		
	PLT POINDEXTER	POST SLEEP	GRWBUP	SNV-3	MUNDRK	UNDOCK OPS	FLYAROUND	SEP	GRWBUP	H/O	MUNDRK	MEAL	MNTVRD	COMM1	EXERCISE		PSLEEPE		
	MS1 MELVIN	POST SLEEP			RMS*	P/TVO3	UNDOCK	SEP	PDEVAOC3	SDSOACT	MEAL	RMS*	STBD WING SURVEY	NOSE CAP SURVEY	PORT WING SURVEY				
	MS2/EV1 WALHEIM	POST SLEEP		UANDKIO		UNDOCK OPS	FLYAROUND	SEP	GPRWBUP	SNV-3	MEAL	EMUINSTL	EVA UNPACK & STOW	PST ISS EVA ENT PREP	EXERCISE				
	MS3/EV2 SCHLEGEL	POST SLEEP				UNDOCK OPS	FLYAROUND	SEP	WLEIS	POST UNDK PGSC CNFG	MEAL	EMUINSTL	EVA UNPACK & STOW	PST ISS EVA ENT PREP	NOSE CAP SURVEY	EXERCISE			
	MS4/EV3 LOVE	POST SLEEP				UNDOCK OPS	FLYAROUND	SEP			MEAL	CTOND	RMS*	STBD WING SURVEY	NOSE CAP SURVEY	PORT WING SURVEY			
ISS	FE-2 TANI	POST SLEEP				UNDOCK OPS	FLYAROUND	SEP			MEAL		EXERCISE						
	ISS CDR WHITSON	POST SLEEP	DPC	PREP WORK		PMA2 DEPART CONFIG	PMA2-DEPRESS			MIDDAY-MEAL	PLMKNACT		EXERCISE TVIS	EXERCISE RED			PWROPERK		
	FE-1 MALENCHENKO	POST SLEEP	DPC	PREP WORK		PMA2 DEPART CONFIG	VELO			MIDDAY-MEAL		IMS FILE PREP	COX MNT	EXERCISE TVIS			PWROPERK		
UP	FE-2 EXP16 EYHARTS	POST SLEEP	DPC	PREP WORK	DRCCSNFG	UNDOCK OPS	HRM S/W PREP	EXERCISE TVIS		MIDDAY-MEAL	IWIS DEACT		EXERCISE RED				PWROPERK		
DAY/NIGHT		ORBIT		W		E		Z		ORB ATT		NOTES							
		135		136		137		138		139		140		141		142		143	
		-171.0		-46.0		-275.0													
		MATED TEA		UNDOCK/FLYAROUND/SEP		-ZLV +YVV		STBD SURVEY		NOSE CAP		PORT SURVEY							
		*MNVN-UNDOCK		*8/15:50		*FILTER CHECK		*MNVN-FLAT FIELD		#DEACT									

FD10

GMT 12/15/07 (349)

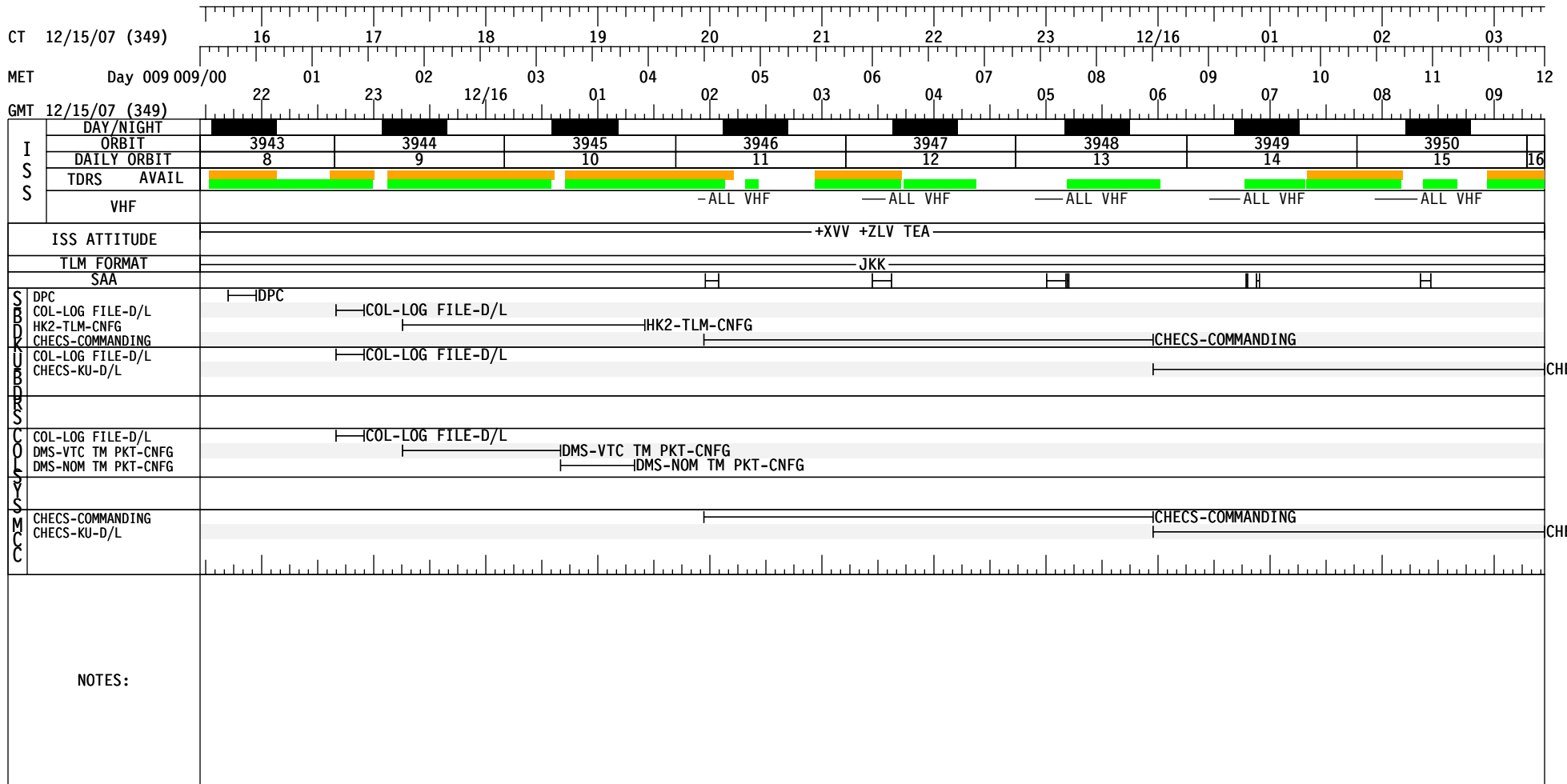
MET Day 009



S T S - 1 2 2	CDR FRICK	M C N O V M R M	PRE SLEEP	M - N Z V L R V	PMC A/G	PRE SLEEP	SLEEP	S D L V A Y	P S O L S T E E P
	PLT POINDEXTER	PRE SLEEP	LDRI DOWNLINK	PRE SLEEP*	D C A	SLEEP	C S D L V A Y	P S O L S T E E P	
	MS1 MELVIN	⊕ OBSS BERTH	R P M W S R D N	PRE SLEEP	SLEEP	L O G	P O S T S L E E P		
	MS2/EV1 WALHEIM			PRE SLEEP	SLEEP	L O G	P O S T S L E E P		
	MS3/EV2 SCHLEGEL	M U S		PRE SLEEP	SLEEP	L O G V A	P S O L S T E E P		
	MS4/EV3 LOVE	⊕ OBSS BERTH	R P M W S R D N	PRE SLEEP	SLEEP	L O G V A	P S O L S T E E P		
D N	FE-2 TANI		PRE SLEEP	SLEEP	S D L V A Y	P S O L S T E E P			
I S S	ISS CDR WHITSON	P W R O R E R P K	DPC	PRE SLEEP-ISS	SLEEP	POST SLEEP			
	FE-1 MALENCHENKO	P W R O R E R P K	DPC	PRE SLEEP-ISS	SLEEP	POST SLEEP			
U P	FE-2 EXP16 EYHARTS	P W R O R E R P K	DPC	PRE SLEEP-ISS	SLEEP	POST SLEEP			
DAY/NIGHT		[Bar chart showing day/night cycle]							
ORBIT		[Bar chart showing orbit parameters]							
TDRS		[Bar chart showing TDRS data]							
ORB ATT		[Bar chart showing orb att]							
NOTES		⊕PORT WING SURVEY *√ HUM SEP ⊕PORT WING SURVEY ⊕PORT WING SURVEY							

FD10

STS-122/1E JOINT MSN SHORT TERM PLAN



NOTES:

FD11

GMT 12/16/07 (350)

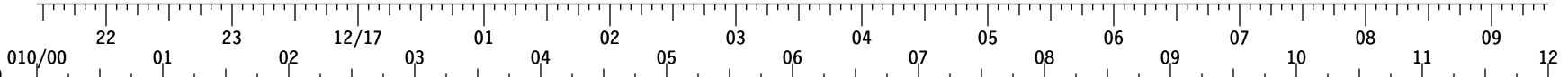
MET Day 009

		12	10	11	14	12	15	13	16	14	17	15	18	16	19	17	20	18	21	19	22	20	23	21	010/00				
STS - 122	CDR FRICK	DRY	POST SLEEP		BCS LOU OLB O L J D	CABIN STOW		FCS C/O		RFI SRE HOT	CABIN STOW	DRY	PILOT OPS		PEAV OENT	D/O BRIEF	MEAL	M DNU V M R P D	C I O N I T	PWR DUMP	F E D S R Y I T	EXERCISE		CABIN STOW	M A O E N X L R V	OFF DUTY			
	PLT POINDEXTER	DRY	POST SLEEP		W/B* B O L O L J D	BCS LOU OLB O L J D	C D M *	FILTER CLEANING		FCS C/O		RFI SRE HOT	CABIN STOW	DRY	PILOT OPS		PEAV OENT	D/O BRIEF	MEAL	E V N I E T D T R E U O P	S E V A C T	CABIN STOW	C A T B O I N	C T O E N R R D M	C I O N I T	CABIN STOW	F E S I T	OFF DUTY	
	MS1 MELVIN		POST SLEEP		B S L E L O T O U D P D	B C O L O P O L R O L D	B C O L O P O L R O L D	B C O L O P O L R O L D	B C O L O P O L R O L D	B C O L O P O L R O L D	S T O W	CABIN STOW		EXERCISE		P S A E O T U P	PEAV OENT	D/O BRIEF	MEAL	L-1 C O M M C H K	C O M M 1	CABIN STOW		L-1 C O M M C H K	C A T B O I N	ERG STOW	C S T B O I N	K U S T O W	OFF DUTY
	MS2 WALHEIM		POST SLEEP		EXERCISE		FCS C/O		RFI SRE HOT	CABIN STOW	PILOT OPS		PEAV OENT	D/O BRIEF	MEAL	CABIN STOW		LAUNCH ENTRY SUIT CK		R C M B N T S E A T S / U	OFF DUTY								
	MS3 SCHLEGEL	DRY	POST SLEEP		BCS LOU OLB O L J D	CABIN STOW		EXERCISE		DRY	EXERCISE		PEAV OENT	D/O BRIEF	MEAL	CABIN STOW		DRY	CABIN STOW		ERG STOW	CABIN STOW	M	OFF DUTY					
	MS4 LOVE	DRY	POST SLEEP		CABIN STOW	BCS LOU OLB O L J D	CABIN STOW		EXERCISE	DRY	CABIN STOW		PEAV OENT	D/O BRIEF	MEAL	CABIN STOW		DRY	CABIN STOW		W D L E A S C T	P G S C S T O W P A R T I	OFF DUTY						
	FE-2 EXP15 TANI		POST SLEEP		CABIN STOW	BCS LOU OLB O L J D	EXERCISE		CABIN STOW		PEAV OENT	D/O BRIEF	MEAL	CABIN STOW		LAUNCH ENTRY SUIT CK		R C M B N T S E A T S / U	OFF DUTY										
DAY/NIGHT		[Timeline bars for Day/Night]																											
ORBIT		[Timeline bars for ORBIT]																											
TDRS		[Timeline bars for TDRS]																											
ORB ATT		[Timeline bars for ORB ATT]																											
GND		[Timeline bars for GND]																											
NOTES		*HEATER ACT *TERM *PWR ON																											

FD11

GMT 12/16/07 (350)

MET Day 010

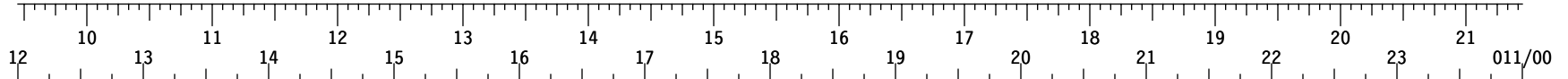


STS-122	CDR FRICK	OFF DUTY	PMC A/G	PRE SLEEP	YRD	SLEEP	POST SLEEP
	PLT POINDEXTER	OFF DUTY	ENTR Y*	PRE SLEEP	YRD	SLEEP	POST SLEEP
	MS1 MELVIN	OFF DUTY		PRE SLEEP	YRD	SLEEP	LOG POST SLEEP
	MS2 WALHEIM	OFF DUTY		PRE SLEEP	YRD	SLEEP	LOG POST SLEEP
	MS3 SCHLEGEL	OFF DUTY		PRE SLEEP	YRD	SLEEP	LOG POST SLEEP
	MS4 LOVE	OFF DUTY		PRE SLEEP	YRD	SLEEP	LOG POST SLEEP
	FE-2 EXP15 TANI	OFF DUTY		PRE SLEEP	YRD	SLEEP	POST SLEEP
EYHARTS DAY/NIGHT							
ORBIT							
TDRS							
ORB ATT							
GND							
NOTES		*COOLING CNFG					

FD12

GMT 12/17/07 (351)

MET Day 010

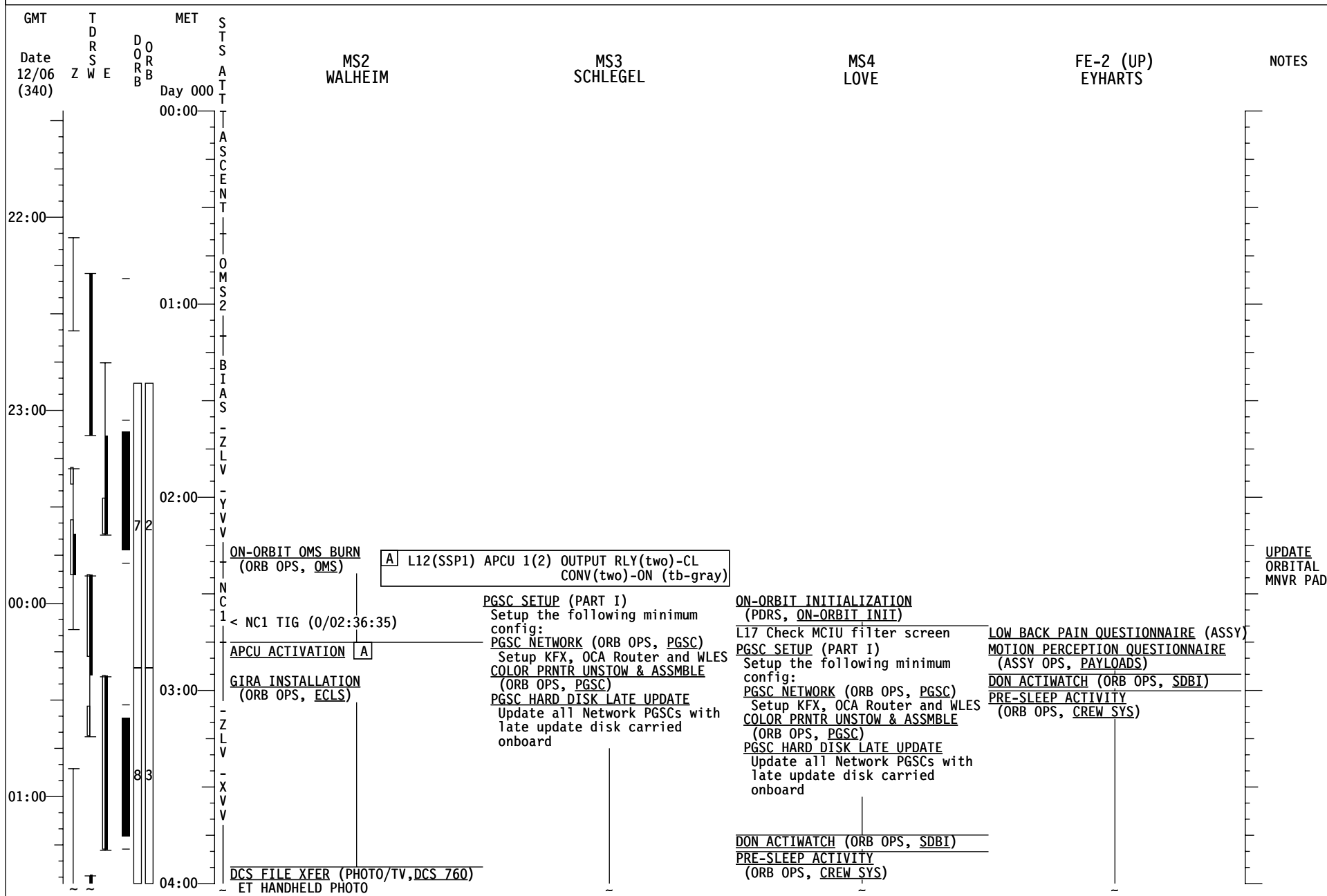


STS-122	CDR FRICK	POST SLEEP	MADPMSA/G GPRUP	IMU ALIGN & VERIF	T-RXSKI	DEORBIT PREP			
	PLT POINDEXTER	POST SLEEP	GPRUP	POST SLEEP	STOW*	DEORBIT PREP	KSC	KSC	
	MS1 MELVIN	POST SLEEP			WACTCH OSTACW	DEORBIT PREP	DEORBIT	LANDING	
	MS2 WALHEIM	POST SLEEP			WACTCH WGDIACAT	DEORBIT PREP	DEORBIT	LANDING	
	MS3 SCHLEGEL	POST SLEEP			WMAUTSCH	DEORBIT PREP	DEORBIT	LANDING*	
	MS4 LOVE	POST SLEEP			WPGSC TSTOW CPART HII	DEORBIT PREP	DEORBIT	LANDING*	
	FE-2 EXP15 TANI	POST SLEEP			WACTCH	DEORBIT PREP			
DAY/NIGHT		[Day/Night bar]							
ORBIT		[Orbit bar]							
TDRS		[TDRS bar]							
ORB ATT		[ORB ATT bar]							
GND		[GND bar]							
NOTES		*ENABLE *SALIVA KIT *KSC TIG 10/18:27 *KSC LANDING 10/19:30							

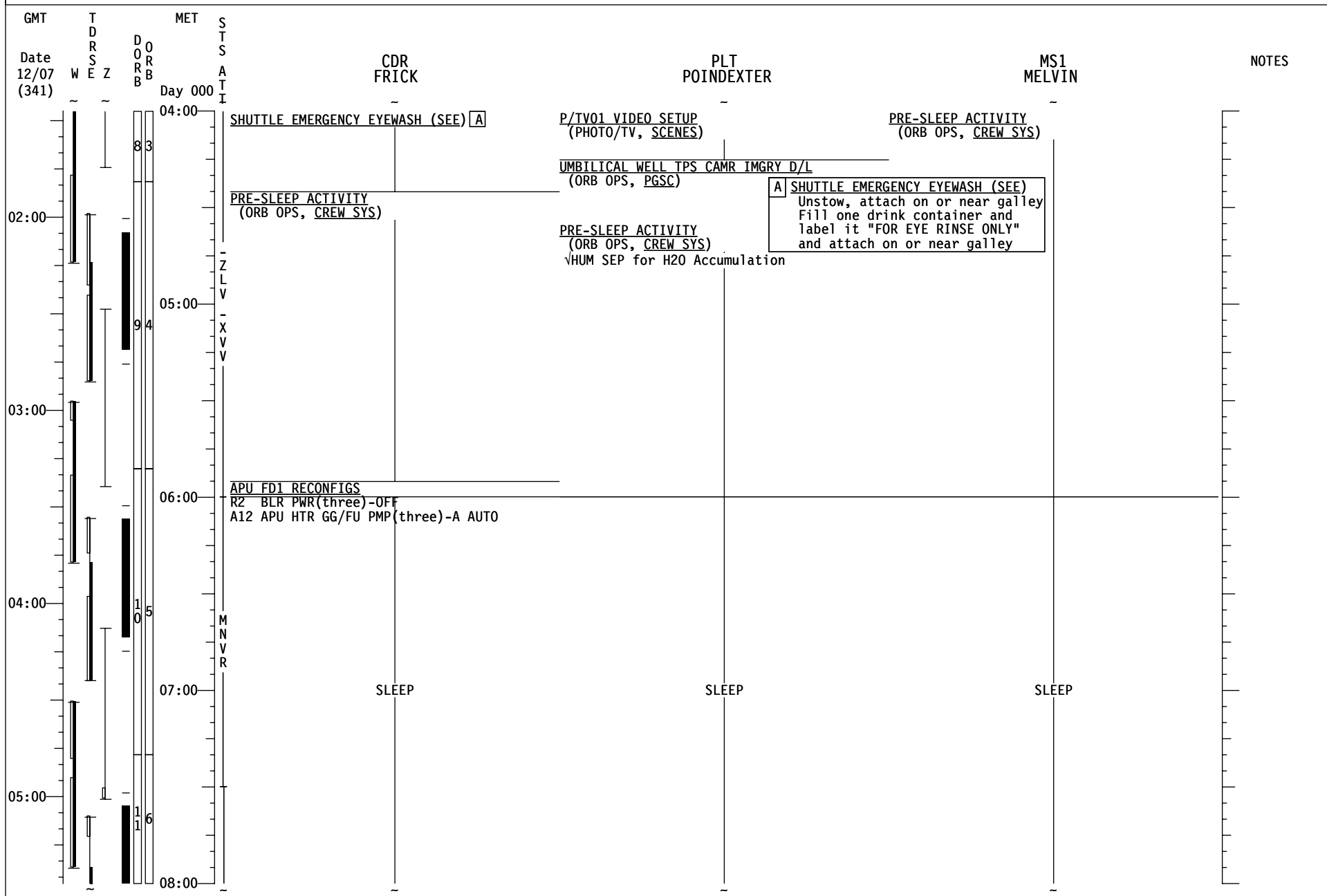
DETAILED TIMELINE

DETAILED
TIMELINE

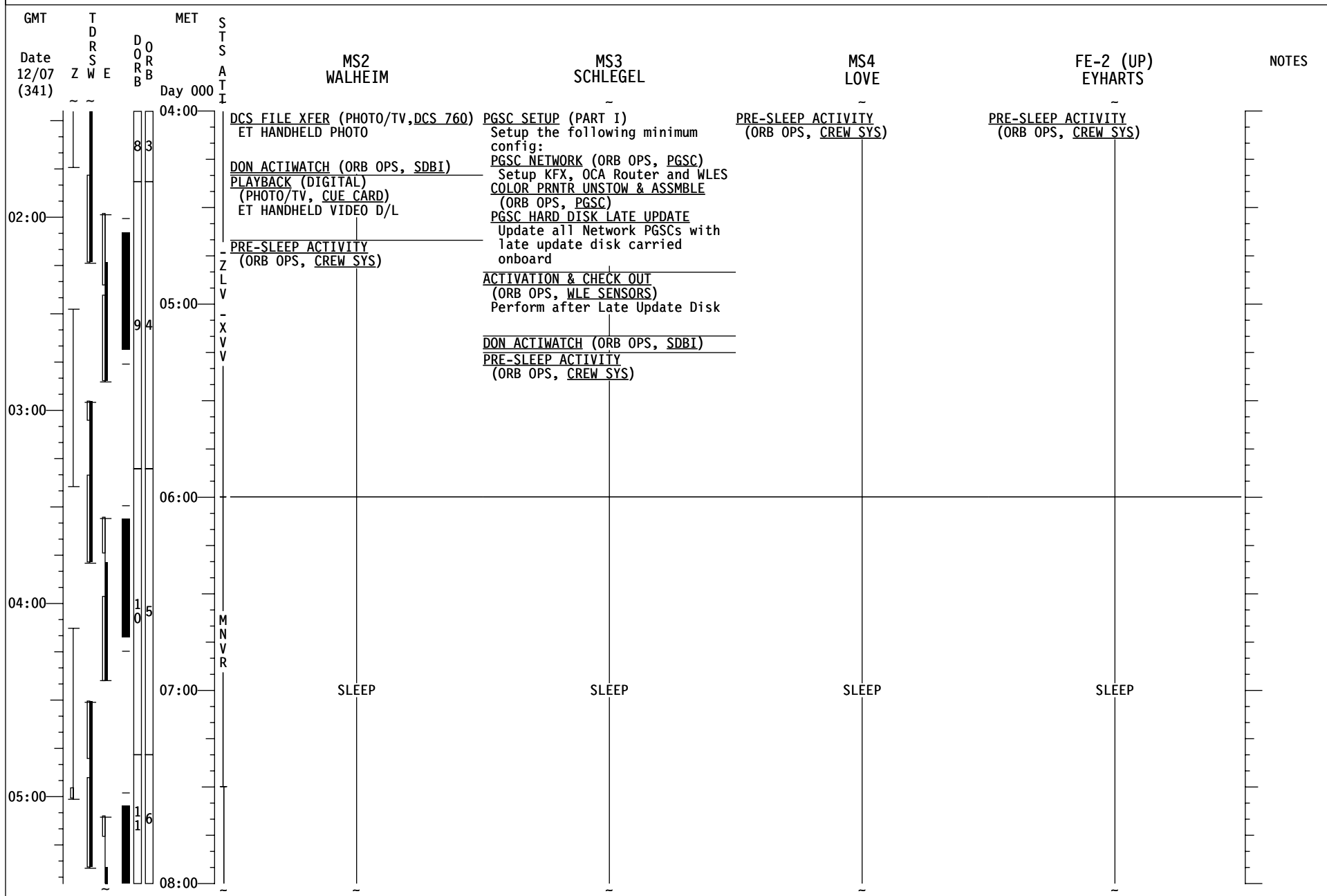
STS-122 FD (01)



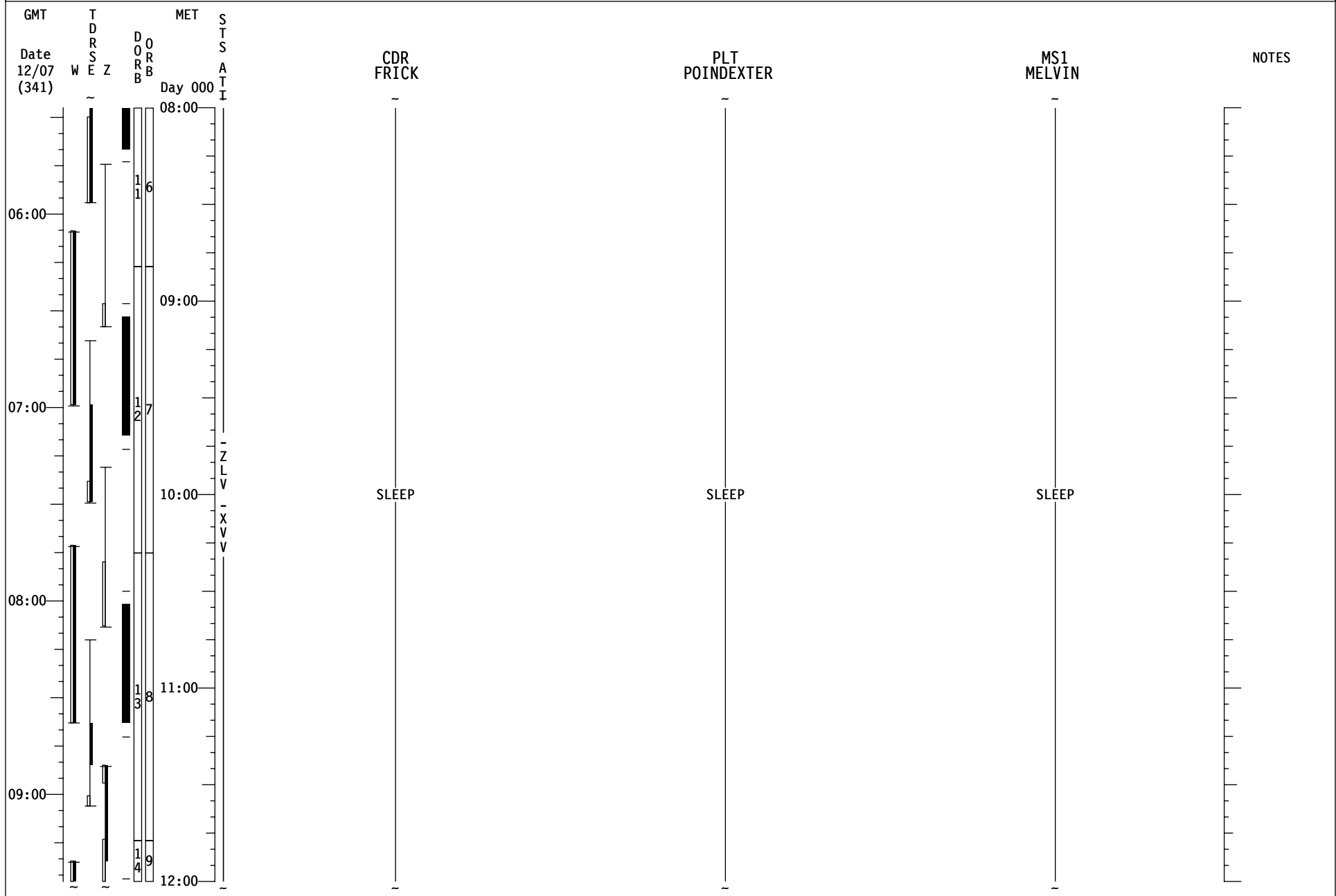
STS-122 FD (01)



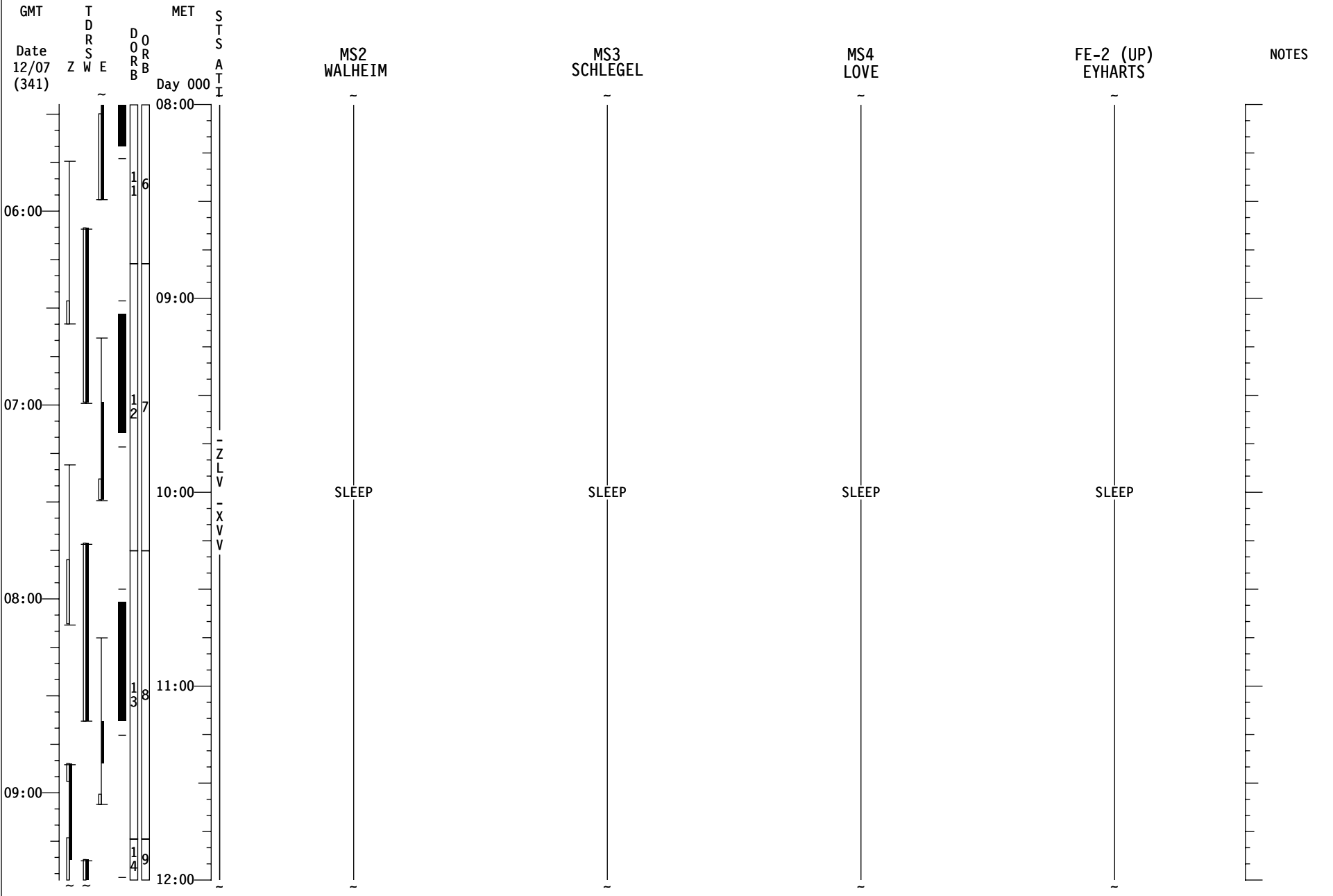
STS-122 FD (01)



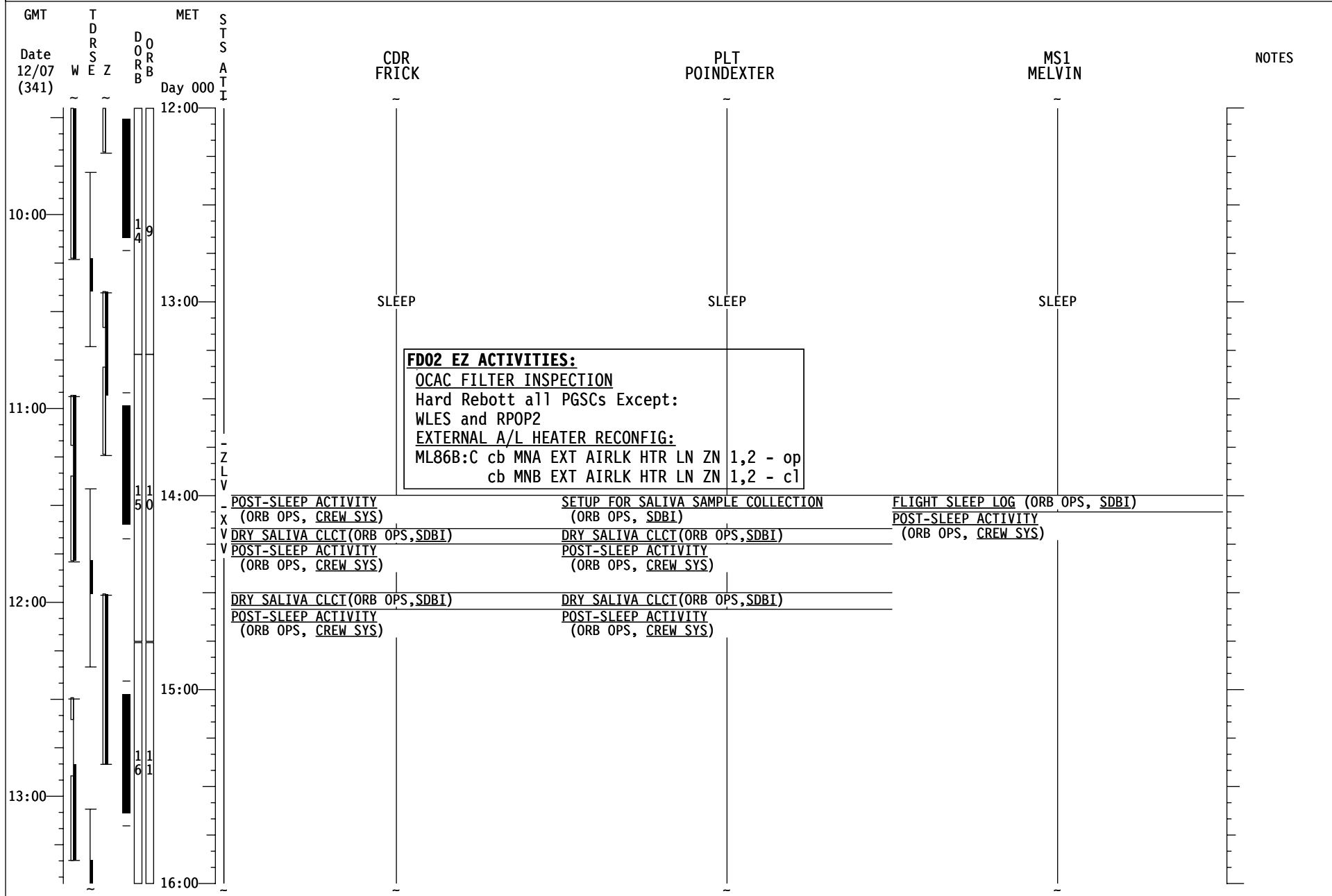
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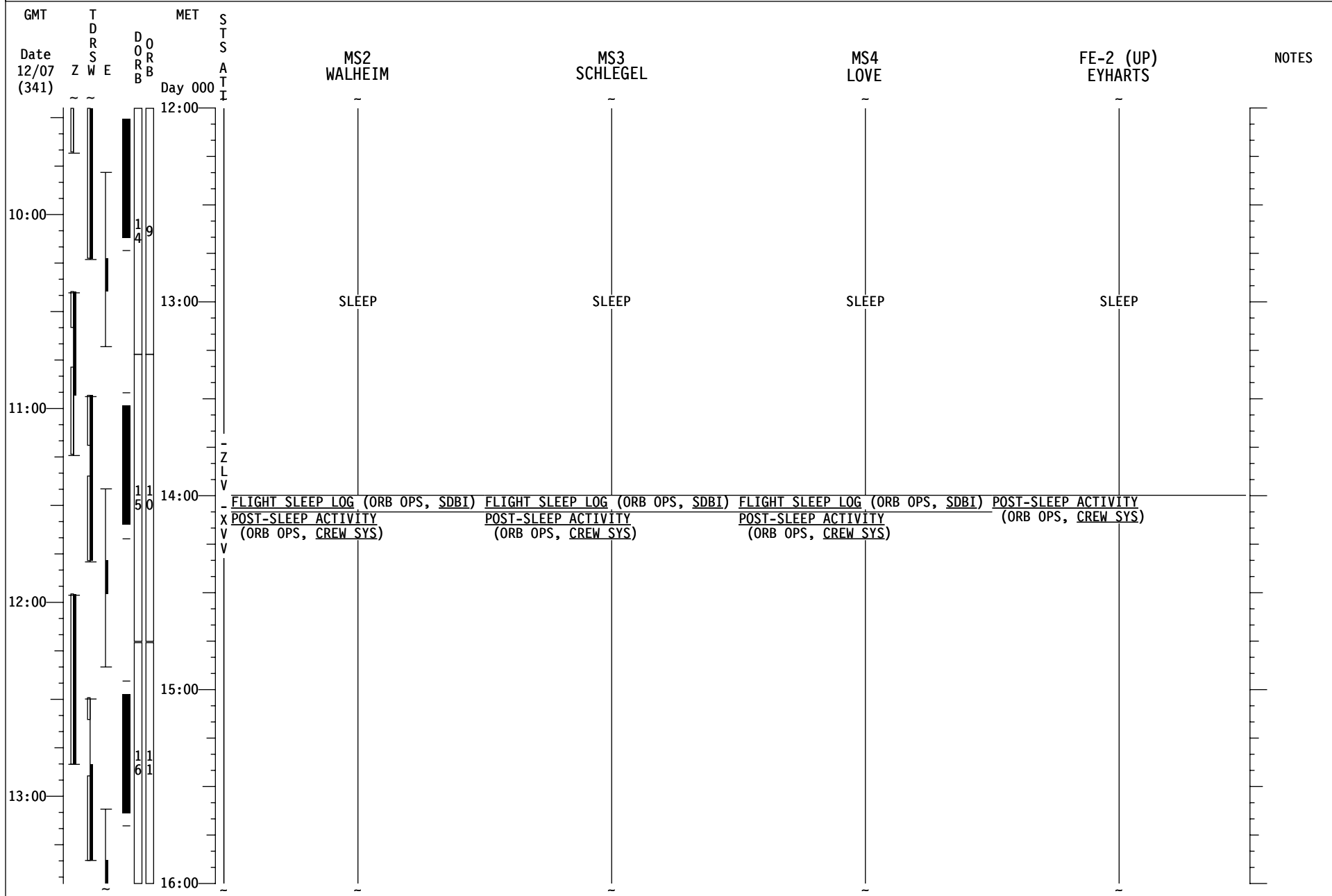
STS-122 FD (01)



STS-122 FD (02)



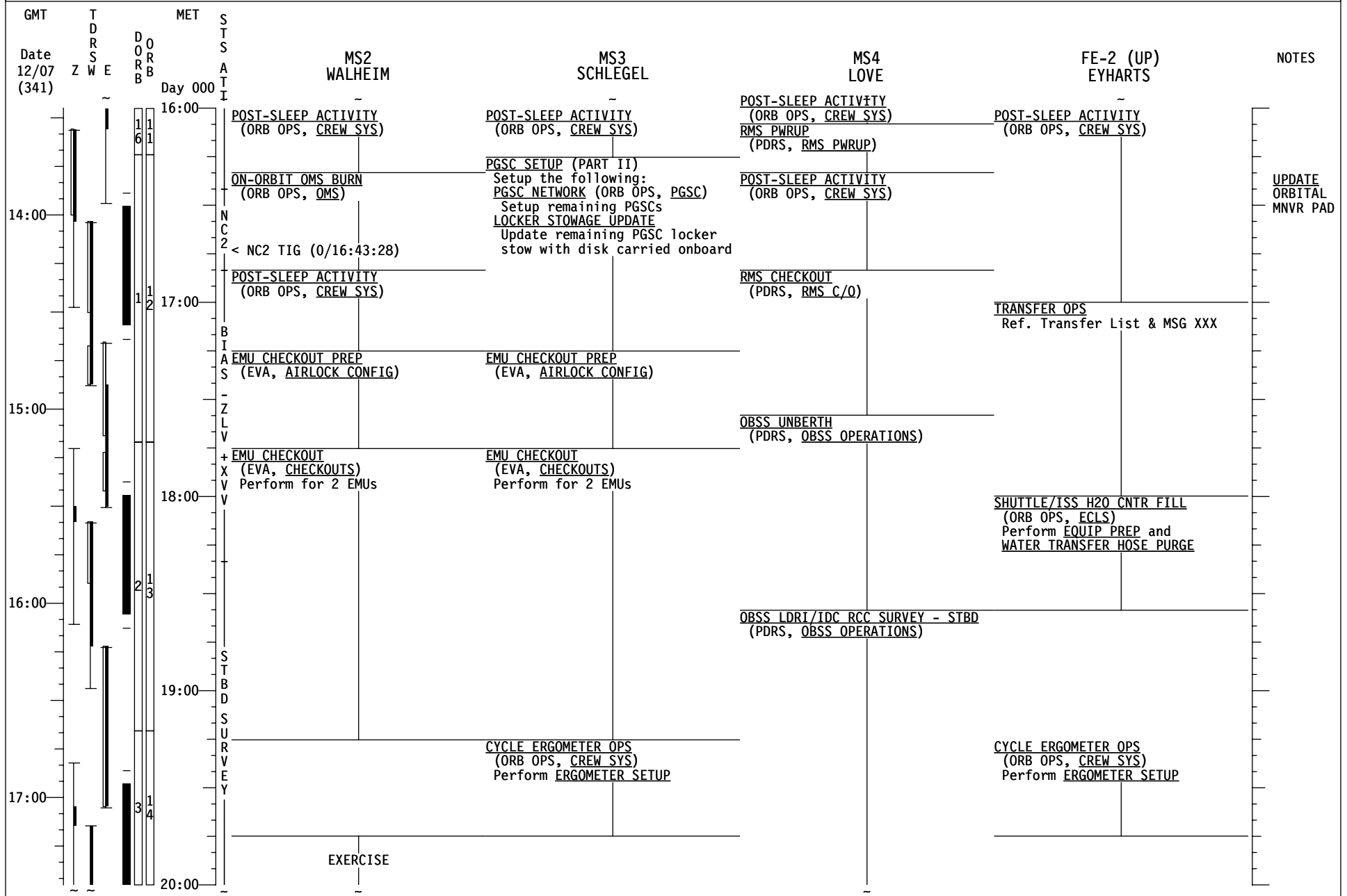
STS-122 FD (02)



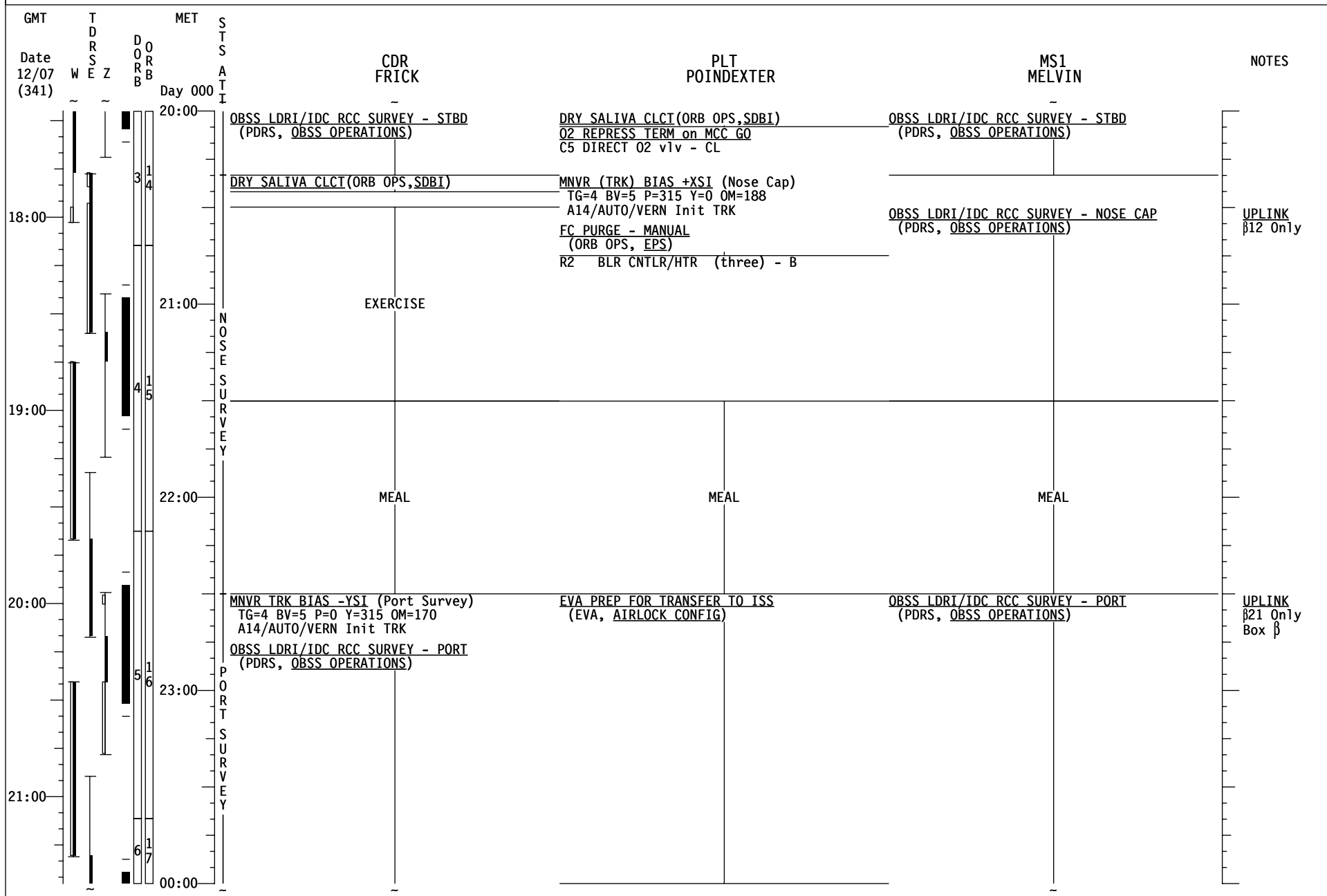
STS-122 FD (02)

GMT	T D R S E Z	MET	S T S	CDR FRICK	PLT POINDEXTER	MS1 MELVIN	NOTES
Date 12/07 (341)	W E Z	Day 000	A T I				
			D O R B				
			1 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) RMS PWRUP (PDRS, RMS PWRUP)	UPLINK β21 + Mask Box α
				ON-ORBIT OMS BURN (ORB OPS, OMS)	ON-ORBIT OMS BURN (ORB OPS, OMS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	UPDATE ORBITAL MNVR PAD
14:00			N C 2	< NC2 TIG (0/16:43:28)	< NC2 TIG (0/16:43:28)		
				MNVR (TRK) BIAS -ZLV +XVV (Flat Field) TG=2 BV=3 OM=160 A1/AUTO/VERN Init TRK	P/TV01 VIDEO SETUP (PHOTO/TV, SCENES)	RMS CHECKOUT (PDRS, RMS C/O)	
17:00				RCS/OMS HEATER RECONFIG [A]			
				POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)			
15:00				OBSS UNBERTH (PDRS, OBSS OPERATIONS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)		UPLINK β21 Only Box β
				[A] A14 RCS/OMS HTR L POD A - OFF B - AUTO R POD A - OFF B - AUTO			
18:00					CRYO 02 TK HTR SNSR CK (ORB OPS, EPS)		
					MNVR (TRK) BIAS +YSI (Stbd Survey) TG=4 BV=5 P=0 Y=40 OM=330 A14/AUTO/VERN Init TRK		
16:00				OBSS LDRI/IDC RCC SURVEY - STBD (PDRS, OBSS OPERATIONS)	L12(SSP1) APCU 1 OUTPUT RLY - CL CONV - ON (tb-gray)	OBSS LDRI/IDC RCC SURVEY - STBD (PDRS, OBSS OPERATIONS)	UPLINK β21 Only Box γ
					FILTER CLEANING (IFM, SCHEDULED MAINTENANCE)		
19:00							
					02 REPRESS INIT C5 DIRECT 02 v1v - OP		
17:00							
20:00							

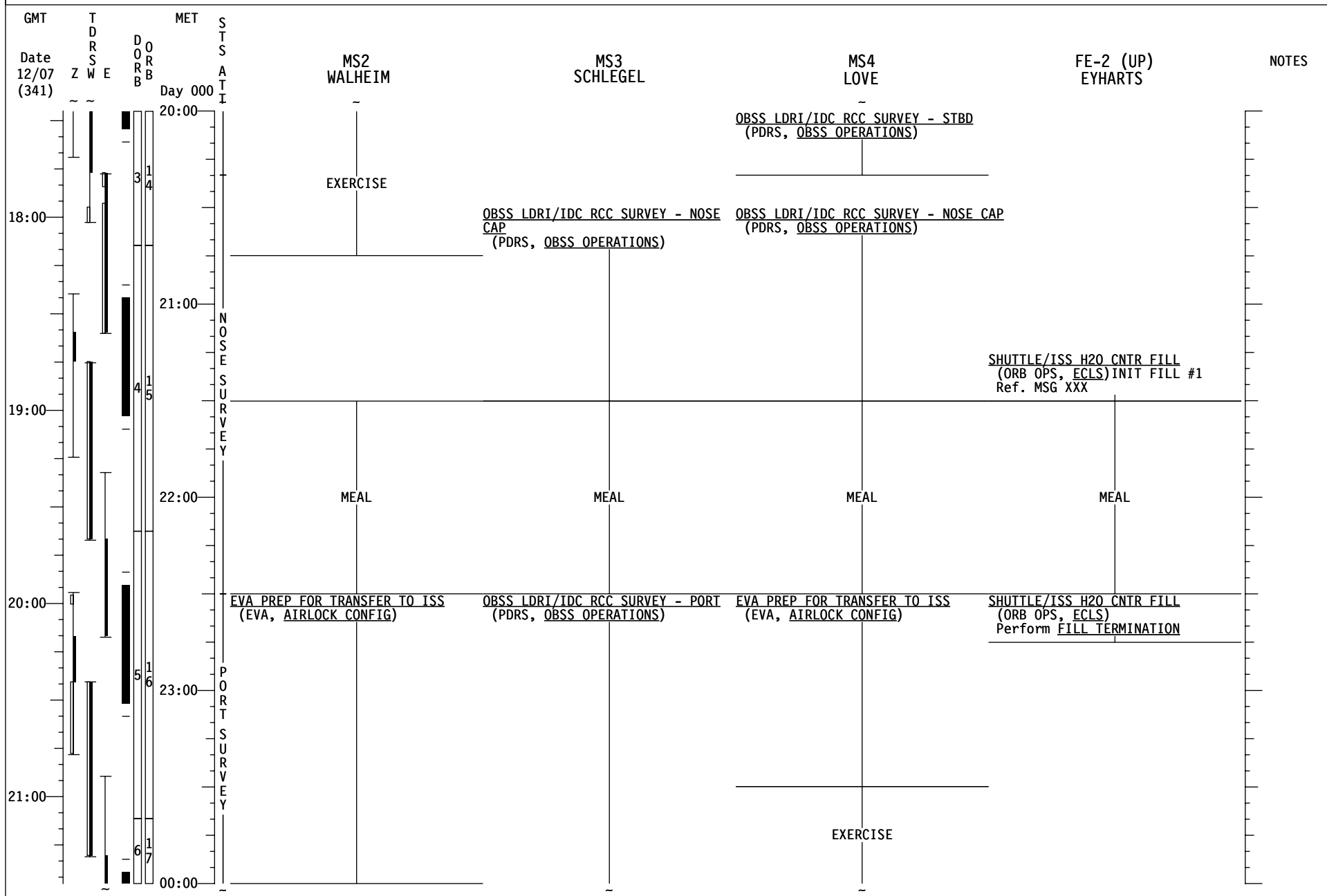
STS-122 FD (02)



STS-122 FD (02)



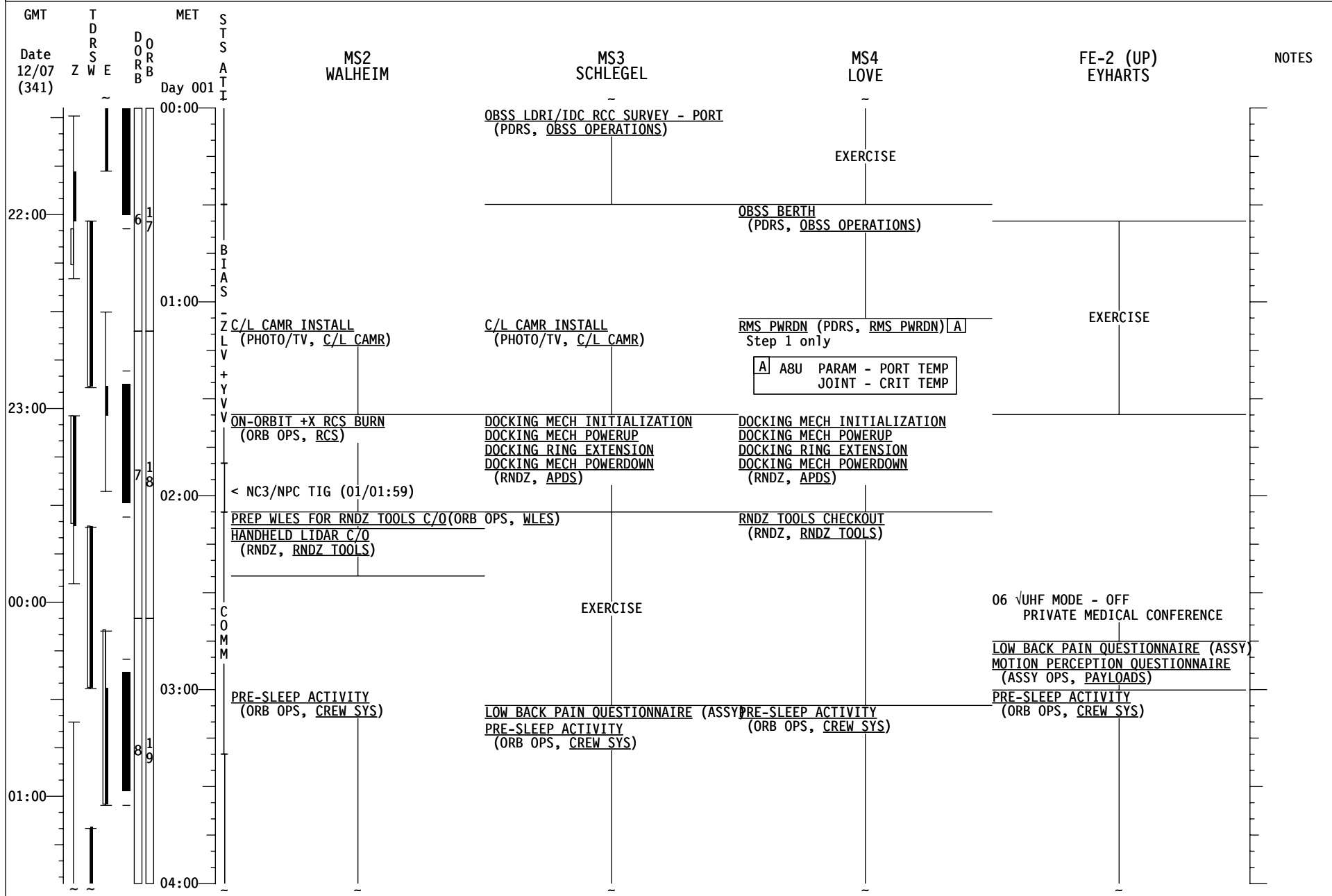
STS-122 FD (02)



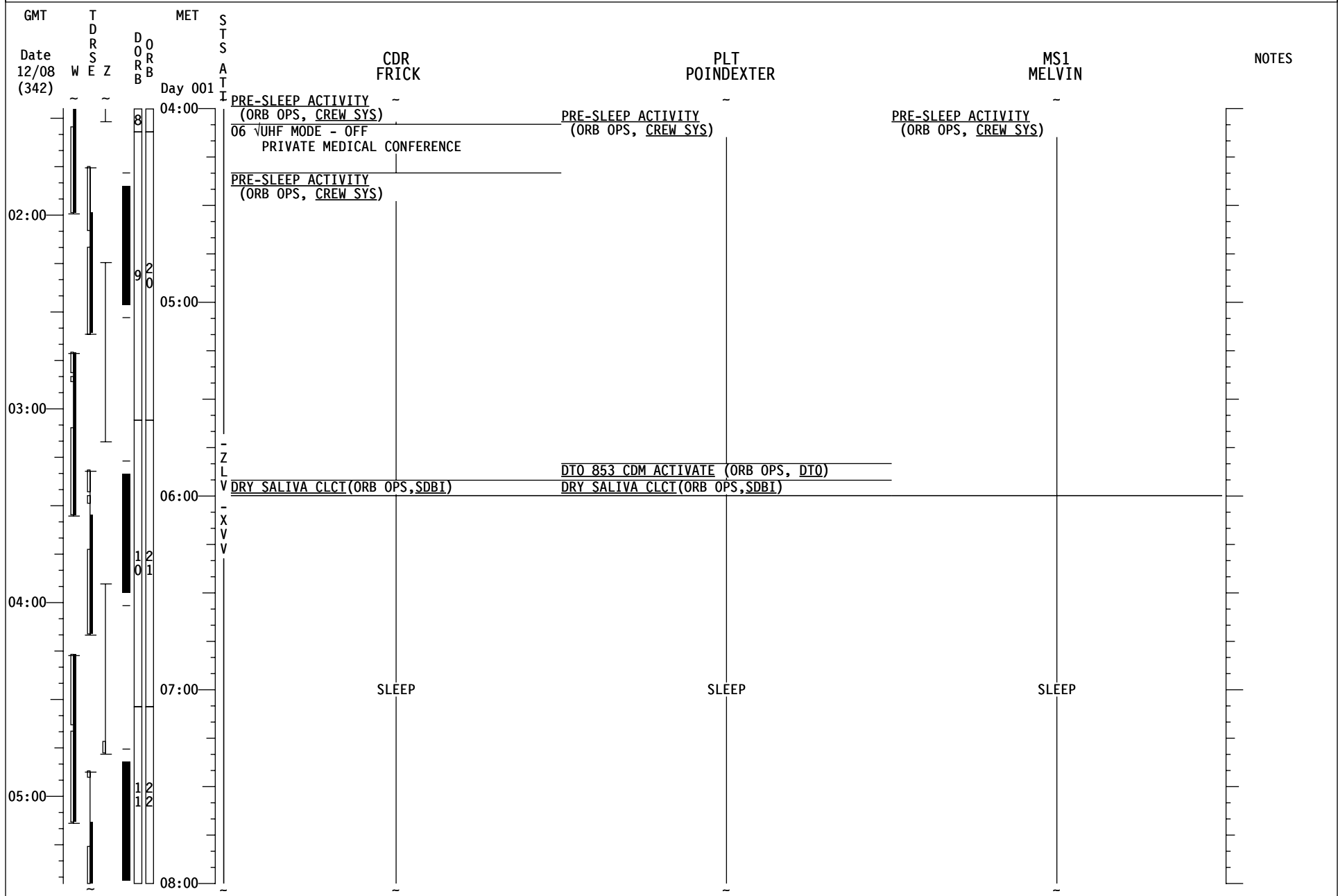
STS-122 FD (02)

GMT	T D R S E Z	MET	S T S	C D R	P L T	M S 1	N O T E S
Date 12/07 (341)	W E Z	Day 001	A T I	FRICK	POINDEXTER	MELVIN	
00:00				OBSS LDRI/IDC RCC SURVEY - PORT (PDRS, OBSS OPERATIONS)	DRY SALIVA CLCT(ORB OPS,SDBI)	OBSS LDRI/IDC RCC SURVEY - PORT (PDRS, OBSS OPERATIONS)	
22:00				MNVR (TRK) BIAS -ZLV +YVV TG=2 BV=3 OM=220 A14/AUTO/VERN Init TRK	EXERCISE	OBSS BERTH (PDRS, OBSS OPERATIONS)	
01:00				DRY SALIVA CLCT(ORB OPS,SDBI) P/TV08 EXTERNAL SURVEY (S/U) (P/TV, SCENES) Step 1 P/TV08 EXTERNAL SURVEY (OPS) (P/TV, SCENES) Item 1		A A8U PARAM - PORT TEMP JOINT - CRIT TEMP	
23:00				LI2(SSP1) APCU 2 OUTPUT RLY - CL CONV - ON (tb-gray)	FCMS OPS (ORB OPS, EPS)	RMS PWRDN (PDRS, RMS PWRDN) [A] Step 1 only PLAYBACK (DIGITAL) (PHOTO/TV, CUE CARD) LDRI SURVEYS	UPLINK β21 + Mask
02:00				ON-ORBIT +X RCS BURN (ORB OPS, RCS)	ON-ORBIT +X RCS BURN (ORB OPS, RCS)		
				< NC3/NPC TIG (01/01:59)	< NC3/NPC TIG (01/01:59)		
00:00				MNVR (TRK) GROUND TRK (LDRI Downlink) TG=3 LAT=0 LON=-143 ALT=19232 BV=3 OM=0 A1/AUTO/VERN Init TRK PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	RNDZ TOOLS CHECKOUT (RNDZ, RNDZ TOOLS)		TFL 192
03:00							
					DTQ 853 CDM SETUP (ORB OPS, DTQ) PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		TFL 188
01:00				MNVR (TRK) -ZLV -XVV TG=2 BV=3 OM=0 A1/AUTO/VERN Init TRK FUTURE LOADED MNVR (Water Dump) TG=2 BV=3 OM=270 A1/AUTO/VERN (1/13:55) Init TRK PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
04:00							

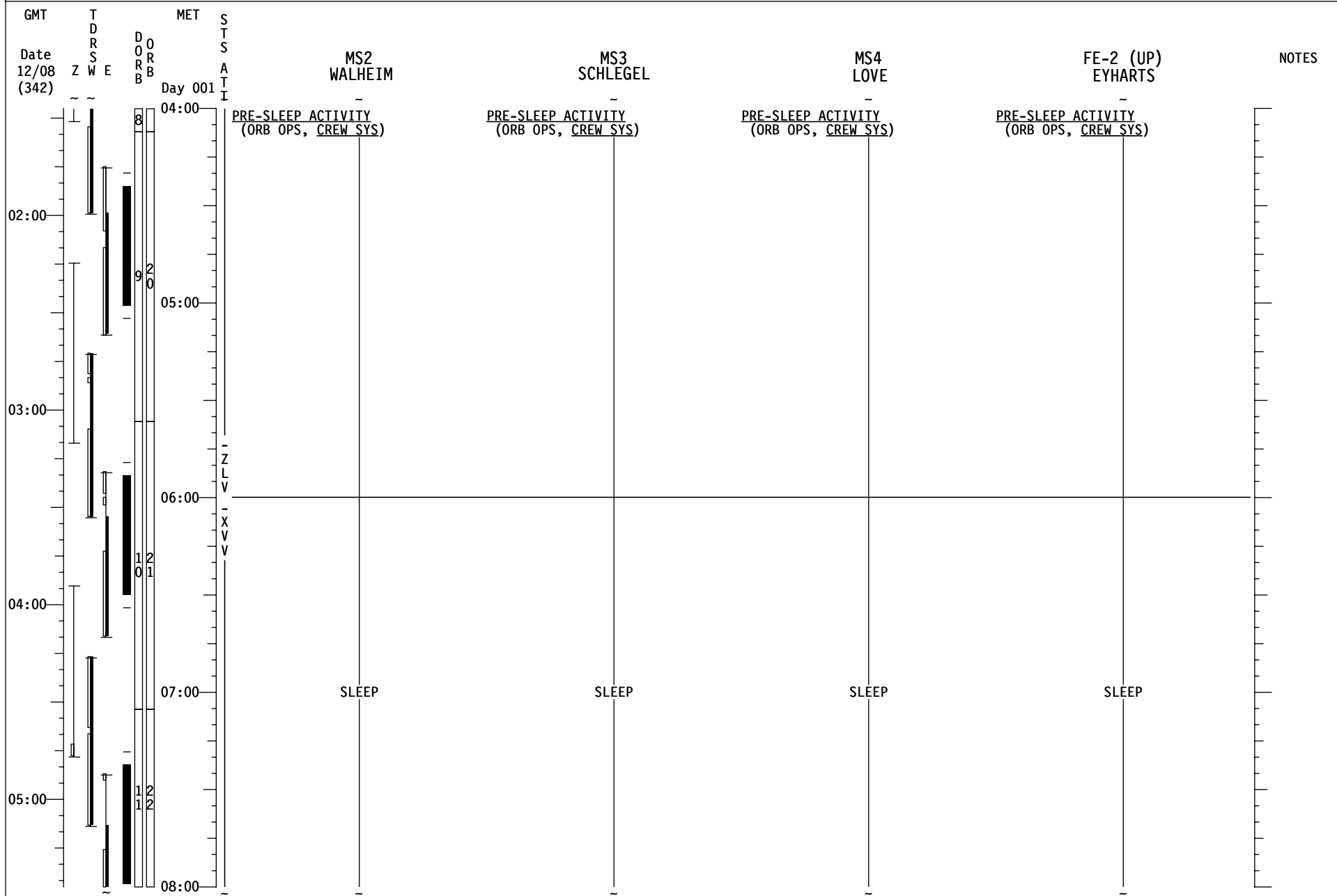
STS-122 FD (02)



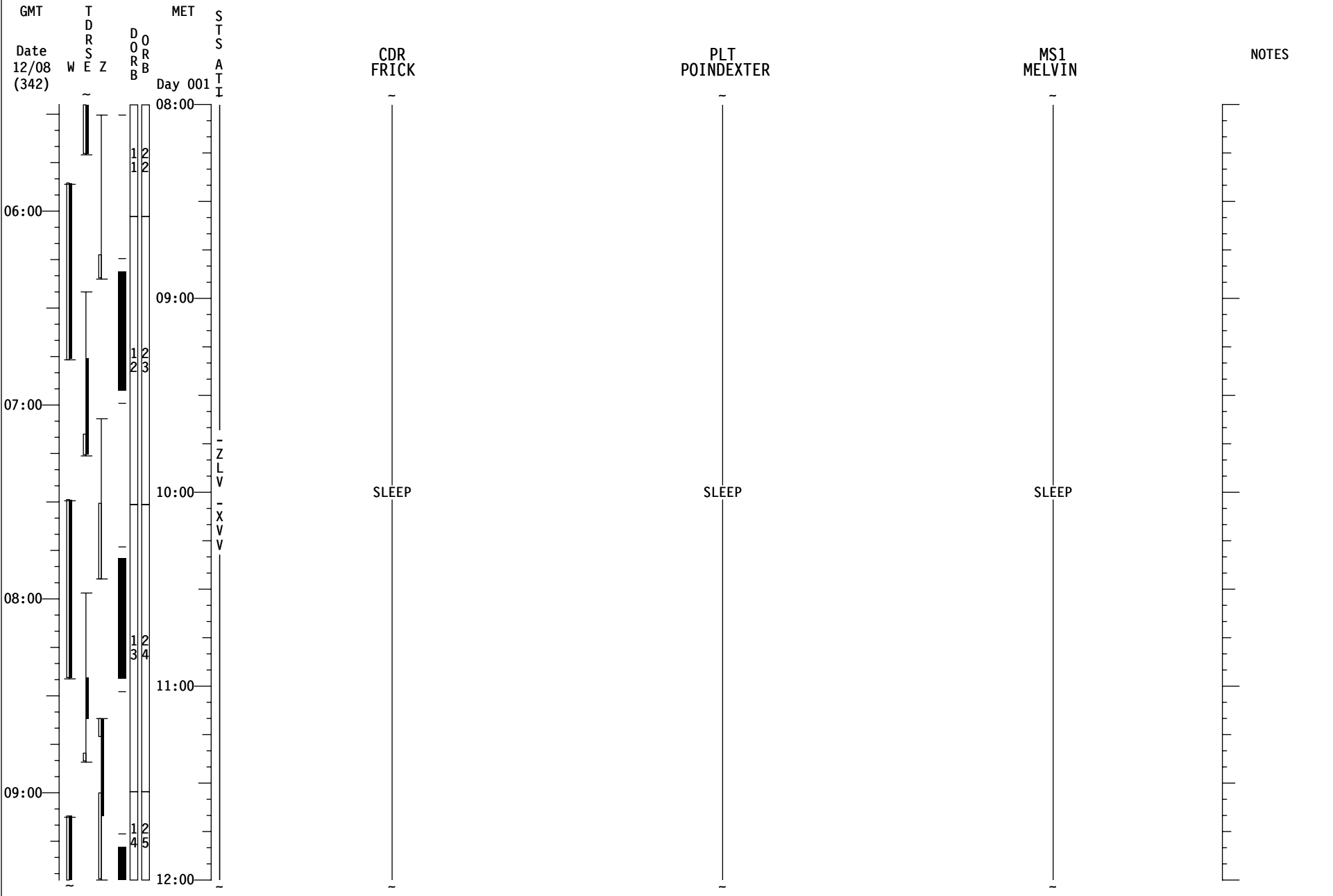
STS-122 FD (02)



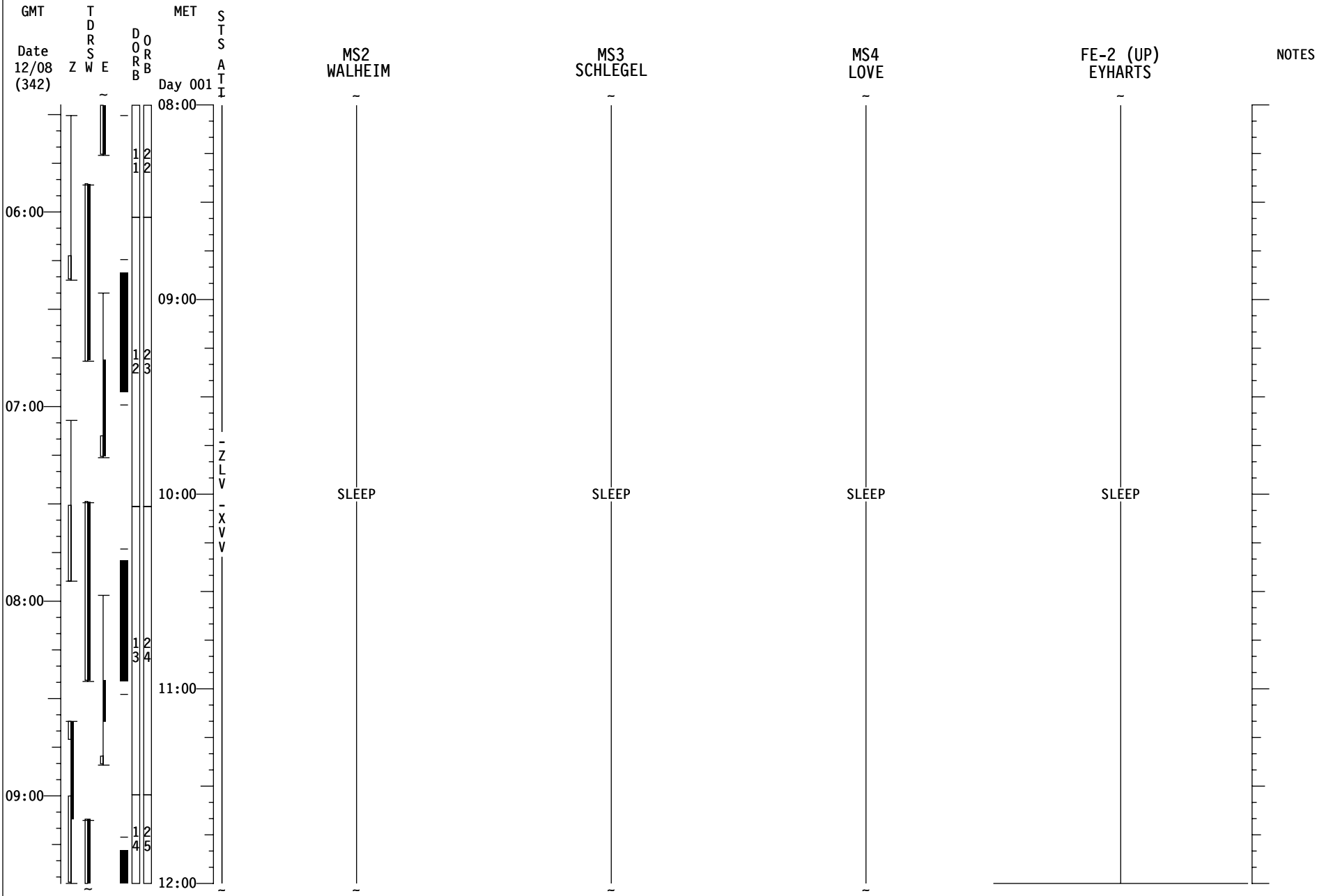
STS-122 FD (02)



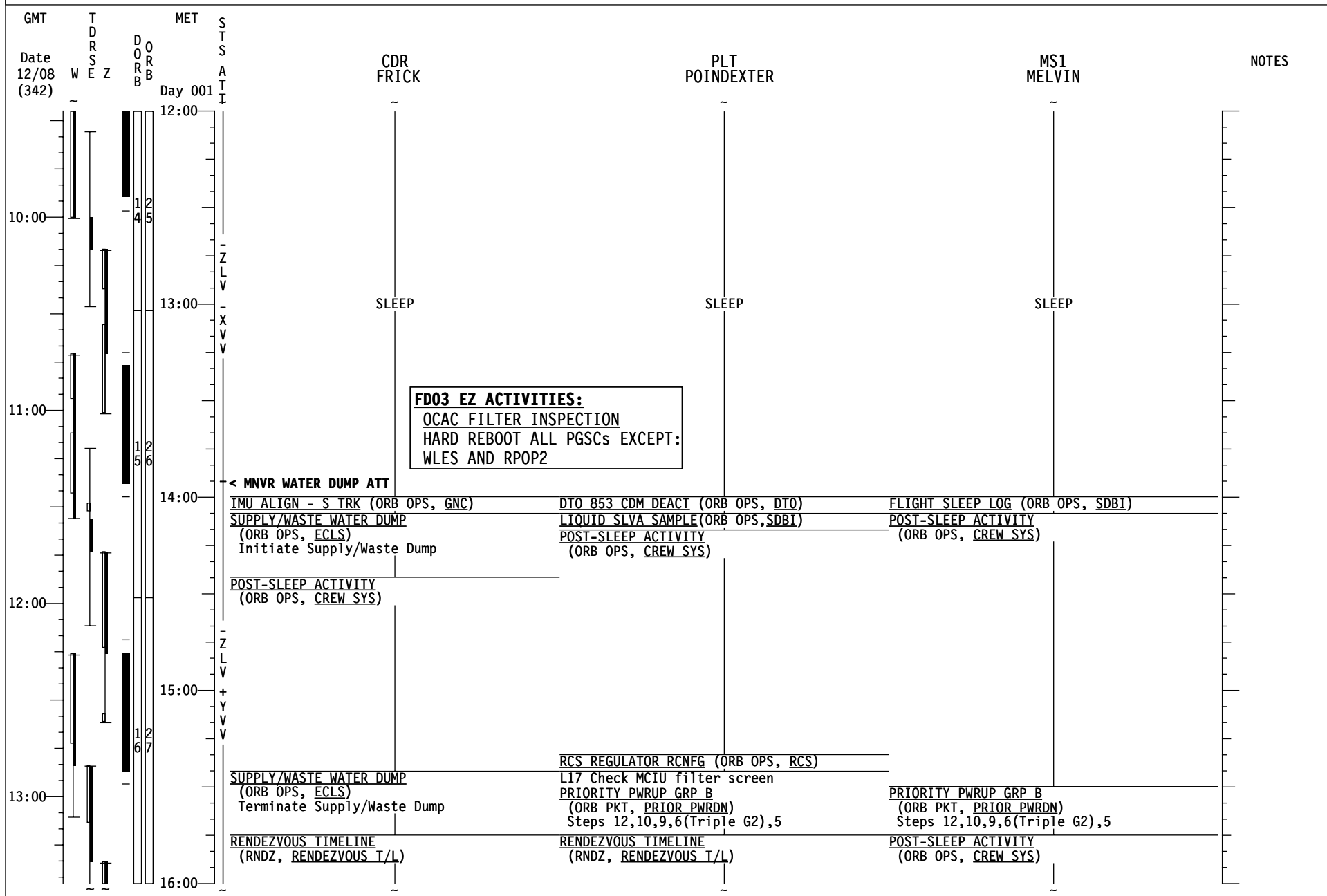
STS-122 FD (02)



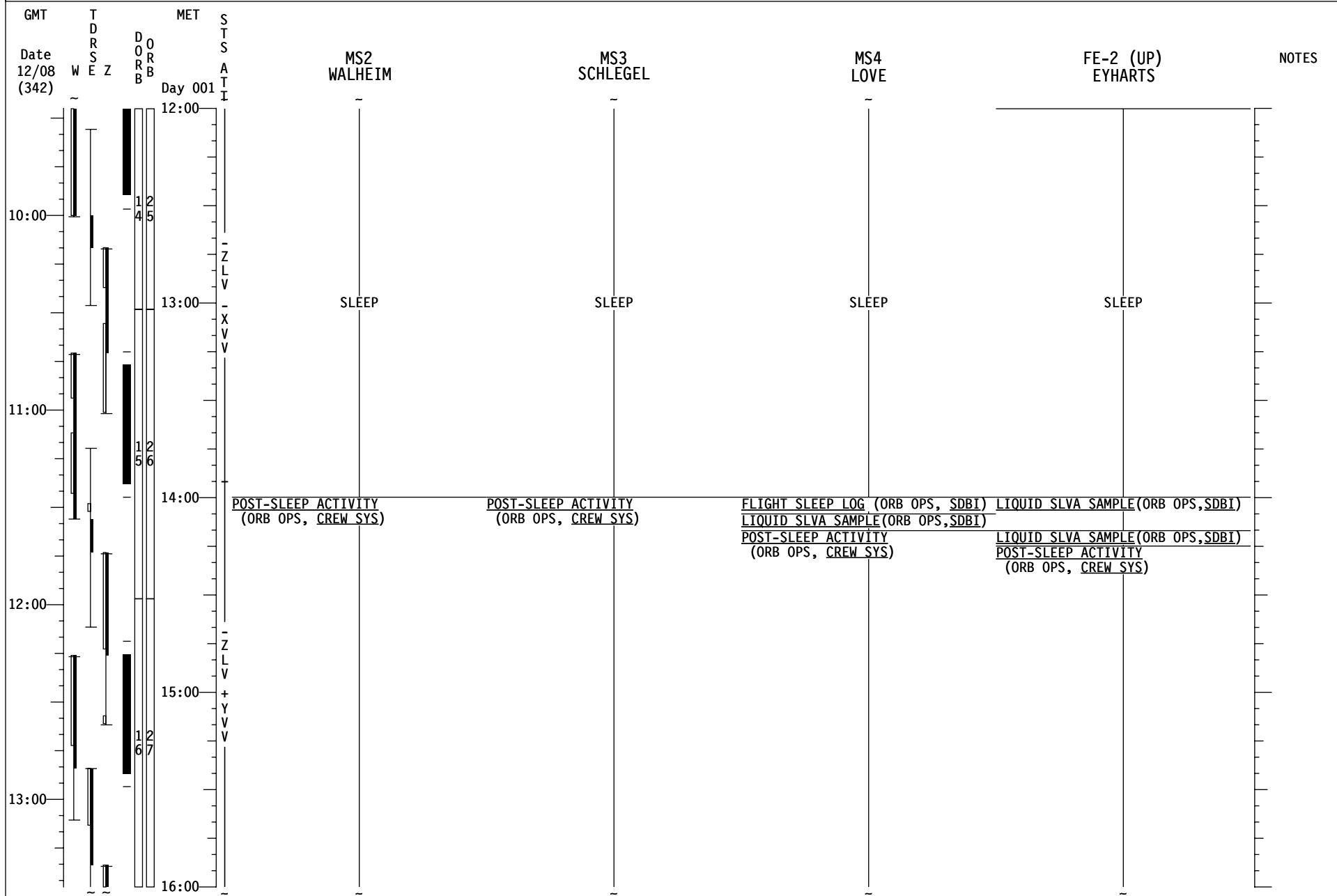
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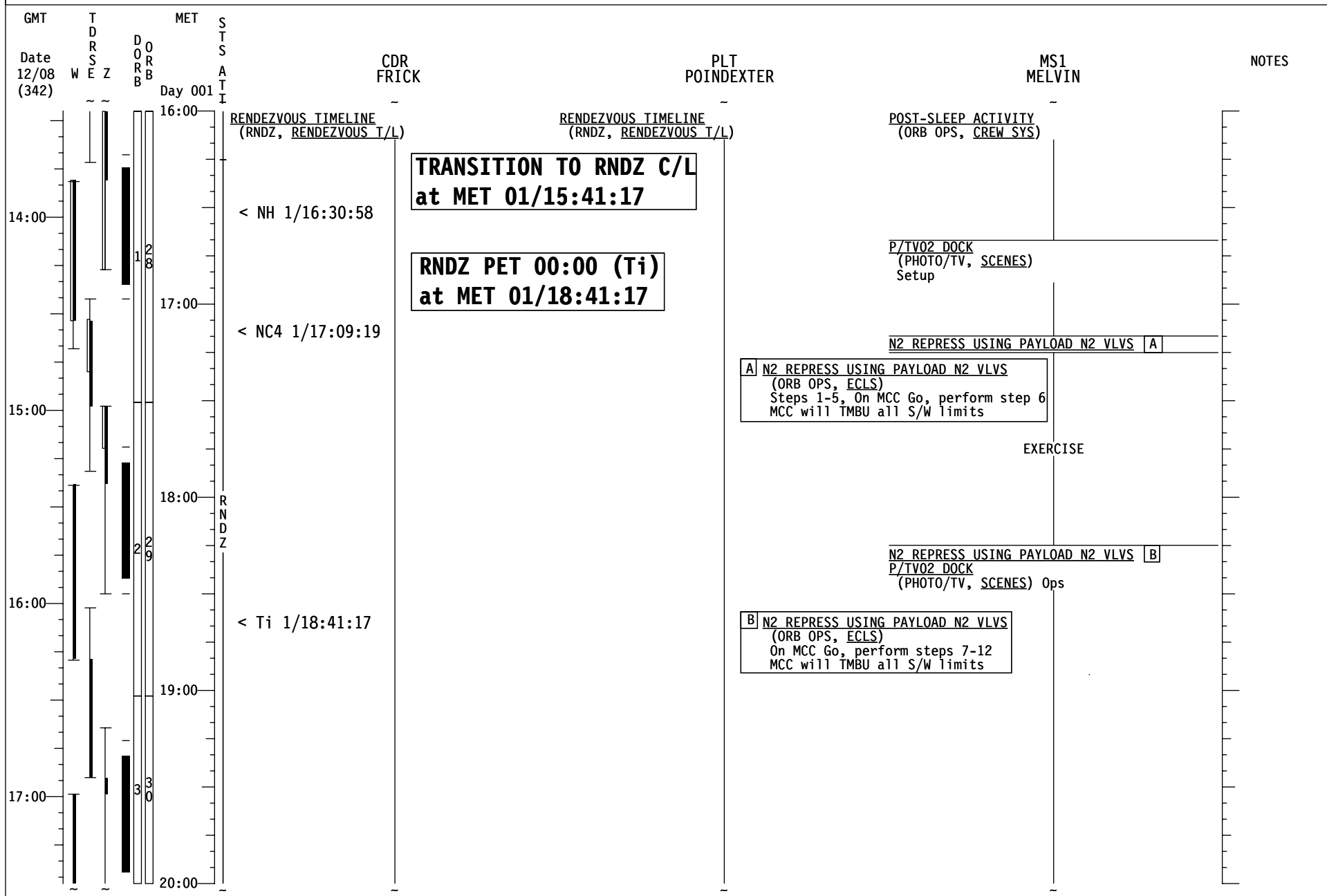
STS-122 FD (03)



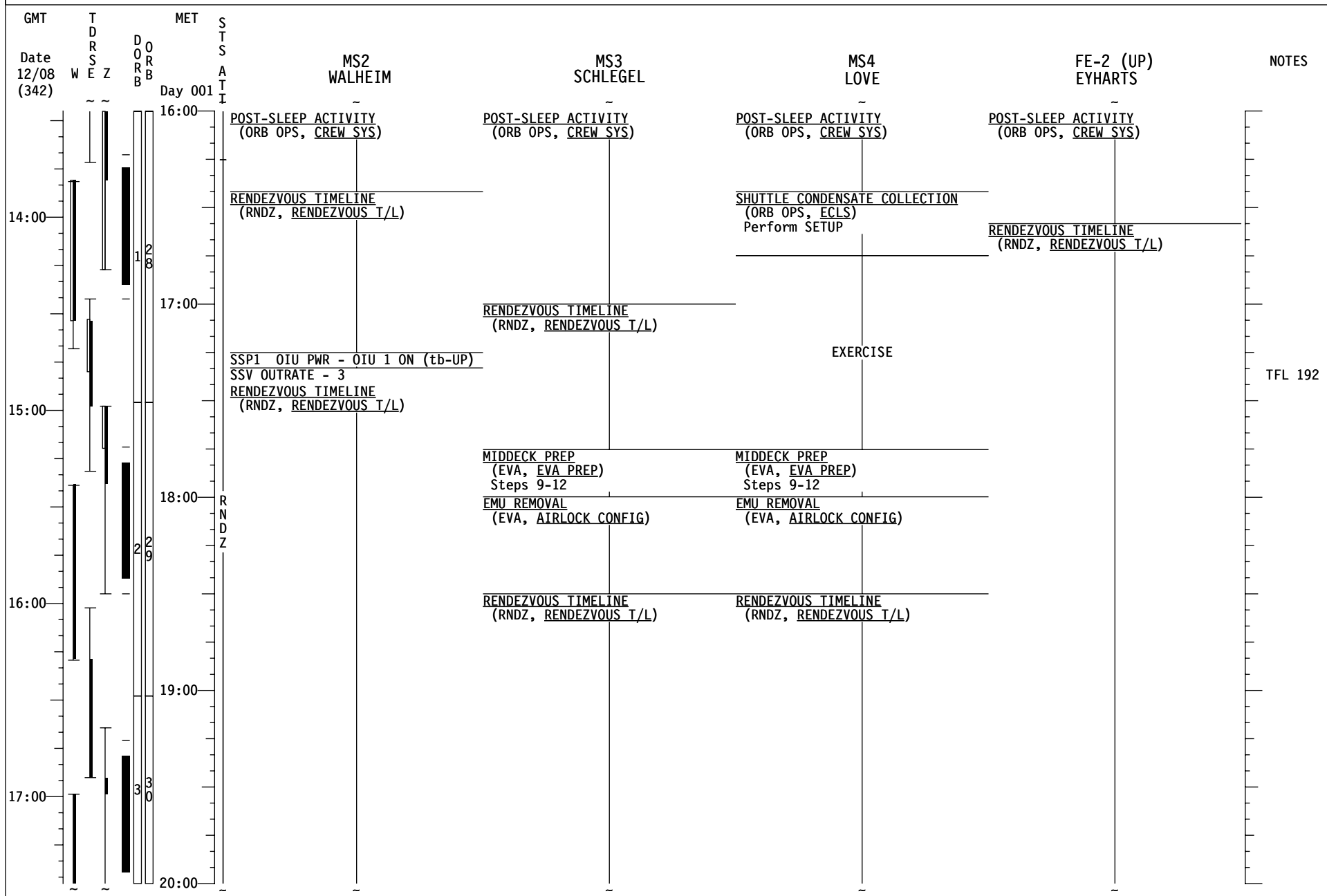
STS-122 FD (03)



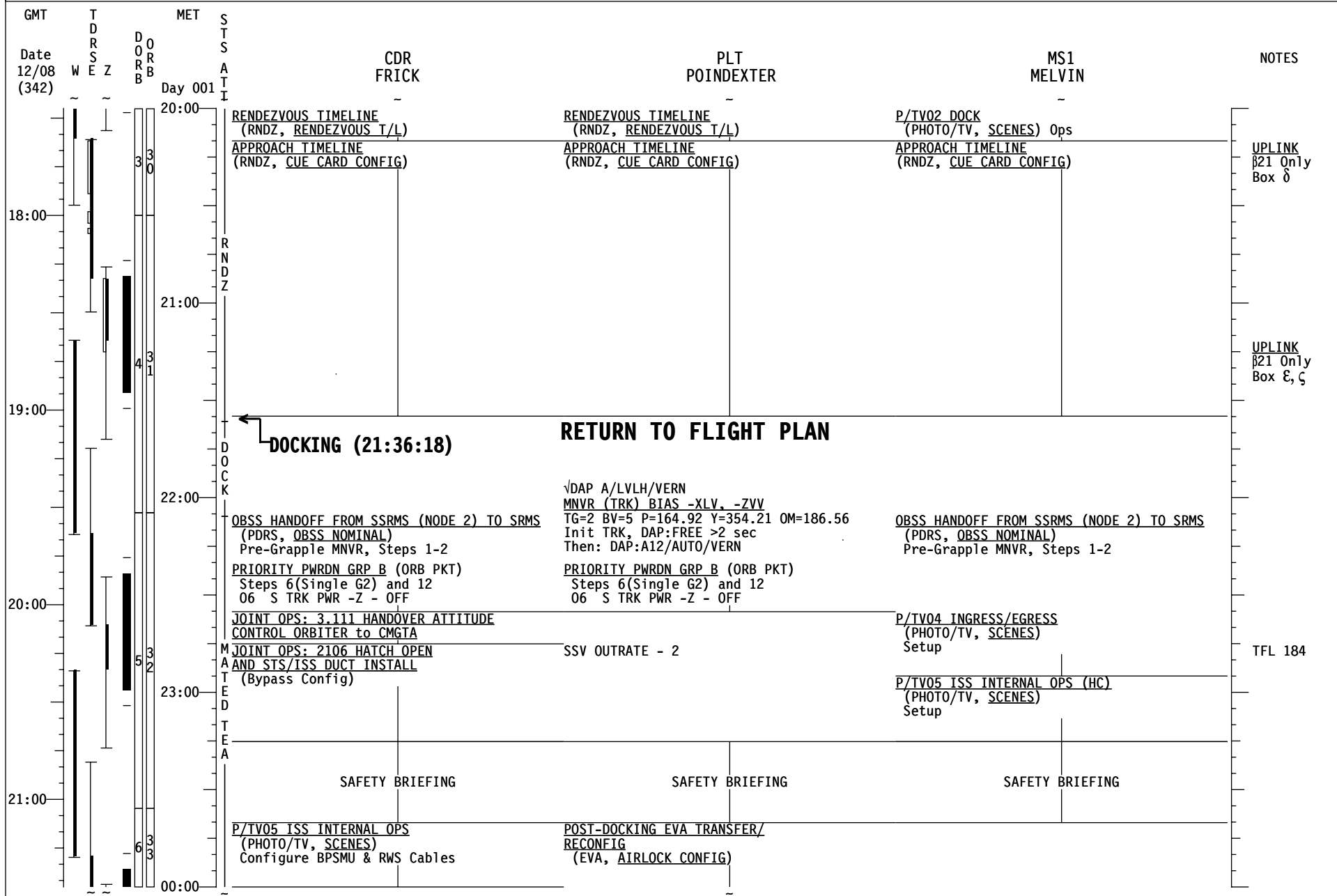
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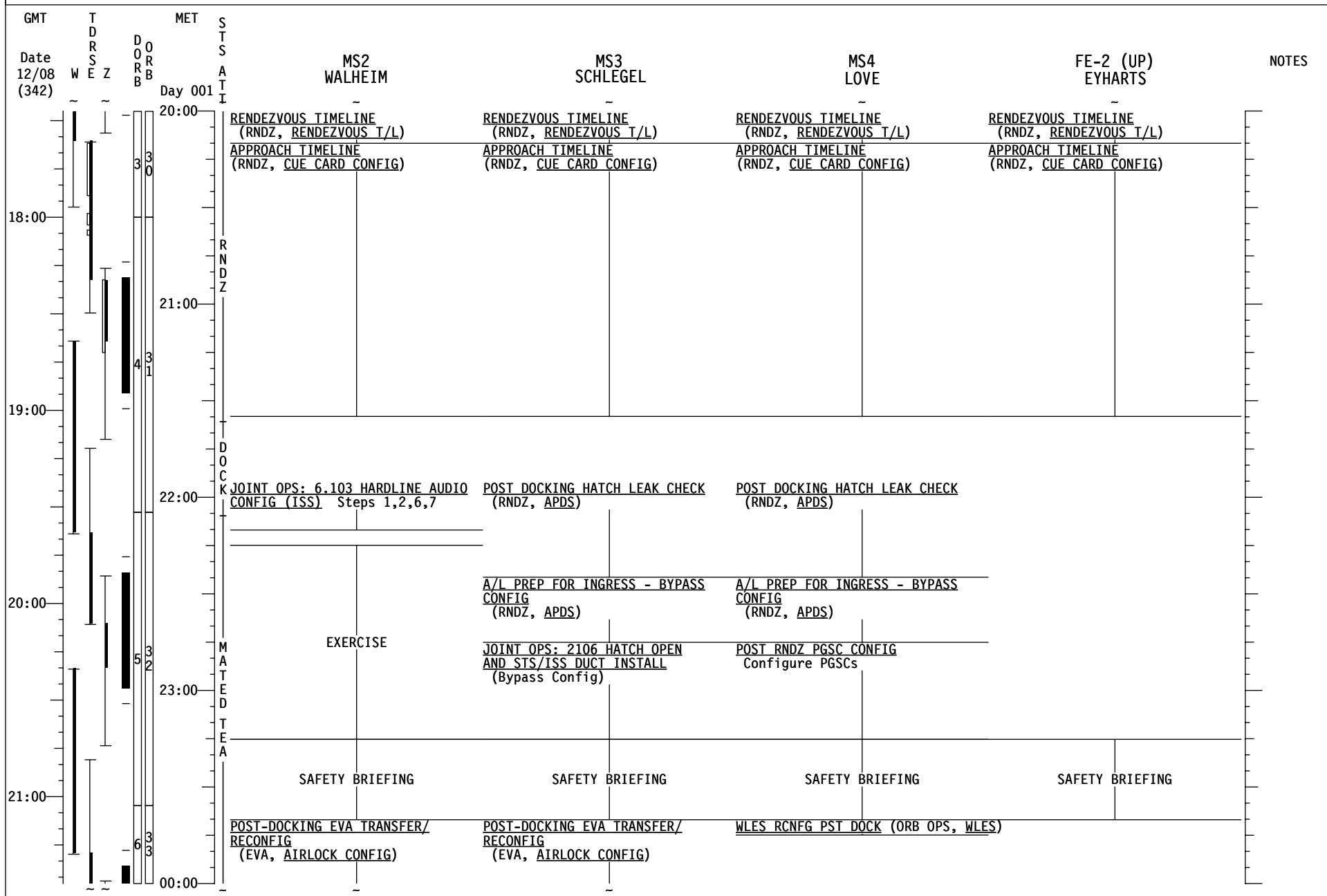
STS-122 FD (03)



STS-122 FD (03)



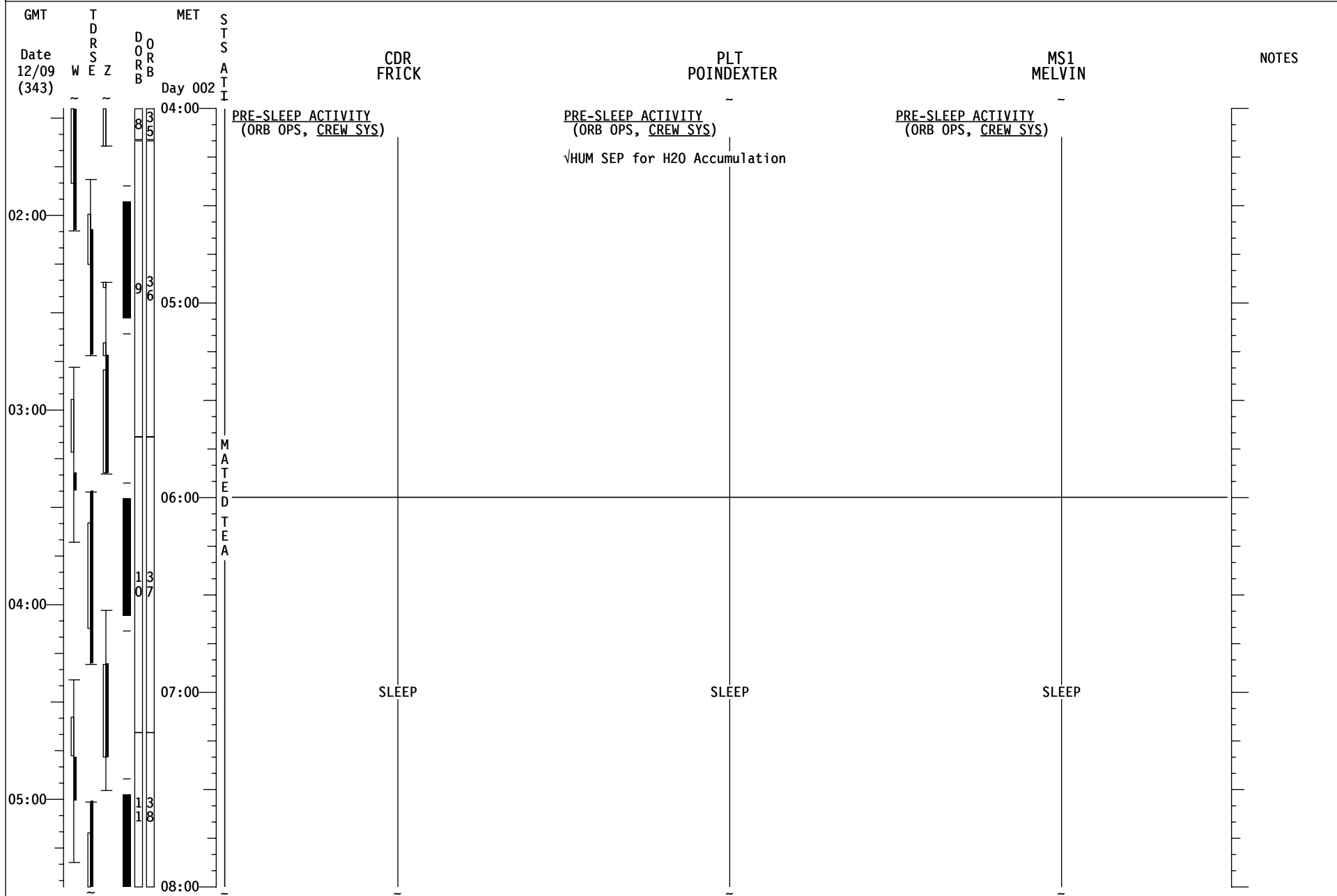
STS-122 FD (03)



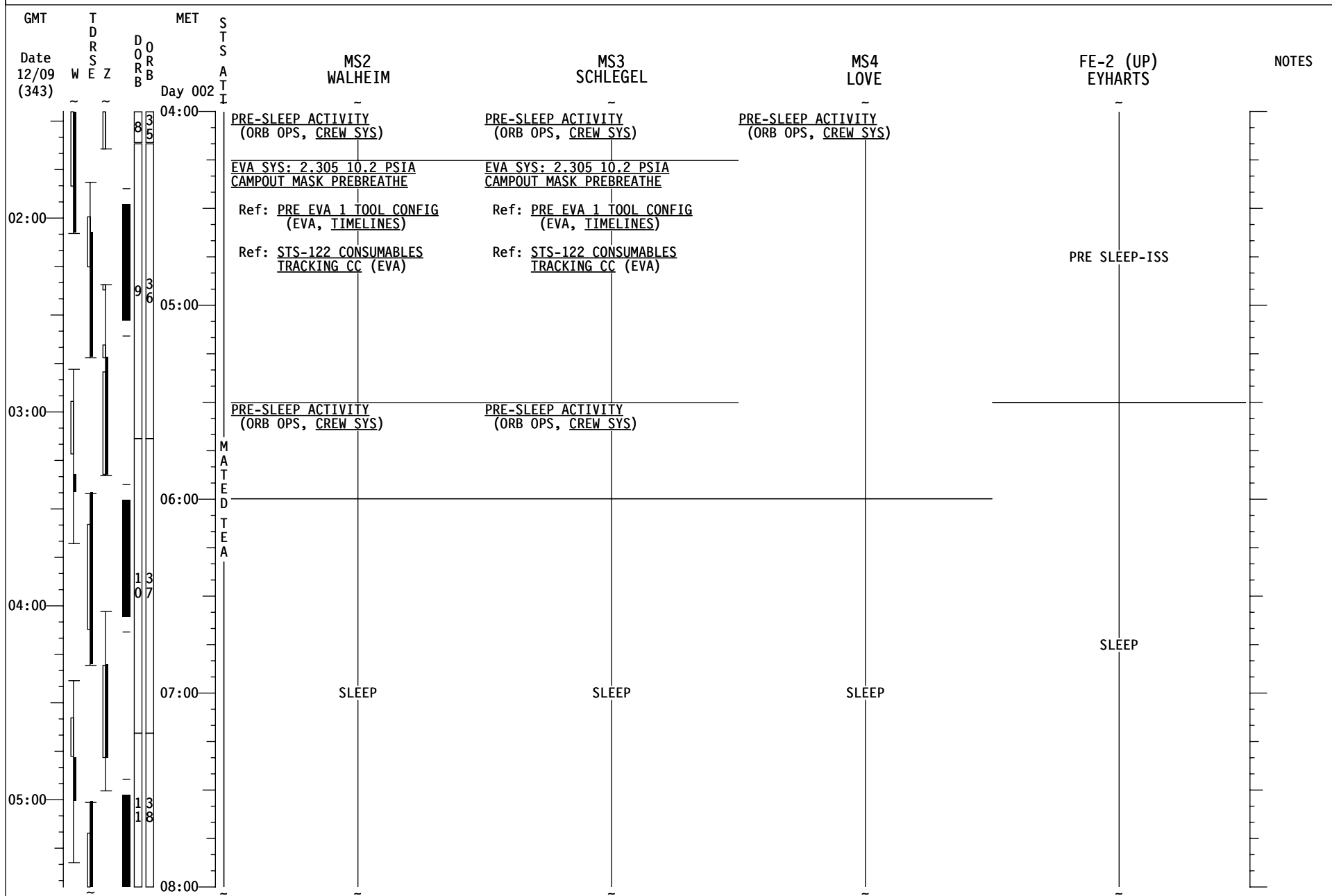
STS-122 FD (03)

GMT	TDRS W E Z	MET Day 002	S T S A T I	CDR FRICK	PLT POINDEXTER	MS1 MELVIN	NOTES	
Date 12/08 (342) 22:00 23:00 00:00 01:00 04:00	DOR B 6 3 7 4 8 3 5	00:00 01:00 02:00 03:00 04:00	M A T E D	<u>JOINT OPS: 3.120 P/B USING O2 SETUP</u>	<u>POST-DOCKING EVA TRANSFER/ RECONFIG (EVA, AIRLOCK CONFIG)</u>	<u>ROBOTICS: 1.110 OBSS GRAPPLE</u>	<u>UPLINK β21 Only Box ε, ζ, η</u>	
				23:00 <u>OBSS HANDOFF FROM SSRMS (NODE 2) TO SRMS (PDRS, OBSS NOMINAL) Grapple, Steps 6-7</u>	23:00 <u>EVA SYSTEMS: 1.305 EQUIPMENT LOCK PREP Ref: STS-122 CONSUMABLES TRACKING CC (EVA)</u>	23:00 <u>ROBOTICS: 1.111 OBSS MANEUVER TO HANDOFF</u>	NO EXERCISE WHILE BOTH ARMS GRAPPLED TO OBSS UPLINK β21 Only Box ζ, η	
				02:00 <u>OBSS MANEUVER TO COLUMBUS VIEWING POSITION (PDRS, OBSS NOMINAL) PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)</u>	02:00 <u>PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)</u>	02:00 <u>ROBOTICS: 1.112 OBSS UNGRAPPLE Steps 1-2</u>		
				03:00 <u>EVA1 PROCEDURE REVIEW Ref: EVA1 BRIEFING CARD (EVA, TIMELINES)</u>	03:00 <u>PLAYBACK (DIGITAL) (PHOTO/TV, CUE CARD) KU TDRW (02:25-02:45)</u>	03:00 <u>PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)</u>		
				04:00 <u>NETMEETING VIDEO CONFERENCING (ORB OPS, PGSC) Private Medical Conference</u>	04:00 <u>EVA1 PROCEDURE REVIEW Ref: EVA1 BRIEFING CARD (EVA, TIMELINES)</u>	04:00 <u>EVA1 PROCEDURE REVIEW Ref: EVA1 BRIEFING CARD (EVA, TIMELINES)</u>		
				04:00 <u>PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)</u>	04:00 <u>PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)</u>	04:00 <u>PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)</u>		OCA-PMC
				04:00 <u>HUM SEP for H2O Accumulation</u>	04:00 (Empty)	04:00 (Empty)		(Empty)
				(Empty)	(Empty)	(Empty)		(Empty)
				(Empty)	(Empty)	(Empty)		(Empty)
				(Empty)	(Empty)	(Empty)		(Empty)
(Empty)	(Empty)	(Empty)	(Empty)					

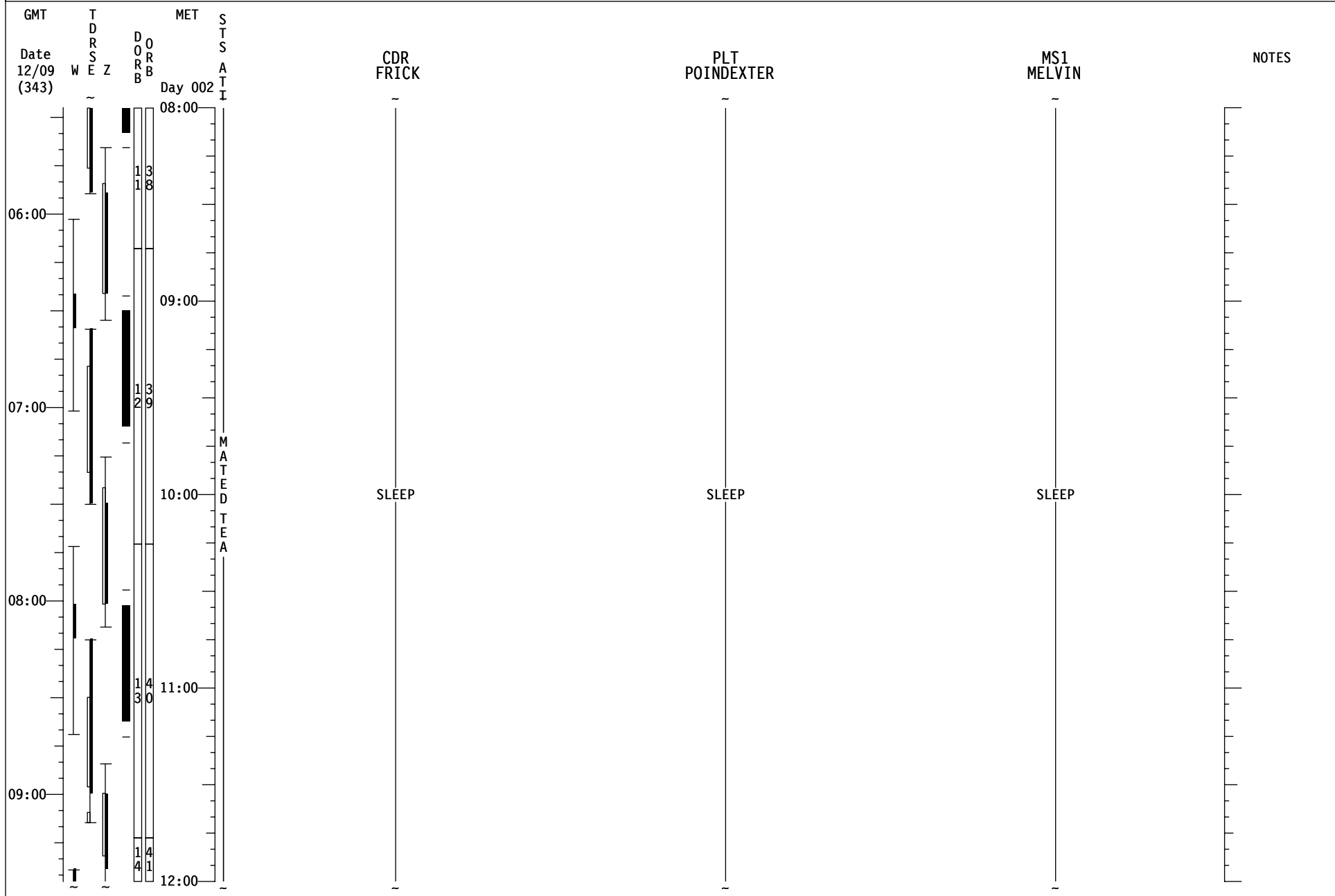
STS-122 FD (03)



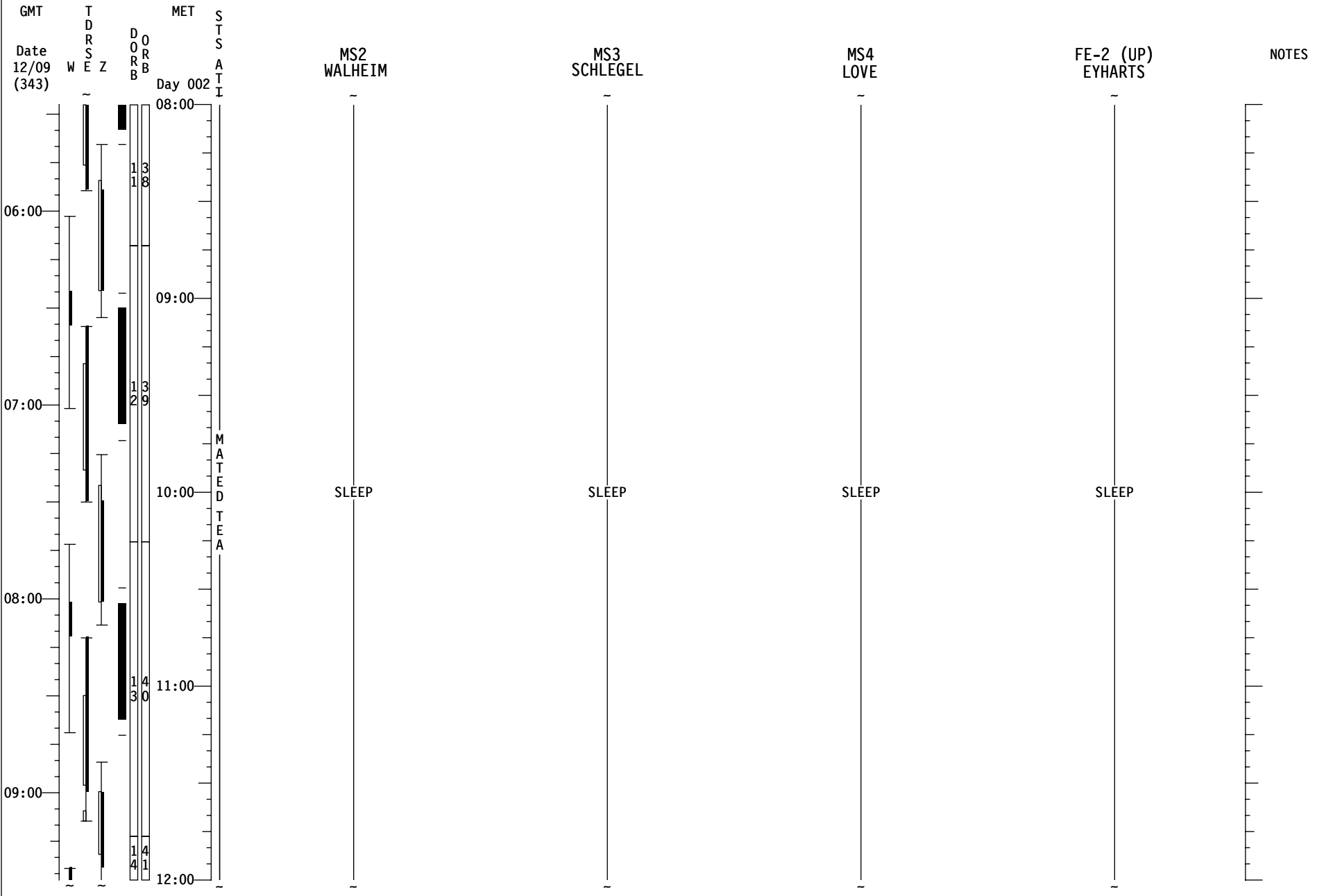
STS-122 FD (03)



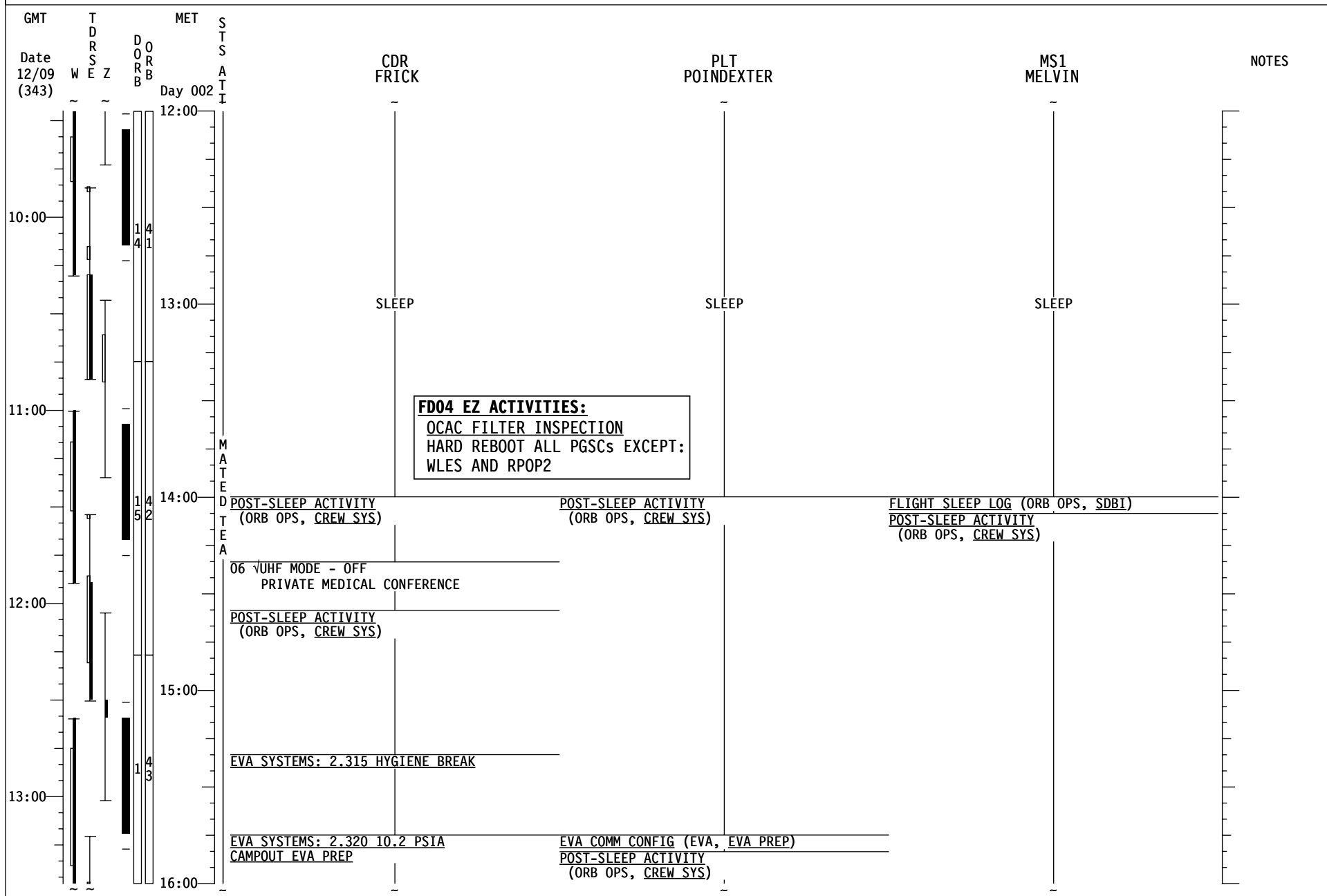
STS-122 FD (03)



STS-122 FD (03)

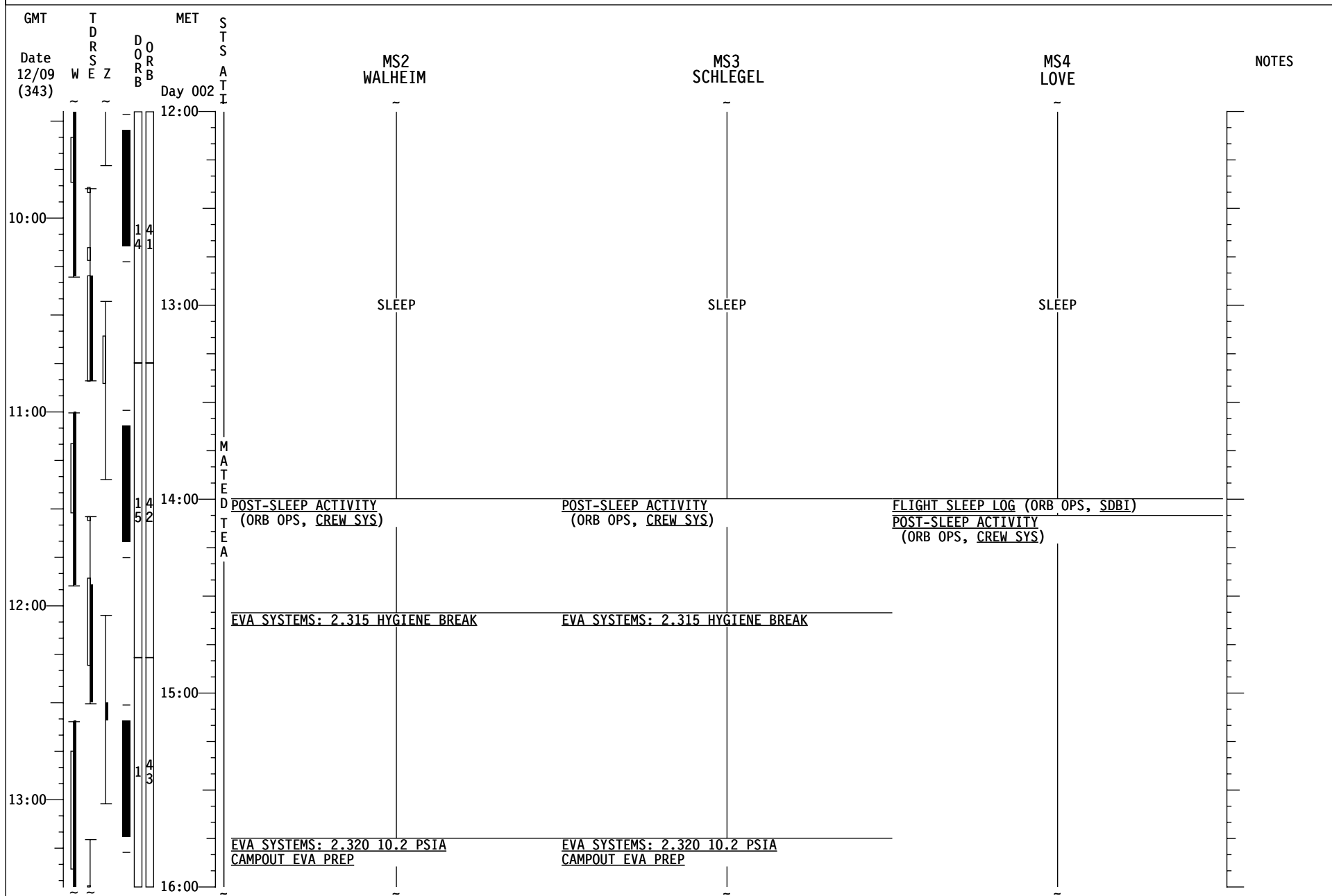


STS-122 FD (04)



FD04 EZ ACTIVITIES:
 OCAC FILTER INSPECTION
 HARD REBOOT ALL PGSCs EXCEPT:
 WLES AND RPOP2

STS-122 FD (04)



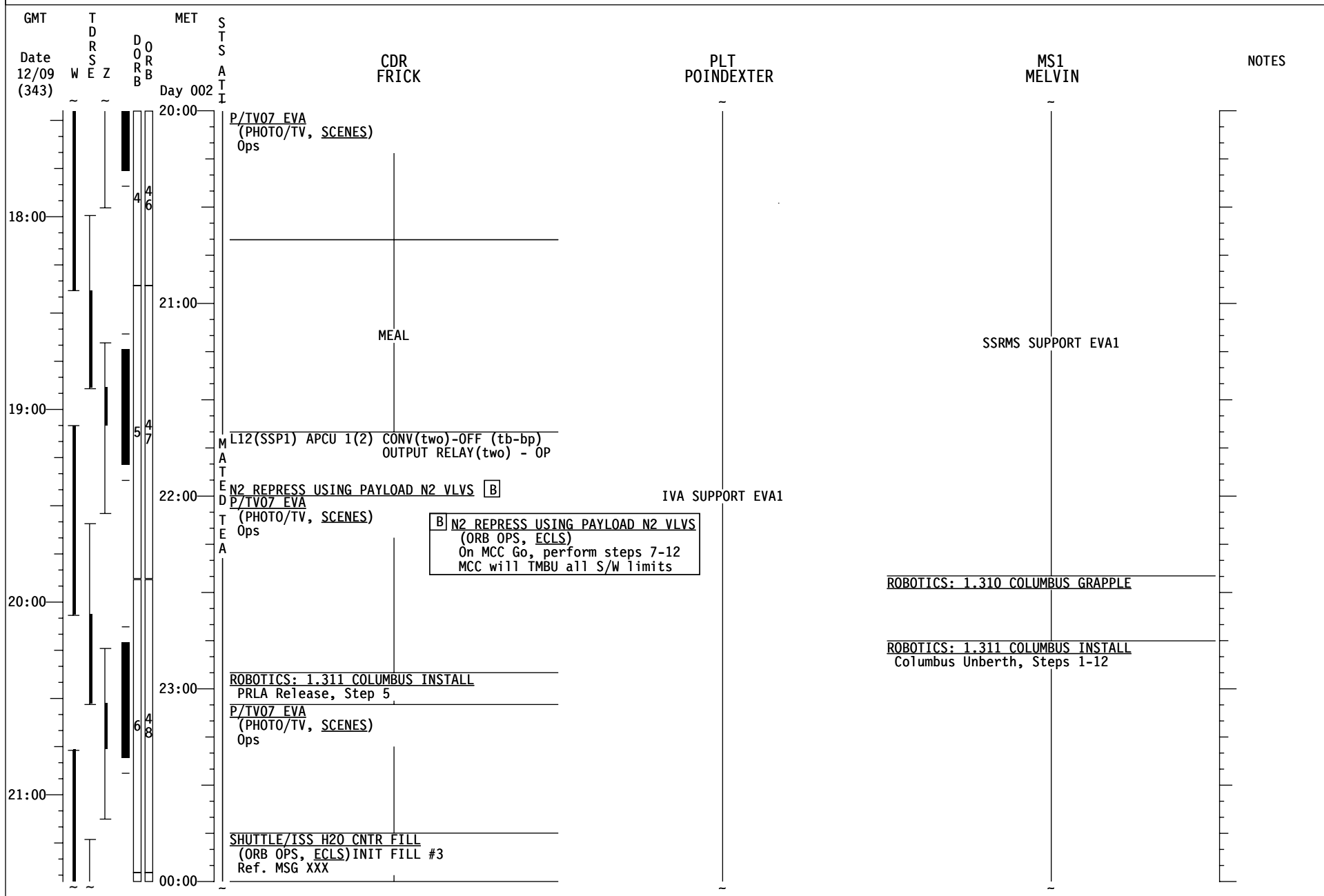
STS-122 FD (04)

GMT	TDRSEZ	MET	SATS	CDR FRICK	PLT POINDEXTER	MS1 MELVIN	NOTES
Date 12/09 (343)	W E Z	Day 002	Day 002				
16:00				EVA SYSTEMS: 2.320 10.2 PSIA CAMPOUT EVA PREP	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
14:00							
17:00				EVA SYSTEMS: 1.220 EMU PURGE	L17 Check MCIU filter screen SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #2 Ref. MSG XXX	TRANSFER OPS Ref. Transfer List & MSG XXX	
15:00				EVA SYSTEMS: 1.225 EMU PREBREATHE	EVA INHIBIT PAD (EVA, TIMELINES)		
					P/TV07 EVA (PHOTO/TV, SCENES) Setup		
18:00							
16:00				EVA SYSTEMS: CREWLOCK DEPRESS (CC)	SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION	EXERCISE	
					CWC TRANSFER Transfer 1 CWC to ISS		
19:00					EVA SYSTEMS: CREWLOCK POST DEPRESS (CC)	KU-BD ANT STOW (ORB OPS, COMM/INST)	
17:00				EXERCISE	IVA SUPPORT EVA1	SSRMS SUPPORT EVA1	
20:00				N2 REPRESS USING PAYLOAD N2 VLVS [A]	[A] N2 REPRESS USING PAYLOAD N2 VLVS (ORB OPS, ECLS) Steps 1-5, On MCC Go, perform step 6 MCC will TMBU all S/W limits		

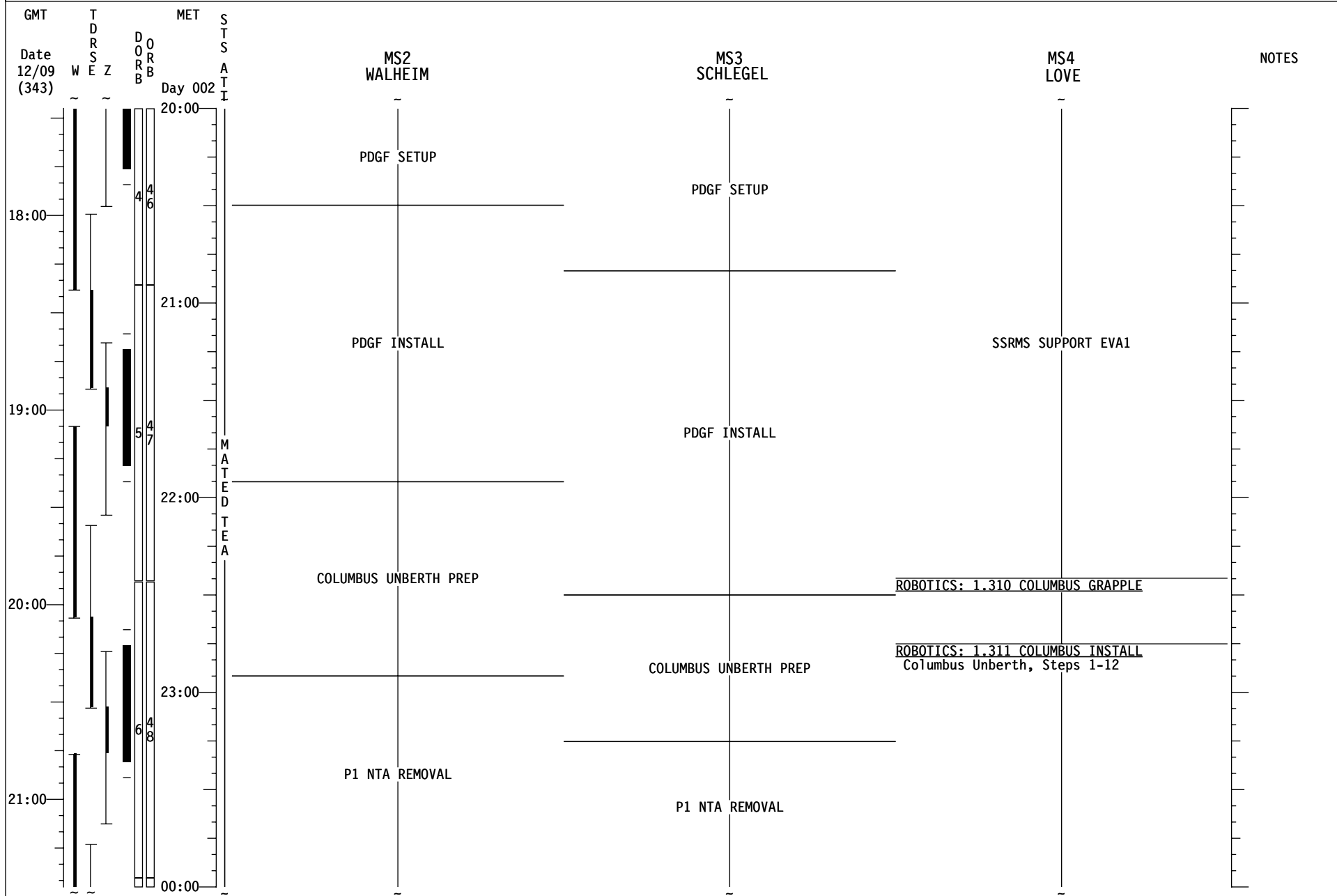
STS-122 FD (04)

GMT	T D R S E Z	MET	S T S	MS2 WALHEIM	MS3 SCHLEGEL	MS4 LOVE	NOTES
Date 12/09 (343)	W E Z	Day 002	A T I				
				~	~	~	
				EVA SYSTEMS: 2.320 10.2 PSIA CAMPOUT EVA PREP	EVA SYSTEMS: 2.320 10.2 PSIA CAMPOUT EVA PREP	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
14:00							
				EVA SYSTEMS: 1.220 EMU PURGE	EVA SYSTEMS: 1.220 EMU PURGE		
15:00				EVA SYSTEMS: 1.225 EMU PREBREATHE	EVA SYSTEMS: 1.225 EMU PREBREATHE	EXERCISE	
16:00				EVA SYSTEMS: CREWLOCK DEPRESS (CC)	EVA SYSTEMS: CREWLOCK DEPRESS (CC)	S&M: 1.4XX NODE 2 NADIR CBCS INSTALLATION/REMOVAL Perform CBCS OPERATIONS, Steps 38-39	
						TRANSFER OPS Ref. Transfer List & MSG XXX	
				EVA SYSTEMS: CREWLOCK POST DEPRESS (CC)	EVA SYSTEMS: CREWLOCK POST DEPRESS (CC)	KU-BD ANT STOW (ORB OPS, COMM/INST)	
				EVA SYSTEMS: CREWLOCK EGRESS (CC)	EVA SYSTEMS: CREWLOCK EGRESS (CC)		
17:00				PDGF SETUP	PDGF SETUP	SSRMS SUPPORT EVA1	
20:00							

STS-122 FD (04)



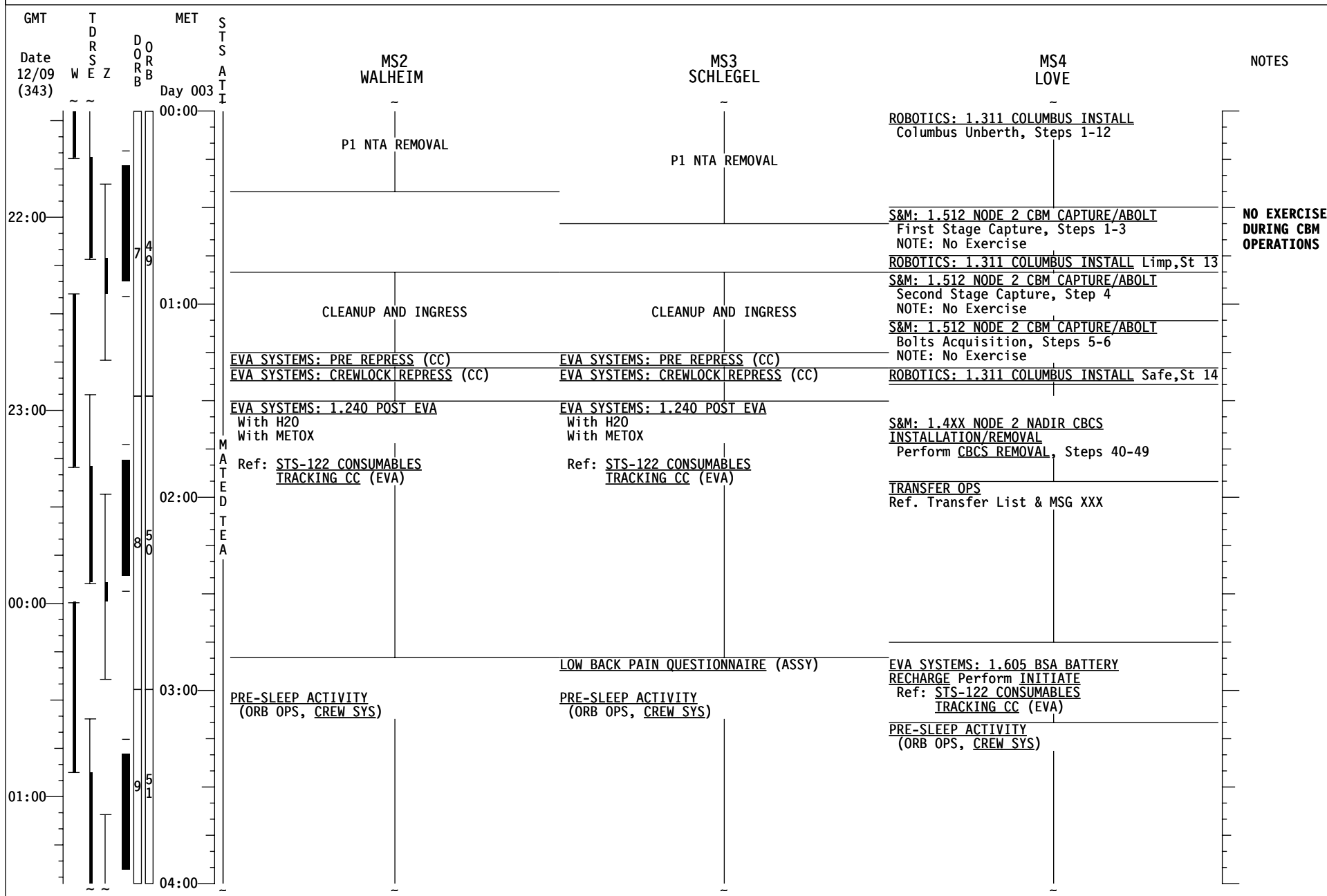
STS-122 FD (04)



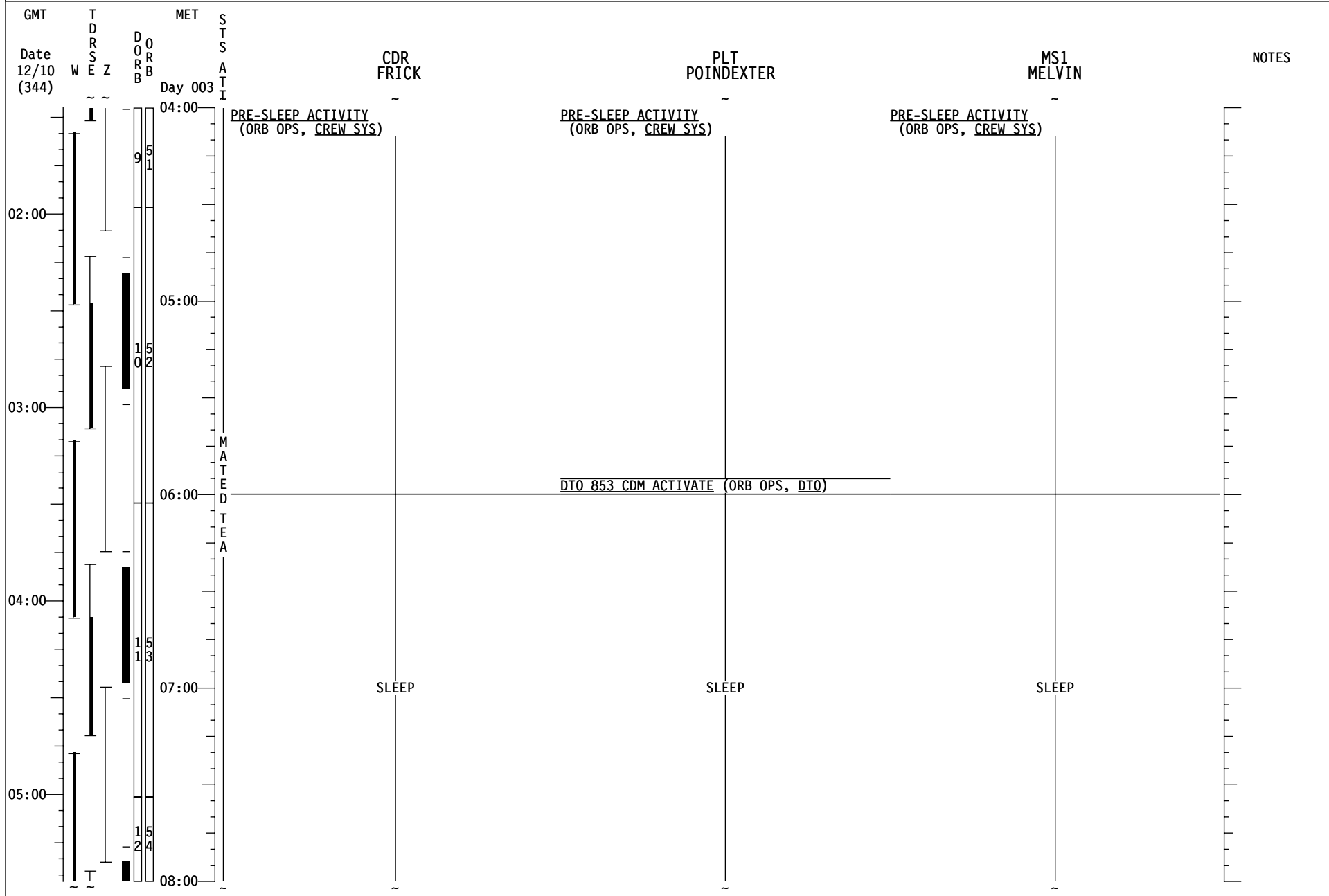
STS-122 FD (04)

GMT	TDRSEZ	MET	SATS	CDR FRICK	PLT POINDEXTER	MS1 MELVIN	NOTES
Date 12/09 (343)	W E Z	Day 003	Day 003				
00:00				P/TV07 EVA (PHOTO/TV, SCENES) Ops		ROBOTICS: 1.311 COLUMBUS INSTALL Columbus Unberth, Steps 1-12	
22:00					IVA SUPPORT EVA1		NO EXERCISE DURING CBM OPERATIONS
				SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION		S&M: 1.512 NODE 2 CBM CAPTURE/ABOLT First Stage Capture, Steps 1-3 NOTE: No Exercise	
				CWC TRANSFER Transfer 1 CWC to ISS	EVA SYSTEMS: PRE REPRESS (CC) EVA SYSTEMS: CREWLOCK REPRESS (CC)	ROBOTICS: 1.311 COLUMBUS INSTALL Limp, St 13	
23:00				EVA SYSTEMS: 1.240 POST EVA With H2O With METOX Ref: STS-122 CONSUMABLES TRACKING CC (EVA)	EVA COMM DECONFIG (EVA, EVA PREP)	S&M: 1.512 NODE 2 CBM CAPTURE/ABOLT Second Stage Capture, Step 4 NOTE: No Exercise	
					EXERCISE	ROBOTICS: 1.311 COLUMBUS INSTALL Safe, St 14 TRANSFER OPS Ref. Transfer List & MSG XXX	
00:00							
				06 VUHF MODE - OFF PRIVATE MEDICAL CONFERENCE	DTO 853 CDM BATTERY CHANGEOUT (ORB OPS, DIO)	TRANSFER TAGUP Coordinate with xfer counterpart	
				PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	TRANSFER BRIEF Call down status to MCC	
01:00						PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
04:00							

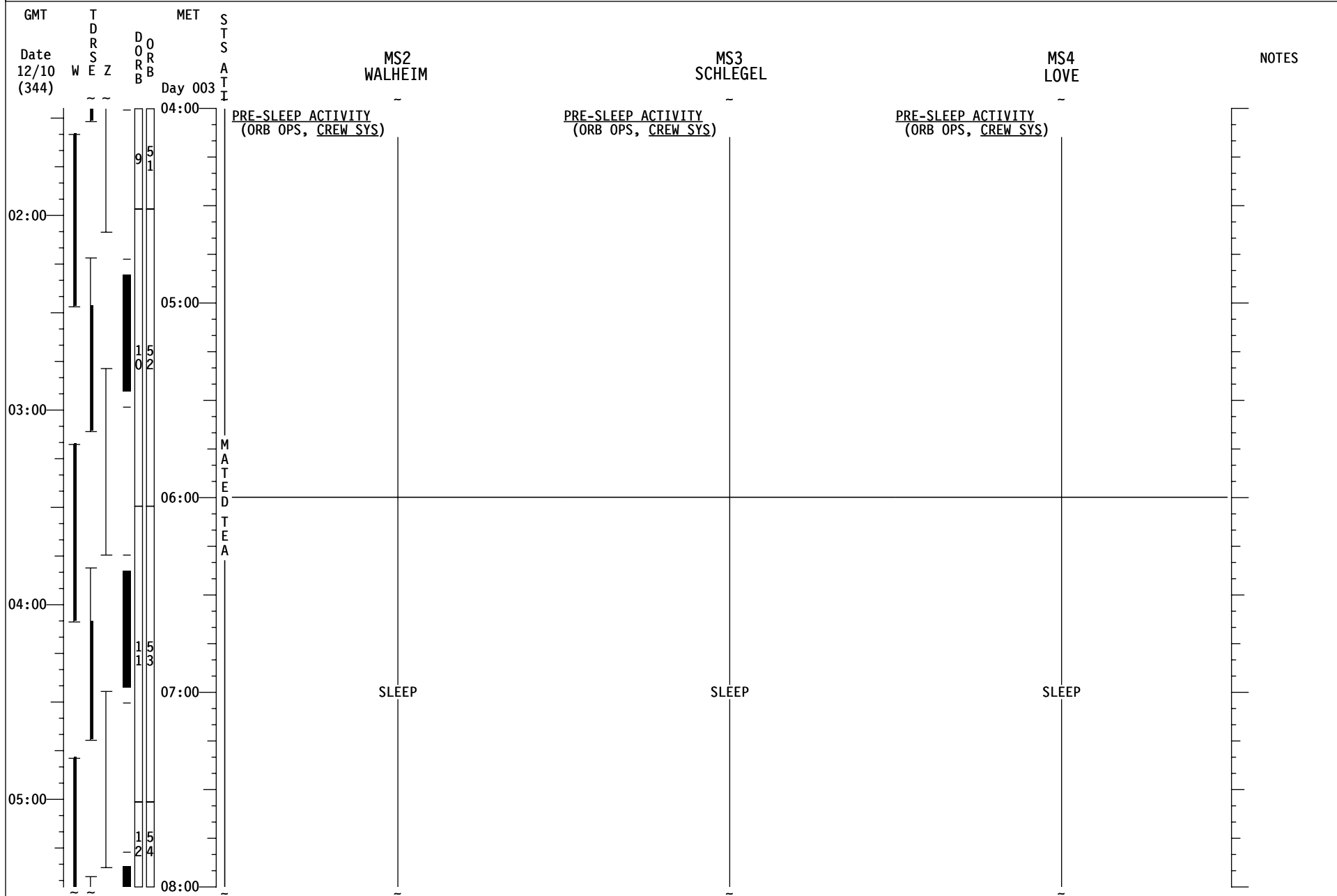
STS-122 FD (04)



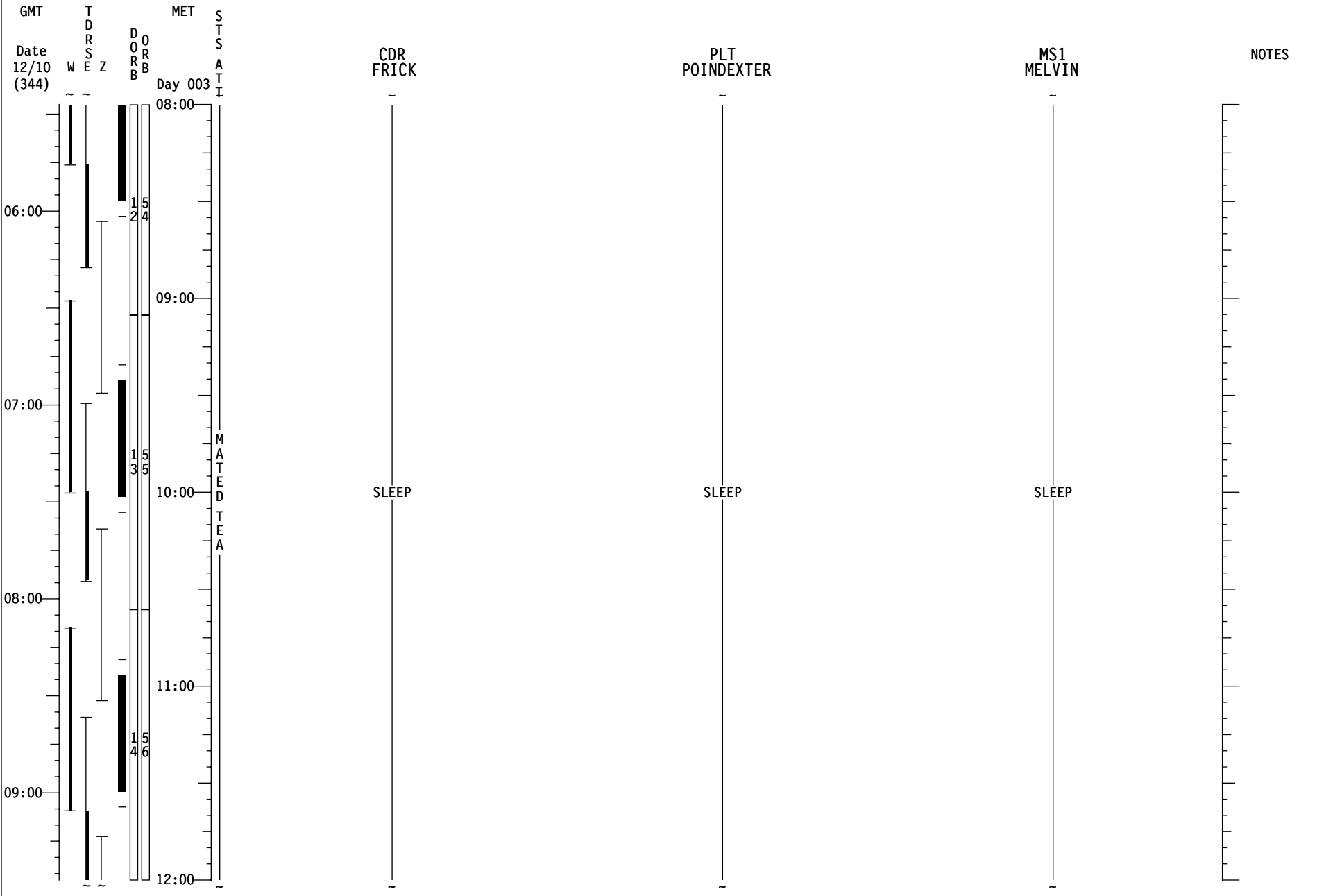
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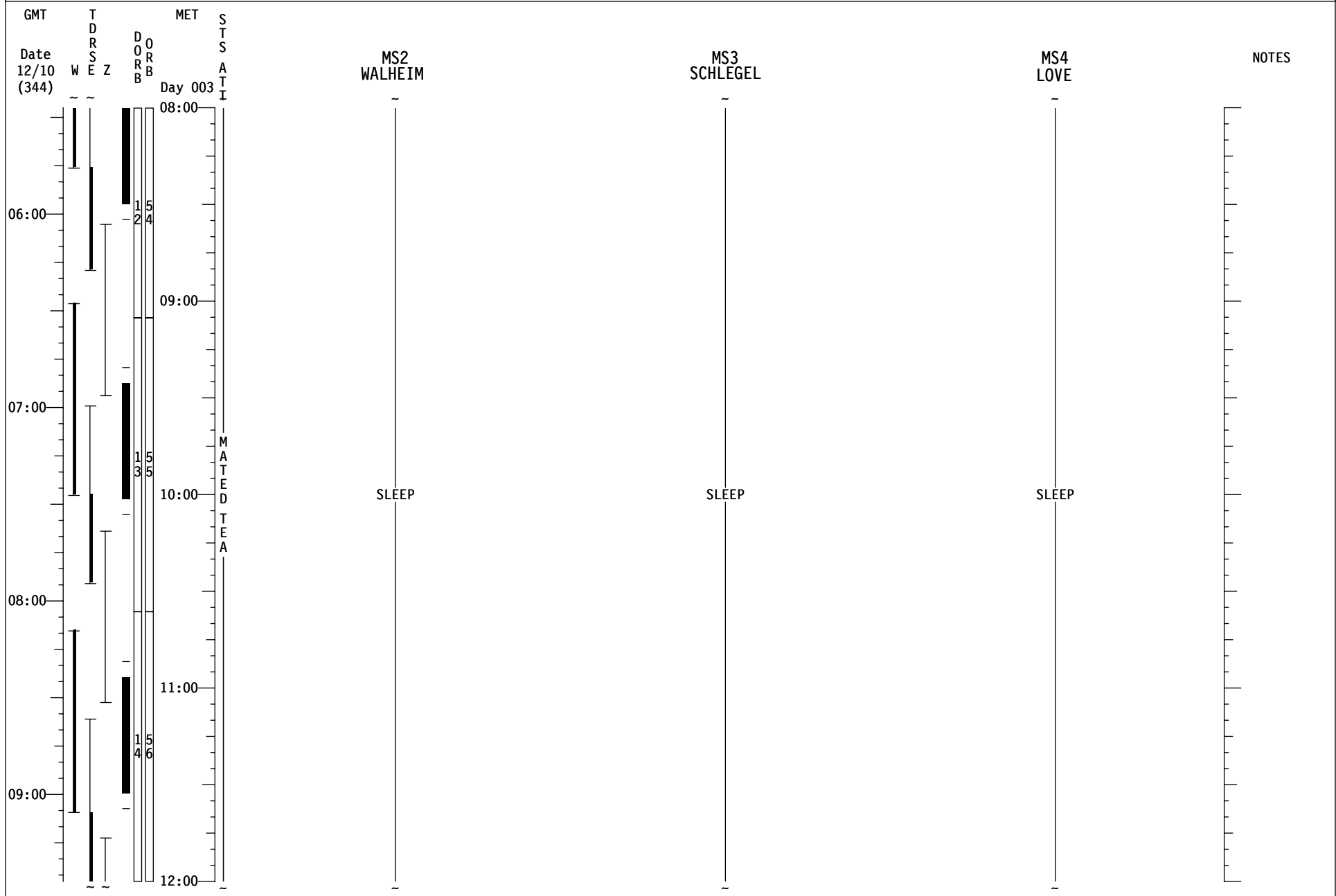
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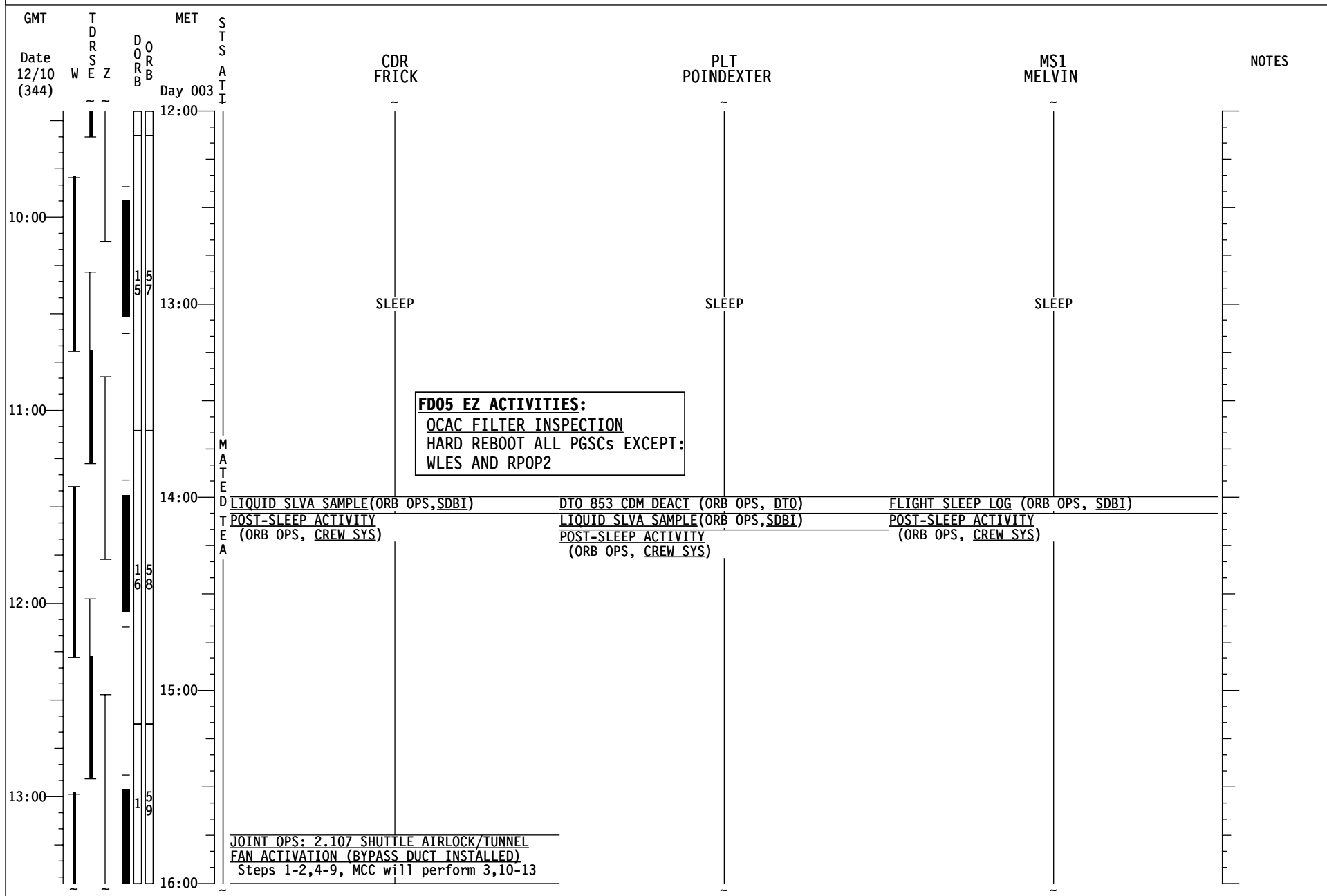
STS-122 FD (04)



STS-122 FD (04)



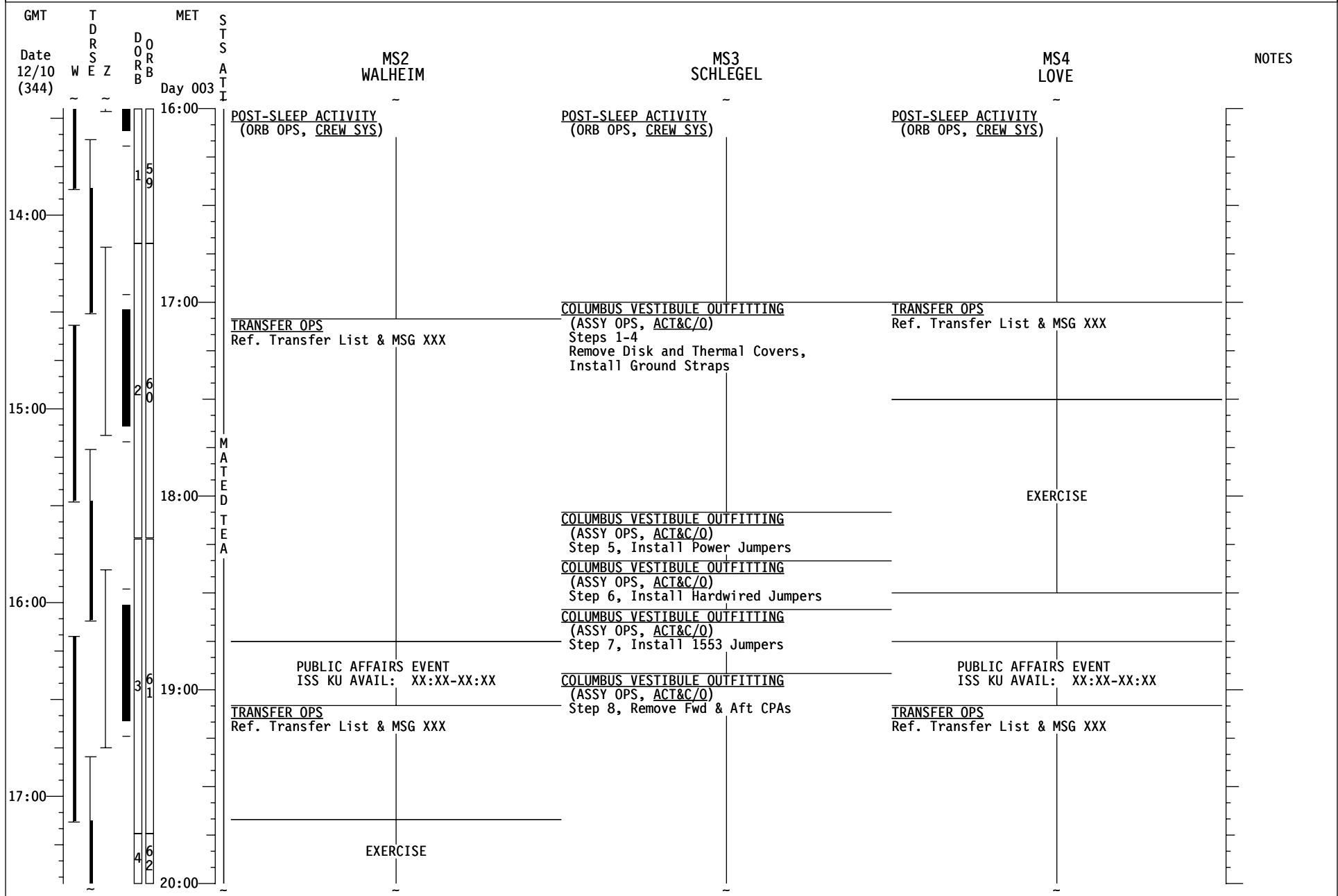
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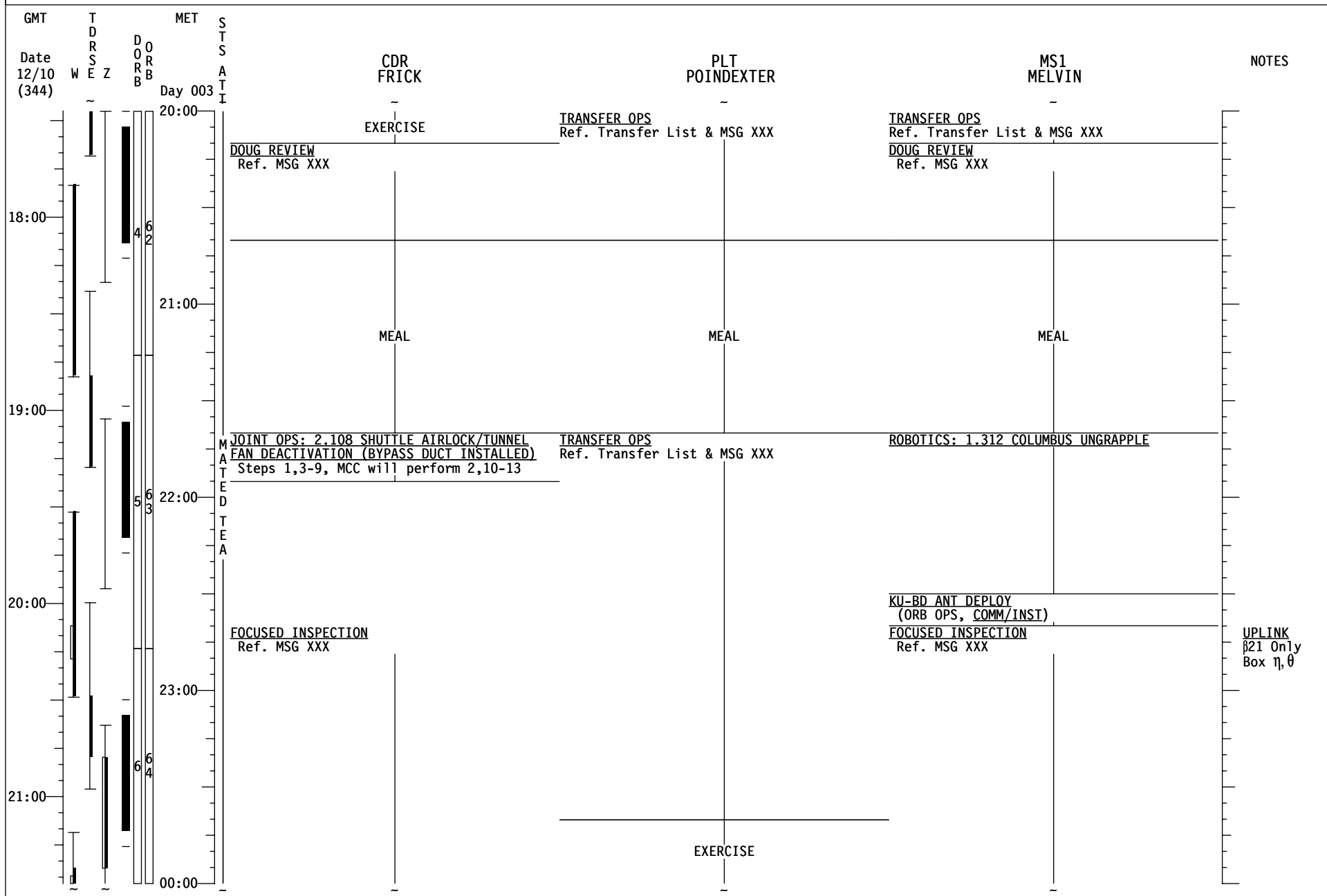
STS-122 FD (05)

GMT	T D R S W E Z	MET Day 003	S A T I	CDR FRICK	PLT POINDEXTER	MS1 MELVIN	NOTES
Date 12/10 (344)	D O R B 1 5 9	16:00	M A T E D T E	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
				SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #4 Ref. MSG XXX	L17 Check MCIU filter screen WCS CRADLE - AUTO INHIBIT Inspect hose block filter, change if req'd WCS CRADLE - AUTO TRANSFER OPS Ref. Transfer List & MSG XXX	EXERCISE	
				SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION	TRANSFER OPS Ref. Transfer List & MSG XXX	P/TV05 ISS INTERNAL OPS (PHOTO/TV, SCENES) Setup	
				CWC TRANSFER Transfer 1 CWCs to ISS	PUBLIC AFFAIRS EVENT ISS KU AVAIL: XX:XX-XX:XX	PUBLIC AFFAIRS EVENT ISS KU AVAIL: XX:XX-XX:XX	
				EXERCISE	TRANSFER OPS Ref. Transfer List & MSG XXX		
17:00	2 6 0						
16:00	3 6 1						
17:00	4 6 2						
17:00							
20:00							

STS-122 FD (05)



STS-122 FD (05)



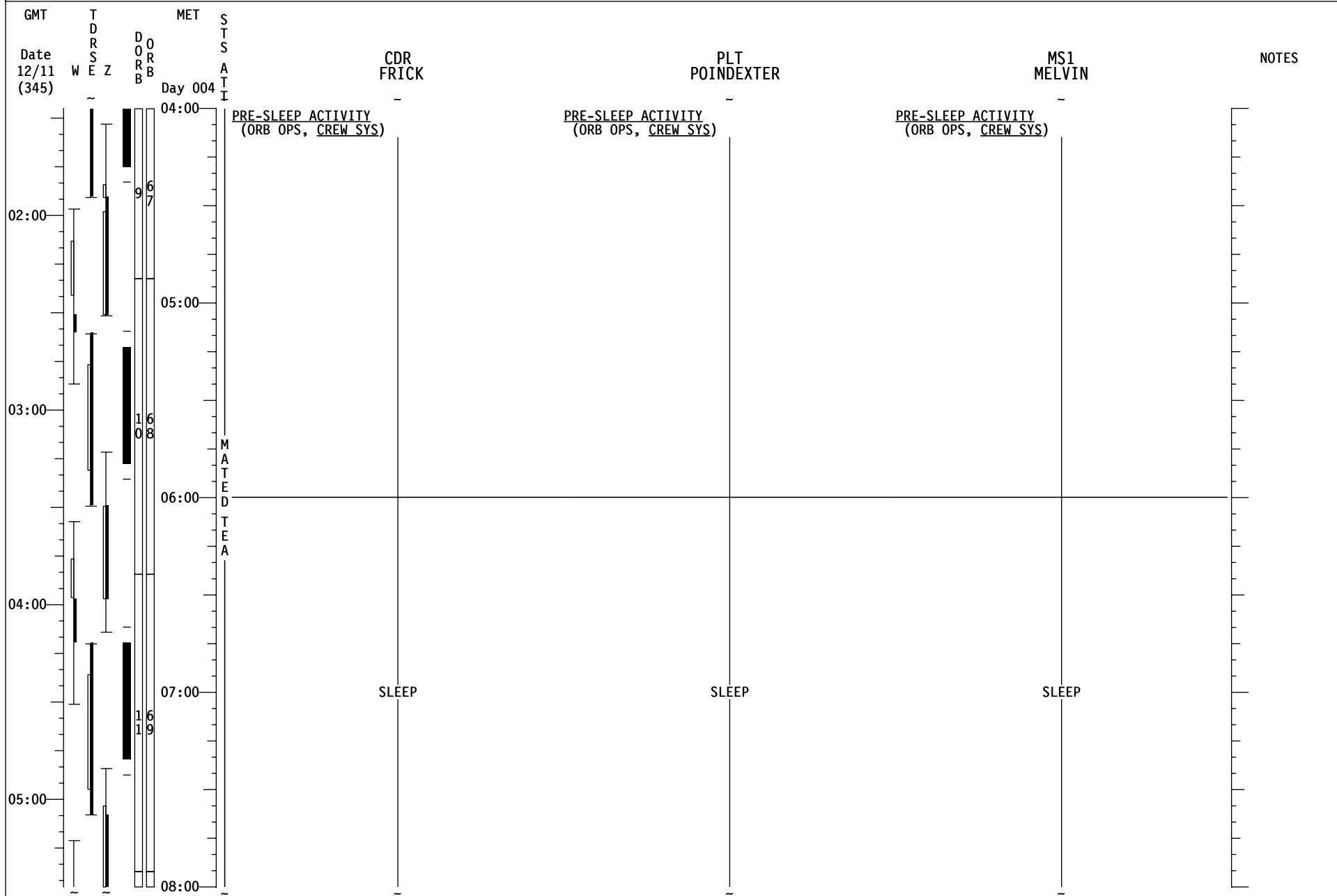
STS-122 FD (05)

GMT	T D R S E Z	M E T	S T S A T I	CDR FRICK	PLT POINDEXTER	MS1 MELVIN	NOTES
Date 12/10 (344)	W E Z	Day 004	00:00				
				<u>FOCUSED INSPECTION</u> Ref. MSG XXX		<u>FOCUSED INSPECTION</u> Ref. MSG XXX	
					EXERCISE		
22:00					<u>P/TV05 ISS INTERNAL OPS</u> (PHOTO/TV, SCENES) Setup		
					<u>DTO 853 CDM BATTERY CHANGEOUT</u> (ORB OPS, DTO)		
23:00				ESA PUBLIC AFFAIRS EVENT KU AVAIL: XX:XX-XX:XX	<u>P/TV07 EVA</u> (PHOTO/TV, SCENES) Setup	<u>TRANSFER TAGUP</u> Coordinate with xfer counterpart	
						<u>TRANSFER BRIEF</u> Call down status to MCC	
			02:00	<u>EVA2 PROCEDURE REVIEW</u> Ref: <u>EVA2 BRIEFING CARD</u> (EVA, TIMELINES)	<u>EVA2 PROCEDURE REVIEW</u> Ref: <u>EVA2 BRIEFING CARD</u> (EVA, TIMELINES)	<u>EVA2 PROCEDURE REVIEW</u> Ref: <u>EVA2 BRIEFING CARD</u> (EVA, TIMELINES)	
00:00							
				<u>06 VUHF MODE - OFF</u> PRIVATE MEDICAL CONFERENCE	<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)			
01:00							
			04:00				

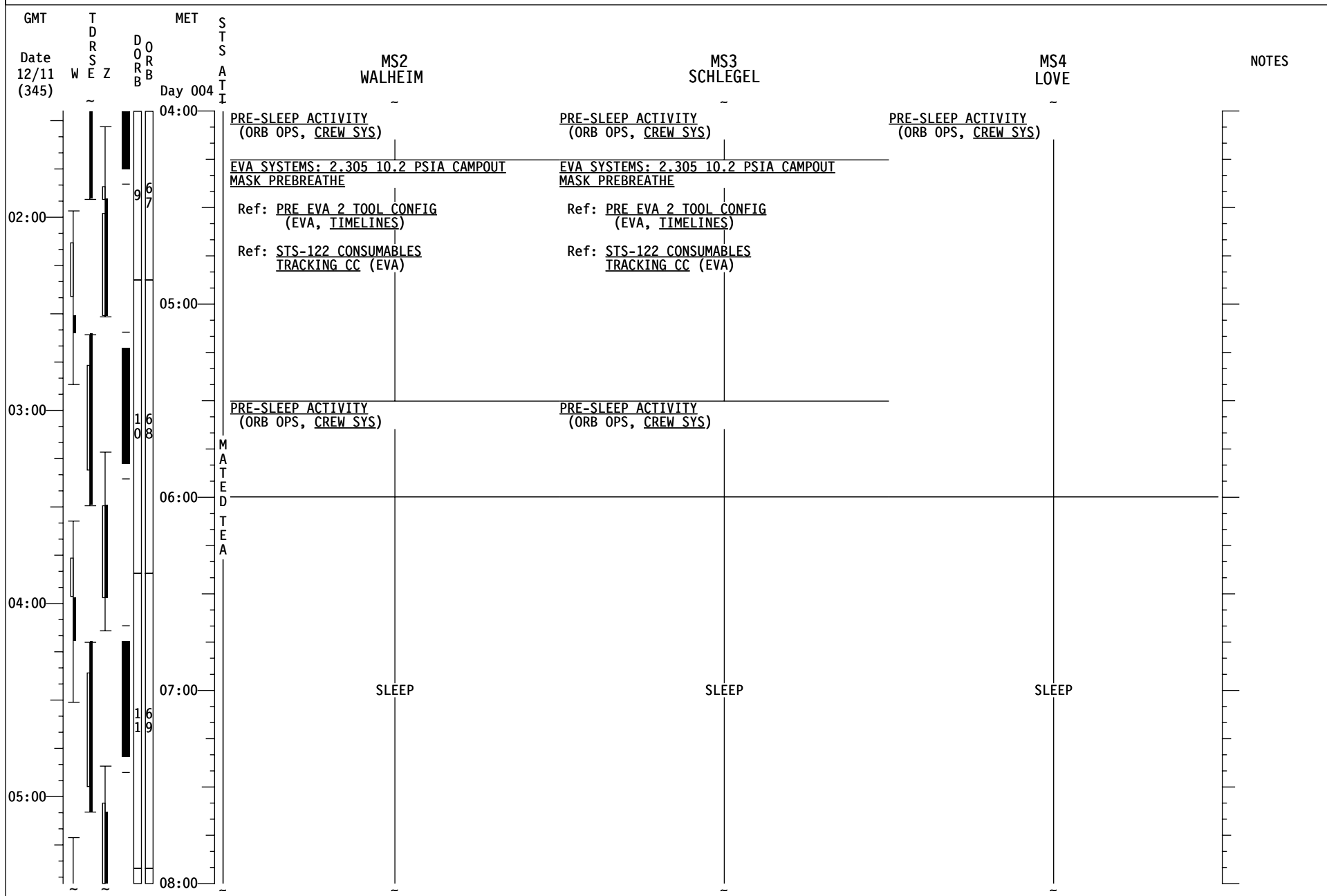
STS-122 FD (05)

GMT	T D R S E Z	MET	S T S	MS2 WALHEIM	MS3 SCHLEGEL	MS4 LOVE	NOTES
Date 12/10 (344)	W E Z	Day 004	A T I				
00:00				EVA TOOL CONFIG (EVA, TIMELINES) TRANSFER OPS Ref. Transfer List & MSG XXX	EVA TOOL CONFIG (EVA, TIMELINES)	FOCUSED INSPECTION Ref. MSG XXX	
22:00					EXERCISE		
					LOW BACK PAIN QUESTIONNAIRE (ASSY)		
23:00				PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	ESA PUBLIC AFFAIRS EVENT KU AVAIL: XX:XX-XX:XX	ESA PUBLIC AFFAIRS EVENT KU AVAIL: XX:XX-XX:XX	
					PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		
00:00				EVA2 PROCEDURE REVIEW Ref: EVA2 BRIEFING CARD (EVA, TIMELINES)	EVA2 PROCEDURE REVIEW Ref: EVA2 BRIEFING CARD (EVA, TIMELINES)	EVA2 PROCEDURE REVIEW Ref: EVA2 BRIEFING CARD (EVA, TIMELINES)	
01:00				PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
04:00							

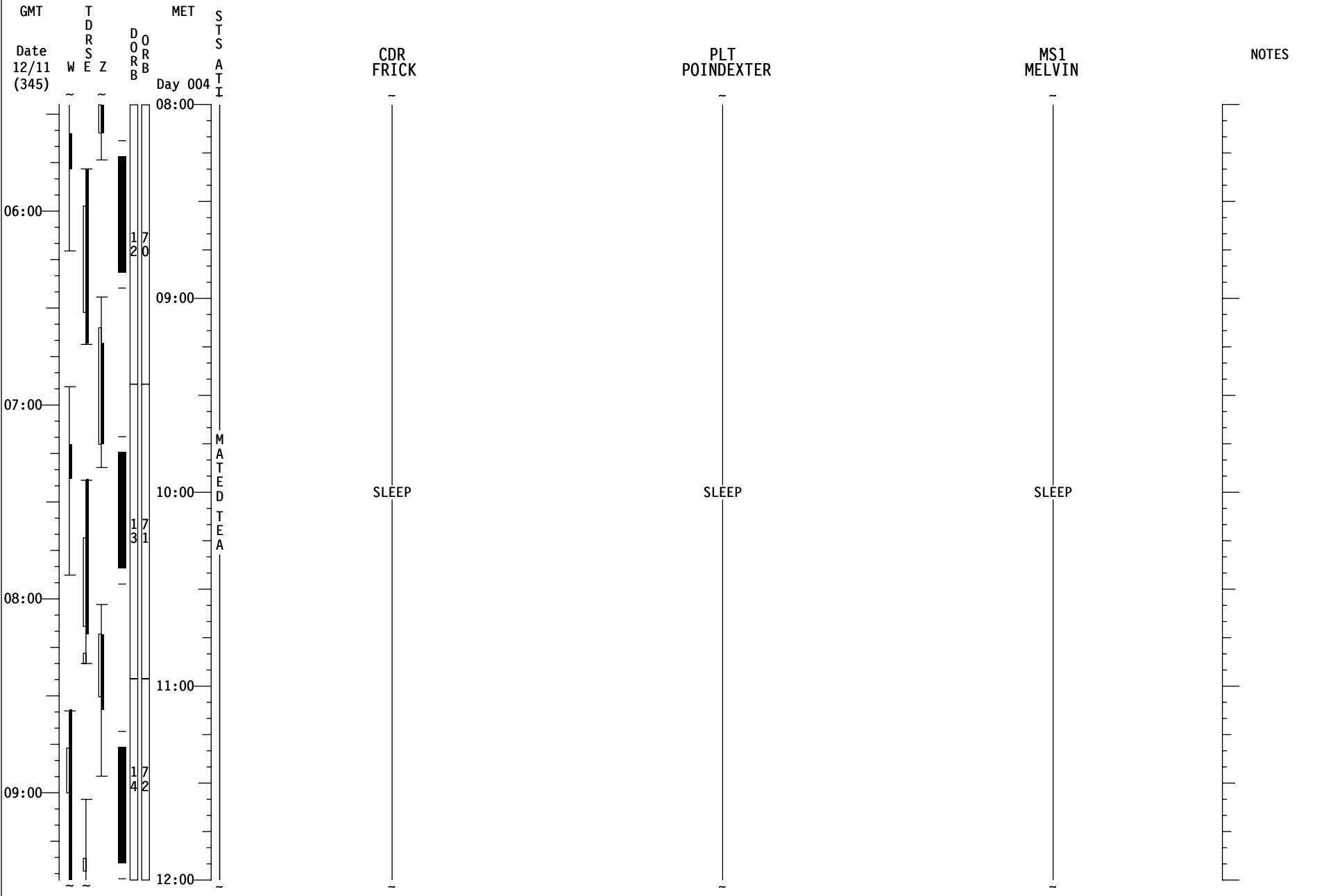
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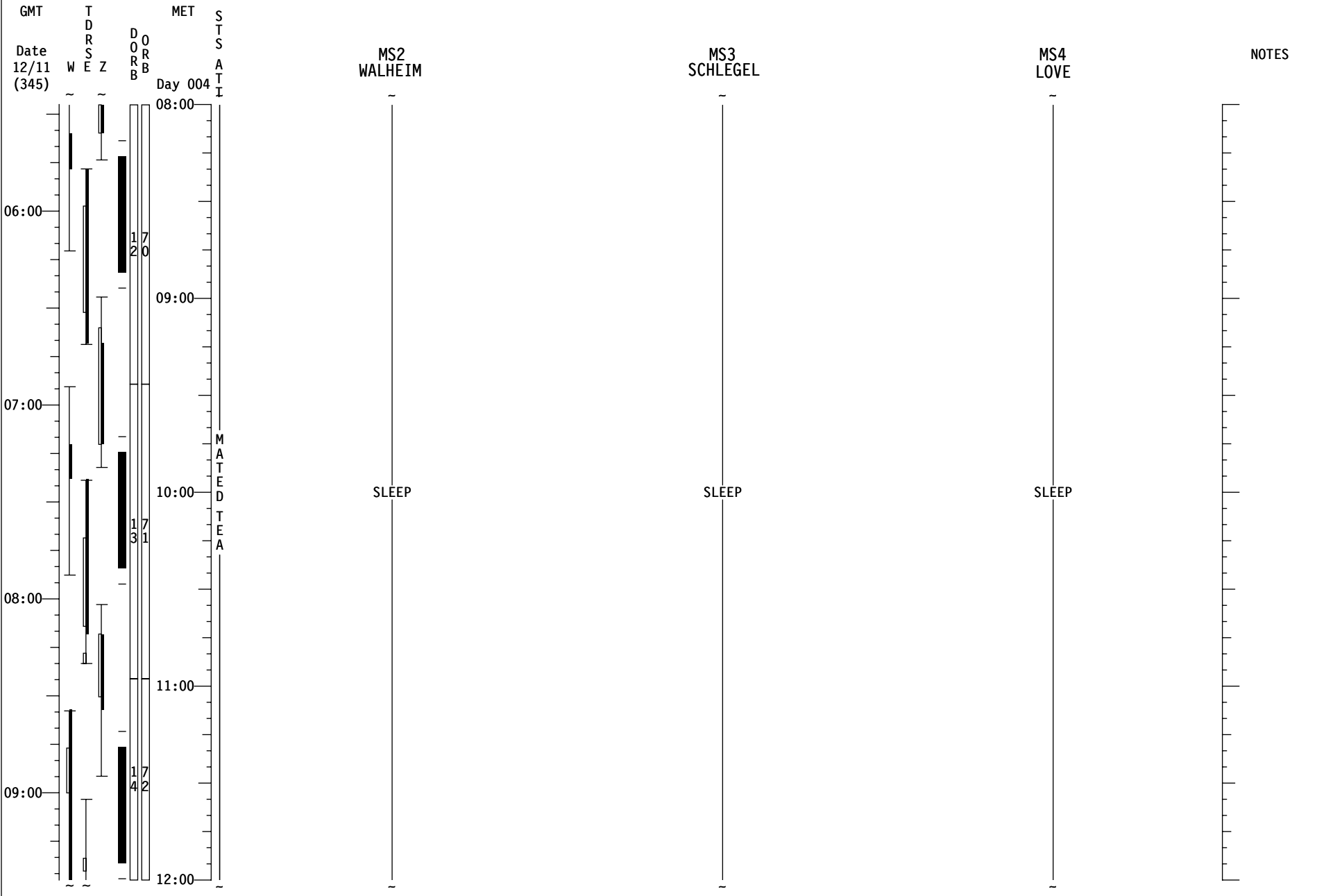
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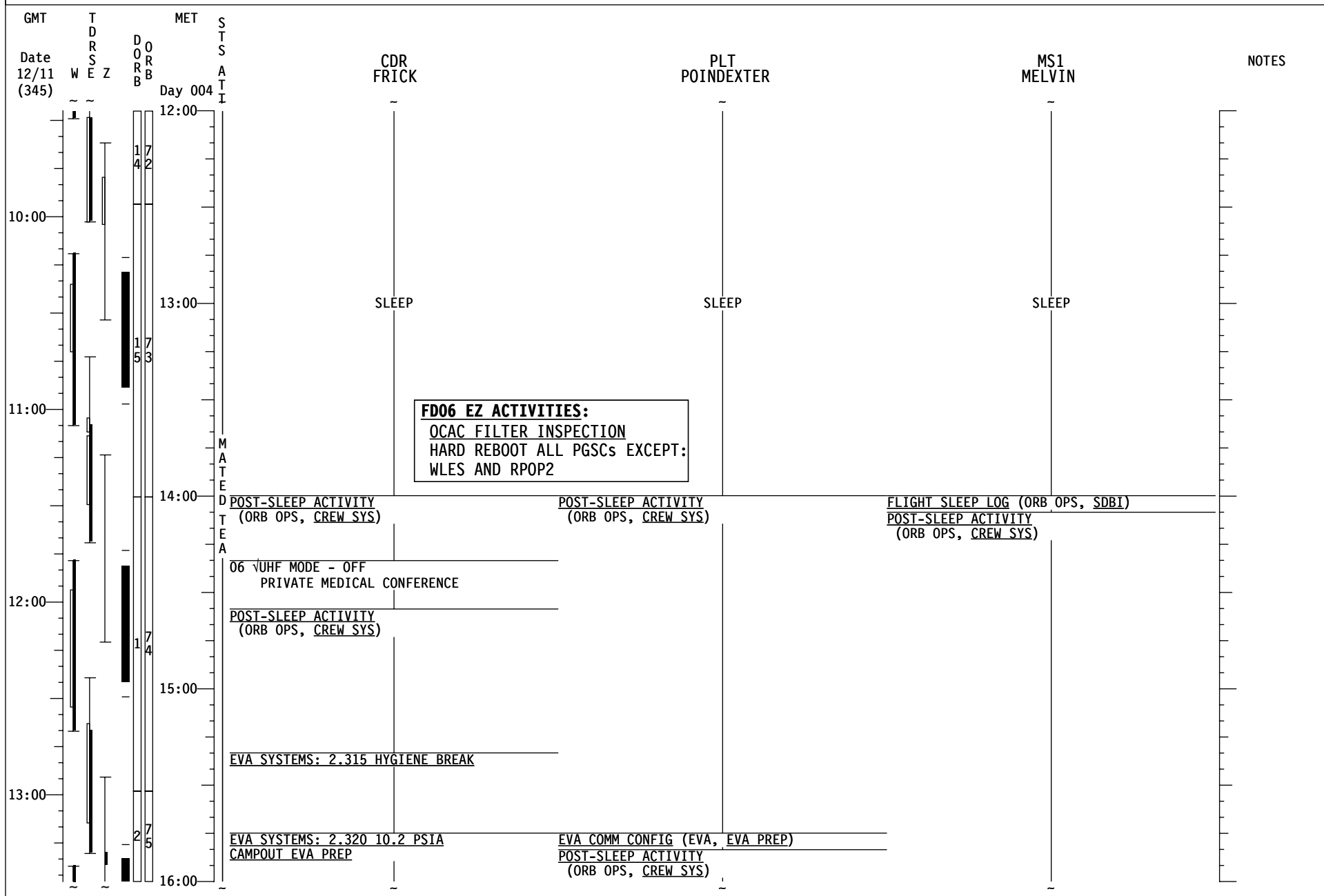
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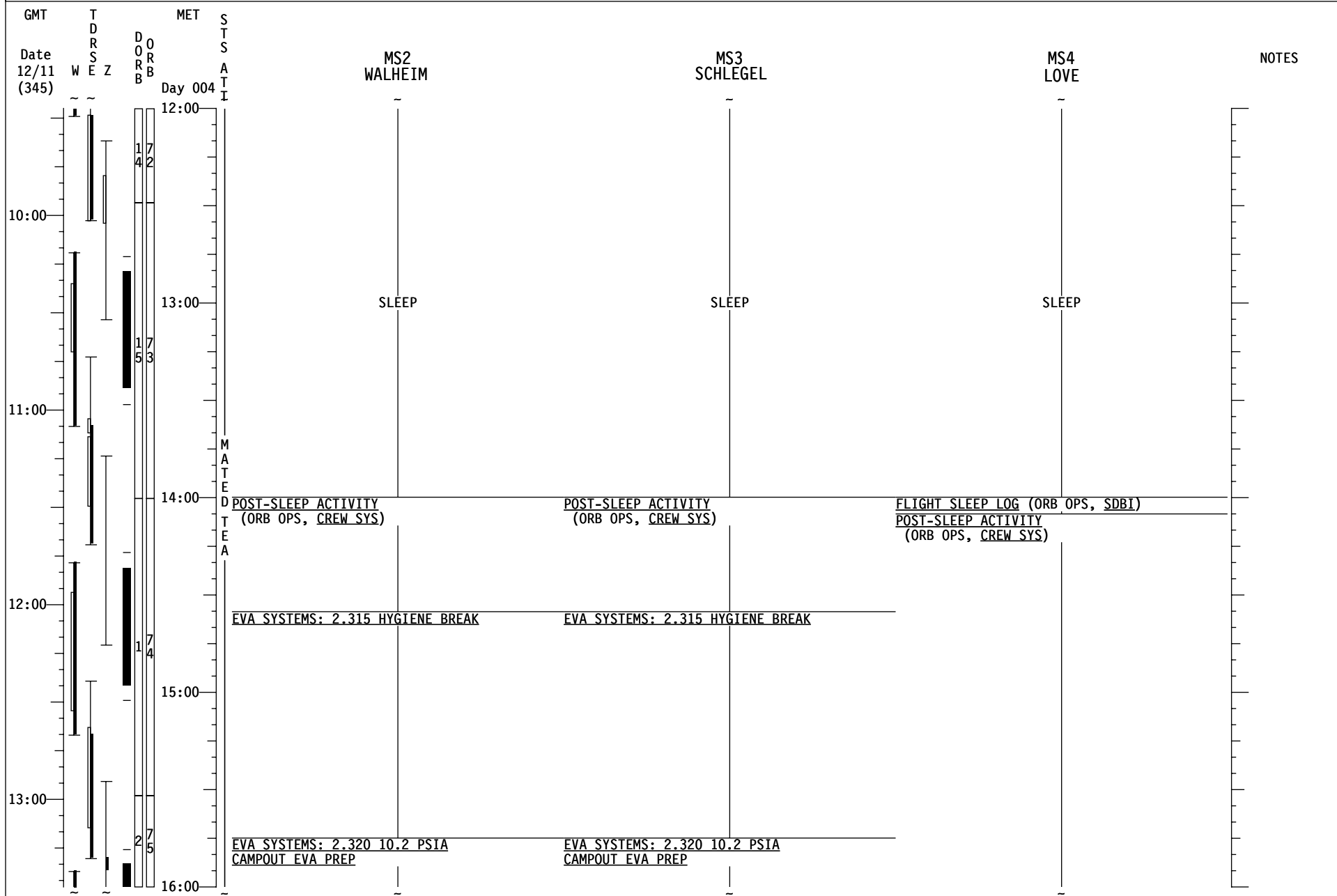
STS-122 FD (05)



STS-122 FD (06)



STS-122 FD (06)



STS-122 FD (06)

GMT	TDRSEZ	MET	S T S A T I	CDR FRICK	PLT POINDEXTER	MS1 MELVIN	NOTES
Date 12/11 (345)	W E Z	Day 004	D O R B				
16:00				EVA SYSTEMS: 2.320 10.2 PSIA CAMPOUT EVA PREP	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
14:00							
17:00					EVA INHIBIT PAD (EVA, TIMELINES)	OBSS MNVR TO EVA 2 VIEWING POSITION (PDRS, OBSS NOMINAL) Steps 1-3	
				EVA SYSTEMS: 1.220 EMU PURGE	SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #5 Ref. MSG XXX		
15:00				EVA SYSTEMS: 1.225 EMU PREBREATHE		EXERCISE	
18:00					EXERCISE	TRANSFER OPS Ref. Transfer List & MSG XXX	
				EVA SYSTEMS: CREWLOCK DEPRESS (CC)	SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION		UPLINK BO Only Box η, θ
16:00							
19:00				SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #6 Ref. MSG XXX			
				P/TVO7 EVA (PHOTO/TV, SCENES) Ops	IVA SUPPORT EVA2	SSRMS SUPPORT EVA2	
17:00							
20:00							

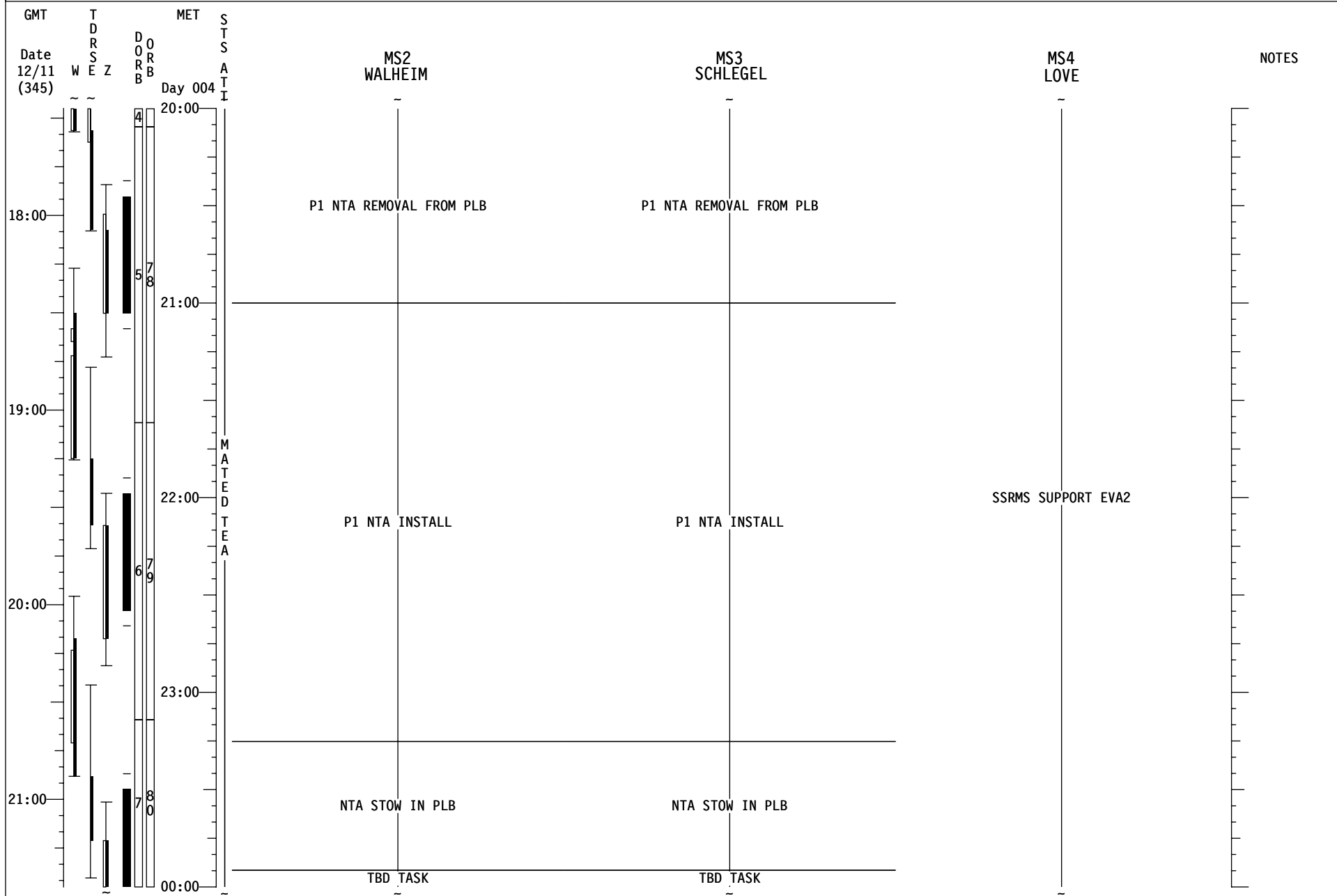
STS-122 FD (06)

GMT	TDRSEZ	MET	SATS	MS2 WALTHEIM	MS3 SCHLEGEL	MS4 LOVE	NOTES
Date 12/11 (345)	W E Z	Day 004	DOORB				
16:00				EVA SYSTEMS: 2.320 10.2 PSIA CAMPOUT EVA PREP	EVA SYSTEMS: 2.320 10.2 PSIA CAMPOUT EVA PREP	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
14:00							
17:00							
15:00				EVA SYSTEMS: 1.220 EMU PURGE	EVA SYSTEMS: 1.220 EMU PURGE		
				EVA SYSTEMS: 1.225 EMU PREBREATHE	EVA SYSTEMS: 1.225 EMU PREBREATHE		
18:00							
16:00				EVA SYSTEMS: CREWLOCK DEPRESS (CC)	EVA SYSTEMS: CREWLOCK DEPRESS (CC)	EXERCISE	
				EVA SYSTEMS: CREWLOCK POST DEPRESS (CC)	EVA SYSTEMS: CREWLOCK POST DEPRESS (CC)		
19:00				EVA SYSTEMS: CREWLOCK EGRESS (CC)	EVA SYSTEMS: CREWLOCK EGRESS (CC)		
17:00				P1 NTA REMOVAL FROM PLB	P1 NTA REMOVAL FROM PLB	SSRMS SUPPORT EVA2	
20:00							

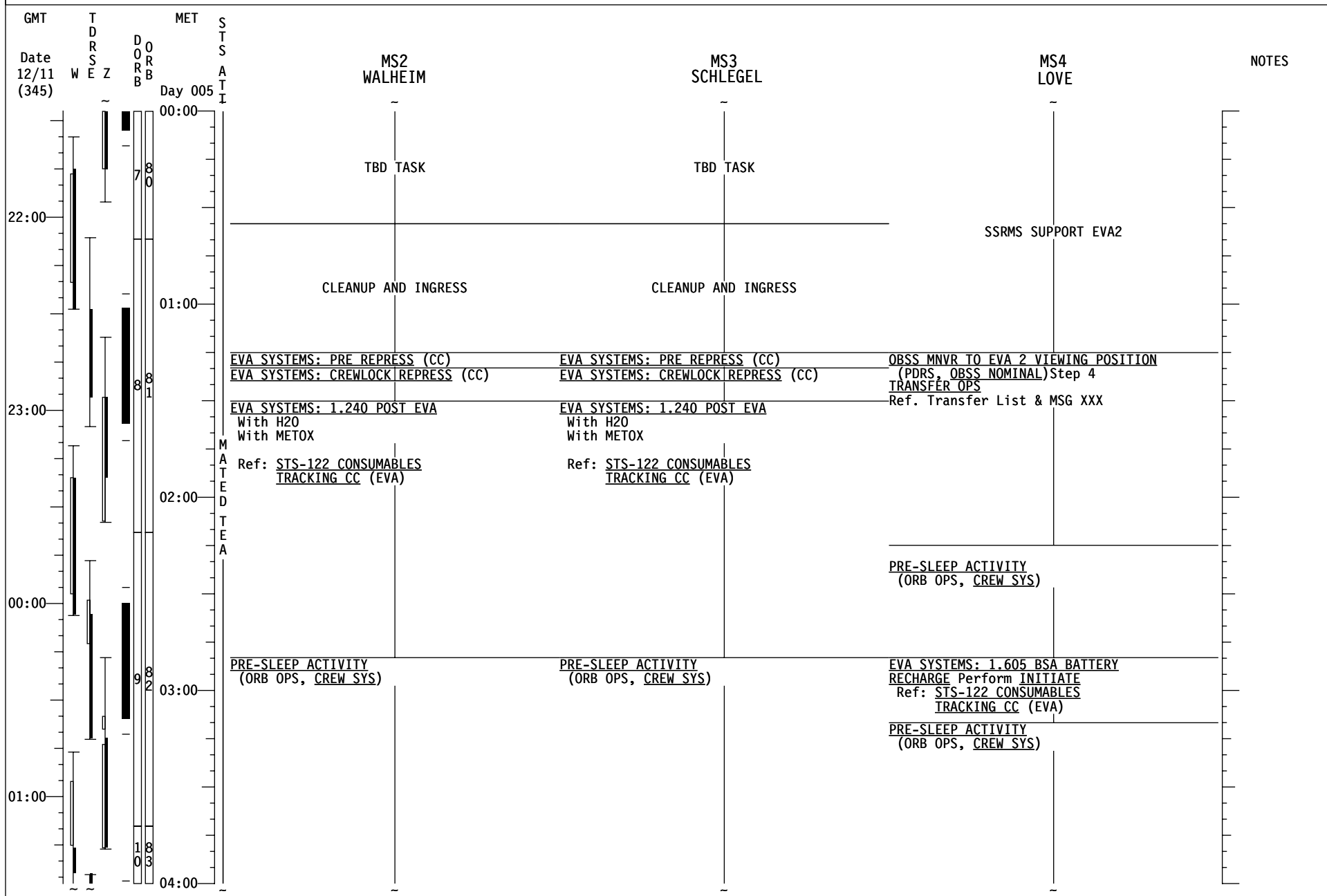
STS-122 FD (06)

GMT	TDRS W E Z	MET Day 004	S T S A T I	CDR FRICK	PLT POINDEXTER	MS1 MELVIN	NOTES
Date 12/11 (345)	D O R B 4 5 6 7 8	20:00 18:00 21:00 19:00 22:00 20:00 23:00 21:00 00:00	M A T E D T E	<p>P/TV07 EVA (PHOTO/TV, SCENES) Ops</p> <hr/> <p>SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION</p> <hr/> <p>CWC TRANSFER Transfer 2 CWCs to ISS</p> <hr/> <p>MEAL</p> <hr/> <p>P/TV07 EVA (PHOTO/TV, SCENES) Ops</p> <hr/> <p>A P/TV07 EVA (PHOTO/TV, SCENES) Ops</p>	<p>I V A S U P P O R T E V A 2</p>	<p>S S R M S S U P P O R T E V A 2</p>	<div style="border-left: 1px solid black; border-right: 1px solid black; height: 100%;"></div>

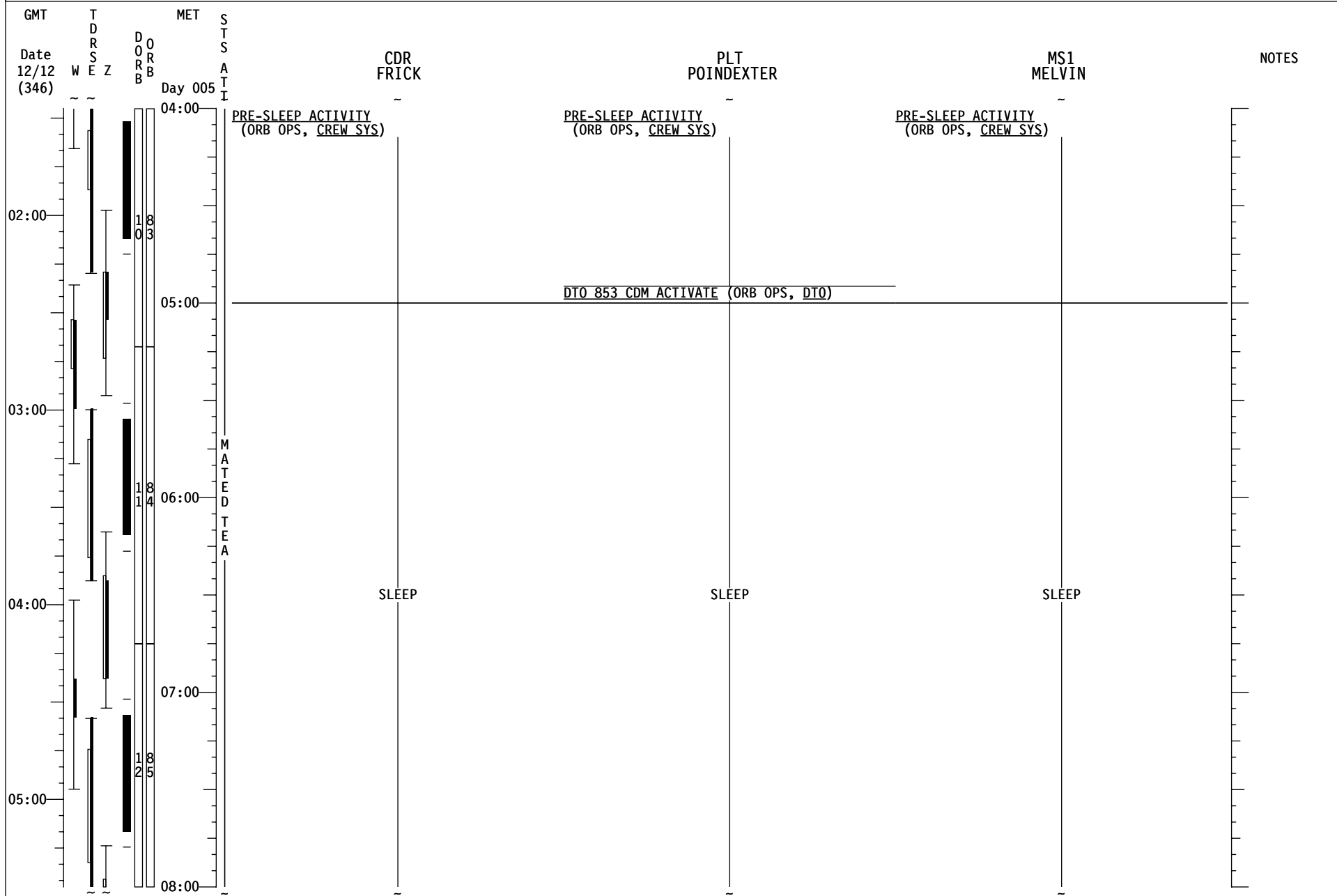
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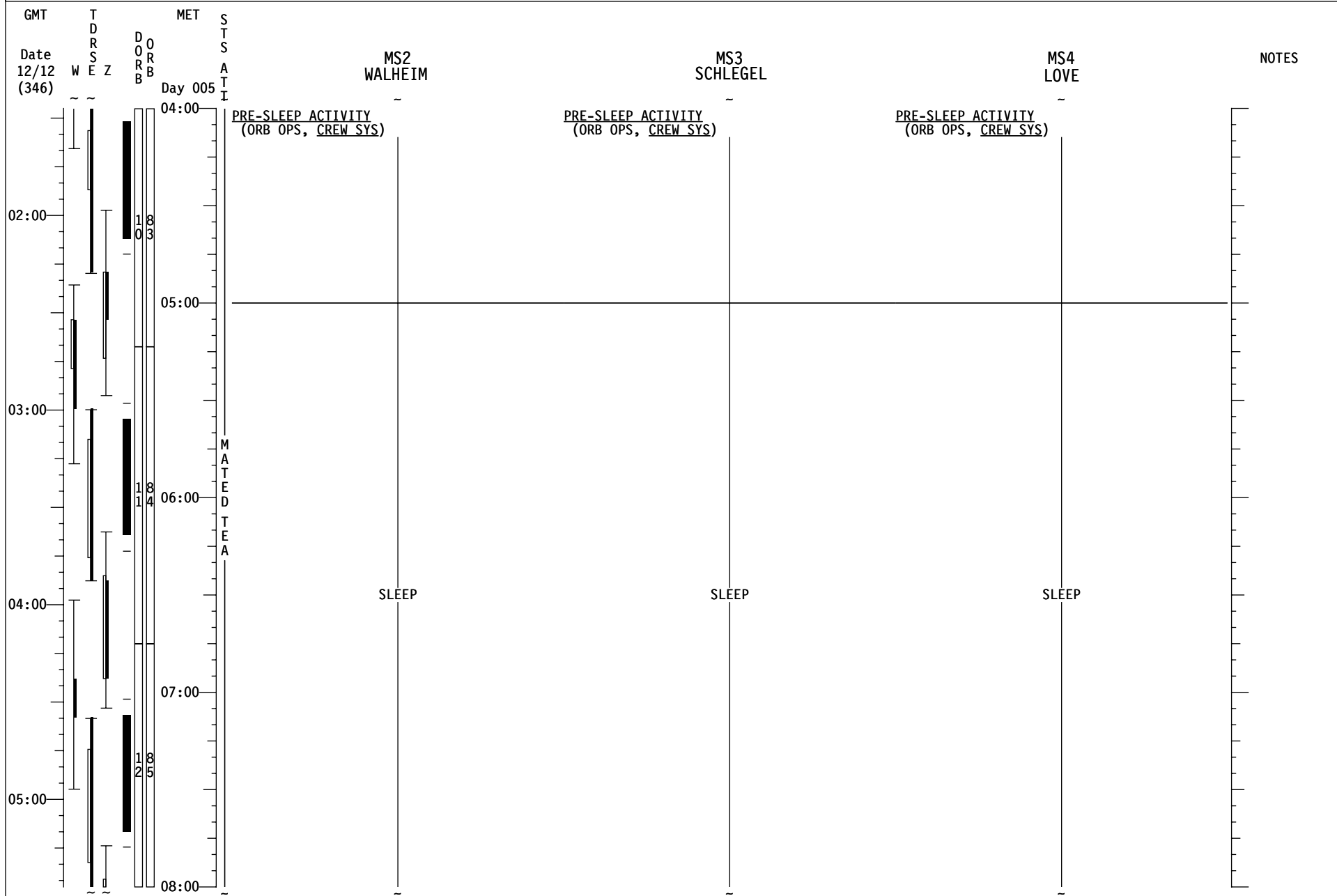
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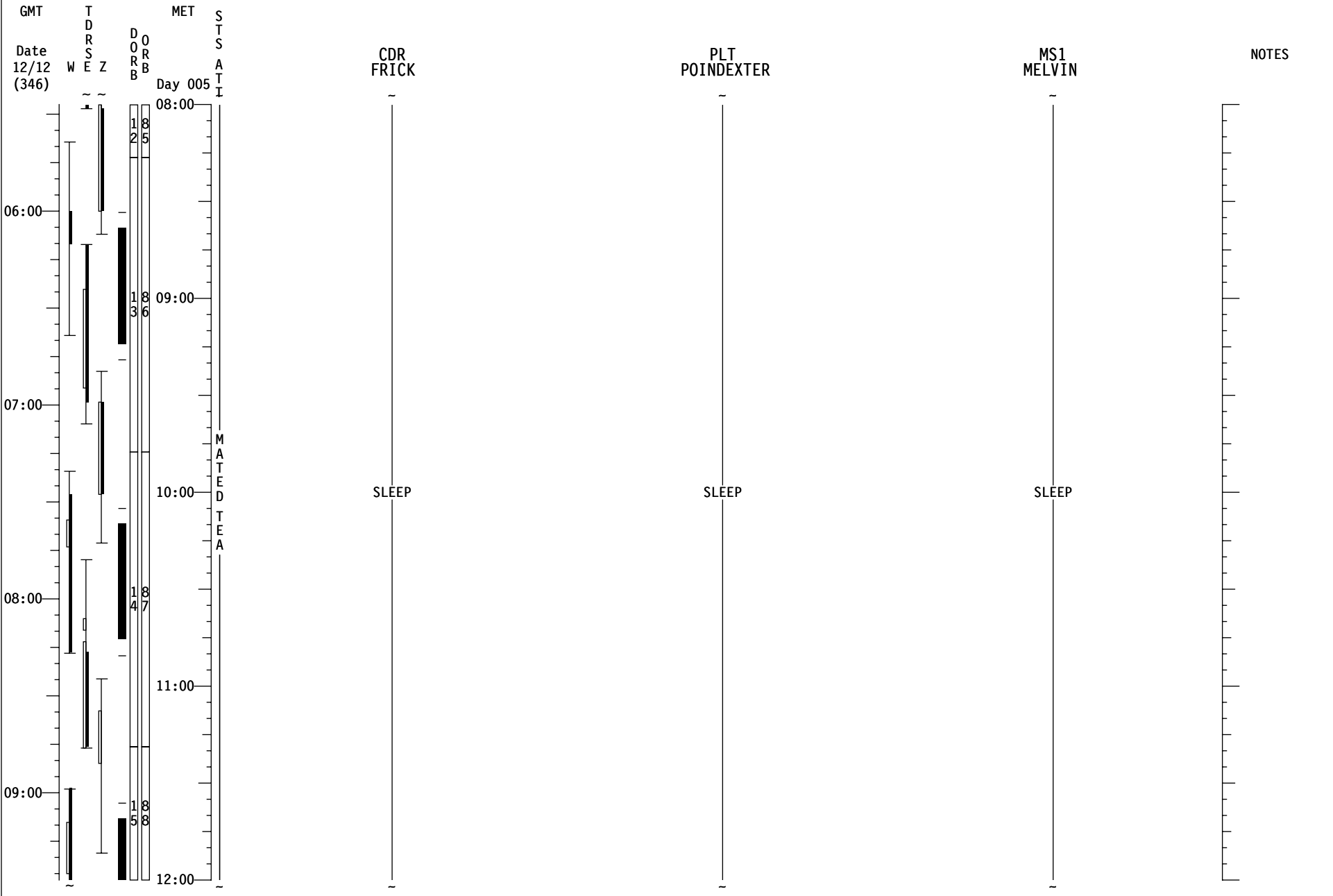
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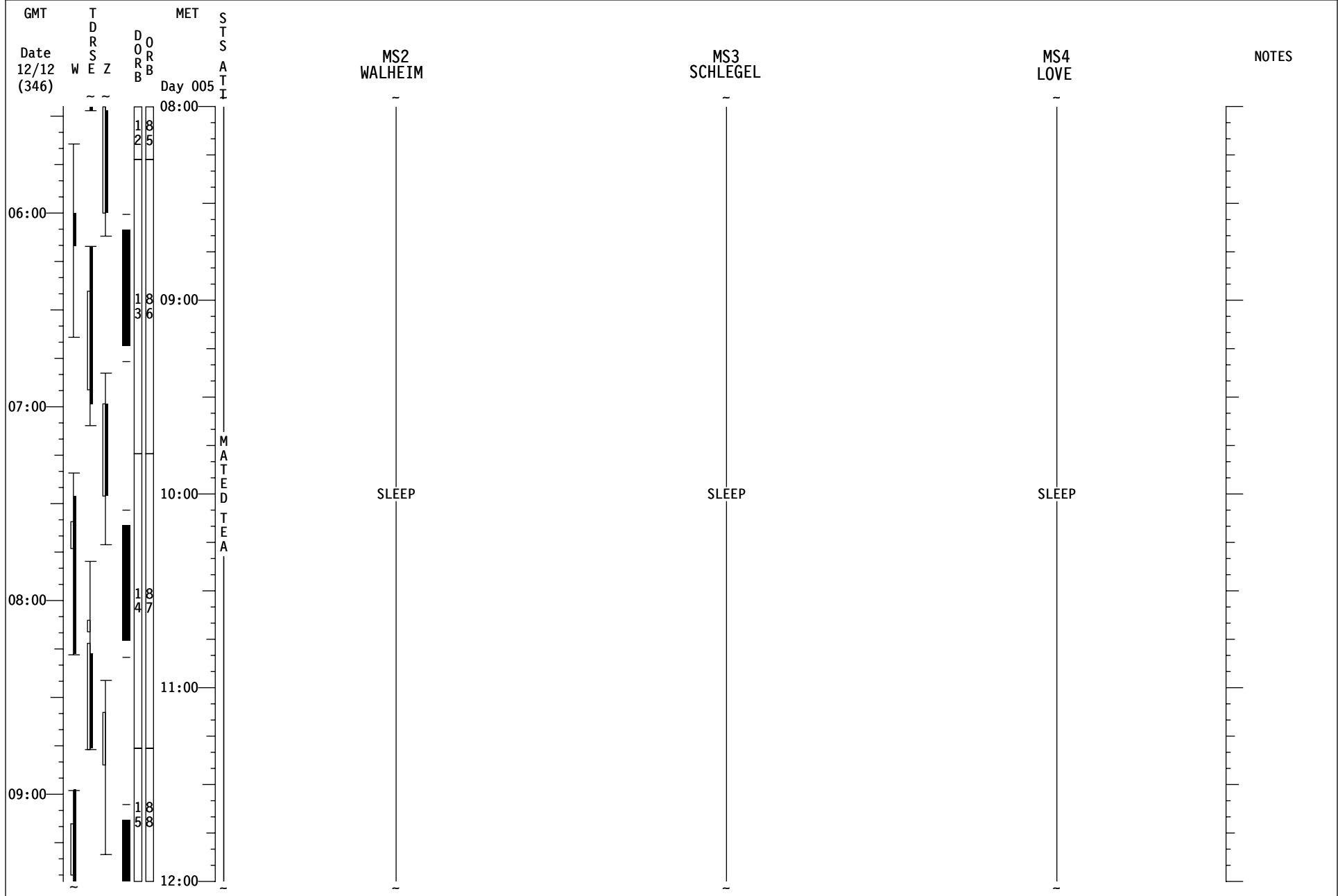
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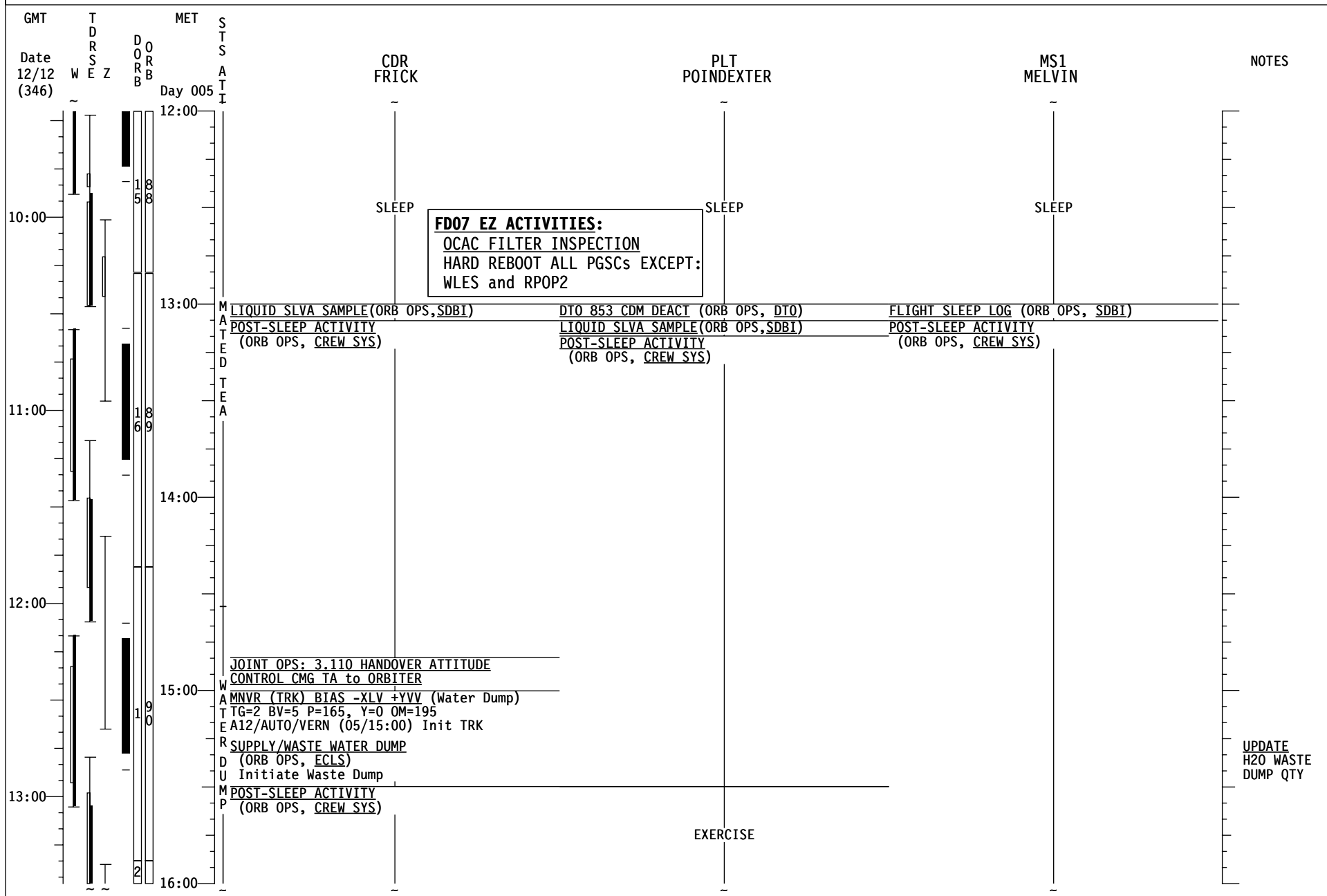
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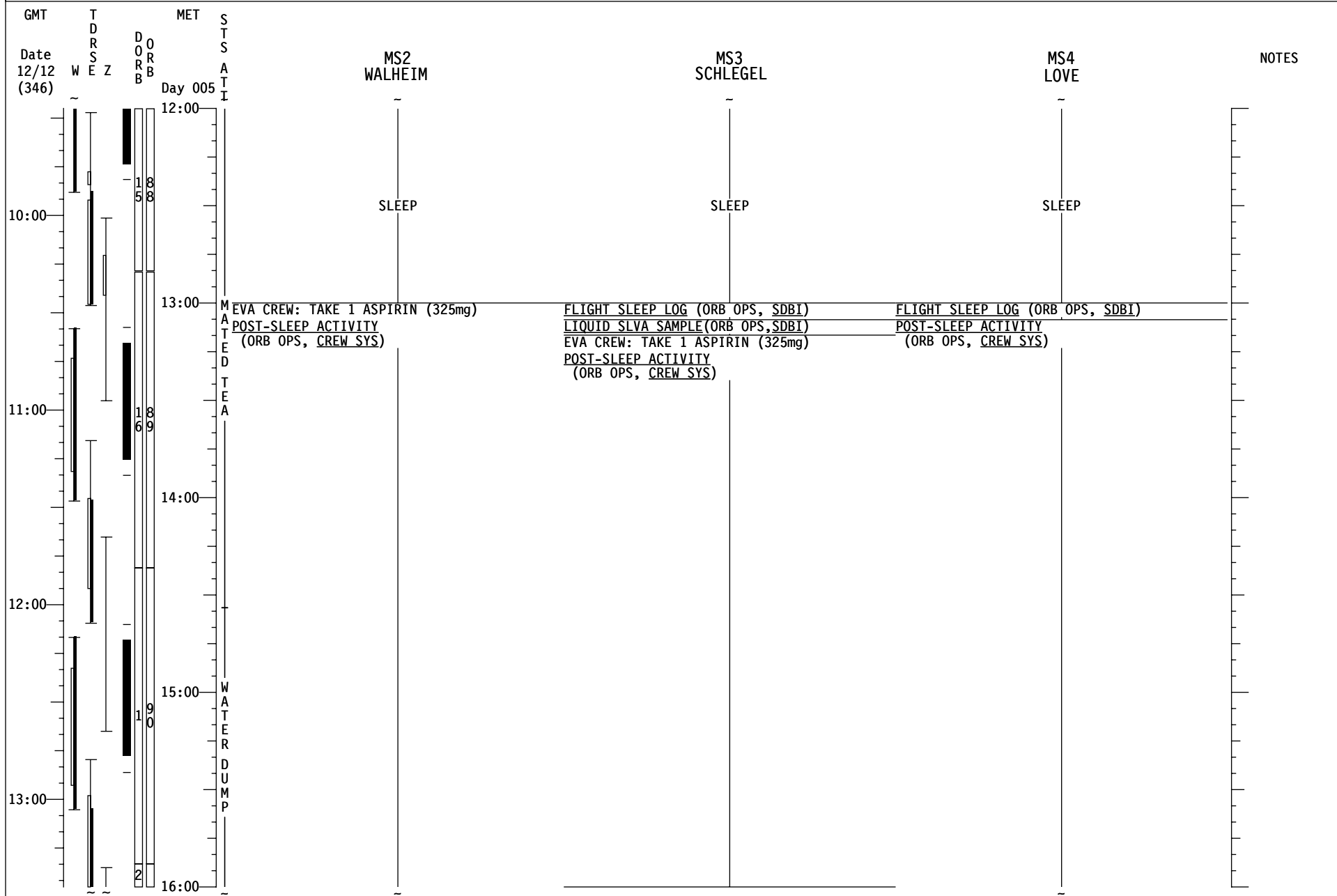
STS-122 FD (06)



STS-122 FD (07)



STS-122 FD (07)



STS-122 FD (07)

GMT	TDRSEZ	MET	SATS	CDR FRICK	PLT POINDEXTER	MS1 MELVIN	NOTES
Date 12/12 (346)	W E Z	Day 005	1				
16:00				POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	EXERCISE	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
14:00			2	SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) Terminate Waste Dump	L17 Check MCIU filter screen DTQ 853 CDM BATTERY CHANGEOUT (ORB OPS, DTQ)		
17:00				MNVR (TRK) BIAS -XLV -ZVV TG=2 BV=5 P=164.92 Y=354.21 OM=186.56 A12/AUTO/VERN Init TRK	N2 REPRESS USING PAYLOAD N2 VLVS [A] P/TV05 ISS INTERNAL OPS (PHOTO/TV, SCENES) Setup	EXERCISE	
15:00				JOINT OPS: 3.111 HANDOVER ATTITUDE CONTROL ORBITER to CMGTA			
				PUBLIC AFFAIRS EVENT KU AVAIL: XX:XX-XX:XX	PUBLIC AFFAIRS EVENT KU AVAIL: XX:XX-XX:XX		
18:00			3		A] N2 REPRESS USING PAYLOAD N2 VLVS (ORB OPS, ECLS) Steps 1-5, On MCC Go, perform step 6 MCC will TMBU all S/W limits	1.207 COLUMBUS ISPR RACK RELOCATION (ASSY OPS, ACT&C/O) Relocate EDR to F1	
16:00				EXERCISE	P/TV07 EVA (PHOTO/TV, SCENES) Setup		
					SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS) Perform CHANGEOUT Use CWC S/N XXX		
19:00					N2 REPRESS USING PAYLOAD N2 VLVS [B]		
17:00			4	OFF DUTY	OFF DUTY	B] N2 REPRESS USING PAYLOAD N2 VLVS (ORB OPS, ECLS) On MCC Go, perform steps 7-12 MCC will TMBU all S/W limits	OCA-PFC
					VIDEO TELECONFERENCE (ORB OPS, OCA) Private Family Conference	OFF DUTY	
20:00					OFF DUTY		

STS-122 FD (07)

GMT Date 12/12 (346)	T D R S E Z W E Z	D O R B D O R B	MET Day 005	S T S A T I	MS2 WALHEIM	MS3 SCHLEGEL	MS4 LOVE	NOTES
					<p>16:00 POST-SLEEP ACTIVITY - (ORB OPS, CREW SYS) EVA TOOL CONFIG (EVA, TIMELINES)</p>		<p>16:00 POST-SLEEP ACTIVITY - (ORB OPS, CREW SYS) EVA TOOL CONFIG (EVA, TIMELINES)</p>	
						EXERCISE		
					<p>17:00 EMU SWAP (EVA, AIRLOCK CONFIG) EMU X to MDDK, EMU Y to A/L</p>	<p>BANISTER DESTOWAGE (ASSY OPS, ACT&C/O)</p>	<p>EMU SWAP (EVA, AIRLOCK CONFIG) EMU X to MDDK, EMU Y to A/L</p>	
					<p>15:00 EVA SYSTEMS: 1.515 EMU METOX/LIOH/BATTERY REPLACEMENT Install METOX Canisters Ref: STS-122 CONSUMABLES TRACKING CC (EVA)</p>	PUBLIC AFFAIRS EVENT KU AVAIL: XX:XX-XX:XX	<p>EVA SYSTEMS: 1.515 EMU METOX/LIOH/BATTERY REPLACEMENT Install METOX Canisters Ref: STS-122 CONSUMABLES TRACKING CC (EVA)</p>	
					<p>18:00 EVA SYSTEMS: 1.305 EQUIPMENT LOCK PREP Ref: STS-122 CONSUMABLES TRACKING CC (EVA)</p>	<p>1.207 COLUMBUS ISPR RACK RELOCATION (ASSY OPS, ACT&C/O) Relocate EDR to F1</p>	<p>EVA SYSTEMS: 1.305 EQUIPMENT LOCK PREP Ref: STS-122 CONSUMABLES TRACKING CC (EVA)</p>	
					OFF DUTY		OFF DUTY	
						<p>19:00 DISABLE WLES FILE B/U (ORB OPS, WLES)</p>		
					MEAL	OFF DUTY	MEAL	
						OFF DUTY		
						MEAL		

STS-122 FD (07)

GMT	TDRSEZ	MET	SATS	CDR FRICK	PLT POINDEXTER	MS1 MELVIN	NOTES
Date 12/12 (346)	W E Z	Day 005	Day 005				
18:00				MEAL	MEAL	MEAL	
19:00							
20:00				OFF DUTY	OFF DUTY		
21:00							
22:00							
23:00							
00:00							

VIDEO TELECONFERENCE
(ORB OPS, OCA)
Private Family Conference

VIDEO TELECONFERENCE
(ORB OPS, OCA)
Private Family Conference

OCA-PFC

OCA-PFC

OFF DUTY

OFF DUTY

OFF DUTY

MATED TEA

DORB

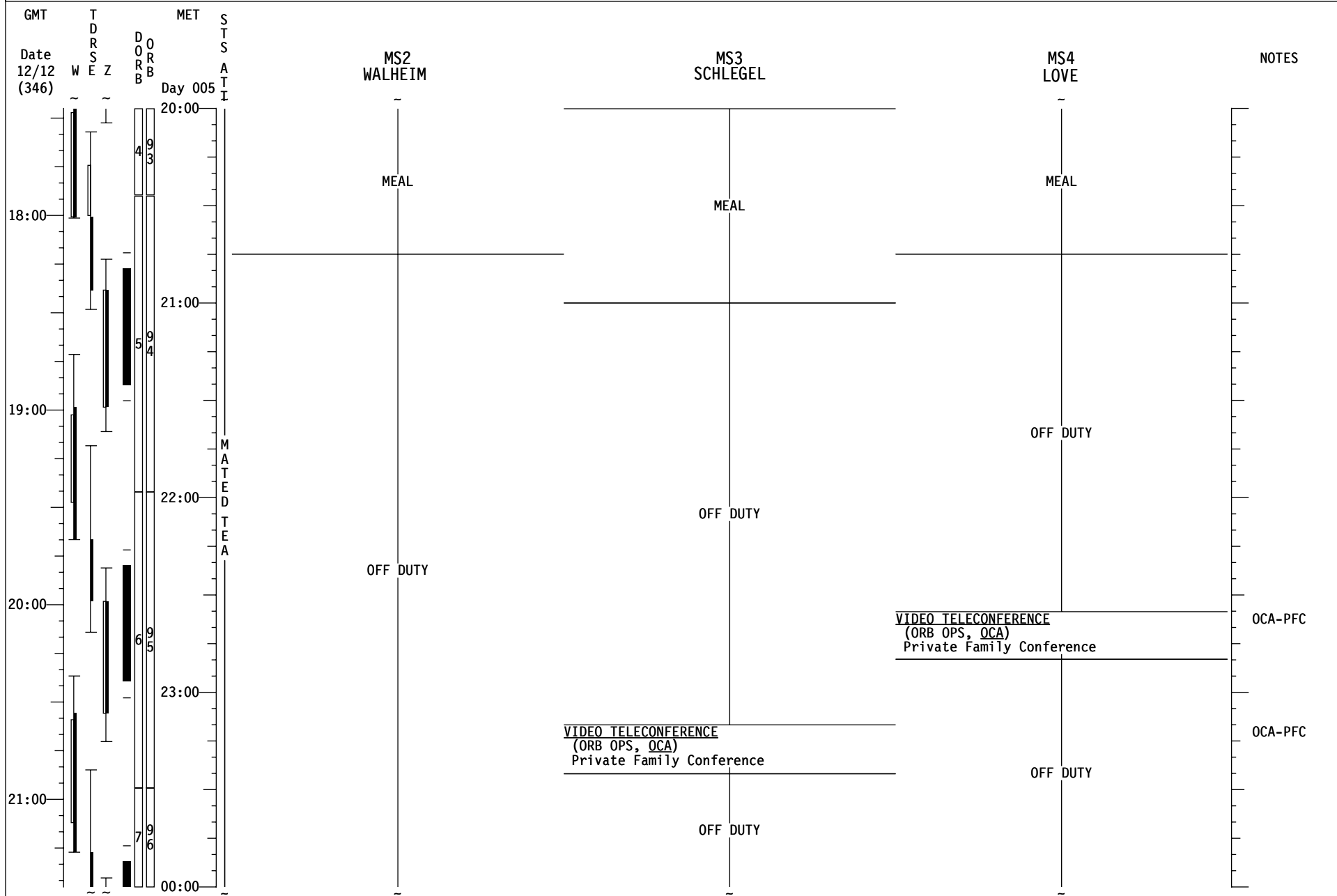
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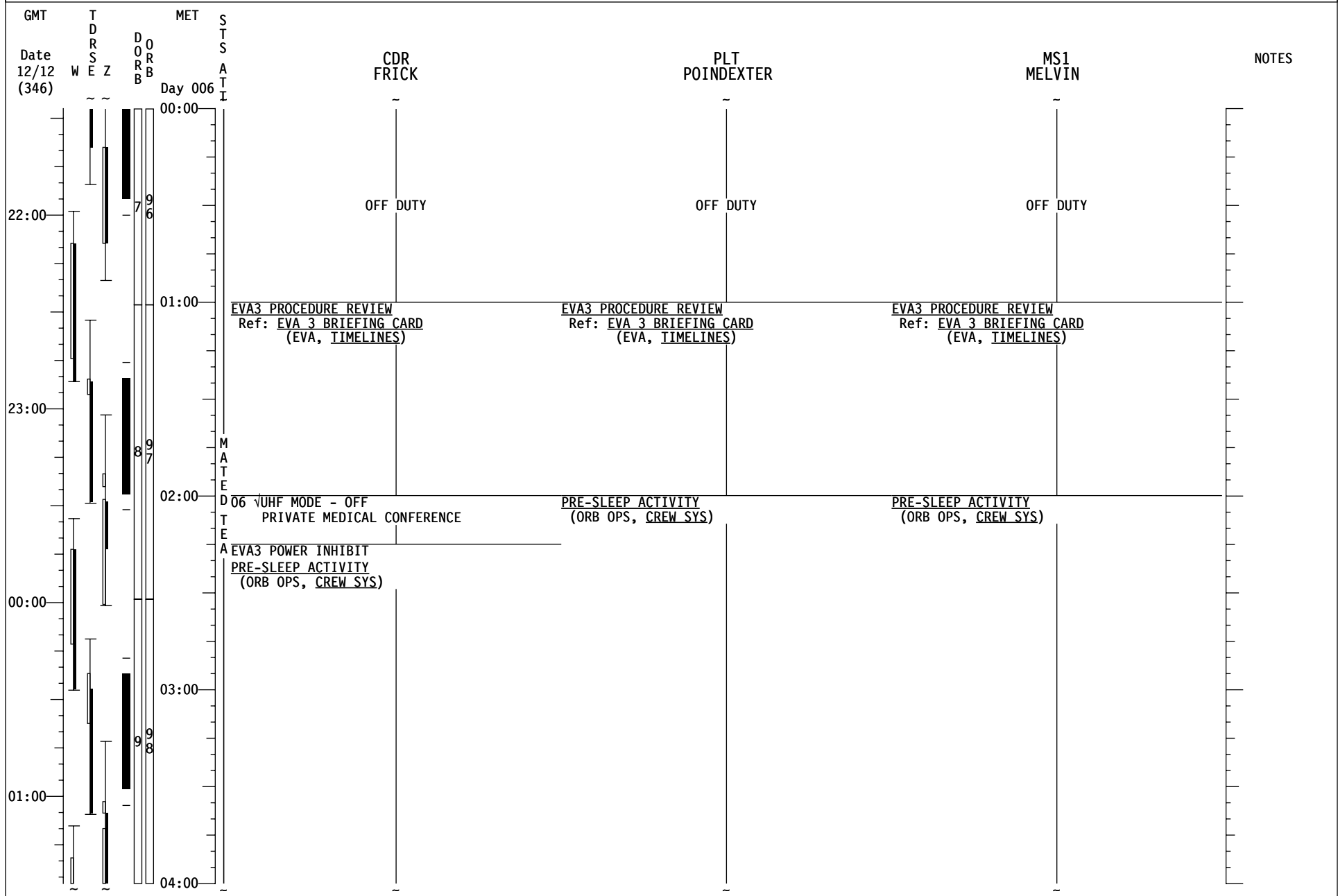
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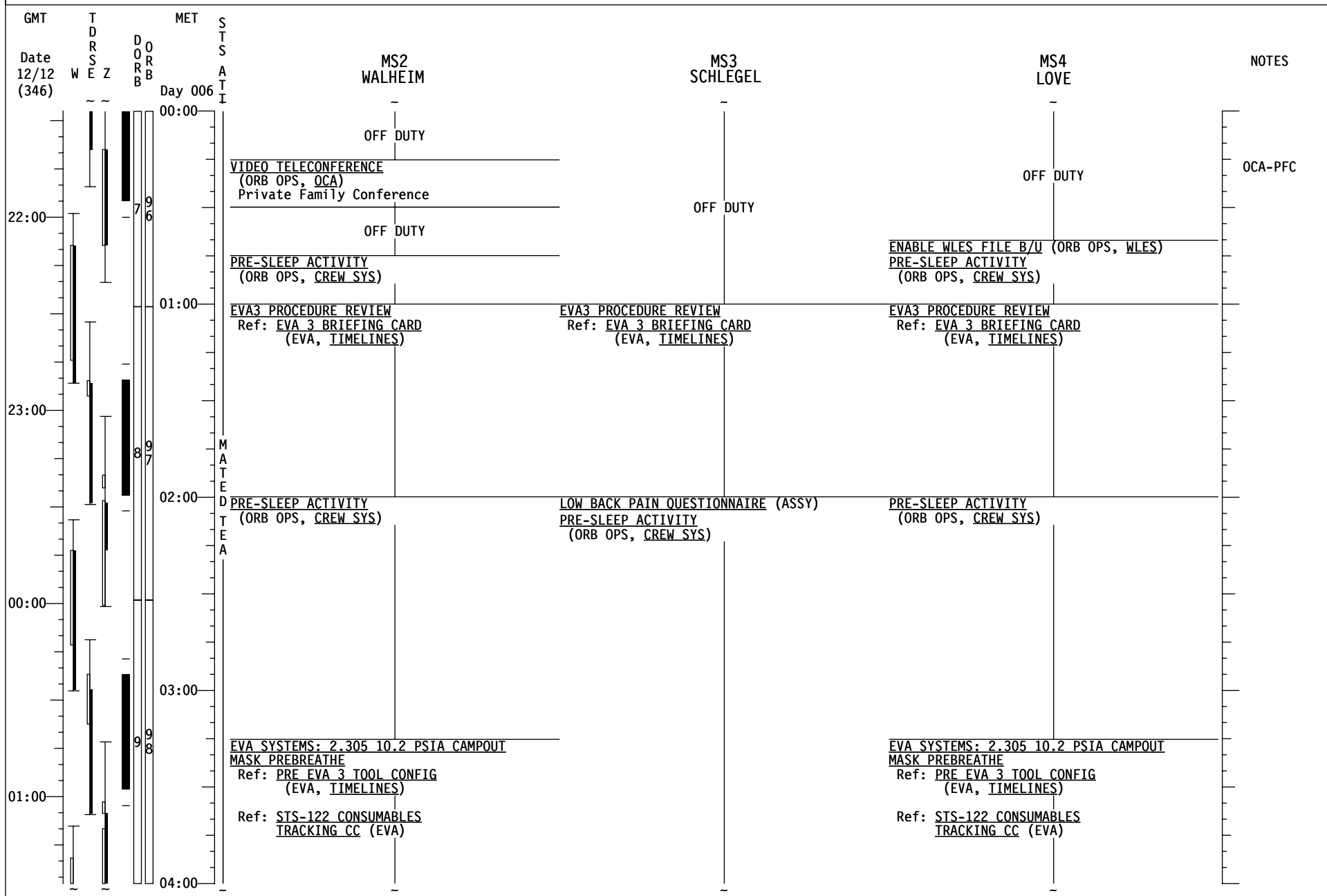
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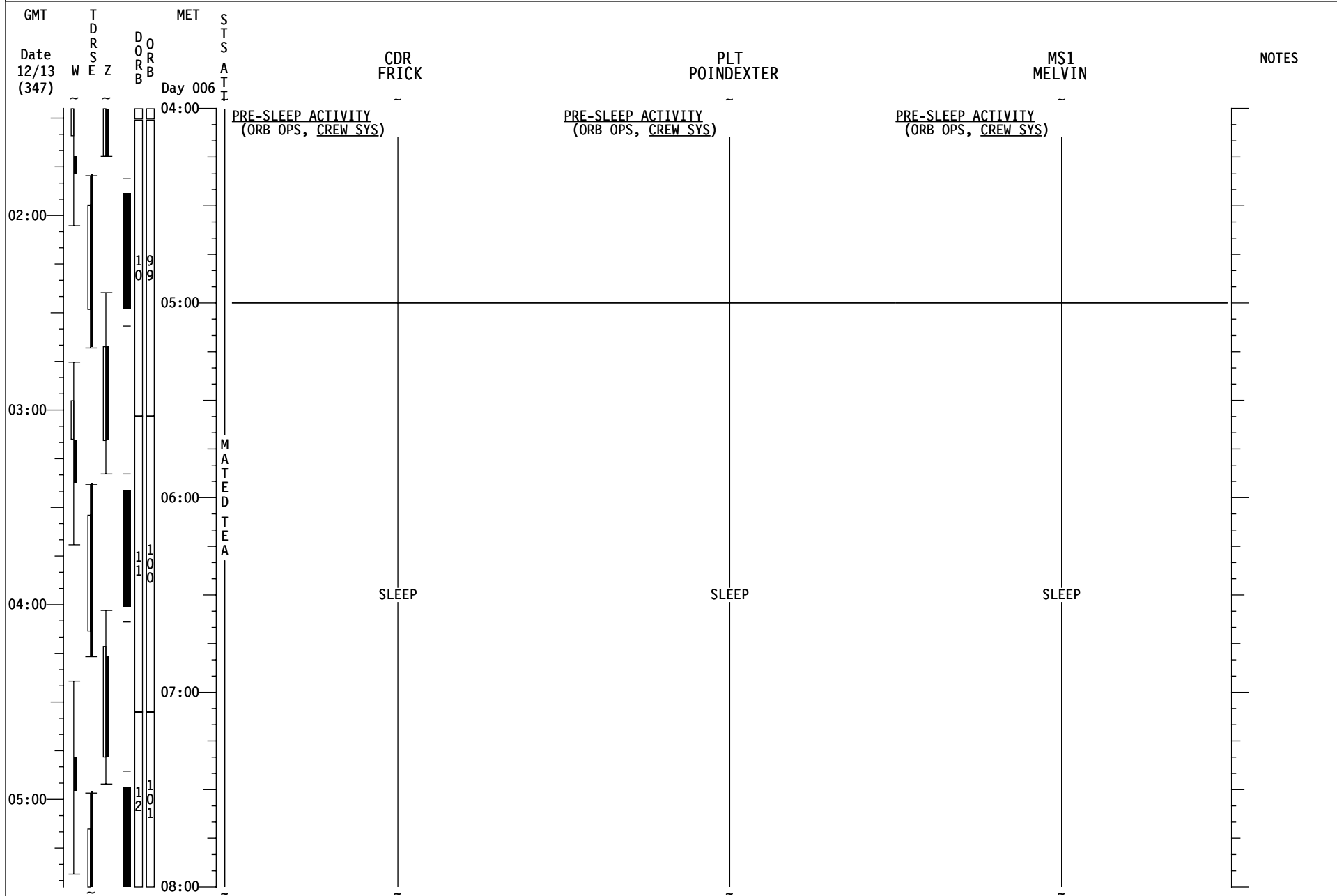
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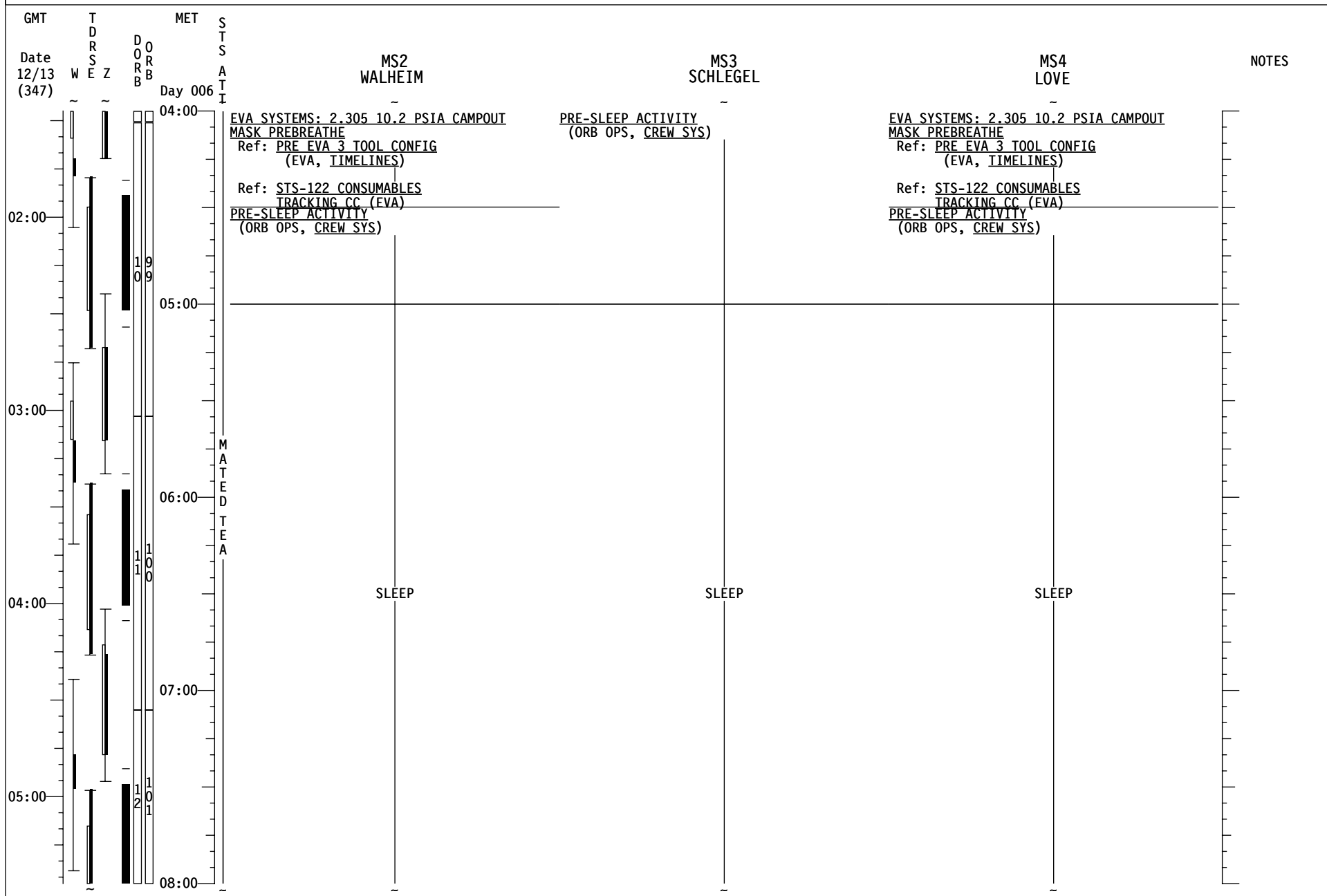
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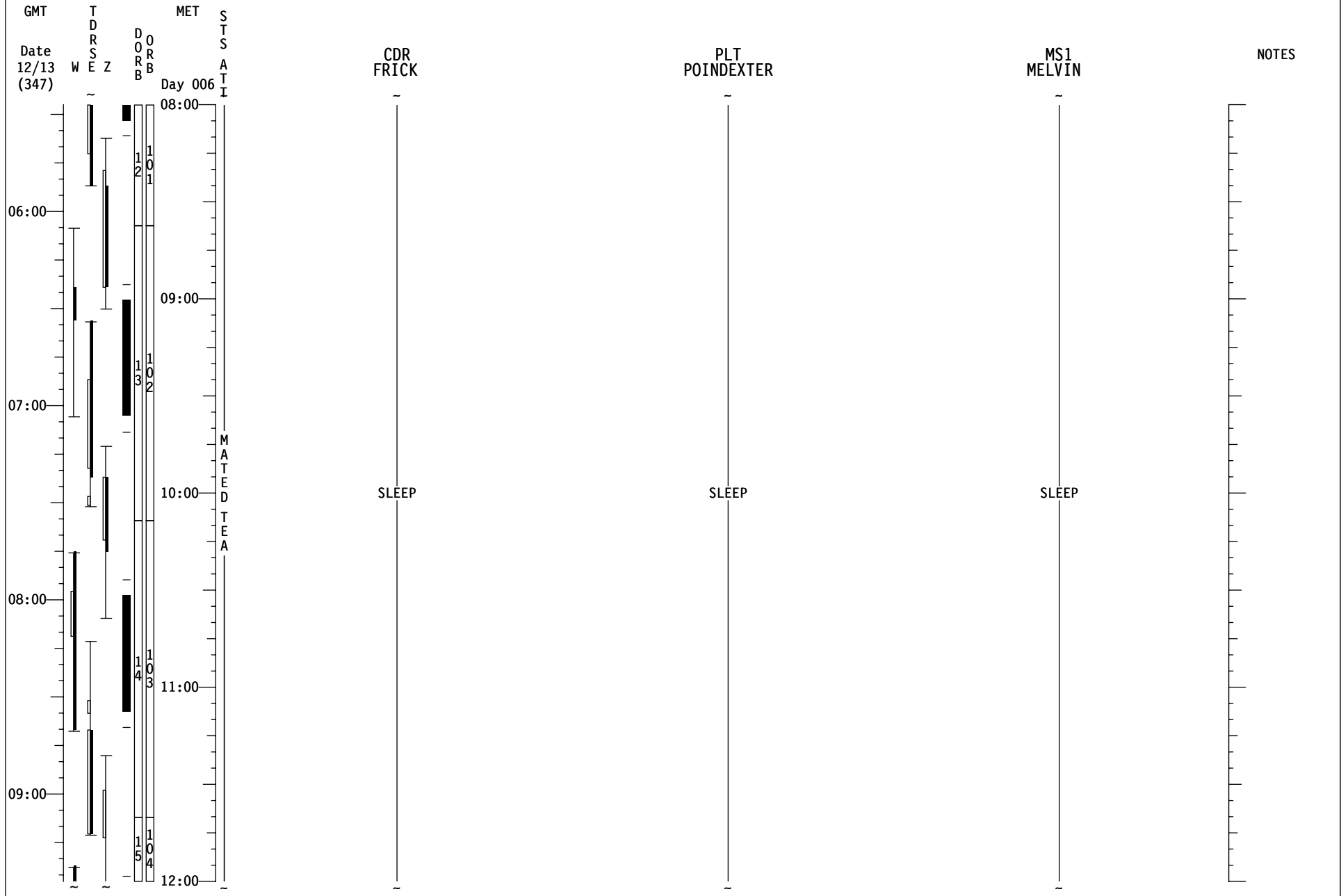
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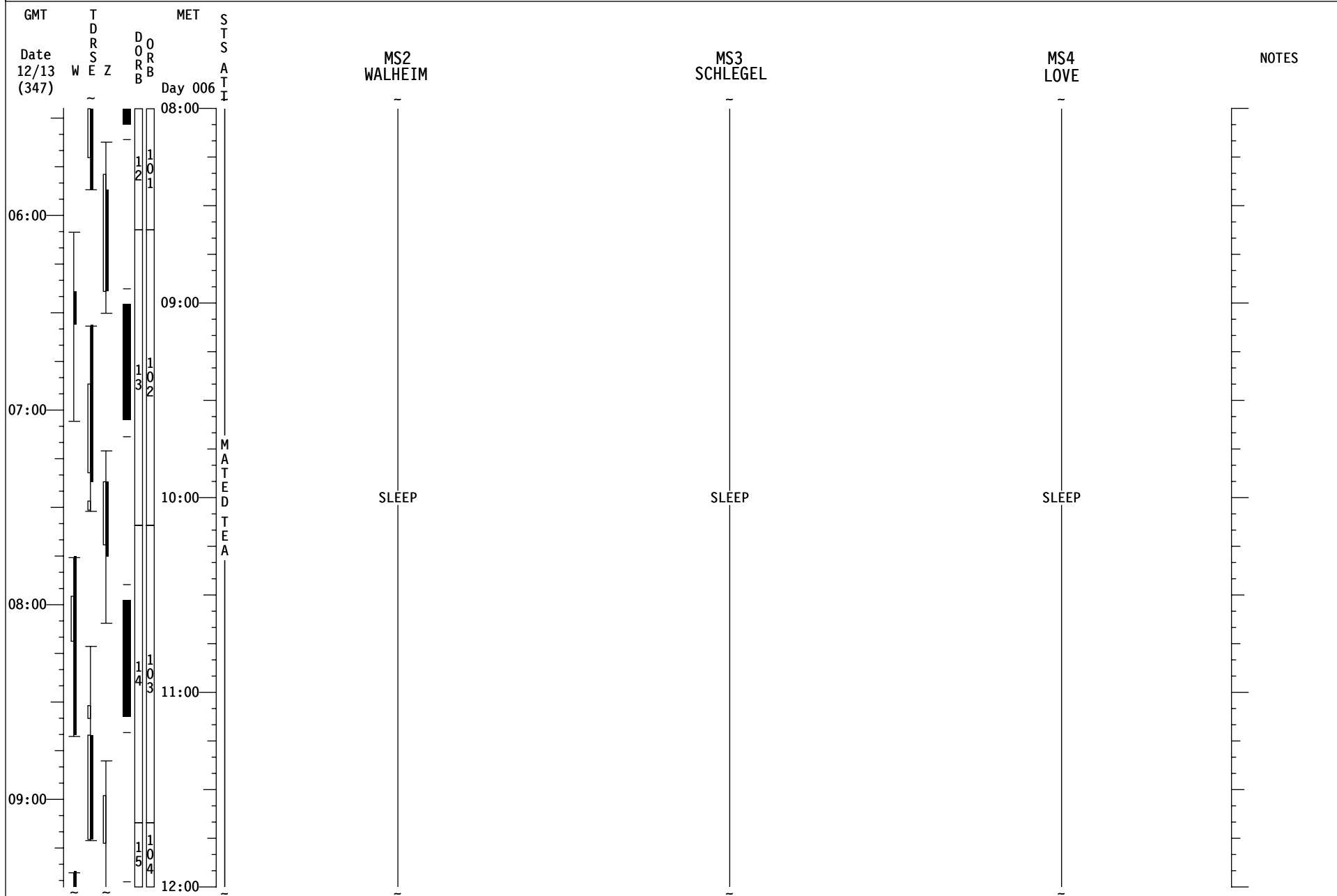
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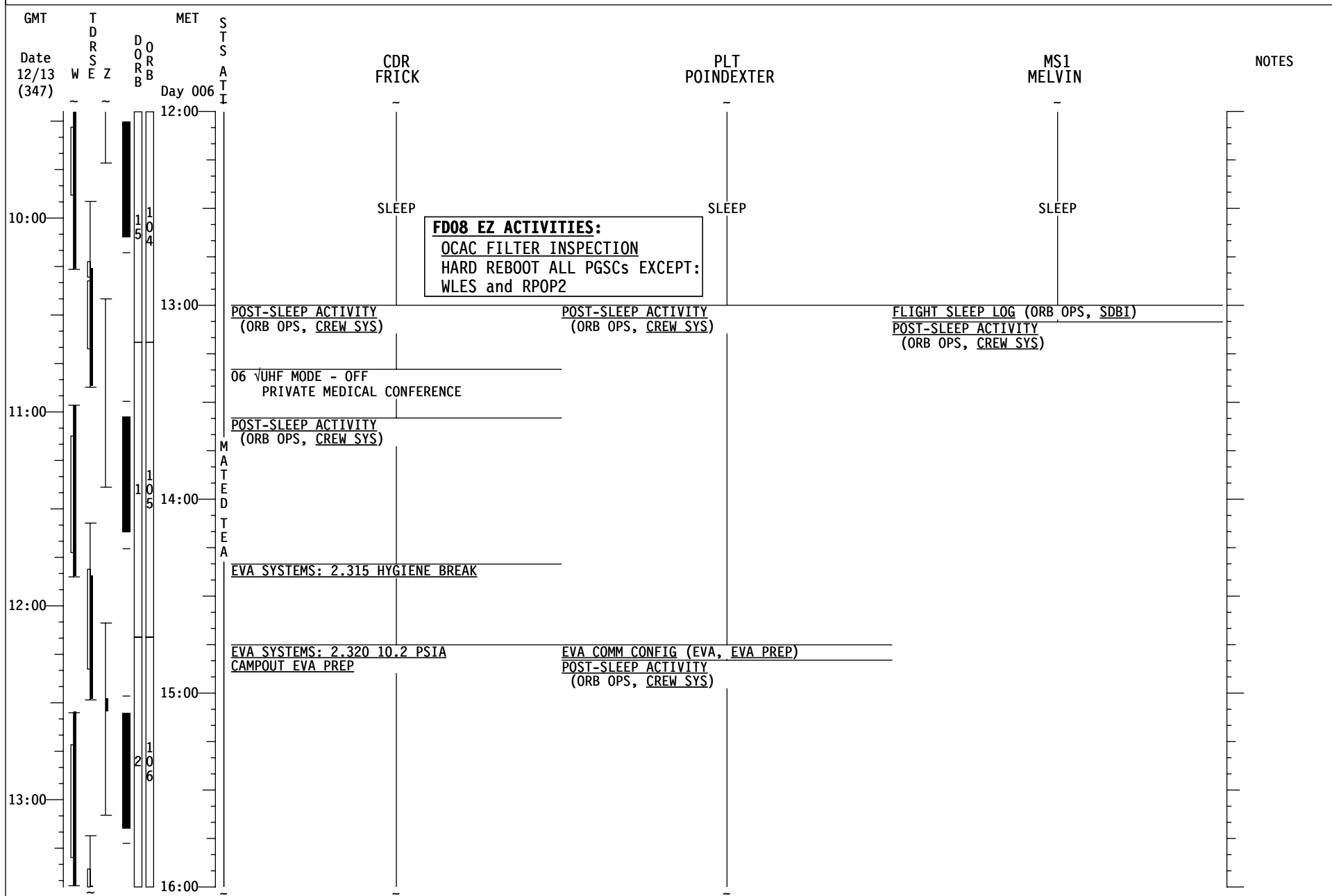
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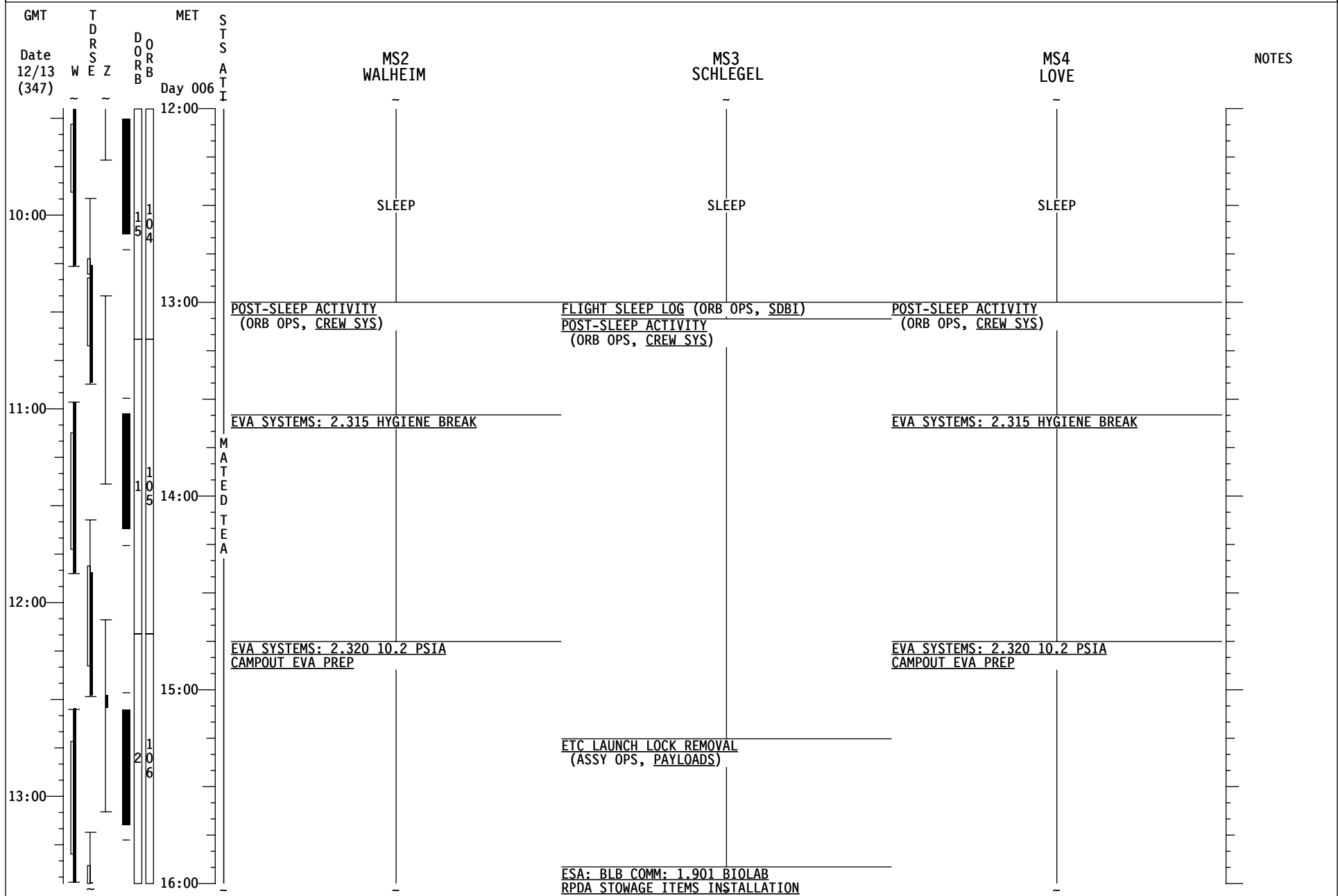
STS-122 FD (07)



STS-122 FD (08)



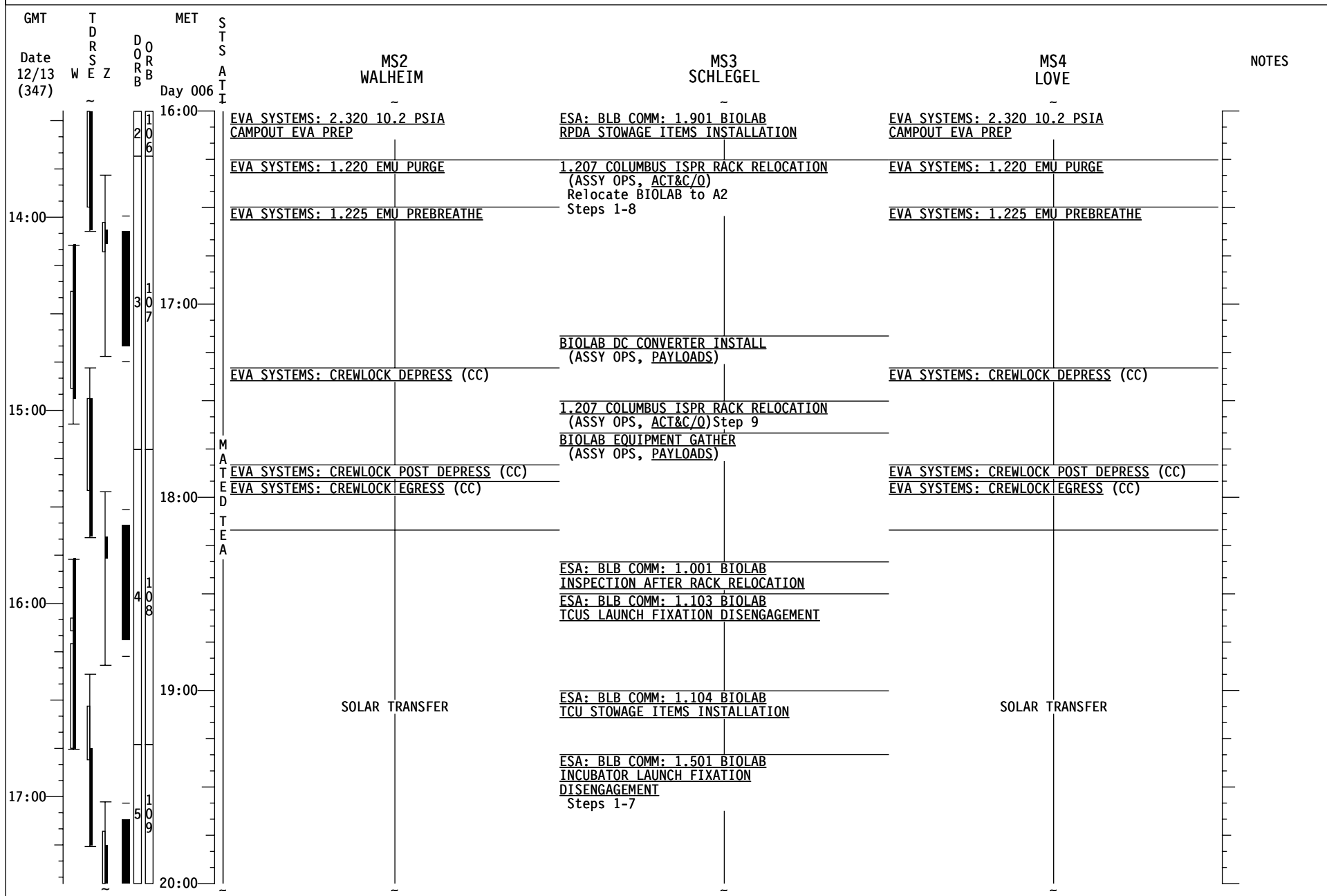
STS-122 FD (08)



STS-122 FD (08)

GMT	TDRSEZ	MET	SATS	CDR FRICK	PLT POINDEXTER	MS1 MELVIN	NOTES
Date 12/13 (347)	W E Z	Day 006	Day 006				
16:00				EVA SYSTEMS: 2.320 10.2 PSIA CAMPOUT EVA PREP	POST-SLEEP ACTIVITY - (ORB OPS, CREW SYS) L17 Check MCIU filter screen	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
				EVA SYSTEMS: 1.220 EMU PURGE	EVA INHIBIT PAD (EVA, TIMELINES)	1.207 COLUMBUS ISPR RACK RELOCATION (ASSY OPS, ACT&C/O)	
14:00				EVA SYSTEMS: 1.225 EMU PREBREATHE	PRLA CLOSE (ORB OPS, PRLA)	Relocate BIOLAB to A2 Steps 1-8	
					EXERCISE		
15:00				EVA SYSTEMS: CREWLOCK DEPRESS (CC)		1.207 COLUMBUS ISPR RACK RELOCATION (ASSY OPS, ACT&C/O) Step 9	
					EVA SYSTEMS: CREWLOCK POST DEPRESS (CC)		
18:00				MATED Ops P/TV07 EVA (PHOTO/TV, SCENES)			UPLINK BO Only Box η, θ
16:00							
19:00				ICC DEACT	IVA SUPPORT EVA3	SSRMS SUPPORT EVA3	
17:00				EXERCISE			
20:00							

STS-122 FD (08)



STS-122 FD (08)

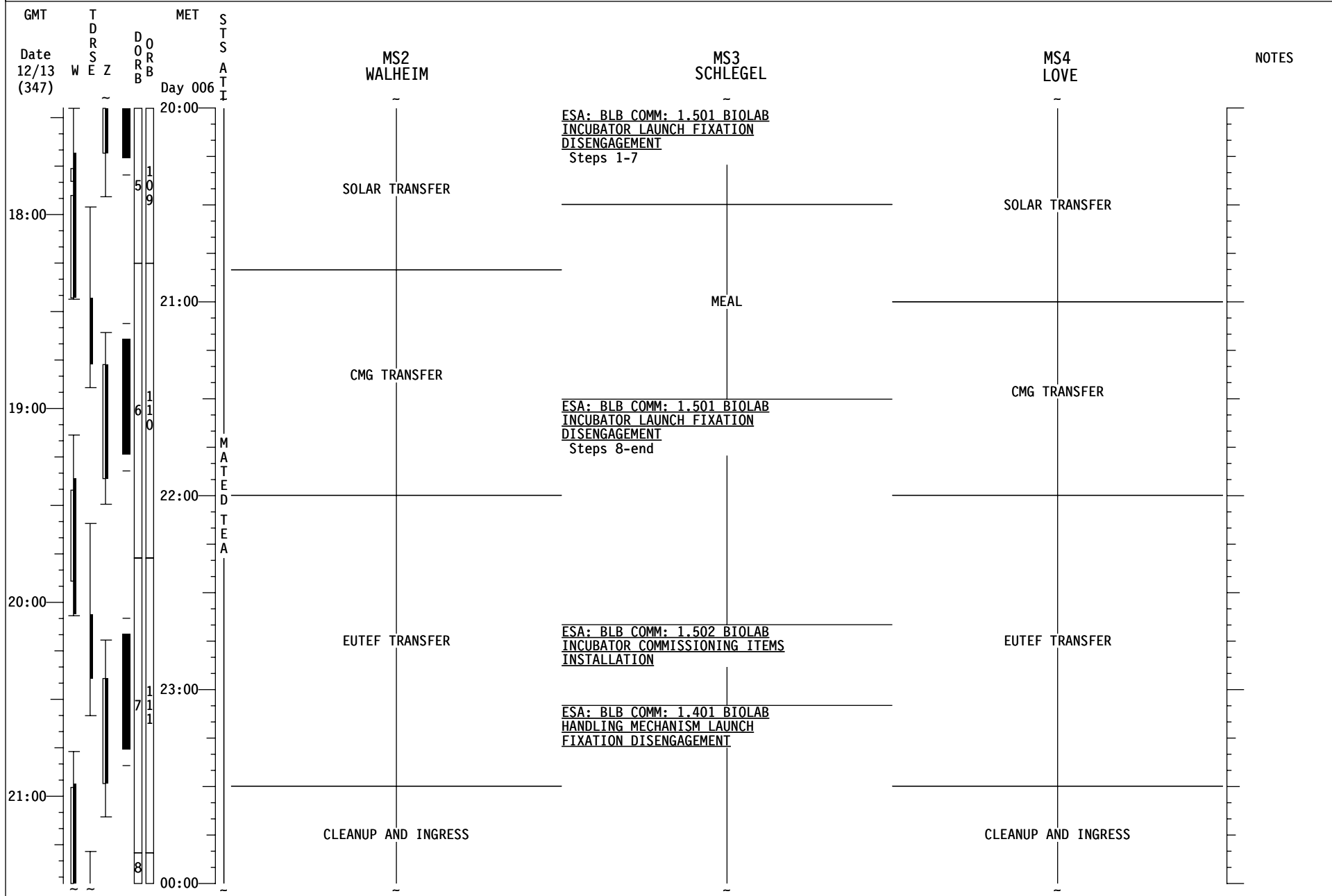
GMT	T D R S E Z	MET	S T S	CDR	PLT	MS1	NOTES
Date 12/13 (347)	W E Z	Day 006	A T I	FRICK	POINDEXTER	MELVIN	
18:00							
19:00							
20:00							
21:00							
22:00							
23:00							
00:00							

P/TV07 EVA
 (PHOTO/TV, SCENES)
 Ops
 2.310 PPSB MANUAL POWER SWITCHING
 (ASSY OPS, PAYLOADS) Step 1
 MEAL
 SHUTTLE/ISS H2O CNTR FILL
 (ORB OPS, ECLS) INIT FILL #7
 Ref. MSG XXX
 P/TV07 EVA
 (PHOTO/TV, SCENES)
 Ops
 2.310 PPSB MANUAL POWER SWITCHING
 (ASSY OPS, PAYLOADS) Step 1
 P/TV07 EVA
 (PHOTO/TV, SCENES)
 Ops
 SHUTTLE/ISS H2O CNTR FILL
 (ORB OPS, ECLS)
 Perform FILL TERMINATION
 SHUTTLE/ISS H2O CNTR FILL
 (ORB OPS, ECLS) INIT FILL #8
 Ref. MSG XXX
 P/TV07 EVA
 (PHOTO/TV, SCENES)
 Ops
 2.310 PPSB MANUAL POWER SWITCHING
 (ASSY OPS, PAYLOADS) Step 1
 P/TV07 EVA
 (PHOTO/TV, SCENES) Ops

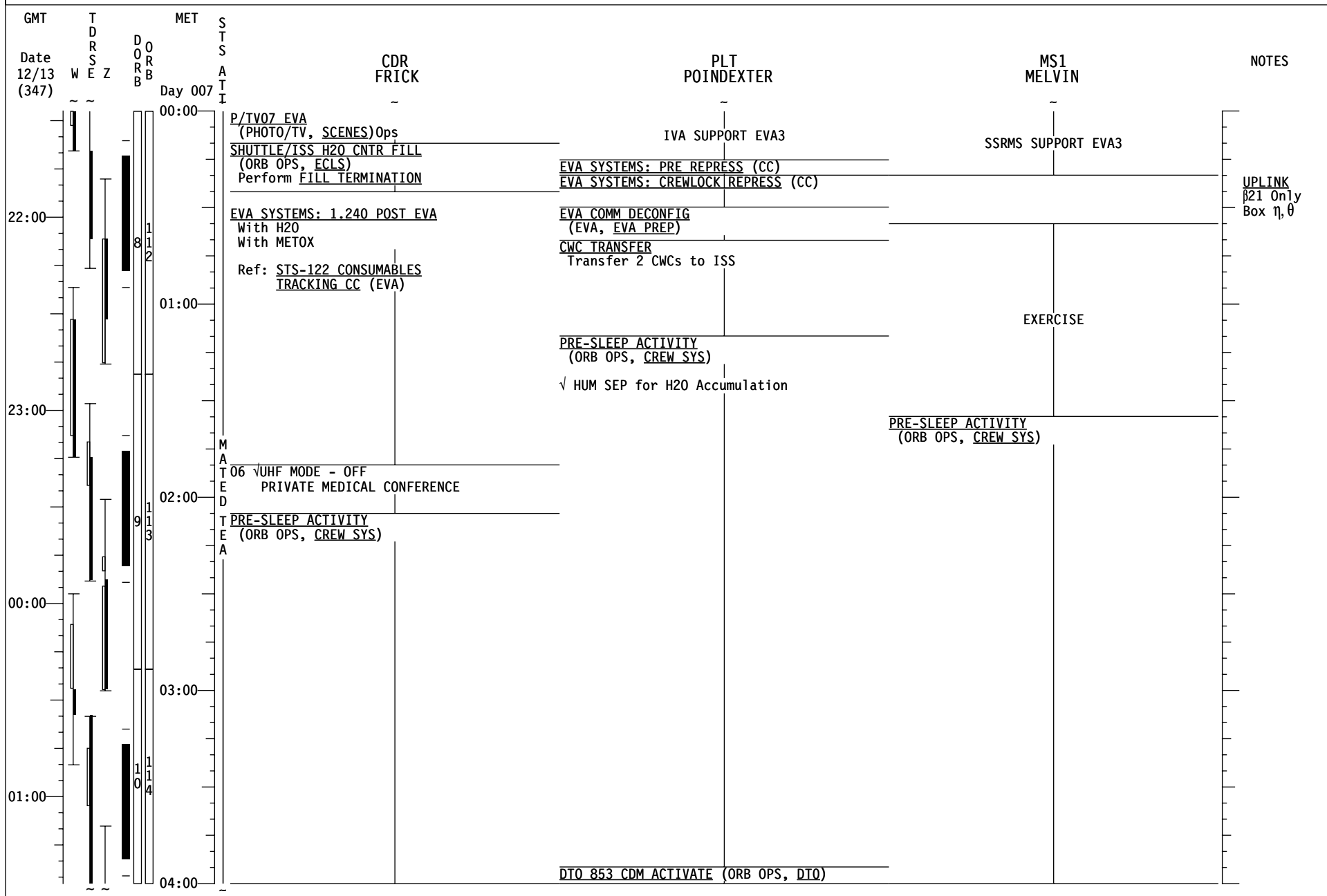
IVA SUPPORT EVA3

SSRMS SUPPORT EVA3

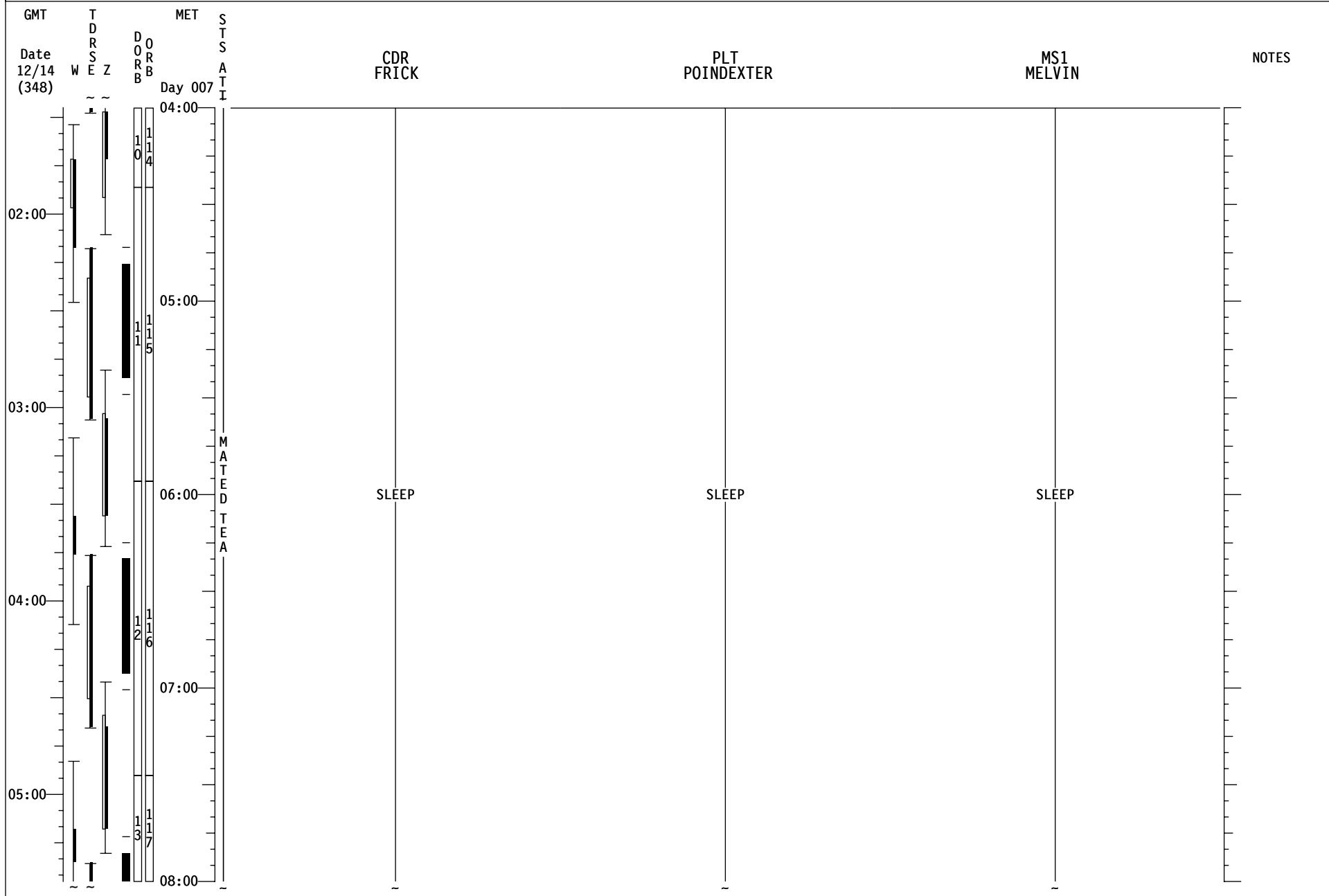
STS-122 FD (08)



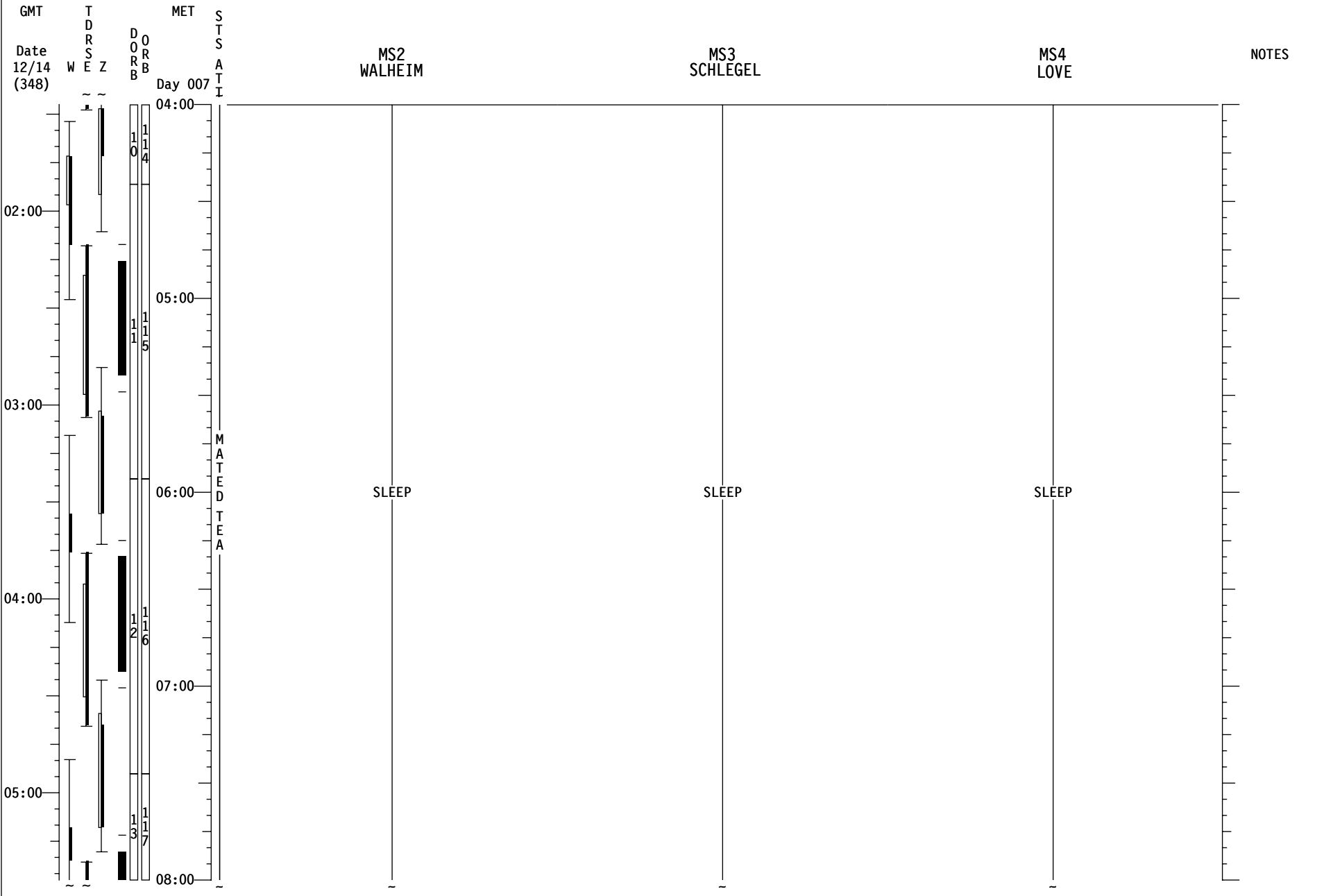
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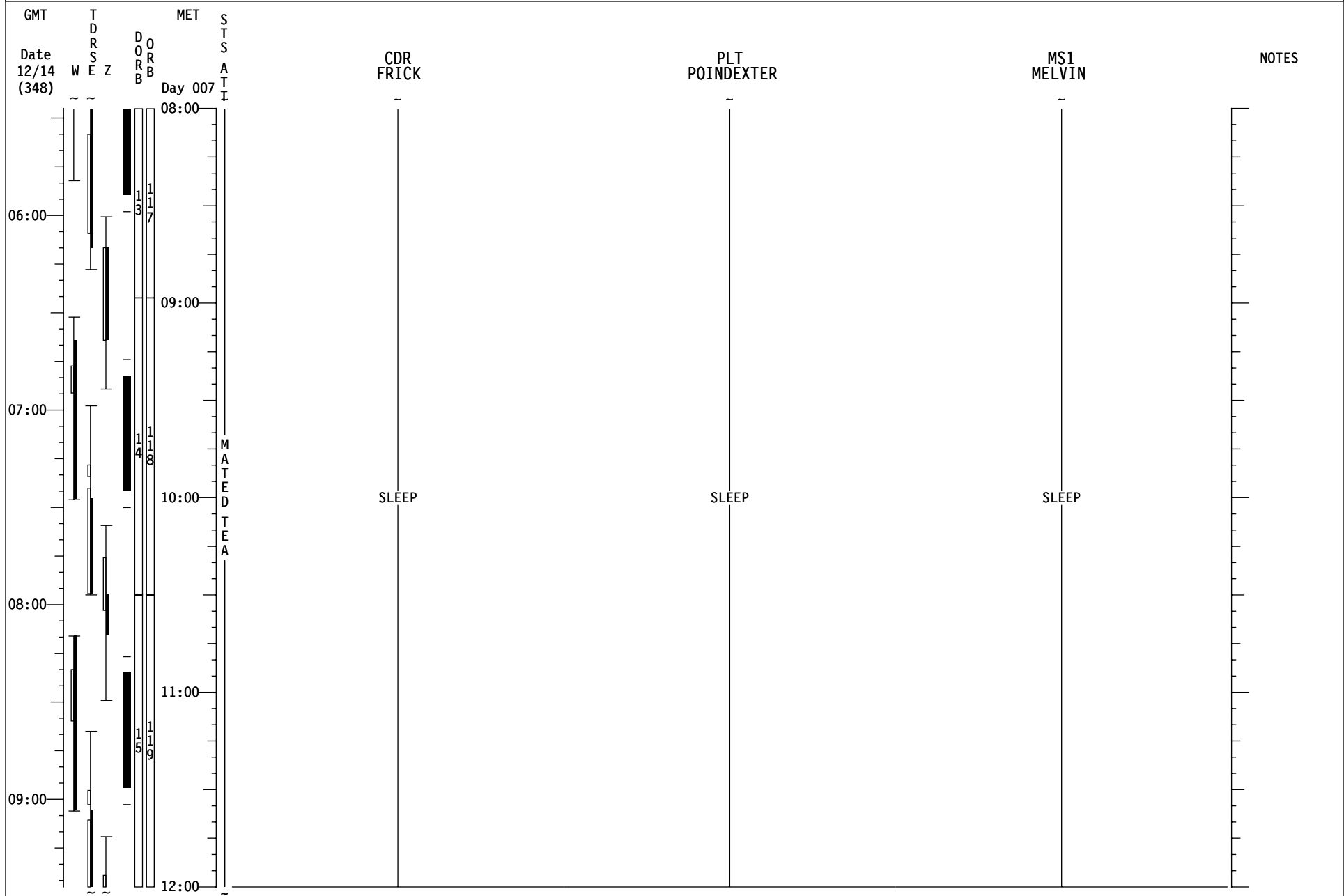
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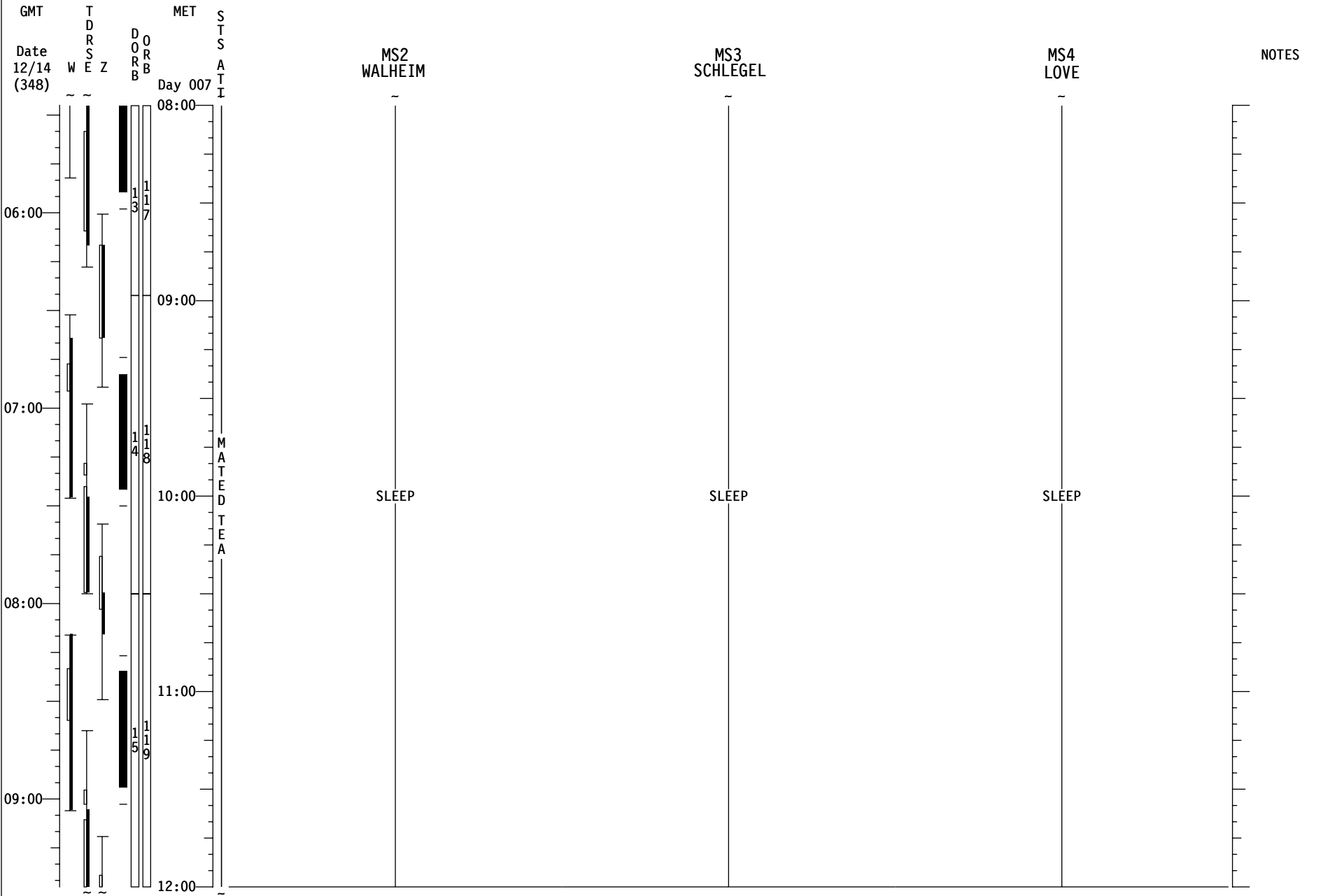
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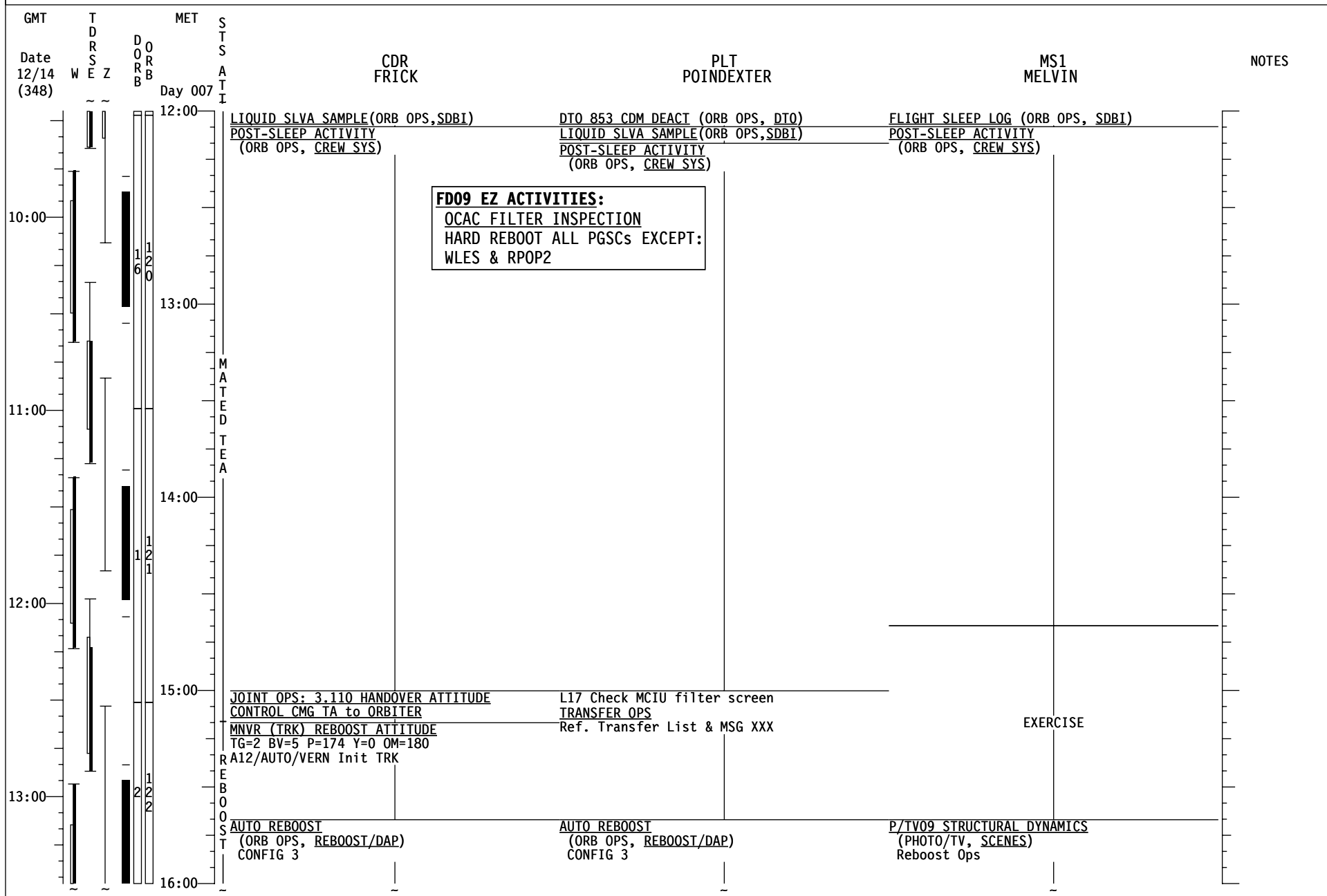
STS-122 FD (08)



STS-122 FD (08)



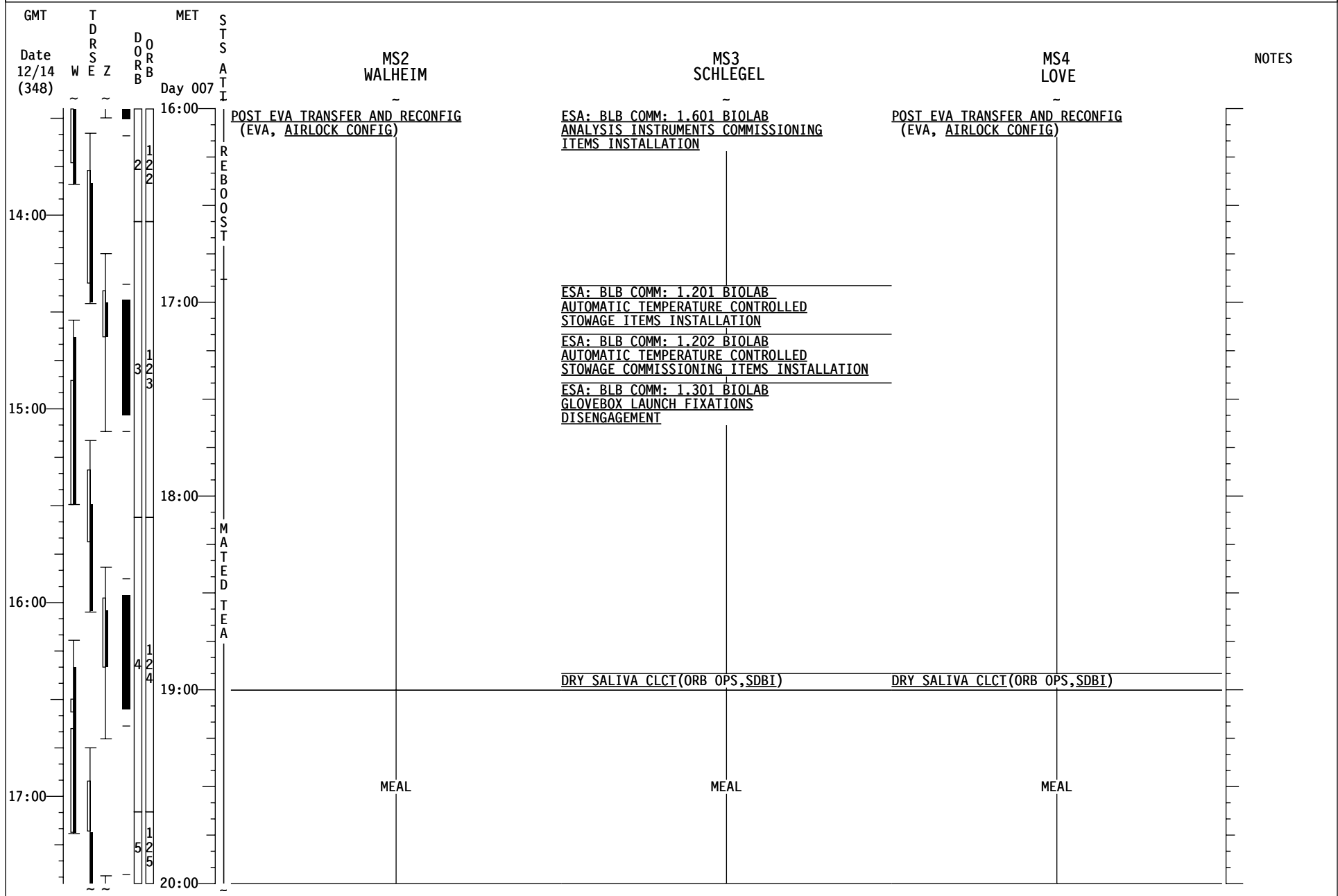
STS-122 FD (09)



STS-122 FD (09)

GMT	TDRSEZ	MET	SATS	CDR FRICK	PLT POINDEXTER	MS1 MELVIN	NOTES
Date 12/14 (348)	W E Z	Day 007	DOORB				
16:00	1		REBOOST	AUTO REBOOST (ORB OPS, REBOOST/DAP) CONFIG 3	AUTO REBOOST (ORB OPS, REBOOST/DAP) CONFIG 3	P/TV09 STRUCTURAL DYNAMICS (PHOTO/TV, SCENES) Reboost Ops	
17:00	2			MNVR (TRK) BIAS -XLV -ZVV TG=2 BV=5 P=164.92 Y=354.21 OM=186.56 A12/AUTO/VERN Init TRK	SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #9 Ref. MSG XXX	TRANSFER OPS Ref. Transfer List & MSG XXX	
15:00	3			JOINT OPS: 3.111 HANDOVER ATTITUDE CONTROL ORBITER to CMGTA	TRANSFER OPS Ref. Transfer List & MSG XXX		
18:00	4			N2 REPRESS USING PAYLOAD N2 VLVS [A]		P/TV08 EXTERNAL SURVEY (PHOTO/TV, SCENES) Ops	
16:00	5		MATED	EXERCISE	SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION		
19:00					CWC TRANSFER Transfer 1 CWCs to ISS	TRANSFER OPS Ref. Transfer List & MSG XXX	
17:00					P/TV05 ISS INTERNAL OPS (PHOTO/TV, SCENES) Setup		
18:00				MEAL			
19:00				[A] N2 REPRESS USING PAYLOAD N2 VLVS (ORB OPS, ECLS) Steps 1-5, On MCC Go, perform step 6 MCC will TMBU all S/W limits			
17:00				MEAL			
18:00				[B] N2 REPRESS USING PAYLOAD N2 VLVS (ORB OPS, ECLS) On MCC Go, perform steps 7-12 MCC will TMBU all S/W limits			
19:00							
20:00				N2 REPRESS USING PAYLOAD N2 VLVS [B]			

STS-122 FD (09)



STS-122 FD (09)

GMT	TDRSEZ	MET	S T S	CDR FRICK	PLT POINDEXTER	MS1 MELVIN	NOTES
Date 12/14 (348)	W E Z	Day 007	A T I				
18:00				CREW CONFERENCE	CREW CONFERENCE	CREW CONFERENCE	
19:00				CREW PHOTO	CREW PHOTO	CREW PHOTO	
20:00				<u>SHUTTLE/ISS H2O CNTR FILL</u> (ORB OPS, ECLS) INIT FILL #10 Ref. MSG XXX	<u>RNDZ TOOLS CHECKOUT</u> (RNDZ, RNDZ TOOLS)	<u>RNDZ TOOLS CHECKOUT</u> (RNDZ, RNDZ TOOLS)	
21:00							
22:00					<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX		
23:00				<u>SHUTTLE/ISS H2O CNTR FILL</u> (ORB OPS, ECLS) Perform <u>FILL TERMINATION</u>		<u>US PODF: HRF INT IMM: 2.011 INTEGRATED</u> <u>IMMUNE BLOOD COLLECTION</u> Perform Step 1, Blood Setup	
				<u>CWC TRANSFER</u> Transfer 1 CWC to ISS		<u>US PODF: HRF INT IMM: 2.001 INTEGRATED</u> <u>IMMUNE BLOOD COLLECTION</u> Perform Step 2, Blood Draw	
				<u>JOINT OPS: 3.118 OXYGEN TRANSFER TEARDOWN</u> Steps 1-6			
					<u>P/TV04 INGRESS/EGRESS</u> (PHOTO/TV, SCENES) Setup	<u>US PODF: HRF INT IMM: 2.001 INTEGRATED</u> <u>IMMUNE BLOOD COLLECTION</u> Perform Step 3, Stow	
					<u>P/TV05 ISS INTERNAL OPS</u> (PHOTO/TV, SCENES) Perform <u>DEACTIVATION</u> , Step 2	<u>TRANSFER TAGUP</u> Coordinate with xfer counterpart	
21:00				FAREWELL	FAREWELL	FAREWELL	
00:00					<u>DTO 853 CDM BATTERY CHANGEOUT</u> (ORB OPS, DTO)		

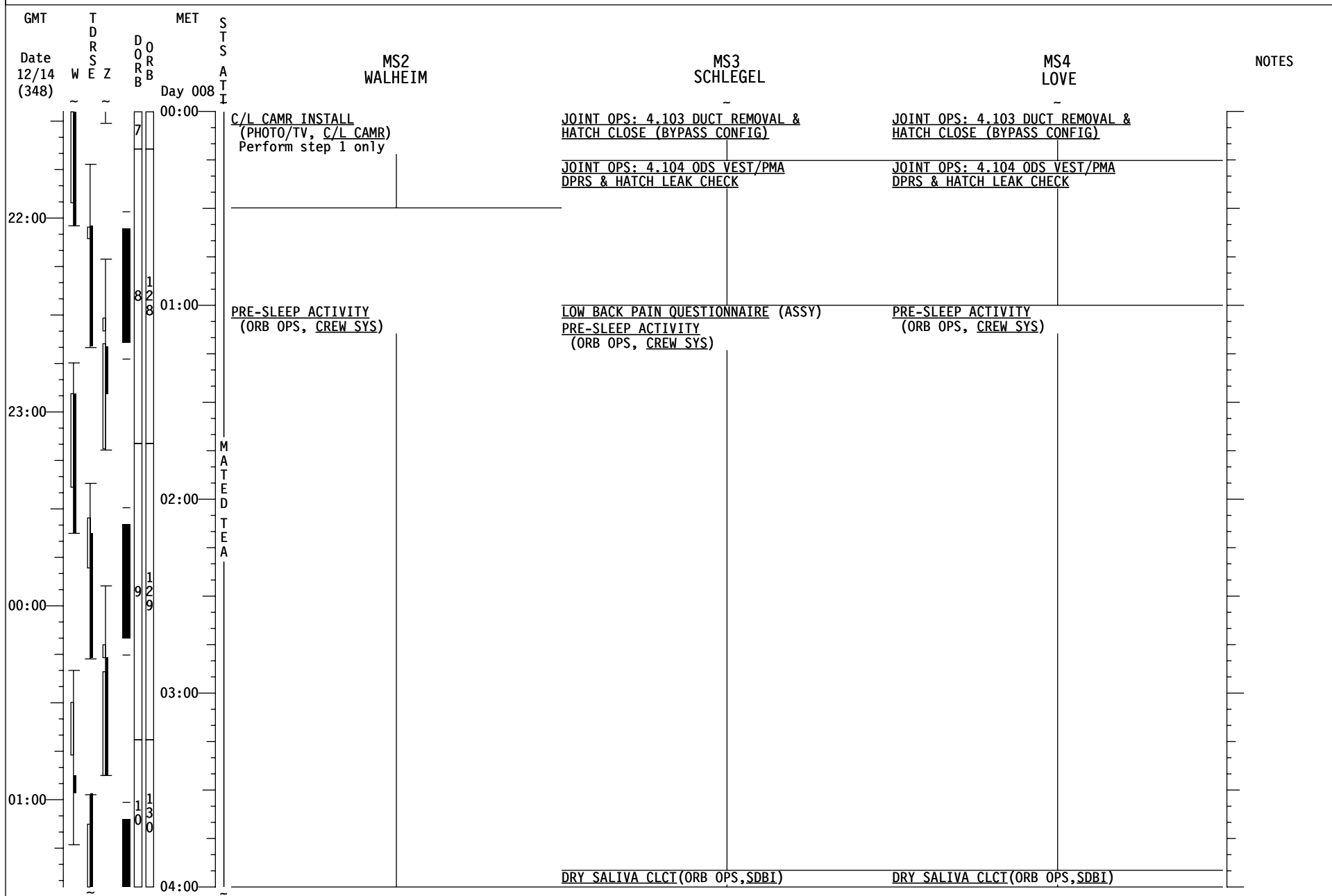
STS-122 FD (09)

GMT	T D R S E Z	MET	S T S	MS2 WALHEIM	MS3 SCHLEGEL	MS4 LOVE	NOTES
Date 12/14 (348)	W E Z	Day 007	A T I				
				CREW CONFERENCE	CREW CONFERENCE	CREW CONFERENCE	
18:00				CREW PHOTO	CREW PHOTO	CREW PHOTO	
				<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX	<u>1.216 BIOLAB UMBILICAL MATE</u> (ASSY OPS, PAYLOADS)	<u>PREP WLES FOR RNDZ TOOLS C/Q(ORB OPS, WLES)</u>	
19:00					<u>ESA: BLB COMM: 1.302 BIOLAB</u> <u>GLOVEBOX STOWAGE ITEMS INSTALLATION</u>	EXERCISE	
					<u>ESA: BLB COMM: 1.303 BIOLAB</u> <u>GLOVEBOX COMMISSIONING ITEMS</u> <u>INSTALLATION</u>	<u>DRY SALIVA CLCT(ORB OPS,SDBI)</u> <u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX	
20:00				EXERCISE	<u>DRY SALIVA CLCT(ORB OPS,SDBI)</u>		
					EXERCISE		
21:00				FAREWELL	FAREWELL	FAREWELL	
					<u>JOINT OPS: 4.103 DUCT REMOVAL &</u> <u>HATCH CLOSE (BYPASS CONFIG)</u>	<u>JOINT OPS: 4.103 DUCT REMOVAL &</u> <u>HATCH CLOSE (BYPASS CONFIG)</u>	
00:00							

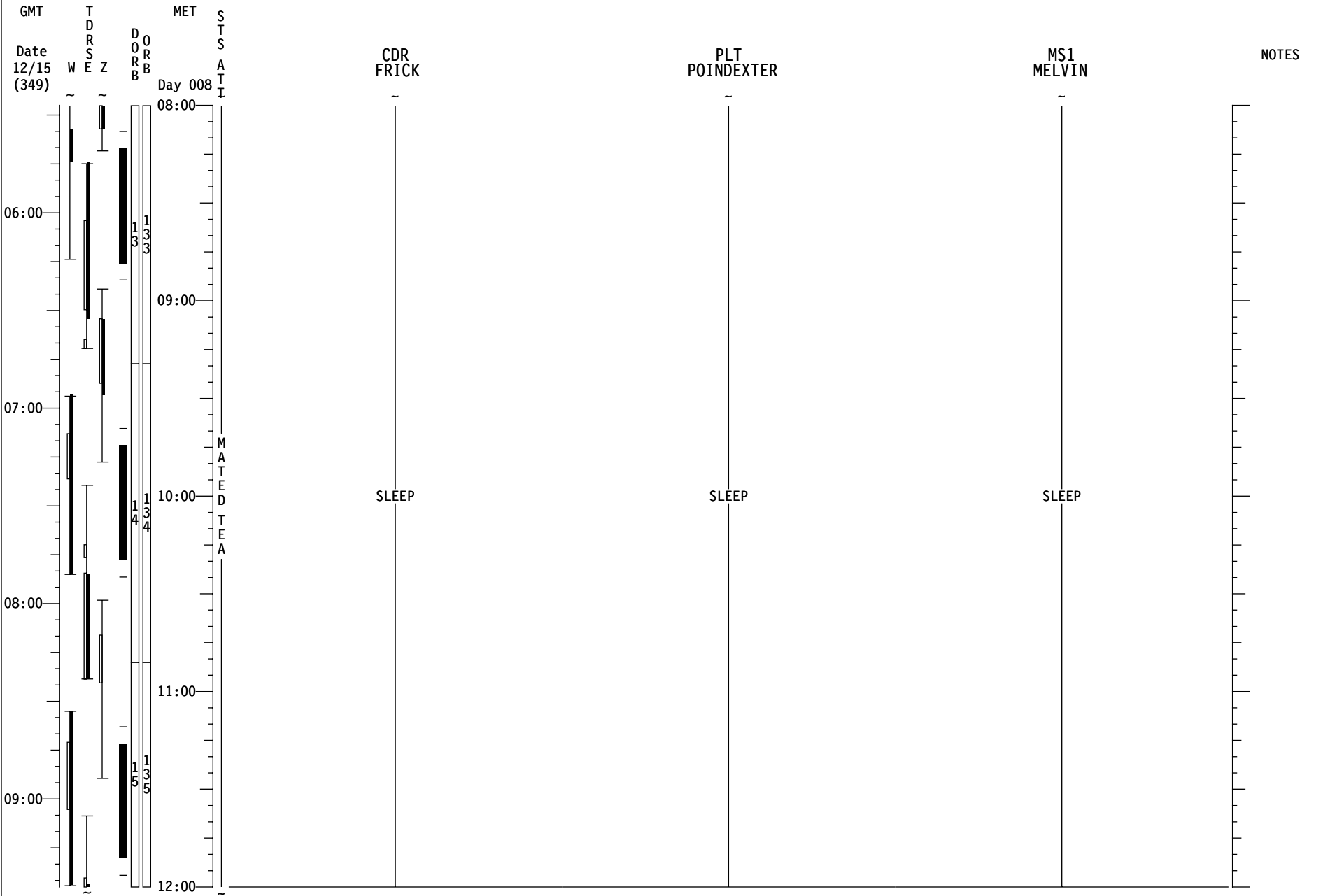
STS-122 FD (09)

GMT	TDRSEZ	MET	SATS	CDR FRICK	PLT POINDEXTER	MS1 MELVIN	NOTES
Date 12/14 (348)	W E Z	Day 008	Day 008				
					EXERCISE		
00:00				NOMINAL H2O CONFIG (ORB OPS, ECLS) FES PRI A Req'd		P/TV03 UNDOCK (PHOTO/TV, SCENES) Setup	
22:00				PCS ACTIVATION A			
				A PCS ACTIVATION MO10W 14.7 CAB REG INLET SYS 1 VLV - OP Avoid WCS use during high N2 flow Expect possible "S66 CAB N2(02) FLO 1" msgs			
01:00				06 VUHF MODE - OFF PRIVATE MEDICAL CONFERENCE	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
23:00				PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)			
02:00							
00:00							
01:00							
04:00							

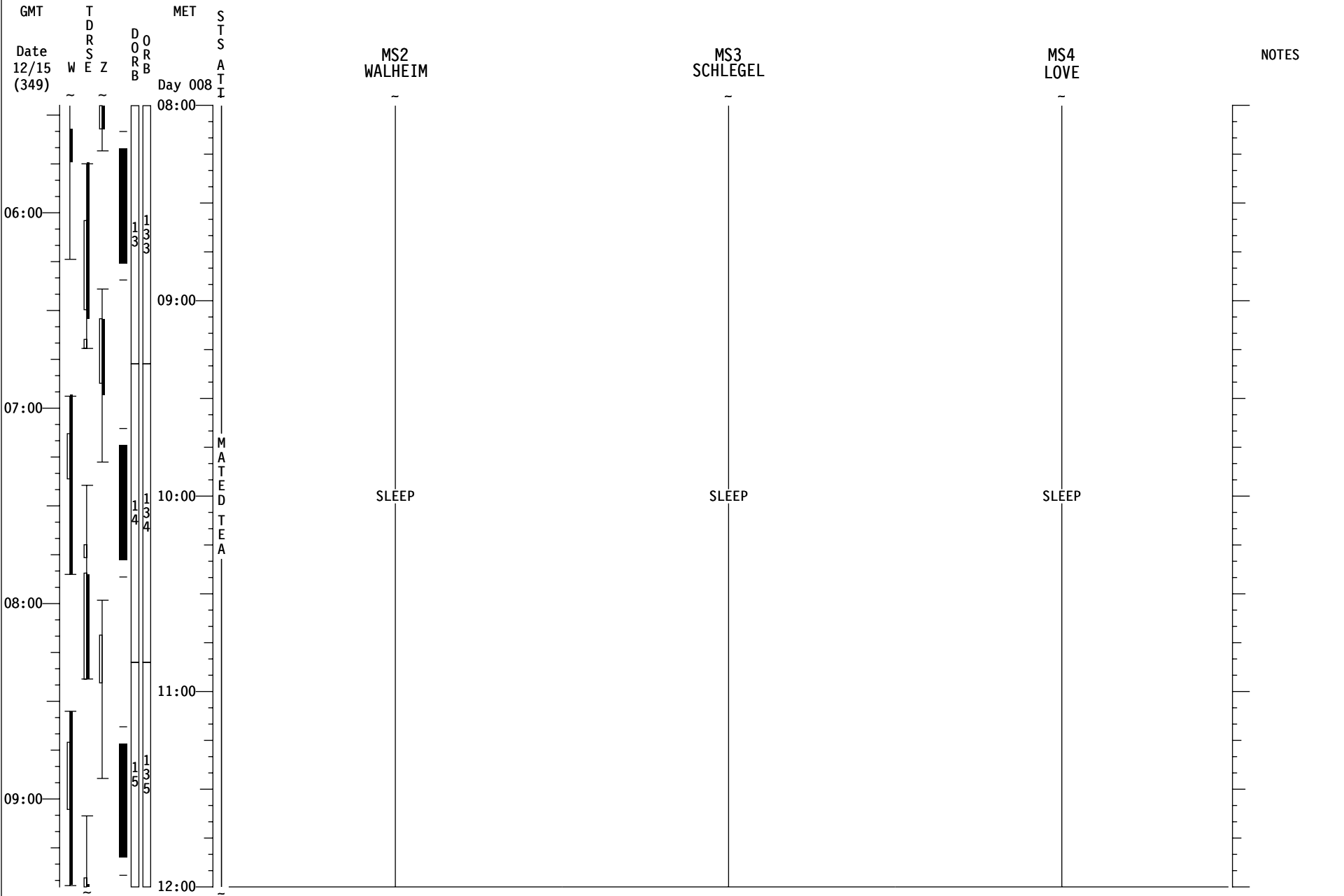
STS-122 FD (09)



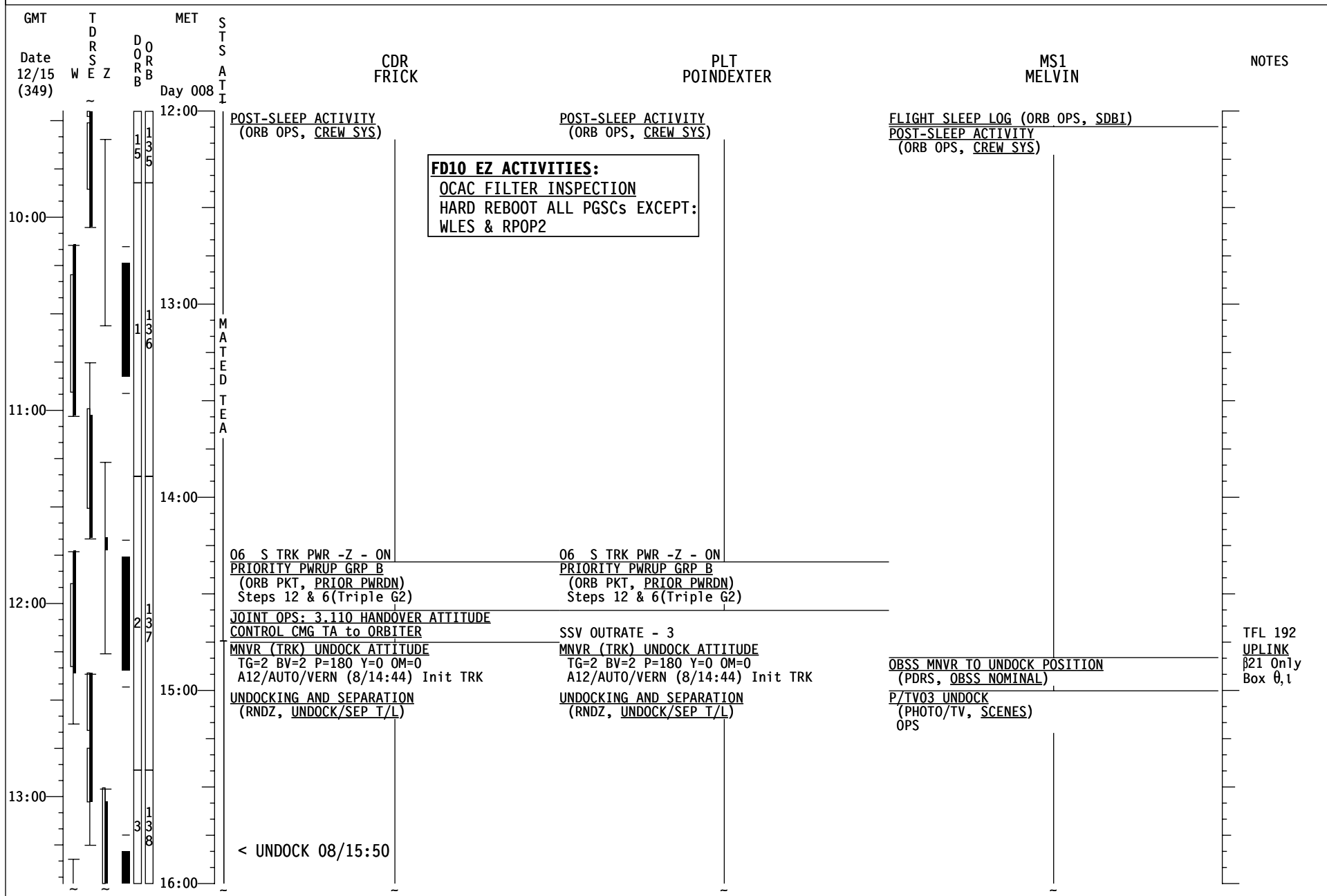
STS-122 FD (09)



STS-122 FD (09)



STS-122 FD (10)



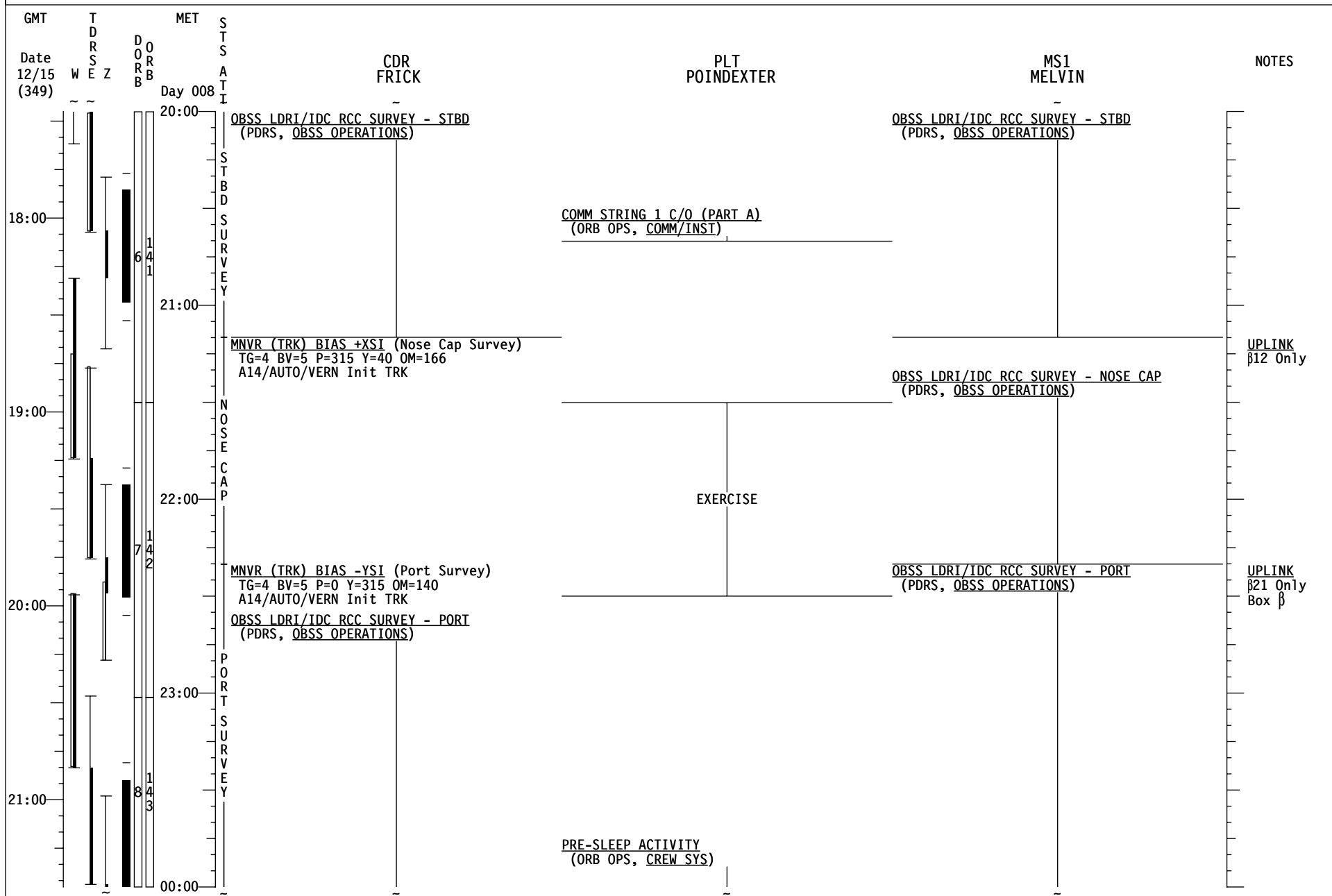
STS-122 FD (10)

GMT	TDRS W E Z	MET Day 008	S T S A T I	CDR FRICK	PLT POINDEXTER	MS1 MELVIN	NOTES			
Date 12/15 (349)	D O R B 1 3 8	16:00	U N D O C K /	UNDOCKING AND SEPARATION (RNDZ, UNDOCK/SEP T/L)	UNDOCKING AND SEPARATION (RNDZ, UNDOCK/SEP T/L)	P/TV03 UNDOCK (PHOTO/TV, SCENES) OPS				
				FLYAROUND (RNDZ, UNDOCK/SEP T/L)	FLYAROUND (RNDZ, UNDOCK/SEP T/L)					
				17:00	U N D O C K /	SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)		
				15:00	1 4 3 9	MNVR (TRK) -ZLV +YVV TG=2 BV=3 OM=230 A1/AUTO/VERN Init TRK	PRIORITY PWRDN GRP B (ORB PKT, PRIOR PWRDN) Steps 5,6(Single G2),9,10 & 12	P/TV03 UNDOCK (PHOTO/TV, SCENES) Deactivation	UPLINK β21 + Mask	
				18:00		SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) Initiate Supply/Waste Dump	HEATER RECONFIG-CONFIG B (ORB OPS, EPS) CABIN TEMP CONTROLLER RECONFIG 2(1) (ORB OPS, ECLS) L17 Check MCIU filter screen	JOINT OPS: 6.106 SSOR DEACTIVATION		
				16:00		MEAL	MEAL	MEAL		
				19:00					UPLINK β21 Only Box β	
				17:00	1 5 4 0	SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) Terminate Supply/Waste Dump	MNVR (TRK) BIAS +YSI (STBD Survey) TG=4 BV=5 P=0 Y=40 OM=192 A14/AUTO/VERN Init TRK	OBSS MNVR TO FLAT FIELD POSITION (PDRS, OBSS NOMINAL)	OBSS LDRI/IDC RCC SURVEY - STBD (PDRS, OBSS OPERATIONS)	UPLINK β21 Only Box γ
				20:00						

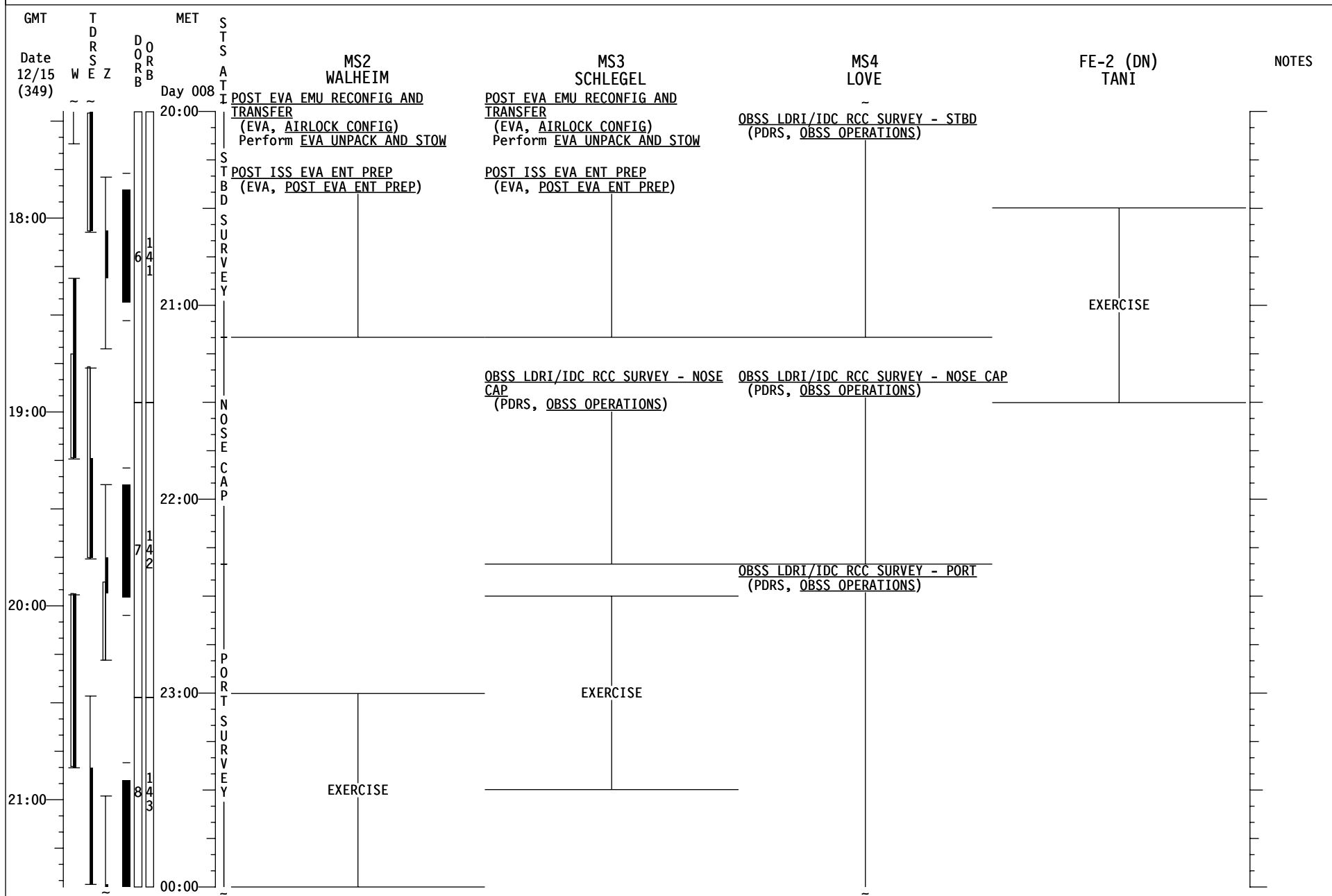
STS-122 FD (10)

GMT	TDRS WSEZ	MET Day 008	S T S A T I T	MS2 WALHEIM	MS3 SCHLEGEL	MS4 LOVE	FE-2 (DN) TANI	NOTES
16:00	138	138	UNDOCK	UNDOCKING AND SEPARATION (RNDZ, UNDOCK/SEP T/L)	UNDOCKING AND SEPARATION (RNDZ, UNDOCK/SEP T/L)	UNDOCKING AND SEPARATION (RNDZ, UNDOCK/SEP T/L)	UNDOCKING AND SEPARATION (RNDZ, UNDOCK/SEP T/L)	
				FLYAROUND (RNDZ, UNDOCK/SEP T/L)	FLYAROUND (RNDZ, UNDOCK/SEP T/L)	FLYAROUND (RNDZ, UNDOCK/SEP T/L)	FLYAROUND (RNDZ, UNDOCK/SEP T/L)	
17:00	139	139	UNDOCK	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)	
18:00	140	140	UNDOCK	PRIORITY PWRDN GRP B (ORB PKT, PRIOR PWRDN) Steps 5,6(Single G2),9,10 & 12	PLAYBACK (DIGITAL) (PHOTO/TV, CUE CARD) Undocking KU TDRW (17:40-18:00)	WLES RCNFG PST UNDOCK (ORB OPS, WLES) POST UNDOCK PGSC CONFIG Configure PGSCs		TFL 188
				SSV OUTFATE - 4 SSP1 OIU PWR - OFF (tb-bp) Expect S62 BCE BYP PSP 1				
19:00	140	140	UNDOCK	MEAL	MEAL	MEAL	MEAL	
20:00	140	140	UNDOCK	EMU INSTALLATION (EVA, AIRLOCK CONFIG)	EMU INSTALLATION (EVA, AIRLOCK CONFIG)	SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS) Perform TEARDOWN		
				POST EVA EMU RECONFIG AND TRANSFER (EVA, AIRLOCK CONFIG) Perform EVA UNPACK AND STOW	POST EVA EMU RECONFIG AND TRANSFER (EVA, AIRLOCK CONFIG) Perform EVA UNPACK AND STOW	OBSS MNVR TO FLAT FIELD POSITION (PDRS, OBSS NOMINAL) OBSS LDRI/IDC RCC SURVEY - STBD (PDRS, OBSS OPERATIONS)		

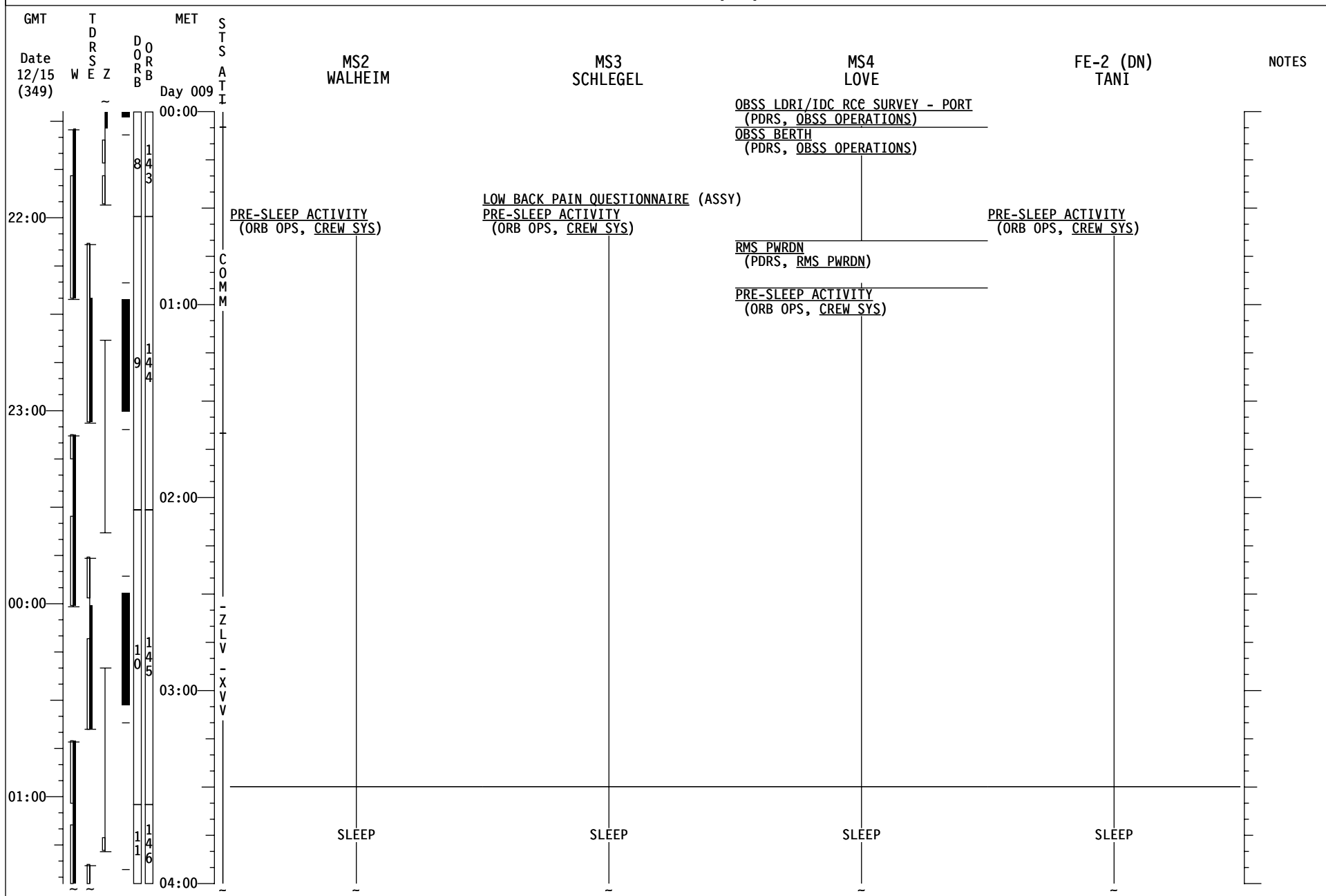
STS-122 FD (10)



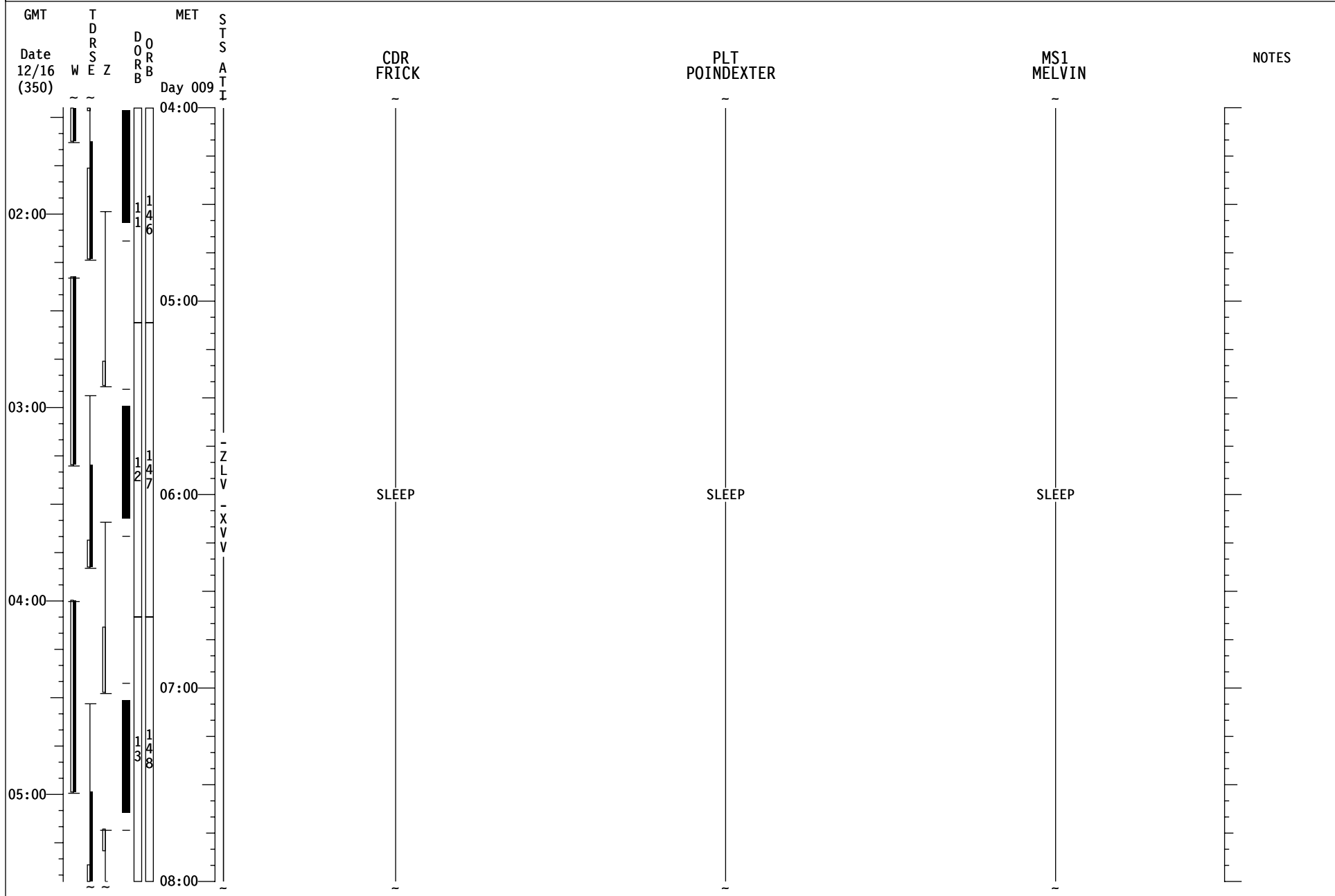
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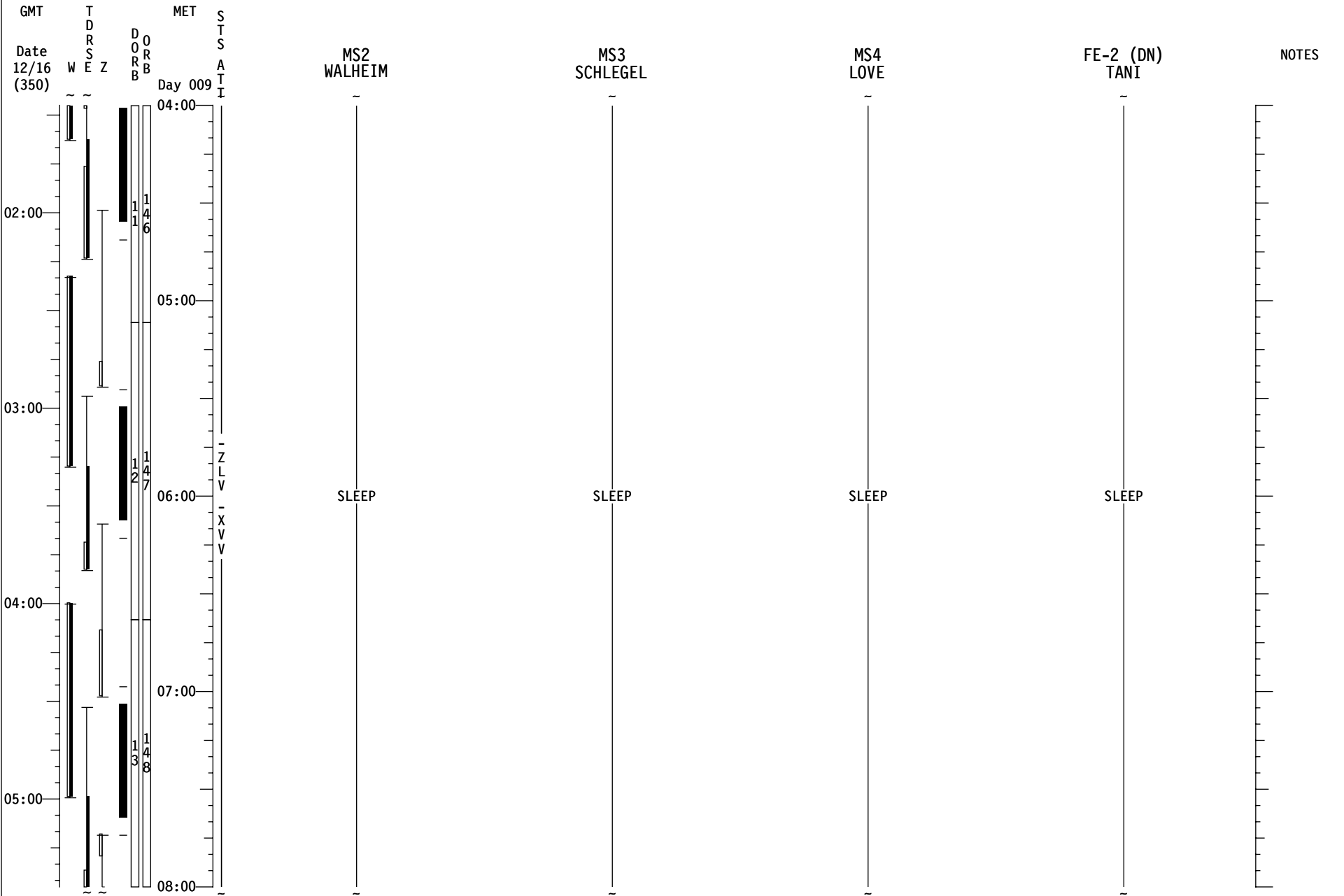
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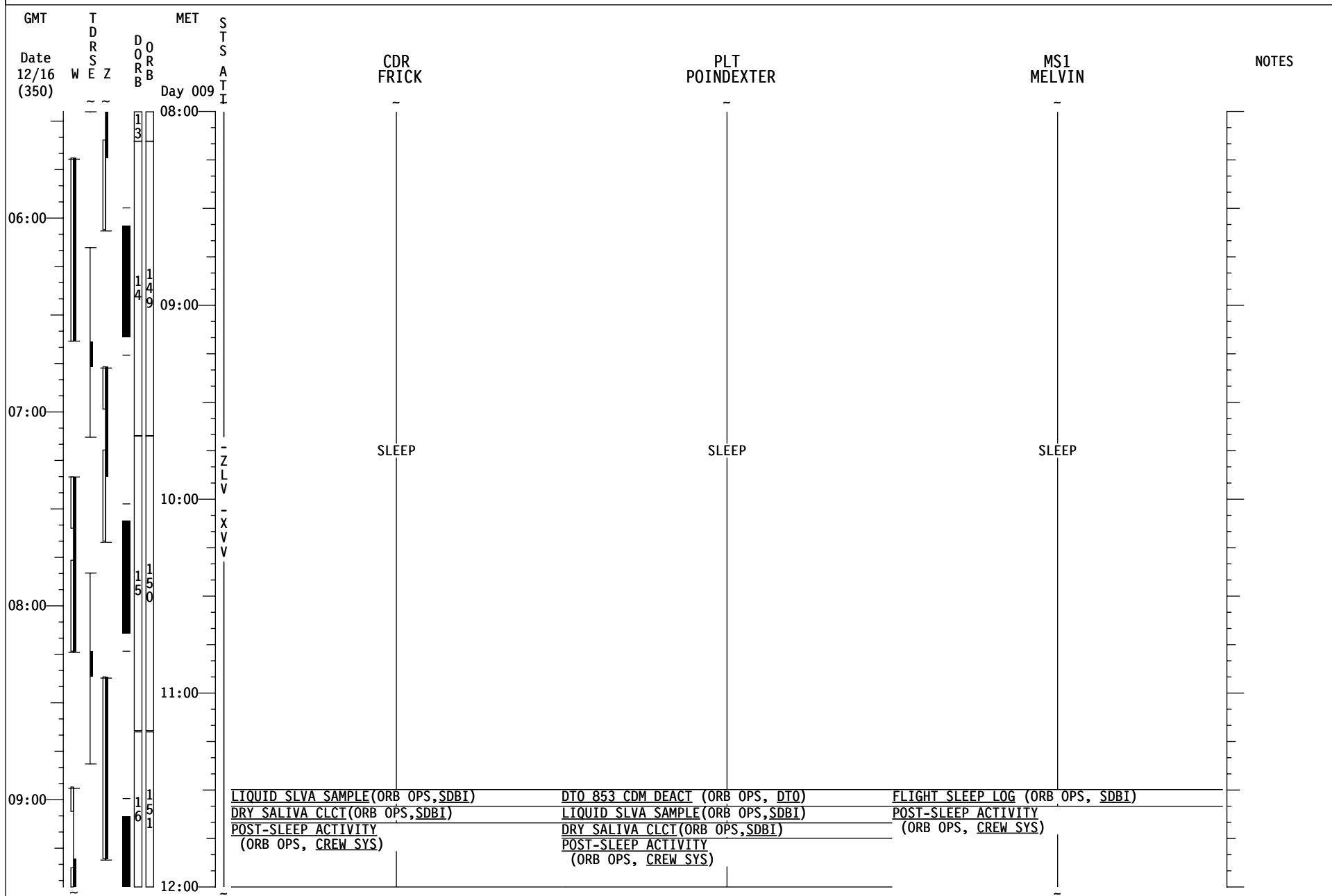
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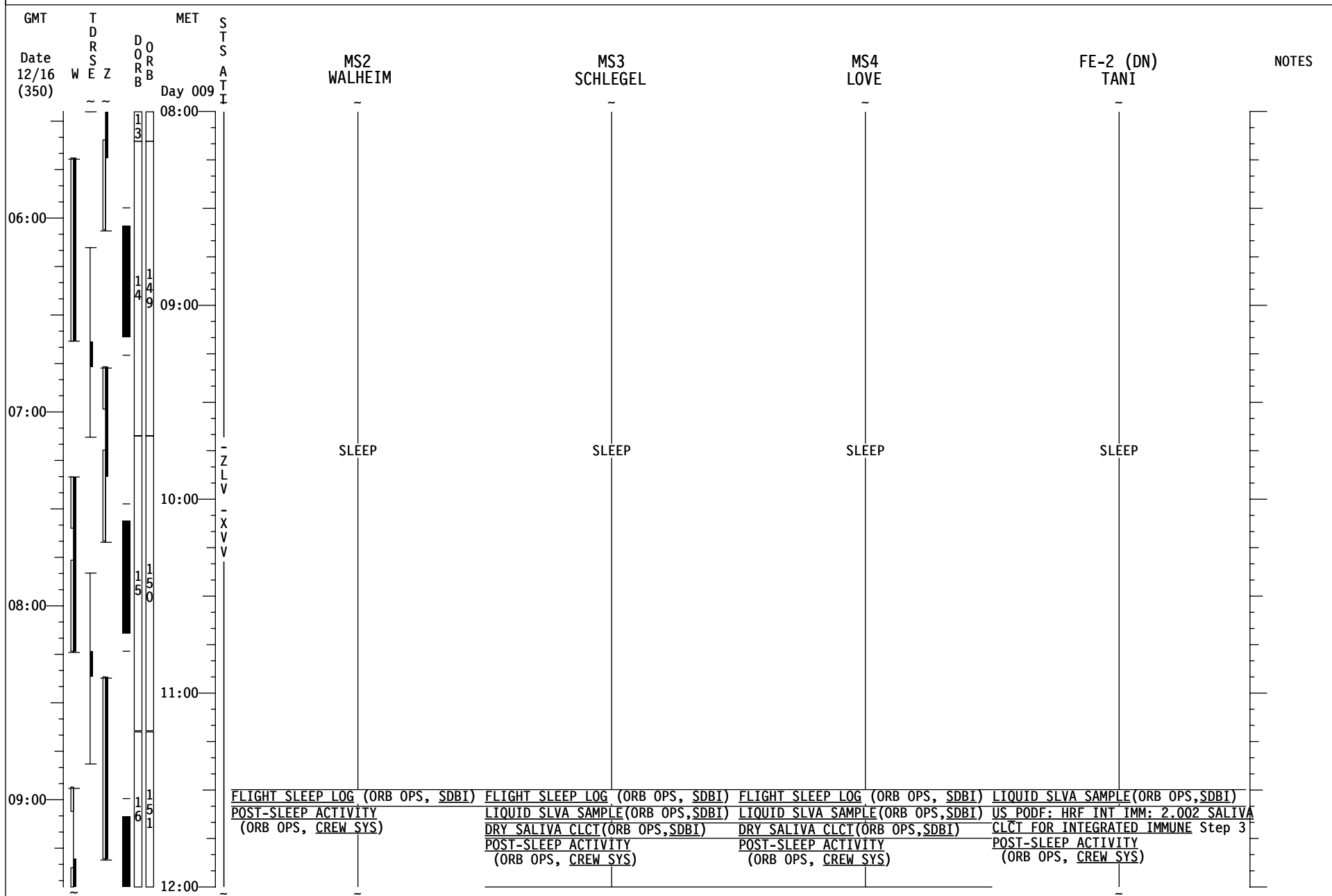
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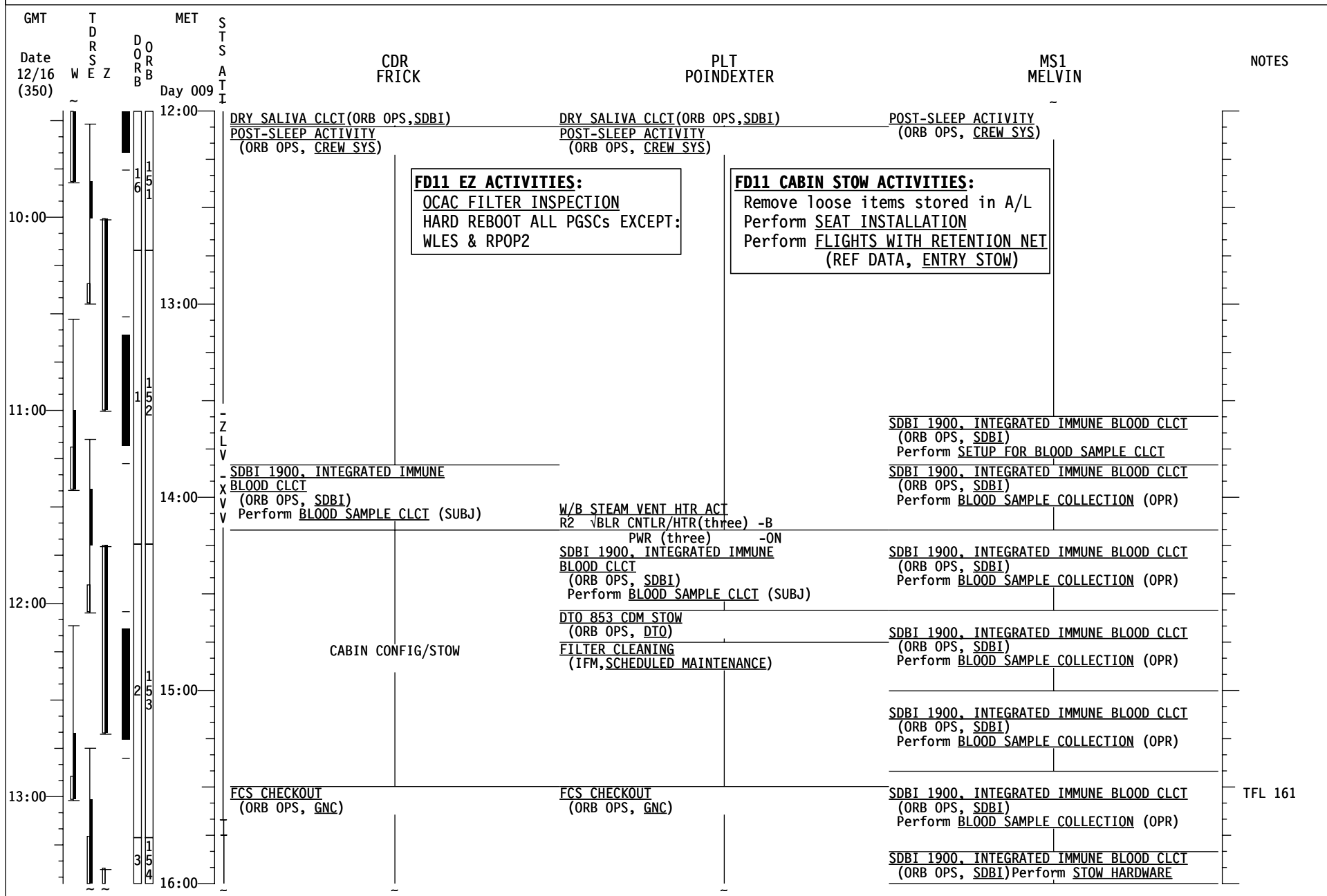
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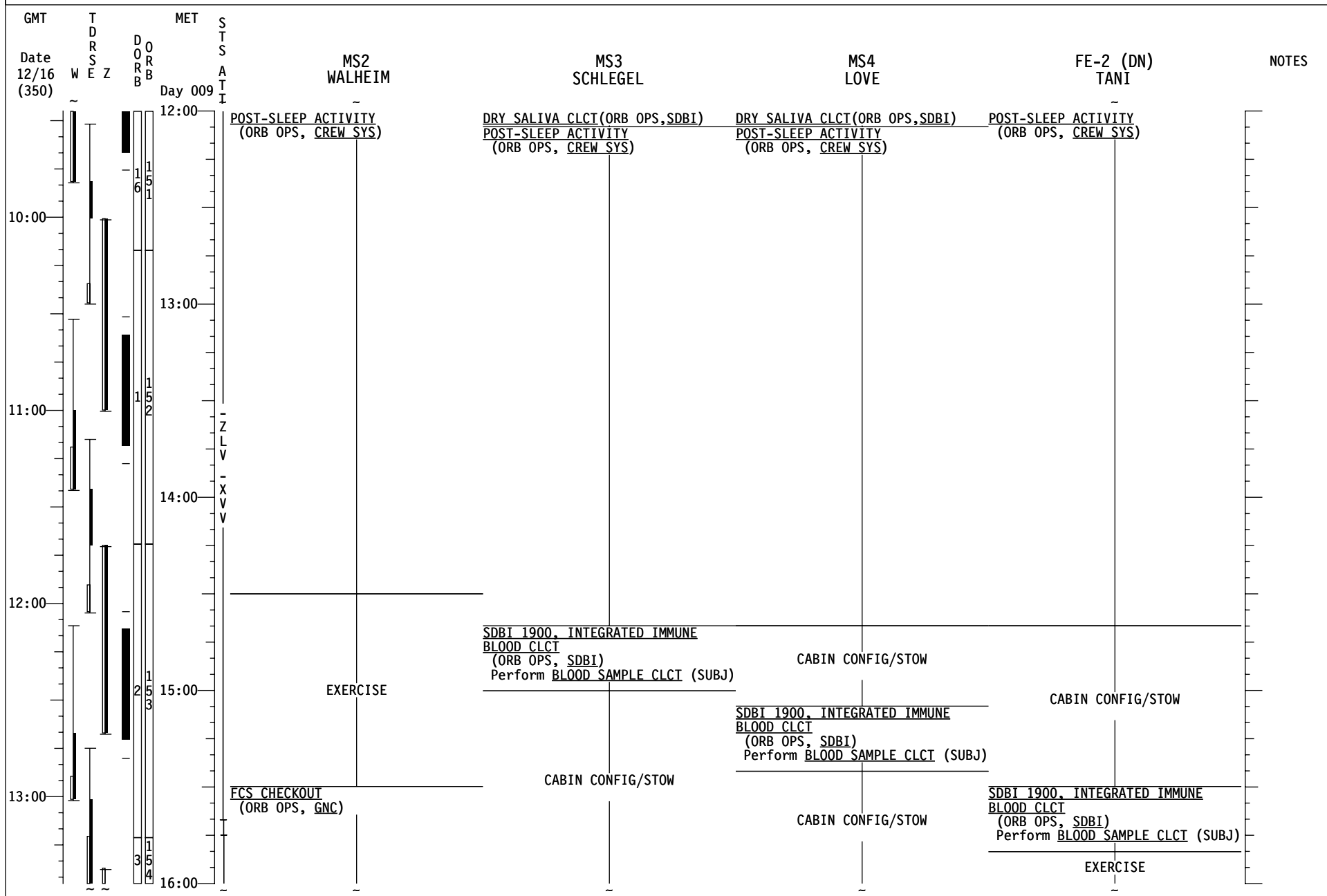
STS-122 FD (10)



STS-122 FD (11)



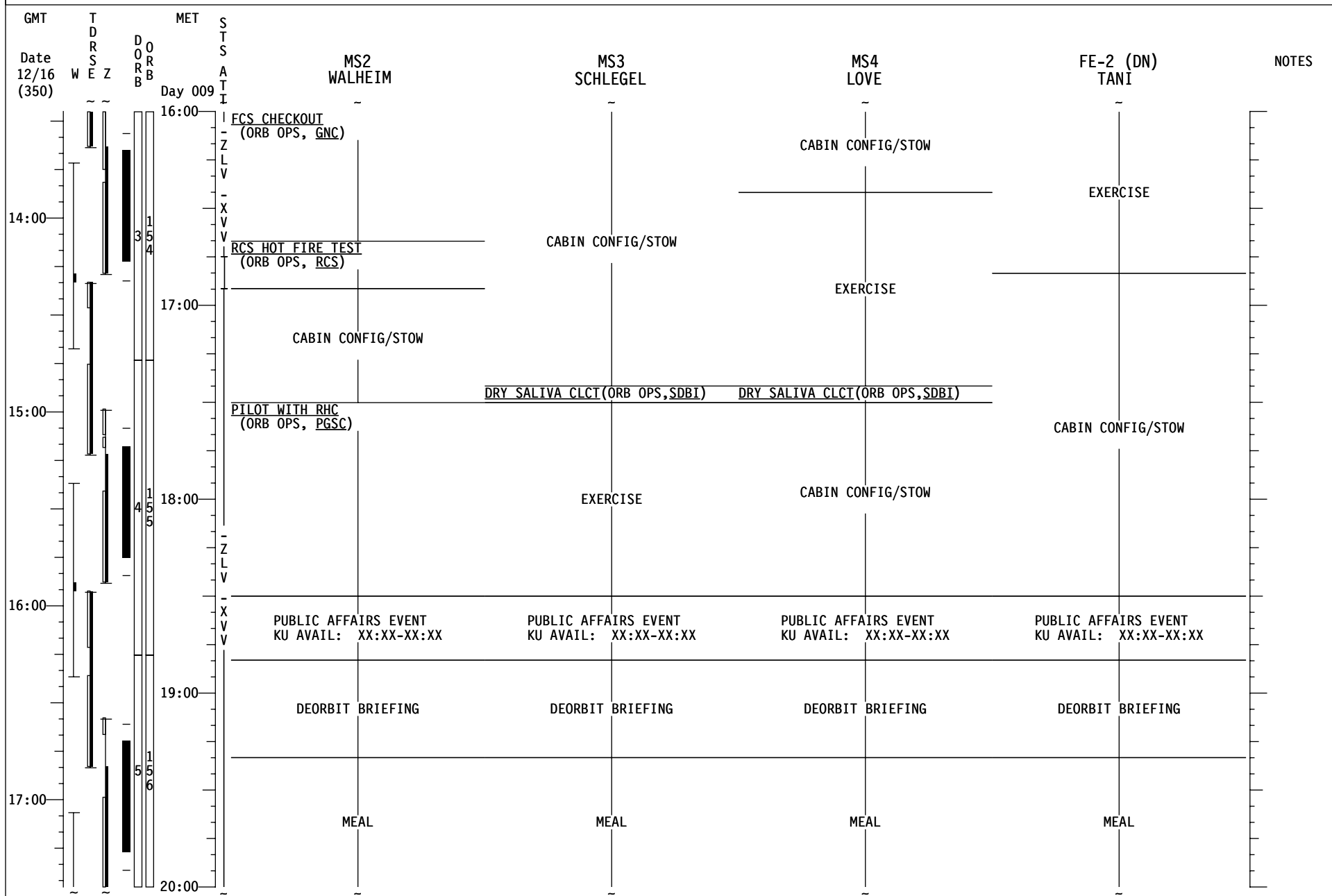
STS-122 FD (11)



STS-122 FD (11)

GMT	T D R S E Z	MET	S T S	C D R	P L T	M S 1	N O T E S
Date 12/16 (350)	W E Z	Day 009	A T I	FRICK	POINDEXTER	MELVIN	
16:00			I Z L V				
				FCS CHECKOUT (ORB OPS, GNC)	FCS CHECKOUT (ORB OPS, GNC)		
14:00			X V V			CABIN CONFIG/STOW	
				RCS HOT FIRE TEST (ORB OPS, RCS)	RCS HOT FIRE TEST (ORB OPS, RCS)		
17:00				CABIN CONFIG/STOW	CABIN CONFIG/STOW		TFL 188
15:00				DRY SALIVA CLCT(ORB OPS,SDBI)	DRY SALIVA CLCT(ORB OPS,SDBI)	EXERCISE	
				PILOT WITH RHC (ORB OPS, PGSC)	PILOT WITH RHC (ORB OPS, PGSC)		
18:00			Z L V				
						ANALOG PAO CC (PHOTO/TV, SONY PD100)	
16:00			X V V				
				PUBLIC AFFAIRS EVENT KU AVAIL: XX:XX-XX:XX	PUBLIC AFFAIRS EVENT KU AVAIL: XX:XX-XX:XX	PUBLIC AFFAIRS EVENT KU AVAIL: XX:XX-XX:XX	
19:00				DEORBIT BRIEFING	DEORBIT BRIEFING	DEORBIT BRIEFING	
17:00				MEAL	MEAL	MEAL	
20:00							

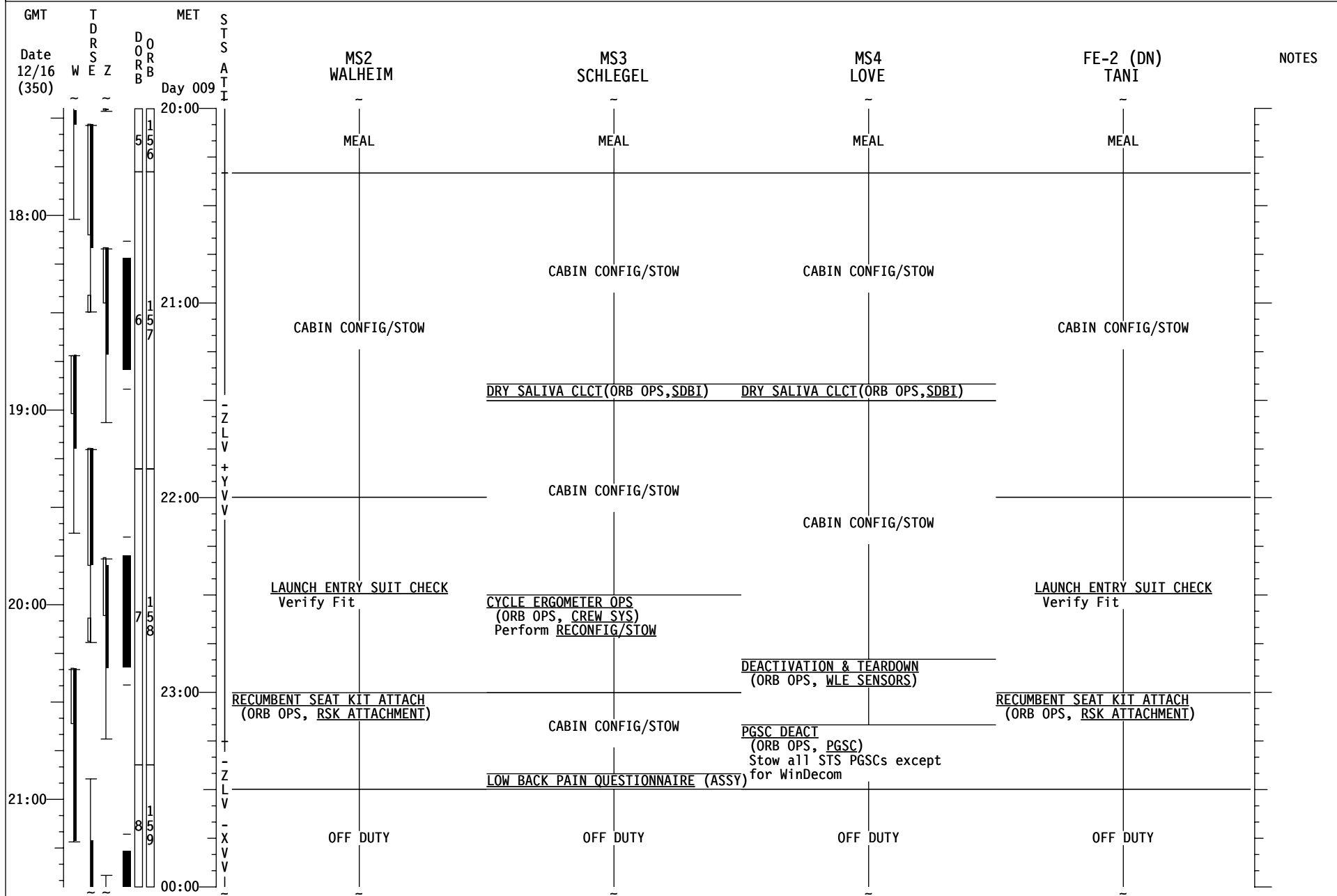
STS-122 FD (11)



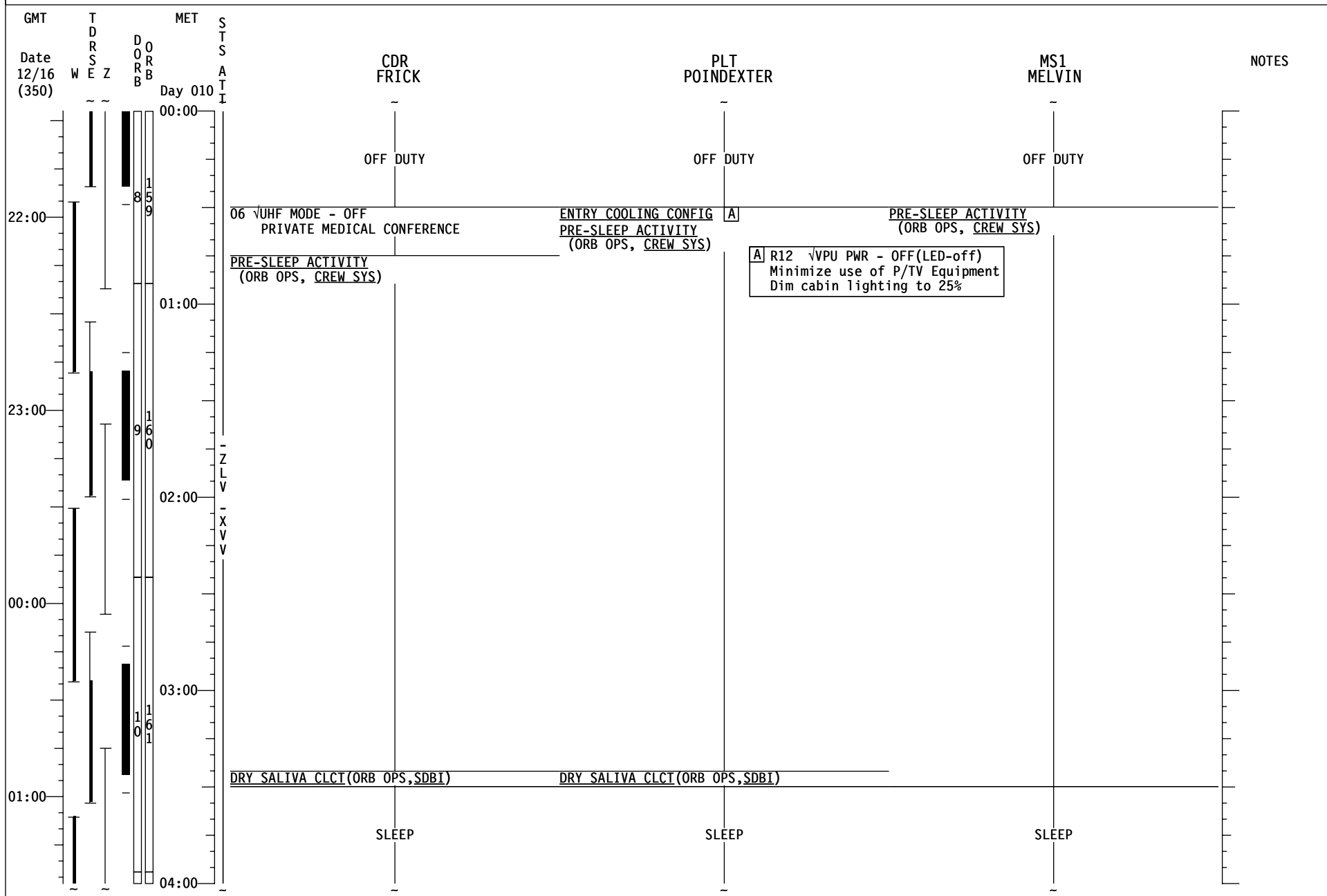
STS-122 FD (11)

GMT	T D R S E Z	MET	S T S	C D R	P L T	M S 1	N O T E S
Date 12/16 (350)	W E Z	Day 009	A T I	FRICK	POINDEXTER	MELVIN	
20:00				MEAL	MEAL	MEAL	
18:00				MNVR (TRK) -ZLV +YVV (Water Dump) TG=2 BV=3 OM=270 A1/AUTO/VERN Init TRK	ENTRY VIDEO SETUP (PHOTO/TV, MINI-CAM)	LANDING-1 COMM C/O (ORB OPS, COMM/INST) MLA AOS: 20:28:26 LOS: 20:34:46	
				CWC OVERBOARD DUMP (ORB OPS, ECLS) Initiate Dump	SSV DEACTIVATION (PHOTO/TV, SSV)	COMM STRING 1 C/O (PART B) (ORB OPS, COMM/INST)	
21:00				PWR DUMP - SUPPLY LINE (ORB OPS, ECLS) Dump SN TBS (Barcode #TBS) Dump dur. -xx min			
					CABIN CONFIG/STOW		
19:00				SUPPLY H2O DUMP USING FES (ORB OPS) Step 1 using FES Pri A DRY SALIVA CLCT(ORB OPS,SDBI)		CABIN CONFIG/STOW	
					CABIN CONFIG/STOW		
22:00				EXERCISE	CWC OVERBOARD DUMP (ORB OPS, ECLS) Perform DUMP TERMINATION	LANDING-1 COMM C/O (ORB OPS, COMM/INST) DFR AOS: 21:56:28 LOS: 22:04:37	
					CWC OVERBOARD DUMP (ORB OPS, ECLS) Initiate Dump		
						CABIN CONFIG/STOW	
20:00				CABIN CONFIG/STOW		CYCLE ERGOMETER OPS (ORB OPS, CREW SYS) Perform RECONFIG/STOW	
					CABIN CONFIG/STOW		
23:00				C3 MASTER MADS POWER - ON A6L MADS STRAIN GAGE - ON CWC OVERBOARD DUMP (ORB OPS, ECLS) Perform DUMP TERMINATION			
					CABIN CONFIG/STOW	CABIN CONFIG/STOW	
21:00				MNVR (TRK) -ZLV -XVV -TG=2 BV=3 OM=0 Z A1/AUTO/VERN Init TRK	SUPPLY WATER DUMP USING FES (ORB OPS, ECLS) On MCC GO: Step 2, FES Pri A Req'd	KU-BD ANT STOW (ORB OPS, COMM/INST)	
				OFF DUTY	OFF DUTY	OFF DUTY	
00:00							

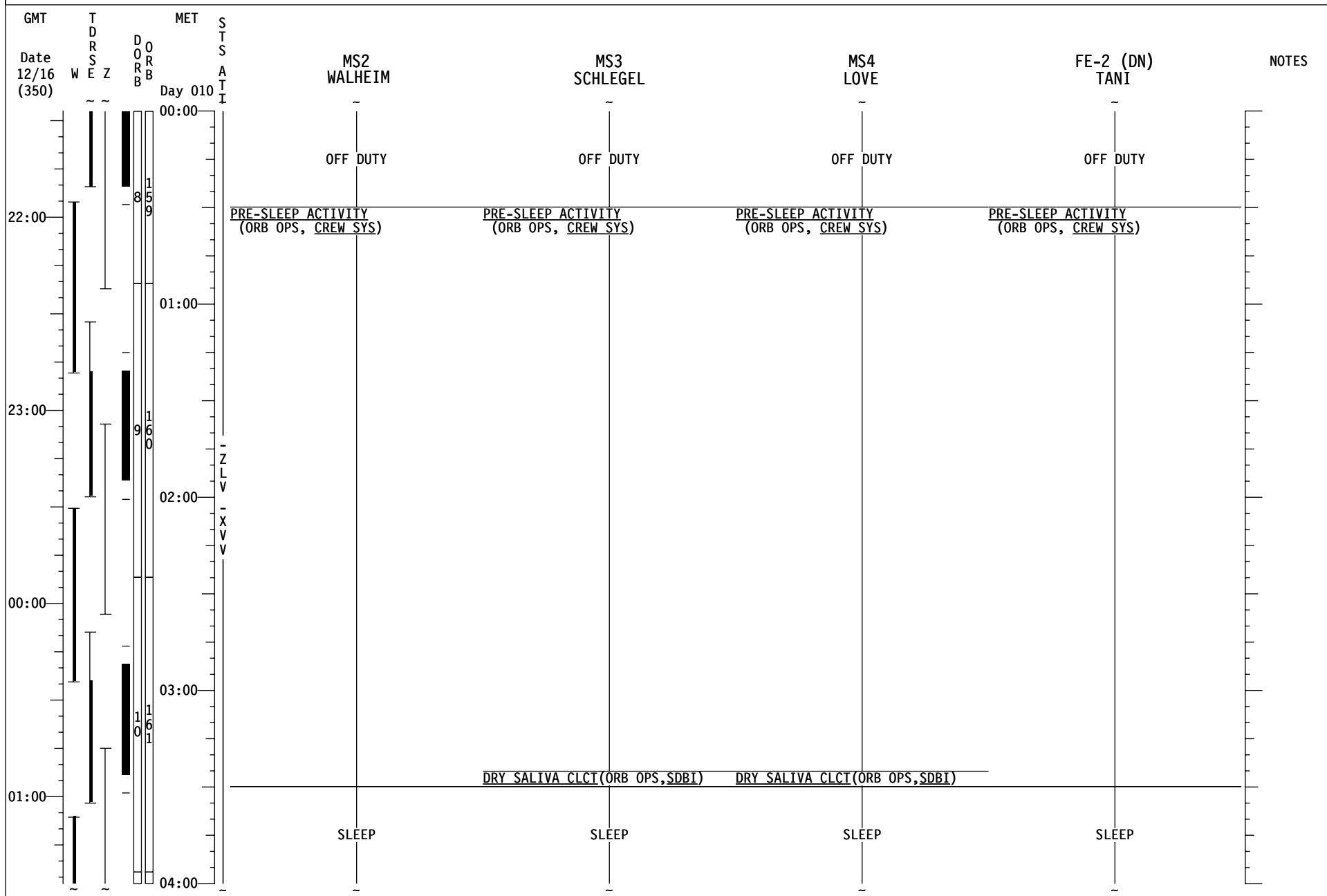
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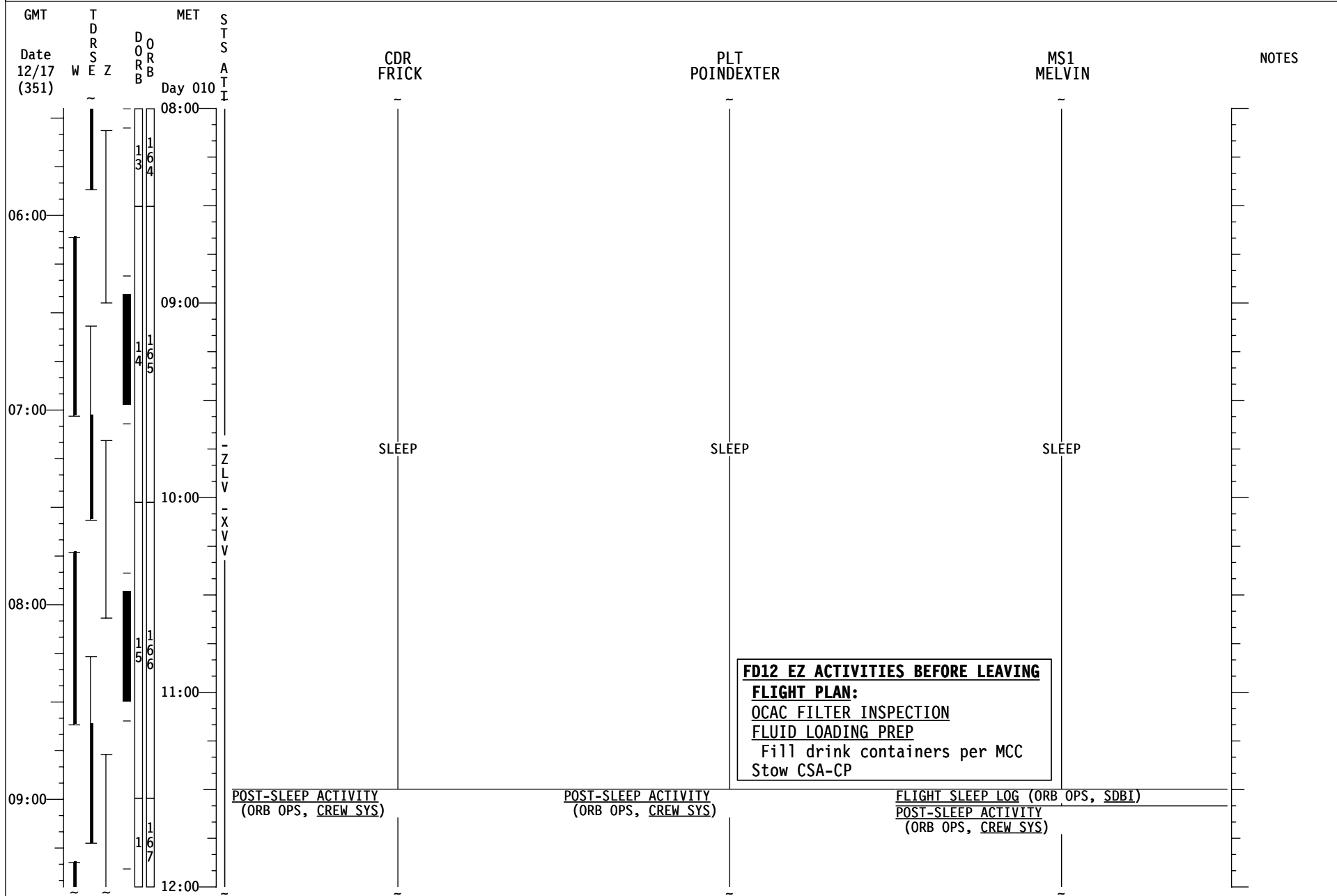
STS-122 FD (11)



STS-122 FD (11)

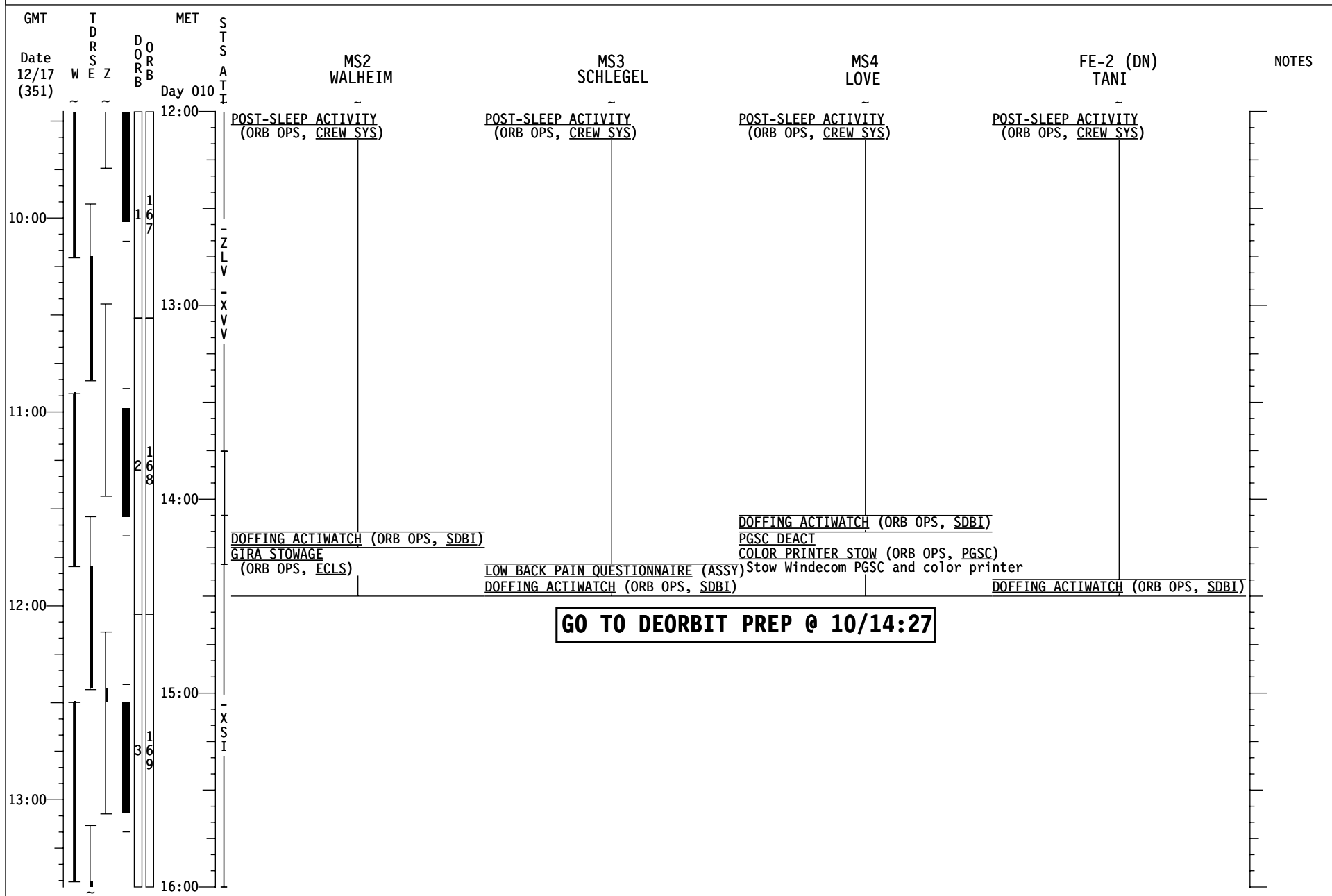


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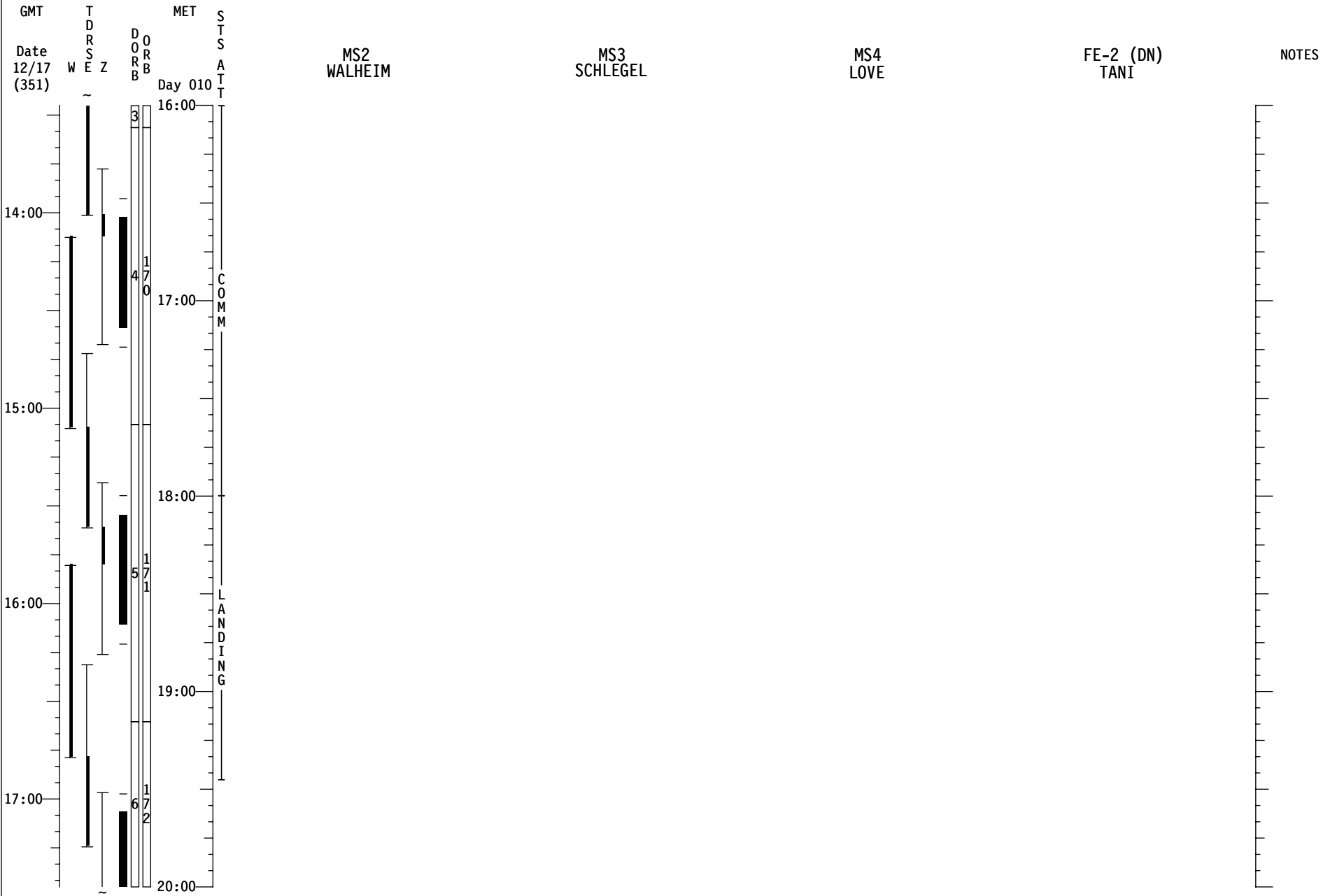


FD12 EZ ACTIVITIES BEFORE LEAVING
FLIGHT PLAN:
 OCAC FILTER INSPECTION
 FLUID LOADING PREP
 Fill drink containers per MCC
 Stow CSA-CP

STS-122 FD (12)



STS-122 FD (12)



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ATTITUDE TIMELINE

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Attitude Timeline

MET/GMT	ORBITER		REF ATT/REMARKS	EVENT
	MNVR OPTION	DAP E/S/ β		
1 000/00:38:03 M 340/22:05:23 G	M50 (CALC) INRTL R = 72.00 MNVR P = 134.00 PYR Y = 10.00 MNVR A1/AUTO/PRI HOLD (same)	RATE 0.2000 DB AT 5.00 DB RT 0.20 SUN R 194 P 72 β = 13	+X PYR R = 359.91 P = 16.19 Y = 0.15 LVLH 000/00:38:03 M 340/22:05:23 G	OMS2 Heads Up DV = 96.8 fps
2 000/00:40:00 M 340/22:07:20 G	STS-122 Liftoff 12/06/2007 1527 CDT			
3 000/01:10:00 M 19:51 340/22:37:20 G 47:11	LVLH TRACK TGT = 2 P = 90.00 BV = 3 Y = 0.00 OM = 115.00 MNVR A1/AUTO/PRI HOLD (same)	RATE 0.2000 DB AT 5.00 DB RT 0.20 EARTH R 0 P 90 β = 13	LVLH R=180.00 P= 0.00 Y=295.00	BIASED -ZLV -YVV PLBD OPENING
4 000/02:20:00 M 32:45 340/23:47:20 G 341/00:00:05	M50 (CALC) INRTL R = 309.46 MNVR P = 346.92 PYR Y = 297.88 MNVR A1/AUTO/VERN HOLD A1/AUTO/PRI	RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 343 P 52 β = 13	+X PYR R = 0.00 P = 16.00 Y = 0.00 LVLH 000/02:36:35 M 341/00:03:55 G	NC1 OMS/Heads Up DV = 72.9 fps
5 000/02:45:00 M 55:47 341/00:12:20 G 23:07	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 β = 13	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XVV Overnight Att
6 000/06:00:00 M 341/03:27:20 G	TBD	TBD	TBD	INRTL MNVR FN1
7 000/07:30:00 M 341/04:57:20 G	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 β = 12	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XVV
8 000/16:25:00 M 40:00 341/13:52:20 G 14:07:20	M50 (CALC) INRTL R = 252.52 MNVR P = 139.64 PYR Y = 31.54 MNVR A1/AUTO/VERN HOLD A1/AUTO/PRI	RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 11 P 94 β = 10	+X PYR R = 180.00 P = 344.00 Y = 0.00 LVLH 000/16:43:28 M 341/14:10:48 G	NC2 OMS/Heads Up DV = 8 fps
9 000/16:50:00 M 51:51 341/14:17:20 G 19:11	LVLH TRACK TGT = 2 P = 90.00 BV = 3 Y = 0.00 OM = 160.00 MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 EARTH R 0 P 90 β = 10	LVLH R=180.00 P= 0.00 Y=340.00	Bias -ZLV +XVV Flat Field
10 000/18:20:00 M 33:14 341/15:47:20 G 16:00:34	TGT= 4 BV = 5 P = 0.00 Y = 40.00 OM = 330.00 MNVR A14/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 90 P 40 β = 10	INRTL R=133.22 P=217.04 Y=298.88 RA= 253.012 DEC= -22.528S	+YSI BIASED STBD 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/ β		
11 000/20:20:00 M 31:00 341/17:47:20 G 58:20	TGT= 4 BV = 5 P = 315.00 Y = 0.00 OM = 188.00 MNVR A14/AUTO/VERN HOLD A14/AUTO/PRI	RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 180 P 45 $\beta = 10$	INRTL R= 95.14 P=312.78 Y=287.20 RA= 253.103 DEC= -22.538S	+XSI BIASED NOSE SURVEY
12 000/22:30:00 M 35:00 341/19:57:20 G 20:02:20	TGT= 4 BV = 5 P = 0.00 Y = 315.00 OM = 170.00 MNVR A14/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 270 P 45 $\beta = 9$	INRTL R=319.27 P=205.80 Y=311.90 RA= 253.202 DEC= -22.549S	-YSI BIASED PORT SURVEY
13 001/00:30:00 M 33:15 341/21:57:20 G 22:00:35	LVLH TRACK TGT = 2 P = 90.00 BV = 3 Y = 0.00 OM = 150.00 MNVR A14/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 EARTH R 0 P 90 $\beta = 9$	LVLH R=180.00 P= 0.00 Y=330.00	UPPER SURFACE SURVEY SR 00:33 SS 01:25 SR 02:03 SS 02:54
14 001/01:50:00 M 54:32 341/23:17:20 G 21:52	M50 (CALC) INRTL R = 252.16 MNVR P = 117.88 PYR Y = 318.46 MNVR A1/AUTO/VERN HOLD A1/AUTO/PRI	RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 27 P 21 $\beta = 9$	+X PYR R = 180.00 P = 350.00 Y = 0.00 LVLH 001/01:59:00 M 341/23:26:20 G	NC3 +X RCS Heads Down DV = 3.0 fps
15 001/02:05:00 M 19:59 341/23:32:20 G 47:19	GND TRACK TGT = 3 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 $\beta = 9$	LVLH R= 2.06 P=276.53 Y= 0.00 LAT = 0.000N LON = -143.000W ALT = 19232.0nm	MNVR COMM HI GROUND TRK
16 001/03:20:00 M 21:50 342/00:47:20 G 49:10	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 $\beta = 8$	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XV Overnight Att
17 001/13:55:00 M 14:02:30 342/11:22:20 G 29:50	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 $\beta = 7$	LVLH R= 0.00 P=180.00 Y= 90.00	-ZLV +YV SIMO DUMP FTR LOAD
18 001/16:15:00 M 27:13 342/13:42:20 G 54:33	M50 (CALC) INRTL R = 68.24 MNVR P = 148.58 PYR Y = 60.05 MNVR A7/AUTO/VERN HOLD A7/AUTO/PRI	RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 188 P 124 $\beta = 6$	+X PYR R = 0.00 P = 16.00 Y = 0.00 LVLH 001/16:30:58 M 342/13:58:18 G	NH DV = 151.3 fps
19 001/16:35:00 M 342/14:02:20 G	 HOLD A7/AUTO/VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020 EARTH R 180 P 122 $\beta = 6$	LVLH R= 0.01 HOLD P= 32.11 Y=359.99	HOLD B/W BURNS
20 001/17:04:00 M 05:14 342/14:31:20 G 32:34	M50 (CALC) INRTL R = 1.45 MNVR P = 40.97 PYR Y = 280.58 MNVR B7/AUTO/ALT HOLD A7/AUTO/PRI	RATE 0.5000 DB AT 2.00 DB RT 0.200 SUN R 346 P 28 $\beta = 6$	+X PYR R = 0.00 P = 16.00 Y = 0.00 LVLH 001/17:09:19 M 342/14:36:39 G	NC4 OMS/Heads Up DV = 45.2 fps

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FLT PLN/122/BAS

Attitude Timeline

MET/GMT	ORBITER		REF ATT/REMARKS	EVENT
	MNVR OPTION	DAP E/S/ β		
21 001/17:15:00 M 19:17 342/14:42:20 G 46:37	EPH TARGET TGT = 1 P = 90.00 BV = 3 Y = 0.00 OM = 0.00 MNVR B7/AUTO/ALT HOLD A7/AUTO/VERN	RATE 0.5000 DB AT 2.00 DB RT 0.200 $\beta = 6$	LVLH R=359.83 P=270.83 Y= 0.00 TGT VIDFILE: 122BAS VID #: 13	-Z TG TRK
22 001/18:30:00 M 34:34 342/15:57:20 G 16:01:54	M50 (CALC) INRTL R = 346.49 MNVR P = 25.73 PYR Y = 280.61 MNVR A7/AUTO/VERN HOLD A7/AUTO/PRI	RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 347 P 31 $\beta = 6$	+X PYR R = 0.00 P = 16.00 Y = 0.00 LVLH 001/18:41:17 M 342/16:08:37 G	Ti OMS/Heads Up DV = 8.9 fps
23 001/18:45:00 M 48:58 342/16:12:20 G 16:18	EPH TARGET TGT = 1 P = 90.00 BV = 3 Y = 0.00 OM = 0.00 MNVR B7/AUTO/ALT HOLD A7/AUTO/VERN	RATE 0.5000 DB AT 2.00 DB RT 0.200 $\beta = 6$	LVLH R=359.16 P=272.49 Y= 0.00 TGT VIDFILE: 122BAS VID #: 13	-Z TG TRK
24 001/19:01:17 M 342/16:28:37 G	MC1			MC1 Ti + 00:20
25 001/19:02:01 M 06:10 342/16:29:21 G 33:30	LVLH TRACK TGT = 2 P = 330.00 BV = 5 Y = 0.00 OM = 0.00 MNVR A7/AUTO/VERN HOLD (same)	RATE 0.0876 DB AT 1.000 DB RT 0.020 EARTH R 180 P 30 $\beta = 6$	LVLH R= 0.00 P=300.00 Y= 0.00	Post MC1
26 001/19:31:17 M 342/16:58:37 G	MC2			MC2 Ti + ~00:50
27 001/19:32:00 M 35:04 342/16:59:20 G 17:02:24	LVLH TRACK TGT = 2 P = 310.00 BV = 5 Y = 0.00 OM = 0.00 MNVR A7/AUTO/VERN HOLD (same)	RATE 0.1086 DB AT 1.000 DB RT 0.020 EARTH R 180 P 50 $\beta = 6$	LVLH R= 0.00 P=320.00 Y= 0.00	POST MC2
28 001/19:48:17 M 342/17:15:37 G	MC3			MC3 Ti + ~01:07
29 001/19:49:00 M 51:56 342/17:16:20 G 19:16	LVLH TRACK TGT = 2 P = 290.00 BV = 5 Y = 0.00 OM = 0.00 MNVR A7/AUTO/VERN HOLD (same)	RATE 0.1138 DB AT 1.000 DB RT 0.020 EARTH R 180 P 70 $\beta = 6$	LVLH R= 0.00 P=340.00 Y= 0.00	POST MC3
30 001/19:58:17 M 342/17:25:37 G	MC4			MC4 Ti + ~01:17

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Attitude Timeline

MET/GMT	ORBITER		REF ATT/REMARKS	EVENT
	MNVR OPTION	DAP E/S/ β		
31 001/19:59:01 M 20:00:40 342/17:26:21 G 28:00	LVLH TRACK TGT = 2 P = 280.00 BV = 5 Y = 0.00 OM = 0.00 MNVR A8/AUTO/VERN HOLD (same)	RATE 0.1006 DB AT 1.000 DB RT 0.020 EARTH R 180 P 80 $\beta = 6$	LVLH R= 0.00 P=350.00 Y= 0.00	POST MC4
32 001/20:09:00 M 50 342/17:36:20 G 37:10	LVLH TRACK TGT = 2 P = 270.00 BV = 5 Y = 0.00 OM = 0.00 MNVR A8/AUTO/VERN HOLD A9/AUTO/VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020 EARTH R 180 P 90 $\beta = 6$	LVLH R= 0.00 P= 0.00 Y= 0.00	RBAR MC2 + ~00:37
33 001/20:31:17 M 33:17 342/17:58:37 G 18:00:37	LVLH TRACK TGT = 2 P = 180.00 BV = 5 Y = 0.00 OM = 0.00 MNVR A9/AUTO/PRI HOLD (same)	RATE 0.7500 DB AT 5.00 DB RT 0.20 EARTH R 221 P 180 $\beta = 6$	LVLH R= 0.00 P= 90.00 Y= 0.00	+ZVV -XLV RPM START MC2 + ~01:00
34 001/20:33:17 M 35:17 342/18:00:37 G 02:37	LVLH TRACK TGT = 2 P = 90.00 BV = 5 Y = 0.00 OM = 0.00 MNVR A9/AUTO/PRI HOLD (same)	RATE 0.7500 DB AT 5.00 DB RT 0.20 EARTH R 0 P 90 $\beta = 6$	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XVV
35 001/20:35:17 M 37:17 342/18:02:37 G 04:37	LVLH TRACK TGT = 2 P = 0.00 BV = 5 Y = 0.00 OM = 0.00 MNVR A9/AUTO/PRI HOLD (same)	RATE 0.7500 DB AT 5.00 DB RT 0.20 EARTH R 162 P 0 $\beta = 6$	LVLH R= 0.00 P=270.00 Y= 0.00	-ZVV +XLV
36 001/20:37:17 M 39:17 342/18:04:37 G 06:37	LVLH TRACK TGT = 2 P = 270.00 BV = 5 Y = 0.00 OM = 0.00 MNVR A9/AUTO/PRI HOLD (same)	RATE 0.7500 DB AT 5.00 DB RT 0.20 EARTH R 180 P 90 $\beta = 6$	LVLH R= 0.00 P= 0.00 Y= 0.00	+ZLV +XVV RPM END
37 001/20:42:17 M 49:52 342/18:09:37 G 17:12	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 $\beta = 6$	LVLH R= 0.00 P= 91.00 Y= 0.00	TORVA MC2 + ~01:11
38 001/21:36:18 M 342/19:03:38 G				DOCK
39 001/22:06:00 M 35:02 342/19:33:20 G 20:02:22	COE (CALC) TGT = 2 P = 164.92 BV = 5 Y = 354.21 OM = 186.56 MNVR A12/AUTO/VERN HOLD (same)	RATE 0.1000 DB AT 1.000 DB RT 0.020 EARTH R 339 P 164 $\beta = 5$	ISS YPR R = 354.00 P = 15.00 Y = 185.00 LVLH 002/00:12:40 M 342/21:40:00 G	MNVR to TEA ORB R = 175.13 LVLH P = 75.56 Y = 7.27
40 005/14:34:00 M 35:42 346/12:01:20 G 03:02	COE (CALC) TGT = 2 P = 165.00 BV = 5 Y = 0.00 OM = 195.00 MNVR A12/AUTO/VERN HOLD (same)	RATE 0.1000 DB AT 1.000 DB RT 0.020 EARTH R 0 P 165 $\beta = -10$	ISS YPR R = 0.00 P = 15.00 Y = 195.00 LVLH 005/14:34:00 M 346/12:01:20 G	MNVR to DUMP Att ORB R = 165.49 LVLH P = 75.49 Y = 3.84

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Attitude Timeline

MET/GMT	ORBITER		REF ATT/REMARKS	EVENT
	MNVR OPTION	DAP E/S/ β		
41 005/16:44:40 M 46:22 346/14:12:00 G 13:42	COE (CALC) TGT = 2 P = 164.92 BV = 5 Y = 354.21 OM = 186.56 MNVR A12/AUTO/VERN HOLD (same)	RATE 0.1000 DB AT 1.000 DB RT 0.020 EARTH R 339 P 164 $\beta = -10$	ISS YPR R = 354.00 P = 15.00 Y = 185.00 LVLH 005/16:44:40 M 346/14:12:00 G	MNVR to Mated TEA ORB R = 175.13 LVLH P = 75.56 Y = 7.27
42 007/15:09:40 M 11:44 348/12:37:00 G 39:04	COE (CALC) TGT = 2 P = 174.00 BV = 5 Y = 0.00 OM = 180.00 MNVR A12/AUTO/VERN HOLD (same)	RATE 0.1000 DB AT 1.000 DB RT 0.020 EARTH R 0 P 174 $\beta = -19$	ISS YPR R = 0.00 P = 6.00 Y = 180.00 LVLH 007/15:09:40 M 348/12:37:00 G	MNVR to REBOOST CONFIG X ORB R = 180.00 LVLH P = 84.00 Y = 0.00
43 007/16:52:40 M 54:44 348/14:20:00 G 22:04	COE (CALC) TGT = 2 P = 164.92 BV = 5 Y = 354.21 OM = 186.56 MNVR A12/AUTO/VERN HOLD (same)	RATE 0.1000 DB AT 1.000 DB RT 0.020 EARTH R 339 P 164 $\beta = -20$	ISS YPR R = 354.00 P = 15.00 Y = 185.00 LVLH 007/16:52:40 M 348/14:20:00 G	MNVR to Mated TEA ORB R = 175.13 LVLH P = 75.56 Y = 7.27
44 008/14:44:40 M 15:13:43 349/12:12:00 G 41:03	LVLH TRACK TGT = 2 P = 180.00 BV = 2 Y = 0.00 OM = 0.00 MNVR A12/AUTO/VERN HOLD (same)	RATE 0.1000 DB AT 1.000 DB RT 0.020 EARTH R 63 P 180 $\beta = -24$	LVLH R= 0.00 P= 90.00 Y= 0.00	MNVR to UNDOCK Att
45 008/15:50:00 M 349/13:17:20 G				UNDOCK
46 008/16:15:00 M 349/13:42:20 G	LVLH FREE ROTATION ROTR ABOUT +Y AXIS RATE=0.130 MNVR A1/LVLH/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 $\beta = -24$	LVLH R= 0.00 P= 90.00 Y= 0.00	flyaround
47 008/17:05:00 M 349/14:32:20 G		RATE 0.2000 DB AT 1.000 DB RT 0.020 EARTH R 0 P 150 $\beta = -25$	LVLH R= 0.00 HOLD P=120.00 Y= 0.00	SEP 1 DV + 3 fps
48 008/17:06:00 M 349/14:33:20 G	LVLH FREE ROTATION ROTR ABOUT +Y AXIS RATE=0.130 MNVR A1/LVLH/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 $\beta = -25$	LVLH R= 0.00 P=120.00 Y= 0.00	flyaround
49 008/17:33:00 M 349/15:00:20 G		RATE 0.2000 DB AT 1.000 DB RT 0.020 EARTH R 180 P 61 $\beta = -25$	LVLH R= 0.00 HOLD P=330.60 Y= 0.00	SEP 2 DV = 1 fps
50 008/17:35:00 M 48:58 349/15:02:20 G 16:18	LVLH TRACK TGT = 2 P = 90.00 BV = 3 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 $\beta = -25$	LVLH R=180.00 P= 0.00 Y= 50.00	-ZLV +YVV DUMP REGION C

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/ β		
51 008/19:20:00 M 24:13 349/16:47:20 G 51:33	TGT= 4 BV = 5 P = 0.00 Y = 40.00 OM = 192.00 MNVR A14/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 90 P 40 $\beta = -25$	INRTL R=215.06 P= 45.55 Y=316.31 RA= 261.855 DEC= -23.236S	+YSI BIASED STBD SURVEY
52 008/21:10:00 M 12:52 349/18:37:20 G 40:12	TGT= 4 BV = 5 P = 315.00 Y = 40.00 OM = 166.00 MNVR A14/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 130 P 57 $\beta = -25$	INRTL R=168.76 P= 6.06 Y=318.22 RA= 261.939 DEC= -23.240S	+XSI BIASED NOSE SURVEY
53 008/22:20:00 M 28:01 349/19:47:20 G 55:21	TGT= 4 BV = 5 P = 0.00 Y = 315.00 OM = 140.00 MNVR A14/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 270 P 45 $\beta = -26$	INRTL R=328.80 P=225.99 Y=298.46 RA= 261.993 DEC= -23.243S	+XSI BIASED PORT SURVEY
54 009/00:05:00 M 16:24 349/21:32:20 G 43:44	GND TRACK TGT = 3 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 $\beta = -26$	LVLH R= 37.27 P=246.40 Y= 0.00 LAT = 0.000N LON = -110.000W ALT = 19232.0nm	MNVR COMM HI GROUND TRK
55 009/01:09:53 M 349/22:37:13 G				NC5
56 009/01:40:00 M 43:50 349/23:07:20 G 11:10	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 $\beta = -26$	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XV
57 009/14:06:32 M 350/11:33:52 G				NC6
58 009/15:40:00 M 350/13:07:20 G		RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 150 P 102 $\beta = -29$	INRTL R=116.52 HOLD P=115.60 Y= 36.19	FCS C/O INRTL Hold
59 009/15:45:00 M 46:39 350/13:12:20 G 13:59	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 $\beta = -29$	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XV
60 009/16:45:00 M 350/14:12:20 G		RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 51 P 140 $\beta = -29$	INRTL R=244.03 HOLD P=327.38 Y= 34.12	RCS HOTFIRE

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Attitude Timeline

MET/GMT	ORBITER		REF ATT/REMARKS	EVENT
	MNVR OPTION	DAP E/S/ β		
61 009/16:55:00 M 58:16 350/14:22:20 G 25:36	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 $\beta = -29$	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XVV
62 009/20:20:00 M 27:30 350/17:47:20 G 54:50	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 $\beta = -30$	LVLH R= 0.00 P=180.00 Y= 90.00	-ZLV +YVV DUMP
63 009/23:15:00 M 22:30 350/20:42:20 G 49:50	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 $\beta = -31$	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XVV
64 010/13:45:00 M 58:04 351/11:12:20 G 25:24	INRTL R = 101.00 MNVR P = 341.00 Y = 359.00 MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 189 P 102 $\beta = -34$	-Y: 16 AOS: 13:33 LOS: 14:23 -Z: 23 AOS: 13:31 LOS: 14:15	IMU ALIGN -Y:16 ACHERNAR -Z:23 BETELGEUSE PAIR AOS: 13:33 PAIR LOS: 14:15
65 010/14:05:00 M 11:03 351/11:32:20 G 38:23	INRTL R = 53.00 MNVR P = 42.00 Y = 41.00 MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 241 P 117 $\beta = -34$	-Y: 51 AOS: 13:51 LOS: 14:41 -Z: 55 AOS: 13:42 LOS: 14:32	IMU VERIF -Y:51 ATRIA -Z:55 ALPHARD PAIR AOS: 13:51 PAIR LOS: 14:32
66 010/14:20:00 M 25:45 351/11:47:20 G 53:05	TGT= 4 BV = 5 P = 184.00 Y = 0.00 OM = 90.00 MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 180 P 176 $\beta = -34$	INRTL R=187.76 P=293.73 Y= 66.77 RA= 263.837 DEC= -23.326S	-XSI
67 010/16:00:00 M 03:42 351/13:27:20 G 31:02	M50 (CALC) INRTL R = 172.43 MNVR P = 274.51 PYR Y = 36.43 MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 90 P 150 $\beta = -34$	+Y PYR R = 0.00 P = 0.00 Y = 30.00 TCWIN 010/16:00:00 M 351/13:27:20 G	COMM
68 010/18:00:00 M 03:10 351/15:27:20 G 30:30	M50 (CALC) INRTL R = 242.71 MNVR P = 303.19 PYR Y = 338.97 MNVR A1/AUTO/VERN HOLD (same)	RATE 0.5000 DB AT 1.000 DB RT 0.020 SUN R 35 P 92 $\beta = -35$	+X PYR R = 0.00 P = 196.00 Y = 0.00 LVLH 010/18:27:00 M 351/15:54:20 G	DO TIG 10/18:27-ish DV = 287.4 fps

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FLIGHT PLAN NOTES

FLIGHT PLAN NOTES
(CONSTRAINTS AND GUIDELINES)

A. FLIGHT DESCRIPTION

Orbiter: Atlantis (OV-104)
 Launch Window: 10 minutes
 Inclination: 51.6°
 Insertion Attitude: 122 nautical miles
 Rendezvous Altitude: 185 nautical miles
 Duration: 11+(1)+2 Days

B. SHUTTLE AND STATION CREW

<u>Shuttle Crew:</u>		<u>ISS Crew:</u>	
CDR/IV	– Steven N. Frick	FE-2 (DN)	– Daniel M. Tani
PLT/IV	– Alan G. Poindexter	ISS CDR	– Peggy A. Whitson
MS1/	– Leland D. Melvin	FE-1	– Yuri Malenchenko
MS2/EV1	– Rex J. Walheim	FE-2 (UP)	– Léopold Eyharts
MS3/EV2	– Hans Schlegel		
MS4/EV3	– Stanley G. Love		

C. MAJOR EVENTS

<u>EVENT</u>	<u>FD</u>	<u>MET</u>	<u>GMT</u>	<u>CST</u>
Launch	01	00/00:00	340/21:27	15:27 (12/06/07)
OMS-2	01	00/00:38	340/22:05	16:05 (12/06/07)
NC-1	01	00/02:36	341/00:03	18:03 (12/06/07)
NC-2	02	00/16:43	341/14:10	08:10 (12/07/07)
OBSS Survey	02	00/16:50	341/14:17	08:17 (12/07/07)
NC-3	02	01/01:40	341/23:07	17:07 (12/07/07)
NH	03	01/16:31	342/13:58	07:58 (12/08/07)
NC-4	03	01/17:09	342/14:36	08:36 (12/08/07)
Ti	03	01/18:41	342/16:08	10:08 (12/08/07)
ISS Docking	03	01/21:36	342/19:03	13:03 (12/08/07)
OBSS Handoff	03	02/00:00	342/21:27	15:27 (12/08/07)
EVA 1	04	02/18:50	343/16:17	10:17 (12/09/07)
Columbus Install	04	03/01:05	343/22:32	16:32 (12/09/07)
EVA 2	06	04/18:50	345/16:17	10:17 (12/11/07)
EVA 3	08	06/17:50	347/15:17	09:17 (12/13/07)
Undock	10	08/15:50	349/13:17	07:17 (12/15/07)
Sep 1	10	08/17:05	349/14:32	08:32 (12/15/07)
Sep 2	10	08/17:33	349/15:00	09:00 (12/15/07)
Deorbit	12	10/18:27	351/15:54	09:54 (12/17/07)
Landing	12	10/19:30	351/16:57	10:57 (12/17/07)

FLIGHT PLAN NOTES

D. LANDING OPPORTUNITIES

		<u>Landing Orbit #</u>	<u>Site</u>	<u>TIG MET</u>	<u>Landing MET</u>	<u>Landing GMT</u>	<u>Landing CST</u>
Nominal	Primary	171	KSC	10/18:27	10/19:30	351/16:57	10:57, 12/17/07
	1 Rev Late	172	KSC	10/20:03	10/21:05	351/18:32	12:32, 12/17/07
	Weather Alt	173	EDW	10/21:32	10/22:35	351/20:02	14:02, 12/17/07
EOM + 1	Primary	186	KSC	11/17:14	11/18:17	352/15:45	09:44, 12/18/07
	1 Rev Late	187	KSC	11/18:50	11/19:52	352/17:20	11:19, 12/18/07
	Weather Alt	188	EDW	11/20:20	11/21:23	352/18:50	12:50, 12/18/07
EOM + 2	Primary	202	KSC	12/17:37	12/18:40	353/16:07	10:07, 12/19/07
	1 Rev Late	203	KSC	12/19:13	12/20:15	353/17:43	11:42, 12/19/07
	Weather Alt	204	EDW	12/20:43	12/21:45	353/19:13	13:12, 12/19/07

E. COMMUNICATIONS

The Summary Timeline contains several databands for ground sites and TDRS events. The TDRS band reflects the three TDRS satellites that will be used for Orbiter coverage (East, West, and Z) and their longitudinal position. The data shown contain Ku-band coverage (unshaded bars) as well as TDRS SHO schedule (solid bars). The SHO schedule depicts early, normal, and midpass handovers and closed or extended Z satellite coverage.

The GNG band contains the AOS/LOS of the US ground sites used for the L-1 Comm Checks and for Deorbit and landing comm. MLA and DFA are for Kennedy Space Center and Edwards Air Force Base respectively, and WSS is for White Sands Space Harbor (which is needed on wave-off opportunities only).

The RS band contains the AOS/LOS of the Russian ground sites used the by FGB and SM. The data displayed is a summation of AOS/LOS times of all the ground sites on each respective pass.

Shuttle

TDRS Support: East (-46°), West (-171°), and Z (-275°)

Ground Sites: MLA, WLP, WSS, and DFR

Contingency RTS: DGS, GTS, HTS, OTS, CTS, VTS, and NHS

ISS

TDRS Support: East (-46°), West (-171°), and Z (-275°)

US Ground Sites: MIL, WLP, and DFR

Russian Ground Sites: DJS, PPK, BRN, SPB, KLP, ULD, SHK, USK

F. PAYLOADS

LAUNCH PACKAGE (LP) 1E

The primary objective of this flight is to install and activate the Columbus Module, rendezvous and dock with the ISS at Pressurized Mating Adapter-2 (PMA-2) on Node 2, and deliver and return items in the Orbiter Payload Bay. The EVA tasks include unberthing the Columbus Module from the Payload Bay, installing the Power and Data Grapple Fixture (PDGF) on the Columbus Module, deploying and installing the Nitrogen Tank Assembly (NTA) to the ISS P1, and installing and activating the European Technology Exposed Facility (EuTEF) and SOLAR on the Columbus Module. Also performed via EVA is the return of a failed Control Moment Gyroscope (CMG) on ISS from ESP 2. The rotation of a single ISS crewmember will also be performed on this flight.

G. PAYLOADS OF OPPORTUNITY

1. Maui Analysis of Upper atmospheric Injections (MAUI)

The objective of the MAUI payload is to obtain optical signatures of spacecraft plumes using the optical telescope sensors and all-sky images at the Air Force Maui Optical and Supercomputing Site (AMOS). The MAUI payload will require state vector information and may request OMS, Primary Reaction control System (PRCS) and Vernier Reaction Control System (VRCS) burns, if propellant and crew time are available. The MAUI payload may collect data during any encounter opportunity when the Orbiter support activities can be planned to meet the criteria defined.

H. ON ORBIT DETAILED TEST OBJECTIVES (DTOS)

1. DTO 805 Crosswind Landing Performance (DTO of Opportunity)

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

2. DTO 853 In-flight Evaluation for Areas of CO₂ Concentration

The purpose/objective of the DTO is to evaluate Carbon Dioxide (CO₂) levels at mission specific times and suspect areas in the Orbiter that have the potential to contain elevated levels of CO₂. CO₂ levels will be recorded using the Carbon Dioxide Monitor (CDM) – a portable handheld device designed to monitor and quantify CO₂ concentrations.

I. STATION DEVELOPMENT TEST OBJECTIVE (SDTO)

1. SDTO 13005-U, ISS Structural Life Validation and Extension

The objective of this SDTO is to accurately determine ISS structural life usage, to expand ISS operations, and to increase the life of the structure. Structural life estimates are based on worst case loading conditions using finite element models of structures and forcing function estimations. It is desirable to reduce this conservatism through post-flight reconstructions using correlated models, validated forcing functions, measured ISS response data, and actual on-orbit loading conditions. This reconstruction requires actual or educated estimates of input (forcing function) and actual output (sensor measurements) of the ISS response.

J. SHORT DURATION BIOASTRONAUTICS INVESTIGATIONS (SDBIs)

1. SDBI 1490 (Protocol B) – Bioavailability and Performance Effects of Promethazine During Space Flight

The purpose of this SDBI is to establish dose-response relationship of Promethazine (PMZ) before and during flight, estimate bioavailability of PMZ from the intramuscular (IM), oral, and suppository routes of administration before and during flight, and compare and contrast the effect of flight-related variables (e.g., space motion sickness, (SMS), mission duration, sleep medications, and crew activity schedules) and PMZ administration on sleep quality and efficiency.

2. SDBI 1503-S – Test of Midodrine as a Countermeasure Against Postflight Orthostatic Hypotension

This SDBI determines the use of midodrine, an α -adrenergic agonist, to support standing arterial blood pressure and thereby reduce incidence of postflight orthostatic hypotension. During Protocol A, midodrine was administered postflight. For Protocol B, midodrine will be administered in-flight between Time of Ignition (TIG) and landing with the callout located in the Entry C/L book.

3. SDBI 1634 – Sleep-Wake Actigraphy and Light Exposure During Spaceflight

This SDBI will use state-of-the-art ambulatory technology to monitor sleep-wake activity and light exposure patterns obtained in-flight. These data should help to 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.

4. SDBI 1900 – Validation of Procedures for Monitoring Immune Function (Integrated Immune)

This SDBI is designed to develop and validate a set of assays that will monitor spaceflight-associated immune system dysfunction in crewmembers, and the clinical risk associated with long duration spaceflight. It is intended that the determined set of relevant assays will be used to monitor the effectiveness of human medical countermeasures related to immune function (exercise, medication, diet regulation-supplementation, immune modulators, etc.) In addition, the validated assays will have significant benefit for the routine monitoring of crewmembers immune system status with regards to diagnosis and prognosis of immune-related disease states.

K. EUROPEAN SPACE AGENCY (ESA) QUESTIONNAIRES

1. Low Back Pain Questionnaire (MUS)

The goal of the experiment is to study the development of Low Back Pain during flight in short-term astronauts. According to biomechanical model, strain on the iliolumbar ligaments increases with backward tilt of the pelvis combined with forward flexion of the spine. This is what astronauts may experience due to loss of curvature.

2. Motion Perception Questionnaire (MOP)

The purpose of this experiment is to obtain insight in the process of vestibular adaptation to G-transitions and to correlate the cosmonauts susceptibility to the Space Adaptation Syndrome (SAS) with the susceptibility to Sickness Induced by Centrifugation (SIC).

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KU BAND ANTENNA MASKING PLAN

KU BAND ANT
MASKING

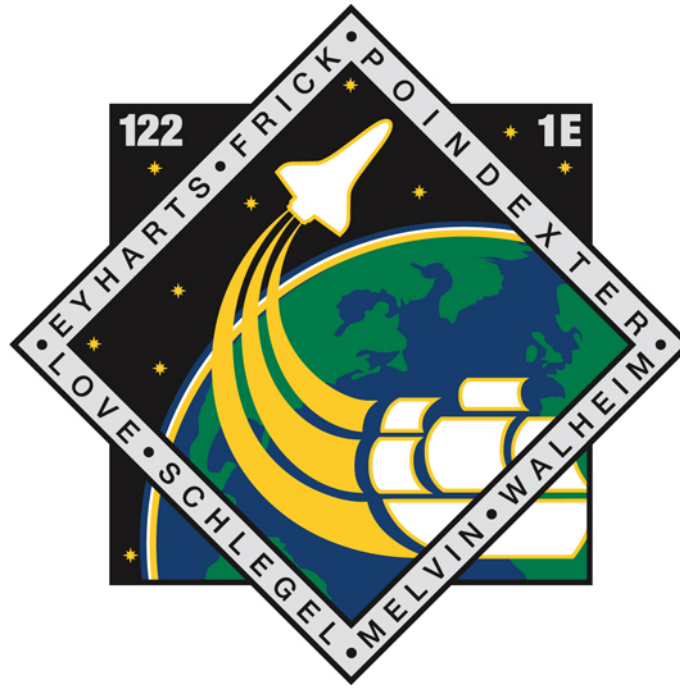
STS-122/1E ORBITER KU-BAND MASKING PLAN

APPROX. MET (ALL TIMES APPROXIMATE)	MODE	EVENT	DESCRIPTION
000/01:45:00	Beta 21 + Mask	Ku-band deploy	Standard mode used for Orbiter with all payloads within PLB envelope <i>SRMS ON-ORBIT INIT</i>
000/16:05:00	Beta 21 + Mask with box: $\alpha:$ $26 \leq AZ \leq 110$ $-90 \leq EL \leq -30$	SRMS Power-up	Protects the SRMS during C/O operations <i>RMS PWRUP</i> <i>RMS C/O</i> <i>PRECRDL</i>
000/17:35:00	Beta 21 Only with box: $\beta:$ $-90 \leq AZ \leq 110$ $-90 \leq EL \leq 0$	OBSS Unberth through Flat Field Positions.	Protects the SRMS during OBSS Unberth and initial survey operations <i>OBSS UNBERTH</i> <i>FLAT FIELD</i>
000/18:35:00	Beta 21 Only with box: $\gamma:$ $-132 \leq AZ \leq 80$ $-90 \leq EL \leq 60$	OBSS STBD Survey	Protects SRMS during survey operations <i>OBSS STBD SURVEY</i>
000/20:30:00	Beta 12 Only	Nose Cap Survey	Protects SRMS during survey operations <i>NOSE CAP SURVEY</i> NOTE: Do not initiate until SRMS in NOSE CAPE ACAS Start
000/22:30:00	Beta 21 Only with box: $\beta:$ $-90 \leq AZ \leq 110$ $-90 \leq EL \leq 0$	Port Wing Survey and OBSS Berth	Protects SRMS during survey operations <i>OBSS PORT SURVEY</i> <i>OBSS BERTH</i>
001/01:05:00	Beta 21 + Mask	SRMS Post Pre-cradle	SRMS back in Pre-Cradle Posn. Standard mode used for Orbiter with all payloads within PLB envelope
001/20:15:00	Beta 21 Only with box: $\delta:$ $-42 \leq AZ \leq 50$ $-35 \leq EL \leq 40$	ISS at 765 ft.	Post MC-2 to protect the ISS Ku-band antenna
001/21:15:00	Beta 21 Only with box: $\epsilon:$ $-21 \leq AZ \leq 40$ $-58 \leq EL \leq 32$ $f:$ $-74 \leq AZ \leq -16$ $-11 \leq EL \leq 29$	ISS at 105 ft.	Protects the ISS Ku-band antenna, ISS structure during approach, ISS structure while mated <i>SRMS @ Pre-Cradle Posn</i> <i>SSRMS @ Docked Viewing Posn</i>

KU BAND ANT
MASKING

APPROX. MET (ALL TIMES APPROXIMATE)	MODE	EVENT	DESCRIPTION
002/00:00:00	Beta 21 Only with box: ϵ : -21 \leq AZ \leq 40 -58 \leq EL \leq 32 f : -74 \leq AZ \leq -16 -11 \leq EL \leq 29 ζ : -92 \leq AZ \leq 9 -90 \leq EL \leq -52	OBSS operations	Protects ISS structure while mated, and for use during OBSS Unberth and H/O procedures 1.110 OBSS GRAPPLE 1.111 OBSS MANEUVER TO HO 1.112 OBSS UNGRAPPLE OBSS H/O f/m SSRMS to SRMS SRMS mnvr to Columbus viewing
002/02:20:00	Beta 21 Only with box: f : -74 \leq AZ \leq -16 -11 \leq EL \leq 29 η : -28 \leq AZ \leq 40 -81 \leq EL \leq 32	OBSS operations completed	Protects ISS structure while mated, and for OBSS on SRMS in H/O Posn SSRMS @ OBSS Grapple Backoff Posn
002/18:55:00	N/A	N/A	KU-BD ANT STOW
003/22:40:00	Beta 21 Only with box: η : -28 \leq AZ \leq 40 -81 \leq EL \leq 32 θ : -74 \leq AZ \leq -16 -61 \leq EL \leq 29	KU-BD ANT DEPLOY Focused Inspection (TBD)	Protects ISS structure, and MT/SSRMS operations while mated SSRMS @ Columbus ungrapple SRMS @ focused inspection (positions TBD)
004/18:20:00	Beta 0 Only with boxes η : -28 \leq AZ \leq 40 -81 \leq EL \leq 32 θ : -74 \leq AZ \leq -16 -61 \leq EL \leq 29	EVA #2	Protects ISS structure, and MT/SSRMS operations during EVA SRMS w/OBSS @ EVA 2 viewing position SSRMS supporting EVA 2
005/01:25:00	Beta 21 Only with box: η : -28 \leq AZ \leq 40 -81 \leq EL \leq 32 θ : -74 \leq AZ \leq -16 -61 \leq EL \leq 29	EVA #2 completed	Protects ISS structure, and MT/SSRMS operations while mated
006/17:55:00	Beta 0 Only with box: η : -28 \leq AZ \leq 40 -81 \leq EL \leq 32 θ : -74 \leq AZ \leq -16 -61 \leq EL \leq 29	EVA #3	Protects ISS structure, and MT/SSRMS operations during EVA
007/00:20:00	Beta 21 Only with box: η : -28 \leq AZ \leq 40 -81 \leq EL \leq 32 θ : -74 \leq AZ \leq -16 -61 \leq EL \leq 29	EVA #3 completed	Protects ISS structure, and MT/SSRMS operations while mated

APPROX. MET (ALL TIMES APPROXIMATE)	MODE	EVENT	DESCRIPTION
008/14:45:00	Beta 21 Only with box: θ: -74 ≤ AZ ≤ -16 -61 ≤ EL ≤ 29 ι: -45 ≤ AZ ≤ 40 -77 ≤ EL ≤ 32	Undocking and OBSS ops	Protects ISS structure, and OBSS mnvr <i>OBSS MNVR TO UNDOCK POSITION</i>
008/16:30:00	Beta 21 Only with box: δ: -42 ≤ AZ ≤ 50 -35 ≤ EL ≤ 40	ISS Range > 105 ft.	Protects the ISS Ku-band antenna and RMS during undock
008/17:30:00	Beta 21 + Mask	ISS Range > 765 ft.	Unmated
008/18:50:00	Beta 21 Only with box: β: -90 ≤ AZ ≤ 110 -90 ≤ EL ≤ 0	OBSS maneuver to flat fields	Protects the SRMS during survey operations <i>OBSS MNVR to FLAT FIELDS</i>
008/19:20:00	Beta 21 Only with box: γ: -132 ≤ AZ ≤ 80 -90 ≤ EL ≤ 60	OBSS STBD Survey	Protects SRMS during survey operations <i>OBSS STBD SURVEY</i>
008/21:15:00	Beta 12 Only	Nose Cap Survey	Protects SRMS during survey operations <i>NOSE CAP SURVEY</i> NOTE: Do not initiate until SRMS in NOSE CAPE ACAS Start.
008/22:40:00	Beta 21 Only with box: β: -90 ≤ AZ ≤ 110 -90 ≤ EL ≤ 0	Port Wing Survey	Protects SRMS during survey operations <i>OBSS PORT SURVEY OBSS BERTH</i>
009/00:20:00	Beta 21 + Mask	Post OBSS Berth	Unmated
009/23:20:00		Ku-band Stow	



FLIGHT PLAN

**STS
122**